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Interaction Administrator

Printed Help

Abstract

This document contains the application help for Interaction Administrator.

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About Setup Assistant

During installation, the installer uses IC Setup Assistant to configure any or all of the following features for Interaction Administrator:

- CIC administrator and network information
- CIC license
- Dial plan
- Database
- CIC optional components, such as Switchover, Multi-Site RTM, and TFTP server
- Site Information (Interaction Tracker — add-on license)
- Server Group Certificate and Private Key (Switchover)
- Interaction Recorder (add-on license)
- Speech Recognition engine (add-on license)
- Mail provider
- Log Retrieval Assistant
- SIP Lines and Default Registration
- Stations
- Users
- Workgroups
- Roles
- Default hours of operation
- Group call processing
- DCOM security

After the installation is complete, you can re-run IC Setup Assistant to complete the tasks that you cannot complete in Interaction Administrator or anywhere else in CIC.

When you re-run the IC Setup Assistant, a different **Welcome** page appears. From this page, you can make the following changes by re-running IC Setup Assistant:

- Identity
- Optional components
- Dial plan
- Rename DS
- Database
- DCOM
- Certificates

You must make additions or changes to the following configurations in Interaction Administrator:

- Site information
- SIP lines and default registration group
- Interaction Recorder
- Speech recognition
- Mail provider
- Log retrieval assistant
- Stations
- Users
- Workgroups
- Roles

Additions or changes to the following configurations must be made in Interaction Attendant:

- Default hours of operation
- Group call processing

New features in Interaction Administrator

Interaction Administrator version 4.0 contains the following new features to assist you in customizing and configuring Interaction Center. The new features include:

[Access Control Groups](#): Access Control Groups (ACGs) provide a flexible way of defining administrative access rights.

[AudioCodes phones](#): CIC now supports AudioCodes phones.

[Concurrent Licensing](#): This new license option allows licenses to be assigned to more users than there are licenses available.

[Crystal Reports](#): The Report Management container is now used to configure Crystal Reports 2013. You can now configure Crystal Reports run by IC Business Manager to [execute without a direct connection to the database server](#). You can also configure secure parameters to [restrict report results with secure parameters](#).

[Enhanced Interaction Administrator Change Notification Log](#): CIC supports enhanced change audit logging for selected Interaction Administrator containers.

[Gmail OAuth support](#): CIC now supports OAuth 2.0 for Gmail authentication.

[Interaction Analyzer](#): Interaction Analyzer's real-time word and phrase spotting allows for fully-integrated speech analytics with supervisors and agents being informed in real time of interaction scores and spotted keywords and phrases.

[Interaction Update](#): You can now configure the local Interaction Update provider URI in the System Configuration container.

[Password policies](#) now contain additional configuration options for enhanced security.

[PureCloud for CIC Integration](#): The new PureCloud container allows you to easily configure the integration between your CIC server and your PureCloud organization.

[Remote Content Server](#): Interaction Recorder Remote Content Server provides multiple efficiencies in recording telephone conversations and screen activity in the Interaction Center environment. The Remote Content Server can take over the certain tasks from the CIC server improving bandwidth.

[Security](#): The new security configuration and management dialog boxes have changed significantly, allowing simplified management of these security settings. With the addition of a search function and the ability to get better insight into the security inheritance model, administration and ongoing system maintenance has become much easier. The new security settings also allow more granular control over existing features.

[Server parameters for IC Business Manager views](#) allow you to restrict the number of records that may appear in the IC Business Manager statistics views.

[Session Manager Regionalization](#): An off-server session manager can be assigned to a specific region/location and all the client applications (the CIC clients and IC Business Manager) running in that location use the local off-server session manager.

[Single sign-on](#): When single sign-on is enabled, a user can log in once and then access multiple CIC applications without being prompted to log in again. To simplify the configuration process, activate the Single Sign-on Configuration Utility plug-in by enabling the [EnableSSOConfiguration](#) server parameter.

[SMS](#): New configuration options are available for SMS messages. These include [associating an SMS broker account with a workgroup or user](#), [purging SMS data](#), and [tracking SMS messages with Interaction Tracker](#).

[Advanced syslog tracing options](#) are available for Polycom phones.

[Wrap-up Categories](#): Wrap-up codes can be associated with categories.

Overview of Interaction Administrator

Important: Interaction Administrator is available in several different editions: Interaction Administrator, Interaction Web Edition, and Interaction Administrator Server Manager Administrator Edition. In this help system, "Interaction Administrator" denotes the specific edition that you are using. The full product name appears at the top of each help topic. The full product name may also be used in a help topic when necessary to distinguish between Interaction Administrator editions.

Interaction Administrator allows the system administrator to configure virtually every aspect of CIC - from the telephony hardware and inbound/outbound phone lines on the server, to the appearance and security levels of each user's CIC client.

Other configurable features include:

- Fax resources and fax groups
- Dial plan configuration and dialing privileges for the server
- Telephone lines and line groups, including an SMDI interface
- Customizations for T1, ISDN, and other digital line interfaces
- Stations, such as PCs, telephones, internal and external fax resources
- Users, Roles, and Workgroups, including [ACD](#) agent and skill configuration
- Account codes for designated types of calls and account billing
- A collective for easy communications across multiple CIC sites
- Administration, security, and user privileges
- CIC report logs and reports for tracking phone system activity
- CIC handlers, parameters, and other system initialization functionality
- Status messages
- [DDE](#) actions for invoking third party applications with each call
- Data manager configuration for speed dial lists and directories
- Response Management for creating Agent documents
- Web interaction messages and URLs for the CIC Web server interface

In Interaction Administrator, functionality is organized in containers. For more information, see *Containers list*.

Related topics

[Containers list](#)



License Management

Use the License Management dialog box to view and load licenses.

Note: Only users with the master administrator right can access the **License Management** dialog box. This is a display list only. You cannot add to, delete from, or copy or paste into this list. For general licensing information, see the *PureConnect Licensing Technical Reference* in the PureConnect Documentation Library.

For complete instructions on updating your licenses, go to the Activation File Management area of the Customer Care portal dashboard.

Navigation Controls

The following navigation controls are always available in Interaction Administrator:

Lists support quick-key selection. That means you can select an entry inside any list and then press the letter or number key that begins the entry you want to select. The cursor jumps to the first entry in the list that begins with that character. If there are multiple entries that begin with the same character, you can continue to press the same character key to select the next entry that begins with that character.

- In the list view (right pane), once an entry is highlighted, you can press Enter to open the page for that entry.
- When a configuration dialog box is open to a particular page, and there are multiple entries in that configuration container, you can click on the >> button at the bottom of the page to view that page in the next entry down the list. If the Confirm Auto-save check box is selected, you can make changes to each page, click the >> (or << to go up) button, and the changes are saved automatically.
- Interaction Administrator automatically remembers which container was selected from one session to the next. In addition, it remembers which property page you were on each time you open a page.
- [Context sensitive menus](#) are available in the list view (right pane) when you right-click, or when you see the Context menu available on the menu bar. The available menus depend on which container is selected.



Telephony Server Configuration

An IC server contains telephony hardware resources (for example, analog and/or digital voice boards, fax boards, station boards, etc.) that connect incoming telephone lines with your company's PCs, telephones, fax machines, etc. Each IC server has a specific number of configurable resources that are defined in Interaction Administrator containers found under the container named after the IC server (for example, I3Server). These include:

- Report logs and accumulators activated for this server
- Telephone lines that are defined to use a particular phone number, telephony board, port/channel, and other attributes
- Line groups that are named groups of telephone lines used for specific applications
- Stations (for example, PCs, telephones, fax devices and stand-alone fax machines) that have extensions and are associated with specific boards, ports/channels, and so on

Each IC server also supports server parameters that are similar to macros that contain data (such as drive and path information) unique to that server and that can be used by the IC Interaction Processor as it operates.

Related topics

[Add Stations Assistant](#)

[Add User Assistant](#)

[CIC System Configuration](#)

[Configure a SIP Line](#)

[Line Group Configuration](#)

Station Group Configuration

[User and Workgroup Configuration](#)



User and Workgroup Configuration

Each CIC user has at least one unique attribute (such as an extension number) along with many other attributes that define the user's CIC client interface, status messages, telephone privileges, security controls, workgroup memberships, and so on. Each user [inherits](#) default values for some of these attributes from the **Default User** configuration container, which is the logical place to start user configuration. The CIC installation program creates a minimal set of Default User attributes that can be modified.

Each CIC user must have a network user account (for a Windows server) and have a Microsoft Exchange mail account to receive voicemail and faxes. Configuring CIC users is easier if the network and Exchange accounts are already established, but it is not required. Each user can be a member of zero or more CIC workgroups, which are logical groups of users that can (optionally) have a common telephone extension and serve as a queue for [ACD](#) calls as well as other attributes. Workgroups also inherit some default attributes from the **Default User** configuration container.

Wherever a user logs in to the CIC network, the Interaction Processor (IP) identifies that user by his or her unique extension number and routes calls to the extension number of his or her current workstation. IP then routes calls and tracks user interactions based on that user's activity.

Related topics

[Delete User](#)

[CIC System Configuration](#)

[Telephony Server Configuration](#)

[Overview of how to add users](#)



CIC System Configuration

CIC system resources control specific features and functionality provided in the Interaction Center for the entire configuration, regardless of how many servers or users are installed. System-level configuration includes:

- Interaction Processor (IP) variables and startup handlers
- Phone number identification and pattern matches. All [dial plan configuration](#) and phone number classifications are controlled in the Phone Numbers container.
- Report , [Report Log](#) , and [Accumulator](#) activity for gathering and producing call activity reports
- [System-wide parameters](#) that can be referenced by all CIC handlers on each server
- [Status messages](#) that can be defined on the server and set on each workstation running a CIC client.
- [Action](#) definitions
- [Log Retrieval](#)
- Administrative, fax, and voice [email account names](#)
- [Interaction Process Automation](#)
- [Interaction Feedback](#)
- [Fax server](#), Interaction Fax Viewer default attributes and [fax groups](#) that are named groups of fax devices used for specific applications.
- [Database](#) and [data source](#) configuration
- Predefined [Web chat messages](#) and [URLs](#) for agents taking Web chat sessions
- [Voice recognition](#)
- [Media Servers](#)
- [SIP Proxies](#)
- [MRCP Servers](#)
- [Session Manager](#)
- [SMS](#)

Related topics:

[Exporting configuration data](#)

[Telephony_server_configuration.htm](#)

[User and Workgroup Configuration](#)

Starting CIC server modules

The CIC server installation procedure sets up the IC Console service, which starts all the CIC server modules automatically as Windows services when the server is rebooted. If the server is restarted for any reason, all CIC services are automatically started. In addition, if any individual module is ever terminated (for example, someone kills a process in Task Manager), it will automatically be restarted when IC Console is running as a service.

In general, we recommend that any future CIC server restarts include a complete power cycle of the server to ensure that the telephony hardware and/or software is completely reset.

Warning: Do NOT manually edit the registry entries in the IC ProcessTree and do NOT use these optional EicService command line arguments without explicit instructions from PureConnect Customer Care representatives. Doing so could cause your system to stop functioning or not start as designed.



Minimum Hardware and Software Requirements

The system requirements for the current release are available on the Product Information site.

Overview of command line options

When necessary, you can also start Interaction Administrator from a command line. When you do that, you can use optional command line arguments to do the following things:

- Specify another CIC server on the network.
- Run Interaction Administrator as a master administrator.
- Specify the default language (locale) for Interaction Administrator.

Related topics

[Specify an alternate CIC server](#)

[Start Interaction Administrator as a master administrator](#)

[Specify the default language \(locale\)](#)

Specifying an alternate CIC server

You can specify an alternate CIC server when you start Interaction Administrator from a command line. This allows you to use the same workstation to configure or test with multiple CIC servers.

To specify an alternate CIC server with Interaction Administrator

1. Open a command prompt and type one of the following:
 - IAShellA.exe /notifier=servername

Note: If your release of CIC includes the Multi-server Administration license and you are attempting to make configuration changes to a Multi-server Administration slave, a warning message is displayed. The message instructs you to change the /notifier=servername parameter to point to the Multi-server Administration Master.

- IAShellA.exe /notifier=ipaddress

Substitute the name of another CIC server on the network for *servername*, or enter that server's IP address if the *servername* is not available on the LAN.

Related topics

[Overview of starting options for Interaction Administrator](#)

Start Interaction Administrator as a master administrator

If you accidentally delete all of the user accounts with master administrator privileges, you can start Interaction Administrator from the CIC server console.

Note: You will not be able to start it as master administrator from another computer.

To start Interaction Administrator as a master administrator

1. On the CIC server, open a command prompt and type one of the following:

- C:> IAShellU.exe
- C:> IAShellU.exe /notifer=localhost

Do not use the /user and /password command line arguments in this case. This starts Interaction Administrator as a (undefined) user with master administrator privileges. From there, you can recreate user accounts and assign master administrator privileges to other accounts.

Related topics

[Overview of starting options for Interaction Administrator](#)

Specify the default language

You can start Interaction Administrator in a specific locale.

To specify the default language during startup

1. Enter the following at a command line: IAShellA.exe /LANGID=[language code]

Related topics

[Overview of starting options for Interaction Administrator](#)

Interaction Administrator Help

This help contains information about the Interaction Administration application. The application interface consists of a tree view window (the left hand pane) with container names and icons, and a list view window (the right hand pane) displaying columns of pertinent configuration data for the container selected in the tree view.

Note: Anytime you open Interaction Administrator, the top-level container is expanded and displays all sibling containers under it.

A note about client applications: Customer Interaction Center (CIC) supports two interaction management client applications. This documentation uses the term "CIC client" to refer to either Interaction Connect or Interaction Desktop. For more information about CIC clients, see the [CIC Client Comparison](#) in the PureConnect Documentation Library.

Interface commands

Click on one of the following links for more information on available commands from the Interaction Administrator interface:

- [Menu Commands](#)
- [Toolbar Commands](#)
- [Right-Click Menu Commands](#)
- [Selection Commands](#)

Create new entries

To create new configuration entries, select a container in the tree view. Configuration objects in that container (if any are defined) appear in the list view.

In the list view pane:

1. Press the **Insert** key to create a new entry, or

Right-click and select the **New Insert** command, or

On the **Edit** menu select the **New Entry Insert** command
2. Type the name of the configuration entry, and then click **OK**.

Some containers have an associated Configuration object displayed in the list view window (such as Default User Configuration and System Configuration). Double-click the configuration object to modify its properties.

Note: The list view does not redraw the list every time you insert, delete, or modify an entry. The list view is refreshed only when you use the Refresh (F5) command, sort the columns, or when you select a new branch in the tree view. Deletes will leave the following item selected. Inserts are added to the bottom of the list.

Modify existing entries

To modify existing configuration entries, do one of the following:

- Double-click on a configuration object in the list view window, or
- Select an entry in the list view and right-click to select the **Properties** menu, or
- On the **Edit** menu, click **Properties**.

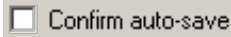
You can display a pop-up menu for some configuration entries. In list view, select the entry, and then right-click the entry. Use the menu options to modify key configuration data, and then click **OK** to save the changes.

Editing lists of configuration entries

Property pages in most configuration entries include two buttons to facilitate making individual changes to each entry quickly.



The  buttons allow you to display the previous (above) or the next (below) entry's configuration in the list view window, automatically saving changes as you do.



The ☐ Confirm auto-save check box gives you the option to display a dialog box asking you to confirm you want to save any changes. Click [here for an explanation of why you may see the "Do you want to save changes?"](#) in the Auto Save dialog box when you didn't change anything.

Notes: Most configuration property changes are recognized by CIC immediately after they are saved. The only exceptions are server parameters and entry fields that include UNC or explicit drive/directory names. These changes are recognized only after restarting CIC.

All property page fields that require a file name for input include a **Browse** button to help you locate and enter the correct path and file name.

Using the Apply button

Use the **Apply** button to save any changes you may have made in a property page without closing the property page, like the OK button. When you create a new object in Interaction Administrator, the Apply button is not available until after you click the OK button and open it the second time. The Apply button is available all the time, but it knows if you have already saved something; it will not write the same saved data again.

Site name

The site name is specified during the IC Server installation procedure and cannot be changed from within Interaction Administrator. The server name is automatically detected during IC Server installation and this name is inserted in Interaction Administrator.

Caution: If you need to change the site, configuration (Production), or server name settings after you install IC Server, use the Setup Assistant. For more information, see the IC Setup Assistant help.

If a PureConnect Customer Care representative gives you specific instructions to edit these settings in the registry, use only DSEdit to make the recommended changes. If you incorrectly change these settings, you could adversely affect the performance of CIC or prevent it from functioning properly.

License information.

The Interaction Administrator screen displays how many days you have to renew your license before expiration in the lower left-hand corner.

A message is shown requesting the system administrator re-register the license file prior to the license anniversary date. If license renewal is due within a specific time period, a message is displayed similar to "Your license is due for its annual re-registration in XX days. Please visit <http://license.inin.com> to re-register your license."

Other licensing messages are displayed as well. For example, in a non-Switchover environment, you may see "The new license file was successfully published to this server.", or "The new license file failed to apply to this server. Contact PureConnect Customer Care for further assistance."

Related Topics

[Overview of how to add users](#)

[Auto Save feature](#)

[Exporting configuration data](#)

[Updating configuration values](#)

Containers list

The following table describes the containers and subcontainers in Interaction Administrator.

If a listed container does not appear in your copy of Interaction Administrator, it may mean that you have not installed the release of CIC or functionality that requires that container, or it may mean that you do not have rights to the container.

Configuration Container	Description
Collective	If you have installed Interaction Multi-Site, this is the container in which you can configure several Multi-Site behaviors.
Collective: Home Site	Configures the site identifier and password for this CIC server.
Collective: Peer Sites	Identifies other CIC servers in the collective and allows you to check connectivity and synchronize with those sites.
Server (your CIC server Name)	Configures the handlers, report logs, accumulators, and several other settings to run on this server. Note: When Interaction Administrator is connected to a backup server in a switchover pair, and you are connected to the backup server, the name of the server appears with the label "(Backup)."
Server: Lines	Configures digital lines for the server.
Server: Line Groups	Defines line groups and dial groups based on configured lines.
Server: Stations	Configures workstations, fax stations, stand-alone phones, or any other kind of station information including extension, board number, port number, etc.
Server: Stations: Templates	Configures the default behavior of stations by the type of station, such as standalone phone or workstation.
Server: Stations: Groups	Creates station groups so that you may transfer a caller to a specific group of stations.
Server: Stations: Default Station	Configures default station settings globally, including SIP stations settings.
Server: Managed IP Phones	Configures and manages IP phones.
Server: Managed IP Phones: Templates	Configures the default behavior when importing or creating new individual managed IP phones.
Server: Managed IP Phones: Ring Tones	Configures ring tone behavior for managed IP phones.
Server: Managed IP Phones: Default IP Phone	Configures the default IP phone provisioning line.
Server: Managed IP Phones: Registration Groups	Configures the settings used when provisioning managed IP phones.
Server: SIP Bridges	Configures connectivity paths (SIP bridges) between remote users and the CIC server.
Server: Audio Sources	Configures sources that continuously transmit audio and can be listened to simultaneously by multiple calls.
Server: Server Parameters	Defines parameters used by handlers and CIC subsystems for this server.
Server: Structured Parameters	Defines typed, grouped parameters that are used by handlers and CIC subsystems for this server.
Regionalization	Defines region-specific configuration options, such as locations.

Regionalization: Locations	Defines locations and endpoints (lines, stations, and servers) that share a common dial plan and sets the codec mappings for the endpoints.
Regionalization: Default Regionalization	Sets the default server location and conference settings.
Regionalization: Selection Rules	Configures rules that are used for prioritizing server use, per location.
Licenses Allocation	Displays licenses and their allocations based on users and stations.
People	Contains subcontainers where you configure users, workgroups, roles, and related functionality.
People: Default User	Controls user options, basic security and access control for all users, workgroup members, and roles. All users, workgroup members, and roles inherit these properties.
People: Roles	Defines roles, which are reusable sets of basic security settings and access control settings. You use roles to easily configure standardized security and access control levels for users and workgroups.
People: Users	Controls workgroups, options, basic security, ACD features, access control, etc., for each user.
People: Workgroups	Controls members, options, basic security, ACD features, and access control for workgroups.
People: Password Policies	Configures security policies for use with CIC passwords and apply these policies per role or user.
People:Password Policies: Policies	Defines new policies.
People: Schedules	Creates and configures schedules used to schedule menus in Interaction Attendant.
People: Secure Input Forms	Defines forms that Agents use to collect confidential customer information.
People: Wrap-up	Defines categories and codes that indicate the nature of interactions for reporting purposes.
People: Wrap-up Categories	Defines groupings of wrap-up codes for reporting and other purposes.
People:Wrap-up: Wrap-up Codes	Defines wrap-up codes that Agents associate with interactions to indicate the nature of the interaction.
People: Client Buttons	Configures buttons to appear in the CIC clients that open an application or invoke a custom handler.
People: Client Configuration	Defines templates that specify the CIC client configuration and apply these templates to users.
People:Client Configuration: Templates	Defines new templates.
People: Queue Columns	Configures which fields can be displayed in Interaction Client's My Interactions page.
People: Account Codes Configuration	Enables the account code feature for tracking incoming and outgoing calls.
People:Account Codes Configuration: Account Codes	Creates and configures account codes optionally used for incoming and outgoing calls.
People: Client Templates	Defines templates that determine how the CIC clients should look and behave. The templates can be assigned to multiple agents to simplify the installation and configuration of their stations.

People: Response Management	Creates a library of predefined responses that agents can use in chat sessions, email messages, and callbacks.
People:Response Management: Import Documents	Imports previously exported response management documents into the library of responses.
People: Skills	Defines ACD skills to assign to users or workgroups.
People: Access Control Groups	Provides a flexible way to group CIC objects in order to assign administrative access rights to users and workgroups.
System Configuration	Controls default mailbox accounts, languages, and host server configuration.
System Configuration: Interaction Processor	Configures handlers in Interaction Processor.
System Configuration:Interaction Processor: Handlers	Lists handlers active on the server.
System Configuration:Interaction Processor: Initialization Functions	Lists initialization functions used by CIC handlers (do not modify these functions).
System Configuration:Interaction Processor: Tables	Enables you to create in-memory tabular databases for fast lookups on static data by handlers
System Configuration: Phone Numbers	Defines dial plans, dialing classifications, and phone number processing.
System Configuration: Report Logs	Defines report logs that capture all call data. Several standard logs are bundled with CIC.
System Configuration: Accumulators	Defines accumulators used to hold numbers of system events for tracking and monitoring system performance.
System Configuration: System Parameters	Defines parameters that are used by handlers and CIC subsystems on all servers across the system.
System Configuration: Status Messages	Defines status messages and their attributes that appear in the CIC clients in the Status box (e.g., At Lunch, Available, etc.).
System Configuration: Actions	Defines DDE actions and commands that can be invoked when a call connects or disconnects.
System Configuration: Log Retrieval Assistant	Configures how logs are retrieved through Log Retrieval Assistant.
System Configuration: Mail	Defines multiple mail storage sources.
System Configuration: Single Sign-On	Enables users to securely log in to CIC applications through third-party authentication providers.
System Configuration: Single Sign-On: Secure Token Server	Configures the Secure Token Server, which grants authenticated users access to specific CIC applications.
System Configuration: Single Sign-On: Identity Providers	Configures the Identity Providers, which authenticate login requests from users.
System Configuration: Interaction Process Automation	Activates and deactivates published Interaction Process Automation processes.
	Controls access to process-level variables in an Interaction Process Automation process.
System Configuration: Interaction Feedback	Configures settings for survey recordings.
System Configuration: Fax	Controls the fax appearance, cover page, and other options.
System Configuration:Fax Configuration: Fax Groups	Defines fax groups when multiple fax resources are available to be dedicated to specific purposes (e.g., inbound, outbound, etc.)

System Configuration: IC Data Sources	Defines external data sources CIC uses for report logs, contact databases, etc.
System Configuration: Contact Data Manager	Controls general resources used by the Contact List Sources.
System Configuration:Contact Data Manager: Contact List Sources	Specifies CIC data sources to use for creating contact lists that integrate with CIC clients.
System Configuration: Web Services	(Available with Web add-on license, IC Web Services installed.) No configuration dialog exists for Web Services. You can, however, configure five parameters using the Parameters folder in the Web Services container.
System Configuration:Web Services: Web Services Parameters	(Available with Web add-on license, IC Web Services installed.) Lets you configure parameters including the join and leave messages for Chats, the CIC server name displayed for the agent's side of Chats (you might put your company's name here), the Web Services port number, and the time that visitor's URLs will remain in the Web Sessions tab after they have left the website.
System Configuration: Recognition	Configures the behavior of all speech recognition servers.
System Configuration:Recognition: Loquendo	Configures the behavior of all Loquendo speech recognition servers.
System Configuration:Recognition: Loquendo:Servers	Configure the behavior of each individual Loquendo speech recognition server.
System Configuration:Recognition: Interaction Speech Recognition	Configures the behavior of all Interaction Speech Recognition servers.
System Configuration:Recognition: MRCP	Configures the behavior of all MRCP speech recognition servers.
System Configuration:Recognition:MRCP: Servers	Configures the behavior of each individual MRCP speech recognition server.
System Configuration:Recognition: Nuance Recognizer	Configures the behavior of all Nuance speech recognition servers.
System Configuration:Recognition:Nuance Recognizer: Servers	Configures the behavior of each individual Nuance speech recognition server.
System Configuration: Media Servers	Configures stand-alone media servers to record and monitor calls on media server devices, as well as play on-hold music to callers connected with a media server device.
System Configuration:Media Servers: Servers	Sets the location and other server-specific details for each media server.
System Configuration: SIP Proxies	Configures the settings for each SIP proxy.
System Configuration: MRCP Servers	Configures options for all MRCP servers including the protocol and network adapter
System Configuration:MRCP Servers: Servers	Configures the SIP address, location, priority, and capabilities of each MRCP server.
System Configuration: Session Managers	Configures the settings for all Session Manager servers.
System Configuration:Session Managers: Servers	Configures the settings for each Session Manager server. These settings include the FQDN, the acceptable connections, and the server location.
System Configuration: SMS	Configures behavior of Short Message Service messages.
System Configuration:SMS: Brokers	Defines connection with a broker.

System Configuration: Problem Reporter	Enables an authorized user to report a problem with a CIC client to the user's support representative.
System Configuration: Problem Reporter	Enables an authorized user to report a problem with a CIC client to the user's support representative.
System Configuration: Layouts	Identifies station locations on floor plan images.
Interaction Tracker	Configures Interaction Tracker behavior that displays views of interaction history.
Interaction Tracker: Individual Types	Defines individual types such as Marketing Director.
Interaction Tracker: Organization Types	Defines organization types such as Marketing.
Interaction Tracker: iAddress Types	Defines iAddress types such as Home or Mobile.
Interaction Tracker: iAddress Subtypes	Defines iAddress sub-types to extend iAddress type such as Home 1 and Home 2.
Interaction Tracker: Tracker Attribute Types	Defines attribute types for individuals, locations and organizations to extend these types.
Interaction Tracker: Tracker Address Types	Defines address types such as billing or shipping.
Interaction Tracker: Titles	Defines titles such as Mr. or Mrs.
Interaction Tracker: Read-only Data Sources	Designates read-only data sources, so that Data Manager does not modify them.
Interaction Recorder	Configures what interactions are recorded and how interactions are recorded.
Interaction Recorder: Policy Editor	Creates policies that manage recordings.
Interaction Recorder: Screen Recording	Configures Interaction Screen Recorder.
Interaction Recorder: Remote Content Server	
Interaction Optimizer	Configures Activity Types, Day Classifications, and Scheduling Units to prepare Forecasts and Schedules for Real-time Adherence.
Interaction Analyzer	Defines the keywords that Interaction Analyzer uses to monitor conversations between agents and customers.
Interaction Analyzer: Keyword Sets	Organizes keywords into logical groups.
Report Management	Configures custom reports that are run in Interaction Reporter in IC Business Manager.
Report Management: Report Configuration	Manages report metadata.
Report Management: Report Configuration Export	Exports report configuration metadata to an XML format file.
Report Management: Report Configuration Import	Imports report configuration metadata from an XML format file.
Report Management: Report System Settings	Configures the first day of a customer's work week and sets the report timeout value.

Menu Commands

The menu bar includes commands on each of the **File**, **Edit**, **View**, **Context**, and **Help** menus. The following information describes the most important menu bar commands. Available commands vary according to the selected container.

File

The **File** menu includes the **Export**, **License Management**, and **Exit** commands.

Export dumps the existing CIC configuration data into a `.csv` file, which can then be opened with Excel.

License Management To update CIC licenses, click this command to display the **License Management** dialog.

The **Exit** command closes Interaction Administrator.

Edit

The **Edit** menu includes the **Copy** (Ctrl+C) and **Paste** (Ctrl+V) commands to copy and paste (with a new name) configuration entries. Copy and Paste work for all entries except Skills and Report Logs.

The menu also includes the following standard **New Entry (Insert)**, **Delete Entry (Delete)**, and **Properties (Enter)** commands:

Command	Description
New Entry (Insert)	Requires that you select a configuration container in the tree view. Newly inserted items are added to the bottom of the list.
Delete Entry (Delete)	Requires that you select one or more configuration entries in the list view. A Delete leaves the previous item in the list selected.
Properties (Enter)	Requires that you select only one configuration entry in the list view.

View

The **View** menu includes the following commands:

Filter Bar (F3)

Jump to/from filter Bar (Shift+F3)

Clear Filter Bar (Alt+F3)

Expand Tree

Select this command to expand the tree and to show all branches.

Initial Tree

Select this command to revert the initial tree view that is displayed when you start Interaction Administrator. The initial tree view displays the top-level (Production) as expanded and displays all sibling containers under Production.

Collapse Whole Tree

This command collapses the entire tree showing only Site.

Refresh (F5)

This command causes Interaction Administrator to read the directory services data and to refresh the entries in the list view. The list view does not redraw the list after every time you insert, delete, or modify an entry. The list view is refreshed only when you use the **Refresh (F5)** command, sort the columns, or when you select a new branch in the tree view.

Toolbar

This command controls (toggles) the appearance of the toolbar icons near the top of the Interaction Administrator window.

Status Bar

This command controls (toggles) the appearance of the status bar at the bottom of the window.

The **Status Bar** and **Toolbar** commands control (toggle) the appearance of the status bar at the bottom of the Interaction Administrator window, and the toolbar icons near the top of the window.

Context

The **Context** menu displays different commands, depending on whether Lines , Stations, or Users entries are displayed in the list view.

Help

Use the Help menu to display Help topics for Interaction Administrator and information for your CIC release.

Selection Commands

In the list view window, as well as most list boxes in the configuration pages, you can select one or more entries in the list using the standard Windows control keys. This allows you to delete multiple entries, or perform some context sensitive actions on a group of entries. Use the standard Windows GUI commands to select multiple rows (for example, hold the Shift or Ctrl key while selecting rows with the mouse.)

Toolbar Commands

Interaction Administrator includes an optional toolbar, which you can control from the View menu's Toolbar command. The toolbar provides the following icon commands:



[New Entry \(Insert\)](#)

[Properties \(Enter\)](#)

[Delete Entry \(Delete\)](#)

[Copy](#)

[Paste](#)

[Refresh](#)

[Filter](#)

[License Management](#)

Right-Click Menu Commands

In the list view window, right-click displays a context sensitive menu to perform basic editing operations. This menu is populated with three static entries - New (Insert), Delete (Delete) and Properties (Enter). These commands are also available on the Edit menu and the Toolbar icons. A few types of configuration data support additional right-click menu commands in the list view. These include:

Lines

Line objects have three additional entries in the context sensitive menu. These commands work on multiple entries.

Command	Description
New	Create a new SIP line.
Delete	Remove the selected line or lines.
Set Active	Can be On or Off to activate or deactivate the selected lines. The line can not be deactivated if there are any active calls on the line. Some changes to SIP lines require deactivation and reactivation in order for changes to take affect.

Stations

Station objects have one additional entry in the context sensitive menu. This action can be performed on multiple entries.

Command	Description
Set Active	Can be Yes or No to activate or deactivate the selected stations.
Set to Template	Sets the station to a specific station template values .
Set Preferred Language	Select the preferred language for the prompts for the selected station(s). The default setting is <System Default>.
Auto Extensions	Changes the extensions of the selected station(s).
Rename Station	Renames the selected station.
Change Station Type	Changes the station type of a selected station (workstation, stand-alone phone, or stand-alone Fax).
Station Assistant	Opens the Station Assistant .
Change Station Columns to View	Opens a dialog box to select the columns to view.
Managed IP Phone Properties	Opens the properties of a managed IP phone.

Users

Users' entries have one additional item in the context sensitive menu. This action can be performed for multiple entries.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes made through these menu items are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Command	Description
Set Status	Select a status from the sub-menu (for example, At Lunch.) for the selected user(s). Note: In Interaction Administrator, you can change an agent's current status to another status only if the current status is persistent.
Set Password...	Set passwords for Exchange or LotusNotes user(s) and set password options .
Set Auto-Answer ACD Calls	Select Yes or No to change the auto-answer ACD calls setting. This also can be set (checked or unchecked) on the ACD tab under Options.
Set Auto-Answer non-ACD Calls	Select Yes or No to change the auto-answer non-ACD calls setting.
Set Unified Messaging Destination	Select the server destination for messages when using SIP diversion. Note: For more information on configuring CIC to use UM, see <i>Unified Messaging Integration with CIC Technical Reference</i> in the PureConnect Documentation Library on the CIC server.
Set Preferred Language	Select the preferred language for the prompts for the selected user(s). The default setting is <System Default>.
Set Time Zone...	Sets the Time Zone... for the selected users.
Set Location	Sets the location of the selected users.
Set User's NT Domain Name	Click this option and type the name of the domain used to connect their user to the CIC server, (i.e., i3 domain), and then click OK.
Reset Failed Login Count	Click this option to reset the count to 0, so that the user is no longer locked out of the system.

Managed IP Phones

The following commands may be performed from the right-click menu in the managed IP phones list:

Command	Description
Change Multiple IP Phones	Change options on multiple IP phones.
Reload Now	Reloads the selected managed IP phone(s) now.
Reload at a Scheduled Time	Reloads the selected managed IP phone(s) at a scheduled time .
Cancel Scheduled Reload	Cancels a scheduled reload of managed IP phone(s) and reverts phone to it's previous status.
Reload All (Reload Required) Now	Reloads the managed IP phone(s) now that require a reload.
Unprovision	Unprovisions the managed IP phone(s) so that the phone can not be used. For example, you might want to unprovision a managed IP phone if an employee leaves the company, and a new employee is going to use the phone. Unprovision it and it will be waiting to be provisioned for the next person. Notes: Clearing the MAC or computer name will also cause the phone to become unprovisioned.
Set Active	Can be Yes or No to activate or deactivate the selected stations.
Set Preferred Language	Sets the language for all prompts for this managed IP phone. Can be set to <System Default> or any other languages that have been installed.
Set Custom Attributes	Define Custom Attributes for the selected IP phones.
Set Time Zone...	Sets the Time Zone... for the selected IP phones. <i>This option is reserved for a future release.</i>
Set Location	Sets the location of the managed IP phone.
Set to Template	Sets the managed IP phone options to a specific station template's values .
Managed IP Phone Assistant	Opens the Managed IP Phone Assistant .

Media Servers

The following command may be performed from the right-click menu in the Media Servers list:

Command	Description
Set Location	Sets the location of the media server.

SIP Proxies

The following command may be performed from the right-click menu in the SIP Proxies list:

Command	Description
Set Location	Sets the location of the media server.

MRCP Servers

The following command may be performed from the right-click menu in the MRCP Servers list:

Command	Description
Set Location	Sets the location of the media server.



About Interaction Administrator

Click the **About Interaction Administrator** button to display information about the CIC release. In addition, you can display details about Customer Interaction Center's environment and the environment of your computer.

Auto Save feature

Most of the time, using the  (next) and  (previous) browse buttons to view configuration data in a list (for example, the list of CIC users) displays the next or previous dialog immediately, unless you made changes to the settings. However, in a certain situation, CIC may display the Auto Save dialog box and ask, "Do you want to save changes?" even if you did not make any changes. This can occur if a new release of CIC is installed and new attributes are supported in the registry.

For example, if a new field is added to the Line object in a new release of CIC, the next time a line entry is opened and the  button is clicked, the Auto Save dialog box appears and asks "Do you want to save changes?" even though nothing was changed on the dialog.

This happens because Interaction Administrator looks at all fields currently in Directory Services (that is, the registry). When Interaction Administrator decides whether or not to save the configuration data for that page, it checks all fields that can be written against what is currently in the registry. Since a new field was added to Interaction Administrator in the patch release, it detects a difference and assumes the user changed something. As a result, the Auto Save dialog asks, "Do you want to save changes?" If you select "Yes," Interaction Administrator will not display the dialog for that property page again, unless you make a change.

System security for CIC

CIC is a Windows Server-based communication system that takes advantage of NT Advanced Server (NTAS) security features built into the operating system. CIC also uses encrypted passwords, implicit and explicit login procedures, and it provides other mechanisms to prevent the abuse of CIC accounts and toll fraud practices. Toll fraud is a common abuse of phone system privileges where employees and external thieves use corporate resources for long distance phone charges. To control telephone access, CIC allows you to define patterns or groups of phone numbers for any number of dialing destinations (for example, Local Calls, Emergency Calls, In State, International, etc.), called "classifications." It also allows you to assign zero or more of these classifications to all users, individual users, all members of a workgroup, or any station (for example, stand-alone telephone) defined in CIC an organization or organizational group . This approach gives CIC administrators complete control over which users and stations are allowed to dial certain numbers.

Using Interaction Administrator, CIC administrators can control which parts of the CIC clients appear on each agent's computer, and which telephone features each agent may use. A CIC Master Administrator can also give limited CIC administration controls to trusted users who have access to Interaction Administrator.

The following sections provide an overview of several security considerations. For more information about CIC security considerations that may affect your environment, see the *Interaction Center Security Features Technical Reference* in the Documentation Library.

Basic Precautions

To minimize opportunities for toll fraud or sabotage to the CIC server, follow these basic precautions in any CIC installation.

- CIC client users should log out each day or evening before going home. To be safe, CIC users should lock their desktops or completely log out of the operating system to prevent unauthorized users from starting the CIC clients and gaining dialing privileges. As long as a CIC client user's workstation is logged in to the CIC server, that workstation's telephone can be used to make any kind of call that user has privileges to make, even if the user's computer is password protected.
- Configure each CIC user account with that user's NT domain account (see the [User Configuration](#) page in Interaction Administrator) to enable NTAS account/password security. See the *CIC Account Authentication* section below for details on how this works.
- Unless it is absolutely necessary, do not modify the IC DialPlan handler to require all users to dial a single digit (for example, 9) to dial an external number. This scheme is prone to the bogus "test your line" phone scam where a caller falsely representing the phone company asks an unsuspecting operator to press the keys 9, 0, and # and then hang up in order to conduct a line test. Doing so gives the caller access to that line. CIC can intelligently select the appropriate lines (that is, [dial groups](#)) for external calls; CIC does not require a prefix digit to "get an outside line."
- Control access to the corporate toll free line, and follow the precautions described in the [Toll Fraud Prevention](#) topic to prevent remote callers from abusing CIC's powerful remote access capabilities.
- To enhance security and simplify the process updating CIC, ensure that each CIC user account name identically matches the user's corresponding NT domain account name. This name convention is not a requirement, but it will enable you to take advantage of improved security features.

Fraud, authentication, and passwords

Toll Fraud

See the [Toll Fraud Prevention](#) topic for a detailed discussion on preventing toll fraud by employees who may choose to abuse CIC's powerful remote access features.

CIC Account Authentication

Each CIC user account generally corresponds to a network domain account established on a Windows server. This network account usually has an email account on a mail server (for example, Microsoft Exchange Server) on the network. CIC user accounts can exist apart from a network account, but those CIC users will not have access to CIC's unified messaging features, and they must explicitly log in to CIC with a CIC password each time they connect to the IC server. The most efficient, and recommended, way for CIC users to connect to CIC is via an implicit login using a valid network account. CIC performs implicit or explicit account validation the first time a CIC user starts a client application (for example, the CIC client, voice mail form, Interaction Fax Viewer, and so on.) The implicit login process uses NTAS to verify the CIC user has a valid NT domain account, and is thereby automatically authenticated to the CIC server.

Login Authentication Cache

During the initial account authentication process, that account's login information is cached on the local client workstation, if the login was successful. CIC applications started after that they do not require manual validation because they use the cached login information by default. For example, if you successfully start Interaction Client Fax Viewer and then later choose to start Interaction Fax Viewer or use the MAPI voicemail form, those CIC client applications will not need to be authenticated by the CIC server because the user's login information is cached on the client workstation.

You can manually start some CIC applications with /User= and /Password= command line arguments, which override the cached login names. When an CIC user logs out of the operating system, or restarts the computer, the login account cache is destroyed. Just logging out of CIC does not destroy the user cache. If a user encounters a problem logging in to CIC, you can manually clear the client workstation's login cache by closing the process named I3aca.exe on that workstation.

Implicit Login

Implicit login allows properly configured CIC users to be authenticated on the CIC server via the user's NT domain account. When someone logs in to a network domain, that person is authenticated on the network via NTAS. CIC Client applications can take the domain/account name used to log in to a workstation and compare it with a list of domain/account names entered in the CIC user's configuration in Interaction Administrator. If a match is found, the IC Client application is automatically authenticated. This works only if the Domain User field is properly completed in Interaction Administrator for the users starting CIC applications. If it does not find an exact match between the client's domain/user name and the user configuration data on the CIC server, the login is denied and the client application can prompt the user to manually log in. [Click here](#) for more details.

Implicit login requires that each CIC user's Configuration page has the NT Domain User field correctly filled in with the text:

DOMAIN/UserName

The DOMAIN portion is the name of the network domain the CIC server is on, and the CIC user accounts have access to (for example, I3Domain). The UserName portion is the network user's account name (for example, Kevink). If the NT Domain User field is not filled in (for example, I3domain/Kevink), users must log in to CIC manually.

Explicit Login

CIC client applications can manually log in to the CIC server in two ways.

- Some CIC client applications can use /User and /Pass command line arguments
- If implicit login fails, CIC client applications present the Login dialog

Some applications, like Interaction Fax Viewer and Fax Monitor cannot be started with user name and password arguments. However, the CIC clients, Interaction Administrator, Interaction Designer, and several other CIC client applications can be started from a command prompt with command line arguments that specify the CIC user name and password. For example:

```
C:> clienta /user=sonyam /password=123 /notifier=I3server
```

If CIC finds a CIC user named "sonyam" with a CIC password of "123" defined on the CIC server, the login is successful and the login data is cached on client workstation for subsequent connections. However, if the user name or password is not authenticated (for example, the wrong password is entered), CIC displays a login dialog to prompt the user, as shown below:

In the Login dialog box, enter a valid CIC user and server configuration data:

- **IC Username** A valid CIC account name (such as, milanv)
- **Password** The CIC password for this account (such as, 1234)
- **Server** The name or IP address of the CIC server (such as, I3Server)

Password Encryption

While passwords entered on a command line are visible, and therefore vulnerable, at that point, passwords are concealed on the Login dialog box. In both cases, passwords are immediately encrypted before they are passed across the network; they are not passed as clear text. Passwords are stored in an encrypted format in the registry on the CIC server and are therefore not readable by editing the registry. If a CIC user forgets his or her unique password, the CIC administrator must enter a new password for that user in the [User Configuration](#) page in Interaction Administrator.

Related topics

[Overview of security for people](#)

[Client Admin Components Login Details](#)

[Toll Fraud Prevention](#)

Toll Fraud Prevention

Toll fraud is the theft of long distance service. A common type of toll fraud involves employees who use company phones in an unauthorized manner to make personal long distance calls. Because CIC is capable of performing many different telephone operations, CIC administrators should know that under certain conditions employees could use CIC features to commit toll fraud.

This topic addresses ways that CIC features could be used to commit toll fraud, and ways that CIC could be configured to prevent such abuses. This does *not* cover possible toll fraud activities that only a system administrator could commit (for example publishing rogue handlers), or toll fraud activities that could be performed on an ordinary telephone system (for example using stolen phone access codes).

Note: All the toll fraud activities described in this topic occur in the context of an employee calling into the company's phone system on a corporate toll-free number.

Reply to a voice mail from a long distance caller

Description

An employee calls into the CIC's auto attendant system via a corporate toll-free number. The employee listens to a personal voice mail message from a long distance caller. Upon playing the message, the CIC auto attendant system allows the employee to reply back to the message, which the employee chooses to do. CIC dials the long distance number, the call connects, and it is charged to the company bill.

Prevention

You can prevent this type of toll fraud by blocking the employee from initiating all long distance calls, including the ability to reply to long distance calls. In Interaction Administrator you can set Basic Security rights so that the employee does not have the option to initiate Long Distance, International, or 900 Service calls. These rights can be set for an individual user, a workgroup, or the entire company. For more information, see the [Configuration Property Inheritance](#) and [User Rights](#).

Set the forward number to a long distance number

Description

An employee sets the user status to **Available, Forward**. However, the forward number the employee enters is the long distance number of a friend that the employee wants to call. Later, the employee calls his/her own extension via a corporate toll-free number. CIC automatically forwards the call to the friend's long distance phone, the call connects, and it is charged to the company bill. For more information, see the help for the CIC clients.

Prevention

Again, the key to preventing this type of toll fraud is to block the employee from initiating long distance calls, which includes forwarding a call to a long distance number. Interaction Administrator allows you to set Basic Security rights so that the employee does not have the option to initiate Long Distance, International, or 900 Service calls. These rights can be set for an individual user, a workgroup, or the entire company. For more information, see the [Configuration Property Inheritance](#) and [User Rights](#) help.

Set the forward number to a local number and call from long distance

Description

An employee sets the user status to **Available, Forward**. However, the forward number the employee enters is a friend's local phone number. Then, from a long distance number (for example while on vacation in another state) the employee calls his/her own extension using a corporate toll-free number. CIC automatically forwards the call to the friend's local number and the call connects. For more information, see the *Forward Calls* help topic in Interaction Client.

This scenario is similar to the previous one. However, instead of CIC forwarding a call from a local number to a long distance number, now CIC is forwarding a call from a long distance number to a local number. In either case, the result is the same—the employee has used a company phone line to make an unauthorized long distance call.

Prevention

Preventing this type of toll fraud activity requires you to block the employee from setting the forward number to a local external number. There are several ways to do this:

- Block the employee's ability to configure the Interaction Client

One simple way to prevent this type of toll fraud is to block the employee from making **any** configuration changes to the Interaction Client, including the ability to set a forward number. In the Interaction Administrator you can set the Basic Security rights so that the employee does not have the rights to view and modify the Configuration Page on Interaction Client. You can set these rights for an individual user, a workgroup, or the entire company. For more information, see the [Configuration Property Inheritance](#) and [User Rights](#) help topics.

- Remove the "Available, Forward" status

Another simple way to prevent this type of toll fraud is to completely remove the **Available, Forward** status. In Interaction Administrator's **Status Messages** container, you can delete this status. This solution is more extreme because removing a status can be performed only on a *global* level. In other words, if you remove this status for one employee, it will also be removed for the entire company. For more information, see the [User Configuration](#) help topic.

- Configure CIC so that it forwards calls only to internal numbers

A final way to prevent this type of toll fraud is to configure CIC so that **all** employees—both those in and out of the office—must set their forward numbers to internal extensions. Again, this prevents the forward number feature from being abused, while still allowing it to be used for work related purposes. To configure CIC so that it requires all employees to set their forward numbers to internal extensions, insert a lookup step in the **SystemIVRRemoteEmployee** handler. The lookup step should check to see if the forward number is a valid extension. If it is valid, the handler would allow the employee to set personal attributes; if it is not valid, the handler could play an "Invalid Number" message and permit the employee to reenter the forward number. For more information on this handler, see the *SystemIVRRemoteEmployee* help topic in Interaction Designer.

Related topics

[System security for CIC](#)

Client Admin Components Login Details

The first time a CIC client application is started (without explicitly passing a CIC user name and password) after logging in to the network domain, the application calls the EICAuth COM object on the CIC server. The EICAuth program attempts to authenticate the network domain user who started the application. At this point, the Notifier compares the NT Domain User field values (see the [User Configuration](#) property page in Interaction Administrator) stored on the CIC server with the domain/account name in use on the client workstation. If it finds an exact match, the CIC client connection succeeds and the login authentication information for that user is cached on the client workstation for subsequent logins (during the remainder of the current Windows session). If the Notifier does not find an exact match between the client's domain/user name and the user configuration data on the CIC server, the login is denied and the client application can prompt the user to manually log in.

Related topics

[System security for CIC](#)



Collective concepts

A collective is a group of CIC servers that communicate with each other and that share resources. In a collective, CIC servers act as **home sites** and **peer sites**.

The **home site** for a user depends on the user's configuration. By default, a user's home site is the site that the user is logged on to. However, you can configure a "permanent" home site for a user, if necessary.

The collective for a user looks different on each of the CIC sites that the user logs on to. For example, suppose that CIC servers in Indianapolis, Indiana, Deerfield Beach, Florida, and Aix, France, all communicate with one another. For example, if a user logs on in Indianapolis, then Indianapolis is the user's home site and Deerfield Beach and Aix are peer sites.

A user in a collective can log on to any of the collective's sites. For example, a user in Indianapolis can see whether or not another user in Deerfield is on the phone. If a user visits Indianapolis, someone dialing that user's extension from any of the other sites is automatically connected to the phone that person is currently logged on to in Indianapolis. When new users are added in any of these cities, the users automatically appear in the company directory, which is viewable from all of the other cities.

A user can be shared between the collective site and workgroups that span the collective. User data is replicated between collective sites, but not all users are replicated. Only users that are members of spanning workgroups are replicated.

All calls or workgroup-related activity for the user are routed to the last CIC site the user logged on to.

For more information, see the *Multi-Site Technical Reference* document in the PureConnect Documentation Library on your CIC server.

Overview of the process to set up a collective

To set up a collective, in the **Collective** container, use the **Home Site** subcontainer to configure the home site. Then use the **Peer Sites** container to add one or more peer sites.

Related topics

[Home site concepts](#)

[Configure a home site](#)

[Peer site concepts](#)

[Add a peer site](#)

[Configure a peer site](#)

[Configure trusted access for a peer site](#)

[User extensions that span peer sites](#)



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Related topics

[Home site concepts](#)

[Configure a home site](#)

[Peer site concepts](#)

[Add a peer site](#)

[Configure a peer site](#)

[Configure trusted access for a peer site](#)

[User extensions that span peer sites](#)



Home site concepts

Use the **Home Site Configuration** tab to define the specific characteristics of a CIC server that is participating in a collective as a home site.

If you have multiple CIC servers at different sites that need to send the output of their report logs to a single database server via a LAN, WAN, or some other remote connection, configure a unique site identifier for each site in the **Home Site** container. All CIC report logs include a SiteID column to identify the site for each row of data in the logs.

For example, suppose a company has three call center offices. Each site uses CIC. The headquarters office has a central SQL Server machine that hosts all of the call center report logs. To uniquely identify each call center in the report log data, assign a unique site identifier to each site. Also, configure the data source for each CIC server to point to the central database server that hosts the CIC SQL Server database.

To ensure that all report log data is captured correctly, implement and test this part of the site configuration before you start the CIC server.

Note: For a multi-site reporting system, configure the CIC data source for each of the CIC servers on the network to point to the same SQL server. Then populate the **ServerReportLogDataDestination** CIC server parameter with the following value:

PMQ:<The name of the IA data source that points to the SQL server>

Related topics

[Configure a home site](#)

[Collective concepts](#)



Configure a home site

To configure a home site

1. In the **Collective** container, double-click the **Home Site** container.
 2. In the list view window, right-click **Configuration**.
The **Home Site Configuration** dialog box appears.
 3. In the **Site Identifier** box, type a number that uniquely identifies this site. This number appears in all CIC report logs and can be used to create custom queries that isolate data for this site. The default value is 0 (zero). For the purposes of reports, a 0 means that a single CIC server is writing data to the report logs.
 4. In the **Password** box, type a password for the site. Passwords are case-sensitive and can be any length or character. The next time that you open this dialog box, the **Password** and **Confirm** boxes will display 16 asterisk (*) characters, regardless of the length of the password that you type now.
- Tip:** You can change the password whenever you open the **Site Configuration** dialog box.
5. In the **Confirm** box, re-type the password.
 6. In the **Note ID Dial String Digits** box, type a two-digit value. This value identifies a multi-site call when it is sent to a peer site through an established tie-line connection. For example, *90.
 7. Do one of the following:
 - If you have a switchover environment, complete steps 8 and 9.
 - Otherwise, skip to step 10.
 8. In the **Switchover Server Configuration** section, in the **Switchover Server A** and **Switchover Server B** lists, select the locations of the switchover servers. For example, you may have switchover servers in different geographic locations. This location is not the computer name. This location of a switchover server allows you to change the codecs that is associated with the server.
 9. Type the server names.
 10. To activate the site as a home site in a collective, select the **Activate this site to participate in a multi-site configuration** check box.
 11. Click **OK**.

Related topics

[Home site concepts](#)

[Collective concepts](#)



Peer site concepts

You can add one or more **Peer Sites** to a collective. Each site can have its own configuration.

Related topics

[Add a peer site](#)

[Configure a peer site](#)

[Configure trusted access for a peer site](#)

[Collective concepts](#)



Add a peer site

To add a peer site to a collective

1. In the **Collective** container, double-click the **Peer Sites** container.
2. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
3. Type the name of the peer site.

Note: The name of the peer site must match an existing site name.

4. Click **OK**.
The **Peer Site Configuration** dialog box appears.
5. Configure the peer site. For more information, see *Configure a peer site*.

Related topics

[Configure a peer site](#)

[Configure trusted access for a peer site](#)

[Peer site concepts](#)

[Collective concepts](#)



Configure a peer site

These instructions assume that you have added a peer site to the collective and want to edit its configuration.

If you are in the process of adding a peer site, start with step 3.

To configure a peer site

1. In the **Collective** container, double-click the **Peer Sites** container.
 2. In the list view window, right-click the name of the peer site that you want to configure. The **Peer Site Configuration** dialog box appears.
 3. In the **Site Identifier** box, type a number or a set of numbers that identifies the peer site. The site identifier (site ID) allows peer sites to connect to one another. The default value is 0 (zero). You cannot use a host name.
 4. In the **Phone Number** box, type the telephone number of the peer site. CIC uses this telephone number to route calls to a user who is logged on to the peer site.
 5. In the **Password** box, type the password of the peer site. Passwords are case-sensitive. Use the password you set when you configured the site as a home site. For more information, see *Configure a home site*.
 6. Do one of the following:
 - If you have a Multi-Server Administration license, complete steps 7 and 8.
 - Otherwise, skip to step 9.
 7. In the **Site Address** box, type the IP address or host name for this peer site.
 8. In the **Location** list, select a location. For more information, see *Locations*.
 9. Sometimes peer sites are connected via tie lines as well as via PSTN. When a tie line has been established between two sites CIC has a **Tie Line Optimization** feature that allows it to process multi-site calls more efficiently. Do you want to use the Tie Line Optimization feature?
 - If yes, select the **Use Note ID Dial String** check box.
 - Otherwise, skip to the next step.
 10. Press **Check Site** to verify that the peer site be reached with the site identifier and that the password for the peer site is correct.
 11. Press **Synchronize** to force the local site and the peer site to synchronize.
- Note:** If you change the peer site name or the site ID, you must press **Synchronize** in order to save the change.
12. Click **OK**.

Related topics

[Add a peer site](#)

[Configure a home site](#)

[Locations](#)

[Configure trusted access for a peer site](#)

[Peer site concepts](#)

[Collective concepts](#)

Trusted access concepts

Trusted access refers to the ability of selected users to publish and manage handlers or to act as master administrators, when they are logged on to a peer site.

Note: Trusted access applies only to users who the appropriate security right(s) and access right. Fore more information, see [Security](#).

When trusted access is configured, a user must have the appropriate security right(s) in order to perform the tasks:

- An Interaction Designer user must have the **Publish** right in order to update production handlers or publish new handlers on the CIC server.
- An Interaction Designer user must have the **Manager** right in order to add or remove production handlers from the CIC server.
- A user must have **Master Administrator** access in to act as a master administrator.

For information on assigning the security rights, see [Security](#).

Related topics

[Security](#)

[Configure trusted access for a peer site](#)

[Peer site concepts](#)

[Configure a peer site](#)

[Collective concepts](#)

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For information on assigning the security rights, see [Security](#).

Related topics

[Security](#)

[Configure trusted access for a peer site](#)

[Peer site concepts](#)

[Configure a peer site](#)

[Collective concepts](#)



User extensions that span peer sites

It is always important to plan for growth when you create user extensions in Interaction Administrator. Consider both the growth of your current site and the growth of other sites or other CIC systems.

Note: Avoid duplicate user extensions.

When multiple CIC sites form a collective, CIC replicates user information throughout the collective. A user who spans sites (a "spanner") on a CIC server that is part of a collective cannot have the same user extension as another spanner on another CIC server in the collective.

For example, suppose User A on Server 1 is part of a workgroup that spans sites. User A has an extension of 8001. User B on Server 2 is part of a workgroup that spans sites. User B also has an extension of 8001. When their user data is replicated throughout the collective, they will have a problem getting calls and other services.

Use careful planning if you change user extensions. The extensions must be unique if a user is added to a workgroup that spans sites. Here are some suggested approaches:

- Change the user extension altogether. For example, if User A on Server 1 had an extension of 8001, change the extension to 8801.
- Add a digit to the beginning of the user's extension. For example, if User A on Server 1 has an extension of 8001, then change the extension to 18001. This extension means "Server 1, User A extension 8001." Likewise, if User B on Server 2 has an extension of 8001, then change it to 28001. This extension means Server 2, User B extension 8001.

Related topics

[Collective concepts](#)

[Configure a peer site](#)

Assistants

This section contains help about the Assistants available in Interaction Administrator:

[Add Stations Assistant](#)

[Add User Assistant](#)

[Add Location Assistant](#)

[Managed IP Phone Assistant](#)



Add Location Assistant

The Location Assistant steps you through the location configuration tasks in a linear fashion, so there is no need to manually open each related container or sub-container to complete the new location configuration.

Related topics

- [Overview](#)
- [Assign Stations](#)
- [Add Gateway](#)
- [Call Routing](#)
- [Select Media Server](#)



Location Assistant Overview

This page lists each location configuration task and provides a summary of each task. The check box next to each task indicates if

the task needs to be completed (, gray checkmark), has been completed (, green checkmark), is optional (no checkmark), or

cannot be completed without other prerequisite configuration (, red "X"). You can also choose a task listed on the left to further configure or examine this location's behavior.

Click **Next** to go to [Assign Stations](#).

Related Topics:

[Assign Stations](#)

[Add Gateway](#)

[Call Routing](#)

[Select Media Server](#)

[Regionalization](#)



Assign Stations

Use this page to assign stations to this location. What the Assign Stations page displays depends on whether the prerequisite station line group SIP Station Transport configuration exists.

Station Support Exists

If station support exists, a summary of what stations are assigned to this location is displayed. Click **Add or remove stations** to modify the station members that are in the station line group assigned to this location.

No Station Support Exists

If no station support exists, you are prompted to create a station line group in the first task, Add Station Support. After adding station support, you can return to this task by selecting **Assign Stations** on the left, or clicking **Back**. Once station support exists, you can click **Add or remove stations** to modify the station members that are in the station line group assigned to this location.

Click **Next** to go to [Add Gateway](#).

Related Topics:

[Location Assistant Overview](#)

[Add Gateway](#)

[Call Routing](#)

[Select Media Server](#)

[Regionalization](#)



Add Gateway

This page allows you to use line objects to create a SIP gateway associated with this location. Click **Add or remove gateway lines...** to open the **Assign Endpoints** dialog box. From this dialog box, you can click **Add Lines** to add lines as endpoints or to change the line endpoint memberships for this location. You can also click **Create a new line...** to create a new SIP line.

Once you add lines to the location, click **Next** to go to **Call Routing** and make sure that the dial plan is configured properly.

Related topics

[Location assistant overview](#)

[Assign stations](#)

[Call routing](#)

[Select media server](#)

[Regionalization](#)



Call Routing

This page displays a table of this location's gateway usage within the dial plan. The table displays each line, its dial group, and indicates whether it's used in the dial plan. This task helps the user set up dial plan entries to help route calls for the gateways associated with a location. If no gateways have been added, you're prompted to return to the [Add Gateway](#) task.

Click **Update the dial plan for these gateways...** to open the first page of the Dial Plan Call Routing Wizard, [Select a Gateway Line and its Dial Group](#). The wizard allows you to configure dial groups and specific dial plan entries.

Click **Review the current dial plan...** to open the Regional Dial Plan page in the Phone Numbers sub-container listed under the System Configuration container. The Regional Dial Plan page displays the associated attributes of the dial plan.

After updating the dial plan for the gateways, or reviewing the current dial plan, click **Next** to go to [Select Media Server](#).

Related Topics:

[Location Assistant Overview](#)

[Assign Stations](#)

[Add Gateway](#)

[Select Media Server](#)

[Regionalization](#)



Select a Gateway Line and its Dial Group

This page shows a list of lines and any associated dial group in this location. A dial group must have a line assigned to it to be a part of the dial plan. If the dial group is part of the dial plan, the **Dial Plan** column will display **Yes:** and which feature (i.e., emergency, local routing or toll avoidance) it supports. For example, if the dial group is part of the dial plan and is supports emergency dialing, **Yes: 911** may be displayed.

Click **Next** to go to [Select a Call Routing Feature](#).



Select Media Server

Use this page to associate a media server with this location.

Add or remove media servers...

Click this link to add or remove a media server associated with this location. Select **Add** or **Remove** from the **Assign Endpoints** page.

Click **OK** to save the media server changes. Click **Close** to save all the changes made to this location and to close the [Location Assistant](#).

Related Topics:

[Location Assistant Overview](#)

[Assign Stations](#)

[Add Gateway](#)

[Call Routing](#)

[Select Media Server](#)

[Regionalization](#)



Managed IP Phone Assistant

The Managed IP Phone Assistant allows you to create new managed IP phones and the associated SIP stations by importing.

The advantage of managed IP phones and SIP stations is ease of configuration. All configuration is done in Interaction Administrator. The IC ProvisionServer subsystem takes care of “serving” the phone its configuration and manufacturer-specific firmware through a registration group. Using Interaction Administrator to manage IP phones also eliminates the need going forward to maintain SIP phone configuration (.cfg) files.

Importing CSV Lists

Use the .CSV **import** option if you want to create multiple new managed IP phones and the associated SIP stations.

For example, you have purchased 50 Interaction SIP Station or Polycom phones, and you want to create new managed IP phones and the associated SIP stations for all 50 of the phones at the same time, each having different names and extensions.

Prerequisites for import:

- Create one or more [managed IP phone templates](#) based on managed IP phone type, manufacturer, model, location, language, audio protocol, station appearance, etc.
- Create one or more [CSV Managed IP Phone Lists](#).

Migrating: You can use the migrate option if you already have SIP stations in Interaction Administrator and you want to migrate these station appearances into managed IP phones. For example, you are updating CIC and you have 100 existing Polycom SIP stations already configured in Interaction Administrator. You want to migrate all 100 stations to managed IP phones at the same time.

You must know the location and format of the SIP configuration (.cfg) files when importing. Also, see the [SIP Phone Information Update](#) server parameter for help during the migration process.

Notes: The Managed IP Phone Assistant after business hours because the procedure requires significant server resources.

After running the Managed IP Phone Assistant, the managed IP phones must be [provisioned](#). For more information, see *CIC Managed IP Phones Administrator's Guide* and *CSV List Import Technical Reference* in the PureConnect Documentation Library.



Add Managed IP Phones

To create new managed IP phones, import new SIP stations from a CSV file or migrate existing SIP stations based on the manufacturer.

To add managed IP phones

1. Do one of the following:
 - Select the **Create Managed IP Phones From a CSV File** option. Then do the following:
 - Select the .csv file
 - Review .csv file import results
 - Correct errors if detected and reload the .csv file
 - Commit changes
 - Select the **Create Managed IP Phones By Migrating Existing Stations to Phones on a Per Manufacture Basis** option. Then do the following:
 - Select the manufacturer
 - Specify the format strings for the phone names
 - Enter the directory location that contains the IP phone configuration (*.cfg) files
 - Select items to migrate
 - Build migration items
 - Review current state of migration items
 - Correct errors or make changes to name, model, or type
 - Back up directory services
 - Convert migration items into phones
 - Display migration results
2. Click **Next**.

Related topics

[Create managed IP phones From a CSV File](#)

[Create managed IP phones by migrating existing stations to phones on a per manufacture basis](#)



Create Managed IP Phones From a CSV File

Create managed IP phones based on:

- Template containing name, template, proxy group, extension, identification address, label, and address information for the appropriate IP phones in your CIC system, and/or...
- Type, Manufacturer, and Model containing name, type, model, manufacturer, proxy group, extension, identification address, label, and address information for the appropriate IP phones in your CIC system.

Note: The CSV file must be in UTF-8 format. For more information, see [CSV files with non-English column headings](#)

Click **Browse** to select the CSV file that contains the managed IP phones that you want to create and their additional information.

To see sample data, click **Example**. Two sample Managed IP Phones CSV lists corresponding to the two types of CSV lists are available to download from the Product Information site:

- CSV Managed IP Phone List-Template.csv and CSV Managed IP Phone List-Template.xlsx
- CSV Managed IP Phone List-TMM.csv and CSV Managed IP Phone List-TMM.xlsx

The managed IP phones CSV files are formatted in two sections; a header section, and a data section. The header is the first row in the file and contains the names of all columns to import. The two sample lists are described below.

CSV Managed IP phone-Template list supports the following columns:

Name (Required): This is the IP phone name.

Template (Required): Type the managed IP phone template for this IP phone. The template name must be identical to one of the templates you have created.

Proxy Group: Type the Registration (Proxy) Group to be used with the managed IP phone template for this IP phone. If this value is left blank, Managed IP Phone Assistant will fill in the Registration Group defined in the template.

Extension: Type the primary appearance extension number for this IP phone.

Identification Address: If you know the IP address for this IP phone ahead of time, type the SIP connection address in the form of sip:xxx@[IPaddress]:[portnumber], e.g., sip:320@172.17.238.68:5060.

If you do not know the IP address, leave this value blank. It will be filled in when the phone registers with the CIC server following provisioning.

Label: (Polycom only) Type the label that will be used for the primary appearance of this IP phone and the associated SIP station. Typical values for "label" are the station extension or the user's extension (in the case where one user will almost always be using the station).

When this value is left blank, Managed IP Phone Assistant will fill in the Name attribute (IP phone name).

Address: If you know the address for this IP phone ahead of time, type:

- **For Polycom phones**: The MAC address of the IP phone.
- **For SIP Soft Phones**: The full computer name for the IP phone. To make sure you get the full computer name, navigate to My Computer....Properties....Computer Name and note the **Full Computer Name**. For example: PattyJ.acme.com.
- **For Interaction SIP Station phones**: The MAC address of the IP phone. Interaction SIP Station MAC addresses always start with 00.26.fd.

If you do not know the address ahead of time, you will need to manually provision the Polycom phone or SIP Soft Phone using the provisioning IVR. (Interaction SIP Station phones cannot be manually provisioned.)

CSV Managed IP Phone - TMM list supports the following columns:

Name (Required): Type the name of the IP phone.

Type (Required): Type the type of IP phone – Workstation or Stand-alone Phone. For Interaction SIP Station phones: Type Workstation. (Stand-alone Phone is not supported).

Manufacturer (Required): Type the IP phone manufacturer. Currently, the supported manufacturers are Polycom and ININ (Genesys).

Model (Required): Type the phone model based on the manufacturer. If the manufacturer is Polycom: Type the Polycom phone model. If the manufacturer is ININ: If the manufacturer is ININ, type Soft Phone or Interaction SIP Station.

Proxy Group: Type the Registration (Proxy) Group to be used with the managed IP phone template for this IP phone. If this value is left blank, Managed IP Phone Assistant will fill in the Registration Group defined in the template.

Extension: Type the primary appearance extension number for this IP phone.

Identification Address: If you know the IP address for this IP phone ahead of time, type the SIP connection address in the form of sip:xxx@[IPaddress]:[portnumber], e.g., sip:320@172.17.238.68:5060. If you do not know the IP address, leave this value blank. It will be filled in when the phone registers with the CIC server following provisioning.

Label (Polycom only): Type the label that will be used for the primary appearance of this IP phone and the associated SIP station. Typical values for "label" are the station extension or the user's extension (in the case where one user will almost always be using the station). When this value is left blank, Managed IP Phone Assistant will fill in the Name attribute (IP phone name).

Address: If you know the address for this IP phone ahead of time, type:

- For Polycom phones: The MAC address of the IP phone.
- For SIP Soft Phones: The full computer name for the IP phone. To make sure you get the full computer name, navigate to My Computer....Properties....Computer Name and note the Full Computer Name. For example: PattyJ.acme.com.
- For Interaction SIP Station phones: The MAC address of the IP phone. Interaction SIP Station MAC addresses always start with 00.26.fd.

If you do not know the address ahead of time, you will need to manually provision the Polycom phone or SIP Soft Phone using the provisioning IVR. (Interaction SIP Station phones cannot be manually provisioned.)

Click **Yes** to continue to [Saving Managed IP Phones](#). If the assistant encounters errors while parsing the CSV file a message is displayed. Click [Errors](#) to view the status of the errors and a description:

- Warning error - Managed IP Phone Assistant cannot verify one or more values. You can continue with the import, but some of those values will not be imported.
- Severe error - Managed IP Phone Assistant detects no columns or the file could not be opened. You cannot continue with the import.

CSV files with non-English column headings

If you want to use a CSV file that uses non-English column headings or non-ANSI data, you must save the data as UTF-8 first. Otherwise, the data does displays incorrectly and you receive error messages.

To save a CSV file in UTF-8 format

1. Open the Excel file (.xls, .xlsx).
2. From the File menu, choose **Save As**.
3. From the **Save as type** list, select **CSV (Comma Delimited) (*.csv)**.
4. Click the Windows **Start** menu, click **All Programs**, click **Accessories**, and then click **Notepad**.
5. From the **File** menu, click **Open**.
6. In the list next to the **File name** box, select **All Files**.
7. Browse to your .CSV file, select it, and then click **Open**.
8. From the **File** menu, click **Save As**.
9. In the **Encoding** list, select **UTF-8**.

Note: Do NOT use ANSI or you lose all accents and other language-specific characters. After selecting UTF-8, then save the file to a slightly different file name from the original.

10. In the **File name** box, type a name that is similar to the original file name.
11. Click **Save**.



Saving Managed IP Phones

If you are ready to save the import results, click on **Commit Changes**. Click **Back** to make changes.

It may take several hours to import all the IP phones, depending on the number of IP phones and station appearances being created for each phone. On average, expect the import to take 1 to 2 seconds per IP phone with a single station appearance.

If you imported a CSV list based on type, manufacturer, and model ([CSV Managed IP Phone TMM List](#)), clicking **Commit Changes** takes you to the following pages:

- [Access Control](#)
- [Station Appearance Licenses](#)
- [License Allocation Results](#)

If you imported a CSV list based on template ([CSV Managed IP Phone Template List](#)), clicking **Commit Changes** takes you to the [License Allocation Results](#) page.



Access control

This page may appear when you run the Add Stations Assistant or the Managed IP Phones Assistant.

Note for the Add Stations Assistant: If you created a dial plan in IC Setup Assistant, select the dial plan classifications for the new stations. If you did *not* create a dial plan in IC Setup Assistant, no Available classifications appear. After you create the dial plan in Interaction Administrator after installation, run the Add Stations Assistant in Interaction Administrator and specify the outbound dialing privileges for your stations.

Use the Access control page to select the dial plan classifications for new stations. These classifications determine the outbound dialing privileges for the new stations.

Select one or more classification names from the list of **Available** classifications and add them to the **Currently Selected** list to give the selected dialing privileges to this station.

If someone attempts to place a call from a station and the dialed phone number is not supported in one of the phone number classifications for the station, CIC plays a prompt that says that the station does not have sufficient dialing privileges to place the call.

Stations Appearance Licenses

Use this page to assign licenses to the station appearance.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station will not play. A non-audio station may be used or for non-audio interactions.

Remote Stations must be assigned a Basic Station license. If a user logs into a remote station it will also need to acquire a Client Access license, which delivers the previously defined price list functionality of a "Business User". If a TUI login is performed against dynamic remote stations, no Client Access license is acquired.

Client Access License

Assigning this license to the station allows the client functionality of the CIC clients. Without this license assignment, the CIC clients will not run on this station.

ACD Access License

Select this check box if this workstation is an ACD station, then select the type of ACD license. These are the available types of ACD licenses:

- Media 1 - This license allows 1 interaction type at a given time.
- Media 2 - This license allows 2 interaction types at a given time.
- Media 3 Plus - This license allows 3 or more interaction types at a given time.

Note: Failure to have a ACD Access License assigned to the station will prevent that station from being ACD active.

Interaction Process Automation License

Select the **Interaction Process Automation** check box if this user is an Interaction Process Automation user, and then select the type of license to assign to that user.

These are the available types of Interaction Process Automation licenses:

- **Direct Routed Work Items** (I3_ACCESS_IPA_USER) license: Enables you to launch any process to which you have rights. It also enables you to receive Work Items that are directly routed to you.
- **Group Routed Work Items** (I3_ACCESS_IPA_USER_ACD) license: Enables you to receive Work Items that are either routed to you directly or as a member of a workgroup (similar to an ACD queue).
- **Process Monitor** (I3_ACCESS_IPA_MONITOR) license: Enables you to view process status and details in the Process Monitor or to use Process Reporting in IC Business Manager Applications.

- **Process Designer** (I3_ACCESS_IPA_DESIGNER) license: Enables you to use the Process Designer to create and modify Interaction Process Automation processes.

Note: Each license in this list enables you to **use the Interaction Process Automation features included in all the previous licenses in the list**. That is, the Group Routed Work Items license includes the Direct Routed Work Items license. The Process Monitor license includes both of the Routed Work Items licenses. The Process Designer license includes all the other licenses.

For more information about designing processes, refer to the *Interaction Process Automation Technical Reference* and the Process Designer help.

License List

This list displays additional licenses that are available. Select the licenses you wish to assign to this station.

Note: For specific license information on each type of license, see *PureConnect Licensing Overview Technical Reference* in the PureConnect Documentation Library.

Click **Next**.



SIP station appearances settings

This page is not available when setting options for a Global SIP Station.

CIC's shared appearances feature allows SIP stations to use boss-assistant (primary-secondary) settings and group extensions settings to define relationships between the stations. By configuring stations to use a shared appearance, users have the following abilities:

- All members of a shared appearance group are alerted when a call alerts for the primary number.
- All members of a shared appearance group can determine that the primary number is in use.
- Users of secondary appearances can answer calls as if they are using the primary number.
- Users of secondary appearances can place calls as if they are using the primary number.

Notes: This feature applies to Polycom phone models IP301, IP430, IP501, IP550, IP601, IP650 only. Similar functionality is available via the features of the CIC clients.

For more information on configuring SIP Station shared appearances, see [Managed IP Phone Configuration - General](#).

Also see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.

Use this page to add appearances to SIP stations. A station can have one or more shared appearance entries, where each shared appearance has:

- The name of the other station on which the **Primary Station** is appearing
- A **Number of Call Appearances** setting (similar to the existing SIP station, but is a separate setting for the shared line appearance itself)
- An **Identification Address** setting (similar to the existing SIP station, but it is a separate setting for the shared line appearance itself)
- A **Connection Address** setting (similar to the existing SIP station, but it is a separate setting for the shared line appearance itself)

Note: You can create a maximum of 20 appearances per station.

The page contains two lists, **Appearance For:** and **Appearance On:**. The **Appearance For** list contains the stations that will appear on the current station being edited. The **Appearance On** list contains the stations on which the current station will appear.

Select the list in which you wish to add an entry and click [Add](#).

Buttons

Use the **Up** and **Down** buttons to arrange the order of the entries in the **Appearances For** list. This order specifies the way shared line appearance buttons appear in Interaction Client.

Click **Modify** to edit settings for an existing entry or click **Delete** to remove an entry.



License Allocation Results

Use this page to view license allocation results. License errors can occur if the total license count is exceeded. If this occurs, or if different licenses need to be specified, use the [license allocation](#) page to make changes.

Click on **Review** to display any licensing errors.



Complete the Managed IP Phone Assistant

The Managed IP Phone Assistant process is now complete. Click **Finish** to exit the assistant.

In the **Managed IP Phone** container, notice the new managed IP phones listed in the right-hand pane:

- The new managed IP phones will have a Status of "Not registered". Their status will become "Up-to-date" on the phones' next SIP registration.
- If you did not supply the Address attribute for one or more managed IP phones in your CSV Managed IP Phone list, they will have a status of "Not provisioned". Their status will become "Up-to-date" once you provision them using the Polycom phone or SIP Soft Phone provisioning IVR.

In the **Stations** container, notice the SIP station appearances associated with the new IP phones:

- The SIP stations associated with managed IP phones are of the type **Managed Workstation** or **Managed Stand-alone Phone**.

Tip: To make sure the list of managed IP phones is up-to-date at any time, click **F5** to refresh the screen.

[Information on migration](#)



Select Manufacturer

If you select **Create Managed IP Phones By Migrating Existing Stations to Phones on a Per Manufacture Basis**, you will need to choose the manufacturer of the stations you wish to migrate.

Select **Polycom** and click **Next** to go to the [Select Default Model](#) page.



Select Default Model

Use this page to select the default phone model that should be used if the model cannot be derived from the stations on the phones being migrated.

For example, SIP stations associated with a Polycom configuration file may not have a manufacturer or model set in Interaction Administrator. By selecting a default model, the Managed IP Phone Assistant knows what settings to use for the migration.

The Polycom models available are:

- IP300
- IP301
- IP320
- IP321
- IP330
- IP331
- IP335
- IP4000
- IP430
- IP450
- IP500
- IP501
- IP550
- IP560
- IP600
- IP6000
- IP601
- IP650
- IP670
- IP7000
- SL8440
- SL8450
- TRIO8500
- TRIO8800
- VVX101
- VVX150
- VVX201
- VVX250
- VVX300
- VVX301
- VVX310
- VVX311
- VVX350
- VVX400
- VVX401
- VVX410
- VVX411
- VVX450
- VVX500
- VVX501
- VVX600
- VVX601

Select the default model on the pull-down menu, and click **Next** to go to the [New Phone Naming](#) page.



New Phone Naming

Use this page to specify a format string that specifies the name for the assistant to use for the migration item. The assistant also creates an associated SIP station with the same name. There are two different substitution strings that can also be used with a name format to create phone names.

Phone Name Format

This is the name of the first private station display name that is added to the migration item. Use a format string to define the phone's name when created. Use one or more substitution strings with a format string, so that every phone created will have meaningful and unique name.

There are two different substitution strings:

- `$FirstPrivateStation$` - This is the name of the first private station display name as defined in the `reg.x.displayName` attribute found in the SIP phone's `.cfg` file.) that is added to the migration item. (For more information on `.cfg` file attributes, click [here](#).)
- `$MAC$` - This is the MAC address of the phone being migrated.

By default, the assistant uses the `$FirstPrivateStation$` substitution string. A substitution string can be used separately, in combination with the other substitution string, in combination with a format string, or a format string can be used alone. For example:

- `$FirstPrivateStation$`
- `$MAC$`
- `$FirstPrivateStation$-$MAC$-SecondFloor`
- `SecondFloorPhone` – Using just text, the assistant appends the text with `_1`, `_2`, and so on after naming the first IP phone and associated SIP station.

If a single format string of `ManagedPhone` is used without a substitution string, then all new phone names created would be named "ManagedPhone_1", "ManagedPhone_2", etc. If the substitution string `$MAC$` is used together with the format string of `ManagedPhone`, such as `ManagedPhone - $MAC$`, then the MAC address for each phone would be substituted in the new name, i.e., "ManagedPhone - 0004f2008100".

Note: The substitution strings are case-sensitive manner. For example, if `Phone - $mac$` is specified, `$mac$` will not resolve to the MAC address. The string must be entered as `Phone - $MAC$` for proper MAC address resolution.

Sample Phone Name

The sample phone name field shows how the phone name format field will resolve.

Click **Show Available Substitution Strings** to view the substitution strings.

Click **Next** to go to the [Phone Configuration File Directory](#) page.



Phone Configuration File Directory

Enter the directory or click **Browse** to select the directory where the existing IP phone configuration (.cfg) files are located. The Managed IP Phone Assistant searches this directory for .cfg files and displays a list of files found in the next page, [Select the Items to Migrate](#). The assistant uses the settings in the selected .cfg files to create managed IP phone objects.

Note: For the assistant to recognize a phone configuration file, the file must:

- Be in the XXXXXXXXXXXX.cfg format, where XXXXXXXXXXXX is a 12 character alpha-numeric MAC address
- Contain an APPLICATION XML element at the root that has a CONFIG_FILES XML attribute that specifies the other phone configuration files

Each .cfg file that meets this criteria will be displayed as a selectable item to migrate. The assistant must have read access to the phone configuration directory specified. See [Frequently Asked Questions](#) for more information on .cfg files and the Managed IP Phone Assistant.

About the Managed IP Phone Assistant's Migration of Polycom Configuration Files

The assistant reviews the data in the .cfg files, and bases the migration items that it will build on the settings that are known in Interaction Administrator. The assistant displays migration item details, including any errors, in [migration information](#). For the best and most error-free migration process, it is recommended to use the [IP Phone Configurator](#) utility to generate the SIP stations and SIP phone configuration files. (See *CIC Managed IP Phones Administrator's Guide* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.)

Not all settings, such as custom settings in Polycom configuration files (and where the configuration files have been set up manually instead of using the IP Phone Configurator), may be recognized by the assistant. Settings that are not recognized may not be written to the new managed IP phone's configuration file when provisioning.

Note: If there is a needed setting that is not recognized by the assistant, it is possible to use "custom override attributes." For more information, see the *IC Managed IP Phones Administrator's Guide* in the CIC Documentation Library.



Select the Items to Migrate

Use this page to select the items to migrate by moving the items from the **Available** list to the **Selected** list. The items displayed in the **Available** list are the Polycom configuration files that the assistant found in the directory specified in the previous page, [Phone Configuration File Directory](#).

Select the items to migrate, and click **Next** to go to the [Build Migration Items](#) page. At least one item must be selected to continue.



Build Migration Items

This page shows that the migration process is going to begin building migration items, and it lists the number of migration items that will be included in the process.

Click **Next** to begin the process of building migration items, and to go to the next page, [Current State of Migration Items](#).



Current State of Migration Items

Use this page to view summary information of the migration items that have built. The page displays items with errors, items with warnings, and items with no errors or warnings.

- Items with errors: The assistant can *not* create a managed IP phone from these items.
- Items with warnings: These items are candidates for migration at the current state, and the assistant *may* be able to create a managed IP phone from these items.
- Items with no errors or warnings: These items are good candidates for migration at the current state, and the assistant will most likely be able to create a managed IP phone from these items.

Note: Please review the migration item details. The assistant may have detected warnings while building the migration items, but some warnings may not impact whether an item is a candidate for migration and creation of a managed IP phone. For example:

A Polycom configuration file selected for migration has two registrations specified in it. The assistant matches the first registration to a SIP station in Interaction Administrator, but does not match the second registration to a SIP station or shared appearance. In this migration item's current state, the assistant can still create a managed IP phone from it, because it does recognize the one station (first registration) which would be the private station, and therefore there are not any true errors.

It is strongly recommended to review migration item details by clicking **Show Item Details** to display the [migration information](#). Item details show what happened during the building of the migration items, and shows why an item may have a warning or an error.

After reviewing the item details, click **OK** to go to the next page, [Backup Directory Services](#).

Note: After clicking **OK**, the assistant displays a prompt that it will not create managed IP phones from migration items with errors. Clicking **Continue** will go to the next step in the migration process: [Backup Directory Services](#).



Backup Directory Services

It is strongly recommended to perform a Directory Services backup. This is the final step in the migration process before the Managed IP Phone Assistant begins creating the managed IP phones based on the migration items.

Click **Backup Directory Services** to perform the backup. The Directory Services backup may take several minutes. There is a timeout set at 40 minutes. If the timeout is reached, the assistant displays "The Interaction Center server was unable to perform a backup of Directory Services." Either click **Try Again** to attempt another backup, or click **Continue** without making a backup.

Note: It is strongly recommended to make a backup of directory services. In the event that a restoration of directory services is necessary, click [here](#) for instructions.

When the backup is complete, the dialog will show the location of the backup file. Please note the location.

Click **Next** to begin the migration and go to the next page, [Migration Results](#). The migration process begins, and the assistant creates IP phones from the migration items. This process may take several minutes.

For detailed information in the migration process, click [here](#).



Migration Results

This page shows the number of IP phones that have been created in the migration process, and shows the number of IP phones that have not been created.

Click [Show Detailed Migration Results](#) to view each step that was taken during the migration.

Migration Information

If managed IP phones were created from migration, the assistant saves [.i3m files](#) containing all migration information in the \\ic\server directory. These files have summary information both about the migration items when they were built and what happened when the migration ran.

The two files will look like this:

MIGRATE_#_PRE.I3M - This file is created when the migration items have been built.

MIGRATE_#_POST.I3M - This file is created after the migration is run.

The migrate file with the highest number will correspond to the most recent run of the migration assistant.



Complete the Managed IP Phone Assistant

The Managed IP Phone Assistant process is now complete. Click **Finish** to exit the assistant.

In the **Managed IP Phone** container, notice the new managed IP phones listed in the right-hand pane:

- The new managed IP phones will have a Status of "Not registered". Their status will become "Up-to-date" on the phones' next SIP registration.
- If you did not supply the Address attribute for one or more managed IP phones in your CSV Managed IP Phone list, they will have a status of "Not provisioned". Their status will become "Up-to-date" once you provision them using the Polycom phone or SIP Soft Phone provisioning IVR.

In the **Stations** container, notice the SIP station appearances associated with the new IP phones:

- The SIP stations associated with managed IP phones are of the type **Managed Workstation** or **Managed Stand-alone Phone**.

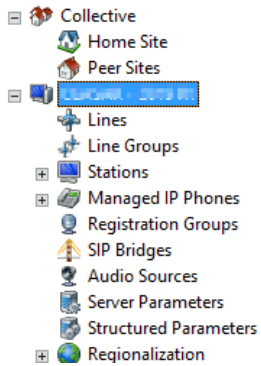
Tip: To make sure the list of managed IP phones is up-to-date at any time, click **F5** to refresh the screen.

[Information on migration](#)



Overview of CIC server configuration

Each CIC server requires a specific configuration to support the hardware and software resources that are associated with it. You configure your server in the server configuration container, which displays the name of your CIC server.



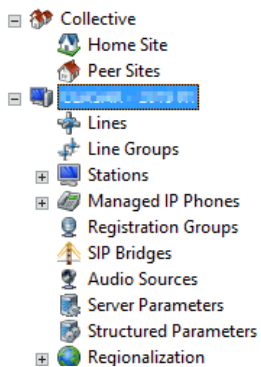
Related topics

- [Configure your CIC server](#)
- [SIP lines concepts](#)
- [Configure line groups](#)
- [Configure stations](#)
- [Configure managed IP phones](#)
- [Configure registration groups](#)
- [Configure SIP bridges](#)
- [Configure audio sources](#)
- [Configure server parameters](#)
- [Configure structured parameters](#)



Overview of CIC server configuration

Each CIC server requires a specific configuration to support the hardware and software resources that are associated with it. You configure your server in the server configuration container, which displays the name of your CIC server.



Related topics

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IP configuration options

The following table describes the options on the **IP Configuration** tab.

Option	Description	Default
Starting Number of Threads in Thread Pool	Each handler runs in a separate thread. This box shows how many threads are available. If this box is set to 0, then there are 100 starting threads in the thread pool. To gain a small amount of efficiency when IP starts, increase the value to a number closer to the Maximum Number of Threads in Thread Pool. Note: The maximum number of threads is 5,000.	0
Maximum Number of Threads in Thread Pool	This number indicates the maximum number of threads that you want your system to create to run handlers. If this box is set to 0, then a maximum of 5,000 threads will be created to run handlers. Note: The maximum number of threads is 5,000.	0

Related options

[Review the IP configuration of your CIC server](#)

[Overview of CIC server configuration](#)

[Configure your CIC server](#)



IP configuration options

The following table describes the options on the **IP Configuration** tab.

Option	Description	Default
Starting Number of Threads in Thread Pool	Each handler runs in a separate thread. This box shows how many threads are available. If this box is set to 0, then there are 100 starting threads in the thread pool. To gain a small amount of efficiency when IP starts, increase the value to a number closer to the Maximum Number of Threads in Thread Pool. Note: The maximum number of threads is 5,000.	0
Maximum Number of Threads in Thread Pool	This number indicates the maximum number of threads that you want your system to create to run handlers. If this box is set to 0, then a maximum of 5,000 threads will be created to run handlers. Note: The maximum number of threads is 5,000.	0

Related options

[Review the IP configuration of your CIC server](#)

[Overview of CIC server configuration](#)

[Configure your CIC server](#)



Configure your CIC server

<IC Server> > Configuration > Server Configuration

Configure your server using the tabs in this dialog box. For complete instructions, click the links below.

Related topics

[Server configuration concepts](#)
[Review the IP configuration of your CIC server](#)
[Handlers concepts](#)
[Select the handlers for your CIC server](#)
[Monitor handlers concepts](#)
[Select the monitor handlers for your CIC server](#)
[Accumulators concepts](#)
[Select the accumulators for your CIC server](#)
[CPU load detection concepts](#)
[Configure CPU load detection for your CIC server](#)
[Report log purging concepts](#)
[Configure report log purging for your CIC server](#)
[Configure reports concepts](#)
[Configure reports for your CIC server](#)
[Audio compression concepts](#)
[Configure audio compression for your CIC server](#)
[Telephony parameters concepts](#)
[Configure general telephony parameters for your CIC server](#)
[General telephony parameters reference](#)
[Configure SIP telephony parameters for your CIC server](#)
[SIP telephony parameters reference](#)
[Recording beep tones concepts](#)
[Configure recording beep tones for your CIC server](#)
[Define a recording beep tone](#)



Overview of handlers

A handler is a process that runs in response to an event. In CIC, handlers complete numerous functions.

Interaction Designer users create and publish handlers. Published handlers are available to all CIC servers. In Interaction Administrator, you select the handlers to run on your CIC server by activating them and deactivating them. Interaction Processor uses the activated handlers to complete CIC functions.

Note: As the system administrator, you must also assign the necessary security right to the users who create and publish handlers in Interaction Designer.

For more information on handlers, see the Interaction Designer Help.

Related topics

[Select the handlers for your CIC server](#)
[Security](#)
[Configure your CIC server](#)



Select the handlers for your CIC server

<IC Server> > Configuration > Server Configuration > Handlers

The handlers that are listed in the **Active Handlers** list run on your CIC server. Do one of the following:

- To activate handlers, select them in the **Inactive Handlers** list and then click **Add**.
- To deactivate handlers, select them in the **Active Handlers** list and then click **Remove**.

Note: When an Interaction Designer user modifies and re-publishes an active handler, Interaction Processor automatically detects the new version of the handler. It uses the new handler for all new interactions that require it. Any interaction that is uses the older version of the handler finishes its processing with the old version of the handler.

Related topics

[Overview of handlers](#)

[Configure your CIC server](#)



Overview of monitor handlers

A monitor handler is a process that monitors specific interactions in CIC and gathers data for reporting.

Interaction Designer users create and publish the monitor handlers. Published monitor handlers are available to all CIC servers. In Interaction Administrator, you select the monitor handlers to run on your specific CIC server by activating and deactivating them. Interaction Processor uses the activated monitor handlers to monitor numerous functions in CIC.

Note: As the system administrator, you must also assign the necessary security right to the Interaction Designer users who create and publish monitor handlers in Interaction Designer.

For more information on monitor handlers, see the Interaction Designer Help.

Related topics

[Select the monitor handlers for your CIC server](#)

[Configure your CIC server](#)

[Security](#)



Select the monitor handlers for your CIC server

<IC Server> > Configuration > Server Configuration > Monitor Handlers

The monitor handlers that are listed in the **Active Monitor Handlers** list run on your CIC server. Do one of the following:

- To activate monitor handlers, select them in the **Inactive Handlers** list and then click **Add**.
- To deactivate monitor handlers, select them in the **Active Monitor Handlers** list and then click **Remove**.

Note: When an Interaction Designer user modifies and republishes an active monitor handler, Interaction Processor automatically detects the new version of the monitor handler. It uses the new monitor handler for all new interactions that require it. Any interaction that is uses the older version of the monitor handler finishes its processing with the old version of the monitor handler.

Related topics

[Overview of monitor handlers](#)

[Configure your CIC server](#)



Overview of accumulators

Accumulators are similar to global variables. They hold a value outside of a handler. Accumulator tools within handlers can assign, increment, and retrieve the values stored in accumulators. The types of values that you can store in accumulators are String, Integer, Numeric, Boolean, and DateTime values.

In Interaction Administrator, you select the accumulators that can be set on your CIC server by activating them and deactivating them.

Notes: To see the definition of an accumulator or to configure an accumulator, use the **Accumulators** subcontainer of the **System Configuration** container.

When a new instance of an accumulator is created in the **Accumulators** subcontainer, you must deactivate it and then reactivate it for your CIC server. If you do not do this, a warning message appears when an accumulator tool attempts to use the accumulator.

Related topics

[Select the accumulators for your CIC server](#)

[Accumulator configuration](#)

[Handlers concepts](#)



Select the accumulators for your CIC server

<IC Server> > Configuration > Server Configuration > Accumulators

The accumulators that are listed in the **Currently Selected Accumulators** list run on your CIC server. Do one of the following:

- To activate accumulators, select them in the **Available Accumulators** list and then click **Add**.
- To deactivate accumulators, select them in the **Currently Selected Accumulators** list and then click **Remove**.

Related topics

[Overview of accumulators](#)

[Configure your CIC server](#)



Overview of CPU load detection

You can monitor the CPU load on your CIC server in order to determine if IC Server's **Notifier** and **Queue Manager** subsystems are overloaded.

To configure CPU load detection, you set a high watermark value, a low watermark, and the sample period. IC Server calculates the time it takes to send two back-to-back ping messages to **Queue Manager** during a sample period. It then divides this resulting number by two to get the average time. The average time indicates how quickly **Notifier** is passing messages, and if **Queue Manager** is keeping up with queue transitions or attribute changes.

IC Server then compares the average time against the high watermark and the low watermark values:

- If the average time of the ping messages take longer than the **high watermark**, then IC Server sends a message to the CIC subsystems. This message states that the CIC system is experiencing high load conditions. When this occurs, e-mails are no longer queued, Interaction Dialer stops placing campaign calls, and other subsystems take action to reduce the load on the system.
- IC Server continues to send ping messages. When the ping messages result in an average time that is less than the **low watermark**, IC Server sends a message to the CIC subsystems. This message states that the CIC system has returned to normal. The CIC subsystems then return to normal as well.

Note: In multiprocessor systems, the average ping time is measured across all CPUs. For example, if you have two CPUs and one is 50% busy and the other is 100% busy, the CPU utilization is 75%.

Related topics

[Configure CPU load detection for your CIC server](#)

[Configure your CIC server](#)



Configure CPU load detection for your CIC server

<IC Server> > Configuration > Server Configuration > CPU Load Detection

1. In the **High Watermark** field, select the number of milliseconds that indicates high load conditions. The default value is 200.
2. In the **Low Watermark** field, select the number of milliseconds that indicates normal (or low) load conditions. The default value is 200.
3. In the **Sample Period(s)**, select the period of time over which the CIC system determines the average time of a test ping. The default value is 5 seconds.
4. Click **OK**.

Related topics

[Overview of CPU load detection](#)

[Configure your CIC server](#)



Overview of report log purging

You can configure when the CIC system deletes expired report log records from the log databases. Report log records are expired when they exceed their retention times. You configure retention time for each report log in the **Report Logs** subcontainer, which is found in the **System Configuration** container.

Related topics

[Configure report log purging for your CIC server](#)

[Configure your CIC server](#)

[Report log retention](#)



Configure report log purging for your CIC server

Note: Data in the Enhanced Interaction Administrator change log is purged based automatically on the setting of this field. For more information, see *About the Enhanced Interaction Administrator change log*.

<IC Server> > Configuration > Server Configuration > Report Log Purging

1. Use the **Reference Time** fields to select the hour, minute, and second when you want expired logs to be purged.
2. Use the **Run Every** fields to select the days, hours, and minutes between each purge.
3. Click **OK**.
The **Purge will occur at** list displays the dates and times when the purge will occur.

Note: Report log purging for large databases might require using an optional server parameter to prevent a five-minute timeout. For more information, see the *PureConnect Reporting Technical Reference*.

Related topics

[Overview of report log purging](#)

[Configure your CIC server](#)

[About the Enhanced Interaction Administrator Change Notification Log](#)



Overview of report configuration

You can configure the following report options for your CIC server:

- Generation of DNIS reporting data, which allows you to run the DNIS reports
- Reporting by media type
If you activate this feature, then CIC logs interaction types in log 90, log 91, and log 92. By default, CIC logs interaction types only in log 10.

Notes

If you run Interaction Optimizer, then you automatically have the ability to run reports by media type.

If you activate reporting by media type, then you must restart the Stat Server if you activate media type report data for the change to take effect. Also, you will notice an increased amount of logged data.

- Inclusion of the detailed report version information on each report that is run the Interaction Reporting application
- The number of minutes during which CIC collects data in each reporting interval
- The interval period for the line and line group data in the report logs

Related topics

[Configure reports for your CIC server](#)

[Configure your CIC server](#)



Configure reports for your CIC server

<IC Server> > Configuration > Server Configuration > Report Configuration

Options

- To activate DNIS reporting data in the Queue Period Statistics data, select the **Generate DNIS reporting data** check box. When this feature is activated, the report group for calls is DNIS-(Dnis) and all calls are put into a statistics group called DNIS. You can generate the DNIS reports that are included with CIC.
- To activate reporting by media type, select the **Generate media type reporting data...** check box.
- The **Display report version in reports** check box is not currently used.

Reporting intervals

- To change the interval during which CIC collects report data, in the **Queue/IVR reporting interval (min)** field, use the up and down arrow keys to set the number of minutes to collect data in a reporting interval. The default value is 30 minutes.

Note: The minimum allowable interval is 15 minutes. If you specify an smaller interval, then CIC automatically uses 15 minutes.

- To change the report log interval period for the line and line group data, in the **Line reporting interval (min)** field, use the up and down arrow keys to set the length in minutes of the report log interval. The default value is 30 minutes.

Proxy enabled reporting

The values in this section allow you to set limits on the amount of time your users wait for [Internet enabled reports](#) before they time-out.

Note: The default settings are appropriate for most customers. Do not change these values unless your access to reports is critical, or you run a significant number of reports. These settings are per session manager.

- **Maximum Reporting Proxy Client Connections:** This is the highest number of IC clients that can simultaneously access reports through the proxy.
- **Maximum Proxied Report Run Time (min):** This is the highest run time (in minutes) allowed for a report running through the proxy.
- **Reporting Proxy Client Timeout (sec):** This is the amount of time (in seconds) that a report running through the proxy can be inactive.

For information about running Internet-based reports, see [Report Connection Configuration](#) and the *PureConnect Reporting Technical Reference* in the PureConnect Documentation Library.

Related topics

[Overview of report configuration](#)

[Configure your CIC server](#)

Restrict report results with secure parameters

You can configure secure report parameters that limit which data users can report on based on the access control lists (ACLs) to which they have access.

This help topic contains the following sections:

- [Example of how secure parameters restrict report results](#)
- [Reports that use secure parameters](#)
- [Secure versus non-secure parameters](#)
- [Parameter classes and control classes](#)
- [ACLs that work with secure parameters](#)
- [A note about migrating from an earlier version](#)
- [Example configuration procedures](#)

Example of how secure parameters restrict report results

Suppose your marketing managers want to report on the results of ongoing outbound marketing campaigns. However, you want to ensure that each manager sees only the results for their particular campaigns. You can configure the Dialer reports to use the SecuredAutoCompleteCampaignNameComboBox secure parameter. Then you configure each user's ACL to allow access to select the appropriate campaigns. When a user attempts to run the Dialer reports in IC Business Manager, the user can select only the campaigns that they should see.

Reports that use secure parameters

You can the SecuredAutoCompleteCampaignNameComboBox secure parameter with all Dialer reports that retrieve a campaign name. These include:

- Campaign Statistics
- Call History
- Agent Success Results
- Campaign Success Results

Note: This secure parameter matches on the campaign name.

Secure parameters versus non-secure parameters

For each secure parameter, there is a corresponding non-secure parameter:

- If you choose a secure parameter, then the user is presented with a list of valid parameter choices based on their access control list.
- If you choose a non-secure parameter, then a user type any value for the parameter when the user runs the report. This potentially allows the user to report on sensitive information, or to run reports using invalid (non-existent) parameter values.

The following table displays the secure parameter classes and their corresponding non-secure parameters:

Secure parameter class name	Non-secure parameter class name
SecuredAutoCompleteCampaignNameComboBox	AutoCompleteCampaignNameComboBox
SecuredAutoCompleteUsersComboBox	AutoCompleteUsersComboBox
SecuredDistributionQueueComboBox	DistributionQueueComboBox
SecuredUserList	UsersList

Parameter classes and control classes

For each secure parameter, you must specify both the parameter class name and the control class. The following table displays the secure parameter classes and the control class that you can use with it.

Secure parameter class name	Control class name
SecuredAutoCompleteCampaignNameComboBox	AutoCompleteComboBox
SecuredAutoCompleteUsersComboBox	AutoCompleteComboBox
SecuredDistributionQueueComboBox	AutoCompleteComboBox
SecuredUserList	UserList

ACLs that work with secure parameters

In addition to configuring a report to use a secure parameter, you must also assign the appropriate ACLs to the users who run reports. The following table lists the ACLs that work with each secure parameter.

Secure parameter class name	ACL
SecuredAutoCompleteCampaignNameComboBox	Interaction Dialer > Campaigns > View
SecuredAutoCompleteUsersComboBox	User Queue > Users/Workgroups > Search
SecuredDistributionQueueComboBox	Workgroup Queue > Workgroups > Search
SecuredUserList	Users Queue > User Queue > View

A note about migrating from an earlier version

Note: Secure report parameters are available in CIC 2016 R3 and later releases. If you configured Crystal Reports that use queue parameters for an earlier version of CIC, you must edit those reports to use either the secure or unsecure parameters.

Example configuration procedures

The following examples show you how to use the various secure parameters, control classes, and ACLs.

- [Configure a report to use the SecuredUserList parameter](#)
- [Configure a report to use the SecureCampaign parameter](#)

Configure a report to use the SecuredUserList parameter

Note: You can configure any report that uses the **UserList** parameter to use the **SecuredUserList** parameter.

Configure a report

1. Report Management > Report Configuration > Categories
2. From the Categories list, select the category that contains the report you want to configure.
3. In the Reports list, select the report.
4. On the **Parameters** tab, check the list of parameters for the UserList parameter. If it appears, then you can configure the report to use the SecuredUserList parameter.

Note: If the **UserList** parameter is not listed, you cannot configure the report to use the **SecuredUserList** parameter.

5. Click the **General** tab.
6. Unlock the report.
7. In the Class Name box, type **ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredUserList**.
8. Click **Save**.

Configure the Access Control Lists for each user who runs the report

1. **Users > User Configuration > Security > Access Control**
2. In the Search box, type **user queue**.
3. Under the View column, select the user queues and workgroups on which the user can report.
4. Click **Close**.

Configure a report to use the SecureCampaign parameter

Configure the report

1. In **Report Management**, configure the Dialer report you want.
2. Click the **Parameters** tab.
3. Click the **General** tab and set the following options:

- Complete the Name, Name Resource, Description, Description Resource, and Friendly Key fields. For more information, see [Report Configuration](#).
- Select the Required check box.

Note: If you do not select the **Required** check box, then any user can view reports on any campaign they choose.

- In the User Control Assembly Name box, type **ININ.Dialer.Reporting.Historical**.
 - In the User Control Class Name box, type: **ININ.Dialer.Reporting.Historical.Viewmodels.SecuredAutoCompleteCampaignNameComboBox**.
 - In the License list, select **_NO_LICENSE_REQUIRED_**.
4. On the **Data** tab, set the following options:
 - In the Source box, type **User Supplied**.
 - In the Data Type list, select **String**.
 - Do not type anything in the Default Value box.
 5. On the **Custom Data** tab, do not type anything in any field.
 6. On the **Miscellaneous** tab, set the following options:
 - Select either **Allow Sample** or **Allow Or**.
 - Make sure that the **Allow And** check box is not selected.
 - Select the **Visible** check box.
 - In the User Control Assembly Name field, type **ININ.Reporting.Historical.Engine.Module**.
 - In the User Control Class Name field, type **ININ.Reporting.Historical.Engine.Module.Parameters.Views.AutoCompleteComboBox**.
 7. On the **SQL Table Columns** tab, in the Column Name box, type **campaignname**.
 8. Click **Save**.

Configure the Access Control List for each user who runs the report

1. **Users > User Configuration > Security > Access Control**
2. In the Search box, type **campaigns**.
3. Under the View column, select the campaigns on which the user can report.
4. Click **Close**.

Related topics

[Report Configuration](#)

[Assign access control rights](#)



Overview of audio compression

You can configure the audio compression options for the **Audio Compression Manager** that runs on your CIC server.

Note: If you do not configure the audio compression settings, then the **Audio Compression Manager** sets them to the appropriate values.

Related topics

[Configure audio compression for your CIC server](#)

[Configure your CIC server](#)



Configure audio compression for your CIC sever

<C Server> > Configuration > Server Configuration > Audio Compression

1. In the **Total Number of Compression Threads** field, enter the number of compression threads for audio compression. By default the system uses 3 compression threads.
2. In the **Local Compression Thread Priority** field, select **Below Normal**, **Normal**, or **Above Normal**. This value represents the thread priority of compression threads running on the CIC server.
3. Click **OK**.

Related topics

[Overview of audio compression](#)

[Configure your CIC server](#)



Overview of Telephony parameters

You can configure the resources that connect incoming telephone lines with your company's computers, telephones, fax machines, and so on.

Related topics

[Configure general telephony parameters for your CIC server](#)

[General telephony parameters](#)

[Configure SIP telephony parameters for your CIC server](#)

[SIP telephony parameters](#)

[Configure your CIC server](#)



Configure general telephony parameters for your CIC server

<C Server> > Configuration > Server Configuration > Telephony Parameters

1. In the list, select **General**.
The general telephony parameter options appear in the right side of the tab.
2. Select the check boxes for the parameters that you want to enable. For information, see *General telephony parameters*.
3. As necessary, specify any additional values.
4. Click **OK**.

Related topics

[General telephony parameters](#)

[Overview of telephony parameters](#)

[Configure your CIC server](#)



General telephony parameters

The following table describes the general telephony parameters. For information on how to set these parameters, see *Configure general telephony parameters for your CIC server*.

Parameter	Description	Default
Allow Recording of External Transfers	Determines whether a call can be recorded when an agent transfers it to an external number. If you do not select this option, a call is not recorded if it is transferred to an external party and <i>only</i> external parties are involved. If you do select this option, the call recording continues after the transfer occurs.	Not selected
Append SIP Call-ID to CallLog	Determines whether the call log includes the SIP call ID.	
Auto Disconnect Last Party	Determines whether the CIC system automatically disconnects the last party in a conference.	Selected
Block All External Transfers	Blocks all consult and blind transfers to external parties and remote numbers. This option works with the Disconnect Conferences with Only External Parties option to help prevent toll fraud.	Not selected
Board Event Window Limit	Specifies the maximum number of allowable digital board events. Excessive board events can generate in-sync/out-of-sync errors from a bad board or a bad digital line. This option prevents bad equipment (such as T-1, ISDN, and other digital lines) from causing excessive errors and slowing down CIC. Note: If board events are disabled on a board, the board remains registered as active. However, events are disabled for the amount of time specified for the Event Recovery Time option. If more than this number of digital events is counted during the Board Event Window Time , then digital events are disabled on the board. The minimum number of events is 5.	20
Board Event Window Time (ms)	Specifies the number of consecutive milliseconds during which digital board events are counted. The minimum number is 10000 ms (10 seconds). Note: If 20 events occur within 60 seconds, CIC disables the board that generated the events. See also Board Event Window Limit .	60000 ms (60 seconds)

Call Analysis Diagnostic Record	Enables diagnostic call recordings for call analysis. Diagnostic records are 8k, mono, 8bit unsigned PCM. Note: If Media Servers are not used for advanced operations, diagnostic recordings are placed in the default Recordings directory and have the following naming convention: DR_<callid>.pcm. If Media Servers are used for advanced operations, diagnostic recordings are stored on each Media Server with the following naming convention: <pre>%in\trace_root%\<date>\diagnostics\<lastTwoDigitsOfCallId>\<callId>_<16RandomCharacters>_ca.wav</pre> Diagnostic recordings stored on Media Servers are automatically deleted after seven days.	Not selected
Keyword Spotting Diagnostic Recording	Enables diagnostic recordings for keyword spotting. Interaction Analyzer uses diagnostic recordings to help determine accuracy in keyword spotting. For more information, see <i>Interaction Analyzer Technical Reference</i> in the PureConnect Documentation Library on the CIC server.	Not selected
Fetch Diagnostic Recordings from Media Server	Retrieves all diagnostic recordings from the Media Server and from the [drive]:[CIC installation folder]/logs/diagnostics.	On
Confirm Station Connection	Sends an eCallEvent_StationConnectionConfirmation event. This event can be intercepted and handled by the ConfirmStationConnection initiator and the StationConnectionConfirmation tool step. This allows the user to intercept a remote client connection call and change the behavior via a handler.	Not selected
Diagnostic Recording Extension Time (sec)	Sets the time (in seconds) that a diagnostic recording will be extended beyond the completion of the call analysis operation. Support Services may increase this period to troubleshoot call analysis result issues in order to thoroughly analyze the audio. The acceptable values are 3 through 30.	3 seconds
Disconnect Conferences with Only External Parties	Disconnects conferences in which the only members are external parties and remote numbers. If all internal parties leave a conference, and only external parties remain on the call, the conference is disconnected. This option works with the Block all External Transfers parameter to help prevent toll fraud.	Not selected
Enable Call Analysis for Conference Add Party	Enables the ability to add a party to a conference immediately or to perform call analysis before adding the party to the conference.	Not selected
Enable Secure Input feature	Activates the Secure Input feature, which separates and encrypts data to protect it from theft or misuse. When this parameter is elected, you can create and configure secure input forms in the Secure Input Forms container. You can then assign individual secure input forms to different workgroups in the Workgroup container.	Not selected
Extension Dialing Analysis Type	Used with extension dialing. When CIC uses extension dialing to place a call, and the number dialed includes a /xxx where xxx is an IVR entry or extension number, CIC attempts to detect if the dialed number is answered by a human voice or an answering machine or an IVR script. The acceptable values are: • Voice: CIC waits for the dialed number to answer and then automatically sends the DTMF tones for the extension. This has the advantage that you can always be certain that the DTMF will be sent. The disadvantage is that when a human answers the call, the DTMF will play in that person's ear. • Answering Machine: CIC attempts to recognize an IVR or automated voice before sending the DTMF tones. If it does not detect an automated voice, it assumes a human voice answered and does not send the DTMF extension digits. This kind of detection is less reliable than voice detection.	Voice
Global No Connection Timeout (min)	Sets a timer on all calls made on the CIC system. The CIC system disconnects a call if the call does not enter a connected state before the expiration of this timer.	30 minutes
Held Call Timeout (seconds)	Specifies the number of seconds a call can remain on hold. When the timer elapses, the call flow proceeds to a menu to present the caller with options. This menu is generated by the System_HeldInteractionTimer handler. You can modify the call flow behavior in the CustomHeldInteractionTimer handler. The default value is 900 seconds (15 minutes). The minimum value is 2 seconds. Note: If you change this parameter, you do not need to restart CIC in order for it to take effect.	900 seconds
Honor No Answer Timeout	Sets CIC to honor the no answer value presented to it by the caller, which is usually the client or handler tool step.	Not selected.
Inband Dial Delay (ms)	Sets the time in milliseconds that the system waits before dialing in-band digits to the external party of a call. In-band dial digits are most commonly used for extension dialing and account code dialing.	500 milliseconds
Intercom Calls ASR Enabled	Allows a user to toggle permissions for allowing ASR enabled intercom calls on the system, as well as set a threshold for concurrent intercom ASR enabled sessions. The acceptable values are: • On • Off • 0	On
Line Event Window Limit	Disables line events if a digital line starts generating abnormal numbers of events and degrades CIC performance. Such events can generate in-sync/out-of-sync errors from a bad board or bad digital line. This safety mechanism prevents bad equipment (such as T-1, ISDN, and other digital lines) from causing excessive errors and dragging down CIC. The event and shutdown threshold is configurable with three parameters: Line Event Window Limit, Line Event Window Time, and Event Recovery Time. Enter the maximum number of digital line events to detect within the Line Event Window Time window before disabling digital events on the excessive board. If a digital line exceeds this limit, CIC disables events from that line for the specified Event Recovery Time. The minimum event limit is 5. The board remains registered as active, but events are disabled for the specified time. Note: Not all lines implement this option.	20 events

Line Event Window Time	Specifies the number of consecutive milliseconds during which digital line events are counted. The minimum window is 10000 ms (10 seconds). Notes: If 20 events occur within 60 seconds, CIC disables the line that generated the events. Not all lines implement this options	60000 ms (60 seconds)
Maximum ASR Session Limit	Sets a maximum value of resources that are expected to be used concurrently at any given time in the system for ASR sessions. Specify any integer. Note: CIC derives a proper value if you do not provide one.	0
Maximum Number of Calls per Station	Sets the maximum number of outgoing calls originating from a single station that are allowed to exist. When an outgoing call is made, TsServer checks a map of Call IDs to Station IDs and, if the station has the specified number of outgoing calls still active, the new call attempt will fail. If not, an entry should be placed in the map. When the call disconnects, the entry is removed from the map.	5
Minimum ASR Session Limit	Sets a minimum value of resources that are expected to be available to the system for any ASR session (for a minimum level of resources that should not be fixed to any line, and therefore available to all sessions). The acceptable values are: 0: Indicates that no minimum level is required - Any integer	0
Optimize Audio for Conferences	This option applies only to conferences. If you select this option, CIC automatically identifies the dominant speaker and mutes all of the other calls on the conference. Conference calls hosted by Interaction Media Server include features such as dominant speaker detection with echo cancellation (muting errant noises from other callers), automatic level control (volume), support for Interactive Voice Response (IVR) input, and other optimizations. Note: This parameter globally controls dominant speaker detection with echo cancellation for conference calls. If you experience audio issues when this parameter is enabled, you can enter the ConferenceTypeDominantSpeakerDiagnosticRecording property through the Media Servers container in Interaction Administrator and set the value to true. This property creates diagnostic recordings that you can send to a PureConnect Customer Care representative for analysis.	Selected
Perform Call Analysis	Contact your authorized PureConnect Customer Care representative for information on this setting. For more information, see the <i>Interaction Media Server Technical Reference</i> document in the PureConnect Documentation Library.	Not selected
Play Digits Tone Specification	Sets the number duration of the on or off time between DTMF tones. By default Telephony Services uses DTMF tones of 100ms in duration with 50ms off time between tones at vendor-specific levels. In some circumstances it may be necessary to adjust the duration on or off time so that the receiving system can correctly detect different tones. This parameter applies to all DTMF played using the Play Digits tool step. The acceptable values are X:Y, where X=on time (ms) and Y=off time (ms).	90:60
Recording Silence Time	Sets the duration (milliseconds) of silence that is required to disconnect a call that is in voice mail. This parameter is valid only for calls that are on the system, such as station-to-station calls, as opposed to physical external lines. External lines have the same configuration option, which is available on that line's configuration page in Interaction Administrator.	0
Remote Station Timeout Override	This parameter should be modified only with the direction of a PureConnect Customer Care representative. Any modifications to the value can have a significant impact on the accuracy of call progress analysis, and those changes will be noted in the appropriate log files. Modifying this parameter without explicit instruction from a PureConnect Customer Care representative could result in a billable support incident to restore functionality.	Not specified
Ringback Silence Detection Time	Dialogic and Aculab: Adjusts the maximum period of silence allowed before call analysis will detect no ringback. If unspecified, TS defaults to 11 seconds for connection calls (calls to a remote station), and 20 seconds for all other outbound calls. The minimum value allowed is 8 seconds. Note: This setting has no effect if Media Servers are used for advanced operations.	Not specified
Ringback File	Specifies the .wav file that is played to the caller during alerting to the destination user or station. .wav files are located in the resource directory: Ringback.wav?playlocation=mediaserver Caution: If you replace the RingBack.wav file in the Resources directory with your own customized file, then this file will be overwritten when you update to a newer release. If you have replaced this file in the Resources directory, back up your customized file before you begin the update process. Then restore the file after the upgrade is complete. This applies to the files on IC servers and on Media Servers.	RingBack.wav
Telephony Supported IP Versions	This parameter is available if the appropriate server parameter is selected. Specifies the type of protocol address family that is supported by the CIC server. For more information, see <i>SIP Line Transport</i> and <i>SIP Station Transport</i>. Note: If this parameter is set to IPv4, then all lines and stations that specify the Address Family as IPv6, or the Media Address Family as IPv6, are unusable and shown as "Unusable" in the Status column. If this parameter is set to IPv6, then all lines and stations that specify the Address Family as IPv4, or the Media Address Family as IPv4, are unusable and shown as "Unusable" in the Status column. For more information, contact your authorized PureConnect Customer Care representative.	IPv4 and IPv6
Ts Consult Transfer To Intercom Move All Queues Active	Specifies that when a call is consult transferred to an intercom call, the transferring call is placed on ALL queues of the replaced intercom call.	Selected
Waiting Call Indication	Enables call waiting. If this parameter is not selected, call waiting is globally disabled for all alert types.	Selected
Use Voice Buffer Input	Specifies whether the voice buffer input is activated. If you enable this parameter, it decreases the usage of voice and conference resources. If you do not enable this parameter, there is no timeout.	Selected

Timeout (seconds)	Sets the number of seconds to wait before freeing up the resource after a play switches to the VoiceBufferInput role. Acceptable values are 5-20000 seconds.	5
Warm Down Time (ms)	Specifies the duration in milliseconds that the audio remains in Interaction Center after a user plays a digit(s).	15 milliseconds
Zone Page Delay	Sets the maximum time in milliseconds that the CIC server should wait for the stations being paged to respond to a page request. Stations that take longer than this timeout to respond are included in the page. If all stations respond before this timeout is reached, the page begins to load immediately.	1500 milliseconds

Related topics

[Configure general telephony parameters for your CIC server](#)

[Secure input](#)

[SIP line transport](#)

[Overview of telephony parameters](#)

[Configure your CIC server](#)



Configure SIP telephony parameters for your CIC server

<IC Server> > Configuration > Server Configuration > Telephony Parameters

1. In the list, select **SIP**.
The SIP telephony parameter options appear in the right side of the tab.
2. Specify the values for the parameters that you want to enable. For more information, see *SIP telephony parameters*.
3. Click **OK**.

Related topics

[SIP telephony parameters](#)

[Overview of telephony parameters](#)

[Configure your CIC server](#)



SIP telephony parameters

The following table describes the SIP telephony parameters. For information on how to set these parameters, see *Configure SIP telephony parameters for your CIC server*.

Parameter	Description	Default
Broken RTP Disconnect Time	Determines the amount of time (in seconds) that a VoIP call remains active after audio has been disrupted before the call is automatically disconnected. Audio is considered disrupted if no RTP, no RTCP, and no comfort noise packet is received from the remote device. • 0 - Disables this feature. Calls will not be monitored or disconnected. • 1 - Number of seconds before a disrupted call is disconnected Note: By default, CIC disconnects a call when both endpoints are in the idle state (no RTP packets). If you want CIC to disconnect calls where only one endpoint has entered the idle state, see the TreatEndpointIdleAsFullIdle server parameter. For more information, see the <i>Media Server Technical Reference</i> in the PureConnect Documentation Library.	30 seconds
Default Display String	Sets the SIP display string in the FROM header when calls are made to persistent SIP managed stations and to any SIP managed station when the CIC client MakeCall button is pressed. This display string appears on the From field on the phone TUI display. Any string value is acceptable.	Interaction Center
Managed Phone Shortcut	Specifies the main IVR number that is given to managed phones. This number is typically an "*." Configure your network to route calls that are generated by managed phones to use this number to reach the Interaction Center. The acceptable values are: • SIP • None • Any number	None
Message Button	Specifies the number to retrieve voice mail over the IP phone when the user presses the Message button. Configure the voice mail button of the phone to call this number when it is pressed. Do not enter spaces. The acceptable values are: • None • Any number. Spaces are not allowed. Note: When this option is not set, the message button dials "stationname" when it connects to voice mail.	None
Voicemail Direct	Sends calls directly to voice mail for unmanaged phones. Voice mail for managed phones is already handled. Configure your network to send calls that are destined for voice mail to this number. The acceptable values are: • None • Any number	None
Lineside Transcode Preference	If a transcode is necessary, this parameter indicates which side (the line or the station) to tap first. Since recordings tap the line side, transcoding should, too. This parameter is rarely used.	Yes
Initial Contact Expiration	Specifies the time that is used to expire a station contact address on system startup. • This parameter is used only if all of the following are true: • The station allows registrations to update its contact address. • The station sent a REGISTER message that had not expired before the CIC reboot. • The station has NOT sent a REGISTER message after the CIC reboot. For example, a station is registered with a CIC server. The CIC server is rebooted. If the contact address that the phone sent before the reboot was suppose to expire before Initial Contact Expiration seconds after the reboot, it will not expire.	86400

Related topics

[Configure SIP telephony parameters for your CIC server](#)

[TreatEndpointIdleAsFullIdle server parameter](#)

[Overview of telephony parameters](#)

[Configure your CIC server](#)



Overview of recording beep tones

You can configure beep tones for the **Beeps During Recordings** feature. A beep tone allows participants to be aware that a conversation is being recorded, which may be required for regulatory compliance.

For a beep tone, you can configure the length of beeps, the interval between beeps, and how the beeps sound.

You can apply beep tones to a workgroup.

CIC includes a default beep tone that you cannot edit or remove.

Related topics

[Configure recording beep tones for your CIC server](#)

[Recording beep tone options](#)

[Configure your CIC server](#) [Workgroup configuration](#)



Configure recording beep tones for your CIC server

<IC Server> > Configuration > Server Configuration > Recording Beep Tones

- Do one of the following:
 - To add a recording beep tone, click **Add**.
The **Add Recording Beep Tone** dialog box appears.
 - To edit a recording beep tone, select the tone and then click **Edit**.
The **Edit Recording Beep Tone** dialog box appears.
 - To delete a recording beep tone, select the tone and then click **Remove**.
- Complete the options on the dialog box. For more information, see *Recording beep tone options*.
- Click **OK**.

Related topics

[Recording beep tone options](#)

[Overview of recording beep tones](#)

[Configure your CIC server](#)



Recording beep tone options

The following table describes the options for recording beep tones. For information on how to set these options, see *Configure recording beep tones for your CIC server*.

Option	Description	Default
Name	A meaningful name for the beep tone.	New Beep Tone
Duration (ms)	The time in milliseconds that the actual beep sound lasts.	200 ms
Interval	The time in seconds between the beeps. This is the time between the start of one beep and the start of the next beep.	12 seconds
Tone Type	The type of tone for the beep. You can set the beep as a single tone, or dual tone (having two tones). If you select Dual as the type, the Frequency 2 (Hz) and Amplitude 2 (dB) fields are available.	Single
Frequency (Hz)	The beep tone frequency in Hertz.	1400Hz
Amplitude (dB)	The beep tone volume in decibels.	-24dB
Frequency 2 (Hz)	The frequency of the second part of the tone and is available when the beep tone type is dual.	1400Hz
Amplitude 2 (dB)	the amplitude of the second part of the tone and is available when the beep tone type is dual. The acceptable range is -33dB is through 0.	-24dB

Related topics

[Configure recording beep tones for your CIC server](#)

[Overview of recording beep tones](#)

[Configure your CIC server](#)



History

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Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.

SIP lines concepts

You use Interaction Administrator to configure your SIP interface. CIC enables SIP by default; you do not need to set any server parameters in order to use the SIP-related features. However, you must configure each SIP line you want to use with CIC.

You can associate a SIP line with one, many, or all stations that are connected to the CIC server. For example, you can associate a SIP line with a workstation, fax machine, stand-alone phone, and so on. A single SIP line can handle multiple calls.

Note: You configure stations in the **Stations** container.

CIC uses SIP lines and their associated stations for inbound and outbound calls. SIP lines allow the CIC server to communicate with the SIP boards.

Note: IC Setup Assistant automatically creates three permanent SIP station lines for different transport protocols: < Stations-TCP>, <Stations-UDP>, and < Stations-TLS>. These lines are used for station-to-station calls. You cannot delete them.

Many of the configuration options for a SIP station that is associated with a SIP line are similar to the configuration options for SIP lines. The settings for a SIP **station** configuration always override the settings for the same configuration options for the SIP **line** configuration.

In general, when you set or change the configuration of a SIP line, your settings take effect immediately. No restart is required.

Note: If you change the transport protocol for a line, you must deactivate the line and then reactivate it in order for the change to take effect.

Related topics

[Overview of creating SIP lines](#)

[Configure a SIP line](#)

[Stations](#)

[Line groups](#)

[Line group configuration](#)

[Add and remove lines from a line group](#)

SIP lines concepts

You use Interaction Administrator to configure your SIP interface. CIC enables SIP by default; you do not need to set any server parameters in order to use the SIP-related features. However, you must configure each SIP line you want to use with CIC.

You can associate a SIP line with one, many, or all stations that are connected to the CIC server. For example, you can associate a SIP line with a workstation, fax machine, stand-alone phone, and so on. A single SIP line can handle multiple calls.

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Note: If you change the transport protocol for a line, you must deactivate the line and then reactivate it in order for the change to take effect.

Related topics

[Overview of creating SIP lines](#)

[Configure a SIP line](#)

[Stations](#)

[Line groups](#)

[Line group configuration](#)

[Add and remove lines from a line group](#)



Overview of adding and configuring SIP lines

The process of setting up SIP lines involves multiple containers in Interaction Administrator:

1. In the **Lines** container, add a SIP line.
2. Configure the SIP line. For more information, see *Configure a SIP line*.
3. In the **Server** container, define the global configuration for SIP stations.
4. Configure the SIP workstations.

Related topics

[SIP lines concepts](#)

[Configure a SIP line](#)

Add a SIP line

To add a SIP line

1. In the <IC_Server> container, double-click the **Lines** container.
2. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
3. Type the line name and then click **OK**.
4. Configure the SIP line.

Related topics

[Configure a SIP line](#)

Configure a SIP line

To configure a SIP line

1. In the <IC_Server> container, double-click the **Lines** container.
 2. In the list view window, double-click a line.
 3. In the list of options, click **Identity (Out)**.
-
4. Specify the **Outbound Identity** of the line.
 5. In the list of options, click **Access**.
 6. Verify that the access type does not conflict with other SIP lines in the same port.
 7. As necessary, click the other options in the list and the other tabs in the **Line Configuration** dialog box to specify additional configuration details. For more information on these options, use the links under **Related topics**.
 8. Click **OK**.

Related topics

[SIP line options](#)

[SIP line identity \(In\) options](#)

[SIP line identity \(Out\) options](#)

[SIP line audio options](#)

[SIP line transport options](#)

[SIP line session options](#)

[SIP line authentication options](#)

[SIP line proxy options](#)

[SIP line registrar options](#)

[SIP line headers options](#)

[SIP line access options](#)

[SIP line region options](#)

[SIP line recorder options](#)

[SIP Line TLS Security options](#) (only if the line's transport protocol is TLS)

[Call putback options](#)

[Custom attributes](#)

[History](#)

[Lines concepts](#)

Configure a SIP line

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 8. Click **OK**.

Related topics

[SIP line options](#)

[SIP line identity \(In\) options](#)

[SIP line identity \(Out\) options](#)

[SIP line audio options](#)

[SIP line transport options](#)

[SIP line session options](#)

[SIP line authentication options](#)

[SIP line proxy options](#)

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[SIP line region options](#)

[SIP line recorder options](#)

[SIP Line TLS Security options](#) (only if the line's transport protocol is TLS)

[Call putback options](#)

[Custom attributes](#)

[History](#)

[Lines concepts](#)

Using a Third Party Unified Messaging (UM) Platform - SIP Diversion

SIP Diversion in CIC allows you to use a third party UM platform for voice mail collection and retrieval, by identifying the SIP address (also known as the Voicemail pilot number) to reach the UM server. By configuring Exchange 2010 to act as your unified messaging application with out-of-the-box configuration settings in CIC, the integration diverts the call to the UM server after receiving a "ring no answer" from the CIC user.

Note: For more information on configuring CIC to use UM, see *Unified Messaging Integration with CIC Technical Reference* in the PureConnect Documentation Library.

SIP Diversion is enabled in Interaction Administrator by configuring settings in the following pages:

- [SIP Line Transport](#): Configure **Transport Protocol**, **Audio Protocol**, and **Receive Port**
- [SIP Line Session](#): Select **Disable Delayed Media**
- [Station Type](#): Select **Exchange**
- [SIP Station Addresses](#): Configure **Identification SIP Address**, **Connection SIP Address** (User Portion and Host), **Contact Line**
- [SIP Station Session](#): Select **Disable Delayed Media**
- [Station Custom Attributes](#): Add the **Divert For TUI** attribute

Note: Third party UM configuration is available only if a SIP and a third party UM license (Exchange) are present.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

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Last Modified

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Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



SIP line options

The following table describes the general options that you can use to configure a SIP line. For information on how to access these options, see [Configure a SIP line](#).

Changes to any of the options on this dialog box take effect immediately.

Option	Description	Default
Active	Activates or deactivates the line in the CIC system. You can not deactivate a line if any calls are on the line. If you change line configuration parameters or to perform other line maintenance, you may have to deactivate a line and then reactivate it in order for the changes to take effect. For example, if you change the SIP line transport protocol. Note: Genesys only counts active lines to determine whether you are in compliance with your license agreement.	Active
Line Usage	Designates the usage of the line. The options are: - General Purpose - Microsoft Lync - Station Connections	General Purpose
Domain Name	Specifies the domain name that is used to formulate SIP-URLs for CIC users and phone numbers. This domain name is automatically appended to all REGISTER requests that are sent by CIC. This value is used in the "From" header in outbound SIP calls. Note: You can set additional identity settings by click Identity (In) and Identity (Out) in the options list.	Varies depending on your configuration
Maximum Number of Calls	Designates the maximum limit number of calls that the SIP line processes. When the number of calls is reached, this line processes no more calls. The options are Combined or Inbound/Outbound: Combined means that the maximum number is the sum of both inbound calls and outbound calls. Inbound/Outbound means that the values specified for each type of call count towards the maximum number of calls. The No Limit check box indicates whether there is a maximum limit. If No Limit is <i>not</i> selected, then you must set a maximum number of calls.	No limit
Fax Protocol	Indicates the fax protocol to use. The options are: - T30 only - T38 only T38 then T30: If you select this option, CIC tries the T38 fax protocol first. If the recipient endpoint does not support this protocol, then CIC tries the T30 fax protocol.	T38 only

Enable Fax Detection	Indicates whether fax tones are detected when the Allow Deferred Answer check box is selected. To determine whether to play the fax detection prompt or not, the system evaluates this check box: • If this check box is selected, then the system overrides the user's setting. • If this option is not selected, then the system uses the user's setting. If you select a Fax Protocol, then this check box is also automatically selected. If the Fax Protocol check box is set to None, then this check box is not available.	Selected
Maximum Number of Faxes	Designates the maximum limit number of faxes that the SIP line processes. When the number of faxes is reached, this line processes no more faxes. The options are Combined or Inbound/Outbound: • Combined means that the maximum number is the sum of both inbound faxes and outbound faxes. • Inbound/Outbound means that the values specified for each type of fax count towards the maximum number of faxes . The No Limit check box indicates whether there is a maximum limit. If No Limit is <i>not</i> selected, then you must set a maximum number of faxes.	No limit
Auto Disconnect when Silence Detected in Voice Mail	Designates whether CIC automatically disconnects a call that is in voice mail after a certain number of seconds of silence. This option is important if your CO (public exchange switch) does not send a disconnect signal (a forward disconnect notice) when a caller disconnects a call. If this check box is selected, when a call is left in voice mail, CIC waits for the number of seconds of silence that you specify in the Silence Time (ms) box, and then it automatically disconnects the call. If the CO does not send a disconnect signal, and if this check box is not selected, then the voice mail will continue to record silence.	Selected; The default silence time is 10,000 milliseconds (10 seconds).
Call Analysis Type	Indicates the call analysis type for this SIP line. The options are: ■ Media Server: The Media server listens to the RTP stream and performs call analysis. Use this option with a third-party gateway. ■ Interaction Gateway (Gen2 only; not recommended for new deployments): The CIC server defers to the Interaction Gateway, which listens to the TDM (ISDN) lines and returns the results via SIP messages. Do not use this option with Interaction Gateway. ■ Media Server to Interaction Gateway: Interaction Gateway and Media Server are both used; the Media Server performs call analysis. This is the preferred setting to use with Interaction Gateway and Interaction Gateway Gen2. Do not use this option with any third-party gateway.	Media Server
Allow Deferred Answer	Indicates whether to delay answering an incoming call until an agent is reached or an IVR system is entered. This gives callers time to disconnect the call without being charged by their telecommunications provider. Note: Deferred answer is not used with ACD calls. If a call is placed to the DID of an ACD workgroup, interactions are immediately answered before alerting occurs. Note: Use the Allow Multiple Calls to Station On Deferred Answer Line server parameter to disable the alert to a station for an additional call when Allow Deferred Answer is selected.	Not selected
Playback Early Media to Inbound Calls	Indicates whether to use early media (when the remote party sends SDP before the call is answered in a 183 response) instead of ringback on an inbound call. This option does not apply to ACD calls on this line. Note: This option works only if <i>either</i> of the following conditions exist: *The CIC server receives an INVITE with SDP. *The CIC server receives an INVITE with no SDP but with 100rel in the Supported: header. Additionally, this option requires both of the following conditions: *CIC must get an SDP from the remote. *The CIC server must have the INVITE and a PRACK to get an SDP <i>before answering</i>. (PRACK requires 100rel).	Not selected
Enable SIP Prack/Update for Early Media Support	This option indicates whether the system tells the SIP line to enable PRACK in the outbound and inbound registration.	Not selected
Max Probation Time (s)	This is the maximum time in seconds for probation on a failed line. To improve query times, the query for line selection ignores lines that are on probation.	600 seconds

Related topics

[Configure a SIP line](#)

[SIP lines concepts](#)

[SIP line Identity \(In\) options](#)

[SIP line identity \(Out\) options](#)

[Transport protocol](#)

[Media Server Fax](#)

[Fax configuration](#)

[SIP line proxy options](#)

[SIP line registrar options](#)



SIP line options

The following table describes the general options that you can use to configure a SIP line. For information on how to access these options, see [Configure a SIP line](#). Changes to any of the options on this dialog box take effect immediately.

Option	Description	Default
Active	Activates or deactivates the line in the CIC system. You can not deactivate a line if any calls are on the line. If you change line configuration parameters or to perform other line maintenance, you may have to deactivate a line and then reactivate it in order for the changes to take effect. For example, if you change the SIP line transport protocol. Note: Genesys only counts active lines to determine whether you are in compliance with your license agreement.	Active
Line Usage	Designates the usage of the line. The options are: - General Purpose - Microsoft Lync - Station Connections	General Purpose
Domain Name	Specifies the domain name that is used to formulate SIP-URLs for CIC users and phone numbers. This domain name is automatically appended to all REGISTER requests that are sent by CIC. This value is used in the "From" header in outbound SIP calls. Note: You can set additional identity settings by click Identity (In) and Identity (Out) in the options list.	Varies depending on your configuration
Maximum Number of Calls	Designates the maximum limit number of calls that the SIP line processes. When the number of calls is reached, this line processes no more calls. The options are Combined or Inbound/Outbound: Combined means that the maximum number is the sum of both inbound calls and outbound calls. Inbound/Outbound means that the values specified for each type of call count towards the maximum number of calls. The No Limit check box indicates whether there is a maximum limit. If No Limit is <i>not</i> selected, then you must set a maximum number of calls.	No limit
Fax Protocol	Indicates the fax protocol to use. The options are: - T30 only - T38 only T38 then T30: If you select this option, CIC tries the T38 fax protocol first. If the recipient endpoint does not support this protocol, then CIC tries the T30 fax protocol.	T38 only
Enable Fax Detection	Indicates whether fax tones are detected when the Allow Deferred Answer check box is selected. To determine whether to play the fax detection prompt or not, the system evaluates this check box: - If this check box is selected, then the system overrides the user's setting. - If this option is not selected, then the system uses the user's setting. If you select a Fax Protocol, then this check box is also automatically selected. If the Fax Protocol check box is set to None, then this check box is not available.	Selected
Maximum Number of Faxes	Designates the maximum limit number of faxes that the SIP line processes. When the number of faxes is reached, this line processes no more faxes. The options are Combined or Inbound/Outbound: Combined means that the maximum number is the sum of both inbound faxes and outbound faxes. Inbound/Outbound means that the values specified for each type of fax count towards the maximum number of faxes . The No Limit check box indicates whether there is a maximum limit. If No Limit is <i>not</i> selected, then you must set a maximum number of faxes.	No limit
Auto Disconnect when Silence Detected in Voice Mail	Designates whether CIC automatically disconnects a call that is in voice mail after a certain number of seconds of silence. This option is important if your CO (public exchange switch) does not send a disconnect signal (a forward disconnect notice) when a caller disconnects a call. If this check box is selected, when a call is left in voice mail, CIC waits for the number of seconds of silence that you specify in the Silence Time (ms) box, and then it automatically disconnects the call. If the CO does not send a disconnect signal, and if this check box is not selected, then the voice mail will continue to record silence.	Selected; The default silence time is 10,000 milliseconds (10 seconds).
Call Analysis Type	Indicates the call analysis type for this SIP line. The options are: Media Server: The Media server listens to the RTP stream and performs call analysis. Use this option with a third-party gateway. Interaction Gateway (Gen2 only; not recommended for new deployments): The CIC server defers to the Interaction Gateway, which listens to the TDM (ISDN) lines and returns the results via SIP messages. Do not use this option with Interaction Gateway. Media Server to Interaction Gateway: Interaction Gateway and Media Server are both used; the Media Server performs call analysis. This is the preferred setting to use with Interaction Gateway and Interaction Gateway Gen2. Do not use this option with any third-party gateway.	Media Server
Allow Deferred Answer	Indicates whether to delay answering an incoming call until an agent is reached or an IVR system is entered. This gives callers time to disconnect the call without being charged by their telecommunications provider. Note: Deferred answer is not used with ACD calls. If a call is placed to the DID of an ACD workgroup, interactions are immediately answered before alerting occurs. Note: Use the Allow Multiple Calls to Station On Deferred Answer Line server parameter to disable the alert to a station for an additional call when Allow Deferred Answer is selected.	Not selected

Playback Early Media to Inbound Calls	Indicates whether to use early media (when the remote party sends SDP before the call is answered in a 183 response) instead of ringback on an inbound call. This option does not apply to ACD calls on this line. Note: This option works only if <i>either</i> of the following conditions exist: *The CIC server receives an <code>INVITE</code> with SDP. *The CIC server receives an <code>INVITE</code> with no SDP but with <code>100rel</code> in the <code>Supported:</code> header. Additionally, this option requires both of the following conditions: *CIC must get an SDP from the remote. *The CIC server must have the <code>INVITE</code> and a <code>PRACK</code> to get an SDP <i>before answering</i>. (<code>PRACK</code> requires <code>100rel</code>).	Not selected
Enable SIP Prack/Update for Early Media Support	This option indicates whether the system tells the SIP line to enable PRACK in the outbound and inbound registration.	Not selected
Max Probation Time (s)	This is the maximum time in seconds for probation on a failed line. To improve query times, the query for line selection ignores lines that are on probation.	600 seconds

Related topics

[Configure a SIP line](#)

[SIP lines concepts](#)

[SIP line Identity \(In\) options](#)

[SIP line identity \(Out\) options](#)

[Transport protocol](#)

[Media Server Fax](#)

[Fax configuration](#)

[SIP line proxy options](#)

[SIP line registrar options](#)

SIP line identity (in) concepts

You can configure line identity options for inbound SIP interactions. Inbound SIP line behavior includes how CIC passes SIP line extensions in SIP messages, what CIC considers a diverted call and what information it passes, and how CIC routes an inbound call.

Note: All **Inbound Identity** settings affect the values of the **Eic_RemoteAddress** and **Eic_RemoteId** call attributes.

Related topics

[SIP line identity \(In\) options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line identity (in) options

The following table describes the options that you can use to configure inbound identity options for a SIP line. For information on how to access these options, see [Configure a SIP line](#).

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Use only numeric portion	Determines whether only the numeric portion of the caller ID is displayed. If this option is selected, then all other information is removed. For example: - If this check box is selected, the caller ID appears as 3178723000. - If this check box is not selected, the caller ID appears as sip:3178723000@123.45.67.89. Notes: If you do not select this check box, then CIC's telephony services do not change the inbound address and extension before the dial plan standardizes the address. The address appears in this format: sip:8723000;ext=999@inin.com. If you do select this check box, then CIC's telephony services changes the inbound address and extension before the dial plan standardizes the address. The address appears in this format: (317) 872-3000 ^ 999. If you do select this check box, and if the user portion of the SIP address is <i>not</i> numeric, then the entire SIP address is used as the caller ID.	Selected
Called Address	Designates the <i>local</i> selection method. The options are: Use Request URI: displays the destination address in the form <sip:counsel@acme.com>. Use To' header: displays the "To" field in the SIP header as the called address (the destination address). - If the field contains both a URI and a display name, then both of these items are displayed. For example, "Patty Johnson" <sip:counsel@acme.com>. - If the field contains only a display name, then it is displayed alone. For example, "Patty Johnson."	Use Request URI
Use this diversion info if present	Displays the diversion information, such as the original or most recent line value. This information is contained in the URI address field in the SIP message. When this option is enabled, you can select the following values: - Use most recent Use original	Not selected
Calling Address	Designates the remote selection method. P-Asserted-Identity is a header field in a SIP message that contains a URI and display name (optional). For example, "Patty Johnson" <sip:counsel@acme.com>. The options are: - Use 'From' header only: displays only the "From" field in the SIP header as the calling address (the origination address). - If the field contains both a URI and a display name, then both of these items are displayed. For example, "Patty Johnson" <sip:counsel@acme.com>. - If the field contains only a display name, then it is displayed alone. For example, "Patty Johnson." - Use 'P-Asserted-Identity' header only: displays only the authenticated sender origination information from the SIP message. If the "P-Asserted-Identity" header information is not available and no value is set in the header, then the number appears as "Private number," and the name appears as "Unknown Name." - Use 'P-Asserted-Identity' header then 'From' header" (default): displays the authenticated sender information from the SIP message. - If the "P-Asserted-Identity" header is known, then that value is used and then the "From" header information is used. - If the "P-Asserted-Identity" header is unknown, then only the "From" header information is used.	Use 'P-Asserted-Identity' header then 'From' header
Ignore address if user portion is not numeric	if the address is not numeric (for example, <sip:counsel@acme.com>), then this option sets the From field to "Unknown." You can optionally use this option with the Use only numeric portion check box. Either way, the CIC client displays the call as "Private Number."	Not selected

Related topics

[Configure a SIP line](#)

[Dial plan](#)

[Line options reference](#)

[SIP line identity \(in\) concepts](#)

[Lines concepts](#)

SIP line identity (Out) concepts

You can configure line identity options for outbound SIP interactions. Outbound SIP line behavior includes how CIC passes SIP line extensions in SIP messages, what CIC considers a diverted call and what information it passes, and how CIC routes an outbound call.

Related topics

[SIP line identity \(out\) options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line identity (out) options

The following table describes the options that you can use to configure outbound identity options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Use 'sips:' scheme	Note: This option is applicable only to TLS lines. Converts the SIP address in the "From" header to use SIPS instead of SIP. SIPS is a secure transmission that uses the URI format. For example: <sips:+13178723000@ICServer:5061>. If you do not select this option, CIC converts all SIPS to SIP.	Not selected
Called Address: Keep 'tel:' scheme when using a proxy	Note: This option is available only if one or more proxy addresses are configured. It is available for all three line protocols. Determines whether CIC uses the telephone format (tel:NNNNNNNNNN) for the remote address. If you do not select this option, CIC converts the phone and phone number to the SIP format (SIP:NNNNNNN@ipaddress).	Not selected
Called Address: Send Extension	Determines whether CIC dials an extension if one is passed. If this option is selected, then CIC dials it after "/." The options are: None: CIC does not include the extension in the SIP message. Use 'ext=': Post Connect: After the call connects, CIC sends the extension as DTMF tones.	Post Connect
Calling Address: Line Value 1	Sets the first calling address. After you set the value here, you can select it for the Calling Address options below. For more information, see <i>SIP Line Options</i> and <i>Configure a line value</i>.	Not specified
Calling Address: Line Value 2	Sets the second calling address. After you set the value here, you can select it for the Calling Address options below. For more information, see <i>SIP Line Options</i> and <i>Configure a line value</i>.	Not specified
Calling Address: Diversion Method	Sets how an outbound call on this line is indicated to the network. The Use 'Diversion' Header setting causes the line to use a header with diversion information, such as the origination address or the most recent address.	Use 'Diversion' Header
Calling Address (Normal Calls): From Header Address	Sets the value that appears as the local address in an outbound SIP interaction that is not diverted or redirected. The options are: Use line value 1: displays the value in the Line Value 1 field. Use line value 2: displays the value in the Line Value 2 field. Use passed value if present: displays the CIC user's outbound ANI. For example, "Name if present" <sip:+13178723000@ICServer.ININ.com>.	Use passed value if present
Calling Address (Normal Calls): From Header Name	Sets the value that appears as the local name in an outbound SIP interaction that is not diverted or redirected. The options are: Use line value 1: displays the value in the Line Value 1 field. Use line value 2: displays the value in the Line Value 2 field. Use passed value if present: displays the name value that the handlers pass. If the handlers do not pass a value, and if the CIC user's outbound ANI is configured, then CIC uses the CIC user's display name. For example, "CIC User's Display Name" <sip:+13178723000@ICServer.ININ.com>. None: displays only the address value.	Use passed value if present
Calling Address (Normal Calls): 'P-Asserted-Identity' Header Address	Sets the value that appears as the authenticated local address in the outbound SIP interaction that is not diverted or redirected. The options are: Use line value 1: displays the value in the Line Value 1 field. Use line value 2: displays the value in the Line Value 2 field. Use passed value if present: displays the address value that the handlers pass. If the handlers do not pass a value, then CIC displays the CIC user's outbound ANI. For example, "Name if present" <sip:+13178723000@ICServer.ININ.com>. None: displays neither the address nor the name.	None

Calling Address (Normal Calls): 'P-Asserted-Identity' Header Name	Sets the value that appears as the authenticated local name in the outbound SIP interaction that is not diverted or redirected. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the name value that the handlers pass. If the handlers do not pass a value, and if the CIC user's outbound ANI is configured, then CIC displays the CIC user's display name. For example, "CIC User's Display Name" <sip:+13178723000@ICServer.ININ.com>. ■ None: displays neither the address nor the name. Note: This option is not available if 'P-Asserted-Identity' Header Address is set to None.	None
Calling Address (Normal Calls): Diverted Header Address	Sets the value that appears as the destination address in the diversion header for the outbound SIP interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the address value that the handlers pass. If the handlers do not pass a value then CIC uses the CIC user's outbound ANI. For example, "Name if Present" <tel:+13178723000>. ■ None: displays neither the address nor the name.	None
Calling Address (Normal Calls): Diverted Header Name	Sets the value that appears as the destination name in the diversion header for an outbound SIP interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the name value that the handlers pass. If the handlers do not pass a value, and if the CIC user's outbound ANI is configured, then CIC displays the CIC user's display name. For example, "CIC User's Display Name" <tel:+13178723000>. ■ None: displays neither the address nor the name. Note: This setting is not available if Diversion Header Address is set to None.	None
Calling Address (Diverted Calls): 'From' Header Address	Sets the value that appears as the local address in an outbound SIP interaction that is redirected. This is typically a follow-me or forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the CIC <i>calling</i> user 1 outbound ANI. For example, "User 1 Name if Present" <sip:+13178723000@ICServer.ININ.com>. For external to follow-me interactions and forwarded interactions, CIC displays the From address of the external device. ■ Use diverted value: displays the CIC user 2 outbound ANI. For example, "User 2 Name if Present" <sip:+13178723000@ICServer.ININ.com>.	Use passed value if present
Calling Address (Diverted Calls): 'From' Header Name	Sets the value that appears as the local name in an outbound SIP interaction that is redirected. This is typically a follow-me or forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the CIC <i>calling</i> user 1 display name, if the user's outbound ANI is configured. For example, "CIC User 1 display name" <sip:+13178723000@ICServer.ININ.com>. For external to follow-me interactions and forwarded interactions, CIC displays the From name of the external device. ■ Use diverted value: displays the CIC user 2 display name if the user's outbound ANI is configured. For example, "CIC User 2 display name" <sip:+13178723000@ICServer.ININ.com>. ■ None: displays the address only.	Use passed value if present
Calling Address (Diverted Calls): 'P-Asserted-Identity' Address	Sets the value that appears as the authenticated local address in an outbound SIP interaction that is redirected. This is typically a follow-me interaction or a forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the CIC <i>calling</i> user 1 outbound ANI. For example, "User 1 Name if Present" <sip:+13178723000@ICServer.ININ.com>. For external to follow-me interactions or forwarded interactions, CIC displays the authenticated From address of the external device. ■ Use diverted value: displays the CIC user 2 outbound ANI. For example, "User 2 Name if present" <sip:+13178723000@ICServer.ININ.com>. ■ None: displays neither the address nor the name.	None
Calling Address (Diverted Calls): 'P-Asserted-Identity' Name	Sets the value that appears as the authenticated local name in an outbound SIP interaction that is redirected. This is typically a follow-me interaction or a forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the name value that the handlers pass. If the handlers do not pass a value, then CIC displays the user's outbound ANI, if it is configured. For example, "CIC user's Outbound ANI" <sip:+13178723000@ICServer.ININ.com>. For external to follow-me interactions or forward interactions, CIC displays the authenticated From name of the external device. ■ Use diverted value: displays the CIC user 1 display name if the user's outbound ANI is configured. For example, "CIC User 1 display name" <sip:+13178723000@ICServer.ININ.com>. ■ None: displays the address only. Note: This option is unavailable if 'P-Asserted-Identity' Address is set to None.	None

Calling Address (Diverted Calls): Diverted Header Address	Sets the value that appears as the destination address in the diversion header for an outbound SIP interaction that is redirected. This is typically a follow-me interaction or forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Use passed value if present: displays the address value that the handlers pass. If the handlers do not pass a value then CIC displays the CIC user 1 outbound ANI, if it is configured. For example, "CIC User 1 Outbound ANI" <sip:+13178723000@ICServer.ININ.com>. ■ Use diverted value: displays the CIC user 1 outbound ANI, if it is configured. For example, "CIC User 1 Outbound ANI" <tel:+13178723000>. ■ None: displays neither the address nor the name.	Use diverted value
Calling Address (Diverted Calls): Diverted Header Name	Sets the value that appears as the destination name in the diversion header for an outbound SIP interaction that is redirected. This is typically a follow-me or forwarded interaction. The options are: ■ Use line value 1: displays the value in the Line Value 1 field. ■ Use line value 2: displays the value in the Line Value 2 field. ■ Select "Use passed value if present: displays the name value that the handlers pass. If the handlers do not pass a value then CIC displays the CIC user 1 display name, if the user's outbound ANI is configured. For example, "CIC User 1 display name" <sip:+13178723000@ICServer.ININ.com>. ■ Use diverted value: displays the CIC user 1 display name if the user's outbound ANI is configured. For example, "CIC User 1 display name" <sip:+13178723000@ICServer.ININ.com>. ■ None: displays neither the address nor the name. Note: This setting is unavailable if Diversion Header Address is set to None.	Use diverted value

Related topics

[SIP line identity \(out\) concepts](#)

[Configure a SIP line](#)

[Configure a line value](#)

[User outbound ANI configuration](#)

[Lines concepts](#)



Configure a SIP line value

You can configure the appearance of an outbound SIP line. You then select a line appearance (value) for each **Calling Address** option when you configure the identity (out) options for a SIP line. For more information on configuring the outbound identity of a SIP line, see *Configure a line* and *Identity (out) options*.

To configure a line value

1. In the <IC_Server> container, double-click the Lines container.
2. Do one of the following:
 - To add a new line, in the list view window, right-click and then click **New**. The **Entry Name** dialog box appears. Type the line name and then click **OK**.
 - To edit an existing line, in the list view window, double-click a line.
3. In the **Line Configuration** dialog box, in the list of options, click **Identity (Out)**.
4. In the **Calling Address** section, next to the **Line Value 1** field or the **Line Value 2** field, click ... The **Configure Line Value** dialog box appears.
5. To display non-specific information for the outbound line identification, select the **Use Anonymous** values check box. This option displays: Address = "sip:anonymous@anonymous.invalid," Name = "Anonymous."
6. In the **Name** box, type the SIP phone name (or line name). CIC automatically displays this information. Additionally, this information appears in the **From** header in outbound SIP calls. If you select **Use Anonymous**, then "Anonymous" appears in the **From** header. Alternatively, a handler can set a name value.
7. In the **Address** box, type the SIP phone number (or line number). CIC automatically displays this information. Additionally, this information appears in the **From** header in outbound SIP calls. If you select **Use Anonymous**, then "sip:anonymous@anonymous.invalid" appears in the **From** header. Alternatively, a handler can set an address value.
8. The **Display** value box displays the actual value as it appears in CIC.
9. Click **OK**.

Related topics

[Identity \(out\) options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line audio options

The following table describes the options that you can use to configure audio options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Audio Path	For information on the available options, see the following resources on the Product Information site: <i>SIP Application Note</i> <i>Telephony Applications Note</i> <i>Interaction Media Server document</i>	Dynamic
DTMF Type	Sets the Dual Tone Multi-Frequency (DTMF) type for the station. The options are: - Do not use RFC2833 inband only RFC2833 if supported, otherwise inband (default) RFC2833 only.	RFC2833 if supported, otherwise inband
DTMF Payload	Sets the value that is used for the DTMF Real-time Transport Protocol (RTP) payload value. The acceptable values are 96-127. The vendor-specific values are:100, 102-105. Vendor-specific values should not be used for AudioCodes stations.	101
Voice Activation Detection (VAD)	Determines whether packets are sent for silence. When Voice Activation Detection is selected, no packets are sent for silence. This option saves bandwidth on your network. However, like compression, there is some loss of voice quality.	18 (24, 011000) CS53
		Not selected
Echo Cancellation	Determines whether echo cancellation is used. Echo cancellation removes echoes from voice communication to improve the sound quality.	Selected
Allow Multiple Codecs in Outbound SDP Offer	This option indicates whether CIC delivers all of the available Codecs to the recipient endpoint when a user makes an outbound call. The recipient endpoint can then select which Codec it recognizes. You set up Codecs in the Locations container.	Not Selected

Related topics

[Configure a SIP line](#)

[Lines concepts](#)



SIP line audio options

The following table describes the options that you can use to configure audio options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Audio Path	For information on the available options, see the following resources on the Product Information site: <i>SIP Application Note</i> <i>Telephony Applications Note</i> <i>Interaction Media Server document</i>	Dynamic
DTMF Type	Sets the Dual Tone Multi-Frequency (DTMF) type for the station. The options are: - Do not use RFC2833 inband only RFC2833 if supported, otherwise inband (default) RFC2833 only.	RFC2833 if supported, otherwise inband
DTMF Payload	Sets the value that is used for the DTMF Real-time Transport Protocol (RTP) payload value. The acceptable values are 96-127. The vendor-specific values are:100, 102-105. Vendor-specific values should not be used for AudioCodes stations.	101
Voice Activation Detection (VAD)	Determines whether packets are sent for silence.	18 (24, 011000) CS53
	When Voice Activation Detection is selected, no packets are sent for silence. This option saves bandwidth on your network. However, like compression, there is some loss of voice quality.	Not selected
Echo Cancellation	Determines whether echo cancellation is used. Echo cancellation removes echoes from voice communication to improve the sound quality.	Selected
Allow Multiple Codecs in Outbound SDP Offer	This option indicates whether CIC delivers all of the available Codecs to the recipient endpoint when a user makes an outbound call. The recipient endpoint can then select which Codec it recognizes. You set up Codecs in the Locations container.	Not Selected

Related topics

[Configure a SIP line](#)

[Lines concepts](#)



SIP line transport options

The following table describes the options that you can use to configure transport options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to *most* of the options on this dialog box take effect immediately.

Note: The protocol and port settings on this page are static. You must restart the CIC server in order for changes to these settings to take effect.		
Option	Description	Default
Transport Protocol	Sets the transport protocol. Your selection depends on the protocols that are supported by your SIP-enabled devices (gateway, phones, and so on). The options are: TCP (Transmission Control Protocol). The TCP station line is available if needed. Most new IP phones support TCP. TLS (Transport Layer Security or SSL). This option requires the Advanced Security feature license. After you select it, the TLS Security configuration option appears. UDP (User Datagram Protocol). Nearly all IP phones support UDP. Note: If you change the transport protocol, you must deactivate and reactivate the line in order for the change to take effect. The line cannot be deactivated if any calls are active on it. When a line is deactivated, no calls can be taken. Therefore, after you deactivate the line, reactivate it and then verify that it can take calls. The other available options on this dialog box depend on the transport protocol that you select.	UDP

Audio Protocol	Indicates whether the audio stream is unencrypted or encrypted. The options are: • RTP (Real Time Protocol): The audio stream is unencrypted. • SRTP (Secure RTP): The audio stream is encrypted. This option is available only if you select the TLS transport protocol. Select SRTP only if the endpoint(s) on this line support SRTP. If you select SRTP, the Security option is also available. Calls between devices that transmit and receive SIP TLS messages and SRTP audio are completely secure.	RTP (unencrypted)
Security	The Security setting determines, in part, whether the security lock icon appears in the CIC clients when a user places or receives an insecure call on this SIP line. The Security option is available only when you select the SRTP audio protocol. In a CIC system environment, some devices may be configured to use SRTP while others do not. When two devices that use SRTP connect directly, both Interaction Clients display the lock icon to indicate that the call is secure from "end to end." The display of this lock icon is automatic and is not configurable. If one device uses SRTP and another device does not, then at least one segment of a call between these devices is insecure. The audio between these devices needs to be transcribed (converted) between SRTP and RTP via an intermediate device such as the media server. If a SIP line handles insecure calls, you can configure the display of an open-lock icon to inform CIC client users that the call is not secure. The options are: • Minimal: hides the display of the open-lock icon on non-secure calls. If you select this option, completely secure calls always show the lock icon and all other calls show no lock icon. If a secure call creates a conference that includes a non-secure call, the lock icon disappears to indicate that the call is no longer secure. • End-to-Edge: displays the open-lock icon when a call, or at least one segment of a call in the CIC system domain is or becomes non-secure. End-to-edge means from one end of the call in the CIC system up to the edge of the CIC system (a gateway connected to the PSTN). It does not indicate security conditions on the PSTN or service provider outside of the CIC domain. If you select this option, secure calls always show the lock icon and all other calls that are non-secure show the open-lock icon. If a secure call creates a conference that includes a non-secure call, all parties in the conference see the lock icon turn into an open-lock icon. Conversely, if a non-secure conference call becomes secure from all of the end points to the edge of the CIC system, the open-lock icons change to lock icons.	Depends on your selection for the transport protocol
Adapter Name	Determines the local server IP address. The name of the adapter appears below the list. This setting was formerly Address to Use.	The actual name of your network adapter. This value is typically <i>Local Area Connection</i> because that is the default network adapter name that Windows uses.
Usable Addresses	CIC displays the list of IP addresses assigned for the chosen adaptor. This option is available only if the EnableIPv6 server parameter is set to 1 (true).	Not specified.
Address Family	Sets the family of addresses to which CIC listens. CIC listens to all IP address assigned to each family. This option is available only if the EnableIPv6 server parameter is set to 1 (true). The options are: • IPv4 • IPv6 • Telephony Default (IPv4 and IPv6). The host name resolves to both IPv4 and IPv6.	The default setting uses the order returned from a DNS query. If there are multiple IP addresses, CIC uses the first IP address in that range.
Media Address Family	Specifies the media address family to which CIC should listen. This option is available only if the EnableIPv6 server parameter is set to 1 (true). The options are • IPv4 • IPv6 • Telephony Default (IPv4 and IPv6). The host name resolves to both IPv4 and IPv6. This option is typically used when CIC offers media, but it also helps to determine an answer when CIC receives identical media types and transport protocols for IPv4 and IPv6 information in the session description protocol (SDP).	
Receive Port	UDP, TCP, and TLS: This option sets the port number for which the CIC SIP engine services requests. The valid values are 1024 to 65535. TLS runs on top of TCP. There is a conflict if TCP is set on the same port or the same protocol. A new SIP line cannot have the same port and the same protocol as an existing SIP line. However, a new line may use the same port of an existing line if it uses a different protocol. For more information, see <i>PureConnect Security Features</i> in the PureConnect Documentation Library.	The default is 5060. For TLS, this is set to 5061.
Connect Timer	TCP and TLS only: Sets the timer value in milliseconds for TCP connections on the SIP Line. The valid values are 500 to 20000 (milliseconds).	2000
T1 Timer (ms)	UDP only: Sets the timer value in milliseconds that represents the initial incremental delay between packet retransmission. The valid values are 500 to T2 (milliseconds).	500
T2 Timer (ms)	UDP only: Sets the timer value in milliseconds that represents the maximum incremental delay between packet retransmissions. The valid values are any values greater than or equal to 1000 (milliseconds).	1000
Maximum Packet Retry	UDP only: Sets the maximum number of packet retry attempts for requests. Valid values are from 0 to 10.	4

Maximum Invite Retry	UDP only: Sets the maximum number of packet retry attempts for INVITE and ACK requests. Valid values are from 0 to 6.	3
Reinvite Delay (ms)	UDP only: Sets the reinvite delay in milliseconds.	50
Retryable Reason Codes	Defines the list of valid SIP reason codes. If this line is part of a line group, and an outbound call that is made on this line returns a valid SIP reason code, then CIC retries the call on the next line in the line group. Separate reason codes or ranges of reason codes with commas. For example: "500-599" Or... "401, 480, 490-495, 500-599" Note: "480" is not available on lines that are enabled for Microsoft Lync.	480, 500-599
Retryable Cause Codes	Defines a list of SIP cause codes. Cause codes take precedence over SIP response codes for retry attempts. If dial attempts are exhausted, the disconnect is treated as the most recent cause code if a cause code was present on any of the dial attempts. All dial attempts are traced at the note level when multiple retries are not treated as a 'no available lines' error. Separate cause codes with commas. For example: "503, 507, 550"	The default value is 1-5,25,27,28,31,34,38,41,42,44,46,62,63,79,91,96,97,99,100,103
SIP DSCP Value	Sets the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted SIP packets. The values are shown in both hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of valid values is 00 (0, 000000) through 3F (63, 111111).	18 (24, 011000) CS3
Inbound Progress Timer (ms)	Sets the number of milliseconds to wait before sending the 180 RINGING message. If the call is answered before this time expires, the 180 RINGING message is not sent. Acceptable values are 1000 through 60,000 milliseconds	5000
No Inbound Progress Timer	Determines whether the 180 RINGING message is never sent on this SIP line.	Not selected
SIP Answer Delay (ms)	Sets the number of milliseconds of delay to insert before a call is answered. This setting is useful when there is some audio loss during call setup. The acceptable values are from 0 through 8,000 milliseconds. If the value is greater than or equal to 1000 milliseconds, an 180 Ringing SIP signal is sent before delay is inserted. Regardless of the value, the delay is always inserted after 200 OK is sent back.	500 milliseconds

Related topics

[Configure a SIP line](#)

[PureConnect Customer Care](#)

[SIP line transport concepts](#)

[SIP lines concepts](#)

SIP line transport concepts

You can configure the SIP line transport options to specify secure protocols to encrypt SIP messages and audio streams, define security indicator behavior for the CIC clients, and specify encryption cipher suites and authentication certificates for each SIP line.

You can also set some of these configuration options at the station level. Station-level settings override the corresponding line-level settings.

The transport protocol corresponds to Layer 4 in the Open Systems Interconnection (OSI) reference model. The protocol that you use depends on the features that your devices support.

Related topics

[SIP line transport options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line transport options

The following table describes the options that you can use to configure transport options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to *most* of the options on this dialog box take effect immediately.

Note: The protocol and port settings on this page are static. You must restart the CIC server in order for changes to these settings to take effect.

Option	Description	Default

Transport Protocol	Sets the transport protocol. Your selection depends on the protocols that are supported by your SIP-enabled devices (gateway, phones, and so on). The options are: • TCP (Transmission Control Protocol). The TCP station line is available if needed. Most new IP phones support TCP. • TLS (Transport Layer Security or SSL). This option requires the Advanced Security feature license. After you select it, the TLS Security configuration option appears. • UDP (User Datagram Protocol). Nearly all IP phones support UDP. Note: If you change the transport protocol, you must deactivate and reactivate the line in order for the change to take effect. The line cannot be deactivated if any calls are active on it. When a line is deactivated, no calls can be taken. Therefore, after you deactivate the line, reactivate it and then verify that it can take calls. The other available options on this dialog box depend on the transport protocol that you select.	UDP
Audio Protocol	Indicates whether the audio stream is unencrypted or encrypted. The options are: • RTP (Real Time Protocol): The audio stream is unencrypted. • SRTP (Secure RTP): The audio stream is encrypted. This option is available only if you select the TLS transport protocol. Select SRTP only if the endpoint(s) on this line support SRTP. If you select SRTP, the Security option is also available. Calls between devices that transmit and receive SIP TLS messages and SRTP audio are completely secure.	RTP (unencrypted)
Security	The Security setting determines, in part, whether the security lock icon appears in the CIC clients when a user places or receives an insecure call on this SIP line. The Security option is available only when you select the SRTP audio protocol. In a CIC system environment, some devices may be configured to use SRTP while others do not. When two devices that use SRTP connect directly, both Interaction Clients display the lock icon to indicate that the call is secure from "end to end." The display of this lock icon is automatic and is not configurable. If one device uses SRTP and another device does not, then at least one segment of a call between these devices is insecure. The audio between these devices needs to be transcribed (converted) between SRTP and RTP via an intermediate device such as the media server. If a SIP line handles insecure calls, you can configure the display of an open-lock icon to inform CIC client users that the call is not secure. The options are: • Minimal: hides the display of the open-lock icon on non-secure calls. If you select this option, completely secure calls always show the lock icon and all other calls show no lock icon. If a secure call creates a conference that includes a non-secure call, the lock icon disappears to indicate that the call is no longer secure. • End-to-Edge: displays the open-lock icon when a call, or at least one segment of a call in the CIC system domain is or becomes non-secure. End-to-edge means from one end of the call in the CIC system up to the edge of the CIC system (a gateway connected to the PSTN). It does not indicate security conditions on the PSTN or service provider outside of the CIC domain. If you select this option, secure calls always show the lock icon and all other calls that are non-secure show the open-lock icon. If a secure call creates a conference that includes a non-secure call, all parties in the conference see the lock icon turn into an open-lock icon. Conversely, if a non-secure conference call becomes secure from all of the end points to the edge of the CIC system, the open-lock icons change to lock icons.	Depends on your selection for the transport protocol
Adapter Name	Determines the local server IP address. The name of the adapter appears below the list. This setting was formerly Address to Use.	The actual name of your network adapter. This value is typically <i>Local Area Connection</i> because that is the default network adapter name that Windows uses.
Usable Addresses	CIC displays the list of IP addresses assigned for the chosen adaptor. This option is available only if the EnableIPv6 server parameter is set to 1 (true).	Not specified.
Address Family	Sets the family of addresses to which CIC listens. CIC listens to all IP address assigned to each family. This option is available only if the EnableIPv6 server parameter is set to 1 (true). The options are: • IPv4 • IPv6 • Telephony Default (IPv4 and IPv6). The host name resolves to both IPv4 and IPv6.	The default setting uses the order returned from a DNS query. If there are multiple IP addresses, CIC uses the first IP address in that range.
Media Address Family	Specifies the media address family to which CIC should listen. This option is available only if the EnableIPv6 server parameter is set to 1 (true). The options are • IPv4 • IPv6 • Telephony Default (IPv4 and IPv6). The host name resolves to both IPv4 and IPv6. This option is typically used when CIC offers media, but it also helps to determine an answer when CIC receives identical media types and transport protocols for IPv4 and IPv6 information in the session description protocol (SDP).	
Receive Port	UDP, TCP, and TLS: This option sets the port number for which the CIC SIP engine services requests. The valid values are 1024 to 65535. TLS runs on top of TCP. There is a conflict if TCP is set on the same port or the same protocol. A new SIP line cannot have the same port and the same protocol as an existing SIP line. However, a new line may use the same port of an existing line if it uses a different protocol. For more information, see <i>PureConnect Security Features</i> in the PureConnect Documentation Library.	The default is 5060. For TLS, this is set to 5061.

Connect Timer	TCP and TLS only: Sets the timer value in milliseconds for TCP connections on the SIP Line. The valid values are 500 to 20000 (milliseconds).	2000
T1 Timer (ms)	UDP only: Sets the timer value in milliseconds that represents the initial incremental delay between packet retransmission. The valid values are 500 to T2 (milliseconds).	500
T2 Timer (ms)	UDP only: Sets the timer value in milliseconds that represents the maximum incremental delay between packet retransmissions. The valid values are any values greater than or equal to 1000 (milliseconds).	1000
Maximum Packet Retry	UDP only: Sets the maximum number of packet retry attempts for requests. Valid values are from 0 to 10.	4
Maximum Invite Retry	UDP only: Sets the maximum number of packet retry attempts for INVITE and ACK requests. Valid values are from 0 to 6.	3
Reinvite Delay (ms)	UDP only: Sets the reinvite delay in milliseconds.	50
Retryable Reason Codes	Defines the list of valid SIP reason codes. If this line is part of a line group, and an outbound call that is made on this line returns a valid SIP reason code, then CIC retries the call on the next line in the line group. Separate reason codes or ranges of reason codes with commas. For example: "500-599" Or... "401, 480, 490-495, 500-599" Note: "480" is not available on lines that are enabled for Microsoft Lync.	480, 500-599
Retryable Cause Codes	Defines a list of SIP cause codes. Cause codes take precedence over SIP response codes for retry attempts. If dial attempts are exhausted, the disconnect is treated as the most recent cause code if a cause code was present on any of the dial attempts. All dial attempts are traced at the note level when multiple retries are not treated as a 'no available lines' error. Separate cause codes with commas. For example: "503, 507, 550"	The default value is 1-5,25,27,28,31,34,38,41,42,44,46,62,63,79,91,96,97,99,100,103
SIP DSCP Value	Sets the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted SIP packets. The values are shown in both hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of valid values is 00 (0, 000000) through 3F (63, 111111).	18 (24, 011000) CS3
Inbound Progress Timer (ms)	Sets the number of milliseconds to wait before sending the 180 RINGING message. If the call is answered before this time expires, the 180 RINGING message is not sent. Acceptable values are 1000 through 60,000 milliseconds	5000
No Inbound Progress Timer	Determines whether the 180 RINGING message is never sent on this SIP line.	Not selected
SIP Answer Delay (ms)	Sets the number of milliseconds of delay to insert before a call is answered. This setting is useful when there is some audio loss during call setup. The acceptable values are from 0 through 8,000 milliseconds. If the value is greater than or equal to 1000 milliseconds, an 180 Ringing SIP signal is sent before delay is inserted. Regardless of the value, the delay is always inserted after 200 OK is sent back.	500 milliseconds

Related topics

[Configure a SIP line](#)

[PureConnect Customer Care](#)

[SIP line transport concepts](#)

[SIP lines concepts](#)



SIP line session options

The following table describes the options that you can use to configure session options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to any options on this dialog box take effect immediately.

Option	Description	Default
Use SIP Session Timer	Determines whether a recurring OPTIONS message is sent to the remote device. If the remote device does not respond to the OPTIONS message, the call is disconnected.	Not selected
SIP Session Timeout	The recurrence interval of the OPTIONS message that is sent when the Use SIP Session Timer check box is selected.	60 seconds
Disconnect on Broken RTP	Determines if a VoIP call remains active if the audio is disrupted. Audio is considered disrupted if no RTP, RTCP, and no comfort noise packet is received from the remote device.	Not selected
Media Timing	The options are: • Normal • Delayed	Normal
Media reINVITE Timing	Specifies if the media attempts to add media streams to the session immediately or if the timing is delayed when it receives a reINVITE. The options are: • Normal • Delayed	Normal
Terminate Analysis on Connect	Terminates the call analysis procedure when a SIP connection indication from the network is received. For example, Interaction Center makes its PSTN call via SIP calls through a SIP/ISDN gateway. In this example, the SIP/ISDN gateway sends only a SIP connect message back to Interaction Center after the remote party answers the call. If call analysis is used, you would want to select Terminate Analysis on Connect, so that call analysis terminates when the SIP connect message is received. For example, Interaction Center makes its PSTN call via SIP calls through a SIP/Analog gateway. In this example, the SIP/Analog gateway always sends a SIP connect message back to Interaction Center prematurely, before the remote party answers the call. If call analysis is used, you would want to deselect Terminate Analysis on Connect, so that call analysis continues after the SIP connect message is received. If the connection is to a station, the Terminate Analysis on Connect configured in the station is used. Notes: Beginning in IC 4.0 SU3, CIC terminates call analysis when it connects to remote stations. This decreases the time it takes to connect the caller to the agent at the remote station. If you want to restore the previous functionality of using call analysis when connecting to remote stations, create the Remote Station Call Analysis Answer Supervision Interaction Center server parameter, and set it to False. You should always enable the Terminate Analysis on Connect option for a standalone fax station. Otherwise outbound faxing could fail.	Not selected
Disable Media Server Passthru	Determines whether the media server rewrites the SSRC header.	Not selected
ASR Enabled	Determines whether ASR (Automatic Speech Recognition) resources are allocated for this SIP line.	Selected

Related topics

[Configure a SIP line](#)
[PureConnect Customer Care site](#)
[Optional general server parameters](#)
[Media server general configuration](#)
[Lines concepts](#)



SIP line session options

The following table describes the options that you can use to configure session options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to any options on this dialog box take effect immediately.

Option	Description	Default
Use SIP Session Timer	Determines whether a recurring OPTIONS message is sent to the remote device. If the remote device does not respond to the OPTIONS message, the call is disconnected.	Not selected
SIP Session Timeout	The recurrence interval of the OPTIONS message that is sent when the Use SIP Session Timer check box is selected.	60 seconds
Disconnect on Broken RTP	Determines if a VoIP call remains active if the audio is disrupted. Audio is considered disrupted if no RTP, RTCP, and no comfort noise packet is received from the remote device.	Not selected
Media Timing	The options are: • Normal • Delayed	Normal
Media reINVITE Timing	Specifies if the media attempts to add media streams to the session immediately or if the timing is delayed when it receives a reINVITE. The options are: • Normal • Delayed	Normal
Terminate Analysis on Connect	Terminates the call analysis procedure when a SIP connection indication from the network is received. For example, Interaction Center makes its PSTN call via SIP calls through a SIP/ISDN gateway. In this example, the SIP/ISDN gateway sends only a SIP connect message back to Interaction Center after the remote party answers the call. If call analysis is used, you would want to select Terminate Analysis on Connect, so that call analysis terminates when the SIP connect message is received. For example, Interaction Center makes its PSTN call via SIP calls through a SIP/Analog gateway. In this example, the SIP/Analog gateway always sends a SIP connect message back to Interaction Center prematurely, before the remote party answers the call. If call analysis is used, you would want to deselect Terminate Analysis on Connect, so that call analysis continues after the SIP connect message is received. If the connection is to a station, the Terminate Analysis on Connect configured in the station is used. Notes: Beginning in IC 4.0 SU3, CIC terminates call analysis when it connects to remote stations. This decreases the time it takes to connect the caller to the agent at the remote station. If you want to restore the previous functionality of using call analysis when connecting to remote stations, create the Remote Station Call Analysis Answer Supervision Interaction Center server parameter, and set it to False. You should always enable the Terminate Analysis on Connect option for a standalone fax station. Otherwise outbound faxing could fail.	Not selected
Disable Media Server Passthru	Determines whether the media server rewrites the SSRC header.	Not selected
ASR Enabled	Determines whether ASR (Automatic Speech Recognition) resources are allocated for this SIP line.	Selected

Related topics

[Configure a SIP line](#)

[PureConnect Customer Care site](#)

[Optional general server parameters](#)

[Media server general configuration](#)

[Lines concepts](#)



SIP line authentication options

The following table describes the options that you can use to configure authentication options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all options on this dialog box take effect immediately.

Option	Description	Default
Authentication	Determines whether authentication is enabled for this SIP line.	Not selected
User Name	Specifies the User Name that is used in the authentication process. If you enable authentication for the SIP line, you must specify a user name.	Not specified
Password	Specifies the Password that is used in the authentication process.	Not specified
Confirm Password	Confirms the Password that is used in the authentication process.	Not specified

Related topics

[SIP line authentication concepts](#)

[Configure a SIP line](#)

[Lines concepts](#)

SIP line authentication concepts

Authentication credentials on the SIP line apply only to outbound calls that are made from the Interaction Center.

SIP line authentication is only used when a proxy "challenges" an outbound call.

A SIP line is typically used to send a call to an external party through a SIP gateway or proxy. If the gateway or proxy challenges the call with a 401 or 407 response code, then the **User Name** and **Password** that are defined in the **Authentication** options in the **SIP Line Configuration** dialog box on the are used to authenticate the call.

The digest access algorithm is used as defined in RFC 2617 HTTP Authentication: Basic and Digest Access Authentication.

Related topics

[SIP line authentication options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line authentication options

The following table describes the options that you can use to configure authentication options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all options on this dialog box take effect immediately.

Option	Description	Default
Authentication	Determines whether authentication is enabled for this SIP line.	Not selected
User Name	Specifies the User Name that is used in the authentication process. If you enable authentication for the SIP line, you must specify a user name.	Not specified
Password	Specifies the Password that is used in the authentication process.	Not specified
Confirm Password	Confirms the Password that is used in the authentication process.	Not specified

Related topics

[SIP line authentication concepts](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line proxy options

The following table describes the options that you can use to configure proxy options for a SIP line. For more information, see *SIP line proxy concepts* and *Configure proxy addresses*. Changes to most of the options on this dialog box take effect immediately.

Note: If you change the port number of a proxy address, then you must restart the CIC server in order for the change to take effect.		
Option	Description	Default
Prioritized list of Proxy addresses	Displays the a prioritized list of outbound proxy addresses that are available to CIC. All messages are sent to the first proxy address in this list. The remaining proxy addresses are used only if the first proxy address is not operational. "Not operational" means that CIC did not receive any response from the proxy and the request timed out. For each IP address, specify the port number at which the proxy services requests. Valid port numbers are 1024 to 65535.	The default proxy port number for a line that uses TLS is 5061. The default proxy port number for all other protocols (TCP and UDP) is 5060.
DNS SRV	Dynamically requests a list of proxy servers from a DNS server.	Not selected

Related topics

[Configure proxy addresses](#)
[SIP line proxy concepts](#)
[Configure a SIP line](#)
[Line group configuration](#)
[Lines concepts](#)

SIP line proxy concepts

If you configure an outbound proxy, then all SIP messages are sent to it for transmission. For each proxy you can specify one or more proxy addresses.

The list of proxy addresses indicates the order in which they are tried. All messages are sent to the **first** proxy address in this list. The remaining proxy addresses are used only if the first proxy address is not operational. "Not operational" means that CIC did not receive any response from the proxy and the request timed out.

If any response is received from the proxy then the proxy selection operation is considered complete, regardless of the response value.

This proxy list is intended to be used only when the proxies are considered to be "cold-standbys" of each other, meaning that only one is operational at a time.

If you intend to use the proxies as "hot-standbys" or N+1 configurations, then use SIP lines and line groups instead.

For example:

1. Assign one proxy per SIP line. Assign multiple SIP lines into one line group. This method orders proxies alphanumerically by line name. It enables the use of different hunt selection methods.
2. Assign one proxy per SIP line. Assign one SIP line into one line group. You can then arrange the line group list in Dial Plan Dial Group List. This method allows the selection of one proxy as the main proxy regardless of the line name.

Each SIP line contains a configurable list of response codes that can be retried. The response codes can be used to determine when or if the next SIP line or line group is attempted.

Related topics

[Configure proxy addresses](#)
[SIP line proxy options](#)
[Configure a SIP line](#)
[Lines concepts](#)



SIP line proxy options

The following table describes the options that you can use to configure proxy options for a SIP line. For more information, see *SIP line proxy concepts* and *Configure proxy addresses*. Changes to most of the options on this dialog box take effect immediately.

Note: If you change the port number of a proxy address, then you must restart the CIC server in order for the change to take effect.

Option	Description	Default
Prioritized list of Proxy addresses	Displays the a prioritized list of outbound proxy addresses that are available to CIC. All messages are sent to the first proxy address in this list. The remaining proxy addresses are used only if the first proxy address is not operational. "Not operational" means that CIC did not receive any response from the proxy and the request timed out. For each IP address, specify the port number at which the proxy services requests. Valid port numbers are 1024 to 65535.	The default proxy port number for a line that uses TLS is 5061. The default proxy port number for all other protocols (TCP and UDP) is 5060.
DNS SRV	Dynamically requests a list of proxy servers from a DNS server.	Not selected

Related topics

[Configure proxy addresses](#)
[SIP line proxy concepts](#)
[Configure a SIP line](#)
[Line group configuration](#)
[Lines concepts](#)



Configure proxy addresses

To configure proxy addresses

1. Open the **Proxy** tab of the **Line Configuration** dialog box.
2. In the list of options, click **Proxy**.
3. To request a list of proxy servers from a DNS server, select the **DNS SRV** check box. You can then add an occurrence of a proxy server into the prioritized list.
4. To add a proxy address, click **Add**. Specify the proxy address and port number. Click **OK**.
5. To edit a proxy address, select the address. Click **Edit**. Make your changes. Click **OK**.

Note: If you change the port number of a proxy address, then you must restart the CIC server in order for the change to take effect.

6. To delete a proxy address, select the address. Click **Delete**.
7. To change the priority order of a proxy address, select the address. Then use the **Up** and **Down** buttons to change its position in the list.
8. To save your changes, click **OK**.

Related topics

[SIP line proxy concepts](#)
[SIP line proxy options](#)
[Configure a SIP line](#)
[Lines concepts](#)



SIP line registrar options

The following table describes the options that you can use to configure registrar options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
External List of Telephone Numbers	This is a list of External Phone Numbers that are not configured in CIC but that need to be directed to the CIC server when they are encountered. Therefore, CIC (via TS) must register these external phone numbers with the registrar. Typically, these are numbers that are provisioned on the PSTN interface but that are not provisioned in the CIC system, such as a 1-800 number.	Not specified
Prioritized List of Registrar addresses	This is a list of registrars in order of priority that are available for contact registration by CIC. If a registrar is configured, then all CIC contacts are sent to it in a SIP REGISTER message by TS. The SIP engine attempts to register the given telephone numbers to every host in the registrar list. Each entry in the list must be either an IP address in the IPv4 dotted-notation or a fully qualified domain name. For each IP address there should be a port. The port number identifies the port at which the registrar will be servicing requests. Valid port values are from 1024 to 65535. For each IP address, you must also specify the registration time in seconds. The value for the registration time must be an integer between 0 and 360000 (100 hours) inclusive.	The default for a line that uses TLS is 5061. The default for all other protocols (TCP and UDP) is 5060.

Related topics

[Configure a SIP line](#)

[SIP line registrar concepts](#)

[Lines concepts](#)

SIP line registrar concepts

In SIP, a registrar is a logical entity that stores information about where to contact a user when someone dials that user's number. In CIC, a registrar represents a SIP carrier. Before service is granted, the SIP carrier usually requires CIC to register the SIP line, which is done by TS sending a SIP REGISTER message to the carrier. The registration tells the SIP carrier that if it receives calls for CIC's DID (Direct Inward Dial)s, then those calls should be sent to CIC.

Related topics

[SIP line registrar options](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line registrar options

The following table describes the options that you can use to configure registrar options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
External List of Telephone Numbers	This is a list of External Phone Numbers that are not configured in CIC but that need to be directed to the CIC server when they are encountered. Therefore, CIC (via TS) must register these external phone numbers with the registrar. Typically, these are numbers that are provisioned on the PSTN interface but that are not provisioned in the CIC system, such as a 1-800 number.	Not specified
Prioritized List of Registrar addresses	This is a list of registrars in order of priority that are available for contact registration by CIC. If a registrar is configured, then all CIC contacts are sent to it in a SIP REGISTER message by TS. The SIP engine attempts to register the given telephone numbers to every host in the registrar list. Each entry in the list must be either an IP address in the IPv4 dotted-notation or a fully qualified domain name. For each IP address there should be a port. The port number identifies the port at which the registrar will be servicing requests. Valid port values are from 1024 to 65535. For each IP address, you must also specify the registration time in seconds. The value for the registration time must be an integer between 0 and 360000 (100 hours) inclusive.	The default for a line that uses TLS is 5061. The default for all other protocols (TCP and UDP) is 5060.

Related topics

[Configure a SIP line](#)

[SIP line registrar concepts](#)

[Lines concepts](#)



SIP line headers options

The following table describes the options that you can use to configure header options for a SIP line. For information on how to access these options, see *Configure a SIP line*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Transferred Headers	Specifies the headers that are collected from the initial inbound INVITE message and transferred to the outbound INVITE message to the partner or connection call. Define the header for use by both the inbound line and the outbound line. Valid entries in the list must contain a string of the following characters: ■ lowercase "a" through "z" ■ uppercase "A" through "Z" ■ digits "0" through "9" ■ " _" ■ " ." ■ " !" ■ " %" ■ " &" ■ " -" ■ " +" ■ " ^" ■ " " ■ " ~"	Not specified
Call Attribute Headers	Specifies the headers that are collected on inbound SIP messages. These headers are converted into CIC attributes for use by the CIC subsystems. Each entry in the list must contain a string of the following characters: ■ lowercase "a" through "z" ■ uppercase "A" through "Z" ■ digits "0" through "9" ■ " _" ■ " ." ■ " !" ■ " %" ■ " &" ■ " -" ■ " +" ■ " ^" ■ " " ■ " ~"	Not specified
User-to-User Settings	Determines the exchange of user-to-user information (UUI) data when a SIP session is initiated.	
Header	Selects the type of UUI header information. The options are: • X-UserToUser: This parameter format is the Audiocodes or Genesys proprietary header. It does not use the protocol discriminator (PD). The length limit of the data is 129 bytes (129*2 hex digits). • User-to-User: This is the general parameter that includes the PD in the format User-to-User: XXhexdata;encoding=hex, where the XX is the PD. The length limit is 129 bytes including the PD (129*2 hex digits). • User-to-User PD Attribute: This is the parameter that some gateways use where the PD is specified separately in the format User-to-User: hexdata;pd=XX;encoding=hex.	<u>X-UserToUser</u>
Protocol Discriminator	Describes the user protocol message being transferred. You can specify any integers, lowercase letters from a-f, and uppercase letters from A-F. If the X-UserToUser header is used, this option is not applicable.	00
Attribute Format	Selects the encoding format for the header. The options are: • Hex • Ascii • Extended Ascii	Hex

Related topics

[Configure a SIP line](#)

[Optional general server parameters](#)

[SIP line headers concepts](#)

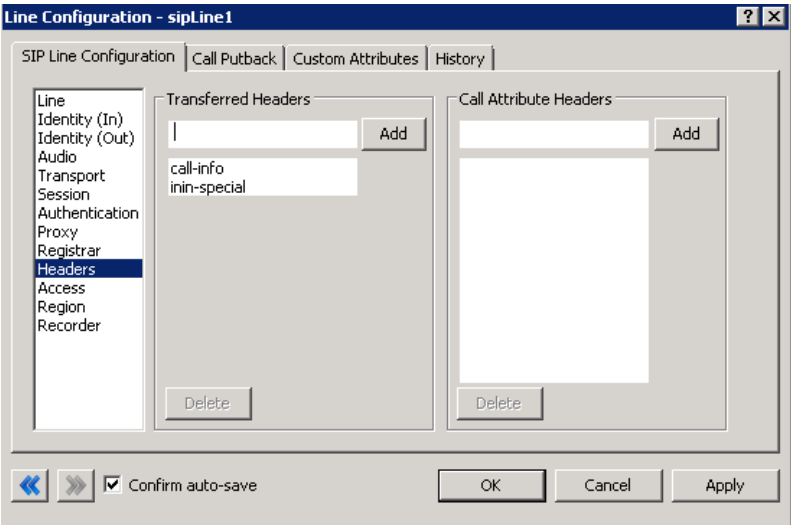
[Lines concepts](#)

SIP line headers concepts

On a SIP line, headers are collected on inbound SIP messages. Based on header type, the header information is sent to stations or converted into CIC attributes. The header information is not always transferred: the phone receiving the partner call may not have a use for the header.

Example

An external call to GeorgeB is inbound on DID number 317.555.1212. The call, referred to as **0001**, comes into CIC through the gateway, and is assigned to line **SIP_ININ_GW**. The **Transferred Headers** for this line have been configured for **call-info** and **inin-special**.



CIC retains these headers for call **0001**. The information may or may not be needed. GeorgeB's station is 8182, so another call, **0002**, is created to contact his station. This 'connection' call **0002** is now a partner with call **0001**, since they need to collaborate. The outbound call **0002** is assigned line **Stations-TCP**, which has **inin-special** defined as a **transferred header**. Call **0002** now has the **inin-special** header information, but not the **call-info** header information from call **0001**, and it is passed to GeorgeB's station **8182**. In this case, only the transferred headers at the intersection of the inbound line **SIP_ININ_GW** and the outbound line **Station-TCP** defines what information is transferred.

Related topics

- [Optional general server parameters](#)
- [SIP line headers options](#)
- [Configure a SIP line](#)
- [Lines concepts](#)



SIP line headers options

The following table describes the options that you can use to configure header options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Transferred Headers	Specifies the headers that are collected from the initial inbound INVITE message and transferred to the outbound INVITE message to the partner or connection call. Define the header for use by both the inbound line and the outbound line. Valid entries in the list must contain a string of the following characters: ■ lowercase "a" through "z" ■ uppercase "A" through "Z" ■ digits "0" through "9" ■ " _" ■ " ." ■ " !" ■ " 0/1" ■ " &" ■ " -" ■ " +" ■ " ~" ■ " ! ! !" ■ " ~ ~"	Not specified
Call Attribute Headers	Specifies the headers that are collected on inbound SIP messages. These headers are converted into CIC attributes for use by the CIC subsystems. Each entry in the list must contain a string of the following characters: ■ lowercase "a" through "z" ■ uppercase "A" through "Z" ■ digits "0" through "9" ■ " _" ■ " ." ■ " !" ■ " 0/1" ■ " &" ■ " -" ■ " +" ■ " ~" ■ " ! ! !" ■ " ~ ~"	Not specified
User-to-User Settings	Determines the exchange of user-to-user information (UUI) data when a SIP session is initiated.	
Header	Selects the type of UUI header information. The options are: • X-UserToUser: This parameter format is the Audiocodes or Genesys proprietary header. It does not use the protocol discriminator (PD). The length limit of the data is 129 bytes (129*2 hex digits). • User-to-User: This is the general parameter that includes the PD in the format User-to-User: XXhexdata;encoding=hex, where the XX is the PD. The length limit is 129 bytes including the PD (129*2 hex digits). • User-to-User PD Attribute: This is the parameter that some gateways use where the PD is specified separately in the format User-to-User: hexdata;pd=XX;encoding=hex.	<u>X-UserToUser</u>
Protocol Discriminator	Describes the user protocol message being transferred. You can specify any integers, lowercase letters from a-f, and uppercase letters from A-F. If the X-UserToUser header is used, this option is not applicable.	00
Attribute Format	Selects the encoding format for the header. The options are: • Hex • Ascii • Extended Ascii	Hex

Related topics

[Configure a SIP line](#)

[Optional general server parameters](#)

[SIP line headers concepts](#)

[Lines concepts](#)



SIP line access options

The following table describes the options that you can use to configure access options for a SIP line. For more information, see *Configure a SIP line* and *Configure exceptions to the default SIP line access level*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
All computers will be: Granted Access Denied Access	Indicates the default access level for all computers.	Granted Access
Exceptions	Lists the computers that are exceptions to the default access level.	Not specified

Related topics

[Configure a SIP line](#)

[Configure exceptions to the default SIP line access level](#)

[Lines concepts](#)

SIP line access concepts

You can protect the SIP line against denial of server (DoS) attacks. A DoS attack occurs when a website or other resource is overwhelmed is intentionally overwhelmed with bogus requests for service. As a result, legitimate customers are deprived of the services that the resource provides.

To protect the SIP line, you enter the SIP address restrictions by doing either of the following:

- **Grant Access** to all computers and then enter the exceptions for the computers to which you want to deny access.
- **Deny Access** to all computers, and then enter the exceptions for the computers to which you want to grant access.

Related topics

[SIP line access options](#)

[Configure exceptions to the default SIP line access level](#)

[Configure a SIP line](#)

[Lines concepts](#)



SIP line access options

The following table describes the options that you can use to configure access options for a SIP line. For more information, see *Configure a SIP line* and *Configure exceptions to the default SIP line access level*.

Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
All computers will be: Granted Access Denied Access	Indicates the default access level for all computers.	Granted Access
Exceptions	Lists the computers that are exceptions to the default access level.	Not specified

Related topics

[Configure a SIP line](#)

[Configure exceptions to the default SIP line access level](#)

[Lines concepts](#)

Configure exceptions to the default SIP line access level

To configure exceptions to the default SIP line access level

- 1. Open the **SIP Line Configuration** tab of the **Line Configuration** dialog box.
 - 2. Do any of the following:
 - To add an exception, click **Add**.
The **Grant <Exception Type> On** dialog box appears.
 - To edit an exception, select it in the **Exceptions** list and then click **Edit**.
The **Grant <Exception Type> On** dialog box appears.
 - To delete an, select it in the **Exceptions** list and then click **Delete**.
 - 2. In the **Type** group, select **Single Computer** or **Group of Computers**.
 - 3. In the **Validate access using** list, select which IP address is checked against the access list of a sip line. Select one of the following:
 - Select **Last hop's IP Address**
 - Select **Originator's IP Address**
 - 4. Complete the **Address** field:
 - If you selected **Single Computer**, do one of the following:
 - Enter an address string using IPv4 dotted notation (for example, 172.16.1.25).
 - Enter an address string using IPv6 dotted notation.
 - Click the **DNS Lookup...** button. Then type a fully qualified domain name and click **OK**.
 - If you selected **Group of Computers**, enter the beginning IP address for the range of addresses in the **Network ID** field. Then in the **Subnet prefix length** box, type the ending IP address for the range of addresses. If you use the IPv4 dotted notation, the **Subnet mask length**: defaults to 24. If you select IPv6 protocol, the **Subnet mask length**: defaults to 48.
- Note:** Only one SIP line per port per protocol can grant all access. IP address entries must be unique per port per protocol.
5. Do one of the following:
 - Click **OK** to close the dialog box.
 - Click **Apply** to save your changes and continue with the configuration process.

Related topics

- [SIP line access concepts](#)
- [SIP line access options](#)
- [Configure a SIP line](#)
- [Lines concepts](#)



SIP line region options

The following table describes the options that you can use to configure region options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Location	Sets a location for this SIP line. Note: The locations that appear in the Location list are defined in the Regionalization container.	Default Location

Related topics

- [Configure a SIP line](#)
- [SIP line region concepts](#)
- [Regionalization](#)
- [Lines concepts](#)

SIP line region concepts

A region defines areas where SIP stations and lines are physically interconnected. Within a region, a specific dial plan may be required depending on the central office or switching mechanism to which it is connected. CIC uses locations to define the bandwidth requirements and endpoints (stations and lines) for a region.

A location represents the area where devices are considered to be in the same physical place. This location defines a set of endpoints that can share a common dial plan. The stations and lines that are members of a location are utilized by the dial plan entries that apply to the locale in which they are operating. The location also defines the codec communications and the ability to communicate between devices and locations.

Related topics

- [SIP line region options](#)
- [Configure a SIP line](#)
- [Lines concepts](#)



SIP line region options

The following table describes the options that you can use to configure region options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Location	Sets a location for this SIP line. Note: The locations that appear in the Location list are defined in the Regionalization container.	Default Location

Related topics

[Configure a SIP line](#)
[SIP line region concepts](#)
[Regionalization](#)
[Lines concepts](#)



SIP line recorder options

The following table describes the options that you can use to configure Interaction Recorder options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Use Proactive Recording	Determines whether CIC starts recording as soon as audio starts on a call and continues that recording until the call disconnects. Note: Not all proactive recordings are stored. CIC retains proactive recordings only when all of the following occur: * The recording is run through Recorder Policies. * Tracker data is stored.	Not selected
Encrypt Recordings	Determines whether the recordings are encrypted. This option is available only if the Use Proactive Recording option is selected. Note: This setting overrides the Encrypt the Recording setting in an initiation policy. For example, if Encrypt the Recordings setting is <i>not</i> selected in an initiation policy, and both the Use Proactive Recording and Encrypt Recordings settings are selected here, then the recording is encrypted. If Encrypt the Recording setting is selected in an initiation policy, and the Use Proactive Recording setting is selected, but the Encrypt Recordings setting is <i>not</i> selected here, then the recording is <i>not</i> encrypted. In the event of a conflicting record call request, a Configuration Error warning message is logged in the Application log.	Not selected
Include Hold Music	Determines whether the recordings include hold music. This option is available only if the Use Proactive Recording option is selected.	Not selected
Include Early Audio (IVR and ACD Wait)	Determines whether the recordings include IVR and ACD Wait audio. Note: This check box is available only if you have the appropriate license. This option is available only if the Use Proactive Recording option is selected. Note: The default compression format for a new SIP line with Proactive Recording selected is "µ-law." The compression format can be changed for this SIP line by configuring Interaction Recorder's recording processing.	Not selected

Related topics

[Configure a SIP line](#)
[Configure Interaction Recorder's recording processing](#)
[Lines concepts](#)



SIP line recorder options

The following table describes the options that you can use to configure Interaction Recorder options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Use Proactive Recording	Determines whether CIC starts recording as soon as audio starts on a call and continues that recording until the call disconnects. Note: Not all proactive recordings are stored. CIC retains proactive recordings only when all of the following occur: * The recording is run through Recorder Policies. * Tracker data is stored.	Not selected
Encrypt Recordings	Determines whether the recordings are encrypted. This option is available only if the Use Proactive Recording option is selected. Note: This setting overrides the Encrypt the Recording setting in an initiation policy. For example, if Encrypt the Recordings setting is <i>not</i> selected in an initiation policy, and both the Use Proactive Recording and Encrypt Recordings settings are selected here, then the recording is encrypted. If Encrypt the Recording setting is selected in an initiation policy, and the Use Proactive Recording setting is selected, but the Encrypt Recordings setting is <i>not</i> selected here, then the recording is <i>not</i> encrypted. In the event of a conflicting record call request, a Configuration Error warning message is logged in the Application log.	Not selected
Include Hold Music	Determines whether the recordings include hold music. This option is available only if the Use Proactive Recording option is selected.	Not selected
Include Early Audio (IVR and ACD Wait)	Determines whether the recordings include IVR and ACD Wait audio. Note: This check box is available only if you have the appropriate license. This option is available only if the Use Proactive Recording option is selected. Note: The default compression format for a new SIP line with Proactive Recording selected is "μ-law." The compression format can be changed for this SIP line by configuring Interaction Recorder's recording processing.	Not selected

Related topics

[Configure a SIP line](#)

[Configure Interaction Recorder's recording processing](#)

[Lines concepts](#)



SIP line TLS security options

The following table describes the options that you can use to configure TLS security options for a SIP line. The behavior of TLS communication depends on the capabilities of the devices that use this SIP line.

For information on how to access these options, see *Configure a SIP line*.

Note: The **TLS Security** options are available only if you select TLS as the transport protocol on the **Transport** dialog box.

Changes to any of the options on this dialog box take effect immediately.

Option	Description	Default
TLS Options		
Require mutual authentication	Determines whether the CIC server requests a certificate from the SIP device and authenticates it. Note: This option works if the devices that use the SIP line support the capability to perform a mutual authentication. The SIP device then requests a certificate from the CIC server, validates it, and establishes a secure TLS connection. This one-way authentication of the server is sufficient to ensure the SIP device is connecting to the proper CIC server. By default, a SIP device using TLS to connect to the CIC server must contain the CIC line certificate authority (CA) certificate in order to authenticate the CIC server when it connects.	Not selected
Certificates	Displays the list of authority certificates that are selected for this SIP line. You can select additional authority certificates if you plan to use an external third-party certificate authority to sign line certificates. For more information, see <i>Select certificate authorities for a SIP line</i>. Click Configure certificates and port mappings... to open the SIP/TLS Configuration dialog box. Note: For more information, see <i>PureConnect Security Features</i> in the Technical Reference Documents section of the PureConnect Documentation Library.	<Default Line Authority Certificate>

Related topics

[Configure a SIP line](#)
[Modify TLS cipher suites](#)
[Select certificate authorities for a SIP line](#)
[SIP line transport options](#)
[Configure a SIP line](#)
[SIP lines concepts](#)



TLS security concepts

If a SIP device (that is, some AudioCodes Mediant gateways) using this line does not support the stronger AES (Advanced Encryption Standard) cipher suites used by default in CIC, click the [Modify Cipher Suites](#) button to select one or more additional cipher suites to add to the list of TLS Cipher Suites to use. The cipher suites are listed in order of strongest to weakest. CIC will negotiate with each SIP device and agree to use the strongest cipher suite common between the device and the CIC server.

Related topics

[TLS line certificate concepts](#)
[Configure TLS line certificates](#)

[TLS authority certificate concepts](#)
[Configure TLS authority certificates](#)

[TLS port-to-certificate mapping concepts](#)
[Configure TLS port-to-certificate mappings](#)

[Third-party certificate signing concepts](#)
[Sign third-party certificates](#)

[Import a certificate](#)

[Configure a SIP line](#)
[SIP lines concepts](#)



SIP line TLS security options

The following table describes the options that you can use to configure TLS security options for a SIP line. The behavior of TLS communication depends on the capabilities of the devices that use this SIP line.

For information on how to access these options, see *Configure a SIP line*.

Note: The **TLS Security** options are available only if you select TLS as the transport protocol on the **Transport** dialog box.

Changes to any of the options on this dialog box take effect immediately.

Option	Description	Default
TLS Options		
Require mutual authentication	Determines whether the CIC server requests a certificate from the SIP device and authenticates it. Note: This option works if the devices that use the SIP line support the capability to perform a mutual authentication. The SIP device then requests a certificate from the CIC server, validates it, and establishes a secure TLS connection. This one-way authentication of the server is sufficient to ensure the SIP device is connecting to the proper CIC server. By default, a SIP device using TLS to connect to the CIC server must contain the CIC line certificate authority (CA) certificate in order to authenticate the CIC server when it connects.	Not selected
Certificates	Displays the list of authority certificates that are selected for this SIP line. You can select additional authority certificates if you plan to use an external third-party certificate authority to sign line certificates. For more information, see <i>Select certificate authorities for a SIP line</i>. Click Configure certificates and port mappings... to open the SIP/TLS Configuration dialog box. Note: For more information, see <i>PureConnect Security Features</i> in the Technical Reference Documents section of the PureConnect Documentation Library.	<Default Line Authority Certificate>

Related topics

[Configure a SIP line](#)
[Modify TLS cipher suites](#)
[Select certificate authorities for a SIP line](#)
[SIP line transport options](#)
[Configure a SIP line](#)
[SIP lines concepts](#)

Modify TLS cipher suites

You can specify which cipher suites to use for encrypting SIP messages when using TLS on the SIP lines. The CIC server uses the activated TLS cipher suites in the order in which they appear.

The following weaker cipher suites do not comply with PCI standards and no longer appear in the list for you to activate:

- TLS_RSA_WITH_3DES_EDE_CBC_SHA
- TLS_RSA_WITH_DES_EDE_CBC_SHA
- TLS_RSA_WITH_RC4_128_SHA
- TLS_RSA_EXPORT_WITH_DES40_CBC_SHA

If you previously activated any of these weaker cipher suites, they still appear in the list as activated. Once you deactivate any of these weaker cipher suites, the cipher suite is no longer available in the list.

To modify the TLS cipher suites

1. Open the **TLS Security** tab of the **Line Configuration** dialog box.

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

2. Click **Modify Cipher Suites**.
The **TLS Cipher Suites** dialog box appears.
3. Do any of the following:
 - To activate a cipher suite, select its check box.
 - To deactivate a cipher suite, deselect its check box.
 - Use the **Move Up** and **Move Down** buttons to change the order of the cipher suites.
 - Click **Default** to restore the default cipher suites settings.
4. Click **OK**.

Related topics

[SIP line TLS security options](#)
[Select certificate authorities for a SIP line](#)
[Configure a SIP line](#)

Select certificate authorities for a SIP line

CIC provides a default line authority certificate for use with every SIP line. You can select additional certificate authorities if you plan to use an external third-party certificate authority to sign line certificates.

The third-party certificate authority files must be generated and copied to the CIC server before you can select them for a SIP line.

To select certificate authorities for a SIP line

1. Open the **TLS Security** tab of the **Line Configuration** dialog box.

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

2. Click **Modify**.
The Select the certificate authorities for this line dialog box appears.
3. To select a certificate authority, select it in the **Available** list and then click **Add**.
4. To deselect a certificate authority, select it in the **Currently Selected** list and then click **Remove**.
5. Click **OK**.

Related topics

[SIP line TLS security options](#)

[Modify TLS cipher suites](#)

[TLS security concepts](#)

[Configure a SIP line](#)



TLS security concepts

If a SIP device (that is, some AudioCodes Mediant gateways) using this line does not support the stronger AES (Advanced Encryption Standard) cipher suites used by default in CIC, click the [Modify Cipher Suites](#) button to select one or more additional cipher suites to add to the list of TLS Cipher Suites to use. The cipher suites are listed in order of strongest to weakest. CIC will negotiate with each SIP device and agree to use the strongest cipher suite common between the device and the CIC server.

Related topics

[TLS line certificate concepts](#)

[Configure TLS line certificates](#)

[TLS authority certificate concepts](#)

[Configure TLS authority certificates](#)

[TLS port-to-certificate mapping concepts](#)

[Configure TLS port-to-certificate mappings](#)

[Third-party certificate signing concepts](#)

[Sign third-party certificates](#)

[Import a certificate](#)

[Configure a SIP line](#)

[SIP lines concepts](#)



TLS security concepts

If a SIP device (that is, some AudioCodes Mediant gateways) using this line does not support the stronger AES (Advanced Encryption Standard) cipher suites used by default in CIC, click the [Modify Cipher Suites](#) button to select one or more additional cipher suites to add to the list of TLS Cipher Suites to use. The cipher suites are listed in order of strongest to weakest. CIC will negotiate with each SIP device and agree to use the strongest cipher suite common between the device and the CIC server.

Related topics

[TLS line certificate concepts](#)

[Configure TLS line certificates](#)

[TLS authority certificate concepts](#)

[Configure TLS authority certificates](#)

[TLS port-to-certificate mapping concepts](#)

[Configure TLS port-to-certificate mappings](#)

[Third-party certificate signing concepts](#)

[Sign third-party certificates](#)

[Import a certificate](#)

[Configure a SIP line](#)

[SIP lines concepts](#)



TLS line certificate concepts

You can configure the certificates that enable secure connections over SIP TLS lines.

TLS line certificates are signed by the CIC server's root certificate authority (CA) or a third-party CA. They are used to identify the CIC server when it connects to remote SIP devices via TLS.

In a switchover pair environment, you must import, on each switchover server, a special certificate that contains the domain name and a DHCP service record (SRV) so Polycom phones can be authenticated against both CIC servers. This special certificate is created by Setup Assistant and stored in the \server\ic\certificates\Lines folder.

A <Default Line Certificate> is automatically installed for you. The <Default Line Certificate> is signed by the CIC <Default Line Authority> CA. By default, this line certificate is used on single CIC servers that use the CIC certificate authority.

Note: You can optionally include a third-party certificate in a Windows certificate store in order to enable Windows to recognize that the certificate is trusted. If you do not include the certificate in a Windows certificate store, the certificate status in CIC indicates that the certificate is not trusted by Windows. However, this status does not affect the security of the CIC system.

Related topics

[Configure TLS line certificates](#)

[TLS security concepts](#)



Configure TLS line certificates

To configure TLS line certificates

1. Use one of these paths:
 - **System Configuration > Configuration > Certificate Management > SIP/TLS Certificates Configuration > Modify > Line Certificates**
 - **IC Server > Lines > Line Configuration > TLS Security > Configure certificates and port mappings > Line Certificates**

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

2. To load line certificates to use with a third-party certificate authority, click **Import**.
3. To view the general and detailed information about the issuer, valid dates, and descriptive details for a certificate in the list, select it and then click **View**.
4. To delete a certificate, select it and then click **Delete**.
5. Click **Close**.

Related topics

[Import a certificate](#)

[TLS line certificate concepts](#)

[SIP lines concepts](#)

[Configure a SIP line](#)



TLS authority certificate concepts

You can configure the certificate authority files that are used to validate devices connecting to the CIC server over SIP TLS lines. This is typically used when mutual authentication is required.

A <Default Line Authority Certificate> is automatically installed for you. The <Default Line Authority Certificate> is equivalent to the root certificate authority for lines. It is responsible for signing the default CIC line certificates.

In a switchover pair environment, the <Default Line Authority> certificate file is automatically replicated on the backup server as soon as the primary CIC server and the resident switchover service is started. If you import any new authority certificates on this tab, they are automatically replicated to the backup switchover server, if one is available.

Note: You can optionally include a third-party authority certificate in a Windows certificate store in order to enable Windows to recognize that the certificate is trusted. If you do not include the certificate in a Windows certificate store, the certificate status in CIC indicates that the certificate is not trusted by Windows. However, this status does not affect the security of the CIC system.

Related topics

[Configure TLS line certificates](#)

[TLS security concepts](#)



Configure TLS authority certificates

To configure TLS authority certificates

1. Use one of these paths:

- **System Configuration > Configuration > Certificate Management > SIP/TLS Certificates Configuration > Modify > Authority Certificates**
- **IC Server > Lines > Line Configuration > TLS Security > Configure certificates and port mappings > Authority Certificates**

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

2. To load authority certificates, click **Import**.
3. To view information about the issuer, valid dates, and descriptive details for an authority certificate, select it and then click **View**.
4. To delete an authority certificate, select it and then click **Delete**.
5. Click **Close**.

Related topics

[TLS authority certificate concepts](#)

[TLS security concepts](#)

[Import a certificate](#)

[SIP lines concepts](#)

[Configure a SIP line](#)



TLS port-to-certificate mapping concepts

SIP/TLS lines can use only one line certificate per port. Therefore, if you have multiple SIP/TLS lines and one of the lines requires a different certificate for its connection (for example, to a gateway, SIP Proxy server, and so on), you must map a port number to the line certificate to use for that connection. The port for each line is specified on the SIP line's **Transport** tab, in the **Receive Port** box.

By default, when only the default line certificate is being used, all TLS line ports maps to that certificate and no mappings appear or are required in the **Port-To-Certificate Mappings** tab.

When you use a pair of switchover servers, you must assign a port number to the domain certificate in the **Line Certificate** list and then add it to the **Port-To-Certificate Mappings** list. The default port number for all SIP/TLS lines is 5062. Port 8062 is recommended for the SIP/TLS line and certificate map to the domain certificate.

Related topics

[Configure TLS port-to-certificate mappings](#)

[TLS security concepts](#)

[SIP line transport options](#)



Configure TLS port-to-certificate mappings

To configure TLS port-to-certificate mappings

1. Use one of these paths:
 - **System Configuration > Configuration > Certificate Management > SIP/TLS Certificates Configuration > Modify > Port-To-Certificate Mappings**
 - **IC Server > Lines > Line Configuration > TLS Security > Configure certificates and port mappings > Port-To-Certificate Mappings**

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

2. To add a mapping, do the following:
 - in the **Line Certificate** list, select the certificate that you want to map to a port number.

Note: To import an existing certificate that does not appear in this list, click the **Import New Line Certificate...** link.

 - In the **Port** field, select the port number. The port number must match the receive port number on the SIP/TLS line that you want to use with the certificate.
 - Click **Add**.
3. To remove a mapping, select it in the **Port-To-Certificate Mappings** list and then click **Remove**.
4. Click **Close**.

Related topics

[TLS authority certificate concepts](#)

[TLS security concepts](#)

[SIP lines concepts](#)

[Configure a SIP line](#)



Third-party certificate signing concepts

You can sign a certificate from a third-party device (for example an Audiocodes Mediant gateway) that uses the CIC authority certificate.

This is necessary when you configure a SIP line that uses TLS to connect to a third-party device that supports TLS. The connection between the CIC server and the third-party device needs to be authenticated when it establishes a connection that uses mutually authenticated certificates. If the device's certificate is not signed by the CIC line authority certificate, the connection will not be authenticated.

Note: Use the **Third Party Certificate Signing** tab only if you use the CIC line authority certificates. Do not use it if you have your own third-party certificate authority. If you use your own third-party certificate authority and line certificates, then you must use your own certificate signing utility to sign the third-party device certificate.

Related topics

[Sign third-party certificates](#)

[TLS security concepts](#)



Sign third-party certificates

To sign a third-party certificate

1. On the remote device to which you want to connect, generate the text for a Certificate Signing Request (CSR). Copy that text to the clipboard on the CIC server or copy it in a text file that you can access on the CIC server.
2. Use one of these paths:
 - System Configuration > Configuration > Certificate Management > SIP/TLS Certificates Configuration > Modify > Third Party Certificate Signing
 - IC Server > Lines > Line Configuration > TLS Security > Configure certificates and port mappings > Third Party Certificate Signing

Note: In order to access the **TLS Security** tab, you just first select **TLS** as the transport protocol on the **Transport** tab.

3. For the **Digest Algorithm** option, select either **SHA-1** or **SHA-256** as your preferred secure hash algorithm.
4. Paste the CSR text from step 1 into the **Certificate Request To Sign** box.
5. Click **Sign** button. The signed certificate and the signing authority certificate are generated. They appear in the **Generated Certificates** fields on the tab.
6. Under the field that displays the signed certificate, click **Save As**.
7. Specify the directory and file name for this certificate.

Tip: Include the name of the third-party device in the name.

8. Under the field that displays the signing authority certificate, click **Save As**.
9. Specify the directory and file name for this certificate.

Tip: Use a name that distinguishes this certificate from the signed certificate.

Note: Some third-party interfaces may let you paste the signed certificate or signed authority certificate data directly in to their interface, or you may wish to copy and paste this certificate text into your own file. In this case, use the Clipboard button to select and copy the signed certificate text to the clipboard for pasting into another application.

10. Copy the saved signed certificate and the saved CIC default line authority certificate to a USB flash drive. Then import them on the third-party device and continue the configuration there.

Related topics

[SIP lines concepts](#)

[Configure a SIP line](#)

Import a certificate

Identify the location and format of your own corporate (or third-party) line certificate and line private key or a line authority certificate you wish to use on this IC server. You do not normally need to use this dialog if you use the CIC Default line authority and CIC Default Line certificates provided with Interaction Center.

This dialog is also used in Setup Assistant to import your own server group certificate and private key on a pair of switchover IC servers. See the IC Setup Assistant help for more information about server group certificates.

Using your own line certificate, private key and authority certificate

If your company has already established its own root certificate authority and manages its own certificates, you can choose to use your own authority certificate, line certificate and private key for the IC server instead of the default IC-generated certificate authority and line certificates.

If you are using your own certificates, you must also specify the **Type** and **Format** information, and whether the private key is password protected.

Switchover server pair considerations

In the case where you have two IC servers in a switchover pair, certificate authority files (e.g., *YourLinesAuthorityCertificate.cer*) are automatically replicated to the backup switchover server as soon as both servers are running and the switchover service is enabled. This is to ensure that the same certificate authority file and public key is always resident on both servers. The private key is not copied over the network, to avoid a potential security breach.

Each switchover server must have its own unique line certificate and private key, which are generated for each server by your root certificate authority (CA). Once the line certificates are generated, you can manually copy the line certificates via a USB flash drive to install the line certificates on each IC server, then use the Import dialog on the Line Certificates page to import the certificates. See Transferring certificate files for a recommended secure procedure for transferring certificates via a USB flash drive.

Note: Even though it is technically possible to use the Import dialog to browse and directly import a certificate over the network, we strongly recommend against this. If the network is already compromised and a network packet sniffer is in use, the certificate and its private key could be intercepted, which defeats the purpose of enabling security on the lines.

Name:

Enter a descriptive name for this line or authority certificate. This name appears in the Line Certificates or Authority Certificates page. It also appears on the Line Configuration page.

Certificate Path

Browse to the directory location of the certificate (e.g., *YourLineCertificate.cer* or *YourCertificateAuthority.cer*) you wish to use for this IC server.

Certificate Type

Note: This field is applicable if you are using *your own* line certificate/private key or certificate authority. Otherwise, use the default selection.

Select one of the following CIC-supported certificate file format storage types:

- **X.509:** Standard specification for public key certificates, in either DER or PEM format.
- **PKCS 7:** Contains one or more certificates in either DER or PEM format.
- **PKCS 12:** Defines a file format to store keys *and* certificates in either DER or PEM format.

Certificate Format

Note: This field is applicable if you are using *your own* line certificate/private key or certificate authority. Otherwise, use the default selection.

Select one of the following CIC-supported certificate file encoding formats:

- **DER** – Binary encoding
- **PEM** – Base64 encoding

Private Key Path

Browse to the directory location of the line certificate private key file (e.g., *YourLinesPrivateKey.bin*) you wish to use.

Private Key Format

Note: This field is applicable if you are using *your own* line certificate private key certificate. Otherwise, use the default selection.

Select one of the following IC-supported key file encoding formats:

- **DER** – Binary encoding
- **PEM** – Base64 encoding

My private key is password protected

Note: This field is applicable if you are using *your own* certificate/private key. Otherwise, use the default selection.

Select this check box if a password is attached to the private key file.

Password

Enter the private key password.

Transferring certificate files

When transferring a line certificate from one server to another, use the following procedure.

1. Insert a USB flash drive in the source server, where the certificate was generated.
2. Browse to the directory on the source server that contains the original certificate to be transferred.
3. Copy the Line Certificate file (e.g., *ICSRvOneLineCertificate.cer*) and its Private Key file (e.g., *ICSRvOneLinePrivateKey.bin*) to the USB drive.
4. Eject the USB drive from the source server.
5. Insert the USB drive in the destination IC server, where you want to copy the certificate.
6. From the SIP/TLS Line Certificates Configuration page in Interaction Administrator, click the Import... button to open the Import Certificate dialog.
7. In the Import Certificate dialog on the destination server, browse to the locations of the certificate and private key files on the USB drive in the Certificate Path and Private Key Path fields, for example, *F:\ICSRvOneLineCertificate.cer* and *F:\ICSRvOneLinePrivateKey.bin*.
8. Click OK and you will see the newly generated certificate listed on the SIP/TLS Line Certificates Configuration page.
9. Delete the certificate and private key files on the USB drive.
10. Eject the USB drive from the destination server.
11. Repeat this process for any additional IC servers, using a uniquely generated line certificate for each IC server.
12. (Recommended) As an additional security procedure, re-format the USB drive:
 - Open My Computer on the desktop
 - Right-click USB Drive and select Format...
 - In the Format USB Drive dialog, select Start.



Call putback options

The following table describes the options that you can use to configure call putback options for a SIP line. For information on how to access these options, see *Configure a SIP line*. Changes to all of the options on this dialog box take effect immediately.

Option	Description	Default
Enable sending SIP REFER messages	Determines whether CIC can do the following items without tying up two CIC lines (one for the original call and one for the call to the destination): 1. Receive a call from the PSTN or a PBX. 2. Perform some processing on the call. 3. Transfer the call to a non-CIC destination (a PBX station or a remote number).	Not selected
Enable sending SIP REFER messages to Lines in other Lines Groups	Determines whether CIC can send SIP REFER messages to lines in other line groups. This option is available only if Enable sending SIP REFER messages is selected.	Not selected
Enable Processing of Received SIP REFER Messages	Determines whether CIC allows the party sending the REFER to be notified of the outcome of the received request. This option is typically set on lines going to internal gateways or CIC servers. Notes: Because this option can be used to enable other applications including call transfer, it can create additional calls and carrier charges.	Not selected

Related topics

[SIP lines concepts](#)
[Configure a SIP line](#)



Call putback options

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Enable sending SIP REFER messages to Lines in other Lines Groups	Determines whether CIC can send SIP REFER messages to lines in other line groups. This option is available only if Enable sending SIP REFER messages is selected.	Not selected
Enable Processing of Received SIP REFER Messages	Determines whether CIC allows the party sending the REFER to be notified of the outcome of the received request. This option is typically set on lines going to internal gateways or CIC servers. Notes: Because this option can be used to enable other applications including call transfer, it can create additional calls and carrier charges.	Not selected

Related topics

[SIP lines concepts](#)
[Configure a SIP line](#)



Overview of line groups

The **Line Groups** container allows you to create line groups and specify membership.

Purpose

A line group identifies a group of one or more lines that are reserved for specific uses, such as long distance calls, local calls, and so on. A line group can also reserve a group of lines for calls for an individual user or a workgroup. The DialPlanEx handler determines if an outgoing call uses the next available line (default behavior), or a specific line group.

Call selection sequence

CIC's Telephony Services subsystem attempts to minimize line conflicts between inbound and outbound calls. Specifically when the DialPlanEx handler sends Telephony Services a line group to use for an outbound call, Telephony Services sorts the lines in the line group in alphabetical order. When a call is placed, Telephony Services selects the next line in the line group.

Eligible lines

Any SIP line can be part of a line group. You can include individual lines in multiple line groups.

Reporting considerations

Note: To ensure accuracy in reporting, do not generate reports on line groups that contain the same lines.

Related topics

[Line Group Configuration](#)

[Line Group Members](#)



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Note: To ensure accuracy in reporting, do not generate reports on line groups that contain the same lines.

Related topics

[Line Group Configuration](#)

[Line Group Members](#)



Add a line group

To add a line group

1. In the <IC server> container, click the **Line Groups** subcontainer.
2. In the list view, right-click and then click **New**.
3. In the **Entry Name** box, type the line group name and click **OK**.
4. Complete the **Line Group Configuration** tab and the **Line Group Members** tab. For more information, click the links under *Related topics*.

Related topics

[Line Group Configuration](#)

[Line Group Members](#)



Configure a line group

To configure a line group

1. In the <IC server> container, click the **Line Groups** subcontainer.
2. In the list view, right-click the line group you want to configure and then click **Properties**.
3. In the **Description** box, type a descriptive name or sentence that describes the purpose of the line group. For example, "Line Group 1 Long Distance" or "This line group is reserved for long distance calls" could be used for a description of a group of lines reserved for long distance calls.
4. To cause CIC to generate trunk group usage statistics for reporting on the lines in this group, select the **Use for Reporting** check box. To keep the statistics clean and the line group reports useful, you must not select this check box on more than one line group that contains the same lines. If you do, Interaction Administrator warns you about the need to have unique lines in each line group that is used for reporting. You may chose to ignore the warning, but the statistics generated for the line group reports will not be reliable. When this check box is clear, CIC does not generate line group usage statistics for the lines in this line group.
5. To use this line group as a dial group when you configure dial plans, select the **Use as Dial Group** check box. Dial plans allow you to automate how certain kinds of calls are routed. For more information, see *Overview of regional dial plans* and *Overview of old dial plans*. The lines you include in a dial group should have a direction of outbound rather than inbound or both.
6. To use the dial group for a private line assignment, select the **Use for Private Line Assignment** check box. This option is available only when you first select the **Use as Dial Group** check box. For more information, see *Overview of private line assignment*.
7. Under **Hunt Selection Method**, select how CIC selects the line to ring. After you configure the line group, you use the **Members** tab to add lines to it.
 - Choose **Descending Sequential** to ring lines one at a time, beginning from bottom of the list on the **Members** tab.
 - Choose **Ascending Sequential** to ring lines one at a time, beginning from the top of the list on the **Members** tab. If no a call is not answered, the prompt "No one is available to take your call at this time" is played, and the call is routed back to the IVR System. Lines are distinguished by their name.
 - Choose **Round-robin** to have CIC remember the last user who was sent a call. Round Robin works in a loop, repeating the process down through the list, and then the process starts over with the next call.

For example, a line group has three lines (Line1 - Line3), all available for calls and are listed Line1, Line2, Line3, in that order. If Line1 was alerted, then Line2 was alerted, even though both are now available, the next alerting call will go to Line3. Round-robin knows which line has been alerted and goes to the next available line in the list.

8. Click **OK**.

Related topics

[Add a line group](#)

[Add and remove lines from a line group](#)

[Overview of dial groups](#)

[Overview of regional dial plans](#)

[Overview of old dial plans](#)



Add and remove lines from a line group

Line groups define a group of one or more lines that can be reserved for specific uses, such as long distance and local calls. A line group can also reserve a group of lines for calls for an individual user or a workgroup. You can include individual lines in more than one line group, but be careful to not use line groups (containing the same lines) for reporting.

Notes: If you combine two or more different types of lines (for example, analog lines and digital channels) in a single line group, be sure to specify the appropriate prefix numbers for the lines.

To add lines to a line group

1. In Interaction Administrator, under the server name, select the **Line Groups** container.
2. Double-click one of the line group names in the **Line Group** column. The **Line Group Configuration** window appears.
3. Select a line name in the **Available Lines** box, and then click **Add**.
4. Click **OK**.

To remove lines from a line group

1. In the **Currently Selected Lines** box, select a line name and then click **Remove**.
2. Click **OK**.

Related topics

[Add a line group](#)

[Configure a SIP line](#)

[Configure a dial group entry](#)



Line selection order

CIC's Telephony Services subsystem attempts to minimize line conflicts between inbound and outbound calls. Specifically when the DialPlanEx handler sends Telephony Services a line group to use for an outbound call, Telephony Services sorts the lines in the line group in alphabetical order. When a call is placed, Telephony Services selects the next line in the line group.



Delete a line group

Note: Before you can delete a line group that is also a dial group, you must first remove the dial group.

Before you can delete a line group that is used in a regional dial plan, you must first remove the line group from the regional dial plan.

To delete a line group

1. In the **<IC server>** container, click the **Line Groups** subcontainer.
2. In the list view, right-click the line group you want to delete and then click **Delete**.

Related topics

[Overview of line groups](#)



Overview of dial groups

A dial group is a group of lines or channels that CIC uses for outbound calls. You define dial groups in the **Line Groups** container.

Note: The lines included in a dial group should have a direction of outbound or both rather than inbound to avoid line contention when dialing.

You can use dial groups in your regional dial plan to direct certain kinds of outbound calls (for example, classifications of calls) to specific lines. As an example, international calls may be directed to one dial group and local outbound calls may be directed to another dial group.

Related topics

[Add a line group](#)

[Configure a dial group entry](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list. The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Overview of stations

A station represents a workstation, remote station, stand-alone fax, stand-alone phone, or unified messaging entity that is not managed by PureConnect's managed IP phone feature. You configure each station so that CIC can recognize the station and deliver messages to and from it.

Note: For Switch hook stations: If a user is logged into a station, then that user's rights apply and override the station rights. If no user is logged in, the system uses the station rights.

Related topics

[Overview of how to add stations](#)

[Configure a station](#)

[Overview of the default station](#)

[Overview of station templates](#)

[Overview of station groups](#)



Overview of how to add stations

There are several ways that you can add stations. You can use:

- The **Add Stations Assistant** to be guided through the process of quickly adding station records.
- The **Station Configuration** dialog box to add a single user record.

Related topics

[Add stations with the Add Stations Assistant](#)

[Add a station with the Station Configuration dialog box](#)



Add a station

To add a station

1. In the <IC_Server> container, double-click the **Stations** container.
2. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
3. Do one of the following:

- In the box, type the station name.
- Click  to browse for and select the station.

Note: Do not use the machine name for the station name unless you are using machine name based licensing. Specifying matching names when you are not using machine name based licensing can cause issue with stationless logons.

4. Select the station type and then click **Next**.
5. Complete the configuration options. Depending on the type of station you are creating the configuration options vary.

Note: If you are using a station template, some values may already be completed for you.

Related topics

[Station types](#)

[Configure a station](#)



Station name

Type the name of a station connected to the network with the CIC server. A station can be one of the following kinds of devices:

- Workstation (a PC on the network, such as SUPPORT1PC)
- A phone not directly connected to the CIC (such as a remote employee working at home)
- Fax machine (a stand-alone fax machine, such as HPOfficeJet1)

Note: Do not use the machine name for the station name unless you are using machine name based licensing. Specifying matching names when you are not using machine name based licensing can cause issue with stationless logons.

Browse

Click Browse to select a station from the network. The Browse location defaults to the last open domain.

Hint: Type a descriptive station name to more easily identify the [kind of station](#), its location, the user, or another key attribute that uniquely identifies the station (such as Conference_Room_Phone, Mktg_Fax_Machine, and so on).

Related topics

[Add a station](#)



Station types

You can create several types of stations:

Station Type	Description
Workstation	A PC (with a phone) on the network in the same domain as the CIC server.
Stand-Alone Phone	A telephone that is NOT associated with a PC, but that has an extension number on the Interaction Center server.
Stand-Alone Fax	An independent fax machine with its own phone line (for example, HP OfficeJet).
Remote Station	A station assigned to a user or agent who runs a CIC client outside of the network domain of the CIC server.
Unified Messaging	This station type defines the station as a Third Party Unified Messaging provider. This station type is only available when a SIP or a Third Party Unified Messaging license is present.

Once a station entry is complete, the only way to change that station's name is to create a new entry with the new name and configuration attributes and then delete the original station.

Note: All stations have dialing Access Controls that determine what kinds (for example, classifications) of phone numbers each station is permitted to dial. This provides a level of dialing security to prevent toll fraud.



Add Stations with the Add Stations Assistant

To simplify the process of creating SIP stations, the **Add Stations Assistant** walks you through the necessary station configuration steps.

To add a station with the Add Stations Assistant

1. Under **<IC Server>** container, click the **Stations** Container.
2. Right-click in the right pane.
3. Select **Station Assistant**
4. Complete the pages in the wizard.
5. Click the help button on each page for instructions on how to complete the fields.

Related topics

[Import SIP stations from a CSV list](#)

Review created stations

[Set access control](#)

[Save SIP station data](#)



Import SIP Stations from a CSV List

Use this page to select the CSV file that contains SIP stations and any additional information such as name, type, extension or address.

Note: The CSV file must be in UTF-8 format. For more information, see [CSV files with non-English column headings](#).

Click **Browse** to the location of the CSV file.

Note: If you plan to implement managed IP phones, please note that managed IP phones/stations are imported from the [Managed IP Phones Assistant](#) in Interaction Administrator, following the CIC installation. Use Add Stations Assistant to create non-managed SIP stations only.

Click **Example** to view a sample CSV file.

A Microsoft Excel document (CSV SIP Station List.xls) and a sample CSV file (CSV SIP Station List.csv) are available on the CIC products disc in Additional Files...CSV Lists.

The SIP stations CSV file is formatted in two sections; a header section, and a data section. The header is the first row in the file and contains the names of all columns to import. Open a copy of CSV SIP Station List.xls in Excel, and enter the information in the appropriate columns for the SIP stations you wish to create. The following columns are supported:

Name (Required): This is the station name.

Note: Do not use the machine name for the station name unless you are using machine name based licensing. Specifying matching names when you are not using machine name based licensing can cause issue with stationless logons.

Type: The type must be workstation, phone, or fax.

Extension: Enter a unique extension number for the SIP station.

Identification Address: Enter the SIP identification address.

Connection Address: Enter the connection address of the SIP station. If specified, this column will create a static SIP station. If left blank the station will be dynamic.

Manufacturer: Enter Generic, Cisco, Polycom, etc.

Model: Enter the specific type of phone model made by the phone manufacturer.

- If Cisco is the manufacturer, use 7905, 7912, 7940, or 7960.
- If Polycom is the manufacturer, use SoundPoint IP 300, SoundPoint IP 500, or SoundPoint IP 600.

MAC Address: Enter the MAC address of the SIP station.

Machine Name: Maps a machine to this station for licensing.

When your additions are complete, save the document as a .CSV file type and download it to a secure location on the CIC server. You can open the new .CSV file in any text editor.

For more information, including station attribute descriptions and instructions for importing the CSV SIP Station list in Add Stations Assistant, see *CSV List Import Technical Reference* in the PureConnect Documentation Library.



Review Imported SIP Stations

Use this page to review the stations that you imported from a CSV file.

If this information is not correct, click **Back** to make changes. Otherwise click **Next**.



Access control

This page may appear when you run the Add Stations Assistant or the Managed IP Phones Assistant.

Note for the Add Stations Assistant: If you created a dial plan in IC Setup Assistant, select the dial plan classifications for the new stations. If you did *not* create a dial plan in IC Setup Assistant, no Available classifications appear. After you create the dial plan in Interaction Administrator after installation, run the Add Stations Assistant in Interaction Administrator and specify the outbound dialing privileges for your stations.

Use the Access control page to select the dial plan classifications for new stations. These classifications determine the outbound dialing privileges for the new stations.

Select one or more classification names from the list of **Available** classifications and add them to the **Currently Selected** list to give the selected dialing privileges to this station.

If someone attempts to place a call from a station and the dialed phone number is not supported in one of the phone number classifications for the station, CIC plays a prompt that says that the station does not have sufficient dialing privileges to place the call.



Saving SIP Station Data

If you have reviewed your SIP station data and are ready to commit the new station creation, click on the **Commit Changes** button. After clicking **Commit Changes**, there is a progress indicator displayed while saving the SIP stations and station configurations that you have created. Depending on how many stations you created, this may take several moments.



Station Licenses

Use this page to assign licenses to the stations you are creating. This page applies to workstations or remote stations.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station does not play. A non-audio station may be used or for non-audio interactions.

Remote stations must be assigned a Basic Station license. If a user logs into a remote station, it also needs a Client Access license. (In previous versions, this was a Business User license.) If a TUI login is performed against dynamic remote stations, no Client Access license is acquired.

Client Access License

To allow the station to run a CIC client, assign this license to the station.

Note: If the user has this license, the user can run any of the CIC clients.

ACD Access License

Select this check box if this workstation is an ACD station. Then select one of the following ACD licenses for the station:

- Media 1 - This license allows 1 interaction type at a given time.
- Media 2 - This license allows 2 interaction types at a given time.
- Media 3 Plus - This license allows 3 or more interaction types at a given time.

Note: A station can receive ACD interactions only if it has the ACD Access License.

Interaction Process Automation License

Select the **Interaction Process Automation** check box if this user is an Interaction Process Automation user. Then select one of the following Interaction Process Automation licenses for the user:

- **Direct Routed Work Items** (I3_ACCESS_IPA_USER) license: Enables the user to launch any process to which the user has rights. It also enables the user to receive work items that are directly routed to the user.
- **Group Routed Work Items** (I3_ACCESS_IPA_USER_ACD) license: Enables the user to receive work items that are either routed to the user directly or as a member of a workgroup (similar to an ACD queue).
- **Process Monitor** (I3_ACCESS_IPA_MONITOR) license: Enables the user to view process status and details in the Process Monitor or to use Process Reporting in IC Business Manager Applications.
- **Process Designer** (I3_ACCESS_IPA_DESIGNER) license: Enables the user to use the Process Designer to create and modify Interaction Process Automation processes.

Note: Each license in this list enables the user to **use the Interaction Process Automation features included in all the previous licenses in the list**. That is, the Group Routed Work Items license includes the Direct Routed Work Items license. The Process Monitor license includes both of the Routed Work Items licenses. The Process Designer license includes all the other licenses.

For more information about designing processes, refer to the *Interaction Process Automation Technical Reference* and the Process Designer Help.

License List

Select any additional licenses to assign to this station.

Note: For specific license information on each type of license, see the *PureConnect Licensing Overview Technical Reference* in the PureConnect Documentation Library.



Complete the Add Stations Assistant

You have successfully completed the **Add Stations Assistant**. Click **Finish** to save your changes or newly created stations. Select **I want to add additional stations** then click **Next** to run the Add Stations Assistant again.



Configure a station

To configure a station

1. In the <IC_Server> container, double-click the **Stations** container.
2. Do one of the following:
3. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
 - To add a station, in the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
Type the station name and then click **OK**.
 - To edit an existing station, in the list view window, double-click a station.
4. Enter the station name and then click **OK**.
The **Station Type** dialog box appears.
5. Select the station type and complete the other fields on the screen.
6. To use a template to create the station, in the **Station Template** list, select the template.
7. Click **Next**.
The **Station Configuration** dialog box appears.
8. In the **Station Extension** field, type a unique extension for the station.
9. Complete any other fields that appear in the top portion of the page. For an explanation of these fields, click the links under *Related topics*.
10. If a list of headings appears along the left side of the page, click each heading and complete the required fields. The headings that appear depend on the station type. For an explanation of these fields, click the links under *Related topics*.

11. As necessary, click the other tabs in the **Station Configuration** dialog box to specify additional configuration details. The tabs and options that appear depend on the station type. For more information on these options, use the links under **Related topics**.
12. Click **OK**.

Related topics

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Appearances](#)

[Region](#)

[Licensing](#)

[Licenses for standalone fax and phone stations](#)

[Access control](#)

[Options](#)

[Call forwarding](#)

[Emergency information](#)



SIP Station Configuration

Use this page to define what default values for SIP Stations. If in a given station you select **Use Global SIP...**, then this station will inherit the values defined at the Global SIP Station level.

Select the line group to be used by SIP stations. The options in the list box on the left include Addresses, Audio, Transport, Session, Authentication, and Compression. Depending on what you choose in the list box, the options displayed in the dialog box are different.

Click on the following options for specific configuration information:

- [Addresses](#)
- [Audio](#)
- [Transport](#)
- [Session](#)
- [Authentication](#)
- [Phone](#)
- [General](#)
- [Appearance](#)
- [Region](#)

Notes: The values you set for these options are used as defaults by each station. You can change the defaults for each station on the **Workstation Configuration** dialog box.

All SIP stations are considered "local", therefore do not have remote options.

For more information, see the latest version of *SIP Application Note* on the Product Information site.



SIP station addresses settings

Use this page to configure your SIP station addresses. Depending on whether you are configuring a default Global SIP Station, or a stand-alone fax or phone as a station, some of these options are not available.

Station Extension (Station configuration only)

Type a unique extension number for this SIP workstation phone. During the installation of the CIC clients, the Station Extension is created based on the user's input. You can enter any extension number you like (as long as it does not conflict with existing numbers), but it is helpful to preserve a visible relationship between a user's logical extension and his or her [default workstation extension](#).

Note: If the [Enable Regional Dialing](#) option is selected in Regionalization - [Location](#), and a change to a station extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Connection Type (Station configuration only)

This option is grayed-out and is set to SIP because you have previously selected to create a SIP workstation. Click **Back** to select a different type of workstation if this is not correct.

Active (Station configuration only)

Select this check box to activate the station. This enables the station to place and receive calls. Clear the check box to deactivate the station, preventing calls from coming in to or going out from the station.

Auto Conference (Station, if stand-alone phone, configuration only)

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN (Station, if stand-alone phone, configuration only)

If you enabled auto conference you must enter the Personal Identification Number.

Identification Address (Station configuration only)

Click **Edit** to choose a predefined format or use an alternate format for the identification address for this SIP station.

Connection Settings

Select **Obtain Settings Automatically** or **Use the Following Settings**.

Obtain Settings Automatically (Station configuration only)

This setting allows the station's **Address** and **Contact Line** information to be dynamically updated where the contact address and the new contact line are set automatically when an IP phone registers (SIP INVITE message or REGISTER message). This option is very useful if SIP stations use DHCP and can change IP addresses frequently.

Use the Following Settings (Station configuration only)

This setting is static where you have to manually specify the contact address and contact line.

Address: Enter the User Portion, Host, and Port manually.

Contact Line: (Global SIP Station and Station configuration)

Select an existing SIP line from the pull-down menu to use that line's settings for registration information. In a new CIC installation, the contact line for the Global SIP Station is <Stations-UDP>.

Note: If you are configuring a new station and you select "Use Global SIP Station" for the contact line on static (Use the Following Settings) SIP stations, you still need to set a contact line on the default Global SIP Station. Setup Assistant populates the contact line on the Global SIP Station with the default <Stations-UDP> setting.

Other (Station configuration only)

To enter other connection address Click **Edit** to choose a predefined format or use an alternate format.

SIP audio settings

The following table describes the SIP audio settings for the global SIP station, managed IP phones, and managed IP phones templates.

Setting	Description	Default
Use Global SIP Station Audio Settings (Station Configuration Only)	This option specifies whether stations inherit the values that are defined for the global SIP station.	
Audio Path	See the latest version of <i>SIP Application Note</i> on the Product Information site.	Dynamic
DTMF Type	The options are: - Do not use RFC2833 inband only - RFC2833 if supported, otherwise inband RFC2833 only	RFC2833 if supported, otherwise inband
DTMF Payload	This option sets the value that is used for the DTMF RTP payload type. The acceptable values are 96-127. The vendor-specific values are: 100 and 102-105. Note: The values 100, 102-105 should not be used for AudioCodes.	101
RTP DSCP Value	This option sets the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted RTP packets. The values are shown in both hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of acceptable values is 00 (0, 000000) through 3F (63, 111111). Note: If this is a Polycom, SIP Soft Phone, or Interaction SIP Station managed IP phone, the default value is 2E (46, 101110) EF.	18 (24, 011000) CS53
Voice Activation Detection (VAD)	This option indicates whether Voice Activation Detection is enabled on your network. When Voice Activation Detection is used, no packets are sent for silence and bandwidth is saved. However, like compression, there is some loss of voice quality.	Not selected
Echo Cancellation	This option indicates whether echoes are removed from voice communications to improve the sound quality.	Selected
Allow Multiple Codecs in Outbound SDP Offer	This option indicates whether CIC delivers all of the available Codecs to the recipient endpoint when a user makes an outbound call. The recipient endpoint can then select which Codec it recognizes. You set up Codecs in the Locations container.	Not selected

Related topics

[Configure advanced options for managed IP phones and templates](#)

[Codecs](#)

SIP transport settings

The following table describes the SIP transport settings for the global SIP station, managed IP phones, and managed IP phone templates.

Setting	Description	Default
Use Global SIP Station Transport Settings	This option specifies whether stations inherit the values that are defined for the global SIP station. This option is available for station configurations only.	Selected
Use Proxy for Station Connections	This option indicates that the proxy list configured in the line configuration in Interaction Administrator should be used to connect stations. Tip: If this option is not selected, CIC contacts the stations directly.	Not selected
Audio Protocol (does not apply to managed IP phones)	The audio stream on this SIP station can be unencrypted using RTP (Real Time Protocol) or encrypted using Secure RTP (SRTP). You must choose TLS as the Transport Protocol to use SRTP. Choose SRTP only if the endpoint(s) on this line support SRTP. If you select SRTP, it enables the Security option (below). Calls between devices transmitting and receiving SIP TLS messages and SRTP audio are completely secure.	
Security (does not apply to managed IP phones)	The Security list box is available only when you select SRTP as the Audio Protocol. The Security setting determines, in part, the visibility of the security icons on calls that appear in the CIC clients when placing or receiving calls via this SIP station. In an CIC system environment, some devices may support and be configured to use SRTP while other devices do not support SRTP or are not configured to use it. When two devices (e.g., two stations) that support and are configured to use SRTP connect directly, both CIC clients will always display the lock icon because the call uses SRTP from one end to the other and is therefore secure. This secure icon display is automatic and not configurable. If one device supports and is configured to use SRTP and another device does not support or use SRTP, then at least one segment of a call between these devices is not secure. That means audio between these devices needs to be transcrypted (i.e., converted) between SRTP and RTP and vice versa via an intermediate device such as the Interaction Media Server. SIP stations that handle calls that are not secure from one end to the other can use the Security list box to control the display of an open-lock icon to inform CIC client users that the call is not secure. In the Security list box select Minimal to hide the display of the open-lock icon on non-secure calls. In this case, completely secure calls will always show the lock icon and all other calls will show no lock icon. If a secure call creates a conference and includes a non-secure call, the lock icon will disappear, indicating the call is no longer secure. Select End-to-Edge to display the open-lock icon when a call, or at least one segment of a call in the CIC system domain is or becomes non-secure. End-to-edge means from one end of the call in the CIC system up to the edge of the CIC system (e.g., a gateway connected to the PSTN). It does not indicate security conditions on the PSTN or service provider outside of the CIC domain. In this case, secure calls will always show the lock icon and all other calls that are non-secure will show the open-lock icon. If a secure call creates a conference and includes a non-secure call, all parties in the conference will see the lock icon turn into an open-lock icon. Conversely, if a non-secure conference call becomes secure from all the end points to the edge of the CIC system, the open-lock icons will change to lock icons.	
Fax Protocol	Indicates the fax protocol to use. The options are: - T30 only - T38 only T38 then T30: If you select this option, CIC tries the T38 fax protocol first. If the recipient endpoint does not support this protocol, then CIC tries the T30 fax protocol.	T38 only
SIP DSCP Value	This option indicates is the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted SIP packets. The available values appear in hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of values available is 00 (0, 000000) through 3F (63, 111111).	18 (24, 011000) CS53

Related topics

[Configure advanced options for managed IP phones and templates](#)

[PureConnect Customer Care](#)

SIP session settings

The following table describes the SIP session settings for the global station, managed IP phones, and managed IP phone templates.

Setting	Description	Default
Use Global SIP Station Session Settings	This option specifies whether stations inherit the values that are defined for the global SIP station. This option is available for station configurations only.	
Use SIP Session Timer and SIP Session Timeout	This setting indicates whether an OPTIONS messages is sent to the remote device when a SIP session times out. By default, a timeout occurs after 60 seconds. If the remote device does not respond to the OPTIONS message, the call is disconnected.	Selected
SIP Register Interval	This setting specifies the amount of time in days, hours, minutes or seconds.	1 day
Disconnect on Broken RTP	This setting determines if a VoIP call remains active after audio has been disrupted. Audio is considered disrupted if no RTP, RTCP and no comfort noise packet is received from the remote device. By default, this parameter is turned on (checked).	Selected
Media Timing	This setting specifies the timing on an INVITE request that contains a new media description in the SIP message body in the existing signaling session. The available options are: • Normal • Delayed	Delayed
Media reINVITE Timing	This setting indicates the type of timing on a re-INVITE request that contains a new media description in the SIP message body in the existing signaling session. The available options are: • Normal • Delayed	Delayed
Terminate Analysis on Connect	This setting indicates whether the call analysis procedure terminates when a SIP connection indication from the network is received. Example: CIC makes its PSTN call via SIP calls through a SIP/ISDN gateway. This particular SIP/ISDN gateway only sends a SIP connect message back to Interaction Center after the remote party answers the call. If call analysis is used, select this setting so that call analysis terminates when the SIP connect message is received. Example: CIC makes its PSTN call via SIP calls through a SIP/analog gateway. This particular SIP/Analog gateway always sends a SIP connect message back to CIC prematurely, before the remote party answers the call. If call analysis is used, deselect this setting so that call analysis continues after the SIP connect message is received. Tip: If the connection is to a station, the configuration of this option for the station determines the call analysis behavior.	Selected
Disable Media Server Passthru	This setting stops the media server from rewriting the SSRC header.	Not selected
Station Connections are Persistent	This setting determines whether a persistent voice connection to the CIC server is maintained. If so, then the audio path does not disconnect until the station initiates the disconnection. If this setting is not selected, when CIC determines that the audio path to the station is no longer needed, CIC initiates the disconnection. Recommended settings: • Operators—Selected: If you want to handle more calls than the phone is capable of handling, select this setting. For example an operator wants to handle up to 20 simultaneous calls. • Call Center Agents—Selected: If call center agents use an IP phone with a headset and also uses the CIC clients, select this setting.	Not selected
Connection Call Warm Down Time	This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout is expired, the connection call will be disconnected. Note: This option is not used for persistent connection calls.	5 seconds Note: Decreasing the default value (5 seconds) can cause stability issues and is not recommended.
Call Appearances	Select the number of call appearances the phone can handle. CIC will send up to the configured number of calls to the phone. The default value for this option is 1. Note: If Persistent is selected, the number of call appearances defaults to 1 and is grayed-out. Recommended settings: • General: This value should be over 1 for experienced phone users only. • Cisco: The Cisco IP phone 7960 can have up to 6 line appearances (each line appearance is equivalent to a station). Each line appearance has a unique SIP address. <i>Line</i> appearances are different than <i>call</i> appearances. Each <i>line</i> appearance handles 2 <i>call</i> appearances. Configure the phone to one line appearance and then this station configuration to 1 or 2 call appearances. • Pingtel: Pingtel Expressa IP phone has one line appearance that handles 4 call appearances. Set station configuration to 1, 2, 3, or 4 call appearances. This option does not apply to managed IP phones.	
Enable AutoAnswer	If selected, this option sets the phone's "Enable Talk Event" attribute to yes. This attribute allows the phone to automatically receive phone calls. If this option is not selected, the agent will not be able to pick up calls from the CIC clients or from the toast message.	Selected

Related topics

[Media Server General Configuration](#)

[Configure advanced options for managed IP phones and templates](#)

[SIP station shared appearances](#)

SIP authentication settings

The following table describes the SIP audio settings for the global SIP station, managed IP phones, and managed IP phones templates.

Enabling authentication causes the phone to exchange credentials with the CIC server before the CIC server processes its requests. SIP station authentication prevents access to Interaction Center resources from unauthorized SIP devices. If authentication fails, then the station will not be able to make outbound calls.

Setting	Description	Default
Use Global SIP Station Authentication Settings	This setting specifies whether stations inherit the values that are defined for the global SIP station. This setting is available for station configurations only.	
Authentication	This setting activates or deactivates the authentication process for this SIP station. Note: In the Managed IP Phone container, only the Authentication setting appears because the user name and password are automatically generated. When Authentication is selected for a managed IP phone, authentication is encrypted.	Selected
User Name	This setting is the User Name to be used in the authentication process. This name should match the user name configured in the SIP device being authenticated. This setting is available for station configurations only. Note: If you modify the user name for a global SIP station, the system checks all SIP stations that are CE Phone enabled (that have a data source and a user association). If a match is found, the data source Desired Values and the Active Directory entries are updated with the new values. For more information, see <i>CE Phone Administration</i> .	
Password	This setting is the Password to be used in the authentication process. This password should match the password configured in the SIP device being authenticated. This setting is available for station configurations only. Note: If you modify the password for a global SIP station, the system checks all SIP stations that are CE Phone enabled (that have a data source and a user association). If a match is found, the data source Desired Values and the Active Directory entries are updated with the new values. For more information, see <i>CE Phone Administration</i> .	
Confirm Password	This setting is confirms the Password . This setting is available for station configurations only.	

Note: The **Use SIP Station Authentication Defaults** setting appears on the **Station Configuration** dialog box when the **SIP Station Authentication** setting is selected on the **Server Configuration** dialog box. Select this setting to inherit the defaults selected under **Authentication** on the **Sip Station Authentication** page of the **Server Configuration** dialog box. SIP station defaults are inherited by all SIP stations and can be overridden for a specific individual station.

Related topics

[Configure advanced options for managed IP phones and templates](#)

[Genesys Support](#)

[CE Phone Administration](#)



SIP station phone settings

Use this page to configure your SIP station manufacturer and model.

Use Global SIP Station Phone Information Settings (Station Configuration Only)

Select this check box to inherit the values defined at the Global SIP Station level.

Manufacturer

Select the manufacturer of the phone for this SIP station. Possible values are **Polycom** (default for Global SIP Station), Cisco, Generic, Aastra, Microsoft Lync, or free-text entry.

Model

Enter the SIP phone model.

For more information on configuring SIP stations for Zone Paging, see *Configuration of CIC Phone Features for Polycom Phones* Technical Reference in the PureConnect Documentation Library.



SIP station general

Use this page to configure general SIP station options. *This page is not available when setting options for a Global SIP Station.*

Call Waiting

Select this check box to enable the call waiting tone.

Ring Always (Workstation configuration only)

This check box controls whether or not the telephone associated with a workstation rings when incoming calls alert on that station. The Ring Always check box always overrides the CIC client setting. If the station configuration in Interaction Administrator has Ring Always selected, on the Client Configuration page, the "Ring telephone for calls" option is selected and grayed out by default and the user can not override it.

Select this check box if you want the station telephone to always ring when the user receives a call, even if the CIC client is not running or if the Ring Telephone check box is not selected. Clear this check box to allow the state of the Ring telephone for calls check box to determine if a user's default workstation telephone rings when a new interaction arrives for a user.

Synchronize Phone DND Button to IC Status

Select this check box to allow the CIC client user on this station, to synchronized status between CIC client and the user's desktop Polycom IP phone DND button.

MAC Address

Enter the MAC address for this SIP station in the format as XX-XX-XX-XX-XX-XX.



SIP station appearances settings

This page is not available when setting options for a Global SIP Station.

CIC's shared appearances feature allows SIP stations to use boss-assistant (primary-secondary) settings and group extensions settings to define relationships between the stations. By configuring stations to use a shared appearance, users have the following abilities:

- All members of a shared appearance group are alerted when a call alerts for the primary number.
- All members of a shared appearance group can determine that the primary number is in use.
- Users of secondary appearances can answer calls as if they are using the primary number.
- Users of secondary appearances can place calls as if they are using the primary number.

Notes: This feature applies to Polycom phone models IP301, IP430, IP501, IP550, IP601, IP650 only. Similar functionality is available via the features of the CIC clients. For more information on configuring SIP Station shared appearances, see [Managed IP Phone Configuration - General](#).

Also see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.

Use this page to add appearances to SIP stations. A station can have one or more shared appearance entries, where each shared appearance has:

- The name of the other station on which the **Primary Station** is appearing
- A **Number of Call Appearances** setting (similar to the existing SIP station, but is a separate setting for the shared line appearance itself)
- An **Identification Address** setting (similar to the existing SIP station, but it is a separate setting for the shared line appearance itself)
- A **Connection Address** setting (similar to the existing SIP station, but it is a separate setting for the shared line appearance itself)

Note: You can create a maximum of 20 appearances per station.

The page contains two lists, **Appearance For:** and **Appearance On:**. The **Appearance For** list contains the stations that will appear on the current station being edited. The **Appearance On** list contains the stations on which the current station will appear.

Select the list in which you wish to add an entry and click [Add](#).

Buttons

Use the **Up** and **Down** buttons to arrange the order of the entries in the **Appearances For** list. This order specifies the way shared line appearance buttons appear in Interaction Client.

Click **Modify** to edit settings for an existing entry or click **Delete** to remove an entry.



SIP station region settings

A region defines areas where SIP stations and lines are physically interconnected and within this region a specific dial plan may be required based on the central office or switching fabric it may be connected to.

CIC uses locations to define the bandwidth requirements and endpoints (stations and lines) for a region.

Use this page to set a location for this SIP station. *This page is not available when setting options for a Global SIP Station.*

Location

Choose the **Location** from the pull-down menu for this SIP station.

The location represents an area where devices are considered to be in the same physical place. This location defines a set of endpoints that can share a common dial plan. The stations and lines that are members of a Location are utilized by the dial plan entries that are applicable to a locale they are operating in. The location also defines the codec communications and the ability to communicate between devices and locations.

Note: Location options available from the pull-down menu are defined in the [Regionalization](#) container.



Station licensing settings

Use this page to assign licenses to the station or station template. This page applies to Workstations or Remote Stations.

Note: If you enabled the Enhanced Interaction Administrator Change log, then changes to station licenses are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Licensed Machine Name

You can associate a station with a specific machine. Typically the **Licensed Machine Name** is the station name, but you can select the check box to override this setting. Click ... to select the machine name.

The machine name cannot be a duplicate of an already **Licensed Machine Name**. This is a required field used for licensing only, and it cannot be blank.

When you log in to ICBM, use the machine name that is associated with the station. You will not be logged off the client to which you are currently logged on.

If a module requires station audio, the module will check to see if there is a logged in station that supports audio. If there is not a station that supports audio, the audio functionality will be disabled.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station will not play, and there will be no dial tone. A non-audio station may be used or for non-audio interactions.

Remote Stations must be assigned a Basic Station license.

Client Access License

Assigning this license to the station allows the client functionality of the CIC clients. Without this license assignment, no CIC client will not run on this station.

ACD Access License

Select this check box if this workstation is an ACD station, then select the type of ACD license. These are the available types of ACD licenses:

- Media 1 - This license allows 1 interaction type at a given time.
- Media 2 - This license allows 2 interaction types at a given time.
- Media 3 Plus - This license allows 3 or more interaction types at a given time.

If **Media 1** or **Media 2** type of ACD licenses is selected, you can click **Interaction Types** and select the type of interaction from the list to apply to the license. **Interaction Types** is grayed-out and not available if **Media 3 Plus** is selected.

Notes: Failure to have a ACD Access License assigned to the station will prevent that station from being ACD active.

If the station (Station A) is assigned a Basic Station license and two different users (User A and User B) each have all other necessary rights (i.e., Client Access) assigned to them, then both users can simultaneously login to that station, (User A and User B can both be logged into Station A at the same time). If the second user to login does not have the necessary licenses assigned, then the second user login will fail.

Interaction Process Automation License

Select the **Interaction Process Automation** check box if this station is an Interaction Process Automation station, and then select the type of license to assign to that station.

These are the available types of Interaction Process Automation licenses:

- **Direct Routed Work Items** (I3_ACCESS_IPA_USER) license: Enables you to launch any process to which you have rights. It also enables you to receive Work Items that are directly routed to you.
- **Group Routed Work Items** (I3_ACCESS_IPA_USER_ACD) license: Enables you to receive Work Items that are either routed to you directly or as a member of a workgroup (similar to an ACD queue).

Note: The Group Routed Work Items license includes the Direct Routed Work Items license.

For more information about designing processes, refer to the *Interaction Process Automation Technical Reference* and the Process Designer online help.

License List

This list displays additional licenses that are available. Select the licenses you wish to assign to this station.

Enable Licenses

Select this check box to set the license settings to Active. If unchecked, the licenses settings on this page are ignored by the system. This is a way to turn off licensing for a station, but keep the license settings.

Click OK to save your changes. These license assignments are immediately reflected in the license counts in the [Licenses Allocation](#) container list.

Note: For specific license information on each type of license, see the *PureConnect Licensing Overview Technical Reference* in the PureConnect Documentation Library.

Related topics

[Overview of the default station](#)

[About Remote Stations](#)

[Licensing](#)

[Other Station Licenses](#)



Licenses for stand-alone fax and stand-alone phone stations

Note: If you enabled the Enhanced Interaction Administrator Change log, then changes to station licenses are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Use this page to assign licenses to the station or station template. This page applies to Stand-alone Fax and Stand-alone Phone station types.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station will not play. A non-audio station may be used or for non-audio interactions.

A Standalone Fax and Standalone Phone should always be assigned a Basic Station License. A Bus Device Fax station does not use a Basic Station License.

Note: If the station (Station A) is assigned a Basic Station license and two different users (User A and User B) each have all other necessary rights (i.e., Client Access) assigned to them, then both users can simultaneously login to that station, (User A and User B can both be logged into Station A at the same time). If the second user to login does not have the necessary licenses assigned, then the second user login will fail.

Recorder Access License

Assign this license to enable the ability to record on this station.

Enable Licenses

Select this check box to set the license settings to Active. If unchecked, the licenses settings on this page are ignored by the system. This is a way to turn off licensing for a station, but keep the license settings.

Click OK to save your changes. These license assignments are immediately reflected in the license counts in the [Licenses Allocation](#) container list.

Note: For specific license information on each type of license, see the *PureConnect Licensing Technical Reference* in the PureConnect Documentation Library.

Related topics

[Overview of the default station](#)



Station access control settings

Station Access Control enables you to specify the outbound dialing privileges for a station, if any.

Select one or more classification names from the list of Available [classifications](#) and add them to the Currently Selected list to give the selected dialing privileges to this station. If someone attempts to place a call from this station and the dialed phone number is not supported in one of the phone number classifications for this station, CIC plays a prompt saying that the station does not have sufficient dialing privileges to place the call.

To give this station all dialing privileges, automatically including new classifications added in the future, select the **[All*]** entry, and then click **Add**.

To prevent a CIC station (such as a stand-alone phone) from having any dialing privileges, leave the Currently Selected list of classifications blank. If someone attempts to place a call from a disabled station, CIC plays a prompt saying that the station does not have sufficient dialing privileges to place the call.

Phone number classifications are defined in the Classifications page and used in the [Dial Plan page](#) in the Phone Numbers container.

Related topics

[Overview of the default station](#)



Station options settings

Use this page to set station options.

Timeout for Incoming Interactions

This setting determines the number of seconds an incoming interaction rings at the CIC client station before the interaction quits alerting and proceeds to the next step in the handler (for example, goes to voicemail or changes an ACD agent's status to ACD-Agent not answering and offers the interaction to another agent). The default value is 15 seconds; entering 0 (zero) also means 15 seconds. The minimum value is 7 seconds, which allows at least one full ring cycle. For North America, the standard ring duration for one ring is six seconds, which includes two seconds of ring and four seconds of pause time.

Use IC Follow Me *(applies only to Exchange - Unified Messaging users)*

Select this option to rely on the CIC server instead of the UM platform to perform this function.

Require Forced Authorization Code

Select **Require Forced Authorization Code** to require users to enter an extension and a password for certain phone classifications assigned to this station. The phone classifications have been previously set up by the server parameter "Toll Call Classifications." This setting does not apply to UM station types.

Station has MWI message light *(this option is not available on a managed workstation)*

Select **Station has MWI message light** so the system will turn on the message light (on Caller ID and ADSI telephones) whenever a caller leaves a voice message. When the message is picked up, the light is automatically turned off.

Note: To fully enable the MWI feature, you must activate MWI at the default station level, the station level, and the user level.

Outbound ANI

Enter the ANI/Caller ID for the system to send when making an outbound call from this station.

Notes: If a user is logged into the station and makes a call, the user's configuration for the Outbound ANI overrides this setting.

This Outbound ANI option does not override a call placed with a specific Calling Party Number and Calling Party Name. Call Forwarding and Follow-me numbers placed as outbound calls use the Forwarded Parties ANI and Name where allowed.

Related topics

[Overview of the default station](#)

[Activate MWI for the default station](#)

[Activate MWI for a user](#)

[User's configuration for the Outbound ANI](#)



Station emergency information settings

Use this page to set station location options that are used in the event of an emergency.

Note: If both new E911 interface and old E911 interface are enabled, then only new E911 interface will be displayed, so user will be able to see old interface.

New E911 Interface

If the E911Enabled server parameter is true, then the new user interface appears.

Customer Name

Enter the name (32-character alpha-numeric) to provide for this station (For example, John Smith). The ALI record field is NAM.

Primary Email

Enter the email address to receive an email at this address when a call 911 is made from the station.

Country, State, City, Street Name, House Number, Zip Code

Enter the full address of your station location for emergency personnel dispatched.

Location

Enter the location information (60-character alpha-numeric) for emergency personnel dispatched (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.

Old E911 Interface

If the E911Enabled server parameter is false (by default) or not defined, then the old user interface appears.

Description

Enter the description of the location of this station. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1."

Emergency Access

Use this section to enter emergency access information for this station for emergency support.

Calling Party Number

Enter the outbound ANI (10-digit numeric) to use for emergency calls from this station. The Automatic Location Identification (ALI) record field is CPN and in "emergency" terminology it is Emergency Location Identification Number (ELIN).

Location

Enter the location information (60-character alpha-numeric) for emergency personnel dispatched (For Example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.

Customer Name

Enter the name (32-character alpha-numeric) to provide for this station (For example, John Smith). The ALI record field is NAM.

Related topics

[Overview of the default station](#)

[Emergency classification](#)

[Setting up Line, Line Group, Dial Plan for E911](#)



CE Phone Administration

Use this tab to enable the SIP Station (stand-alone phone or workstation only) to be used as a CE Phone device, associate the phone to an Active Directory User entry, and to set the Active Directory attributes of the phone.

A CE Phone is a SIP station phone that is running Windows CE operating system. It's a desk phone that plugs into the network with standard patch cable. For more information see Windows CE at msdn.microsoft.com.

Note: This tab will only appear if the user is licensed for SIP.

Enable this SIP Station as a CE Phone

Select this check box to enable this SIP Station as a CE Phone.

Data Source

Click **Set User Association** to open the [Associate Active Directory User](#) dialog box.

User Entry

The user entry information based on the user association is displayed. Click **Clear User Association** to clear to set a new user association.

CE Phone Attribute List

Once the this list is populated, the Attribute, AD (Active Directory) Value, and Desired Value associate to the CE Phone is displayed. You must click **Query AD** for the system to query the Active Directory data, and if the query is successful the list is populated. If any errors (for example, user not found) are encountered the you'll receive an error message.

Click **Edit** to modify the Desired Values in the [CE Phone Desired Settings](#) dialog box. Any changes made to the **Desired Value** of an attribute are reflected in the CE Phone Attribute List after you click **OK** in the [CE Phone Desired Settings](#) dialog box. If an attribute's **AD Value** is equal to the **Desired Value**, a green "checkmark" is displayed next to the attribute in the list. If an attribute's **AD Value** is not equal or out of date with respect to the **Desired Value**, a red "X" is displayed.

Click **Apply** or **OK** to synchronize the AD user entry and ensures the following:

- Data Source entries for the Active Directory User DN and the Active Directory Data Source are saved
- Active Directory changes are saved



About remote stations

Interaction Center supports two types of remote stations: dynamic and configured (static). Each type of remote station connection serves a slightly different purpose, depending on the needs of the call center and of the remote agent. Both provide the same full functionality of the CIC clients.

Dynamic remote CIC client connections

Dynamic remote stations enable traveling agents to connect to the CIC server and place or receive calls from any remote location. This provides maximum flexibility for agents who may need to work from multiple locations and yet receive calls at a single phone number. When such a remote agent starts a CIC client and logs in to the CIC server, the agent enters a local phone number (for example, the desk phone, cell phone) where the CIC server will route calls for that agent.

Dynamic remote stations are not predefined station names configured in Interaction Administrator - the telephone number given when the agent starts the CIC client and logs in to the CIC server is the remote station. The CIC server detects that the user is logged in and routes calls for that user's extension to the remote phone number.

Configured remote stations

Configured remote stations are defined in Interaction Administrator as a "Remote Station" type of workstation with a single remote phone number for all calls to the remote agent's extension. Configured remote stations ensure that the remote agent always connects to the CIC server using the same remote phone number, unless a CIC administrator changes it. Some call centers may prefer this approach, to ensure remote agents are working from the prescribed location.

The remote station name can be the same as the remote agent's workstation (computer) name, or it can be another name. The CIC administrator is responsible for creating these Remote Station workstations and either installing the CIC client with the appropriate command line parameters on the remote agent's computer, for or educating the remote agent on how to use the CIC cClient (remote) Login dialog box to enter the station name.

SIP stations are local

Remote agents who use a SIP-enabled device or IP phone to receive calls from the CIC server are not classified as "remote stations," either dynamic or configured. This is because SIP devices or phones connect directly to the CIC server via an IP-based network connection. The distance from the server or the physical location of a SIP device or phone has nothing to do with its classification as a "remote" station.

Each SIP device or phone is configured as a "local" workstation type of station in Interaction Administrator, with the connection type of "SIP." The connection type of "Line" is used for analog phone workstations. The configuration specifies the SIP address of the computer, which must be on the same domain or trusted domain as the CIC server. Some "remote" agents with SIP devices or phones may use a Virtual Private Network (VPN) connection over the Internet to connect to the domain and to run the CIC client and log in to the CIC server. In any case, these stations are treated as local workstations by the CIC server.

Remote station licenses

Even though dynamic remote stations are not configured in Interaction Administrator, each dynamic station connection is counted toward the total number of station licenses purchased for your Interaction Center server. The number of current dynamic station connections is added to the number of configured stations (remote stations, workstations, and stand-alone phones) that are active to calculate the total number of active stations. If a remote agent attempts to start the CIC client and log in to the CIC server when the total number of station licenses are in use, that agent will not be able to connect, and he or she will see an error message that indicates that no stations are available. An error message will be logged in the event log on the CIC server as well.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list. The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Overview of station templates

Station templates allow you to configure the behavior of stations by the type of station, such as standalone phone or workstation.

This feature allows you to create stations of type easily because default behavior is already defined.

By default, Interaction Administrator provides standard template types. These types are **Stand-alone Fax Machine**, **Remote Station**, **Stand-alone Phone, SIP**, and **Workstation, SIP**. These templates cannot be deleted.

Depending on the type of template you select, configuration options vary. For example, you cannot change the grayed-out options on default templates, but you can change other (not grayed-out) options.

Click on the station template type below for specific configuration information:

- [Remote Station](#)
- [Stand-alone Fax Machine, SIP](#)
- [Workstation, SIP](#)



Add a station template

To add a station template

1. In the **<IC_Server>** container, click the **Stations** container.
2. Click the **Templates** subcontainer.
3. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
4. Type the template name and then click **OK**.
The **Station Type** dialog box appears.
5. Select the station type and then click **Next**.
The **Information** dialog box appears.
6. In the **Description** box, type a meaningful description and then click **Next**.
The configuration dialog box appears. The configuration options that appear depend on the station type that you selected. Click **Next** to view additional dialog boxes of configuration options.
7. Complete the configuration. See the links under *Related topics* for more information.

Related topics

[Information](#)

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Appearances](#)

[Region](#)

[Licenses](#)

[Licenses for standalone fax and phone stations](#)

[Access control](#)

[Options](#)

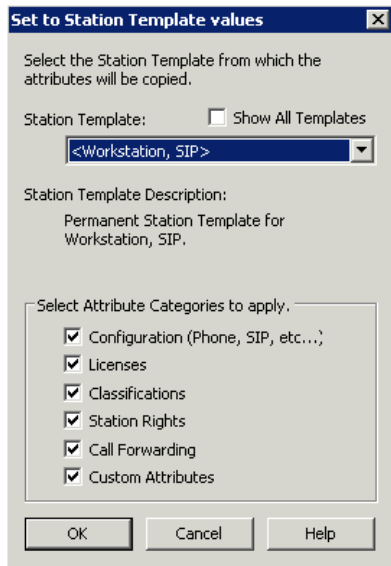
[Call forwarding](#)

[Emergency information](#)

Set to Station Template Values

As a convenience you may apply some or all station template values to an existing station.

1. Select the station to apply a template and right-click. Select **Set to Station Template** from the menu that appears. The **Set to Station Template values** dialog box is displayed:



The dialog box is titled "Set to Station Template values" and contains the following elements:

- A text label: "Select the Station Template from which the attributes will be copied."
- A "Station Template:" label followed by a checkbox labeled "Show All Templates" and a dropdown menu currently showing "<Workstation, SIP>".
- A "Station Template Description:" label followed by the text "Permanent Station Template for Workstation, SIP."
- A section titled "Select Attribute Categories to apply." containing a list of checkboxes, all of which are checked:
 - Configuration (Phone, SIP, etc...)
 - Licenses
 - Classifications
 - Station Rights
 - Call Forwarding
 - Custom Attributes
- At the bottom are three buttons: "OK", "Cancel", and "Help".

2. Select the **Station Template** from the drop-down menu. To list all templates, select the **Show all Templates** check box.
3. Select the attribute categories that you want to apply to this station. The attribute categories listed in the **Select Attribute Categories to apply** section show the available attributes associated with the station template selected.
4. Click **OK** to apply the changes to the station.

Note: Selecting the **Custom Attributes** check box applies all station template custom attributes to this station.

Related topics

[Station Templates](#)

Change Station Columns to View

Use this dialog box to select the station columns to view. You can click **Revert to Defaults** to change the view to the default columns. Click **OK** to save your selections.

The default column view is:

- Station Name
- Type (workstation, stand-alone phone, ...)
- Home Site (only if licensed for Multi-server Administration)
- Extension
- Connection (includes Line, Board #, and Port #)
- Active

Optional columns to view:

- Current Site (only if licensed for Multi-server Administration)
- Manufacturer (only if licensed for SIP)
- Model (only if licensed for SIP)
- MAC Address (only if licensed for SIP)
- Line (included in **Connection** column, but can be viewed as a separate column)
- Board # (included in **Connection** column, but can be viewed as a separate column)
- Port # (included in **Connection** column, but can be viewed as a separate column)
- User (displays the default user assigned to a station. **Note:** If multiple users are assigned a station, a comma (,) separated list of user names is shown. Adding this column can increase time to query for all users to display).

Related topics

[Right-Click Menu Commands](#)



Remote station configuration template settings

To configure a remote station template, complete the information on the **Remote Station Configuration** page. For more information on the other pages in this dialog box, click the links under *Related topics*.

Ring Always

Select this check box if you want the station telephone to always ring when the user receives a call, even if the CIC client is not running or if the Ring Telephone check box is not selected. Clear this check box to allow the state of the Ring Always check box to determine if a user's default workstation telephone rings when a new interaction arrives for a user.

Use Global Remote Station Settings

Select this check box to use the **Station Connections are Persistent** and **Connection Call Warm Down Time** settings as defined in the Default Station configuration for [Remote Stations](#).

- **Station Connections are Persistent**

Select this check box to maintain a persistent voice connection to the CIC server. The audio path will not disconnect until the station initiates the disconnect.

Clear this check box to indicate when CIC determines that the audio path to the station is no longer needed, and CIC will initiate the disconnection.

- **Connection Timeout (min)**

If a station connection is persistent, you can configure the timeout in minutes. If you leave a remote station connected, it will stay connected until it is manually disconnected, which could result in additional billing. By setting this parameter to a value in minutes greater than 0, the connection will timeout at the set number of minutes. By default, this setting is 0, meaning it is disabled and the connection will not time out.

This option can be configured here, or in the [remote station configuration](#).

- **Connection Call Warm Down Time**

This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout expired, the connection call will be disconnected. The default value for this option is 5 seconds.

Note: This option is not used for persistent connection calls.

Related topics

[Overview of station templates](#)

[Information](#)

[Licensing](#)

[Access control](#)

[Station Options](#)

[Custom Attributes](#)

[History](#)



Stand-alone fax template settings

To configure a stand-alone fax template, complete the information on the **Stand-alone Fax Configuration** page. For more information on the configuration options, click the links under *Related topics*.

Related topics

[Overview of station templates](#)

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Region](#)

[Information](#)

[Licensing](#)

[Access control](#)

[Station Options](#)

[Custom Attributes](#)

[History](#)



Stand-alone SIP phone template settings

To configure a stand-alone SIP phone template, complete the information on the **Stand-alone Phone Configuration** page. For more information on the configuration options, click the links under *Related topics*.

Preferred Language

Select the preferred language for the prompts for this station. The default setting is <System Default>.

Auto Conference

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN

If you enabled auto Conference you must enter a **Personal Identification Number**.

Related topics

[Overview of station templates](#)

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Region](#)

[Information](#)

[Licensing](#)

[Access control](#)

[Station Options](#)

[Custom Attributes](#)

[History](#)



Workstation template settings

To configure a stand-alone workstation template, complete the information on the **Configuration** page. For more information on the configuration options, click the links under *Related topics*.

Related topics

[Overview of station templates](#)

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Region](#)

[Information](#)

[Licensing](#)

[Access control](#)

[Station Options](#)

[Custom Attributes](#)

[History](#)



Overview of station groups

Create station groups to transfer a caller to a specific group of stations. In a station group, a user does not have to be logged on to a CIC client in order for the station to ring. For example, you might want to set up a station group for certain phones to ring after normal business hours (night transfer).

Related topics

[Add a station group](#)



Add a station group

To add a station group

1. In the <IC_Server> container, click the **Stations** container.
2. Click the **Groups** subcontainer.
3. In the list view window, right-click and then click **New**.
The **Entry Name** dialog box appears.
4. Type the group name and then click **OK**.
The **Station Group Configuration** dialog box appears.
5. Complete the configuration. See the links under *Related topics* for more information.

Related topics

[Configure a station group](#)



Configure a station group

To configure a station group

1. In the <IC_Server> container, click the **Stations** container.
2. Click the **Groups** subcontainer.
3. Double-click the station group that you want to configure.
The **Station Group Configuration** dialog box appears. Complete fields on the tabs. See the links under **Related topics** for complete information.

Related topics

Configuration

[Members](#)

[Custom Attributes](#)

[History](#)



Station Group Configuration

Use this page to select the configuration options for a station group.

Extension

Type a unique extension for the station group.

Notes: See DID/DNIS Routing for information on mapping DID/DNIS to station groups.

If the **Enable Regional Dialing** option is selected in **Regionalization - Location**, and a change to a station group extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Type

There are several types of station groups: **Group Ring**, **Sequential**, and **Round-robin**.

Type	Description
Group	Simultaneously alerts the members of a Workgroup that a call is available in the queue for that Workgroup. Selecting Group Ring disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available). The length of the Group Ring is determined by the Workgroup Offering Call Timeout setting. Note: There can be a maximum of 20 members (stations or users) in a workgroup that uses group ring.
Sequential	Alerts individual members of a Workgroup that a new call is available in the queue for that Workgroup. Members are alerted to the call in the order specified in Workgroup Configuration properties>Members page >under Currently Selected Users. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Sequential disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).The length of the Sequential Ring is determined by the Workgroup Offering Call Timeout setting.
Round Robin	Similar to linear hunt groups, CIC's Round Robin remembers the last user who was sent a call. Round Robin works in a loop, repeating the process down the through list, and then the process starts over with the next call. For example, a workgroup has three users (User1 - User3), all available for workgroup calls and are listed User1, User2, User3, in that order . If User1 received the last call but is available, the next alerting call will go to User2 if available. If User2 is not available, the call will go to User3. The next alerting call after that will go back to User1 if that user is available. If you select the Maintain Order option (in Workgroup Configuration properties --> Members --> Currently Selected Users), members are alerted to the call in the order specified in the list. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Round Robin disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).

- Choose **Group Ring** to simultaneously ring the stations in the group. All phones ring until the call times out after 1 minute. At that time, the prompt, "No one is available to take your call at this time" is played. The call is then routed back to the IVR system.
- Choose **Sequential** to ring stations one at a time, in the order specified in Station Group Configuration dialog, in the Currently Selected Stations box on the Members page. In the sequential **Retries** box, type the number of retries for calling each station before timing out. The default is 1. If the number of retries is reached and no one answers, the prompt, "No one is available to take your call at this time" is played and the call is routed back to the IVR System.
- Choose **Round-robin** to have CIC remember the last user who was sent a call. Round Robin works in a loop, repeating the process down through the list, and then the process starts over with the next call.

For example, a station group has three stations (Station1 - Station3), all available for workgroup calls and are listed Station1, Station2, Station3, in that order . If Station1 was alerted, then Station2 was alerted, even though both are now available, the next alerting call will go to Station3. Round-robin knows which station has been alerted and goes to the next available station in the list.

Selecting Round-robin disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).The length of the Round-robin ring is determined by the Workgroup Offering Call Timeout setting.

Note: If you select the Maintain Order option for the workgroup members, then the members are alerted to the call in the order specified in the list. For more information on alerting users in workgroup queues, see *Workgroup Members*.

Station Timeout (sec)

This is the amount of time in seconds that each individual station will alert using any of the alert types. The default value is 15 seconds.

Must Answer

Select **Must Answer**, for Group Ring or Sequential, for the call to continue ringing. Also, **Must Answer** will only work if stations in the station group are available to be alerted. Selecting this option causes Round-robin and Sequential to try the members of the station group 3000 times.

Enhanced call routing to station phones

Station groups can contain station devices only. If a user is logged into a station group phone, a call to the station group will also appear in My Interactions in the user's CIC client, in the same way as regular calls. Users should always see a call to a station that they are logged into.

Related topics

[DID/DNIS Routing](#)

[Workgroup members](#)



Members

Use this page to add stations to a station group.

Available Stations

In the **Available Stations** box, select the stations to include in the station group, and click **Add**.

Note: Stations can be stand-alone phone stations, workstations, or stand-alone fax stations.

Station groups can contain station devices only. If a user is logged into a station group phone, a call to the station group will also appear in My Interactions in the user's CIC client, in the same way as regular calls. Users should always see a call to a station that they are logged into.

Currently Selected Stations

This box displays the stations you have included in the Station Group. To remove a station, select it and click **Remove**.

Note: If you have selected sequential ring, stations ring in the order listed in this box.

For more information on adding SIP stations to a station group for Zone Paging, see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Overview of the default station

The default station represents the set of configuration options that apply to all stations.

Related topics

[Configure the default station](#)

[Options for the default station](#)

[Options for the global SIP station](#)

[Configure options for remote stations](#)

[Configure auto extensions](#)



Configure the default station

To configure the default station

1. In the **<IC_Server>** container, double-click the **Stations** container.
2. Click the **Default Station** container.
3. In the list view window, double-click **Configuration**.
4. In the **Default Station Configuration** dialog box, complete the tabs. For more information about the configuration options on those tabs, click the links under *Related topics*.

Related topics

[Station Options](#)

[Global SIP Station](#)

[Remote Stations](#)

[Stations Auto Extensions](#)



Options for the default station

Use this page to configure settings that affect all stations.

Notes: The settings on this page are not inherited when you add a SIP station. A new SIP station inherits only the settings in the Global SIP Station.

To fully enable the MWI feature, you must activate MWI for the default station, for the station that user uses, and for the user.

MWI

Use these check boxes to configure Message Waiting Indicator (MWI) behavior for this default station.

Message Light

Select this check box to activate message light logic in the Interaction Center for this default station. Disable it to turn this option off.

Message Light Persistent

Select this check box to set the message light on the phone associated with this default station to persistent in the on state while any unread voicemails exist.

If you enable Message Light and disable Message Light Persistent it causes the message light on the phone to turn off after the first unread voicemail is read.

Related topics

[Global SIP Station](#)

[Activate MWI for a user](#)

[Activate MWI for a station](#)



Options for the global SIP station

For information about the configuration options for the global SIP station, click the links under *Related topics*.

Related topics

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)



SIP station addresses settings

Use this page to configure your SIP station addresses. Depending on whether you are configuring a default Global SIP Station, or a stand-alone fax or phone as a station, some of these options are not available.

Station Extension (Station configuration only)

Type a unique extension number for this SIP workstation phone. During the installation of the CIC clients, the Station Extension is created based on the user's input. You can enter any extension number you like (as long as it does not conflict with existing numbers), but it is helpful to preserve a visible relationship between a user's logical extension and his or her [default workstation extension](#).

Note: If the [Enable Regional Dialing](#) option is selected in Regionalization - [Location](#), and a change to a station extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Connection Type (Station configuration only)

This option is grayed-out and is set to SIP because you have previously selected to create a SIP workstation. Click **Back** to select a different type of workstation if this is not correct.

Active (Station configuration only)

Select this check box to activate the station. This enables the station to place and receive calls. Clear the check box to deactivate the station, preventing calls from coming in to or going out from the station.

Auto Conference (Station, if stand-alone phone, configuration only)

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN (Station, if stand-alone phone, configuration only)

If you enabled auto conference you must enter the Personal Identification Number.

Identification Address (Station configuration only)

Click **Edit** to choose a predefined format or use an alternate format for the identification address for this SIP station.

Connection Settings

Select **Obtain Settings Automatically** or **Use the Following Settings**.

Obtain Settings Automatically (Station configuration only)

This setting allows the station's **Address** and **Contact Line** information to be dynamically updated where the contact address and the new contact line are set automatically when an IP phone registers (SIP INVITE message or REGISTER message). This option is very useful if SIP stations use DHCP and can change IP addresses frequently.

Use the Following Settings (Station configuration only)

This setting is static where you have to manually specify the contact address and contact line.

Address: Enter the User Portion, Host, and Port manually.

Contact Line: (Global SIP Station and Station configuration)

Select an existing SIP line from the pull-down menu to use that line's settings for registration information. In a new CIC installation, the contact line for the Global SIP Station is <Stations-UDP>.

Note: If you are configuring a new station and you select "Use Global SIP Station" for the contact line on static (Use the Following Settings) SIP stations, you still need to set a contact line on the default Global SIP Station. Setup Assistant populates the contact line on the Global SIP Station with the default <Stations-UDP> setting.

Other (Station configuration only)

To enter other connection address Click **Edit** to choose a predefined format or use an alternate format.

SIP audio settings

The following table describes the SIP audio settings for the global SIP station, managed IP phones, and managed IP phones templates.

Setting	Description	Default
Use Global SIP Station Audio Settings (Station Configuration Only)	This option specifies whether stations inherit the values that are defined for the global SIP station.	
Audio Path	See the latest version of <i>SIP Application Note</i> on the Product Information site.	Dynamic
DTMF Type	The options are: - Do not use RFC2833 inband only - RFC2833 if supported, otherwise inband RFC2833 only	RFC2833 if supported, otherwise inband
DTMF Payload	This option sets the value that is used for the DTMF RTP payload type. The acceptable values are 96-127. The vendor-specific values are: 100 and 102-105. Note: The values 100, 102-105 should not be used for AudioCodes.	101
RTP DSCP Value	This option sets the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted RTP packets. The values are shown in both hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of acceptable values is 00 (0, 000000) through 3F (63, 111111). Note: If this is a Polycom, SIP Soft Phone, or Interaction SIP Station managed IP phone, the default value is 2E (46, 101110) EF.	18 (24, 011000) CS53
Voice Activation Detection (VAD)	This option indicates whether Voice Activation Detection is enabled on your network. When Voice Activation Detection is used, no packets are sent for silence and bandwidth is saved. However, like compression, there is some loss of voice quality.	Not selected
Echo Cancellation	This option indicates whether echoes are removed from voice communications to improve the sound quality.	Selected
Allow Multiple Codecs in Outbound SDP Offer	This option indicates whether CIC delivers all of the available Codecs to the recipient endpoint when a user makes an outbound call. The recipient endpoint can then select which Codec it recognizes. You set up Codecs in the Locations container.	Not selected

Related topics

[Configure advanced options for managed IP phones and templates](#)

[Codecs](#)

SIP transport settings

The following table describes the SIP transport settings for the global SIP station, managed IP phones, and managed IP phone templates.

Setting	Description	Default
Use Global SIP Station Transport Settings	This option specifies whether stations inherit the values that are defined for the global SIP station. This option is available for station configurations only.	Selected
Use Proxy for Station Connections	This option indicates that the proxy list configured in the line configuration in Interaction Administrator should be used to connect stations. Tip: If this option is not selected, CIC contacts the stations directly.	Not selected
Audio Protocol (does not apply to managed IP phones)	The audio stream on this SIP station can be unencrypted using RTP (Real Time Protocol) or encrypted using Secure RTP (SRTP). You must choose TLS as the Transport Protocol to use SRTP. Choose SRTP only if the endpoint(s) on this line support SRTP. If you select SRTP, it enables the Security option (below). Calls between devices transmitting and receiving SIP TLS messages and SRTP audio are completely secure.	
Security (does not apply to managed IP phones)	The Security list box is available only when you select SRTP as the Audio Protocol. The Security setting determines, in part, the visibility of the security icons on calls that appear in the CIC clients when placing or receiving calls via this SIP station. In an CIC system environment, some devices may support and be configured to use SRTP while other devices do not support SRTP or are not configured to use it. When two devices (e.g., two stations) that support and are configured to use SRTP connect directly, both CIC clients will always display the lock icon because the call uses SRTP from one end to the other and is therefore secure. This secure icon display is automatic and not configurable. If one device supports and is configured to use SRTP and another device does not support or use SRTP, then at least one segment of a call between these devices is not secure. That means audio between these devices needs to be transcrypted (i.e., converted) between SRTP and RTP and vice versa via an intermediate device such as the Interaction Media Server. SIP stations that handle calls that are not secure from one end to the other can use the Security list box to control the display of an open-lock icon to inform CIC client users that the call is not secure. In the Security list box select Minimal to hide the display of the open-lock icon on non-secure calls. In this case, completely secure calls will always show the lock icon and all other calls will show no lock icon. If a secure call creates a conference and includes a non-secure call, the lock icon will disappear, indicating the call is no longer secure. Select End-to-Edge to display the open-lock icon when a call, or at least one segment of a call in the CIC system domain is or becomes non-secure. End-to-edge means from one end of the call in the CIC system up to the edge of the CIC system (e.g., a gateway connected to the PSTN). It does not indicate security conditions on the PSTN or service provider outside of the CIC domain. In this case, secure calls will always show the lock icon and all other calls that are non-secure will show the open-lock icon. If a secure call creates a conference and includes a non-secure call, all parties in the conference will see the lock icon turn into an open-lock icon. Conversely, if a non-secure conference call becomes secure from all the end points to the edge of the CIC system, the open-lock icons will change to lock icons.	
Fax Protocol	Indicates the fax protocol to use. The options are: - T30 only - T38 only T38 then T30: If you select this option, CIC tries the T38 fax protocol first. If the recipient endpoint does not support this protocol, then CIC tries the T30 fax protocol.	T38 only
SIP DSCP Value	This option indicates is the Differentiated Services Code Point (DSCP) value of Quality of Service (QoS) in transmitted SIP packets. The available values appear in hex (00..3F) and related decimal (0..63) formats. Some values are also identified by the binary format, CS6. The range of values available is 00 (0, 000000) through 3F (63, 111111).	18 (24, 011000) CS53

Related topics

[Configure advanced options for managed IP phones and templates](#)

[PureConnect Customer Care](#)

SIP session settings

The following table describes the SIP session settings for the global station, managed IP phones, and managed IP phone templates.

Setting	Description	Default
Use Global SIP Station Session Settings	This option specifies whether stations inherit the values that are defined for the global SIP station. This option is available for station configurations only.	
Use SIP Session Timer and SIP Session Timeout	This setting indicates whether an OPTIONS messages is sent to the remote device when a SIP session times out. By default, a timeout occurs after 60 seconds. If the remote device does not respond to the OPTIONS message, the call is disconnected.	Selected
SIP Register Interval	This setting specifies the amount of time in days, hours, minutes or seconds.	1 day
Disconnect on Broken RTP	This setting determines if a VoIP call remains active after audio has been disrupted. Audio is considered disrupted if no RTP, RTCP and no comfort noise packet is received from the remote device. By default, this parameter is turned on (checked).	Selected
Media Timing	This setting specifies the timing on an INVITE request that contains a new media description in the SIP message body in the existing signaling session. The available options are: • Normal • Delayed	Delayed
Media reINVITE Timing	This setting indicates the type of timing on a re-INVITE request that contains a new media description in the SIP message body in the existing signaling session. The available options are: • Normal • Delayed	Delayed
Terminate Analysis on Connect	This setting indicates whether the call analysis procedure terminates when a SIP connection indication from the network is received. Example: CIC makes its PSTN call via SIP calls through a SIP/ISDN gateway. This particular SIP/ISDN gateway only sends a SIP connect message back to Interaction Center after the remote party answers the call. If call analysis is used, select this setting so that call analysis terminates when the SIP connect message is received. Example: CIC makes its PSTN call via SIP calls through a SIP/analog gateway. This particular SIP/Analog gateway always sends a SIP connect message back to CIC prematurely, before the remote party answers the call. If call analysis is used, deselect this setting so that call analysis continues after the SIP connect message is received. Tip: If the connection is to a station, the configuration of this option for the station determines the call analysis behavior.	Selected
Disable Media Server Passthru	This setting stops the media server from rewriting the SSRC header.	Not selected
Station Connections are Persistent	This setting determines whether a persistent voice connection to the CIC server is maintained. If so, then the audio path does not disconnect until the station initiates the disconnection. If this setting is not selected, when CIC determines that the audio path to the station is no longer needed, CIC initiates the disconnection. Recommended settings: • Operators—Selected: If you want to handle more calls than the phone is capable of handling, select this setting. For example an operator wants to handle up to 20 simultaneous calls. • Call Center Agents—Selected: If call center agents use an IP phone with a headset and also uses the CIC clients, select this setting.	Not selected
Connection Call Warm Down Time	This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout is expired, the connection call will be disconnected. Note: This option is not used for persistent connection calls.	5 seconds Note: Decreasing the default value (5 seconds) can cause stability issues and is not recommended.
Call Appearances	Select the number of call appearances the phone can handle. CIC will send up to the configured number of calls to the phone. The default value for this option is 1. Note: If Persistent is selected, the number of call appearances defaults to 1 and is grayed-out. Recommended settings: • General: This value should be over 1 for experienced phone users only. • Cisco: The Cisco IP phone 7960 can have up to 6 line appearances (each line appearance is equivalent to a station). Each line appearance has a unique SIP address. <i>Line</i> appearances are different than <i>call</i> appearances. Each <i>line</i> appearance handles 2 <i>call</i> appearances. Configure the phone to one line appearance and then this station configuration to 1 or 2 call appearances. • Pingtel: Pingtel Expressa IP phone has one line appearance that handles 4 call appearances. Set station configuration to 1, 2, 3, or 4 call appearances. This option does not apply to managed IP phones.	
Enable AutoAnswer	If selected, this option sets the phone's "Enable Talk Event" attribute to yes. This attribute allows the phone to automatically receive phone calls. If this option is not selected, the agent will not be able to pick up calls from the CIC clients or from the toast message.	Selected

Related topics

[Media Server General Configuration](#)

[Configure advanced options for managed IP phones and templates](#)

[SIP station shared appearances](#)

SIP authentication settings

The following table describes the SIP audio settings for the global SIP station, managed IP phones, and managed IP phones templates.

Enabling authentication causes the phone to exchange credentials with the CIC server before the CIC server processes its requests. SIP station authentication prevents access to Interaction Center resources from unauthorized SIP devices. If authentication fails, then the station will not be able to make outbound calls.

Setting	Description	Default
Use Global SIP Station Authentication Settings	This setting specifies whether stations inherit the values that are defined for the global SIP station. This setting is available for station configurations only.	
Authentication	This setting activates or deactivates the authentication process for this SIP station. Note: In the Managed IP Phone container, only the Authentication setting appears because the user name and password are automatically generated. When Authentication is selected for a managed IP phone, authentication is encrypted.	Selected
User Name	This setting is the User Name to be used in the authentication process. This name should match the user name configured in the SIP device being authenticated. This setting is available for station configurations only. Note: If you modify the user name for a global SIP station, the system checks all SIP stations that are CE Phone enabled (that have a data source and a user association). If a match is found, the data source Desired Values and the Active Directory entries are updated with the new values. For more information, see <i>CE Phone Administration</i> .	
Password	This setting is the Password to be used in the authentication process. This password should match the password configured in the SIP device being authenticated. This setting is available for station configurations only. Note: If you modify the password for a global SIP station, the system checks all SIP stations that are CE Phone enabled (that have a data source and a user association). If a match is found, the data source Desired Values and the Active Directory entries are updated with the new values. For more information, see <i>CE Phone Administration</i> .	
Confirm Password	This setting is confirms the Password . This setting is available for station configurations only.	

Note: The **Use SIP Station Authentication Defaults** setting appears on the **Station Configuration** dialog box when the **SIP Station Authentication** setting is selected on the **Server Configuration** dialog box. Select this setting to inherit the defaults selected under **Authentication** on the **Sip Station Authentication** page of the **Server Configuration** dialog box. SIP station defaults are inherited by all SIP stations and can be overridden for a specific individual station.

Related topics

[Configure advanced options for managed IP phones and templates](#)

[Genesys Support](#)

[CE Phone Administration](#)



SIP station phone settings

Use this page to configure your SIP station manufacturer and model.

Use Global SIP Station Phone Information Settings (Station Configuration Only)

Select this check box to inherit the values defined at the Global SIP Station level.

Manufacturer

Select the manufacturer of the phone for this SIP station. Possible values are **Polycom** (default for Global SIP Station), Cisco, Generic, Aastra, Microsoft Lync, or free-text entry.

Model

Enter the SIP phone model.

For more information on configuring SIP stations for Zone Paging, see *Configuration of CIC Phone Features for Polycom Phones* Technical Reference in the PureConnect Documentation Library.



Configure remote station options

CIC supports remote agents who run CIC clients outside of the network domain of the CIC server. Most commonly, these agents have a PC at home with two phone lines (or ISDN, etc.), and access to the CIC server via the Internet. These agents can connect CIC clients to the CIC server and have incoming company calls routed to them at home. This Remote Station Configuration page allows you to specify a line group to carry calls routed to remote agents.

To configure a remote station, select **Default Station** under the **Stations** node, and then click the **Remote Station** tab in the **Default Station Configuration** dialog box.

Note: You must create the line group in the Line Group container before you can assign it to carry calls to remote stations.

Line Group

Select the (predefined) line group from the drop-down list. When the program routes an incoming call to a remote agent connected to CIC, that call is forwarded to the remote agent using a line in the specified line group. This setting affects agents logged into remote stations and agents logged into remote numbers.

Disable Automatic Connect on no-ringback / no-answer

Select this check box to prevent false connections with long PBX delays.

Station Connections are Persistent

Select this check box to maintain a persistent voice connection to the CIC server. The audio path will not disconnect until the station initiates the disconnection.

Clear this check box to indicate when CIC determines that the audio path to the station is no longer needed, and CIC will initiate the disconnection.

Connection Timeout (min)

If a station connection is persistent, you can configure the timeout in minutes. If you leave a remote station connected, it will stay connected until it is manually disconnected, which could result in additional billing. By setting this parameter to a value in minutes greater than 0, the connection will timeout at the set number of minutes. By default, this setting is 0, meaning it is disabled and the connection will not time out.

This option can be configured here, or in the [default remote station configuration](#).

Connection Call Warm Down Time

This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout is expired, the connection call will be disconnected. The default value for this option is 5 seconds.

Note: This option is not used for persistent connection calls.



Configure how extensions are automatically assigned

Use this page to set the default values for the Automatic Extensions feature.

Each CIC station requires a unique extension. And extension is recommend to be 3 to 6 digits. A station extension cannot start with the digit '0'.

Starting Extension

Enter the starting extension number. The default setting is 100.

Overwrite existing extensions

Select this check box to change already existing extensions with the new extension numbers. By default, this option is not enabled.

Next Station Extension

The next station extension is always the starting extension.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list. The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Station configuration

Use this page to enter a physical extension for the station and complete the configuration options that are specific to the type of station that you are creating.

Station Extension

Type a unique extension number for this workstation's analog (or PC) phone. During the installation of the CIC clients, the Station Extension is created based on the user's input. You can enter any extension number you like (as long as it does not conflict with existing numbers), but it is helpful to preserve a visible relationship between a user's logical extension and his or her default workstation extension.

The extension can be dialed directly to ring the analog phone at this workstation, regardless of who is logged in to the network at this workstation. The analog phone at this extension also rings if:

A call is sent to a user's queue on his or her default workstation, that user does not have a DND status, and the Ring Always check box is selected. It doesn't matter if a CIC client is running or not when the Ring Always check box is selected.

Note: If the **Enable Regional Dialing** option is selected in **Regionalization - Location**, and a change to a user extension creates an extension conflict, a message appears with the duplicate extensions. To streamline the process of resolving the duplicate extensions, click **Copy to Clipboard**. Then paste the content to a program that supports CSV (like Microsoft Excel).

Active

Select this check box to activate the station. This enables the station to place and receive calls. Clear the check box to deactivate the station, preventing calls from coming in to or going out from the station.

Preferred Language

Select the preferred language for the prompts for this station. The default setting is <System Default>.

Auto Conference

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN

If you enabled **Auto Conference** you must enter the Personal Identification Number.

Related topics

[Overview of the default station](#)

[Addresses](#)

[Audio](#)

[Transport](#)

[Session](#)

[Authentication](#)

[Phone](#)

[General](#)

[Appearances](#)

[Region](#)

[Licensing](#)

[Licenses for standalone fax and phone stations](#)

[Access control](#)

[Options](#)

[Call forwarding](#)

[Emergency information](#)



Remote Station Configuration

Use this page to configure the remote station.

Active

Select this check box to activate the station. This enables the station to place and receive calls. Clear the check box to deactivate the station, preventing calls from coming in to or going out from the station.

Connection

Enter the phone number or SIP address for this connection.

Ring Always

This check box controls whether or not the telephone associated with a workstation rings when incoming calls alert on that station. The Ring Always check box always overrides the setting in the CIC client. If the station configuration in Interaction Administrator has Ring Always selected, on the Client Configuration page, the "Ring telephone for calls" option is selected and grayed out by default and the user can not override it.

Select this check box if you want the station telephone to always ring when the user receives a call, even if the CIC client is not running or if the Ring Telephone check box is not selected. Clear this check box to allow the state of the Ring telephone for calls check box to determine if a user's default workstation telephone rings when a new interaction arrives for a user.

Notes: Selecting Ring Always prevents the agent/user from controlling the telephone ringing - this setting always overrides the CIC client option.

This option must be selected to properly enable a [default workstation](#) for a user.

Use Global Remote Station Settings

Select this check box to use the **Station Connections are Persistent**, **Connection Timeout**, and **Connection Call Warm Down Time** settings as defined in the Default Station Configuration for [Remote Stations](#).

Station Connections are Persistent

Select this check box to maintain a persistent voice connection to the CIC server. The audio path will not disconnect until the station initiates the disconnection.

Clear this check box to indicate when CIC determines that the audio path to the station is no longer needed, and CIC will initiate the disconnection.

Connection Timeout (min)

If a station connection is persistent, you can configure the timeout in minutes. If you leave a remote station connected, it will stay connected until it is manually disconnected, which could result in additional billing. By setting this parameter to a value in minutes greater than 0, the connection will timeout at the set number of minutes. By default, this setting is 0, meaning it is disabled.

This option can be configured here, or in the [remote station configuration](#).

Connection Call Warm Down Time

This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout is expired, the connection call will be disconnected. The default value for this option is 5 seconds.

Note: This option is not used for persistent connection calls.

Related topics

[Overview of the default station](#)



Multi-Server Site

The Multi-Server Site page appears if the following conditions apply:

- This station is a workstation, a stand-alone phone or a stand-alone fax
- Your release of CIC includes the Multi-Server Administration license

Use this page to select the multi-server site settings.

Home Site



Select the **Home Site** using the button which allows the selection of site IDs as defined by the [peer sites](#).

Current Site

This is the **Current Site** for this station, and is read-only.

Muti-Server Home Site Allocation option

Also available from the right-click menu in the stations container, is the **Multi-Server Home Site Allocation** option. Select this option to open the Site Allocation dialog box and apply random site IDs or specific site IDs to stations. The site ID(s) can be applied to all selected stations, all stations, or all stations without an existing site ID.

Note: Site IDs can be applied to Workstation, Stand-alone Phone, or Stand-alone Fax station types only.

Related topics

[Overview of the default station](#)

Station Licensing



Station licensing settings

Use this page to assign licenses to the station or station template. This page applies to Workstations or Remote Stations.

Note: If you enabled the Enhanced Interaction Administrator Change log, then changes to station licenses are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Licensed Machine Name

You can associate a station with a specific machine. Typically the **Licensed Machine Name** is the station name, but you can select the check box to override this setting. Click ... to select the machine name.

The machine name cannot be a duplicate of an already **Licensed Machine Name**. This is a required field used for licensing only, and it cannot be blank.

When you log in to ICBM, use the machine name that is associated with the station. You will not be logged off the client to which you are currently logged on.

If a module requires station audio, the module will check to see if there is a logged in station that supports audio. If there is not a station that supports audio, the audio functionality will be disabled.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station will not play, and there will be no dial tone. A non-audio station may be used for non-audio interactions.

Remote Stations must be assigned a Basic Station license.

Client Access License

Assigning this license to the station allows the client functionality of the CIC clients. Without this license assignment, no CIC client will not run on this station.

ACD Access License

Select this check box if this workstation is an ACD station, then select the type of ACD license. These are the available types of ACD licenses:

- Media 1 - This license allows 1 interaction type at a given time.
- Media 2 - This license allows 2 interaction types at a given time.
- Media 3 Plus - This license allows 3 or more interaction types at a given time.

If **Media 1** or **Media 2** type of ACD licenses is selected, you can click **Interaction Types** and select the type of interaction from the list to apply to the license. **Interaction Types** is grayed-out and not available if **Media 3 Plus** is selected.

Notes: Failure to have a ACD Access License assigned to the station will prevent that station from being ACD active.

If the station (Station A) is assigned a Basic Station license and two different users (User A and User B) each have all other necessary rights (i.e., Client Access) assigned to them, then both users can simultaneously login to that station, (User A and User B can both be logged into Station A at the same time). If the second user to login does not have the necessary licenses assigned, then the second user login will fail.

Interaction Process Automation License

Select the **Interaction Process Automation** check box if this station is an Interaction Process Automation station, and then select the type of license to assign to that station.

These are the available types of Interaction Process Automation licenses:

- **Direct Routed Work Items** (I3_ACCESS_IPA_USER) license: Enables you to launch any process to which you have rights. It also enables you to receive Work Items that are directly routed to you.
- **Group Routed Work Items** (I3_ACCESS_IPA_USER_ACD) license: Enables you to receive Work Items that are either routed to you directly or as a member of a workgroup (similar to an ACD queue).

Note: The Group Routed Work Items license includes the Direct Routed Work Items license.

For more information about designing processes, refer to the *Interaction Process Automation Technical Reference* and the Process Designer online help.

License List

This list displays additional licenses that are available. Select the licenses you wish to assign to this station.

Enable Licenses

Select this check box to set the license settings to Active. If unchecked, the licenses settings on this page are ignored by the system. This is a way to turn off licensing for a station, but keep the license settings.

Click OK to save your changes. These license assignments are immediately reflected in the license counts in the [Licenses Allocation](#) container list.

Note: For specific license information on each type of license, see the *PureConnect Licensing Overview Technical Reference* in the PureConnect Documentation Library.

Related topics

[Overview of the default station](#)

[About Remote Stations](#)

[Licensing](#)

[Other Station Licenses](#)



Licenses for stand-alone fax and stand-alone phone stations

Note: If you enabled the Enhanced Interaction Administrator Change log, then changes to station licenses are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Use this page to assign licenses to the station or station template. This page applies to Stand-alone Fax and Stand-alone Phone station types.

Basic Station License

This license represents an audio path between CIC and a station. This license is not required, but without it the audio for station will not play. A non-audio station may be used or for non-audio interactions.

A Standalone Fax and Standalone Phone should always be assigned a Basic Station License. A Bus Device Fax station does not use a Basic Station License.

Note: If the station (Station A) is assigned a Basic Station license and two different users (User A and User B) each have all other necessary rights (i.e., Client Access) assigned to them, then both users can simultaneously login to that station, (User A and User B can both be logged into Station A at the same time). If the second user to login does not have the necessary licenses assigned, then the second user login will fail.

Recorder Access License

Assign this license to enable the ability to record on this station.

Enable Licenses

Select this check box to set the license settings to Active. If unchecked, the licenses settings on this page are ignored by the system. This is a way to turn off licensing for a station, but keep the license settings.

Click OK to save your changes. These license assignments are immediately reflected in the license counts in the [Licenses Allocation](#) container list.

Note: For specific license information on each type of license, see the *PureConnect Licensing Technical Reference* in the PureConnect Documentation Library.

Related topics

[Overview of the default station](#)



Station access control settings

Station Access Control enables you to specify the outbound dialing privileges for a station, if any.

Select one or more classification names from the list of Available [classifications](#) and add them to the Currently Selected list to give the selected dialing privileges to this station. If someone attempts to place a call from this station and the dialed phone number is not supported in one of the phone number classifications for this station, CIC plays a prompt saying that the station does not have sufficient dialing privileges to place the call.

To give this station all dialing privileges, automatically including new classifications added in the future, select the **[All*]** entry, and then click **Add**.

To prevent a CIC station (such as a stand-alone phone) from having any dialing privileges, leave the Currently Selected list of classifications blank. If someone attempts to place a call from a disabled station, CIC plays a prompt saying that the station does not have sufficient dialing privileges to place the call.

Phone number classifications are defined in the Classifications page and used in the [Dial Plan page](#) in the Phone Numbers container.

Related topics

[Overview of the default station](#)



Station options settings

Use this page to set station options.

Timeout for Incoming Interactions

This setting determines the number of seconds an incoming interaction rings at the CIC client station before the interaction quits alerting and proceeds to the next step in the handler (for example, goes to voicemail or changes an ACD agent's status to ACD-Agent not answering and offers the interaction to another agent). The default value is 15 seconds; entering 0 (zero) also means 15 seconds. The minimum value is 7 seconds, which allows at least one full ring cycle. For North America, the standard ring duration for one ring is six seconds, which includes two seconds of ring and four seconds of pause time.

Use IC Follow Me *(applies only to Exchange - Unified Messaging users)*

Select this option to rely on the CIC server instead of the UM platform to perform this function.

Require Forced Authorization Code

Select **Require Forced Authorization Code** to require users to enter an extension and a password for certain phone classifications assigned to this station. The phone classifications have been previously set up by the server parameter "Toll Call Classifications." This setting does not apply to UM station types.

Station has MWI message light *(this option is not available on a managed workstation)*

Select **Station has MWI message light** so the system will turn on the message light (on Caller ID and ADSI telephones) whenever a caller leaves a voice message. When the message is picked up, the light is automatically turned off.

Note: To fully enable the MWI feature, you must activate MWI at the default station level, the station level, and the user level.

Outbound ANI

Enter the ANI/Caller ID for the system to send when making an outbound call from this station.

Notes: If a user is logged into the station and makes a call, the user's configuration for the Outbound ANI overrides this setting.

This Outbound ANI option does not override a call placed with a specific Calling Party Number and Calling Party Name. Call Forwarding and Follow-me numbers placed as outbound calls use the Forwarded Parties ANI and Name where allowed.

Related topics

[Overview of the default station](#)

[Activate MWI for the default station](#)

[Activate MWI for a user](#)

[User's configuration for the Outbound ANI](#)



Station call forwarding options

You can configure this station to forward calls if it is busy or there is no answer.

Forward calls to this extension

Type the extension to forward calls to in the box.

When this station has an active call, forward these calls:

Select this box to forward calls when the station is in use. To select which calls to forward when the line is busy, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
Unknown	Forward all calls that cannot be determined if they are internal or external.
All	Forward internal and external calls.

When calls go unanswered, forward these calls:

Select this box to forward calls that are not answered. To select which calls to forward when the phone rings and there is no answer, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
Unknown	Forward all calls that cannot be determined if they are internal or external.
All	Forward internal and external calls.

Note: You can also configure Client templates to enable additional Call Forwarding and Follow Me features. For more information on client templates, see *Call Coverage* and *Follow Me*.

Related topics

[Overview of the default station](#)

[Call Coverage](#)

[Follow Me](#)



Station emergency information settings

Use this page to set station location options that are used in the event of an emergency.

Note: If both new E911 interface and old E911 interface are enabled, then only new E911 interface will be displayed, so user will be able to see old interface.

New E911 Interface

If the E911Enabled server parameter is true, then the new user interface appears.

Customer Name

Enter the name (32-character alpha-numeric) to provide for this station (For example, John Smith). The ALI record field is NAM.

Primary Email

Enter the email address to receive an email at this address when a call 911 is made from the station.

Country, State, City, Street Name, House Number, Zip Code

Enter the full address of your station location for emergency personnel dispatched.

Location

Enter the location information (60-character alpha-numeric) for emergency personnel dispatched (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.

Old E911 Interface

If the E911Enabled server parameter is false (by default) or not defined, then the old user interface appears.

Description

Enter the description of the location of this station. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1."

Emergency Access

Use this section to enter emergency access information for this station for emergency support.

Calling Party Number

Enter the outbound ANI (10-digit numeric) to use for emergency calls from this station. The Automatic Location Identification (ALI) record field is CPN and in "emergency" terminology it is Emergency Location Identification Number (ELIN).

Location

Enter the location information (60-character alpha-numeric) for emergency personnel dispatched (For Example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.

Customer Name

Enter the name (32-character alpha-numeric) to provide for this station (For example, John Smith). The ALI record field is NAM.

Related topics

[Overview of the default station](#)

[Emergency classification](#)

[Setting up Line, Line Group, Dial Plan for E911](#)

Managed IP phones

CIC systems using SIP can reduce initial IP phone configuration time and ongoing maintenance with managed IP phones. A provisioning subsystem manages the configuration of all IP phones in Interaction Administrator.

Related topics

[Managed IP phone template concepts](#)

[Add a managed IP phone or template](#)

[Configure managed IP phones or templates](#)

[Registration Group Configuration](#)

[Ring Sets](#)

[Default IP Phone](#)



Add a managed IP phone or template

To add a managed IP phone or template

1. In the **<IC_Server>** container, do one of the following:
 - To add a managed IP phone, double-click the **Managed IP Phones** container.
 - To add a managed IP phone template, double-click the **Templates** container.
2. In the list view window, right-click and then click **New**.
3. In the **Name** box, type a unique name. To create a managed IP phone template that is based on an existing workstation, click **Browse**.
4. If you are adding a managed IP phone and want to use a template, from the **Template** list, select the template. For more information on templates, see *Managed IP phone template concepts*.
5. In the **Type** list, select the appropriate type for the phone.
6. In the **Manufacturer** list, select the manufacturer.
7. In the **Model** list, select the model of the phone.
8. The **Access Control Group** field appears if one or more access control groups have been added in the **Access Control Groups** subcontainer, which is found in the **People** container.
9. To associate this IP managed phone with an access control group, click ... and then select the access control group.
10. Click **OK**.
The **Managed IP Phone Configuration** dialog box appears.
11. Use the tabs in this dialog box to configure the managed IP phone or managed IP template. For complete information on the configuration settings, use the links under **Related topics**.

Related topics

[Overview of configuration settings for managed IP phones and templates](#)

[Managed IP phone template concepts](#)

[Select access control group](#)

[Right-Click Menu Commands](#)



Change multiple IP phones

Change Multiple IP Phones allows you to edit multiple IP phones at one time. To access this feature, select two or more IP phones in the Managed IP Phones container, right-click and select the **Change Multiple IP Phones ...** from the context menu.

You can change settings in the **General**, **Option Values**, and **Advanced Options** tabs.

Note: The Advanced Options tab appears only if one of the selected IP phones has advanced settings.

To change a setting, click on the pull-down menu and select the desired option. If you do not change a value, a grayed-out "Leave unchanged" message is displayed. Optionally, you can right-click on a row and select "Reset" to removed any changes already made. After clicking **OK**, any changes made are saved and applied to all selected (or highlighted) IP phones. A progress dialog box appears while CIC updates the phones.

You can cancel the application of the new values, but IP phones that have already been modified do not revert to the initial settings. If any errors occur during the process, they are listed on the **Errors** tab on the progress dialog box.

Overview of configuration settings for managed IP phones and templates

This topic contains links to the configuration settings that are available for managed IP phones and templates.

AudioCodes and Genesys phones

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Interaction SIP stations

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Polycom phones

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Related topics

[Add a managed IP phone or template](#)

Configure managed IP phones or templates

To configure a managed IP phone or template

- 1. In the <IC_Server> container, do one of the following:
 - To configure a managed IP phone, double-click the **Managed IP Phones** container.
 - To configure a managed IP phone template, double-click the **Templates** container.
- 2. In the list view window, click the item that you want to configure.
- 3. Use the tabs in this dialog box to configure the managed IP phone or managed IP template. For complete information on the configuration settings, use the links under **Related topics**.

Related topics

AudioCodes and Genesys phones

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Interaction SIP stations

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Polycom phones

[General settings](#)

[Options](#)

[Advanced options](#)

[Information](#)

Related topics

[Add a managed IP phone or template](#)

AudioCodes and Genesys settings

General settings

[Options](#)

[Advanced options](#)

[SIP settings](#)

[Information](#)



General settings: AudioCodes and Genesys phones or templates

The following table describes the general settings for AudioCodes and Genesys phones and templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Setting	Description	Default
Name	The name of this IP phone must be unique. Click Browse to locate an existing station.	Specified when the phone is added
Active	Inactive phones do not receive calls.	Active
MAC Address	The MAC address must be in the format xx:xx:xx:xx:xx:xx. AudioCodes and Genesys addresses start with 00:90:8f. Note: Changing the MAC address will reload a previously registered managed IP phone.	
Registration Group	The default options are: • Default Registration Group • Default Secure Registration Group You can create other registration groups in the Registration Groups container.	Default Registration Group
Location	All station appearances are in this same location. Time zone information is read from the location and used to set the phone time, DST settings, and so on. Note: If the Enable Regional Dialing option is selected, and a change to this location creates an extension conflict of a managed IP phone, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click Copy to Clipboard to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).	Default Location
Preferred Language	This option is available only if multiple languages are installed. Select the language for all prompts for this managed IP phone. The available options depend on the installed languages.	System Default
Use Location Time Zone	Determines whether the time zone of the associated location is used to set the date/time. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used.	Selected
Firmware Version	The available firmware options are listed.	
Audio Protocol	The audio stream on this IP phone can be unencrypted using RTP (Real Time Protocol) or encrypted using Secure RTP (SRTP). • To use SRTP, you must choose TLS as the Transport Protocol. • Choose SRTP only if the endpoint(s) on this line support SRTP. • If you select SRTP, it enables the Security option (below). Calls between devices transmitting and receiving SIP TLS messages and SRTP audio are completely secure.	
Time Zone	The time zones listed are the same as Windows time zones. The managed IP phone will use this time zone to set the daylight saving time information. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used.	(UTC-05:00) Eastern Time (US & Canada)
Station Appearances	This is a regular station appearance. It is the default appearance of this managed IP phone. AudioCode phones do not support shared line appearances. After you add, edit, or remove station appearances, you must reload the phone.	Not specified

Related topics

[Configure managed IP phones or templates](#)
[Add Registration](#)
[Registration Group](#)
[SIP Bridge](#)
[SIP Bridges Configuration](#)
[Location](#)
[Enable Regional Dialing option](#)
[Managed IP phone appearance configuration](#)



Options: AudioCodes and Genesys phones or templates

The following tables describe the options for AudioCodes and Genesys phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

General

Option	Description	Default
Enable MWI	When this setting is enabled, the phone flashes a message-waiting indicator (MWI) LED when voice messages are waiting.	Yes
Ring Always	When this setting is enabled, the phone will always ring when the user receives a call, even if a CIC client is not running.	
Inband Call Waiting Tone	When this setting is enabled, the phone will emit a tone on an incoming call when another call is active	
SIP Receive Port	This is the port that the IP phone uses to send and receive SIP signaling packets. Note: The Interaction SIP Station and the SIP Soft Phone use this setting regardless of the protocol type.	5060
Media Port Start Range	Use this setting for Polycom and Interaction SIP Station phones that need to use a different port range than the default ports for audio traffic. Set this to a valid port number that begins the new range of ports to use for audio. Reasons to use this include phones that are behind a firewall, or that use port forwarding, or that have another reason to specify a different port range. If Interaction SIP Stations use both RTP and RTCP for the audio stream, a new port number specified in the Media Port Start Range (e.g., 6400) will apply to RTP audio, and RTCP audio will automatically use one port number higher (e.g., 6401). The default port number of 4000/4001 on Interaction SIP Stations works well for most situations.	Depends on the device manufacturer
LAN Port Mode	This is the network speed over the Ethernet for the IP phone through the LAN port. Acceptable values are: • 10 Mbps Full-duplex • 10 Mbps Half-duplex • 100 Mbps Full-duplex • 100 Mbps Half-duplex	Automatic
PC Port Mode	This is the network speed over the Ethernet for the IP phone through the PC port. Acceptable values are: • 10 Mbps Full-duplex • 10 Mbps Half-duplex • 100 Mbps Full-duplex • 100 Mbps Half-duplex	Automatic

Interface

Option	Description	Default
Ring Volume (0-9)	This value sets the ring volume heard in the agent's headset. When the phone configuration is reloaded or the device is rebooted (e.g., the network cable is unplugged and reconnected), the phone resets ring volume to this default value.	5

Emergency Information

For New E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified
Primary Email	The email address to which the emergency personnel arrival information can be sent.	Not specified
Country, State, City, Street Name, House Number, Zip code	The full address of the station location including house number, street name, zip code, city, state and country to dispatch emergency personnel. (For example, 2001 Junipero Serra Blvd, Daly City, CA 94014, US)	Not specified

For Old E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Calling Party Number	The outbound ANI (10-digit numeric) to use for emergency calls from this IP phone. The Automatic Location Identification (ALI) record field is CPN and in "emergency" terminology it is Emergency Location Identification Number (ELIN).	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified

Related topics

[Configure managed IP phones or templates](#)



Advanced options: AudioCodes and Genesys phones or templates

The following tables describe the advanced options for AudioCodes and Genesys phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Note: These options are used only for diagnostic and troubleshooting purposes. Do not change them without clear direction from a PureConnect Customer Care representative.

Provisioning

Option	Description	Default
Provisioning Method	This setting supports several methods for determining the provisioning server to which the IP phone should connect. The options are DHCP Options , Disabled , Static URL . Depending on which method is selected, the DHCP Option or the Static URL may be required below.	DHCP Options
DHCP Option	This setting specifies the Dynamic Host Configuration Protocol (DHCP) option number that identifies the vendor and functionality of a DHCP client. Note: For AudioCodes and Genesys, instead of setting this option, set the DHCP Option Records 002 in the network configuration. For more information, see <i>CIC Managed IP Phones Administrator's Guide</i> in the Technical Reference Documents section of the PureConnect Documentation Library.	160
Static URL	This setting specifies the CIC server by entering the host name or IP address. All IP addresses in managed phones configuration are pass-through strings to support IPv6. Note: If Provisioning Method is set to Disabled , the AudioCodes or Genesys phone does not attempt to connect with the provisioning server. Therefore configuration of firmware is not requested, so that configuration information requires updates through the web interface.	blank or <empty>
Enable Configuration Web Page	This setting determines whether the phone's configuration web page appears on the AudioCodes or Genesys phones. By default, this configuration page is visible to users.	On
Obtain Time Zone from DHCP	This option enables prioritization of the NTP GMT offset information received from the DHCP server, over the static configuration (system/ntp/gmt_offset).	No

Syslog Tracing

The following are all of the Syslog tracing options for AudioCode phones. The available options depend on the model.

Option	Description	Default
Syslog Enabled	This setting enables or disables diagnostic logs for Interaction SIP Stations in the form of Syslog messages. Setting this to Yes requires a Syslog Server to be specified. Use this only at the direction of authorized PureConnect Customer Care representatives.	No
Syslog Server	This setting specifies the IP address of a third party Syslog server used to capture diagnostic logs and error messages generated by the Interaction SIP Station. A valid Syslog server IP address is required if Syslog Enabled is set to Yes . All IP addresses in managed phones configuration are pass-through strings to support IPv6 in a future release.	The default IP address is 0.0.0.0, which is invalid until set to a valid address.
Server Port	This setting defines the UDP port of the Syslog Server. The valid range is from 0 to 65,535.	514
Voip Application	This setting specifies the level at which Syslog messages are generated related to VoIP. Select from the following list: None Emergency Error Warning Notice Info Deb	None
Control Center	This setting specifies the level at which Syslog messages are generated related to Networking	None
LCD Display	This setting specifies the level at which Syslog messages are generated related to LCD Display and other keypresses.	None
Web	This setting specifies the level at which Syslog messages are generated related to phone web server.	None
Watchdog	This setting specifies the level at which Syslog messages are generated related to the watchdog process, which keeps other processes running.	None
802.1x	This setting specifies the level at which Syslog messages are generated related to the security protocol.	None
Kernel	This setting specifies the level at which Syslog messages are generated related to the kernel process of the phone.	None
DSP	This setting specifies the level at which Syslog messages are generated related to the voice engine of the phone.	None

Gain

The microphone settings adjust the volume for the benefit of the caller and the speaker settings adjust the volume for the benefit of the agent. We recommend you talk to authorized PureConnect Customer Care engineers if you have problems with audio volume.

Digital settings adjust volume to the line while the analog settings adjust volume to headset. Select the intended value from the drop-down list.

Option	Description	Default
NB Headset Digital Microphone Gain	This setting controls the gain of the RTP audio stream sent from the AudioCodes or Genesys phone to the line (narrow band).	+0 dB
NB Headset Digital Speaker Gain	This setting controls the gain of the RTP audio stream from the line through the AudioCodes or Genesys phone and to the headset (narrow band).	+4 dB
WB Headset Digital Microphone Gain	This setting controls the gain of the RTP audio stream sent from the AudioCodes or Genesys phone to the line (wide band).	+0 dB
WB Headset Digital Speaker Gain	This setting controls the gain of the RTP audio stream from the line through the AudioCodes or Genesys phone and to the headset (wide band).	-4dB

VLAN

Option	Description	Default
VLAN Discovery Mode	This setting specifies the method that this AudioCodes or Genesys phone uses to find its Virtual Local Area Network (VLAN). This setting controls the use of VLAN tagging (802.1Q) for audio streams over a VLAN: - Automatic (CDP+LLDP) – This (default) option uses CDP (Cisco Discovery Protocol) together with LLDP (Link Layer Discovery Protocol) to automatically obtain the VLAN ID assignment. This option allows for discovery using whichever mode is active, and to use VLANs on different switches without changing configuration of the phone. - Automatic (CDP) - This option uses CDP (Cisco Discovery Protocol) to automatically obtain the VLAN ID assignment. Use this option to strictly limit VLAN discovery to Cisco switches. - Automatic (LLDP) - This option uses LLDP (Link Layer Discovery Protocol) to automatically obtain the VLAN ID assignment. Use this option to strictly limit VLAN discovery to non-Cisco switches. - Disabled – This option disables the use of VLANs which stops VLAN tagging for this AudioCodes or Genesys phone. If you do not have the standard Voice/Data VLAN set up in your network, using this option skips the VLAN discovery mode which causes the IP phone to start-up faster on a reboot. - Manual – This option requires you to specify a VLAN ID in the Manual VLAN ID field. This option allows the IP phone to generate traffic on the specified VLAN without having either CDP or LLDP protocols enabled on the network.	
Manual VLAN ID	If the VLAN Discovery Mode field is set to "Manual", you can specify the VLAN ID for this AudioCodes or Genesys phone in this field by entering the value it will use. Valid values are 1 through 4094. Note: Important information regarding Manual VLAN ID If you configure an AudioCodes or Genesys phone to a Manual VLAN ID, the phone will not listen to packets that come into its network port unless the appropriate 802.1q tagging is set in the header. Some network switches have been observed to strip away this header before sending the packets to the ISS in the field. If this occurs, and Manual VLAN ID is set on the device, the device will no longer hear any traffic and cannot be accessed. If this occurs, there are only two ways to recover the device: 1.The switch must be changed to not strip the 802.1q header. The simplest way to do this is to configure the switch port as a trunk port. The method for performing this is dependent on your type of switch. 2.The device must be reset to factory defaults to reset/clear the Manual VLAN ID value. This however is only possible if the phone is already running on the 2.0.0.18 version of firmware.	

LAN

Option	Description	Default
IP Assignment Mode	This setting specifies the method that this AudioCodes or Genesys phone uses to obtain an IP address: - Automatic (DHCP) – (Default) All network IP settings are provided by the Dynamic Host Control Protocol (DHCP) server in your network. - Static – All network IP settings are specified manually through the remaining fields in the LAN section.	
IP Address	This setting specifies the IP address that this AudioCodes or Genesys phone will use when it starts. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Subnet Mask	This setting specifies the appropriate subnet mask for your IP telephony network. The IP address for this AudioCodes or Genesys phone must fall within the range specified by the subnet mask. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Default Gateway	This setting specifies the IP address for the network device that controls the routing of IP packets. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Primary DNS	This setting specifies the IP address of the primary Domain Name Server (DNS). Do not enter a URL in this field. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Secondary DNS	This setting specifies the IP address of the secondary DNS. Do not enter a URL in this field. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6. Note: The fields for the IP network settings do not reflect the settings that are assigned by the DHCP server to the AudioCodes or Genesys phone.	

Audio Quality Diagnostics

These settings are designed to help diagnose audio quality problems by capturing recorded audio packets using a network sniffer utility (for example Wireshark) and analyzing the network traffic and audio packets. Change these settings only at the direction of authorized PureConnect Customer Care technical support representatives. Setting these values incorrectly can cause additional audio problems.

Option	Description	Default
Packet Recording Enabled	This option activates the packet recording mechanism.	No
Packet Recording Remote IP Address	This setting specifies the IP address of the remote computer to capture the recorded packets. The recorded packets should be captured by a network sniffer application. The default IP address is 0.0.0.0 . All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Packet Recording Remote Port	This setting specifies the UDP port on the computer specified in Packet Recording Remote IP Address .	5000
RTP Recording Enabled	This option activates the DSP RTP recording.	No
Network Recording (To User) Enabled	This option activates the DSP network recording of outgoing audio traffic.	No
TDM Recording (From User) Enabled	This option activates the DSP TDM recording of incoming audio traffic.	No
Echo Cancellation Debug Recording Enabled	This option activates the recording of the echo cancellation activity to debug associated echo problems.	No

Registration

Option	Description	Default
Redundant Proxy Mode	This option is mandatory for the phone to operate in redundancy. Enable the option to operate with a proxy server that serves as a backup if the first goes down. Primary-Fallback/Disabled - Phone does not use redundant proxy. If set to Disable in the Web interface, it will set the previously described ini file parameter <code>redundant_proxy/enabled</code> as well. Primary-Fallback -Phone registered to redundant proxy if the primary proxy does not respond to SIP signaling messages.	Primary-Fallback/Disabled
Switch Back to Primary SIP Proxy	The phone identifies cases where the primary proxy does not respond to SIP signaling messages. In these scenarios, the phone registers to the redundant proxy and the phone continues normal functionality, without the user noticing any connectivity failure or malfunction with the primary proxy. No/disabled = Asymmetric (default). In this mode, the primary proxy is assigned a higher priority for registration than the redundant proxy. Once the phone is registered to the primary proxy, it sends keep-alive messages (using SIP OPTIONS messages) to the primary proxy. If the primary proxy does not respond, the phone registers to the redundant proxy, but continues sending keep-alive messages to the primary proxy. If the primary proxy responds to these keep-alive messages, the phone re-registers to the primary proxy. Therefore, the phone assigns the primary proxy a higher priority for registration. If asymmetric mode is configured and the primary server goes down, an attempt will be made to revert to the primary server. Yes/Enabled = Symmetric. In this mode, both proxies are assigned the same priority for registration. Once the phone is registered to a proxy, it sends keep-alive messages to this proxy. The phone switches proxies only once the proxy to whom it has registered does not respond. Therefore, the phone assigns both proxies the same priority for registration. If symmetric mode is configured and the primary server goes down, the phone operates with the redundant proxy without ever reverting to the primary unless the redundant proxy also goes down. In both the Asymmetric and Symmetric modes, the following applies: - If the phone is not registered (i.e., if the proxy server – redundant or primary – to which the phone currently tries to register does not respond), the phone attempts to register to an alternative proxy. These attempts continue until the phone successfully registers. - If this feature is enabled and the user reboots the phone, the phone registers to the last proxy to which it was trying to register, and not necessarily to the primary proxy.	No
Failback Retry Timeout	This options determines whether to perform failback. This option applies only if you are operating with the DNS mode of failover (for example, with a DNS server). Select 0 to disable the failback retry timeout or enter the number of seconds to wait before failback is performed.	0
Enable Keep Alive Using OPTIONS	This options determines whether keep-alive is performed by using SIP OPTIONS messages sent to the proxy.	Yes

Related topics

[Configure managed IP phones or templates](#)

[Support Site special notices](#)



SIP settings overview: AudioCodes and Genesys phones or templates

SIP settings are organized into categories, as shown under **Related topics**.

For information on how to access the SIP settings, see *Configure advanced options for managed IP phones or templates*.

Related topics

[SIP audio settings](#)

[SIP transport settings](#)

[SIP session settings](#)

[SIP authentication settings](#)

[Configure advanced options for managed IP phones or templates](#)



Information: AudioCodes and Genesys phones or templates

The following table describes the information that is shown for AudioCodes and Genesys phones or templates. This information is automatically updated when the IP phone, or an IP phone that uses the template, is registered.

For information on how to access these settings, see *Configure managed IP phones or templates*.

Detail	Description
Phone	This is the manufacturer and model of the IP phone device.
Type	This is the type of station (workstation or stand-alone phone).
IP Address	This is the IP address of the device. N/A indicates the device is not registered.
Contact Line	This is the SIP line used when the phone registered with the CIC server. This line will be used to send SIP signaling to the phone.
Last Reload	This is the date and time when the phone requested configuration update or the phone was reloaded after a configuration change.
Status	This is the status of the phone from the CIC server perspective (i.e., Not registered, Up-to-date, Reloading, Reload required).
Max. Line Keys	This is the maximum number of line keys associated with this device. An AudioCodes and Genesys phone has 1 line key.
Max. Appearances	This is the maximum number of shared line appearances for this device. An AudioCodes and Genesys phone has 1 appearance.
Notes	These are any comments CIC administrators add about this device or the associated template.

Related topics

[Configure managed IP phones or templates](#)

Interaction SIP stations settings

[General settings](#)

[Options](#)

[Advanced options](#)

[SIP settings](#) [Information](#)



General settings: Interaction SIP stations or templates

The following table describes the general settings for Interaction SIP stations or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Setting	Description	Default
Name	The name of this IP phone must be unique. Click Browse to locate an existing station.	Specified when the phone is added
Active	Inactive phones do not receive calls.	Active
MAC Address	The MAC address must be in the format xx:xx:xx:xx:xx:xx. Interaction SIP station MAC addresses start with 00:26:fd. Note: Changing the MAC address will reload a previously registered managed IP phone.	

Full Computer Name	The correct full computer name is listed on the SIP soft phone user's computer. Navigate to My Computer --> Properties --> Computer Name and note the Full Computer Name. For example: PattyJ.acme.com or... PattyJ This option is available for SIP soft phones only. Notes: Changing the Full Computer Name will reload a previously registered managed IP phone. When you add a SIP Soft Phone, CIC automatically trims extra whitespace from the beginning and the end of the Full Computer Name.	
Registration Group	The default options are: • Default Registration Group • Default Secure Registration Group You can create other registration groups in the Registration Groups container.	Default Registration Group
Location	All station appearances are in this same location. Time zone information is read from the location and used to set the phone time, DST settings, and so on. Note: If the Enable Regional Dialing option is selected, and a change to this location creates an extension conflict of a managed IP phone, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click Copy to Clipboard to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).	Default Location
Preferred Language	This option is available only if multiple languages are installed. Select the language for all prompts for this managed IP phone. The available options depend on the installed languages.	System Default
Audio Protocol	The audio stream on this IP phone can be unencrypted using RTP (Real Time Protocol) or encrypted using Secure RTP (SRTP). • To use SRTP, you must choose TLS as the Transport Protocol • Choose SRTP only if the endpoint(s) on this line support SRTP. • If you select SRTP, it enables the Security option (below). Calls between devices transmitting and receiving SIP TLS messages and SRTP audio are completely secure. Note: Interaction SIP Station phone models IP300, IP301, IP500, IP501, IP600, and IP601 do not support this audio protocol option, therefore this field is not displayed for these models.	RTP
Use Location Time Zone	Determines whether the time zone of the associated location is used to set the date/time. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used.	Selected
Firmware Version	The available firmware options are listed.	
Time Zone	The time zones listed are the same as Windows time zones. The managed IP phone will use this time zone to set the daylight saving time information. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used. <i>The SIP Soft Phone does not support this time zone option.</i>	(UTC-05:00) Eastern Time (US & Canada)
Station Appearances	There are three types of station appearances (or an existing station may be selected). Not all types of appearances apply to all phones: • Station Appearance - This is a regular station appearance. For example, ManagedIPPhone105 has a regular station appearance by default labeled ManagedIPPhone105 on this station. (The label can be edited.) Interaction SIP Station uses only one station appearance. • Shared Station Appearance - This is an appearance that is assigned to another SIP station. If the key that is associated with this appearance is pressed, an incoming call can be picked up from the other SIP station. Note: This option does not apply to Interaction SIP Station or a managed IP phone using a SIP bridge. • External Registration - The IP phone obtains its registration outside the IC server or the managed proxy system. For example, one station appearance for the IP phone connects to the IC server, and another appearance connects to an outside SIP server. Note: This option does not apply to a managed IP phone using a SIP bridge. After you add, edit, or remove station appearances, you must reload the phone.	Not specified

Related topics

[Configure managed IP phones or templates](#)

[Support Site special notices](#)

[Add Registration](#)

[Registration Group](#)

[SIP Bridge](#) [SIP Bridges Configuration](#) [Location](#) [Enable Regional Dialing option](#)



Options: Interaction SIP stations or templates

The following tables describe the options for Interaction SIP stations or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

General

Option	Description	Default
Ring Always	When this setting is enabled, the phone will always ring when the user receives a call, even if a CIC client is not running.	Not selected
Inband Call Waiting Tone	When this setting is enabled, the phone will emit a tone on an incoming call when another call is active	Not selected
SIP Receive Port	This is the port that the IP phone uses to send and receive SIP signaling packets using the TCP and UDP transport protocols.	5060
SIP TLS Receive Port	This is the port that the IP phone uses to send and receive SIP signaling packets using the TLS transport protocol.	5061
Media Port Start Range	Use this setting for Polycom and Interaction SIP Station phones that need to use a different port range than the default ports for audio traffic. Set this to a valid port number that begins the new range of ports to use for audio. Reasons to use this include phones that are behind a firewall, or that use port forwarding, or that have another reason to specify a different port range. If Interaction SIP Stations use both RTP and RTCP for the audio stream, a new port number specified in the Media Port Start Range (e.g., 6400) will apply to RTP audio, and RTCP audio will automatically use one port number higher (e.g., 6401). The default port number of 4000/4001 on Interaction SIP Stations works well for most situations.	Depends on the device manufacturer
LAN Port Mode	This is the network speed over the Ethernet for the IP phone through the LAN port. Acceptable values are: • 1 Gbps Full-duplex • 10 Mbps Full-duplex • 10 Mbps Half-duplex • 100 Mbps Full-duplex • 100 Mbps Half-duplex	Automatic
PC Port Mode	This is the network speed over the Ethernet for the IP phone through the PC port. Acceptable values are: • 1 Gbps Full-duplex • 10 Mbps Full-duplex • 10 Mbps Half-duplex • 100 Mbps Full-duplex • 100 Mbps Half-duplex	Automatic
Ringtone Name	This option allows you to select a custom ring tone for SIP100, SIP200, and 420HD phones. The ININDefault.wav file contains the ring tone that is included with CIC. You can replace this file with your custom ring tone provided that it meets these requirements: • The ring tone file must be a WAV file (A/Mu-Law, 8-kHz audio sample rate and 8-bit audio sample size or PCM 16-kHz audio sample rate and 16-bit audio sample size, Intel PCM encoding). • You must name your ring tone file ININDefault.wav. • You must place your ringtone file in \\\3\\ic\\resources on the CIC server.	ININDefault.wav

Interface

Option	Description	Default
Ring Volume (0-9)	This value sets the ring volume heard in the agent's headset. When the phone configuration is reloaded or the device is rebooted (e.g., the network cable is unplugged and reconnected), the phone resets ring volume to this default value.	5

Emergency Information

For New E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified
Primary Email	The email address to which the emergency personnel arrival information can be sent.	Not specified
Country, State, City, Street Name, House Number, Zip code	The full address of the station location including house number, street name, zip code, city, state and country to dispatch emergency personnel. (For example, 2001 Junipero Serra Blvd, Daly City, CA 94014, US)	Not specified

For Old E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Calling Party Number	The outbound ANI (10-digit numeric) to use for emergency calls from this IP phone. The Automatic Location Identification (ALI) record field is CPN and in "emergency" terminology it is Emergency Location Identification Number (ELIN).	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified

Related topics

[Configure managed IP phones or templates](#)



Advanced options: Interaction SIP stations or templates

The following tables describe the advanced options for Interaction SIP Station phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Note: These options are used only for diagnostic and troubleshooting purposes. Do not change them without clear direction from a PureConnect Customer Care representative.

Provisioning

Option	Description	Default
Provisioning Method	This setting supports several methods for determining the provisioning server to which the IP phone should connect. The options are DHCP Options , Disabled , Static URL . Depending on which method is selected, the DHCP Option or the Static URL may be required below.	DHCP Options
DHCP Option	This option specifies the Dynamic Host Configuration Protocol (DHCP) option number that identifies the vendor and functionality of a DHCP client.	160
Static URL	Specify the CIC server by entering the host name or IP address. All IP addresses in managed phones configuration are pass-through strings to support IPv6. Note: If Provisioning Method is set to Disabled , the Interaction SIP Station does not attempt to connect with the provisioning server. Therefore configuration of firmware is not requested, so that configuration information requires updates through the web interface.	blank or <empty>

Syslog Tracing

The following are all of the Syslog tracing options for Interaction SIP stations. The available options depend on the model.

Option	Description	Default
Syslog Enabled	This setting enables or disables diagnostic logs for Interaction SIP Stations in the form of Syslog messages. Setting this to Yes requires a Syslog Server to be specified. Use this only at the direction of an authorized PureConnect Customer Care engineer.	No
Syslog Server	This setting specifies the IP address of a third party Syslog server used to capture diagnostic logs and error messages generated by the Interaction SIP Station. A valid Syslog server IP address is required if Syslog Enabled is set to Yes . All IP addresses in managed phones configuration are pass-through strings to support IPv6 in a future release.	The default IP address is 0.0.0.0, which is invalid until set to a valid address.
Server Port	This setting defines the UDP port of the Syslog Server. The valid range is from 0 to 65,535.	514
Voip Application	This setting specifies the level at which Syslog messages are generated related to VoIP. Select from the following list: None Emergency Error Warning Notice Info Deb	None
Control Center	This setting specifies the level at which Syslog messages are generated related to Networking	None
LCD Display	This setting specifies the level at which Syslog messages are generated related to LCD Display and other keypresses.	None
Web	This setting specifies the level at which Syslog messages are generated related to phone web server.	None
Watchdog	This setting specifies the level at which Syslog messages are generated related to the watchdog process, which keeps other processes running.	None
802.1x	This setting specifies the level at which Syslog messages are generated related to the security protocol.	None
Kernel	This setting specifies the level at which Syslog messages are generated related to the kernel process of the phone.	None
DSP	This setting specifies the level at which Syslog messages are generated related to the voice engine of the phone.	None

Gain

The microphone settings adjust the volume for the benefit of the caller and the speaker settings adjust the volume for the benefit of the agent. We recommend you talk to authorized PureConnect Customer Care engineers if you have problems with audio volume.

Digital settings adjust volume to the line while the analog settings adjust volume to headset. Select the intended value from the drop-down list.

Option	Description	Default
Headset Digital Microphone Gain (default +0 dB)	This setting controls the gain of the RTP audio stream sent from the Interaction SIP Station device to the line.	+0 dB
Headset Digital Speaker Gain (default +0 dB)	This setting controls the gain of the RTP audio stream from the line through the Interaction SIP Station device and to the headset.	+0 dB
Headset Analog Microphone Gain (default +39 dB)	This setting controls the audio signal gain from the analog headset microphone into the Interaction SIP Station device.	+39 dB
Headset Analog Speaker Gain (default -12 dB)	This setting controls the audio signal gain from the Interaction SIP Station device to the analog headset.	-12 dB
Headset Analog Sidetone Gain (default -12 dB)	This setting controls the sidetone audio signal gain from the Interaction SIP Station device to the analog headset. The sidetone controls the agents ability to hear their own voice in the headset as they speak.	-12 dB

VLAN

Option	Description	Default
VLAN Discovery Mode	This setting specifies the method that this Interaction SIP Station uses to find its Virtual Local Area Network (VLAN). This setting controls the use of VLAN tagging (802.1Q) for audio streams over a VLAN: - Automatic (CDP+LLDP) – This (default) option uses CDP (Cisco Discovery Protocol) together with LLDP (Link Layer Discovery Protocol) to automatically obtain the VLAN ID assignment. This option allows for discovery using whichever mode is active, and to use VLANs on different switches without changing configuration of the phone. - Automatic (CDP) - This option uses CDP (Cisco Discovery Protocol) to automatically obtain the VLAN ID assignment. Use this option to strictly limit VLAN discovery to Cisco switches. - Automatic (LLDP) - This option uses LLDP (Link Layer Discovery Protocol) to automatically obtain the VLAN ID assignment. Use this option to strictly limit VLAN discovery to non-Cisco switches. - Disabled – This option disables the use of VLANs which stops VLAN tagging for this Interaction SIP Station. If you do not have the standard Voice/Data VLAN set up in your network, using this option skips the VLAN discovery mode which causes the IP phone to start-up faster on a reboot. - Manual – This option requires you to specify a VLAN ID in the Manual VLAN ID field. This option allows the IP phone to generate traffic on the specified VLAN without having either CDP or LLDP protocols enabled on the network.	
Manual VLAN ID	If the VLAN Discovery Mode field is set to "Manual", you can specify the VLAN ID for this Interaction SIP Station in this field by entering the value it will use. Valid values are 1 through 4094. Note: Important information regarding Manual VLAN ID If you configure an Interaction SIP Station (ISS) to a Manual VLAN ID, the phone will not listen to packets that come into its network port unless the appropriate 802.1q tagging is set in the header. Some network switches have been observed to strip away this header before sending the packets to the ISS in the field. If this occurs, and Manual VLAN ID is set on the device, the device will no longer hear any traffic and cannot be accessed. If this occurs, there are only two ways to recover the device: 1.The switch must be changed to not strip the 802.1q header. The simplest way to do this is to configure the switch port as a trunk port. The method for performing this is dependent on your type of switch. 2.The device must be reset to factory defaults to reset/clear the Manual VLAN ID value. This however is only possible if the phone is already running on the 1.2.2 version of firmware. WARNING Because of this danger of causing the device to be inaccessible, systems running on firmware versions prior to 1.2.2 will not honor the Manual VLAN ID value until you set a safety server parameter. The server parameter is "Provision ISS Manual VLAN ID Enabled" and needs to be set to "Yes" to enable it. Make sure you test one single phone to ensure your switch is not stripping the 802.1q VLAN tagging before you set any more phones! If you choose to set the VLAN ID manually on an ISS and they are on pre-1.2.2 firmware, you will have to set your network switch ports to trunk ports in the case that they are stripping the 802.1q headers. If the ISS is on post 1.2.2 firmware, you will have to either configure the network switch ports as trunk ports, or perform the factory reset sequence on the device that is added in the 1.2.2 firmware. Be sure to check the support site for special notices.	

LAN

Option	Description	Default
IP Assignment Mode	This setting specifies the method that this Interaction SIP Station uses to obtain an IP address: - Automatic (DHCP) – (Default) All network IP settings are provided by the Dynamic Host Control Protocol (DHCP) server in your network. - Static – All network IP settings are specified manually through the remaining fields in the LAN section.	
IP Address	This setting specifies the IP address that this Interaction SIP Station will use when it starts. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Subnet Mask	This setting specifies the appropriate subnet mask for your IP telephony network. The IP address for this Interaction SIP Station must fall within the range specified by the subnet mask. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Default Gateway	This setting specifies the IP address for the network device that controls the routing of IP packets. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Primary DNS	This setting specifies the IP address of the primary Domain Name Server (DNS). Do not enter a URL in this field. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Secondary DNS	This setting specifies the IP address of the secondary DNS. Do not enter a URL in this field. This field is used only if the IP Assignment Mode field is set to Static. All IP addresses in managed phones configuration are pass-through strings to support IPv6. Note: The fields for the IP network settings do not reflect the settings that are assigned by the DHCP server to the Interaction SIP Station.	

Audio Quality Diagnostics

These settings are designed to help diagnose audio quality problems by capturing recorded audio packets using a network sniffer utility (for example Wireshark) and analyzing the network traffic and audio packets. Change these settings only at the direction of authorized PureConnect Customer Care technical support representatives. Setting these values incorrectly can cause additional audio problems.

Option	Description	Default
Packet Recording Enabled	This setting activates the packet recording mechanism.	No
Packet Recording Remote IP Address	This setting specifies the IP address of the remote computer to capture the recorded packets. The recorded packets should be captured by a network sniffer application. The default IP address is 0.0.0.0 . All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Packet Recording Remote Port	This setting specifies the UDP port on the computer specified in Packet Recording Remote IP Address .	5000
RTP Recording Enabled	This setting activates the DSP RTP recording.	No
Network Recording (To User) Enabled	This setting activates the DSP network recording of outgoing audio traffic.	No
TDM Recording (From User) Enabled	This setting activates the DSP TDM recording of incoming audio traffic.	No
Echo Cancellation Debug Recording Enabled	This setting activates recording of the echo cancellation activity to debug associated echo problems.	No
Port Mirroring	This setting activates port mirroring.	No
SRTP Audit Events	This setting activates auditing of SRTP events.	No
Noise Reduction Debug Recording	This setting activates noise reduction debug recording.	No

Registration

Option	Description	Default
Allow Manual Redundant Proxy Symmetric	CIC sets the <code>redundant_proxy_is_symmetric</code> parameter to true only when proxy type is configured as Line. In some scenarios, this is problematic and as a result the phone cannot be registered. Set this option to Yes to allow CIC to set the <code>redundant_proxy_is_symmetric</code> parameter as true if the first and second registration types are manual. For more information about the use of this option, see the <i>Interaction SIP Proxy Technical Reference</i> .	No

Related topics

[Configure managed IP phones or templates](#)

[Support Site special notices](#)



SIP settings overview: Interaction SIP stations or templates

SIP settings are organized into categories, as shown under **Related topics**.

For information on how to access the SIP settings, see *Configure advanced options for managed IP phones or templates*.

Related topics

[SIP audio settings](#)

[SIP transport settings](#)

[SIP session settings](#)

[SIP authentication settings](#)

[Configure advanced options for managed IP phones or templates](#)



Information: Interaction SIP stations or templates

The following table describes the information that is shown for Interaction SIP stations or templates. This information is automatically updated when the IP phone, or an IP phone that uses the template, is registered.

For information on how to access these settings, see *Configure managed IP phones or templates*.

Detail	Description
Phone	This is the manufacturer and model of the IP phone device.
Type	This is the type of station (workstation or stand-alone phone).
IP Address	This is the IP address of the device. N/A indicates the device is not registered.
Contact Line	This is the SIP line used when the phone registered with the CIC server. This line will be used to send SIP signaling to the phone.
Last Reload	This is the date and time when the phone requested configuration update or the phone was reloaded after a configuration change.
Status	This is the status of the phone from the CIC server perspective (i.e., Not registered, Up-to-date, Reloading, Reload required).
Max. Line Keys	This is the maximum number of line keys associated with this device. Interaction SIP Station and SIP Soft Phone both have 1 line key.
Max. Appearances	This is the maximum number of shared line appearances for this device. Interaction SIP Station and SIP Soft Phone both have 1 appearance.
Notes	These are any comments CIC administrators add about this device or the associated template.

Related topics

[Configure managed IP phones or templates](#)

Polycom phone settings

[General settings](#)

[Options](#)

[Advanced options](#)

[SIP settings](#) [Information](#)



General settings: Polycom phones or templates

The following table describes the general settings for Polycom phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Setting	Description	Default
Name	The name of this IP phone must be unique. Click Browse to locate an existing station.	Specified when the phone is added
Active	Inactive phones do not receive calls.	Active
MAC Address	The MAC address must be in the format xx:xx:xx:xx:xx:xx. Polycom MAC addresses start with 00:04:f2. Note: Changing the MAC address will reload a previously registered managed IP phone.	
Registration	The available options are: - Registration Group - SIP Bridge If you choose SIP Bridge, and there are more than one SIP bridges available, then select the name of the bridge in the list. If no bridge exists, CIC prompts you to create one. To modify an existing SIP bridge, select the bridge and click Configure. Note: If you select a SIP Bridge registration, then you must complete the MAC Address field.	Default Registration Group
Location	All station appearances are in this same location. Time zone information is read from the location and used to set the phone time, DST settings, and so on. Note: If the Enable Regional Dialing option is selected, and a change to this location creates an extension conflict of a managed IP phone, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click Copy to Clipboard to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).	Default Location

Firmware Version	Older firmware versions previously installed on this system may also appear in the drop down list. In certain scenarios, you may wish to select older approved firmware for this Polycom IP phone model, for example, to control the rollout of new firmware to a managed IP phone or group of managed IP phones during an SU update. You can change this setting on multiple IP Phones if each phone selected supports this feature. Note: This option will not appear if the selected Polycom IP phone model does not support the selectable firmware feature.	Latest
Preferred Language	This option is available only if multiple languages are installed. Select the language for all prompts for this managed IP phone. The available options depend on the installed languages.	System Default
Audio Protocol	The audio stream on this IP phone can be unencrypted using RTP (Real Time Protocol) or encrypted using Secure RTP (SRTP). - To use SRTP, you must choose TLS as the Transport Protocol. - Choose SRTP only if the endpoint(s) on this line support SRTP. - If you select SRTP, it enables the Security option (below). Calls between devices transmitting and receiving SIP TLS messages and SRTP audio are completely secure.	RTP
Use Location Time Zone	Determines whether the time zone of the associated location is used to set the date/time. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used.	Selected
Time Zone	The time zones listed are the same as Windows time zones. The managed IP phone will use this time zone to set the daylight saving time information. Note: You can also configure the time zone on the DHCP server. If you configure the time zone both on the DHCP server and in Interaction Administrator, then the time zone on the DHCP server is used.	(UTC-05:00) Eastern Time (US & Canada)
Expansion Modules	In the first list, select the number of expansion modules you want. If a second list appears, select the type of expansion modules you want. Note: If you select multiple expansion modules, they must all be of the same type. IA automatically adds the appropriate number of line keys for the type of expansion module that you select.	
Station Appearances	There are three types of station appearances (or an existing station may be selected). Not all types of appearances apply to all phones: Station Appearance - This is a regular station appearance. For example, ManagedIPPhone105 has a regular station appearance by default labeled ManagedIPPhone105 on this station. (The label can be edited.) Interaction SIP Station uses only one station appearance. Shared Station Appearance - This is an appearance that is assigned to another SIP station. If the key that is associated with this appearance is pressed, an incoming call can be picked up from the other SIP station. Note: This option does not apply to a managed IP phone using a SIP bridge. External Registration - The IP phone obtains its registration outside the CIC server or the managed proxy system. For example, one station appearance for the IP phone connects to the CIC server, and another appearance connects to an outside SIP server. Note: This option does not apply to a managed IP phone using a SIP bridge. After you add, edit, or remove station appearances, you must reload the phone.	Not specified

Related topics

[Configure managed IP phones or templates](#)
[Options](#)
[Information](#)
[Advanced options](#)
[Add Registration](#)
[Registration Group](#)
[SIP Bridge](#)
[SIP Bridges Configuration](#)
[Location](#)
[Enable Regional Dialing option](#)
[Managed IP phone appearance configuration](#)



Options: Polycom phones or templates

The following tables describe the options for Polycom phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

General

Option	Description	Default
Enable MWI	When this setting is enabled, the phone will flash a message-waiting indicator (MWI) LED when instant messages and voice messages are waiting.	Yes
Ring Always	When this setting is enabled, the phone will always ring when the user receives a call, even if a CIC client is not running.	No
Inband Call Waiting Tone	When this setting is enabled, the phone will emit a tone on an incoming call when another call is active	No
SIP Receive Port	This is the port that the IP phone uses to send and receive SIP signaling packets using the TCP and UDP transport protocols.	5060
SIP TLS Receive Port	This is the port that the IP phone uses to send and receive SIP signaling packets using the TLS transport protocol.	5061
Media Port Start Range	Use this setting for Polycom phones that need to use a different port range than the default ports for audio traffic. Set this to a valid port number that begins the new range of ports to use for audio. Reasons to use this include phones that are behind a firewall, or that use port forwarding, or that have another reason to specify a different port range.	Depends on the device manufacturer

Polycom Interface

Option	Description	Default
Language	This is the internal language used by the Polycom interface. The language is specified in <language-region> format. Notes: The supported languages for this IP phone depend on your Polycom firmware version and your CIC version. Please check the firmware release notes for information on your firmware version at VoIP SIP Software Release Matrix . It is recommended to select "internal" for the Polycom IP430 phone to conserve memory resources.	English-United States
Regional Tone Set	Use this setting to change the language of most call progress tones. The tone set can be specified separately from the Language , but the value defaults to "Language Default", which is the country based on the value of the Language setting. The IP phone requires a reload after changing this setting. Valid languages for the regional tone set include: Canada, China, Denmark, France, Germany, Italy, Japan, Korea, Netherlands, Norway, Poland, Portugal, Russia, Slovenia, Spain, Sweden, United Kingdom, United States. Notes: The regional tone set does not affect busy tones, ringback tones, or reorder tones. If the tone set is not providing the desired tones, contact a PureConnect Customer Care representative for assistance in making configuration changes.	Language Default
Use 24 Hour Clock	Use this setting to display the time in 24 hour format (for example, 21:43:12). The options are: • Yes • Language Default • No	Language Default
Use Long Date Format	Use this setting to display the date in the long date format (for example, January 14, 2010). The options are: • Yes • Language Default • No	Language Default
Show Date Before Time	Use this setting to display the date before the time. If the date and time are on the same line, then the date will be displayed on the left. If the date and time are on separate lines, then the date is displayed above the time. The options are: • Yes • Language Default • No	Language Default
Date Format	Use this setting to display the day of week, day, and month in a specific order. The options are: • Thursday, 21 January • Thursday, January 21 • 21 January, Thursday • January 21, Thursday • MM-DD-YY (for example, 07-03-10) • DD-MM-YY (for example, 03-07-10) Note: For Use 24 Hour Clock , Use Long Date Format , Show Date before Time , and Date Format parameters, the "Language Default" value uses the Language field above.	Language Default
Headset Mode	When this setting is enabled, the headset is selected as the preferred mode after its first use until the headset key is pressed again. If this setting is not enabled, hands-free (speaker phone) mode is the preferred mode.	No
One Touch Voicemail	When this setting is enabled, the voice mail summary display is bypassed, and voice mail is dialed directly.	No

Polycom Call Waiting	Use this setting to change the call waiting behavior on Polycom IP phones. The options are: • Beep • Silent (for no sound indicator for a call that is waiting)	Beep
Persist Headset Volume	When this setting is enabled, the receive volume between calls is remembered. If not enabled, the receive volume is reset to nominal at the start of each call.	No
Persist Handset Volume	When this setting is enabled, the receive volume between calls is remembered. If not enabled, the receive volume is reset to nominal at the start of each call.	No
Persist Handsfree Volume	When this setting is enabled, the receive volume between calls is remembered. If not enabled, the receive volume is reset to nominal at the start of each call. The default value is Yes (enabled).	Yes
Enable Handsfree	When this setting is enabled, the speakerphone can be used to dial. If not enabled, the handsfree mode is disabled and the speakerphone cannot be used to dial.	Yes
Line 2 Key Function	This applies to Polycom IP 330/IP 320 only. Use this setting to change the function of the Line 2 hard key. The options are: • Line 2 • Messages • Do Not Disturb	Line 2
DND Key Function	Select Phone only to enable DND functions on this IP phone. Select Status Synchronized to synchronize the user's status with the user's CIC client configuration status when he/she is logged into the station.	Disabled
Forward Key Function	Select Phone only to enable forwarding functions on this IP phone. When setting this option to Phone only , this phone's status changes to "Reload Required." After rebooting, a forward softkey is shown on the IP phone.	Disabled
Number First in Caller ID	This setting specifies the order of name and number in the caller ID. The options are: • No: The caller's name appears first. • Yes: The phone number appears first.	No

Polycom Local Dialplan

Option	Description	Default
Emergency Registration Group	Select the registration group from the pull-down list to use when routing calls made to emergency numbers (as listed in the Emergency Numbers option below).	Not specified
Emergency Numbers	This setting lists the numbers that should be monitored. If one of these numbers is detected as having been dialed by a user, the call will automatically be directed to the defined Emergency Registration Group . Separate multiple numbers by a comma.	911

Emergency Information

For New E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified
Primary Email	The email address to which the emergency personnel arrival information can be sent.	Not specified
Country, State, City, Street Name, House Number, Zip code	The full address of the station location including house number, street name, zip code, city, state and country to dispatch emergency personnel. (For example, 2001 Junipero Serra Blvd, Daly City, CA 94014, US)	Not specified

For Old E911 Interface

Option	Description	Default
Description	The description of the location of this IP phone. This description is displayed in station group directories in the CIC clients. For example, a description might be "Conference Room 1".	Not specified
Location	The location information (60-character alpha-numeric) that is provided to dispatched emergency personnel (For example, Building 1, floor 3, north wing, office #26, next to elevator). The ALI record field is LOC.	Not specified
Calling Party Number	The outbound ANI (10-digit numeric) to use for emergency calls from this IP phone. The Automatic Location Identification (ALI) record field is CPN and in "emergency" terminology it is Emergency Location Identification Number (ELIN).	Not specified
Customer Name	The name (32-character alpha-numeric) to provide for this IP phone (For example, John Smith). The ALI record field is NAM.	Not specified

Related topics

[Configure managed IP phones or templates](#)



Advanced options: Polycom phones or templates

The following tables describe the advanced options for Polycom phones or templates. For information on how to access these settings, see *Configure managed IP phones or templates*.

Note: These options are used only for diagnostic and troubleshooting purposes. Do not change them without clear direction from a PureConnect Customer Care representative.

Polycom General

Option	Description	Default
Call Offering Timeout		
Call Ringback Timeout	This option specifies the time in seconds to allow an outgoing call to remain in the ringback state before dropping the call.	0
Call Dialtone Timeout	This option specifies the time in seconds to allow the dialtone to be played before dropping the call. If set to 0, the call is not dropped. If set to <NULL> (or no value), the call is dropped after 60 seconds.	15
Configuration Time Zone Overrides DHCP	This option determines whether the time zone that is set for the location that is associated with the IP phone overrides the DHCP time zone settings.	No
Configuration NTP Server Overrides DHCP	This option determines whether the SNTP server settings that are associated with the IP phone override the DHCP server settings.	No
DTMF On Time	This option sets the length of time (in milliseconds) that the tones are generated when a sequence of DTMF tones is played automatically. This option also sets the minimum time the tone is played when an agent dials manually, regardless of the duration of the key press.	80
DTMF Off Time	This option sets the length of time (in milliseconds) that the IP phone pauses between digits when a sequence of DTMF tones is played automatically. This option also sets the minimum inter-digit time when an agent dials manually.	80
Phone Limits Calls Per Line Key	This option indicates whether the number of calls per line key is limited by the specific model of Polycom IP phone settings.	No
Always Reboot on Reload	This option indicates whether the phone is automatically rebooted when a user clicks Reload Now . Note: When you enable this option, another port/service is open on the phone. Consider the security implications before you enable this option.	No
Enable Configuration Web Page	This option allows you to enable or disable the webpage on Polycom phones.	Off
Phone Offer Cryptosuites	This option determines which cryptosuite(s) the phone offers in SDP. The choices are: - AES_CM_128_HMAC_SHA1_32 only - AES_CM_128_MHAC_SHA1_80 only - Both Note: If you do not set this option, the phone automatically offers both cryptosuites.	Both

Phone Require Secure Media	This option indicates whether the phone is allowed to use only secure media streams. • If set to "No,"the phone can accept non-secure media streams. • If set to "Yes,"the phone accepts only secure media streams. • Any offered SIP INVITES must include a secure media description in the SDP or the call is rejected. • For outgoing calls, only a secure media stream description is included in the SDP of the SIP INVITE. The non-secure media description is not included.	No
Enable Power Saving	Select this option to enable power saving mode. When the phone is in power saving mode, the phone's LCD display is automatically turned off after 1 minute. This option is available for Polycom VVX models only: • By default, this option is disabled on the VVX 300, 301, 310, 311, 400, 401, 410 and 411 models. • By default, this option is enabled on the VVX 500, 501, 600 and 601 models.	Off
Use 486 For Reject	This option indicates whether CIC sends a busy signal as the rejection reason to a SIP request.	No
Phone Warning Level	This option determines when the phone's warning icon and warning pop-message appear on the Polycom phones. The choices are: • All warnings • Critical warnings • None The default value is All warnings. You must opt-in for settings other than the default value. Note: The warning, "Default admin password is in use. Please contact your administrator," reminds you to change the default administrator password on the phone. Genesys recommends that you change this password. Alternatively, you can change the Phone Warning Level to 1 and the warning will no longer appear. However, changing the phone warning level does not actually fix the root problem involving the default admin password. On the phone, the warnings always appear under Settings>Status>Diagnostics>Warnings.	
TCP Session Timeout (seconds)	This option sets the number of seconds CIC waits before it attempts a TCP connection. CIC attempts to connect until it meets the TCP session retries count. To control the timeout behavior in the event of a TCP connection failure, set this parameter and the TCP Session Retries parameter.	<Null> or 0 (The IP phone's default settings are used.)
TCP Session Retries	This option sets the number of times CIC attempts to make a TCP connection. If it cannot connect within this number of times, CIC moves to the next server. A retry is made if the session reaches in seconds the timeout as set in the TCP Session Timeout (above). To control the timeout behavior in the event of a TCP connection failure, change this parameter and the TCP Session Timeout parameter.	<Null> or 0 (The IP phone's default settings are used.)
Boot Server Type	This option determines whether the phone controls boot server options by the menu or the provisioning server controls boot server options. If controlled by the phone, the CIC provisioning subsystem does not write configuration for boot server options. If controlled by the provisioning server, the server writes configuration to the provisioning files. Note: If the Boot Server Option, Boot Server Option Type, or Provisioning URL contain incorrect values, the provisioning server does not write the configuration for boot server options. If incorrect values exist, the provisioning logs contain errors such as: • Boot Server Option not in range of 128-254. • Provisioning URL is not a compliant RFC 2396/RFC 3986 URL. This option is available for Polycom phones capable of 4.0 or newer firmware. Select: Phone to use the phone menu to control boot server options. Custom to use the DHCP option you set by using the Boot Server Option option and the Boot Server Option Type option. Custom + Opt.66 to use the DHCP option you set by using the Boot Server Option option and Boot Server Option Type option. If the phone cannot determine the information from the Boot Server Option option, the phone uses DHCP option 66. Opt.66 to use DHCP option 66 to determine boot server parameters. Static to use the Provisioning URL option to determine the boot server.	Phone
Boot Server Option	This option is the DHCP option that the phone uses when trying to determine the boot server parameters. Set this option if you selected Custom or Custom + Opt.66 in the Boot Server Type option. Valid entries include empty string or an integer in range from 128 to 254. This option is available for Polycom phones capable of 4.0 or newer firmware.	
Boot Server Option Type	This option indicates the DHCP option type to use with the Boot Server Option option. You can select IP Address or String . Set this option if you selected Custom or Custom+Opt.66 in the Boot Server Type option. This option is available for Polycom phones capable of 4.0 or newer firmware.	String
Provisioning URL	This option indicates the URL that the phone points to. Set this option if you selected Static in the Boot Server Type option. Enter a compliant RFC 2396/RFC 3986 URL and use a scheme of FTP/TFTP/FTPS/HTTP/HTTPS. If you do not enter the scheme, the phone uses HTTP. If you do not enter the port, the phone uses the default value for the scheme. For HTTP provisioning, the URL must specify port 8088 since the Provisioning subsystem on the CIC server listens on port 8088 and not port 80. Polycom phones assume port 80 for an HTTP URL. Example: http://provision.mydomain.com:8088 This option is available for Polycom phones capable of 4.0 or newer firmware.	

Polycom Features

Option	Description	Default
Presence	This option is related to the Presence feature of Microsoft Windows Messenger 5.1 on the IP phone. Note: The Presence feature is reserved for custom integrations outside of CIC. Enabling this option in Interaction Administrator has no effect in the CIC system.	No
Messaging	This option is related to the Instant Messaging feature of Microsoft Windows Messenger 5.1 on the IP phone. Note: The Messaging option is reserved for custom integrations outside of CIC. Enabling these features in Interaction Administrator has no effect in the CIC system.	No
Directory	This option specifies whether the user can edit the local contacts.	Yes
All Call Lists	This option specifies whether the user can view all call lists, including the Received Call List, the Placed Call List, and the Missed Call List.	Yes
Received Call List	This option specifies whether the user can view the list of received calls.	Yes
Placed Call List	This option specifies whether the user can view the list of placed calls.	Yes
Missed Call List	This option specifies whether the user can view the list of missed calls.	No
URL Dialing	This option specifies whether URL/name dialing is available from a private line. (This feature is never available from a shared line.)	No
Call Park	This option specifies whether active calls can be parked and retrieved.	Yes
Group Call Pickup	This option specifies whether calls to another phone within a predefined group can be picked up without dialing the extension of the other phone.	Yes
VVX D60 Profile	This option indicates whether to enable the VVX D60 feature.	No

Polycom Interface

Option	Description	Default																						
Idle Screen Logo	This option sets the background image that the Polycom IP phone displays when the phone is not on a call. Enter the name of the file excluding the extension. For example, if logo_ip600.bmp is the complete file name, enter the value of "logo_ip600." Supported formats for VVX phones are PNG, JPG, and BMP. Supported formats for SoundPoint IP phones are JPG and BMP. Note: If you do not specify an extension, CIC assumes that BMP is the extension. Place the source image file in the \\ic\\provision\\polycom directory on the CIC server. If you leave this value, which is the default setting, the system looks for the following file names, based on the model: <table><tr><th>Model(s)</th><th>File name</th></tr><tr><td>IP320, IP330</td><td>IP_330</td></tr><tr><td>IP430</td><td>IP_430</td></tr><tr><td>IP450</td><td>IP_450</td></tr><tr><td>IP501</td><td>IP_501</td></tr><tr><td>IP550, IP560, IP600, IP601, IP650, IP670</td><td>IP_600</td></tr><tr><td>IP4000</td><td>IP_4000</td></tr><tr><td>IP6000</td><td>IP_6000</td></tr><tr><td>IP7000</td><td>IP_7000</td></tr><tr><td>TRIO8500</td><td>TRIO_8500</td></tr><tr><td>TRIO8800</td><td>TRIO_8800</td></tr></table> Note: The resolution is dependent on the model. JPG, PNG, and BMP images may require special file format parameters. See the "Adding a Background Logo" section in the <i>Polycom Administration Guide</i> for information on resolutions.	Model(s)	File name	IP320, IP330	IP_330	IP430	IP_430	IP450	IP_450	IP501	IP_501	IP550, IP560, IP600, IP601, IP650, IP670	IP_600	IP4000	IP_4000	IP6000	IP_6000	IP7000	IP_7000	TRIO8500	TRIO_8500	TRIO8800	TRIO_8800	
Model(s)	File name																							
IP320, IP330	IP_330																							
IP430	IP_430																							
IP450	IP_450																							
IP501	IP_501																							
IP550, IP560, IP600, IP601, IP650, IP670	IP_600																							
IP4000	IP_4000																							
IP6000	IP_6000																							
IP7000	IP_7000																							
TRIO8500	TRIO_8500																							
TRIO8800	TRIO_8800																							
Idle Screen Background Color	This option sets a custom background color for the Polycom IP670 phone. This option is used to improve the appearance of the Idle Screen Logo for the IP670. Enter the color in either hexadecimal (for example, "0x0077FF" - must begin with "0x"), or decimal value.	Not specified																						
Headset Echo/Noise Suppression	This option indicates whether echo and noise suppression is used with the agents' headsets. Note: When you enable the Headset Echo/Noise Suppression option, there is a short transmit delay of 30 milliseconds.	No																						
Headset Microphone Gain	This option specifies the gain value for the headset microphone: - IP330 group (320, 321, 330, 331, 335)=21, and acceptable values are 0 to 21 - IP430=21, and acceptable values are 0 to 39 - IP450=21, and acceptable values are 0 to 21 - IP550 and IP560=21, and acceptable values are 0 to 21 - IP650 and 670=21, and acceptable values are 0 to 21																							
Headset Speaker Gain	This option specifies the gain value for the headset speaker: - IP330 group (320, 321, 330, 331, 335)=4, and acceptable values are 0 to 25 - IP430 and IP450=1, and acceptable values are 0 to 25 - IP550 and IP560=1, and acceptable values are 0 to 25 - IP650 and IP670=1, and acceptable values are 0 to 25																							
Headset Sidetone Gain	This option specifies the gain value for the headset sidetone: - IP330 group (320, 321, 330, 331, 335)=-3, and acceptable values are -25 to -3 - IP430 and IP450=-3, and acceptable values are -25 to -3 - IP550 and IP560=-3, and acceptable values are -25 to -3 - IP650 and IP670=-3, and acceptable values are -25 to -3																							
Electronic Hookswitch Mode	This option indicates whether optional external hardware is available for use with a headset attached to the IP phone's analog headset jack. The options are: - Regular (None) - Jabra (DHSG) - Plantronics	Regular (None)																						
Auto Dial on Off-hook	This option indicates whether contacts can be automatically dialed when the phone is off-hook. Contacts must be configured with the Auto Dial on Off-hook Number option.	No																						
Auto Dial on Off-hook Number	This option specifies a number to auto dial when the Auto Dial on Off-hook Number option is enabled.																							
VVX D60 Allowing Pairing	This option indicates whether a user can pair or unpair a VVX D60 base station with a VVX business media phone. You can select: None - To not allow users to pair or unpair a base station from the VVX phone. Pairing - To allow users to pair the base station with the VVX phone, but not allow users to unpair a base station. Unpairing - To allow users to unpair the base station from the VVX phone, but not allow users to pairing a base station. Both - To allow users to pair and unpair the base station with the VVX phone.	None																						

Option	Description	Default
Digitmap	This option allows you to edit digitmap properties. The digitmap feature eliminates the need for using the Dial or Send soft key when making outgoing calls when a matching digit pattern is detected. As soon as a digit pattern match is found, the call setup process completes automatically. Acceptable values are strings compatible with the digit map feature of MGCP described in 2.1.5 of RFC 3435. String is limited to 768 characters and 30 segments; a comma is also allowed; when reached in the digit map, a comma will turn dial tone back on; '+' is allowed as a valid digit; extension letter 'R' is used. For complete information, see the <i>Polycom Technical Bulletin 11572</i> and Polycom's <i>Administrator's Guide for the SoundPoint® IP/SoundStation® IP Family</i>.	x.T[*T]*905*90[1-4]x.T
Digitmap Timeout	This option sets the timeout in seconds for each segment of the digitmap. Note: If there are more digitmaps than timeout values, the default value of 3 is used. If there are more timeout values than digitmaps, the extra timeout values are ignored.	3 1 3 3

Polycom Network Address Translation (NAT)

Option	Description	Default
NAT IP Address	This option sets the IP address to use in NAT traversal. Note: This setting only changes the IP address that is displayed in SIP signaling. <i>All IP addresses in managed phones configuration are pass-through strings to support IPv6.</i>	Not specified
NAT Signal Port (1024-65535)	This option sets the signal port to use in NAT traversal. This setting changes the port setting used by the IP phone.	Not specified
NAT Audio Port Start (1024-65535)	This option sets the audio port to start in NAT traversal. This setting changes the RTP port that is initially allocated to the IP phone.	Not specified
NAT Keep Alive Interval (0-3600 seconds)	This option sets the interval time in seconds in which IP phones send a keep-alive packet to the NAT device to keep the communication port open so that NAT can continue to function as initially configured.	Not specified

Polycom Flash Parameters

Option	Description	Default
Admin Password	This setting changes the phone's local administrator password. Any string is an acceptable value. Note: When this password is changed, the value is passed to the phone one time, and then is removed from DS (Directory Services). The Polycom phone remembers the password change, and the provisioning server does not send this value to the phone configuration in any subsequent phone reboots.	Not specified
802.1Q VLAN Identifier	This setting is used by the IP phone to set the phone's 802.1Q VLAN identifier if VLAN ID is not obtained by CDP or DHCP. Acceptable values are 0 to 4094	Not specified (no VLAN tagging)
LAN Port Mode	This option sets the network speed over the Ethernet for the IP phone through the LAN port. Acceptable values are: • Auto • 10 Full Duplex • 10 Half Duplex • 100 Full Duplex • 100 Half Duplex	Auto

Polycom Syslog Tracing

Option	Description	Default
Syslog Server	This option sets the syslog server IP address or host name. When a Syslog Server is specified, the Syslog Transport and Syslog Render Level settings are used. When a Syslog Server is not specified, the Syslog Transport and Syslog Render Level settings are ignored. All IP addresses in managed phones configuration are pass-through strings to support IPv6. Note: When you specify a Syslog Server value, the IP phone's application log which is sent to the provisioning server, is no longer used, or disabled. This means the log file no longer appears in the IC, and all information is present in the syslog instead, which protects Polycom's flash memory abilities.	Not specified (syslogging is enabled, and the log file no longer appears in the CIC system)
Syslog Transport	This option sets the syslog transport protocol. Acceptable values include TCP and TLS.	UDP

Syslog Render Level	This option sets the lowest class of event that will be rendered to the syslog. The acceptable range of values is 0 through 6.	0
Disable App Logs When Using Syslog	When Syslog Tracing is enabled, application logs are disabled (set to Yes) by default. Change this setting to No, to enable the creation of application logs by Polycom phones. The information generated and collected in the application log (which is stored in the phones folder in the IC server's logging directory, usually \\IC\\Logs\\[date]\\..., is the same information as the information generated and collected in the system log. Tracing bandwidth can be reduced by turning off the application log collection when the system log collection is enabled.	
Application	This option sets the tracing level for the Application syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level when you no longer need it. For more information, see Tracing levels for the Polycom Syslog.	4
Browser	This option sets the tracing level for the Browser syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
Configuration	This option sets the tracing level for the Configuration syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
Copy Utilities	This option sets the tracing level for the Copy Utilities syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
CURL	This option sets the tracing level for the CURL syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
Key Observer	This option sets the tracing level for the Key Observer syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
SIP	This option sets the tracing level for the SIP syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
Support Objects	This option sets the tracing level for the Support Objects syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
TLS	This option sets the tracing level for the TLS syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4
Wapp Mgr	This option sets the tracing level for the Wapp Mgr syslog topic. Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously Be sure to reduce the tracing level as soon as possible. For more information, see Tracing levels for the Polycom Syslog.	4

Polycom Voice Quality Monitoring

Note: The Polycom Voice Quality Monitoring feature requires a license.

Option	Description	Default
Enable RTCP-XR Reports	This setting indicates whether Polycom phones to generate reports in RTCP XR packet metrics on listening and conversational quality.	No
Enable Collector Session Reports	This setting indicates whether Polycom phones to create session type reports, which are generated at the end of a call.	No
Enable Collector Periodic Reports	This setting indicates whether Polycom phones to create periodic type reports, which are generated throughout a call.	No
Report Collector Address	This option sets the IP address or host name of the SIP server (report collector) that accepts voice quality reports contained in SIP PUBLISH messages. All IP addresses in managed phones configuration are pass-through strings to support IPv6.	
Report Collector Port	This option sets the port of the SIP server (report collector) that accepts voice quality reports contained in SIP PUBLISH messages. If port is 0 or <Null>, port 5060 will be used.	
Collector Period (5 to 20)	This option sets the time interval between successive periodic quality reports.	20

Polycom Voice Quality Monitoring Alerts

Option	Description	Default
Enable Triggered Collector Periodic Reports	This option indicates whether the generation of periodic quality reports triggered by alert states. The options are: • Critical: periodic reports will be generated when an alert state is critical • Warning or Critical: periodic reports will be generated when an alert state is either warning or critical	Disabled
MOS-LQ Warning Threshold (15 to 40)	This option sets the threshold value of listening MOS score that causes the IP phone to send a warning alert quality report. Acceptable values are 15 to 40.	Not specified (warning alerts are not generated)
MOS-LQ Critical Threshold (15 to 40)	This option sets the threshold value of listening MOS score that causes the IP phone to send a critical alert quality report. Acceptable values are 15 to 40.	Not specified (warning alerts are not generated)
Delay Warning Threshold (10 to 2000)	This option sets the threshold value of one way delay (in ms) that causes the IP phone to send a warning alert quality report. Acceptable values are 10 to 2000.	Not specified (warning alerts are not generated due to one way delay; includes both network and end system delays)
Delay Critical Threshold (10 to 2000)	This option sets the threshold value of one way delay (in ms) that causes the IP phone to send a critical alert quality report. Acceptable values are 10 to 2000.	Not specified (critical alerts are not generated due to one way delay; includes both network and end system delays)

Polycom SIP Security

Option	Description	Default
Inbound SIP Security Challenge	This option sets the level of security the Polycom IP phone uses to validate the SIP inbound (to the phone versus inbound to CIC) traffic. The possible values are: • Source: The IP phone checks the source IP address of the SIP request against the IP addresses of its SIP Registrations. If addresses do not match, the SIP request is rejected. If there is a match, the request is accepted. • Digest: The IP phone sends a 401 Unauthorized challenge when a SIP request comes in, and the sender of the request must respond with the proper credentials for the SIP transaction to proceed. • Source and Digest: The IP phone first applies the Source method, then the Digest method.	None (the phone does not take any steps to authenticate inbound SIP traffic)
Phone side only SRTP (Offloading)	This setting has the same effect as the as the audio protocol setting in the general configuration, however it only changes the phone setting.	No

Related topics

[Configure managed IP phones or templates](#)

[Location](#)

[SNTP server](#)

[Audio protocol](#)



SIP settings: Polycom phones or templates

SIP settings are organized into categories, as shown under **Related topics**.

For information on how to access the SIP option settings, see *Configure advanced options for managed IP phones or templates*.

Related topics

[SIP audio settings](#)

[SIP transport settings](#)

[SIP transport settings](#)

[SIP session settings](#)

[SIP authentication settings](#)

[Configure advanced options for managed IP phones or templates](#)



Information: Polycom phones or templates

The following table describes the information that is shown for Polycom phones or templates. This information is automatically updated when the IP phone, or an IP phone that uses the template, is registered.

For information on how to access these settings, see *Configure managed IP phones or templates*.

Detail	Description
Phone	This is the manufacturer and model of the IP phone device.
Type	This is the type of station (workstation or stand-alone phone).
IP Address	This is the IP address of the device. N/A indicates the device is not registered.
Contact Line	This is the SIP line used when the phone registered with the CIC server. This line will be used to send SIP signaling to the phone.
Last Reload	This is the date and time when the phone requested configuration update or the phone was reloaded after a configuration change.
Status	This is the status of the phone from the CIC server perspective (i.e., Not registered, Up-to-date, Reloading, Reload required).
Max. Line Keys	This is the maximum number of line keys associated with this device.
Max. Appearances	This is the maximum number of shared line appearances for this device.
Notes	These are any comments CIC administrators add about this device or the associated template.

Related topics

[Configure managed IP phones or templates](#)



Schedule Reload

Use this page to schedule a time to reload the selected managed IP phone(s).

Reload at

Select the date that you want to reload the managed IP phones from the pull-down list. The default date is the next day. For example, if the current date is March 21, 2017, then the default date of March 22, 2017 automatically populates this field.

Select the time to reload. By default, the reload time is 6:00 pm.

Time Zone

Select the time zone to use for the reload from the pull-down list. The default setting is "Managed IP Phone" meaning the reload time is based on the same time zone as the [location](#) of the managed IP phone. The other available settings are "My Workstation" and "IC server".

Click **OK** to save the schedule reload information.



Managed IP phones and templates options

Click the links below to see detailed explanations of the options.

[AudioCodes and Genesys](#)

[Interaction SIP stations](#)

[Polycom phones](#)

Managed IP Phone Appearance Configuration

Use this page to add or edit managed IP phone station appearances.

Label

Enter the [label](#) displayed on the line key of the IP phone.

Extension

Enter the extension number for this station appearance.

Identification Address

Enter the unique SIP ID address (containing no spaces) for this station appearance. This is a required field.

Line Keys

Select the number of contiguous line keys dedicated to this station appearance from the pull-down list. The number of line keys cannot be increased unless there are line keys available. The Interaction SIP Station is currently limited to one line key.

Calls per Line Key

Select the number of calls from the pull-down list that come into each individual line key. The default is 1. The Interaction SIP Station is currently limited to one call per line key.

Security

This option is not currently available for Interaction SIP Stations.

This option is available only when you select SRTP as the Audio Protocol.

Select **Minimal** to hide the display of an open-lock icon on non-secure calls in the CIC clients. Select **End-to-Edge** to display the open-lock icon when a call, or at least one segment of a call in the CIC system domain is or becomes non-secure. See [SIP Line Transport](#) for more information.

Ring Set

This option is not available for Interaction SIP Station.

Select the ring set to apply to this managed IP phone. By default, the **<Default - Polycom>** ring set is applied. The ring sets available depend on the configured [ring sets](#). Select **<Local Phone Settings>** on the station to use the ring as chosen locally on the IP phone.

Sharable

This setting does not apply to Interaction SIP Station or to SIP Soft Phones.

Select this check box if this station appearance is sharable, and therefore can be added as a shared appearance.

Auto Conference

This setting applies only to Polycom stand-alone phones.

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN

If you enabled auto conference you must enter the Personal Identification Number.

External Registration Label

Enter a unique name for the external registration associated with the station appearance.



Common Errors and Warnings

Common Errors:

- The MAC address must be unique for each IP Phone.
- The Template name specified doesn't exist.
- The proxy group name specified doesn't exist.
- The manufacturer/model doesn't match any known supported manufacturer and model.

Common Warnings:

- An IP phone with the specified name already exists and will be replaced. You can move forward and have all the existing IP phones replaced.
- Duplicate extension exists for the station appearance.



Configuration File Attributes

When the assistant creates a managed IP phone from a migration item, the phone must be associated with a [registration group](#). The assistant uses the information contained in the SIP phone's configuration file to create a registration group. Each registration group in the file must have the same server entries for the server address, transport and port in order for the assistant to assign servers to the migration item's registration group. If there are no servers in the migration item's registration group, the assistant will not create a managed IP phone from the migration item.

The assistant requires that the address, transport, and port settings for the server are defined. The assistant uses either the server settings on the registration, or the server settings in volpProt. The assistant uses the following rules:

If reg.X.server.Y.address exists registration settings are used:

XML Attribute	Server Value
reg.X.server.Y.address	Server Address
reg.X.server.Y.transport	Server Transport
reg.X.server.Y.port - Server Port	Server Port

If reg.X.server.Y.address does not exist, volpProt settings are used:

XML Attribute	Server Value
volpProt.server.Y.address	Server Address
volpProt.server.Y.transport	Server Transport
volpProt.server.Y.port	Server Port

The assistant converts the Server Values to the CIC equivalents to create a server in the registration group for it. The assistant uses the following conversion rules:

Server Value	CIC Value
Server Address	Text only. Cannot be <null>. The assistant does not convert between server names and IP addresses.
Server Port	Converts the value of this value to the numeric equivalent. If <null>, then use port 5060.
Server Transport	"UDPOnly" or "DNSnaptr", use UDP "TCPPreferred" or "TCPOnly" use TCP "TLS" use TLS

When the migration process reads a migration item, it looks at the current set of registration groups in CIC to see if any of the registration groups match what is on the migration item. If there is a match, the migration item is set to use that registration group. If there is not a match, the migration process creates a registration group for the item using the following rules:

- The default registration group name is set to the first server's address. If that name already exists for a registration group on the server, the assistant tries successive "_1", "_2", "_3" attempts until it finds one that does not exist in CIC.
- For each server in the registration group, the following is set:
 - The type is set to Manual.
 - The address is set to the Server Address value from above.
 - The port is set to the Server Port value from above.
 - The transport is set to the Server Transport value from above.

Polycom XML Attributes Mappings

The following table shows the mappings of the IP phone properties to Polycom configuration file XML attributes:

Notes: If there is no value specified for these attributes in a Polycom configuration file, the assistant sets the default value (if a default value is listed shown in the **Default** column). Before a value is actually assigned to the attribute, the assistant goes through the conversions listed below in the [Value Conversion Results](#) table. For example, if a configuration file attribute had a value of "1" and the associated Interaction Administrator property data type was "Boolean", then the assistant would set the Interaction Administrator property for the attribute to "True".

XML Attribute	Property Display Label	Property Data Type	Applies To Phone or Station	Default	Value Conversion
call.autoOffHook.1.enabled Phone No	Auto Dial On Off-hook	Boolean	Phone	No	
call.autoOffHook.1.contact	Auto Dial On Off-hook Number	String	Phone		
dialplan.digitmap	Digitmap	String	Phone		
dialplan.digitmap.timeOut	Digitmap Timeout	String	Phone	3	
dialplan.routing.emergency.1.value	Emergency Numbers	String	Phone	911	
lcl.ml.lang	Language	Enum	Phone	English_United_States	
nat.ip	NAT IP Address	String	Phone		
nat.keepalive.interval	NAT Keep Alive Interval (0-3600 seconds)	String	Phone		
nat.mediaPortStart	NAT Audio Port Start (1024-65535)	String	Phone		
nat.signalPort	NAT Signal Port (1024-65535)	String	Phone		
up.headsetMode	Headset Mode	Boolean	Phone	No	
up.oneTouchVoiceMail	One Touch Voicemail	Boolean	Phone	No	
voice.volume.persist.handsfree	Persist Handsfree Volume	Boolean	Phone	Yes	
voice.volume.persist.handset	Persist Handset Volume	Boolean	Phone	No	
voice.volume.persist.headset	Persist Headset Volume	Boolean	Phone	No	
volpProt.local.port	SIP Receive Port	String	Phone	5060	

Value Conversion Results

Property Data Type	Resulting Value Conversion Applied
Boolean	If the case-insensitive resulting value is "true", "1", "yes" or "-1", the value of the property is set to "True". Otherwise, the value is set to "False".
Enumeration	The corresponding internal enumeration in the custom property's possible enumeration values is assigned. Typically, there is a value conversion applied to the value in the configuration file and maps the configuration file's value to the appropriate enumeration, so it can then be set in the enumeration handling.
Integer	The resulting string is converted to an integer and that value is assigned to the property. If the value in the string cannot be converted to an integer, 0 is assigned.
String	The resulting string value is assigned directly to the property.

The values assigned to the attributes are listed in [Managed IP Phone Configuration - Options](#).

Configure advanced options for managed IP phones and managed IP phone templates

To configure advanced options for managed IP phones and managed IP phone templates

1. In the <IC_Server> container, double-click the **Managed IP Phones** container.
2. If you are configuring a managed IP phone template, double-click the **Templates** subcontainer.
3. In the list view window, double-click the item that you want to configure.
4. Click the **Options** tab.
5. Click **Advanced Options**.
6. Use the **Advanced Options** tab and the **SIP Options** tab to configure the advanced options. For more information on the configuration settings, use the links under **Related topics**.

Related topics

AudioCodes and Genesys phones

[Advanced options](#)

[SIP audio options](#)

[SIP transport options](#)

[SIP session options](#)

[SIP authentication options](#)

Interaction SIP stations

[Advanced options](#)

[SIP audio options](#)

[SIP transport options](#)

[SIP session options](#)

[SIP authentication options](#)

Polycom phones

[Advanced options](#)

[SIP audio options](#)

[SIP transport options](#)

[SIP session options](#)

[SIP authentication options](#)

External Registration Configuration

Use this page to add or edit managed IP phone external registration station appearances.

Label

Enter the [label](#) displayed on the line key of the IP phone.

Identification Address

Enter the unique SIP ID address (containing no spaces) for this station appearance. This is a required field.

Registration Group

Select the registration group from the drop-down menu to use to register the appearance for this IP phone.

Line Keys

Select the number of contiguous line keys dedicated to this station appearance from the pull-down list. The number of line keys cannot be increased unless there are line keys available. The Interaction SIP Station is currently limited to one line key.

Calls Per Line Key

Select the number of calls from the pull-down list that come into each individual line key. The default is 1. The Interaction SIP Station is currently limited to one call per line key.

Use External SIP Server Authentication

Select this check box to connect to an external (outside the CIC server) SIP server to verify identity. Enter **User Name**, **Password**, and enter password again for the SIP server credentials necessary to connect for registration.

SIP Display Name

Enter the associated SIP station's display name as configured for the CIC server.

Related Topics

[Registration Group Configuration](#)

[Managed IP Phone Appearance Configuration](#)

[SIP Station Configuration](#)

[Managed IP Phone Configuration - General](#)



Frequently Asked Questions about the Managed IP Phone Assistant

Question: If an IP phone has already been created from a migration item, can the migration assistant be re-run for that same item at a later date and be expected to re-convert?

Answer: No. It is recommended to use Interaction Administrator to make any modifications on the phone at this point.

Question: If a migrated Polycom phone configuration file has a registration for a shared appearance or a station that does not exist in Interaction Administrator, will that shared appearance or station be added to the new managed IP phone?

Answer: No. The assistant uses the information in the Polycom configuration file to match existing information in Interaction Administrator. If the identification address in the configuration file does not exist in Interaction Administrator, either for an un-managed station or a shared appearance, then registration will not be added to the new IP phone.

Question: When the migration code converts a migration item to an IP phone, and all of the stations that are added to the phone are marked as "inactive", is the resulting IP phone "inactive"?

Answer: Yes.

Question: What time zone is used for a new managed IP phone?

Answer: No time zone is used, because there is no time zone setting directly on a managed IP phone. The managed IP phone uses the time zone based on the location setting assigned. The migration process used the [location](#) found on the first private station added to the IP phone.

Question: Does the assistant support the 000000000000.cfg file for migrating Polycom phone configurations?

Answer: No. The assistant uses the configuration file's name to determine the MAC address that is assigned to the migration item.

More: When a Polycom phone tries to request its main configuration file, the phone will first try to get it by requesting the phone's .cfg file based on its MAC address. If that doesn't exist, it will ask for "000000000000.cfg" for its configuration information. This makes sense from the phone's perspective, because the phone knows its MAC address. Looking at it from the assistant's perspective, the migration would have to be given a list of phone MAC addresses that exist at a site, which is not supported.

Question: Does the migration support substitution of a phone's MAC address for the [MACADDRESS] syntax in a phone's CONFIG_FILES entry?

Answer: Not at this time. In general, this is used for sites that want phones to pick up main configuration from the 000000000000.cfg file. As an example, the list of configuration files to load might look like this in 000000000000.cfg:

```
CONFIG_FILES="phone-[MACADDRESS].cfg, phone1.cfg, sip.cfg"
```

If the phone whose MAC address was 0004f20352b2 went to find the files it should load, it would replace the [MACADDRESS] with 0004f20352b2 so we could think of the list looking like:

```
CONFIG_FILES="phone-0004f20352b2.cfg, phone1.cfg, sip.cfg"
```

Again, since the migration doesn't know the MAC addresses of phones that would possibly be requesting configuration at a site, it does not have support for the [MACADDRESS] substitution.

Question: What manufacturers and models are supported for managed IP phones in Interaction Administrator?

Answer: If migrating, the supported models are listed in the pull-down list in the [Select Default Model](#) page of the assistant. If importing, the supported models are listed in [New Managed IP Phone](#).



IP Phone Configurator and Migration

There are some settings available in the IP Phone Configurator that will not be included or recognized in the migration process, but can be configured later in [Managed IP Phone Configuration - Options](#) after creating the managed IP phone. The settings are:

- NAT Settings
- One Touch Voicemail
- Dial on Offhook Settings
- SIP Receive Port
- Headset Mode
- Persist [speaker type] Volume



About .i3m Files

.i3m files contain summary information about the building of migration items and information about what happened during the entire migration process. There are two files created:

- **MIGRATE_#_PRE.I3M** - This file is created when the migration items are built.
- **MIGRATE_#_POST.I3M** - This file is created after the migration process is complete.

The migration file name containing the highest number (#), corresponds to the most recent migration performed.

Each file contains summary information and information about each migration item. The MIGRATE_#_PRE.I3M file contains **Build History** and **Issues Before Migration** messages. The MIGRATE_#_POST.I3M file contains **Build History**, **Issues Before Migration**, and **Migration Results** messages. The messages are group in sets, and each set is related to a migration item.

- **Build History** messages (seen in the [Build History](#) tab on the Migration Information page) contain the history of the migration item's building, before the actual migration.
- **Issues Before Migration** messages (seen in the [Current Issues](#) list on the Migration Information page) contain any issues that a migration item has/had before the actual migration.
- **Migration Results messages** (seen in the [Migration Results](#) list on the Migration Results page) contain migration results information about the migration item after the migration is complete.

Click [here](#) to see an example **MIGRATE_#_POST.I3M** file.



Managed IP Phone Configuration

Use this page to configure the following settings for a managed IP phone or a managed IP phone template:

- [General](#)
- [Information](#)
- [Options](#)



Migration Information

Use this page to view the migration items, and any errors or warnings associated with each item. Also view information about how the item was built.

Migrate Items

This list shows each .cfg file that was included in the migration process. The .cfg files shown depend on the check boxes selected in **Show** section below. Highlight the .cfg file to view the information, such as **General**, **Registration Group**, **Appearances** and **Build History** related to the file.

Show

The settings in this section determine what type of item details are displayed. By default, **Error Items** and **Warning Items** are displayed. Select the **OK Items** check box to display items with no errors or warnings. De-select (un-check) a check box to hide the item details.

New Phone Settings

This section contains the following information on the new managed IP phone that will be created:

- [General](#)
- [Registration Group](#)
- [Appearances](#)
- [Build History](#)

Current Issues

This section lists any issues with the selected migration item in the **Migrate List**. Double-click on an issue to view the entire message.



Migration Process

As the Managed IP Phone Assistant migration process runs, the system performs the following steps automatically:

Step 1: Validate Registration Group

This step in the process makes sure that the registration group specified on the [migration items](#) exist in CIC and if it does not, the system tries to create a registration group so the IP phone can be created.

Step 2: Create the IP Phones and Add Private Stations

This step in the process creates the managed IP phones using the settings that are specified on the migration items and adds any private stations (not shared appearances which is done in the next step) to the IP phone. This step also sets custom properties (manufacturer and model) on the new phones.

Step 3: Migrate Shared Appearances and Set the Display Order

It is necessary for shared appearances to be migrated in a separate step because shared appearances can only be added to an already-created IP phone. If the IP phone does not exist, the shared appearance will not be added. After the assistant completes adding any (or all) shared appearances to the IP phone, the display order and line key information (if present) is determined, and that information is added to the phone.



New Phone Settings - Appearances

Use this page to view the appearances for the new managed IP phone being created based on the selected migration item.

Label, Station, and Extension are displayed for each appearance. For example, an entry listed may look like this:

Conference1A4000 (Label)

Conf1A4000SIP (Station)

6775 (Extension)

This information is based on the .cfg file. It is read-only and cannot be edited.



New Phone Settings - Build History

This page shows what happened to a migration item during the build process. It shows each error, warning and steps that were successfully processed related to an item.

Double-click on a step to view the entire build history message.



New Phone Settings - General

Use this page to view or change the general settings for the new managed IP phone being created based on the selected migration item.

Name

This is the name of the IP phone as specified in the [New Phone Naming](#) page. Click **Change Name** to enter a different or more specific name for this IP phone.

Model

This is the model of the IP phone as specified in the [Select Default Model](#) page. Click **Change Model** to select a different model from the pull-down menu.

MAC Address

This is the MAC Address of the IP phone. This information is from the .cfg file. This field is read-only and cannot be edited.

Type

This is the type of the IP phone. Click **Change Type** to select a different type (either stand-alone or workstation) from the pull-down menu.

Manufacturer

The manufacturer is Polycom. This field is read-only and cannot be edited.



New Phone Settings - Registration Group

Use this page to view the registration group(s) for the new managed IP phone being created based on the selected migration item.

The Address, Port, Transport and Type are listed for each registration group. For example, an entry listed may look like this:

10.10.1.135 (Address)

8060 (Port)

TCP (Transport)

Type (Manual)

This information is based on the .cfg file. It is read-only and cannot be edited.



New Registration Group

Type a unique name for the new registration group. By default, CIC creates two registration groups; <Default Registration Group>, and <Default Secure Registration Group>, both of which are regular type groups.

Select the type of group from the drop-down menu. The type can be Regular or External.

A regular registration entry can be a line, proxy, DNS server, or can be specified manually. Only one line can be defined per regular registration group. An external registration entry can be a DNS server, or can be specified manually.



Provisioning

The CIC Managed IP Phones feature reduces implementation time and ongoing maintenance work for SIP phones by managing them completely within CIC, in the Interaction Administrator **Managed IP Phones** container.

For more information, see *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.



Restoring the Directory Services Backup

In the event a restoration of the directory services backup is needed after running the Managed IP Phone Assistant, the procedure is fairly simple.

Note: CIC must be shut-down to perform this procedure.

For example, the directory services backup was saved to "D:\3\IC\Backup\RegistryBackup_6-4-2007-735760". Follow these procedures:

1. Go to the CIC server, and shut down CIC.
2. Run **Regedit.exe**.
3. Open the **HKEY_LOCAL_MACHINE\SOFTWARE\Interactive Intelligence** key.
4. Click on **Interactive Intelligence** to make it the selected key in Regedit.
5. After the application starts, click on **File | Import...**
6. On the **Import Registry File** dialog box that is displayed, select **Registry Hive Files (.)** in the **Files of Type** pull-down list at the bottom of the page.
7. Browse to the **d:\3\ic\backup** and open the **RegistryBackup_6-4-2007-735760** file.

Notes: Microsoft's **Registry Editor** makes the server unresponsive while the registry is being restored.

The Managed IP Phone Assistant displays the location of the **directory services backup** after the backup is complete. If the location is misplaced, see the **Last Known Good Backup** server parameter for the location. If someone else has performed a directory services backup since the backup that the Managed IP Phone Assistant performed, the server parameter will contain the path to the most recent backup. therefore may not list the most recent backup performed by the Managed IP Phone Assistant. This is unlikely, but it should be known as a possibility.



Sample MIGRATE_#_POST.I3M file

Managed IP Phone Assistant Migration Wizard Summary

Steps run:

- Create migration items
- Create phones from migration items

Total migration item count: 2

Directory Services backup on server location: C:\server\IC\Backup\RegistryBackup_27-4-2007-691301

Phone creation summary:

Created: 1 (0 had errors or warnings during the creation)

Not Created: 1

Item No. : 1

Migration Item: 0004f2008100.cfg

Description : Migrate '0004f2008100.cfg' to an Interaction Center phone.

Phone created: Yes

Message Set : Migration Results

Message Count: 26

Info : Starting the task 'Validate migration item.'.
Info : The 'Validate migration item.' task completed successfully for '0004f2008100.cfg'.
Info : Starting the task 'Setup registration group for phone.'.
Info : Created new registration group named 'hydra.inin.com' for use on the phone.
Info : The 'Setup registration group for phone.' task completed successfully for '0004f2008100.cfg'.
Info : Starting the task 'Create phone and add private stations.'.
Info : Set phone type='Workstation', manufacturer='Polycom', model='IP600'
Info : Set phone name='boss', MAC address='0004f2008100', registration group='hydra.inin.com'
Info : Set custom property value 'Auto Dial on Off-hook' to '0'
Info : Set custom property value 'Digitmap' to '[2-9]11|0T|011xxx.T|[[2-9]xxxxxxxx|[0-1][2-9]xxxxxxxx|[2-9]xxxxxxT|[[2-9]xxxT|1xxT|*T]*905|*90[1-4],x.T]*9[89],x.T]*91'
Info : Set custom property value 'Digitmap Timeout' to '1'
Info : Set custom property value 'Emergency Numbers' to '911'
Info : Set custom property value 'Headset Mode' to '0'
Info : Set custom property value 'One Touch Voicemail' to '0'
Info : Set custom property value 'Persist Handset Volume' to '0'
Info : Set custom property value 'Persist Handsfree Volume' to '1'
Info : Set custom property value 'Persist Headset Volume' to '0'
Info : Sip settings for phone obtained from station 'boss'
Info : Added private station 'boss' to the phone with label 'Boss-8100' and 2 line key(s).
Info : Successfully saved the phone for the 'Create phone and add private stations.' task.
Info : The 'Create phone and add private stations.' task completed successfully for '0004f2008100.cfg'.
Info : Starting the task 'Add shared appearances and finalize.'.
Info : Setting the appearance order to 0 for 'Station - boss'
Info : Setting the line key count to 2 for station 'boss'
Info : Successfully saved the phone for the 'Add shared appearances and finalize.' task.
Info : The 'Add shared appearances and finalize.' task completed successfully for '0004f2008100.cfg'.

Message Set : Issues Before Migration

Message Count: 1

Warn : Please check the Build History. There were errors or warnings encountered when building this migration item.

Message Set : Build History

Message Count: 17

Info : Set migration item property 'MAC Address' to '0004f2008100'
Info : Processed configuration information from file 'sip.cfg'
Info : Processed configuration information from file 'phone1.cfg'
Info : Processed configuration information from file 'xIC.cfg'
Info : Processed configuration information from file 'Boss-0004f2008100.cfg'
Info : Phone configuration has 1 registration(s).
Info : Got registration group for phone. Registration group has 1 servers.
Info : Registration group server 0: Address='hydra.inin.com', Port=5060, Transport='UDP'
Info : Looked up station 'boss' from identification address '8100' on registration 1.
Info : Adding station 'boss' to migration item. Assigning label 'Boss-8100' and line key count of 2.
Info : Set migration item property 'Phone Name' to 'boss'
Info : Using the station type from station 'boss' to set the new phone type.
Info : Set migration item property 'Phone Type' to 'Workstation'
Warn : No phone model could be derived from the private station appearances on the migration item.
Warn : Using default manufacturer 'Polycom' with model 'IP600' because the model of " " is not supported for the manufacturer 'Polycom'.
Info : Set migration item property 'Phone Manufacturer' to 'Polycom'
Info : Set migration item property 'Phone Model' to 'IP600'

Item No. : 2

Migration Item: 0004f2008101.cfg

Description : Migrate '0004f2008101.cfg' to an Interaction Center phone.

Phone created: No

Message Set : Migration Results

Message Count: 9

Info : Starting the task 'Validate migration item.'.
Err : No private stations were added to this migration item. In order for a phone to be created from a migration item, there needs to be at least 1 private station associated with it.
Err : The 'Validate migration item.' task did not complete successfully for '0004f2008101.cfg'

Err : Not executing task 'Setup registration group for phone.' due to previous errors.
Err : The 'Setup registration group for phone.' task did not complete successfully for '0004f2008101.cfg'
Err : Not executing task 'Create phone and add private stations.' due to previous errors.
Err : The 'Create phone and add private stations.' task did not complete successfully for '0004f2008101.cfg'
Err : Not executing task 'Add shared appearances and finalize.' due to previous errors.
Err : The 'Add shared appearances and finalize.' task did not complete successfully for '0004f2008101.cfg'

Message Set : Issues Before Migration

Message Count: 2

Err : No private stations were added to this migration item. In order for a phone to be created from a migration item, there needs to be at least 1 private station associated with it.

Warn : Please check the Build History. There were errors or warnings encountered when building this migration item.

Message Set : Build History

Message Count: 16

Info : Set migration item property 'MAC Address' to '0004f2008101'

Info : Processed configuration information from file 'sip.cfg'

Info : Processed configuration information from file 'phone1.cfg'

Info : Processed configuration information from file 'xlc.cfg'

Info : Processed configuration information from file 'Assistant-0004f2008101.cfg'

Info : Phone configuration has 2 registration(s).

Info : Got registration group for phone. Registration group has 1 servers.

Info : Registration group server 0: Address='hydra.inin.com', Port=5060, Transport='UDP'

Warn : The registration at index 1 with the identification address '8101' does not match the identification address for any SIP station or shared appearance on the server. Nothing will be added to the migration item for this registration.

Warn : The registration at index 2 with the identification address '8102' does not match the identification address for any SIP station or shared appearance on the server. Nothing will be added to the migration item for this registration.

Info : Set migration item property 'Phone Name' to 'Phone 1'

Warn : No private stations were added to the migration item. Setting default model and manufacturer.

Info : Set migration item property 'Phone Manufacturer' to 'Polycom'

Info : Set migration item property 'Phone Model' to 'IP600'

Warn : No private stations on this phone had a supported type of workstation or stand alone. The migrator will use the phone type 'Workstation'

Info : Set migration item property 'Phone Type' to 'Workstation'

Select Time Zone

Select time zone from the pull-down menu. The time zones listed are the same as Windows time zones. The selected managed IP phones will use this time zone to set the daylight saving time information.

Note: If you change the CIC server to a different time zone, you must restart both the CIC server and Session Manager.



Set to Template

Use this page to set the managed IP phone options to a template's values. Managed IP phone appearances are not modified.

Select the template from the pull-down menu.



Show Detailed Migration Results

Use this page to view the migration results in each step of the migration process for each migration item. Highlight an item in the **Migrate Items** list to view the associated steps in **Migration Results** section.

Items that are displayed as phones are migration items that were successfully created into phones. If there were any errors associated with their creation, the phone will be red. If there were no errors but there were warnings, then the phone will be yellow. If there were no errors or warnings encountered, the phone will be green.

If the icon next to the item is not a phone, that means that no phone was created for that migration item. It is expected to see the square items for migration items that were in error before the migration process started. If IP phones were not created for migration items that were *not* in error, investigation is required.

What if an IP phone was created with errors?

This may be due to the steps in the process of the migration. For example, in the first step the IP phone was created successfully and the private stations were added. Now, in the second step there were problems adding the shared appearances to the phone. The phone itself was created, but the end result the phone does not have the expected shared appearances. The text of the error messages tell what problems occurred during the migration.

Similarly, a phone that is created but had warnings during the creation, may be due to migration process having to deactivate the phone to get it to save properly due to a licensing problem. Again, the text of the warning will tell what happened to cause the warning.

Click **Next**. If there are any reloadable phones (i.e., IP phones that have stations with valid connection addresses), the assistant prompts Yes or No for a reload. If Yes is selected, the phones are reloaded at that time. If No is selected, the phones can be reloaded manually in Interaction Administration at a later time. For example, changes or tweaks can be made to individual IP phones in the Managed IP Phone container after the assistant is complete. After the desired changes are made, right-click in the container and click one of the reload options; **Reload Now**, **Reload at a Scheduled Time**, or **Reload All "Reload Required" Now**.



Registration Group Configuration

You must specify a registration group for every managed IP phone. The registration group controls how and where the phone is registered with CIC. It determines which phone is associated with which user, and it controls the user's contact information.

When you add a registration group, you designate it as either regular or external. See [Add Registration](#) for more information.

Each registration group is comprised of a list of registration entries:

- To add an entry to a regular registration group, you can select an existing line, you can specify an entry manually, you can designate a proxy, or you can designate a DNS server. You can specify only one line in a regular registration group.
- To add an entry to an external registration group, you can specify an entry manually, or you can designate a DNS server.

The entries in a registration group are ordered. When CIC attempts to place a call to the registration group, it tries to connect to the first entry in the list. If it connects to that entry, then it attempts to connect to the next entry in the list, and so on. You can change the order of entries in a registration group by using the up and down arrow keys.

Notes:

A registration group can have multiple entries. The first entry in the list is the only device that has full SIP functionality. Therefore, if you add a line registration, you must add it as the first entry. Or, if you add a DNS SRV registration, you must add it as the first entry. You cannot add both a line registration and a DNS SRV registration to the same registration group.

A single Polycom phone can have up to 3 devices in a registration group. Polycom registers all entries in the registration group, even if the phone is not actively sending outbound calls to the server.

A registration group can have a maximum of 4 registration entries.

Default Registration Groups

By default, in a new CIC installation, CIC creates two permanent default registration groups:

- **<Default Registration Group>**: line type of <Stations-UDP> See [SIP Line Transport](#) for more information.
- **<Default Secure Registration Group>**: secure line type of <Stations-TLS> The certificate is set to the domain certificate. See [SIP Line TLS Security](#) and [SIP Line Transport](#) for more information.

Interaction SIP Station does not currently support TLS, so you can choose to use the permanent **<Default Registration Group>**, or create a custom registration group in the [Registration Groups](#) in the **Managed IP Phones** container.

Note: See *CIC Managed IP Phones Administrator's Guide* in the **Technical Reference Documents** section of the PureConnect Documentation Library on the CIC server.

Registration Types

Line - Select an existing line from the pull-down list for the registration. This is currently the only type of registration allowed for Interaction SIP Station.

Manual - Manually enter the address, port, and protocol for the registration.

DNS SRV - Enter the domain name and protocol for the registration.

Note: If you change a line that is used in a registration group, all managed IP phones using it will immediately need to be reloaded. Any phones not reloaded will stop functioning when the line is changed.

Field Definitions

Name

This is the name of the registration group. The default registration groups are read-only and can not be renamed.

Registrations

This section displays the registration types and registration details.

Click [Add](#) to add a new registration entry to the registration group.



Add Registration

Use this page to select the type of registration and enter the settings. The options that are available depend on the registration group type.

If the registration group is "External," then you must define the registration settings manually or obtain them from DNS SRV. You cannot obtain the registration settings automatically from a line or from a proxy.

If Polycom phones connect to both a primary CIC server and to another SIP server, then you can create an external group and add an external station appearance to the phones.

Switchover Systems

If you are configuring a Switchover pair on an IP phone network for managed Polycom phones, select **Obtain registration settings automatically using DNS SRV** on this page to obtain registration settings from the DNS SRV records created when you configured the network for Polycom phones.

For more information, see the *CICManaged IP Phones Technical Reference* in the **Technical Reference Documents** section of the PureConnect Documentation Library.

Obtain registration settings automatically from this line

This option does not currently apply to an external registration group.

Use this option for Interaction SIP stations.

From the list, select the line from which settings are to be read. By default, the line setting is <Stations-UDP>. The settings used from the line are the network adapter, transport, protocol, and port. In this case, switchover is handled by the provisioning server.

CIC allows only one line registration per registration group. If there were multiple line registrations per registration group, phones could register to the same server twice.

Note: CIC creates two [default line type registration groups](#).

Use the following registration settings

This option does not currently apply to Interaction SIP stations.

Address: Enter an IP address or host name. and the protocol (default: UDP) address. IP addresses are pass-through strings to support IPv6.

Port: Enter the port to be used. The default is 5060.

Transport Protocol: Select the type of transport protocol. The options are **UDP**, **TCP**, and **TLS**. The default is **UDP**.

Obtain registration settings automatically from this proxy

This option does not currently apply to Interaction SIP stations, nor does it apply to an external registration group.

SIP Proxy: The SIP proxy that is trusted and available appears here.

Alternate Address: Type the alternate SIP proxy address in the format where the proxy is appended to the address, like "1|Proxy|proxy1|TCP|10.10.10.10." If you leave this field blank, the value is location-based.

Transport Protocol: Select the type of transport protocol for the proxy. The options are **UDP**, **TCP**, and **TLS**. The default is **UDP**.

Obtain registration settings automatically using DNS SRV

CIC allows only one DNS SRV registration per registration group, otherwise phones could register to the same server twice.

Domain: Type the DNS domain name.

Transport Protocol: Select the type of transport protocol. The options are **UDP**, **TCP**, and **TLS**. The default is **UDP**.

Note: Shared appearances do not attempt to register with managed SIP proxies. If a registration group has multiple entries, one of which is a managed SIP proxy, shared appearances using that registration group will attempt to register with all other entries, but not with a managed SIP proxy. Other (non-shared) appearances register as usual.

Related topics

[SIP proxies](#)

[SIP line proxy](#)

[SIP proxy configuration - general](#)

[Endpoints](#)

[Registration groups](#)

[Managed IP Phone configuration - general](#)



Registration Group Options

Use this page to select the DNS cache option and a custom certificate authority for managed IP phones.

Use Polycom Static DNS Cache

Select this check box to use cache file's preloaded resource information which is obtain when the DNS service is started.

Certificate Authority

Select the certificate from the pull-down list to use for managed IP phones for this registration group.

Note: You must first import the certificate authority in [Certificate Authorities](#). This option is available only if the registration transport protocol is TLS, which requires the Advanced Security Feature license.



Default IP Phone Configuration

Use the this page to select the menu line. This page does not apply to Interaction SIP Station.

Note: Interaction SIP Station devices do not currently support auto-provisioning. In addition, the Use digest authentication option must be disabled to use Interaction SIP Stations on the server.

Auto-Provisioning

This line is used to provide the provisioning IVR you hear when you plug in an unprovisioned IP phone. The protocol and security settings of this line are used on the IP phone.

For example, if you have the advanced security feature license, then you can use a TLS line with SRTP enabled. Using a TLS line makes sure the DTMF can not be captured while entering your setup password.

Menu Line

Select the menu line for the default IP phone. The options are:

- Stations - TCP
- Stations - TLS
- Stations - UDP (default)
- An existing SIP line

Line Label

Type the name (or string) to display for the line on IP phones. This is a free-form field and the default value is "Setup".

Configuration Requests

Use this section to set the request options for the default IP phone configuration.

Use Digest Authentication

Select this check box to enable digest authentication. Digest authentication is a protocol used with web browsers for authenticating users browsing the Internet, and also a general protocol used for authentication, and by using SASL, provides increased protection. If this option is enabled, enter the **User Name** and **Password**, and **Confirm Password** to use as the authentication credentials. By default, this option is not enabled.

Use HTTPS Always

Select this check box to always have HTTP requests redirected to the HTTPS Port. Selecting this option requires mutual authentication. By default, this option is not enabled.

Note: To install client certificates through configuration and provide mutual authentication, select the **Use HTTPS Always** check box and set the [Provision HTTPS Mutual Authentication](#) server parameter to "Yes. Also, the client certificates must be signed by the Default Lines [Certificate Authority](#). For more information, See the *CIC Managed IP Phones Administrator's Guide* document in the **Technical Reference Documents** section of the PureCloud Documentation Library on the CIC server.

Support Insecure Legacy Phones

Select this check box to support legacy phones that do not support HTTPS protocol, which means FTP/HTTP protocol is required. By default, this option is not enabled.

Note: If **Support Insecure Legacy Phones** and **Use HTTPS Always** options are both selected, then the HTTP protocol channel is available only for legacy phones. All other requests are redirected to HTTPS. Therefore, later model Polycom phones used as managed IP phones, should use HTTP directly.



Ring Set Configuration

A ring set contains details of the type of ring that occurs on incoming internal (user to user), external (through the main IVR or workgroup) and direct inward dial (DID) calls on a Polycom phone. By default, there is ring set <Default-Polycom> already configured for Polycom phones. The ring sets are assigned to stations/[station appearances](#).

Use this page to configure additional ring sets or change the behavior of the default ring set.

Name

Type a descriptive name of the ring set. The category, ring type and details are displayed below the ring set name. Highlight the category to display the options for each setting. Select one option per internal, external, or DID setting. The options include settings for **Cadence**, **Wave File**, **Wave URL**, and **Visual**:

Cadence - Select one of the built-in ring types (based on the IP phone manufacturer):

- LowTrill
- LowDoubleTrill
- MediumTrill
- MediumDoubleTrill
- HighTrill
- HighDoubleTrill
- HighestTrill
- HighestDoubleTrill
- Beeble
- Triplet

Wave File - Select a wave file to play for a call. The wave file location must be in \\ic)\resources\....

Wave URL - Select a valid URL for a wave file to play for a call.

Visual - Select this option to change the behavior of an incoming call, such that when a call is alerting and the user picks up the handset, the IP phone assumes that a new call is being placed. This protects against accidentally being connected to an alerting call.

Related Topic:

[Managed IP Phone Appearances Configuration](#)

SIP Bridges

A SIP bridge provides connectivity between an IP phone located at a user's home (remotely) and the CIC server (office). It allows remote users to use IP phones with a VPN connection, without requiring separate hardware. It serves as a relay for all RTP, SIP, HTTP, and DHCP Options communications to and from the IP phone.

This section includes:

[New SIP Bridge Name](#)

[SIP Bridges Configuration: General](#)

New SIP Bridge Name

Type a meaningful and unique name that represents this new SIP bridge. This name is displayed in various dialog boxes in CIC.

SIP Bridges Configuration: General

Use this page to configure a SIP bridge by associating a registration group to it.

Before you configure SIP bridges and associated managed IP phones:

- Determine a unique [name](#) for each bridge.
- Get the [MAC addresses of IP phones](#) you are going to configure as managed IP phones used a SIP bridge.

Registration Group

the options are <Default Registration Group> (default) and <Default Secure Registration Group>.

SIP Bridge Details

The information displayed here shows details of this SIP bridge.

Note: Managed IP phones using a SIP bridge do not support [shared appearances](#) and [external registrations](#).



Audio Sources Introduction

Audio Sources is a feature that provides "named" audio sources that continuously transmit audio and can be listened to simultaneously by multiple calls. A common use of Audio Sources is for hold music, either for system-wide calls on-hold or in-queue waiting for an agent, but there is no restriction on the use of this feature.

CIC currently supports voice resources that continuously play an audio file.

ACD workgroup on-hold music

To implement ACD workgroup on-hold music using an Audio Source:

1. Create a name for an audio source in the [Audio Source Entry Name](#) dialog box.
2. Configure the WAV file audio source in the [Audio Source Configuration](#) dialog box.
3. Navigate to the [Workgroups](#) container.
4. Right-click on the workgroup you want to hear the audio source and select **Properties**.
5. In the [Files](#) tab, type "Audio:AudioSourceName" in the **On-Hold Music** field.
6. Repeat steps 4 and 5 for other workgroups.

Note: When using an audio source for on-hold music, playback begins at a random point in the audio file.

Custom implementations

Use the "Audio:AudioSourceName" call attribute name in a Play Audio File tool step to create custom handlers for other Audio Source implementations.

There is also an optional timeout setting in seconds, that can be used with the "Audio:AudioSourceName" parameter, For example:

audio:audiosourcename:#seconds

The "#seconds" is a timeout value that TS uses to play the audio source for that number of seconds, and then stops playing the audio.

Note: This optional timeout setting is not normally used. See the [Interaction Designer](#) online help for more information.



Audio Source Entry Name

Type a name to represent an [audio source](#).



Audio Source Configuration

Use this page to configure the audio source.

Audio source for a WAV file

If you plan to create a WAV file, a safe format to use (which is also optimal in many configurations) is 8 kHz mono mu-law PCM. Store it in the \\IC\\Resources directory. The default WAV files are also located in the \\IC\\Resources directory.

If you have not already done so, create an audio source in the [Audio Source Entry Name](#) dialog box.

1. In the **Audio Source** tab in the Audio Sources Configuration dialog, select **WAV File**.
2. Set **Filename** to the address of the WAV file in the \\IC\\Resources directory or use the Browse button to locate the WAV file in that directory.
3. Implement the audio source using the "Audio:AudioSourceName" call attribute in one of the following ways:
 - For [system-wide on-hold music](#), in the OnHoldAudioRandomizerMonitor handler.
 - For [ACD workgroup on-hold music](#), in the Workgroup Configuration...Files dialog.
 - To create a [custom handler](#), in the Play Audio File tool step.



Server Parameter Configuration

Type a value for the parameter.

Parameters are like macro names that can be included as a variable in a handler step, a path to a report, and so on. When the handler runs or the report is generated, the parameter is expanded and its value is used in the process.

Note: Parameters can have a server-level scope which is known as a server parameter, a system-wide (for example, enterprise) scope which is known as a [system parameter](#). Their names and configuration are otherwise identical. Server parameters are available only on a particular CIC server and system parameters are available on all CIC servers on a network.

For example, server parameter values could include a valid directory path, a DLL file name, a database name, and so on. A system parameter might contain a corporate phone number or some other enterprise-wide value referenced by handlers on multiple servers.

Certain [chat parameters are used for Web Services](#).

Using Parameters

If you use multiple references to the content of a particular directory whose location may change, or if you use multiple references to some other value that may change, you should probably define a server or system parameter. Using a parameter in such cases allows you to change the value in one location (where the parameter is defined) instead of looking for and changing all locations of the value.

For example, suppose a few handlers and a configuration attribute need to reference the directory containing report files. Create a server parameter named ReportsPath whose value is, for example, D:\EIC\Reports\. Then, wherever you need to refer to the contents of that directory, specify the name \${ReportsPath} instead of the physical directory name. Such references work in Interaction Administrator fields.

Note: Parameters containing directory paths (for example, ServerReportLogOutputPath) are not updated, nor are they recognized immediately, when you change a path. To update these values, you must restart CIC.



Packaged Server Parameters

CIC includes several pre-configured server parameters that are used in the default handlers and by various modules on the CIC server. In addition, there are several optional server parameters that modify the default behavior of the email tools and the CIC and Exchange interface.

Note: Parameters containing directory paths (for example, ServerReportLogOutputPath) are not updated, nor are they recognized immediately, when you change a path. To update these values, you must restart CIC.

Packaged Server Parameters	Description	Module
AdminServerMonitorPath	This server parameter monitors paths and replaces trailing backslash with the following value: \${SERVER}\Parameters\Attendant Audio Path\Value;\${SERVER}\Parameters\Handler Path\Value;\${SERVER}\Parameters\Attendant Fax path\Value;\${SERVER}\Parameters\CustomMirrorDir\Value;\${SERVER}\Parameters\Resource Path\Value;\${SERVER}\Parameters\Rx Document Path\Value;\${SERVER}\Parameters\Server Path\value;\${SERVER}\Parameters\Temp Path\value;\${SERVER}\Parameters\Work Path\value;\${SERVER}\Parameters\IconPath\Value	Interaction Attendant
Allow Voicemail Operator Escape	Use this parameter to enable or disable the (silent) option to escape to the operator by pressing '0' during voicemail. Acceptable values are Y, Yes, T, True or 1 to enable the parameter. Any other value is treated as false which disables the option.	System
Attendant Audio Path	This is the default path where Interaction Attendant's stores its audio files on the server. This is usually \\IC\Resources\InteractionAttendantWaves, which is shared as the AttendantWaves directory. This value is set during installation, and you should not change this value.	Interaction Attendant
Attendant Fax Path	This is the path where Interaction Attendant's fax files are stored on the server. This is usually \\IC\Resources\InteractionAttendantFaxes, which is shared as the AttendantFaxes directory. This value is set during installation, and you should not change this value.	Interaction Attendant
Collective Support	When this server parameter has a value of 1, it tells CIC that Multi-Site is installed. When it has a value of 0, Multi-Site is not installed.	Multi-Site
CreateICNotifierIdentityProvider	To reset the IC Notifier Identity Provider entries to their default settings, set this server parameter to "1." The first time the IC Secure Token Server (STS) starts up, it creates and sets the IC Notifier Identity Provider Directory Services settings. The IC STS also creates the CreateICNotifierIdentityProvider server parameter and sets it to "1" (true). The IC STS automatically resets the value of this server parameter to "0" each time it resets the IC Notifier Identity Provider Directory Services settings to their default values to prevent it from recreating the entries.	

CustomMirrorDir	Specifies one or more directories on the active server to be mirrored on the backup server, in addition to the default mirrored directories. Any time a file is added, removed, or modified in one of these directories, the change is mirrored in the corresponding directory on the backup server. Each directory in the list is separated from the next by a semicolon (;). If you want the directory mirrored recursively (including directory additions and deletions), place a + in front of the directory name. For example: +D:\server\ic\ImportantDir Please refer to the Automated Switchover technical reference for information on mirrored directories.	Switchover
Default Hold Music File	The default value used by TS is "SystemDefaultMusicOnHold.wav?playlocation=mediaserver". Note: Handlers may override the hold music for any call by setting the Eic_OnHoldAudioFile call attribute. CIC adds the ?playlocation=mediaserver by default. CIC uses this default setting when the check boxes are selected on the Media Server General Configuration page. Also see Audio Configuration.	Telephony Services
DID Voicemail Workgroup	Use this server parameter to set workgroups members having DID numbers so that when a call is placed to the DID number, callers hear the name prompt, and then are sent to voicemail. Type the name of the workgroup to set this behavior.	
Director Support	You use Setup Assistant to configure a server as a Director Support server. To change disable monitored server support, you can set this parameter to 0 and then restart the CIC server.	
DirectoryGrammarFileCall	Use this parameter to set the resource directory for Call grammar files. For example, D:\3\IC\Resources\CallDirectory.	
DirectoryGrammarFileCompany	Use this parameter to set the resource directory for Company grammar files. For example, D:\3\IC\Resources\CompanyDirectory.	
DirectoryGrammarFileForward	Use this parameter to set the resource directory for Forward grammar files. For example, D:\3\IC\Resources\DirectoryForward.	
DirectoryGrammarFileMessage	Use this parameter to set the resource directory for Message grammar files. For example, D:\3\IC\Resources\MessageDirectory.	
DirectoryGrammarFileMO	Use this parameter to set the resource directory for Mobile Office grammar files. For example, D:\3\IC\Resources\MODirectory.	
e-FAQ Support	Set this parameter to 1 or True to enable the e-FAQ controls in the Interaction dialog. By default, this parameter is set to 0.	
EnableDynamicStatusIconUpdates	This parameter protects network bandwidth by limiting when CIC clients display a new status icon after you change it. By default, all CIC clients will display the new status icon after they log out and log back in. Set this parameter to Yes to enabled all logged-in CIC clients to dynamically receive the new status icon.	
EnableSupervisoryRecordAndMonitor	Allows an administrator to turn on the hidden supervisory recording. If the server parameter is set to Yes on the server, the CIC clients will suppress the indication of Workgroup Queue Supervisor Monitoring or Recording. When this parameter is added or modified, all CIC clients need to be restarted for the change to become effective. By default, this parameter is set to No. Note: If you change the setting of this server parameter, Session Manager must be restarted to recognize the change. The change will not affect any interactions that are currently in-progress until an update occurs for them. For more information, see Who can see and listen to recordings	
External Priority Voicemail	Set this parameter to Yes for an external caller to set the priority of the voicemail. By default, this parameter is set to No.	
Generate CBO Statistics	This parameter applies to CIC subsystems that use an Oracle database only. Setting this parameter will have no effect on CIC subsystems that use an SQL Server database. Set this parameter to a value in the format 'HH:MM' with the time that the statistics collection should run. Removing the parameter or clearing the value will disable the job from running. On a large database, this can be a time consuming process, and should be scheduled in off-time if possible.	Database
Handler Path	Specifies the active handler storage directory on the CIC server.	System
Held Call Timeout (This server parameter is now a setting in IC server Telephony Parameters - General configuration.)	Obsolete as server parameter. Specifies the number of seconds a call can remain on hold before TsServer signals an event. The minimum setting is two seconds and the default setting is 900 seconds (15 min). By default CIC uses this event to automatically disconnect the held call after 15 minutes. By default CIC uses this event to present the caller with an IVR (or use "menu" vs IVR) allowing the caller to stay on hold, go to voice mail or re-alert the user. If no option is selected, the call will automatically be disconnected after the timeout limit is reached. Also, the call must be placed on hold by the user, not by the system (for example, ACD-Wait Agent is not a valid on hold state in this instance) .	Telephony Services

I3Tables Path	Specifies the path for the location of table data used by CIC handlers. You cannot save table data without this parameter. The default location on the CIC server is: \\ic\Common\I3Tables	Table Editor
IconPath	This value is set and used during IC server installation to determine where in the Start Menu to create the shortcuts to CIC help files and applications. Do not change this value.	Installation
Ignore Dial String Leading Plus Sign	Set this parameter to True for CIC to ignore the "+" beginning a dial string. By default this parameter is set to False.	
Ignore Dial String Leading Slash	Set this parameter to False for CIC to acknowledge the "/" beginning a dial string. By default this parameter is set to True.	
InitialMirrorDir	Specifies one or more directories on the active server to be mirrored on the backup server when the CIC server starts, in addition to the default mirrored directories. Each directory in the list is separated from the next by a semicolon (;). If you want the directory mirrored recursively (including directory additions and deletions), place a + in front of the directory name. For example: +D:\server\ic\ImportantDir Please refer to the <i>CIC Automated Switchover Technical Reference</i> for information on mirrored directories.	Switchover
Interaction Limit (Chats)	This is the maximum number of chat interactions that are allowed in the CIC system at any given time. The default is 4000. This server parameter is dynamic, meaning that any change to it takes effect immediately. If there are chat interactions in the queue when you set a new limit, and your new maximum number is less than the previous maximum number, then the chat interactions that are currently in the queue will remain there. However, no new chat interactions will be added to the queue until the number of chat interactions in the queue falls below the new limit.	
Interaction Limit (Emails)	This is the maximum number of email interactions that are allowed in the CIC system at any given time. The default is 10000. This server parameter is dynamic, meaning that any change to it takes effect immediately. If there are email interactions in the queue when you set a new limit, and your new maximum number is less than the previous maximum number, then the email interactions that are currently in the queue will remain there. However, no new email interactions will be added to the queue until the number of email interactions in the queue falls below the new limit.	
Internal Call Classifications	The default name of the phone number classification for calls within the CIC system (for example, station-to-station calls) is Intercom. That classification could also be named Internal and work identically. CIC handlers look for the name(s) in this server parameter to determine the name of the classification to use for dialing internal calls. If you change (for example, translate) the name of the Intercom classification, you must add that name to this server parameter. This parameter is a comma delimited list of classifications that are designated for internal calls. The default value of this parameter is <i>Intercom, Internal</i> and is setup during the server install. Customers can add any classification, which has been previously setup in the Phone Number > Classifications configuration, to this list. (Our default dial plan is configured with <i>Intercom</i> as the internal call classification.) Any Classification that appears in this list will be treated as an internal call by the handlers that process manual and CIC Client dialing.	Telephony Services
Keep Internal Regional Calls On Server	Set this server parameter to Enable, E, Disable, D, Same Region Only, or S to limit calls that can be completed as intercom calls rather than "out and back in" (tromboning) through the PSTN.	System
Last Known Good Backup	D:\I3\IC\Backup\RegistryBackup_18-8-2011-825171	
Mirror Exceptions	Specifies the extensions of any files that you do not want to mirror. Separate multiple extensions with a semicolon, for example: txt,gif,myext.	Switchover
Mobile Office DID	This parameter adds capability to direct dial into Mobile Office based on a configured DID. When the user calls the DID, the ANI is recognized as a number associated with a user and is prompted for the voicemail password for Mobile Office. By default this parameter is <Not Set>.	
PlayUserPrompts	When this parameter is set to false, internal calls and transferred calls will not announce the name and extension that is being called. PlayUserPrompts = True Prompts will be heard for all calls. PlayUserPrompts = False User prompts will not be heard on internal calls and calls transferred internally. You should just hear the phone ring. The default value for this server parameter is false .	

Mobile Office ANI Pattern	Patterns are defined in the "Mobile Office ANI Pattern" server parameter. Patterns use "X" for digits along with any other characters as literals, so the pattern "+1 (XXX) XXX - XXXX" would format 3178723000 as "+1 (317) 872 - 3000". Because the ANI may not be stored in the user's settings in the same format in which it is received, the tool will try to use the following patterns (in order) for the search: Any pattern specified using the "Mobile Office ANI Pattern" server parameter is used first, followed by: XXXXXXXXXX XXX-XXX-XXXX (XXX)XXX-XXXX (XXX) XXX-XXXX 1-XXX-XXX-XXXX 1-(XXX)-XXX-XXXX For this server parameter, the format should be a pipe delimited list of patterns. In the pattern, X is the next available digit of the ANI, and any other character is a literal. For example, if the ANI is 3178723000, and the pattern is ABC-XXX-123-XXX-XXXX, then the value used for the search would be ABC-317-123-872-3000.	Mobile Office
NewVMPollingInterval	This parameter determines the interval in time in seconds that the IP Server queries the Mail server for unread voicemails for users. The default value is 240 seconds.	System
OutOfBandReportDataTransfer	This parameter enables Interaction Reporter reports that run on the CIC clients to retrieve data from the database using a secure communication layer.	
Play Queue Announcements	Set this parameter to External for user and extension prompts to be played only to external callers. Set this parameter to No for no prompts to be played.	
Reco Call Type	This parameter should only be used by the direction of an Interactive Intelligence Support representative.	
Recording Path	A packaged server parameter, pre-configured, which specifies the directory on the CIC server used to store uncompressed manually recorded calls. The path is specified during the IC server installation. Interaction Recorder uses its own setting to specify the Default Storage Location. If you used IC Setup Assistant during IC Sever installation to configure the Interaction Recorder Compressed Files Location, the directory you specified is used to create the Default Storage Location Retention Policy. The Default Storage Location Retention Policy for compressed and processed recordings can be modified using Interaction Recorder Policy Editor. For more information, see <i>Interaction Recorder and Interaction Quality Manager Technical Reference</i> in the PureConnect Documentation Library.	System
RecordServer	Enter the name of the recording server.	
ReportComponentsInstalled	Used by various CIC systems to determine which type of reporting is installed. Do not change this value. Reporting is considered active when REPORTS is found in the string of this parameter. All references to the Report tab in the CIC clients are disabled when reporting is considered inactive (when REPORTS is not found in the string of this parameter).	Reporting
ReportFilePath	Specifies the path to the report templates used to generate reports from CIC clients. The default value is \\\$(ServerName)\IC_Reports.	Reporting
ResetCalledIDOnExternalTransfer	If the call is in the IVR and the call is blind transfered to a non-Native(EXTERNAL) IC Directory Number/Queue then CIC will reassign the Cisco TAPI Call Attribute "CalledID" to the value it's redirecting it to. This works well when CIC is acting as a front end to another PBX. Example: 1.) Call come into Main IVR (CalledID = 3000) 2.) CIC performs a blind transfer to another PBX at 3010. 3.) When the PBX gets the call. (CalledID = 3010)	Telephony Services (TAPI)
ResetCalledIDOnTransferToUser	This reassigns the Cisco TAPI Call Attribute "CalledID" value to the destine Directory Number any time a call is sent to a user through the alert tool step. Example: 1.) Call comes into Main IVR (CalledID = 3000) 2.) IC blind transfers the call to User logged into Station 7001. (CalledID = 7001) 3.) User then blind transfers to User logged into Station 7075. (CalledID = 7001)	Telephony Services (TAPI)
Resource Path	Specifies the directory on the CIC server used to store CIC resources such as IVR prompts, fax cover pages, etc. The path is specified during the IC server installation.	System
Rx Document Path	Response management document path on the server. Defaults to C:\server\IC\I3RxDocs where C: is the install drive. Paths to create on the server: \$(Rx Document Path) \$(Rx Document Path)\users For example, if Rx Document Path = C:\server\IC\server\i3rxdoc, the following directories must be created: C:\server\IC\server\i3rxdoc C:\server\IC\server\i3rxdoc\users	Response Management
Server Path	Specifies the home directory of the CIC system software. The path is specified during the IC server installation.	System
ServerReportLogAutoN	Auto logging refers to the ability of statserver to receive its own statistics sent out in a notification and then log the statistics to the database. Turn off auto logging if you want handlers to catch this information and log it to the database. This parameter is for advanced administrator use only.	Reporting

ServerReportLogDataDestination	This parameter replaces the ServerReportLogMSMQPath parameter. It now includes support for CSV, RTM, and other transport types.	Reporting
SNMPTrapEnterprise	This parameter tells the I3 SNMP Trap Monitor what SNMP traps it needs to monitor. The values are All , I3 , ININ , Microsoft (default), and None . The Trap Monitor can then forward these traps to Handlers.	Remote Monitoring and Control
Station Event Window Time	Station Event Window Time is the number of consecutive milliseconds used to detect the maximum number of station events (set in "Station Event Window Limit"). Default value is 60000 ms (60 seconds), with a minimum window of 10000 ms (10 seconds). By default, if 20 events occur within 60 seconds, CIC disables the station device that generated the events.	Telephony Services
SupressAdsiCallDetailLogging	ADSI calls are not normally seen on the queues, and cannot be logged. This suppresses them if they should some how end up on the queues. After you install this optional parameter, you may use it to control whether to log ADSI calls. Set the parameter to T, TRUE, Y, YES, or 1 to suppress logging ADSI calls. Set the parameter to F, FALSE, N, No, or 0 (Zero) to log ADSI calls. The default setting for this feature is Yes. You should not change this value.	Reporting
SwitchAddress	If the Switchover system uses a Dataprobe device with an Ethernet control card, this parameter specifies the IP address.	Switchover
SwitchComPort	If the Switchover system uses a Dataprobe device with a serial port control card, this parameter specifies the COM port. Note: This server parameter is installed by default, but is not relevant for MIC.	Switchover
SwitchMACAddress	This parameter specifies the MAC address of the Ethernet control card in the Dataprobe device.	Switchover
Switchover UDP Initial Ping Delay	Specifies the time in seconds that Switchover on the backup server will wait before starting to listen for datagrams from the active server. Acceptable values are between 1 and 3600 seconds. The default value is 5 seconds.	Switchover
SwitchoverServer A	The name of the Switchover server designated as the initial active server. This server will come up as active first and will remain so until the first Switchover event. If the Switchover system uses a Dataprobe device to switch lines, this is the server connected to the "A" row. Note: This server parameter is installed by default, but is not relevant for MIC.	Switchover
SwitchoverServer B	The name of the Switchover server designated as the initial backup server. This server will come up as backup first and will remain so until the first Switchover event. If the Switchover system uses a Dataprobe device to switch lines, this is the server connected to the "B" row. Note: This server parameter is installed by default, but is not relevant for MIC.	Switchover
SwitchType	The type of switch control used between the two Switchover servers. If the Switchover system does NOT use a Dataprobe device to switch lines, set the value to None. (SIP/AudioCodes, and Cisco TAPI systems do not use a Dataprobe device.) If the Switchover system uses a Dataprobe device, set one of the following values, depending on the type of control card: SerialCP8, SerialK16, EthernetEPAL, EthernetK16. Please refer to the Automated Switchover technical reference for information on the different types of control cards.	Switchover
Temp Path	Specifies the temporary file storage location on the CIC server.	System
Toll Call Classifications	This server parameter is used for setting Forced Authorization Codes. It is created during installation with these values: Long Distance;International;Unknown. Additional phone classifications can be added as values, or the default values can be deleted. Tip: See How Do I Set Up Forced Authorization Codes?	
Unified Messaging	This server parameter is set to 1 during the IC server installation if one of the unified messaging options was selected (such as Microsoft Exchange or IBM Notes). In this case, Interaction Administrator can configure all mailboxes for user, workgroup, etc. If neither unified messaging option was selected during installation, this server parameter is set to zero. In this case, Interaction Administrator will not attempt to connect to the Exchange or Domino server, and the Mailboxes dialogs will not work for users, workgroups, and so on.	Mail
Use Enhanced Regional Dial Plan	Contact a PureConnect Customer Care representative for information on this server parameter.	
Use ICMS for AdHoc Conferences	Set this server parameter to Yes for Interaction Conference Media Server to host internal conferences instead of a Media Server. By default, the parameter is set to No.	Telephony Services
Use Outbound Base Call For Connection	This parameter should only be used at the direction of a PureConnect Customer Care representative.	
Use Network Echo	The CIC client's listen feature allows authorized users to listen to agent calls. Normally, the listener can hear both the agent and the external caller via telephone sidetone. In some cases, the listener may be able to hear the agent but not the external party. If this happens, change the value of Use Network Echo to 1, which dynamically tells CIC to use the echo from the network to listen to the remote party.	Telephony Services
Voicemail Maximum Duration	Set this parameter (in minutes) to pass the value to the Record Audio toolstep to override the default values. The default length of voicemail recordings in the shipping handlers is 300 seconds (5 minutes), and the default length of the voicemail recordings by the Record Audio toolstep is 600 seconds (10 minutes). You may want to set an arbitrary value, other than these default settings, for this duration. For more information on the Record Audio toolstep, see the Interaction Designer help.	System
Web Event Image Path	/i3webimages/	

Work Path	Specifies the location of a working directory used by the fax and voicemail subsystems to store intermediate copies of faxes and voicemail.	System

Related topics

[Automated Switchover System Server Parameters](#)

[Dialer Server Parameter](#)

[e-FAQ Server Parameters](#)

[Optional Server Parameters](#)

[Packaged System Parameters](#)

[Text To Speech Server Parameters](#)



Optional General Server Parameters

The following general server parameters are optional. To set these server parameters, add the parameters in the **Server Parameters** container. Then set the values as necessary.

Optional Server Parameter	Description	Module
ACDAgentLockTimeout	This parameter determines how long the agent will be locked out if the "Select Item" or "Release Agent Lock" toolsteps are not called for the agent. Without this parameter the ACD agent lockout time is 10 seconds.	ACD
ACDAvailableOnNon-ACD	Use this parameter so that agents are available for ACD interactions when on non-ACD interactions. To be unavailable, the agents must set their status to a non-ACD status. Set the parameter value to any value, such as Yes, 1, true, etc., to enable it. Without this parameter, or if there is no value entered for the parameter, then agents are not available for ACD when on non-ACD interactions. For similar email-specific actions, see the ACDAvailableOnNon-ACDEmail parameter.	ACD
ACDAvailableOnNon-ACDEmail	Use this parameter so that agents are available for ACD interactions when on non-ACD email, for example, creating a new email from Interaction Desktop, or receiving a forwarded email. To be unavailable, the agents must set their status to a non-ACD status. Set the parameter value to any value, such as Yes, 1, true, etc., to enable it. Without this parameter, or if there is no value entered for the parameter, then agents are not available for ACD when on non-ACD email. This parameter is similar to the ACDAvailableOnNon-ACD parameter, but is email-specific.	
ACDConsiderSingleTypeForEWTAvailable	Use this parameter for ACD Queue Statistics to compare the agent %available to the %utilization for an interaction type. Possible values are: - call - chat - callback - web collaboration - instant question - sms message - email - generic Note: Enter only one interaction type. This parameter is useful if you want to route a particular interaction type to an agent, even if the agent was unavailable due to being on other interaction types or being on a non-acd interaction. Setting this parameter forces a single type of interaction to agents when otherwise the agent would be unavailable take the interaction.	ACD
ACDDisableOnHoldProcessingForCalls	A non-blank value turns off "on hold" processing for calls. This removes the call from consideration on an Agent's utilization "score."	System
ACDDoNotDeleteObjectsUntilDeallocation	Currently, ACD skills are lost when calls are transferred. This server parameter forces the ACD server to wait until the call is deallocated from the system before deleting it. The value to set this parameter is 1. ACDDoNotDeleteObjectsUntilDeallocation=1	System
ACDInteractionLockTimeout	This server parameter determines how long the interaction will be locked if the "Select agent" or "Release interaction lock" toolstep is not called for the interaction. Without this parameter the ACD interaction lockout time is 10 seconds.	ACD
ACD Recorded Workgroups	This is an optional parameter that was added for EIC so that automatic recording could be enabled without modifying handlers. This parameter will work with CIC too. The parameter value is a semicolon separated list of workgroup names (not the fully qualified queue id, only the queue name). For example, if the following workgroups existed Marketing, Support and Sales then a parameter value of "Marketing;Sales" would turn on automatic recording on for those two workgroups. The Support workgroup recording would remain off. Automatic recording is off by default for workgroups configured as "ACD" by the Call Management Type on the workgroup's Configuration tab in IA. This does not apply to workgroups configured as "Custom."	System
Additional Redaction Expression	This parameter allows you to either append text to the default filter expression or to completely replace the default filter expression. To append text to the default filter expression: - Add the Redact Using Default Expression server parameter and set its value to Yes. - Add the Additional Redaction Expression server parameter and specify the text to append. To replace the default filter expression: - If you added a Redact Using Default Expression parameter, set its value to No. - Add the Additional Redaction Expression and specify the new default filter expression.	

Allow Multiple Calls to Station On Deferred Answer Line	If the Allow Deferred Answer SIP line option is enabled for a line on a station, this parameter determines whether an additional call alerts the station. To enable the alert, set this parameter to T, True, Y, Yes, 1, or blank. If enabled and if the station can accept an additional call, an additional call alerts the station even if the station is already on a call. To disable the alert, set this parameter to a value other than T, True, Y, Yes, 1 or blank. If disabled, an additional call does not alert the station.	
Allow Full Custom Headers	Use this server parameter to allow the use of custom SIP headers (headers in addition to standard SIP headers). If you do not set this parameter to "Yes", you can only use headers that begin with "x-". By default this parameter is not present, so you must create it and set it to "Yes" to enable it.	
AllowScripterToBypassStatusCheck	To allow Scripter to be exempt from status change access checks, add this parameter and set it to yes. If you do not add this server parameter, then errors can appear in Scripter logs when the following situation arises: - The agent's status in the User container indicates that the "status is user selectable." - The user's has the View access control rights for the All and Do Not Disturb status messages. - The agent goes on break but leaves his or her status set to "Available." - Scripter cannot set the agent's status to "Do Not Disturb."	
Allow Voicemail Save As	Use this server parameter to conditionally show or hide the Save As menu option for voicemail messages in the CIC clients. By default, the menu option is available (visible). Set the value to "False" to hide the menu option.	Interaction Client
Allow SNMP Process Restarts	If you use SNMP monitoring/management tools to monitor CIC server processes and you want the ability to stop/restart processes via SNMP, create this server parameter and set the value to 1 (enabled). By default, this parameter is disabled (is not listed in the server parameter container).	
AltocloudPacingDisabledUpdates	If set to true, the Altocloud availability updates are turned off.	
AltocloudPacingUpdateRateSeconds	This parameter overrides the default rate at which PureConnect sends availability updates to Altocloud. The default value is 3 seconds. Any value above three seconds is allowed.	
AltocloudPacingDisabledUpdates	If set to true, the Altocloud availability updates are turned off.	
AltocloudPacingUpdateRateSeconds	This parameter overrides the default rate at which PureConnect sends availability updates to Altocloud. The default value is 3 seconds. Any value above three seconds is allowed.	SNMP
Attendant System Profile	Attendant System Profile designates which Interaction Attendant profile calls are routed to when Users press the star (*) key after going off hook. See the Interaction Attendant online help for more information.	Interaction Attendant
AutoAddUsernameCategory	This server parameter adds a category to each user upon startup. The possible values are: 0: Feature is turned off. 1: Feature is turned on adding a suffix of "-auto" to the CIC user name. <any other value>: Feature is turned on adding a suffix of <value> to the CIC user name. For example, if set to "1", user JeffS would result in a category of JeffS-auto. If set to "-Director", user JeffS would result in a category of JeffS-Director. Blank or <null> values are not supported. This parameter must be present at ACD startup to take effect. The changes are not dynamically updated in ACD Server, so adding this parameter or changing the value of the parameter, requires a restart of the ACD Server.	ACD
AutoSortWorkgroupOverview	To enhance performance, IC Business Manager no longer sorts the Workgroup Overview. To automatically sort that view, add the AutoSortWorkgroupOverview server parameter, and set its value true.	
BatchSaveSalesforceCallLogs	Use this parameter to configure the way the Salesforce web client saves custom attributes. By default, Salesforce saves attributes in an iterative method, one at a time. - Set the parameter to 1 to save all custom parameters at once. - Set the parameter to 0 (which is the default) to enable the iterative saving method. Notes: Setting this parameter to 1 to save all parameters at one, is firm. If there is an error on one attribute save, all saves will fail. Otherwise, if there is no errors, the saves are successful. You must reload the SIP Soft Phone or log in again to Salesforce to save the change in behavior.	Salesforce Web
BridgeHostTrustedSites	Use this parameter to provide BridgeHost with a list of trusted IP addresses, so that the Web server can be located almost anywhere, including outside of the firewall, as long as it can communicate with the CIC server. By default Session Manager only trusts connections from clients on the same subnet. If there are more than 20 connections in a 3 second span from clients on a different subnet, Session Manager will reject these connections. Enter values in the following pipe-delimited format: <IPAddress> <IPAddress> ...	Session Manager
Call Analysis Language	CIC can provide language specific call analysis based on the language specified with this parameter. If this parameter and the value is not specified here, call analysis uses CIC's default language. Enter the language value such as "en-US". The value of the parameter must match an existing language folder name located in the [drive]:[install folder]\IC\Resources\i3ca directory on the CIC server. For example, language folder "bg-BG" or "de-DE". For more information on Call Analysis, see Media Servers .	Telephony Services
Call Forward Analysis Mode	This server parameter affects the "System\IVRFollowMeSequential.ihd" handler. The possible parameters values are: - DEFAULT (default settings) - CA_DISABLE (disable Call Analysis) - VM_DISABLE (disable VM Analysis) - FULL_DISABLE (set both to false) If you set this parameter to "FULL_DISABLE," then CIC stops all forms of call analysis on calls that are sent to agents who have selected either the Follow-me status or the Forward status. Instead, CIC connects these calls immediately.	Handlers-CIC
Call History Max Size	Use this parameter to set the number of calls per user to save in the Call History page of the CIC clients. The default value is 300.	CIC clients
Call History Max Time	Use this parameter to set the time in hours to save the call information saved in the Call History page in the CIC clients. The default value is 72, meaning the call history lists 3 days of information unless the maximum number of calls is reached (See Call History Max Size). Note: The Call History Max Time server parameter which controls only the amount of data ClientServices needs to store in memory, avoiding Out Of Memory issues on CIC Server. It does not control the amount of call history displayed in the Call History view in the CIC client.	CIC clients

Callback Interaction Recovery Enabled	Create this parameter and assign a non-zero value to enable switchover support for callback interactions. This server parameter is available in IC 4.0 SU3 and later releases.	Switchover
Chat Interaction Recovery Enabled	Create this parameter and assign a non-zero value to enable switchover support for chat interactions. This server parameter is available in IC 4.0 SU3 and later releases.	Switchover
ClientDirectoryPageSize	Use this parameter to specify the number of directory records to display on a single page, when a paged interface is being used. The default value is 25.	CIC clients
Confirm Station Connection	Enabling this sever parameter sends an eCallEvent_StationConnectionConfirmation event that can be intercepted and handled by the ConfirmStationConnection initiator, and StationConnectionConfirmation tool step. This allows the User to intercept a remote client connection call and change the behavior via a handler. Valid values are: true, yes, false, and no.	Telephony Services
ConnectionCache.ODBC.Timeout	This server parameter provides a way to explicitly set the timeout for connection pools used by the IP Server. You can use this parameter to fine tune the performance of your database connections. Enter the time in seconds.	
ConsultCallProfileRouting		IP Server
Continue to Monitor Calls After Transfer	This server parameter provides the option for an Interaction Supervisor user to continue monitoring of a call if the call is transferred away from the monitored agent. By default, monitoring ends when the call is transferred away from the agent. To enable this option, set the parameter to Y, Yes, T, True or 1. For more information about continuous monitoring, see "Monitor Agent, Station, Workgroup, or Line Queues" in the Interaction Supervisor Help.	Interaction Supervisor
CustomOnHookNotification		
DefaultSpeedDialPageSize	If MaxSpeedDialPageSize is not defined, CIC uses this parameter to determine the maximum number of directory records to display in a Speed Dial view. For more information, see MaxSpeedDialPageSize.	CIC clients
DialByNameExtensionLength	Defines how many characters can be used in searching a party by last name. Companies with large directories can extend the default search character 3, to 4 or 5 digits, narrowing the search results.	Handlers-CIC
DID Ringback Only	If you do not like the current voice prompt that plays with DID, you can change it to a simple ringback. To make the change, create this server parameter with one of the following values: Y, Yes, T, True, or 1. The value is not case sensitive. To use a custom .wav, set the value to "c", and define the ringback you want to hear on 'DID_CustomRingback.wav' located in the Resources folder. Note: If you use this server parameter some Fax systems might fail, because they wait for a cadence break or other indication of answer before sending a fax tone.	
DirectoriestoCacheOnSMStartup	Lists the directories that Session Manager will cache on startup. By default all directories except the Company Directory are cached upon the first request.	Session Manager
Disable Related Interactions	In case of system degradation due to rapid multiple related interactions queries, an emergency shutoff mechanism was put into place. In order to shut off all automatic related interactions queries, add this related interactions emergency shut off server parameter, and set the value to True. As long as this server parameter exists with the specified value, no related interactions queries will take place from any clients. This will NOT disable the interaction history or interaction search features. Note: The related interactions feature is only available in SQL Server installations. The CIC client performs a check during the Tracker plug-in initialization to see which type of database the CIC server is connected to. If an Oracle database is detected, the related interactions feature will be unavailable. Interaction search and interaction history are available for Oracle as well as SQL Server installations.	Interaction Tracker
DiscardFailedFax	Note: This server parameter is not used when Media Server Fax is enabled. See Media Server Fax Configuration - Fax Server . Use this server parameter to disable delivery of partial faxes on fax failure. If this parameter is set to 1 failed faxes are discarded. The value is 0 by default, and partial faxes are delivered on a fax failure.	Fax
Don't Allow Users To Delete Recordings	Enter this parameter to turn off the ability for users to delete recordings. There is no value to set; the presence of this parameter turns off the ability to delete recordings.	Recorder
EmailEditor	This parameter determines which editor agents use to format their emails in email interactions. The editor appears as a toolbar of formatting options. - To use the Telerik editor, set this parameter to 1. - To use the MSHTML editor, set this parameter to 2. - To display the CEF (Chromium Embedded Framework) editor, set this parameter to 3 or leave as blank. For more information on how agents use the editor, see the Interaction Desktop Help in the CIC Documentation Library. Note: This parameter affects all users of Interaction Desktop. An agent cannot select one editor or the other. In Interaction Desktop, the MSHTML editor is available for only the Email Editor window. It is not available for the Email Preview view and Editor view. For more information, see the Interaction Desktop Help. Important: If you configure the CIC clients to use the MSHTML toolbar, the Email Editor and Email Preview are unavailable. If users had the Email Editor or Email Preview view open before this change the views will be closed. In order to get these views back you would have to switch the configuration back to Telerik mode. Once this is done the user can re-add these views or you can push out a template with these views.	Interaction Client
Email Admin User	When listening to voicemail messages remotely or through the TUI, the system does a lookup to match the number to a Display Name in the system, then reads "Voicemail from (DisplayName)" If a user is not found, then the system reads the phone number that the call is from. If the call is from an external number, then the ICAdmin account delivers the voicemail to the user. Use this parameter to show the external number (remote number) instead of ICAdmin. Set the value to a CIC user name or the display name for that user.	System
Email Stream	This parameter allows a voicemail opened from Exchange via the CIC server TUI handlers, to stream the audio rather than copy the entire contents of the message. This parameter is helpful in WAN environments where a CIC server might be in one location and the Exchange Server at another remote location. Set the value to Yes to turn on this parameter.	TS
Enable CaaS Speech Billing	For PureConnect Cloud customers only. This parameter determines whether the system provides usage-based billing data for Speech (ASR/TTS). If this parameter is set to True, then the IC billing system sends the billing data to the PureConnect Cloud billing system, IC billing. The default value is false.	PureConnect Cloud

EnableEnhancedTTS	Interaction Text to Speech (ITTS) supports enhanced models, providing more natural sounding voices for a better caller experience. These models, trained with Deep Neural Networks, are available for de-DE (German, Germany), en-AU (English, Australia), en-US (English, United States), es-US (Spanish, United States), nl-NL (Dutch, Netherlands), and ja-JP (Japanese, Japan). Starting with CIC 2018 R2, Media Servers use enhanced DNN models for text-to-speech instead of older GMM models. If a Media Server connects to multiple CIC servers (development, testing, and production environments for example), calls on all environments will use enhanced DNN models after the first CIC server is updated with CIC 2018 R2. DNN models slightly increase processing and memory usage on a Media Server. If your IVR environment makes heavy use of text-to-speech, or you have Media Server capacity concerns, consider opting out of DNN models to use GMM models instead. In a future release, the option to use GMM models will be eliminated. The EnableEnhancedTTS server parameter is not created by default. You must manually add it to opt out of DNN models to use older GMM models. To use GMM instead of DNN: 1. On each CIC server that connects with your Media Server, use Interaction Administrator to add the EnableEnhancedTTS server parameter. 2. Set the value of the parameter False. After the parameter is set on all CIC servers. When opting out, you do not need restart the Media Server. If you change your mind, you can switch back to DNN models by setting the value of EnableEnhancedTTS to True on each CIC server. When opting in, you must restart Media Server to put the change into effect.	Interaction Text-to-Speech (ITTS)
E911Enabled	Set this parameter to True to enable the WestE911 Configuration dialog box. The default value is False. See WestE911 Configuration	WestE911 Configuration
Enable Media Server Call Analysis	When this setting is enabled (set to "1" or "true"), and the "Use Media Servers for advanced operations" check box is selected, call analysis is turned on. When turned on, "Media Server" option to appears in the Call Analysis Type drop-down list on the SIP Line Configuration page. If you delete this server parameter, the "Media Server" option will disappear and the Interaction Media Server will no longer be used for call analysis.	Media Server
EnableSSOConfiguration	To activate the Single Sign-on Configuration Utility plug-in, create this server parameter and set it to True. The default value is False. The Single Sign-on Configuration Utility plug-in simplifies the creation of a SAML-based Single-Sign-on mechanism for your Interaction Center Server. For more information about the Single Sign-on Configuration Utility plug-in, see the Identity Providers Technical Reference in the PureConnect Documentation Library.	Single Sign-on
ErrorOutIfT38ReinvitesNotSupported	Create this parameter and set to "true", to help prevent 'stuck' calls if REINVITE to T38 occurs due to TS error. For more information, contact your PureConnect Customer Care representative.	Telephony Services
External Pick Access Codes	(Value = a list of any strings, separated by a semicolon, that will be used as a pin numbers. Non-digit strings are converted to their key pad equivalent so it can be compared to the digits entered by the caller) - If this attribute is set, then external callers must enter this pin number to pickup a call on the server from their outside call. External callers can pickup held, parked or alerting calls from an external call. This feature would be used in a scenario where a user can use a cell phone to pickup a call on the server. Like if you were in a meeting and Sarah came and said she parked a call on your queue. You dial into the server on your cell phone and pickup the call.	System
Fax Header "From" String	Set this parameter to the appropriate replacement for the English string, "From" in the fax header.	Fax Server
Fax Header "To" String	Set this parameter to the appropriate replacement for the English string, "To" in the fax header.	Fax Server
Force 200 Response For Delayed Media Remote Initiated Unhold	This server parameter applies to customers using phones that are configured with persistent station connections and that are connected to a CUCM. These customers may experience a problem where agents on remote stations cannot resume the persistent connection calls that they placed on hold when there was no regular ongoing call. The calls are dropped instead. To remedy this problem, create this server parameter and set it to True.	Telephony Services
Force Message Button Password Only	Set this parameter to Y, Yes, T, True or 1 for users to be prompted to enter only the password portion of their voicemail access code when using the message button on the station. Users must be either logged into the station or have the station set as the default workstation for the user.	System
Generic Parameter with Replaces	Cisco Series 7960 Customers: To make the Call Recovery Feature compatible with Cisco Series 7960 phones, set this parameter to True. The default value is False.	Telephony Services
Global Remote Message Limit	This parameter limits the number of messages enumerated in the mail folder by the Open Folder Mail Tool. If a value is given, it overrides other email settings and is the maximum number of emails listed. If the value is set to zero, it will return all messages. Note: Beginning in 2.3, the message limit is set globally in the Mail container. We will continue support of the server parameter for backward compatibility issues, but you should start using the Mail setting in the Mail container instead. The Mail setting takes precedence over the server parameter.	System
HDSI Switchover	This server parameter informs TsServer that the HDSI SIB is in use in a switchover environment. The value can be set to: true, yes, no, or false. The default value is false.	TS Server
Honor User Language	Set this parameter to Yes or True to recognize the users default language when using DID/DNIS routing from Interaction Administrator. For example, a CIC server may have users in multiple countries. A UK user's voicemail message should be presented in UK English, while a German user's voicemail message should be presented in German. Based on this server parameter, CIC sets the language of the call based on the user's default language. If this server parameter is not enabled, the default behavior does not change.	Handlers
ICRenderServerHost	After you run the IC Render Server setup, create a server parameter with the name ICRenderServerHost and type the name of the computer running IC Render Server.	Fax Server
Immediate Socket Operations	This is an optional general system parameter for TLS and TCP transport lines. If packet delays occur in new TCP or TLS connections during times of high call volume, set this parameter to true to improve the speed of TLS and TCP connections and disconnections. The default value is false.	
Include Fax With Notification	Set this parameter to Yes, for all users that are setup for fax notifications to receive a copy of the fax file as an attachment to the fax notification email. The default value is No.	
Include VM with Notification	SystemNotificationsProcessor uses this parameter to determine whether to include the voicemail with the voicemail notification. It only affects the client configuration voicemail alerting address.	Fax Server

INDEPENDENT_STATION_TIMEOUT	If you select the Prevent station logout on navigation option in PureConnect for Salesforce Call Center Settings, you can set this parameter to a number of minutes. This forces CIC stations to log off the PureConnect for Salesforce Integration when CIC does not detect any agent activity during the specified period. For more information, see the PureConnect for Salesforce Integration Administrator's Guide. Note: To enforce a timeout, CIC requires both this parameter and the Prevent station logout on navigation setting. This parameter does not affect Interaction Connect or Interaction Desktop. This option requires CIC 2017 R3 Patch 8 or later.	
Interaction Conference Support	This server parameter is created by the Interaction Conference install, and should not be modified. The presence of this parameter signifies that the Interaction Conference module is licensed and installed.	Interaction Conference
INTERNAL_USER_PIC_URL	This parameter enables the Company Directory shortcut menu in the CIC clients to display an employee photo for each user. Set the value to http://intranet.yourcompany.com/users/{0}.png, where you replace the example value with actual valid URI pointing to images. The string formatting placeholder "{0}" substitutes the currently selected user's ID into the URL string.	System
INTERNAL_USER_LOCATION_PIC_URL	This parameter enables the "Office Location" feature available in Interaction Client's context menu (right-click) in the Company Directory. When selecting Office Location, the user's office location picture is displayed. Set the value to http://intranet.yourcompany.com/offices/{0}.png, where you replace the example value with actual valid URI pointing to images. The string formatting placeholder "{0}" substitutes the currently selected user's ID into the URL string.	System
IR Disable Social Snippets When Recording	Snippets for social interactions are always enabled by default. When this server parameter is set to "Yes" or "True", snippets will be disabled for social interactions that already have a policy recording started for them.	Interaction Recorder
IR Search Unique Tracker Joins	This optional server parameter controls the number of recordings returned when an Interaction Recorder search is run that includes the search attributes Date/Time range and User Name. When this server parameter is set to 1, in addition to returning recordings for the specified User Name, recordings are also returned for participants whose last name matches the specified User Name.	Interaction Recorder
IR Use Recording Date For Expired Calculations	Setting this optional server parameter to True causes retention policies to be re-evaluated based on the recording date at the system level. When this server parameter is set, you do not have to modify the Policy Editor Retention Policy action, re-evaluate retention policies in <time period> for every Retention policy. When this server parameter is set, the Policy Editor Retention policy configuration setting Re-evaluate recordings based on the recording date check box is not available, as the IR Use Recording Date For Expired Calculations server parameter is active. When this server parameter is set to False, or deleted, the check box is enabled again. When the server parameter is turned off, the re-evaluation action will be based on the recording date only for those policies which had the check box selected by the user before turning on the server parameter.	
ISDN Inband Dial Enabled	Add this parameter and set the value to True to enable the feature that allows a PIN or long distance access code to be dialed inband.	
IWPCallMonitoringOperationTimeouts	Add this parameter to specify timeout values in milliseconds. To specify a single timeout value for all operations, type the value in milliseconds. For example, 10000. To specify timeout values for each of the different types of call operations, use a pipe delimited list of values, in the following sequence: eSTART_MONITORING eSTOP_MONITORING eDISCONNECT ePICKUP ePLAY_AUDIO eCALL_PHONE_NUMBER Note: If you do not set this parameter, then the default timeout value is 5 seconds for all call operations.	IWP
IwpldapSyncFrequency	Add this parameter to control how frequently IC syncs with LDAP. You must restart the WebPortal subsystem in order for the parameter to take effect. The default is 5 seconds. Notes: In earlier CIC releases, the LDAP sync frequency defaulted to 5 minutes. If you changed this value in a previous version, CIC will continue to use the sync value you set. All new servers added to the IWP's CIC server configuration are automatically created with a 5 second sync value.	IWP
IVRReportingTransactionBatchCount	Add this parameter to designate the batch count for IVR tracing transactions. Prior to 2015 R3, all IVR tracing transactions were sent out one at a time. This led to unnecessary overhead and reduced throughput. When this parameter is enabled, IVR tracing transactions are sent in batches; each batch has the number of transactions defined by this server parameter. To disable transaction batching, set this parameter to zero (0). The default value is 100.	TS Server
IVRReportingTransactionDelayMilliseconds	Add this parameter to designate the delay in milliseconds that will occur after an IVR tracing transaction. This results in a throttling of transactions when the number of transactions overwhelms the database. To prevent this delay from being used, set this parameter to zero (0). The default value is 5000.	IVR
IVRReportingTransactionDelayThresholdSeconds	Add this parameter to designate the threshold in seconds of the length of time it takes to execute a single IVR tracing transaction. If the transactions exceed this threshold three consecutive times, then the delay designated in the IVRReportingTransactionDelayMilliseconds parameter will be engaged. If subsequent transactions are under this threshold five consecutive times, then the delay configured in the IVRReportingTransactionDelayMilliseconds parameter will be disengaged. To disable the automatic throttling mechanism, set this parameter to zero (0). The configured delay will then occur every time. The default value is 10.	IVR
Leave Dynamic Calls Connected on Shutdown	Add this parameter and set it to True to keep dynamic calls connected in the case of a shutdown. The default value is True. Note: For development and test machines, set this parameter to False.	Telephony Services
Mail Interaction Recovery Enabled	Create this parameter and assign a non-zero value to enable switchover support for email interactions. This server parameter is available in IC 4.0 SU3 and later releases.	Switchover
Mail Maximum Interactions	Add this parameter to specify the maximum number of email interactions that can exist in the system at any one time. This is not a typical situation, but for example you might specify "1000".	Mail
Max T.38 Datagram Size	This parameter allows you to configure the max datagram size of T.38 packets for fax sessions. If the server parameter is undefined or set to -1, the media server determines the datagram size. You can specify any positive value up to the maximum supported by the media server. This value will be used for all fax sessions. The recommended value is 150.	Telephony
Max Cover Page Size	This parameter determines the maximum size of a cover page in Interaction Fax. The default for this parameter is 10,000 KB. If the cover page for a fax exceeds the value set in this parameter, the fax does not get sent.	Fax
MaxDirectoryStatusWatches	Add this parameter and set the value to a number to specify the maximum size of a directory in the CIC clients before the interface changes to a paged interface.	Client Services
MaxQualitySearchResultsICWS	Use this parameter to specify the maximum number of scorecards returned by the search in the Interaction Connect My Quality Results view. If you do not define MaxQualitySearchResultsICWS, the default is 100.	CIC clients

MaxSpeedDialPageSize	Use this parameter to specify the maximum number of directory records to display in a Speed Dial view. This parameter works in conjunction with DefaultSpeedDialPageSize. - If you do not define DefaultSpeedDialPageSize and the requested number of directory contacts is greater than MaxSpeedDialPageSize, the number of contacts returned is less than or equal to 25. - If you define only DefaultSpeedDialPageSize, the number of contacts returned is equal to DefaultSpeedDialPageSize. - If you define both MaxSpeedDialPageSize and DefaultSpeedDialPageSize and the requested number of contacts is less than or equal to MaxSpeedDialPageSize, then the requested number of contacts is returned. If greater than MaxSpeedDialPageSize, the DefaultSpeedDialPageSize number of contacts is returned. - If you do not define either MaxSpeedDialPageSize or DefaultSpeedDialPageSize, the number of contacts returned is less than or equal to 25.	CIC clients
Maximum Ringing Calls per Second	Add this parameter to limit the number of station calls that CIC places every second. By default, there is no limit. Note: If you are using workgroups that are configured as Group Rings, set this parameter to improve system stability.	Clients
MaximumHttpSessions	Add this parameter to specify the maximum number of HTTP sessions that Session Manager will allow. When the maximum threshold is reached, any subsequent attempts will be denied until the session count drops under the limit. The default value is 1000. Note: This limit is per Session Manager and not the CIC server as whole. To turn the parameter off, set it to -1.	Session Manager
Non-silence Timeout	When using Media Server , set this parameter to specify in milliseconds before a series of plays are resumed if no silence is detected. If this parameter doesn't exist or is set to 0, there is no timeout before plays resume. The value of this parameter should be greater than the value of the Answering Machine Silence Time parameter, otherwise, the timeout occurs before silence is detected.	Media Server
OnPhoneDoesNotChangeTimelnStatus	Set this server parameter to prevent users' "Time in Status" from changing when they make a call (and you do not want their status to change). To enable, set the value to true. To return to the previous behavior, set the value to false.	Client Services
Outlook Data Source	This server parameter is used by handlers for Data Manager queries of Outlook Private Contacts in Interaction Mobile Office. The name of the parameter is the same name as the actual data source as configured in CIC Data Source Configuration . Parameter value: <the data source name for outlook private contacts>	Interaction Mobile Office
PAS_usev2	Set this parameter to True, Yes, or 1 to use Process Automation Server version 2. Otherwise, CIC uses Process Automation Server version 1 by default. This parameter was deprecated in 2018 R1.	IPA
PAS_blockLaunchDuringRestore	Set this parameter to True, Yes, or 1 to have Process Automation Server version 2 block new user flow launches until it finishes restoring previously-existing flows.	IPA
PAS_HandlerResponseTimeout	Use this parameter to specify the number of seconds IPA should wait before displaying an error for the Run Handler action if it does not execute successfully. If the parameter is not set, the default wait time is 30 seconds. If the server parameter's value is 0, then the wait time is unlimited. Note: Only processes migrated from Interaction Process Automation 3.0 use this parameter. Beginning in Interaction Process Automation 4.0, you can configure timeout values for each action individually.	IPA
PAS Maximum Monitored Flows	This server parameter determines the maximum number of monitored process flows in the process monitor workspace in IC Server Manager. You can use it to reduce the number of process monitors if they return too much data. Set this parameter to any value to override the default maximum value of 5000. The minimum allowable value is 100.	IPA
PAS_UseOldDroplist	When enabled, this parameter allows users to quickly find items by entering a string. Default value is false.	IPA
Play Queue Announcements	This server parameter applies to non-DID calls (values are not case sensitive): - Neither (N) - Neither internal or external calls will hear queue announcements - Internal (I) - only internal (intercom) calls will hear queue announcements - External (E) - only external calls hear queue announcements (this is the default behavior if parameter is not set or set with an invalid value) - Both (B) - both internal and external calls hear queue announcements Note: DID calls: Queue announcements are different than the DID prompt used to listen for fax. Anytime a DID number is called (only accessible from an external, inbound call), queue announcements are skipped. See Queue Announcements for more information.	Clients
Prevent IC Server from Moving Recordings by Region	Set this server parameter to True to block the IC Server from moving recordings to Remote Content Servers when they are not available. For example, this server parameter blocks the IC Server from moving recordings by region when a Remote Content Server runs out of space.	Interaction Recorder
Prevent Multiple Proactive Recordings	Set this server parameter to True to prevent multiple recordings from being created for each redial.	Telephony Services
ProblemReporterPath	Use this server parameter to specify the local path to store Problem Reporter log files. The default path is <ICservername>\I3\IC\ProblemReporter\<CIC client user name>. This server parameter is used by Problem Reporter .	Client Services
ProcessIVREvents	Set this server parameter to True to enable IVR tool step execution, or False to disable it. When this Analytics server parameter is set to True, IVR events will be generated and processed. If this parameter is set to False, IVR events will not be generated and processed.	Analytics
Provision Auto-Provisioning Enabled	Set this parameter to No to disable the auto-provisioning feature. This returns temporary configuration that displays a Setup label. It allows the phone to be associated to a managed IP phone during deployment, instead of the need for the MAC Address to be entered into Interaction Administrator before deployment. A restart of the provisioning server is required to make this setting effective.	Provisioning
Provision FTP Enabled	This parameter allows you to enable FTP on the provisioning server. Set the parameter to "Yes" to enable FTP. If the value is anything other than "Yes"(case in-sensitive), FTP is disabled. If the server parameter is not present, the default behavior is FTP enabled. Note: The provision server must be restarted after adding/modifying the parameter for the changes to take effect.	Provisioning

Provision HTTPS Mutual Authentication	Set this parameter to Yes and enable Use HTTPS Always to support mutual authentication, where the server authenticates the IP phone, and the IP phone authenticates the server. Also, the client certificates must be signed by the Default Lines Certificate Authority. A restart of the provision server is required for this setting to take effect. For more information, See IC Managed IP Phones Administrator's Guide document PureConnect Documentation Library.	Provisioning
Provision ISS Manual VLAN ID Enabled	For more information, see Managed IP Phone Advanced Options.	Managed IP Phones
QPSReportingTransactionBatchCount	Add this parameter to control the batching of the queue period stat database operations that are performed by Stat Server at every interval. To reduce the StatServer CPU usage, reduce the batch count. Be aware, however, that in large environments large PMQ files could become backed up on the hard drive. To increase the StatServer CPU usage, increase the batch count. This also increases the speed of PMQ file processing and reduces PMQ file backups if they become a problem with the default value. The default value is 100.	Stat Server
Reco Input Timeout Multiplier	Use this parameter to change the multiplier that Interaction Attendant uses to determine the amount of time a user has to enter numbers before the system times out. This parameter applies if Speech Recognition is enabled on the caller data Entry node. The default value is 4. You can set this parameter to any numeric value. For more information, see Caller Data Entry in Interaction Attendant help.	Interaction Attendant
Redact Using Default Expression	This parameter allows you to filter most credit card numbers and social security numbers in chat messages and email messages. These numbers are replaced with masked numbers so that agents cannot see the sensitive information. By default, masked numbers appear as "#####". See also the Additional Redaction Expression and Redaction Replacement Text server parameters.	Chats
Redaction Replacement Text	This parameter allows you to specify the how masked numbers appear. Optionally use this server parameter with the Redact Using Default Expression server parameter or the Additional Redaction Expression server parameter.	Chats
Reject T38 If Multiple Media In INVITE	Some SIP carriers offer SIP INVITE messages with multiple media lines for multiple messages types, such as RTP (voice) and T.38 (fax). When this server parameter is set to Yes (default), Interaction Center rejects the T.38 portion of these INVITE messages while acknowledging and processing the RTP portion. Note: This server parameter does not affect SIP REINVITE messages that change the message type from RTP to T.38.	SIP
Remote Station Call Analysis Answer Supervision Interaction Center	Call analysis should terminate as soon as a call connects for remote stations. This is the behavior by default beginning in IC 4.0 SU3. To revert to the previous behavior, set this parameter to False.	Telephony Services
RemoteEmailFormLimit	This server parameter limits the number of email forms that can be open simultaneously in the CIC client. This includes the Email Window for Incoming Messages and Email Window for Outgoing Messages. This server parameter applies only to CIC clients in a Citrix or Terminal Services environment. The default value is 8. To disable the limit, set this parameter to -1.	Clients
ResetCalledIDOnExternalTransfer	This server parameter is a feature for customers that want to use Cisco Unity for voice mail instead of using CIC for voice mail. When this parameter is set to 1 or Yes (enabled), if a call is in the IVR and it is blind transferred to a non-native (EXTERNAL) CIC Directory Number/Queue, then CIC reassigns the Cisco TAPI Call Attribute "CalledID" to the value it's redirecting it to. This works well when CIC is acting as a front end to another PBX. Example: 1. Call come into Main IVR (CalledID = 3000) 2. CIC Blindtransfers to another PBX at 3010. 3. When the PBX gets the call. (CalledID = 3010)	Telephony Services (Cisco TAPI)
ResetCalledIDOnTransferToUser	This server parameter is a feature for customers that want to use Cisco Unity for voice mail instead of using CIC for voice mail. When this parameter is set to 1 or Yes (enabled), the system reassigns the Cisco TAPI Call Attribute "CalledID" value to the destination Directory Number any time a call is sent to a user through the alert tool step. Example: 1. Call come into Main IVR (CalledID = 3000) 2. CIC Blindtransfers the call to User logged into Station 7001. (CalledID = 7001) 3. User then Blindtransfers to User logged into Station 7075. (CalledID = 7001)	Telephony Services (Cisco TAPI)
Rx Tree Init Collapsed	This server parameter gives users the option (on the Configuration tab in CIC client) to have Response Management nodes open or closed when accessing Response Management. Set the value to 1 for the nodes to be collapsed initially.	Response Management
SAPI DSCP Value	If the PureConnect QoS driver is not installed, Interaction Center can still be configured to play SAPI TTS through VoIP calls. Enter "0x0" to represent the Differentiated Services Code Point (DSCP) value that is inserted in RTP packets of VoIP interactions. The DSCP value can be set to any value between 0x00 and 0x3f, if there is a specific need to do so.	SIP
Screen Record Delta Frame Count	This optional server parameter controls the number of delta frames between a key frame in a Screen Recording. Increasing this value effectively decreases the size of screen recordings. [Value - Integer 10...300] For more information, see Interaction Recorder and Interaction Quality Manager Technical Reference in the PureConnect Documentation Library.	Interaction Recorder
Seize Deactivated Lines	This parameter applies to analog lines. When present and set to a value of "true" or "yes", this server parameter causes TS to set analog lines that are not configured as active in Interaction Administrator to the off-hook state. This causes inbound calls on those lines to receive a busy signal. Note: Values are not case sensitive.	Telephony Services
Send FBMC Call Recordings To Notification Address	Set this server parameter to Y, Yes, T, True or 1 to have FBMC users' call recordings sent to their voice mail and fax notification email address as configured in CIC client options. By default, this server parameter is set to False, or disabled.	System
Send MWI to PBX	Set this parameter to Yes to send MWI to non-CIC stations. The default value is No.	MWI
Send Status Forward Notification	Set this parameter to Internal, External, All or None to determine which type of a user's incoming calls result in an email notification if the user is in a forwarding status.	System
Server A Address	Specifies the alternate IP address of SwitchoverServer A in a dual NIC configuration.	Switchover
Server B Address	Specifies the alternate IP address of SwitchoverServer B in a dual NIC configuration.	Switchover

Show Legacy Res Mgt	Legacy response management containers (Interaction Messages, Interaction URLs, Interaction Files) are not displayed unless they contain legacy information. Use this parameter to display the legacy containers (whether they contain information or not). Set the value to "1" to display the legacy containers. If this parameter is not added, or the value is set to "0" or "No", then the legacy response management containers will not be displayed unless they contain legacy information.	System
Single-Sided Monitor	This parameter allows you to listen to both sides of a monitored call. The default 0 allows you to hear both sides. If the server parameter is set to 1, monitoring will only hear one side of the call. You might want to do this if you are short on conference resources, but in general, this should not be used. Note The benefit of setting the parameter to 1 is you save conference resources. In some situations, you might hear both sides of the monitored call.	Telephony Services
SIP Phone Information Update	Enter this parameter and set the value to "1", "yes", or "true" for TS to dynamically update the Manufacturer and Model information, and MAC address for Polycom phones based on the User-Agent string from the registration process. This server parameter is helpful when migrating IP phones and associated SIP stations.	Telephony Services
Split E-1 Support	A value of 1 tells TS to turn on Split E-1 support. You can then choose the type of support in the T-1 Line Configuration dialog when creating a new line. Your choices will include: • <Not Split> • E & M • FXS Loopstart	Telephony Services
Split T-1 Support	A value of 1 tells TS to turn on Split T-1 support. You can then choose the type of support in the T-1 Line Configuration dialog when creating a new line. Your choices will include: • <Not Split> • E & M • FXS Loopstart	Telephony Services
StatServer_AlwaysTrackACWForLastACDInteraction	After an interaction is disconnected for an agent, the agent can manually change his or her status to ACW (After Call Work). By default, Stat Server only adds any automatic follow up for the interaction, or manual ACW statuses within the first two minutes post-disconnect. To track any other ACW time for the agent and workgroups, add this server parameter and set it to True. This impacts workgroup and agent data only. Interaction data (created by the Tracker subsystem) only tracks the total ACW time of any automatic status or a manual status that was started during the two minutes before deallocation.	Clients
StatServer_CombineConsecutiveAcwStatus Changes	If set to True, CIC combines consecutive ACW status changes. The value is False by default.	
StatServer_SendQPSNotification	You can create the StatServer_SendQPSNotification parameter when you want to use a Notifier callback with the Queue Period Initiator handler to generate a notification that contains QPS data. Note: If there is a large amount of user or workgroup data, the notification can become very large and take several seconds to send. In some cases, the Notifier service terminates. For this reason, the server parameter is not enabled by default.	Notifier
StatServer_UseTotalInteractionCountForServiceLevelCalculations	When enabled, Stat Server calculates the service level target as Target Answered / Total Entered. Otherwise, the default calculation is Target Answered / Total Answered. Set the value (case-sensitive) to 1, Yes, or True. After changing the value, restart the StatServer subsystem on both the primary and backup CIC servers for the change to take effect.	
Station Pickup User Validation	(Value = Yes) - If this attribute is set, users must enter their extension and password to pickup calls on a queue other than their own. Users only have access to the queues configured for the user as Modify Queue rights. This parameter requires that the user identify themselves if they are dialing from a phone that they are not logged into.	System
Stop Recording T38	Use this parameter to automatically stop the proactive recording of a call if the call switches to a T.38 fax call. IC Server automatically enables the proactive recordings of calls. In order for IC Server to release MSTap on time when the call is switched to a T.38 fax call, you must enable this parameter. During a race condition, if this parameter is not enabled, inbound and outbound faxes may fail. By default, this parameter is disabled.	Telephony
Stutter Tone	If you create this server parameter and give it any non-null value, you will hear a stutter-tone if your inbox contains unheard voicemails. If you want to change the tone, it can be edited in System_StationOffHook.	System
SupervisorViewSuspendDelay	Use this parameter to tell Supervisor how long (in seconds) a view must be invisible before its queue watches are suspended. This parameter is queried at startup. If the parameter value is changed on the CIC server, Supervisor must be restarted to apply the change.	Interaction Supervisor
SupervisorMaxActiveInvisibleViews	Use this parameter to tell Supervisor how many invisible views may exist with active queue watches. This parameter is queried at startup. If the parameter value is changed on the CIC server, Supervisor must be restarted to apply the change.	Interaction Supervisor
SuppressForwardingAnnouncement	Currently, for "available, forward" calls, the prompt "your party is available at a remote location" (followed by hold music) is played. If you do not want this prompt played, you can suppress it and just play ringback while the call is being forwarded and connected. To suppress the prompt, add this server parameter with a value of either Y, yes, T, True, or 1 (this value is not case sensitive).	Clients
Switchover NetTest A	For use with Switchover in WAN environments. Switchover NetTest A specifies the name or IP address of a machine on the same network segment as SwitchoverServer B. It is used by the Switchover process on SwitchoverServer A when SwitchoverServer A is the backup server. Whenever a failure condition is detected, Switchover on the backup server will attempt to ping (ICMP echo) this IP endpoint found on the same network segment as the active server. If Switchover cannot ping this endpoint, it will assume the active server is still operable and not switch because there a WAN failure. Important: Since Switchover no longer has a network connection (and thus cannot replicate changes), it will log an error to the event log and shut down processing. The backup server will need to be restarted for Switchover monitoring and replication to resume. Recommendation: The value for Switchover NetTest A should be the closest "pingable" (ICMP echo) IP address to SwitchoverServer B from SwitchoverServer A.	Switchover
Switchover NetTest B	For use with Switchover in WAN environments. Specifies the name or IP address of a machine on the same network segment as SwitchoverServer A. It is used by the Switchover process on SwitchoverServer B when SwitchoverServer B is the backup server. Recommendation: The value for Switchover NetTest B should be the closest "pingable" (ICMP echo) IP address to SwitchoverServer A from SwitchoverServer B.	Switchover
Switchover NetTest Timeout	For use with Switchover in WAN environments. Used with Switchover NetTest A and Switchover NetTest B, this parameter specifies the amount of time (in seconds) that Switchover should wait for the ICMP echo to return. By default, this value is 1 second.	Switchover

Switchover Monitoring	For use in Interaction Director Switchover systems. Allows Interaction Processor to be monitored in Interaction Director configurations, instead of Telephony Services. The default value is "TsServer". Create and set the parameter to "IP".	Switchover
Switchover IP Retry Delay	For use in Interaction Director Switchover systems. When monitoring IP, this server parameter has the same effect as Switchover TS Failure Retry Delay.	Switchover
Switchover IP Timeout	For use in Interaction Director Switchover systems. When monitoring IP, this server parameter has the same effect as Switchover TS Timeout.	Switchover
Switchover UDP Monitor	Allows UDP (heartbeat) monitoring to be disabled. Create and set this server parameter to 'No' or '0' to do so. If a failure occurs, file replication is in an unknown state. The backup server will need to be restarted for Switchover monitoring and replication to resume.	Switchover
Switchover UDP Maximum Ping Delay	Specifies the number of failures (failure count increases each second a datagram is received) that Switchover on the backup server will tolerate before initiating a Switchover. Acceptable values are between 1 and 3600 seconds. The default value is 5 seconds.	Switchover
Switchover TS Timeout	Specifies the number of seconds that Switchover will wait for a Telephony Services (TS) ping response from the active server before signalling a TS failure. The value should be between 5 and 60 seconds. The default is 10 seconds.	Switchover
Switchover TS Failure Retry Delay	Specifies the number of seconds Switchover will wait after the active server fails to respond to a Telephony Services (TS) ping before retrying a TS ping. A second failure will cause the system to switch. The value must be greater than 0 seconds. The default is 1 second.	Switchover
SwitchMACAddress	Specifies the MAC address of the Ethernet control card in the Dataprobe device.	Switchover
Switchover Ping on Aux Connection	Set this parameter to Yes or 1 to move the TS ping from the main data connection to the auxiliary connection. Note: To enable QoS on the ping on the auxiliary connection (not the main connection), you must enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. QoS will not be used on ping if only Switchover Use QoS For Ping parameter is enabled.	Switchover
Switchover Use QoS For Ping	This parameter allows customized use of QoS for the TS ping on the auxiliary connection. This sets the priority of ping (echo request and echo reply) packets. Set this parameter to Yes or 1 to enable it. Further customization can be made using Switchover QoS DSCP, Switchover QoS Token Rate, and Switchover QoS Value 8021, each described below. Note: To enable QoS on the ping on the auxiliary connection (not the main connection), you must enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. QoS will not be used on ping if only Switchover Use QoS For Ping parameter is enabled.	Switchover
Switchover QoS DSCP	When Switchover Use QoS For Ping is enabled, set this parameter to set the value in the QoS byte. Differentiated Services Code Point (DSCP), is the six most significant bits of a packet. You can use DSCP to prioritize QoS traffic on switchover. Note: To enable QoS on the ping on the auxiliary connection, you must enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. QoS will not be used on ping if only Switchover Use QoS For Ping parameter is enabled.	Switchover
Switchover QoS Token Rate	When Switchover Use QoS For Ping is enabled, set this parameter to define the QoS traffic rate of packets on switchover. Note: To enable QoS on the ping on the auxiliary connection, you must enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. QoS will not be used on ping if only Switchover Use QoS For Ping parameter is enabled.	Switchover
Switchover QoS Value 8021	When Switchover Use QoS For Ping is enabled, set this parameter to define the interface trunking value (priority levels in both RTP and RTCP packets) for the QoS traffic. Note: To enable QoS on the ping on the auxiliary connection, you must enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. QoS will not be used on ping if only Switchover Use QoS For Ping parameter is enabled.	Switchover

Tone Location	Use this server parameter to set the global signaling tones for dial tone, busy signal and ringback tones played by handlers. Entering a value does not change the signaling of the hardware. This changes audio that callers and users will hear during calls so the tones are more similar to the types used in a particular locale. User and station settings can be changed by configuring a Custom Attribute on the desired user or station. Possible values: Belgium France Germany Israel Italy Japan Norway Singapore SouthKorea Sweden Switzerland Taiwan TheNetherlands UnitedKingdom UnitedStates Notes: Internal alerts are controlled by the global setting only. User and station settings have no affect over internal alerting since the context of the tone is tied to the remote caller. Therefore, internal alerting is controlled by the server parameter setting only. Ringback for outbound calls to delayed answer devices does not follow this setting. To configure this type of ringback, set 'Ringback File' in Telephony Parameters. This type of ringback typically happens for outbound calls on a SIP line that is configured to use Delayed Media.	System
Track Abandoned Dialer Interactions in InteractionSummary	Beginning in 2016 R1, Interaction Dialer calls with a connect event are no longer written to the interaction summary table. To re-enable this behavior, add this parameter and set it to "Yes", "True", or "1" After you enable or re-enable this parameter, Interaction Tracker needs to re-evaluate all server parameters, so you must do one of the following: - Modify an item under Items tracked in Interaction Administrator - Un-check (disable) an item in the Items Tracked configuration (Interaction Tracker --> Configuration --> Items Tracked), and apply the changes. You then can re-check (enable) that item if it you need to track it. Or... - Restart Interaction Tracker - we recommended taking this action after normal operating hours.	Interaction Tracker
TreatEndpointIdleAsFullIdle	By default, CIC disconnects a call when both endpoints are in the idle state (no RTP packets) - see Broken RTP on Disconnect Time. If you want CIC to disconnect calls where only one endpoint has entered the idle state, create this parameter and set to "On", "True", or "Yes" to enable it. Also see Media Server Technical Reference in the PureConnect Documentation Library on the CIC server.	
TS Remove From Workgroup Conference Logic Active	This server parameter was added to make conferences conform to the same rules for callers and workgroups as for transfers. The default is set to TRUE. If you set the value to FALSE, the function will be restored to the behavior prior to this server parameter—where a workgroup call transferred from a three-party conference to a two-party conference is not seen as a transfer, and the call stays on the workgroup (even when it has been transferred externally and is no longer in the system).	Telephony Services
UseDNISStringComparison	This server parameter determines how the DNIS of an incoming call is handled in Interaction Attendant. To evaluate as an integer, remove the parameter entirely. To evaluate as a string, create the parameter with any value or leave it blank. Evaluating as a string is useful in the following cases: - The DNIS starts with leading 0's (for example, 000153) - The value of the DNIS is greater than 2^31, or 2147483648 (for example, 18889468999) When evaluating the DNIS as a string, the comparisons evaluate properly. For example, CIC uses 000153 instead of 53. In the same way, CIC uses 18889468999 instead of 2147483648 because any value greater than 2^31 would otherwise resolve to that numeric value. Note: Changes to this parameter are not in effect until you publish the Interaction Attendant configuration.	Interaction Attendant
UseExternalTranProviderForPurging	Use this parameter to avoid a five-minute timeout that prevents purging from working on large data sets. To prevent restarting the PureConnect service when this parameter is added, you must install either the Microsoft SQL Server command line tools or the Oracle SQL*Plus utility.	System
UUI Headers Copied in REFER	UUI information is sent via a BlindTransfer or a ConsultTransfer to the transfer target. Prior to CIC 2016 R1, CIC duplicated the UUI information in the transferee's REFER request. However, that behavior has been removed from CIC 2016 R1. If you want to duplicate the UUI information in the transferee's REFER request, add this parameter and set it to true. The default value is false. Note: The standard technique of forwarding UUI information to the new transfer target is always included in the Refer-To address URI.	SIP Engine
Waiting Call Indication	Call waiting is enabled out-of-the-box. The default for this parameter, if it is not set, is On. Use the Waiting Call Indication parameter to globally disable call waiting for all alert types. Set this parameter to disable call waiting with one of the following values: off, false, F, No, N, or O.	Handlers
Workgroup Alert Users On Calls	Set this parameter to T (true) to alert users on calls for direct to queue processing for non-ACD workgroup alerts. The default value is F (false).	ACD
Workgroup Distribution List Behavior	Set this parameter to True, Yes, or 1 to make a workgroup (without a queue) behave as a distribution list of members. When this server parameter is enabled, voicemail messages left for a workgroup are sent as email messages to the workgroup members. The workgroup can not have an email address associated with it, in order for this feature to work correctly. See "Set Up Voice Mail Distribution in Attendant" in Interaction Attendant online help for more information.	System

Related topics

[Packaged Server Parameters](#)

[Automated Switchover System Server Parameters](#)

[Dialer Server Parameters](#)

[E-FAQ Server Parameters](#)

[Server parameters for IC Business Manager Views](#)

[Text To Speech Server Parameters](#)

Automated Switchover System Server Parameters

The server parameters for the Automated Switchover System affect how interactions are handled when a switchover occurs. The following table lists the *optional* Switchover System server parameters that you can set. For information about the required Switchover System server parameters, see *Packaged Server Parameters*. For more information about the Automated Switchover System, see the *Automated Switchover System Technical Reference* in the PureConnect Documentation Library on the CIC server.

Automated Switchover System Server Parameter	Description
Callback Interaction Recovery Enabled	To enable switchover support for callback interactions, add this parameter and assign it a non-zero integer. This server parameter is available in IC 4.0 SU3 and higher releases. By default, this parameter is set to "0" or "Off."
Chat Interaction Recovery Enabled	To enable switchover support for chat interactions, add this parameter and set it to "Yes" or "1." This server parameter is available in IC 4.0 SU3 and higher releases. Note: CIC does not support SMS resiliency when the Chat destination option is selected. By default, this parameter is set to "0" or "Off."
Custom Upgrade Attribute Exceptions	For information about this server parameter, see the <i>Automated Switchover System Technical Reference</i> in the PureConnect Documentation Library.
Custom Upgrade File Synchronization Directories	For information about this server parameter, see the <i>Automated Switchover System Technical Reference</i> in the PureConnect Documentation Library.
Custom Upgrade File Synchronization Exceptions	For information about this server parameter, see the <i>Automated Switchover System Technical Reference</i> in the PureConnect Documentation Library.
Custom Upgrade Synchronization Directories	For information about this server parameter, see the <i>Automated Switchover System Technical Reference</i> in the PureConnect Documentation Library.
Directmessage Interaction Recovery Enabled	To enable switchover support for social media direct messages, add this parameter and assign it a non-zero integer.
ForceSwitchoverFQDNs	This parameter enables the Switchover system to override the system-generated names for the switchover pair, which it automatically resolves. When this parameter is set to "Yes" or "1," the Switchover system instead uses the names that the system administrator specifies in the SwitchoverServerFQDN A and SwitchoverServerFQDN B server parameters. Note: If this server parameter is missing or disabled, then Switchover will try to automatically resolve the FQDNs from the NetBIOS.
Mail Interaction Recovery Enabled	To enable switchover support for email interactions, create this parameter and assign it a non-zero value. This server parameter is available in IC 4.0 SU 3 and later releases. By default, this parameter is set to "0" or "Off."
Server A Address	To specify the IP address of the dedicated Switchover NIC on SwitchoverServer A in a dual or multiple NIC configuration, add this parameter. When Server A Address and Server B Address are set, the Switchover system uses these addresses exclusively to direct its traffic.
Server B Address	To specify the IP address of the dedicated Switchover NIC on SwitchoverServer B in a dual or multiple NIC configuration, add this parameter. When Server A Address and Server B Address are set, the Switchover system uses these addresses exclusively to direct its traffic.
SMS Interaction Recovery Enabled	To enable switchover support for SMS interactions, add this parameter and set it to "Yes" or "1." This server parameter is available in CIC 2016 R4 and higher releases. By default, this parameter is set to "0" or "Off."
Socialconversation Interaction Recovery	To enable switchover support for Social Conversation interactions, add this parameter and assign it a non-zero integer.
StatServer_DisableQPSLoggingOnBackup	To disable the backup server from sending its log data to the CSV file, add this parameter and set its value to Yes.
Switchover Disable Gateway Ping	To enable the gateway ping, set this server parameter to "No" or "0." To disable the gateway ping set the parameter to "Yes" or "1." For more information about using this server parameter, see the <i>Automated Switchover System Technical Reference</i> in the PureConnect Documentation Library.
Switchover DS Request Timeout	To specify the timeout length (in seconds) for DS requests that are sent by the backup server to the primary server, add this parameter. The requests can be sent during either the initial startup of the backup server or the resynchronization with the primary server. When you enable the WAN Optimizations for DS Synchronization parameter, the minimum value for the Switchover DS Request Timeout parameter is 120 seconds. In this case, the 120-second timeout is used only as a temporary value. The Switchover DS Request Timeout parameter is not changed from its user-defined setting.

Switchover File Monitor Health Check Interval	Set this parameter to the number of seconds between each health check request that is sent from the backup server to the File Monitor on the primary server. To turn off the health check request, set this parameter to "0." If no value is specified, the default value is 60 seconds.
Switchover File Monitor Health Check Timeout	Set this parameter to the number of seconds that the backup server gives File Monitor to respond to the health check request before it times out and traces the failure. If no value is set, the default value is 10 seconds.
Switchover IP Retry Delay	Add this parameter, if necessary, for use with Interaction Director Switchover systems. When monitoring IP, this server parameter has the same effect as Switchover TS Failure Retry Delay. The Interaction Director server install automatically creates this server parameter. Genesys recommends that you review this server parameter in Interaction Administrator on the Interaction Director server to confirm the setting.
Switchover IP Timeout	Add this parameter, if necessary, for use with Interaction Director Switchover systems. When monitoring IP, this server parameter has the same effect as Switchover TS Timeout. The Interaction Director server install automatically creates this server parameter. Note: Confirm the setting of this server parameter in Interaction Administrator on the Interaction Director server.
Switchover Max Restarts	To specify the maximum number of times in a restart period that a new process ID can be returned in the TS ping notification before a restart occurs, add this parameter. By default, this value is 2.
Switchover Max Restarts Period	To specify the time period (in seconds) during which the Switchover system counts TS ping notifications that contain new process IDs, add this parameter. By default, this value is 300 (5 minutes).
Switchover Max Sequential Restarts	To specify the maximum number of sequential times that a new process ID can be returned in the TS ping notification before a switch occurs, add this parameter. By default, this value is 2.
Switchover Max TS Failures	To specify the number of TS ping failures the Switchover system on the backup server tolerates before starting a switchover, add this parameter. Note: Set this value greater than 0. The default value is 2 Note: The failure count is reset each time the Switchover system successfully receives a response from TS on the primary server.
Switchover Monitoring	Add this parameter, if necessary, for use with Interaction Director Switchover systems. The Interaction Director server install automatically creates this server parameter. It sets up an IP ping process in Interaction Director configurations, which are similar to the TS ping process in CIC configurations. The default value is TsServer. Note: Confirm the setting of this server parameter in Interaction Administrator on the Interaction Director server.
Switchover NetTest A	Add this parameter, if necessary, for switchover in WAN environments. Switchover NetTest A specifies the name or IP address of a computer on the same network segment as SwitchoverServer B. The Switchover system uses the IP address on SwitchoverServer A when SwitchoverServer A is the backup server. Whenever a failure condition is detected, the Switchover system on the backup server uses ICMP echo to ping this IP endpoint. It must find the IP endpoint on the same network segment as the active server. If the Switchover system cannot ping this endpoint, it assumes that the active server is still operable and doesn't switch because there a WAN failure. Important: Since the Switchover system no longer has a network connection (and thus cannot replicate changes), it logs an error to the event log and shuts down processing. Restart the backup server, so that the Switchover system can resume its monitoring and replication. Recommendation: The value for Switchover NetTest A is the closest "pingable" (ICMP echo) IP address to SwitchoverServer B from SwitchoverServer A.
Switchover NetTest B	Add this parameter, if necessary, for switchover in WAN environments. This parameter specifies the name or IP address of a computer on the same network segment as SwitchoverServer A. The Switchover process on SwitchoverServer B uses the IP address when SwitchoverServer B is the backup server. Recommendation: The value for Switchover NetTest B is the closest "pingable" (ICMP echo) IP address to SwitchoverServer A from SwitchoverServer B.
Switchover NetTest Timeout	Add this parameter, if necessary, for use with Switchover in WAN environments. It is used with Switchover NetTest A and Switchover NetTest B. This parameter specifies the amount of time (in seconds) Switchover waits for the ICMP echo to return. By default, this value is 1 second.
Switchover Notifier Reconnect Delay	Specifies the interval in seconds that the Notifier connections will wait to re-establish a new connection after a loss. Lower values can improve reconnection response during short periods of connection los with the primary monitor. The default value is 5. The minimum value is 5. The maximum value is 60.
Switchover Ping on Aux Connection	This parameter moves the TS ping from the main data connection to the auxiliary connection. By default, this parameter is set to 1, which means it is enabled. Note: To enable QoS on the ping on the auxiliary connection (not the main connection), enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. If only the Switchover Use QoS For Ping parameter is enabled, QoS is not used on the ping.
Switchover Primary Monitor Ping Delay	Specifies the delay in seconds between the primary monitor pings to the notifier on the primary monitor. The default value is 0. The maximum value is 300.
Switchover Primary Monitor Retry Ping Delay	Specifies the delay in seconds between pings when the primary monitor is in retry mode. The default value is 0. The minimum value is 0. The maximum value is 300.
Switchover Primary Monitor Retry Count	Specifies the number of times the primary monitor will send retry pings before it begins diagnosing the connection issues. The default value is 2. The minimum value is 1. The maximum value is 50.
Switchover Primary Monitor Timeout	Specifies the timeout value in seconds for a ping from the primary monitor on the backup to the notifier on the primary. If a ping is not received in this time frame, the primary monitor will then begin its retry mode. The default value is 0, which indicates that the value will be one half of the monitored module timeout whose default value is 10 seconds. The maximum value is 300.

Switchover QoS DSCP	When Switchover Use QoS For Ping parameter is enabled, add this parameter to set the value in the QoS byte. Differentiated Services Code Point (DSCP) is the 6 most significant bits of a packet. You can use DSCP to prioritize QoS traffic on Switchover. Note: To enable QoS on the auxiliary connection ping, enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. If only the Switchover Use QoS For Ping parameter is enabled, QoS is not used on the ping.
Switchover Reconnect Delay	Add this parameter to specify the number of seconds that the Switchover system waits after the main connection goes down before it attempts to reconnect to the primary server. When this parameter is set, a switchover does not occur as a result of the auxiliary connection going down until after the delay period. You can use this parameter to prevent switchovers from occurring on networks where the connection occasionally drops for a short, consistent amount of time. The default value is 90 seconds.
Switchover Reconnect Timeout	Specifies the duration in seconds that switchover on the backup will attempt to reconnect with the primary. This timeout begins once the primary monitor has diagnosed the connection and signaled the appropriate event to the switchover state machine. Therefore, the actual duration from the time connections issues were first detected to the time the backup gives up and switches over will be longer than this because there is the interval where the retry pings are sent and then the network checks all made by the primary monitor. This can take around 15 seconds if the backup is not connected to the network or 70 seconds if the primary is not connected to the network. A value of 0 indicates an immediate switchover when a connection is lost. A value greater than 0 indicates the number of seconds that the timer will be set to expire. The default value is 30. The minimum value is 0. There is no maximum value.
Switchover TS Failure Retry Delay	To specify the number of seconds that the Switchover system waits, after marking a TS failure, before sending the second ping, add this parameter. The system switches once the failure count exceeds the value stored in the Switchover Max TS Failures parameter, which defaults to 2. Note: Set this value to greater than 0 seconds. The default is 1 second.
Switchover TS Timeout	To specify the number of seconds that the Switchover system waits from the time the ping is sent until it is marked as a TS failure, add this parameter. This parameter also specifies the number of seconds that the Switchover system waits after a TS success before it sends another ping. Set this value between 5 - 60 seconds. The default is 10 seconds.
Switchover Unreachable Primary Ping Count	Specifies the number of times that a ping set is sent to the primary before switching over. A ping set consists of one or more pings sent during a single attempt to detect the primary's system on the network. Pings will be sent until the primary responds or the maximum number of ping attempts is reached. This count is not the number of pings sent in a single set when trying to contact the primary but the maximum number of sets before a switchover will occur. The delay between sending ping sets is defined by the Switchover Unreachable Primary Ping Delay parameter. A value of 0 results in an immediate switchover. No further attempts are made to detect the primary after it is considered unreachable. This is the default value if the parameter is not defined. A value of -1 results in unlimited attempts until the primary is reachable. In this case, if the connection issue has been determined to be an unreachable primary, switchover will not occur since the backup will keep waiting for the primary to be reachable again. This value should only be used if a switchover should never occur as long as the primary is unreachable. The default value is 0. The minimum value is -1. There is no maximum value.
Switchover Unreachable Primary Ping Delay	Specifies the interval in seconds between sending ping sets to the primary monitor when it is unreachable. See the Switchover Unreachable Primary Ping Count parameter for the definition of a ping set. The default value is 10. The minimum value is 1. The maximum value is 300.
Switchover Use QoS for Ping	To customize QoS for the TS ping on the auxiliary connection, add this parameter and set it to Yes or 1 to enable it. Use this parameter to set the priority of ping (echo request and echo reply) packets. You can make further customizations by using the Switchover QoS DSCP parameter. When enabling DSCP tagging, AF41 (DSCP 34) is tagged by default. To change the value, set it to any of the tagging classes. Note: To enable QoS on the ping on the auxiliary connection (not the main connection), enable both the Switchover Ping on Aux Connection and the Switchover Use QoS For Ping parameters. If only the Switchover Use QoS For Ping parameter is enabled, QoS is not used on ping.
SwitchoverServerFQDN A	When the ForceSwitchoverFQDNs server parameter is enabled, then the SwitchoverServerFQDN A server parameter contains the fully qualified domain name of the Switchover Server A. For more information, see ForceSwitchoverFQDNs.
SwitchoverServerFQDN B	When the ForceSwitchoverFQDNs server parameter is enabled, then the SwitchoverServerFQDN B server parameter contains the fully qualified domain name of the Switchover Server B. For more information, see ForceSwitchoverFQDNs.

Related topics

[Packaged Server Parameters](#)



Dialer Server Parameter

The optional server parameter for the Dialer check box is:

Dialer Server Parameter	Description	Module
Dialer Support	Set the value of this server parameter to 1 to enable the "Dialer" check box in Interaction Administrators User configuration. This server parameter, along with the appropriate feature license is required for expose Interaction Dialer in Interaction Administrator.	Interaction Dialer



e-FAQ Server Parameters

The optional server parameters available for e-FAQ support are:

e-FAQ Server Parameter	Description	Module
e-FAQ Support	This server parameter enables the e-FAQ Interaction Administrator plug-in to register e-FAQ servers for use with the CIC clients. A value of 1 means e-FAQ is installed, and a value of 0 means e-FAQ is not installed.	e-FAQ
Hide e-FAQ	This server parameter removes the e-FAQ tab from the CIC clients. If the e-FAQ Support server parameter is 1 and Hide e-FAQ server parameter is 0, the e-FAQ tab will be displayed as well as the options menu. If the e-FAQ Support server parameter is 0 and Hide e-FAQ server parameter is 0, the e-FAQ tab will show a "commercial" for e-FAQ and the e-FAQ Options menu item will be gray and not available. If the Hide e-FAQ server parameter is 1, neither the e-FAQ tab nor the e-FAQ Options menu item will be displayed regardless of the value for e-FAQ Support.	e-FAQ

Server parameters for IC Business Manager Views

You can set the following server parameters to restrict the number of records that may appear in the IC Business Manager statistics views.

To set these server parameters, add the parameters in the **Server Parameters** container. Then set the values as necessary.

Note: When performing scalability tests for 5000+ agents and 500+ supervisors, we were able to allow each supervisor to observe up to 720 agent statistics and 720 workgroup statistics simultaneously. Exceeding the tested number of simultaneous statistics watches could cause CIC server scalability issues.

Parameter Name	Description
MaximumAgentsInAgentGraphView	Set this parameter to limit the number of agents shown in the Agent Graph view. The default value is 20.
MaximumAgentsInAgentOverviewView	Set this parameter to limit the number of agents shown in the Agent Overview view. The default value is 20.
MaximumStatisticsInAgentGraph	Set this parameter to limit the number of statistics shown in the Agent Graph view. The default value is 40.
MaximumStatisticsInWorkgroupGraph	Set this parameter to limit the number of statistics shown in the Workgroup Graph view. The default value is 40.
MaximumStatisticsInWorkgroupOverviewView	Set this parameter to limit the number of statistics shown in the Workgroup Overview view. The default value is 180.
MaximumWorkgroupsInWorkgroupOverviewView	Set this parameter to limit the number of statistics shown in the Workgroup Overview view. The default value is 20.
MaximumWorkgroupsInWorkgroupGraphView	Set this parameter to limit the number of workgroups shown in the Workgroup Graph view. The default value is 20.

Server parameters to suppress logging of sensitive data

Trace logs, particularly the IP trace log, can potentially contain sensitive data. Logging of sensitive data can occur when Interaction Attributes are used to store sensitive values. The value of an attribute is traced when the attribute is set, retrieved, or processed. For this reason, sensitive data may be traced and logged by multiple processes, not just by IP. Logging can also occur when traced output from SOAP tools contains an XML blob with sensitive data in it, or when an IceLib function is traced.

Examples of sensitive data include:

- Data that could be useful for hacking or identity theft. Common examples are birth date, social security number, home address, credit card or ID numbers,
- Data that must be protected for legislative reasons.
- Personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade-union membership.
- Data concerning a person's health, sex life, or sexual orientation.
- Genetic or biometric data.
- Salary information.
- Data relating to criminal offenses and convictions.
- Any other attributes that your business wants to remain confidential.

Not all data is sensitive. Examples of non-sensitive data include:

- Data stored about configured users of the IC server.
- Calling name data for telephone calls (internal or external).
- Email addresses.
- Telephone numbers.
- IP addresses.

Starting with PureConnect CIC 2018 R2, customers can suppress tracing of potentially sensitive data, by setting 2 server parameters.

Parameter	Description
SuppressSensitiveDataTracing	If this server parameter is not present, or it is set to a case-insensitive value of "TRUE", "YES", or "1", then "##Suppressed##" is written to trace log entries instead of the value traced.
SensitiveAttributes	This parameter identifies which attributes will be suppressed. Set its value to a delimited list of Interaction Attributes whose value should not be traced. Attribute names are automatically trimmed of leading or trailing spaces. You may delimit items using semicolons or new lines. For example, if you assign a value of <code>CC_SOCIAL_SECURITY;CC_AMOUNT_DUE</code> then <code>##Suppressed##</code> will be written to logs instead of the actual values of those custom attributes. When this parameter is empty, no tracing of Interaction Attributes is suppressed. But if <code>SuppressSensitiveDataTracing</code> is enabled, the system will suppress tracing of potentially sensitive data from SOAP Tools XML and when IceLib function is traced.

Notes:

- Both server parameters are dynamic. Changes go into effect immediately.
- For new installations, `SuppressSensitiveDataTracing` is TRUE by default and `SensitiveAttributes` is set to an empty string.
- These parameters are not supported prior to CIC 2017 R2, and will not be back ported.



Text To Speech Server Parameters

The optional server parameters for the CIC's Telephony tools for text-to-speech (TTS) conversion can change the default behavior of the TTS tools and the way CIC interfaces with the TTS engine on the CIC server. If the server parameter is not set (that is, it does not appear in the Server Parameters container in Interaction Administrator), the default values are in effect for each condition.

The most common optional TTS server parameters are listed in the following table. Other server parameters can be set as needed, under the direction of qualified PureConnect Customer Care staff.

TTS Server Parameters	Description	Module
TTS Audio File Directory	Specifies the path to a .wav file created with the Record String tool if the path was not specified in the tool step. (For more information, see the Record String tool in Interaction Designer's online help.)	TTS
TTS Speech Pitch	An integer that specifies the number of hertz used to determine the voice pitch of the TTS engine reading a user's email or other text.	TTS
TTS Speech Rate	An integer that specifies the rate (words per minute) at which the TTS engine reads a user's email or other text.	TTS



Set up forced authorization codes

To require users to enter an extension and a password in order to make a call, you can configure forced authorization codes.

There are many reasons you might want to use forced authorization codes. If you have a phone station in a reception area, you might set it up so an authorization code would have to be used to make a call. You might set codes so users, placing long distance calls from an associate's office, would have to enter their own extension and password to make a call.

The first step in setting forced authorization codes is including a phone classification in the server parameter "Toll Call Classification." Then, set the forced authorization codes by the Default User, users, members of roles and workgroups, or by stations.

Set up the Toll Call Classification server parameter

The server parameter "Toll Call Classification" is created during installation and includes the following classifications: Long Distance; International; and Unknown. You can add additional classifications or remove existing ones. To configure this server parameter:

1. In the list view of the Server Parameter container, double-click **Toll Call Classification**.
2. To add a phone classification, type the name exactly as it appears on the Classifications page in the Phone Number Configuration dialog. Use a semi-colon (;) between classifications. You can also delete classifications from the server parameter.

Next, set the Forced Authorization Codes to be required by Default User, User, members of Roles and Workgroups, or by stations.

Set up the default user

1. Double-click **Configuration** in the Default User container.
2. On the **User Rights** page, select **Required Forced Authorization Code**.

Set up a user

1. In the list view of the **Users** container, double-click on a user name.
2. On the **User Rights** page, select **Required Forced Authorization Code**.

Set up a member of a role or workgroup

1. In the list view of the **Roles** or **Workgroups** container, double-click on a name.
2. On the **User Rights** page, select **Required Forced Authorization Code**.

Configure a station

1. In the list view of the **Stations** container, double-click on a station.
2. On the **Station Rights** page, select **Required Forced Authorization Code**.

The extension and password defined in the User Configuration dialog is used for forced authorization code access.

Notes:

- If a user is dialing an external (long distance) number through the switch hook and the forced authorization codes are in effect for that user, the user has to enter an authorization code.
- Forced authorization codes apply to calls made at a station. Users cannot enter these codes through any client applications, such as the CIC clients or Interaction Fax.



Structured Parameters

The Structured Parameter container allows you to add typed parameters grouped together (like server parameters). Single strings, multi-strings and passwords are supported. The passwords are stored in an encrypted fashion. These parameters are accessible by the handlers through a tool step.

For example, you may want to use the LDAP tools to access an LDAP directory. In the structured parameter container you can store the LDAP server name, the login account and the required password. Use the **Get Structured Parameters** and **Put Structured Parameters** tools under **System** in Interaction Designer to access the parameters.

Related topics

[Add a Structured Parameter](#)

[Packaged Structured Parameters](#)



Add a Structured Parameter

To add a parameter click **Add** and enter the **Name**, **Type**, and **Value**.

Name

Type the name of the parameter.

Type

Select the type of parameter from the list. Options are String, Multi-string and Secrets.

Value

Enter the value of the parameter.

To edit a parameter entry, select it and then click **Edit**.

To delete a parameter entry, select it and then click **Delete**.



Packaged Structured Parameters

CIC includes a pre-configured structured parameter that is accessible through the **Get Structured Parameters** and **Put Structured Parameters** tools under **System** in Interaction Designer.

The pre-configured structured parameters are:

Packaged Server Parameter	Description	Module
Additional Client About Statement	Use this parameter to create an additional statement to be displayed in the CIC client interface in the "About" box. Create name-value pairs associated with your required language (i.e., en-US = "Hello", es = "Hola", or fr-FR = "Bon Jour"), or use a default (i.e., Default = "Hello").	CIC clients

Related Topics:

[Structured Parameters](#)

[Add a Structured Parameter](#)



Regionalization

CIC's Regionalization allows the use of high-bandwidth Codecs across LANs and low-bandwidth Codecs across WANs to increase call quality and reduce traffic across LAN/WAN links.

The Regionalization container provides a view of location configuration. This view can be used to modify existing locations, but cannot be used to add or delete locations (which must be performed in the Locations sub-container. The information displayed in each cell is based on your CIC licenses.

A region defines areas where SIP stations and lines (or servers) are physically interconnected, and within this region a specific dial plan may be required based on the central office or switching fabric it may be connected to. To use this functionality, you must define and add the following information:

- Define a [Location](#)
- Add stations, lines, or servers as [Endpoints](#) to a Location

Or...

- Define the Codec [Communications](#) between Locations
- Define a single-table Dial Plan with input patterns for specific regions and assign to a [Location\(s\)](#)

Note: For more on Regionalization, see *IC Regionalization and Dial Plan* in the PureConnect Documentation Library.



Create Location

Create a [location](#) to allow incoming calls to be routed to stations and perform dial plan operations on remote gateways for emergency calls and/or toll bypass.

To create a new location perform the following steps:

- [Name the Location](#)
- [Select Location Communications](#)
- [Select Codecs](#)
- [Save the Location](#) and Launch the [Location Assistant](#) (Optional)

Related topics

[Regionalization](#)



Location Name

Use this page to name the new location and enter a description.

Location Name

Enter a name for the location, i.e., "HQ".

Description

Enter a description for the location, i.e., "Indianapolis Headquarters".

Time Zone

Select time zone for this location from the pull-down menu. The time zones listed are the same as Windows time zones. The managed IP phones in this location use the time zone to set the daylight saving time information.

SNTP Server

Managed IP phones in this location use this server to request the time. Select **Use IC server** to use the CIC server as the SNTP server or select **Other** and enter the SNTP server IP address.

Enable Regional Dialing

Select this check box to allow dialing of short extensions within the same location. When selected, the **Significant Digits** setting is enabled. By default, this option is not enabled.

Example:

- Station A in Location "Indianapolis" has an extension of 1500
- Station B in Location "Indianapolis" has an extension of 1600

If the Enable Regional Dialing check box is selected in the Location "Indianapolis" the Significant Digits are set to "3", Station A can reach Station B by dialing 600, and Station B can reach Station A by dialing 500.

This feature is not limited to stations. All objects that can be assigned an extension, including users (through the default workstation for the user) and IP phones, as well as stations, are included in the scope of this feature.

Significant Digits

When the Enable Regional Dialing option is selected, the Significant Digits option can be set. By default, the value is 4 digits. A value of 0 means that no number of (or zero) digits are significant, therefore regional dialing is not truly enabled. Set the value to 3 to make the last three digits of an extension significant, set the value to 2 to make the last two digits significant, etc. See the example above.

Note: If changing the significant digit setting on a location creates an extension conflict, i.e., using the example above and setting the significant digits to "2", a conflict would exist between Station A (00) and Station B (00). If the system detects a conflict, a message is displayed listing duplicate extensions. For later reference to help with conflict resolution, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (comma-separated value) format (like Microsoft Excel).

Related topics

[Select Location Communications](#)

[Select Codecs](#)

[Save the Location](#)

[Location Assistant](#)



Select Location Communications

Use this page to indicate which locations are allowed to communicate with devices in each other location. The location you are creating is listed as "This Location" at the top of the list, and the <Default Location> and other configured locations are listed below it. Select a location(s) by clicking the check box next to the location.

Click **Next** to go to [Select Codecs for Each Location Mapping](#)

Related topics

[Regionalization](#)

[Location Name](#)

[Select Codecs](#)

[Save the Location](#)

[Location Assistant](#)



Select Codecs

Use this page to specify the Codecs used to communicate within that location and from that location to each of the other previously selected locations. The first location listed is the new location you are creating. The default Codecs for each location is displayed. Click **Modify Codecs...** to change the default Codec selection for a location.

Click **Next** to go to [Save the Location](#).

Related topics

[Regionalization](#)

[Location Name](#)

[Select Location Communications](#)

[Save the Location](#)

[Location Assistant](#)



Save the Location

This page allows you to review the new location and the location communications. Click **Finish** to save the location. You can optionally select the **Launch the Location Assistant after the new location is saved** check box to step through the Location Assistant. The assistant steps you through the location configuration tasks in a linear fashion, so there is no need to manually open each related container or sub-container to complete the new location configuration.

Related topics

[Regionalization](#)

[Location Name](#)

[Select Location Communications](#)

[Select Codecs](#)

[Location Assistant](#)



Location

A location represents an area where things are considered to be in the same physical place. This location defines a set of endpoints (lines, stations, and servers) that share a [common dial plan](#), and it defines Codec communications for the endpoints. A Codec mapping defines the list of Codecs for two locations to communicate with each other sharing a common set of bandwidth requirements. The stations and lines that are members of a Location define the dial plan entries that are applicable to a locale they are operating in.

Use the **Location** container to configure the following:

- [Location Name](#)
- [Configuration](#)
- [Selection Rules](#)
- [Communications](#)
- [Endpoints](#)
- [Custom Attributes](#)
- [History](#)

How CIC prioritizes multiple locations

In IA, you can select locations for the following items:

- Users
- Stations
- Lines

When a user initiates or transfers a call, CIC determines which servers to use in the following ways:

- When a user makes an outbound call while logged in to a workstation, CIC uses the servers in the station's region.
- When a users makes an outbound call while logged in to a remote station or remote number, CIC uses the servers in the user's region.
- If a user transfers an inbound call to an external number with the forward, follow me, or TUI transfer feature, CIC uses stations in the region of the line on which the inbound call arrived.

Related topics

[SIP Line Region](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Configuration](#)

[Location Assistant](#)

[Peer Site Configuration](#)

[User Configuration](#)

[Managed IP Phone Configuration - General](#)



Location

A location represents an area where things are considered to be in the same physical place. This location defines a set of endpoints (lines, stations, and servers) that share a [common dial plan](#), and it defines Codec communications for the endpoints. A Codec mapping defines the list of Codecs for two locations to communicate with each other sharing a common set of bandwidth requirements. The stations and lines that are members of a Location define the dial plan entries that are applicable to a locale they are operating in.

Use the **Location** container to configure the following:

- [Location Name](#)
- [Configuration](#)
- [Selection Rules](#)
- [Communications](#)
- [Endpoints](#)
- [Custom Attributes](#)
- [History](#)

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- When a user makes an outbound call while logged in to a remote station or remote number, CIC uses the servers in the user's region.
- If a user transfers an inbound call to an external number with the forward, follow me, or TUI transfer feature, CIC uses stations in the region of the line on which the inbound call arrived.

Related topics

[SIP Line Region](#)
[SIP Station Region](#)
[Regional Dial Plan](#)
[Home Site Configuration](#)
[Location Assistant](#)
[Peer Site Configuration](#)
[User Configuration](#)
[Managed IP Phone Configuration - General](#)

Selection rules for a location

CIC uses selection rules to determine the following things:

- Which media servers CIC uses to handle audio communications for an interaction
- Which session managers CIC uses to handle connections between users and stations
- Which content servers CIC uses to manage recordings for a location
- Which ASR servers CIC uses to handle automatic speech recognition
- Which MRCP servers CIC uses to handle text to speech and in-line audio (MoH)

CIC has a default selection rule for each of these types of objects. You can define additional selection rules in the **Selection Rules** container. For each location, you can configure the selection rule(s) that you want CIC to use.

Related topics

[Selection Rules](#)



Location Configuration

Use this page to add a description for this location. If this is the **Default Location** which CIC automatically creates, these fields are read-only and cannot be edited.

Description

Enter the description for this location.

Time zone

Select the time zone for this location.

SNTP Server

Managed IP phones in this location use this server to request the time. Select **Use IC server** to use the CIC server as the SNTP server or select **Other** and enter the SNTP server IP address.

This IC server is in this location (Default Location)

Use this check box to indicate if this CIC server is in this specific location. This is applicable when the server acts as an endpoint. By default this check box is selected (enabled).

This Location accepts hub conferences

The default value should be selected for locations containing a CIC server and false/unchecked otherwise.

By default, CIC enables hub conferences for locations containing a CIC server, and defines latency values of 10. For locations outside current location, hub conferences are not enabled by default, although if you enable it, the latency defaults to 100. These default actions ensure functionality of the distributed conferencing feature through the Interaction Center network.

Note: Use these default settings for the distributed conferencing feature. Extensive modification of hub connector locations and latency values could result in unforeseen or unintended consequences, such as usage of expensive network connections and the inability of Interaction Media Server to connect regional conference calls. Other variables, such as allowed codecs, can increase the possibility of not being able to connect regional conference calls. For more information on the Distributed Conferencing feature, see the *Interaction Conference Media Server Technical Reference* document in the PureConnect Documentation Library on the CIC server.

The Switchover Server A (server name) is in this location

Select this check box if you have a switchover environment, and Switchover Server A is located in this geographic location. By default, this check box is not selected. The location of a switchover server allows you to change codecs associated with the server.

The Switchover Server B (server name) is in this location

Select this check box if you have a switchover environment, and Switchover Server B is located in this geographic location. By default, this check box is not selected. The location of a switchover server allows you to change codecs associated with the server.

Enable keyword spotting in this location

Select this check box to use [Interaction Analyzer's Keyword Spotting](#) for this location. For more information about keyword spotting, see *Interaction Analyzer Technical Reference* in the CIC Documentation Library.

Enable Regional Dialing

Select this check box to allow dialing of short extensions within the same location. When selected, the **Significant Digits** setting is enabled. By default, this option is not enabled.

Example:

- Station A in Location "Indianapolis" has an extension of 1500
- Station B in Location "Indianapolis" has an extension of 1600

If the Enable Regional Dialing check box is selected in the Location "Indianapolis," and the Significant Digits are set to "3," Station A can reach Station B by dialing 600, and Station B can reach Station A by dialing 500.

This feature is not limited to stations. All objects that can be assigned an extension, including users (through the default workstation for the user) and IP phones, as well as stations, are included in the scope of this feature.

Significant Extension Digits

When the **Enable Regional Dialing** option is selected, you can set the Significant Digits option. By default, the value is 4 digits. A value of 0 means that no number of digits are significant, therefore regional dialing is not truly enabled. Set the value to 3 to make the last three digits of an extension significant, set the value to 2 to make the last two digits significant, etc. See the example above.

Note: If changing the significant digit setting on a location creates an extension conflict, i.e., using the example above and setting the significant digits to "2," a conflict would exist between Station A (00) and Station B (00). If the system detects a conflict, a message is displayed listing duplicate extensions. For later reference, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Related topics

[Communication](#)

[Endpoints](#)

[SIP line region options](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Concepts](#)

[Location Assistant](#)

[Configure a Peer Site](#)



Users

Use this page to select users that belong in this physical location. Click **Add** to open the **Select Users** page, and use this page to identify the users in this location. Click **Delete** to remove a user from this location.

Related Topics

[Location](#)

[Communications](#)

[Endpoints](#)

[SIP Line Region](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Configuration](#)

[Location Assistant](#)

[Peer Site Configuration](#)



Communication

Use this page to define a set of Codec communications for the endpoints (lines, stations, and servers). Communication between devices require a mapping between locations.

Click **Modify** to display the list of prioritized Codecs. Select the Codecs to map to the endpoints. By default, no Codecs are selected. You must select one Codec for the mapping to be valid. The **Up** and **Down** buttons set the preferred order of Codecs to use.

Click **Set Parameters** to modify the **Frame Size** (in milliseconds) and the **Frames per Packet** of a Codec. This option is available only for G.711 Codecs.

Use the up and down arrows to set the **Inter-conference latency** in milliseconds. You assign latency values to connections between locations. By specifying the latency values, you create a method of indicating which connections CIC should prefer when it joins regional conference calls through hub servers.

By default, the latency value for communications within a location is 10. The default latency value for communications to other locations is 100. Acceptable latency values range from -1 to 3000. You can adjust the latency values to specify which location Interaction Center should first attempt to use in establishing connections between regional servers and hub servers.

As an example, if the cost of bandwidth usage to one location is much more expensive than another location, you could give a higher latency value to the first location. Interaction Center would try to join conference calls through a hub server in the second location. Only if no hub servers in the second location had enough resources to facilitate the conference calls would Interaction Center then try to use a hub server in the first location.

You can use any criteria you prefer to determine the latency values that you will assign to connections between locations. The criteria could include bandwidth costs, bandwidth limits, network quality, and so on.

Notes

Latency: For distributed conference calls in the Interaction Center environment, *latency* does not implicitly refer to the delay in the relaying of transmissions on a network. Instead, *latency* is a value that an administrator specifies to indicate which locations Interaction Center should first use to find a hub server for joining regional conference calls together.

Multiple Codecs: To enable the use of multiple codecs, contact your PureConnect Customer Care support representative.

No Codecs Defined: If two devices each have a Codec defined, but there are no Codecs defined in the communications between them, then they are not allowed to communicate directly to each other. This can be used to intentionally block traffic between some Codecs.

G.726: G.726 is only available with AudioCodes.

Packet and Frame size: Summary on packet size and frequency from the www.erlang.com website: "The frequency at which the voice packets are transmitted have a significant bearing on the bandwidth required. The selection of the packet duration (and therefore the packet frequency) is a compromise between bandwidth and quality. Lower durations require more bandwidth. However, if the duration is increased, the delay of the system increases, and it becomes more susceptible to packet loss; 20ms is a typical figure." So, the more of the voice you put in a single packet (i.e., 60ms versus 20ms), the more of the voice you lose if that packet is lost.

MOS: The quality of transmitted speech is a subjective response of the listener. A common benchmark used to determine the quality of sound produced by specific Codecs is the mean opinion score (MOS). With MOS, a wide range of listeners judge the quality of a voice sample (corresponding to a particular Codec) on a scale of 1 (bad) to 5 (excellent). The scores are averaged to provide the MOS for that sample.

Tip: For the most current list of Codecs, see the latest version of *SIP Application Note* on the Product Information site.

Related Topics:

[Location Configuration](#)

[Endpoints](#)

[SIP Line Region](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Configuration](#)

[Location Assistant](#)

[Peer Site Configuration](#)



Endpoints

Use this page to configure endpoints for the location. An endpoint is one end of a SIP connection. An endpoint can be a line, a station, or a server.

Line and Station Endpoints

When you select a line as an endpoint, and a [proxy](#) is configured on this line, then the proxy is in this region. When you select a line as an endpoint and a proxy is not configured on this line, then any SIP device that uses this line also uses this region. Typically, this is any device (station or line proxy) that is not configured already in CIC.

Notes: A line or station can only belong to one location.

Server Endpoints

The purpose of server endpoints is to define the Codec communications between the server and other endpoints (i.e., lines or stations) recognized by CIC. The following objects are valid server endpoints:

- Lines
- Managed IP phones
- Media servers
- MRCP servers
- Recognition servers (ASR servers)
- Session manager servers
- SIP proxies
- Unmanaged stations

Example

An example of a server and a station as endpoints is if a call is made from a station into an IVR menu. In this case, the station is one endpoint, and the server playing the IVR menu is the other endpoint.

Adding Endpoints

To add endpoints:

1. In the **Endpoint type** list, select the type of endpoint you want to add.
2. In the **Available endpoints** list, select the endpoints you want for this location and click the arrow to move them to the **Selected endpoints** list.
3. Click **OK**.

Note: Interaction Administrator prevents you from adding unmanaged stations and managed IP phones with duplicate extensions.

Removing Endpoints

Note: You cannot remove endpoints from the default location.

To remove endpoints:

1. In the **Endpoint type** list, select the type of endpoint you want to remove.
2. In the **Selected endpoints** list, select the endpoints you want to remove from this location and click the arrow to move them to the **Available endpoints** list.
3. Click **OK**.

Related topics

[Location Configuration](#)

[Communications](#)

[SIP Line Region](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Configuration](#)

[Location Assistant](#)

[Peer Site Configuration](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list. The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.

Default Regionalization

Default Regionalization Options

CIC's [Regionalization](#) allows the use of high-bandwidth Codecs across LANs and low-bandwidth Codecs across WANs to increase call quality and reduce traffic across LAN/WAN links. This is the default configuration for regionalization.

Options

Select the **CIC server** location from the pull-down menu. This [location](#) represents an area where things are considered to be in the same physical place. This is the CIC server's default location that defines the [location](#) configuration.

See the [Regionalization](#) topic for detailed configuration information. Also, see *CIC Regionalization and Dial Plan* in the **Technical Reference Documents** section of the PureConnect Documentation Library on the CIC server.

Related Topics

- [Regionalization](#)
- [Location Configuration](#)
- [Location](#)

Default Regionalization Conferences

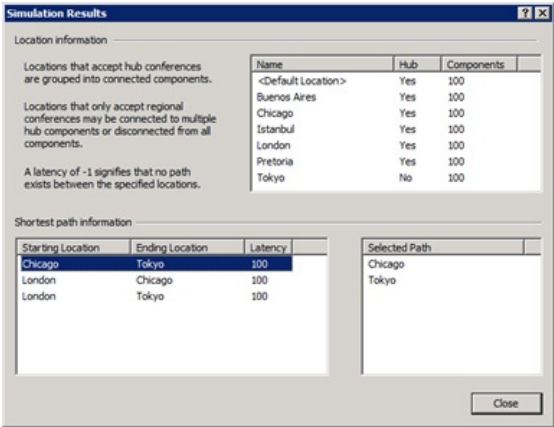
Use this page to configure latency. You can also use the configuration simulation to test conference behavior.

Starting Location

Select the starting location for the distributed conference. Selecting a location sets the latency to 10 milliseconds. You can also enable hub conferencing to a location here.

Configuration Simulation

- In the **Configuration simulation** area, select one of the following options:
 - **Include only locations with active media servers** (default)
 - **Specify a custom list of locations**
 - Click the **Configure** button to open the [Select Locations](#) dialog box and select locations to include.
 - Click **OK**.
- Click the **Simulate** button. The **Simulation Results** dialog box is displayed.



- If you selected more than two locations, CIC calculates the path between each combination of locations.
- In the list box on the left side of the dialog box, select an item.
- The list box on the right side of the dialog box displays a list of locations through which CIC would connect a distributed conference call. To view the path of the other location combinations, select each item in the list box on the left side of the dialog box.
- Note:** If an item in the list box on the left side of the **Simulation Results** dialog box displays **-1**, Interaction Center would not be able to connect a distributed conference call between the two locations. This problem is caused by a location that is configured to not accept hub connections. To fix this problem, enable the location to allow hub connections.
- When you are finished, select the **Close** button.

Selection Rules

CIC uses selection rules for other servers such as media and session manager servers. Use this page to create prioritized lists of locations to select media servers and session manager servers. By default, CIC has a default <Default Media Server Selection Rule> configuration, and a default <Default Session Manager Selection Rule> configuration.

About media servers and selection rules

CIC uses Interaction Media Server to process audio communications for an interaction between two or more endpoints, such as a telephone call. To select a media server, CIC uses **Selection Rules**.

This feature enables you to create prioritized lists of locations in **Selection Rules** configuration. You can select media server to service an interaction. (You can also select a session manager server to service an interaction.)

Within a location, CIC selects a media server, if more than one exists, based on the following criteria:

- Available CPU resources
- Number of resources in use

When an interaction that requires audio processing starts, CIC searches, in order, each location in a selection rules configuration. If a location does not have a media server or all media servers in that location are busy, CIC searches the next location in the **Selection Rules** configuration. This process continues until CIC finds an available media server.

Notes: By default, CIC has only one **location**: <Default Location>. When you create a device in CIC, it is assigned to the <Default Location> location. To use the selection rules effectively, define additional **locations** and assign devices, such as stations, SIP lines, and media servers, to those locations.

When you configure RCS server selection rules, you cannot make an RCS server a member of a location. Instead, you configure each RCS server to service one, multiple, or no locations. For more information, see the *Interaction Recorder Remote Content Service Installation and Configuration Guide* in the PureConnect Documentation Library on the CIC server.

For more information, see *Interaction Media Server Technical Reference* in the PureConnect Documentation Library on the CIC server.

About session manager servers and selection rules

Selection rules allow connections for users and stations associated with a particular location, to use certain session manager servers.

A location also uses selection rules to define which session manager locations should be used first, similar to the way media server selection rules are processed: When CIC needs a session manager for processing, CIC searches, in order, each session manager location in a selection rules configuration. If a location does not have a session manager server or all session manager servers in that location are busy, CIC searches the next location in the selection rules configuration. This process continues until CIC finds an available session manager server.

About Interaction Recorder Remote Content Service and selection rules

For more information, see the *Interaction Recorder Remote Content Service Installation and Configuration Guide* in the PureConnect Documentation Library on the CIC server.

Default Selection Rules

CIC provides the following default selection rules:

- <Default ASR Selection Rule>
- <Default Media Server Selection Rule>
- <Default MRCP Selection Rule>
- <Default Session Manager Selection Rule>

Prioritized Location list

Add: Click this button to add a static or variable location to the **Prioritized Location** list box.

Remove: Click this button to remove the highlighted location from the **Prioritized Location** list box.

Move up: Click this button to move the highlighted location to higher position in the **Prioritized Location** list box.

Move down: Click this button to move the highlighted location to a lower position in the **Prioritized Location** list box.

Group selected: Click this button to group the highlighted locations together for distributed call audio processing.

Tip: To select multiple locations, press and hold the Ctrl key while clicking each location in the box.

Ungroup selected: Select this button to remove the highlighted location from an existing call audio processing group.

Excluded Location list

Do not use any other Locations: Select this option to restrict Interaction Center from selecting any other location than those specified in the Prioritized Location list box.

Use any Location, except the following: Select this option to allow Interaction Center to select any available location after it cannot locate an available media or session manager server in the Prioritized Location list box. Interaction Center will exclude any server location specified in the Excluded Location list box.

Add: Click this button to add a location to the Excluded Location list box.

Remove: Click this button to remove the highlighted location from the Excluded Location list box.

Restore: Click this button to reset this configuration to the default settings.



Licenses Allocation

The Licenses Allocation container displays a list of all licenses known by CIC License Manager. These numbers coincide with the numbers in **License Management**. For each license the following information is shown:

- **Name** – This is the license name, such as "ACD Media 2".
- **Assignable Allowed** - This is the number of licenses purchased or the license 'threshold'.
- **Assignable Configured** - This is the number of licenses that are configured or in use by users or stations.
- **Concurrent Allowed** - This is the number of purchased licenses that users can use dynamically, or as needed, through a network connection. For example, a user can acquire a license to access an application, and release the license when logging out of the application. CIC maintains a list of users and licenses available and in use, similar to a library loaning limited resources to members.
- **Concurrent Configured** - - This is the number of concurrent licenses that are assigned.
- **Concurrent in Use** - - This is the number of concurrent licenses that are currently in use.
- **Notes** – This column shows text if the count exceeds the number of licenses.

The Interaction Administrator screen displays how many days you have to renew your license before expiration in the lower left-hand corner. If license renewal is due within a specific time period, a message is displayed similar to "Your license is due for its annual re-registration in XX days. Please visit <http://license.inin.com> to re-register your license."

Right-click the license you want to configure and select Properties. This launches the **License Configuration** page.

Related topics

[License Management](#)

[License Configuration](#)



License Configuration

The **License Configuration** dialog box allows you to add and remove users, workgroups, and stations allocated to a license as needed, while keeping within the license threshold. This dialog box is especially useful when allocating an Access license because of the overview it provides of users, workgroups, and stations at the same time. Access to this information can save time when determining availability of licenses for new staff or departmental changes, and in setting up newly purchased licenses that must be configured. Large numbers of items such as the CIC clients, or ACD and media level, can be granted the license to a user, workgroup, or station quickly.

The **License Configuration** dialog box has two tabs; **Assignable** and **Concurrent**.

Note: If you enabled the Enhanced Interaction Administrator Change log, then changes to user licenses and station licenses are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Assignable

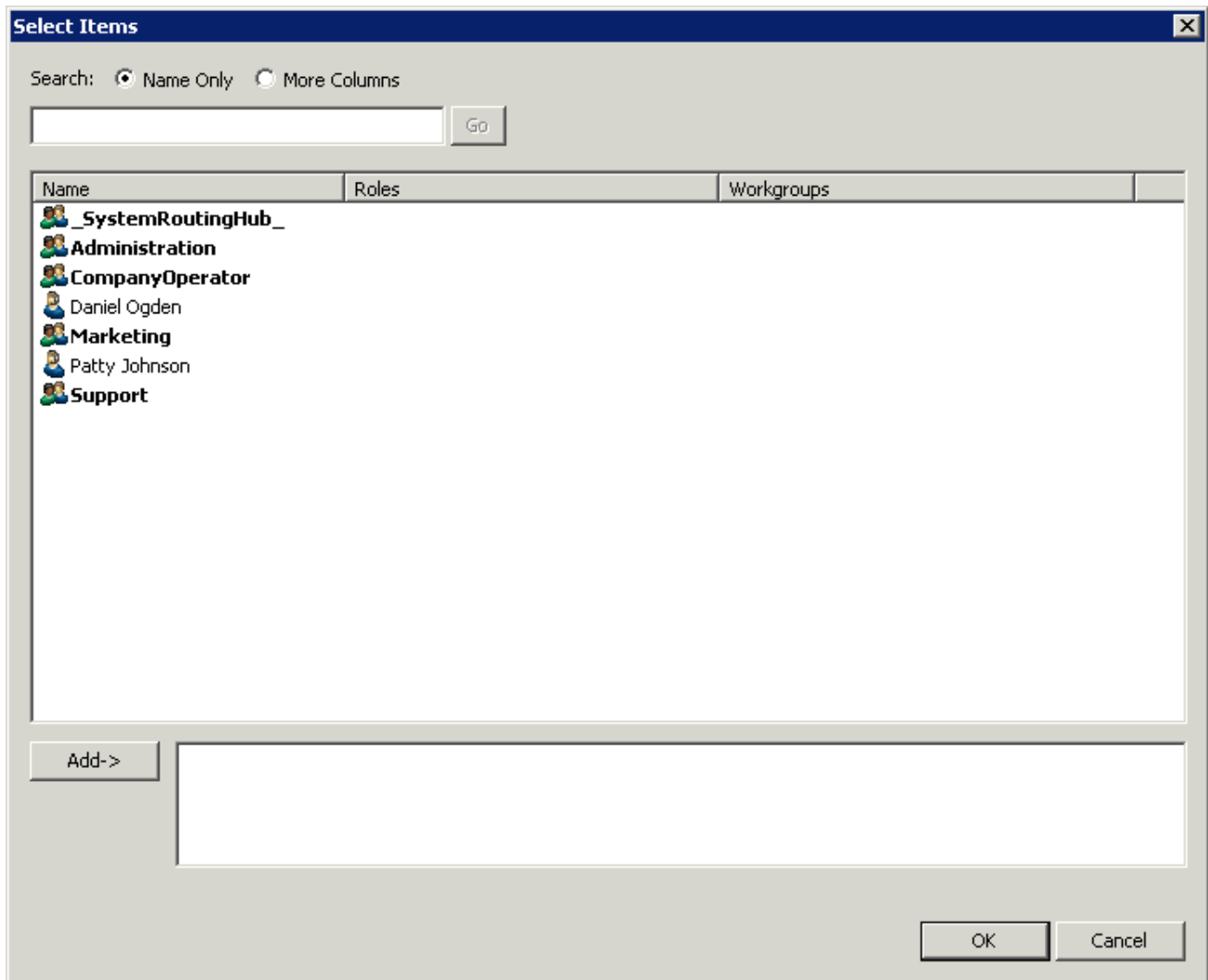
The **Assignable** tab provides a way to allocate licenses to users, workgroups and stations, with the exception of a Basic Station license. The Basic Station license can only be allocated to stations.

There are two counters shown at the bottom of each page. These counters are the **Number of licenses** and the **Total Configured (which is the number of licenses assigned and *enabled*)** :

- **Number of licenses** - This is the total number of licenses available.
- **Total Configured** - This is a count of the total number of users, workgroups and stations that are granted and *have the **enabled*** the current license based on the contents of this page. If this number exceeds the **License Threshold**, warning text is displayed at the bottom of the page.

To allocate a license to a user or workgroup (making this user or workgroup a licensed user or workgroup):

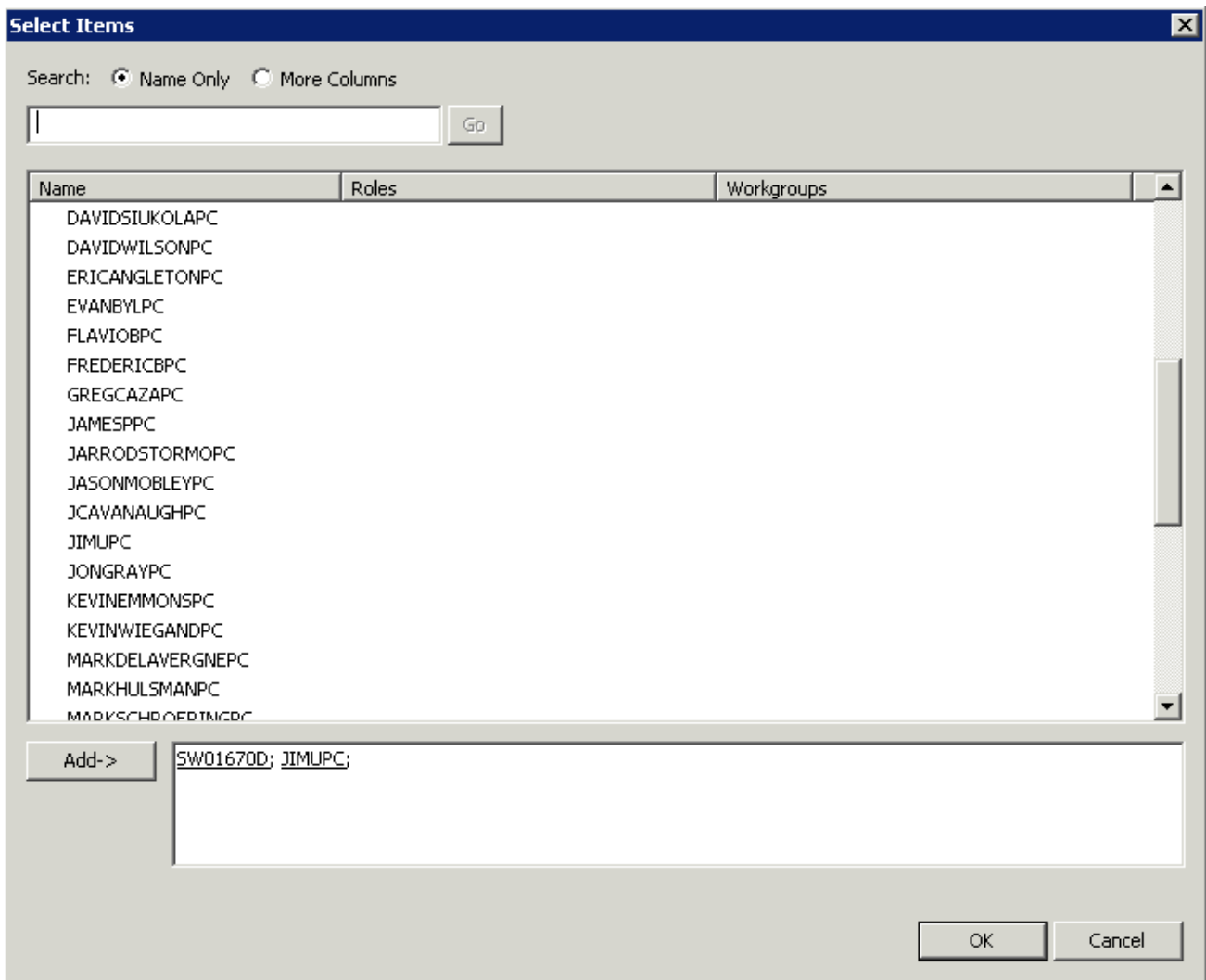
1. Click the **Add** button to the right of the user or workgroup list to display the **Select Items** dialog box.



2. Add users or workgroups to be assigned the license:
 - Double-click the user or workgroup, or
 - Select the user or workgroup and click **Add**. To add a group of users or workgroups, highlight each, then click **Add**.
3. Optionally search for **Name Only** or display **More Columns**.
4. Click **OK** to return to the **License Configuration** dialog box.

To allocate this license to a station (making this station a licensed station):

1. Click the **Add** button to the right of the station list to display the **Select Items** dialog box.



2. Add stations to be assigned the license:
 - Double-click the station, or
 - Select the station and click **Add**. To add a group of stations, highlight each station, then click **Add**.
3. Optionally search for **Name Only** or display **More Columns**.
4. Click **OK** to return to the **License Configuration** dialog box.

To de-allocate this license to a user, workgroup, or station (making this user, workgroup, or station not licensed):

1. Highlight the user, workgroup or station and click the **Delete** button to the right. To de-allocate a group of user, workgroups, or stations, highlight each, then click **Delete**.
2. Click **OK** to save the changes.

Concurrent

The **Concurrent** tab provides a way to allocate licenses to users only and is based on the number of simultaneous users accessing a feature or function. This license method allows users to acquire available licenses during logon instead of based on configuration. With the concurrent license method, the license is not allocated until the user logs in to the application. CIC maintains a list of users, and licenses available and in use.

There are two counters shown at the bottom of each page. These counters are the **Number of licenses** and the **Total Configured**:

- **Number of licenses** - This is the total number of licenses available.

- **Total Configured** - This is a count of the total number of users and stations that are granted the current license based on the contents of this page. If this number exceeds the **License Threshold**, warning text is displayed at the bottom of the page. If a user or station was granted the license but does not have licenses enabled, then the user or station is not included in the Total Configured count. Instead, the assigned but disabled license appears in a **dynamic** count next to the Total Configured count.

To allocate a concurrent license to a user:

1. Click the **Add** button to the right of the user list to display the **Select Items** dialog box.

2. Add users to be assigned the license:
 - Double-click the user, or
 - Select the user and click **Add**. To add a group of users, highlight each, then click **Add**.
3. Optionally search for **Name Only** or display **More Columns**.
4. Click **OK** to return to the **License Configuration** dialog box.

Note: Clicking OK on the License Configuration dialog box updates the total license values for the users or stations by updating the station and user configuration directly. The list for this license in the [Licenses Allocation](#) container is updated to reflect the user and station allocations. Also, the **Total Configured** count changes based on the selections on each page.

Related Topics

[Licensing](#)

[License Agents for the My Quality Results View in Interaction Connect](#)

[Station Licenses](#)

[Other Station Licenses](#)

People

You use the **People** container to configure the following options for your CIC users:

- [Default User](#)
- [Roles](#)
- [Users](#)
- [Workgroups](#)
- [Password Policies](#)
- [Schedules](#)
- [Secure Input Forms](#)
- [Wrap-up Codes](#)
- [Wrap-up Categories](#)
- [Client Buttons](#)
- [Client Configuration](#)
- [Queue Columns](#)
- [Account Codes](#)
- [Client Templates](#)
- [Response Management](#)
- Skills
- [Access Control Groups](#)

Related topics

[About inheritance of configuration properties](#)



Overview of security for people

You can configure security for the default user, for roles, for a user, or for a workgroup.

Because users inherit one or more properties from the default user, roles and workgroup, the Security page is available from each of these containers. See *Configuration Property Inheritance* for an explanation of how these properties are related in each container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes related to user security are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

For more information on the types of security available for people, see the links under *Related topics*.

Related topics

[Overview of the master administrator rights](#)

[Overview of administrator access rights](#)

[Overview of access control rights](#)

[Overview of security rights](#)

[Configuration property inheritance](#)



Overview of the master administrator rights

Users with master administrator rights have permission to add, remove or change all security rights. Anyone having master administrator rights can view and change everything in Interaction Administrator, and assign or remove all levels of rights for any other CIC account, including others with master administrator rights. All security pages (especially Administrator Access and Access Control) for the Default User, User, Workgroup, and Role containers are visible to master administrators. This is not the case for other accounts without master administrator rights.

Master administrators can grant individual users a range of access rights, which enable them to manage other CIC configuration resources. These rights can be very minimal, such as a user allowed to run Interaction Administrator to change only their own user and station configuration, or perhaps the user and station configurations for the members of a workgroup. In contrast, a master administrator can grant another user rights to create, modify, or delete any other CIC configuration resource in Interaction Administrator, including giving other users a subset of their own administration rights. Master administrators also control the appearance of the [Access Control](#) and [Administrator Access](#) pages for select users (other users do not have the option to control these pages).

Authorized Master Administrator network accounts

When CIC is first installed, only the designated CIC Administrator account and the account used to run the CIC server Setup program have master administrator rights in Interaction Administrator. The CIC Administrator account is specified during the IC server installation. When you are logged in to the network as either the CIC Administrator or with the account used to run the IC Server Setup program (typically, the network system administrator account), you have Master Administrator rights when you start Interaction Administrator. All other users who start Interaction Administrator will not see the configuration containers in the left window pane unless they are given rights to view and or modify specific configuration entries

Related topics

[Assign the master administrator rights](#)

[Overview of security for people](#)



Assign the master administrator rights

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To assign the master administrator right

1. On the **Security** page, select any combination of the following options:
 - To allow the user to modify anything in CIC, select the **Master Administrator** check box. If you select this option, the other options are unavailable, because they represent a subset of the functionality provided by the Master Administrator right.
 - To allow the user the right to edit all Administrative Access items, select the **Allow Administrative Access editing** check box.
 - To allow the user the right to edit all Access Control items, select the **Allow Access Control editing** check box.
2. Click **OK**.

Related topics

[Overview of the master administrator rights](#)



Overview of administrator access rights

Administrator access options allow access to a subset of rights that are available with the **Master Administrator** right. These rights control what objects are shown and what objects can be edited in Interaction Administrator. You can set access at the default user, role, user, or workgroup level.

Related topics

[Overview of security for people](#)

[Admin Access Categories](#)

[Assign administrator access rights](#)



Admin access categories

These are the available categories in the **Category** list in the **Administrator Access** page:

- Account Codes
- Accumulators
- Actions
- Audio Sources
- Client Buttons
- Client Configuration
- Client Configuration Templates
- Collective
- Contact Data Manager

- Contact List Sources
- Default IP Phone
- Default Location
- Default Station
- Default User
- e-FAQ
- Fax Configuration
- Fax Groups
- Handlers
- IC Data Sources
- Initialization Functions
- Interaction Conference: Allows user access to configure the Interaction Conference global settings.
- Interaction Conference Rooms: Allows user access to configure individual conference rooms.
- Interaction Feedback
- Interaction Files
- Interaction Messages
- Interaction Recorder
- Interaction Tracker
- Interaction URLs
- Interfaces
- IP Phone Registration Groups
- IP Phone Ring Sets
- IP Phone Templates
- IP Phones
- Licenses Allocation
- Line Groups
- Lines
- Locations
- Log Retrieval Assistant
- Mail Configuration
- Media Servers
- MRCP
- MRCP Servers
- Optimizer Advanced Configuration
- Optimizer Agents
- Password Policies
- Password Policies Configuration
- Peer Sites
- Phone Numbers
- Recorder Categories
- Recorder Questionnaires
- Report Logs
- Reports
- Response Management
- Roles
- Schedules
- Server Parameters
- Servers
- SIP Proxies
- Skills
- SMDI Ports
- SMS Broker
- SMS Configuration
- Speech Recognition
- Station Groups
- Station Templates
- Stations

- Status Messages
- Structured Parameters
- System Configuration
- System Parameters
- Tables
- Telephony Resources
- Users
- Voice Modules
- Web Services Parameters
- Widgets

Note: Unlike other Admin Access Categories which refer to objects you can edit in Interaction Administrator, this category controls whether the assigned user can display the Widgets view in Interaction Connect.

- Workgroups
- Wrap-up Codes



Assign administrator access rights

Administrator access allows a user to modify configuration options in Interaction Administrator containers. You can assign administrator access to any role, workgroup, user, or the default user.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To assign administrator access rights

1. In the **Security** page, click **Administrator Access**.
The **Administrator Access** dialog box appears.

By default (<All>) categories are displayed. You can select a specific category of access rights or you can locate rights by using the **Search** box.

2. Select the rights to assign. You can assign specific access rights within a group (or container), or assign *[All] access rights in a group.
3. Click **Close**.
The **Administrator Access** page appears.
4. Click **Apply**.
Your configuration changes are saved.

To allow an administrator to assign (edit) all of the actions in the Actions container

1. From the **Category** list, select **System**.
2. Under **Actions**, select the *[All] check box.
3. Click **Close**.

Related topics

[Analyzer category](#)

[Attendant category](#)

[Collective category](#)

[Conference category](#)

[Dialer category](#)

[Integrations category](#)

[Optimizer category](#)

[People category](#)

[Recorder category](#)

[Resource category](#)

[Server category](#)

[Survey category](#)

[System category](#)



Overview of access control rights

Access control rights determine which items each user, workgroup, or role can view and which items they can modify in CIC. "Modify" means to perform CIC client functions such as pick up calls, listen in on calls, place calls on hold, change [\(valid\) status](#), and so on. You can assign access control rights to roles, workgroups, the default user and users.

You cannot remove access control rights that a user, workgroup, or role has inherited. You must remove rights at the level where they are set. See *Configuration property inheritance* for more information.

Related topics

[Overview of security for people](#)

[Assign access control rights](#)

[Configuration property inheritance](#)



Assign access control rights

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To assign access control rights

1. In the **Security** page, click **Access Control**.
The **Access Control** dialog box appears. The categories of rights that appear depend on the CIC products that you have installed. You can locate rights by selecting a category or by using the **Search** box.
2. Select the rights to assign. You can assign specific rights within a group, or assign *[All] rights in a group. The following tables show the available access control groups, the rights, and the associated descriptions, by category.

Application Category		
Group	Name	Description
Feedback Surveys	View	Determines which Interaction Feedback surveys and survey results the user can view.
	Modify	Determines which Interaction Feedback survey definitions can be modified. Note: Select this right for the user if the user needs to be able to enable the survey.
Recorder Questionnaires	View	Determines which questionnaire directories are available from the drop-down list in the Interaction Recorder Questionnaire container. If available from the list, a recording can be scored with that questionnaire.
	Modify	Determines which questionnaire directories can be modified. Users can create and delete questionnaires within the directory.

Attendant Profiles Category		
Group	Name	Description
Email Profiles	View	Determines which Interaction Attendant email profiles can be viewed.
	Search	Determines which Interaction Attendant email profiles are available in the Transfer to dialog box.
	Modify	Determines which Interaction Attendant email profiles can be modified. Users who can modify a profile can acquire a lock and edit or publish it.
Inbound Profiles	View	Determines which Interaction Attendant inbound profiles can be viewed.
	Search	Determines which Interaction Attendant inbound profiles are available in the Transfer to dialog box.
	Modify	Determines which Interaction Attendant inbound profiles can be modified. Users who can modify a profile can acquire a lock and edit or publish it.
Operator Profiles	View	Determines which Interaction Attendant operator profiles can be viewed.
	Search	Determines which Interaction Attendant operator profiles are available in the Transfer to dialog box.
	Modify	Determines which Interaction Attendant operator profiles can be modified. Users who can modify a profile can acquire a lock and edit or publish it.
Outbound Profiles	View	Determines which Interaction Attendant outbound profiles can be viewed.
	Search	Determines which Interaction Attendant outbound profiles are available in the Transfer to dialog box.
	Modify	Determines which Interaction Attendant outbound profiles can be modified. Users who can modify a profile can acquire a lock and edit or publish it.

Interaction Conference Category		
Group	Name	Description
Conference Rooms	Restrict	Determines if a conference room is available for creating conferences. A conference room is a set of telephone phone numbers or stations that are designated as a conference room in Interaction Conference. If you assign the Restricted right to a conference room, then users cannot make new conferences that use the conference room. Users can still call into the conference room if they have a PIN. By default, every user who has access to Interaction Conference can use every conference room that is defined in CIC.

Interaction Dialer Category		
Group	Name	Description
Campaigns	View	Determines which campaigns can be viewed in Interaction Dialer Manager.
	Modify	Determines which campaigns can be managed in Interaction Dialer Manager.

Interaction Optimizer Category		
Group	Name	Description
Agent Groups	View	Determines which agent groups in Interaction Center Business Manager (ICBM) can be viewed.
	Modify	Determines which agent groups in ICBM can be modified.
	Create	Determines if user can create agent groups in ICBM.

	Delete	Determines if user can delete agent groups in ICBM.
Forecasts	View	Determines which forecasts in Interaction Center Business Manager (ICBM) can be viewed.
	Modify	Determines which forecasts in Interaction Center Business Manager (ICBM) can be modified.
	Create	Determines which forecasts in Interaction Center Business Manager (ICBM) can be created.
	Delete	Determines which forecasts in Interaction Center Business Manager (ICBM) can be deleted.
Interaction Optimizer Master Administrator	Has Right	Allows access to all Interaction Optimizer-related activities in IC Business Manager. Requires the RTA view right.
Intraday Monitoring	View	Allows access to view Intraday Monitoring configuration in ICBM.
Real-time Adherence (RTA)	View	Allows access to view RTA configuration in ICBM. Required for the Interaction Optimizer Master Administrator right.
	Modify	Allows access to modify RTA configuration in ICBM.
Schedule Preferences	View	Allows access to the Schedule Preferences configuration in ICBM.
Schedules	View	Allows access to view schedules in ICBM. This includes weekly schedules and schedule bids.
	Modify	Allows access to modify schedules in ICBM. This includes weekly schedules and schedule bids.
	Create	Allows access to create schedules in ICBM. This includes weekly schedules and schedule bids.
	Delete	Allows access to delete schedules in ICBM. This includes weekly schedules and schedule bids.
Scheduling Unit Configuration	View	Allows access to view scheduling units.
	Modify	Allows access to modify scheduling units. See Security Rights for rights to create or delete scheduling units.
Shift Rotations	View	Allows access to view shift rotations.
	Modify	Allows access to modify shift rotations.
	Create	Allows access to create shift rotations.
	Delete	Allows access to delete shift rotations.
Shifts	View	Allows access to view shifts in ICBM.
	Modify	Allows access to modify shifts in ICBM.
	Create	Allows access to create shifts in ICBM.
	Delete	Allows access to delete shifts in ICBM.
Time off requests	View	Allows access to view time-off requests.
	Modify	Allows access to modify time-off requests.
	Delete	Allows access to delete time-off requests.

	Create	Allows access to create time-off requests.

Interaction Process Automation Category		
Group	Name	Description
Processes	View	Determines what processes in Process Monitor and the CIC clients can be searched for and viewed.
	Manage	Determines which processes can be searched, canceled, and retried in Process Monitor.
	Launch	Determines which processes can be launched from the CIC clients. Note: A process must be published before it can be launched.

People Category		
Group	Name	Description
Account Codes	View	Determines which account codes the user can view in the CIC client dialog boxes. To assign account codes to incoming and outgoing calls the Account Code Verification security right must be assigned in addition to this access control right.
Client Buttons	View	Determines which custom buttons can be used on the Queue Control toolbar in the CIC clients.
Directory Status Columns	View	Determines which status columns the user can add to a directory view. These status columns include: Activated, Forward Number, Logged In, Notes, On Phone, Status, Status Summary, Time in Status, and Until.
Queue Columns	View	Determines which queue columns the user can view in user, station, orbit, or workgroup queues. For more information, see Who can see and listen to recordings .
	Substitute	Determines which interaction attributes the user can use in a response macro. For more information, see the help for the CIC clients.
Skills	View	Determines which skills the user can use design processes that transfer interactions to workgroups. For more information, see the Interaction Process Automation help.
Workgroups	View	Determines how the user can work with workgroups in the CIC clients.
	Statistics	CIC clients: View workgroups in the Workgroup Statistics view. Interaction Supervisor: View and select workgroup statistics.

Queues Category(see note)		
Group	Name	Description
Line Queues	Modify	Allows pickup, transfer, and disconnect of call interactions on a line queue.(see note)
	Monitor	Allows coach, join, listen, and record of call interactions on a line queue.(see note)
	View	Determines which line queues can be viewed.
Station Queues	Modify	Allows disconnect, hold, mute, Pickup, or transfer of call interactions on a station queue. (see note)
	Monitor	Allows coach, join, listen, or record of call interactions on a station queue.(see note)
	View	Determines which station queues can be viewed.
	Search	Determines which station queues can be transfer targets in the Transfer dialog box.
User Queues	Modify	Allows disconnect, hold, mute, pickup, or transfer of interactions on a user queue.(see note)
	Monitor	Allows coach, join, listen, or record of interactions in a user queue.(see note)
	View	Determines which user queues can be viewed. See also Configure the visibility of user data in reports
	Statistics	Determines which user queues' statistics can be viewed.
Workgroup Queues	Modify	Allows disconnect, hold, mute, pickup, or transfer of interactions on a workgroup queue.(see note)
	Monitor	Allows coach, join, listen, or record of interactions on a workgroup queue.(see note)
	View	Determines which workgroup queues can be viewed. Note: The View Workgroup Queue rights filter which workgroups are exposed to a user when the user is using the Telephone User Interface (TUI) to send or forward voice mail and email messages.
	Search	Determines which workgroup queues can be transfer targets in the Transfer dialog box.

Note: The **Advanced Access Details** button is enabled when you select a line, station, user, or workgroup queue. Click this button to select or de-select a subset of queue rights or individual rights.

Example 1: For a person, you can select the ability to preview interactions.

Example 2: For a queue, you can give a user the ability to snip other users' interactions. For more information on snipping interactions, see the *Interaction Recorder and Interaction Quality Manager Technical Reference* in the PureConnect Documentation Library and [Recording Generation](#).

Server Category		
Group	Name	Description
Station Groups	View	Determines which station groups can be viewed.
	Search	Determines which station groups can be transfer targets in the Transfer dialog box.

Station Logon Category		
Group	Name	Description
Stations	Login	Determines which stations can be logged in.

System Category		
Group	Name	Description
General Directories	View	Determines which general directories can viewed.
IC Data Sources	View	Determines which data sources the user can configure and reference in database actions in Interaction Process Automation.
Interaction Reporter Reports	View	Determines which Interaction Reporter reports can be generated.
Layouts	View	Determines which layouts the user can view.
Misc Items	View	Allows a user to log in on behalf of another user.
Phone Number - Classifications	View	Determines which phone number classifications can be accessed, such as blocked or long distance.
	Follow-me	Determines which phone number classifications can be used as follow-me numbers.
	Forward	Determines which phone number classifications can be used as forwarding numbers.
	TUI	Determines which phone number classifications can be used as forward numbers available through the menu when logged into voice mail. This access right prevents toll-fraud through the TUI.
Positions	View	Determines which floor plan images (positions) the user can use in Interaction Supervisor iPad Edition.
Plugins	View	Determines which plug-ins can be added.
Response Management	View	Allows access to chat features.
Status Messages	View	Determines which statuses can be selected from the My Status list or from the Set Status list when changing another user's status.
e-FAQ's	View	Determines which eFAQs and eFAQ controls agents can see.

User Category		
Group	Name	Description
Users	View History	Determines whose interactions can appear in the Interaction Tracker Related Items view in the CIC clients.
	Change Status	Determines which users' status can be changed..

3. Click **Close** to return to the **Security** page
4. Click **Apply** to save changes to the configuration.

Example

If an administrator user needs access control rights to view all general directories, do the following:

1. From the **Category** list, select **System**.
2. Under the **General Directories** access control, select the ***[All]** check box in the **View** column.
3. Click **Close**.

To assign the same rights to the default user, role, or workgroup, follow the same procedure.

Caution: It is strongly recommend not to select the *[All] check box for the default user, since it would give every user access control to these categories minimizing phone system security. This could also significantly impact system performance on sites with large numbers of users (that is, more than 1,000 users). It is further recommend to limit the number of users who have access control to *[All] user and station queues, as those items generate the most traffic in large implementations.

Related topics

[Administrator access](#)

[Assign security rights](#)

Overview of security rights

Security rights determine the functionality a user can work with in the CIC clients. For example, whether the buttons for recording, listening, and coaching appear.

You cannot remove security rights that a user, workgroup, or role has inherited. You must remove rights at the level where they are set. See *Configuration property inheritance* for more information.

Related topics

[Overview of security for people](#)

[Assign Security rights](#)

[Configuration property inheritance](#)



Assign security rights

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To assign security rights

1. In the **Security** page, click **Security Rights** to display the **Security Rights** dialog box. There are two categories of security rights; **Application** and **User**. The categories are further divided into groups of related rights. By default, <All> categories is selected to display security rights in both categories. You can optionally locate rights by typing information in **Search**.
2. Select the rights to assign. The following tables show the available security rights groups, the rights, and the associated descriptions, by category:

Application Category		
Group	Name	Description
Alerting Rights	Email Alerts	This security right allows the user to add email alerts that are automatically triggered when an Interaction Supervisor statistic is within a given range.
	Handler Alerts	This security right allows the user to add handlers that are automatically triggered when an Interaction Supervisor statistic is within a given range.
	Memo Alerts	This security right allows the user to add memo alerts that are automatically triggered when an Interaction Supervisor statistic is within a given range.
Attendant	Allow the User to Create Email Profiles	Allows users to create profiles used to process email interactions. This security right gives users the modify access right to email profiles they create.
	Allow the User to Create Inbound Profiles	Allows users to create profiles used to process incoming interactions. This security right gives users the modify access right to inbound profiles they create.

	Allow the User to Create Operator Profiles	Allows users to create profiles used to process incoming interactions to the operator. This security right gives users the modify access right to operator profiles they create.
	Allow the User to Create Outbound Profiles	Allows users to create profiles used to process transferred interactions. This security right gives users the modify access right to outbound profiles they create.
Interaction Conference Policy	Create and Modify All Conferences	Allows users to create conferences and to modify <i>all</i> conferences regardless of creator.
	Create and Modify Conferences	Allows users to create conferences, but to modify only those conferences they created.
Interaction Process Automation	Publish	Allows the user to publish from the Interaction Process Automation designer in the IC Server Manager application.
Interaction Dialer	Ligon Campaign	Allows the Interaction Scripter user, at login time, to select campaigns to participate in. Agents who not have this right are logged into all campaigns automatically. See the <i>Interaction Scripter Client User Guide</i> .
	Manually Transition to a Campaign Group	When using the Advanced Campaign Management feature and monitoring a campaign in the Dialer Campaign Sequence Details view in IC Business Manager, this right allows a user to be able to manually transition from the currently active campaign group to any campaign group in the sequence. Without this right, users can only monitor campaign transitions.
	Modify Configuration General	View and modify two specific settings on the General tab of the Global Configuration Settings dialog box in Interaction Dialer Manager. The settings are: • Delay in seconds before auto-dispositioning a disconnect interaction • Pause a campaign when the database query failure rate exceeds
	Modify Preview Call Behavior	Modify specific preview call settings on the General tab of the Global Configuration Settings dialog box in Interaction Dialer Manager. The settings are: • If a Preview call fails to connect, play this file to the agent • If a Preview call encounters a busy signal, play this file to the agent
	Run Contact List Predefined Actions	This right allows the user to perform the Predefined Actions from the Data Query section of a Contact List. The actions are: • Bulk Edit • Delete • Make Callable • Make Uncallable • Reset Attempts • Schedule Calls The View/Modify Contact List Data Query right is required to use the Run Contact List Predefined Actions right.
	View Configuration General	View, but not modify, two specific settings on the General tab of the Global Configuration Settings dialog box in Interaction Dialer Manager. The settings are: • Delay in seconds before auto-dispositioning a disconnect interaction • Pause a campaign when the database query failure rate exceeds
	View Preview Call Behavior	View specific preview call settings on the General tab of the Global Configuration Settings dialog box in Interaction Dialer Manager. The settings are: • If a Preview call fails to connect, play this file to the agent • If a Preview call encounters a busy signal, play this file to the agent

	View/Modify Contact List Data Query	Determines whether or not the Data Query tab of a Contact List object is visible or not. The Data Query tab queries the contact list to display a list of results in a data grid. Query results can be saved as filters. Users may also apply actions to records displayed in the grid, and commit changes back to the database.
Interaction Dialer - Campaigns	Create/Modify Dialer Campaign Group	When using the Advanced Campaign Management feature, this right allows a user to be able to create new and modify existing campaign groups on the Campaign Sequence tab in the Campaigns view. Without this right, users can only view existing campaign groups.
	Modify Campaign Group Sequence	When using the Advanced Campaign Management feature, this right allows a user to be able to create new and modify existing campaign sequences on the Campaign Sequence tab in the Campaigns view. Without this right, users can only view existing campaign sequences.
	View/Modify Agentless Calling Type	Determines whether users can select Agentless dialing mode when setting the Calling mode for a Campaign.
	View/Modify Automatic Zone Mapping	Grants right to select the "Automatically map time zones and all child options" option for a Campaign object. Without this right, these options are unavailable.
	View/Modify Line Settings	Enables settings in the Dialer Line Information group box for a Campaign. Options in this frame configure Dialer to adhere strictly to CIC's Dial Plan, or to use one specific line group for campaign calls.
	View/Modify Maximum Lines	Maximum Lines per Campaign setting on the Basic Configuration tab of a Campaign is enabled or not.
	View/Modify Status	Enables the Campaign Execution Panel for a campaign entry. Users who have this right can control the running state of a campaign, whether it runs in accordance with a schedule, or in a manually operated state. Users can also recycle the contact list, recycle the campaign, and test to ensure that campaign settings are valid. When not granted, these controls are unavailable.
Interaction Dialer - Global Dialer Settings	Modify Change Auditing	Grants right to modify Configuration Change Auditing settings under Global Dialer Settings. When enabled, auditing tracks configuration changes made.
	Modify HTTP Server	Grants right to modify HTTP Server settings under Global Dialer Settings. These settings are used to stream data in and out of a contact list table.
	Modify Outbound Dialer Servers	Grants right to modify settings on the Outbound Dialer Servers tab under Global Dialer Settings. The user can designate an ODS server to send notifications and e-mails when errors or outages occur, and can set threshold values for individual ODS servers, including Maximum Calls and Maximum Call Rate.
	Modify Phone Number Types	Grants right to modify Phone Number Types under Global Dialer Settings. Types are user-defined strings that can be associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell".
	View Change Auditing	Grants right to view Configuration Change Auditing settings under Global Dialer Settings. These settings are disabled if the user does not have this right. The Configuration Change Auditing feature tracks configuration changes made using Dialer Manager, or an API such as IceLib.Configuration.Dialer.
	View HTTP Server	Grants right to view HTTP Server settings under Global Dialer Settings. These settings are used to stream data in and out of a contact list table. Options on the HTTP Server tab are disabled when this right is not granted.
	View Outbound Dialer Servers	Grants right to view the Outbound Dialer Servers tab under Global Dialer Settings. The user can see which ODS server has been selected to send notifications and e-mails when errors or outages occur. When this right is not granted, options on the tab are disabled
	View Phone Number Types	Grants right to view the Phone Number Types tab under Global Dialer Settings. Types are user-defined strings that can be associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". When this right is not granted, options on the tab are disabled.
	View/Modify Data Connections	Grants right to view and modify Database Connections in Dialer Manager. When this right is not granted, Database Connection options are disabled.

	View/Modify DNC Sources	Grants right to view and modify the DNC Sources view in Dialer Manger. A DNC Source provides a list of telephone numbers that should not be dialed. When this right is not granted, DNC options are disabled
	View/Modify Time Zone Map Data	Grants right to view and modify the Timezone Map Data view in Dialer Manger. A time zone map is a file that associates the initial digits of a phone number (area code and exchange in North America, for example) with a time zone. When this right is not granted, options on the view are disabled.
Interaction Dialer - Policy/Rule Sets	Lock Policy Sets	Determines whether or not a user can check the "Locked" check box option for a Dialer policy object, preventing it from being modified, removed, or unlocked by anyone who does not have Master Administrator rights. Once a policy is locked, users who are not Master Administrators can view the policy, but they cannot remove or edit it until a Master Administrator removes the lock. Locked policies can be assigned to a campaign, but they cannot be removed from a campaign without Master Administrator rights.
	View/Modify Custom Handler Actions	Grants right to run the Dialer_RuleActionEvent handler by setting up a Rule Action or Policy Behavior. A user who does not have this right cannot modify settings that configure a Run Handler rule action.
	View/Modify Event Log	Grants right to configure Rule Set Actions or Policy Set Behaviors that write an event log entry.
Interaction Optimizer	Agent can bid on schedules	Allows users to bid on preferred schedules in Interaction Desktop.
	Agent can see rank	Allows agents to view their ranking of potential schedules in order of most to least-desired. Agents can view the details about how the bid was ranked in the Bid Information section in Interaction Desktop. When enabled, agents can see the initial part of their rank string, such as "Your rank is 22 for this bid."
	Agent can see relative rank	Allows agents to view their ranking of potential schedules compared to other agents' rankings. Agents can view the details about how their bids were ranked compared to other agents' bids in the Bid Information section in Interaction Desktop. When enabled, agents can see the second part of their rank string, such as "Your rank is 22 out of 45 for this bid." vs. "Your rank is 22 for this bid."
	Agent can specify schedule preferences	Allows users to set schedule preferences in Interaction Desktop.
	Agent can submit time off	Allows users to submit requests for time off.
	Can create activity codes	Allows users to add activity codes.
	Can create day classifications	Allows users to add day classifications.
	Can create scheduling units	Allows users to create scheduling units.
	Can delete activity codes	Allows users to delete activity codes.
	Can delete day classifications	Allows users to delete day classifications.
	Can delete scheduling units	Allows users to delete scheduling units.
	Can create scheduling units	Allows users to create scheduling units.
	Can modify activity codes	Allows users to edit activity codes.

	Can modify activity type mapping	Allows users to edit activity type mappings.
	Can modify day classifications	Allows users to edit day classifications.
	Can view activity codes	Allows users to view activity codes.
	Can view activity type mapping	Allows users to view activity type mappings.
	Can view day classifications	Allows users to view day classifications.
Interaction Reporter	Interaction Report Administrator	Allows users to configure all features and functions in Interaction Reporter.
Recorder Policy	Create/Delete Questionnaire Directories	Create, modify, or delete Interaction Quality Manager Questionnaires directories and Questionnaire rankings.
	Interaction Recorder Policy Editor	Access the Interaction Recorder Policy Editor and configure and update Interaction Recorder Policies. The Interaction Recorder policies determine which interactions are recorded, and where the recordings are stored and archived. The Interaction Recorder policies also determine how long recordings are retained, and who can access, modify, and take actions for recordings within the system.
	Master Key Password Administrator	Create, change, or deactivate the Master Key Password that is used to protect the Master Key File and securely encrypt master key data. This security right requires the Master Key Password license (I3_FEATURE_RECORDER_MASTER_KEY_PASSWORD) to be included in the IC Server license. The Master Key Password function is available on the Interaction Recorder Key Generation page. Important Note: PureConnect Customer Care cannot recover encrypted recordings if a master key password is lost.
	Override Finished Scorecards	Make additional answer and scoring changes for Interaction Quality Manager Questionnaire Scorecards that have already been finished in the system. Note: Overriding a finished scorecard can affect reports.
Tracker Policy	Add Individuals	Allows users to add individuals in Interaction Tracker.
	Add Organizations	Allows users to add organizations in Interaction Tracker.
	Delete Individuals	Allows users to delete individuals in Interaction Tracker.
	Delete Organization	Allows users to delete organizations in Interaction Tracker.
	Have Private Contacts	Allows users to designate an Interaction Tracker contact as private and prevent other users from viewing or using information for this contact.
	Modify Individuals	Allows users to change or update individuals in Interaction Tracker.
	Modify Interactions	Allows users to change or update interactions in Interaction Tracker.
	Modify Organizations	Allows users to change or update organizations in Interaction Tracker.
	Related Interactions Page	Allows users to view the page that shows related interactions in Interaction Tracker.

Interaction Tracker Administrator	Gives users the rights to access all pages in Interaction Tracker.
View Other People's Private Interactions	Allows users to view other users' private interactions in the Related Items view and to have these interactions included in search results in the Find Interaction dialog box. Users can indicate that an interaction is "Private" to prevent other users from recording or listening to it.

User Category		
Group	Name	Description
Alerting Rights	Email Alerts	Allows users to add alerts to email type actions in Interaction Supervisor. Users must also have the Alert Programming user right to add any type of alert.
	Handler Alerts	Allows users to add alerts to handler type actions in Interaction Supervisor. Users must also have the Alert Programming user right to add any type of alert.
	Memo Alerts	Allows users to add alerts to memo type actions in Interaction Supervisor. Users must also have the Alert Programming user right to add any type of alert.
Client Rights (in CIC clients)	Account Code Verification	Allows users to assign account codes to incoming and outgoing interactions. See also the View Account Codes access control right.
	Can Create Speed Dials	Allows users to create speed dial views.
	Conference Calls	Allows users to create conference calls. See also the Conference Rooms access control right.
	Customize Client	Allows users to customize configuration settings in the CIC clients. It also allows users to add view, however, the ability to display certain views may require additional access control rights.
	Force User Logout	Allows a user to log off another user. From the Workgroup Details view or the Workgroup Directory view in IC Business Manager/Interaction Supervisor, a user with this security right can log off another user from all CIC applications except for Interaction Administrator, Interaction Recorder Screen Capture Client, and Interaction Recorder Policy Editor. For example, if a user left for the day and forgot to log off, a supervisor with this security right can log off another user to release the licenses the user was consuming.
	Manage Client Templates	Allows users to create and edit configuration templates in Interaction Desktop and IC Business Manager.
	Mini-Mode	Allows users to run the Mini-Mode add-on to Interaction Desktop. Mini-mode provides a compact view and basic control of your interactions.
	Monitor Columns	Allows users to add the Lstns column and Recs column to a queue view. The Lstns column shows a speaker icon when someone is listening to the conversation. The Recs column shows a red dot icon to indicate that the conversation is being recorded. For more information, see Who can see and listen to recordings .

	Multiple Calls	Determines whether or not users are alerted when a new call arrives in the queue when already on a call. This only occurs on calls into lines that are marked "Allow Deferred Answer." If users do not have this right, or are already on a call and do not have call coverage set to forward calls when busy, then they are not alerted to the new call and it rolls to voicemail. This setting does not actually prevent multiple calls from being on a queue at the same time. It merely controls whether users are alerted or not. This setting applies only to My Interactions, not to calls to a logged-in station or default workstation.
	Orbit Queue	This security right allows a user to park a call on an orbit queue. An orbit queue is a numbered queue that holds a call until another user picks it up.
	Persistent Connections	Allows users the option of keeping remote telephone connected until you log off. Allows users to select Allow Persistent Connection when using a dynamic remote client connection with Interaction Connect or Interaction Desktop.
	Personal Rules	Allows users to set up Personal Rules or create a Quick Call rule. These rules automatically perform specific actions when triggered by certain interactions
	Problem Reporter	Allows users to use the Report a Problem option from the File menu in Interaction Desktop. This option allows users to send an email message containing problem information to a specified email recipient.
	Receive Voice mail	If users have this right, callers are sent to voice mail when in a DND status (Gone Home, Out of the Office, or some other "not available" status) or when not answering phone. If users don't have this right, callers are returned to the Interaction Attendant main menu.
	Response Management	Allows users to use Response Management to incorporate a stored response such as a standard greeting or their company's support website address in e-mail messages, chats, callback requests, or text message.
	Status Notes	Allows users to create a Status Note when they set Status details for themselves or other users. Status Notes provide additional details about status, for example, the date an agent expects to return after vacation.
	User-defined Telephone Number on Remote Login	Allows users to enter a new Remote Number when logging in to Interaction Connect or Interaction Desktop.
	Workgroup Queue Statistics	This security right allows a user to use the Workgroup Statistics view in the CIC clients.
Handler Rights	Workgroups/Profiles Tab	Allows users to display the Workgroup and Profiles view. This view lists workgroups and Attendant Profiles by name.
	Debug	Allows users to debug handlers published to the CIC server. This applies only to users who have the Interaction Designer program and who are authorized to update production handlers or create new handlers on the CIC server. If this check box is not selected, users who attempt to debug handlers from Interaction Designer will see an appropriate error message.

	Manage	Allows users to add or remove handlers published to the CIC server. A handler's status can be managed by someone running the Interaction Designer program on a workstation and using the Manage Handlers command on the Tools menu. If this option is not selected, users who attempt to manage handlers from Interaction Designer will see an appropriate error message.
	Publish	Allows users to publish new or updated handlers on the CIC server. This applies only to users who have the Interaction Designer program and who are authorized to update production handlers or create new handlers on the CIC telephony server. If this check box is not selected, users who attempt to publish handlers from Interaction Designer will see an appropriate error message.
Interaction Command Rights - (Restricts which commands are visible in the CIC clients) Note: These rights control the buttons in the CIC clients.	Assistance	Displays the Assistance button.
	Coach	Displays the Coach button.
	Disconnect	Displays the Disconnect button.
	Hold	Displays the Hold button.
	Join	Displays the Join button.
	Listen	Displays the Listen button.
	Mute	Displays the Mute button.
	Park	Displays the Park button.
	Pause	Displays the Pause button.
	Pickup	Displays the Pickup button.
	Private	Displays the Private button.
	Record	Displays the Record button.
	Secure Input	Displays the Secure Input button.
	Secure Recording Pause	Displays the Secure Record button.
	Snip	Displays the Snip button. For more information, see the <i>Interaction Recorder and Interaction Quality Manager Technical Reference</i> in the PureConnect Documentation Library and Recording Generation .
	Transfer	Displays the Transfer button.
	Voicemail	Displays the Voicemail button.
My Interaction Rights	Coach Interactions	Allows users to coach interactions by adding themselves to other agents' interactions.
	Disconnect Interactions	Allows users to disconnect interactions using the CIC clients instead of hanging up the telephone.
	Initiate Secure Input Interactions	Allows users to initiate Secure Input to collect confidential information from a customer.
	Join Interactions	Allows users to join interactions, thus creating a conference call.
	Listen in on Interactions	Allows users to listen to calls. Both sides of a call can be heard.

	Mute Interactions	Allows users to disable the microphone on the telephone so that the other party or parties cannot hear what is being said during a call. It also enables users to reactivate the microphone.
	Park Interactions	Allows users to park calls on orbit. Note: Can only park calls appearing in My Interactions.
	Pause Interactions	Allows users to use the Pause button to control a recording session. The button can be clicked to pause the recording session. It can be clicked again to resume the recording session.
	Pickup Interactions	Allows users to pick up interactions.
	Private Interactions	Allows users to prevent other CIC client users from recording or listening to their conversation.
	Put Interactions on Hold	Allows users to place selected interactions on hold.
	Record Interactions	Allows users to record interactions. The recordings are stored in files.
	Request Assistance from Supervisors	Allows users to request assistance from supervisors.
	Secure Recording Pause Interactions	Allows users to Secure Pause a Recording to avoid recording sensitive information, such as Social Security numbers or credit card numbers, when recording interactions.
	Snip Interactions	Allows users to create snippet recordings of their own interactions. Note: If a user needs to create snippet recordings of another user's interactions, you must assign the appropriate access control rights. For more information, see Assign access control rights. For more information, see the <i>Interaction Recorder and Interaction Quality Manager Technical Reference</i> in the PureConnect Documentation Library and Recording Generation.
	Transfer Interactions	Allows users to transfer interactions.
	Transfer Interactions to Voicemail	Allows users to transfer calls to voicemail.
Remote Access Rights	Email Access via TUI	Allow users to participate in e-mail interactions through the Telephone User Interface (TUI).
	Fax Access via TUI	Allows users to participate in fax interactions through the Telephone User Interface (TUI).
	Mobile Office User	Allows users access to the Mobile Office feature.
	Outlook TUI User (Requires Mobile Office User)	Allows users access to Microsoft Outlook through the Telephone User Interface (TUI).
	Voicemail Access via TUI	Allows users to participate in voicemail interactions through the Telephone User Interface (TUI).
User Rights	Alert Programming	This right controls whether or not users can add, edit and remove alerts. When this right is assigned, context menus over statistic-based values in Supervisor provide the ability to add, edit and remove alerts. Without this right, users can only view alerts.

	Directory Administrator	Allows users to edit public directories that were created by other users.
	Follow Me	Allows users to call-forward multiple numbers, long distance numbers, and international numbers.
	Intercom Chat	Allows users to have intercom chats between other users on the same CIC server.
	IP Phone Provisioning Administrator	Allows users to provision IP phones in the Managed IP Phones container.
	Remote Control	Allows users to remotely run applications and utilities that are Notifier clients, for example, IC System Manager and Switchover Control Panel.
	Require Forced Authorization Code	Requires users logged into station phones to enter a code that authorizes toll number calls.
	TIFF Faxes	Allows users to use TIFF (Tag Image File Format) for faxes.
	Trace Configuration	Allows users to configure tracing using IC System Manager or IC Trace utility.
	Video	Reserved for future use.
	View Interaction Details	Allows users to use Interaction Details view in the Interaction Tracker category. This view allows Interaction Supervisor users to search for interactions and examine the details.
Widgets	Widgets Configuration Master	Allows users to create widget and configure every widget property in the Interaction Connect Widgets view.

3. Click **Close** to return to the Security page
4. Click **Apply** to save changes to the configuration.

Example

If a user needs security rights to join interactions creating conference calls, do the following:

1. Select "User" from the **Category** drop-down list.
2. Under the "Interaction Command" security rights, select the check box in the **Has Right** column for **Join** to display/enable the **Join** button in Interaction Connect and Interaction Desktop.
3. Under "My Interactions" security rights, select the check box in the **Has Right** column for **Join Interactions**.
4. Click **Close**.

To assign the same rights to the default user, role, or workgroup, follow the same procedure.

Related topics

[Administrator Access](#)

[Access Control](#)

[Overview of security](#)

[Configuration property inheritance](#)



ACD configuration

For [ACD](#) applications that use skills based call routing, you must configure each ACD agent with skills and attributes. Each skill associated with an agent is described in terms of that user's proficiency in that skill and his or her desire to use that skill. Agents can inherit skills defined from each Workgroup of which they are members. If an agent inherits skills assigned in the **Workgroup ACD** configuration page, you can override the proficiency and desire to use levels of the inherited skills on this **User ACD** configuration page.

In addition to skills, each agent has attributes that are used to help calculate the score of an agent when CIC is evaluating how to match a call with an agent or an agent with a call. The first attribute is the Cost of an agent and the other three attributes are customizable (and not used unless values are entered for each). Cost is a value that reflects an agent's expense to the company; the higher the cost value, the more it costs the company to use that agent. For example, a senior technical support agent has a higher cost (a larger number) than a junior technical support agent.

Handlers that define skills-based routing evaluate these skills and attributes, and their various weights, to route calls to the appropriate agent. Weights are assigned in the handler tool steps (for example, ACDProcessCall).

Tip: For complete information on ACD processing and how these settings are used in CIC, see the *CIC ACD Processing Technical Reference* in the PureConnect Documentation Library.

The options in the list box on the left include Utilization, Skills, Options, Options2, and Statistics. Depending which ACD category you choose, the options displayed in the page are different.

Click on the following options for specific configuration information:

- [Utilization](#)
- [Skills](#)
- [Options](#)
- [Options2](#)
- [Statistics](#)

Related topics

[Workgroup ACD](#)



Utilization

You can set these utilization options at the workgroup or user level (user settings override workgroup settings). Agents can handle multiple phone calls and other interactions simultaneously and in any combination. Using the ACD Utilization settings, you can configure how much of an agent's attention would be required for each of the interaction types as a percentage.

For example, if, as an administrator, you set the Chat category for an agent to 25%, it would mean that the agent could handle up to four chat events simultaneously. Indicating 100% for an event type would mean that the agent could handle only one such event at a time.

The percentages might vary from agent to agent based on their experience. Agents are available to the extent that the sum of the percentage utilization of all their current interactions is less than 100.

For example, if an agent is configured so that phone calls are set to 100 percent, chats to 25 percent, and email messages to 10 percent, then the agent could, at any given time, process one phone call, or four chats, or two chats and five email messages, or one chat and seven email messages, and so forth.

Note: Once an interaction enters a conference or enters an ACD queue as the consult portion of a consult transfer, utilization is no longer recognized. If an interaction is transferred to an ACD Queue, utilization is only recognized if the transfer is a blind transfer.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Interaction Type

The **Interaction Type** list displays the interaction types assigned to this workgroup or user, including Call, Callback, Chat, Email, Generic Object, Social Conversation, Social Direct Message, or Work Item.

% Utilization

The **% Utilization** list shows the percentage of an agent's attention required for each interaction type.

When you add an Interaction Type, the percent utilization you assign to that interaction appears in this list. By default, the **% Utilization** is 100%.

Tip: Set the percent utilization for Calls to **51% or more** when either or both of the following conditions apply:

- You have selected **Auto answer** for the agent.
- You have selected **Exempt held interactions** for the agent.

Under the above conditions and at less than 51% utilization, if an agent is on a call and another call comes in, the CIC client puts the first call on hold automatically and connects the incoming call.

Since calls on hold (held interactions) are exempt and do not count against the agent's percent utilization, the CIC client will continue putting active calls on hold automatically and connecting new calls to that agent.

Setting 51% or more utilization ensures that an agent handles only one call at a time. Setting it at 50% allows the CIC client to assign two calls simultaneously to the agent, one active and one on hold (achievable by some agents).

Note: Calls at 50% or less utilization with a maximum assigned of 1 will only allow 1 call.

Max. Assign.

The **Max. Assign.** list displays the maximum number of interactions allowed for this interaction type. By default, the value of **Max. Assign** is "1" for Call interaction type. The default value of **Max. Assign** for all other interaction types is "0".

Edit

Select an interaction type and click **Edit** to see the **Edit** dialog where you can change the percent utilization for a Call, Chat, Email, or other interaction type.



Skills

You can assign skills to each agent in addition to any **Inherited Skills** from the workgroup he or she belongs to. The agent's total skill set is the union of **Inherited Skills** plus the agent skills in this list. You can also override the agent's inherited skill's **Proficiency** and **Desire to use** levels.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Proficiency

Type a value of 1 - 100 to indicate the minimum proficiency of skill level that an agent must have in order to receive an ACD call that requires this skill. 100 represents the highest skill level required. You define the skill attributes, which include proficiency level, for an agent on the **ACD configuration** page. The default value is 1. By default, the weight for proficiency is equal to 1, so this value is included in the ACD skills calculation.

Desire to Use

Type a value from 1 - 100 to indicate the minimum desire to use level agents must have in order to receive an ACD call that requires this skill. 100 is the highest possible desire; the higher the number, the more often the user wants to use the skill. Remember, desire to use is different than knowledge or ability. An agent can have a high level of proficiency (ability), but very little desire to use that ability. The default value is 0.

Notes: A user inherits the desire setting for a skill from any workgroup(s) to which the user belongs. However, you can override this with a user-level proficiency setting.

By default, the weight for Desire to Use equals 0, so the value that you specify is evaluated only as a qualifier instead of as the specified Desire to Use range for the ACD interaction. The Desire to Use setting is considered for ACD skill calculations when ACD customization points (such as CustomACDInitiateProcessing) are used. The weight for Desire to Use must be set to a value greater than 0 in order for it to be considered in ACD skills calculations. For more information on skills-based routing using the ACD Specify Interaction Skill Tool, see the *ACD Processing Technical Reference* in the PureConnect Documentation Library on the CIC server or the white paper, ACD Processing: CIC's Automatic Communication Distribution in the documentation directory on the CIC server.

Related topics

[Utilization](#)

[Options](#)

[Options2](#)

[Statistics](#)



ACD Options

Use this page to set ACD options for the user.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Auto-Answer ACD Interactions

Select this check box if you want CIC to automatically connect ACD interactions to an agent's phone. When a interaction alerts on a user's queue, you can use the Alert tool in Interaction Designer to play a tone, a wave file, or both to inform the agent about the incoming interaction. These are called "whisper tones." This is useful if you are using auto-answer but want to warn an agent that another interaction is about to connect to his or her queue. If this box is selected, an agent must be at his or her station to be automatically connected to a interaction.

Clear this check box if you want to alert an agent and not automatically connect the interaction. When the agent's CIC client rings, he or she must manually click the Pickup button or pick up the handset to answer the interaction.

Note: In other CIC applications, the "whisper tones" feature is referred to as "Coach."

Cost

Type a positive number from 1 to 100 to define the cost attribute for this agent. The higher the cost number, the more expensive this agent appears to the ACD processing. If you want to consider employee cost when distributing ACD calls, assign a cost to each ACD agent according to their relative expense in the company or group. Then make analogous changes in the ACDProcessCall tool to increase the weight for Cost. The default value is 0.

Agent Greeting

Select the **Enable** check box to activate the agent's greeting ("smile") prompt played for callers at the beginning of every ACD call to this agent. To select a prompt (.wav) file, click the **Browse** button, navigate to the directory containing the recording, and select a .wav file (for example, \\ICServer\IC\Resources\AgentGreeting_MarkM.wav). See [Queue Announcements](#) for more information.

Tip: For more information on ACD processing, see *the white paper ACD Processing: CIC's Automatic Communication Distribution* and the *ACD Processing Technical Reference* in the PureConnect Documentation Library.



Options2

Use this page to set additional ACD options for the user.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Attribute1

Any unique agent attribute that can be used to qualify an agent to receive a call. Leave this field blank if the ACD handlers do not use it. Otherwise enter any whole number.

Attribute2

Any unique agent attribute that can be used to qualify an agent to receive a call. Leave this field blank if the ACD handlers do not use it. Otherwise enter any whole number.

Attribute3

Any unique agent attribute that can be used to qualify an agent to receive a call. Leave this field blank if the ACD handlers do not use it. Otherwise enter any whole number.

Whisper Tone Level

Move the slider bar to adjust the 'whisper' tone the agent hears when there is an ACD call to the workgroup. Adjusting the slider bar to the right results in a whisper tone at a higher volume level.



ACD Statistics

You can set ACD statistic shift start options for a user or for a workgroup.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Call Statistics

The Call Statistics fields appear only in the workgroup configuration since these fields affect only call statistics for Workgroup (that is, ACD) queues that belong to an ACD Workgroup.

Statistics Period

This is the number of minutes used to define the "current period" and the "previous period" statistics on the Queues page in Interaction Supervisor. The statistics period includes every X number of minutes from midnight to the current time, where X is the number in the field. The default time is 30 minutes, which means the "current period" and "previous period" changes on every half-hour boundary.

Estimated Call Time Interval

The ACD Statistics (Call or Queue) tools in a handler that provides callers with estimated wait time feedback, uses this number of minutes in its wait time calculation. This is a rolling interval, which means the interval is the number of minutes prior to each use of the estimated wait time function as it is invoked on the CIC server. The ACD Statistics tools calculate the estimated wait time for a caller in a queue by taking the average time all callers waited in the queue during the current interval (for example, the previous 30 minutes from the time the ACD Statistics tool in a handler was invoked). The default setting for the interval is 30 minutes.

Statistic Shift Starts

This list of times determines the beginning time and duration of each shift for this user or the members of the current workgroup. These times are used to define (relative to the current time) the "current shift" and the "previous shift" on the Queues page in Interaction Supervisor. The default statistic shift is a 24 hour shift starting at midnight (0:00), meaning the statistics are relative to one day (or 24 hours).

Use the **Add** and **Delete** buttons to add or remove shift times. To change a shift time, first delete it and then add a new time to replace it.



Default User

When you configure the Default User, you set global options that have an impact on all other CIC users.

Click the following links for specific configuration information:

- [About inheritance of configuration properties](#)
- [ACD Options](#)
- [Options](#)
- [Security](#)
- [Access Control](#)
- [Admin Access](#)



Default User - ACD Options

Use this page to configure default ACD Options for users.

Whisper Tone Level

Move the slider bar to adjust the 'whisper' tone the agent hears when there is an ACD call to the workgroup. Adjusting the slider bar to the right results in a whisper tone at a higher volume level.

Apply to All Users

Click this button to apply the whisper tone level to all new and existing users.



Default User Options

Incoming Faxes

Select the format from the drop-down list, of faxes received in Interaction Connect. The options are <None> (default), PDF or PNG.

Non-ACD Alerting Actions

You can specify different kinds of application actions for ACD calls and non-ACD calls. To configure actions for ACD calls, see the [ACD Actions](#) page. For applications to respond to non-ACD calls, specify the following actions.

Alerting Action

Select an action to start each time a non-ACD call enters an alerting state (for example, the station rings) in a user or workgroup queue. Actions in this list are defined in the [Actions](#) container. For the complete procedure, click [here](#).

Disconnected Action

Select an action to start each time a call moves from the Connected state to a Disconnected state. Actions in this list are defined in the Actions container in the Interaction Administrator hierarchy.

Parked Interactions

Use this section to set the maximum time that a parked **call**, **chat**, **email**, or **generic object** will wait on silent hold, and to specify the extension that interaction will be transferred to when the time has elapsed.

Timeout (minutes)

Set the maximum time in minutes here that a parked call should wait before transfer to the specified extension.

Extension

Set the destination extension here for a parked call that has reached its timeout.

Tracing...

Tracing allows users to set trace levels for various IceLib (Interaction Center Extension Library) -based client applications through Interaction Administrator. Click Tracing... to display the [Tracing Configuration](#) page.



Overview of security for people

You can configure security for the default user, for roles, for a user, or for a workgroup.

Because users inherit one or more properties from the default user, roles and workgroup, the Security page is available from each of these containers. See *Configuration Property Inheritance* for an explanation of how these properties are related in each container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes related to user security are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

For more information on the types of security available for people, see the links under *Related topics*.

Related topics

[Overview of the master administrator rights](#)

[Overview of administrator access rights](#)

[Overview of access control rights](#)

[Overview of security rights](#)

[Configuration property inheritance](#)



Workgroup Configuration

If this is a functional workgroup that can take calls (for example, an ACD queue), type an extension number and fill in the appropriate fields and check boxes. Logical workgroups may exist for organizational and administrative purposes, and do not require an extension or other configuration.

Workgroups can serve as distribution lists within CIC for voice mail, email, and faxes. When creating a workgroup to serve as a distribution list, do not assign an extension or define a mailbox user (other fields are ignored).

Extension

Type a unique extension number associated with this workgroup. The extension number can be used as an option for callers to dial in response to an auto-attendant prompt (controlled in SystemIVRCustomizations). If the workgroup does not take calls (that is, it does not have a queue), no extension is necessary.

To create a workgroup that serves as a distribution list, leave this field blank. Also, if no extension is entered, faxes are delivered to the default user mailbox instead of the workgroup mailbox.

Notes: See **Fax Options** in *Interaction Attendant help* for more information about delivering faxes to the default mailbox, a user's mailbox or a workgroup mailbox.

If the **Enable Regional Dialing** option is selected in **Regionalization - Location**, and a change to a station group extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Mailbox User

If you are using unified messaging (such as Microsoft Exchange or IMAP 4 email client), select an email account to receive

voicemail, faxes, and email sent to this workgroup. The  button displays the **Mailboxes** page that lets you specify the mailbox for

this user. If this workgroup does not have or require a mail account, leave the field blank.

To create a workgroup that serves as a distribution list, leave this field blank. The program uses the mailboxes of the individual Workgroup members to create a semicolon-separated distribution list. Users who do not have a mailbox configured won't get the message, despite their workgroup membership. Workgroup Distribution List Behavior can be set to define the behavior of a distribution list.



Note: If you use Interaction Message Store to store and track user voicemail messages and faxes, when you click , the Mailbox Selection page is displayed. Select **Interaction Message Store**, then choose the user you want to receive the voicemail messages for this workgroup. User names and addresses must contain only valid (alpha-numerical) characters.

Preferred Language

Select the preferred language for the prompts that are played to customers who call the workgroup. For example, this is the language of the voice mail prompts. The default setting is <System Default>.

Workgroup has Queue

When an incoming call is for members of a workgroup that has a queue, you can use this option to specify how the system should alert members to the new call. When this option is selected, all email interactions for the workgroup are routed the same as call interactions.

Option categories	Description
Custom	This is the default setting. The alert behavior is set in the CustomIVRWorkgroupQueue subroutine. For more information about CustomIVRWorkgroupQueue, see the Interaction Designer Help.
Group	Simultaneously alerts the members of a Workgroup that a call is available in the queue for that Workgroup. Selecting Group Ring disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available). The length of the Group Ring is determined by the Workgroup Offering Call Timeout setting. Note: There can be a maximum of 20 members (stations or users) in a workgroup that uses group ring.
Sequential	Alerts individual members of a Workgroup that a new call is available in the queue for that Workgroup. Members are alerted to the call in the order specified in Workgroup Configuration properties>Members page >under Currently Selected Users. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Sequential disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).The length of the Sequential Ring is determined by the Workgroup Offering Call Timeout setting.
Round Robin	Similar to linear hunt groups, CIC's Round Robin remembers the last user who was sent a call. Round Robin works in a loop, repeating the process down the through list, and then the process starts over with the next call. For example, a workgroup has three users (User1 - User3), all available for workgroup calls and are listed User1, User2, User3, in that order . If User1 received the last call but is available, the next alerting call will go to User2 if available. If User2 is not available, the call will go to User3. The next alerting call after that will go back to User1 if that user is available. If you select the Maintain Order option (in Workgroup Configuration properties --> Members --> Currently Selected Users), members are alerted to the call in the order specified in the list. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Round Robin disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).
ACD	Sets a call for Automatic Communication Distribution (ACD) processing. Automatic recording of interactions is off by default for Workgroups configured as ACD.

Clear this check box if this is a logical Workgroup that does not receive calls but is designed for organizational or administrative purposes. Clearing this check box will also disable the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).

Active

Select this check box to activate the Workgroup queue to receive calls and to activate the Workgroup members to inherit skills and other attributes assigned to the Workgroup. Clear this check box to deactivate the Workgroup queue so it does not receive calls. This also prevents Workgroup members from inheriting the skills and other attributes assigned to this Workgroup. This does not control the presence of Workgroup queues in the CIC clients. See [Queue Activation](#) for more information.

Record All Calls, Emails, Chats, and Instant Questions in this Workgroup

Select this check box for the CIC system to record all these interactions for this workgroup.

Notes: The workgroup administrator receives a voice mail of all recorded interactions. Each recording includes the secure audio recording of whatever the user said in the IVR. The DTMF tones are replaced with static values, but the caller's words can be heard.

Do not select this check box if you use Interaction Recorder.

Important: CIC saves a copy of each recording on the Media Server. CIC does not delete these recordings. To ensure that your Media Server does not run out of space, use a content management system, such as Recorder or a third-party utility, to delete the recordings or to archive them to a long-term storage location.

Workgroup Spans Sites

When this option is selected, user information about the members of this workgroup is displayed at all sites monitoring the workgroup. The information about the workgroup's members is propagated to all sites.

Recording Beep Tones

Recording beep tones are tones played to parties during a recorded conversation. See [Recording Beep Tones](#).

Select the **Use this tone when recording** check box to enable recording beep tones for this workgroup. Use the default beep tone or select another already [configured beep tone](#) from the drop-down menu.

You have the option to play the tone to only external parties and not the internal parties, otherwise the tone is played to both (default) internal and external parties.

You can the beep tones included in the recordings by selecting Save beep tones in recordings, but by default the tones are not recorded.

Related topics

[Configure Service Levels](#)

[Workgroup Distribution List Behavior](#)



Overview of roles

A role is a way to define a special group of people that require specific CIC client rights or Interaction Administrator access. Users and members of workgroups can be assigned to a role.

Users and members of a workgroup that is assigned to a role inherit the user rights and administrative access controls that are configured for the role. Users and workgroups can be assigned multiple roles.

Default roles

The following roles are created during installation:

- Administrator
- Agent
- Billable-Time User
- Business User
- Mobile Office
- Operator
- Supervisor

These roles have default rights, access, and dialing privileges. You can change the permissions for these roles in the **Roles** subcontainer.

Note: There are no values set for the default user created during setup. If a role is not defined for a user, the default Business User role is added to the user's configuration. Administrator Role is added to the administrator's user configuration.

Related topics

[About inheritance of configuration properties](#)

[Client Configuration Introduction](#)

[Roles](#)

[Roles configuration](#)



Add a role

To add a role

1. In the **People** container, click the **Users** subcontainer.
2. In the list view, right-click and then click **New**.
3. In the **Entry Name** box, type the role name and click **OK**. For more information, see *Role name*.
4. In the **Role Configuration** dialog box, complete the tabs. See the links under *Related topics* for complete information.
5. Click **OK**.

Related topics

[Role name](#)

[Configuration](#)

[Client Configuration](#)

[Security](#)

[Password Policies](#)

[Custom Attributes](#)

[History](#)



Configuration

Use this tab to assign users and workgroups to the role you are creating.

1. To add a user to this role, in the **Users** list, click **Add User**.
2. To delete a user from this role, select the user and click **Delete**. You can select multiple users at a time.
3. To add a workgroup to this role, in the **Workgroup** list, click **Add Workgroup**.
4. To delete a workgroup from this role, select the workgroup and click **Delete**. You can select multiple workgroups at a time.

Note: Workgroup membership is not inherited by a user assigned to a role. Adding a workgroup to a role, and then assigning the role to a user, does not mean the user automatically is assigned to the workgroup.

Related topics

[Overview of roles](#)



CIC Client Configuration

Use this tab to select the template for the role.

1. From the **Client Configuration** list, select the template to assign.

Note: You can also configure templates at the user level. For more information, see [Configure a CIC client for a user](#).

Related topics

[Overview of roles](#)

[Configure a CIC client for a user](#)



Overview of security for people

You can configure security for the default user, for roles, for a user, or for a workgroup.

Because users inherit one or more properties from the default user, roles and workgroup, the Security page is available from each of these containers. See *Configuration Property Inheritance* for an explanation of how these properties are related in each container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes related to user security are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

For more information on the types of security available for people, see the links under *Related topics*.

Related topics

[Overview of the master administrator rights](#)

[Overview of administrator access rights](#)

[Overview of access control rights](#)

[Overview of security rights](#)

[Configuration property inheritance](#)



Password Policies

These password policy options can be set at the user or role level. The default password policy has pre-selected settings and other rights. You can change these values in the [Password Policy](#) container. The settings displayed depend on whether you are configuring password policies for user or role.

For more information about password policies, see the *Security Precautions Technical Reference* in the PureConnect Documentation Library on the CIC server.

For Users

Inherited

A password policy is a set of rights. When a password policy is added to a role, the user assigned that role, automatically takes on those rights. The inherited password policies are displayed in this list.

Owned

To assign a password policy to a user, in the **Owned** list click **Add**.

To delete a policy that is assigned in the **Owned** list, select the password policy and click **Delete**. You can select multiple policies to delete.

For Roles

A password policy is a set of rights. When a password policy is added to a role, users assigned that role take on those rights.

The **Available Password Policies** list shows the policies available to assign to the role. Select an available policy and click the **Add** button to assign the policy to this role. It appears in the **Currently Selected Password Policies** list.

To remove a policy from a role, click the **Remove** button. You can select multiple policies to add or remove.

Related Topics

[Creating Policies](#)

[Password Policies](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Users overview

In CIC, a user is someone who has a valid domain user name and an associated mailbox user profile on the network mail server (for example, Exchange Server or Notes server). Each user must have a name that is registered as a valid network account and email user account before the user can receive calls on the CIC system.

In the CIC system users have their own extensions separate from physical station devices. Users may have their own call routing preference separate from phone devices, as well. This allows users to log in to the system from any station or remote location.

Note: The above information does not apply to Interaction Message Store users. Interaction Message Store uses mailboxes that are kept on the CIC server, so network mailboxes are not required.

Related topics

[About inheritance of configuration properties](#)

[Add users overview](#)

[Configure a user](#)



Overview of how to add users

There are several ways that you can add users. You can use:

- The **Add Users Assistant** to be guided through the process of adding multiple user records.
- The **User Worksheet** to quickly add multiple user records with only the most frequently needed attributes.
- The **User Configuration** dialog box to add a single user record.

Related topics

[Add users with the Add Users Assistant](#)

[Add users with the User Worksheet](#)

[Add a user with the User Configuration dialog box](#)



User name

Interaction Administrator displays a list of valid domain user names associated with each mailbox user profile on the network mail server (for example, Exchange Server or Notes server). Default CIC user names are identical to each network account that has an email user profile.



To specify a user name, you can type a name in the box, or to retrieve a list of existing users for a domain, click the .

You can type a user name not found in the list of email users, but that name must be registered as a valid network account and email user account before the user can receive calls on the CIC system. This name must contain only valid (alpha-numerical) characters.

Notes:

Do not use these characters: \ / : * < > |

If you copy an existing user and paste to create a new user, any workgroups the original user is a member of are not copied to the new user. The problems with users inheriting rights and memberships are too complicated and require the administrator to deliberately assign workgroup membership to users created this way.

You can choose Interaction Message Store (formerly Voicemail Only or FBMC) to store and track user voice mails and faxes. If you chose Interaction Message Store as your voice mail option, it was installed and configured during Interaction Center installation.

Do not exceed 64 characters.

Related topics

[Add a user](#)



Add users with the Add Users Assistant

The **Add Users Assistant** wizard guides you through the creation of multiple CIC user accounts. You can import users from the following sources:

- Mail server distribution lists
- Windows
- A CSV user list

You can use the **Add Users Assistant** to assign the extensions and passwords to the CIC user accounts that you import from mail servers or from Windows. Alternatively, you can assign the extensions and passwords in the **User Worksheet**, which is launched when you complete the **Add Users Assistant**.

Notes:

In order to use the Add Users Assistant, you must have sufficient rights to create new users, roles, and workgroups. Specifically, you must have either the Master Administrator right, or you must have all of the security rights to add, edit, and delete users, workgroups, and roles.

If you enabled the Enhanced Interaction Administrator Change log, then the addition of users is tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To add users with the Add Users Assistant

1. Under **People**, click the **Users** Container.
2. Right-click in the right pane.
3. Select **User Assistant and Worksheet...**
4. On the first page, select **Search for new users**.
5. Complete the pages in the wizard.
6. Click the help button on each page for instructions on how to complete the fields.



Search Options

Use this page to determine how you want to locate existing users. The options are:

- [Discover users from a mail server](#)

Use this option to search for mail users.

- [Discover Windows users](#)

Use this option to select users from Windows

- [Import users from a CSV user list](#)

Use this option to import users from a comma-separated value user list.



Discover users from a mail server

Use this page to select how users will be imported for the mail provider's directory. The Add User Assistant searches all enabled mail providers with directory lookup enabled. The options are:

- **Search for all users**

Add User Assistant will import each user in the address list you pick. The members of the address list and their attributes (email address, address, etc.) serve as the source of information to be replicated into CIC user entries in IC Directory Services. Click **Next** to search for all users.

If no address lists are defined but you wish to use one, exit the Add User Assistant, define an address list on the email server, and start the Add User Assistant again.

You can make changes to these users in the User Worksheet after the Add User Assistant completes.

Note: If the Address List is very large (e.g., several thousand accounts), you will notice a significant delay (and potential failure) during installation.

- **Search only for users in a distribution list**

To further reduce a subset of users, use this option to select a distribution list within the address list. Click **Find** to get distribution lists.

A distribution list is typically much smaller than the address list; set up for the convenience of users when messages are frequently sent to the same group of individuals, for example, a department.

If no distribution lists are defined but you wish to use a subset list, quit the Add User Assistant, define a distribution list on the email server, and restart the Add User Assistant again.

You can make changes to these users in the User Worksheet after the Add User Assistant completes.



Discover users from Windows

Use this page to query for existing Windows users in your current domain. If not in a domain, these will be the users local to the machine. Click **Find** to begin the search.

The results are displayed showing **Windows Users**, **Display Name** and **Comments**. You may select one user or use the **CTRL** key to select multiple users to import. Click **Select All** to select all users for import. Click **Back** if this is not the correct list of users.

Search Results from Windows

Use this page to review the results of your Windows user search.

The results are displayed showing **Windows Users**, **Display Name** and **Comments**. You may select one user or use the **CTRL** key to select multiple users to import. Click **Select All** to select all users for import. Click **Back** if this is not the correct list of users.



Import users from a CSV list

Click **Browse...** to select the CSV User List that contains your CIC users and their attributes. If you receive the User CSV Import Errors dialog box, you should correct the errors shown in the CSV list and run the import again. You may continue without resolving any errors by selecting the **I want to continue on with these warning-only errors**. Click **Next** to continue.

In most cases you should have your CSV User List completed before you run the Add User Assistant.

Note: The CSV file must be in UTF-8 format. For more information, see [CSV files with non-English column headings](#)

Example

Click **Example** to view a sample CSV file.

A Microsoft Excel document (CSV User List.xls) and a sample CSV file (CSV User List.csv) are available on the CIC products disc in Additional Files...CSV Lists.

The User CSV file is formatted in two sections; a header section, and a data section. The header is the first row in the file and contains the names of all columns to import. Open a copy of CSV User List.xls in Excel, and enter the information in the appropriate columns for the users you wish to create. The following columns are supported:

User Name (Required): Type a unique user name. That name must be registered as a valid network account and e-mail user account before the user can receive calls on the CIC system.

First Name: Type the user's first name.

Last Name: Type the user's last name.

Display Name: Type the name to display on voicemails and faxes from this user. This information is also used for the Voice-Mail Only messaging account (if Interaction Message Store (Voice Mail Only) was chosen for this CIC server.)

Extension: Type the user's extension.

DID: Type the user's Direct Inward Dialing number. This is the number a caller would dial to call this user directly to bypass the autoattendant. Some users may not have a DID.

Password: If you type a user password here, it will be used. If you do not type a user password here, the assistant will automatically generate one that meets the default password policy requirements. You will have an opportunity at the end of the import to view those passwords, and to copy them to a document for distribution. *Caution:* Keep these passwords confidential by keeping track of the password report presented at the completion.

Network ID: Type the unique identifier for the user's computer workstation. Also include the name of the domain. For example: AcmeDomain\RogerDPC.

Mailbox: Type the e-mail address known by the mail provider. For example, use an "SMTP:" prefix for SMTP, like SMTP:ictwin@twin.local. Use a "GMAIL:" prefix for Gmail, like GMAIL:user@gmail.com.

If the mail provider is Interaction Message Store (Voicemail only), no mailbox is needed. Instead, type "FBMC" in this column. The assistant will automatically assign a Voice Mail address.

Roles: Type the role that users should be assigned. It must be one of the following roles:

- Administrator
- Agent
- Billable-Time User
- Business User
- Mobile Office
- Operator
- Supervisor

These roles each have certain associated dialing privileges, such as Long Distance calling and Emergency dialing. See "Default Roles" for more information. IC Setup Assistant automatically assigns the Operator Role to the default Company Operator.

Note: You can add additional roles. IC Setup Assistant will create the role in Directory Services, but no permissions will be assigned to that role. After installation, you can assign the permissions in the Interaction Administrator Roles container.

Workgroups: Type the names of the workgroups the user should belong to. After installation, you can further define the workgroups in the Interaction Administrator Workgroups container. IC Setup Assistant creates a default Company Operator workgroup. All users are automatically assigned to the Company Operator workgroup. You can modify this for each user later in Interaction Administrator.

Station Name: Type the user's station name. This should be a computer of the user running a CIC client. The assistant uses this information to assign the correct CIC station account (whose name must be identical.)

Example CSV:

Client1,Billy,Smith,Billy Smith,1002,7151002,1234,twinadmin,SMTP:ictwin@twin.local,Agent,MegaSales|MegaMarketing,Guest01,No

When your additions are complete, save the document as a .CSV file type and download it to a secure location on the CIC server. You can open the new .CSV file in any text editor.

For more information, including user attribute descriptions and instructions for importing the CSV User list in Add Users Assistant, see *CSV List Import Technical Reference* in the PureConnect Documentation Library.

Search Results from a CSV List

Use this page to review the results of your user import. The results are displayed showing **User ID**, **Display Name**, **Extension**, **Password** and **Network ID**.

Click **Next** to import all users in the list.



Mail Search Results

Use this page to review the results of your mail search. The results are displayed showing **User Name**, **Display Name**, **First Name** and **Last Name**. Depending on whether you discovered users from an address or distribution list, the **Directory searched**, and the **Distribution list** are displayed, along with the **Number found** of users.



Set extensions for CIC user accounts

Use this page to tell the Add User Assistant how station extensions should be assigned.

I want to skip the automatic assignment of user extensions.

If you select this option, any imported extensions are used.

Automatically assign each user's extension, starting with the specified value

Select this option if you want IC Setup Assistant to automatically generate an extension for each user. You will be able to view the user information once your changes are committed. Enter the **Starting Extension**. The extensions are incremented by 1.

You might choose this option if you are importing users from an email server, or if you have not entered user extensions in the CSV User List.

Note: If the [Enable Regional Dialing](#) option is selected in Regionalization - [Location](#), and a newly created user extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).



Set Passwords for CIC User Accounts

Use this page to tell the Add User Assistant how to create user passwords. Users will use this password to start the CIC clients and also to access the voice mail messaging menu over the telephone. CIC users can change their passwords over the telephone by accessing their personal options through the voice mail retrieval menu.

For more information about passwords, see the *PureConnect Security Precautions Technical Reference* in the PureConnect Documentation Library on the CIC server.

I want to skip the automatic assignment of user passwords

If you select this option, any imported passwords are used. Click **Next**.

Note:

If you select this option, the import process does **not** check that the user passwords in the User Worksheet comply with your [password policies](#).

Assign a single password for each new user account

Select this option to use the same password for every account. You should recommend that users change their password later by dialing into their voicemail retrieval. Enter the **Password** and click **Next**. The password you enter here must meet the [default password policy](#) requirements. If not, the **Add Users Assistant** displays an error message.

Notes:

If you select this option, the import process checks that the selected password complies with your [password policies](#). If the password is not compliant, an error message appears.

It is not advisable to use a simple value such as "1234" for the password for security reasons. It is recommended to use the [Set Password](#) feature in Interaction Administrator after completing the current tasks.

If you have master administrator rights, you can use the a command line executable to report on password usage within a CIC organization. Run the PWCheckU executable from a command prompt in the CIC server path using a user log in switch, for example, "C:\ pwchecku -login adminuser 07158609." For more information about this utility, see the Product Information site.



Preview Search Results

Use this page to preview search results of any users found from a mail server search or a Windows users search. If you chose to [set extensions](#) or [set passwords](#) you can view this information as well. Click **Next** to continue.



Preview Import Results

Use this page to preview import results of any users imported from a CSV list. If you chose to [set extensions](#) or [set passwords](#) you can view this information as well. Click **Next** to continue.



Completing the Add User Assistant

You have successfully completed the **Add User Assistant**. Click **Finish** to review the information in the User Worksheet before applying the changes. Click **Back** to return to the previous screen.



User Worksheet

Use this page to add users, modify user attributes or delete users. Make changes directly in the worksheet, or select the user attribute then use the shortcut icons below. When you are finished save your changes by selecting **Save and Close** from the **File**

menu, Ctrl+S, or click .

The User Worksheet automatically opens after you complete the Add Users Assistant. Alternatively, you can skip the Add Users Assistant and use the User Worksheet to quickly add new users. In the User Worksheet, you can add users and specify only the attributes that are most frequently used.



Starts the Add User Assistant if you want to run it again.



Opens the Mailbox Selection dialog box for the selected user.



Opens the Set Extensions dialog box to assign extensions (if you skipped this process before), or reassign extensions if you want to make changes. You can set extensions for one, all, or only selected users.



Opens the Set Passwords dialog box to assign passwords (if you skipped this process before), or reassign passwords if you want to make changes. You can set passwords for one, all, or only selected users.

Use the Tools menu to select [Manage Roles](#) or [Manage Workgroups](#).

The following user attributes can be modified:

User Name

Click on this field to add or modify the user name. This is the name that appears before the @ in an email address. Do not use these characters: \ / : * < > |

First Name

Click on this field to add or modify the user's first name.

Last Name

Click on this field to add or modify the user's last name.

Display Name

Click on this field to add or modify the user's display name. This is the name that displayed to users in the CIC clients.

Extension

Click on this field to add or modify the user's extension.

Note: If the [Enable Regional Dialing](#) option is selected in Regionalization - [Location](#), and a newly created user extension creates an extension conflict, an error message is displayed. The conflict must be resolved before saving the worksheet information.

DID

Click on this field to add or modify the user's DID number.

Password

Click on this field to add or modify the user's password.

Network ID

Click on this field to add or modify the user's network ID.

Mailbox

Use the  button to open the [Mailbox Selection](#) dialog box. Review mailbox attributes or make changes to the mailbox attributes for this user.

Roles

Use the  button to open the Roles selection box. To add roles to this user, select the role and click . The role appears in the Selected list. To remove a role from this user select the role and click . The role appears in the Available list. Multiple roles can be assigned to a user.

Workgroups

Use the  button to open the Workgroups selection box. To add workgroups to this user, select the workgroup and click . The workgroup appears in the Selected list. To remove a workgroup from this user select the workgroup and click . The workgroup appears in the Available list. Multiple workgroups can be assigned to a user.

Warning: The system creates a workgroup called "_SystemRoutingHub_" for the routing of calls. This workgroup exists for internal reasons only.

User Workstation

Use the  button to open the list of defined user workstations. Add or modify the workstation assigned to this user.

Station Name

Use the  button to open the list of defined stations. Add or modify the station assigned to this user.

Location

Use the  button to open the list of defined locations. Add or modify the location assigned to this user.



Add users with the User Worksheet

You can bypass the Add Users Assistant and add users directly in the User Worksheet.

Notes:

In order to use the User Worksheet, you must have sufficient rights to create new users, roles, and workgroups. Specifically, you must have either the Master Administrator right, or you must have all of the security rights to add, edit, and delete users, workgroups, and roles.

If you enabled the Enhanced Interaction Administrator Change log, then the addition of users is tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To add users with the User Worksheet

1. Under People, click the **Users Container**.
2. Right-click in the right pane.
3. Select **User Assistant and Worksheet...**
4. On the first page, select **Skip the search and add or modify user entries within the worksheet**.
5. Add the users and attributes directly in the worksheet.
6. To save your changes, from the **File** menu, click **Save and Close**.



Note: At any time you can click the button to run the **Add Users Assistant**.

The import process checks that any user passwords in the User Worksheet comply with your [password policies](#). If a password is not compliant, an error message appears.

Related topics

[User Worksheet](#)



Add a user

Note: If you enabled the Enhanced Interaction Administrator Change log, then the addition of the user is tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To add a user in the User Configuration dialog box

1. In the **People** container, click the **Users** subcontainer.
2. Right-click the **Users** subcontainer and then click **New**.
3. In the **Entry Name** box, type the user name and click **OK**.

Notes:

Do not use these characters: \ / : * < > |

If you copy an existing user and paste to create a new user, any workgroups the original user is a member of are not copied to the new user. The problems with users inheriting rights and memberships are too complicated and require the administrator to deliberately assign workgroup membership to users created this way.

You can choose Interaction Message Store (formerly Voicemail Only or FBMC) to store and track user voice mails and faxes. If you chose Interaction Message Store as your voice mail option, it was installed and configured during Interaction Center installation.

Do not exceed 50 characters.

4. In the **User Configuration** dialog box, complete the tabs. See the links under *Related topics* for complete information.
5. Click **OK**.

Related topics

[User Name](#)

[Configuration](#)

[Licensing](#)

[Personal Info](#)

[Workgroups](#)

[Roles](#)

[Password Policies](#)

[ACD](#) (automatic call distribution)

[MWI](#) (message waiting indicator)

Client configuration

[Phonetic Spellings](#)

[Options](#)

[Security](#)

[Custom Attributes](#)

[History](#)

Configure a user

To configure a user in the User Configuration dialog box

1. In the **People** container, click the **Users** subcontainer.
2. Double-click the user that you want to configure.
The **User Configuration** dialog box appears. Complete fields on the tabs. See the links under **Related topics** for complete information.
3. Click **OK**.

Related topics

[Configuration](#)

[Personal Info](#)

[Licensing](#)

[Workgroups](#)

[Roles](#)

[Password Policies](#)

[Security](#)

[ACD](#)

[MWI](#)

Client Configuration

[Phonetic Spellings](#)

[Options](#)



User Configuration

To define a CIC user account or change an existing user account, type or select the appropriate values in this page for the user.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Extension

Type a unique (logical) extension number associated with this user. When this user logs on to the network at any CIC client workstation, the CIC system detects that user's presence (by his or her extension) and routes calls to the workstation where the user logged on. If the user is logged on to more than one workstation at the same time, all connected workstations ring when a call is received for that user, regardless of the workstation's extension number.

Notes: Be sure the user extension numbers do not begin with a number that conflicts with a workgroup extension or other valid queue extension. Extension numbers can be from two to six digits but should avoid the following numbers (in North America): 1800, 1900, 1411, 1911.

If the **Enable Regional Dialing** option is selected in **Regionalization - Location**, and a change to a user extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Mailbox User

If you are using unified messaging (such as Microsoft Exchange or IMAP email client), select an email account to receive voicemail, faxes, and email sent to this user. If a user does not have an email account, he or she will not receive voice mail. The



button displays the Mailboxes page that lets you unambiguously specify the mailbox for this user. If this user does not have or require an email account, leave the field blank.

Notes: If you chose Interaction Message Store to store and track user voice mails and faxes, you cannot change the Mailbox User address on this page. When Interaction Message Store is enabled, the name displayed is from information on the Mailbox Info tabbed page. To change Mailbox User information for Interaction Message Store, click the Mailbox Info tab.

User names and addresses must contain only valid (alpha-numerical) characters.

Password

Type a password of any length or any characters (upper and lower case are significant); it is initially displayed as one or more "*" characters. The next time you open the User configuration, the Password and Confirm Password fields will display 16 '*' characters, regardless of the length of the password you entered, as an added security measure. Blank passwords are not allowed. A message appears if you do not enter a password, or if you enter a password that does not satisfy the requirements of the password policy. The default password policy requires that passwords have a minimum of 16 characters.

Keep in mind that remote callers may have to enter this password from a phone key pad. This password is required for some CIC operations, such as remote voicemail retrieval, remote CIC client connections, and Forced Authorization Codes. It is not required for local CIC client use.

Note: If you have master administrator rights, you can use the a command line executable to report on password usage within a CIC organization. Run the `PWCheckU` executable from a command prompt in the IC server path using a user log in switch, for example, "C:\`pwchecku` -login adminuser 07158609." For more information about this utility, see the Product Information site.

For more information about passwords, see the *Security Precautions Technical Reference* in the PureConnect Documentation Library.

Confirm Password

Retype the password exactly as you did in the **Password** box.

Preferred Language

Select the preferred [language](#) for the prompts for this user. The default setting is <System Default>.

Default Workstation

From the Default Workstation list, select the name of the workstation primarily associated with the user's account. This field will auto-complete the listing. For example, type in the letter "a" to display a listing of all stations that contain the letter "a".

For example, if **USER1** is the workstation name associated with User 1's account, then **USER1**, or its analog phone, rings on incoming calls even if User One is not logged on to the network unless:

- User 1 has selected a status other than **Available** (for example, **Do Not Disturb**).
- Someone other than User 1 is logged on to the workstation. Example, if User 1's default station is Station 1, do not route calls addressed to User 1 to Station 1, as long as another user is logged on to that station (whether Station 1 is the name of the PC or the name specified in the IC command line, it doesn't matter). Otherwise, it causes a security breach.

In either case, incoming calls for User 1 go directly to User 1's voice mail.

Notes: Do not configure as a user's default workstation any workstation intended for regular use by more than one person.

You cannot select a remote station name as the default workstation. Remote users must log on to IC to receive calls.

The workstation needs to have the **Ring Always** setting enabled to properly set the default workstation for the user.

IC Privacy Name

This field is used for creating an alias for agent names in chat and other displays.

NT Domain User

Type the domain qualified user log on name for this CIC user (for example, CorpDomain\SonyaM). Click the **Browse** button to browse domains and users, and to validate. CIC uses this field to automatically authenticate that the CIC user has a valid account in the network domain. With the appropriate value in this field, the CIC user logged in to the domain with this name can start any CIC application and CIC automatically authenticates this user as a form of security. This prevents non-IC users from starting a CIC application (such as a CIC client) and running it on the network.

If this field is blank, IC attempts to validate a CIC user from a cached list of valid CIC accounts created the first time each user logs on to IC. If IC cannot reconcile a CIC user account with a known Windows user account, the log on will fail, or an application may present an IC logon dialog to give the user an opportunity to enter valid IC and account names and passwords.

Outbound ANI

Enter the ANI/Caller ID for the system to send when this user makes an outbound call.

Notes: This option overrides the Outbound ANI setting in [Station Options](#).

This Outbound ANI option does not override a call placed with a specific Calling Party Number and Calling Party Name. Call Forwarding and Follow-me numbers placed as outbound calls use the Forwarded Parties ANI and Name where allowed.

Exclude From Directory

Select this check box to exclude the user from the company directory listing.

Location

Select the physical [location](#) for this user. By default, <Default Location> is used.

Time Zone

Select the time zone to associate with this user. The system uses this offset to make date and time announcements for messages such as voicemail and vacation until date status.

Use Location Time Zone

To automatically set the user's time zone based on the user's location, select this check box.

Home Site

Select the **Home Site** using the  button which allows the selection of site IDs as defined by the peer sites.

Current Site

This is the **Current Site** for this user, and is read-only.

Tip: To create a GIF image photo for this user to appear in a Chat Window during an IC Web Chat session, see the "Agent Photo" section in *Interaction Web Tools Developer's Guide* in the PureConnect Documentation Library.

Related topics

[Users overview](#)

[Configure a user](#)

[Enable Regional Dialing](#)

[Forced Authorization Codes](#)

[Peer site concepts](#)

[Status Messages](#)



Licensing

Use this page to assign licenses to the user.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

License Allocation Method

Click the type of license allocation to use for this user. By default, **Assignable** method is used.

The **Assignable** method provides a way to allocate licenses to users, workgroups and stations, with the exception of a Basic Station license. The Basic Station license can only be allocated to stations.

The **Concurrent** method provides a way to allocate licenses to users only and is based on the number of simultaneous users accessing a feature or function. This license method allows users to acquire available licenses during logon instead of based on configuration. With the concurrent license method, the license is not allocated until the user logs in to the application. CIC maintains a list of users, and licenses available and in use.

Client Access License

To allow the user to use the CIC clients, assign this license. Without this license assignment, the user cannot run the CIC clients.

ACD Access License

Select this check box if this user is an ACD user, then select the type of ACD license. These are the available types of ACD licenses:

- **Media 1:** This license allows 1 interaction type at a given time.
- **Media 2:** This license allows 2 interaction types at a given time.
- **Media 3 Plus:** This license allows 3 or more interaction types at a given time.

If **Media 1** or **Media 2** type of ACD licenses is selected, you can click **Interaction Types** and select the type of interaction from the list to apply to the license. **Interaction Types** is grayed-out and not available if **Media 3 Plus** is selected.

Notes: Failure to have a ACD Access License assigned to the user will prevent that user from being ACD active.

If the station (Station A) is assigned a Basic Station license and two different users (User A and User B) each have all other necessary rights (i.e., Client Access) assigned to them, then both users can simultaneously login to that station, (User A and User B can both be logged into Station A at the same time). If the second user to login does not have the necessary licenses assigned, then the second user login will fail.

ACD Social Media

Users with ACD Social Media enabled are eligible to receive routed social media interactions. For more information, see the *PureConnect Social Media Technical Reference*.

IPA License

Select the **IPA License** check box if this user is an Interaction Process Automation user, and then select the type of license to assign to that user.

These are the available types of Interaction Process Automation licenses:

- **Direct Routed Work Items** (I3_ACCESS_IPA_USER) license: Enables you to launch any process to which you have rights. It also enables you to receive Work Items that are directly routed to you.
- **Group Routed Work Items** (I3_ACCESS_IPA_USER_ACD) license: Enables you to receive Work Items that are either routed to you directly or as a member of a workgroup (similar to an ACD queue).
- **Process Monitor** (I3_ACCESS_IPA_MONITOR) license: Enables you to view process status and details in the Process Monitor or to use Process Reporting in IC Business Manager Applications.
- **Process Designer** (I3_ACCESS_IPA_DESIGNER) license: Enables you to use the Process Designer to create and modify Interaction Process Automation processes.

Note: Each license in this list enables you to **use the Interaction Process Automation features included in all the previous licenses in the list**. That is, the Group Routed Work Items license includes the Direct Routed Work Items license. The Process Monitor license includes both of the Routed Work Items licenses. The Process Designer license includes all the other licenses.

For more information about designing processes, refer to the *Interaction Process Automation Technical Reference* and the Process Designer online help.

Enable Licenses

Select this check box to set the license settings to Active. If unchecked, the licenses settings on this page are ignored by the system. This is a way to turn off licensing for a user, but keep the license settings.

Additional Licenses

This list displays additional licenses that are available. Select the licenses you wish to assign to this user.

Click **OK** to save your changes. These license assignments are immediately reflected in the license counts in the [Licenses Allocation](#) container list.

Related topics

[Configure a user](#)



Personal Info

The **Personal Info** page displays the user's mailbox information.

If the user's mailbox was selected from a directory service (Exchange for example), then the personal information displayed here is populated by that directory service, and is read-only. If the user's mailbox was selected without using a directory service (No Mailbox, Interaction Message Store, or IMAP), then the personal information can be entered manually for display in the Company Directory.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To complete the personal information for a user

1. Click the buttons at the top of the Personal Info tab to access all of the pages of personal information fields.

Related topics

[Configure a user](#)



User Workgroups

If one or more workgroups are defined in the Workgroups container of Interaction Administrator, they appear in the user's **Available Workgroups** list. If this user is a member of any workgroup, that workgroup name appears in the **Currently Selected Workgroups** list.

Moving users in and out of workgroups on this page accomplishes the same result as adding and removing users from workgroups in the [Workgroups](#) container. In the same way, if a workgroup has a queue, use one of these pages to add or remove users from the workgroup queue.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Available Workgroups

Workgroups in this list are defined in the Workgroups container. To add the user to one of the **Available Workgroups**, which is indicated by the workgroup name appearing in the **Currently Selected Workgroups** list, do one of the following:

- Double-click the workgroup name, or
- Select a workgroup name and click **Add**.

Currently Selected Workgroups

Workgroups in this list are defined in the Workgroups container. To remove a user from one of the **Currently Selected Workgroups**, which is indicated by the workgroup name appearing in the **Available Workgroups** list, do one of the following:

- Double-click the workgroup name, or
- Select the workgroup and click **Remove**.

Related topics

[Users overview](#)

[Configure a user](#)

[Workgroups overview](#)



Roles

You can assign multiple roles to a user or multiple users to a role.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Inherited

A role is a set of permissions. When a role is added to a workgroup, the workgroup takes on those permissions. If a user is a member of that workgroup, the user automatically inherits the roles assigned to the workgroup. The inherited roles are displayed in this list.

Owned

To assign a role to this user, in the **Owned** list click **Add**. Again, you must already have defined one or more roles to add a role in this list.

To delete a role that is assigned in the **Owned** list, select the role and click **Delete**. You can select multiple roles to delete.

Note: The only inherited permission that an individual may override is Account Code Required.

Related topics

[Configure a user](#)

[Users overview](#)

[Roles configuration](#)



Password Policies

Security policies can be configured for use with CIC passwords and apply these policies per role or user. These policy configurations are very similar to password security policies of Windows. You can define password policies, control password types, and set password change rules, and so on.

You can disguise passwords by setting a parameter. In this case, asterisks (*) appear instead of the actual password.

You can set the following password attributes:

- Minimum Number of Unique Passwords Before One Can be Reused
- Minimum Age of Password Before User Can Change It (days)
- Maximum password age (days)
- Password Age Warning Period (days before password expires)
- Minimum password length
- Minimum number of unique DTMF digits
- Allow or not allow sequential digits
- Maximum number of failed logins
- Lockout duration (minutes)
- Failed Login Count Reser Time (minutes)
- User Must Change Password At Next Login

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Related topics

[Configure a user](#)



MWI

Use this page to configure the behavior of Message Waiting Indicator (MWI) for a user.

Each PBX phone user must have a CIC user account to receive voice mail.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Enable MWI

Select the check box to indicate this user has an MWI-enabled phone and wishes to use the feature. Clear the check box to disable the MWI feature for this user.

If you enable this feature you must select one of the following options:

- **Send to Default or Logged Workstation:** (default) Select this option to send the indicator to the station the user is logged into. If the user is not logged in, it sends the indicator to the user's default workstation.
- **Send to Following Address:** If you select this option, you must also enter the **Address** or directory number.

Note: To fully enable the MWI feature, you must activate MWI for the default station, for the station that user uses, and for the user.

Related topics

[Activate MWI for the default station](#)

[Activate MWI for a station](#)

[Configure a user](#)



CIC Client Configuration

To configure a CIC client for a user

1. In the **People** container, click the **Users** subcontainer.
2. Double-click the user. The **User Configuration** dialog box appears.
3. Click the **Client Configuration** page.
4. Do one of the following:
 - To use a template to configure the client, in the **Client Configuration** list, select the template to use. Then click **OK**.
 - To configure a client that is unique to this user, next to **Edit user's own**, click **Configure**. For more information on how to complete the configuration, click the links under *Related topics*.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Related topics

[Configure a user](#)

[Client Configuration Template](#)



Phonetic spellings

You can set phonetic spelling options for users workgroups. Use this page to define alternate (phonetic) spellings of the user name or workgroup name for Text To Speech (TTS) and Automatic Speech Recognition (ASR).

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Text To Speech

Type the phonetic spelling of the user's or the workgroup's name.

The TTS spelling should be a single-valued attribute. Spell the name like it sounds. For example if you have a user name spelled "Rose," but it is pronounced "Rosy," then enter "Rosy."

Automatic Speech Recognition

Enter the user's or workgroup's phonetic spelling of the name. You can specify multiple spelling entries for ASR. The ASR spelling attribute should be a multi-valued attribute.

The ASR phonetic spelling values are used by the Reco Create Company Directory Grammar. You can specify any valid grammar token, including nicknames or different spellings of a user's name.

For example, assume a user is called "John Smith." This is the first name and last name known to the CIC system, and this spelling entry is used by default for the company directory grammar. To add spelling entries to increase the grammar coverage, add the following alternate spelling entries:

- Johnny Smith
- John Robert Smith
- John R Smith

Note: Be careful not to add too many alternate spelling entries. If the grammar coverage becomes too broad, or if the company directory contains too many similar names, the recognition quality degrades.

You can also include phonetic spelling entries for a specific language. To do this, at the end of the phonetic spelling entry, type **!language identifier**.

For example, the following spelling entry indicates that it is for the English language.

Johnny Smith !en-us

Note: You can use only one language identifier for each spelling entry. The language identifier must be the last characters of the spelling entry. Any languages that you specify must be installed on all ASR servers, or the company directory grammar will not compile.

Related topics

[Configure a user](#)



User Options

Incoming Faxes

If you configure a **user** as fax-capable in Interaction Administrator (**User Configuration-->Options-->Fax Capability**), then callers to

that **DID** hear ring-back while the handler listens for a fax. The handler then places the call on the queue. If you do **not** configure a user as fax-capable, the call goes directly to that user queue.

Note: If you create new users by importing them or by using Setup Assistant, the default **Fax capability** setting for those users is false.

Tip: See [Tell Me the Difference Between DID Fax and DID Non-fax Users](#).

Select the Interaction Connect fax format from the **Web Client Fax Format** list. The options are <None> (default), PDF or PNG. This setting is only available if you do not select the **Default** check box (this check box indicates you want to use the default system setting).

Note: For faxes in TIFF format, select TIFF faxes in the list of security rights on the user Security tab.

When a fax is sent specifically to a user, system handlers first check for the TIFF faxes security right. If the security right isn't enabled, the system then checks the user's Web Fax Format setting.

Unified Messaging

Select the server destination from the drop-down list for messages when using SIP diversion, or click Advanced Options to specify to use the CIC user extension (default), or to use other number for Unified Messaging (UM).

Note: For UM users to receive voice mail, faxes, and email, each user will have a uniquely named email account, which you specify in Mailboxes Selection. For more information on configuring CIC to use UM, see *Unified Messaging Integration with Interaction Center* in the PureConnect Documentation Library.

Interaction Alerting

Select the **Auto Answer Non-ACD Interactions** check box if you want CIC to automatically connect non-ACD interactions to an agent's phone. When a interaction alerts on a user's queue, you can use the Alert tool in Interaction Designer to play a tone, a .WAV file, or both, to inform the agent about the incoming interaction. These are called "whisper tones." This is useful if you are using auto-answer but want to warn an agent that another interaction is about to connect to his or her queue. If this box is selected, an agent must be at his or her station to be automatically connected to a interaction.

Clear this check box if you want to alert an agent and not automatically connect the interaction. When the agent's CIC client rings, he or she must manually click the Pickup button or pick up the handset to answer the interaction.

Note: This setting applies to DID/DNIS or ACD calls, but does not apply to non-ACD workgroups calls.

Alerting Action

Select an action to start each time a non-ACD call enters an alerting state (for example, the station rings) in a user or workgroup queue. Actions in this list are defined in the [Actions](#) container. For the complete procedure, click [here](#).

Disconnected Action

Select an action to start each time a call moves from the Connected state to a Disconnected state. Actions in this list are defined in the Actions container in the Interaction Administrator hierarchy.

Incoming Interactions

Set the **Timeout** in minutes and/or seconds that an incoming interaction rings at the CIC client station before the interaction quits alerting and proceeds to the next step in the handler (for example, goes to voicemail or changes an ACD agent's status to "ACD-Agent not answering" and offers the interaction to another agent). The **Default** check box indicates the timeout value is the system default of 30 seconds. You can change the value by de-selecting the **Default** check box and using the up and down arrows to adjust the number (7 seconds is the minimum). Use the drop-down list to select Seconds, Days, Hours or Minutes.

Parked Interactions

Use this section to set the maximum time that a parked **call**, **chat**, **email**, or **generic object** will wait on silent hold, and to specify the extension that interaction will be transferred to when the time has elapsed.

Timeout (minutes)

Set the maximum time in minutes here that a parked call should wait before transfer to the specified extension.

Extension

Set the destination extension here for a parked call that has reached its timeout.

Tracing

Tracing allows users to set trace levels for various IceLib (Interaction Center Extension Library) -based client applications through Interaction Administrator. Click Tracing... to display the [Tracing Configuration](#) page.



Overview of security for people

You can configure security for the default user, for roles, for a user, or for a workgroup.

Because users inherit one or more properties from the default user, roles and workgroup, the Security page is available from each of these containers. See *Configuration Property Inheritance* for an explanation of how these properties are related in each container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes related to user security are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

For more information on the types of security available for people, see the links under *Related topics*.

Related topics

[Overview of the master administrator rights](#)

[Overview of administrator access rights](#)

[Overview of access control rights](#)

[Overview of security rights](#)

[Configuration property inheritance](#)

Set Password Options

Use this page to configure the email message when generating new passwords to send to the Exchange or LotusNotes users who have mailboxes. this option does not apply to Interaction Message Store users.

Message

Use the default setting, or select **Custom** to create a custom message. By selecting **Custom**, you can enter your own **Subject** and **Body** of the email message. Selecting either Default or Custom, "%%USER%%" and "%%PASSWORD%%" is entered automatically in the email message body.

Generate Numeric Passwords Only

Select this check box to create passwords with numbers only, no alphabetical passwords.

Note: If you have master administrator rights, you can use the a command line executable to report on password usage within a CIC organization. Run the PWCheckU executable from a command prompt in the CIC server path using a user log in switch, for example, "C:\ pwchecku -login adminuser 07158609." For more information about this utility, see the Product Information site.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



User Rights

These user rights options can be set at the Default User, User, Role or Workgroup level. Select the appropriate option to determine the User Rights properties. These options determine the CIC client and Interaction Designer user rights.

Customize Client

Select this option to allow users to customize the settings on their CIC client workstation. Clear the check box to disable customization options on the Configuration page in the CIC client. Clearing the check box removes the **Pages...** and **Configuration...** items from the **Options** menu. Clearing the check box also disables the right-click options in the area next to the queue tab or directory tab.

Record Calls

Select this option to enable the **Record** button and allow users to record conversations, storing them in a .WAV file. If this check

box is not selected, the **Record** button is not displayed and the record feature cannot be used. This option provides the same functionality as the **Record** button check box; you can enable the call recording feature by selecting this **Record Calls** option, or by selecting the **Show Record Button** option in [Button Display](#) rights. Selecting both check boxes is not necessary to enable the call recording feature.

Listen in on Calls

Select this option to enable the **Listen** button in the user's CIC client.

Note: In order for the user to be able to listen in on calls, you **must also select** the **Show Listen Button** option in [Button Display](#) rights.

Private Calls

Select this option to enable the **Private** button and allow users to have a private call that no one else in the CIC system can listen in on. This option provides the same functionality as the **Private** button check box; you can enable the feature by selecting this **Private Calls** option, or by selecting the **Show Private Button** option in [Button Display](#) rights. Selecting both check boxes is not necessary to enable the private feature.

Publish Handlers

Select this option to allow users to publish new or updated handlers on the CIC server. This applies only to users who have the Interaction Designer program and who are authorized to update production handlers or create new handlers on the CIC server. If this check box is not selected, users who attempt to publish handlers from Interaction Designer will see an appropriate error message.

Manage Handlers

Select this option to allow users to add or remove handlers published to the CIC server. A handler's status can be managed by someone running the Interaction Designer program on a workstation and using the **Manage Handlers** command on the **Tools** menu. If this option is not selected, users who attempt to manage handlers from Interaction Designer will see an appropriate error message.

Debug Handlers

Select this option to allow users to debug handlers published to the CIC server. This applies only to users who have the Interaction Designer program and who are authorized to update production handlers or create new handlers on the CIC server. If this check box is not selected, users who attempt to debug handlers from Interaction Designer will see an appropriate error message.

Allow Workgroup Alerts

Reserved for future use.

Allow Workgroup Queue Alerts

Reserved for future use.

Allow Handler Trigger Alerts

Select this option allow Interaction Supervisor users to configure email alerts and alerts that call custom handlers. See the Interaction Supervisor online help and the Interaction Designer online help for more information.

Remote Control

Select this option to allow the user to run system utilities remotely. These utilities include IC System Manager and Switchover Control Panel.

Trace Configuration

Select this option to allow the user to configure tracing using IC System Manager or IC Trace utility.

Follow me

Select this option to allow users to call-forward multiple numbers, long distance numbers, and international numbers. Long distance and international follow-me numbers are limited by the user’s dialing privileges.

Note: In order for a User to have the "Available, Follow-Me" status appear in the CIC clients, the **Follow me** User right must be selected.

Account Code Verification

Select this option to allow users to access account codes and assign them to incoming and outgoing calls.

The **Account Code Verification** check box is a tri-state attribute, as shown in the following table.

Check box state	Indicates
Black check mark	Users have access to account codes. CIC verifies numbers that require an account code in Dial Plan. The administrator can use a black check mark to override an inherited value.
Gray check mark	Users have inherited the right to use account codes.
No check mark	Users do not have the rights to use account codes. The administrator can clear a box and override an inherited value.

Inherited Value (only enabled for Users and Workgroups)

This box indicates whether the User has inherited rights from the Default User configuration or from the Workgroups configuration. For more information, see [Configuration Property Inheritance](#) .

IP Phone Provisioning Admin

Select this box to give the user rights to provision IP phones in the Managed IP Phones container.

Allow Workgroup Statistics

Select this box to give the user access to the Workgroup Statistics page in the CIC clients.

Directory Admin

Select this box to give the user rights to edit public and private contact directories that the user created and that other users created.

Select All

To select all of the options in the User Rights box, click **Select All**.

Clear All

To clear the User Rights option boxes when all the boxes are selected, click **Clear All**.

Note: If an option was inherited, indicated by a gray check mark, the box will not be cleared (with the exception of Account Code Verification, see above.)



User Rights 2

These user rights options can be set at the Default User, User, Role or Workgroup level. Select the appropriate option to determine the additional User Rights properties. These options determine the CIC client and Interaction Designer user rights.

Require Force Authorization Code

Select this option so the station phone that the user is logged into will not allow toll numbers to be dialed without an authorization code. This option prevents someone from using the phone when another user is still logged in, but is away from the desk. This is regardless if the workstation is locked. Without this option, a bystander has full client rights on the station phone. This option is not turned on by default.

Tip: See [How Do I Set Up Forced Authorization Codes?](#)

Use TIFF for Faxes

Select this option for the right to use TIFF (Tag Image File Format) for faxes.

Allow Video

Reserved for future use.

Allow User-defined Telephone Number on Remote Login

Select this option to allow the remote user to enter a new number in the login dialog box. This option is set in the Default User during install, so all users have this option by default.

Allow Persistent Connections

Select this option to give a user the right to start a remote CIC client with the persistent option. A user or workgroup member who does not have the right to start a CIC client with that persistent connection and receives a pop-up message.

Allow Supervisor Message Creation

Select this option to allow Interaction Supervisor user to create messages and send to the CIC client users.

Allow Intercom Chat

Select this option to allow the user to initiate intercom chats between other users on the same CIC server (cannot be on a peer server).

Allow Monitor Columns

Select this option to allow a user to view the "Lstns" column (shows a speaker icon to indicate someone is listening into the conversation), and the "Recs" column (shows a red dot icon to indicate that the conversation is being recorded).

Allow to Receive Voicemail

Select this option to allow callers to record voicemail messages for this user.

Allow Voice Mail Access via TUI

Select this option to allow the user to participate in Voice Mail interactions through the Telephone User Interface (TUI).

Allow Fax Access via TUI

Select this option to allow the user to participate in Fax interactions through the Telephone User Interface (TUI).

Allow Email Access via TUI

Select this option to allow the user to participate in email interactions through the Telephone User Interface (TUI).

Outlook TUI User

Select this option to allow the user access to Outlook through the TUI.

Mobile Office User

Select this option to allow the user access to the Mobile Office feature.

Note: If **Outlook TUI User** is selected, the **Mobile Office User** option is automatically selected and grayed-out. This allows correct inheritance with the Mobile Office role. For example, User A can inherit from Role B and Role C. If Role B has Outlook TUI User checked and Role C has Mobile Office User checked, then User A will have both options selected.



Overview of workgroups

Workgroups are logical groups of users (for example, departments) that can function as a group in the CIC system. Workgroups can have extensions and queues that enable all members of a Workgroup to receive calls notifying the Workgroup. In addition, Workgroups can receive regular calls and ACD calls to specific Workgroups and agents. You may also create Workgroups to serve as distribution lists (to the members) for voice mail, email, and faxes from within CIC.

Related topics

[About inheritance of configuration properties](#)

[Add a workgroup](#)



Add a workgroup

Note: If you enabled the Enhanced Interaction Administrator Change log, then the addition of the workgroup is tracked in that log. For more information, see *About the Enhanced Interaction Administrator Change Log*.

To add a workgroup

1. In the **People** container, click the **Workgroups** subcontainer.
2. Right-click and then select **New**.
3. In the **Entry Name** box, type the workgroup name and click **OK**.

Note: Do not exceed 64 characters.

4. In the **Workgroup Configuration** dialog box, complete the tabs. See the links under **Related topics** for complete information.

Related topics

[Configuration](#)

[Files](#)

[Members](#)

[Roles/Supervisors](#)

[Wrap-up Codes](#)

[ACD](#) (automatic call distribution)

[Phonetic Spellings](#)

[Secure Input Forms](#)

[Options](#)

[Security](#)

[Custom Attributes](#)

[History](#)

[Overview of workgroups](#)



Workgroup name

Type a name that describes the purpose and/or nature of the group. For example, if a workgroup queue is solely for ACD calls, use "ACD" as part of the workgroup name, e.g., "ACD - DB Support".

A workgroup name should be no more than 50 characters long (25 characters with a double-byte character set). It must start with an alphabetic character and contain no colon (:), backslash (\), or vertical bar (|). It may contain spaces.

Note: Profile names in Interaction Attendant should not contain the name of a workgroup to prevent routing errors. See the **Custom Inbound Call Profile Node** help in the Interaction Attendant help for more information.

Do not exceed 64 characters.

Related topics

[Add a workgroup](#)



Configure a workgroup

To configure a workgroup

1. In the **People** container, click the **Workgroups** subcontainer.
2. Double-click the workgroup that you want to edit.
The **Workgroup Configuration** dialog box appears. Complete fields on the tabs. See the links under **Related topics** for complete information.
3. Click **OK**.

Related topics

[Configuration](#)

[Files](#)

[Members](#)

[Roles/Supervisors](#)

[Wrap-up Codes](#)

[ACD](#) (automatic call distribution)

[Phonetic Spellings](#)

[Secure Input Forms](#)

[Options](#)

[Security](#)

[Custom Attributes](#)

[History](#)



Files

Select the voice mail and on hold messages, and the on hold music you want to assign to this workgroup.

Voicemail Message

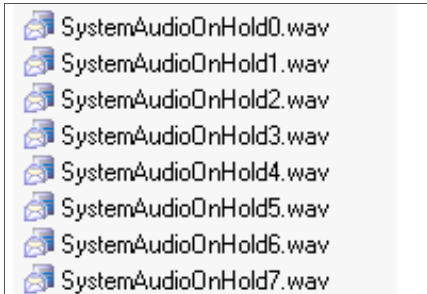
Use this setting to specify the path to a (.wav) file to be played as the voice mail message for the workgroup (ACD or non-ACD).

On Hold Music

CIC plays the named wave (.wav) file each time a call is put on Hold. By default CIC plays the random wave file (SystemDefaultAudioOnHold.wav) file in the \Resources directory. You can also click [Configure](#) to specify a random wave from Media Server, use a set wave file (optionally from Media Server), or use an audio source.

CIC's On Hold Music selection criteria:

CIC installs eight system audio (.wav) files and stores them on the CIC server in the \\IC\Resources directory:



The .wav file selected to play for external incoming and intercom calls 'held' (not to be confused with the 'ACD wait' state), is determined by the modulus value matching the .wav file name. The handler containing the $\text{mod}(x,x)$ function processes the values based on seconds of the current time, returns the modulus, and selects *SystemAudioOnHold[modulusvalue].wav*.

For example, $\text{Mod}(35,8)$ returns a modulus of "3". Based on this value, the system selects and plays *SystemAudioOnHold3.wav*. If the modulus was "6", the system would select and play *SystemAudioOnHold6.wav*.

Customers can record their own wave files and replace the files above as long as these two conditions are met:

- The files must be in CCITT mu-law format.
- The file names must be exactly as above.

Caution: If you replace any of the .wav files (including the *SystemAudio[x].wav* or *Ringback[x].wav* files) in the Resources directory with your own customized files, then these files will be overwritten when updating. If you have replaced any of these files in the Resources directory, back up your customized files before updating, then restore the files after the update is complete. This applies to the files on CIC servers and on Media Servers.

On Hold Message

You can specify a recorded message in a sound file to play when a caller is waiting in a call queue.



Audio Configuration

Use this page to select the on hold audio or in-queue audio (as configured in Media Server) to play to the caller.

Note: The optimal format for .wav files depends on your system configuration. A safe format to use (which is also optimal in many configurations) is 8 kHz mono mu-law PCM.

Use Random Wave File

Select this option to play random wave files from the Resources folder on the CIC server for in-queue audio for this workgroup.

Use Wave File

Type a [parameter](#) or the drive, path, and .WAV file name found on the IC server. For example, C:\I3\IC\server\sounds\support.wav, where C: is the local drive of the IC server. Use this to specify a unique wave file to play in-queue audio for this workgroup.

Use Audio Source

If you are implementing the Audio Sources feature to identify a single audio stream to be played to calls waiting in the workgroup queue, select an audio source from the drop-down menu. See [Audio Sources](#) for complete audio source configuration instructions.

Select **Only play this audio source for ___ seconds**, and enter the number of seconds to limit the length of the audio playing time.

For more information on Media Server, see *Interaction Media Server* in the **Technical Reference Documents** section of the PureConnect Documentation Library on the CIC server.



Workgroup Members

Select the users you wish to belong to this workgroup. You can optionally specify a fixed linear hunt order for alerting Workgroup members when the workgroup has a queue, and it is not an ACD queue.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Available Users

Names in the **Available Users** list are registered on the server but are not members of this workgroup. To add one of these users to this workgroup, which is indicated by the user's name appearing in the **Currently Selected Users** list, do one of the following:

- Double-click a user's name, or
- Select a user's name and click **Add**.

Currently Selected Users

Names in the **Currently Selected Users** list are members of the current workgroup. To remove a user from this workgroup, which is indicated by the user's name appearing in the **Available Users** list, do one of the following:

- Double-click the user's name, or
- Select the user's name and click **Remove**.

Maintain Order

Select this check box to preserve the order of the **Currently Selected Users** list. Handlers can optionally use this **Currently Selected Users** list as an ordered (linear) hunt group for alerting users in workgroup queues (not ACD queues). The Alert Workgroup tool includes a check box that allows you to alert all users in a workgroup at the same time, or in a sequential order. If the Alert Workgroup tool specifies a sequential order, and the **Maintain Order** check box is selected, workgroup members will be alerted in the order specified in the **Currently Selected Users** list, starting at the top.

To arrange the order of user selection

1. Click the **Maintain Order** check box at the bottom of the **Currently Selected Users** list to create a fixed order of user selection.
2. Click on the name of the user to be first in order to receive calls in this workgroup queue.
3. Click the **Up** button until that user's name is at the top of the list.
4. Select the name of the user to be second in order to receive calls in this workgroup queue.
5. Click the **Up** button until that user's name is second from the top of the list.
6. Select each user's name and click the **Up** or **Down** button to determine the order in which each user is selected to receive calls that alert on this workgroup queue.
7. Click **OK** to save this order and exit.

For additional information, see **Alert Workgroup tool** in Interaction Designer Help.



Roles/Supervisors

Use this page to assign roles and supervisors to this workgroup. Assigning a role to a workgroup gives the role's permissions to the workgroup members. Assigning a supervisor to a workgroup, associates that supervisor with the supervisor alerts for this workgroup.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Roles

To assign a role to this workgroup, in the **Roles** box click **Add**. You must already have defined one or more roles in the Roles container.

To delete a role, select the role and click **Delete**. You can select and delete multiple roles.

Supervisors

If agents need to alert a supervisor, they can type a message and broadcast it to all CIC clients.

To assign a user as a supervisor for this workgroup, in the **Supervisor** box click **Add**. This feature affects the CIC clients.

Related topics

[About roles](#)



Wrap-up Codes

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To configure wrap-up codes for a workgroup

1. To prompt workgroup members to enter a wrap-up code for every interaction, select the **Wrap-up Active** check box.
2. In the **Keypad wait time** box, type the number of seconds that the TUI displays a message to prompt the agent to enter a wrap-up code. When the agent enters the wrap-up code, the TUI removes the prompt. The default is 30 seconds.

Note: The CIC clients also prompt the agent to enter a wrap-up code. The agent can choose whether to use the TUI or the CIC client to enter the wrap-up code. If this is confusing, you can turn off the TUI prompt. To do this, type 0 in the **Keypad wait time** box.

3. In the **Client wait time** box, type the number seconds that the CIC client displays a message to prompt the agent to enter a wrap-up code. When the agent enters the wrap-up code, the CIC client removes the prompt. The default is 30 seconds.
4. In the **Prompt name** box, type the name of the file that instructs the user to enter data.

Related topics

[Wrap-up codes overview](#)

Workgroup ACD

Use this tab to configure ACD settings for the workgroup. Depending what you select in the list on the left, select the related options on the right. The available areas are:

- [Utilization](#)
- [Skills](#)
- [Statistics](#)
- [Routing](#)
- [Actions](#)
- [Wrap-up Codes](#)
- [Options](#)
- Predictive Routing



Utilization

You can set these utilization options at the workgroup or user level (user settings override workgroup settings). Agents can handle multiple phone calls and other interactions simultaneously and in any combination. Using the ACD Utilization settings, you can configure how much of an agent's attention would be required for each of the interaction types as a percentage.

For example, if, as an administrator, you set the Chat category for an agent to 25%, it would mean that the agent could handle up to four chat events simultaneously. Indicating 100% for an event type would mean that the agent could handle only one such event at a time.

The percentages might vary from agent to agent based on their experience. Agents are available to the extent that the sum of the percentage utilization of all their current interactions is less than 100.

For example, if an agent is configured so that phone calls are set to 100 percent, chats to 25 percent, and email messages to 10 percent, then the agent could, at any given time, process one phone call, or four chats, or two chats and five email messages, or one chat and seven email messages, and so forth.

Note: Once an interaction enters a conference or enters an ACD queue as the consult portion of a consult transfer, utilization is no longer recognized. If an interaction is transferred to an ACD Queue, utilization is only recognized if the transfer is a blind transfer.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Interaction Type

The **Interaction Type** list displays the interaction types assigned to this workgroup or user, including Call, Callback, Chat, Email, Generic Object, Social Conversation, Social Direct Message, or Work Item.

% Utilization

The **% Utilization** list shows the percentage of an agent's attention required for each interaction type.

When you add an Interaction Type, the percent utilization you assign to that interaction appears in this list. By default, the **% Utilization** is 100%.

Tip: Set the percent utilization for Calls to **51% or more** when either or both of the following conditions apply:

- You have selected **Auto answer** for the agent.
- You have selected **Exempt held interactions** for the agent.

Under the above conditions and at less than 51% utilization, if an agent is on a call and another call comes in, the CIC client puts the first call on hold automatically and connects the incoming call.

Since calls on hold (held interactions) are exempt and do not count against the agent's percent utilization, the CIC client will continue putting active calls on hold automatically and connecting new calls to that agent.

Setting 51% or more utilization ensures that an agent handles only one call at a time. Setting it at 50% allows the CIC client to assign two calls simultaneously to the agent, one active and one on hold (achievable by some agents).

Note: Calls at 50% or less utilization with a maximum assigned of 1 will only allow 1 call.

Max. Assign.

The **Max. Assign.** list displays the maximum number of interactions allowed for this interaction type. By default, the value of **Max. Assign** is "1" for Call interaction type. The default value of **Max. Assign** for all other interaction types is "0".

Edit

Select an interaction type and click **Edit** to see the **Edit** dialog where you can change the percent utilization for a Call, Chat, Email, or other interaction type.



Workgroup ACD Skills

Workgroup queues can be used to deliver regular calls and [ACD](#) calls. Regular calls can appear on a workgroup queue and be answered by any workgroup member monitoring that queue. ACD calls are routed to the appropriate workgroup based on caller input. All members of that workgroup (call agents) are expected to have a core set of skills required to handle any call on that queue. Further ACD processing directs the call to the most appropriate agent who is a member of that workgroup based on each agent's [User ACD](#) configuration. This page defines the minimal skill set required by all members of this workgroup who handle ACD calls.

If this workgroup does not have a queue or does not handle skills-based ACD calls, no skills are required.

Skills

This field contains skill names required for members of this workgroup who handle skills-based ACD calls.

To enter a skill for this workgroup:

1. Click **Add** to add a skill requirement.
2. Select a skill name from the list and click **OK**.

Skill names are created in the Skills section in the People container.

Proficiency

Type a value of 1 - 100 to indicate the minimum proficiency of skill level that an agent must have in order to receive an ACD call that requires this skill. 100 represents the highest skill level required. You define the skill attributes, which include proficiency level, for an agent on the **ACD configuration** page. The default value is 1. By default, the weight for proficiency is equal to 1, so this value is included in the ACD skills calculation.

Desire to Use

Type a value from 0 - 100 to indicate the minimum desire to use level agents must have in order to receive an ACD call that requires this skill. 100 is the highest possible desire; the higher the number, the more often the user wants to use the skill. Remember, desire to use is different than knowledge or ability. An agent can have a high level of proficiency (ability), but very little desire to use that ability. The default value is 0.

Notes: A user inherits the desire setting for a skill from any workgroup(s) to which the user belongs. However, you can override this with a user-level proficiency setting.

By default, the weight for Desire to Use equals 0, so the value that you specify is evaluated only as a qualifier instead of as the specified Desire to Use range for the ACD interaction. The Desire to Use setting is considered for ACD skill calculations when ACD customization points (such as CustomACDInitiateProcessing) are used. The weight for Desire to Use must be set to a value greater than 0 in order for it to be considered in ACD skills calculations. For more information on skills-based routing using the ACD Specify Interaction Skill Tool, see the *ACD Processing Technical Reference* or the white paper, *ACD Processing: CIC's Automatic Communication Distribution* in the Documentation Library.

Related topics

[Skills](#)

[Utilization](#)

[Statistics](#)

[Routing](#)

[Actions](#)

[Wrap-up](#)

[Options](#)



ACD Statistics

You can set ACD statistic shift start options for a user or for a workgroup.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Call Statistics

The Call Statistics fields appear only in the workgroup configuration since these fields affect only call statistics for Workgroup (that is, ACD) queues that belong to an ACD Workgroup.

Statistics Period

This is the number of minutes used to define the "current period" and the "previous period" statistics on the Queues page in Interaction Supervisor. The statistics period includes every X number of minutes from midnight to the current time, where X is the number in the field. The default time is 30 minutes, which means the "current period" and "previous period" changes on every half-hour boundary.

Estimated Call Time Interval

The ACD Statistics (Call or Queue) tools in a handler that provides callers with estimated wait time feedback, uses this number of minutes in its wait time calculation. This is a rolling interval, which means the interval is the number of minutes prior to each use of the estimated wait time function as it is invoked on the CIC server. The ACD Statistics tools calculate the estimated wait time for a caller in a queue by taking the average time all callers waited in the queue during the current interval (for example, the previous 30 minutes from the time the ACD Statistics tool in a handler was invoked). The default setting for the interval is 30 minutes.

Statistic Shift Starts

This list of times determines the beginning time and duration of each shift for this user or the members of the current workgroup. These times are used to define (relative to the current time) the "current shift" and the "previous shift" on the Queues page in Interaction Supervisor. The default statistic shift is a 24 hour shift starting at midnight (0:00), meaning the statistics are relative to one day (or 24 hours).

Use the **Add** and **Delete** buttons to add or remove shift times. To change a shift time, first delete it and then add a new time to replace it.



Routing

You can set routing options at the user or workgroup level. Multiple mailboxes can now be monitored by a single workgroup or user. For each mailbox folder that feeds a queue, Interaction Administrator stores the email address. Because of address lookup, each entry in the list has mailbox, email address, inbound folder, and queued folder. The mailbox and email address uses the same method that is used for associating a user with a workgroup.

Tip: See [Set Up Email Routing on ACD Queues](#).

Notes: When searching for a mailbox to select for ACD email routing, distribution lists and public folders are not listed in the search.

You cannot create an SMTP-monitored mailbox through a workgroup's ACD. If SMTP and IMAP are active, however, you can configure an SMTP/IMAP mailbox through a workgroup's ACD.

ACD Email Routing Active

Use this check box to activate email routing. When activated, CIC uses the same rules for email arriving for the workgroup as it does for calls and faxes.

Mailboxes:

Click [Add](#) to open the **ACD Email Routing Mailbox** dialog box.

Save replies to Sent Items folder

When this option is enabled, ACD routed email replies are saved to the Sent Items mailbox associated with the workgroup. This feature is supported for Exchange (EWS) integrations only.

Note: Enabling this option only applies to the workgroup you're configuring. Enable the option for each workgroup where you want this behavior to apply.

Adding an ACD Email Routing Mailbox

Use this page to add an ACD email routing mailbox.

Mailbox

Click the browse button to open the **Mailbox Selection** dialog box.

Use this mailbox to send outgoing emails

Select this check box to use this mailbox when an agent sends an email message through the CIC clients to a workgroup queue. This outbound email interaction is tracked similar to the way in which an inbound email interaction is tracked in CIC.

Use this mailbox to receive emails

Select this check box to receive workgroup queue emails in this mailbox.

Inbound Folder

Select the folder for routed email from the list. This is the receiving folder in the associated mailbox. CIC polls the inbox every few seconds to see if a new email has entered.

Allow to Receive Encrypted Email

Select this option to support the use of the [S/MIME](#) type in email. Selecting this check box enables support of email encryption, but other configuration, such as installing certificates, is necessary. For more information see *CIC Security Concepts* in the **Technical Reference Documents** section of the PureConnect Documentation Library.

Related topics

[Mailbox selection](#)

[Attendant mailboxes](#)

[Email certificates configuration](#)



ACD Actions

These ACD actions options can be set at the user or workgroup level. [ACD](#) calls directed to an agent's station can initiate [DDE](#), [custom screen pop](#), or [web browser screen pop](#) actions when the call rings on an agent's station, is disconnected, or transferred from the agent's station. For example, when an ACD call alerts the agent's station, a database application can start. When the call is disconnected or transferred, either of those actions can initiate another database application specifically used for completing records or follow up on the call. The Actions property page specifies which actions are used with ACD calls to this workgroup or user. Each workgroup or user may use different actions or no actions at all.

Alerting Action

Select a [custom screen pop](#), [web browser screen pop](#), or [DDE](#) action to start on an agent's workstation each time a call enters an alerting state (for example, the station rings) in this workgroup queue. Actions in this list are defined in the [Actions](#) container.

Disconnected Action

Select a [DDE](#) action to start on an agent's workstation each time a call moves from the Connected state to a Disconnected state (that is, the call terminates) in this workgroup queue. Actions in this list are defined in the [Actions](#) container.

No-answer Status

Select a status message from the list to display in an agent's My Status box when an agent is alerted by an ACD interaction and does not answer it. The selected status message should have the "Status is Do Not Disturb" attribute set on the [Status Message Configuration](#) page.

Note: The default setting is ACD - Agent Not Answering unless another status has been specified by the workgroup. If a user is a member of multiple workgroups, and just one of those workgroups is configured to change members' status to 'agent not answering' when there is no answer, then the no-answer behavior applies to this user for all workgroup memberships.

Revert to Available After

Set this time interval (in seconds) to automatically return an agent's status to what the status was prior to going to Agent Not Answering. If the status has been changed in the meantime, the agent's status will not be reset. The default value is 0 which does not automatically revert the status.

Transfer Action

Select a [DDE](#) action to start on an agent's workstation each time a call is not answered or is transferred by the agent in this workgroup queue. Actions in this list are defined in the [Actions](#) container.

If an agent does not pick up an alerting ACD call, the call times out and the agent's status is automatically changed to ACDAgentNotAnswering. The Alerting Action may need to be terminated, or some other action performed if the agent does not pick up the call. When the agent's status is ACDAgentNotAnswering, the agent is not assigned any more calls until he or she changes the status to Available.

If an agent transfers a call using a CIC client, the same Transfer Action may optionally be invoked if the Execute Transfer Action on the User Transfer check box is selected.

Execute Transfer Action on User Transfer

Select this check box to automatically invoke the Transfer Action DDE command when an agent manually transfers a call from his or her station. Leave the check box blank to perform no DDE action when an agent manually transfers a call. If a Transfer Action is defined and this check box is blank, the Transfer Action is invoked only when an ACD call is not picked up at an agent's workstation and then transfers to another agent.

Incoming Transfer Action

Select a [DDE](#) action to start on an agent's workstation when that agent receives an ACD call transferred from another agent. This allows an agent who starts an ACD call to transfer that call to another agent and allows the second agent to see the appropriate [DDE](#) action when the call alerts.

This action is valid only when the transfer is from one user to another user (not from a user to a workgroup, line, station, or other type of queue).

On Call Status

Select a status message from the list to assign to an agent (and display in an agent's My Status box) while the agent is on an ACD call. After the call disconnects, the agent's status changes to Follow up (or the Wrap Up Status setting) for the designated period before returning to the agent's status before the call (for example, Available).



Wrap-up Status

Use this page to configure the behavior of after call work status for this workgroup.

Status

Select a status message from the list to assign to an agent (and display in the agent's My Status box) while the agent is in the After Call Work (ACW) time. The ACW time begins after an ACD call is terminated; this is when the optional DDE Disconnected Action begins. When the specified ACW period ends, the agent's status message is set to Available again. The selected status message should have the "Status is ACW (After Call Work)" attribute set on the [Status Message Configuration](#) page.

Note: If an agent is in an After Call Work (ACW) status at the time a Switchover occurs, the agent's status will not automatically be set to Available after the specified ACW period ends. The agent will need to manually change his status to Available. Supervisors should check for agents who have forgotten to do so after the Switchover event.

Time

Type the number of seconds to allow a CIC client user to finish any After Call Work (ACW) associated with the previous call before becoming available to receive a new call. For example, a value of 180 seconds allows call agents three minutes between the time they end a call and the time they appear on the available list for taking a new call.

If you specify no time, each Workgroup member is considered available to receive calls as soon as the current call is disconnected.

You cannot set a Wrap-Up Time until you select a compatible Status in Wrap-Up Status entry box.

Exempt held interactions

Click this box to allow agents who have ACD interactions on hold to receive new ACD interactions within the parameters listed below. The default CIC client behavior is for the agent with held interactions to be unavailable and for the agent with the highest computed score among those remaining in the workgroup to receive the next ACD interaction.

This feature does not apply to **direct interactions** that an agent puts on hold.

Max number of exempt interactions

Type the maximum number of interactions an agent in a given workgroup can have on hold and still receive another ACD interaction. The default is 1.

For example, if you set this parameter to **3**, then a workgroup agent could have **three** interactions on hold and still receive an additional ACD interaction. An agent with **four** interactions on hold would **not** receive another interaction until the number of interactions on hold dropped to **three** or fewer.

Grace Period before new interaction

Type the period of pause in seconds before the workgroup agent receives the next interaction. The default is **10** seconds.

Agent score change amount

Type the value you want to add to the computed agent score for each interaction on hold. You might use this to ensure a more even distribution of interactions among the workgroup members. The default is **-10**.

For example, if Agent A has a score of 75 with one interaction on hold and Agent B has a score of 70 with no interactions on hold, applying the Agent Priority change would add -10 (for each held interaction, in this case one call) to Agent A's score, reducing it to 65. Agent B, with no held interactions and a score of 70, would then receive the next ACD interaction.

Direct calls If Agent C, with a score of 80, receives a **direct** (non-ACD) call and puts the call on hold, the CIC client regards Agent C as unavailable while that direct call is connected because the **Exempt held interactions** feature is not applied to direct calls.

Workgroup ACD Options

Select The **Use Availability Time in Skills Calculation** check box to change the calculation of how [skills](#) are configured. By default this check box is selected so skills are calculated on a formula that uses Availability Time, in addition to Desire to Use and Proficiency. Interaction Attendant uses skill settings in the skills-based routing.



Phonetic spellings

You can set phonetic spelling options for users workgroups. Use this page to define alternate (phonetic) spellings of the user name or workgroup name for Text To Speech (TTS) and Automatic Speech Recognition (ASR).

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Text To Speech

Type the phonetic spelling of the user's or the workgroup's name.

The TTS spelling should be a single-valued attribute. Spell the name like it sounds. For example if you have a user name spelled "Rose," but it is pronounced "Rosy," then enter "Rosy."

Automatic Speech Recognition

Enter the user's or workgroup's phonetic spelling of the name. You can specify multiple spelling entries for ASR. The ASR spelling attribute should be a multi-valued attribute.

The ASR phonetic spelling values are used by the Reco Create Company Directory Grammar. You can specify any valid grammar token, including nicknames or different spellings of a user's name.

For example, assume a user is called "John Smith." This is the first name and last name known to the CIC system, and this spelling entry is used by default for the company directory grammar. To add spelling entries to increase the grammar coverage, add the following alternate spelling entries:

- Johnny Smith
- John Robert Smith
- John R Smith

Note: Be careful not to add too many alternate spelling entries. If the grammar coverage becomes too broad, or if the company directory contains too many similar names, the recognition quality degrades.

You can also include phonetic spelling entries for a specific language. To do this, at the end of the phonetic spelling entry, type **!language identifier**.

For example, the following spelling entry indicates that it is for the English language.

Johnny Smith !en-us

Note: You can use only one language identifier for each spelling entry. The language identifier must be the last characters of the spelling entry. Any languages that you specify must be installed on all ASR servers, or the company directory grammar will not compile.

Related topics

[Configure a user](#)



Secure Input Forms: Workgroups

Use this page to make the secure input forms available to a workgroup and give workgroup members access to the form.

Click the form in the **Available Forms** list, and click **Add** (or just double-click the form) to add it to the **Currently Selected Forms** list.

Note: If the dialog box does not include the **Secure Input Forms** tab, verify that you have [enabled secure input](#) and defined at least one [secure input form](#). Those two steps add the tab to the dialog box.



Workgroup Options

Incoming Faxes

If you configure a workgroup as fax-capable in Interaction Administrator (**Workgroup Configuration-->Options-->Fax Capability**), callers to that DID hear "Welcome to CIC," then ring-back while the handler listens for a fax. The handler then places the call on the queue. If you do **not** configure a workgroup as fax-capable, the call goes directly to that workgroup queue.

Select **Use TIFF for faxed sent to this workgroup** for received faxes to be in the Tagged Image File Format. You can also select the Interaction Connect received fax format from the **Web Client Fax Format** drop-down list. The options are <None> (default), PDF or PNG. This setting is only available if you do not select the **Default** check box (this check box indicates you want to use the default system setting).

Interaction Alerting

Alerting Action

Select an action to start each time a non-ACD call enters an alerting state (for example, the station rings) in a workgroup queue. Actions in this list are defined in the [Actions](#) container. See a [sample DDE action procedure](#).

Disconnected Action

Select an action to start each time a call moves from the Connected state to a Disconnected state. Actions in this list are defined in the [Actions](#) container in the Interaction Administrator hierarchy.

Incoming Interactions

Select the **Warn if chat response time exceeds limit** check box to indicate to a workgroup agent that an ACD-routed chat interaction response time is nearing the limit. When this warning is enabled, you can set the **Response time limit** in seconds that you want to use.

To set the **Operator target**, enter the telephone number or extension to which to send callers that choose zero to exit out of voice mail for this workgroup. See also [How Do I Set Up Operator Target?](#)

Set the **Timeout** in minutes and/or seconds that an incoming interaction rings at the CIC client station before the interaction quits alerting and proceeds to the next step in the handler (for example, goes to Voicemail or changes an ACD agent's status to "ACD-Agent not answering" and offers the interaction to another agent). The **Use Default** check box indicates the timeout value is the system default of 30 seconds. You can change the value by de-selecting the **Use Default** check box and using the up and down arrows to adjust the number (7 seconds is the minimum). Use the drop-down list to select Seconds, Days, Hours or Minutes.

Parked Interactions

Use this section to set the maximum time that a parked **call**, **chat**, **email**, or **generic object** will wait on silent hold, and to specify the

extension that interaction will be transferred to when the time has elapsed.

Timeout (minutes)

Set the maximum time in minutes here that a parked call should wait before transfer to the specified extension. The **Use Default** check box indicates the timeout value is the system default of 1 minute. You can change the value by de-selecting the **Use Default** check box and using the up and down arrows to adjust the number (1 minutes is the minimum).

Extension

Set the destination extension here for a parked call that has reached its timeout.

The **Use Default** check box indicates the extension for parked interactions is default workgroup extension as set in [workgroup configuration](#). You can change the value by de-selecting the **Use Default** check box and using the up and down arrows to adjust the extension number (0 is the minimum).

Callback Settings

- To enable the use of any attributes that have been set for advanced features, such as Callback Retry, select the **Enable Advanced Callback options in the Interaction Client** option.
- To enable CIC to automatically make callback attempts, select the **Enable callback retries** option.
 - In the **Maximum number of retries** field, select the maximum number of callback attempts that CIC should make for a given interaction.
 - In the **Time between retrying callbacks (min)** field, select the number of minutes between callback attempts.

Genesys Cloud Services

Select the **Enable Altocloud queue availability updates** option if your organization is using the PureConnect integration with Altocloud and you want to include the workgroup when the services checks for available agents. If there are no available agents, Altocloud does not pop a chat window for website visitors when the chat action is triggered.

For more information, see Altocloud Administration.

Tracing...

Tracing allows users to set trace levels for various IceLib (Interaction Center Extension Library) -based client applications through Interaction Administrator. Click **Tracing** to display the [Tracing Configuration](#) page.



Overview of security for people

You can configure security for the default user, for roles, for a user, or for a workgroup.

Because users inherit one or more properties from the default user, roles and workgroup, the Security page is available from each of these containers. See *Configuration Property Inheritance* for an explanation of how these properties are related in each container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes related to user security are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

For more information on the types of security available for people, see the links under *Related topics*.

Related topics

[Overview of the master administrator rights](#)

[Overview of administrator access rights](#)

[Overview of access control rights](#)

[Overview of security rights](#)

[Configuration property inheritance](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.

Director: Workgroup Configuration

Use this page to manage settings that apply exclusively to Interaction Director post-call routing.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

The following topics explain Interaction Director options for configuration, skill, overflow, and error handling options in detail.

Related Topics

- [Configuration](#)
- [Overflow Options](#)
- [Skill Options](#)
- [Error Handling Options](#)

Director: Configuration Options

Use this page to set Director configuration options.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Configuration

When the **Configuration** button is clicked, the following settings related to Enterprise Groups and interactions appear:

Enable Director Processing on this workgroup

This per-workgroup check box enables Director processing for that workgroup. When this box is checked, all calls entering that workgroup will be processed via Director, instead of local ACD.

Enterprise Group

Use this text edit control to specify the Enterprise Group for the workgroup to query. The workgroup does not have to be a member of the Enterprise Group on the Director server.

Enterprise Group browse button

Opens the Browse Enterprise Group dialog box, so that you can select from a list, instead of typing a name manually.

Priority

Per workgroup, specifies an interaction priority which all interactions in this queue will initially inherit. Values can range from 1 to 100. The default priority is 50; higher numbers indicate higher priority.

In Queue Timeout

Specifies the number of seconds that Director will wait for an Agent to pick up the call before performing in-queue timeout actions (running a handler). Director notifies CIC when this time limit passes. CIC can take any action (via a customized handler) such as playing a prompt, transferring the call, and so on.

Related topics

[Interaction Director: Workgroup Configuration](#)

[Overflow Options](#)

[Skill Options](#)

[Error Handling Options](#)

Overflow Options

Use this page to set the overflow options for Interaction Director.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Overflow

When the **Overflow** button is clicked, a summary of workgroup overflow options appears, listing conditions that will be evaluated when an interaction enters the system via this Queue. These post-call routing rules (conditions) are evaluated in top-down order. A transfer is invoked for the first condition that fails. Overflow rules can be edited or reordered (prioritized) from the summary page.

Note: Overflow conditions specify when an interaction should not be queued, for example, when too many interactions are waiting, when wait time is too high, when an interaction can be serviced immediately, and when there is no viable destination within an enterprise group.

These conditions within the Director system result in some action other than queuing the interaction. The conditions on this tab are evaluated for a newly arrived interaction before it is accepted (i.e. enqueued) by Director. There are five separate conditions: Calls Waiting, Average Wait Time, Longest Wait Time, Immediate Assignment, and No Viable Destination. The first three conditions can be evaluated at any rollup level (Queue, Enterprise Group, Server, System) yielding a great deal of flexibility. For each condition a transfer target can be specified. It indicates where the interaction should go when that condition is triggered. The conditions can be ordered.

Condition

This column lists conditions that will be evaluated when an interaction enters the system via this Queue.

Summary

Displays a logical summary of the configured condition, or "Not Used" if the condition is not enabled.

Edit

This button opens the condition for editing using a dialog box specific to the type of condition:

Overview on Number of Calls Waiting

This dialog sets an overflow condition based on *number of calls waiting*. When this condition is enabled, you can transfer the call to a specific queue or extension when the number of calls waiting in the Queue, Enterprise Group, Server, or system exceeds a configurable limit.

Overview on Average Wait Time

This dialog sets an overflow condition based on *average wait time*. When this condition is enabled, you can transfer the call to a specific queue or extension when the average wait time for the Queue, Enterprise Group, Server, or system exceeds a configurable number of seconds.

Overview on Longest Wait Time

This dialog sets an overflow condition based on *longest wait time*. When this condition is enabled, you can transfer the call to a specific queue or extension when the longest wait time for the Queue, Enterprise Group, Server, or system exceeds a configurable number of seconds.

Overview on no Immediate Assignment Possible

This dialog sets overflow processing that occurs if Director cannot *assign* the call immediately to a monitored server. When this condition is enabled, you can transfer the call to a specific queue or extension.

Overview on no Viable Destination

This dialog sets overflow processing that occurs if there are no viable destinations within an Enterprise Group. "No Viable Destinations" is different from "No Immediate Assignment Possible" in that the latter implies that while there are candidate destinations, all agents might be busy or do not meet the criteria, while the former says there are no candidate destinations at all. This could happen for a variety of reasons, but an example would be that perhaps the Enterprise Group has no members configured, or more likely, all of the member queues are down due to connection loss. In this case, you would not want to make the interaction wait whereas if it is simply a matter of no agents being available you would. When this condition is enabled, you can transfer the call to a specific queue or extension.

Up/Down

Changes the evaluation order of conditions. Topmost conditions are evaluated first.

Related topics

[Configuration](#)

[Skill Options](#)

Skill Options

Use this page to set Director workgroup skills.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Skills

When the *Skills* button is clicked, the tab summarizes workgroup skills associated with the Enterprise Group. Skills are evaluated to influence the routing of calls to queues in an Enterprise Group. All interactions that enter the system via this workgroup will initially require the listed skills. The following columns are displayed:

Skill Name

The name of a skill assigned at the workgroup or queue level. Director scores required Skills against the skills of logged in Agents when it determines an interaction's target destination.

Proficiency

This column lists for each skill, *proficiency* values from minimum to maximum, whether or not the bias is positive or negative, and the value of Importance, a weight assigned to this particular skill proficiency.

Desire to Use

This column lists *desire to use* values from minimum to maximum, whether or not the bias is positive or negative, and the value of Importance, a weight assigned to this particular desire.

Add

Click **Add** to open the [Enterprise Group Skill Specification](#) dialog box, so that you can define the attributes of a new required skill.

Edit

Click **Edit** to open the selected skill for editing using the Enterprise Group Skill Specification dialog box.

Delete

Click **Delete** to remove the selected skill. You are not asked to confirm this operation.

Related topics

[Configuration](#)

[Overflow Options](#)

[Error Handling Options](#)

Error Handling Options

Use this page to set Director error handling options.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Errors

When the **Errors** button is selected, the tab displays options that set flow of control when connectivity between Director and a CIC server is lost while calls are waiting. When the CIC server detects that Director is not reachable, it acts in accordance with the options specified here. The possible actions are wait forever, wait a while and then transfer the call somewhere, or wait a while and let local ACD handle it in place. The following options appear:

Enable Error Handling

This option enables configuration of error processing.

Leave in queue, letting local ACD handle the interaction

This option tells the CIC server not to pass the call to Director or post-call routing. The call will remain in the queue until it is dispatched by local ACD. In short, CIC will transfer the interaction to local ACD in the event of an error.

Transfer to the following target

This option sends the call to the specified workgroup, user name, extension, or external telephone number, or any other transfer type supported by the Extended Blind Transfer (XBT) tool.

Target is passed to a handler. If a Workgroup or User name was specified, the handler passes it to the Extended Blind Transfer tool. If the specified target was not a workgroup, the handler checks to see if it is a user name. If the target was not a workgroup or user name, the entry is passed through dial plan to XBT. If the transfer succeeds, no additional processing occurs. If the transfer fails, the call is transferred to the System queue, where the caller will hear Main Menu prompts again.

Wait time before taking any action

The number of seconds to wait before performing the error recovery action, or 0 to disable delay. In releases before Director 2.3.1, Director would immediately take whatever recovery action was specified when an error occurred. The delay itself was not configurable. In Director 2.3.1 and later, you can configure a time threshold. If the situation rectifies itself within the time allotted, routing resumes where it left off. This can result in less churn in the waiting interaction if a short network glitch occurs.

Related topics

[Configuration](#)

[Overflow Options](#)

[Skill Options](#)



Password Policies

Security policies can be configured for use with CIC passwords and apply these policies per role or user. These policy configurations are very similar to password security policies of Windows. You can define password policies, control password types, and set password change rules, and so on.

You can disguise passwords by setting a parameter. In this case, asterisks (*) appear instead of the actual password.

You can set the following password attributes:

- Minimum Number of Unique Passwords Before One Can be Reused
- Minimum Age of Password Before User Can Change It (days)
- Maximum password age (days)
- Password Age Warning Period (days before password expires)
- Minimum password length
- Minimum number of unique DTMF digits
- Allow or not allow sequential digits
- Maximum number of failed logins
- Lockout duration (minutes)
- Failed Login Count Reser Time (minutes)
- User Must Change Password At Next Login

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Related topics

[Configure a user](#)



Creating Policies

Use this page to create new password policies. Complete the following steps to create new policies or configure the default policy:

1. From Interaction Administrator, select **Policies**.
2. Double-click the **Default Policy** or right-click on the right-hand side of the screen or choose **New** to create a new password policy.
3. Configure the options for the password policy on the following tabs:

Password Policy

1. Enter a description for the password policy in the Description field.
2. Click the check box next to **User must change password next login** if you want the system to prompt the user to change his or her password during the next login.
3. Click **Apply**.

Password

The password tab includes the following options:

- **Minimum Number of Unique Passwords Before One Can Be Reused:**

Determines the minimum number of unique passwords a user must reach before reusing a password. The default setting is 24.

- **Minimum Age of Password Before User Can Change It (days):**

Determines the period of time (in days) that a password must be used before the user can change it. You can set a value between 1 and 999 days, or you can allow changes immediately by setting the number of days to 0. The default setting is 2.

If the **Maximum Password Age (days)** is more than 0, the **Minimum Password Age** must be less than or equal to the **Maximum Password Age**.

Configure the minimum password age to be more than 0 if you want the **Password History** policy to be effective. Without a **Minimum Password Age**, users can cycle through passwords repeatedly until they get to an old favorite. Note that if the **Password History** is set to 0, the user does not have to choose a new password. For this reason, **Password History** is set to 1 by default.

- **Maximum Password Age (days):**

Determines the period of time that a password can be used before the system requires the user to change it. You can set passwords to expire after a number of days between 1 and 999, or you can specify that passwords never expire by setting the number of days to 0. The default is 180.

- **Password Age Warning Period (days before password expires):**

Determines the period of time that reminders will be generated about soon-to-expire passwords. These reminders will be provided in both the CIC clients and through the TUI. This value is ignored if the Maximum Password Age is zero. If this value is greater than or equal to the Maximum Password Age, nagging will occur frequently. You can set this value to zero to suppress warnings. The default is set to 14.

- **Minimum Password Length:**

Determines the least number of characters that a password may contain. You can set a value of between 1 and 24 characters, or you can set the number of characters to 0 to specify that no password is set for the user, effectively disabling the user account. The default value is 8.

Note: The **Minimum number of unique DTMF digits** must be less than the **Minimum password length**. If the value of the **Minimum number of unique DTMF digits** is greater than the value of the **Minimum password length**, you will receive a warning message.

- **Minimum Number of Unique DTMF Digits:**

Determines the minimum number of unique DTMF digits required to be in the password. You can set a value between 1 and 12 digits. The default is 4. While CIC passwords can be composed of digits, punctuation and upper and lower case letters, they are mapped to the 12 standard DTMF digits (0-9, * and #) when entered through the telephone keypad.

Note: The **Minimum number of unique DTMF digits** must be less than the **Minimum password length**. If the value of the **Minimum number of unique DTMF digits** is greater than the value of the **Minimum password length**, you will receive a warning message.

- **Allow All Sequential Digits**

This check box allows you to allow or disallow sequential digits in users' passwords. If unchecked, passwords which consist of a sequence (ascending or descending) of consecutive DTMF digits, will not be allowed. This prohibits passwords like "1234" or "9876", but will allow passwords like "1245". While CIC passwords can be composed of digits, punctuation and upper and lower case letters, they are also mapped to the twelve standard DTMF digits (0-9, * and #) when entered through a telephone keypad. This mapped string is used when enforcing the **All Sequential Digits Allowed** policy. The default is set to No, or unchecked.

- **Minimum Number of Uppercase Characters**

Determines the minimum number of uppercase characters required to be in the password.

- **Minimum Number of Lowercase Characters**

Determines the minimum number of lowercase characters required to be in the password.

- **Minimum Number of Numeric Characters**

Determines the minimum number of numeric characters required to be in the password.

- **Minimum Number of Special Characters**

Determines the minimum number of special characters that are required to be in a user's password. If you complete this box, you must also complete the **Required Special Character Options** box with the special characters that will be counted towards your required minimum number.

- **Required Special Character Options**

Determines which special characters count towards the required minimum number of special characters. Special characters

include

If you complete this box, you must also complete the **Minimum Number of Special Characters** box.

Note: Users can include other special characters in their passwords. However, only the special characters that you specify in this box count toward the required minimum number of special characters. For example, suppose you require a minimum number of 3 special characters, and you specify the required special characters as `!@#*&^`. Then a password of `JOe@#%1234` is not acceptable because while it contains 3 special characters, it does not contain 3 of the special characters that you require.

Account Lockout

The Account Lockout tab includes the following options:

- **Maximum Number of Failed Login Attempts Before Account is Locked Out:**

Determines the maximum number of failed login attempts that will be permitted. If this limit is exceeded, an "Account Locked Out" error will be reported until the failed login attempt counter gets reset by an administrator or until the **Account Lockout Duration** has expired. The default setting is 5.

- **Lockout Duration (minutes):**

Determines the number of minutes a locked-out account remains locked out before automatically becoming unlocked. The available range is 1 to 99,999 minutes. You can specify that the account will be locked out until an administrator explicitly unlocks it by setting the value to 0. If a **Maximum Number of Failed Login Attempts** is defined, the **Account Lockout Duration** must be greater than or equal to the **Account Lockout Reset Time**. The default setting is 30.

- **Failed Login Count Reset Time (minutes):**

Failed Login Count Reset Time defines the minutes since the last failed attempt, that the count gets reset to the Lockout Duration. If the Lockout Duration is not 0, then after whatever time the duration is set to has elapsed since the account was locked out, the account gets "unlocked" and the valid password will work. The default setting is 30.

There are a certain number of failed attempts before the account is locked out as defined by **Maximum number of failed login attempts before account is locked out**. Once you have made that many attempts with incorrect passwords, the account is locked out, and no password will work.

Assuming the account has not been locked out, i.e., the user has not made more than the **Maximum Number of Failed Login Attempts**, once the **Failed Login Count Reset Time** has elapsed since the last attempt with an incorrect password, the count gets reset to 0.

Example: If **Failed Login Count Reset Time** is 1440 minutes (24 hours) and the **Maximum Number of Failed Login Attempts** is 3, the user can try to login with a incorrect password three times before the account is locked out. If he tries three times, then waits 24 hours (the **Failed Login Count Reset Time**), the count goes down to 0 and he gets three more attempts with incorrect passwords before the account gets locked out. The **Failed Login Count Reset Time** is counted from the last login attempt with a incorrect password. If the **Failed Login Count Reset Time** is 0, the count never gets reset automatically. In this example, even if the user waits a day or a week, the fourth time the he tries to login with a incorrect password, the account gets locked out.

Using this same example, if the **Account Lockout Duration** is 1440 minutes (24 hours), once the user tries to login with a incorrect password more than three times, the account gets locked out and he cannot login even with the correct password.

After 24 hours from the last login with an incorrect password that triggered the lockout, the account gets unlocked and the user can login with the correct password. He now has 3 chances with incorrect passwords until the account gets locked again.

If **Account Lockout Duration** is 0, the account remains locked until an administrator unlocks it from the User container in Interaction Administrator, by right-clicking on the user and choosing **Reset Failed Login Count**. In this case the count is set to 0 as if the time had elapsed. The administrator may reset this count anytime.

Users/Roles

From the Users/Roles tab you can apply policies to users and/or roles. From this page, you can add and delete users, as well as add and delete roles.

History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Last Modified

This date is automatically updated each time the user clicks the OK button, presumably after making changes to the configuration property sheet. To avoid updating this date, exit the page by clicking the Cancel button.

Note: If you click Cancel, none of the changes made to this configuration will be preserved.

Date Created

This date is automatically set when the user creates the initial configuration for this policy. If the policy was initially created by IC Setup Assistant, the date could be blank.

Notes: Type notes about configuration settings and changes. If you change the configuration settings and click OK, the Last Modified date is updated.

You must manually enter the date beside each entry in the Notes field to identify the date of each note.

To create a new line in the Notes field, press Ctrl+Enter.



Password Policy Configuration

Use the Policies Configuration page to define new policies. To configure the password policies options, double-click **Configuration** on the right-hand side of the screen. The Password Policies Configuration page appears with the following options:

Combining Policies

Because several password policies can be assigned to a user, through direct assignment or because he or she is assigned to a role which has a policy assigned to it, multiple policies get combined. You must then decide how you want the different policies to be interpreted. This is done through a check box which allows you to choose the most restrictive or least restrictive policy when checking new passwords and when the user has more than one policy. For example:

- Policy A: Password Maximum Age = 10, Minimum Length = 4, Assigned to User A
- Policy B: Password Maximum Age = 20, Minimum Length = 6, Assigned to Role B
- User A is assigned to Role B

Both Policy A and Policy B apply to User A. The values will be combined based on the choice on the **Combining Policies** page.

If **Most Restrictive** is chosen, when a new password is checked for User A, the **Maximum Age** will be 10 days and the **Minimum Length** will be 6. If **Least Restrictive** is chosen, **Maximum Age** will be 20 and **Minimum Length** will be 4.

The example was for just two policies, but any number of policies might apply to a user, and they would all be combined in this way.

1. Click the appropriate check box for the restriction level you want when combining policies for a given user:

- Most restrictive
- Least restrictive

2. Click **Apply**.

History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Last Modified

This date is automatically updated each time the user clicks the OK button, presumably after making changes to the configuration. To avoid updating this date, exit the page by clicking the Cancel button.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the configuration was initially created by the IC Setup program, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note. To create a new line in the **Notes** field, press Ctrl+Enter.



Policy Name

Type a unique policy name that will represent a set of attributes and permissions that you want to assign to specified users or a role.



About schedules

The **Schedules** container lets you set dates and times to activate *telephone-based menus*. Telephone-based menus (or simply menus) are the set of choices that callers select by pressing buttons on a telephone keypad. In CIC, menus that are configured to run on certain days and at certain times are known as *scheduled menus*.

For example, you can schedule a menu to run on a holiday, every Tuesday, after hours, or during lunch. However before you schedule a menu, you must create the menu using the **Scheduled Menus** feature of Interaction Attendant. For more information, see the Help for Interaction Attendant.

The **Schedules** container is located under the **Peoples** container.

you modify and delete schedules in the right pane of the container.

Note: You cannot delete a schedule that is used Interaction Attendant.

Related topics

[Schedule configuration](#)

[One time](#)

[Link a menu to a schedule](#)

[Set dates and times for menus](#)



Schedule Configuration

Use this page to set dates and times to activate **telephone-based menus**. Telephone-based menus (or simply menus) are the set of choices callers select by pressing buttons on a telephone keypad. In CIC, menus that are configured to run on certain days and at certain times are known as *scheduled menus*.

You might schedule a menu to run on a holiday, every Tuesday, after hours, or during lunch. However before you schedule a menu, you must have created the menu using the **Scheduled Menus** feature of Interaction Attendant. For more information on **Scheduled Menus**, see the Interaction Attendant help.

Description

Type information that identifies the menu or type of scheduled event. The description displays in the Interaction Administrator list view window when the **Schedule** container is selected.

Keywords

Type a unique name that categorizes the schedule. For example, if the schedule is one of many schedules for the Support department, you might want to specify "support" as the keyword. Then, all schedules with the keyword "support" are associated. The **Get Schedules** tool uses these keywords for retrieving a list of schedule-specific menus. For more information on the **Get Schedules** tool, see the Interaction Designer help.

Use a comma to separate more than one keyword.

Schedule is Active

Select this check box to activate the schedule. When the schedule is active, it is available as a candidate for evaluation by the system. Clear the check box to deactivate the schedule.

Periodicity

Click one of the following tabs to apply the type of schedule (or periodicity). The periodicity tab that is displayed when opening or closing the schedule configuration page, is the type of schedule that is active for the schedule entry. You can also see the type of schedule each entry is by looking at the Periodicity column:

Schedule	Periodicity	Start Date	End Date	Start Time	End Time
Thanksgiving	Yearly	12/18/2012	No End Date	12:00 AM	Midnight
Sunday	Weekly	12/18/2012	No End Date	12:00 AM	Midnight
Corporate Offsite	Monthly	12/18/2012	No End Date	9:00 AM	11:00 AM

- [One Time](#)

Sets a menu to run for the specified time period, which plays the menu as often as needed.

Note: The **One Time** schedule should not be confused with the **Unplanned** schedule type in available in Interaction Attendant. An unplanned schedule allows you to specify an indefinite end time, staying active until it is turned off. See *Unplanned Schedules* in the Interaction Attendant help for more information.

- [Daily](#)

Sets a menu to run every day at a specific time for a specified length of time

- [Weekly](#)

Sets a menu to run every week on certain days or every week in a sequence of days

- [Monthly](#)

Sets a menu to run on relative and specific days of the month

- [Yearly](#)

Sets a menu to run on specific and relative days during the year

The type of schedule determines the order in which CIC selects the schedule to play. The order of priority is as follows:

- **Unplanned:** Highest priority (See the note above under **One Time**.)
- One Time
- **Yearly**
- Monthly
- Weekly
- **Daily:** Lowest priority

If there is more than one schedule that matches in priority, then the start and end times are compared. The schedule containing the closest comparable times is the higher priority.

Related Topics

[Video: Use System schedules for holidays](#)

[Schedules](#)

[Linking a menu to a schedule](#)

[One Time](#)



To set dates and times for menus

You can schedule a menu to play at any time, day, week, month, or year. However, before you set the time and date that activates the menu, you must have created the menu using the Schedule feature of Interaction Attendant.

After you have created the menu in Interaction Attendant, follow these steps:

1. In Interaction Administrator, under **People**, select **Schedules.**, and right-click and select **New**. Or click the **Insert** key.
2. Type a name for the schedule, and then click **OK**.
The Schedule Configuration window appears.
3. In the **Description** box, type information that best describes the scheduled event. The description appears in the Interaction Administrator list view window when the **Schedule** container is selected.
4. In the **Keywords** box, type a unique name that will be used to categorize the schedule. If you have more than one keyword, use commas to separate them. The **Get Schedules** tool uses the keyword to retrieve a list of schedule-specific menus. For information on the **Get Schedules** tool, see the Interaction Designer online Help.
5. Select the button that describes the frequency of event you want to schedule – **One Time**, **Daily**, **Weekly**, **Monthly**, and **Yearly**.
6. Fill in the appropriate fields, and then click **OK**.
The schedule is added to the Interaction Administrator list view window. From this window, you can modify or delete the schedule.

Related topics

[Schedules](#)

[Schedule Configuration](#)

[One Time](#)

[Linking a menu to a schedule](#)



To link a menu to a schedule

Once a menu is created using Interaction Attendant, and a schedule configured using the Schedules container in Interaction Administrator, you will need to establish a link between the menu and the schedule. Follow these steps:

1. Start Interaction Attendant.
From the **Start** menu, point to **Programs**, and then **PureConnect**. Click **Interaction Attendant**. The Interaction Attendant window appears.
2. On the **File** menu, click **Connect to Server**.
The Logon to Server dialog appears.
3. Type the name of the server, your user ID, and password.
4. Click **OK**.
5. In the tree structure, select the name of an existing profile or schedule form.
6. On the **Insert** menu, click **New Schedule**.
7. Click the **System** tab.
8. In the **System Schedule** list, use the down arrow to find the schedule you want to link to.
9. Click **Show Schedule** to view the schedule in read-only mode.



One Time

You can set a menu to run for the specified time period (required), which plays the menu as often as needed.

Note: The **One Time** schedule should not be confused with the **Unplanned** schedule type in available in Interaction Attendant. An unplanned schedule allows you to specify an indefinite end time, staying active until it is turned off. See *Unplanned Schedules* in the Interaction Attendant help for more information.

Occurs

Sets the menu to run one time during a 24-hour period as follows:

- One time, but not all day.

Use the Start boxes to select the date and time you want the menu to become active. Use the End boxes to select the date you want the menu to become inactive.

Note: If you configure both the start time and the end time as 12:00 am, CIC treats the end time as midnight at the end of the specified date (24:00) rather than midnight at the start of the specified date (00:00).

- One time, all day.

Use the **Start** boxes to select the date and time you want the menu to become active, and then select the **All Day** option.

Overview of secure input forms

You can define secure input forms to allow your customers to enter confidential customer information without divulging that information to agents. During a call, if an agent needs to capture confidential information, the agent can start a secure session. The customer can then use the IVR system to enter confidential information. After the customer has completed the IVR and entered all of the necessary confidential information, the agent can re-engage with the customer to conclude the call.

You manage secure input forms in the **Secure Input Forms** sub-container, which is found under the **People** container.

Before you can use any other secure input features, you must enable the Secure Input feature. You must also do the following things:

- Assign a secure input form to a workgroup.
- Assign the **Secure Input** and **Initiate Secure Input Interactions** security rights to users.

For more information on how to enable the Secure Input feature, see *Enable secure input*. For more information about the Secure Input feature, see the *Secure Input Technical Reference* document in the **Technical Reference Documents** section in the PureConnect Documentation Library.

Related topics

[Add a secure input form](#)

[Enable secure input](#)

Add a secure input form

Note: Remember to enable the Secure Input feature. For more information, see *Enable secure input*.

To add a secure input form

1. In the **People** container, click the **Secure Input Forms** subcontainer.
2. In the list view, right-click and then click **New**.
3. In the **New Secure Input Form** box, type a meaningful and unique name for the secure input form name.
4. From the **Form type** list, select one of the following:
 - **Simple:** Select this type to enable the form to receive text input.
 - **Custom:** Select this type if you have the CIC client add-in to create custom secure input forms. Custom forms receive input with attributes that you specify in your code. For more information, see the *Secure Input Technical Reference* in the PureConnect Documentation Library.
- e. Click **OK**.
- f. In the **Secure Input Form Configuration** dialog box, complete the tabs. See the links under *Related topics* for complete information.

Related topics

[Configure general information](#)

[Enable secure input](#)

[Overview of secure input forms](#)

Configure general information

Use this tab to configure general information about secure input forms.

Note: You must enable the secure input forms feature before any secure input forms are available for agents to use. Secure input is available in Interaction Desktop. For more information, see *Enable secure input*.

To configure general information

1. In the **Dialog title** box, type a title for the secure input form. Agents will see this text in the title bar of the dialog box that contains the secure input form.
2. In the **Description** box, type a description for the secure input dialog box. The CIC clients display the description when an agent selects the secure input form.
3. From the **IVR Handler** list, select a handler to start the secure session. The list includes only published handlers that begin with the Secure Input initiator.
4. To add a form field, next to the **Input fields** list, click **Add**. For more information, see *Add form field*.
5. To edit a form field, select it in the **Input fields** list and then click **Edit**.
6. To remove a form field, select it in the **Input fields** list and then click **Remove**.
7. To change the position of a form field, select it in the **Input fields** list and then use the **Move up** and **Move down** buttons as necessary.

Related topics

[Enable secure input](#)

[Define a form field](#)

[Overview of secure input forms](#)

Enable secure input

You must enable the Secure Input feature in order for agents to use your secure input forms. You can enable secure input in the when you add or edit a secure input form. If you need to create multiple secure input forms, you can wait to enable secure input until all of the forms are available.

Note: Secure input is available in Interaction Desktop.

To enable secure input

1. In the **People** container, click the **Secure Input Forms** subcontainer.
2. Do one of the following:
 - Add a new secure input form. For more information, see *Add a secure input form*.
 - In the list view, right-click an existing secure input form and then click **Properties**.
3. At the top of the **Secure Input Form Configuration** dialog box, locate the text that indicates that the Secure Input feature is disabled. Click the **click here to enable Secure Input** link.
4. Click **OK**.

Note: You can also enable secure input in the **Telephony Parameters** tab of the **Server Configuration** container.

Related topics

[Add a secure input form](#)

[Configure general telephony parameters for your CIC server](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.

Disable secure input

To disable secure input

1. In the <IC Server> container, in the list view window, double-click **Configuration**.
The **Server Configuration** dialog box appears.
2. Click the **Telephony Parameters** tab.
3. In the list, select **General**.
The general telephony parameter options appear in the right side of the tab.
4. Clear the check box for the Enable Secure Input option.
5. Click **OK**.

Related topics

[Overview of secure input forms](#)

[Configure general telephony parameters for your IC server](#)

Overview of wrap-up codes

You can add wrap-up codes to CIC that can be used to associate the nature of the interaction; for example, Billing Problem, New Order, or Service Request. The wrap-up codes you define are used in reports specific to wrap-up codes. Once wrap-up codes are defined, users can assign wrap-up codes to incoming and outgoing interactions from the Interactions page in the CIC clients.

Phone-only users can use wrap-up codes as well. After a phone-only ACD user completes a call, the CIC server calls that user and plays a prompt requesting he/she enter the appropriate wrap up code. The user keys in the wrap-up code digits (from the wrap-up code definition) and these digits are saved in the report log.

There is a timeout window for all users to enter a wrap-up code. If no wrap-up code value is entered when required, "NS" (for not specified) is entered into the report log instead. Reports can be generated to categorize interaction details by wrap-up codes. Users are not assigned interactions during the wrap-up code timeout, which is defined by either the Client Wait Time or the Keypad Wait Time (for phone-only users).

Note: Phone-only users should not attempt to manage multiple calls while using the wrap-up codes feature. You cannot delete the default wrap-up code.

Related topics

[View wrap-up codes](#)

[Add a wrap-up code](#)

[Configure a wrap-up code](#)

Configure advanced information

View wrap-up codes

The **View Wrap-up Codes** page displays wrap-up codes in a list in the master view, and displays details of the currently selected wrap-up code in the details view. In the list view, you can add, delete, and copy and paste codes. You can change the way the list is displayed, such as change visible columns, sort by column, and filter.

To view wrap-up codes

1. Click the **View Wrap-up Codes** action under the **User Management** category or click **View Wrap-up Codes** in the breadcrumbs, if available.
2. The **View Wrap-up Codes** page appears.
3. The details of the selected wrap-up code appear in the details view.

Note:

There are two system wrap-up codes for call segments that end in a transfer, requiring a wrap-up code. These two wrap-up codes do not appear in Interaction Administrator, but they do appear in reporting and review of interactions.

These are the wrap-up codes:

"~~WRAPUP-CONSULT" is used for call segments which end in consult transfers

"~~WRAPUP-TRANSFER" is used for call segments which end in blind transfers

Related topics

[Add a wrap-up code](#)

Add a wrap-up code

To add a wrap-up code

1. Right-click in the master view area and select **New** or click the **New** button in the master view toolbar.
2. Complete the wrap-up code configuration in the details tabs.

Note: There is a 50 character limit for wrap-up codes and wrap-up categories.

Related topics

[Configure a wrap-up code](#)

Configure a wrap-up code

The wrap-up codes details tab contains name, digits, label, category, access control group, and multi-language label information the code. Click the name of the details tab for field descriptions.

To configure a wrap-up code

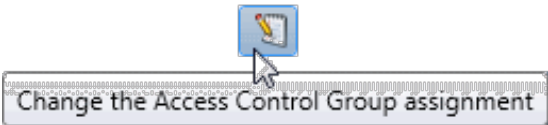
1. To display the details view, click the **Configuration** details tab
2. Complete the following information in the first section:
 - Type the **Name** of the new code.
 - Type the **Code label**. This is label appears in the CIC clients.
 - Select the wrap-up code category to which the new code belongs.

<Default Wrap-up Category>

WrapUpCategory1

The default category is <Default Wrap-up Category>. New categories are defined in Wrap-up Category configuration.

- To display the access control groups available, click the icon,



and select the **Access Control Group** from the list to assign to the code.

- If the outbound call reaches the intended party, this option is applied to the wrap-up code. Interaction Dialer uses this setting to determine if the intended party was contacted and then includes it in the Right Party Contact calculation.
3. Click the **Multi-language labels** section expander to display (or hide) the language section's contents, and complete the following information:

- Click  to open the **Add languages** dialog box.

Select one or more languages in the **Available** items list, and click **Add** to assign the language to the **Selected** items list. You can also click **Add all** to add all languages. To filter the list of languages, type in the filter field above the list.

- Type in the string value associated with the language selected.

Language	Value	 
Azeri (Cyrillic)	Azeri_translation	
Bulgarian (Bulgaria)	Bulgarian_translation	

Note: You must specify a value or the multi-language label is not saved.

4. Save the new code or modified code.
 - If necessary, the new code or changes made to an existing code can be reverted.

Related topics

[Wrap-up codes: configuration field descriptions](#)

Configure advanced information

Use the **Advanced** tab information to configure for custom attributes and history.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this tab are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

You can define custom attributes for skills to further assist the ACD routing process in selecting the most appropriate agents. For more information on how to use custom attributes with skills, see the *IC ACD Technical Processing Technical Reference* in the CIC Documentation Library.

To configure advanced information

1. In the Skills window details area, click the **Advanced** tab.
2. To create a custom attribute, under the **Custom Attributes** section, click the  button.
3. In the **Name** box, type the attribute name.
4. In the **Value** box, type the attribute value.
5. To add a history note, under the **History** section, in the **Notes** box, type the information that you wish to capture.
6. Click **Save**.

Related topics

[Overview of skills](#)

[Configure general information](#)

View wrap-up categories

The **View Wrap-up Categories** page displays wrap-up categories in a list in the master view, and displays details of the currently selected wrap-up category in the details view. You can take actions on the wrap-up categories in the list view, such as add, delete, and copy and paste, and you can add a new category. You can change the way the list is displayed, such as change visible columns, sort by column, and filter.

Note: You cannot delete the default wrap-up category.

To view wrap-up categories

1. Click the **View Wrap-up Codes** action under the **User Management** category or Click **View Wrap-up Categories** in the breadcrumbs, if available.
2. The **View Wrap-up Categories** page appears.
3. The details of the selected wrap-up category appear in the details view.

Related topics

[Add a wrap-up category](#)

View wrap-up categories

The **View Wrap-up Categories** page displays wrap-up categories in a list in the master view, and displays details of the currently selected wrap-up category in the details view. You can take actions on the wrap-up categories in the list view, such as add, delete, and copy and paste, and you can add a new category. You can change the way the list is displayed, such as change visible columns, sort by column, and filter.

Note: You cannot delete the default wrap-up category.

To view wrap-up categories

1. Click the **View Wrap-up Codes** action under the **User Management** category or Click **View Wrap-up Categories** in the breadcrumbs, if available.
2. The **View Wrap-up Categories** page appears.
3. The details of the selected wrap-up category appear in the details view.

Related topics

[Add a wrap-up category](#)

Add a wrap-up category

To add a wrap-up category

1. Right-click in the master view area and select **New** or click the **New** button in the master view toolbar.
2. Complete the wrap-up category configuration in the details tabs.

Note: There is a 50 character limit for wrap-up codes and wrap-up categories.

Related topics

[Configure a wrap-up category](#)

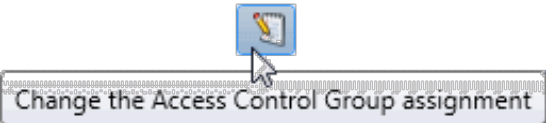
Configure a wrap-up category

The wrap-up categories details tab contains name, category label, access control group, record status, phone number status, options, and multi-language label information the category. Click the name of the details tab for field descriptions.

To configure a wrap-up category

1. Click the **Configuration** details tab to display the details view.
2. Complete the following information in the first section:

Type the **Name** of the new category.
Type the **Category label**. This is label appears in the CIC clients.
To display the access control groups membership available, click the icon,



and select the **Access Control Group** from the list to assign to the category.

Record status: Interaction Dialer uses this setting to determine the status of the record in the contact list.

Phone number status: Interaction Dialer uses this setting to determine the status of the phone number associated with the record.

The interaction connected to an actual person: This setting indicates whether the interaction is considered a contact. Interaction Dialer uses this setting to determine if the next contact column should be attempted for the record. If this setting is enabled, then Interaction Dialer will not attempt to dial any other contact columns for the record. If the setting is disabled, Interaction Dialer attempts to dial the next available contact column for the record.

Increment the attempts counter: Interaction Dialer uses this setting to determine if the interaction is considered an attempt on the record.

The interaction was successful: Interaction Dialer uses this setting to determine if the interaction is considered a success. The setting is used for reporting to calculate success rates.

3. Click the **Multi-language labels** section expander to display the language section's contents, and complete the following information:

- Click  to open the **Add languages** dialog box

Select one or more languages in the **Available** items list, and click **Add** to assign the language to the **Selected** items list. You can also click **Add all** to add all languages. To filter the list of languages, type in the filter field above the list. Type in the string value associated with the language selected.

Language	Value	
Azeri (Cyrillic)	Azeri_translation	 
Bulgarian (Bulgaria)	Bulgarian_translation	

Note: You must specify a value or the multi-language label is not saved.

4. Save the new category or modified category.

If necessary, the new category or changes made to an existing category can be reverted.

Related topics

[Wrap-up categories configuration field descriptions](#)

Configure advanced information

Use the **Advanced** tab information to configure for custom attributes and history.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this tab are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

You can define custom attributes for skills to further assist the ACD routing process in selecting the most appropriate agents. For more information on how to use custom attributes with skills, see the *IC ACD Technical Processing Technical Reference* in the CIC Documentation Library.

To configure advanced information

1. In the Skills window details area, click the **Advanced** tab.
2. To create a custom attribute, under the **Custom Attributes** section, click the  button.
3. In the **Name** box, type the attribute name.
4. In the **Value** box, type the attribute value.
5. To add a history note, under the **History** section, in the **Notes** box, type the information that you wish to capture.
6. Click **Save**.

Related topics

[Overview of skills](#)

[Configure general information](#)



CIC Client Buttons

You can configure the buttons that appear in the CIC clients which start an application, invoke a custom handler, invoke an add-in, or open a URL.

Note: Custom buttons can appear in Interaction Desktop, Interaction Connect, and the PureConnect for Salesforce integration. Custom buttons that invoke an add-in work only in Interaction Connect. Custom buttons that launch a local application work only in Interaction Desktop. Custom buttons that invoke a handler work in all CIC clients.



CIC Client Button Name

Type a descriptive label for a client button. This is the label for the new button in the CIC clients.



CIC Client Button Configuration

Use this page to configure the behavior and appearance of a button in the CIC clients. Custom buttons can appear on queue control toolbars and interaction form toolbar. You can configure a custom button to apply to an "interaction type" which causes a queue-based custom button to be enabled only when one of the correct interaction types is selected in the queue view.

Users need the appropriate **Client Buttons: View** Access Control right to see all or selected custom buttons in the CIC client.

Although custom buttons can appear in Interaction Desktop, Interaction Connect, and the PureConnect for Salesforce integration, be aware of the following:

- You can optionally display custom buttons on the appropriate **interaction form toolbars** (for email, chat, call, and so on) only in Interaction Desktop.
- Custom buttons that launch a **local application** work only in Interaction Desktop.
- Custom buttons that invoke an **add-in** work only in Interaction Connect.
- Custom buttons that invoke a **handler** work only in Interaction Desktop.
- Custom buttons that open a **URL** work only in Interaction Desktop and the PureConnect for Salesforce integration.

Active

Select this check box to enable this custom button in the CIC clients.

Text

This is the button name you entered when starting to create the custom button. It is used as a label in Interaction Desktop and Interaction Connect.

Description

Enter a description of this CIC client button. This description is used as a tool tip text when CIC client users mouse-over the button.

Icon

You may select an icon to display on the button. Click **Change Icon** to open a file browser to search for a *.ico file.

Availability section

Use the options in this section to define where the custom button is located and when it is enabled.

Enabled

Select when the button is enabled.

- The default option is **Always**. **Always** makes the custom button available in a selected interaction's right-click context menu.

If you select **Always**, you can optionally select **Deactivate after one use per logon**.

- **Interaction Selected** or **Active Interaction Selected** options affect only the queue tool bar. This is because an interaction form represents only one interaction, which is assumed to be the *selected* interaction, and Interaction Desktop interaction forms cannot be shown for inactive interactions. An active interaction is any interaction that is not in the disconnected state.

If you select either of these options, you can optionally select **Deactivate after one use per interaction**.

Location

Select where the button should appear from the pull-down menu. The options are **Queue** (queue toolbar), **Interaction Form**, or **Both**.

Note: This setting is ignored by **Interaction Connect**. Interaction Connect does not have interaction forms with buttons. Custom buttons automatically show up on Queue views for all CIC clients.

Interaction Types

Select the check box for each interaction type for which the button should be enabled. Select **All** if the button should be enabled for every interaction (depending on the option chosen for the **Enabled** setting).

Note: Setting **Enabled** to **Always** automatically selects **All** for Interaction Types and selects and disables the check boxes for every interaction type.

In Interaction Desktop, if only certain interaction types are selected, the button is available only on those interaction type forms (if

the **Location** is set to "Interaction Form" or "Both"), and it is enabled only when an interaction of the selected types is in the queue (depending on the **Enabled** and **Location** settings).

Deactivate after one use per logon

Select this check box if you wish the button to disable or be grayed out after the first-time use per session.

Action section

Use the options in this section to define what action happens when the custom button is clicked.

Handler Notification

Select this option to send a notification to launch a custom handler. This option passes to the handler the interaction ID of the selected interaction (if any), the ID of the user that pressed the button, and the station from where the request was made. The handler then performs whatever action is required as customized.

Add-In Notification

Select this option to notify add-ins that are installed on the web server. This option passes to the add-in the interaction ID of the selected interaction (if any), the ID of the user who pressed the button, the station from where the request was made, and the queue ID and type if the button was pressed from a queue view. The add-in then performs whatever action is required as customized.

Note: Custom buttons for add-ins are available only for Interaction Connect.

Launch Application

If you select **Launch Application**, the blind path to the executable application (*.exe) must be defined. Enter the path relative to the local CIC Client workstation (e.g., C:\Program Files\Interactive Intelligence\application.exe), or enter a UNC path (e.g., \\hydra\icapplications\application.exe).

Note: Custom buttons for launching applications are available only in Interaction Desktop.

When launching an application, you can use the following command line parameters:

- Button ID
- Interaction ID
- Username
- Station

Code Example:

```
Process customApp = new Process();
customApp.StartInfo.FileName = _CustomButton.LocalApplication;
// Use quotes in command string to allow for names with spaces
customApp.StartInfo.Arguments =
String.Format("\"\"/BUTTON={0}\"\" \"/OBJECT={1}\"\" \"/USER={2}\"\" \"/STATION={3}\"\"",
ShellEscape(_CustomButton.Id),
interactionId,
ShellEscape(userName),
ShellEscape(stationName));
```

Open URL

When an agent clicks this custom button, it opens the URL in a separate browser window.

Click the **Plus** button to insert an interaction attribute into the URL. For example, this could be used to pass an interaction ID to a CRM.

Note: This does not support launching or running an application. Other than the URL, it does not support any other strings.

User Notification

Select this check box to display a toast to the user indicating that the custom button was clicked.

Related Topics

[Client Button Entry Name](#)

[Client Buttons](#)

Overview of client configuration templates

You can create boilerplates of configuration options that you can then assign to users, workgroups or roles. These client configuration templates streamline the process of configuring large numbers of CIC clients.

Note: The options for queue pages and directories pages are used only by Interaction Desktop.

Configure who can modify values in a template

Each page in a client configuration template contains a **Allow user to modify any of these values** check box. If you select this check box, both the users who are assigned the template and the master administrator can change the settings on that page for the template.

Related topics

[Rank client configuration templates and designate the default template](#)

[Add a client configuration template](#)

[Client configuration template options](#)



Rank client configuration templates and designate the default template

The first template in the list is selected when a user inherits multiple templates. When a user does not inherit a template, then the default template is used.

To rank client configuration templates and designate the default template

1. In the **People** container, click the **Client Configuration** subcontainer.
2. In the list view, right-click **Configuration** and then click **Properties**.
3. In the **Templates** list, select a template. Use the **Move Up** and **Move Down** buttons to position it in the list.
4. To designate a template as the default template, click **Set as Default**.
5. Click **OK**.

Related topics

[Overview of client configuration templates](#)

[Add a client configuration template](#)

Overview of client configuration templates

You can create boilerplates of configuration options that you can then assign to users, workgroups or roles. These client configuration templates streamline the process of configuring large numbers of CIC clients.

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Related topics

[Rank client configuration templates and designate the default template](#)

[Add a client configuration template](#)

[Client configuration template options](#)

Add a client configuration template

Before you assign a client configuration template to a user, you must first add the template. For more information on CIC client configuration, see the help for the CIC clients.

To add a client configuration template

1. In the **People** container, click the **Client Configuration** subcontainer.
2. Click the **Templates** subcontainer.
3. Right-click and then select **New**.
4. In the **Entry Name** box, type the template name and click **OK**.
5. In the **Client Configuration** dialog box, use the tree structure to navigate through and complete the configuration options. For more information, see the links under *Related topics*.

Related topics

- [Alerting](#)
- [Voicemail/Fax Paging](#)
- [My Interaction Ring Sounds](#)
- [Calls](#)
- [Follow Me](#)
- [Call Coverage](#)
- [Personal Prompts](#)
- [Emails](#)
- [IP Phone](#)
- [Monitored Appearances](#)
- [Queues Pages](#)
- [Directories Pages](#)
- [General](#)
- [Plugins](#)
- [e-FAQ](#)
- [Interaction Tracker](#)
- [History](#)



Alerting

This dialog box displays the alerting configuration options in the **General** section and the **Parked Call** section.

General Alerting

Ring Telephone for Calls

Select this option to make the telephone ring when a call comes to a CIC client. If **Ring Always** setting for the station is enabled, then the **Ring Always** setting overrides this setting. If the station is a remote station, then the **Ring Always** setting overrides this setting.

Ring Computer

Selecting this option causes incoming interactions to ring through the computer's speakers. This feature does not work if the computer does not have a sound card installed. **Ring When On Phone** - When selected, incoming interactions ring on the computer when an agent is already on the phone.

Pop Client

If this option is selected, an incoming interaction causes the CIC client to appear on top of any other applications that are running, but does not become the active window. This feature avoids interrupting work in another application.

Pop for Work Items

If this option is selected and a work item ([collection of routed forms](#)) is received, the CIC client appears on top of any other applications that are running, but does not become the active window. A work item appears in the 'My Work Items' tab in the CIC client, along with descriptive information.

Auto Select Interactions After Disconnect

CIC allows multiple interactions in the My Interactions queue. However, actions (such as mute, record, and transfer) can only be performed on the currently selected, or highlighted, interaction.

If there are multiple active interactions in the My Interactions queue, choosing this option causes the CIC client to automatically search and select the most recent or next interaction that is not disconnected.

Otherwise, the CIC client automatically selects the interaction that was most recently connected.

By default, if there are no active interactions in the My Interactions queue, when an alerting interaction appears, it is automatically selected.

Timeout for Incoming Calls (in seconds)

Typically, 6 seconds covers one ring and a pause, so 18 seconds should allow three full ring cycles. The default is 30 seconds. Negative numbers are not valid. The Timeout for ACD calls is controlled separately by the Workgroup configuration.

Parked Call Alerting

These options include:

Display Desktop Alert for New Parked Calls

Select this option to display a "pop up" window when calls are on hold (parked) while the agent is on a phone call. This window is displayed on top of all other applications, and pops-up only on new calls parked on the agent's queue.

Play Audio Alert for New Parked Calls

Select this option to play an audio alert when calls are on hold (parked) while the agent is on a phone call, and select one option below:

- **Once** (default): Plays audio alert for parked calls one time only.
- **At regular intervals**: Plays audio alerts for parked calls at specified intervals.

Minutes between alerts: Specify the minutes between alerts.

Allow User to Modify Any of These Values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.



Voicemail/Fax Paging

Use this section to configure the following properties.

Alerting Method

Select the way the agent is alerted when a voicemail or fax arrives.

Do Not Send Me Alerts

Select this option when you don't want agents to receive alerts when a voicemail or fax is delivered to their Inbox or phone.

Email Address

Select this option to send an alert notification to an email address when a voicemail or fax is delivered to an Inbox or phone. Enter the full email address (for example: joe.user@inin.com).

Telephone Number

Select this option to send an alert notification to a designated telephone number when a voicemail or fax is delivered to an Inbox or phone. Enter the telephone number using the area code for long distance calls.

Pager Number

Select this option to send a pager notification when a voicemail is delivered to an Inbox or phone. Enter the pager number and ID if applicable. Enter the ID if applicable.

Alerting Reason

Define the criteria for alert notifications by using these options:

I receive a voice mail

Use this option to receive alerts when voicemail messages are delivered to an Inbox or phone.

- **Any voice mail:** Receive alerts for all voicemails.
- **Only urgent voice mails:** Receive alerts for voicemails marked as urgent.

I receive a new fax

Use this option to receive alerts when faxes are delivered to an Inbox or phone.

Alerting Time

Use the following options to restrict when alerts are received.

Any time of day

Receive alerts any time of day.

Only between

Receive alerts only between these times:

- **Start:** Specify the start time for receiving alerts.
- **End:** Specify the end time for receiving alerts.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



My Interaction Ring Sounds

Use this section to configure the following properties. Custom ring sounds are supported in Interaction Desktop.

Calls

Select the location of the .wav file to play when calls ring in the CIC clients.

Chats

Select the location of the .wav file to play when chats arrive in the CIC clients.

Emails

Select the location of the .wav file to play when emails arrive in the CIC clients.

All Other Interactions

Select the location of the .wav file to play when all other interactions arrive in the CIC clients.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Calls

Use this section to configure the following properties for calls.

Timeout for external calls (in seconds)

Enter the number of seconds outgoing calls will ring before they are disconnected. This timeout setting will be ignored unless Analyze Outgoing External Calls is selected, and the dialing is from the CIC clients. If outgoing call is manually dialed (using handset), the outgoing call will ignore this setting and will continue ringing until answered. The default value is 45 seconds.

Used advanced dialing options (account code, workgroup)

Select this option to display the Advanced Dialing Options dialog box when calls are made. This dialog box enables assignment of an account code to the call and association of the call with a workgroup.

Analyze outgoing external calls

Select this option to allow the CIC clients to monitor outgoing external interactions. When this option is selected, Telephony Services (TS) monitors whether the outgoing interaction connects to a person or an answering machine. An interaction is listed in

the Dialing state after dialing a number from the CIC client Number field or directly on the phone handset. After the remote party picks up the interaction, the state changes to Connected. If an interaction does not connect, then TS will try to diagnose why the attempt to connect failed and display the reason (for example, a connect may fail if the other party fails to answer or if the line is busy).

Enable call waiting

Select this option to turn on the call waiting feature so agents are notified when another call is coming in while they are on the phone.

Mute calls when transferring

Select this option to mute a transferred call so that the caller cannot hear what the agent is saying. (However, the transfer recipient can hear the agent.) Once the call is transferred or the Transfer dialog box is closed, the call is no longer muted.

Connect to Oldest Held Call When I Pick up the Phone (as long as there are no alerting calls)

Select this option for the CIC clients to automatically connect to interactions on hold. When the receiver is picked up and there is one or more interactions on hold, the CIC clients will automatically connect to the call holding the longest in the queue. This option is not available in Cisco TAPI environments.

Show alert dialog when the security of a call falls below the requested security level

Select this option to display an alert to the user if a once secure call is determined to no longer be secure.

Play DTMF sounds when using the dial pad with external stations

When you are using an external station (e.g., a Polycom phone, Interaction SIP station, or a remote station), select this option to play the DTMF tones through the user's PC speakers when pressing the corresponding digits on the CIC clients dial pad. By default, this option is not enabled.

Operator Target Number

Enter the telephone number or extension to which to send callers that choose zero to exit out of voice mail.

Open new window for incoming calls

Select this check box to open a new window for incoming calls, otherwise any incoming call will be opened in the existing window.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Follow Me

Use this section to configure the following properties for the Follow Me feature.

Note: You can also configure call forwarding for stations. For more information see *Station call forwarding options*.

Phone Number

Enter the telephone number for the CIC clients to call if the agent is not available.

Time Out

Enter the number of seconds for the CIC clients to ring a follow-me routing number before moving to the next number in the list or transferring the call to voicemail. If no number is entered in this field, the CIC client defaults to 15 seconds.

Use Pin

Select this option to force call recipients to enter the CIC password to accept the call.

Screen calls

Select this option for the CIC clients to require callers to record their name. When a CIC client contacts the agent, the callers name will be played before the agent accepts the call.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Station call forwarding options](#)

[Add a client configuration template](#)

[Client configuration template options](#)



Call Coverage

Call coverage allows an agent to forward calls to voice mail, another number, or another agent when the agent changes his or her status to a DND status. When CIC forwards a call to another agent, the original extension information appears with the call so that the agent can see where the call was originally intended to go.

Note: You can also configure call forwarding for stations. For more information see *Station call forwarding options*.

Coverage Options

The Call Coverage section contains the following items:

Forward

Select this option to send all calls, internal calls, external calls, or unknown calls to a Call Coverage number.

If I'm "Do Not Disturb," Forward

Select this option to send all calls, internal calls, external calls, or unknown calls to a Call Coverage number, when status is Do Not Disturb (DND), including not being logged into the CIC clients. This behavior depends on the configuration of DND statuses.

If I'm on the Phone, Forward

Select this option to send all calls, internal calls, external calls, or unknown calls to a Call Coverage number, when an agent is on the phone.

If I Don't Answer, Forward

Select this option to send all calls, internal calls, external calls, or unknown calls to a Call Coverage number, when an agent does not answer.

Coverage Number

The Call Number section contains the following items:

Send My Calls To:

Enter the phone number that interactions are sent to when one of the Coverage Options above in the Coverage Options section is selected. This number must be an internal number or a CIC extension.

If a Caller Leaves Voicemail, Send it to:

Click this drop-down menu to choose to send voice mail messages to the internal telephone number or CIC extension set, or to voice mail. The internal number or extension must have a mailbox assigned. If no mailbox is assigned to this number, then the system will not allow the changes.

For example, when the **My Mailbox** option is selected, any message left by a caller is sent to that agent's voice mail. If the other option (the number you entered in **Send my calls to**) is selected, then this gives ownership of the call (or any voice mail) to that coverage number.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Station call forwarding options](#)

[Add a client configuration template](#)

[Client configuration template options](#)



Personal prompts

Use this section to configure the following properties.

Activate out of office message

Check this option to activate the **Out of Office** message. Agents should record their **Out of Office** message before they use this option for the first time.

Activate agent greeting

Select this check box to activate the Agent Greeting message. Agents should record their Agent Greeting Message before they use this option for the first time.

Record Out of Office Message

Use this button to record a message played to callers when the agent's status is set to one of the unavailable statuses (i.e. any status other than **Available** or **Available, Forward** or **Available, No ACD**). Also select the **Activate out of office message** option.

Record No Answer Message

Use this button to record a message played to callers when agents do not answer their calls.

Record Follow Me Message

Use this button to record a message to play to callers if agent status is set to Available, Follow Me.

When status is set to Available, Follow Me, the *Follow Me* message plays to callers while the CIC client consecutively calls the agent at a series of numbers that have been set up to find the agent and eventually connects the agent to the caller.

Record Name

Use this button to record agent name. This recording is played anytime someone calls the agent .

Record Agent Greeting

Use this button to record a message to play to callers before the agent answers an ACD call. This greeting, also known as a "smile", is intended for use by call center agents who are members of a workgroup and are receiving ACD calls. This feature is best used with the **Auto Answer Calls** (user/agent attribute set in Interaction Administrator). When used with **Auto Answer Calls** enabled, your **Agent Greeting** plays to the caller as the agent is being alerted. The length of the **Agent Greeting** is limited to 10 seconds, and therefore, is considered an introduction or "smile".

Note: Once recorded, the Agent Greeting will be played to all ACD callers alerting on the agent's queue. To disable this greeting, click **Disable**.

Record Available, Forward message

Use this button to record a message to play to callers when agent status is set to "Available, Forward."

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



IP Phone

Use this page to set the default behavior of the Do Not Disturb (DND) button on an IP phone in the CIC clients.

Note: This feature applies to users that are logged into a managed IP phone that supports DND button status synchronization.

When I turn the DND button on, set my status to:

Select a status that is configured as a DND status from the pull-down menu that you want your status to appear as when you enable the DND button on your IP phone. Do Not Disturb is the default DND status.

When I turn the DND button off, set my status to:

Select My Last Available Status (default) to display your status as the last status you had that is configured as an available status, or choose The Following Status and select a status that is configured as an available status from the drop-down menu.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)

Emails

Use this section to configure email behavior options in the CIC clients.

Spelling

Select the **Always check spelling before sending email** option to automatically check ACD-routed email messages after clicking send. Once the spell check is complete, the message is sent.

HTML Email

Select this option to automatically download and display any images included in ACD-routed email messages.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Monitored Appearances

The options in this page allow you to set up monitored appearances to observe the activity of several personnel at the same time. This feature is particularly helpful if a person has a number of personnel for whom he or she manages calls.

For example, receptionists or secretaries can use monitored appearances to continuously observe a manager's queue, control interactions, and perform tasks on his or her behalf, such as picking up or transferring calls and creating conferences.

Add

Click this button to add a user to monitor, then set the following options for the appearance:

Settings

Use this section to set up alerting options for a monitored appearance.

Label

To change the way the name appears in the Monitored Appearances page, in the Label box, type a new name. To list this monitored user on the My Interactions tab, select the **Active** check box.

To remove the user from the list, click to remove the checkmark from the Active check box.

Ring telephone for calls

Select this option to make the phone ring when a monitored user receives a phone call at his or her extension.

Ring Computer

Select this option to receive an audible alert through the computer's speakers when the monitored user receives a telephone call at his or her extension.

Note: If the **Ring when on phone** option is selected, incoming calls for the monitored user ring on the computer when he or she is already on the phone.

Pop Client

Select this option to make the CIC client .appear on top of any other applications that are running when the monitored user receives an incoming interaction.

Display Desktop Alerts

Select this option to display a desktop alert (toast) when a monitored user receives a telephone call.

Call Ring Sound

Use this option to select the sound used by the computer when **Ring Computer** is selected and the monitored user receives a phone call.

Tip: Click the button next to the Call Ring Sound box to test the sound.

Click **Remove** to remove a monitored appearance. To change the order of monitored appearances, select the name of a monitored appearance and click **Move Up** or **Move Down** as needed.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Queues Pages

Use this page to configure which queue pages appear in the CIC client interface, including station and user queues.

Note: The queue pages options are used only by Interaction Desktop.

Allow User to Modify Any of These Values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Directories Pages

Use this page to configure which directory and workgroup views appear in the CIC clients.

Note: The directories pages options are used only by Interaction Desktop.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



General

Use this page to show the actual status icon in the system tray, choose whether or not to open a dialog box each time an interaction is dragged from the My Interactions queue to another call in the My Interactions queue, sort account codes by account number, and pop Interaction Tracker for unresolved contacts.

Hide disconnected interactions

Select this check box to remove interactions from the My Interactions page immediately after you disconnect them.

Show actual status icon in system tray

Select this check box to replace the icon of the CIC client with an icon associated with agent status.

Confirm drag and drop operations

Select this check box to confirm drag and drop operations such as dragging and dropping calls on another call to create a conference call.

Confirm single click dialing

Select this check box to display a confirmation dialog box anytime you initiate a call by single-clicking on a number in your Call History, or Company directory. This gives you the opportunity to click Yes or No before the call is dialed.

Sort Account Codes by account number

Select this check box to sort account codes by account number within the CIC client.

Automatically play voice mail interactions

Select this check box to automatically play .wav files that are attached to an email message when that message is opened.

Minimize to the notification area instead of the task bar

Select this check box to remove the icon for Interaction Desktop from the Windows taskbar when the user closes the CIC Client workspace.

Note: This setting has no effect if the user has already pinned the Interaction Client application to the Windows taskbar. If the application is pinned, the task bar icon remains when the user closes Interaction Client.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Plugins

Use this page to select the check box associated with the plugin that you want to be visible to the user.

Note: When you enable a plugin, some necessary files are downloaded from the CIC server to the CIC clients. Subsequently, plugin availability is determined by comparing information on the CIC server with corresponding information in the CIC clients. Therefore, if a user runs disconnected, or the server connection fails, or if the user changes to another CIC server, previously enabled plugins may not be available or only the plugins that were loaded when the user last closed CIC client may be available.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



e-FAQ

Use this page to configure how e-FAQ search results appear in this client configuration template.

Search Results

Selecting **All** is the least restrictive search configuration where all results found based on the search terms will be returned. **Strict** is the most restrictive search configuration where the search results will only contain the most closely matched entries, similar to keyword matches. Note that relevant entries that contain misspelled words or less common terms may not be included in the search results for **Strict** searches.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



Tracker

Use this page to configure Interaction Tracker related interactions and interaction history behavior in Interaction Desktop.

Show Interactions from the Previous:

Use this option to set the previous timeframe for interactions to appear in Interaction Desktop. The default setting for this option is **Week**. The other options are **Month** and **3 Months**. The interactions tracked are associated with how Interaction Tracker is [configured](#) in Interaction Administrator.

Maximum Number of Interactions to Show

Use this option to set the maximum number of interactions to show based on the **Show Interactions from the Previous:** setting above. The default maximum number of interactions to display is **10**. The other options are **50** and **100**.

Allow user to modify any of these values

Select this check box to allow users assigned to this template and the master administrator to change any of these settings.

Note: The **Related Interactions** feature is available only for installations that have the Tracker feature license and that use SQL Server for the Tracker database.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)



History

This page allows you to enter information about and changes made to this client configuration template.

Related topics

[Add a client configuration template](#)

[Client configuration template options](#)

Queue Columns

Queue Columns

The **Queue Columns** container allows you to configure which fields can be displayed in the **My Interactions** page in the CIC clients. The columns displayed can be set in Interaction Desktop by right-clicking the column header.

For descriptions of the columns, see *Queue Columns* in the Interaction Supervisor help, or *Queue Contents* in the Interaction Desktop or Interaction Connect help.

Some of the default columns are:

Column name	Interaction Desktop?	Interaction Connect?	Interaction Supervisor?
Account Code	Yes	Yes	Yes
ACD Wait Reason	Yes	Yes	Yes
Agent Score	No	No	Yes
Associated Process	Yes	Yes	Yes
Attachments	Yes	Yes	Yes
Chat Response Time	Yes	Yes	Yes
Customer Score	No	No	Yes
Details	Yes	Yes	Yes
Duration	Yes	Yes	Yes
Importance	Yes	Yes	Yes
Interaction Id	Yes	Yes	Yes
Interaction Type	Yes	Yes	Yes
Line	Yes	Yes	Yes
Lstns	Yes	Yes	Yes
Name	Yes	Yes	Yes
Number	Yes	Yes	Yes
Process Id	Yes	No	Yes
Queue	Yes	Yes	Yes
Recs	Yes	Yes	Yes
Security	Yes	Yes	Yes
State	Yes	Yes	Yes
Station	Yes	Yes	Yes
Subject	Yes	Yes	Yes
Time in Status	No	No	Yes
Time in Workgroup Queue	No	No	Yes
User	Yes	Yes	Yes
Work Item Category	Yes	No	Yes
Work Item Created On	Yes	No	Yes
Work Item Description	Yes	No	Yes
Work Item Due Date	Yes	No	Yes
Work Item Error	Yes	No	Yes
Wrapup Code	Yes	Yes	Yes

For each column, you can select the interaction attribute and the corresponding attribute type. If you select an interaction attribute that pertains to time, such as `Eic_ConnectTime`, you can either use **Timestamp** or **Duration** as the attribute type.

To define new columns

1. Right-click and select **New**.
2. Type a unique and meaningful **name** for the new column, typically a name that reflects the associated attribute.
3. Select an attribute from the list. For the column to populate the information, you must assign an attribute. For information about specific attributes and their meanings, see *Interaction Attributes Technical Reference* in the Technical Reference Help in the PureConnect Documentation Library on the CIC server.
4. Click **OK**.
5. After you add a new column, assign the queue column viewing right to the user. The Queue Columns **access control** rights in the People category determine which columns are available to the user. Once the user has the appropriate right, the new column is available for display in the CIC clients.

View account codes

You can add special codes to CIC that can be used to associate outgoing and incoming calls. An account code is an identifying set of numbers assigned to an account name. Once users have access to an account code, they can add it to a call so that it can be tracked and reported in standard reports.

Account code authorization can be given to users, and members of a workgroup or role. As an example, suppose you want a specific department to track all outgoing calls placed to a specific customer. Assign the members of that department to a workgroup or role, and give them access to account codes. You can now track the calls made by that department to a specific customer.

Because account code data is stored in call detail and account code mirror tables, your CIC administrator can generate reports that summarize calls by user or by date.

Using Interaction Administrator Web Administrator, you can set up account codes (up to a maximum of 50 digits long) at the system, default user, user, or workgroup level. Once account codes are set up, users can assign them to incoming and outgoing calls.

Note: Because account codes are treated as strings, not numbers, by the database program, account codes with leading zeros will appear first in reports. For example, account numbers 1, 3, 20, 213, 0214, 1234, and 001235 would be sorted as 001235, 0214, 1, 1234, 20, 213, and 3.

The **View Account Codes** page displays account codes in a list in the master view, and displays details of the currently selected account code in the details view. You can take actions on the account codes in the list view, such as add, delete, and copy and paste, and you can add a new account codes. You can change the way the list is displayed, such as change visible columns, sort by column, and filter.

Note: In order for account codes to work, the **Use advanced dialing options (account code, workgroup)** option must be selected in the CIC client.

To view account codes:

1. Click the **View Account Codes** action under the **User Management** category or Click **View Account Codes** in the breadcrumbs if available.
2. The **View Account Codes** page appears.
3. The details of the selected account code are displayed in the details view.

Related topics

[Add an account code](#)

[Enable account codes](#)

Add an account code

You can add an account code in Interaction Administrator Web Edition. The account codes settings are configured in detail tabs. In the details view, you can click the [section expanders](#) to display or hide the sections' contents.

To add an account code:

1. Right-click in the master view area and select **New** or click the **New** button in the master view toolbar.

The **New Item** appears in the details view.

2. Complete the following general account code configuration

- Type the **Code** representing the account code.
- Type a **Description** for the new account code. This information appears in the CIC clients.
- To display the access control groups membership available, click the icon,



and select the **Access Control Group** from the list to assign to the skill.

3. Click **Custom Attributes** section expander to display the custom attributes section's contents, and complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.

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4. Click **History** section expander to display (or hide) the history section's contents, and complete the following information:

- View the **Created** and **Modified** dates for this code.
- Type or view information in the **Notes** field for the code.

5. Save the new account code or modified account code.

If necessary, you can revert the new account code or the changes that you made to an existing account code.

Notes: To use account codes, they must be enabled at the system level, enabled for each dial plan object, and the user must have access to account codes.

To save a new account code, all required information must be entered. Details tabs containing incomplete or erroneous information, are shown with an error message.

Related topics

[Account codes: field descriptions](#)

[Account code settings: field descriptions](#)

[Enable account codes](#)

Account codes: field descriptions

This topic contains the descriptions for each field in the **Account Codes** details view under the **View Account Codes** page.

Code

This is a set of numbers zero through 9 (up to a maximum of 50 digits) to use as an account code. These numbers are associated with the account name.

Note: Because account codes are treated as strings, not numbers, by the database program, account codes with leading zeros will appear first in reports.

For example, account numbers 1, 3, 20, 213, 0214, 1234, and 001235 would be sorted as 001235, 0214, 1, 1234, 20, 213, and 3.

Description

Type a name for the account code. The name is added next to the account code shown in Interaction Administrator list view.

Access Control Group

An access control group (ACG) is a group of administrative rights. When an ACG is added to the account code, the account code takes on those ACG's rights. The account code can be assigned to only one ACG.

Note: Access Control Groups appear if they have been configured in your environment. If Access Control Groups have not been configured, this field is not displayed.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

This date is automatically set when the user creates the initial configuration for this account code. If the account code was initially created during setup, the date could be blank.

Modified

This date is automatically updated each time the user clicks the OK button, presumably after making changes to the account code configuration. To avoid updating this date, exit the property sheet by clicking **Revert**.

Note: If you click **Revert**, none of the changes made to this account code since the changes were last saved are preserved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click **Save**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

Related topics

[Add an account code](#)

Account codes global settings

Enable account codes

You can configure global account code settings in Interaction Administrator Web Edition. To use account codes, they must be enabled here. The account code global settings are configured in the master view. You can click the section expanders to display or hide the sections' contents.

Note: To use account codes, they must also be enabled for each dial plan object, and the user must have access to account codes.

To enable account codes:

1. Select the **Enable Account Codes** check box.
2. Click Custom Attributes section expander to display (or hide) the custom attributes section's contents, and complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.

HomeFax	5551212

3. Click History section expander to display (or hide) the history section's contents, and complete the following information:
 - View the **Created** and **Modified** dates for this code.
 - Type or view information in the **Notes** field for the code.
4. Save the account code configuration.

If necessary, you can revert your configuration changes.

Related topics

[View account codes](#)

Account code settings: field descriptions

This topic contains the descriptions for each field in the **Account Code Settings** master view under the **Account Code Global Settings** page.

Enable Account Codes

This setting activates the account codes feature for the CIC system.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

This date is automatically set when the user creates the initial configuration for this account code configuration. If the account code configuration was initially created during setup, the date could be blank.

Modified

This date is automatically updated each time the user clicks the OK button, presumably after making changes to the account code configuration. To avoid updating this date, exit the property sheet by clicking **Revert**.

Note: If you click **Revert**, none of the changes made to this account code configuration since the changes were last saved are preserved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click **Save**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

Related topics

[Add an account code](#)

Overview of client templates

To simplify the configuration of Interaction Desktop clients, CIC provides the Client Templates feature. An authorized CIC client user creates client templates on the CIC server. Then, an administrator assigns the client templates to roles, workgroups, or users by publishing them in the **Client Templates** container.

Notes:

A user needs the **Manage Client Templates** security right to create or edit templates for other CIC client users. An administrator needs the **Client Templates** administrator access right to use Interaction Administrator to assign these templates to selected CIC client users.

The Client Templates feature is designed to enable the one-time application of a template to a bulk set of users, roles, or workgroups. It is not designed to facilitate incremental, ongoing changes to selective users, roles, or workgroups.

If you change a template, you must republish the template in order for the changes to take effect on the CIC clients.

Related topics

[Publish a client template](#)

[Assign security rights](#)

Publish a client template

You can publish a client template to make it available to roles, workgroups, or user.

To publish a client template to roles, workgroups, or users

1. In the **People** container, open the **Client Templates** subcontainer.
The **Client Templates** page appears.
2. Under **Select template targets**, do one of the following:
 - Click **Select Users** to select the users who should receive the template.
 - Click **Select Roles** to select the roles that should receive the template. All of the users that have the roles that you select will receive the template.
 - Click **Select Workgroups** to select the workgroups that should receive the template. All of the users in the workgroups that you select will receive the template.
3. Under **Select a template to apply**, click the template that you want to publish. The following predefined templates are available:
 - All Channel Agent. This template provides all available channels to the agent.
 - Basic Chat Agent. This template enables the agent to participate in online chat sessions.
 - Basic Email Agent. This template enables the agent to send and receive emails.
 - Basic Email Agent with preview. This template enables the agent to send and receive emails and to preview incoming calls.
 - Default template. This is the standard template that is automatically assigned to all new users.
 - Default ICM. Not used.
 - Multi-Channel Agent: This template enables the agent to use chats and emails.

Tip: You can search for templates by name and by application.

4. Click **Apply Template**.
5. Click **Reset**. You can now apply another template if necessary.

Related topics

[Overview of client templates](#)



Response Management

Response Management is a library of pre-defined responses, such as messages, URLs, and files. The CIC administrator creates and organizes pre-defined responses, and makes them available by granting [access control](#) rights to CIC client users. The user can use a stored response during a chat session, in a reply to an ACD-routed email message, or when responding to a callback request. These responses are available to users under administrator-defined folders in the Response Management window in Interaction Desktop and the Response Management view in Interaction Connect.

Response Organization

The organization of responses has three levels:

Library - A library (also called a server document) is the top-level collection of related response items. A library contains individual response items (such as a standard greeting or statement of your typical business hours) which can be organized into categories.

Category - A category is a folder in a response library. Categories are a way to organize individual response items in a library. Categories are optional.

Item - An item is a single response. There are two types of response items:

- **Messages:** Message items are stored text messages which can contain greetings, closings, and standard responses to common questions. A text message can also contain a working URL hyperlink.
 - **Files:** File items are computer files that you can attach to an email message or send to external chat participants.
-

How recipients receive responses

When an agent inserts a response file into an email, it appears as an attachment.

When an agent inserts a response file into a chat, it appears as a file that the recipients can download.

To view response management items:

1. Click the **Response Management** sub-container under the **People** container.
2. Click the item you want to view in the master view to display the details of the selected schedule in the details view.

Related Topics

[Add a New Response Management Library](#)

[Add a Response Management Message](#)

[Add a Response Management File](#)

[Import a Response Management document](#)

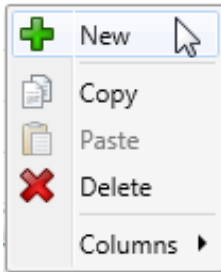
Add a Response Management Library

You can add a response management library that contains response categories and items. The item settings are configured in detail tabs. In the details view, you can click the [section expanders](#) to display or hide the sections' contents.

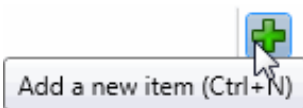
You must create a response management library before creating a [category](#) or an [item](#).

To create a library:

1. Right-click in the master view area and select **New**:



...Or click the **New** button in the master view toolbar:

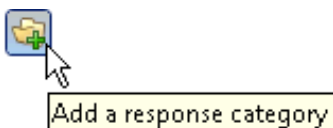


The **New Item** appears in the details view:

2. Type the **Name** representing the library.
3. Type a **Description** for the library. This information appears in Interaction Client.
4. Save the library.

To add a category to a library:

1. In the master details view in a library, click the add a response category button.



2. Type a **Name** representing the category. This information appears in Interaction Client.
3. Save the category.

To add items to the library or category, see [Add a response management message](#) or [Add a response management file](#).

Related topics

[Response Management](#)

Add a Response Management Message

Use a message item to save standard text responses that CIC client users often refer to when interacting with customers. You can add a response management message item to a library or category.

The item settings are configured in detail tabs. In the details view, you can click the section expanders to display or hide the sections' contents.

To create a message response item:

1. In the Response Management library or category details view, click the  to add a response item.
2. In the **Type** section, select **Message**.
3. In the composition area, do one of the following:
 - Import an existing HTML file by clicking the Import HTML toolbar button. In the HTML Editor dialog box, locate an HTML file and click Open.

Tip: By default, the HTML Editor lists only files with an HTML extension. Use the file type drop-down list to include files with an HTM extension. You can also import plain text files (TXT extension).
4. Optionally, do any of the following in the editor:
 - Format the text: Use any of the text formatting tools.
 - Add a hyperlink: Create a clickable link: Select some text in your message and click the Create Hyperlink tool, then supply a ScreenTip and a URL address.
 - Add an image: Select a place in your message and click the Add Image tool. Use any of the drag handles to resize the image.
 - Add a Response Macro: Response macros automatically insert a constant like today's date, an interaction attribute such as the customer's name, or another response item into your response at the time you use it. See the help for the CIC clients for more details.
5. In the **Name** text box, type a name for this stored message.

Note: Response Management provides a full-text search tool that uses the information in Name, Shortcut, and Labels along with the response item's content to find a response.

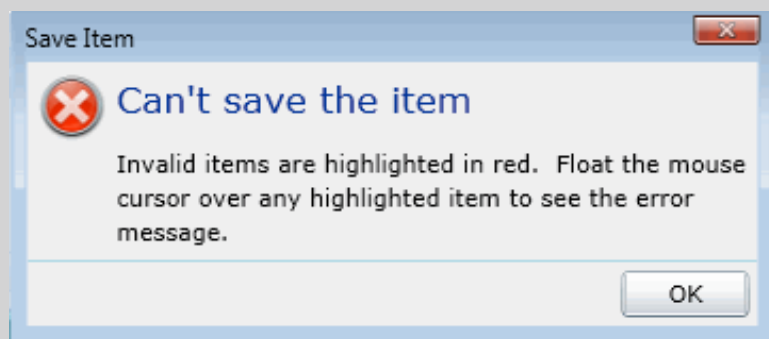
Tip: **Name** identifies the response item, but does not have to be unique. If you do not provide a name, it defaults to the first few characters of the message.

6. In the **Shortcut** text box, type a short name, abbreviation or code for this response.

Tip: Use this Shortcut to insert a response item where needed by typing the shortcut and then pressing Ctrl+Space. The shortcut does not have to be unique. For example, you could use the shortcut "Hi" for all the variations of your standard greeting.

7. In the **Labels** text box, type a space-separated list of words that identify or classify this response item.
8. Click **Save**.

Note: To save a new item, all required information must be entered. Details tabs containing incomplete or erroneous information, are shown with an error message:



Tip: You can edit or delete multiple files or messages by selecting consecutive items with the Shift key and click, or multiple items with the Control key and click.

Related topics

[Section expanders](#)

[Response Management](#)

[Add a Response Management Library](#)

[Add a Response Management File](#)

Add a Response Management File

Use a file item as a pointer to a file on the network that you frequently share with customers. You can add a response management file item to a library or category.

The item settings are configured in detail tabs. In the details view, you can click the section expanders to display or hide the sections' contents.

To create a file response item:

1. In the Response Management library or category details view, click the  to add a response item.
2. In the **Type** section, select **File**.
3. Do one of the following:
 - Click Browse. In the Open dialog box, locate and select the appropriate file and then click Open.
 - Use Windows Explorer to locate and select the appropriate file and then drag and drop the file in the **Drop file here** area.
4. In the **Name** text box, type a name for this file.

Note: Response Management provides a full-text search tool that uses the information in Name, Shortcut, and Labels, and the response item's content to find a response.

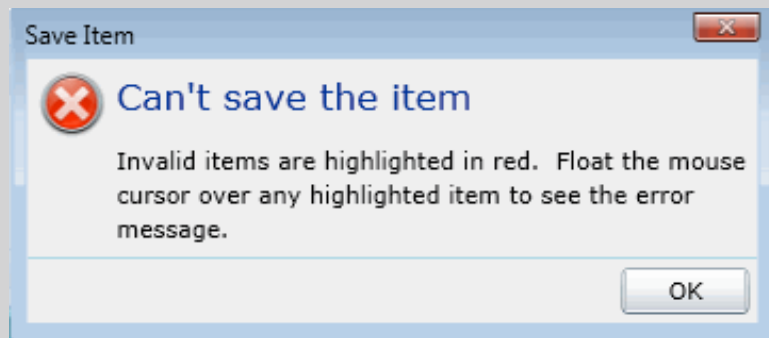
Tip: Name identifies the response item, but does not have to be unique. If you do not provide a name, it defaults to the first few characters of the file's directory path.

5. In the **Shortcut** text box, type a short name, abbreviation or code for this response.

Tip: Use this Shortcut to insert a response item where needed by typing the shortcut and then pressing Ctrl+Space. The shortcut does not have to be unique. For example, you could use the shortcut "TS" for all your files containing troubleshooting tips.

6. In the **Labels** text box, type a space-separated list of words that identify or classify this response item.
7. Click **Save**.

Note: To save a new item, all required information must be entered. Details tabs containing incomplete or erroneous information, are shown with an error message:



Tip: You can edit or delete multiple files or messages by selecting consecutive items with the Shift key and click, or multiple items with the Control key and click.

Related topics

[Section expanders](#)

[Response Management](#)

[Add a Response Management Library](#)

[Add a Response Management Message](#)

Import a Response Management Document

You can import response management documents from CIC 3.0 to a later release.

Note: You can import only response management documents that were created with CIC 3.0. Do not use this feature to import XML documents that were created outside of CIC.

1. Under the **Response Management** subcontainer, click the Import Documents subcontainer.
 2. To complete the **Response document path** field, click **Browse** to navigate to the document that you want to import.
 3. Click **Import**.
 4. Optionally click the response management document in the list to preview it.
 5. In the **Name** field type a descriptive name that agents will see.
 6. Click **Save**.
-

Overview of skills

Skills represent the particular characteristic, skill, product, or knowledge that a user or workgroup possesses. Skills are used by ACD (Automatic Communication Distribution) handlers to route interactions to the agents who are best equipped to handle them.

After you create skills in the **Skills** container, you can assign them to agents in the **Skills** container or the **Users** container. You can also assign skills to ACD workgroups in the **Workgroups** container. All agents in a workgroup inherit the skills that you assign to the workgroup.

Note: You cannot assign skills to a non-ACD workgroup or a custom workgroup.

Prerequisites: For each skill, you can select the workgroups, users, and access control groups who have it. While you can add these items at any time, it can be more efficient to add them before you configure skills.

- * Define workgroups in the **Workgroups** container. On the Configuration tab, in the **Workgroup has Queue** list, be sure to select **ACD**.

- * Define users in the **Users** container.

- * Define access control groups in the **Access Control Groups** container.

How CIC routes interactions based on skills

CIC uses sophisticated mathematical algorithms to determine how to route interactions to agents. For more information on the ACD routing process, see the *CIC ACD Processing Technical Reference* in the PureConnect Documentation Library.

When you define skills, you set several values that influence the automated routing behavior:

- [Proficiency level](#)
- [Desire to use](#)

Proficiency level

For each skill, you assign a proficiency level. The proficiency scale is from 1-100, with 100 being the highest value. The proficiency number represents of the ability of the user or workgroup with regards to the skill. Interactions can require minimum proficiency levels for one or more skills.

For example, suppose you have four agents who speak Spanish. Juan is a native speaker, so you assign him a proficiency level of 100. Rebecca studied Spanish in college and can speak and understand conversational Spanish well enough to address most straightforward questions. You assign Rebecca a proficiency level of 60. Barb knows a few basic phrases, so you assign her a proficiency level of 10. Mark does not know Spanish. Therefore, you do not assign the skill to him at all. When an interaction comes in with a requirement of Spanish at 51, CIC can direct it to either Juan or Rebecca.

Depending on the complexity of your combination of skills and agents, you may prefer to identify your criteria for assigning proficiency levels offline before you assign them in CIC.

Desire to use

For each skill, you also set the **Desire to use** level. The desire to use scale is from 1-100, with 100 being the highest value. The desire to use number represents the level of interest the user or workgroup has in applying the skill while they are handling interactions. You can also set this based on your organization's desire for an agent or workgroup to use that skill. The higher you set this number, the greater the likelihood that an agent or workgroup will receive an interaction that requires that skill.

For example, suppose that Rebecca wants to use her Spanish whenever possible. However, since Juan is a native speaker, you would prefer that he answer interactions requiring Spanish ability whenever possible. Therefore, you set Juan's desire to use level to 100 and Rebecca's desire to use level to 80.

Depending on the complexity of your combination of skills and agents, you may prefer to identify your criteria for assigning desire to use levels offline before you assign them in CIC.

Related topics

[Add a skill](#)

Add a skill

Note: If you enabled the Enhanced Interaction Administrator Change log, then your addition of a skill is tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To add a skill

1. In the **People** container, click the **Skills** subcontainer.
2. In the master view area, right-click and select **New**, or click the **New** button in the master view toolbar.
3. In the **Name** box, use a word or phrase to identify the skill. You can use blank spaces (for example, Spanish speaker, Database expertise, and so on).
4. Configure [general information](#).
5. Configure [advanced information](#).

Configure general information

Use the **Configuration** tab to configure the access control group, workgroups, and users for a skill.

Note: You can assign skills to workgroups and users in the **Skills** container as described in the following procedure. You can also assign skills to users in the **Users** container and to workgroups in the **Workgroups** container.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this tab are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To configure general information

1. In the details area of the Skills window, click the **Configuration** tab.
2. If the **Access Control Group** box appears, click the icon to select the ACG for the skill.
An access control group (ACG) is a group of administrative rights. When an ACG is added to the skill, the user that is assigned this skill takes on those ACG's rights. The skill can be assigned to only one ACG.

Note: Access Control Groups appear if they have been configured in the Access Control Groups container. If Access Control Groups have not been configured, this field is not displayed.

3. To select the workgroups that have the skill, in the **Workgroups** section, click the  button.
4. Select one or more workgroups in the **Available** items list, and click **Add**. Alternatively, click **Add all** to add the skill to all workgroups. To find a specific workgroup, type a simple search in the filter field above the list.

Note: You can select only ACD workgroups. If the workgroup you need does not appear here, go to the **Workgroups** container and edit the workgroup's record. On the **Configuration** tab, select the **Workgroup has Queue** checkbox. Then in the corresponding list, select **ACD**.

5. For each workgroup that has the skill, set the proficiency level. To do this, click under the **Proficiency** heading so that the field is active. Then either type a number or use the controls to select a number. The proficiency number represents the minimum proficiency of skill level workgroup members must have to receive an ACD interaction that requires the skill. The proficiency level is a relative number that you assign based on a scale of 1-100, where 100 is the highest level. For more information, see [Proficiency level](#).
6. For each workgroup that has the skill, set the desire to use level. To do this, click under the **Desire to use** heading so that the field is active. Then either type a number or use the controls to select a number. The desire to use number represents the minimum level of interest users must have in order to receive an ACD interaction that requires this skill. The desire to use level is a relative number that you assign based on a scale of 1-100, where 100 is the highest level. For more information, see [Desire to use](#).
7. To select the users who have the skill, in the **Users** section, click the  button.
8. Select one or more users in the **Available** items list, and click **Add**. Alternatively, click **Add all** to add the skill to all users. To find a specific user, type a simple search in the filter field above the list.
9. For each workgroup that has the skill, set the proficiency level. To do this, click under the **Proficiency** heading so that the field is active. Then either type a number or use the controls to select a number. The proficiency number represents the minimum proficiency of skill level workgroup members must have to receive an ACD interaction that requires the skill. The proficiency level is a relative number that you assign based on a scale of 1-100, where 100 is the highest level. For more information, see [Proficiency level](#).
10. For each workgroup that has the skill, set the desire to use level. To do this, click under the **Desire to use** heading so that the field is active. Then either type a number or use the controls to select a number. The desire to use number represents the minimum level of interest users must have in order to receive an ACD interaction that requires this skill. The desire to use level is a relative number that you assign based on a scale of 1-100, where 100 is the highest level. For more information, see [Desire to use](#).
11. Click **Save**.

Related topics

[Overview of skills](#)

[Configure advanced information](#)

Configure advanced information

Use the **Advanced** tab information to configure for custom attributes and history.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this tab are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

You can define custom attributes for skills to further assist the ACD routing process in selecting the most appropriate agents. For more information on how to use custom attributes with skills, see the *IC ACD Technical Processing Technical Reference* in the CIC Documentation Library.

To configure advanced information

1. In the Skills window details area, click the **Advanced** tab.
2. To create a custom attribute, under the **Custom Attributes** section, click the  button.
3. In the **Name** box, type the attribute name.
4. In the **Value** box, type the attribute value.
5. To add a history note, under the **History** section, in the **Notes** box, type the information that you wish to capture.
6. Click **Save**.

Related topics

[Overview of skills](#)

[Configure general information](#)

Access control groups

Access control groups (ACGs) provide a flexible way of defining [administrative access rights](#). With ACGs, it becomes simple to make someone the administrator of a department or location. The administrator can then create users, stations, and other objects related to the department or location, without being able to access objects that are outside of that department or group. A full list of all the objects supported by ACGs appears later in this section. For example, an ACG can allow an administrator access to manage and modify users and workgroups within a certain part of the organization, without having access to other parts of the organization.

Hierarchical Structure of Access Control Groups

An ACG is similar to Active Directory structure, where the structure is a hierarchical arrangement of information about objects. The ACG allows access rights to be assigned against the hierarchy to define which objects or items (see item list below) a user can access. You can define multiple ACGs containing subsets of objects from the "root" ACG. A user can have access to one ACG or multiple ACGs.

With the hierarchy in place, an organization can give administrative rights to each of the ACGs. A user who gets administrative permission for East Region – Marketing can only see users, workgroups, and other objects for that ACG. The user won't be able to see or modify any of the objects in the other ACGs. An administrator who has permissions for East Region will have access to all objects that in that ACG and its child ACGs: East Region – Marketing and East Region – Support. An administrator who has permissions for an ACG automation inherits security rights for child ACGs. The following object types support ACGs: · Users · Roles · Workgroups · Skills · Stations, station groups, and station templates · IP phones, proxy groups, ring sets, and templates · Wrap-up codes and categories · Account codes · Schedules · Client configuration templates · Password policies · Locations · Analyzer keyword sets

CIC includes a default ACG "Root," which is the parent of the hierarchy.



To create levels in the hierarchy, first create ACGs from the root. Then create a second level of ACGs from, and so on. The maximum levels in a hierarchy is five (5). For example:



An ACG can have only a single parent, and an item can only be a member of a one ACG.

ACGs can contain the following items:

- [Account codes](#)
- [Analyzer keyword sets](#)
- [Client configuration templates](#)
- [IP phones](#)
- [IP phone proxy groups](#)
- [IP phone ring sets](#)
- [IP phone templates](#)
- [IP tables](#)
- [Locations](#)
- [Password policies](#)
- [Roles](#)
- [Schedules](#)
- [Skills](#)
- [Stations](#)
- [Station groups](#)
- [Station templates](#)
- [Users](#)
- [Workgroups](#)
- [Wrap-up categories](#)
- [Wrap-up codes](#)

Related topics

[Access group configuration](#)

[Access control groups: members](#)

[Access control groups: members field descriptions](#)

[Access control groups: advanced](#)

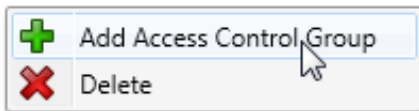
[Access control groups: advanced field descriptions](#)

Access group configuration

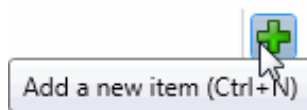
The **Access Control Groups** (ACGs) page displays the ACGs hierarchy in the master view. It displays details of the currently selected ACG in the details view. In the master view, you can add, edit, and delete ACGs. You cannot delete the default root.

To add a new ACG

1. Right-click in the master view area and select **Add Access Control Group**:



...Or click the **New** button in the master view toolbar:



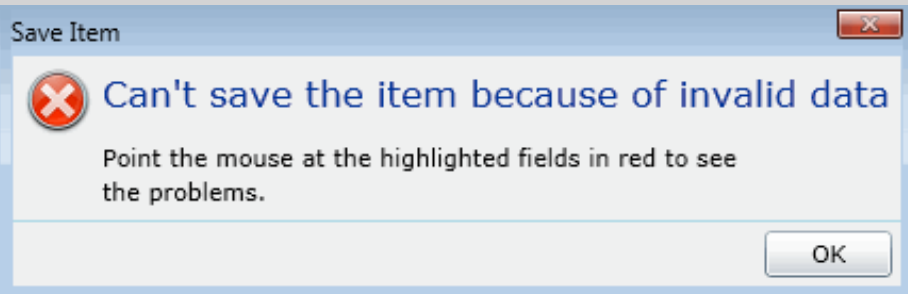
The **New Item** appears in the details view:

The 'New Item' details view is shown. It has a sidebar with 'Members' and 'Advanced' tabs. The main area has a 'Name' field with 'New Item' entered. Below it is a search bar with 'Search' text. To the right is a 'Type' field with '<Search>' text. At the bottom, there is an 'Auto-save' checkbox (checked), a 'Save' button, and a 'Cancel' button.

2. Complete the ACG configuration in the two details tabs. The links below open the topics containing procedures for completing each details tabs configuration:

- [Members](#): You can view membership only. Items must be added to ACGs through the specific item configuration.
- [Advanced](#): Complete the optional custom attributes and history information.

Note: To save a new ACG, all required information must be entered. Incomplete or invalid information is shown with a message:



Related topics

[Access control groups: members](#)

[Access control groups: members field descriptions](#)

[Access control groups: advanced](#)

[Access control groups: advanced field descriptions](#)

Access control groups: members

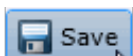
The **Members** details tab contains the name of the ACG and the items that belong to the group. Click the name of the details tab for field descriptions.

To complete the ACG's general information

1. Click the **Members** details tab to display the details view.
2. Type the ACG Name. The name must be unique.

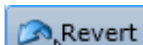
Name:

3. Save the new ACG.



Save the modified item (Ctrl+S)

If necessary, the new ACG or changes made to an existing ACG name can be reverted.



Revert the changes to the modified item

Note: The **Name** and **Type** area in the details view is empty.

Name	Type
Search	<Search>

Items must be added to the ACG through the specific item's configuration. The following image illustrates how an item appears after it is added to the ACG.

Name: Root	
Name	Type
Search	<Search>
<Default Registration Group>	IP Phone Registration Group
<Default Secure Registration Group>	IP Phone Registration Group
<Default-Polycom>	IP Phone Ring Set
<Local Phone Settings>	IP Phone Ring Set
Administration	Workgroup
Administrator	Role
Agent	Role

Related topics

[Access group configuration](#)

[Access control groups: members field descriptions](#)

Access control groups: members field descriptions

This topic contains the descriptions for each field in the **Members** details view under the **View Access Control Groups** page.

Members

When an item (member) is added to an ACG, the users assigned to the ACG's, take on those rights. The details view here shows the name of the item (Administration) and associated item type (Workgroup):

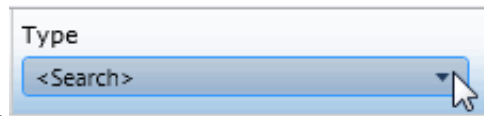
Name	Type
Search	<Search>
<Default-Polycom>	IP Phone Ring Set
<Local Phone Settings>	IP Phone Ring Set
Administration	Workgroup
Administrator	Role

- To search for a specific item in the list, type a digit or digits and select the filter type to apply:

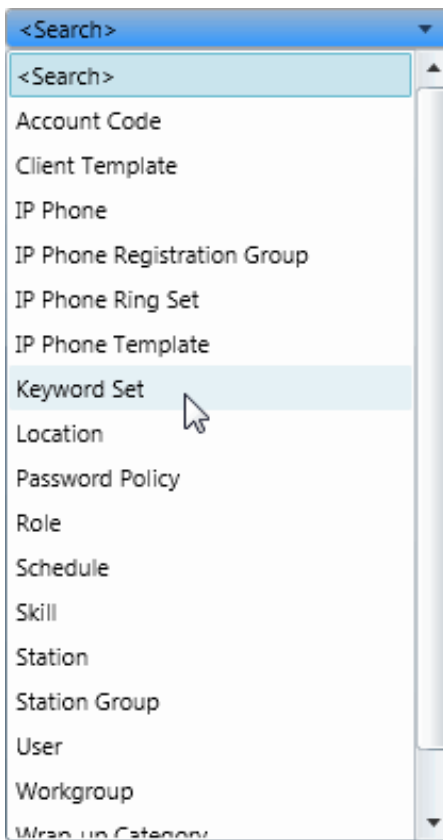
☒ Contains

☐ Starts with

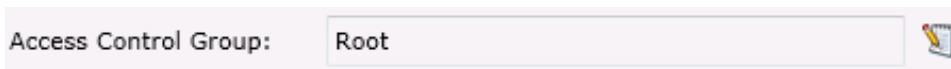
☐ Matches whole word



- To search by item type, click , and select the item type from the list:



- All items belonging to an ACG are displayed in this view only list. Items cannot be added to or deleted from this view. Items must be added or deleted from ACGs from the item configuration. For example, a user must be added to an ACG through the **Access Control Group** field in user configuration:



Related topics

[Access group configuration](#)

[Access control groups: members](#)

[Access control groups: advanced](#)

[Access control groups: advanced field descriptions](#)

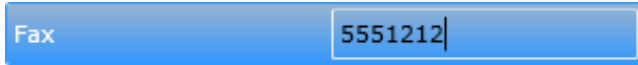
Access control groups: advanced

The **Advanced** details tab contains the custom attributes and history of the ACG. Click the name of the details tab for field descriptions.

To complete the ACG's advanced information

1. Click the **Advanced** details tab.
The details view appears.
2. Click the **Custom Attributes** [section expander](#) to display (or hide) the custom attributes section's contents, and complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.



3. Click the **History** [section expander](#) to display (or hide) the history section's contents, and complete the following information:
 - View the **Created** and **Modified** dates for this ACG.
 - Type or view information in the Notes field for the ACG.
4. Save the ACG.

Note: If necessary, the new ACG or changes made to an existing ACG can be reverted.

Related topics

[Access group configuration](#)

[Access control groups: members](#)

[Access control groups: members field descriptions](#)

[Access control groups: advanced field descriptions](#)

Access control groups: advanced field descriptions

This topic contains the descriptions for each field in the **Advanced** details view under the **View Access Control Groups** master view.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

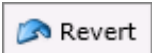
History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

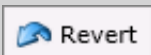
This date is automatically set when the user creates the initial configuration for this ACG. If the ACG was initially created during setup, the date could be blank.

Modified

This date is automatically updated each time the user clicks the **OK** button, presumably after making changes to the ACG



configuration. To avoid updating this date, exit the details view by clicking



Note: If you click , none of the changes made to this ACG since the changes were last saved are preserved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click **Save**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

Related topics

[Access group configuration](#)

[Access control groups: members](#)

[Access control groups: members field descriptions](#)

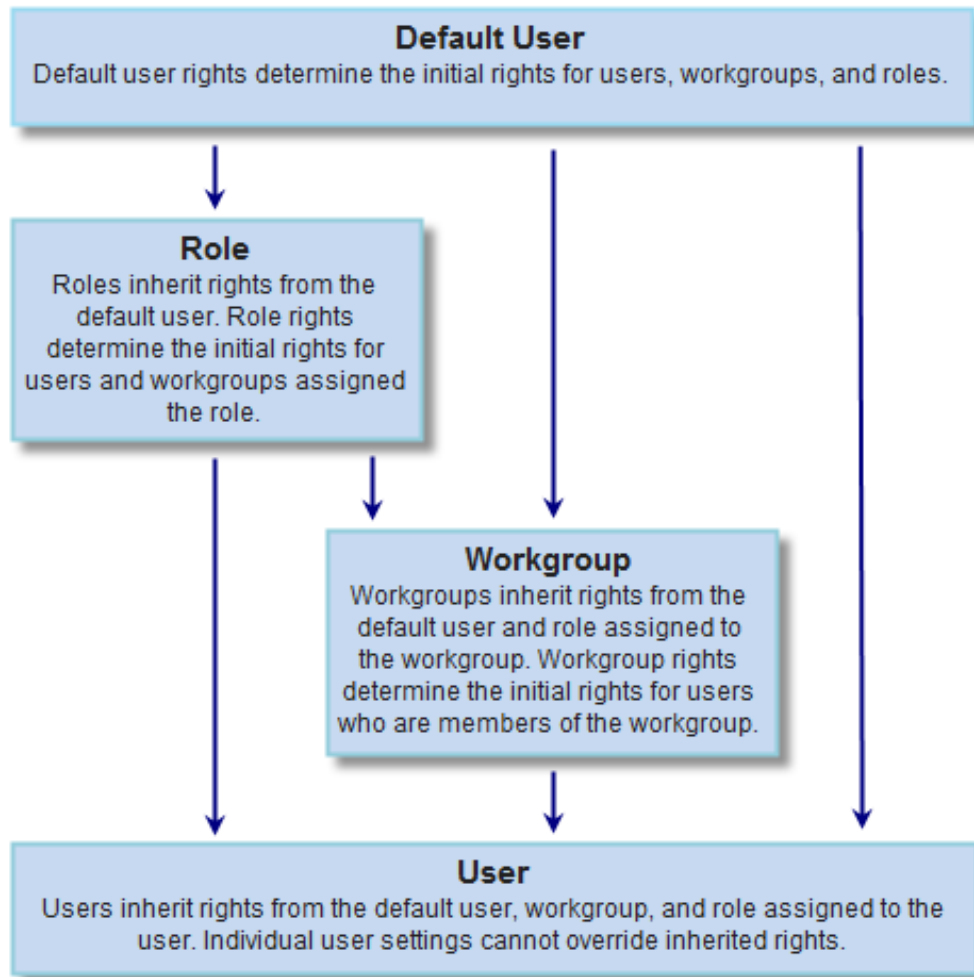
[Access control groups: advanced](#)



About inheritance of configuration properties

To streamline the configuration of people-related records, CIC automatically assigns rights to roles, workgroups, and users based on a system of inheritance.

- All users inherit some initial rights from the default user.
- If you create workgroups, users who are members of a workgroup also inherit rights from that workgroup.
- If you create a role, users who are assigned to the role inherit the rights associated with that role.
- If a user is a member of more than one workgroup, or is assigned more than one role, and if those workgroups and roles include conflicting rights, the user will inherit the union of the rights set in all the workgroups and roles.



Activating configuration changes for users, workgroups, roles, and the default user

Configuration changes made in the configuration pages for users, workgroups, roles, and the default user dynamically update the affected CIC clients while they are actively running.

The following table summarizes how users are affected.

Changes made to:	Update Interaction Client in this way:
Individual User	The user's active CIC client is immediately updated.
Workgroups	Users who are members of that workgroup with active CIC clients are immediately updated.
Roles	Users who have been assigned the role with active CIC clients are immediately updated.
Default User	All users with active CIC clients are immediately updated.

Related topics

[Updating configuration values](#)



CIC System Configuration

CIC system resources control specific features and functionality provided in the Interaction Center for the entire configuration, regardless of how many servers or users are installed. System-level configuration includes:

- Interaction Processor (IP) variables and startup handlers
- Phone number identification and pattern matches. All [dial plan configuration](#) and phone number classifications are controlled in the Phone Numbers container.
- Report , [Report Log](#) , and [Accumulator](#) activity for gathering and producing call activity reports
- [System-wide parameters](#) that can be referenced by all CIC handlers on each server
- [Status messages](#) that can be defined on the server and set on each workstation running a CIC client.
- [Action](#) definitions
- [Log Retrieval](#)
- Administrative, fax, and voice [email account names](#)
- [Interaction Process Automation](#)
- [Interaction Feedback](#)
- [Fax server](#), Interaction Fax Viewer default attributes and [fax groups](#) that are named groups of fax devices used for specific applications.
- [Database](#) and [data source](#) configuration
- Predefined [Web chat messages](#) and [URLs](#) for agents taking Web chat sessions
- [Voice recognition](#)
- [Media Servers](#)
- [SIP Proxies](#)
- [MRCP Servers](#)
- [Session Manager](#)
- [SMS](#)

Related topics:

[Exporting configuration data](#)

[Telephony_server_configuration.htm](#)

[User and Workgroup Configuration](#)

System Configuration Pages

The system configuration pages include:

[Connection Security](#)

[Certificate Management](#)

[Prompt Server](#)

[Text to Speech](#)

[Display Name Format](#)

[Languages/Time Zones](#)

[Mailboxes](#)

[Host Server](#)

[Trace Logs](#)

[Site Information](#)

[ACD Options](#)

[Interaction Client](#)



Connection Security

Use this page to define connection security settings.

Move the slider to select a level of security for connections between subsystems and the server.

High

- Data is only transmitted through server connections using Secure Sockets Layer (SSL)
- All applications use SSL
- Subsystem connections use SSL and certificates

Medium

- Data is encrypted before being transmitted through regular server connections or server connections using Secure Sockets Layer (SSL)
- You have the ability to configure which applications use SSL
- Subsystem connections use SSL and certificates

Low

- Data is transmitted in cleartext through regular server connections or server connections using Secure Sockets Layer (SSL)
- You have the ability to configure which applications use SSL
- Subsystem connections use SSL and certificates

[Configure application connection security...](#)

[Configure subsystem certificates...](#)

[Configure login authentication...](#)



Certificate Management

Use this page to configure which certificates are used on the CIC server.

Subsystem Certificates Configuration

Subsystem certificates are used to allow or deny subsystems from connecting to the server.

Click [Modify](#) to manage subsystem certificates.

Email Certificates Configuration

Email certificates are used to securely send and receive email messages and make secure connections to email (IMAP, SMTP, and S\MIME) providers.

Click [Modify](#) to manage email certificates.

SIP\TLS Line Certificates Configuration

SIP\TLS line certificates are used to authenticate SIP/TLS connections to and from the server.

Click [Modify](#) to manage line certificates.

Application Connection Security

By default, all application connections to the CIC server via the IC Notifier subsystem require SSL and certificates for validation. Using the medium level of connection security, you can optionally specify one or more PureConnect applications to not use SSL. Because SSL requires additional overhead to encrypt data, high volume sites that communicate with large amounts of data in the messages may notice latency. An example might be sites using Interaction Recorder and Interaction Recorder Client for audio or screen recordings may notice latency due to SSL related overhead. In such cases you may want to exclude these applications from using SSL. Applications that connect via the Session Manager subsystem (e.g., CIC clients, IceLib applications, etc.) do not need to be excluded from this list because they do not incur the same overhead as applications connecting via Notifier.

You can also customize Interaction Center Extension Library (IceLib) applications that may not use SSL or that may require heavy data , to exclude them from requiring SSL connections.

To exclude specific PureConnect applications from using SSL:

1. On the Connection Security page, set the slider bar to Medium and then click on the Configure application connection security... link.
2. On the Application Connection Security dialog, select a CIC application from the application list.
3. Click the Add button and the application appears in the Applications Not Requiring SSL: list.
4. To remove an application from the list of applications not using SSL, select the application name from the Applications Not Requiring SSL: list and click the Remove button.

To exclude specific IceLib-based applications from using SSL:

1. On the Connection Security page, set the slider bar to Medium and then click on the Configure application connection security... link.
2. On the Application Connection Security dialog, type the IceLib application name or application ID passed in when connecting to the IC server in the IceLib-based Application: text field.
3. Click the Add button and the application appears in the Applications Not Requiring SSL: list.
4. To remove an application from the list of applications not using SSL, select the application name from the Applications Not Requiring SSL: list and click the Remove button.

Subsystem Certificates

Use this page to choose which certificates are trusted and untrusted by the CIC server. Subsystems with new or untrusted certificates will not be allowed to connect to the server until they are trusted.

Show

Select what certificates to display by choosing one of the following options on the pull-down menu:

- All Certificates
- New Certificates
- Trusted Certificates
- Untrusted Certificates

Trusting remote subsystem certificates

Remote CIC subsystem servers, such as Interaction Media Server, Automated Speech Recognition Server, and remote Session Manager Servers, send their trusted certificate to the CIC server when establishing a connection to the Notifier subsystem. As a safety precaution, a CIC administrator must deliberately trust the certificates from these remote subsystems before they can establish a connection.

To trust a new certificate from a remote subsystem:

1. On the Connection Security page, click on the Configure subsystem certificates... link.

Or...

On the Certificate Management page, click on the Modify... button for Subsystem Certificates Configuration.

2. On the Subsystem Certificates dialog, select All Certificates or Untrusted Certificates on the drop-down list to display the certificates in an untrusted state.
3. In the State column, select the desired "Untrusted" application certificate click the Trust button, then click Close.

Notes: Some subsystem connections are trusted automatically when run on the CIC server, so no intervention from a CIC administrator is required. When Setup Assistant runs on a CIC server, it creates a subsystem connection to Notifier and automatically registers and trusts a client certificate. In the case of a switchover pair, running Setup Assistant on both CIC servers auto-matically registers and trusts their client certificates.

If a remote subsystem server is compromised or is taken out of service, you may need to tell the CIC server to stop trusting a certificate from that server, or delete that certificate once it is obsolete. When you revoke or delete a certificate, CIC terminates any subsystems using the certificate.

Email Certificates Configuration

Enter the folder path to store email certificates and private keys used to decrypt encrypted messages, verify digital signatures, and establish secure mail provider connections.

Note: For [IMAP](#), [SMTP](#), and [S\MIME](#) providers, CIC uses this location to store email certificates as files. For [GroupWise](#) and [LDAP](#) providers, the email certificates stored in the Windows Certificate Store.

Related topics

[Configuring IMAP](#)

[Configuring SMTP](#)

[Configuring Novell GroupWise](#)

[Configuring LDAP](#)

[Adding an ACD Email Routing Mailbox](#)

[Attendant Mailboxes](#)

Prompt Server

The Prompt Server subsystem is installed on the CIC server, but it is not used by default. You must first assess the capacity and consider the implications of moving most audio play and input operations to the Interaction Media Server before enabling prompt server with the **Use Media Servers for prompt play and input operations** check box on the [Media Server Configuration](#) page.

The default values on the Prompt Server Configuration page are reasonable settings for initial use. Depending on the load on your media server and the types of prompts being accessed, you may need to adjust these settings.

Web Server Options

Prompt Server uses an HTTP server hosted on the CIC server to serve audio files to HTTP clients (e.g., Interaction Media Server, MRCP server). The following parameters specify how the HTTP clients connect to this HTTP Prompt Server.

Address to use: This drop-down menu shows the available friendly names of network adaptors associated with the HTTP or HTTP port. If a network adapter is renamed and no longer exists, there is a warning icon displayed next to that adaptor. CIC supports IPv4 and IPv6 addressing schemes.

HTTP Port: This specifies a local port on the CIC server that Prompt Server uses to service HTTP requests. The default value is 8098 and must not be set to conflict with any other port number on the CIC server. If set to 0, Prompt Server does not have an HTTP listener and therefore is disabled. If the media server is in a different location and there is a firewall between the media server and the CIC server, then you must configure the firewall to open the port used by Prompt Server.

Note: If you change the HTTP Port setting, you must immediately restart the Prompt Server subsystem, using IC System Manager, to activate the new HTTP port. Until you restart Prompt Server, HTTP client connections will fail.

Use HTTPS: This optional check box specifies whether resources (e.g. audio files) are served only through a secure TLS connection. It is off by default. If selected, HTTP requests will be redirected to the specified HTTPS Port. Using this option requires that the Interaction Media Server certificate is trusted by the CIC server.

HTTPS Port: This specifies a local port on the CIC server that Prompt Server uses for servicing (secure) HTTPS requests. The default value is 8099 and must not be set to conflict with any other port number on the CIC server. If set to 0, Prompt Server will not have an HTTP listener and therefore be disabled. If the media server is in a different location and there is a firewall between the media server and the CIC server, you must configure the firewall to open the port used by Prompt Server.

Note: If you change the HTTPS Port setting, you must immediately restart the Prompt Server subsystem, using IC System Manager, to activate the new HTTPS port. Until you restart Prompt Server, HTTPS client connections will fail.

Mutual Authentication Required: This specifies whether mutual authentication of certificates is required between the CIC server and the Interaction Media Server. The check box is clear (off) by default. If selected, remote subsystem certificates will automatically be exchanged between the Interaction Media Server and CIC server.

Note: If any changes are made to the **HTTP Port**, **HTTPS Port** or **Use HTTPS** settings, the prompt server must be restarted immediately.

Cache Options

In order to efficiently process prompt requests, Prompt Server manages a local cache of audio file properties on the CIC server. Most of these cache options are good default values and don't need to be changed in the normal case of Interaction Media Server processing audio plays. Some options are only for special cases when another application may access a prompt not tagged with release information by Prompt Server.

Note that the Interaction Media Server keeps its own local cache of prompts as well, but that cache is not affected by these options.

Maximum age of files without a version (sec)

This specifies the maximum age, in seconds, of cached files that have not been tagged with a release identifier. The default value is 600 seconds (10 minutes).

In the typical case of Prompt Server serving files to and receiving requests from Interaction Media Server, all audio files are tagged with release information, which is used to determine if a file has changed. In some cases, an MRCP server may use SSML documents that reference audio files not tagged by Prompt Server. In this case, Prompt Server sets the max-age HTTP header directive to the specified value when these files are requested.

Cached prompt idle time (sec)

This specifies the number of seconds to wait before removing a cached prompt that has not been used or requested. Once a prompt is played, the idle time counter is reset for that prompt. As long as the prompt is being used within the idle time limit, it will remain in the cache. If a prompt has not been used or requested in that idle time period, it will be removed from the cache on the next cache cleanup event. The default value is 600 seconds (10 minutes).

Cache cleanup interval (sec)

This specifies the number of seconds between cache cleanup events. Files that have been identified as having exceeded the cached prompt idle time will be cleaned out of the cache at this interval. The default setting is 300 seconds (5 minutes).

Cached prompt refresh interval (sec)

This specifies the interval Prompt Server uses to determine whether or not to scan the cache for updated file attributes when a file is requested. It is used to help prevent excessive refreshing of cached file attributes. The default value is 10 seconds. That means, for example, once Prompt Server reads a file's attributes and that data is cached, if there is another request for that file within the interval (10 sec), Prompt Server does not read the file attributes again – it assumes the file is current. If a request for that file occurs after the interval, Prompt Server reads the file attributes again to determine if it has changed.

Click [Configure File Extensions...](#) to enter or edit prompt server file extensions.

Click [Configure Virtual Directories...](#) to enter or edit prompt server virtual directories.

For more information, see *Interaction Media Server Technical Reference*, which is in the **Technical Reference Documents** section in the PureConnect Documentation Library.

Related Topics

[Media Servers](#)

[Prompt Server File Extensions](#)

[Prompt Server - Add File Extension](#)

[Prompt Server - Virtual Directories](#)

[Prompt Server - Add Virtual Directory](#)

Prompt Server File Extensions

Interaction Media Server plays .wav .snd and .au prompt files. These file extensions are configured by default in the Prompt Server File Extensions dialog box. In the typical case, you do not need to add or change the default file extensions. The inmodel file extension (with application/xml Content Type) is required for call analysis to work on the Interaction Media Server.

In the more rare case where a CIC server sends audio to an MRCP server that supports additional audio formats, you may need to add that file extension and content type here.

Click [Add](#) to add a prompt server file extension, or highlight an existing file extension and click **Delete** to remove it.

Related Topics

[Media Servers](#)

[Prompt Server](#)

[Prompt Server - Add File Extension](#)

[Prompt Server - Virtual Directories](#)

[Prompt Server - Add Virtual Directory](#)

Prompt Server - Add File Extension

Use this page to enter the prompt server file extension information.

File Extension

Enter a unique prompt server file extension, such as "wav". Extensions are case-insensitive.

Content Type

Enter the prompt server file content type in the format of "xxx/xxx", such as "audio/x-wav". An error is displayed if not entered in the proper format. This information is contained in the HTTP or HTTPS header for the associated file extension.

Related Topics

[Media Servers](#)

[Prompt Server](#)

[Prompt Server File Extensions](#)

[Prompt Server - Virtual Directories](#)

[Prompt Server - Add Virtual Directory](#)

Prompt Server - Virtual Directories

Prompt Server provides access to audio files residing in the file system on the CIC server. In order to limit access to the CIC server file system and provide a degree of security, Prompt Server creates virtual directories for Interaction Media Server to access the files. A media server or other third party server can only access audio files residing in (or in a subdirectory under) one of the virtual directories defined on the Prompt Server configuration page.

By default, Prompt Server creates virtual directories for the common audio resource folders on an CIC server, including

- Recording Directory (x:\server\IC\Recordings)
- Resource Directory (x:\server\IC\Resources)
- Work Directory (x:\server\IC\Work)

By default, handlers use prompts under one of these directories, but you can choose to omit any of these or create additional virtual directories that map to a specific location on the CIC server.

The **Use resource directory** option is required for call analysis to work on the Interaction Media Server.

Click [Add](#) to add a virtual directory, or highlight an existing directory and click **Delete** to remove it.

Note: For security reasons, only prompt files that are located in one of the virtual directories (or the subdirectories) are mapped to URIs.

Related Topics

[Media Servers](#)

[Prompt Server](#)

[Prompt Server File Extensions](#)

[Prompt Server - Add File Extension](#)

[Prompt Server - Add Virtual Directory](#)

Prompt Server - Add Virtual Directory

Use this page to add a registered virtual directory and the corresponding root paths.

Virtual Directory Name

Enter a unique virtual directory name for the prompt server. The name is case-sensitive.

Root Server Path

Enter the file path prefix which this virtual directory references on the local system. Click ... to browse the server directory. If Interaction Administrator is not running on the server, then the browse button is not available.

The root server path is matched against files to be mapped to URIs. CIC uses the virtual directory with the longest matching local root path to compose the URI.

Related Topics

[Media Servers](#)

[Prompt Server](#)

[Prompt Server File Extensions](#)

[Prompt Server - Add File Extension](#)

[Prompt Server - Virtual Directories](#)



Text to Speech

Default Text to Speech (TTS) voice configuration is performed in the Windows Control Panel Speech Applet.

Use the **Text to Speech** tab of the **System Configuration** dialog box to perform the following advanced TTS configuration:

- Set the maximum number of sessions to be allowed at one time
- Add multiple languages and voices

For more information, see *Text-to-Speech Engines Technical Reference* in the PureConnect Documentation Library.

Default TTS Provider

When CIC receives a TTS request, it must select which TTS technology to use to complete the request. The **Default TTS Provider** field indicates which TTS technology to use when a TTS request does not indicate a specific TTS technology. The options are:

- SAPI: This is a Windows-only API.
- MRCP: This is a standardized TTS protocol. Many third-party TTS vendors support only MRCP.
- Media Server: This is CIC's proprietary Text-to-Speech engine. This option is available only if you have installed a license for it.

Concurrent Session Limit

Enter the maximum number of concurrent sessions to attempt. This limit is either a license-enforced limit or a load-enforced limit. TTS will not attempt to create more sessions than what is defined here. Additional requests will fail and an event log entry will be logged.

Concurrent Session Warning Level

Enter the maximum concurrent sessions. When this threshold is exceeded an event log entry will be created. Use this warning level to see when you are getting close to exceeding your license limit so you can plan ahead.

Number of Sessions Currently in Use

This is the number of TTS sessions currently in use in the CIC system.

Volume Control (0 - 100)

Use the up and down arrow keys to set the volume level for the voice resource. The default value for this field is 100 decibels.

Voices

You can choose to write custom applications for multiple languages and voices by creating a voice name parameter for each voice and then making the necessary handler modifications using these voice name parameters.

Click **Add** to add voice resources. Enter the voice name and the registry path. Select the Language from the pull-down list.

For example, you may define "Mary" as the name, "HKEY_LOCAL_MACHINE\Software\Microsoft\Speech\Voices\Tokens\MSMary" as the path, and "English (United States)" as the language. Once defined, you can then just pass "Mary" to the TTS defined tool.

There is no limit to the number of voices to add. By default, the system refreshes every 5 seconds.

Click **Edit** to change existing voice resources or **Delete** to remove them.

Notes: Only configured voices on the CIC server are listed.

Each language can only be associated with one voice.

Voice configuration settings in this dialog will override the voice configuration settings in the Windows Control Panel Speech applet.



Display Name Format

Use this page to configure the way names are displayed in the system. Select one of three options:

- **FirstName MiddleNameOrInitial Last Name**
For example, Sonya M Mullins
- **LastName, FirstName, MiddleNameOrInitial**
For example, Mullins, Sonya, M
- **LastNameFirstName**
For example, MullinsSonya

Set Asian Names to "LastNameFirstName"

Use this option to set LastNameFirstName as the default format if an Oriental name is detected.

Example

This section displays an example based on the format chosen above.



Languages

For sites that support multiple languages (such as English, French, Spanish, etc.), the handlers that play prompts can select which language (*and time zones will be available in a future release*) to use when playing these prompts. Use this page to define the languages available at a site and to specify the default language. Use the prompt editor to record prompts in different languages.

Include User's Time Zone in Announcements (*available in a future release*)

Select this check box to include the user's time zone information in announcements. For example, you may want to include "..10:00 AM **savings daylight time**...". . By default, this option is not enabled.

Languages

Click the **Add** button to define a new language for this site.

To remove a language from this site, select a language name and click the **Delete** button.

Note: Languages available depend on the language installed by the add-on language pack install. For non-supported language prompts, you can create a language prompt set as prompt handlers, and add the language to CIC using the option in this dialog box.

Default Language

The languages defined in the Languages box appear in this list box. Select the default language used in all system prompts. In addition, the GetLanguage handler uses this Default Language value if the "Language" attribute is not set on a call.

Notes: If you install a non-English language pack and require call analysis for that language, you must set the [Call Analysis Language server parameter](#) on the Interaction Center server. For more information, see "Specify Interaction Media Server call analysis language model" in *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

For more information about the GetLanguage handler and the Play Prompt tool, see **Reference (Tools and more) > Tools > Telephony** in the Interaction Designer Help.



Mailboxes

Select the default email account (or distribution list) for each of the following roles in CIC message distribution. Handlers can send email to these designated accounts by specifying the Directory Services (DS) attributes for each recipient. See the [Mailboxes Configuration](#) online Help for details on how to select a mailbox if you don't know its name.

Note: The actual IC Administrator mailbox should not be used in these fields, as it could result in the administrator's mailbox receiving excessive mail. On your email server, you might create an account and mailbox (that the IC Administrator can log on to and check periodically) to be used in these fields.

Voice Mail Recipient

Select the mailbox account to receive voicemail when the intended recipient is not known or cannot be reached. This prevents voicemail from getting lost because an incorrect or ambiguous email address was used. The DS attribute for this account is: **Default Voice Mail Recipient**, found in the \$CONFIGPATH\Configuration registry key.

Fax Recipient

Select the Mailbox account (or distribution list) to use to receive faxes when they arrive. This account must be a group or individual who is entrusted with the responsibility of reading the cover page on each fax and then forwarding it to the intended recipients. The DS attribute for this account is: **Default Fax Recipient**, which is found in the \$CONFIGPATH\Configuration registry key.

IC Administrator

Select the mailbox account to receive email if a handler needs to report an event. You can customize handlers to send an email notification for any event to the mailbox you select. For example, you could create an email account and mailbox named ICMail, and the CIC administrator could check it periodically for email.

The DS attribute for this account is: **IC Administrator Recipient**, found in the \$CONFIGPATH\Configuration registry key.

Voice Mail TUI XML File

This setting supports the migration of Voicemail TUI definitions from handlers to XML.

Default

By default this option is selected and the standard Voicemail TUI XML file is used that is shipped with CIC. The XML file (and other related files) is stored in a standard directory location (defined by the [Resources Path server parameter](#)) which is populated during installation.

Custom

Select this option to create a custom Voicemail TUI XML file. Click the Browse button to browse to the custom XML file location.



Host Server

The optionally licensed host tools and host server executable provide an interface between CIC and data stored on mainframe or AS400 computers. CIC's host server subsystem supports a specific number of concurrent connections to the host computer, based on the number of licenses purchased.

Note: Contact your authorized reseller or Genesys to purchase a CIC license key for host access tools.

Maximum number of concurrent sessions:

Enter a number that corresponds to the maximum number of threads you want CIC's host server (HostServerU.exe) to support at one time. The largest number you can enter is equal to the number of concurrent session licenses you purchased from Genesys. For example, if you purchased 24 concurrent session licenses for host computer connections, you could set this field to 24, or any number less than 24 if you wanted to restrict the maximum number of concurrent sessions allowed. Licenses are sold in bundles of 10, 24, and 50.

Host Tools Path:

By default the Host Tools Path is {SERVER PATH}\HostTools. Use this field if you need to change the default path to a local path. The path you enter here overrides the default path.

See Also

CIC Host Integration Solutions document in the **Technical Reference Documents** section of the PureConnect Documentation Library on the CIC server.



Trace Logs

Use this tab to configure the behavior of trace logs.

Log File Compression

Select this option for the CIC system to compress the prior day's log files at the specified time. This option is turned on by default.

Log File Compression Time

Enter the time for the log file compression to start. This option is grayed out unless **Log File Compression is checked** (and enabled). The default time is 12:40 a.m.

CPU Usage

Select the type of compression to use. The faster the compression the higher the CPU usage. The options are:

- High (Fastest Compression)
- Medium(Fast Compression)
- Low (slow compression)
- Very Low (very slow compression)

Disable Logging when there is less than...

Enter the amount of free space remaining in MB that when reached, will disable logging. The default value is 100 MB.

Re-enable Logging when there is more than...

Enter the amount of free space remaining in MB, that when reached, will re-enable logging. This option is only used if logging has been disabled. The default value is 200 MB.

Note: By default, CIC retains logs for 8 days.



Site Information

Enter site information that Interaction Tracker and other CIC components require.

Interaction Tracker uses the information to create user Organization and Location records during the CIC user import. Tracker uses the records to link interactions to CIC users.

Organization Name

Enter the name of your company, for example, "Acme Corporation" or "Acme". The default is OrganizationName.

In a Multi-Site environment, the name should be the same for each site.

Location Name

(Optional) Enter an identifier for physical location, for example, "Indianapolis" or "HQ" or "2nd Floor". The location should generally reflect a mailing address.

If you configured for Multi-Site during installation the Site ID is set. You can change this if it does not suit the location scheme for your customer site. (Note that Site ID is not related to physical location.)

Note: There are no requirements for how to name a location. Choose the scheme that works best for your customer site.



ACD Options

Use this page to configure ACD options at the CIC system configuration level.

Reset Available Time on ACD Available state change

Enable this check box to reset agents' time when they change their status from a non-ACD Available state to an ACD Available state. By default this option is disabled.

Reset Available Time on Logon

Enable this check box to reset agents' time when they log in to a CIC client. By default this option is disabled.

Maintain ACD Skills on transfer

Enable this check box to maintain ACD skills and categories when a call is transferred to a different workgroup or user. By default this option is disabled.



Interaction Client

Use this tab to configure which user records a user sees in the CIC clients.

Company Directory and Transfer Dialog Users' Visibility

To ensure that the user sees only members of the workgroups that the user can view or modify, select **Restrict User's Visibility**. If this option is not selected, the user can see all user records.

Note: Whether a user can view or modify a workgroup depends on [access rights](#).



Update Service

To streamline the configuration of Interactive Update local provider information on CIC client machines, complete the fields on this page. If you do not complete the fields on this page, then you will need to manually configure the local provider on each of your client machines, either during the installation process, through the configuration file, or through Interactive Update.

For complete information on Interactive Update, see the *Interactive Update Technical Reference* in the PureConnect Documentation Library.

Important: In order for this feature to work, IC Server, Interactive Update, and the client applications on client machines must all be on 2016 R2 or later versions.

Update Service Available

Select this check box to enable Interactive Update to receive the information you specify on this page. Then complete the additional fields in the **Update Service URI** group.

If you deselect this check box, you must manually configure each of your CIC clients.

Auto-configured

Interactive Administrator automatically detects the preferred local provider URI for you. If the displayed URI is correct, you do not need to specify a different URI in the **Override** box.

Notes:

Depending on your network topology, the auto-configured URI may work from server machines but not from client machines. To provide a different override URI that can be reached from all machines, specify the accessible URI in the **Override** box.

Do not specify a remote provider in this box.

If you multiple local providers, specify only one of them here. All local providers share the same database and the data is managed appropriately.

Override

If you want to manually configure the local provider URI that your client machines will use, type its URI here.

Note: Be sure to specify a URI that your CIC client machines can reach.



Administrative Alerts

If CIC detects that a message delivery failed, CIC contacts the administrator via an email message and a phone message. The message contains the error generated by the system.

Use this page to activate or deactivate the administrative alerts and to configure the email address and phone number that CIC uses to notify the administrator.

Enable Administrative Alerts

Use this check box to activate or deactivate administrative alerts.

Phone Number

Type the phone number for the system to send the phone alert message.

Email Address

Type the email address for the system to send an email alert message.



Review the IP configuration of your CIC server

To review the IP configuration of your CIC server

1. In the **<IC Server>** container, in the list view window, double-click **Configuration**. The **Server Configuration** dialog box appears. The boxes on the **IP Configuration** tab are automatically completed for you. For more information, see *IP configuration options*.

WARNING: Do **not** modify the boxes on this tab unless you know what changes need to be made, or you have been instructed to modify the settings by a PureConnect Customer Care representative.

If you get an event log message stating that some handlers did not run immediately because the thread pool limit was reached, contact PureConnect Customer Care or your support representative. A representative will advise you if it is necessary to increase the number of available threads.

Related topics

[IP configuration options](#)

[Overview of CIC server configuration](#)

[Configure your CIC server](#)



Handlers

Handlers are the programs that define the interaction processing functionality of the CIC system. A handler is a group of actions (steps) that start when an event occurs on the CIC system. For example, the IVR system that callers interact with is a handler. Handlers can record and send voice mail, for example. Almost every call processing action that occurs on the CIC server is the result of a handler.

For more information about handlers, see the [Interaction Designer Help](#).



Handler Configuration

Handlers published to the CIC server from Interaction Designer appear in the comprehensive list of available handlers under Handler Names. To move a handler from being available (present) on the server to being activated to run on the server, see the [Handlers](#) and [Monitor Handlers](#) property pages in the **Server Configuration** dialog box.

File Name

Handlers published to the default location are stored in Java class files. In general, you should never need to change the handler's Java class file name unless instructed by qualified technical support personnel. Each time a handler is published, Interaction Designer appends a new date code at the end of each handler's Java class file name (for example, DialPlan0_857349795.class). Do not change these names.

Configuring Handlers

It is possible you will never have to change the following default settings for Handlers. If you get any of the messages stated below, we suggest you contact your PureConnect Customer Care representative before changing any of the values.

Maximum Number of Concurrent Handlers

This number determines the maximum number of handlers that can run concurrently. The default, **0**, means there is no limit to the number of concurrent Handlers.

If there is a value in this box, and a message appears in the event log stating the Handler has reached its concurrent limit and additional requests to run this handler will be queued up, you can increase the limit. Again, we suggest you contact PureConnect Customer Care before changing this value.

Note: This limit applies only to first-level handler calls. Handlers called from within another handler via the "Subroutine" initiator are not subject to concurrent handler limits. This is a safety mechanism to ensure that ongoing handler operations do not stall when calling a subroutine due to handler concurrency limits.

Maximum Number of Handlers Queued

When the maximum number of concurrent Handlers is reached, this field indicates how many handler requests can be queued until a slot becomes available.

If the **Maximum Number of Concurrent Handlers** is set to the default, the **Maximum Number of Handlers Queued** field is gray, and not available. When it is not available, a large allowable maximum value has been pre-set.

This box becomes available when you put a value in the **Maximum Number of Concurrent Handlers** box. If you get a message in the event log stating the Handler has exceeded its maximum queue limit and request to run this handler will be discarded, you can increase the limit in this box. Type a number in the box, or if you select **No Limit**, a **-1** appears in the box. Again, we suggest you contact Customer Support before changing this value.

Handler Priority

You can select **Low**, **Normal**, or **High**. The default setting is **Normal**.

Step Limit

You might need to increase the step limit if you get a message in the error log stating the Handler has exceeded its step limit. If the Handler should not have exceeded this step limit, there may be an infinite loop in the Handler. The default, **0**, has a value of 10,000. If you click **No Limit**, a **-1** appears in the box. Again, we suggest you contact Customer Support before changing this value.



Initialization Function

Initialization functions are functions that perform some system initialization when the CIC system starts. These functions are contained in DLLs that must be registered on the CIC server in Interaction Administrator. Multiple initialization functions can be called during system initialization.



Initialization Function Name

Type the name of an [initialization function](#). Use a meaningful and unique name.



Initialization Function Configuration

Type the [initialization function's](#) name and the name of the DLL containing the function. Select the **Active** check box to make it available to the Interaction Processor.

Warning: Do not modify or remove the default CIC initialization functions or the system might not work.



Introduction to Table Editor

Interaction Administrator and Interaction Designer (through the Table Lookup tool) both provide access to a table editor that allows you to create simple, indexed, in-memory databases for fast lookups during CIC interaction processing. The tables are stored on the CIC server and reside in Virtual Memory (VM) while CIC is running. These tables are read-only in the current release.

The Table Editor portrays the table as a set of rows and columns much like a spreadsheet or relational database. You can easily add columns and rows using the toolbar buttons or menu commands. To edit a cell, double-click on it or use one of the keyboard shortcuts. All cell editing is done in place (within each cell). The editor supports multi-level undo and redo operations. When you click on the Save button, CIC re-reads the table into memory and the table values are immediately available for access.

Each column has a label and an index. The label is used to identify each column, and indexed column labels appear in the list of "Columns for Lookup" in the Table Lookup tool in Interaction Designer. Indexes define columns you search quickly for specific values. If a column does not have an index, you cannot use that column as a search key.

Each table is a stand-alone entity. Tables do not obey typical relational operations such as joins and views. Tables are stored on and referenced from the CIC server. Each table and column in that table has a globally unique identifier, a GUID, which uniquely defines each table and each column.

In order to perform a lookup on a table, at least one column in the table must have an index. Table Editor supports two kinds of indexes:

Unique - each entry in the column is unique (for example, account number) and it cannot contain duplicate values. Table Editor warns you if it finds duplicates. Lookups on unique index columns are faster than on columns with duplicate values.

Multiple - each entry in the column may have one or more occurrences of that value in the column (for example, account type, date, and so on). Lookups on multiple value indexes are slower than on columns with unique indexes.

What is the difference between an .i3Table and a .i3TableEX file?

Normally, table data is stored in 2 locations: (1) The column information is stored in the registry; and (2) the data is stored in the .i3Table file. You shouldn't care about these storage structures, they are internal and could change at any time. CIC keeps data in the registry to make lookups/browsing of the different table types quicker.

When you export a table to the .i3TableEx file, it contains the columns found in the registry (1) plus the table data (2). A complete stand-alone 'table'.

CIC stores the data in .i3Table internal format because it may be too big to fit in the registry. We envision large tables may be stored.

Note: For the best performance, tables should contain no more than 2,000 records. Also note that table lookups are case sensitive.



Overview of the Phone Numbers container

For information on the **Phone Numbers** container, click the links under *Related topics*.

Related topics

[Old dial plans](#)

[Regional dial plans](#)

[DID/DNIS](#)

[Private lines](#)



Overview of old dial plans

An old dial plan was created with an older version of Interaction Administrator (pre-2.4). Old dial plans have a two-table format and a .i3pnum extension.

In the **Phone Numbers** container, you can import old dial plans and use them with the current release of Interaction Administrator. However, you will not gain the benefits of the newer regional dial plans.

Note: Only one dial plan format (old dial plan or regional dial plan) can be active. CIC uses the active dial plan to perform dial plan lookups and make calls.
If necessary, you can modify an inactive dial plan and test it by simulating calls.

For more information about old dial plans, click the links under *Related topics*.

Related topics

[Import a dial plan](#)

[Configure an old dial plan](#)

[Manage phone number classifications](#)

[Simulate a call](#)

[Advanced dial plan options](#)



Import a dial plan

You can import an entire CIC phone number plan that was saved (with the **Export** button) by any CIC server. Exported CIC phone number files have a `.i3dplan` extension and include all of the input conversion objects, dial plan objects, and classification names.

To import a dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Dial Plan**.
4. Click **Import**.
5. Click **Browse** button to select a `.i3dplan` file, and then click **Next**.
6. Click **Next** to navigate through the dialog boxes that display the contents of the dial plan file.
7. When you are presented with import options (replace or skip the merge), select the appropriate check boxes and then click **Next**.
8. Review the changes and then click **Finish**.
9. When the message appears that indicates that you have not yet saved your changes, click **OK**. You save your changes when you click **OK** on the **Regional Dial Plan** dialog box.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)

[Export a dial plan](#)



Configure an old dial plan

To configure an old dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab, click **Dial Plan**.
4. Complete the tabs in the dialog box. For more information, click the links under *Related topics*.

Related topics

[Overview of input conversion](#)

[Configure input conversion](#)

[Configure dial plan objects](#)

Simulate a call



Overview of input conversion objects

When you configure an old dial plan, you can create and modify the objects in the input conversion table. CIC uses the objects in this table to find a match between the raw dialed input (however it was initiated) and the input pattern. If it finds a match, the input is converted into a standardized output pattern. This output pattern number is then used as input in the dial plan table. If you are unfamiliar with the syntax for specifying input patterns and the output pattern format, see *CIC Regionalization and Dial Plan Technical References*, in the PureConnect Documentation Library.

Related topics

[Configure input conversion objects](#)



Configure input conversion objects

To configure input conversion objects

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab, click **Dial Plan**.
4. On the **Input Conversion** tab, configure input conversion object names. Each input conversion object name represents an input pattern and an output pattern pair. The order in which the input conversion object names appear determines the order in which CIC searches for a match between the dialed input and one of the input patterns. Complete the following steps as necessary.
 - To add a new input conversion object, click **Add**. Type a name in the **Entry Name** dialog box and then click **OK**. Then select the object and click **Up** or **Down** until the object is in the appropriate position in the list.
 - To create a new object that is similar to an existing object, click an object in the list and then click **Copy**. Type a name in the **Entry Name** dialog box and then click **OK**. Modify the **Input Pattern** and **Output Pattern** fields as necessary.
 - To rename an object, select the object and click **Rename**. Type the new name in the **Entry Name** dialog box and then click **OK**.
 - To delete an object, select it and then click **Remove**.
 - To create a group of similar input conversion objects that map to a group of similar dial plan objects, click **Add Many**. For example, you can specify a list of exchanges included in local, toll-free dialing. You can enter (or import) the list of exchanges once and create a rule that substitutes these exchanges into the input conversion object and the dial plan object. For more information, see *Add Many Input Object Configuration*.
 - To export all phone number objects (input conversion, dial plan, classification names, and many input pattern objects) to a file, click **Export**. The file has the extension .i3pnum (for example, *PhoneNumbers.i3pnum*). This is a good way to preserve your entire dial plan data, or to transfer this data to another CIC server where you can import it into the local phone number configuration.
 - To import an .i3pnum file into CIC, click **Import**. This import operation detects new objects (for example, new dial plan objects, new classifications, etc.) and adds them to the existing phone numbers. It also merges identically named objects by replacing them. If any of the imported objects depend on line groups that are not defined in the current system, CIC warns you about this. You must create the expected line groups or modify the dial plan entries to be able to use these imported numbers.
5. In the **Input Pattern** field, enter a string of literal numbers, variables, or both. CIC tries to match the dialed input with this pattern. If it does not find a match with any of the defined input patterns, it passes the number through to the Dial Plan table unchanged.

To create an input pattern, you must be familiar with wildcard pattern syntax. If the following tables and the input assistance prompts (->) do not provide enough detail to help you understand how to use the pattern syntax, see *CIC Dial Plan*, in the

Technical Reference Documents section of the PureConnect Documentation Library on the CIC server.

The input assistance prompt displays a drop-down menu containing the special input characters allowed in the **Input Pattern** field, as well as some commonly used input patterns, which you can select and modify if necessary.

/

@

Z

+

X

Y

N

NxxXXXXZ

NxxNxxXXXXZ

1NxxNxxXXXXZ

011+Z

011Z

The commonly used patterns in the list represent the following types of phone numbers (in the NANP):

Input Patterns	Description
NxxXXXXZ	Local toll free calls
NxxNxxXXXXZ	Long distance toll calls
1NxxNxxXXXXZ	Direct-dial long distance toll calls
011+Z	Any international number dialed from input containing '+'
011Z	Any international number without a '+' sign

The most commonly used wildcard characters are:

Characters	Variables (wildcards)
0 - 9	'X' (or 'x') represents a single digit character in that range
1 - 9	'Y' (or 'y') represents a single digit character in that range
2 - 9	'N' (or 'n') represents a single digit character in that range
'0' - '9', '#', '*', ''	'?' represents zero or more of these characters. (Note that '/', '@', and '+' are not included).
Any characters after the required digits	'Z' (or 'z') represents zero or more trailing characters of any value. Using Z allows the dialer to enter extra characters after the required digits without interfering with the dial string. This wildcard character must be the last character of the pattern; it is an error for it to appear anywhere else (which means there can be only one occurrence of this character in each number).

Phone number templates can consist of all digits, all wildcard characters, some non-dialing characters such as '+', '@', and '/', or any combination of these characters. The '/' character is generally used as a prefix to introduce an extension for direct extension dialing. The '@' character is used as a prefix before an extension, but that extension is not automatically dialed (that is, it is stored as informational data with the number). The '+' is used as a prefix to introduce a country code. These three characters are not actually dialed, but they are preserved as part of the stored phone number. The spaces these

characters hold within the number are counted when determining ordinal positions in the formatted number (that is, which number is in the first position, second position, and so on).

6. In the **Output Pattern** field, enter numbers that represent the unknown dialed digits. To do this, click the button on the right side of **Output Pattern** field. Select characters from the list of ordinal numbers that appears in the list.

You can enter numbers in two different ways: 1) using the input pattern (that is, wildcard) characters, or 2) using the ordinal positions of wildcard characters (or any characters) in the number. The ordinal positions of characters in the standardized phone number patterns are represented by: {1}, {2}, {3}, and so on. (Ordinal numbers identify the position or order in a sequence, such as 1st, 2nd, 3rd, and so on.)

To illustrate this, consider a pair of input pattern and output pattern templates for local phone numbers.

Local Number Input Pattern	Output Pattern–Wildcard List	Output Pattern–Ordinal List
NxxxxxxZ	+1317NxxxxxxZ	+1317{1}{2}{3}{4}{5}{6}{7}{8}
317NxxxxxxZ	+1317NxxxxxxZ	+1317{4}{5}{6}{7}{8}{9}{10}{11}
1317NxxxxxxZ	+1317NxxxxxxZ	+1317{5}{6}{7}{8}{9}{10}{11}{12}

Both the wildcard list style (middle column) and the ordinal list style (right column) of the output pattern represent the dialed local number in the same way. To CIC, the numbers are interchangeable.

The list to the right of the **Output Pattern** field provides an easy way to specify the ordinal numbers for the input pattern above.

{5}{6}{7}{8}{9}{10}{11}{12}
(Selected Digits from Input Pattern)

@

Z

+

X

Y

N

Nxx◇◇◇◇Z

NxxNxx◇◇◇◇Z

1NxxNxx◇◇◇◇Z

7. In the **Conversion Description** field, explain the purpose of the object. This helps to distinguish the object from similar objects in the table.
8. Click **OK**.

Related topics

[Configure an old dial plan](#)

[Overview of input conversion objects](#)

Add Many Input Object Configuration



Configure dial plan objects

To configure dial plan objects

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab, click **Dial Plan**.
4. On the **Dial Plan** tab, configure dial plan objects.
 - To add a new dial plan object, click **Add**. Type a name in the **Entry Name** dialog box and then click **OK**. Then select the object and click **Up** or **Down** until the object is in the appropriate position in the list. This list controls the order in which CIC searches the input pattern list (from top to bottom), based on the order of the names.

Notes: This order is critical to the dial plan processing stage of dialing.

The packaged dial plan objects that come with CIC serve as a good example of the kinds of names and the kind of order you may want to use in your own dial plan.

- To create a new object that is similar to an existing object, click an object in the list and then click **Copy**. Type a name in the **Entry Name** dialog box and then click **OK**. Modify the **Dial Plan Object** fields as necessary.
 - To rename an object, select the object and click **Rename**. Type the new name in the **Entry Name** dialog box and then click **OK**.
 - To delete an object, select it and then click **Remove**.
5. Complete the **Input Pattern** field. Phone numbers in the **Input Pattern** box on the **Dial Plan** tab are formatted exactly like the numbers in the **Output Pattern** field on the **Input Conversion** tab. This is because the phone number input for dial plan processing is already in a standardized format (in the **Output Pattern** field) based on the results of the input conversion step. However, the input patterns used on the **Dial Plan** tab are not limited to, nor are they necessarily the same as the output pattern used on the **Input Conversion** tab, but they can be identical if necessary. This input pattern table is the key to successfully managing your dial plans.

For example, within the 317 area code, there are long distance exchanges and local exchanges. Depending on your location within the area, there may be just a few local exchanges and many long distance exchanges. In that case, it would be more efficient for you to create an Input Pattern list that includes a pattern for each local exchange and a single general pattern to match all long distance calls within the area. In other locations, the opposite approach may be more efficient.

The **Input Pattern** field displays a list of the special input characters that are allowed in the **Input Pattern** field. It also displays some commonly used input patterns, which you can select and modify if necessary.

/
@
Z
+
X
Y
N
NxxXXXXZ
NxxNxxXXXXZ
1NxxNxxXXXXZ
011+Z
011Z

The commonly used patterns in the list represent the following types of phone numbers (in the NANP):

Input Patterns	Description
NxxXXXZ	Local toll free calls
NxxNxxXXXZ	Long distance toll calls
1NxxNxxXXXZ	Direct-dial long distance toll calls
011+Z	Any international number dialed from input containing '+'
011Z	Any international number without a '+' sign

The following **Characters** are represented by these **Variables**:

Characters	Variables (wildcards)
0 - 9	'X' (or 'x') represents a single digit character in that range
1 - 9	'Y' (or 'y') represents a single digit character in that range
2 - 9	'N' (or 'n') represents a single digit character in that range
'0' - '9', '#', '*', ','	'?' represents zero or more of these characters. (Note that '/', '@', and '+' are not included).
Any characters after the required digits	'Z' (or 'z') represents zero or more trailing characters of any value. Using Z allows the dialer to enter extra characters after the required digits without interfering with the dial string. This wildcard character must be the last character of the pattern; it is an error for it to appear anywhere else (which means there can be only one occurrence of this character in each number).

To specify the ordinal numbers for the input pattern above:

- Select the characters in the **Input Pattern** field you want to convert to ordinal numbers.



- Click the button on the right side of the **Default Dial String** or **Display String** field. The following list appears.

{5}{6}{7}{8}{9}{10}{11}{12}
(Selected Digits from Input Pattern)

@

Z

+

X

Y

N

NxxXXXXZ

NxxNxxXXXXZ

1NxxNxxXXXXZ

- Select from the list of ordinal numbers.

- In the **Standardized Number** field, enter the standard format for all phone numbers. This information is used by applications that perform reverse white pages lookups.
- In the **Default Dial String** field, enter the actual string of characters sent to the CO to place a call. You can specify the dial string based on the dialing requirements the CO may have on your lines. For example, some areas may require you to dial the local area code, even for non-toll local calls. In the **Default Dial String** field, you can add the local area code as a prefix to all local calls, so that CIC users do not need to dial the local area code. As another example, some trunks may require you to dial a '1' or a '9' prefix before certain numbers, or perhaps you need to add a long distance prefix to specify a long distance carrier (for

example, 1010550). You can add any prefix (or suffix) to any type of phone number using the **Default Dial String** field. Users do not need to dial the numbers you include as a prefix in the **Default Dial String** field.

The dial string variable uses the same standardized format syntax described in the *Input Pattern* section on the **Input Conversion** tab. You can use either the wildcard character syntax or the ordinal number. However, if you use the wildcard characters, pay attention to the two conditions where you might have to use the ordinal number syntax in this field, and the potential efficiency of ordinal numbers over wildcard characters. For more information about syntax, search for *Ordinal or Wildcard Syntax* or *Dial Plan Phone Numbers* in the PureConnect Documentation Library on the CIC server.

Note: Even though the '+', '/', and '^' symbols are not dialable characters, you can include them in a dial string entry if you want to. CIC ignores the '+' character when dialing. The '/' precedes digits to dial (for example, an extension) after the main number connects. The '^' indicates numbers stored with the main number (for example, an extension), but are not dialed.

If you use '/' and '^' together (in either order), CIC knows to dial the extension. If you use '^' by itself as a prefix for an extension, CIC does not dial the extension.

8. In the **Display String** field, enter the formatted phone number that appears to users when the user is not allowed to edit the phone number before the call is placed. You can control the numbers displayed to end users by the template you use in the **Display String** field. For example, if the standardized form of the number includes a special long distance carrier prefix (for example, 1010550), you can drop that part from the phone number you display to CIC client users.

The display string variable uses the standardized format syntax. You can use either the wildcard character syntax or the ordinal number. However, if you use the wildcard characters, pay attention to the two conditions where you might have to use the ordinal number syntax in this field, and the potential efficiency of ordinal numbers over wildcard characters. For more information about syntax, search for *Ordinal or Wildcard Syntax* or *Dial Plan Phone Numbers* in the PureConnect Documentation Library on the CIC server.

9. In the **Default Classification** list, select the descriptive name for the group of phone numbers. Phone number classifications allow you to control the kinds of phone numbers each user, workgroup, or station can dial. You assign dialing privileges by selecting access control rights for workgroups, roles, or stations.

You must select a classification name for each dial plan object. For more information on how to add new classifications, see *Manage dial plan classifications*.

10. In the **Components** box, specify the different parts of a phone number in each dial plan entry that need to be tracked in the report logs (such as area code, long distance prefix, country code, and so on). These components are used for tracking different parts of the phone number in the reporting databases.

Note: If you create new dial plan objects for the Local and Long Distance categories, you must copy the content of the default Components field (such as the ReportingCode1 and ReportingCode2 components) and paste them in to your components field. Failure to do this may result in incomplete call data in your reports.

The default dial plan objects in the Local and Long Distance classifications created during installation contain two components: ReportingCode1 and ReportingCode2. These components represent the digits in the ordinal positions indicated by the ordinal number syntax in the field. For example, the syntax for the first entry is:

ReportingCode1:{3}{4}{5};

The part before the colon is the name or label for this component ("ReportingCode1"). The ordinal numbers after the component refer to the 3rd, 4th, and 5th digits in the current dial plan object. In the case of a Local or Long Distance classified number in the NANP, these digits always refer to the area code. The semicolon at the end is simply a separator between components.

In another example, the syntax for the second component in the Components field is:

ReportingCode2:{6}{7}{8}

Again, the part before the colon is the component name ("ReportingCode2"). The ordinal numbers after the component refer to the 6th, 7th, and 8th digits in the current dial plan object. In the case of a Local or Long Distance classified number in the NANP, these digits always refer to the local exchange.

If these same digits refer to a different part of the phone number in another location (such as city code, prefecture code, etc.), you can keep these components as they are and they will work for your location. If you need to track other parts of the phone number, you must:

- Create new components in the **Components** box.
- Customize the CallDisconnectMonitor handler to add the new components to one of the extra columns in the Call Detail report log.
- Modify or add a new column in a Crystal Report template that is based on the Call Detail report log.

11. In the **Description** box, document the purpose, along with any details, of each dial plan entry. This information will be valuable to other CIC administrators, especially if you have more than one administrator managing CIC or more than one person editing the dial plan configuration.
12. To use account codes, select the **Account Code Verification** option. After you select this option, you can track that call type with a verified account code that the user provides for the outbound call. You can use this feature to track call types for billing purposes.

Note: You should **not** apply Account Code Verification to the **911** and **Intercom** Dial Plan Objects.

13. Configure dial groups for the object. Dial groups enable you to specify which outbound lines or channels to use for each type (classification) of phone number. For example, international calls may be directed to one dial group that uses lines with the best rate for international calls. Local calls may be directed to another dial group called "Local" over low-cost analog lines from the local CO. If you do not specify a dial group for a dial plan entry, calls placed via that dial plan object use the first available line with a direction of Outbound or Both.

Note: All of the lines or channels in a dial group must have identical dialing requirements. For example, in a dial group, you cannot have some lines that require a 9 prefix and other lines that do not.

Do the following, as necessary:

- To add a dial group, click **Add Group**. Select the dial group and then click **OK**. If there are no dial groups, create them in the **Line Groups** container.
- To edit a dial group, select it and then click **Edit**.
- To remove a dial group, select it and then click **Remove**.
- To add a secondary dial group to an existing dial group entry, select the dial group and then click **Add Group**.

Related topics

[Configure an old dial plan](#)

[Manage phone plan classifications](#)



Overview of phone number classifications

Phone numbers that can be identified by a pattern in the numbers, or an explicit group of phone numbers with a common purpose are called phone number classifications. For example, internal calls could be identified by the "Internal" classification, toll free (for example, 800 numbers) could be identified by the "Toll Free" classification, and calls to emergency services (such as 911, fire department, police, and hospital) could be identified by the "Emergency" classification.

These named groups of phone numbers are used to control individual users, workgroups, and station dialing privileges in CIC. For example, stand-alone phones may have only Emergency and Internal dialing privileges, while members of the Sales workgroup may have full dialing privileges provided in all classifications.

When CIC users dial a phone number, CIC matches the number dialed with the appropriate classification pattern. It then checks the user's dialing privileges to determine if the user or station is authorized to place the call. In this way, CIC uses phone number classifications to control individual users, workgroups, roles, and station dialing privileges.

You also use classifications to configure forced authorization codes. Administrators set forced authorization codes to require users to enter an extension and a password to make a call.

You create a list of classifications on the **Classifications** dialog box in the **Phone Number Configuration** dialog box. To create the number pattern for the classification, use the **Dial Plan** dialog box.

For more information about phone numbers see the *CIC Regionalization and Dial Plan Technical Reference* in the PureConnect Documentation Library.

Related topics

[Configure an old dial plan](#)

[Manage phone number classifications](#)



Manage phone number classifications

To manage phone number classifications

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or on the **Regional Dial Plan** tab, click **Manage Classifications**.
4. In the **Dial Plan Classifications** dialog box, do one of the following:
 - To add a classification, click **Add**. Type the name of the classification (for example, "900 Service" or "International"), and then click **OK**. Then continue with the next step.
 - To edit a classification, select it and then click **Edit**. Then continue with the next step.
 - To delete a classification, select it and then click **Remove**.
5. In the **Classification** dialog box, the name of the classification appears in the **Display Text** field. You can change this if necessary.
6. In the **Category** list, select the appropriate category.
7. In the **Alerting** section, select the **Send email and client alerts for calls of this classification** check box, and enter the users to receive the alerts in the **To...** field. You can also click the **To...** button and select the available users from the list that is displayed. Alerting sends an email notification and displays a popup notification in the CIC clients, to the specified users and/or workgroups when a call is made with this classification.
8. As necessary, complete the **Multi-Language Support** tab. For more information, see *Multi-Language Support*.
9. Click **OK**.

Related topics

[Configure an old dial plan](#)

[Overview of phone number classifications](#)

[Set up an emergency classification](#)



Simulate a call

You can test your dial plan configuration by entering real phone numbers in any format you can imagine. Since users may enter phone numbers in a variety of ways (with or without a leading 1, with or without a local area code, etc.), you can test different kinds of input without actually placing a live call to different numbers. This page just simulates calls as if they were dialed from a CIC station; it does not actually place calls to the dialed numbers.

To simulate a call

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, click **Simulate Call**. This button appears in the following places:
 - On the **Regional Dial Plan** tab
 - On the **Regional Dial Plan** dialog box
4. In the **Number** field, enter a phone number. You can type letters or digits, and you can use the keypad.
5. In the **Location Filter** list, select a filter to apply to the simulated call.
6. Click **Simulate Call**.

CIC passes your number input through the input conversion objects and dial plan objects you created on their respective property pages. The program displays the resulting output in the **Call Results** fields on the right side of this page.

The most important results you might look at first are in the three-column list box at the bottom of the **Call Results** section. This list box shows which dial group (if any) the call would go out on, the phone number classification for which users would need access rights to dial, and the actual dial string, which is the number CIC sends to the CO when dialing.

If you applied the account code verification feature to a dial plan entry, **Account Code Verification** is listed as **Yes**. You can track that call type by using a verified account code that the user provides for the outbound call. Use this feature to track call types for billing purposes. You should **not** apply account code verification to the **911** and **Intercom** Dial Plan Objects.

If you enter a number that does not match any of the standard input conversion objects or dial plan objects, **Unknown** will appear as the classification in the list box, the description in the call results section will indicate **No pattern match**, and other call results fields display the raw number you entered. This indicates that CIC cannot match the input with an input pattern in the dial plan.

Related topics

[Configure a dial plan in Interaction Administrator](#)

[Manage named lists of phone numbers](#)

[Manage classifications of phone numbers](#)



Activate a dial plan

Note: Only one dial plan format (Old Dial Plan or Regional Dial Plan) can be active. CIC uses the active dial plan to perform dial plan lookups and make calls. If necessary, you can modify an inactive dial plan and test it by simulating calls.

To activate a dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or the **Regional Dial Plan** tab, click **Advanced**.
4. Under **Active Dial Plan**, select the dial plan that you want to activate.
5. Click **OK**.

Related topics

[Overview of old dial plans](#)

[Configure a regional dial plan in Interaction Administrator](#)



Select which dial plan to view

If you have both an old dial plan and a regional dial plan, you can select which one to view in the **Phone Numbers** container.

Note: If you choose to view both dial plans, the **Phone Number Configuration** dialog box displays a separate tab for each one. Only one of the plans can be active at a time.

To select which dial plan to view

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or the **Regional Dial Plan** tab, click **Advanced**.
4. Under **Dial Plan View**, select the dial plan that you want to view.
5. Click **OK**.
6. Close the **Phone Number Configuration** dialog box.
7. Reopen the **Phone Number Configuration** dialog box.

Related topics

[Activate a dial plan](#)

[Overview of old dial plans](#)

[Configure a regional dial plan in Interaction Administrator](#)



Overview of regional dial plans

A regional dial plan is a set of rules that determines how a dialed phone number is handled. Ideally, every phone number that a user dials through CIC should match an entry in the dial plan. However, if a dialed number does not match a pattern in the dial plan, CIC dials the number as it was entered.

For more information on how to represent phone numbers in CIC, see *CIC Regionalization and Dial Plan* in the PureConnect Documentation Library.

Related topics

[Overview of how to add a dial plan](#)

[Configure a regional dial plan in Interaction Administrator](#)

[Managed named lists of phone numbers](#)

[Manage phone number classifications](#)

[Simulate a call](#)

[Advanced dial plan options](#)



Add a dial plan in Setup Assistant

You can use Setup Assistant to create a North American dial plan or to import and localize a dial plan file.

To add a dial plan in Setup Assistant

1. Start **Setup Assistant** and select **Dial Plan**.
2. Do one of the following:

- Select **Import a Dial Plan File**.

Select this option to import an existing dial plan file. For example, a reseller may have created specific complete dial plans for customers in different regions of the country, county, or city. Setup Assistant uses macro substitutions to enable localizers to set up a dial plan for their locale from the imported dial plan file.

This option is recommended for countries using numbering plans *other than* the North American Numbering Plan.

Specify the path to the dial plan file. By default, Setup Assistant looks in the \server\IC\Manifest directory. If the dial plan file is not located in this directory, browse to the appropriate directory.

Note: CIC uses a regional dial plan, enhanced for SIP, with an .i3dplan extension. For more information about dial plans, see *CIC Regionalization and Dial Plan* in the PureConnect Documentation Library.

- Select **I don't have a dial plan; help me create one**.

Select this option if you want Setup Assistant create a dial plan for you. This option is recommended for countries using the North American Numbering Plan. You only need to define a few elements —local area codes and exchanges — and Setup Assistant will do the rest to create a North American dial plan.

3. After the new installation is completed, you can modify your dial plan in the **Phone Numbers container** in Interaction Administrator to:
 - Change the default dialing privileges (classifications) set by Setup Assistant.
 - Add extensions, area codes, or change the number of digits dialed.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)



Overview of how to add a dial plan

To add a dial plan, you can do any of the following:

- **Use Interaction Administrator.**
You can use the **Phone Numbers** container to configure a regional dial plan.
- **Re-run IC Setup Assistant.**
You can use IC Setup Assistant to create your dial plan if you use the North American numbering plan. If you use IC Setup Assistant, you need to enter only the area codes and local exchanges that you need. IC Setup Assistant produces the dial plan, which you can view in the **Phone Numbers** container.
- **Import a dial plan.**
If you use a numbering plan other than the North American numbering plan (for example, a dial plan for another country), you can import an the dial plan file with macros, and IC Setup Assistant substitutes the values you enter for those macros. This is useful to localize a dial plan in various countries or regions.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)

[Add a dial plan in Setup Assistant](#)

[Import a dial plan](#)



Configure a regional dial plan in Interaction Administrator

To configure a regional dial plan in Interaction Administrator

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Dial Plan**.
4. On the **Regional Dial Plan** dialog box, do one of the following:
 - To add a dial plan pattern, click **Add**. When you add a dial plan pattern, you can also configure dial groups. For more information, see *Configure a dial group entry*.
 - To edit a dial plan pattern, select it and then click **Edit**. When you edit a dial plan pattern, you can also configure dial groups. For more information, see *Configure a dial group entry*.
 - To copy a dial plan pattern, select it and then click **Copy**. When you copy a dial plan pattern, you can also configure dial groups. For more information, see *Configure a dial group entry*.
 - To delete a dial plan pattern, select it and then click **Remove**.
5. Configure the lists of phone numbers for the dial plan. For more information, see *Configure named lists of phone numbers*.
6. Configure the classifications for the dial plan. For more information, see *Manage phone number classifications*.
7. Test the dial plan. For more information, see *Simulate a call*.
8. Click **OK**.

Related topics

[Configure the pattern of a regional dial plan](#)

[Configure a dial group entry](#)

[Import a dial plan](#)

[Export a dial plan](#)

[Manage named lists of phone numbers](#)

[Manage phone number classifications](#)

[Simulate a call](#)



Configure the pattern of a regional dial plan

When you configure a regional dial plan, you must configure its pattern.

To configure the pattern of a regional dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Dial Plan**.
4. On the **Regional Dial Plan** dialog box, do one of the following:
 - To add a dial plan pattern, click **Add**.
 - To edit a dial plan pattern, select it and then click **Edit**.
 - To copy a dial plan pattern, select it and then click **Copy**.
5. In the **Regional Dial Plan - Edit Pattern** dialog box, in the **Input Pattern** field, enter a series of literal numbers, variables, or both. CIC tries to match the dialed input with this pattern.

The combination of the input pattern, list name, and location filter define a unique dial plan entry.

The input assistance prompt displays a list of the special input characters that are allowed in the **Input Pattern** field. It also contains commonly used input patterns, which you can select and modify if necessary. You should also be familiar with wildcard pattern syntax.

Note: Quoted and escaped string literals

The Regional Dial Plan enables CIC administrators to embed literal characters or strings in a dial plan input pattern, even if it contains wildcard characters. These literal characters in an input pattern can be used by handler customizations to do special processing, or provide visible indicators to CIC administrators. For example, "Oldphone:"+1NxxNxxxxxZ , or sip:"?"@"inin.com". Previously, this would not be possible because certain characters (such as "?" and "n") were only treated as wildcard characters.

/
@
Z
+
X
Y
N
NxxXXXXZ
NxxNxxXXXXZ
1NxxNxxXXXXZ
011+Z
011Z

Phone number templates can consist of all digits, all wildcard characters, some non-dialing characters such as '+', '^', and '/', or any combination of these characters. The '/' character is generally used as a prefix to introduce an extension for direct extension dialing. The '^' character is used as a prefix before an extension, but that extension is not automatically dialed (that is, it is stored as informational data with the number). The '+' is used as a prefix to introduce a country code. These three characters are not actually dialed, but they are preserved as part of the stored phone number. The spaces these characters hold within the number are counted when determining ordinal positions in the formatted number (that is, which number is in the first position, second position, and so on).

6. In the **Location Filter** list, optionally select a filter to apply for a specific location. This is a feature of regionalization. Locations are used to restrict or filter access to dial plan entries. You can use a **location filter** for the dial group entries. The combination of the location filter, list name, and input pattern define a unique dial plan entry.

The **Location Filter** options are:

- **<All>** - Select this option to make this dial plan entry specific to all stations, regardless of location.
- **<Skip>** - Select this option to ignore the location filter completely.
- **<Many Locations...>** - Select this option to choose multiple locations for this dial plan entry. This option is available only if you have defined one or more locations.
- **<Default Location>** - Select this option to choose the <Default Location> for this dial plan entry.
- **Specific locations** - Select a specific location from the list for this dial plan entry. This option is available only if you have defined one or more locations.

Notes: For stations that do not belong to a location, (those that have an empty location string), the **All** option is the only option that will match these stations.

If a dial plan entry does not have <All> access, then those specific options (patterns or dial groups) are removed from the dial plan and are not presented as dialing choices on dialing lookup in the describe number tool.

Any input pattern that has the <All> filter may require special care when defining the dial groups for the dial plan entry. For example a 911 pattern, the default line groups specified should be local to the location region as possible.

7. In the **List Name** list, select the list name. For information on how to add or edit the list names, see *Managed named lists of phone numbers*. The combination of the list name, pattern, and location filter define a unique dial plan entry.
8. In the **Classification** list, select the classification of phone numbers. For information on how to add or edit the classifications, see *Manage phone number classifications*.

Phone numbers that can be identified by a pattern in the numbers, or an explicit group of phone numbers with a common purpose are called phone number "classifications." For example, internal calls could be identified by the "Internal" classification, toll free (for example, 800 numbers) could be identified by the "Toll Free" classification, and calls to emergency services (such as 911, fire department, police, and hospital) could be identified by the "Emergency" classification.

These named groups of phone numbers are used to control individual users, workgroups, and station dialing privileges in CIC. For example, stand-alone phones may have only Emergency and Internal dialing privileges, while members of the Sales workgroup may have full dialing privileges provided in all classifications.

9. In the **Standardized Number** field, select the standardized number entry and modify it if necessary. The standardized number is a standard format for all phone numbers. Its primary use is to store called numbers in a +1 calling format.

Note: This standardized number is used to make a call, so input patterns should be defined to match the standardized numbers. For example, the 7-digit pattern 715xxxx maps to +1317715xxxx, so there should be a +1317715xxxx, or an equivalent input pattern, in the table to match the standardized number.

10. In the **Default Dial String** field, enter the default dial string. You can select the dial string entries from the list and modify the numbers and characters, if necessary. The dial string is the actual string of characters sent to the CO to place a call. You can specify the dial string based on the dialing requirements the CO may have on your lines. For example, some areas may require you to dial the local area code, even for non-toll local calls. Using the **Dial String** field, you can add the local area code as a prefix to all local calls so CIC users do not need to dial the local area code. As another example, some trunks may require you to dial a '1' or a '9' prefix before certain numbers, or perhaps you need to add a long distance prefix to specify a long distance carrier (for example, 1010550). You can add any prefix (or suffix) to any type of phone number using the Dial String field. CIC client users do not need to dial the numbers you include as a prefix in the Dial String field.
11. In the **Display String** field, enter the formatted phone number that is displayed in the CIC clients when the user is not allowed to edit the phone number before the call is placed. You can control the numbers displayed to end users by the template you use in the **Display String** field. For example, if the standardized form of the number includes a special long distance carrier prefix (for example, 1010550), you can drop that part from the phone number you display to CIC client users.

The display string variable uses the standardized format syntax. You can use either the wildcard character syntax or the ordinal number. However, if you use the wildcard characters, pay attention to the two conditions where you might have to use the ordinal number syntax in this field, and the potential efficiency of ordinal numbers over wildcard characters. For more information about syntax, search for *Ordinal or Wildcard Syntax* or *Dial Plan Phone Numbers* in the PureConnect Documentation Library on the CIC server.

12. In the **Edit Base** field, select an entry from the list and then modify the numbers and characters as necessary. The edit base is an existing phone number from the system that the user can modify before the call is placed. For example, in the CIC clients, the edit base number could be any of the following:

- A Directory or Speed Dial Contact phone number that the user has permission to modify
- A Follow-Me configuration number
- A forward status forward number
- A remote number station

13. To use account codes, select the **Account Code Verification** option. After you apply account code verification to a dial plan object, you can track that call type with a verified account code that the user provides for the outbound call. You can use this feature to track call types for billing purposes.

Note: Do **not** apply Account Code Verification to the **911** and **Intercom** Dial Plan Objects.

14. In the **Components** box, specify the different parts of a phone number in each dial plan entry that need to be tracked in the report logs (such as area code, long distance prefix, country code, and so on). These components are used for tracking different parts of the phone number in the reporting databases.

Note: If you create new dial plan objects for the Local and Long Distance categories, you must copy the content of the default Components field (such as the ReportingCode1 and ReportingCode2 components) and paste them in to your components field. Failure to do this may result in incomplete call data in your reports.

The default dial plan objects in the Local and Long Distance classifications created during installation contain two components: ReportingCode1 and ReportingCode2. These components represent the digits in the ordinal positions indicated by the ordinal number syntax in the field. For example, the syntax for the first entry is:

ReportingCode1:{3}{4}{5};

The part before the colon is the name or label for this component ("ReportingCode1"). The ordinal numbers after the component refer to the 3rd, 4th, and 5th digits in the current dial plan object. In the case of a Local or Long Distance classified number in the NANP, these digits always refer to the area code. The semicolon at the end is simply a separator between components.

In another example, the syntax for the second component in the Components field is:

ReportingCode2:{6}{7}{8}

Again, the part before the colon is the component name ("ReportingCode2"). The ordinal numbers after the component refer to the 6th, 7th, and 8th digits in the current dial plan object. In the case of a Local or Long Distance classified number in the NANP, these digits always refer to the local exchange.

If these same digits refer to a different part of the phone number in another location (such as city code, prefecture code, etc.), you can keep these components as they are and they will work for your location. If you need to track other parts of the phone number, you must:

- Create new components in the **Components** box.
 - Customize the CallDisconnectMonitor handler to add the new components to one of the extra columns in the Call Detail report log.
 - Modify or add a new column in a Crystal Report template that is based on the Call Detail report log.
15. In the **Description** box, document the purpose, along with any details, of each dial plan entry. This information will be valuable to other CIC administrators, especially if you have more than one administrator managing CIC or more than one person editing the dial plan configuration.
 16. To use account codes, select the **Account Code Verification** option. When you select this option, you can track that call type by using a verified account code that the user provides for the outbound call. For example, you would use this feature to track call types for billing purposes.

Note: You should **not** apply Account Code Verification to the **911** and **Intercom** Dial Plan Objects.

17. Configure dial groups for the object. Dial groups enable you to specify which outbound lines or channels to use for each type (classification) of phone number. For example, international calls may be directed to one dial group that uses lines with the best rate for international calls. Local calls may be directed to another dial group called "Local" over low-cost analog lines from the local CO. If you do not specify a dial group for a dial plan entry, calls placed via that dial plan object use the first available line with a direction of Outbound or Both.

Note: All of the lines or channels in a dial group must have identical dialing requirements. For example, in a dial group, you cannot have some lines that require a 9 prefix and other lines that do not.

Do the following, as necessary:

- To add a dial group, click **Add Group**. Select the dial group and then click **OK**. If there are no dial groups, create them in the **Line Groups** container.
- To edit a dial group, select it and then click **Edit**.
- To remove a dial group, select it and then click **Remove**.
- To add a secondary dial group to an existing dial group entry, select the dial group and then click **Add Group**.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)

[Manage named lists of phone numbers](#)

[Manage phone number classifications](#)



Import a dial plan

You can import an entire CIC phone number plan that was saved (with the **Export** button) by any CIC server. Exported CIC phone number files have a `.i3dplan` extension and include all of the input conversion objects, dial plan objects, and classification names.

To import a dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Dial Plan**.
4. Click **Import**.
5. Click **Browse** button to select a `.i3dplan` file, and then click **Next**.
6. Click **Next** to navigate through the dialog boxes that display the contents of the dial plan file.
7. When you are presented with import options (replace or skip the merge), select the appropriate check boxes and then click **Next**.
8. Review the changes and then click **Finish**.
9. When the message appears that indicates that you have not yet saved your changes, click **OK**. You save your changes when you click **OK** on the **Regional Dial Plan** dialog box.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)

[Export a dial plan](#)



Export a dial plan

To export a dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Dial Plan**.
4. Click **Export**.
5. Navigate to your preferred file location and specify a name. Then click **Save**.

Related topics

[Configure a regional dial plan in Interaction Administrator](#)



Overview of dial group entries

A dial group is a group of lines or channels that CIC uses for outbound calls. You can specify which dial groups CIC should use when it places a call.

Before you add a dial group entry, you can define dial groups in the **Lines** container. You can then select which dial groups to use for the dial group entry. If you do not define dial groups in the **Lines** container, CIC chooses which line to use to dial each call. For more information on how CIC chooses the line, see *Line selection order*.

Note: The lines included in a dial group should have a direction of outbound (rather than inbound or both) to avoid line contention.

You can specify multiple dial groups for each dial plan. This enables you to route different kinds of calls over the most cost-effective phone lines you may have. For example, you may have the best rate for international calls from one phone service vendor and the best rate for in-state long distance from another vendor. You can create a dial group for the lines from each of these vendors and route International calls over one dial group and In-state long distance calls over another dial group.

If you have long distance service from multiple vendors, you can specify multiple dial groups for each dial plan object. CIC attempts to dial the number on a line in the dial group listed first (at the top of the list) in this dialog box. If all the lines in that dial group are in use, CIC then attempts to dial the number on a line in the next dial group listed. This way you can specify the order of the dial groups CIC should use when placing a call. If the long distance rates from your vendors change, you can simply switch the order of the dial groups in this list box to change the priority of the dial groups CIC uses to dial long distance calls.

You can change the dial string if the dialing requirements for one dial group are different from the other dial group. For example, if the number dialed failed to go out on the first dial group, it may be dialed on the second dial group, which might require a prefix or other dialing requirement.

In most cases, you will not need to change the classification name from the original. This ability is available in case you want to differentiate between different identically dialed numbers based on the dial group and classifications used.

Note: All of the lines or channels in a dial group must have identical dialing requirements. In other words, you cannot have some lines that require a 9 prefix and other lines that don't within the same dial group.

Related topics

[Add a Dial Plan in Interaction Administrator](#)

[Configure a dial group entry](#)



Configure a dial group entry

When you configure a regional dial plan in Interaction Administrator, you can configure a dial group entry.

To configure a dial group entry

1. In the **Regional Dial Plan - Edit Pattern** dialog box, do one of the following:
 - To add a dial group, click **Add Group**. Continue with step 2.
 - To edit a dial group, select it and then click **Edit**. Continue with step 2.
 - To remove a dial group, select it and then click **Remove**.
 - To change the order of dial groups, click the **Up** and **Down** buttons.
2. In the **Location Filter** list, select the location filter for this dial group. The location filter determines which dial group entries are applicable based on the location for a station. This filter is used in conjunction with pattern selection based on the classification.

Notes: If a dial plan entry does not have <All> access then those specific options (patterns or dial groups) are removed from the dial plan and are not presented as dialing choices on dialing lookup in the describe number tool.

Any input pattern that has the <All> filter may require special care when defining the dial groups for the dial plan entry. For example a 911 pattern, the default line groups specified should be local to the location region as possible.

3. In the **Classification** list, select a value to differentiate between different identically dialed numbers based on the dial group and classifications that are used.
4. In the **Dial String** field, if necessary, change the dial string if the dialing requirements for one dial group are different from the another dial group. For example, if the number dialed failed to go out on the first dial group, it may be dialed on the second dial group, which might require a prefix or other dialing requirement.

Note: All of the lines or channels in a dial group must have identical dialing requirements. In other words, you cannot have some lines that require a 9 prefix and other lines that don't within the same dial group.

5. Click **OK**.

Related topics

[Overview of dial group entries](#)

[Configure a regional dial plan in Interaction Administrator](#)

[Line selection order](#)

[Locations](#)



Manage named lists of phone numbers

You can manage multiple lists of phone numbers for a dial plan. For example, you can create lists of local exchanges for an area code or toll free numbers.

To manage named lists of numbers

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, click **Manage Lists**.
4. To view details of a number list, click it in the **Number Lists** list.
5. To add a new phone number list, under the **Number Lists** list click **Add**.
6. To remove a phone number list, first select it. Under the **Number Lists** list, click **Remove**.
7. To rename a phone number list, first select it. Under the **Number Lists** list, click **Rename**.
8. To add phone numbers to a list, first select the list. Then click **Add** in the right side of the dialog box. Separate numbers with spaces or commas.
9. To import a text file or CSV file of phone numbers for a list, first select the list. Then click **Import** in the right side of the dialog box.
10. To remove a phone number from a list, first select the list. Then select the number in the right side of the dialog box and click **Remove**.

Related topics

[Manage phone number classifications](#)

[Simulate a call](#)

[Perform advanced operations](#)



Overview of phone number classifications

Phone numbers that can be identified by a pattern in the numbers, or an explicit group of phone numbers with a common purpose are called phone number classifications. For example, internal calls could be identified by the "Internal" classification, toll free (for example, 800 numbers) could be identified by the "Toll Free" classification, and calls to emergency services (such as 911, fire department, police, and hospital) could be identified by the "Emergency" classification.

These named groups of phone numbers are used to control individual users, workgroups, and station dialing privileges in CIC. For example, stand-alone phones may have only Emergency and Internal dialing privileges, while members of the Sales workgroup may have full dialing privileges provided in all classifications.

When CIC users dial a phone number, CIC matches the number dialed with the appropriate classification pattern. It then checks the user's dialing privileges to determine if the user or station is authorized to place the call. In this way, CIC uses phone number classifications to control individual users, workgroups, roles, and station dialing privileges.

You also use classifications to configure forced authorization codes. Administrators set forced authorization codes to require users to enter an extension and a password to make a call.

You create a list of classifications on the **Classifications** dialog box in the **Phone Number Configuration** dialog box. To create the number pattern for the classification, use the **Dial Plan** dialog box.

For more information about phone numbers see the *CIC Regionalization and Dial Plan Technical Reference* in the PureConnect Documentation Library.

Related topics

[Configure an old dial plan](#)

[Manage phone number classifications](#)



Manage phone number classifications

To manage phone number classifications

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or on the **Regional Dial Plan** tab, click **Manage Classifications**.
4. In the **Dial Plan Classifications** dialog box, do one of the following:
 - To add a classification, click **Add**. Type the name of the classification (for example, "900 Service" or "International"), and then click **OK**. Then continue with the next step.
 - To edit a classification, select it and then click **Edit**. Then continue with the next step.
 - To delete a classification, select it and then click **Remove**.
5. In the **Classification** dialog box, the name of the classification appears in the **Display Text** field. You can change this if necessary.
6. In the **Category** list, select the appropriate category.
7. In the **Alerting** section, select the **Send email and client alerts for calls of this classification** check box, and enter the users to receive the alerts in the **To...** field. You can also click the **To...** button and select the available users from the list that is displayed. Alerting sends an email notification and displays a popup notification in the CIC clients, to the specified users and/or workgroups when a call is made with this classification.
8. As necessary, complete the **Multi-Language Support** tab. For more information, see *Multi-Language Support*.
9. Click **OK**.

Related topics

[Configure an old dial plan](#)

[Overview of phone number classifications](#)

[Set up an emergency classification](#)



Set up an emergency classification

Calls to emergency services (such as 911, fire department, police, and hospital) should be identified by the "Emergency" classification.

To set up an Emergency classification

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or on the **Regional Dial Plan** tab, click **Manage Classifications**.
4. In the **Dial Plan** Classifications dialog box, click **Add**.
5. In the Entry Name dialog box, type the name of the classification (for example, "911 Emergency Service").
6. Click **OK**.
7. In the Classification dialog box, the name of the classification appears in the **Display Text** field. You can change this if necessary.
8. In the **Category** list, select **Emergency**.
9. In the **Alerting** section, select the users or workgroups to alert when a call is made with this classification. For more information, see *Overview of classification alerts*.
10. Complete the **Multi-Language Support** tab. For more information, see *Multi-Language Support*.
11. Click **OK**.

Related topics

[Station emergency information settings](#)

[Multi-Language Support](#)



Simulate a call

You can test your dial plan configuration by entering real phone numbers in any format you can imagine. Since users may enter phone numbers in a variety of ways (with or without a leading 1, with or without a local area code, etc.), you can test different kinds of input without actually placing a live call to different numbers. This page just simulates calls as if they were dialed from a CIC station; it does not actually place calls to the dialed numbers.

To simulate a call

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, click **Simulate Call**. This button appears in the following places:
 - On the **Regional Dial Plan** tab
 - On the **Regional Dial Plan** dialog box
4. In the **Number** field, enter a phone number. You can type letters or digits, and you can use the keypad.
5. In the **Location Filter** list, select a filter to apply to the simulated call.
6. Click **Simulate Call**.

CIC passes your number input through the input conversion objects and dial plan objects you created on their respective property pages. The program displays the resulting output in the **Call Results** fields on the right side of this page.

The most important results you might look at first are in the three-column list box at the bottom of the **Call Results** section. This list box shows which dial group (if any) the call would go out on, the phone number classification for which users would need access rights to dial, and the actual dial string, which is the number CIC sends to the CO when dialing.

If you applied the account code verification feature to a dial plan entry, **Account Code Verification** is listed as **Yes**. You can track that call type by using a verified account code that the user provides for the outbound call. Use this feature to track call types for billing purposes. You should **not** apply account code verification to the **911** and **Intercom** Dial Plan Objects.

If you enter a number that does not match any of the standard input conversion objects or dial plan objects, **Unknown** will appear as the classification in the list box, the description in the call results section will indicate **No pattern match**, and other call results fields display the raw number you entered. This indicates that CIC cannot match the input with an input pattern in the dial plan.

Related topics

[Configure a dial plan in Interaction Administrator](#)

[Manage named lists of phone numbers](#)

[Manage classifications of phone numbers](#)



Select which dial plan to view

If you have both an old dial plan and a regional dial plan, you can select which one to view in the **Phone Numbers** container.

Note: If you choose to view both dial plans, the **Phone Number Configuration** dialog box displays a separate tab for each one.

Only one of the plans can be active at a time.

To select which dial plan to view

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or the **Regional Dial Plan** tab, click **Advanced**.
4. Under **Dial Plan View**, select the dial plan that you want to view.
5. Click **OK**.
6. Close the **Phone Number Configuration** dialog box.
7. Reopen the **Phone Number Configuration** dialog box.

Related topics

[Activate a dial plan](#)

[Overview of old dial plans](#)

[Configure a regional dial plan in Interaction Administrator](#)



Activate a dial plan

Note: Only one dial plan format (Old Dial Plan or Regional Dial Plan) can be active. CIC uses the active dial plan to perform dial plan lookups and make calls.

If necessary, you can modify an inactive dial plan and test it by simulating calls.

To activate a dial plan

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, on the **Old Dial Plan** tab or the **Regional Dial Plan** tab, click **Advanced**.
4. Under **Active Dial Plan**, select the dial plan that you want to activate.
5. Click **OK**.

Related topics

[Overview of old dial plans](#)

[Configure a regional dial plan in Interaction Administrator](#)



Overview of advanced dial plan options

The following advanced options exist for old dial plans and regional dial plans:

[Activate a dial plan](#)

[Select which dial plan to view](#)



Overview of DID/DNIS

If your phone lines provide the called number as part of the incoming call packet (for example, DID (Direct Inward Dialing) or DNIS (Dialed Number Identification Service)), you can map the called number directly to a CIC user, workgroup, or station queue. When a new call to one of the mapped numbers arrives, CIC immediately routes that call to the mapped destination.

To do this, you simply create the appropriate call routing map using the DID/DNIS Configuration page and the DID/DNIS Route page (which appears when you click Add on the DID/DNIS page). For more information on how to use this feature to route calls, see *Automatic Call Routing Overview*.

Related topics

[Overview of automatic call routing](#)

[Configure DID/DNIS](#)



Configure DID/DNIS

To configure DID/DNIS

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, click the **DID/DNIS** tab.
For information on the information you see in the table, see *Columns in the DID/DNIS table*.
4. To add a DNIS call route to the table, click **Add**. In the **DID/DNIS Identifier** box, enter the DID/DNIS extension. You can use either simple mapping, substitute a prefix, or replace digits. Select a user name, workgroup name, or station name destination to route calls that dialed the number. Click **OK**. For more information, see *Add a new DID/DNIS routing entry*.
5. To edit a DID/DNIS call route entry, select the entry to edit and then click **Edit**. Make the necessary changes and then click **OK**.
6. To edit the digits in a DID/DNIS number, select the entry and then click **Edit Digits**. Make the necessary changes and then press the Enter key.
7. To remove a DID/DNIS call route entry, select the entry and then click **Remove**.

Related topics

[Overview of automatic call routing](#)

[Columns in the DID/DNIS table](#)

[Add a new DID/DNIS routing entry](#)



Columns in the DID/DNIS table

DID/DNIS

This is the number dialed by the caller, regardless of the incoming line.

Deferred

If **Prefix** or **Substitute** appear in this column, it means that CIC defers the transfer to the destination extension until after it receives the DNIS number and looks up the extension of the destination queue.

Note: The Defer substitution option was deprecated, but this column remains.

Destination

Calls with this DID/DNIS number will proceed to the extension, user queue, workgroup queue, or station queue specified in this property.

Type

This is the type of destination queue (for example, User, Workgroup, or Station).

Extension

This is the extension of the destination for calls from this DID/DNIS number.

Description

This is a brief description of this DID/DNIS number and the destination numbers.

Related topics

[Configure DID/DNIS](#)



Overview of automatic call routing

CIC supports multiple ways to route calls directly to any user, workgroup, or station extension (queue) based on Dialed Number Identification Service (DNIS) numbers from the Central Office (CO). Typically, companies buy or lease a block of phone numbers, which are directed to the (fewer number of) inbound lines or channels. You can map each phone number to an individual user, a specific station (for example, phone or fax), or a workgroup (for example, Sales). Before you attempt to create these phone number map tables, you must have the list of phone numbers the CO has reserved for your company.

The Interaction Administrator interface provides convenient ways to create DNIS map tables to route calls to CIC queues without modifying handlers. The way you choose to build the table depends on:

- The number of lines on which you have DNIS service

- Whether you have a block of contiguous phone numbers or a list of non-contiguous numbers
- Whether the queues all have the same number of digits in the extensions
- Whether the destination extensions are fixed or if they are likely to change

Regardless of the implementation, you can easily build DNIS number routing tables using the DID/DNIS configuration pages in Interaction Administrator. This interface enables you to set up direct dialing (similar to the old Direct Inward Dialing (DID) service from the CO) and route calls automatically to specific agents without having to modify handlers. Later, if incoming phone numbers change, you can easily edit these numbers in the DID/DNIS page and the change is effective immediately; no handler publishing is required.

If you have a block of contiguous DNIS phone numbers and all the queue extensions have the same number of digits, you can specify the exchange prefix for those numbers and Interaction Administrator will automatically create a list of DNIS maps by combining the prefix with each extension selected in the list of CIC users. If the extensions have a variable number of digits, you can create the map table by replacing the last N number of digits in the DNIS phone number with that number of extension digits.

You can choose the best method for building the DNIS table map from the three buttons provided on the DID/DNIS Route property page. To get there, on the DID/DNIS configuration page, click the Add button to add one or more DNIS maps for routing calls. On the DID/DNIS Route page that appears, select one of the following radio buttons.

Simple Mapping DNIS Numbers

Simple mapping is for situations where you need to add one DNIS route to the table at a time. Specifically, this approach is useful if you have only a few DNIS numbers to support, and/or these numbers use different exchange prefixes. As the following DID/DNIS Route screen illustrates, to create a simple map:

1. Select the Simple Mapping option on the **DID/DNIS Route** page.
2. Type the DNIS (externally dialed) phone number in the **Simple Mapping** field. If you know only the prefix or first four digits, type them in the box and click **Grab Extension** to complete the number after you select the destination.
3. In the **Destination** list, select a destination queue.
4. Optionally, type a brief description of the purpose of this mapping in the **Description** field. This description text appears in the DID/DNIS table and can be useful documentation for administrators.
5. Verify the route in the explanation field at the bottom and click **OK**.

Substitute Prefix DNIS Mapping

In situations where the company has a block of DNIS numbers that begin with the same three or four digit prefix, and the dialed number's suffix matches the four or three digit extension for each CIC queue, you can quickly define a large block of DNIS maps in the table.

For example, suppose a company has reserved a block of phone numbers from 750-5200 through 750-5600. Further, suppose that the agent extensions in the company range from 201 through 599. To set up a DNIS map for each agent, you could add an entry on the DID/DNIS Route page and:

1. On the DID/DNIS tab, click **Add**. The **DID/DNIS Route** dialog box appears.
2. Click **Substitute Prefix** and enter the DNIS number prefix (for example, 7505) in the adjacent field.
3. In the **Destination** list, sort by the **Extension** column.
4. Then multi-select the list of CIC user/workgroup/station extensions (for example, 201 through ### where ### is the highest defined extension number), and click **OK**. This creates a table of DNIS maps where the prefix (7505) is prepended to the front of every selected CIC extension.
5. Optionally type a brief description of the purpose of this mapping in the **Description** field. This description text appears with each entry (the ones created with this operation) on the DID/DNIS tab. This text can be useful documentation for administrators.
6. Verify the routes in the explanation field at the bottom and click **OK** if the mapped numbers are correct.

Once the map is saved, when an external caller dials 750-5201, that call will be routed directly to the CIC queue with extension 201. This process has the same effect as creating a large number of simple mapping entries, but it is more efficient to create a large block this way.

Replace N Digits DNIS Mapping

This method of building a DNIS map table provides a convenient way to add multiple entries based on a common template. The template consists of a phone number using the DNIS numbers prefix digits (the first three or four digits) followed by any other digits that make a complete phone number but that can be substituted with a one to four digit extension. This method can accommodate one to four digit extensions in the same list at the same time because the N digits replaced are the number of digits in the extension. It replaces the last N digits of the DNIS template with that number of digits in the extension.

For example, if a company has the DNIS numbers 750-8000 through 750-9000, any extension from 1 through 999 could be used in a map to a DNIS number in the range 750-8001 through 750-8999. If a company's sales queue has extension 1, then 750-8001 would map to the sales queue. If the Automated Fax IVR has extension 11, then 750-8011 would map to that queue. If a particular employee has extension 111, then 750-8111 would automatically map to that employee.

To use the digit replacement mode for building a DNIS map table for CIC extensions

1. Click the **Add** button on the DID/DNIS tab. The **DID/DNIS Route** dialog box appears. To build the table described in the above example, continue with the following steps.
2. Select the **Replace N Digits** option.
3. Enter the DNIS number template (for example, 750-8000) in the adjacent field. The first X number of digits in the number template must match the first number in the range of DNIS numbers the company uses.
4. In the **Destination** list, you can optionally sort by the **Extension** column.
5. Then multi-select the list of CIC user/workgroup/station extensions (for example, 1 through ### where ### is the highest defined extension number). This creates a table of DNIS maps where the N number of digits in each extension replaces the last N number of digits in the template. The replaced digits are shown below in parenthesis in the map window at the bottom.
6. Optionally type a brief description of the purpose of this mapping in the **Description** field. This description text appears with each entry (the ones created with this operation) on the DID/DNIS tab. This text can be useful documentation for administrators.
7. Verify the routes in the explanation field at the bottom and click **OK** if the map is correct.

Once the routes are saved, the DNIS mapping will be available for the next call to CIC.

Defer Substitution

The **Substitute Prefix** and **Replace N Digits** methods of building a DNIS map table offer another level of flexibility for advanced applications; it is normally not needed. If you select the Defer substitution until DID/DNIS received check box, CIC does not automatically use the predefined routes in the map table built with one of these two methods. Instead, the handler that routes the call gets the DNIS number and then sequentially compares it with each number in the map table until it finds a match. The handler then assigns the call to the matching queue, regardless of the user, workgroup, or station name currently assigned to that queue. This causes slower processing on the call routing.

Related topics

[Configure DID/DNIS](#)

[DID/DNIS Routing](#)



Routing entry configuration

Each dialed number can be routed to a CIC user, station, station group (including fax group), or workgroup extension. Depending on the quantity and format of DNIS numbers you receive, you can use one of these three methods to set up a map table for routing calls: Simple Mapping, Substitute Prefix, and Replace N Digits. For more information about these methods, see *Overview of automatic call routing*.

Simple Mapping

Select this method if you have only a few call routes to create, or the DNIS numbers have different prefixes. This method allows you to add one call route to the map table at a time. To do this:

1. Select the **Simple Mapping** option.
2. Type the complete DNIS number and then single-click on a Destination field in the list at the right, or

Type the prefix of the DNIS number in the adjacent field, select a Destination queue in the list at the right, and click **Grab Extension** to add the destination extension to the field.

3. Type a brief description of the purpose of this call route. This serves as useful documentation for the CIC administrators looking at the DID/DNIS configuration.

4. Verify the route in the explanation field at the bottom and click **OK** if the map is correct.

Notes: The next two methods allow you to select multiple entries from the **Destination** list:

To select a contiguous range of entries from the list, click on the first entry in the list, scroll down (or up) to view the last entry in the list, hold the Shift key down and then click on the last entry in the list.

To select entries from the list randomly, click on an entry, hold the Ctrl key down, and then click on one or more other entries in the list. To sort the list before selecting entries, click on one of the column names to sort the list by that name.

Substitute Prefix

Select this method if you have a range of DNIS numbers, all with the same prefix and a group of extensions with the same number of digits. This method allows you to build a map table for a large range of extensions with the same DNIS prefix at one time. The DNIS prefix can be three or four digits, depending on the DNIS numbers you have reserved, and whether the extensions are all three-digit numbers or all four-digit numbers.

1. Select the **Substitute Prefix** option.
2. Type the three or four digit DNIS prefix in the adjacent field.
3. Select a range of destination queues in the **Destinations** list to the right. If it would help to select the names in a particular order, click on one of the column headings in the list to sort the list by that column. For example, in the **Destination** list, click the **Extension** column heading to sort the list by extensions.
4. Type a brief description of the purpose of this call route. This serves as useful documentation for the CIC administrators looking at the DID/DNIS configuration.
5. Verify the routes in the explanation field at the bottom and click **OK** if the map is correct.

Replace N Digits

Select this method if you have a range of DNIS numbers with the same prefix, but the DNIS numbers map to extensions with one, two, three, or four digits. You provide a phone number template and this method builds a map table by substituting the number of digits in each extension (N) for that same number of digits at the end of the template phone number. The template DNIS number is usually a seven-digit phone number using the first three digits of the prefix in the DNIS numbers.

1. Select the **Replace N Digits** option.
2. Type a DNIS phone number template in the adjacent field. This is a 7-digit number in the North American Numbering Plan, but it could be more or less than seven digits in other locations.
3. Select a range of destination queues in the **Destinations** list to the right. If it would help to select the names in a particular order, click on one of the column headings in the list to sort the list by that column. For example, in the **Destination** list, click the **Extension** column heading to sort the list by extensions.
4. Type a brief description of the purpose of this call route. This serves as useful documentation for the CIC administrators looking at the DID/DNIS configuration.
5. Verify the routes in the explanation field at the bottom and click **OK** if the map is correct.

Description

This field contains a brief description of the purpose of the DID/DNIS entry. The text entered in this box appears on the DID/DNIS configuration page under the **Description** column. It can provide useful documentation for the CIC administrator who has to manage the call routing later.

Note: There is a tool to process the DID/DNIS routing table from Interaction Administrator. The tool takes the DNIS string of a telephone call and returns a scoped queue name based on the [DID/DNIS](#) configuration in Interaction Administrator. For more information, see the Interaction Designer help.

Related topics

[Configure DID/DNIS](#)

[Overview of automatic call routing](#)



Overview of private lines

Private lines allows you to assign trunk lines or trunk line groups to a specific user's extension or a phone number classification. This ensures that a trunk line will always be available to place a call. You can use this feature to handle 911 emergency calls, or ensure that a specific user always has an available line.

Related topics

[Configure private lines](#)

[Create a private line assignment](#)

[Overview of line groups](#)



Configure private lines

This procedure describes how to configure private lines in the **Private Line Assignment Table**. After you complete this procedure, you can assign the private lines to users.

To configure private lines

1. In the **System Configuration** container, click the **Phone Numbers** subcontainer.
2. In the list view, double-click **Configuration**.
3. In the **Phone Number Configuration** dialog box, click the **Private Lines** tab.
4. To add a private line, click **Add**. For more information on how to complete the fields, see *Add a private line*.
5. To Edit a private line, click **Edit**.

Note: You cannot edit the **Assigned To** field. If you need to assign a private line to another user or classification, first delete the existing entry from the **Private Line Assignment Table**. Then add another entry with the new assigned user or classification.

6. To delete a private line, select the entry and then click **Delete**.
7. Click **OK**.

Related topics

[Add a private line](#)

[Overview of private lines](#)

[Create a private line assignment](#)



Add a private line

To add a private line to the Private Line Assignment Table

1. In the **Private Line Dial Group** list, select a dial group from the list.

Note: For a line group to be available for a private line assignment, the **Use as Dial Group** and **Use for Private Line Assignment** boxes must be selected on the **Line Group Configuration** page.

2. Under **Assigned to**, do one of the following:
 - To assign the private line group to a user, select the **User** option. Then select user from the list.
 - To assign the private line group to phone classification, select the **Classification** option. Then select the classification from the list.
3. Click **OK**.

Related topics

[Configure private lines](#)



Create a private line assignment

To create a private line assignment

1. In the **Line Groups** container, add a line group to be used for a private line. On the **Configuration** tab, select the **Use as Dial Group** and **Use for Private Line Assignment** options.
2. In the **Phone Number Configuration** dialog box, on the **Private Lines** tab, use the **Private Line Assignment** field to associate a private line with a user or classification.
3. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, associate a dial plan object name with a dial group.

Related topics

[Overview of private line assignment](#)

[Overview of line groups](#)

[Configure private lines](#)



Remove a private line assignment

To remove a private line assignment

Note: If a Private Line Assignment line group is in the **Private Line Association** field, you cannot delete it. Also, if a dial group or a Private Line Assignment line group is used in a dial plan, you cannot delete the line group.

1. In the **Phone Number Configuration** dialog box, on the **Regional Dial Plan** tab, delete the dial group that is associated with the dial plan.
2. In the **Phone Number Configuration** dialog box, on the **Private Lines** tab, delete the private line dial group from the **Private Line Assignment** field.
3. In the **Line Groups** container, delete the line group.

Note: If a line belongs to a PLA line group, you cannot delete it from the **Lines** container. If a PLA line group is in the Private Line Association field, you cannot delete it. If a dial group or PLA line group is used in a dial plan, you cannot delete the line group.

Related topics

[Overview of private line assignment](#)

[Overview of line groups](#)



Overview of report logs

For each event that passes through the CIC system (for example, each call, line event, or status change) the IC StatServer subsystem captures data for that event and passes it to the Interaction Processor subsystem or it triggers an initiator and passes the data to a handler. In both cases, Interaction Processor or the handler formats the statistics to match the appropriate report log table and the uses SQL transactions to commit the report log data to an SQL Server database.

Interaction Processor formats and outputs report log data that cannot be customized or that have no custom attributes (for example, Line Configuration Mirror, Line Group Configuration, etc.) Handlers format and output the report log data that contains call information, which could include user-defined call attributes. You can include these custom call attributes in the report logs by modifying the Custom fields in the appropriate tool step (for example Statistics Group Interval) in the appropriate handler.

Handler-generated report logs are built in Interaction Designer using a report log tool specifically created for each report log. For example, the CallDisconnectMonitor handler is responsible for writing data to the CDR Log and it uses a tool called Call Detail Record to gather the data for that log.

Note: To understand the entire report log data gathering process and how that data turns into reports, see the *CIC Reporting Technical Reference* in the PureConnect Documentation Library.

Beginning in 2016 R1, CIC provides the Interaction Administrator Change Notification Log. This log provides robust logging for changes made in the Users, Workgroups, and Licenses Allocation containers. The Interaction Administrator Change Notification Log also tracks changes to user and station licenses. For more information about the enhanced logging capabilities, see *About the Enhanced Interaction Administrator Change Notification Log*.

Related topics

[Report log descriptions](#)

[Configure basic report log information](#)

[Configure report log retention](#)

[Configure report mappings](#)

[Configure custom attributes](#)

[View and update history](#)

[About the Enhanced Interaction Administrator Change Notification Log](#)



Report log descriptions

CIC provides basic report logs that store all line, call, and user-related CIC interaction data. In Interaction Administrator, all report logs are identified with numbers (for example, 1, 2, 3, ... 50, 51, and so on).

For more information about the basic report logs, see the *PureConnect Data Dictionary Technical Reference* in the PureConnect Documentation Library. For more information on how to run and export reports, and how to use the reporting tools, see the *PureConnect Reporting Technical Reference* in the PureConnect Documentation Library.

Descriptions

Note: A more detailed description of each report log appears on the Basic page of the Report Log Configuration dialog box. To see it, double-click the name of the report log in the Report Logs subcontainer.

Log number	Description
7	Interaction Administrator Change Notification Log
8	IC Change Notification Log
9	IC Application Login Logout Change Log
20	Interaction Custom Attributes Log
30	Interaction Summary and Detail Log
40	Interaction Wrap-up Log
50	ETL Data Log
70	User To Workgroup Relationships
71	Line Configuration Mirror
72	Line Group Configuration
73	Line Group to Lines Relationship Mirror
74	Account Code Mirror
80	Agent Activity Log
81	Interval Line Group Statistics
82	Interval Line Statistics
83	Fax Envelope History
84	IVR History
85	IVR Interval
86	Agent Queue Activation History
93	Pre 4.0 Wrap-up Statistics
110	Agent Queue Statistics Interval
111	Statistics Group Interval
112	Workgroup Queue Statistics Interval
9999	Custom Passthrough

Related topics

[Overview of report logs](#)

[Configure basic information](#)

[Configure retention time](#)

[Configure report mappings](#)

[Configure custom attributes](#)

[View and update history](#)



Configure basic report log information

To configure basic report log information

1. In the **Report Logs** subcontainer, double-click the report log you want to configure. Use the **Basic** page to view and update the following fields.
2. The **Log Name** box displays the name of this report log.
3. The **Display Name** box displays the name of the report log appears here as it appears in the Reports tool in Interaction Designer.
4. The **Description** box displays a brief description of the purpose of this report log appears here.
5. The **Data Destination** box contains the server parameter **ServerReportLogDataDestination** by default. This parameter contains the default label for the queue used to deliver data to CIC report logs in the report log database. You can specify a different queue label by typing it in this field. If you do, you must first create this queue and then specify the new queue in the EicLoggingService command line argument on the report log database server.
6. The **Client DB Source** field contains the system parameter ClientReportLogEICDataSourceName. This parameter contains the CIC data source name (DSN) that represents the ODBC data source called IC Report Logs. Reports use IC Report Logs to access the report logs. You may specify a different DSN by typing it in this field. If you do, you must define the new DSN in the ODBC configuration and use Crystal Reports to modify the default DSN expected in CIC reports.
7. The **Active** check box controls whether the data is written to the reporting database. By default, it is selected, which means that CIC sends data to the report log automatically (**auto logging**). Regardless of whether this check box is selected or not, the StatServer generates the raw statistics. If you clear the check box the statistics are still generated, but they are not logged to the database. CIC recognizes changes to this check box immediately.

Note: By default, the IC Application Login Change Log is inactive. You must set this report log to active in order for it to work.

8. **Auto logging** refers to the ability of StatServer to receive its own statistics sent out in a notification and then log the statistics to the database. Turn off auto logging if you want handlers to catch this information and log it to the database. **This parameter is for advanced administrator use only.**

Related topics

[Overview of report logs](#)

[Report log descriptions](#)

[Configure retention time](#)

[Configure report mappings](#)

[Configure custom attributes](#)

[View and update history](#)



Configure report log retention time

The retention time determines how long the data in the report log is saved. Records older than the expiration age can be purged automatically or manually.

To configure report log retention time

1. In the **Report Logs** subcontainer, double-click the report you want to configure.
2. Click the **Retention** page.
3. In the **Purge records older than [x] days** box, type the expiration age for records for this report log.
4. To configure automatic purging, select the **Enable automatic purging for this report log** check box. You must also configure the purging schedule on the **Report Log Purging** page of the **Server Configuration** dialog box, which is located in the Server Configuration container. For more information on how to configure the purge schedule, see *Configure report log purging for your CIC server*.
5. To immediately purge the expired records from this report log, click **Purge Now**. In the message box, click **Yes**.

Note: You cannot undo a purge.

6. Click **OK**.

Related topics

[Overview of report logs](#)

[Report log descriptions](#)

[Configure basic information](#)

[Configure report mappings](#)

[Configure custom attributes](#)

[View and update history](#)

[Configure report log purging for your CIC server](#)



Configure report log mappings

Report log mappings specify what data is logged in which column in the database.

Notes: If you are using this advanced feature, please see the *PureConnect Reporting Technical Reference* in the PureConnect Documentation Library located on the CIC server.

You may also search the knowledge base for articles regarding custom report mappings.

To configure report log mappings

1. In the **Report Logs** subcontainer, double-click the report you want to configure.
2. Click the **Mappings** page. Do one of the following:
 - To use the default mappings and ignore any custom output mappings that you have defined, select the **Use default mappings** check box. By default, this check box is selected.
 - To have CIC dynamically process a custom mapping, deselect the **Use default mappings** check box. Then, in the **Map string** box, type the value that CIC should use to bind the columns.
3. Click **OK**.

Related topics

[Overview of report logs](#)

[Report log descriptions](#)

[Configure basic information](#)

[Configure retention time](#)

[Configure custom attributes](#)

[View and update history](#)



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.

About the Enhanced Interaction Administrator Change Log

The **Enhanced Interaction Administrator Change Notification Log (6)** provides robust logging for changes to users, workgroups, skills, licenses, stations, roles and default user.

Warning: Enable the Enhanced Interaction Administrator Change Log only during non-peak production hours and only if all CIC clients are upgraded to CIC 2016 R1 or later.

Enabling this log is an intensive operation that requires significant computing resources. You must do it during non-peak production hours.

If you enable this feature before you upgrade all CIC clients to CIC 2016 R1 or later, the CIC clients that run earlier versions of CIC will log incomplete audit data.

Note: The enhanced logging feature is available beginning with CIC 2016 R1. It is available for Microsoft SQL Server and Oracle.

This help topic contains the following sections:

[How to start enhanced logging](#)

[About the Snapshot Tool](#)

[Summary of logged data](#)

[Summary of data that is not logged](#)

[How to access the change log data](#)

[How to purge change log data](#)

How to start enhanced logging

By default, the Enhanced Interaction Administrator log is not actively logging changes. If you want to use this log, you must enable it. For information, see [Enable the Enhanced Interaction Administrator Change Log](#).

Note: If you choose to not enable the Enhanced Interaction Administrator Change Log, Interaction Administrator will continue to provide its regular logging capabilities via the Interaction Administrator Change Notification Log report log, it is enabled.

About the Snapshot Tool

When you enable the Enhanced Change Notification Log, the Snapshot tool automatically runs. The Snapshot tool takes a snapshot of the current Directory Service data and updates the Enhanced Change Log database tables. This data acts as a baseline for future views of the log and it ensures that the views remain accurate.

Notes: Enable the Enhanced Interaction Administrator Change Log during off-peak hours. During the snapshot process, you may experience a large amount of processing on your CIC server and database server. While this process lasts only a short time, it is best if you enable the log this during off-peak hours.

The provided database views display only data from the time when the last snapshot was taken. The audit trail data remains in the database tables.

For troubleshooting purposes, you may want to re-run the Snapshot tool. For more information, see [Logging administrative changes from other applications](#).

Summary of logged data

Interaction Administrator data

The Enhanced Interaction Change Notification Log tracks changes to the following information in Interaction Administrator:

- **Users** container: All changes made to all pages
- **Default User** container: All changes made to all pages
- **Roles** container: All changes made to all pages
- **Workgroups** container: All changes made to all pages

Note: Supervisors can change workgroup membership from IC Business Manager. Those changes are also tracked in the Enhanced Interaction Administrator Change Log.

- **Skills**: All changes made to all pages
- **Licenses Allocation** container: All changes made to station licenses and user licenses
- **Stations** container: All changes to station licenses

IceLib and ICWS data

If you enable the enhanced logging feature, all administrator configuration changes from ICWS and IceLib are logged. However, the enhanced logging feature consistently formats only the administrative changes that are logged from Interaction Administrator.

Note: If you have custom applications that use the IceLib or ICWS API's that configure the CIC server, then you might see the additional logging data in those applications.

For more information about the data that is and is not affected by the Enhanced Interaction Administrator Change Notification Log, see [Troubleshooting the Enhanced Interaction Administrator Change Notification Log](#).

Summary of data that is not logged

The following data is not logged by the enhanced logging feature:

- License activations from external files
- Changes to any Interaction Administrator containers other than Users, Skills, Workgroups, Licenses, Roles and Default User.

How to access the change log data

CIC provides several views that you can use to access the change log data. You access these views directly via a database query. For more information on these views, see [Database views for the log](#).

How to purge the change log data

You can configure automated data purging for the Enhanced Interaction Administrator Change Notification Log in the same way as all other logs. You can also do an immediate data purge, if necessary. For more information, see [Configure report log retention time](#).

Related topics

[Enable the Enhanced Interaction Administrator Change Log](#)

[Database tables for the Enhanced Interaction Administrator Change Log](#)

[Examples of changes to database tables](#)

[Database views for the Enhanced Interaction Administrator Change Log](#)

[Troubleshoot the Enhanced Interaction Administrator Change Log](#)

Enable the Enhanced Interaction Administrator Change Log

In order to take advantage of the Enhanced Interaction Administrator Change Log, you must enable it.

Notes:

By default, the Enhanced Interaction Administrator Change Log is **not** enabled. If you enable this feature and then upgrade CIC, the feature will remain enabled.

When you enable the Enhanced Interaction Administrator Change Log, the Snapshot Tool creates a baseline of your data. This process takes time and can affect system performance. Therefore, it is best to enable the Enhanced Interaction Administrator Change Log during off-peak hours. For more information, see [About the Snapshot Tool](#).

To enable the Enhanced Interaction Administrator Change Log

1. In the **Report Logs** subcontainer, double-click the Enhanced Interaction Administrator Change Notification Log (6).
2. On the **Basic** page, select the **Active** check box.
3. Click **OK**.

Related topics

[About the Enhanced Interaction Administrator Change Log](#)

[Database tables for the Enhanced Interaction Administrator Change Log](#)

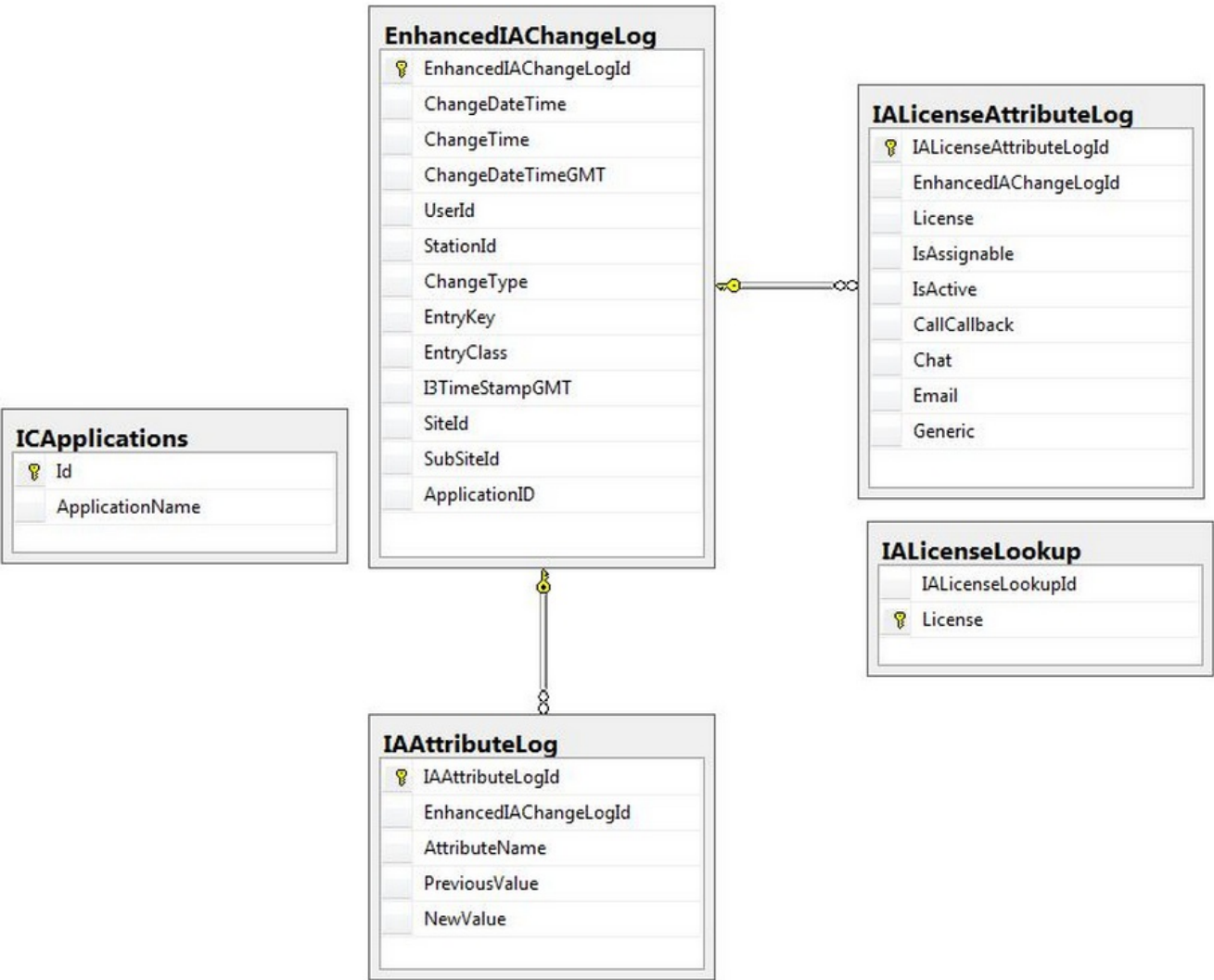
[Troubleshooting the Enhanced Interaction Administrator Change Log](#)

[Database tables for the Enhanced Interaction Administrator Change Log](#)

Database tables for the Enhanced Interaction Administrator Change Log

For complete information about the database tables that are used with the Enhanced Interaction Administrator Change Log, see the *PureConnect Data Dictionary* in the PureConnect Documentation Library.

Click a database table for more details about its purpose and its columns.



EnhancedIChangeLog Table

The **EnhancedIChangeLog** table is the primary table that is used for the Enhanced Interaction Administrator Change Log. If you enable the log, changes in supported Interaction Administrator containers are logged in this table.

Column Name	Description
EnhancedIChangeLogId	Unique ID for the change
ChangeDateTime	Local server date and time when the change was made
ChangeTime	Local time of the change
ChangeDateTimeGMT	Greenwich Mean Time for when the change was made
UserId	User ID that made the change
StationId	ID of the computer from which the change was made
ChangeType	Type of change that was made. The values are Addition, Modification, Deletion, and Initial. Initial is the data taken when the system takes a snapshot point of the DS data
EntryKey	Item affected by the change
EntryClass	The Interaction Administrator container for which the change was made. Note: Log records for licenses and skills are handled in this manner: • "License" denotes a license change made in the License Allocation container. • "UserLicense" denotes a license change made in the Users container. • "StationLicense" denotes a license change was made from the Stations container. Note: Log records for skills are handled in this manner: • "Skills" denotes a change from Skills container. • "SkillsUser" denotes a change to the user from the Skills container. • "SkillsWorkgroup" denotes a change to the workgroup from the Skills container. Note: Log records for roles are handled in this manner: • "Roles" denotes a change from Roles container. • "RolesUser" denotes a change to the user from the Roles container. • "RolesWorkgroup" denotes a change to the workgroup from the Roles container.
I3TimeStampGMT	GMT Timestamp
SiteId	Site ID
SubsiteId	Subsite Id
ApplicationId -	ID of the application from where the change was made. The ID number corresponds to the ID found in the ICApplications table.

IAAttributeLog Table

The **IAAttributeLog** table is a child table of the **IChangeLog** table. This table contains the specific attribute that was changed, the previous value, and the new value. There may be multiple records in the **IAAttributeLog** table that are for a single record in the **IChangeLog** table.

Note: Changes involving licenses are not recorded in this table.

Column Name	Description
IAAttributeLogId	Unique ID for the attribute that was changed
EnhancedIChangeLogId	The foreign key to the IChangeLog table
AttributeName	The name of the attribute that was changed
PreviousValue	The value before the change was made. This field can contain an empty string if the value was never been set before change logging was enabled, or if the field was cleared of its value.
NewValue	The new value for the attribute. This field can contain an empty string if the field was cleared of its value.

IALicenseAttributeLog Table

The **IALicenseAttributeLog** table is a child table of **EnhancedIChangeLog**. This table captures the changes made for a user or a workstation license attribute.

Note: There are several attributes for each user or workstation license. When a change is made to a user or a workstation license attribute, this table does not record which attribute was changed. Instead, all of the licenses for the user or station are written to the table.

To determine which specific attribute was changed, do a diff to compare the current set of license attributes with the previous set of license attributes. A set of records for a single change will have the same EnhancedIChangeLogID.

Column Name	Description
IALicenseAttributeLogId	Unique ID for the license change
EnhancedIChangeLogId	Foreign key to the IChangeLog table
License	License ID. This ID corresponds to the ID found in the IALicenseLookup table.
IsAssignable	Indicates whether the license allocation method for the given IChangeLog entry key is assignable or concurrent: - A value of 1 means assignable - A value of 0 means concurrent.
IsActive	Indicates whether licenses are enabled for the given IChangeLog entry key: 1 means enabled. 0 means disabled.
CallCallback	Denotes whether call/callback is selected as the ACD media type. This field is valid only for ACD Media 2 and ACD Media 3 licenses.
Chat	Denotes whether chat is selected as the ACD media type. This field is valid only for ACD Media 2 and ACD Media 3 licenses.
Email	Denotes whether email is selected as the ACD media type. This field is valid only for ACD Media 2 and ACD Media 3 licenses.
Generic	Denotes whether generic is selected as the ACD media type. This field is valid only for ACD Media 2 and ACD Media 3 licenses.

Related topics

[About the Enhanced Interaction Administrator Change Log](#)

[Examples of changes to database tables](#)

[Database views for the Enhanced Interaction Administrator Change Log](#)

Examples of changes to database tables

This help topic shows how the following types of database changes are tracked when the Enhanced Interaction Administration Change Log is enabled:

[Snapshot of initial data](#)

[Change to a user attribute](#)

[Addition of a user](#)

[Setting or changing a user license](#)

[Deletion of a user](#)

[Assignment of a skill to a workgroup or user](#)

[Removal of a skill from a workgroup or user](#)

[Modification to a Role](#)

[Change to a Default User attribute](#)

Snapshot of initial data

This example shows a snapshot of data that was taken when the Enhanced Interaction Administrator Change Log was enabled. Notice that value in the ChangeType column is "Initial." You can also see that both the **IAAttributeLog** table and the **IALicenseAttributeLog** table have multiple records tied to a single record in the **EnhancedIChangeLog** table.

EnhancedIChangeLog Table									
EnhancedIChangeLogID	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	Change Type	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Initial	john.doe	Users	1
-2147483622	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Initial	john.doe	License	1

IAAttributeLog Table				
IAAttributeLogId	EnhancedIChangeLogId	AttributeName	PreviousValue	NewValue
-2147483563	-2147483623	displayName		john.doe
-2147483562	-2147483623	givenName		John
-2147483561	-2147483623	surname		Doe

IALicenseAttributeLog Table								
IALicenseAttributeLogId	EnhancedIChangeLogId	License	IsAssignable	IsActive	CallCallback	Chat	Email	Generic
-234597962	-2147483622	4	1	0	0	0	0	0
-234597961	-2147483622	7	1	0	1	0	1	0
-234597960	-2147483622	9	1	0	0	0	0	0

Change to a user attribute

This example shows the change log records that are created when you change an attribute on any property page in the **Users** container.

EnhancedIChangeLog Table									
EnhancedIChangeLogID	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	Change Type	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	Users	1

IAAttributeLog Table				
IAAttributeLogId	EnhancedIChangeLogId	AttributeName	PreviousValue	NewValue
-2147483563	-2147483623	displayName	john.doe	doe.john

Addition of a user

This example shows the change log records that are updated when you add a user:

- The UserLicense modification is tied to a record in the **IALicenseAttributeLog** table.
- The Password attribute generates its own change log record.
- The other properties are tied to the other **EnhancedIChangeLog** modification record.
- A record in the **EnhancedIChangeLog** with a ChangeType of Addition denotes that a user was added to the system; there are no attribute records tied to that entry.

EnhancedIChangeLog Table									
EnhancedIChangeLogId	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	UserLicense	1
-2147483622	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	Users	1
-2147483621	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	Users	1
-2147483620	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Addition	john.doe	Users	1

IAAttributeLog Table				
IAAttributeLogId	EnhancedIChangeLogId	AttributeName	PreviousValue	NewValue
-2147483564	-2147483622	displayName		doe.john
-2147483563	-2147483622	extension		9999
-2147483562	-2147483621	Password		*****

IALicenseAttributeLog Table								
IALicenseAttributeLogId	EnhancedIChangeLogId	License	IsAssignable	IsActive	CallCallback	Chat	Email	Generic
-234597962	-2147483623	4	1	1	0	0	0	0
-234597961	-2147483623	7	1	1	1	0	1	0

Setting or changing a user license

This example shows the change log records that are inserted when the client access license and the ACD Media 2 licenses (with call and email qualifiers) are assigned for a user.

EnhancedIChangeLog Table									
EnhancedIChangeLogId	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	UserLicense	1

IALicenseAttributeLog Table								
IALicenseAttributeLogId	EnhancedIChangeLogId	License	IsAssignable	IsActive	CallCallback	Chat	Email	Generic
-234597962	-2147483623	1	1	1	0	0	0	0
-234597961	-2147483623	2	1	1	1	0	1	0

IALicenseLookup Table	
IALicenseLookupId	License
0	-
1	I3_ACCESS_CLIENT
2	I3_ACCESS_ACD_MEDIA_2

Deletion of a user

This example shows the change log record with the Change Type of Deletion. This indicates that the user record was deleted. The **IAAttributeLog** table is also updated to show what attributes were set on that user when the user was removed.

EnhancedIChangeLog Table									
EnhancedIChangeLogID	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Deletion	john.doe	Users	1

IAAttributeLog Table				
IAAttributeLogId	EnhancedIChangeLogId	AttributeName	PreviousValue	NewValue
-2147483564	-2147483623	displayName	john.doe	
-2147483563	-2147483623	extension	9999	
-2147483562	-2147483623	Password	*****	

IALicenseAttributeLog Table								
IALicenseAttributeLogId	EnhancedIChangeLogId	License	IsAssignable	IsActive	CallCallback	Chat	Email	Generic
-234597962	-2147483623	0	0	0	0	0	0	0

Assignment of a skill to a workgroup or user

This example illustrates how the database tables are updated when a skill is added to a workgroup and a user.

Note: If the EntryClass shows "SkillsUser" or "SkillsWorkgroup," then the skill was added from the **Skills** container.

EnhancedIChangeLog Table									
EnhancedIChangeLogID	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	john.doe	SkillsUser	1
-2147483622	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Modification	Support	Workgroups	1

IAAttributeLog Table				
IAAttributeLogId	EnhancedIChangeLogId	AttributeName	PreviousValue	NewValue
-2147483564	-2147483623	Skills	English 1 2	English 1 2 Spanish 2 3
-2147483563	-2147483622	Skills		Spanish 3 4

Removal of a skill from a workgroup or user

This example shows the change log records that are updated when a skill is unassigned from a workgroup or a user. Change log records are logged for the users and workgroups that were assigned that skill, along with the deletion record.

EnhancedIACChangeLog Table									
EnhancedIACChangeLogId	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	ApplicationId
-2147483623	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Deletion	john.doe	SkillsUser	1
-2147483622	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Deletion	Support	SkillsWorkgroup	1
-2147483621	2015-01-30 10:11:56.930	10:11:56	2015-01-30 10:11:56.930	admin	admin_station	Deletion	Spanish	Skills	

IAAttributeLog Table				
IAAttributeLogId	EnhancedIACChangeLogId	AttributeName	PreviousValue	NewValue
-2147483564	-2147483623	Skills	English 1 2 Spanish 2 3	English 1 2
-2147483563	-2147483622	Skills	Spanish 3 4	

Modification to a Role

This example shows the change log records that are created when you change an attribute on any property page in the **Roles** container.

Note: If the EntryClass shows "RolesUser" or "RolesWorkgroup," then the role was added/deleted from the **Roles** container.

EnhancedIACChangeLog												
EnhancedIACChangeLogId	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	I3TimeStampGMT	SiteId	SubSiteId	ApplicationID
-2147483306	16:32.0	15:16:32	16:32.0	MORPHEUS_USER	MORPHEUS	Modification	workgroup1	RolesWorkgroup	16:32.0	1	0	2
-2147483307	16:32.0	15:16:32	16:32.0	MORPHEUS_USER	MORPHEUS	Modification	user41	RolesUser	16:32.0	1	0	2
-2147483308	16:32.0	15:16:32	16:32.0	MORPHEUS_USER	MORPHEUS	Modification	Supervisor	Roles	16:32.0	1	0	2

IAAttributeLog				
IAAttributeLogId	EnhancedIACChangeLogId	AttributeName	PreviousValue	NewValue
-2147481294	-2147483306	Role		Supervisor
-2147481295	-2147483307	Role	Supervisor	
-2147481297	-2147483308	ViewHistoricalReports	[[All]]	[[All]]1108 IVR Audit Report
-2147481296	-2147483308	Notes		History Notes

Change to a Default User attribute

This example shows the change log records that are created when you change an attribute on any property page in the **Default User** container.

EnhancedIACChangeLog												
EnhancedIACChangeLogId	ChangeDateTime	ChangeTime	ChangeDateTimeGMT	UserId	StationId	ChangeType	EntryKey	EntryClass	I3TimeStampGMT	SiteId	SubSiteId	ApplicationID
-2147483305	21:19.0	15:21:19	21:19.0	MORPHEUS_USER	MORPHEUS	Modification	Default Users	Default Users	21:19.0	1	0	2

IAAttributeLog				
IAAttributeLogId	EnhancedIACChangeLogId	AttributeName	PreviousValue	NewValue
-2147481275	-2147483305	ACL Admin		Yes
-2147481274	-2147483305	Notes		History Notes
-2147481273	-2147483305	WebFaxFormat	Use Default	PDF
-2147481272	-2147483305	Whisper Tone Level		-20

Related topics

[About the Enhanced Interaction Administrator Change Log](#)

[Database tables for the Enhanced Interaction Administrator Change Log](#)

[Database views for the Enhanced Interaction Administrator Change Log](#)

Database views for the Enhanced Interaction Administrator Change Log

The following views are available for use with the Enhanced Interaction Administrator Change Log:

- [EIACL_CurrentLicenses](#)
- [EIACL_HistoricalLicenses](#)
- [EIACL_HistoricalLicensesDP](#)
- [EIACL_CurrentSkills](#)
- [EIACL_HistoricalSkills](#)
- [EIACL_HistoricalSkillsDP](#)

For more information on how to use these views, see the *PureConnect Data Dictionary Technical Reference* in the PureConnect Documentation Library.

Note: Some of the values recorded for attributes may have multiple entries. The delimiter is the unit separator character (0x1F).

EIACL_CurrentLicenses

This view shows the current license allocation.

- This view will always be ordered by EntryKey. It displays only the most recent entry for each entry key. The entry key is always going to be a user or a station.
- The EntryKeyLicenseCount column provides a quick way to see how many licenses are currently allocated to a specific entry key.
- The License column displays license names the same way that they are displayed in the [License Management dialog box](#).

SELECT * FROM EIACL_CurrentLicenses																
License	IsActive	IsAssignable	CallCallback	Chat	Email	Generic	ChangeType	EntryClass	EntryKey	EntryKeyLicenseCount	ChangedBy	ChangedFrom	Steld	APPLICATIONNAME	ChangeDate	Time
13_ACCESS_CLIENT	0	0	0	0	0	0	Initial	License	Backup Station	2	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
2_13_LICENSE_BASIC_STATION	0	0	0	0	0	0	Initial	License	Backup Station	2	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
3_13_ACCESS_ACD_MEDIA_3_PLUS	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
4_13_ACCESS_CLIENT	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
5_13_ACCESS_FEEDBACK	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
6_13_ACCESS_IPAD_USER_SUPERVISOR	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
7_13_ACCESS_IPA_USER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
8_13_ACCESS_TRACKER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
9_13_LICENSE_SALESFORCE	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
10_13_LICENSE_SALESFORCE_BUSINESSUSER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
11_13_ACCESS_ANALYZER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000	
12_13_ACCESS_ACD_MEDIA_2	0	1	1	0	1	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
13_13_ACCESS_CLIENT	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
14_13_ACCESS_DIALER_ADDON	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
15_13_ACCESS_FEEDBACK	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
16_13_ACCESS_INTERACTION_MOBILE_EDITION	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
17_13_ACCESS_INTERACTION_SCRIPTER_ADDON	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
18_13_ACCESS_RECORDER_CLIENT	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
19_13_OPTIMIZER_SHOWRTA	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000	
20_13_ACCESS_DIALER_ADDON	1	1	0	0	0	0	Modification	UserLicense	Matt Brown	4	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:59.000	
21_13_ACCESS_FEEDBACK	1	1	0	0	0	0	Modification	UserLicense	Matt Brown	4	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:59.000	
22_13_ACCESS_INTERACTION_CLIENT_OPERATOR_EDITION	1	1	0	0	0	0	Modification	UserLicense	Matt Brown	4	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:59.000	
23_13_OPTIMIZER_SHOWRTA	1	1	0	0	0	0	Modification	UserLicense	Matt Brown	4	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:59.000	
24_13_ACCESS_CLIENT_OUTLOOK_ADDON	0	1	0	0	0	0	Modification	UserLicense	Operator	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:45.000	
25_13_ACCESS_DIALER_ADDON	0	1	0	0	0	0	Modification	UserLicense	Operator	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:45.000	
26_13_ACCESS_ACD_MEDIA_2	1	0	1	0	1	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
27_13_ACCESS_ANALYZER	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
28_13_ACCESS_CLIENT	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
29_13_ACCESS_CLIENT_OUTLOOK_ADDON	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
30_13_ACCESS_DIALER_ADDON	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
31_13_ACCESS_FEEDBACK	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
32_13_LICENSE_BASIC_STATION	1	0	0	0	0	0	Initial	License	Operator/Station	7	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
33_13_ACCESS_ACD_MEDIA_3_PLUS	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
34_13_ACCESS_CLIENT	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
35_13_ACCESS_DIALER_ADDON	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
36_13_ACCESS_DIALER_SUPERVISOR_PLUGIN	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
37_13_ACCESS_FEEDBACK	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	
38_13_ACCESS_HISTORICAL_REPORT_SUPERVISOR_PLUG...	1	0	0	0	0	0	Initial	License	sg-clay3	18	SG-CLAY3_USER	SG-CLAY3	1	iadsenaphot	2015-08-11 10:01:38.713	

EIACL_HistoricalLicenses

This view shows all the changes for licenses.

- This view will always be in descending order by EntryKey and ChangeDateTime. It displays all of the changes for each entry key. The entry key will always be a user or a station.
- The DESCLicenseChangeSequence column displays the ranking of changes for a specific entry key in descending order. A value of 1 always indicates the most recent license change for a specific entry key.
- The EntryKeyLicenseCount column provides a quick way to see how many licenses are currently allocated to a specific entry key and change sequence.
- The License column will display license names in the same way that they appear in the [License Management dialog box](#).

License	IsActive	IsAssignable	CallCallback	Chat	Email	Generic	ChangeType	EntryClass	EntryKey	EntryKeyLicenseCount	DESCLicenseChangeSequence	ChangedBy	ChangedFrom	Steld	APPLICATIONNAME	ChangeDateTime
1 3_ACCESS_CLIENT	0	0	0	0	0	0	Initial	License	BackupStation	2	1	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.713
2 3_LICENSE_BASIC_STATION	0	0	0	0	0	0	Initial	License	BackupStation	2	1	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.713
3 3_ACCESS_ACD_MEDIA_3_PLUS	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
4 3_ACCESS_CLIENT	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
5 3_ACCESS_FEEDBACK	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
6 3_ACCESS_IPAD_USER_SUPERVISOR	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
7 3_ACCESS_IPA_USER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
8 3_ACCESS_TRACKER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
9 3_LICENSE_SALESFORCE	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
10 3_LICENSE_SALESFORCE_BUSINESSUSER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
11 3_ACCESS_ANALYZER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
12 3_ACCESS_ACD_MEDIA_3_PLUS	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
13 3_ACCESS_CLIENT	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
14 3_ACCESS_FEEDBACK	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
15 3_ACCESS_IPAD_USER_SUPERVISOR	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
16 3_ACCESS_IPA_USER	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
17 3_ACCESS_TRACKER	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
18 3_LICENSE_SALESFORCE	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
19 3_LICENSE_SALESFORCE_BUSINESSUSER	1	0	0	0	0	0	Initial	License	Jane Smith	8	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
20 3_ACCESS_ACD_MEDIA_2	0	1	1	0	1	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
21 3_ACCESS_CLIENT	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
22 3_ACCESS_DIALER_ADDON	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
23 3_ACCESS_FEEDBACK	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
24 3_ACCESS_INTERACTION_MOBILE_EDITION	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
25 3_ACCESS_INTERACTION_SCRIPTER_ADDON	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
26 3_ACCESS_RECORDER_CLIENT	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
27 3_OPTIMIZER_SHOWRTA	0	1	0	0	0	0	Modification	UserLicense	John Doe	8	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:25:02.000
28 3_ACCESS_ACD_MEDIA_2	1	1	1	0	1	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
29 3_ACCESS_CLIENT	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
30 3_ACCESS_DIALER_ADDON	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
31 3_ACCESS_FEEDBACK	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
32 3_ACCESS_INTERACTION_MOBILE_EDITION	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
33 3_ACCESS_INTERACTION_SCRIPTER_ADDON	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
34 3_ACCESS_RECORDER_CLIENT	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
35 3_OPTIMIZER_SHOWRTA	1	1	0	0	0	0	Modification	UserLicense	John Doe	8	2	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:41.000
36 3_ACCESS_ACD_MEDIA_2	1	0	1	0	1	0	Initial	License	John Doe	7	3	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
37 3_ACCESS_CLIENT	1	0	0	0	0	0	Initial	License	John Doe	7	3	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707
38 3_ACCESS_DIALER_ADDON	1	0	0	0	0	0	Initial	License	John Doe	7	3	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.707

When a user or station is deleted, the most recent entry for that entry key shows a - in the license column and a 1 in the DESCLicenseChangeSequence column. This provides an easy way to tell which licenses were allocated to the user or station when the user or station was deleted, in case you need to recreate the user or station later with the same licenses.

License	IsActive	IsAssignable	CallCallback	Chat	Email	Generic	ChangeType	EntryClass	EntryKey	EntryKeyLicenseCount	DESCLicenseChangeSequence	ChangedBy	ChangedFrom	Steld	APPLICATIONNAME	ChangeDateTime
1 -	0	0	0	0	0	0	Deletion	Workstations	BackupStation	0	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:29:35.000
2 3_ACCESS_CLIENT	0	0	0	0	0	0	Initial	License	BackupStation	2	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.713
3 3_LICENSE_BASIC_STATION	0	0	0	0	0	0	Initial	License	BackupStation	2	2	SG-CLAY3_USER	SG-CLAY3	1	ladsenaphot	2015-08-11 10:01:38.713
4 3_ACCESS_ACD_MEDIA_3_PLUS	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
5 3_ACCESS_CLIENT	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
6 3_ACCESS_FEEDBACK	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
7 3_ACCESS_IPAD_USER_SUPERVISOR	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
8 3_ACCESS_IPA_USER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
9 3_ACCESS_TRACKER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
10 3_LICENSE_SALESFORCE	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
11 3_LICENSE_SALESFORCE_BUSINESSUSER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000
12 3_ACCESS_ANALYZER	1	1	0	0	0	0	Modification	UserLicense	Jane Smith	9	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:24:36.000

EIACL_HistoricalLicensesDP

This view shows all the changes for licenses. It also includes some date part columns for use in sorting and grouping the data.

- This view will always be in descending order by EntryKey and ChangeDateTime. It displays all of the changes for each entry key. The entry key will always be a user or a station.
- The DESCLicenseChangeSequence column displays the ranking of changes for a specific entry key in descending order. A value of 1 always indicates the most recent license change for a specific entry key.
- The EntryKeyLicenseCount column provides a quick way to see how many licenses are currently allocated to a specific entry key and change sequence.
- The License column will display license names in the same way that they appear in the [License Management dialog box](#).
- Additional columns have been added to show date parts of the local and gmt date time columns.

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SELECT * FROM EIACL_HistoricalSkills ORDER BY EntryKey, ChangeDateTime DESC

EntryKey	SkillNewValue	ProficiencyNewValue	DesireToUseNewValue	SkillPreviousValue	ProficiencyPreviousValue	DesireToUsePreviousValue	ChangeType	EntryClass	DESCSkillChangeSequence	ChangedBy	ChangedFrom	Steld	ApplicationName	ChangeDateTime
1	Jane.Smith	-	-	Spanish	1	1	Deletion	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:52:25.000
2	Jane.Smith	-	-	French	1	1	Deletion	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:52:25.000
3	Jane.Smith	French	1	French	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000
4	Jane.Smith	Spanish	1	French	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000
5	Jane.Smith	French	1	Spanish	1	1	Initial	Users	3	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.690
6	Matt.Brown	Spanish	1	Spanish	1	1	Modification	SkillsUser	1	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:22.000
7	Matt.Brown	French	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:22.000
8	Matt.Brown	Spanish	1	Spanish	1	1	Initial	Users	2	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.700
9	Sue.Johnson	Tech Certification	4	Tech Certification	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000
10	Sue.Johnson	Tech Certification	4	Spanish	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000
11	Sue.Johnson	Spanish	1	Tech Certification	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000
12	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000
13	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:46.000
14	Sue.Johnson	Tech Certification	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:46.000
15	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	SkillsUser	3	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000
16	Support	Tech Certification	1	Spanish	1	1	Initial	Workgroups	1	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.747

EIACL_HistoricalSkillsDP

This view shows all the changes for skills.

- The entry key is always going to be a user or a workgroup.
- The SkillNewValue column displays the skill name.
- The SkillPreviousValue column displays the skill name for the previous value.
- This view is different from EIACL_CurrentSkills in that it also displays the previous values for the skill on the same row as the new value.
- In order to make this data easier to consume, it is recommended that you order the view by EntryKey and ChangeDateTime DESC.
- The DESCSkillChangeSequence column will show the ranking of the EntryKeys ordered by ChangeDateTimeGMT DESC
- This view includes some date part columns for use in sorting and grouping the data.

SELECT * FROM EIACL_HistoricalSkillsDP ORDER BY EntryKey, ChangeDateTime DESC																																	
EntryKey	SkillNewValue	ProficiencyNewValue	DesireToUseNewValue	SkillPreviousValue	ProficiencyPreviousValue	DesireToUsePreviousValue	ChangeType	EntryClass	DESCSkillChangeSequence	ChangedBy	ChangedFrom	Steld	ApplicationName	ChangeDateTime	ChangeTime	ChangeDateGMT	ChangeTimeGMT	Year	Quarter	Month	Week	DayOfMonth	Weekday	Day	DayOfYear	GMTDay	GMTQuarter	GMTMonth	GMTWeekday	GMTDay	GMTDayOfYear		
1	Jane.Smith	-	-	Spanish	1	1	Deletion	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:52:25.000	10:52:25	2015-08-11 10:52:25.000	10:52:25	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
2	Jane.Smith	-	-	French	1	1	Deletion	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:52:25.000	10:52:25	2015-08-11 10:52:25.000	10:52:25	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
3	Jane.Smith	French	1	French	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000	10:49:38	2015-08-11 10:49:38.000	10:49:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
4	Jane.Smith	Spanish	1	French	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000	10:49:38	2015-08-11 10:49:38.000	10:49:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
5	Jane.Smith	French	1	Spanish	1	1	Initial	Users	3	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.690	10:01:38	2015-08-11 10:01:38.690	10:01:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
6	Matt.Brown	Spanish	1	Spanish	1	1	Modification	SkillsUser	1	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:22.000	10:49:22	2015-08-11 10:49:22.000	10:49:22	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
7	Matt.Brown	French	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:22.000	10:49:22	2015-08-11 10:49:22.000	10:49:22	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
8	Matt.Brown	Spanish	1	Spanish	1	1	Initial	Users	2	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.700	10:01:38	2015-08-11 10:01:38.700	10:01:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
9	Sue.Johnson	Tech Certification	4	Tech Certification	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000	10:50:44	2015-08-11 10:50:44.000	10:50:44	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
10	Sue.Johnson	Tech Certification	4	Spanish	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000	10:50:44	2015-08-11 10:50:44.000	10:50:44	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
11	Sue.Johnson	Spanish	1	Tech Certification	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000	10:50:44	2015-08-11 10:50:44.000	10:50:44	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
12	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	Users	1	SG-CLAY3_USER	SG-CLAY3	1	interaction administrator	2015-08-11 10:50:44.000	10:50:44	2015-08-11 10:50:44.000	10:50:44	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
13	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:46.000	10:49:46	2015-08-11 10:49:46.000	10:49:46	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
14	Sue.Johnson	Tech Certification	1	Spanish	1	1	Modification	SkillsUser	2	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:46.000	10:49:46	2015-08-11 10:49:46.000	10:49:46	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
15	Sue.Johnson	Spanish	1	Spanish	1	1	Modification	SkillsUser	3	SG-CLAY3_USER	SG-CLAY3	1	admin.net	2015-08-11 10:49:38.000	10:49:38	2015-08-11 10:49:38.000	10:49:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233
16	Support	Tech Certification	1	Spanish	1	1	Initial	Workgroups	1	SG-CLAY3_USER	SG-CLAY3	1	idsnapshot	2015-08-11 10:01:38.747	10:01:38	2015-08-11 10:01:38.747	10:01:38	2015	3	August	33	33	Tuesday	11	233	2015	3	August	33	33	Tuesday	11	233

Related topics

[About the Enhanced Interaction Administrator Change Log](#)

[Database tables for the Enhanced Interaction Administrator Change Log](#)

[Examples of changes to database tables](#)

Troubleshoot the Enhanced Interaction Administrator Change Log

This help topic contains the following sections:

[Logging administrative changes from other applications](#)

[If you upgrade and then downgrade](#)

[Duplicate records for workgroup media types](#)

[Side effect changes in Directory Services](#)

Logging administrative changes from other applications

If you are using an version of Interaction Administrator that is earlier than CIC 2016 R1, with a server that supported enhanced logging, the changes will not be logged and may introduce inconsistencies with the data. The detailed changes in the Users, Workgroups, Skills, License Allocation, Stations, Roles and Default User containers will not be logged.

If you notice data inconsistencies, disable and re-enable logging. This takes a new snapshot and creates a new baseline for your data.

Note: If you take a new snapshot, the views display data back to the last snapshot. However, your complete change log information remains in the database.

Duplicate records for workgroup media types

You may see duplicate records for workgroup media types. This is because the earlier Interaction Administrator logging feature still exists and it logs data for these items. This feature was preserved for backward compatibility purposes.

If you upgrade and then downgrade

If you upgrade to 2016 R1 and then downgrade to an earlier version, you will see the Enhanced Interaction Administrator Change Log in Interaction Administration. However, the log will not function. When you re-upgrade to 2016 R1, and if the enhanced logging was previously enabled, a new snapshot will be taken during the upgrade process and enhanced logging will begin. If you had not enabled the enhanced logging before downgrading, the logging will not begin until you enable it.

Side effect changes in Directory Services

During the implementation of the Enhanced Interaction Administrator Change Log, certain Interaction Administrator behaviors were affected. This section describes those side effect changes.

The following are the categories of side effect changes that have been noticed in Directory Services:

[Side effects with delayed manifestation in Directory Services](#)

[Side effects with immediate manifestation in Directory Services](#)

Side effects with delayed manifestation in Directory Services

Field	DS Key	Notes
Default Language	Users\[USER]\Preferred Language	If the preferred language for a user or workgroup's is deleted, the default language is automatically assigned to the user or workgroup. However, the Enhanced Interaction Administrator Change Log does not log this change until another action or event updates or saves the user's or workgroup's configuration.
Recording/Beep Tone	Workgroups\[WORKGROUP]\SelectedTone	If the recording beep tone for a workgroup is deleted, the default recording beep tone is automatically assigned to the workgroup. However, the Enhanced Interaction Administrator Change Log does not log this change until another action or event updates or saves the workgroup's configuration.
Default Workstation	Users\[USER]\Default Workstation	If a user's default workstation is deleted, the Enhanced Interaction Administrator Change Log does not log this change until another action or event updates or saves the user's configuration.
CSV User Import	Users\	When a user record is imported by a .CSV file, an administrator can view the user's properties in Interaction Administrator. When the administrator clicks OK to close the user's Configuration dialog box, additional configuration settings are automatically set by Interaction Administrator. The Enhanced Interaction Administrator Change Log logs those additional settings changes.
Time Zone	Users\[USER]\TimeZone	See Location .

[Back to the top of the section](#)

Field	DS Key	Notes
Unified Messaging	Users\[USER]\UM Destination	If a Unified Messaging station is deleted and a user was configured to use that station, the Enhanced Interaction Administrator Change Log logs that the station was deleted. It does not, however, log that the user record was also changed.
Location	Users\[USER]\Location	If a location is deleted, the Enhanced Interaction Administrator Change Log logs that the location was deleted. It does not, however, log that the user records that used that location were also changed. When a location is deleted, the user records that were configured to use that location are changed to use the time zone of the default location. However, the Enhanced Interaction Administrator Change Log does not log this change to the user records. If the time zone for the default location is changed, the Enhanced Interaction Administrator Change Log does not log this change to the users that use the default location.
Password Policy	Users\[USER]\Password Policies	If a user is configured to use a password policy, and that password policy is deleted, the Enhanced Interaction Administrator Change Log does not log that the password policy has been removed from the user. If a role is configured to use a password policy, and that password policy is deleted, the Enhanced Interaction Administrator Change Log does not log that the password policy has been removed from the role.
Roles	Users\[USER]\Role	If a user is configured to use a role, and that role is deleted, the Enhanced Interaction Change Log logs that the role was deleted. It does not, however, log the change to the user's configuration. If a workgroup is configured to use a role, and that role is deleted, the Enhanced Interaction Change Log logs that the role was deleted. It does not, however, log the change to the workgroup's configuration.
Secure Input Forms	Workgroups\[WORKGROUP]\SecureInputForms	If a workgroup is configured to use a secure input form, and that form is deleted, the Enhanced Interaction Change Log does not log that the form was deleted. It also does not log the change to the workgroup's configuration.
Actions	Users\[USER]\Call Disconnected Users\[USER]\Call Offering	If an action is deleted, the Enhanced Interaction Change Log does not log the deletion of that action. In addition, if that action is configured as either an alerting or disconnected action for a user, the Enhanced Interaction Change Log does not log the change to the user's configuration.
Wrap-up Codes	Workgroups\[WORKGROUP]\Wrap-up Codes	If a workgroup is configured to use a wrap-up code, and that wrap-up code is deleted, the Enhanced Interaction Change Log does not log the deletion of the wrap-up code or the change to the workgroup's configuration.
Client Configuration	Users\[USER]\Client Configuration Template	If a client configuration template is deleted, the Enhanced Interaction Change Log logs the deletion. However, if a user is configured to use that template, the Enhanced Interaction Log does not log the change to the user's configuration.
On Hold Music	Workgroups\[WORKGROUP]\Workgroup On Hold Music 	If an audio source is deleted, the Enhanced Interaction Change Log logs the deletion. However, if the audio source is configured as the on hold music for a workgroup, the Enhanced Interaction Change Log does not log the change to the workgroup's configuration.

Related topics

[About the Enhanced Interaction Administrator Change Log](#)



Accumulator

Accumulators are generic, on-the-fly, global variables. The accumulator tools in Interaction Designer create and modify the way accumulators behave and the types of information they accumulate. Accumulators provide a place to store a value. For example, they provide a way for someone to gather (accumulate) a total number of calls. While values in handler variables are lost when the handler stops running, accumulator values are stored in the system and retain values across handlers.

Related topics

[Accumulator configuration](#)



Accumulator configuration

Accumulators are similar to system registers. They count events as they occur in Interaction Processor. Instances of these events are stored in variables and are accessible in report logs or other handlers using the Accumulator tools in Interaction Designer.

Use this configuration page to define characteristics for each accumulator on the CIC server. When you create a new accumulator, be sure to assign it to the server on the [Server Configuration - Accumulators dialog box](#). Handlers built with the Accumulator tools in Interaction Designer must use the accumulator names defined on this page.

Data Type

The data type specifies the type of data that held in this accumulator. Select one of the available types based on the kind of data to accumulate. Data types include:

Data Type	Description
Boolean	True or false
DateTime	The year, month, day, hour, minute, and second.
Integer	Any positive or negative non-decimal number including zero. Includes all whole numbers.
Numeric	Any positive whole or decimal number including zero. Includes all real numbers.
String	Any sequence of alpha-numeric characters.

Instance Type

Accumulator handlers create and modify instances of the data stored in the accumulator (see the Set Acc. tools in Interaction Designer). The accumulator specifies what kind of instances it can store. Select one of the following instance types.

Instance Type	Description
Any Instance	Allows the Accumulator handler to insert any instance (of the correct data type) into the accumulator. No Instance List is necessary. This is the least restrictive option; use it when accumulating values for an indeterminate list (for example, all CIC users referenced by UserID as a Value in the Set Acc. accumulator tool). This is similar to a predefined dynamic array.
Fixed List	The only instances captured by the accumulator are specified in the Instance List (for example, NewIncomingCall, NewOutgoingCall). Use this to capture a fixed set of values of a specific data type.
Single Instance	The accumulator captures only one specific instance of a value, which is specified in the Instance List (for example, CallOnHold).

Instance List

Use the **Instance List** to define one or more instance names if the instance type is either fixed list or single instance. The developer who creates accumulator steps in a handler uses these instance names in the Interaction Designer. For example, to accumulate a call attribute for a specific list of three CIC user accounts, specify the three user names in the instance list, one entry for each name.

To create an instance name, click **Add** and type a name in the **Entry Name** dialog box.

To delete an instance name, select the name and click **Delete**.

Note: When a new accumulator instance is created, it must be deactivated and reactivated in Interaction Administrator --> Server Configuration --> [Accumulators](#) in order to use it. If this is not done, a warning message is displayed.

Active

Select the **Active** check box to activate this accumulator in CIC, assuming you added it to the list of Currently Selected Accumulators in the [Server Configuration - Accumulators dialog box](#). Once you select the check box and click **OK**, the accumulator is immediately available to collect data. Clear the check box and the accumulator stops accepting data.

Note: A newly-defined accumulator immediately appears in the list of **Available Accumulators** in Server Configuration. **You must move this newly defined accumulator to the list of [Currently Selected Accumulators](#) before you can activate it with the Active check box.**

Related topics

[Accumulators](#)



System Parameter Configuration

Type a value for the system parameter.

Parameters are like macro names that can be included as a variable in a handler step, a path to a report, and so on. When the handler runs or the report is generated, the parameter is expanded and its value is used in the process.

Note: Parameters can have either a server-level scope which is known as a [server parameter](#), or parameters can have a system-wide (for example, enterprise) scope which is known as a system parameter. Their names and configuration are otherwise identical. Server parameters are available only on a particular IC server and system parameters are available on all IC servers on a network.

For example, server parameter values could include a valid directory path, a DLL file name, a database name, and so on. A system parameter might contain a corporate phone number or some other enterprise-wide value referenced by handlers on multiple servers.

Using Parameters

If you use multiple references to the content of a particular directory whose location may change, or if you use multiple references to some other value that may change, you should probably define a server or system parameter. Using a parameter in such cases allows you to change the value in one location (where the parameter is defined) instead of looking for and changing all locations of the value.

For example, suppose a few handlers and a configuration attribute need to reference the directory containing report files. Create a server parameter named `ReportsPath` whose value is, for example, `D:\EIC\Reports\`. Then, wherever you need to refer to the contents of that directory, specify the name `${ReportsPath}` instead of the physical directory name. Such references work in Interaction Administrator fields.

Note: Parameters containing directory paths (for example, `ServerReportLogOutputPath`) are not updated, nor are they recognized immediately, when you change a path. To update these values, you must restart CIC.



Packaged System Parameters

CIC includes a few pre-configured system parameters that are used in the default handlers and by a few modules on the CIC server.

The pre-configured system parameters include:

System Parameter	Purpose
ClientReportLogEICDataSourceName	Specifies the CIC data source name Interaction Reporting uses when running reports on CIC report logs. The CIC data source references an ODBC Data Source Name (DSN) that points to the SQL Server database containing the report log data. This scheme allows you to change the report log database type in the future without having to change the Interaction Reporting interface. Report logs are stored in SQL Server tables on the CIC server or on a separate server on the network.
Use Old TUI	Users that are assigned the Interaction Mobile Office role are speech-enabled TUI users, and users that are not assigned the Interaction Mobile Office role are DTMF-only TUI users. If you want DTMF-only users to use the old (original) DTMF TUI instead of the new DTMF TUI, you can change the value of the new Use Old TUI system parameter. The first time any DTMF-only user (a user not assigned the Interaction Mobile Office role) logs into the TUI, CIC creates the Use Old TUI parameter, and sets the value to False, meaning all DTMF-only users will use the new DTMF TUI. If you set the system parameter value to True, all DTMF-only users will use the old DTMF TUI with customizations available only with handler modifications. Note: The Use Old TUI system parameter applies only to users that have not been assigned Interaction Mobile Office role. Any users who are assigned the Interaction Mobile Office role will have the new speech-enabled TUI, regardless of the value of the system parameter. For more information on this parameter, see the <i>System Administration Guide</i>.

Sametime Server

Sametime: Status Mappings



Add a status message

To add a status message to the My Status list in Interaction Client

1. In the **System Configuration** container, double-click the **Status Messages** subcontainer.
2. Click **New**.
3. Type the name of the new status message entry, and then click **OK**.
The **Status Message Configuration** dialog box appears.
4. In the **Status Message** box, type the message text you want to appear in the CIC clients on the **My Status** list.
5. In the **Status Icon** box, type the full path and file name with an .ICO extension. This is the icon that will appear next to the status message.
6. In the **Status Group** list, select a name that most closely describes or categorizes the status message.
7. Depending on your configuration, additional fields may appear that allow you to map the CIC status messages to the status messages in other systems. Select the appropriate options from these fields.
8. Select all of the status attribute boxes that apply to the new status message. The status attribute boxes define the behavior of CIC clients when the status is activated. For more information about the status attributes, see *Configuration*.

Note: While you can select any combination of attributes, choose them carefully. Some combinations do not make sense.

9. Click **OK**.
The new status message immediately appears in the **Status Messages** container in Interaction Administrator and in **My Status** in the CIC clients.

To have CIC play the status message as a DND (not available) prompt when a CIC client has that status set, record a prompt with this message and then modify the CustomIVRSetUserStatus handler in Interaction Designer by adding the new prompt. See *Queue Announcements* for more information.

Related topics

[Overview of status messages](#)

[Multi-Language Support](#)

[Queue Announcements](#)



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The **Status Message Configuration** dialog box appears.
4. In the **Status Message** box, type the message text you want to appear in the CIC clients on the **My Status** list.
5. In the **Status Icon** box, type the full path and file name with an .ICO extension. This is the icon that will appear next to the status message.
6. In the **Status Group** list, select a name that most closely describes or categorizes the status message.
7. Depending on your configuration, additional fields may appear that allow you to map the CIC status messages to the status messages in other systems. Select the appropriate options from these fields.
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Note: While you can select any combination of attributes, choose them carefully. Some combinations do not make sense.

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Related topics

[Overview of status messages](#)

[Multi-Language Support](#)

[Queue Announcements](#)



Status message name

The status message name appears in the My Status list in the CIC clients. For more information about status messages, see [Status message configuration](#).



Status Message Configuration

Status Message

Type the message text to appear on the CIC clients' My Status list. For example, "On Vacation".

Localized Message

If the appropriately localized language is supported, the value of the localized status message is displayed.

Status Icon

Select a path, parameter, or type a full path and file name with an .ICO extension that contains an icon representing the status message. The directory that contains the default CIC status icon files is [\\CIC server\\Resources](#) where Server is the name of your CIC server computer. Status message icons should be 32 x 32 and 16 colors.

Status Group

Select a status group that most closely describes or categorizes the status message. The status data is grouped, by default, in one of the five initial status groups. If necessary, you can create a new status group by typing a name in the list box field. The Agent Activity Log (report log ID 80) logs all user status changes and provides data for user and supervisor reports based on these status changes.

To use a newly created status group in a report, you must:

- Type a new Status Group name in the list box field for a status message. CIC starts logging data for this status with the new group name as soon as the change is saved.
- Add references to the custom column in Agent Activity Log to any appropriate reports.

Status is Do Not Disturb

Select this check box if the status should indicate the user is unavailable or should not be interrupted. When a CIC client user selects a status with the Do Not Disturb attribute set, no calls are sent to that user's station until the status changes to a non-DND status. When CIC detects a DND (Do Not Disturb) status, callers are typically directed to the user's voicemail or given other options, according to the SystemIVR handler.

Clear the **Status is Do Not Disturb** check box if the status indicates the user is available to receive calls.

Note: If the user has selected a status in a CIC client with a Do Not Disturb attribute and has selected the Activate Out of Office Message check box, the caller will hear the user's Out of Office message. See [Queue Announcements](#) for more information.

Status has Date

Select this check box if the status message should indicate an ending date, typically used when the Status is Do Not Disturb attribute is set. When a CIC client user selects a status with a date attribute set (for example, Out of town), an "Ending date for current status" field appears beside the status message. If the user types an ending date, callers are told the person is unavailable until the specified date.

Clear the **Status has Date** check box if the status indicates the user is available to take calls.

Status has Time

Select this check box if the status message should indicate an ending time and the Status is Do Not Disturb attribute is selected. When an Interaction Client user selects a status with a time attribute set (for example, Out to lunch), an "Ending time for current status" field appears beside the status message. If the user types an ending time, callers are told the person is unavailable until the specified time.

Clear the **Status has Time** check box if the status indicates the user is available to take calls.

Status is Forward

Select this check box if the status message indicates the user is available at a different phone number. If a CIC client user sets a status with this attribute selected, CIC checks for a forwarding number and dials it to complete the incoming call. Users must provide a forwarding phone number for CIC to forward calls based on this status. Users can set forwarding numbers on the Incoming Calls tab of the Configuration page in Interaction Client, or remotely using Interaction Mail.

Status is Allow Follow Up

Select this check box if the status message indicates that an agent's status can change to "Follow Up" after an ACD call terminates. For example, in an ACD environment, the "Available" status message may have the Status allows ACD Calls attribute set. If the Status is Allow Follow Up attribute is also set, then the agent's status will automatically change to a "Follow Up" status after every ACD call terminates.

Note: If this check box is clear, terminating ACD calls does not automatically change the agent's status to Follow Up.

Status is User Selectable

Select this check box if the user can select the status message from the CIC client interface or the system tray icon.

If this check box is clear, the status is grayed out or not available for selection by users. It implies the status is set only by CIC using handlers.

Status allows ACD Calls

Select this check box if the status message indicates an agent is available to receive calls from both ACD queues and non-ACD queues. For information on how calls are placed to ACD queues, see *Workgroup Configuration*.

Status is Persistent

Select this check box if the status message can persist when the agent logs out of CIC (for example, exits a CIC client). For example, status messages like "On Vacation" should have this attribute.

Clear this check box if the status should not persist after a user logs out of CIC while the status is selected. If a user logs out of CIC with such a status, the user's status is automatically set to the last persistent status message used.

Note: In Interaction Administrator, you can change an agent's current status to another status only if the current status is persistent.

Status is ACW (After Call Work)

Select this check box if the status message indicates an agent is in a "Follow Up" mode after an ACD call. An agent's time is counted as logged in for ACD calls while the status with this attribute is selected. An ACW status is generally also a DND status, but that can be configured on this page.

Clear this check box if the status is not a follow-up status for ACD calls. You cannot configure a message as both ACW and Persistent. They are mutually exclusive. A warning dialog appears if you try.

Status and Personal prompts

The following table shows you when a caller would hear the user's personal prompts.

Personal Prompt	Is played when:
Name	A caller dials a user's extension, or dials by name, the caller hears the user's Name prompt.
No Answer	The caller hears the user's No Answer prompt when the user is Available but doesn't answer the phone.
Out of the Office	When the user has selected a status with a Do Not Disturb attribute and checked the Activate Out of Office Message box, the caller hears the Out of the Office message. Note If the Activate Out of the Office Message box is not selected, the CIC client directs the call to the user's voicemail or to other options.
Agent Greeting	A caller in an ACD queue assigned to the user hears the user's Agent Greeting prompt for up to 10 seconds before the user answers the call.

Related topics

[Overview of status messages](#)

[Add a status message](#)

[Workgroup Configuration](#)

[Multi-Language Support](#)

Multi-Language Support

Multi-language support refers to the translation of data that are displayed in the CIC clients, and in reports, in a language appropriate to the login locale you specified created during setup.

If the appropriately localized language is not supported, the values are displayed in the default language.

Note: Languages available depend on the language installed by the add-on language install. An error message is displayed if the selected language is not installed.

Parameters

The **Multi-Language Support** tab contains three parameters: **Attribute**, **Language**, and **Value**.

Parameter	Definition
Attribute	The name of the value to be translated. Translation is elected for only a few values that are displayed in reports or status messages
Language	The language used for the translation. The default language is that currently set by the administrator. A list of 100 + additional languages appears in the Languages dialog when you click Add Language. This value is Default if no language is specified for your login country in the Languages list.
Value	The value to display; the translated value.

Buttons

The Multi-Language Support tab also contains the buttons: **Edit Value**, **Add Language**, and **Remove Language**. This is the function they perform:

- **Edit Value**Click this button to translate the selected value. Type the translation and click **OK**. The translated value appears in the **Value** column.
- **Add Language**Click this button to see a list of countries and languages. Highlight a language/country pair and click **OK**. A new set of entries appears in the list of attributes, one for each attribute chosen for translation. The values are left blank until they are translated using **Edit Value**.

If you leave the values blank, no values will be saved for the new language.

- **Remove Language**Select any attribute for the language you wish to remove and click **Remove Language**. A confirmation dialog appears. Click **Yes** to proceed. Another dialog confirms that the attributes for the selected language have been marked for removal. Click **OK**. You return to the **Configuration** dialog. Click **OK** to remove the selected attributes.

For more information on the function of the scroll buttons and the **Confirm auto-save** check box, see [Interaction Administrator Interface](#).

Related topics

[Overview of status messages](#)

[Add a status message](#)

[Configuration](#)



Actions

Configuring actions is a way for two Windows programs to share data or send commands to each other. Actions can be thought of as a direct communications link between two application programs. In CIC, the CIC clients can function with other applications as a client and a server application.



Action Names

Use this page to enter the action name and select the type of action.

Name:

Enter a descriptive name for an [action](#) (for example, Start Call DB, Stop Call DB, and so on). If you use a Force and a non-Force version of the commands, it may be helpful to name the commands accordingly. This name appears as an Alerting Action, Disconnected Action, or a Transfer Action.

Type:

Select the type of action from the drop-down list. The options are '[DDE](#)', '[Custom Screen Pop](#)', and '[Web Browser Screen Pop](#)'.



Action Configuration

Each action must specify the required action protocol components in the following fields. Click [here](#) for an example procedure.

Executable

Type the name of the server application's executable file (for example, C:\Windows\MSOffice\Word.exe).

Application

Type the name of the server application, which is generally the name of the executable without the .EXE extension (for example, Word)

Topic

Type the name of the server application topic (also called the action item name) that specifies the exact group or category of data to use (for example, a bookmark, TOC, System, and so on).

Command List

Add one or more action commands that direct the server application to the desired point for the user or ACD agent. This action will not work unless you enter at least one command for this action. The order in which the commands appear in this list is significant. Commands are executed in order from the top to the bottom of the list.

To add a command, click the **Add** button and type the name of the command in the list. After you enter all of the commands for this action, use the **Up** and **Down** buttons to arrange the order of execution, starting at the top of the list.

Add

Click **Add** to enter each new command in the Command List box. Each command must be on its own line. Click **OK** to complete the entry.

Edit

Select a command in the list and click **Edit** to change the command. Click **OK** to save the edits.

Delete

Select one or more commands in the list and click **Delete** to remove one or more commands from the list.

Up

Select a command in the list and click **Up** to move the command higher in the order of execution.

Down

Select a command in the list and click **Down** to move the command lower in the order of execution.

Note: You must restart the CIC client for any changes to Actions to take effect.



Custom Screen Pop Configuration

Screen Pop configuration allows you to pop open a third party application screen to perform an action. This screen design provides information about the screen to the .NET plug-in.

Screen Pop Type

Enter a unique name for the screen pop type.

Input Values

This section displays the name and associated default value of the inputs. Click [Add...](#) to add a new input value for this screen pop action. Click [Edit...](#) to change an existing input, or click **Remove** to delete an input.



Web Browser Screen Pop

Web Browser Screen Pop configuration allows you to open your browser to a specific location or URL on a specific event. For example, on an incoming call, your browser can open to web page.

URL

Enter a URL to open in the browser. Use the http:// format. For example, use http://my.yahoo.com/. To pass a specific parameter to the URL, click [Insert a URL parameter into the URL string](#).

Popup Type

Select **Pop to a new browser (only supported in Internet Explorer and Firefox)** to open the URL in a new browser instance. Select **Pop to a new tab on an existing browser session** to open the URL in a new page or tab in a currently opened browser.

URL Parameters

This is a list of parameters that are being passed to the URL. Click [Edit...](#) to change an existing parameter.

Note: CIC encodes the URL parameters. Therefore, put special characters, such as "=", in the URL field and not in the values of the URL parameters.



Command Entries

Type an actual command associated with this action. An action can consist of one or more commands. Each command must be on its own line in the Command Entry field. Use the Add button to add each command on its own line. Since the top to bottom order of the commands in this list determines the order in which the commands are executed, use the Up and Down buttons to arrange the order in the list.

Request commands (that is, commands initiated from a client application to the CIC server) can be:

- Called by a specific function in the client application
- Called by a generic execute function in the client application

If a specific function is used in a command, type the function name followed by the requested CIC attributes. For example:

```
MyFunction($ (CallID) , $ (LineName) , $ (StationName) )
```

If a client application requests CIC attributes (that is, not using a unique function), you can type just the CIC attributes to return. For example:

```
$ (CallID) , $ (LineName) , $ (StationName)
```



Log Retrieval Assistant

Log Retrieval Assistant (LRA) is a feature that allows support organizations and certified partners to configure logging and retrieve logs from CIC servers at specific times.

Use the **Log Retrieval Assistant Configuration** dialog box to configure the following items:

- [Company](#)
- [Email](#)
- [Firewall](#)
- [FTP](#)



LRA Company Configuration

Use this page to configure your organization information.

Organization

This is the name of your company you entered in the Company Name field. This name identifies your organization in the master database and in email messages sent by LRA at your site.

LRA Monitored Mailbox

This field shows the display name of the email account on the customer site that LRA monitors to pick up requests. Log requests are mailed to this account for processing by LRA.

SMTP Address for LRA's Monitored Mailbox

This is the SMTP address for the monitored mailbox. For example, you would enter "i3recorder@dev2000.com".

Work Directory

This required field stores the fully qualified path to a working directory where log files are compressed (zipped) prior to FTP transfer. If for some reason the FTP process fails, log files will persist in this location until a subsequent FTP attempt is successful, or until files are manually deleted. The logs directory [drive]:\[server name]\IC\Logs (or \\IC\Logs) is used by default.

Off-Peak Begin and Off-Peak End

These fields indicate a block of time when the CIC server is not at peak utilization. Deferred log retrieval requests are executed during this period to minimize impact on the server.

Standard Slowdown and Off-Peak Slowdown

You can set "slowdown factors" that limit the amount of CPU and network bandwidth that LRA can consume. Throttling forces CPU-intensive processes such as snipping, zipping, FTP, etc. to sleep intermittently so that LRA does not degrade the overall performance of the CIC system.

LRA runs at normal speed when the slowdown factor is 1. It runs at half speed (and consumes half the resources) when the slowdown factor is 2. A factor of 4 means LRA is operating at one-quarter speed with a corresponding decrease in system resources used. This factor applies to requests processed during normal hours and must be between 1 and 100.

Different slowdown factors can be set for peak-time and non-peak times. For example, you might set the slowdown factor to 2 during business hours, and allow LRA to run at normal speed during non-peak hours.

Defer By Default

Check this option to defer all LRA requests until off-peak hours. In an emergency, support personnel can override this setting on a per-request basis, meaning that they can flag a request to be processed immediately.



LRA Email Configuration

Use this page to configure email settings for LRA.

Send Status Email To

Status messages are sent to recipients listed in this field. LRA sends status emails when jobs start and finish. Leave this field blank if you do not want to receive status emails.

Send Error Email To

In the event that an error occurs, LRA will send an error notification message to the recipients listed in this field. Leave this field blank if you do not want to receive error notification emails.



LRA Firewall Configuration

Use this page to configure firewall settings for LRA.

IP Address

If your CIC server is behind a firewall, you must specify additional information that allows outbound payloads and data to pass through the firewall. Contact your local network administrator to find out if your CIC server is behind a firewall. This person can help you complete Firewall type, FTP Passive Mode, Firewall address, FTP Port, Id, and Password fields. Firewall Address is the host name (or IP address) of the firewall.

Port

This number identifies the port used by FTP to pass data through firewalls. Contact your local network administrator to find out which port on the firewall is opened to FTP traffic.

Username

This field stores the User Id needed to pass data through the firewall. It is likely that you will need to contact your local network administrator to obtain this information.

Password

This field stores the password for the Username specified above.

Type

This field identifies the type of firewall used. The choices are None, Socks4 or Socks5. Socks4 is a protocol that relays TCP sessions at a firewall host to allow application users transparent access across the firewall.

Socks5 does the same thing, except that it also resolves issues that Socks4 does not fully address or omitted. Socks5 provides strong authentication, authentication method negotiation, address resolution proxy, and other features.

Sensitive information about your firewall, such as ID and password information, is never transmitted to a remote server or passed to a remote database. LRA uses firewall configuration information to transmit outbound data through the firewall. The firewall Id and password is stored locally in a configuration (.cfg) file in the server\LRA directory so that LRA can retrieve it. If this poses an unacceptable security risk, you should deny user access to the \server\LRA folder.



LRA FTP Configuration

Use this page to enable or disable FTP configuration settings for LRA.

Use Passive Mode

This check box determines whether FTP operations will be performed in passive or active FTP mode. Passive mode allows FTP operations to pass data through certain types of firewalls that would not otherwise allow the flow of data. Check with your local network administrator to find out if your firewall requires passive FTP. Passive FTP mode is the default.

Auto Send

This check box determines whether requested data is automatically FTP'd from the customer site to the requester's FTP site. When checked, the I3LRAU server process FTP's zip files as soon as it finishes staging them in the working directory. When this option is unchecked, zip files remain in the working directory until they are manually FTP'd to the requester by the customer. As a rule of thumb, you should leave this option checked unless you wish to inhibit all LRA-related file transfers for some reason.

When Autosend is unchecked, LRA extracts logs and zips them, but does not do anything else. Customers must use an Internet FTP utility (e.g. WSFTP or equivalent) to manually transfer zip files to the Product Information site.



Overview of Mail

You use the **Mail** container to define mail storage sources, such as voice mail stored on the server (file-based mail), Microsoft Exchange, IBM Notes, Groupwise, LDAP, and IMAP4/SMTP-compliant mail servers, such as SunOne (formerly iPlanet).

Some of the mail features that you can configure are prefixes, message thresholds and compression, directories, transports, and providers.

Note: If you configured your email providers when you ran IC Setup Assistant, then you can use the **Mail** container to change those settings. You cannot re-run IC Setup Assistant to make mail configuration changes.

Related topics

[Configure mail storage sources](#)



Configure a mail storage source

To configure a mail storage source

1. In the **System Configuration** container, click the **Mail** subcontainer.
2. In the view pane, double-click **Configuration**.
3. In the **Mail Configuration** dialog box, complete the tabs. See the links under *Related topics* for complete information.
4. Click **OK**.

Related topics

[Providers](#)

[Directories](#)

[Transports](#)

[Prefixes and Voicemail](#)

[Options](#)

[Monitored Mailboxes](#)

[Attendant Mailboxes](#)



Providers

Use this page to set the properties, enable, or disable available email providers.

Properties

Highlight the mail provider and click **Properties**. Depending on which provider you have selected, different settings are display. Click on the Providers listed below for more information:

- [Exchange](#)
- [Notes](#)
- [Interaction Message Store](#)
- [Novell GroupWise](#)
- [LDAP](#)
- [SMTP](#)
- [IMAP](#)
- [Gmail](#)

Enable Provider or Disable Provider

Highlight the mail provider then click **Enable Provider** or **Disable Provider** to turn on or off the provider. Again, depending on which provider you wish to enable, the system performs different functions.

If you are using Gmail, select SMTP or IMAP. For more information on using Gmail, see the *Gmail Integration Technical Reference* in the PureConnect Documentation Library.



Overview of Exchange

Exchange enables users to retrieve appointments from their Microsoft Outlook calendars via the telephone user interface (TUI).

Note: Exchange calendar access is a Interaction Mobile Office feature (available with the Interaction Mobile Office license), and is available for use only with Microsoft Exchange/Outlook.

Supported Exchange servers

Microsoft Exchange Web Services (EWS)-based integration is an officially supported CIC mail system. Microsoft Exchange Web Services is recommended as an alternative to the Microsoft Exchange MAPI-based integration. See [System Software Requirements](#) in the PureConnect Documentation Library for the latest requirements.

Requirements

- The Exchange server must be connected to the network.
- The CIC administrator permissions must be established.

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure an Exchange provider](#)

[Configure domain properties for an Exchange provider](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure an Exchange provider

To configure an Exchange provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select Exchange.
3. Click **Enable Provider**.
4. In the **Exchange Configuration** dialog box, in the **Host** box, type the URL of the Exchange server that runs the calendar service, in the "http://ServerName" format. If you plan to use SSL/TLS, use "https://ServerName" format.

Note: Point to the Exchange 2010 server acting in the Client Access role.

5. In the **User** box, type an administrative user account name (CIC administrator account) that has "Receive As" rights on the Exchange server. The field should contain the domain and username (domain\username).
6. In the **Password** box, type the password for the user ID.
7. In the **Confirm** box, re-type the password for the user ID.
8. Select **Enable Exchange Web Services**. Clear **Enable MAPI**. Exchange MAPI is no longer supported.
9. To specify an Exchange server in addition to the default Exchange server, click **Add** and continue with *Configure domain properties*.

Note: If you do not specify the domain to use to access mailboxes, CIC connects to the default Exchange server. That is, Exchange Web Services will try to use the CIC service account's mailbox for autodiscovery and impersonation over other mailboxes for message retrieval and queuing. If you want to use another Exchange server in addition to the default Exchange server to access mailboxes, you must specify the domain to use for the default Exchange server and the domain to use for the additional Exchange server.

10. Click **OK**.

Related topics

[Configure a Mail storage source](#)

[Configure domain properties for an Exchange provider](#)



Configure domain properties for an Exchange provider

To configure domain properties for an Exchange provider

1. In the **Service account email address** box, type the email address that is used to access mailboxes.
2. To use the CIC Administrator account credentials to access mailboxes, select the **Use IC Administrator account credentials** option. Otherwise, skip to step 7.
3. To use another account's credentials to access mailboxes, select the **Use the following credentials** option. Then complete steps 4, 5, and 6.
4. In the **User name** box, type an administrative user account name (CIC administrator account) that has impersonation rights on the Exchange server. For network credentials, type the domain and user name (domain\username). For Web credentials, type the account name @ domain (username@domain).
5. In the **Password** box, type the password for the account.
6. In the **Confirm password** box, re-type the password for the account.
7. To use OAuth to authenticate with Exchange, under **Use OAuth**, enter the certificate, certificate password, and the application ID that were generated during the application registration in the Microsoft Azure portal to request an access token that is passed during requests to Exchange.
8. To use the Exchange Autodiscover feature to identify the Exchange Web Services URL, select the **Autodiscover to get the Exchange Web Services URL** option.

Note: The Autodiscover process can be time-consuming. As an alternative, manually specify the Exchange Web Services URL, as described in step 8.
9. To manually specify the Exchange Web Services URL, select the **Use this Service URL** option. Then type the Service URL in the corresponding box.
10. If Exchange information is not stored in Active Directory, using SCP lookup during the autodiscover process to find service endpoints will result in unnecessary delays. To disable this the SCP lookup, deselect the **Enable SCP Lookup** check box.
11. In the **Seconds before timeout** box, type the number of seconds that CIC should attempt to contact the Exchange server.
12. Click **OK**.

Related topics

[Configure an Exchange provider](#)



Overview of Notes

Requirements

- IBM Domino server must be connected to the network.
- You must establish the CIC administrator mail profiles.
- IBM Notes client must be installed on the CIC server.

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure a Notes provider](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure a Notes provider

To configure a Notes provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select Notes.
3. Click **Enable Provider**.
4. In the **Notes Configuration** dialog box, in the **Password** box, type the CIC administrator's IBM Domino password. It should be the same password used to log into the Domino server when IBM Notes is started. (It is not the Windows domain or CIC password.)
5. In the **Confirm** box, re-type the password.

Note: If you used IC Setup Assistant to configure your Notes provider, the IC Setup Assistant verified that you typed the same password in both fields. However, it did not authenticate the password with the IBM Domino server. For more information, see the *Installation and Configuration Guide* in the PureConnect Documentation Library on the CIC server.

6. To filter voice mails and faxes with a database filter, select the **Use Database Search** option. This option provides a significant performance improvement when a user accesses a mailbox via the TUI. However, it is recommended that you also select the **Use Folder References** option. Together, these options limit the voice mails and faxes to the user's inbox (or other selected folder). If you select only the Use Database Search option, then all of voice mails and faxes for the entire mail database appear.
7. To apply a filter that includes a reference to the currently selected folder to the mail database, select the **Use Folder References** option.

Note: In order this feature to work, the IBM Domino administrator must enable folder references on the IBM Domino server(s) for the mail database of each CIC user.

If you select both the **Use Database Search** option and the **Use Folder References** option, but do not enable folder references, then no voice mails or faxes may be returned. After you select the **Use Folder References** option, the only voice mails and faxes returned are those remaining after folder references have been enabled. For more information, see the *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library on the CIC server.

Related topics

[Configure a Mail storage source](#)

[Notes requirements](#)



Overview of Interaction Message Store

Interaction Message Store is a messaging option that provides storing and tracking capabilities for voice mail and fax messages without connection to an email system.

Interaction Message Store stores voice mail and faxes as files on the CIC server (small implementations) or a network file server (large implementations). Users are associated with mailboxes in a file directory structure, and voice mails and faxes are routed to these mailboxes. CIC users can access voice mail messages from the CIC clients or the telephone user interface (TUI). From the CIC clients, a user can view a fax message and forward it to another fax number.

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure Interaction Message Store](#)

[Configure Interaction Message Store mailboxes](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure Interaction Message Store

To configure Interaction Message Store

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select Interaction Message Store.
3. Click **Enable Provider**.
The **Interaction Message Store** dialog box appears. CIC confirms the **Root Directory** location for message storage. The default root directory is \\[server name]\\IC\FBMC.
When the Interaction Message Store is not located on the CIC server, use one of the following to specify the Message Store Path:

- UNC Path Using a DNS resolved host

Example: \\fileserver\FBMC

- UNC Path Using an IP address for the host - **Note:** This method is preferred as it removes a potential point of failure (DNS resolution).

Example: \\192.168.2.27\FBMC

Note: Do not set the root directory to the root of the drive (for example C:\IMS). For more information, see the *Interaction Message Store Technical Reference* in the Technical Reference Documents section of the CIC Documentation Library on the CIC server.

4. To configure individual mailboxes, click **Mailboxes configuration**. For more information, see *Configure Interaction Message Store mailboxes*.
5. In the **Maximum Storage Space (bytes)** field, select the maximum amount of storage space, in bytes, to allocate to voice mail messages. Select **No Limit** if you do not want to limit the storage space for voice mail messages.
6. In the **Maximum Message Count** field, select the maximum number of messages to allocate for voice mail messages. Select **No Limit** if you do not want to limit the storage space or message count for voice mail messages.
7. Click **OK**.

Related topics

[Configure a Mail storage source](#)

[Configure Interaction Message Store mailboxes](#)



Configure Interaction Message Store mailboxes

To configure Interaction Message Store mailboxes

1. To view only unused IMS mailboxes, select the **Show Only Unused Mailboxes** checkbox.
2. To refresh the list of IMS mailboxes, click **Refresh List**.
3. To select all mailboxes, click **Select All**.
4. To delete selected mailboxes, click **Delete Mailbox**.

Note: If a mailbox is still being used by another user, the mailbox will not be deleted.

Valid mailbox names and address use only alpha-numerical characters. Other characters are not recognized by CIC.

Related topics

[Configure Interaction Message Store](#)

[Overview to Interaction Message Store](#)



Overview of GroupWise

Prerequisites

- GroupWise must be connected to the network.
- Create the necessary user accounts in GroupWise.
- Configure the GroupWise POA(s) for SOAP. For each GroupWise Post Office Agent (POA) that will be accessed by CIC, enable SOAP, select the SOAP port, and (optionally) enable SSL for SOAP. If you want to use SSL for SOAP, you must obtain a certificate for this POA and assign it to the POA in GroupWise. The certificate for the POA must be trusted by the CIC server.
- In the GroupWise snap-in in ConsoleOne, generate the Trusted Application Key file. Copy the Trusted Application key file to the CIC server.

Supported versions

For IC 4.0 SU 4 and later, use GroupWise 8.0 or GroupWise 2012.

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure a GroupWise provider](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure a GroupWise provider

To configure a GroupWise provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select GroupWise.
3. Click **Enable Provider**.
4. In the **GroupWise Configuration** dialog box, in the Server box, type the name or IP address of the GroupWise server hosting the POA containing the most CIC users. While the new GroupWise Connector can connect to any POA with SOAP enabled, it is most efficient to connect to the POA that will be used the most. If the GroupWise Connector attempts to access a mailbox on a different post office than the one handled by the POA selected here, it will be redirected to the correct POA.
5. In the **Port** field, select the port value. The port value should be the same as the SOAP port for this POA, which by default is 7191. If the POA uses a different port value, select it here.
6. In the **Username** box, type the account that will be used to access the system address book and to send voice mails left by external callers. Typically, it is an account created just for use by CIC.
7. Click **Browse** to select the **GWTApp.xml** file from the appropriate CIC server directory.

The Groupwise Connector requires that you install CIC as a Trusted Application in GroupWise. This enables CIC to automatically provide GroupWise users access to their mailboxes through email or TUI.

If you have not yet generated the Trusted Application Key file in ConsoleOne and copied the resulting GWTApp.xml file to a directory on the CIC Server, do so now. For instructions, see the *Novell GroupWise Support for CIC Technical Reference* in the PureConnect Documentation Library.

8. To authenticate the server and encrypt subsequent communications, select **Use Secure Connections (SSL/TLS)**.

If you are using TLS/TLS for SOAP and have obtained the certificate, assigned it to the POA, and enabled SSL for SOAP in the POA, select this option to enable SSL for SOAP in CIC.

Prerequisites: The server certificate must be available and trusted, before **Use Secure Connections (TLS)** takes effect. For more information see *CIC Security Features* in the PureConnect Documentation Library.

Note: GroupWise uses certificates stored in the Windows certificate store. The GroupWise server has to be using a certificate that has been issued by a CA (Certification Authority, like Verisign) and trusted in the Windows certificate store. If the certificate is self-signed (not issued by a CA), manually add the server's certificate to your Windows certificate store. To view certificates, run the certificate manager (certmgr.msc) from the Start menu.

Examples:

- The GroupWise administrator has a certificate issued from Verisign. Since Verisign shows up in certmgr.msc under Trusted Root Certification Authorities, just select **Use Secure Connections (TLS)**, and TLS is enabled.
- The GroupWise administrator has a certificate issued from a certificate shop that does not have a Windows certificate store listing. Manually add the certificate to your Trusted Root Certification Authorities, then select **Use Secure Connections (TLS)**.
- The GroupWise administrator created a self-signed certificate (not issued by a CA). Manually add the certificate to your Trusted Root Certification Authorities, then select **Use Secure Connections (TLS)**.

9. To enable GroupWise server tracing for troubleshooting purposes, select the **Enable GroupWise Server-side Tracing** checkbox.

Note: For more information, see *Novell GroupWise Support for CIC* in the **Technical Reference Documents** section of the PureConnect Documentation Library.

10. Click **OK**.

Related topics

[Configure a Mail storage source](#)

[GroupWise requirements](#)



Overview of LDAP, SMTP, and IMAP

LDAP is a protocol for retrieving personal information (given name, surname, address, company, and so on), SMTP is a protocol for delivering email messages, and IMAP is a protocol for retrieving email messages. LDAP, SMTP, and IMAP can all be enabled and configured independently. You can configure what is needed either when you run Setup Assistant as part of a new installation, or later in Interaction Administrator.

Examples:

- If you want delivery of voice mail messages, faxes, and CIC notification email messages (for example, “caller left a voice mail less than 2 seconds” or “you haven’t recorded your name prompt”) to email addresses (even external SMTP email addresses, such as a Hotmail account), and you want to associate users with address book entries, **then you only need to configure SMTP and LDAP.**
- If you want delivery of voice mail messages, faxes, and CIC notification email messages, but you do not want retrieval of messages (through the TUI), **then you only need to configure SMTP, not IMAP.**
- If you want retrieval of email messages through the TUI (again, even from an external IMAP account), but you do not want delivery of voice mails, faxes, and CIC notification-email messages to email addresses, **then you only need to configure IMAP, not SMTP.**

If you want users to access messages on CIC client workstations via email software in addition to or instead of the telephone, you must fulfill the following requirements:

- Establish a mail account on the IMAP server for each CIC user.
- Install IMAP-capable email software (such as Outlook Express, Windows Mail, Thunderbird, etc.) on CIC client workstations. (It is not necessary to install the email software on the CIC server.)

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure an LDAP provider](#)

[Configure an LDAP directory](#)

[Configure an SMTP provider](#)

[Configure an SMTP transport](#)

[Configure an IMAP provider](#)

[Configure an IMAP server](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure an LDAP directory

To configure an LDAP directory

1. In the **Directory Name** box, type the LDAP directory name. The name entered here is arbitrary and used solely within CIC to identify this configured directory.
2. In the **Server** box, type the FQDN or IP address of the LDAP server.
3. In the **Port** box, modify the default port number if necessary. The default port number used on most LDAP servers is 389 (non-SSL) or 636 (SSL). The port number on your LDAP server may vary.
4. In the **Search Base** box, type the distinguished name of the base entry (starting point) for searches in the directory, if required. This entry can be for a country, an organization, or other type of grouping. Whether a search base is required depends on the directory server in use.
5. If the LDAP server requires authentication so that the CIC server can connect to it, select the **Requires Authentication** check box. Then enter the user name and password information.
6. Click **OK**.

Related topics

[Configure an LDAP provider](#)



Configure an LDAP provider

To configure an LDAP provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select LDAP.
3. Click **Enable Provider**.
4. In the **LDAP Configuration** dialog box, click **Add** to add LDAP directories. You can select an existing directory in the worksheet to edit or delete it. For more information, see *Configure an LDAP directory*.
5. In the **Timeout (seconds)** field, enter how long the CIC server should allow a search to proceed through the directory before it times out. The default timeout is 10 seconds.
6. In the **Search Limit** field, select the maximum number of matching entries the LDAP server should return when the directory is searched. The default is 1000 entries.
7. To authenticate the server and encrypt subsequent communications, select the **Use secure connections (SSL/TLS)** option. If you are using SSL/TLS for LDAP, select this option to enable SSL/TLS for CIC.

Prerequisites: The server certificate must be available and trusted, before **Use Secure Connections (TLS)** takes effect. For more information see *PureConnect Security Features* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Note: LDAP uses certificates stored in the Windows certificate store. The LDAP server has to be using a certificate that has been issued by a CA (Certification Authority, like Verisign) and trusted in the Windows certificate store. If the certificate is self-signed (not issued by a CA), manually add the server's certificate to your Windows certificate store. To view certificates or manually import certificates in the Windows certificate store, run the certificate manager (certmgr.msc) from the Start menu.

Examples:

- The LDAP administrator has a certificate issued from Verisign. Since Verisign shows up in certmgr.msc under Trusted Root Certification Authorities, just select **Use Secure Connections (TLS)**, and TLS is enabled.
- The LDAP administrator has a certificate issued from a certificate shop that does not have a Windows certificate store listing. Manually add the certificate to your Trusted Root Certification Authorities, then select **Use Secure Connections (TLS)**.
- The LDAP administrator created a self-signed certificate (not issued by a CA). Manually add the certificate to your Trusted Root Certification Authorities, then select **Use Secure Connections (TLS)**.

8. Click **OK**.

Related topics

[Configure a Mail storage source](#)

[Overview to LDAP SMTP and IMAP](#)

[Configure an LDAP directory](#)



Overview of LDAP, SMTP, and IMAP

LDAP is a protocol for retrieving personal information (given name, surname, address, company, and so on), SMTP is a protocol for delivering email messages, and IMAP is a protocol for retrieving email messages. LDAP, SMTP, and IMAP can all be enabled and configured independently. You can configure what is needed either when you run Setup Assistant as part of a new installation, or later in Interaction Administrator.

Examples:

- If you want delivery of voice mail messages, faxes, and CIC notification email messages (for example, “caller left a voice mail less than 2 seconds” or “you haven’t recorded your name prompt”) to email addresses (even external SMTP email addresses, such as a Hotmail account), and you want to associate users with address book entries, **then you only need to configure SMTP and LDAP.**
- If you want delivery of voice mail messages, faxes, and CIC notification email messages, but you do not want retrieval of messages (through the TUI), **then you only need to configure SMTP, not IMAP.**
- If you want retrieval of email messages through the TUI (again, even from an external IMAP account), but you do not want delivery of voice mails, faxes, and CIC notification-email messages to email addresses, **then you only need to configure IMAP, not SMTP.**

If you want users to access messages on CIC client workstations via email software in addition to or instead of the telephone, you must fulfill the following requirements:

- Establish a mail account on the IMAP server for each CIC user.
- Install IMAP-capable email software (such as Outlook Express, Windows Mail, Thunderbird, etc.) on CIC client workstations. (It is not necessary to install the email software on the CIC server.)

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure an LDAP provider](#)

[Configure an LDAP directory](#)

[Configure an SMTP provider](#)

[Configure an SMTP transport](#)

[Configure an IMAP provider](#)

[Configure an IMAP server](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure an SMTP provider

To configure an SMTP provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select SMTP.
3. Click **Enable Provider**.
4. In the **SMTP Configuration** dialog box, click **Add** to add SMTP transports. You can select an existing transport in the worksheet to edit or delete it. For more information, see *Configure an SMTP transport*.
5. In the **Default Sender** box, type the email address of the default sender. The default sender is used for messages in which a sender has not been explicitly specified.
6. In the **Timeout** (seconds) list, specify how long the CIC server should wait for a response from the SMTP server before abandoning an attempt to send an email message. The default timeout is 10 seconds.
7. To authenticate the server and encrypt subsequent communications, select the **Use secure connections (SSL/TLS)** option. If you are using SSL/TLS for SMTP, check this setting to enable SSL/TLS.

Prerequisites: For TLS to be fully enabled, additional configuration is required. For more information see *PureConnect Security Features* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

8. Click **OK**.

Related topics

[Configure a Mail storage source](#)

[Add an SMTP transport](#)



Configure an SMTP transport

To add an SMTP transport

1. In the **Transport Name** box, type the SMTP transport name. The name you type is used solely within CIC to identify this configured transport.
2. In the **Server** box, type the FQDN or IP address of the SMTP server.
3. In the **Port** box, modify the default port number if necessary. The default TCP/IP port number used on most SMTP servers is 25 (non-SSL) or 465 (SSL). The port number on your SMTP server may vary.
4. In the **Domain Serviced** box, if you want to limit the domain serviced by this transport, type the recipients' domain name. For example, if you type **example.com**, then this transport will attempt to deliver emails intended for john@example.com, but not for john@inin.com. In most cases, you leave this field blank.

Note: This field is not related to the **Server** field. It simply acts as a filter for the recipient (To:) addresses that this SMTP transport serves.

5. If the SMTP server requires authentication so that the CIC server can connect to it, select the **Requires Authentication** check box. Then specify the user name and password information.
6. Click **OK**.

Related topics

[Configure an SMTP provider](#)



Overview of LDAP, SMTP, and IMAP

LDAP is a protocol for retrieving personal information (given name, surname, address, company, and so on), SMTP is a protocol for delivering email messages, and IMAP is a protocol for retrieving email messages. LDAP, SMTP, and IMAP can all be enabled and configured independently. You can configure what is needed either when you run Setup Assistant as part of a new installation, or later in Interaction Administrator.

Examples:

- If you want delivery of voice mail messages, faxes, and CIC notification email messages (for example, “caller left a voice mail less than 2 seconds” or “you haven’t recorded your name prompt”) to email addresses (even external SMTP email addresses, such as a Hotmail account), and you want to associate users with address book entries, **then you only need to configure SMTP and LDAP.**
- If you want delivery of voice mail messages, faxes, and CIC notification email messages, but you do not want retrieval of messages (through the TUI), **then you only need to configure SMTP, not IMAP.**
- If you want retrieval of email messages through the TUI (again, even from an external IMAP account), but you do not want delivery of voice mails, faxes, and CIC notification-email messages to email addresses, **then you only need to configure IMAP, not SMTP.**

If you want users to access messages on CIC client workstations via email software in addition to or instead of the telephone, you must fulfill the following requirements:

- Establish a mail account on the IMAP server for each CIC user.
- Install IMAP-capable email software (such as Outlook Express, Windows Mail, Thunderbird, etc.) on CIC client workstations. (It is not necessary to install the email software on the CIC server.)

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure an LDAP provider](#)

[Configure an LDAP directory](#)

[Configure an SMTP provider](#)

[Configure an SMTP transport](#)

[Configure an IMAP provider](#)

[Configure an IMAP server](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure an IMAP provider

Note: An IC mail account on the IMAP server is not required to configure an IMAP provider.

To configure an IMAP provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select IMAP.
3. Click **Enable Provider**.
4. In the **IMAP Configuration** dialog box, click **Add** to add IMAP servers. You can select an existing server in the worksheet to edit or delete it. For more information, see *Configure an IMAP server*.
5. In the **Timeout (seconds)** field, enter how long the IC server should wait for a response from the IMAP server before abandoning the attempt to receive an email message. The default timeout is 10 seconds.
6. To authenticate the server and encrypt subsequent communications, select the **Use secure connections (SSL/TLS)** option. If you are using SSL/TLS for IMAP, select this option to enable SSL/TLS for CIC.

Prerequisites: For TLS to be fully enabled, additional configuration is required. For more information see *CIC Security Features* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Related topics

[Configure a Mail storage source](#)

[Configure an IMAP server](#)



Configure an IMAP server

To configure an IMAP server

1. In the **Name** box, type the IMAP server name. The name entered here is arbitrary and used solely within CIC to identify this configured server.
2. In the **Server** box, type the FQDN or IP address of the IMAP server.
3. In the **Port** box, modify the default port number if necessary. The default TCP/IP port number used on most IMAP servers is 143 (non-SSL) or 993 (SSL). The port number on your IMAP server may vary.
4. Select the **Supports PROXYAUTH** check box if the IMAP server supports a non-standard extension to the IMAP4rev1 protocol called PROXYAUTH. The PROXYAUTH extension enables CIC to access users' mailboxes without having to know their IMAP passwords. To use this extension, CIC must still be able to determine the users' IMAP logon names (either via an IMAP user account file or via the LDAP server), and CIC must also be granted the necessary privileges on the IMAP server. Then enter the user name and password. The values will depend on the configuration of the IMAP server.
5. Click **OK**.

Related topics

[Configure an IMAP provider](#)



Overview of Gmail

CIC provides an integration with Gmail through Google Apps for Work. To configure the Gmail integration, complete the following steps.

Configure your Gmail account

Configure your Gmail account with Google. In the Google Developer Console, create a client ID and obtain the following:

- Certificate file
- Password
- JSON file

For more information about how to configure your Gmail account with Google, see *Gmail Integration Technical Reference* in the PureConnect Documentation Library on the CIC server.

Install the Gmail integration

To install the Gmail integration, re-run the IC Setup Assistant. On the first page of the IC Setup Assistant, select the **Identity** option and then click **Proceed**.

Configure the Gmail provider and domain

In Interaction Administrator, in the **Mail** container, configure the Gmail provider and the Gmail domain(s).

Configure users to use the mailbox provider

After you configure the provider in the **Mail** container, you must also configure the CIC users to use the mailbox. For more information, see the help for *Configure a User* and the help for *Configuration* page in the **User Configuration** dialog box.

Related topics

[Configure a Gmail provider](#)

[Configure a Gmail domain](#)

[Configure a user](#)

[Configuration page in the User Configuration dialog box](#)



Configure a Gmail provider

To configure a Gmail provider

1. In the **Mail Configuration** dialog box, click the **Providers** tab. For information on how to access the **Mail Configuration** dialog box, see *Configure a Mail storage source*.
2. In the list of providers, select Gmail.
3. Click **Enable Provider**.
4. To view, add, edit, or delete domains for the provider, click **Properties**. For more information, see *Configure a Gmail domain*.

Related topics

[Configure a Mail storage source](#)

[Overview of Gmail](#)

[Configure a Gmail domain](#)



Configure a Gmail domain

In the **Gmail Configuration** dialog box, you can add, edit, and delete a domain. You can also designate a default domain to deliver messages when neither the domain of the sender nor the domain of any of the recipients is one of the configured domains. For example, if a user requests that an email alert be delivered to a personal email address for a voice mail or fax.

To configure a Gmail domain, you need to obtain several items from the Google Developer Console in your Gmail account. For a list of these items, see *Overview of the Gmail integration configuration*. For more information about how to obtain these items, see *Gmail Integration Technical Reference* in the PureConnect Documentation Library.

To configure a Gmail domain

1. To add a domain, click **Add**. Then complete the procedure, *Configure the properties of a Gmail domain*.
2. To edit a domain, select it in the list and then click **Edit**. Then complete the procedure, *Configure the properties of a Gmail domain*.
3. To delete a domain, select it in the list and then click **Delete**.
4. To select a default domain, select it in the list and then click **Set default**.
5. To specify the timeout for IMAP and SMTP requests, in the **Timeout** box, specify the duration in seconds after which the system will stop trying to send a message to the domain.

Note: the timeout value is the same for all domains.

Related topics

[Configure the properties of a Gmail domain](#)



Directories

Use this page to select the default directory which is used for email name searches, and set the order of priority for searches. Use the **Up** and **Down** buttons to change the order of the directories.

Directory Search Order

The directory contains the lookup information for contacts (first name, last name, and so on).

This list shows the default order of email provider directories that CIC will use to search for a user's mailbox.

- Interaction Message Store will not be listed because it does not maintain any contact information.
- If you defined more than one LDAP directory, each will be listed.

Related topics

[Configure a Mail storage source](#)



Transports

Use this page to select the transport which is used for delivering email, and set the order of priority for delivery. Use the **Up** and **Down** buttons to change the order of the transports.

The SMTP transport handles the delivery of mail.

This list shows the default order of email provider transport vehicles that CIC will use to search for a user's mailbox. (If you defined more than one SMTP transport, each will be listed.)

Note: If you have multiple transports and one of them is of the type SMTP for an SMTP mail provider (e.g., Sun ONE), you must move the SMTP provider to the top of the Transports list. Configure each transport to handle messages only in its domain, so messages to each domain are passed to the appropriate transport.

Related topics

[Configure a Mail storage source](#)



Prefixes and Voice Mail

Use this page to configure email subject prefixes and voice mail options.

Email Subject Prefixes

Use this section to set the email subject prefixes for faxes and voice mails.

Fax

Enter the prefix that you want to appear for faxes in the subject line. By default, the system uses **IC Fax:**.

Voice

Enter the prefix that you want to appear for voice mails in the subject line. By default, the system uses **IC Voicemail:**.

Reply

Enter the prefix that you want to appear for replies to interactions in the subject line. By default, the system uses **RE:**.

Note: This option is used only with emails that are created by handler email tools. Emails that users create in the CIC clients do not use this option. For more information on using handlers, see the Interaction Designer Help in the PureConnect Documentation Library.

Forward

Enter the prefix that you want to appear for forwarded interactions in the subject line. By default, the system uses **FW:**.

Note: This option is used only with emails that are created by handler email tools. Emails that users create in the CIC clients do not use this option. For more information on using handlers, see the Interaction Designer Help in the PureConnect Documentation Library.

Voicemail Options

Use this section to set voice mail message options.

Normalize Voice Mails

This setting determines whether or not the audio is normalized. **Normal Voice Mails** attempts to correct any problems in which the person leaving the voicemail could not be heard). Select the check box to turn on this option.

Long Message Compression

This setting is the compression format which is used to compress the audio for "long" messages. Select the format from the pull-down list. The available settings are:

- DSP Group TrueSpeech
- GSM 6.10
- G711 Mu-Law PCM

Related topics

[Configure a Mail storage source](#)



ACD Options

Use this page to configure message delivery behavior.

Message Count Limit

Use the up and down arrow keys to set the count that is used as the maximum number of messages that will be loaded when a user accesses a folder in the telephone user interface (TUI). The default value for this setting is 100.

Polling Intervals

Directory Synchronization (Minutes)

Use this field to set the interval for importing user information from the directory service (what is displayed in the Mailbox Info page in Interaction Administrator and in the Company Directory view in the CIC clients). The default value is 15 minutes.

New Messages (Seconds)

This setting specifies the time in seconds that each message store provider polls for new messages. The default is 120 seconds.

Failed Message Delivery

Use this section to configure failed message delivery behavior.

Delivery Retry Limit

This setting specifies how many times the system will retry the delivery of a message. By default the CIC email server will attempt to transmit a message a maximum of ten times before deciding that there is something wrong with the message itself and moving it to the MAIL\NORETRY directory. The email server will never attempt the second transmission on a message whose first transmission failed until after some other message has been successfully transmitted. Therefore, it is somewhat unlikely, but not impossible, that a transient condition such as network problems would cause an otherwise perfectly valid message transmission to fail twice.

Use the up and down arrow keys to change the limit.

Retry Interval (minutes)

This setting specifies (in minutes) the time to wait between message delivery retries. Use the up and down arrow keys to change the number of minutes. The default value for this setting is 5 minutes.

Failed Message Expiration (days)

This setting specifies the time (in days) to save a message that could not be delivered. If this time expires, the undeliverable message is deleted. Use the up and down arrow keys to change the number of days. The default value for this setting is 7 days.

Threaded Email

CIC can track email messages based on text contained in the messages. This text is the conversation identifier, which CIC uses to associate these email conversations or "Threaded Email". Select the **Add conversation Identifier on Emails** check box to enable the text identifier for this feature.

Related topics

[Configure a Mail storage source](#)



Monitored Mailboxes

A monitored mailbox is a mailbox that is configured so that the Incoming Mail initiator is started whenever a new message arrives in the "Inbox" folder for that mailbox.

Mailbox Number

This is the number that corresponds to the Object ID that will be passed to the Incoming Mail initiator (the Notification Event will always be New Mail). Valid mailbox numbers are 1 through 32767.

Mailbox Address

Click **Select** to set the **Mailbox Address**. The Mailbox Selection dialog box is used to associate a User, Workgroup, Email Queue, Monitored Mailbox, etcetera, with a mailbox. The four options available are:

- **No mailbox** - (this doesn't apply to an Email Queue or a Monitored Mailbox). Assign a **Display Name**. No mailbox will be associated with this entry.
- **Interaction Message Store** - (formerly Voicemail Only or FBMC). Assign a **Display Name** and click **Assign Address**. The generated address will be i.e., "FBMC: JohnDoe".
- **IMAP** - No directory entry is associated with the object, but a mailbox exists on an IMAP server, so you must provide the IMAP server, port, username, and password to access the mailbox.
- **Search for a mailbox in the following directories** - Because the directory entry has associated attributes, the directories can be searched to find the associated entry. Once found, the attributes are populated using the corresponding attributes from that entry.

Notes: If attributes are stored in an LDAP directory, but a mailbox exists on an IMAP server, and the attributes (server, port, username, and password) for the mailbox are not stored as attributes of the LDAP directory, then you will need to provide the attributes separately.

Mailbox names and addresses must contain only valid (alpha-numerical) characters.

Related topics

[Configure a Mail storage source](#)



Attendant Mailboxes

Use this page to configure the mailboxes that Interaction Attendant can use.

Mailbox Address

Click **Select** to set the **Mailbox Address**. The Mailbox Selection dialog box is used to associate a User, Workgroup, Email Queue, Monitored Mailbox, etcetera, with a mailbox. The four options available are:

- **No mailbox** - (this doesn't apply to an Email Queue or a Monitored Mailbox). Assign a **Display Name**. No mailbox will be associated with this entry.
- **Interaction Message Store** - (formerly Voicemail Only or FBMC). Assign a **Display Name** and click **Assign Address**. The generated address will be i.e., "FBMC: JohnDoe".
- **IMAP** - No directory entry is associated with the object, but a mailbox exists on an IMAP server, so you must provide the IMAP server, port, username, and password to access the mailbox.
- **Search for a mailbox in the following directories** - Because the directory entry has associated attributes, the directories can be searched to find the associated entry. Once found, the attributes are populated using the corresponding attributes from that entry.

Notes: If attributes are stored in an LDAP directory, but a mailbox exists on an IMAP server, and the attributes (server, port, username, and password) for the mailbox are not stored as attributes of the LDAP directory, then you will need to provide the attributes separately.

Mailbox names and addresses must contain only valid (alpha-numerical) characters.

The "email" right must be assigned in the Access Control tab of User Configuration.

Allow to Receive Encrypted Email

Select this option to support the use of the **S/MIME** type in email. Selecting this check box enables support of email encryption, but other configuration, such as installing certificates, is necessary. For more information see *PureConnect Security Features Technical Reference* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Related topics

[Configure a Mail storage source](#)

[Adding an ACD Email Routing Mailbox](#)

[Email Certificates Configuration](#)



Mailboxes Selection

During CIC installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a user or workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Note: If your mail server uses SMTP, you cannot configure mailboxes to receive ACD-routed emails.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox
- Interaction Message Store
- IMAP and/or SMTP
- **Search for a mailbox based on the following available directories:**

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store, LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes, included Directory Entry, Message Delivery, and message Retrieval information.

No mailbox

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed in **Display Name**, however there is no mailbox address associated with this entry. Do not use commas in a display name. A comma could cause a conflict with [unified messaging diversion headers](#).

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a display name, then click **Assign Address** to generate the Interaction Message Store address for that display name.

Note: Special characters cannot be used in the name.

IMAP and/or SMTP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox

You may search for a mailbox if you are adding or editing a monitored mailbox, adding or editing user configuration, adding or editing workgroup configuration, or adding or editing ACD routing workgroup configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the email address, type the email address.

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

- **Testing Directory Entry:** Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.
- **Testing Message Delivery:** Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.
- **Testing Message Retrieval:** Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)



Overview of single sign-on

Use the **Single Sign-On** container to enable streamlined access to CIC applications. When single sign-on is enabled, a user can log in once and then access multiple CIC applications without being prompted to log in again.

Note: To simplify the configuration of a SAML-based single sign-on Assertion for your Interaction Center Server, you can use the Single Sign-on Configuration Utility plug-in. To activate this plug-in, you must enable the **EnableSSOConfiguration** server parameter. For more information, see **EnableSSOConfiguration** in [Optional General Server Parameters](#).

For more information about single-sign on and the Single Sign-on Configuration Utility plug-in, see the *Identity Providers Technical Reference* in the PureConnect Documentation Library.

Enable single sign-on

By default, single sign-on is enabled for CIC. However, in order for the feature to work, you must configure at least one identity provider or service provider, and you must configure the secure token server.

Note: To disable single sign-on, change the setting of the **Allow Single Sign-On authentication** check box in the **Login Authentication Configuration** dialog box, which is found in the **System Configuration** container.

About identity providers and service providers

An identity provider authenticates a login request from a user and provides the user with an authentication response. The user then presents this authentication response to a service provider, who validates that the authentication response came from a trusted identity provider.

You configure the identity providers in the **Identity Providers** subcontainer.

About the secure token server

The secure token server can be used as either the identity provider or the service provider, or both. If a user's login is authenticated, the secure token server issues a token, which Interaction Center uses to grant that user access to specific CIC applications.

The token includes standard attributes that are used by the CIC applications to determine which application-specific privileges that user has. For example, the token includes attributes which indicate the role(s) that the user has in CIC. You can specify additional attributes to include in the token.

There is one secure token server on each CIC server. Be sure to verify the configuration of the secure token server on each CIC server at your company.

Note: You must configure the secure token server before you configure the identity providers.

Related topics

[Login Authentication Configuration dialog box](#)

[Configure a secure token server](#)

[Configure a connection for a secure token server](#)

[Configure an identify provider](#)



Configure the secure token server

The **Configuration** page of the **Secure Token Server Configuration** dialog box displays the default configuration values for the secure token server. In most cases, you do not need to change the default values that appear here. However, if the secure token server is known by a different hostname on a remote machine that needs to access it, configure that hostname in the **Machine Name** box.

Note: You must configure the secure token server before you configure the identity providers.

To configure the secure token server

1. In the **Single Sign-on** container, click **Configuration**.
The **Secure Token Server Configuration** dialog box appears. The **Configuration** tab is automatically displayed.
2. In the **Private Key Path** box, type the file path to the location of the private key.
3. In the **Certification Path** box, type file path to the location of the certificate.
4. In the **Port** box, select the port. The default port is 8043.

Note: If you specify a different port, select one that is allowed by your firewall and that does not conflict with any other applications. For information on other ports used by PureConnect products, see the *CIC Port Maps and Data Flow Diagrams Technical Reference*, which is available in the PureConnect Documentation Library.

5. In the **Machine Name** box, type a logical name for this server. The machine name allows other machines to locate this specific server by its IP address or FQDN.

Note: Only one alternative name is allowed per server. The alternate name for the server may be either its IP address or its FQDN, but not both.

6. By default, all tokens issued by this secure token server expire in 14 days. To change this, in the **Token Expiration** group, do one of the following:
 - If the token never expires, select the **Never** option button.
 - If the token expires, select the **After** option button and then specify the expiration time in the corresponding boxes.
1. Click **OK**.

Related topics

[Configure a connection for a secure token server](#)

[Configure an identity provider](#)



Configure the secure token server

The **Configuration** page of the **Secure Token Server Configuration** dialog box displays the default configuration values for the secure token server. In most cases, you do not need to change the default values that appear here. However, if the secure token server is known by a different hostname on a remote machine that needs to access it, configure that hostname in the **Machine Name** box.

Note: You must configure the secure token server before you configure the identity providers.

To configure the secure token server

1. In the **Single Sign-on** container, click **Configuration**.
The **Secure Token Server Configuration** dialog box appears. The **Configuration** tab is automatically displayed.
2. In the **Private Key Path** box, type the file path to the location of the private key.
3. In the **Certification Path** box, type file path to the location of the certificate.
4. In the **Port** box, select the port. The default port is 8043.

Note: If you specify a different port, select one that is allowed by your firewall and that does not conflict with any other applications. For information on other ports used by PureConnect products, see the *CIC Port Maps and Data Flow Diagrams Technical Reference*, which is available in the PureConnect Documentation Library.

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Note: Only one alternative name is allowed per server. The alternate name for the server may be either its IP address or its FQDN, but not both.

6. By default, all tokens issued by this secure token server expire in 14 days. To change this, in the **Token Expiration** group, do one of the following:
 - If the token never expires, select the **Never** option button.
 - If the token expires, select the **After** option button and then specify the expiration time in the corresponding boxes.

1. Click **OK**.

Related topics

[Configure a connection for a secure token server](#)

[Configure an identity provider](#)



Configure a connection for a secure token server

Use the **Connections** page of the **Secure Token Server Configuration** to configure connections to the secure token server.

To prevent a "denial-of-service" attack on the CIC server, CIC allows a server to make up to 5 simultaneous connections to the secure token server. If you know of a server that needs more than this number of simultaneous connections, then create a connection for it.

To configure a connection

On the **Connections** page, do any of the following:

- To add a connection, click **Add**.
The **New Connection** dialog box appears.
 - To edit a connection, select it in the list and then click **Edit**.
The **Edit Connection** dialog box appears.
 - To delete a connection, select it in the list and then click **Delete**.
A confirmation message appears. Click **OK**.
2. Do one of the following:
- Click **OK** to close the dialog box.
 - Click **Apply** to save your changes and continue with the configuration process.

Related topics

[New Connection dialog box](#)

[Edit Connection dialog box](#)

[Configure a secure token server](#)



Configure an identity provider

Use the **Configuration** tab of the **Identity Provider Configuration dialog** box to configure identity providers. For more information about identity providers, see the *Identity Providers Technical Reference* in the PureConnect Documentation Library.

To configure an identity provider

1. In the **Single Sign-on** container, click the **Identity Providers** sub-container.
2. In the container, right-click to display the pop-up menu and then click **New**.
The **Identity Provider Configuration** dialog box appears. The **Configuration** tab automatically appears.
3. In the **Name** box, type a meaningful name for the identity provider.
4. In the **Connection** group, do one of the following:
 - If you configured the identity provider to use single sign-on for a release prior to CIC 2016 R1, select the **Connect to Secure Token Server** option.
 - If you are configuring a new identity provider, select the **Connect to Session Manager** option. This option allows IceLib clients to connect to the local session manager (CIC or OSSM, if it exists). This is the preferred option for new identity providers.
5. In the **UI display** group, do one of the following:
 - To prompt the user for his or her user name and password, select **Allow user to specify username and password**.
 - To prompt the user for his or her Windows credentials, select **Logged in Windows username must be used**.
 - To have CIC automatically use a browser-based authentication site to validate user credentials, select **Use webbrowser for authentication**.
6. In the **Authentication Types** list, select the appropriate authentication type for your identity provider:
 - Select **SAML 2 Enhanced Client or Proxy** for any application that can complete the authentication request, but that is not a web-based application. For example, the CIC clients.
 - Select **SAML 2 Web Browser Post** for the web page of an application that can complete the authentication request.
 - Select **SAML 2 Web Browser Redirect** for a web page that redirects the authentication request to a web page where the authentication can be completed.
7. To import an XML file containing your authentication details, click **Import** and then click **Browse** to select the file. After you import the file, continue with the next step.

Note: The file must contain valid SAML 2 Metdata.

8. Do one of the following:
 - If this is a new configuration, click **Enable**.
 - If this is an existing configuration that you are updating, click **Configure**.
9. Continue with *Configure an endpoint*.

Related topics

[Configure a secure token server](#)

[Configure an endpoint](#)

[Configure SAML attributes](#)

[Configure validation certificates](#)

[Configure claims](#)



Configure an identity provider

Use the **Configuration** tab of the **Identity Provider Configuration dialog** box to configure identity providers. For more information about identity providers, see the *Identity Providers Technical Reference* in the PureConnect Documentation Library.

To configure an identity provider

1. In the **Single Sign-on** container, click the **Identity Providers** sub-container.
 2. In the container, right-click to display the pop-up menu and then click **New**.
The **Identity Provider Configuration** dialog box appears. The **Configuration** tab automatically appears.
 3. In the **Name** box, type a meaningful name for the identity provider.
 4. In the **Connection** group, do one of the following:
 - If you configured the identity provider to use single sign-on for a release prior to CIC 2016 R1, select the **Connect to Secure Token Server** option.
 - If you are configuring a new identity provider, select the **Connect to Session Manager** option. This option allows IceLib clients to connect to the local session manager (CIC or OSSM, if it exists). This is the preferred option for new identity providers.
 5. In the **UI display** group, do one of the following:
 - To prompt the user for his or her user name and password, select **Allow user to specify username and password**.
 - To prompt the user for his or her Windows credentials, select **Logged in Windows username must be used**.
 - To have CIC automatically use a browser-based authentication site to validate user credentials, select **Use webbrowser for authentication**.
 6. In the **Authentication Types** list, select the appropriate authentication type for your identity provider:
 - Select **SAML 2 Enhanced Client or Proxy** for any application that can complete the authentication request, but that is not a web-based application. For example, the CIC clients.
 - Select **SAML 2 Web Browser Post** for the web page of an application that can complete the authentication request.
 - Select **SAML 2 Web Browser Redirect** for a web page that redirects the authentication request to a web page where the authentication can be completed.
 7. To import an XML file containing your authentication details, click **Import** and then click **Browse** to select the file. After you import the file, continue with the next step.
- Note:** The file must contain valid SAML 2 Metdata.
8. Do one of the following:
 - If this is a new configuration, click **Enable**.
 - If this is an existing configuration that you are updating, click **Configure**.
 9. Continue with *Configure an endpoint*.

Related topics

[Configure a secure token server](#)

[Configure an endpoint](#)

[Configure SAML attributes](#)

[Configure validation certificates](#)

[Configure claims](#)



Configure an endpoint

Use the **Endpoint** box to specify the URI of your identity provider. The endpoint is the place where the process of obtaining your credentials begins.

Notes:

The **Endpoint** box appears only after you configure and enable one of the available authentication types on the **Configuration** tab. For information on how to do this, see *Configure an identity provider*.

The endpoint must support SAML 2.0.

To configure an endpoint

1. In the **Endpoint** box, type the URL of the identity provider that is used to authenticate the user's credentials.
2. Do one of the following:
 - To save the configuration and close the dialog box, click **OK**.

Note: You cannot close the dialog box unless you fully configure the identity provider details. These include at least one claim and one validation certificate (unless identity provider does not sign its responses). CIC displays messages if you need to complete your identity provider configuration before closing the dialog box.

- To save the configuration and continue with the configuration process, click **Apply**.
3. Continue with *Configure SAML attributes*.

Related topics

[Configure an identity provider](#)

[Configure SAML attributes](#)

[Configure validation certificates](#)

[Configure claims](#)



Configure SAML attributes

Use the **SAML Attributes** page to configure optional data values to return in the secure token certificate.

Note: The predefined secure token certificate contains all of the data values that are necessary to ensure security. Configuring additional SAML attributes is optional.

For complete information on configuring SAML attributes, contact PureConnect Customer Care.

To configure a SAML attribute

1. On the **SAML Attributes** page, do any of the following:
 - To add a SAML attribute, click **Add**.
The **New Attribute** dialog box appears.
 - To edit a SAML attribute, select it in the list and then click **Edit**.
The **Edit Attribute** dialog box appears.
 - To delete a SAML attribute, select it in the list and then click **Delete**.
A confirmation message appears. Click **OK**.
2. Do one of the following:
 - Click **OK** to close the dialog box.
 - Click **Apply** to save your changes and continue with the configuration process.
3. Continue with *Configure validation certificates*.

Related topics

[New Attribute dialog box](#)

[Edit Attribute dialog box](#)

[Configure an identify provider](#)

[Configure an endpoint](#)

[Configure validation certificates](#)

[Configure claims](#)



Configure validation certificates

Use the **Validation Certificates** page to configure the files that your secure token server uses to verify the SAML responses from the identity provider.

To configure a validation certificate

1. On the **Validation Certificates** page, do any of the following:
 - To add a validation certificate, click **Add**.
The **New Validation Certificate** dialog box appears.
 - To edit a validation certificate, select it in the list and then click **Edit**.
The **Edit Validation Certificate** dialog box appears.
 - To delete a validation certificate, select it in the list and then click **Delete**.
A confirmation message appears. Click **OK**.
2. Do one of the following:
 - Click **OK** to close the dialog box.
 - Click **Apply** to save your changes and continue with the configuration process.
3. Continue with *Configure claims*.

Related topics

[New Validation Certificate dialog box](#)

[Edit Validation Certificate dialog box](#)

[Configure an endpoint](#)

[Configure SAML attributes](#)

[Configure claims](#)



Configure claims

Use the **Claims** page to configure the assertions that are included in the SAML responses. A claim maps each SAML assertion to a user's CIC attribute. If the value of the SAML assertion matches the value of a particular user's CIC attribute, then the authentication is considered to be made for that CIC user. For example, if the SAML assertion "NT Account" has a value of "John.Doe," and it is mapped in a claim to the CIC attribute "Windows Domain Account," then the authentication is applied for the CIC user, "John.Doe."

Tip: Look in the **Users** container for the attributes that are defined for CIC users.

Every identity provider must provide at least one claim (a SAML assertion) that is mapped to a CIC attribute.

To configure a claim

1. On the **Claims** page, do any of the following:
 - To add a claim, click **Add**.
The **New Claim** dialog box appears.
 - To edit a claim, select it in the list and then click **Edit**.
The **Edit Claim** dialog box appears.
 - To delete a claim, select it in the list and then click **Delete**.
A confirmation message appears. Click **OK**.
2. Do one of the following:
 - Click **OK** to close the dialog box.
 - Click **Apply** to save your changes and continue with the configuration process.

Related topics

[New Claim dialog box](#)

[Edit Claim dialog box](#)

[Configure an identify provider](#)

[Configure an endpoint](#)

[Configure SAML attributes](#)

[Configure validation certificates](#)

Logon Authentication Configuration

Use this page to configure authentication methods for CIC client applications. This feature allows for additional security mandated by some highly sensitive environments and applications.

Note: You cannot delete the <Default> user agreement.

To Configure the Logon Authentication

1. Select the check box for each authentication method that you want to enable. You must select at least one of the following methods:
 - **Allow IC authentication:** Select this option to use specific CIC user names and passwords when a user logs in to CIC client applications.
 - **Allow defaulting to the current Windows user credentials:** Select this option to use Windows credentials when logging in to CIC client applications. To use this type of authentication, a CIC Administrator must [link Windows user names and CIC Client user names](#).
 - **Allow manual entry of Windows authentication credentials:** Select this option to require a user to manually enter his or her domains, user names, and passwords to authenticate every time they log in to a client application. This option does not allow credentials to be passed in from CIC or Windows. The credentials of the currently logged in user cannot be used.
 - **Allow Single Sign-On authentication:** Select this option to enable streamlined access to CIC client applications. For more information, see [Single Sign-On](#).
2. Do you want a user's credentials to automatically be populated in the **Logon** dialog box after the user logs on the first time?
 - If yes, select the **Allow cached credentials** check box.
 - If no, skip to the next step.
3. When a user logs on to a client application, do you want to display a splash screen with a user agreement? If yes, select the **Display language-specific user agreement after logon** check box. In the **Languages** box, select **<Default>** to select the CIC system language or click **Add** to select other languages. In the **Agreement** box, type the text of the agreement.

If the User Agreement option is configured to display the user agreement after logon, the information from the user agreement appears after a user logs on, but before the application starts. The user must accept the agreement before they start the application.
4. Click **OK**.

Related Topics

[Connection Security](#)

[Certificate Management](#)

About Genesys Cloud for PureConnect

Genesys Cloud for PureConnect Integration enriches your CIC users' experience by leveraging the power and data of CIC and PureCloud collaborative features. Genesys Cloud connects via a standard SCIM-based API, offering modern and efficient user synchronization between both premise and cloud versions of PureConnect to Genesys Cloud. This integration enables PureConnect to consume services such as WebRTC, Co-Browse, and Salesforce Object Routing from Genesys Cloud. User information is automatically and continuously synced into a paired PureCloud organization.

For more information about the integration, see the *Genesys Cloud for PureConnect Administrator's Guide* in the PureConnect Documentation Library.

Prerequisites

PureCloud Organization

Your CIC server can integrate with only one PureCloud organization. Your PureCloud organization is created for you and you will receive a welcome email to activate your admin account in PureCloud. The PureCloud organization is provisioned with the following:

- The base functionality required for your Genesys Cloud integration.
- An admin console you can use to configure your Genesys Cloud integration.

- A user with the PureCloud Genesys Cloud for PureConnect requirements Admin role, which includes default admin permissions, single sign-on, and any integration-specific permissions.

Make a note of these items in your PureCloud organization:

- Administrator email address
- Administrator password
- Organization short name - generated from the organization long name, in compliance with DNS restrictions (a-z, 0-9, A-Z)
- Region

Note: If you are unsure of the organization short name, log on to PureCloud and navigate to **Admin>Account Settings>Organization Settings**. Both the organization long name and short name are listed here.

PureCloudAdmin user

Before you configure Genesys Cloud for PureConnect, create the **PureCloudAdmin** user in Interaction Administrator. The name of the administrator for the PureCloud organization used in this integration can be the same or different.

Note:

Previous versions of this integration created this user automatically. You can continue to use the PureCloudAdmin user if it already exists.

Important!

The CIC system employs the PureCloudAdmin user for the connection to PureCloud and the associated Genesys Cloud Bridge connectors. The Genesys Cloud Bridge connectors use the PureCloudAdmin user credentials to establish the connection to the CIC server. Do not modify or delete the PureCloudAdmin user.

PureConnect users

In order to sync properly, Genesys Cloud for PureConnect requires that PureConnect user accounts have the following information configured in the Users container:

- Personal Info tab>Internet tab>**Business Email**

The following is recommended:

- Personal Info tab>General tab>**Display Name**

Note: This defaults to the user name, if not supplied. If you later add a display name, the integration updates the PureCloud information.

After the integration is configured, you can change the values of these attributes in the PureCloud Admin web interface.

Notes:

* Ideally you configure all of your users in Interaction Administrator before you configure the integration. However, if you configure more users after you configure the integration, Genesys Cloud for PureConnect automatically syncs them for you.

* If you do not configure the required Email address for PureConnect users, the users are not synced in the PureCloud organization when you configure Genesys Cloud for PureConnect.

Genesys Cloud for PureConnect syncs the following CIC user information in the PureCloud organization:

- Display name (Defaults to user name if not supplied)
User Configuration>Personal Info tab>General tab> Display Name
- Email address (required)
User Configuration>Personal Info tab>Internet tab>Business Email
- Business phone and Business 2 phone (Work Phone and Work Phone 2 in PureCloud)
- Mobile phone (Cell Phone in PureCloud)
- Home phone
- Fax number (Other Phone in PureCloud)

We recommend that you configure the required (and optional) CIC user information before you configure Genesys Cloud for PureConnect. However, if you configure more users after you configure Genesys Cloud for PureConnect, the integration automatically syncs them for you.

User passwords and permissions

If an agent uses Genesys Cloud for PureConnect integration from a CIC client, no passwords are involved.

However, if the user chooses to log in manually to PureCloud without using the integration, the user must create a PureCloud password. CIC user passwords are separate from PureCloud user passwords. They may be different passwords. If a user chooses a different password in PureCloud, it does not affect their ability to log in to any CIC client.

CIC does not recognize PureCloud roles and permissions. PureCloud does not recognize CIC user security settings.

Genesys Cloud Bridge considerations

The Genesys Cloud for PureConnect configuration installs Genesys Cloud Bridge on the CIC server. Genesys Cloud Bridge manages the data transfer between the CIC server and PureCloud.

Note: As of CIC 2019 R4, the Genesys Cloud for PureConnect integration no longer supports off-server bridges.

Switchover

When you configure Genesys Cloud for PureConnect on the active server in a Switchover pair, Genesys Cloud Bridge is automatically installed on both the active and backup servers. The bridge operates independently from the active and backup CIC servers.

If the backup server is down at the time that you configure Genesys Cloud for PureConnect, a bridge will be installed on the backup server the next time that CIC is started.

If the primary CIC server stops, but the computer itself is healthy and running, then the bridge on that computer automatically talks to the new Primary CIC server after the switchover completes.

Related topics

[Genesys Cloud Configuration](#)

[Genesys Cloud Web Page](#)

[Genesys Cloud Integration Health](#)

[Genesys Cloud Dial Groups](#)

Genesys Cloud Configuration

System Configuration > Genesys Cloud > Genesys Cloud Configuration

For complete instructions on how to configure Genesys Cloud for PureConnect Integration, see the *Genesys Cloud for PureConnect Administrator's Guide* in the PureConnect Documentation Library.

Enable Genesys Cloud Integration

Select this check box to configure Genesys Cloud for PureConnect Integration. In the confirmation message, click **Yes** to continue with the configuration.

Note:

Click **No** in the confirmation message if you want to configure more user information in Interaction Administrator before configuring Genesys Cloud for PureConnect, or if you do not want to configure Genesys Cloud for PureConnect now.

Administrator Email

Type the email address for the PureCloud organization administrator.

Status

This displays the status of the connection between the CIC server and your PureCloud organization.

Organization Short Name

Type the short name of the existing PureCloud organization. If you are unsure of the organization short name, log in to PureCloud and navigate to **Admin>Account Settings>Organization Settings**.

Region

Select your closest region to your organization's location. The default is North America. User access to PureCloud is routed to the location of the Amazon data center for the region you select, whether users are in the office, at home, or traveling.

After you make your selection, click **Apply** in the **Genesys Cloud Configuration** tab. A message appears. To confirm that you want to provision the organization, click **Yes**.

A message confirms that you successfully configured Genesys Cloud for PureConnect integration. Click **OK**.

Test Genesys Cloud Connection

After you **initially** provision to PureCloud, click the **Test Genesys Cloud Connection** button to verify that single sign-on works and that the Internet connection to your PureCloud organization is healthy.

If this test fails, try to log on to your PureCloud organization manually using <https://login.mypurecloud.com>. (The URL will be different for regions outside North America East.) If you can log in successfully, then the root cause of the problem may lie with the CIC to PureCloud SSO trust. If that is the case, you can re-provision the integration by disabling and then re-enabling the integration. For more information, see the *Genesys Cloud for PureConnect Administrator's Guide* in the PureConnect Documentation Library.

Enable CIC web-based phone

When you complete the CIC web-based phone configuration wizard the **Enable CIC web-based phone** check box automatically enables. After that if you want to disable CIC web-based phone for all users, clear the **Enable CIC web-based phone** check box.

Configure CIC web-based phone

Select the **Configure CIC web-based phone** button to start a wizard application that configures the necessary options and associations between PureCloud and CIC. If the **Enable CIC web-based phone** check box is cleared, successfully completing the wizard selects the check box. If you previously configured CIC web-based phone, a subsequent running of the wizard reconfigures the feature with the options you select.

Important!

The CIC web-based phone configuration wizard is for use with PureCloud organizations that are associated with only one CIC server.

Remove Configuration

This button deletes Genesys Cloud Bridge on the primary CIC server.

To remove a configuration, first clear the **Enable Genesys Cloud Integration** checkbox. Then click **Remove Configuration**.

After you click this button, a message appears. Click **Yes** to confirm that you want to continue and remove the configuration.

Notes:

While a configuration is being removed, you can change no values and perform no other functions on the Genesys Cloud Configuration page.

Related topics

[About Genesys Cloud for PureConnect](#)

[Genesys Cloud Web Page](#)

[Genesys Cloud Integration Status](#)

[Genesys Cloud Dial Groups](#)

Genesys Cloud Web Page

To go directly to your PureCloud organization, click **Launch Web Page** .

- You automatically log on as the PureCloud Admin user.
- If you configured PureConnect user accounts with Business Email before you completed the Genesys Cloud Configuration, PureConnect user account data was sync'd. Those users appear in the PureCloud Directory.

Other configuration in PureCloud Admin

You may want to:

- Further configure your organization by adding to the PureCloud Admin profile, setting up groups, and so on. See Admin>Overview.
- Modify organization settings in Admin>Account Settings.
- Review Genesys Cloud settings and check for updates in Admin>Integrations. For more information, see the [Genesys Cloud for PureConnect Administrator's Guide](#).

For more information about PureCloud administration, see the PureCloud Resource Center at help.mypurecloud.com.

Related topics

[About Genesys Cloud for PureConnect](#)

[Genesys Cloud Configuration](#)

[Genesys Cloud Integration Health](#)

[Genesys Cloud Dial Groups](#)

Genesys Cloud Integration Health

This page lets you monitor bridge status and activity. It shows at a glance all of your eligible PureConnect users synced to your PureCloud organization.

Refresh

Click **Refresh** to verify that you are viewing the most up-to-date information. The information shown can change as users are sync'd. Genesys Cloud Bridge status may also change.

Details

Select a row in the Integration Health view and click **Details**. This displays error codes and other information to help you or your Customer Care representative troubleshoot problems.

Note: The Copy button copies the Health Details to the Clipboard so you can forward this information to your Customer Care representative.

You can also check for these event IDs in the Windows Log Viewer or an SNMP trap on the IC Server. See the [Genesys Cloud for PureConnect Administrator's Guide](#) for details..

Related topics

[Genesys Cloud Configuration](#)

[Genesys Cloud Web Page](#)

[Genesys Cloud Dial Groups](#)

Genesys Cloud Browser Client Applications

System Configuration > Genesys Cloud > Genesys Cloud Configuration > Genesys Cloud Browser Client Applications

Enter the URIs of Interaction Connect or other browser-based client applications that use Genesys Cloud integrations. This configuration enables these applications to use the PureCloud API from a web browser.

Required: This is required for the WebRTC and Co-browse integrations in Interaction Connect. This is not needed for CIC for Salesforce's WebRTC integration since PureConnect for Salesforce itself is hosted from PureCloud origins; those origins are automatically allowed when the organization is provisioned by PureConnect.

To add a URI, type it in the text box and click **Add**. The list box contains the URI's you have configured.

For more information about PureCloud administration, see the PureCloud Resource Center at help.mypurecloud.com.

Related topics

[About Genesys Cloud for PureConnect](#)

[Genesys Cloud Configuration](#)

[Genesys Cloud Web Page](#)

[Genesys Cloud Integration Health](#)

Genesys Cloud Dial Groups

System Configuration > Genesys Cloud > Genesys Cloud Configuration > Genesys Cloud Dial Groups

The **Genesys Cloud Dial Groups** tab enables you configure which dial groups are used for the Web-based phone integration. Connection calls are placed to the PureCloud Edges using these dial groups.

Available Dial Groups

This list box displays the existing dial groups of this CIC server. You can select a dial group in this box.

Add button

Select one of the **Available Dial Groups** and click this button to move that dial group to the **Currently Selected Dial Groups** box.

Currently Selected Dial Groups

This list box displays the existing dial groups selected to communicate with PureCloud Edges for the Web-based phone integration. For information about PureCloud administration, see the PureCloud Resource Center at help.mypurecloud.com.

Related topics

[About Genesys Cloud for Interaction Connect](#)

[Genesys Cloud Configuration](#)

[Genesys Cloud Web Page](#)

[Genesys Cloud Integration Health](#)

CIC web-based phone configuration wizard prerequisites

To use CIC web-based phone configuration wizard, ensure that the following prerequisites are met:

- Your organization purchased a PureCloud Communicate license.
- You did the procedures for integrating PureConnect with PureCloud as documented in the *Genesys Cloud for PureConnect Administrator's Guide*.
- You installed and configured one or more PureCloud Edge devices.

Failure to do these prerequisites will result in an error message when you click the **Configure CIC web-based phone** button.

CIC Location to PureCloud Site Associations (1 of 6)

This panel of the CIC web-based phone wizard associates CIC *Locations* with PureCloud *Sites*. This mapping enables the users assigned to the CIC Location to use CIC web-based phone.

Note:

The PureCloud Site must include a PureCloud Edge device to facilitate WebRTC communications.

CIC Location

Select an existing CIC Location for which you want to use CIC web-based phone.

Important!

Users in CIC Locations that are not mapped to PureCloud Sites cannot use CIC web-based phone.

PureCloud Site

Select an existing PureCloud Site to associate with the selected CIC Location.

Create Mapping

Select this button to associate the selected CIC Location with the selected PureCloud Site.

Important!

The CIC web-based phone feature requires that you map at least one CIC Location to a PureCloud Site. If you do not map at least one CIC Location to one PureCloud Site, you cannot use CIC web-based phone.

Map list

This list box displays existing mappings between CIC Locations and PureCloud Sites.

Remove Mapping

Select this button to remove the currently-selected, existing mapping in the Map list.

When you have finished mapping CIC Locations to PureCloud Sites, select the **Next** button to continue to the next panel of the CIC web-based phone wizard.

Tip:

To remove all existing mappings between CIC Locations and PureCloud Sites, ensure that no entries are specified in the **CIC Location** and **PureCloud Site** list boxes. Then, select the **Next** button.

The wizard, then, displays the **PureCloud Edge Tie Lines** dialog box, bypassing the **Select PureCloud Edge Devices** and **Select Local NIC** dialog boxes. The **PureCloud Edge Tie Lines** dialog box displays the lines that the wizard will remove from the configuration. Select the **Next** button to continue with the removal of those items.

Related topics

[Select PureCloud Edge Devices](#)

[Select Local NIC](#)

[PureCloud Edge Tie Lines](#)

[PureCloud Edge Line Groups](#)

[Commit Changes](#)

Select PureCloud Edge Devices (2 of 6)

This panel of the CIC web-based phone wizard enables you to select which PureCloud Edge devices in the mapped PureCloud Sites will facilitate CIC web-based phone communications. You must select at least one PureCloud Edge devices in a PureCloud Site that is mapped to a CIC Location to be able to use CIC web-based phone.

Important!

When this dialog box is displayed for the first time, Windows displays a security message box stating that the wizard is requesting access to the network. Select the appropriate network location displayed in the message box and grant the wizard access to the network so that it can make the appropriate PureCloud configuration.

Note:

To successfully complete this step of the CIC web-based phone wizard, PureCloud Edge devices must be configured and assigned to your PureCloud Sites. The PureCloud Edge devices do not have to be operational or online at the time when this wizard is run.

Available Detected Edges

This list box displays the detected PureCloud Edge devices in all PureCloud Sites that are associated with CIC Locations. PureCloud Edge devices in this list box cannot service CIC web-based phone communications.

Add button

Select this button to move the selected PureCloud Edge device in the **Available Detected Edges** list box to the **Currently Selected Edges** list box.

Remove button

Select this button to remove the selected PureCloud Edge device in the **Currently Selected Edges** list box.

Currently Selected Edges

This list box displays the PureCloud Edge devices in PureCloud Sites that can service CIC web-based phone communications. The **Connectivity** column provides a visual indicator if the associated PureCloud Edge device is currently active and responsive.

Manual Edge/Proxy

This group of controls enables you to define a PureCloud Edge device that is not displayed in one of the list boxes. In some environments, a PureCloud Edge device may be located behind a SIP proxy or SBC. This wizard cannot detect SIP proxy or SBC devices through which you want to connect to a PureCloud Edge device.

Additionally, you could use this set of controls to enter a PureCloud Edge device that has not yet been installed and configured.

Address

Enter the IP address of SIP proxy, SBC, or unavailable PureCloud Edge device.

Note:

The IP address must be consistent. Do not attempt to manually enter an address if the device receives its IP address through DHCP and a range of IP addresses is available for assignment.

Name

Enter a name to use for the tie line of the IP address that you entered.

Site

Enter the PureCloud Site that includes this PureCloud Edge device.

Add button

Select this button to add the manually-defined PureCloud Edge device to the **Currently Selected Edges** list box.

When you have finished selecting which PureCloud Edge devices will service CIC web-based phone communications, select the **Next** button.

Note:

If you do not select a PureCloud Edge device in this dialog box, the wizard will bypass the [Select Local NIC](#) dialog box and display the [PureCloud Edge Tie Lines](#) dialog box.

Related topics

[CIC Location to PureCloud Site Associations](#)

[Select Local NIC](#)

[PureCloud Edge Tie Lines](#)

[PureCloud Edge Line Groups](#)

[Commit Changes](#)

Select Local NIC (3 of 6)

This panel of the CIC web-based phone wizard enables you to select the NIC on the CIC server that will communicate with any PureCloud Edge device that is configured to service CIC web-based phone communications.

In the **Local NIC for New Edges** list box, select a listed network interface of the CIC server through which it will send SIP messages to PureCloud Edge devices.

After selecting the appropriate NIC of the CIC server, select **Next**.

Related topics

[CIC Location to PureCloud Site Associations](#)

[Select PureCloud Edge Devices](#)

[PureCloud Edge Tie Lines](#)

[PureCloud Edge Line Groups](#)

[Commit Changes](#)

PureCloud Edge Tie Lines (4 of 6)

This panel of the CIC web-based phone wizard provides a summary of the tie lines that will be created by the CIC web-based phone configuration wizard.

Tie lines are logical circuits that link PureCloud Edge devices to CIC servers without requiring the dialing of a telephone number in E.164 format.

Tie Lines To Be Generated

This box lists the tie lines that the wizard will create on the specified PureCloud Edge devices.

Existing Tie Lines

This box lists any existing tie lines that will not be updated or removed by the wizard.

Tie Lines To Be Removed

This box lists the existing tie lines that the wizard will remove.

If, after reviewing the tie lines changes, you are satisfied with the tie line configuration, select the **Next** button.

Related topics

[CIC Location to PureCloud Site Associations](#)

[Select PureCloud Edge Devices](#)

[Select Local NIC](#)

[PureCloud Edge Line Groups](#)

[Commit Changes](#)

PureCloud Edge Line Groups (5 of 6)

This panel of the CIC web-based phone configuration wizard displays the changes that the wizard will make for PureCloud line groups.

There will be only one line group for each PureCloud site.

Tie Line Groups To Be Generated

This box lists the PureCloud line groups and the dial plan entry pattern for telephone extensions that this configuration wizard will create in PureCloud.

Existing Tie Line Groups

This box lists the existing PureCloud line groups that will not be modified by this wizard.

Tie Line Groups To Be Removed

This box lists the existing PureCloud line groups that the wizard will remove.

Note:

Removing a PureCloud line group also removes any corresponding extension pools.

After you review and approve the line group changes that this wizard will make, select the **Next** button.

Related topics

[CIC Location to PureCloud Site Associations](#)

[Select PureCloud Edge Devices](#)

[Select Local NIC](#)

[PureCloud Edge Tie Lines](#)

[Commit Changes](#)

Commit Changes (6 of 6)

The final panel of the CIC web-based phone wizard enables you to confirm the configuration changes and cause the wizard to implement them. You can use the **Back** button to return to the previous panels and make changes.

If you are satisfied with the configuration for the CIC web-based phone feature, select the **Commit Changes** button to initiate the changes. Upon successful completion, the wizard changes the **Status** message to **Changes Complete!**

Select the **Finish** button to close the CIC web-based phone configuration wizard.

Related topics

[CIC Location to PureCloud Site Associations](#)

[Select PureCloud Edge Devices](#)

[Select Local NIC](#)

[PureCloud Edge Tie Lines](#)

[PureCloud Edge Line Groups](#)

Data Extractor Settings

Configuring Data Extractor

1. In the System Configuration container, select the **Data Extractor** subcontainer.
2. In the workspace under Data Extractor, click **Configuration** to open the Data Extractor Configuration dialog box.

3. Select a data source for your extractions from the drop-down list.
Note: Only ODBC read-only data sources are available.
4. To select the output path for the extracted data, click **Browse**. The **Browse For Folder** dialog box appears.
5. In the **Browse For Folder** dialog box, navigate to the output directory for the extracted data, and click **OK**. The output path is displayed in the **Select output path** field.

Note You can also type or paste the output path directly into the **Select output path** field. The output path can be a UNC path or a local path on the CIC server. Be sure that the CIC processes have write access to the output path location.

6. In the **Extraction Job Parameters** box, set the extraction window start and end times. This window specifies the time frame for when extraction jobs can begin. If you want a 24 hour start-time window, set the start and end times to the same value.

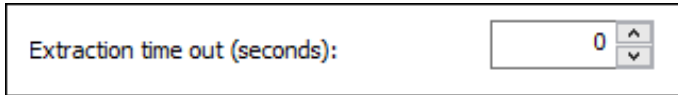
Extraction Job Parameters

Allowed extractions start time:	1:00:00 AM	▲▼
Allowed extractions end time:	1:00:00 AM	▲▼

Notes

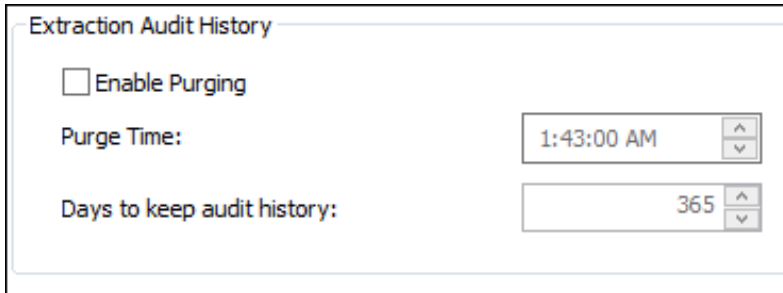
- A queued job does not start if the current time is past the end time and before the start time. The job remains in the queue until the next start time. Also, if a job has started before the end time and is still running when the end time is reached, the job continues running until it is completed or canceled.
- The Data Extractor service running on the CIC server might impact the CPU usage on the CIC server. The SQL utilities that are used by the Data Extractor service will run at below normal priority to minimize the impact to other CIC services. Setting the allowed extraction times to off peak hours is another way to minimize CIC server impact.

7. The extraction timeout specifies how long an extraction job is allowed to run before being canceled by the server. In the Extraction Job Parameters box, set the **Extraction time out**, in seconds.

A dialog box titled "Extraction time out (seconds):" with a numeric input field containing the value "0" and up/down arrow buttons.

The default value is set to 0, which results in no timeout.

8. In the **Extraction Audit History** box, set the values for the extraction audit record purge. The audit history is used to populate the extraction job history.

A dialog box titled "Extraction Audit History" containing a checkbox labeled "Enable Purging", a "Purge Time:" field with a time picker set to "1:43:00 AM", and a "Days to keep audit history:" field with a numeric input set to "365".

- Purging is disabled by default. To activate purging, select the **Enable Purging** check box.
 - Set the time of day to start the purge process in the **Purge Time** field. We recommend running the purge process during off-peak hours.
 - Set the number of **Days to keep audit history**.
9. Click **OK** or **Apply**.

Interaction Process Automation

The **Interaction Process Automation** container displays a list of the current processes. For each process, it displays the published version number, owner, and current status.

Use this page to configure Interaction Process Automation settings.

Active

A process automatically becomes active once a user publishes it in **Interaction Process Automation Designer**. However, as an administrator, you can also deactivate or activate a process when necessary from Interaction Administrator. When a process is deactivated, it cannot be launched.

To activate a process:

1. In the Interaction Process Administrator container, double-click the process to activate. The **Interaction Process Automation Configuration** dialog box appears.
2. Select the **Active** check box.
3. Click **OK**.

To deactivate a process:

1. In the Interaction Process Administrator container, double-click the process to activate. The **Interaction Process Automation Configuration** dialog box appears.
2. Clear the **Active** check box.
3. Click **OK**.

Note: Deactivating a process does not revert any actions the process has already performed.



Security Specifications

Interaction Process Automation provides data-level security that allows each customer the flexibility to specify which users, workgroups, and/or roles can access each data variable.

If your company needs to track sensitive information as part of a process, you can use a security specification to grant access to only those users or workgroups who need to view that data.

You assign users or workgroups to a security specification to give them access to any data that is bound to that specification. If no security specification is assigned to a data variable, everyone has access to that data.

You can add and modify security specifications in Interaction Administrator, and then bind them to data variables in the **Property** tab in **Interaction Process Automation Designer**. You can also delete security specifications. This topic includes instructions for:

- [Adding a Security Specification](#)
- [Modifying a Security Specification](#)
- [Deleting a Security Specification](#)

Adding a Security Specification

To add a security specification:

1. Expand the **Interaction Process Automation** container in Interaction Administrator.
2. Within the **Interaction Process Automation** container, click the **Security Specifications** sub-container.
3. Right-click in the area on the right side of the Interaction Administrator window, and then click **New** from the shortcut menu that appears.
4. In the **Entry Name** dialog, type a name for the new security specification, and then click **OK**. The **Security Specifications Configuration** dialog appears.
5. On the **Configuration** tab, click **Members**.
6. In the **Select Users** dialog, select each user, workgroup, or role for which you want to grant access, and then click **Add**.
7. Once you have selected all the users, click **OK**.
8. *This option is reserved for a future release.* Under **For members that don't have full-access**, choose either of the following or leave both options unselected:

Choose this option...	If...
Do not show data	You don't want the data to appear at all for users, workgroups, and roles not in the Members list.
Show only right 4 characters	You only want to display the right four characters for users, workgroups, and roles not in the Members list. (useful for data such as credit card numbers).

9. Click **OK**.

The security specifications you added should now be available to apply to data variables in Interaction Process Automation Designer.

Modifying a Security Specification

You can modify a security specification to add or remove members.

To modify a security specification:

1. In the **Security Specifications** sub-container, double-click the security specification to modify. The **Security Specifications Configuration** dialog appears.
2. On the **Configuration** tab, click **Members**.
3. Do one of the following:
 - To add a member, select the member from the list and then click **Add**.
 - To remove a member, select the name in the list at the bottom of the dialog and then press **Delete**.
4. Once you have added or removed the appropriate members, click **OK**.

5. Click **OK** to close the **Security Specifications Configuration** dialog.

Deleting a Security Specification

Caution: If you delete a security specification that has been assigned to a data variable in **Interaction Process Automation Designer**, you could cause the data to be unreadable.

To delete a security specification:

1. In the **Security Specifications** container, right-click the security specification to delete. Interaction Administrator displays a message to warn you that deleting a security specification that has been assigned to a data variable will make that data unreadable.
2. Click **Yes** to confirm the deletion or click **No** to cancel the deletion.



Interaction Feedback Settings

Use this page to configure Interaction Feedback settings.

Prompts Path

Type the path from which the survey prompts are loaded. The default value for the prompts is \\[server name]\\IC\\Resources\\SurveyPrompts.

Recordings Path

Type the path where the recorded surveys are stored. This is where free-form survey answers are stored. The default value for the recordings is \\[server name]\\Compressed Recordings\\.

Audio Compression

Select the Audio Compression protocol to use when compressing survey recordings. The values are: audio/PCMU, audio/PCMA, audio/GSM, audio/x-truespeech, and audio/G726-32. The default value is audio/x-truespeech.

Enable Audio Encryption

Select this check box to enable audio encryption. *This feature will be available in a future release.*

Fax Configuration

The configuration options in this container provide the ability configure fax appearance, send and receive options, servers and fax groups. All faxing is done through media server.

How Media Server Faxing Works

When receiving a fax, the call comes into the system, telephony services looks for fax tones using the media server for the audio processing. If the call is determined to be a fax call it is, then the call is forwarded to handlers that decide how to process it. Typically, a handler asks the fax server to receive the fax. The fax server asks telephony services to connect the call to the media server and it sets up a fax termination there. The media server does all of the processing to emulate a fax machine. It stores the fax locally in a TIFF file format, and sends notifications to the fax server when pages complete, errors occur, etc. Once the fax is complete the fax server gets the TIFF file from the media server via HTTP and converts it to *.i3f format (the CIC fax file format). The handlers determine how to process the received fax.

Sending a fax is similar; the same process happens in reverse. If the source pages need conversion (e.g., conversion of a PDF) before sending a fax, a render server can be used instead of the fax server to off-load PDF conversions to relieve processing burden of the CIC server.

This container has the following fax configuration pages:

- [Appearance](#)
- [Send/Receive Options](#)
- [Fax Server](#)
- [Advanced](#)

Related topics

[Fax Group Configuration](#)

[SIP Line Configuration](#)

Appearance

Use this page to configure the appearance options for server faxes. This information is sent as part of the outgoing fax notification.

Header Text

Type the text to appear in the top margin on each page, the area called the page header. The length of the text is limited to 256 characters. If this field is left blank, no text will appear at the top of each page.

Cover Page

Select the cover page (.I3C file) to use as the default cover page sent as the first page of each fax. If values are not specified by the sender in Interaction Fax Viewer, the values specified in the fields below (that is, Name, Company Name, Fax Number, Display Number, and Voice Number) are used in the corresponding fields on the cover page.

Cover pages are stored in the same directory as the Interaction Fax Cover Page Editor (that is, the \bin directory under your IC root directory). Use the Interaction Fax Cover Page Editor (IFaxCovrA.exe) to create or modify cover pages.

Name

Type the default name of the person sending the fax.

Company Name

Type the default name of the company sending the fax.

Fax Number

Type the default phone number for the sending fax device.

Display Number

Type the sending fax phone number. This number is displayed on the receiving fax station's display window and in the fax log. Typically, it is the same number as the **Fax Number** field.

Voice Number

Type the default voice phone number where the fax recipient should call to reach the person sending the fax.

Related topics

[Send and Receive Options](#)

[Fax Server](#)

[Advanced](#)

[SIP Line Configuration](#)

Send/Receive Options

Use this page to configure send and receive options for faxes.

Fax Group

Select a fax group from the pull-down menu. A fax group is a group of fax resources on the media server dedicated for that particular purpose.

Fax Speed

Select the fax transmission speed from the pull-down menu according to the fax modem capacity of the recipients. This speed is the maximum receive baud rate in bps. The default value is 4800 bps. Use "Best" for the maximum support speed by device.

Number of Retries

Use the up and down arrow keys to select the number of times the system will retry to send a fax if it fails to send it on the first attempt (for example, the line is busy or down). The default number of retries allowed for a fax send is 3.

Retry Delay (sec)

Use the up and down arrow keys to select the delay in seconds that the system should wait between the end of a fax failure and the next time it tries to send. The default value is 30 seconds.

No Answer Timeout (sec)

Use the up and down arrow keys to select the time in seconds the system should wait before determining there is no answer when a called fax number rings but does not connect. If the number does not answer within this amount of time, the system terminates the attempted call. The default value is 30 seconds, which represents approximately five rings (in North America).

Do Not Send Faxes During Peak Hours

Select this check box to not send faxes during peak hours as defined in the **Begin** and **End** times in **Peak Hours** below. If selected, the system will not send a fax during the time range entered. For example, if this option is enabled, **Begin** is set to "08:00", and **End** is set to "20:00", then no faxes will be sent from 8:00am through 8:00pm.

The default peak hours are 07:00 for beginning time, and 22:00 for ending time.

Note: The time is based on the time zone of the fax server.

Max Fax Call Rate (cps)

Use the up and down arrow keys to select the maximum calls per second or rate that the media server process faxes. The default value is 5 calls per second. The valid range is 1 to 10 million calls per second.

Related topics

[Media Server Fax Configuration - Appearance](#)

[Media Server Fax Configuration - Fax Server](#)

[Media Server Fax Configuration - Advanced](#)

[SIP Line Configuration](#)

Fax Server

Use this page to configure fax server options.

Servers

You can optionally use a render server and external fax converter for media server faxing.

Use IC Render Server

Select this option to use the IC render server as the fax server. When selected, enter the name of the server in the **Server** field. By default this setting is not enabled. When it is enabled, the default value is the local host.

The render server is used instead of the fax server to off-load PDF conversions to a remote server. This relieves some of the processing burden of the IC server. For information see *CIC Render Server Technical Reference* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Use External Fax Converter

Select this option to use an external fax converter such as Adobe for converting faxes instead of pdf2image. By default this setting is not enabled. When enabled, CIC uses third-party software installed on the IC render server to convert fax files, so using this setting is not recommended. For information see *IC Render Server Technical Reference* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Options

Use this section to set fax server options.

Discard Partial Pages on Failure

Select this option to discard partial fax pages on a fax error. By default, this setting is not enabled. Default unchecked. If enabled, the user receives an email message listing only the pages that succeeded when inbound faxes fail during transmission. If a page is partially received, that page is not sent in an email message to the user.

Notify Event Viewer on Failure

Select this option to send fax failures to the event viewer.

Use Error Correction Mode

Select this option to use Error Correction Mode (ECM) when sending a fax. By default this setting is not enabled. ECM breaks image data into HDLC (High-level Data Link Control) frames and multiple fields, which each hold 256 or 64 octets of image data. There is 16 bit Frame Checking Sequence (FCS) used to check for transmission errors.

Use Call Analysis

Select this option to detect answering machines, SIT tones, or live response to calls when sending a fax. By default this setting is checked (enabled), which means faxes are terminated immediately for cases such as live responses, and a description of the termination is provided.

Override Default Paths

You can optionally override default paths.

Cover Pages

This is the fax cover page directory used by the fax server. The default path for cover pages is \\[server name]\\IC\\Resources\\CoverPages. If Interaction Administrator is installed on the CIC server, then you may click **Browse...** to change the location.

Fax Files

This is the work directory used by the fax server. The default path for fax files is \\[server name]\\IC\\Work\\FaxWork. If Interaction Administrator is installed on the CIC server, then you may click **Browse...** to change the location.

Related topics

[Appearance](#) [Send and Receive Options](#)

[Advanced](#)

[SIP Line Configuration](#)

Advanced

Use this page to configure advanced options for faxing.

Web Server Options

Address to Use

Select the interface name from the drop-down list. This is used to determine the local server IP address. The default value is <All>, and "Local Area Connection" is an option. CIC supports IPv4 and IPv6 addressing schemes.

HTTP Port

Select the local port from the drop-down list to use for servicing HTTP requests. The default port is "8112". Acceptable values are between "2000" and "65535".

Use HTTPS

Select this check box to specify whether resources are only served through a TLS connection. HTTP requests will be re-directed to the HTTPS port. Enter the **HTTPS Port** when selecting this check box.

HTTPS Port

Select the secure local port from the drop-down list to use for servicing HTTPS requests. The default port is "8113". Acceptable values are between "2000" and "65535".

Host Format

Select which format from the drop-down list to use for resolved URI authorities. The default value is "FQDN" (Fully Qualified Domain Name), and the other options are "IP" (Internet Protocol), "Host Name", or "Custom". If you choose "Custom", then a text box appears that you may enter any desired text.

Cache Options

Remove Unversioned Files After (sec)

Use the up and down arrows to set the time in seconds before unversioned files are removed from the cache. The default value is "600".

Remove Unused Files After (sec)

Use the up and down arrows to set the time in seconds before unversioned files are removed from the cache. The default value is "600".

Only Cleanup Idle Files Every (sec)

Use the up and down arrows to set the time in seconds between cache cleanups. The default value is "300".

Only Update File Attributes Every (sec)

Use the up and down arrows to set the amount of time in seconds that has to elapse before a cached prompt will be queried for freshness. This is an optimization to prevent unnecessary file refreshes. The default is "10".

Related topics

[Appearance](#) [Send and Receive Options](#)

[Fax Server](#)

[SIP Line Configuration](#)

Fax Groups

This section contains the following information:

[Fax Group Names](#)

[Fax Group Configuration](#)



Fax Group Names

Type a descriptive name for a fax group, which is a group of fax resources dedicated for a particular purpose.

Fax Group Configuration

A media server fax group is a named group of media server fax resources. The system automatically creates a fax group named <DefaultFaxGroup>.

Description

Type a sentence that describes the purpose of this group of media server fax resources.

Maximum Number of Faxes

In the **Inbound** field enter the maximum number of inbound faxes allowable, or select **No Limit** to be limited by only the number of fax licenses available.

In the **Outbound** field, enter the maximum number of outgoing faxes allowable, or select **No Limit** to be limited by only the number of fax licenses available.

Related topics [Media Server Fax Configuration](#)



Overview of CIC Data Sources and Contact Lists

Some components of CIC depend on data stored in a variety of repositories, such as SQL Server databases, Access databases, different Exchange or IBM Domino data sources, and so on.

Rather than tie CIC components directly to an external data source, these components reference a local CIC data source name, which points to a particular type of data repository. This allows CIC developers and administrators to change a data repository without having to change references to that repository.

For example, CIC report logs are currently stored in SQL Server databases and accessed via a CIC data source (called IC Report Logs in this case). This CIC data source points to a SQL Server database and the ODBC DSN to set up connections to the report logs. However, future versions of CIC may store report log data in databases other than SQL Server. Since the report logs and reports point to a CIC data source, they will not have to be reconfigured to support a new data source. Only the CIC data source must be reconfigured.

Contact List Sources in Interaction Administrator use CIC data sources and a particular CIC-specific driver to define contact lists that can appear as directory tabs in the CIC clients.

The default drivers provide access to and a formatted view of the contact data in the specified data source repository. You can create views for contact lists in other kinds of data sources not directly supported in CIC by creating a view into that repository that matches the format of the supported CIC data source repositories.

For example, you can set up a SQL table view as contacts list for a tab instead of a 'real' table, by setting TABLE=<tableOrViewName>; entry in the Additional Information field of the Data Manager Contact List Source (not the CIC data source).

The Contact Data Manager Configuration page controls how the CIC client users access the speed dial data source for a site. This page specifies how many simultaneous write operations can be performed, the name of the speed dial data source, and a control to refresh connections to the data source repository.



IC Data Source Name

Type the name of an IC data source that generally describes the kind of data another part of CIC might need to access. CIC data sources generically define a gateway to a particular kind of data repository, including:

- An ODBC database
- A JDBC interface to an ODBC database
- The old JDBC-ODBC database interface
- Lightweight directory access protocol (LDAP)
- White Pages directory data

CIC data source names appear in the **Type** field in the **Contact List Sources Configuration** page. The Contact List Sources actually define the directory pages that can appear as a directory view in the CIC clients (such as Company Directory).



IC Data Source Configuration

Some components of CIC depend on data stored in a variety of repositories (such as SQL Server databases, Access databases, different Exchange or IBM Domino data sources). Rather than tie CIC components directly to an external data source, these components reference a local CIC data source name, which points to a particular type of data repository. This allows CIC developers and administrators to change a data repository without having to change references to that repository.

For example, CIC report logs are currently stored in SQL Server databases and accessed via a CIC data source (called IC Report Logs in this case). This data source points to a SQL Server database and the ODBC DSN to set up connections to the report logs. Since the report logs and reports point to a CIC data source, they will not have to be reconfigured to support a new data source. Only the CIC data source must be reconfigured.

CIC supports basic data sources, including:

- [ODBC](#) - for most relational databases that include an ODBC driver (for example, SQL Server and Oracle)
- [JDBC](#) - for Java applications that use JDBC drivers to access ODBC compliant databases (not used in CIC by default)
- [JDBC-ODBC](#) - for the JDBC-ODBC bridge to let Java applications access ODBC compliant databases via ODBC drivers.
- [MAPI](#) - CIC no longer supports Microsoft Exchange MAPI-based integrations.
- [LDAP](#) - for contact directories that use an LDAP-enabled directory server.
- [White Pages](#) - for white pages directory data on the IC server.

Click on the above data source types to see help on how to configure that data source.



ODBC Data Source Configuration

IC Data Sources > <Data source> > IC Data Source Configuration > ODBC Data Source Configuration

Select the appropriate values or enter the appropriate configuration data to create a CIC data source for an ODBC-compliant data repository.

If you use an ODBC data source for speed dial entries, it must have identical data layout as the SQL Server SpeedDial table (found in I3EIC.mdb on the SQL Server computer), and it must provide read/write access. Alternatively, if the layout is not identical, you must create a view to match the data layout.

Subtype

This is an ODBC data type. Therefore, Subtype is one of the listed ODBC compliant relational databases, or another database that includes an ODBC driver. The default setting is "DB2 Family", and other options are "Informix", "Ingres", "Oracle", "MS Access", "MS SQL Server", "Sybase", and "Other".

Read Only

Select this check box if CIC client users cannot update this data source. Clear the check box if CIC client users will be able to add, modify, or delete entries in this data source.

File DSN

Select this check box if the ODBC driver requires a file Data Source Name.

ODBC DSN

Type the name of the System Data Source Name field in the ODBC Administrator used to create the data source. The DSN must be a System DSN, not a User DSN.

Qualifier

If one is required, type the table qualifier used to access the tables in this data source. The qualifier may be the owner or creator of the table, or it may be the path to the table, depending on the database.

User ID

Type a user ID if one is required to connect to the data source.

The user ID is determined by the administrator and the database tool used to create the data source.

Password

Type a password if one is required to connect to the data source.

The password is determined by the administrator and the database tool used to create the data.

Manually enter connection string

Select this check box if you wish to manually enter an ODBC connection string in the **Connection String** field below.

Connection String

This field remains blank unless you first select the **Manually enter connection string** check box above. Type the customized ODBC connection string to connect to the target database. This uses the Qualifier entered above, if any.

Additional Information

Some CIC data sources may need to specify additional information or need a way to temporarily override the default behavior. Values in this field could include the Catalog= and Schema= statements, as illustrated in the IC Report Logs CIC data source.

For example:

DATABASE=i3_eic;SERVER=(local)

Related topics

[Overview of CIC Data Sources and Contact Lists](#)

[Report connection configuration](#)

[Configure reports for your CIC server](#)



JDBC Data Source Configuration

Select the appropriate values or enter the appropriate configuration data to create a CIC data source for a JDBC compliant data repository.

Subtype

This is a JDBC data source. Subtype is one of the listed ODBC compliant relational databases, or another database that can be accessed by a JDBC driver. The default setting is "DB2 Family", and other options are "Informix", "Ingres", "Oracle", "MS Access", "MS SQL Server", "Sybase", and "Other".

Read Only

Select this check box if CIC client users cannot update this data source. Clear the check box if CIC client users will be able to add, modify, or delete entries in this data source.

User ID

Type a user ID if one is required to connect to the data source.

The user ID is determined by the administrator and the database tool used to create the data source.

Password

Type a password if one is required to connect to the data source.

The password is determined by the administrator and the database tool used to create the data.

Qualifier

If one is required, type the table qualifier used to access the tables in this data source. The qualifier may be the owner or creator of the table, or it may be the path to the table, depending on the database.

Driver

Type the name of the JDBC driver (you may have to ask the vendor for your driver name).

URL

Type the URL used to connect to this JDBC data source. This uses the Qualifier entered above, if any.

Additional Information

Some CIC data sources may need to specify additional information or need a way to temporarily override the default behavior. Values in this field could include the Catalog= and Schema= statements, as illustrated in the IC Report Logs CIC data source.

For example:

DATABASE=i3_eic;SERVER=(local)



JDBC-ODBC Data Source Configuration

Select the appropriate values or enter the appropriate configuration data to create a CIC data source for an ODBC compliant data repository.

Note: If you use an ODBC data source for speed dial entries, it must have identical data layout as the SQL Server SpeedDial table (found in I3EIC.mdb on the SQL Server computer), and it must provide read/write access. Alternatively, if the layout is not identical, you must create a view to match the data layout.

Subtype

This is a JDBC-ODBC data source. Subtype is one of the listed ODBC compliant relational databases, or another database that includes a Type 1 ODBC driver. The default setting is "DB2 Family", and other options are "Informix", "Ingres", "Oracle", "MS Access", "MS SQL Server", "Sybase", and "Other".

Read Only

Select this check box if CIC client users cannot update this data source. Clear the check box if CIC client users will be able to add, modify, or delete entries in this data source (that is, it is Read/Write accessible).

ODBC DSN

Type the name of the System Data Source Name field in the ODBC Administrator used to create the data source. The DSN must be a System DSN, not a User DSN.

Qualifier

If one is required, type the table qualifier used to access the tables in this data source. The qualifier may be the owner or creator of the table, or it may be the path to the table, depending on the database.

User ID

Type a user ID if one is required to connect to the data source.

The user ID is determined by the administrator and the database tool used to create the data source.

Password

Type a password if one is required to connect to the data source.

The password is determined by the administrator and the database tool used to create the data.

Manually enter connection string

Select this box to manually enter an ODBC connection string in the **Connection String** field below.

Connection String

This field appears dimmed and is unavailable, unless you first select the **Manually enter connection string** box above. Type the customized ODBC connection string to connect to the target database. This uses the Qualifier entered above, if any.

Additional Information

Some CIC data sources may need to specify additional information or need a way to temporarily override the default behavior. Attributes in the **Additional Information** field could include the Catalog= and Schema= statements, as illustrated in the IC Report Logs CIC data source. For example:

DATABASE=i3_eic;SERVER=(local)

Multiple attributes are separated by semicolons (;).



LDAP Data Source Configuration

IC Data Sources > <Data source> > IC Data Source Configuration > LDAP Data Source Configuration

Use the following to configure an LDAP-compatible data source.

Tip: For more information, see *Using LDAP for IC Contact Lists*, in the PureConnect Documentation Library.

Subtype

This is an LDAP data type. The options are Other, iPlanet, OpenLDAP, and Active Directory.

Read Only

Select this check box if CIC client users cannot update this data source. Clear the check box if CIC client users will be able to add, modify, or delete entries in this data source (that is, it is Read/Write accessible).

Host Name

Type the name of the Netscape Directory Server. For example: BocaSitePC

Port

Type the port number used by the Netscape Directory Server. If blank, then the default **389** is used.

Bind DN

The **distinguished name** (DN) used to authenticate the password. This should be in the format: domain\user name.

For example:

Uid:AiriusDomain\ic_admin, ou=People, o=Airius.com

Password

The password used to bind with.

Search DN

The **distinguished name** (DN) of the node where searching begins.

Note: Because a search DN is usually specified in the contact list source, any information added here is overridden. Typically, this field is left empty.

Additional Information

This field can indicate the connection to specific authentication types. Use the following format: `auth=xxx`

Examples:

`auth=ssl+simple`

`auth=ssl`

`auth=tls+simple`

`auth=tls`

If you do not use this field to indicate an authentication type, the system uses the authentication type selected during the installation of Interaction Web Portal.

This field can indicate the timeout values for Interaction Web Portal. Use the following format: `search=xxx;load=xxx;bind=xxx`

Example: `search=1030;load=4002;bind=12345`

search indicates the time in milliseconds that Interaction Web Portal attempts to search (for example, search for a user, workgroup, or interaction) before timing out and returning an error. If you do not use this parameter, Interaction Web Portal uses 8000 milliseconds.

load indicates the time in milliseconds that Interaction Web Portal attempts to load a page or view before timing out and returning an error. If you do not use this parameter, Interaction Web Portal uses 4000 milliseconds.

bind indicates the time in milliseconds that Interaction Web Portal attempts to bind to the LDAP connection before timing out and returning an error. If you do not use this parameter, Interaction Web Portal uses 4000 milliseconds.

If you do not use this field to indicate the timeout values, Interaction Web Portal uses the default of 8000 milliseconds for searching, 4000 milliseconds for loading and binding.

Tip: For additional information about how CIC supports LDAP-enabled Netscape directory servers, see *Using LDAP for IC Contact Lists* in the PureConnect Documentation Library.



MAPI Data Source Configuration

CIC no longer supports Microsoft Exchange MAPI-based integrations. Use a Microsoft Exchange EWS-based integration as the alternative. The options for configuring Microsoft Exchange MAPI-based integrations remain visible in Interaction Administrator but setting the options no longer enables Microsoft Exchange MAPI-based integrations.



White Pages Data Source Configuration

Use this dialog box to configure your White Pages data sources. CIC includes two White Pages data sources, I3 Text File and Redi-Connect. You may add other data sources to the list if you wish.

Subtype

In the Subtype list, select the data source to configure. Among the choices of compliant databases could be:

Data Source	Description
I3 Text File	Select this to add the WhitePages.txt database. CIC knows which driver to add.
Think Direct Marketing	Note: Think Direct Marketing has been replaced by Redi-Connect. Do not select this option.
Redi-Connect	Select this to add the Redi-connect database. CIC knows which driver to add. Note: Redi-connect is a realtime lead verification service that you must be registered to use.
Other	Select this to add a third-party driver for another White Pages data source.

Read Only

Select this check box if CIC client users cannot update this data source. Clear the check box if CIC client users will be able to add, modify, or delete entries in this data source (that is, it is Read/Write accessible).

Connection Information

If the driver requires a User ID, Password, or Program ID, type it in one of the following fields:

Field	Description
User ID	Type your Redi-Connect ClientID, which Redi-Data provided to you. Leave the other fields blank; you do not need to specify any additional information to configure this driver.
Password	Type a password to access the data source. I3Text File and TDM do not require a password.
Program ID	If the driver Subtype is Other , you must type a Program ID (PROGID). An example PROGID could be I3PDBwp.Rwp.1

Type any additional information your driver may require, (in ATTRIBUTE=VALUE; syntax). This is optional information, not required for I3Text and Redi-Connect drivers.



Reverse White Pages Lookup Sequence

You can configure any public Data Manager contact list source to participate in the reverse white page (RWP) lookup sequence. By default, Data Manager searches CIC *businessphone*, *businessphone2*, and *homephone* attributes. However, you can configure each contact list source to have its own list of phone attributes to search on. This is specified with the RWP_LOOKUP_PHONE_TYPES attribute.

Follow these steps.



1. From Interaction Administrator, select **Contact List Sources**, and then press the **Insert** key.
2. Type the name of a new white pages contact list source, and then click **OK**.
The Contact List Source Configuration window appears.
3. From the **IC Data Source** list, select the name of the white pages data source that you previously created.
4. Select the **Public** option for public contact sources, if applicable.
5. From the **Driver** list, select **White Pages**.
6. Type the appropriate attributes in the **Additional Information** box, for example:

```
RWP_LOOKUP_PHONE_TYPES=HomePage,BusinessPhone,BusinessPhone2,Mobile;
```

You can use any combination upper- or lower-case letters for the RWP_LOOKUP_PHONE_TYPE attribute and phone number type values. Valid phone number types are:

- BusinessPhone
- BusinessPhone2
- HomePhone
- HomePhone2
- AssistantPhone
- Mobile
- Fax
- Pager

If an LDAP source is included in the RWP lookup sequence, then you must index each phone number that you want Data Manager to search for. For information about adding indexes, see *Using LDAP for IC Contact Lists* in the PureConnect Documentation Library.

Report Connection Configuration

IC Data Sources > <Data source> > IC Data Source Configuration > Report Connection Configuration

This page lets you configure the connection to an Oracle or SQL Server data source for the purposes of running reports. For more information about reports, see the *CIC Reporting Technical Reference* in the PureConnect Documentation Library.

About Internet enabled reports

Beginning in CIC 2016 R3, you can configure a data source to run Crystal Reports in IC Business Manager with a direct connection to the database server via the Internet. If you do this, you must also [configure reports for your CIC server](#).

If you are adding an Oracle data source for Internet enabled reporting, after you save the fields on this page, you must re-open this page to specify the Oracle service name and to view the client TNS entry.

Select method to connect to data source

- To connect through the CIC server, select **Direct client connection to the data source**. This is the default configuration.
- To enable a direct connection to the database server via the Internet, select **Proxy through HttpPluginHost**.

Port number to proxy report connection on client workstations

Oracle data sources only (required)

Type the port number for your proxy report connection. The valid range of port connections is 1024-64000.

Oracle service name

Note: This field appears only when you edit an existing Oracle data source.

Type the Oracle service name to which the reports will connect.

View client TNS entry button

Note: This button appears only when you edit an existing Oracle data source.

Click this button to view the TNS entry in Notepad. Copy the TNS and paste it to each of the client workstations. This points the TNS entry to the reporting proxy instead of the database.

Related topics

[ODBC Data Source Configuration](#)

[Configure reports for your CIC server](#)



Contact Data Manager

This section contains the following information:

[Contact Data Manager Configuration](#)

[Contact Data Manager Icons](#)

[Contact List Sources Configuration](#)



Contact Data Manager Configuration

Data Manager configuration covers all data sources used to display contact information on the Directory and Speed Dial views in the CIC clients. Specific data source configuration is discussed in the [IC Data Source Configuration](#) page found under the Data Manager container.

Thread Pool Size

Type a number to specify how many threads are available for data operations between CIC client speed dial pages and the CIC server. A higher number of threads requires more server system resources. A lower number increases the possibility of contention for the threads needed to access the speed dial data sources.

Each data operation request (for example, database read, database update, and so on) is performed in a separate thread on the server. When the operation is complete, the used thread is returned to a pool of available threads. The Thread Pool Size value determines the maximum number of simultaneous data operations (16 by default). If more than sixteen (16) data operations occur at the same time, the seventeenth (17)–and subsequent–operation will have to wait until an operation completes and a thread becomes available.

To see if users require more than the default 16 threads, check the Windows Server's Event Viewer program found in the Administrative Tools folder. Look at the Event Details of the Data Manager application events to see if the number of requests exceeds the number of available threads.

Speed Dial Source

Select the data source containing the speed dial data for this site. The names in this list are based on the data sources defined in the Contact List Sources container. The default CIC Contacts database is contained in a SQL Server database. This database contains the Contacts and the SpeedDial tables.

If you use an ODBC data source for speed dial entries, it must have identical data layout as the SQL Server SpeedDial table, and it must provide read/write access.

Refresh Connections

Click this button to cause CIC to quickly drop and reestablish connections to the contact list data sources. This may be necessary if one or more of the contact list data sources hangs or crashes.

Reverse White Pages Lookup Sequence

The program allows you to arrange your contact lists in the order they should be searched.

Use the **Reverse White Pages Lookup Sequence** box to arrange the lists to:

- Add a contact list, click **Add**. In the Entry Name dialog box, select a list in the drop-down box and click **OK**
- Change the lookup sequence, select a list and use the **Up** and **Down** buttons
- Remove a list, select it and click **Remove**

Note: You cannot add private contact list sources if Interaction Tracker is not licensed.



Contact Data Manager Icons

Each speed dial button on the CIC client interface can have an icon to identify the kind of phone number displayed for each contact. For example, if the contact named Jeff Swinson has phone numbers for home, business, fax, and pager, Jeff's name appears only once in the list, but you can select one of the numbers to display by default. Each kind of phone number can have a different icon to help CIC client users quickly identify which number is displayed.

Select a path, [parameter](#), or a full path and file name with an .ICO extension that contains an icon representing each phone number type. The directory that contains the default CIC icon files is \\Server\IC_Client\IC_Client\Resources where Server is the name of your CIC server computer.



Business Phone

Click **Browse** and select the name of an icon file to appear beside Business Phone numbers. For example:
\\Server\Resources\BusPhone.ico



Business Phone2

Click **Browse** and select the name of an icon file to appear beside secondary Business Phone numbers. For example:
\\Server\Resources\BusPhone2.ico



Assistant Phone

Click **Browse** and select the name of an icon file to appear beside your contact's Assistant Phone numbers. For example:
\\Server\Resources\AsstPhone.ico



Home Phone

Click **Browse** and select the name of an icon file to appear beside Home Phone numbers. For example:
\\Server\Resources\HmPhone1.ico



Home Phone2

Click **Browse** and select the name of an icon file to appear beside secondary Home Phone numbers. For example:
\\Server\IC_Client\IC_Client\Resources\HmPhone2.ico



Mobile Phone

Click **Browse** and select the name of an icon file to appear beside Mobile Phone numbers. For example:
\\Server\Resources\MobPhone.ico



Fax Phone

Click **Browse** and select the name of an icon file to appear beside Fax Phone numbers. For example:
\\Server\Resources\FaxPhone.ico



Pager Phone

Click **Browse** and select the name of an icon file to appear beside Page Phone numbers. For example:
\\Server\Resources\Pager1.ico

Contact List Sources



Contact List Sources Configuration

Select the appropriate values to define a contact list source that can appear as a directory view in the CIC clients.

IC Data Source

Select one of the existing CIC data sources that represent the kind of repository holding the contact list data. If no names appear in this list, go to the IC Data Sources container and create a CIC data source first.

Label

This is the name displayed in the CIC clients for this contact list. The default value is the actual name used in the contact list.

Public

Use this check box to specify if this contact list is public or private. A public data source contains contacts accessible by all users and a private data source is accessible only to the user who enters or owns the contacts.

Has Status

Use this check box specify whether this data source supports status information.

Driver

Select one of the predefined CIC drivers that provide access and formatting to the data in the target data source.

IC Driver	Provides access to:
IC Exchange Contacts	A public address list on the Exchange server
IC Outlook Contacts	An individual address list on the Exchange server
IC Contacts	Contact data in an ODBC compliant database
IC LDAP Contacts	Data in an LDAP-enabled directory server
IC White Pages	The white pages directory data on the CIC server
IC Tracker Contacts	Interaction Tracker contact data on the CIC server

Note: There currently is no support for selecting specific organizations or sub-organizations, only the global address list in Exchange.



Contact List Sources - Options

Add values for the following contact list source options.

Timeout (sec)

Type the number of seconds CIC should wait for a response from the data source before returning an error. If you leave this field blank, CIC uses the default timeout value of 60 seconds.

Query Row Limit

Enter the maximum number of rows the CIC data source can return in one query of the data source. The default value is 1000 rows.

Note: If you are configuring Interaction Tracker contact list sources, consider your operating conditions when setting the values for Timeout and Query Row Limit:

Timeout (sec)

- Under normal operating conditions, set the value to 300.
- Under heavy load or high tracing conditions—for example when diagnosing a problem—set the value to 900.

Query Row Limit

Set the value for this box to no less than 500,000. You can increase this value if needed by the client site. It should be higher than the combined counts of Individuals, Addresses, Attributes and Connections.



Contact List Source Name

Type a descriptive name of the contact list you wish to make available as a directory tab in the CIC clients.

Note: The name you type appears as a selection in the CIC clients.



CIC LDAP Contacts

You can add configuration information to extend the settings of an LDAP contact. In the **Additional Information** box, use the following syntax:

`<Attribute>=<Value>[;<Attribute>=Value...]`

Where:

Syntax	Description
Attribute	Uppercase or lowercase letters are allowed. Case is not preserved.
Value	Uppercase or lowercase letters are allowed. Case is preserved.
=	Blank spaces around equal sign (=) are allowed. When Value contains one or more equal signs (=), then Value must be enclosed by double quotation marks.
;	Blank spaces around semi-colon (;) are allowed. When Value contains one or more semi-colons (;), then Value must be enclosed by double quotation marks.

Additional Information attributes:

Search_DN=

Use to override the search DN specified in the Interaction Administrator CIC Data Source configuration. In LDAP, a search involves three parameters:

Parameter	Description
SEARCH_DN=	A place (node) in the directory tree to start searching from.
SEARCH_FILTER=	A filter/query to be applied to the contact entries.
SEARCH_SCOPE=	A specification for how/if the search is to proceed down the tree.

Tip: When specifying the search DN, enclose the string in double quotation marks (" "), since the standard DN format contains equal signs (=).

You can use one or more user substitution variables inside the DN; this is particularly useful when setting up private contacts (see USERNAME_MAPPING_FILE= below).

In addition, you can use one or more built-in substitution variables. They are:

Variables	Description
\$ICUID	The CIC user ID. Generally only useful for private contact sources.
\$CONTACTSOURCE	The name of the contact list source used by the Data Manager. For example: Our Public Contacts.
\$BINDDN	The DN used to bind with, as specified in the Interaction Administrator CIC Data Source configuration.

Note: The above variables must be all uppercase letters.

SEARCH_FILTER=

Contains, in LDAP search syntax, the search filter/query to be used.

For example: (&(objectclass=i3person)(i3owner=\$ICUID))

You can use one or more user substitution variables inside the DN; this is useful when setting up private contacts (see the section on USERNAME_MAPPING_FILE= below).

In addition, you can use one or more built-in substitution variables. They are:

Variables	Description
\$CICUID	The CIC user ID. Generally only useful for private contact sources.
\$CONTACTSOURCE	The name of the contact list source used by Data Manager. For example: Our Public Contacts.
\$BINDDN	The DN used to bind with, as specified in the Interaction Administrator CIC Data Source configuration.
\$SEARCHDN	The search DN as specified in the Interaction Administrator CIC Data Source configuration (SEARCH DN field), or as overridden in the contact list source.
\$SEARCHDNPARENT	The parent DN of the configured search DN.

Note: These variables must be all uppercase letters.

SEARCH_SCOPE=

Specifies how/if the search proceeds down the sub-tree rooted by the search DN. This attribute can have one of three values:

Values	Description
ONE	Searches only entries directly below the search DN. This is the default.
SUB	Starts the search at the base DN and then searches everything below, including the base DN.
BASE	Searches only the base DN entry.

ATTRIBUTE_MAPPING_FILE=

By default, CIC uses an object class called **i3person** (which inherits from **inetorgperson**) for storing contact information. However, you are free to choose whatever object class you like, including a custom object class. To do this, you must create a file that contains the mappings between the CIC attributes and the attributes of your object class. CIC provides two sample mapping files, **I3PERSON_MAP.TXT** and **INETORPERSON_MAP.TXT**, that contain syntax and usage documentation in the files themselves.

Note: **I3PERSON_MAP.TXT** is provided for informational purposes, and – unless you want to modify any of the defaults – you do not need to have an **ATTRIBUTE_MAPPING_FILE=** entry, since CIC knows about the mapping for the **i3person** object class.

USES_FOLDERS=

The default is True. Set to False if the contact entries are not rooted by a folder/container entry that you want CIC to create. CIC has a default folder object class called **i3genfolder** that you can use.

FOLDER_ATTRIBUTE_FILE=

You can use your own folder type (such as a folder other than **i3genfolder**) and still have CIC automatically create the folders to contain your contacts. To do this you must create a file that contains information about the attributes of the folder object class you wish to use. An example file **I3GENFOLDER_MAP.TXT** is provided whose syntax and usage is the same as the attribute mapping file and is documented in comments inside the file itself.

Note: CIC knows about the mappings for **i3genfolder**, so unless you need to modify the defaults, you don't need to have a **FOLDER_ATTRIBUTE_FILE=** entry if you plan on using the default **i3genfolder** object class.

RDN_ATTRIBUTE=

Each newly created contact must have a globally unique distinguished name (DN). The left-most component of a distinguished name is called a *relative* distinguished name (RDN), and contains the attribute-value pair that uniquely defines the contact entry within the current directory. By default, Data Manager will use the *userid* attribute as the attribute for the RDN. However, you can choose whatever attribute you want by setting this attribute.

Note: Even though you can specify any attribute as an RDN attribute, Data Manager will always set it to a unique timestamp value (for example "200009231456450001000"). Therefore, when choosing an RDN attribute, make sure the semantics of the attribute are such that a unique timestamp value like this will not cause any problems.

USERNAME_MAPPING_FILE=

When accessing private contacts, the only information CIC has when distinguishing one user's contact data from another user's contact data is the CIC user ID value. These values might or might not be the same as the LDAP user ID attribute's values.

If they are not the same, you can set up a file to specify the mapping from the CIC user ID to the LDAP user ID. In fact, you can do this even if they are the same in order to specify other substitution values for a user.

The ICUSER_MAP.TXT example mapping file provides syntax and usage documentation.

Tip: For additional information about how CIC supports LDAP-enabled Netscape directory servers, see *Using LDAP for CIC Contact Lists* located in the PureConnect Documentation Library.



LDAP contact list attributes

Syntax for public contact source that uses the default folders:

```
SEARCH_DN="cn=$CONTACTSOURCE, ou=People, o=Airius.com";
```

Syntax for private contact source that uses the default folders:

```
SEARCH_DN="cn=$CONTACTSOURCE, uid=$ICUID, ou=People, o=Airius.com";
```

Syntax for private contact source that does not use the default folders:

```
USES_FOLDERS=FALSE; SEARCH_DN="uid=$ICUID, ou=People, o=Airius.com";SEARCH_FILTER="(objectclass=i3person);
```



Preparing to Use Web Interactions

If your site uses CIC's Web Services to process web interactions, you can create any number of boilerplate text messages, standard URLs and text files for agents to easily send to web visitors. In addition, you can optionally have each agent's picture appear on the dialogs that visitors see.

How it Works

You must have CIC's web services installed and configured on your web server (see *Interaction Web Tools Technical Reference* in the PureConnect Documentation Library on the CIC server).

- When a visitor requests an interactive **Chat** session or an **Instant Question**, an agent is alerted by the CIC client and can "pick up" the interaction request.
- For a chat, a dialog pops up on the agent's workstation enabling the agent to begin an interactive typing session with the customer. The **Responses** tab of the agent's Chat dialog can contain the names of preset standard text messages, URLs to which the agent can push the visitor's browser, and text file names. The agent can drag any combination of these responses into the **Response** field.
- For an **Instant Question**, the agent's Responses tab can contain the same mix of items. However, if the agent drags a URL into the Response field the program sends only the URL address as text and does not push the visitor's browser.

For more information on how to use the Chat dialog interface, see the help for the CIC client.

Creating Text Messages and URLs

- Use the [web chat configuration](#) sub-container in Interaction Administrator to create preset text that an agent can send to a visitor during an interactive session.
- Use the [Interaction URLs](#) sub-container in Interaction Administrator to create a list of standard URLs from which agents can select during an interactive session. The URLs can point to HTML documents on your website or other websites.
- In a **Chat** session, drag a URL to the Send field and click Send to push the visitor's browser to that URL. Alternatively, the agent can drag the URL directly into the Conversation pane and immediately push the Web visitor's browser to that address.
- In an **Instant Question**, drag the URL to the **Response** pane and click **Send to** send the URL in the message as text.
- Use the [Interaction files](#) sub-container in the Interaction Administrator to create a list of text file names from which agents can select during an interactive session.

You control which Chat text messages and URLs appear on the Chat dialog for each agent by using the Access Control page on the Default User, Users, Roles, and Workgroups configuration pages.

For example, you can create a group of text messages that address specific technical support issues and another group of text messages that answer typical marketing information requests. You can then make the technical support documents available to all agents in the Tech Support workgroup and all the marketing documents available only to agents in the Marketing workgroup.

Adding the Agent's Picture to the Chat Dialog

You can optionally display each agent's picture to the customer on the Chat dialog. See the "Agent Photo" section in *Interaction Web Tools Technical Reference* in the PureConnect Documentation Library

Also, for more information, see the CIC client help.

Related Topics

[Interaction Message Name](#)

[Interaction URL Configuration](#)

[User Configuration](#)

Web Services Configuration

Use this page to define the settings for the HTTP and HTTPS behavior for Web Services.

Notes: You must have CIC's web services installed and configured on your web server (see *Interaction Web Tools Technical Reference* in the PureConnect Documentation Library on the PureConnect server).

In order for these settings to take effect, restart WebProcessor and WebProcessorBridge.

See also [Web Services Parameters](#).



Web Services Parameters

After installing IC Web Services, the Web Services container appears in Interaction Administrator. In that container you can configure the following chat parameters:

Required Parameters

Parameter	Description
CollaborationLaunchURL	The URL on which the Web Collaboration will start when the agent pushes out the web page to the visitor.
HoldMsg	Message displayed when interaction is placed on hold. Preset to: "%1 has put the conversation on hold." %1 delimiter is replaced by agent name.
InteractionsAllowedUnitTime	See the description in MaxInteractionsAllowedPerUnitTime the default is 1
MaxActiveInteractionsAllowed	This determines the maximum number of active interactions (web chats/callback) allowed through WebProcessorBridge at any point of time. For example, if its value is 5000. WPB can create 5000 active web chats/callbacks. If 10 chats/callbacks are disconnected, WPB can create another 10 web chats/callbacks. This limitation doesn't apply on intercom chats/callbacks. The default is 5000.
MaxAnonymousInteractionsAllowed	This limits the total number of active web chats/callbacks, anonymous users can create at any point of time. the default is 5000.
MaxAnyInteractionsAllowedPerQueue	This limits the total number of active chats and callback requests that are allowed on an ACD queue at any point in time. The default is 5000. Note: The Web Processor adheres to this setting. This setting does not affect the number of active calls, e-mails, and faxes allowed on an ACD queue at any point in time.
MaxInteractionsAllowedPerIP	This limits the total number of active web chats/callbacks that can be created from one IP address at any point of time. The default is 15.
MaxInteractionsAllowedPerUnitTime	MaxInteractionsAllowedPerUnitTime and InteractionsAllowedUnitTime together define the web chat/callback burst time. For example, if MaxInteractionsAllowedPerUnitTime = 5 and InteractionAllowedUnitTime = 1, then no more than a burst of 5 chats per 1 second would be allowed. The default is 5.
MaxInteractionsAllowedPerUser	This limits the total number of active web interactions (chats or callbacks), an Interaction Tracker registered user can create at any point of time. The default is 5.
SystemName	Identifies the server name to display as a prefix for server messages. Preset to: IC. For example, if you changed IC to WebAdmin you would see "WebAdmin: DebbiH has joined the conversation." To change the preset value, right-click the parameter name and select Properties. You see the Parameter Configuration dialog where you can enter a new parameter value.
WebCGIRequestTimeout	This is used with the CGI request/response parameter. This time out (in seconds) determines the maximum time a handler can take to reply to the CGI request. The default is 300.

Optional Parameters

The following Web Services parameters are optional and must be set manually in Interaction Administrator.

Parameter	Description
AgentConnectedMsg	Sets the message that appears in the Chat dialog when an Agent joins a chat. Preset to: "<Name> has joined the conversation." A visitor to the Website who has not registered, would appear as WebUser. A visitor who has registered is identified by name. For example, if the agent's ID was TomS, you would see "TomS has joined the conversation." If the visitor was unregistered, you would see "WebUser has joined the conversation." To change the preset value, right-click the parameter name and select Properties. You see the Parameter Configuration dialog where you can enter a new parameter value.

AgentDisconnectedMsg	Sets the message that appears in the Chat dialog when an Agent leaves a chat. Preset to: "<Name> has left the conversation." A visitor to the Website who has not registered, would appear as WebUser. A visitor who has registered is identified by name. For example, if a registered visitor's ID was DebbiH@framis.com, you would see DebbiH@framis.com has left the conversation. To change the preset value, right-click the parameter name and select Properties. You see the Parameter Configuration dialog where you can enter a new parameter value.
CallbackAccessControl	In IC 4.0 SU3 or later, this controls whether WPB allows visitors to create callback requests. In IC 4.0 SU4 or later, this also determines whether the radio buttons for both anonymous and authenticated access appear in the webpage where a visitor requests a callback. • 0=block all • 1=allow all • 2=authenticated only • 3=anonymous only Example: If CallbackAccessControl=2 and your custom web interface ignores the presence or absence of supportAuthenticationAnonymous, WPB prevents website visitors from creating anonymous callback requests. Example 2: If CallbackAccessControl=1 (allow all) and MaxAnonymousInteractions=0 (anonymous users cannot start a chat or create a callback request), supportAuthenticationAnonymous is sent from WebProcessor Bridge to the visitor's browser.
ChatAccessControl	In IC 4.0 SU 3 or later, this controls whether WPB allows visitors to create chat requests. In IC 4.0 SU 4 or later, this also determines whether the radio buttons for both anonymous and authenticated access appear in the webpage where a visitor starts a chat interaction. • 0=block all • 1=allow all • 2=authenticated only • 3=anonymous only Example: If ChatAccessControl=2 and your custom web interface ignores the presence or absence of supportAuthenticationAnonymous, WPB prevents website visitors from creating anonymous callback requests. Example 2: When ChatAccessControl=1 (allow all) and MaxAnonymousInteractions=0 (anonymous users cannot start a chat or create a callback request), supportAuthenticationAnonymous is sent from WebProcessor Bridge to the visitor's browser.
EnableIdleTimeout	0 = Disable timeout. (Default value) 1 = Enable timeout.
IdleDisconnectMessage	Specifies the message sent to all parties after the chat is disconnected. You can customize this default message: "%1 has been disconnected from chat since being idle for %4." %1 = Visitor name %2 = Idle Time %3 = Grace time %4 = Idle Time + Grace Time Curly brackets, {}, are not used. All time display are localized so they appear in the manner in which the visitor is used to seeing them.

IdleWarningMessage	Specifies the warning message sent to all parties after the time defined in PartyIdleTime. You can customize this default message: "%1 has been idle for %2. The party has to type something within next %3 to remain active in chat". %1 = Visitor name %2 = Idle Time %3 = Grace time %4 = Idle Time + Grace Time Curly brackets, {}, are not used. All time displays are localized so they appear in the manner in which the Visitor is used to seeing them.
MaxPollFrequency	Sets the interval after which the Javascript client polls during a chat. the default is 2000ms (2 seconds). Note: Setting this value lower can seem to speed up the pace of a chat conversation, but it increases the CIC server's workload. Setting it to a higher value eases the CIC server's workload but can make chats seem sluggish. Recommended values are between 1000 ms and 5000 ms.
PartyIdleGraceTime	Set the maximum number of seconds the web user can remain idle after the warning message is sent. The default is 120 seconds. See also SMS Configuration. Note: If you want to use this parameter, you must also add the EnableIdleTimeout parameter and set that parameter to 1.
PartyIdleTime	Set the time (in seconds) the visitor can be idle before the warning is displayed. The default is 300 seconds. See also SMS Configuration. Note: If you want to use this parameter, you must also add the EnableIdleTimeout parameter and set that parameter to 1.
QueryQueueAccessControl	Controls whether the radio buttons for both anonymous and authenticated access to the Chat and Callback links appear to website visitors when the appropriate queue is not busy. • 0=block all • 1=allow all • 2=authenticated only • 3=anonymous only The query queue tool enables you to find out programmatically how many agents are available and what the wait time is. You can write your own code to do something with that information. Your code could implement certain rules that control the display of the Chat and Callback links. For example: • Display the Chat link if wait time is less than 3 minutes. • Display the Chat link if agents are free or the wait time is less than 1 minute. Otherwise, show the • Callback link. • Display the link to everyone if agents are free. If not, and the wait time is less than 8 minutes, display the link to every third visitor. Otherwise don't display the link.
VisitorConnectedMsg	Sets the message that appears in the Chat dialog when a visitor joins a chat. Preset to: "<Name> has joined the conversation." A visitor to the Website who has not registered, would appear as WebUser. A visitor who has registered is identified by name. For example, if the agent's ID was TomS, you would see "TomS has joined the conversation." If the visitor was unregistered, you would see "WebUser has joined the conversation." To change the preset value, right-click the parameter name and select Properties. You see the Parameter Configuration dialog where you can enter a new parameter value.

VisitorDisconnectedMsg

Sets the message that appears in the Chat dialog when a visitor leaves a chat. Preset to: "<Name> has left the conversation." A visitor to the Website who has not registered, would appear as WebUser. A visitor who has registered is identified by name. For example, if a registered visitor's ID was pattyj@nville.com, you would see pattyj@nville.com has left the conversation. To change the preset value, right-click the parameter name and select Properties. You see the Parameter Configuration dialog where you can enter a new parameter value.

Note: Changes to the parameters will not take effect until you restart web services.



Web Chat Configuration

Type the message text or a URL in the appropriate fields.

If the chat message contains text only (that is, the Message URL field is blank), the content of the Message Text field appears in the customer's Chat dialog when the agent double-clicks this message on the Chat dialog Responses tab.

Message Text

Type the message text to display on the client's Chat dialog when this message is selected.

Type Ctrl+Enter to create a new line and format the text. The text does not automatically wrap inside this text box or on the Chat dialog.

Message URL

This field is reserved for future use.

Related topics:

Interaction Message Name

Interaction URL Configuration

Preparing to use Web interactions



URL Configuration

Enter a valid URL (Universal Resource Locator) in the URL field. A CIC client user can drag this entry from the Responses tab and send the Web visitor's browser to the specified address.

[Web Chat Configuration](#)

[Preparing to use web interactions](#)



URL Name

Enter a name that represents the Web location. Authorized agents can select this URL from the Responses tab of the dialog to send to a Web visitor. These names also appear under the Interaction URL Category on the Access Control property page for Users, Workgroups, and the Default User.

[Web Chat Configuration](#)

[URL Configuration](#)



Overview of automatic speech recognition

Automatic speech recognition (ASR) in CIC unifies speech and DTMF input and provides the ability to extend handler based IVRs with speaker independent speech recognition in a constrained grammar setting.

To configure automatic speech recognition, you must first complete the tabs in the **Recognition Configuration** dialog box. Then, you must configure the specific ASR engine that you want to use.

For more information, use the links under *Related topics*.

Related topics

- [General](#)
- [Grammar Cache](#)
- [Properties](#)
- [Preloaded Grammars](#)
- [ASR Engines](#)
- [Overview of ASR engine configuration](#)



Recognition Configuration - General

Use this page to configure the general behavior of speech recognition.

Input Modes Mask

These are the input modes that are supported by the system. For example, if this mask is "dtmf", only DTMF input will be considered.

Default Input Modes

This is the default input mode used for all interactions where the input mode is not explicitly overridden in Reco Initialize tool.

See the Handler help in the PureConnect Documentation Library on the CIC server for more information on this tool.

Default Grammar Base URI

This is the URI (or file path) that is used to resolve relative grammar URIs. It is commonly a file path to the grammars, for example d:/I3/IC/Resources. If this parameter is not specified, the "Resource Path" server parameter is used.

For example, assuming a base URI of "d:/I3/IC/Resources", specifying a relative grammar URI of "main_menu.gram" will be resolved to "d:/I3/IC/Resources/main_menu.gram" by the RecoSubsystem.



Recognition Configuration - Grammar Cache

Use this page to configure the settings for the grammar cache.

Note: These settings should only be modified under the direction of PureConnect Customer Care. Any modifications to these values can have a significant impact on the behavior of the system.

Grammar Cache Directory

This is the directory where the RecoSubsystem maintains the grammar cache. If no directory is specified, the system uses the "Work Path" server parameter.

Grammar Source Data Size Limit (bytes)

This is the maximum number of bytes the source of a single parsed grammar may be comprise of. This setting is used to prevent denial of service attacks by specifying excessively large grammar source files. This limit does not apply to grammars that are not parsed (to allow large binary, engine specific grammars).

Max Per Grammar Data Memory Size (bytes)

This is the maximum size (in characters) the source of a grammar may have before it is cached in a file. Data of grammars that is smaller than this value are cached in memory.

Max Total Grammar Data Memory Cache (bytes)

This is the maximum number of bytes the in-memory cache of the grammar source may contain. If the size of all grammar data cached in memory exceeds this value, the data of subsequently cached grammars is cached in a file (regardless of size).

Note: This does not include the memory occupied by the parse-trees of parsed grammars.

Grammar Cache Cleanup Interval (sec)

This is the interval between garbage collections in the grammar cache (time in seconds).

Min Grammar Idle Time (sec)

This is the minimum amount of time that has to elapse since the last reference to a grammar before that grammar is eligible for garbage collection (in seconds).

Grammar Cache Idle Baseline

This setting specifies the minimum number of idle grammars always left in the cache. Even after idle grammars are eligible for removal because the amount of time passed since last use, the number of grammars specified by this setting is kept in the cache. If there are more idle grammars, the oldest ones are removed. This setting prevents excessive grammars if a system has very low traffic and uses only a few grammars. Without the baseline idle grammars, the grammars would be unloaded between a call and then re-loaded in the next call (for example if the system is not used for a long time during the night).

Note: Setting this value too high may lead to excessive virtual memory usage.

Parsed Grammar Cache Size (bytes)

This is the maximum combined size of all parsed grammars held in memory. If all the grammars in the parsed grammar cache occupy more than this, the oldest grammars are serialized to disk and then released. The next time the grammar is accessed, it's reloaded from disk. Grammars that have been accessed in the last "Min Parsed Grammar Idle Time" seconds or are smaller than "Parsed Grammar Compact Threshold" are not considered.

Note: The calculation of the size of the parsed grammars is only approximate. Setting this value very low can lead to churn when large grammars are registered frequently. The default of 16MB should be appropriate in most cases.

Parsed Grammar Compact Threshold (bytes)

Parsed grammars of size less than this setting will never be compacted (saved to disk and parsed object released). This reduces the likelihood that DTMF grammars are being compacted, as they tend to be rather small.

Min Parsed Grammar Idle Time (sec)

This is the minimum amount of time that must pass since the last access before a parsed grammar is considered for compacting (serializing to disk and then releasing the parsed grammar object).



Properties

Use this page to Add, Edit or Delete speech recognition properties. These properties constitute name and value pairs that are maintained by the recognition subsystem. They are retrieved and modified through the 'Reco Get Property' and 'Reco Set Property' tools.

The "namespace prefix" classifies properties. This is important to distinguish between VoiceXML, I3, and engine specific properties. Properties that have no namespace prefix correspond to their VoiceXML counterparts of the same name. See the table below for a list of property names and values.

Note: For more information on the tools, see the Handler help in the PureConnect Documentation Library.

To add a property click **Add** and enter the **Property Name**. Click **Add Value** and enter the property value. Click **Remove Value** to delete a property.

To edit a property select the property and click **Edit**. Make changes then click **OK** to save your changes.

To delete a property select the property and click **Delete**.

Property Name	Description and Value
reco:ASREngine	This is the name of the ASR (Automatic Speech Recognition) engine used by the current session.
reco:ASRServer	Machine name of the ASR server on which the port of the session is located. Empty string if lazy port allocation and port has not yet been allocated.
reco:ASRSupportedFeatures	This Property is reserved for future release. Space separated list of features supported by the ASR engine of a session. Handlers can enforce support for features in the 'Reco Initialize' and check for individual support through the 'Reco Has Feature' tool. The following features are currently defined: asr_multiple_grammars - The ASR engine supports multiple simultaneously active grammars (multiple ASR grammars may be referenced by the 'Reco Input' tool at once). asr_grammar_weights - The ASR engine supports weights for individual grammars. If not supported, 1.0 is assumed. asr_grammar_fragments - The ASR engine supports fragments in the grammar URIs. asr_sisr_conditionals - The engine supports conditional expressions in semantic interpretation tags. asr_sisr_func_reject -The engine supports the 'Reject' function in semantic interpretation tags. asr_inline_grammars - The ASR engine supports adding grammars defined as source at runtime, thus the tools 'Reco Register Grammar String' and 'Reco Register Inline Grammar' are supported. asr_agile - Engine does not tie the session.
reco:ASRMinResultConf	Minimum confidence an ASR recognition hypothesis must have in order to be included in the recognition result. Default: "0.1"
reco:GrammarBaseURI	Base URI used to resolve relative grammar URIs.
reco:ASRDebugWaveLogging	Boolean property to enable logging of wave data for debugging purposes. The default is "false." Note: When the reco:RestrictResultTracing property is set to True, the reco:ASRDebugWaveLogging property will automatically be set to False.
reco:RestrictResultTracing	The purpose of this property is to prevent sensitive data from being logged in the IP logs. Set this property to True for an input operation. This sets a flag in the recognition result that suppresses tracing of the utterance and slot values in the trace logs. Note: When this property is set to True, it will also disable the ASR Debug Wav recordings.

reco:ASRBargeinDisabled	Boolean property to disable barge-in. If this property is set to "true", the plays are not cancelled when speech is detected. The plays will be cancelled when the recognition is complete (successful or failed). Default: "false"
reco:ASRANII	Defines the ANII value of the current call. Used for logging.
reco:ASRApplicationName	Defines the Application Name to be logged for the current call.
reco:ASRConfidenceMapping	Defines a list of confidence mapping pairs which are used to map the native engine confidences into the confidence values returned in the recognition result. This property is thus used to normalize differing confidence values returned by the ASR engines. Each mapping pair consists of two floating point values between 0.0 and 1.0, separated by an equal sign. The first value designates the native value (returned by the engine) and the second value the resulting mapped confidence for that particular engine value. The property may contain an arbitrary number of mapping points. Linear interpolation is used to map confidence values that lie between two point. When mapping confidence values, two implicit mapping points "0.0=0.0" and "1.0=1.0" are always assumed. This results in an identity mapping if no property is defined and to ensure correct handling at the boundaries.
reco:EnableSpeakerVerification	Specifies whether speaker identification/verification features should be enabled for an engine.
reco:GrammarCompileTimeout	Specifies the timeout (in seconds) to use when waiting on grammars to be compiled. Depending on the engine, this may not be able to be set through IA and may only have an affect if set in the server's xml config file. Default: 300.0 (5 minutes)
reco:EndOfSpeechNotifyDelay	Specifies the delay after the end of speech has been detected before the server sends an end-of-speech notification. Default: 0.1 (100 ms)
recocfg:ASRMaxProxySessionCount	Maximum number of sessions a server proxy may host. Creating more sessions than the maximum number will be refused. Sessions will not be killed if the maximum session count is changed to a lower value than the number of currently active sessions.
recocfg:ASRServerProxyEnabled	Configuration property specifying whether a server proxy is enabled. A disabled proxy will not allow new sessions (similar proxies whose recocfg:MaxProxySessionCount property are set to 0.
recocfg:AudioAdvertisedAddress	IP address or DNS name under which the CIC server sees the RTP endpoint of the ASR server. The address specified through this property must refer to the same physical device as recocfg:AudioListenInterfaceAddress. IMPORTANT: This property must be used with care and only if the implications are well understood. Misconfiguration may lead to hard to diagnose problems or failures in the audio delivery to the ASR servers.
recocfg:AudioConnectionProbeInterval	Interval between audio connection probes in seconds. It specifies the minimum interval between successful connection probe attempts.
recocfg:AudioConnectionProbeMaxFail	Maximum number of failed audio connection probe attempts before a connection configuration problem is assumed and reported.

recocfg:AudioListenInterfaceAddress	Local IP address of the NIC which the server should use to receive audio. This address must refer to the same physical device as the recocfg:AudioAdvertisedAddress property. The local NIC address must be specified as "dot" address (no DNS name). IMPORTANT: This property must be used with care and only if the implications are well understood. Misconfiguration may lead to hard to diagnose problems or failures in the audio delivery to the ASR servers.
recocfg:EnableAudioConnectionProbe	Enables the audio connection probes to check the connection between the CIC servers and ASR servers at regular intervals.
recocfg:ServerProxyPriority	Priority of a server proxy compared to other server proxies for the same engine. When choosing a server for a session, the proxies with low priorities are picked first until their session limit is reached.
recocfg:SupportedLanguages	List of languages supported by an EIM or ASR server. Note: A value of "en" indicates that all versions of English are supported. A value of "en-US" indicates that only the U.S. English version is supported.
sensitivity	VoiceXML related property: Relative sensitivity to speech input. 1.0 means highly sensitive to quiet input and 0.0 very insensitive to noise. Not all engines will support this. Default: 0.5
speedvsaccuracy	VoiceXML related property: Relative tradeoff between recognition accuracy and CPU utilization (faster recognition). 0.0 means fastest recognition, 1.0 means highest recognition accuracy. Not all engines support this. Default: 0.5
bargeintype	Type of barge-in performed by the voice input. This property corresponds to the 'bargeintype' VoiceXML property. Possible values defined by VoiceXML: speech - The barge-in occurs when speech or DTMF is detected. hotword - The barge-in occurs after a grammar has accepted voice or DTMF input. Input that does not match a grammar is ignored. Thus, the tool will never take the "No Match" exit. The default is "speech".



Preloaded Grammars

Use this page to configure preloaded grammars.

Name

This is the name of the preloaded grammar. This name is used to identify the preloaded grammar in the "Reco Register Preloaded Grammar" tool.

URI

This is the URI or filename of the grammar to be preloaded.

MIME Type

This is the MIME type of the grammar referenced by the URI.

Mode

This is the mode of the grammar. Currently, only "voice" grammars can be preloaded.

To add a preloaded grammar click **Add** and enter the **Preloaded Grammar Name**, **URI**, **MIME Type**, and the **Mode**, then click **OK**.

To edit a preloaded grammar select the grammar and click **Edit**. Make changes then click **OK** to save your changes.

To delete a preloaded grammar select the grammar and click **Delete**.



Recognition Configuration - ASR Engines

Use this page to arrange in order the list of available ASR engines. Select the engine then use the **Move Up** or **Move Down** buttons to change the order.

Engines appear in this list when they're enabled (which is done by the install based on the manifest). The order of engines determines in which order the RecoSubsystem picks engines when multiple engines match the parameters (such as the language of the call).



ASR server configuration

Location

Select the location from the list where this ASR server resides. By default, when an ASR server logs in to the CIC server, it is automatically assigned to the default location. You must reassign it if it belongs in a different location. You can also set the location in the **Regionalization Locations** container.

Launch Web Configuration...

Click this button to update the configuration of the ASR server. For more information on configuring ASR servers, see the *ASR Technical Reference* in the PureConnect Documentation Library on the CIC server.

Related topics

[Selection Rules](#)

[Regionalization Location](#)



Overview of ASR engine configuration

To configure any of the supported ASR engines, open the ASR engine-specific subcontainer in the **Recognition** container. Then complete the tabs. See the links under *Related topics* for more information.

For more information on configuring ASR servers, see the *ASR Technical Reference* in the PureConnect Documentation Library.

Related topics

[General](#)

[Properties](#)

[Preloaded Grammars](#)



General

Use this page to set general configuration options.

Enabled

This check box enables the use of this ASR engine. For performance reasons, only ASR engines for which there are ASR servers available should be enabled.

EIM Module DLL

This is the DLL that implements the engine integration component for this ASR engine. This field is populated by the install and should not be modified unless directed by support services.



Properties

Use this page to Add, Edit or Delete speech recognition properties. These properties constitute name and value pairs that are maintained by the recognition subsystem. They are retrieved and modified through the 'Reco Get Property' and 'Reco Set Property' tools.

The "namespace prefix" classifies properties. This is important to distinguish between VoiceXML, I3, and engine specific properties. Properties that have no namespace prefix correspond to their VoiceXML counterparts of the same name. See the table below for a list of property names and values.

Note: For more information on the tools, see the Handler help in the PureConnect Documentation Library.

To add a property click **Add** and enter the **Property Name**. Click **Add Value** and enter the property value. Click **Remove Value** to delete a property.

To edit a property select the property and click **Edit**. Make changes then click **OK** to save your changes.

To delete a property select the property and click **Delete**.

Property Name	Description and Value
reco:ASREngine	This is the name of the ASR (Automatic Speech Recognition) engine used by the current session.
reco:ASRServer	Machine name of the ASR server on which the port of the session is located. Empty string if lazy port allocation and port has not yet been allocated.

reco:ASRSupportedFeatures	This Property is reserved for future release. Space separated list of features supported by the ASR engine of a session. Handlers can enforce support for features in the 'Reco Initialize' and check for individual support through the 'Reco Has Feature' tool. The following features are currently defined: asr_multiple_grammars - The ASR engine supports multiple simultaneously active grammars (multiple ASR grammars may be referenced by the 'Reco Input' tool at once). asr_grammar_weights - The ASR engine supports weights for individual grammars. If not supported, 1.0 is assumed. asr_grammar_fragments - The ASR engine supports fragments in the grammar URIs. asr_sisr_conditionals - The engine supports conditional expressions in semantic interpretation tags. asr_sisr_func_reject -The engine supports the 'Reject' function in semantic interpretation tags. asr_inline_grammars - The ASR engine supports adding grammars defined as source at runtime, thus the tools 'Reco Register Grammar String' and 'Reco Register Inline Grammar' are supported. asr_agile - Engine does not tie the session.
reco:ASRMinResultConf	Minimum confidence an ASR recognition hypothesis must have in order to be included in the recognition result. Default: "0.1"
reco:GrammarBaseURI	Base URI used to resolve relative grammar URIs.
reco:ASRDebugWaveLogging	Boolean property to enable logging of wave data for debugging purposes. The default is "false." Note: When the reco:RestrictResultTracing property is set to True, the reco:ASRDebugWaveLogging property will automatically be set to False.
reco:RestrictResultTracing	The purpose of this property is to prevent sensitive data from being logged in the IP logs. Set this property to True for an input operation. This sets a flag in the recognition result that suppresses tracing of the utterance and slot values in the trace logs. Note: When this property is set to True, it will also disable the ASR Debug Wav recordings.
reco:ASRBargeinDisabled	Boolean property to disable barge-in. If this property is set to "true", the plays are not cancelled when speech is detected. The plays will be cancelled when the recognition is complete (successful or failed). Default: "false"
reco:ASRANII	Defines the ANII value of the current call. Used for logging.
reco:ASRApplcationName	Defines the Application Name to be logged for the current call.

reco:ASRConfidenceMapping	Defines a list of confidence mapping pairs which are used to map the native engine confidences into the confidence values returned in the recognition result. This property is thus used to normalize differing confidence values returned by the ASR engines. Each mapping pair consists of two floating point values between 0.0 and 1.0, separated by an equal sign. The first value designates the native value (returned by the engine) and the second value the resulting mapped confidence for that particular engine value. The property may contain an arbitrary number of mapping points. Linear interpolation is used to map confidence values that lie between two point. When mapping confidence values, two implicit mapping points "0.0=0.0" and "1.0=1.0" are always assumed. This results in an identity mapping if no property is defined and to ensure correct handling at the boundaries.
reco:EnableSpeakerVerification	Specifies whether speaker identification/verification features should be enabled for an engine.
reco:GrammarCompileTimeout	Specifies the timeout (in seconds) to use when waiting on grammars to be compiled. Depending on the engine, this may not be able to be set through IA and may only have an affect if set in the server's xml config file. Default: 300.0 (5 minutes)
reco:EndOfSpeechNotifyDelay	Specifies the delay after the end of speech has been detected before the server sends an end-of-speech notification. Default: 0.1 (100 ms)
recocfg:ASRMaxProxySessionCount	Maximum number of sessions a server proxy may host. Creating more sessions than the maximum number will be refused. Sessions will not be killed if the maximum session count is changed to a lower value than the number of currently active sessions.
recocfg:ASRServerProxyEnabled	Configuration property specifying whether a server proxy is enabled. A disabled proxy will not allow new sessions (similar proxies whose recocfg:MaxProxySessionCount property are set to 0.
recocfg:AudioAdvertisedAddress	IP address or DNS name under which the CIC server sees the RTP endpoint of the ASR server. The address specified through this property must refer to the same physical device as recocfg:AudioListenInterfaceAddress. IMPORTANT: This property must be used with care and only if the implications are well understood. Misconfiguration may lead to hard to diagnose problems or failures in the audio delivery to the ASR servers.
recocfg:AudioConnectionProbeInterval	Interval between audio connection probes in seconds. It specifies the minimum interval between successful connection probe attempts.
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To edit a preloaded grammar select the grammar and click **Edit**. Make changes then click **OK** to save your changes.

To delete a preloaded grammar select the grammar and click **Delete**.



Media Servers

The primary purpose of the Interaction Media Server is to handle the RTP/SRTP audio streams for one or more CIC servers.

Interaction Media Server supports supervisory monitoring of calls, and it handles recording (and optionally encrypting) calls that CIC users choose to record, or that the Interaction Recorder system flags for recording. Interaction Media Server enables multiple devices using different coders/decoders (codecs) to communicate by transcoding between RTP streams (e.g., G.711, G.729, etc.) that come into an Interaction Media Server. It also handles Secure RTP (SRTP) audio, when properly configured, and the Interaction Media Server can pass through SRTP or transcode between SRTP and RTP audio streams, if one device sends SRTP and another receiving device can handle only RTP audio. Interaction Media Server plays all IVR prompts and on-hold music hosted on the CIC server. It can also perform call analysis on outbound calls. Interaction Media Server is also the engine for Interaction Speech Recognition and does keyword spotting in conversations for Interaction Analyzer.

Notes: You do not define Interaction Media Servers through Interaction Administrator. Once an Interaction Media Server is licensed, you use the Interaction Media Server web interface to connect to a specific CIC server. Interaction Administrator shows all active, licensed, and connected Interaction Media Servers within the Media Servers object in the left pane of the Interaction Administrator window.

Related topics

[Media Server Configuration](#)

[Media Server General Configuration](#)

[Media Server Properties](#)

[Media Server Web Configuration](#)

[Regionalization](#)

[Location Assistant](#)

[Select Media Server](#)

[Call Analysis Language](#)



Media Server Configuration Properties

Use this page to set global properties for all Interaction Media Servers, or properties for a specific Interaction Media Server. The list displays the **Name** and **Value** of the properties. Click **Add** to add a new property, click **Edit** to edit a property, or click **Delete** to remove a property.

For a list of valid properties see the **Properties Configuration Page** section of the *Interaction Media Server Technical Reference* document in the **Technical Reference Documents** section in the PureConnect Documentation Library.

Notes: For more information on properties, see *the Interaction Media Server* document available on the Product Information site.

Setting global properties in IA overrides the properties set in the Interaction Media Server web interface and applies to all connected Interaction Media Servers.

Related topics

[Media Server Introduction](#)

[Media Server General Configuration](#)

[Media Server Properties](#)

[Media Server Web Configuration](#)

[Regionalization](#)

[Location Assistant](#)

[Select Media Server](#)

[Packaged Server Parameters](#)

[Telephony Parameters - General](#)

[Optional Server Parameters](#)



Media Server General Configuration

Use this page to set a specific location of an Interaction Media Server.

Select the **Location** from the list where this Interaction Media Server resides. By default, when a media server logs in to the CIC server, it is automatically assigned to the **<Default Location>**. To change the virtual location of an Interaction Media Server, use the [Regionalization Locations](#) container.

Related topics

[Media Server Configuration Properties](#)

Servers

Use this section to change the configuration of any Interaction Media Server that is connected to the CIC server.

[Servers Configuration Properties](#)

[Servers Configuration Web Configuration](#)



Media Server Properties

Interaction Media Server properties are name-value pairs that control the operations of the media server.

These properties can be set in four different places – two in the Media Server configuration pages and two in Interaction Administrator. The properties are used in a hierarchical relationship order, which enables an administrator to have specific control

over the scope of these properties, as needed. The default properties are established on each media server, but each property can be overridden by defining it and assigning a different value in Interaction Administrator. Any property can be set from any location, depending on the scope of the property (i.e., which media servers and CIC servers it applies to). If you don't set any media server properties in Interaction Administrator, the default properties apply, or whatever you set locally on each media server.

Note: When you define media server properties with a different value in Interaction Administrator, those properties are not visibly displayed in the Interaction Media Server's interface, as they are when you define them locally on the media server. To see the complete set of all properties in effect on a media server, look in Interaction Administrator and the Interaction Media Server interface.

The four property configuration locations and the scope and purpose of each are summarized in the following table:

Evaluation Order	Property Configuration	Purpose and Scope
1	Global media server properties – defined on the media server from the Config -> Properties configuration page	These properties apply to all CIC servers connected to this media server. This is the lowest level of priority in the hierarchy as all other property settings can override these. Even properties that are not displayed here have a default value and they may be overridden if set elsewhere. Click here for a location example.
2	Server properties – defined on the media server from the Properties page linked from the Config -> Servers configuration page	These properties apply only to the connection between the selected CIC server and that media server. If there is overlap, properties defined here override the same property defined in the Global Properties page. Click here for a location example.
3	IC server Global Properties – defined in Interaction Administrator Media Servers/ Configuration on the Properties tab	These properties apply to all media servers logged in to this CIC server. If there is overlap, these properties override all of the properties set on the web configuration pages of all connected media servers. Click here for a location example.
4	IC server properties – defined in Interaction Administrator, in Media Servers/Server/ <servername> Properties tab	These properties apply only to the selected media server logged in to this CIC server. If there is overlap, these properties override the CIC server Global Properties, as well as all properties defined on the web configuration pages of the specified media server.. Click here for a location example.

When the CIC server performs a media server operation (e.g., start a recording), the Interaction Media Server uses the aggregate set of properties to determine the current configuration. It evaluates the properties in this order:

1. Start with all of the properties defined in its global **Properties** page (1st in the table)
2. Add all of the properties defined in the Server **Properties** page (2nd in the table). If any of the server properties are also set in the global properties, use the server properties.
3. Add all of the properties defined in the global Media Server Properties in Interaction Administrator (3rd in the table). If any of these properties are also defined on the media server, use the global properties from Interaction Administrator.
4. Add all of the properties defined in the specific Media Server <servername> **Properties** page in Interaction Administrator (4th in the table). Use these properties to override any other property defined with the same name.
5. Add all of the properties together for a specific operation.

Using this hierarchy, you can have a default configuration but choose to override any part of it for a specific operation or server combination. If the properties you need to set are identical on all media servers, you can set them all once in Interaction Administrator and you won't have to set them at all in the Interaction Media Server interface.

Property Configuration Example:

Consider the RecordingMimeTypeDefault property, which controls the audio recording format when Interaction Recorder is configured to use "μ-Law (Mono)" as its compression format, or when a custom handler initiates a recording and does not specify a "Mime Type" parameter.

Suppose you specified audio/PCMA as the recording format in the **Config --> Properties** page of the Media server. That means when a recording is created, it is in that format unless specifically overridden. If you later realize the need to record all calls on a particular CIC server in the audio/GSM format, you can add the RecordingMimeTypeDefault property with the audio/GSM value to the **Config --> Server --> Properties** page. However, if a CIC server uses several media servers, you would have to go to each media server and add that property to the **Properties** page of that CIC server's configuration on the media server. Instead, you can use Interaction Administrator and add that property/value to the **Properties** tab on the **Media Servers --> Configuration --> Properties**

dialog. Now all recordings created by that CIC server will be recorded in audio/GSM. If you discover that you really need all but one of the media servers to use audio\GSM, you can open the configuration container for that particular media server in Interaction Administrator and specify a different format for that server on the **Properties** tab.

Related topics

[Media Server Introduction](#)

[Media Server Configuration](#)

[Media Server General Configuration](#)

[Media Server Web Configuration](#)

[Regionalization](#)

[Location Assistant](#)

[Select Media Server](#)

[SIP Line Configuration - Session](#)

[SIP Station Configuration - Session](#)



Media Server Web Configuration

Use this page to launch the web configuration interface for the currently selected Interaction Media Server.

When you click the **Launch Web Interface** button, your default browser will attempt to open the configuration interface on the selected media server. However, if this is the first time that this browser has connected to the media server, you will likely see a certificate warning message because the media server's certificates are self-signed, and it is not yet a trusted site.

Select the **Accept this certificate permanently** radio button to accept the media server's certificate

If you have multiple media servers connected to a CIC server and you want to deactivate an individual media server but keep other media servers active, you can deactivate it in the web interface for that specific media server.

1. Click the **Launch Web Interface** button to open the media server's interface, and log on to the media server.
2. Click the **Config** button in the top right corner of the media server's web interface.
3. On the **Servers** page, click the **Server** button for the media server you want to deactivate.
4. In the **Accept sessions** drop down list, select **No** and click **Apply Changes**. This prevents the media server from accepting any more requests from the CIC server.

Related topics

[Media Server Introduction](#)

[Media Server Configuration](#)

[Media Server General Configuration](#)

[Media Server Properties](#)

[Regionalization](#)

[Location Assistant](#)

[Select Media Server](#)

[SIP Line Configuration - Session](#)

[SIP Station Configuration - Session](#)



SIP Proxies

The Interaction SIP Proxy Server must be configured to log on to the CIC server using valid CIC account credentials. Once the SIP Proxy is logged on to CIC, Interaction Administrator detects the connection and the Interaction SIP Proxy server name appears in the SIP Proxies container. You can not add a SIP Proxy server from Interaction Administrator – the connection must be initiated from the SIP Proxy server side

Once the Interaction SIP Proxy server appears, open it and click on the [General](#) tab.

Note: A SIP proxy server can be added by configuring the proxy server to point to the CIC server, and initiating the connection. You can not add a SIP Proxy server from Interaction Administrator.

Related topics

[SIP Proxy Configuration - General](#)

[SIP Proxy Configuration - Web Configuration](#)

[Add SIP Proxy](#)

[Endpoints](#)

[Add Registration](#)



SIP Proxy Configuration - General

Use this page to configure general settings for the SIP Proxy server.

If you want SIP devices to register to both CIC and Interaction SIP Proxy, you must define a SIP proxy in Interaction Administrator and set a registration group to use both a SIP line and the SIP proxy.

Trust this Proxy

Select this button to enable the CIC server to communicate with the Interaction SIP Proxy server. This button is not displayed if the Interaction SIP Proxy server is currently trusted. If you want to reset or stop using a proxy, you must delete it.

Location

Select the location associated with the SIP Proxy server. Each SIP Proxy server can include device configuration data from only one [location](#) at a time. Location(s) are available in the list assuming one or more locations are defined in the [Regionalization Locations](#) container.

Once you select the location, click **OK** and the CIC server will exchange certificates and share its Location configuration data with the SIP Proxy server. The Version, Registration Address and Ports are displayed below the location.

CIC sends updates in the location configuration data to the Interaction SIP Proxy server as needed.

Related Topics:

[SIP Proxy Configuration - Web Configuration](#)

[Add SIP Proxy](#)

[Endpoints](#)

[Add Registration](#)



SIP Proxy Configuration - Web Configuration

If you know the user name and password (see the CIC Administrator) to the Interaction SIP Proxy server, you can access the web configuration interface. Click on the **Launch Web Configuration...** button to open the web configuration interface for the Interaction SIP Proxy server. You must have a valid user name and password to log in to the SIP Proxy server.

Related Topics:

[SIP Proxy Configuration - General](#)

[Add SIP Proxy](#)

[Endpoints](#)

[Add Registration](#)



MRCP Servers Configuration

The Media Resource Control Protocol (MRCP) allows a client device to control media processing resources on the network. Some media processing resources include speech recognition engines, speech synthesis engines, speaker verification engines, and speaker identification engines. MRCP relies on a session management protocol, such as the Session Initiation Protocol (SIP), to establish the session between the client and the server, and then the media processing control is passed to the client.

Use this page to set the global MRCP server options.

Note: To set MRCP as the default TTS provider, use the **Text to Speech** tab of the **System Configuration** dialog box. For more information, see *Text to Speech*.

Protocol

Select TCP or UDP, depending on protocols supported by your IP-enabled devices (e.g., gateway, phones, etc.) The default protocol is TCP to initiate the session. After the session is established, MRCP uses TCP and cannot be changed. *If you make changes to the protocol setting or to the network interface card, you must restart the MRCP server.* If you change the protocol, you must restart the MRCP subsystem in order for the change to take effect.

Address to Use

Select the network interface for the MRCP server to use. Local Area Connection is the default setting. If you change the address, you must restart the MRCP subsystem in order for the change to take effect.

Connection Timeout

Enter the value in seconds to disconnect the connection if it does not enter a connected state before the expiration of the timeout. The default value is 5 seconds. The acceptable values are 1 through 60.

Use Media Streaming Server to Play Voicemails

Select this check box to enable any Interaction Media Streaming Server to play voice mail messages that are stored as attachments in e-mail messages. You must use the Interaction Media Streaming Server web interface to configure the settings for the e-mail server. If this check box is not enabled, voice mail messages are inserted into the call by Interaction Media Server.

Related Topics

[Configuration](#)

[Supported Resources](#)

[Server Properties](#)

[Text to Speech](#)

MRCP Servers Configuration

Use this page to set the MRCP server configuration options.

Notes: In order to configure an MRCP server, you must have either the Master Administrator right or the admin access right to edit the MRCP server. For more information, see [Assign the master administrator right](#), [Assign administrator access rights](#), and [Administrator access control groups: System category](#).

If you make changes to the [protocol](#) setting, or to the network interface card, you must restart the MRCP server.

Active

This check box indicates if this MRCP server is active. By default, this check box is selected (enabled).

SIP Address

Enter the SIP address of this MRCP server. The address is in the SIP URI format, i.e., sip:x@y:port, where x=username and y=host (domain or IP). Some examples include:

- sip:buzz.mullins@123.123.1.123
- sip:customercare@inin.com
- sip:12345@inin.com

Port 6060 is recommended for MRCP servers with CIC installations to avoid potential conflicts with default ports for SIP endpoints.

Location

Select the [region](#) to associate this MRCP Server with.

Notes: When creating an MRCP session, the Location setting of the MRCP Server is taken into consideration. The MRCP Server selection process based on region, where MRCP Servers in a preferred region are considered before MRCP Servers in other regions, is performed before load balancing, where the MRCP Server is selected with the least amount of sessions.

When a new MRCP resource is required, Telephony Services selects the Media Server to use for the audio resource. Telephony Services passes the region/location of the Media Server to the MRCP subsystem. The MRCP subsystem evaluates all the MRCP Servers in the region, and then selects the MRCP Server with the least amount of sessions to create the resource on. If no MRCP Servers are available in the selected Location for the region, the MRCP subsystem defaults to other available MRCP Servers. The MRCP Server with the least amount of sessions is selected to create the resource on.

Priority

Select the priority level for this MRCP server. The MRCP subsystem uses this setting in the load balancing algorithm. When multiple servers can satisfy a request, sessions are created on servers with a lower priority number. By default, the priority is 1.

Vendor

Use this field to optionally describe the MRCP server's vendor.

Capabilities

This section differs depending on the server's vendor; the **Retrieve from server** option is not available in a third party server configuration.

Retrieve from server: Select this option to have the MRCP server provide its available capabilities to the Interaction Center server. Select the associated button to immediately request the capabilities of the MRCP specified in the **SIP Address** box.

- **Use refresh interval (sec)** – Enable this check box if you want the Interaction Center server to continuously request the capabilities of the MRCP server. Use the associated spin box to set the number of seconds that should elapse between requests.

Use custom: Select this option if you want to manually specify the capabilities of the MRCP server, even if those features are not yet enabled or configured on the MRCP server.

- **Text to speech** – Enable this check box to allow the MRCP server to convert text to synthesized speech in calls.
- **External audio sources** – Enable this check box to allow the MRCP server to provide streaming audio that is injected into calls, such as Music on Hold.
- **Voicemail** – Enable this check box to allow the MRCP server to insert voice mail messages into calls.

SIP Create Session Supported

Select this check box to indicate that the TTS server supports INVITES to create an empty session with no specific resources defined. By default, this check box is not selected (enabled).

Enable Session TTL

This setting enables TTL sessions, when selected. When enabled, either the **Indefinite - Session Stays Live until BYE** option or the **Defined TTL Session Time** option is selected. These options are the time in seconds that an MRCP session is kept alive by the server after the last request. This is used to allow the client to cache the session if needed. If **Defined TTL Session Time** is selected, the default time is 15 seconds. Possible values are from 1 to 3600.

If this check box is not selected, TTL sessions are not enabled, and the options below are grayed-out or unavailable.

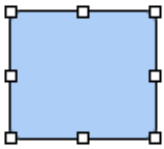
MRCP Version

This field displays the version of the MRCP server.

External Audio Sources

This tab displays the external audio sources that you have defined in the Interaction Media Streaming Server web interface.

Note: Interaction Center can use only those external audio sources for which you have provided a name in the Interaction Media Streaming Server web interface.

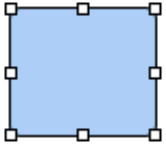


Supported Resources

Use this page to select the resources that are supported for this MRCP server. The options are:

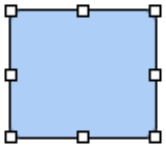
- **Speech Recognition:** This is a full speech recognition resource that is capable of receiving a media stream containing audio, and interpreting it to recognition results. It also has a natural language semantic interpreter to post-process the recognized data according to the semantic data in the grammar, and to provide semantic results along with the recognized input. The recognition resource may also support enrolled grammars, where the client can enroll and create new personal grammars for use in future recognition operations.
- **DTMF Recognition:** This is a recognition resource capable of extracting and interpreting DTMF digits in a media stream, and matching them against a supplied digit grammar. It could also do a semantic interpretation based on semantic tags in the grammar.
- **Speech Synthesizer:** This is a full-capability speech synthesis resource capable of rendering speech from text. Such a synthesizer *should* have full SSML [25] support.
- **Basic Synthesizer:** This is a speech synthesizer resource with very limited capabilities that can generate its media stream exclusively from concatenated audio clips. The speech data is described using a limited subset of SSML [25] elements. A basic synthesizer *must* support the SSML tags <peak>, <audio>, <say-as> and <mark>.
- **Speak Verify:** This is a resource capable of verifying the authenticity of a claimed identity by matching a media stream containing spoken input to a pre-existing voice-print. This may also involve matching the caller's voice against more than one voice-print, also called multi-verification or speaker identification.
- **Recorder:** This is a resource capable of recording audio and saving it to a URI. A recorder *should* provide some end-pointing capabilities for suppressing silence at the beginning and end of a recording, and *may* also suppress silence in the middle of a recording. If such suppression is done, the recorder *must* maintain timing metadata to indicate the actual time stamps of the recorded media.

By default, **Speech Synthesizer** is selected as a supported resource.



Server Properties

Use this page to [Add](#), [Edit](#), or **Remove** custom server properties for this MRCP server.



Voices

Use this page to configure the voices (or audio) for the MRCP server. The voices specified on this page are the MRCP voices used to synthesize the text to speech.

Select a voice from the pull-down menu. Click [Add](#) to enter a synthesizer voice name, or click **Remove** to disable a selected voice.

Gender

Select the gender of the voice. The default value is **Neutral**. The other possible values are **Female** and **Male**.

Supported Languages

A voice can support specific languages. By default, the selected voice supports all languages, and the languages are displayed in the **Currently Selected** list. **Add** moves selected languages from the **Available** list to the **Selected** list. **Remove** moves selected languages from the **Selected** list to the **Available** list. **Add All** moves all languages to the **Selected** list, and **Remove All** removes them all from the **Selected** list.



Custom attributes

The Custom Attributes page allows you to add customized attributes so that you can reference your own variables and settings through the IceLib interface.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the Custom attributes page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

The **Custom Attributes** page contains a list of the attributes and displays a **Name** and a **Value** column, and has the following buttons:

Add

Click **Add** and select an existing custom attribute from the pull-down list, enter a new custom attribute. If creating a new attribute, use a unique name, otherwise the existing attribute is overwritten.

Edit

Click **Edit** to change the value of an existing custom attribute.

Delete

Click **Delete** to delete an existing custom attribute.

Manage Attributes

Click **Manage Attributes** to open a dialog box that displays a list of custom attributes. Click **Add** or **Delete** to manage the appearance of the custom attributes in the pull-down list.

The custom attributes are saved in the path displayed at the bottom of the dialog box.

Note: For more information on the Interaction Center Extension Library (IceLib), see the [System APIs](#) help topic in the PureConnect Documentation Library.



History

This page provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes to the History page in the User Configuration dialog box and the Workgroup Configuration dialog box are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

Last Modified

This date is automatically updated each time you click the **OK** button, presumably after you make changes to the configuration. To avoid updating this date, exit the page by clicking the **Cancel** button.

Note: If you click **Cancel**, none of the changes made to this page will be preserved.

In addition, the history is updated when changes are made to the record elsewhere in Interaction Administrator. For example, when a user change his or her password, the **Last Modified** date is updated.

Note: Changes to the licenses for a user or a station do not update the Last Modified date.

Date Created

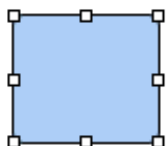
This date is automatically set when the user creates the initial configuration for this page. If the page was initially created during setup, the date could be blank.

Notes

Type notes about configuration settings and changes. If you change the configuration page and click **OK**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

To create a new line in the **Notes** field, press Enter.



Session Manager Configuration

CIC can use an off-server Session Manager to handle some of the CPU and memory demands on the CIC server, thereby improving performance. Use this page to view or manage the off-server domain names and locations of Session Manager servers.

Session Manager servers provide this information to IceLib (Interaction Center Extension Library). [Regionalization](#) can use a Session Manager server as an [endpoint](#) to define a location where users and stations are located.

Note: See the *Session Manager Development Application Note* for information on the off-server Session Manager install. For Session Manager server hardware requirements, see **Interaction Application Servers** on testlab.genesys.com.

Fully Qualified Domain Name:

This is the FQDN of this Session Manager server. This field is read-only.

Override

Select this check box and enter a different FQDN in the text box to let a connecting client know that the FQDN of the this Session Manager server is not the FQDN stored in Interaction Administrator.

Connections

You can configure a Session Manager instance to accept client connections with the **Connections** options.

Option	Description
Use default behavior	This setting has a different meaning depending on whether the Session Manager is an on-server or off-server Session Manager. For an on-server Session Manager: - Available – Session Managers do not accept connections. - Not available – Session Managers accept connections. For an off-server Session Manager: - The default behavior is to accept connections.
Accept all connections	Session Manager accepts connections regardless of whether it is an on- or off-server Session Manager and regardless of any available off-server Session Managers.
Do not accept new connections (Maintenance Mode)	Session Manager stops accepting new connections. If there are existing connections to the Session Manager instance, those will remain live until either those clients disconnect themselves or the Session Manager instance is restarted.

Location

By default, the off-server Session Manager server uses the location of the CIC server as indicated in **Use the location of:**. If the client should connect to another location, select **Use this location** and choose the location (as defined in [Location](#) configuration) from the drop-down menu.

The full name of the location displayed here is the same name as it appears in the location's [endpoint](#) container.

Note: If you set the location of the Session Manager to the location of a CIC server, then Session Manager cannot be removed from that location in the location's [endpoint](#) container.

Switchover Behavior

In a switchover environment, off-server Session Manager servers can connect to the primary CIC server, or to the particular CIC server they were installed against. It is recommended to use the **Always reconnect to the primary IC server on switchover** option or 'no switch' mode. The other option, **Always connect to: [IC server]**, is not common and intended mainly for backwards compatibility for WAN switchover sites.

Related Topics

[Regionalization](#)

[Regionalization Location](#)

[Endpoints](#)

[Subsystem Certificates](#)

[Certificate Management](#)

[CPU Load Detection](#)

[Interaction Client](#)

[Optional General Server Parameters](#)



SMS

CIC provides an integrated SMS (Short Message Service) server subsystem that connects with external SMS brokers to exchange messages. The SMS server arbitrates between external SMS brokers and internal CIC subsystems, such as the ACD server, reporting, and Interaction Recorder.

CIC can send [outbound SMS messages](#) using handlers by connecting to the SMS gateway or an HTTP broker. CIC can also route [inbound SMS messages](#) to users or workgroups by putting the original text into an email message.

Note: For more information on SMS see *Short Message Service Technical Reference* in the Technical Reference Documents section of the PureConnect Documentation Library on the CIC server.

The topics included in this section are:

- [SMS Inbound Routing](#)
- [SMS Inbound Route Configuration](#)
- [SMS Outbound Routing](#)
- [SMS Outbound Route Configuration](#)
- [SMS Broker: Configuration](#)
- [SMS Broker: Accounts](#)
- [SMS Broker: Proxy](#)
- [SMS Broker: Message Originated](#)
- [SMS Broker: Message Terminated](#)

SMS Inbound Routing

Use this page to configure an ordered set of rules for routing SMS messages through CIC. Based on regular expression matching of the ANI, DNIS, or body, a message can be routed to either a user or workgroup queue, chat or a handler.

The routes are defined by type, regular expression, and destination.

Click [Add](#) to add a new inbound route.

Related Topics:

[SMS Inbound Route Configuration](#)

[SMS Outbound Routing](#)

[SMS Outbound Route Configuration](#)

SMS Inbound Route Configuration

Use this page to configure inbound SMS routes. Use the **Move Up** and **Move Down** buttons to order the routes in priority. If no inbound routes are configured, messages travel through the email message routing system. If one or more inbound routes are configured, a default inbound route must also be configured.

Note: Only one default inbound route can exist, and it must always be the last route in order.

Type

Select the type of route from the drop-down menu. the options are ANI, Body (body of the message), and DNIS.

Expression

Enter the expression associated with the type of route. The expressions available are:

Expression	Meaning
*	Zero or more
+	One or more
\d	Any digit (0-9)
.	Any character
[]	Character in set
[^]	Character not in set
?	Preceding group is optional
	Or
^	Beginning of line
\$	End of line

Destination

Select from the drop-down list where to route the message. Setting this option indicates to CIC the type of routing this is required when an inbound SMS matches the expression. The options are Chat (default), Handler and Queue. If a handler is the destination, the handler name must be specified in the **Name** field. If a queue is the destination, select a workgroup or user from the list that appears.

Name

Enter the name of the handler if the **Destination** is "Handler", otherwise the user or workgroup is displayed here that is associated with the queue. Name doesn't apply to a Chat type destination.

Related topics

[SMS Inbound Routing](#)

[SMS Outbound Routing](#)

[SMS Outbound Route Configuration](#)

SMS Outbound Routing

Use this page to configure an ordered set of rules for routing outbound SMS messages through CIC. Based on regular expression matching of DNIS, CIC sends outbound directed SMS messages to a broker using the proper destination number formatting.

The routes are defined by type, regular expression, formatted number, broker and account ID.

To configure outbound routes

1. To add a new outbound route, click [Add](#).
2. To change the configuration of an existing outbound route, select it in the list and then click [Edit](#).
3. To delete an outbound route, select it and then click Delete.
4. To change the sequence of the outbound routes, click a route in the list and then use the Move Up and Move Down buttons.
5. To consolidate outbound messages, select the Consolidate Messages check box.
CIC maintains a queue of outbound messages for an interaction. If an outbound message is added to a queue while another outbound message is waiting to be sent, the second outbound message can be added to the first outbound message provided that this check box is selected and the combined length of the messages is less than the SMS maximum length (160 characters).
6. Click OK.

Related Topics:

[SMS Inbound Routing](#)

[SMS Inbound Route Configuration](#)

[SMS Outbound Route Configuration](#)

SMS Outbound Route Configuration

Use this page to configure outbound SMS routes. Use the **Move Up** and **Move Down** buttons to order the routes in priority. If no routes are configured, messages travel through the email message routing system. If one or more outbound routes are configured, a default outbound route must also be configured.

Note: Only one default outbound route can exist, and it must always be the last route in order.

Type

Select the type of route from the drop-down menu. Currently, DNIS is the supported type.

Regular Expression

Enter the expression that CIC uses match the route against the associated type, This also provides the pattern matches that are used for the formatted number The expressions available are:

Expression	Meaning
*	Zero or more
+	One or more
\d	Any digit (0-9)
.	Any character
[]	Character in set
[^]	Character not in set
?	Preceding group is optional
	Or
^	Beginning of line
\$	End of line

Formatted Number

Type the formatted number that CIC should use as the outbound dial number for the SMS message. All characters are valid and regular expression pattern replacements are denoted using the \$ symbol. \$0 represents the input expression as a whole; \$1 is the first grouped match, and so on.

Broker

Select from the pull-down list the value of the available brokers that CIC should use to deliver this SMS message. By default, CIC uses the default broker (indicated with <Default>). We recommend using the default broker if no other brokers are configured in CIC. Other options are Gateway and HTTP.

Account ID

Select from the drop-down list the value of the available accounts for the selected broker that CIC should use to deliver this SMS message. By default, CIC uses the <Default> account, or no account if one is not configured. The default account appears first in the list even when multiple accounts have been configured.

Access Control

Click the **Access Control** button to select the phone number classifications for the selected outbound SMS route.

Notes:

You must select at least one phone number classification for the outbound SMS route. If you do not select a phone number classification, or do not select a call classification that provides the correct access permissions, then agents and workgroups using this SMS route see an error message when they try to send SMS messages.

You manage the available call classifications as part of your [regional dial plans](#). For more information about call classifications, see [Overview of phone number classifications](#).

Related Topics:

[SMS Inbound Routing](#)

[SMS Inbound Route Configuration](#)

[SMS Outbound Routing](#)

SMS Purge Data

Use this page to configure when old SMS data is purged from the database.

To configure when SMS data is purged

1. In the **Purge data older than box**, type a number greater than 1.
 2. Click **OK**.
-



SMS Broker

An SMS broker is a company that takes care of routing SMS messages to and from cell phones. To accomplish this, SMS brokers maintain hardware at the premises of cell phone providers, called Short Message Service Centers (SMS-C's).

Use the following pages to configure the SMS gateway broker or HTTP broker behavior:

- [SMS Broker: Configuration \(Gateway and HTTP\)](#)
- [SMS Broker: Accounts \(HTTP\)](#)
- [SMS Broker: Message Originated \(HTTP\)](#)
- [SMS Broker: Message Terminated \(HTTP\)](#)
- [SMS Broker: Proxy \(HTTP\)](#)



SMS Broker: Configuration

CIC also includes a default HTTP broker, however you can configure any number of additional HTTP brokers. This help topic explains the following SMS HTTP broker configuration options

Enable

This check box enables or disables the broker configuration for MO and MT processing.

Broker

Select from the drop-down list the specific broker communication interface that should be used to send and receive SMS messages.

Profile

Select from the drop-down list the configuration profile of the broker that should be used as the communication protocol. Many brokers only have one option. This selection must match the communication protocol that was defined when ordering the broker account from the provider.

Encryption

Choose type of HTTP communication security to use for the HTTP broker. By default, CIC does not use encryption. When you set the encryption as HTTPS (Basic), CIC uses HTTPS with basic encryption.

Note: Select HTTPS (Basic) if you are using SSL. If you select this, you must use HTTPS for both inbound and outbound messages. For more information about using SSL, see the *PureCloud for CIC Administration Guide* in the PureConnect Documentation Library.

Related Topics

[SMS Broker: Accounts](#)

[SMS Broker: Proxy](#)

[SMS Broker: Message Originated](#)

[SMS Broker: Message Terminated](#)



SMS Broker: Accounts

This page displays a list of accounts you have configured for this broker. Click [Edit...](#) to make changes to existing accounts, or click **Delete** the currently selected account.

Click [Add...](#) to configure a new broker account.

Click [Associate](#) to associate a broker account with a workgroup or user.

Related Topics

[SMS Broker: Configuration](#)

[SMS Broker: Serial Ports and Cell Phones](#)

[SMS Broker: Proxy](#)

[SMS Broker: Message Originated](#)

[SMS Broker: Message Terminated](#)

Outbound SMS workgroup and user associations

You can associate a broker account with one or more workgroups or users. This allows an agent to choose which number appears when he sends an SMS message, either his personal number or the number associated with his workgroup.

Select workgroups for the broker account

To associate workgroups with the SMS account, in the **Available Workgroups** list, select the workgroups and then click **Add**.

To disassociate workgroups with the SMS account, in the **Currently Selected Workgroups** list, select the workgroups and then click **Remove**.

Select users with the broker account

To associate users with the SMS account, in the **Available Users** list, select the workgroups and then click **Add**.

To disassociate users with the SMS account, in the **Currently Selected Users** list, select the workgroups and then click **Remove**.

Related topics

[SMS Broker Accounts](#)



SMS Broker: Message Originated

A Mobile Origination (MO) message is an inbound SMS message that comes from a cellphone. Use this page to configure settings when polling for new messages and receiving new messages.

Enable

Select this check box to enable or disable the MO functionality of this broker configuration. However, the [broker configuration Enable setting](#) has precedence over this setting.

Incoming HTTP Port

Type the IP port that should be used to receive inbound HTTP requests (messages) from the broker provider. Do not share this port with any other application on the CIC server, and make sure it is accessible by the public network.

Incoming Path

Type the path that an incoming request's URL should be validated against which determines that the request should be processed by this broker configuration.

Notes:

If this broker shares an incoming HTTP port with other brokers on this CIC server, make sure that the **Incoming Path** and **Delivery Receipt URL** values are unique among all brokers that share this port.

When ordering a service from an SMS provider, you must provide the information on this page. Typically, the information should be in the form of a URL that the provider can send messages to. This URL is composed of `http://<CIC Server IP>:< HTTP Port> <Path>`, so for example, `http://172.10.10.10:8080/MyBroker/IncomingSMS`.

Delivery Receipt URL

Type the path where the broker pushes incoming delivery receipt notifications for outbound messages.

Most brokers support delivery receipts in one of the following ways:

- The delivery receipt URL is set in the broker account configuration, for example through the broker's web portal.
- The delivery receipt URL is passed by CIC with each outbound message. In this case, you must go to the [Message Terminated](#) tab and specify a value for the **ExternalDeliveryStatusURI** option.

Note: If this broker shares an incoming HTTP port with other brokers on this CIC server, make sure that the **Incoming Path** and **Delivery Receipt URL** values are unique among all brokers that share this port.

If the broker provides delivery receipts, CIC writes the success or failure counts to the SMSDeliveryReceipts database table.

Related Topics

[SMS Broker: Accounts](#)

[SMS Broker: Serial Ports and Cell Phones](#)

[SMS Broker: Proxy](#)

[SMS Broker: Message Terminated](#)

[SMS Broker: Configuration](#)



SMS Broker: Message Terminated

A mobile terminated message (MT) is an outbound SMS message that goes to a cell phone. This is the only type of message that can be used by handlers.

Use this page to configure settings used when CIC sends SMS messages.

Enable

Select this check box to enable or disable the MT functionality of this broker configuration. However, the [broker configuration Enable setting](#) has precedence over this setting.

Gateway

Type the destination of the HTTP request to reach the provider. CIC combines this destination with a service path by the application, before sending the request to create the complete URL. For some brokers the default gateway may be sufficient, however some brokers require a URL with a unique identifier. The default gateway is <http://www.24x.com>.

Outgoing Path

Type the path against which an outgoing URL should be validated. By default, the field contains the outgoing path from the broker file, however, you can override this value.

Note: Both inbound and outbound messages must use either HTTPS or HTTP. For more information about using SSL, see the *PureCloud for CIC Administration Guide* in the PureConnect Documentation Library.

Timeout

Type a timeout value in seconds for CIC to use for outbound HTTP requests. If no response is received prior to this timeout, then CIC considers the SMS message as failed. The default is 60 seconds.

Internationalize Phone Numbers

Select this option to send internationalized phone numbers to SMS brokers. Internationalized phone numbers are formatted as FQTN (+CCddddddd).

Message Parsing

An SMS message has a limit of either 70 characters or 160 characters, depending on the character encoding. The Message Parsing setting lets you configure how messages should be handled if they exceed the size limit:

- None: Do not alter any MT message that exceeds the SMS limit.
- Split messages: Split an MT message that exceeds the SMS limit into multiple messages.
- Truncate Messages: Truncate a message that exceeds the SMS limit. Send only the characters that fit within the limit.

Options

Options are values that are required by some brokers and are too specialized for CIC to consider as a general configuration option. The broker configuration predefines the Names as empty values. You can specify a value for a name by double-clicking on the name, and add or modify the value. Some brokers may fail SMS messages if you do not populate the information with correct values.

Note: If the **ExternalDeliveryStatusURI** option appears, then you must specify a value for it in order to receive delivery receipts for SMS messages. This option contains the external URL that receives delivery receipts for SMS messages:

*If the CIC server is directly connected to the Internet, the external URL is typically <http://<CIC Server IP>:<HTTP Port><Delivery Receipt URL>>.

*If the CIC server is behind a reverse proxy or other device, the external URL may be different.

For more information, see the description of the **Delivery Receipt URL** box in the [SMS Broker: Message Originated topic](#).

Related Topics

[SMS Broker: Accounts](#)

[SMS Broker: Proxy](#)

[SMS Broker: Message Originated](#)

[SMS Broker: Configuration](#)



SMS Broker Proxy

Use this page to configure the HTTP broker proxy settings if you use a proxy between the CIC server and the HTTP broker endpoint, for example, a corporate HTTP proxy. You set the login and password credentials on the HTTP broker as the 'Proxy-Authorization' tag using basic scheme authentication.

Address

Type the address of the proxy server.

Login

Type the user name to use when logging in to the proxy server.

Password

Type the password (associated with the log in user name) to use when logging in to the proxy server.

Confirm Password

Type the password again to avoid typos.

Encryption

Select the type of encryption. The options are None or SSL.

Related Topics

[SMS Broker: Accounts](#)

[SMS Broker: Message Originated](#)

[SMS Broker: Message Terminated](#)

[SMS Broker: Configuration](#)

Problem Reporter

Problem Reporter enables an authorized user to report a problem with the CIC clients to the user's support representative. When a user selects the **Report a Problem** option from the Help menu in the CIC client, Problem Reporter automatically creates an email message and addresses it to the user's designated representative. The Problem Reporter also uploads a copy of the user's CIC client logs and, optionally a screen capture of the user's desktop, to the CIC server. Specify the upload location with the [ProblemReporterPath](#) server parameter.

To specify a problem reporter email message recipient, type a valid email address. Separate multiple address with a comma.

Note: Problem Reporter is enabled for users that have the [Problem Reporter](#) security right.

View Layouts

You can add layouts to identify station locations on floor plan images. This can be helpful in call centers, and is used in applications such as Interaction Supervisor iPad Edition.

To view layouts:

1. Click the **View Layouts** action under the **System Configuration** category.
...or Click **View Layouts** in the breadcrumbs if available.
2. The **View Layouts** page is displayed.
3. The details of the selected layout are displayed in the details view.

Related Topics:

[Add Layout](#)

Add a New Layout

To add a new layout

1. Right-click in the master view area and select **New**, or click the **New** button in the master view toolbar:

The **New Item** appears in the details view.

2. Complete the following configuration in the first section:

- Type a unique **Name** for the layout.
- Optionally select a **Location** from the drop-down list. If you do not set the location, the default location as configured in Regionalization is used.
- Optionally type a word or phrase that describes this layout.
- Use the up and down arrows to set the pixel width of the layout image. The default is 10 pixels, and the acceptable range is 10 to 2048.
- Use the up and down arrows to set the pixel height of the layout image. The default is 10 pixels, and the acceptable range is 10 to 2048.

3. Complete the layout configuration in the [Positions](#) and [Advanced](#) details tabs. The links below open the topics containing procedures for completing each details tabs configuration:

- [Positions](#)
- [Advanced](#)

Related topics

[Layouts: positions](#)

[Layouts: advanced](#)

[Layouts: positions field descriptions](#)

[Layouts: advanced field descriptions](#)

Layouts: Positions

The **Positions** details tab allows you to upload an image to use for the layout display. You can then add positions to represent stations on the layout. Click the name of the details tab for field descriptions.

Note: The image for a layout is automatically removed when it is no longer referenced.

To add an image for the layout:

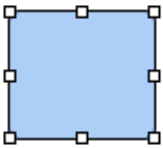
1. Click the **Positions** detail tab to display the details view.
2. Click the **Browse** button to choose an image to upload.
3. Type a unique **Name** for layout image.
4. Save the new image or modified image.

If necessary, the new image or changes made to an existing image can be reverted.

To add a position on an image:

Note: You can add a maximum of 200 positions per layout.

1. Right-click the image to display the menu.
2. Add a position to the layout. A resizable and moveable box appears.



3. Type a unique name for the position.
4. Set the position's location on the image and its size.

Note: Positions must not overlap. Any overlapping areas are highlighted in red.

5. Select a CIC station from the drop-down list to associate to the position.
6. You can also do any of the following:
 - Delete an existing position.
 - Select a position and **Align**. You can select multiple positions using Ctrl-click, and **Align** in more positions on the image.
 - Select multiple positions using Ctrl-click, and **Size**.
7. Save the new position(s) or the modified position.

If necessary, the new code or changes made to an existing position can be reverted.

Related Topics:

[Add a New Layout](#)

[Layouts: Advanced](#)

[Layouts: Positions Field Descriptions](#)

[Layouts: Advanced Field Descriptions](#)

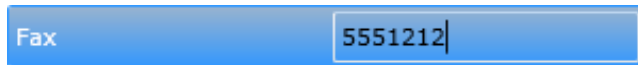
Layouts: Advanced

The Advanced details tab contains the custom attributes and history of the layout. Click the name of the details tab for field descriptions.

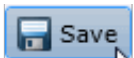
To complete the layout's advanced information:

1. Click the **Advanced** details tab to display the details view.
2. Click Custom Attributes [section expander](#) to display the custom attributes section's contents, and complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.



3. Click History [section expander](#) to display (or hide) the history section's contents, and complete the following information:
 - View the **Created** and **Modified** dates for this layout.
 - Type or view information in the **Notes** field for the layout.
4. Save the new layout or modified layout.



Save the modified item (Ctrl+S)

If necessary, the new layout or changes made to an existing layout can be reverted.



Revert the changes to the modified item

Related topics

[Add a New Layout](#)

[Layouts: Positions](#)

[Layouts: Positions Field Descriptions](#)

[Layouts: Advanced Field Descriptions](#)

Layouts: Positions Field Descriptions

This topic contains the descriptions for each field in the **Positions** details view under the **View Layouts** page.

Layout Image section

The following fields are related to the image you are associating with the layout.

Browse

This button opens the **Open** dialog box where you select an image. Supported image types include .jpg, .jpeg, and .png.

Image Display Name

By default, the file name of the image you select for the layout is displayed here. If necessary, rename the image. All image names must be unique across all layouts.

Image to Upload

This is the actual file name that you have uploaded. It is view-only.

Image Dimensions

This is the size in pixels of the image you uploaded.

New Image...

Click this button to upload a new image for the layout.

Clear Image...

Click this button to remove the image from the layout.

Selected Position section

The following fields are related to the positions you associate with stations and place on the layout image. You must have the administrative access right to a position in order to view it and select it.

Name

Type a name for this position on the layout. The name must be unique across all positions in this layout. You might use a person's name associated with the station, like PattyJ for a station named PattyJ_SIP_Station.

Left

Use the up and down arrows to set the left alignment of the selected position.

Width

Use the up and down arrows to set the width of the selected position.

Top

Use the up and down arrows to set the top alignment of the selected position.

Height

Use the up and down arrows to set the height of the selected position.

Station

Select the station from the pull-down list that you want to associate with this position. You can not add a new station here. The station must be an existing station that is already configured, and it must not be assigned to another position. You can select a station only if you have the administrative access right for it.

Related topics

[Add a New Layout](#)

[Layouts: Positions](#)

[Layouts: Advanced](#)

Layouts: Advanced Field Descriptions

This topic contains the descriptions for each field in the **Advanced** details view under the **View Layouts** page.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

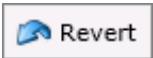
History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

This date is automatically set when the user creates the initial configuration for this layout. If the layout was initially created during setup, the date could be blank.

Modified

This date is automatically updated each time the user clicks the **OK** button, presumably after making changes to the layout

configuration. To avoid updating this date, exit the page by clicking .

**Note:** If you click , none of the changes made to this layout since the changes were last saved are preserved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click , the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

Related Topics:

- [Add a New Layout](#)
- [Layouts: Positions](#)
- [Layouts: Advanced](#)
- [Layouts: Positions Field Descriptions](#)

Analytics



Analytics Configuration

Use these pages to configure the parameters for Analytics.

Server

Config URI

Is the websocket address that PureConnect will use to synchronize configuration and security with the CX Insights server. (Default port shown).

Data URI

Is the websocket address that PureConnect will stream real-time statistics to the CX Insights server.

Web Proxy URI

Is the target URI used by HttpPluginHost to route web requests.

Secret

Is the websocket_auth_secret that was entered into the inventory file when deploying the CX Insights Server.

Retention Settings

In the **IVR Data History** box, configure the following settings.

Enable Purging

Select this check box to purge data on the specified time and day.

Purge Time

Select the time to run the purge job. The default is 12:00:00 AM (midnight).

Purge records older than (days)

Enter the number of days for records to be older than, to be purged. The number of days can be set from 1 day to 2147483647 days. The default is 365 days (1 year).

Note: Purges occur at the set time when a record is older than the set amount of days.

WestE911

WestE911 Configuration

Use these pages to configure the parameters for WestE911.

Note: If E911Enabled server parameter is set to True, then the WestE911 Configuration will be enabled.

E911 Configuration

Account ID

Enter the secure account ID provided by West services to access the WestE911 database.

Authentication Token

Enter the secure authentication token provided by West services to access the WestE911 database.

West EndPoint URI

Enter the endpoint URL provided by West services to access the WestE911 database.



About Interaction Tracker

Interaction Tracker allows CIC users to view interaction histories between other CIC users or between a CIC user and an outside contact. When you choose to track an individual, the system stores information specific to a person. When users view a detailed record for an individual, they will be able to see a history of their interactions with this individual. Users can narrow down the interaction history by specifying a date range.

Related topics

[Configuring Interaction Tracker](#)

[Defining Interaction Tracker types](#)

[Interaction Tracker security](#)



Configuring Interaction Tracker

To use Interaction Tracker you must have the appropriate Interaction Tracker license. For more information, see *the Interaction Tracker Technical Reference* in the PureConnect Documentation Library..

The Interaction Tracker Configuration section includes:

[Naming](#)

[Server](#)

[Database](#)

[Multi-language Support](#)

[Data Purging](#)

[Import and Reassignment](#)

[Image and URL](#)

[Items Tracked](#)

[External Utilities](#)

[Timesheet Reporting](#)



Naming

There are four main logical contact entity labels used by Interaction Tracker. These labels are what appears in the Tracker Client. The singular and plural default values can be changed to any label. For example, you may want to see Person\People, Division\Divisions, Company\Companies or ConnValue for iAddress, instead of the label defaults. Each label is limited in length to 15 characters:

Individual

This entity is where the information specific to a person is stored. Individuals can belong to either a location or an Organization; however, they are not required to belong to either. By default, an individual inherits some of the parent location or organization information, like business address and phone number.

Location

The Location entity typically corresponds to physical location. By default, a location inherits some of the parent organization information, like address and phone number. Locations must belong to an Organization.

Organization

The Organization entity typically correspond to companies. Organizations can have individuals directly associated with them, although it is more likely that individuals will be associated with Locations.

iAddress

The iAddresses entity is where the physical addresses for organizations, locations, and individuals are stored. Addresses have types, such as Home, Business, Business2, Shipping, etc. You can extend the address types. An address entry can also be flagged as the default.

Related topics

[Server](#)

[Multi-language Support](#)



Server

Interaction Tracker encompasses two new server-side subsystems: Tracker Server and Tracker Tran Server. Tracker Server listens for specific events from QueueManager and inserts and updates interaction records. Tracker Tran Server processes insert and update requests from Tracker Server and insert, update, and query requests from Interaction Tracker Clients.

Use this Server page to configure Interaction Tracker behavior.

Note: Change these values only at the request of a certified PureConnect Customer Care representative.

Max Thread Count

Enter the maximum thread count for Tracker Server. The default value is 64. The valid range of values is 16 through 128.

Num seconds before thread considered being hung

Enter the number of seconds to allow a thread to process for Tracker Server. The default value is 60.

Restore Defaults

Click this button to restore settings on the Server tab to default values.



Database

Interaction Tracker stores all information about interactions and participants in tables in the Interaction Tracker Database. These tables are queried for information. Use this Database tab to configure the database behavior.

Note: Interaction Tracker data is stored in the same database as Reporting and IC Public and Private Contacts data, although in different tables.

IC Data Source Name

Enter the IC Data Source Name for the Interaction Tracker database. The default value is IC Tracker.

Query Row Limit

Enter the maximum number of rows to query. The default value is 500.

Query Timeout (sec)

Enter the number of seconds to allow for a database query before timing out. The default value is 45.

Transaction Timeout (sec)

Enter the number of seconds to allow a database transaction before timing out. The default value is 10.

Enable Query Optimizations with Hints (SQL Server)

This query optimization only for SQL Server. By selecting this check box, SQL Server Query processor will use join strategy specified by the Tracker application instead of using the default one.

This setting does not apply to Oracle databases.

Restore Defaults

Click this button to restore settings on the Database tab to default values.

Note: For more information regarding the Interaction Tracker database schema and database planning, see the Interaction Tracker Technical Reference.



Multi-language Support

Multi-language support refers to the translation of data that is displayed in the Interaction Tracker, and in reports, in a language appropriate to the login locale you specified created during setup.

If the appropriately localized language is not supported, the values are displayed in the default language.

Parameters

The Multi-Language Support tab contains three parameters: **Attribute**, **Language**, and **Value**.

Parameter	Definition
Attribute	The name of the value to be translated. Translation is elected for only a few values that are displayed in reports or status messages
Language	The language used for the translation. The default language is that currently set by the administrator. A list of 100 + additional languages appears in the Languages dialog when you click Add Language. This value is Default if no language is specified for your login country in the Languages list.
Value	The value to display; the translated value.

Buttons

The Multi-Language Support tab also contains the buttons: **Edit Value**, **Add Language**, and **Remove Language**. This is the function they perform:

- **Edit Value**Click this button to translate the selected value. Type the translation and click **OK**. The translated value appears in the **Value** column.
- **Add Language**Click this button to see a list of countries and languages. Highlight a language/country pair and click **OK**. A new set of entries appears in the list of attributes, one for each attribute chosen for translation. The values are left blank until they are translated using **Edit Value**.

If you leave the values blank, no values will be saved for the new language.

- **Remove Language**Select any attribute for the language you wish to remove and click **Remove Language**. A confirmation dialog appears. Click **Yes** to proceed. Another dialog confirms that the attributes for the selected language have been marked for removal. Click **OK**. You return to the **Configuration** dialog. Click **OK** to remove the selected attributes.

For more information on the function of the scroll buttons and the **Confirm auto-save** check box, see [Interaction Administrator Interface](#).



Data Purging

Use this page to schedule when the system deletes expired records in the Interaction Tracker database. Expired records are those that have exceeded their retention time.

Enable Purging

Select this check box to enable data purging. By default this checkbox is enabled.

Purge data at this time of day

Type the time of day to begin the data purge. The default value is 2:30:00 AM.

Purge data older than

Type the number of days that defines expired data. The default value is 34.

Related Topics

[Cache clean up](#)

[Database](#)

Configure Interaction Tracker server cache clean up

The Interaction Tracker server maintains data about active interactions in its in-memory caches. Some custom call scenarios may result in improper cache cleanup, which can lead to incorrect data for impacted interactions. To ensure proper cache clean up, you may want to enable and customize the automated cache clean up mechanism. See the [How to enable automated cache clean up in Tracker Server knowledge base article](#) for more information.



Import and Reassignment

This page contains import and reassignment utilities.

The import utility is provided as an easy way of importing or re-importing individuals from current CIC users at a given a Site ID, multiple Side IDs, or all Site IDs.

The reassignment utility is provided as an easy way of reassigning individuals to other locations at a given a Site ID, multiple Side IDs, or all Site IDs.

IC User Location Reassignment

In this reassignment area of the page, enter the home site IDs to reassign to the selected location.

Location

Select the location to reassign the Home Site(s) to.

Home Site IDs

Enter the **Home Site IDs** separated by commas and click **Reassign Now**. Leave this field empty to specify all sites.

IC User Import

In the import area pf the page, enter the home site IDs from which to import users.

Update existing entries

Select this check box to overwrite already existing entries.

Home Site IDs

Enter the **Home Site IDs** separated by commas and click **Import Users Now**. Leave this field empty to specify all sites.



Image and URL

Use this page to set images and URLs for CIC users. The Image and URL set the image path and URL of the CIC user's picture in the CIC clients.

Set Images for CIC Users

Enter the filename and path for the image to be associated with the CIC user. Click **Set Images Now** to save your settings.

Set URL for CIC Users

Enter the location of the URL for the CIC user. Click **Set URLs Now** to save your settings.



Items Tracked

Use this page to configure the items for Interaction Tracker to track. Remember, an interaction is a communication between two or more individuals, where one of the individuals is a CIC client user.

Interaction Types Tracked

Select the types of interactions to track. The options include:

- Calls
- Chats
- Direct Messages
- Emails
- Faxes
- Generic Objects
- SMS
- Social Media

Note: As of CIC 2016 R4, inbound SMS messages are tracked separately from chats.

If the Recorder license is enabled on the system, then call, chat, email, and SMS interactions are logged in the database and tracked, regardless of the selections under Interaction Types Tracked.

Track Intercom Interactions

Select this check box for Tracker Server to track intercom interactions. An intercom interaction is a call or chat from one person to another internally or "interoffice". By default, this check box is checked.

Track Routing Exceptions

Select this check box for Tracker Server to track routing exceptions, including events like abandons, flowouts, and transferred interactions. By default, this check box is not checked.

Track Interactions Without a User Connect Event

Select this check box for the Tracker Server to continue tracking an interaction without a connect event. A user connect event is when a party connects to an interaction, e.g. the user picks up a call in the CIC client or with the headset. By default, this check box is not checked.

Track Voicemails

Select this check box for Tracker Server to track voicemail messages.

Track Additional Segments (i.e., System, Workgroup, Queue, Alert, Messaging, and Hold)

You can also track additional segments by clicking the check box for the desired option:

- Workgroup queue based interactions
- Non-workgroup queue based interactions
- Intercom interactions
- Interactions without a user connect event

System Segment Optimizations

You can configure Interaction Tracker to discard tracked segments that are less than a specific number of seconds.

Call Event Log

Specify the number of characters to display in call logs. The default value is 2000.

Related Topics

[Track Abandoned Dialer Interactions in InteractionSummary](#)



External Utilities

Reserved for future use.

Launch External Utilities

If external utilities for Interaction Tracker are available in the future, you will be able to launch them here.



Timesheet Reporting

Use this page to configure the distribution of timesheets for individual users who have been assigned the Billable-Time User Role in Interaction Administrator under the People container.

Enable Timesheet Reporting

If you have a Timesheet reporting license, select this check box for Timesheets to be emailed to members of your Billable-Time User role.

Run the Report

Select when you want your Timesheets delivered, either Weekly or Daily.

Time

Select or type the time to run the data for your timesheet.

Day

From the drop-down list, select the day to run the data for your timesheet.

Role of Users to Receive Timesheet

From the drop-down list, select the Role of the users you want to receive this report. The default role is Billable-Time User.

Smallest Billable Time Unit

Type or select the smallest billable time in minutes. This field is enabled only if "Billing Units" is selected in the **Billable Time Format** field.

Billable Time Format

Select or type the time format for your timesheet.

Note: Timesheets are delivered in XML format, and can be viewed in an Excel spreadsheet. The XML file is attached to the e-mail that is sent to the members of your Billable-Time User role.

Related topics

[Roles](#)



Defining Interaction Tracker Types

To begin using Interaction Tracker, you must first define types. Define types for Interactions, Individuals, Organizations, and iAddresses. You can further define iAddress Sub-types to extend this type. You may also define Tracker Attributes and Titles.

The Defining Interaction Tracker Types section includes:

[Individual Types](#)

[Organization Types](#)

[iAddress Types](#)

[iAddress Sub-types](#)

[Tracker Attribute Types](#)

[Tracker Address Types](#)

[Titles](#)



Individual Types

You must define your individual types. Enter types such as Public Relations Manager, Marketing Director, Finance Executive, etc.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.

Note: Individuals can belong to either a Location or an Organization; however, they are not required to belong to either. By default, an individual will inherit some of its parent location or the organization information, like business address and phone number.



Organization Types

You must define your organization types. Enter types such as Public Relations, Marketing, Finance, etc.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.



iAddress Types

You must define iAddress types. Enter types such as Home, Mobile, Shipping, etc. An iAddress type can be flagged as default.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.



iAddress Sub-types

You may define iAddress Sub-types. Use iAddress Sub-types to extend iAddress types. Enter Sub-types such as Home 1, Business 2, etc.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.



Tracker Attribute Types

You may define attribute types for some of the Interactions, Interaction Participants, Individuals, Locations and Organizations to extend the types.

Tracker Attribute Name

Enter the name of the attribute.

Show if Empty

Select this check box to if you want the attribute name to be displayed in Interaction Tracker Client even if it is empty.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.

Applies to (Select all that apply)

Select any of these entities you want for the attribute to apply:

- Individuals
- Locations
- Organizations
- Interaction Segments - default - (selecting this option will enable the Segment Attribute Mapping below)

Custom Attribute to Interaction Segment Attribute Mapping (server-specific)

You can specify an interaction attribute name and Tracker Server will retrieve the value at interaction deallocation time and store it with the interaction segment. This custom mapping option is only available if you have selected **Interaction Segments** above.

Get Value From custom Interaction Attribute check box

Check this if you want the value of the attribute to come from an interaction attribute.

Custom Interaction Attribute to Use

Specify the name of the interaction attribute that will be retrieved at interaction deallocation time. For example, you might create a custom attribute named "Gender".

Note: Restart the client for the change to take effect.

Legal Values Presented in Tracker Client

Add or Remove values to assign to the attribute. Use the Up and Down buttons to arrange order of selection. For example, for Gender you can specify legal values that will appear as selectable items in a drop down list for the Gender attribute. The order in the list is the order the values appear in the Tracker Client dialog boxes.



Tracker Address Types

You may define Address types. Enter types such as Home, Billing, Shipping, etc.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.



Titles

You may define titles. Enter titles such as Mr., Mrs., Miss, Ms., etc.

Database ID

This is the database ID of the new attribute. This ID is automatically generated for the new attribute and cannot be changed.



Security

Interaction Administrator controls Interaction Tracker's security. You control access and rights in Interaction Tracker features by setting Tracker Policies in the Security tab in the User configuration. The rights available to apply to a user are:

- Add Individuals
- Modify Individuals
- Delete Individuals
- Add Organizations
- Modify Organizations
- Delete Organizations
- Modify Interactions
- View Other People's Private Interactions
- Have Private Contacts
- Tracker Administration

Notes:

Organizations include Locations.

Interactions include Interaction Participants.

The ability to see other people's non-private interactions is administered via the 'View User Interaction History' category on the [Access Control](#) tab of the User Configuration.

Add, Modify, and Delete rights apply to manual operations using the Tracker Client – automatic insertion and modification of interactions by the system is not affected by these rights.

Interaction Recorder's access control is used to determine whether or not users can playback any recorded media for the interaction. The exception to this is when the user is a participant in the interaction; in this case he/she will always be able to playback any recordings for his/her segment of the interaction.

The user who creates a record becomes the current owner. Owners of a record always have full rights (the system prevents you from deleting a record that is being used).



Interaction Recorder

Use the Interaction Recorder (IR) Configuration dialog box to determine what interactions are recorded and to configure how interactions are recorded, how the recordings are compressed, where they're stored, how they're retrieved, etc. Interaction Recorder data is stored in the same database as Reporting and CIC Public and Private Contacts data, although in different tables.

Note: For more information see *Installing and Configuring Interaction Recorder* in the PureConnect Documentation Library.

This section includes:

[Configuration](#)

[Policy Editor](#)

[Screen Recording](#)

[Remote Content Server](#)

[Who can see and listen to recordings](#)

Interaction Recorder Configuration

Click on the following options for specific configuration information.

- [Recording Processing](#)
- [Email](#)
- [Recording Generation](#)
- [Key Generation](#)
- [Cloud Services Configuration](#)
- [Screen Recording](#)
- [Remote Content Server](#)



Recording Processing

Use this page to configure Interaction Recorder's (IR) Recording Processing.

Compression Format

Select the compression format for recordings from the drop-down list:

- μ -Law (Mono) - This format does not compress recordings.
- True Speech (Mono)
- GSM 6.1 (Mono)
- Opus (Mono)
- Opus (Dual-channel)

Note:

The Opus recording and compression format options are available for Interaction Media Server version 2017 R1 or later. If previous versions of Interaction Media Server are connected to this CIC server, it creates the recordings on those servers with the GSM 6.1 format and creates entries in the error log for an unsupported Interaction Media Server version.

The Opus recording and compression formats generate larger recordings due to the increased fidelity of the audio and, in the case of Dual-channel, two channels of audio. Ensure that Interaction Media Servers, Interaction Recorder Remote Content Servers, and Interaction Recorder have enough free storage space to accommodate the larger recordings.

For more information about Opus, see [Interaction Recorder and Quality Manager Technical Reference](#) and [Interaction Media Server Technical Reference](#).

For other recording options that you can set on a SIP line, see [SIP Line Recorder](#).

Database Processing

Use this utility to initiate the recovery of failed database transactions. Clicking the Recover Errors button makes Interaction Recorder process the PMQ error files. This function can be used when your database has been unavailable and you want to get the data that has been logged into the PMQ error files into the database.

Secure Recording Pause Duration (seconds)

Enter the number of seconds an audio recording is paused when an agent presses the Secure Pause button on the queue toolbar in the CIC clients. The default setting is 20 seconds.

Related Topic

[Media Servers](#)



Email

The e-mail option contains the configuration information necessary for the Interaction Recorder Server to communicate with the e-mail system in order to send recordings.

System E-mail Address

Enter the e-mail address to be used as the Reply To (from) e-mail address when a recording is e-mailed from Interaction Recorder Client.

Reply To Address For Recordings E-mailed From Recorder Client

Select **Use System E-mail Address** to use the e-mail addressed specified in the **System E-mail Address** box. Select **Use E-mail Address of User Logged in to Recorder Client** to use the Recorder Client's user's e-mail address.



Recording Generation

Use this page to configure Interaction Recorder's recording generation options.

Recording

Select the options in the Recording box to configure how Interaction Recorder server initiates recordings.

Enable Recording

Select this check box to record all interactions that qualify for recording based on Interaction Recorder Initiation Policies. If this box is *not* selected, recordings will not be generated.

Stop Interaction Recorder Initiated Recordings at Transfers

Select this check box to stop recording a call when it is transferred. If this check box is selected, each transferred segment of a call will be its own recording and database entry.

If this check box is clear (not selected), recording continues after the transfer. This applies only to calls that were defined to be recorded by the Initiation Policy. Also, if this box is not selected, it is not possible to play only a segment of the call or skip to a specific segment.

Default Audio playback device of recordings to the handset

Select this check box to set the handset as the default audio playback device for a recording. When listening to a recording, the audio playback device can be changed on the Audio menu in the Interaction Recorder Audio Playback window, in IC Business Manager.

Enable Snippet Recordings

To enable the snippet recording feature on this CIC server, select this check box. This feature allows users to create ad hoc recordings of their interactions.

Encrypt Snippet Recordings

To enable the encryption of snippet recordings, select the **Encrypt Snippet Recordings** check box. This option is available only if you enable snippet recordings.

Note:

For more information about configuring encryption for recordings, see [Key Generation](#).

In order for users to make snippet recordings, you must also assign the appropriate security rights and permissions to them. Depending on the person, some combination of the following items is necessary:

- * Security Rights > Interaction Command Rights > **Snip**
- * Security Rights > My Interaction Rights > **Snip Interactions**
- * Access Control > Queues category > User Queues > Advanced Access Details > Monitor > **Snip**

For more information about the security rights and permissions that you set in Interaction Administrator, see [Assign security rights](#) and [Assign access control rights](#).

For more information about Snippet Recordings, including information about the necessary licenses, see the *Interaction Recorder and Interaction Quality Manager Technical Reference* in the PureConnect Documentation Library.

Enable HTTPS Exchanges for Playback, Archiving, and Exporting Recordings

Select this check box to use HTTPS for: communication and traffic for playback, archiving; and exporting of calls, chat, and email recordings.

Unlicensed Recordings

Recordings are encumbered if the user or station was not properly licensed for Interaction Recorder when the recording was made. Encumbered recordings are listed in a search result in the Interaction Recorder client search results view when the **Recording is Encumbered** search attribute is used. Encumbered recordings cannot be played back.

To unencumber a recording, first fix the licensing for the user that has encumbered recordings. Next, contact PureConnect Customer Care to get an unencumber key to unlock the encumbered recording that needs to be played back. Then in the Unlicensed Recordings field, enter a valid unlock code to unencumber the encumbered recordings on the server.



Key Generation

Use this page to generate a Master Key for Recording Encryption. A master key securely protects Recording Keys (media keys), which are generated every time a media file is recorded.

Master Key File

The first step in generating a master key is to specify the location of the master key file. Master keys are stored in the master key file in plain text. For security purposes, make sure the location of the master key file has restricted access.

Generate New Key

Click **Generate New Key** to manually generate a new Master Key. When you click OK or Apply for the first time, an initial Master Key is created and appended to the Master Key file. You can also use this button to manually create a new key and append it to the Master Key file.

Import Key File

Click **Import key file** to import a key file and merge it with the existing Master Key File. An Open dialog is displayed to specify the location of the file to be imported. When the key file is successfully imported, a confirmation message is displayed. If the key file import fails, an error message is displayed.

Import key file can be used to import a 3.0 Recorder key file to the current release. You can also use it to import a key file in order to replace a bad key file. For example, if a switchover pair did not share a key file location.

Master Key Password

Use the Master Key Password box to password protect the Master Key File and securely encrypt master key data. To create, change, or deactivate a Master Key Password, the user must be assigned the Security Right **Master Key Password Administrator**.

Important: PureConnect Customer Care cannot recover encrypted recordings if a Master Key Password is lost.

Important: The master key password is not replicated to the backup PureConnect server in a switchover environment. It needs to be activated after every switchover or system start-up.

Change Password

Click **Change password** to create a new Master key password or to change the current password.

Deactivate/Activate Password

When you create a new Master key password or change the password, the password is Activated, and the Deactivate password button is displayed. To deactivate the password, click **Deactive password**. To activate the password, click **Activate Password**, and on the Activate Password dialog, type the password and click **Activate**.

Recurring Key Generation

Use the **Recurring Key Generation** box to configure parameters to automatically generate a new Master Key on a recurring basis.

Generate New Key Recurrently

To automatically generate a new Master Key, select the **Generate New Key Recurrently** check box.

To schedule an automatic key generation: in the Recur every box, type the number for the weekly recurrence; in the drop down-list, select the day of the week to generate the key; and in the time field, select the time of day to run the key generation.

Note: For more information on recording encryption and key generation, see *Interaction Recorder and Interaction Quality Manager Technical Reference* in the PureConnect Documentation Library.

Cloud Services Configuration

Use this page to configuration Interaction Recorder's Cloud Services.

You can use Amazon Simple Storage Service (Amazon S3; also referred to as AWS S3) to store your recordings and to archive your [retention policies in Policy Editor](#). For more information on Amazon S3, see <http://aws.amazon.com/s3>.

Prerequisite: Before you begin, configure your Amazon S3 account. Make note of your bucket name and your secret key. For more information, see “Using Amazon Simple Storage Service” in the [Interaction Recorder and Interaction Quality Manager Technical Reference](#).

Amazon S3 Bucket Keys Configuration

New Bucket

Follow these steps to configure a new bucket.

1. Click **New Bucket**.

The **S3 Keys Editing** dialog appears.

2. In the **Bucket name** box, type the name of the Amazon S3 bucket.

Note: Use the exact name that you assigned to the bucket in your Amazon S3 account. If you are using HTTPS, the S3 Bucket name cannot contain periods as Amazon's SSL wildcard certificate only matches buckets that do not contain periods.

3. In the **Account ID** and **Secret Key** boxes, type the corresponding information from your Amazon S3 account. The Account ID is the AWSAccessKeyId, and the Secret Key is the AWSSecretKey.
4. In the **Region Endpoint** list, select the region where recordings are stored or accessed. This information helps reduce data latency when you access or store recordings with the Amazon S3 service.

If the region endpoint is not in the list, you can select **Specify Custom S3 Endpoint**, and then click **Configure**. In the **Specify Custom Endpoint** dialog, enter the endpoint information. When adding a custom region and endpoint, the display name must match the region name defined for the given endpoint. Endpoints are defined in Amazon S3.

5. Click **Test**. This validates that the specified bucket and region configuration is valid and that a test communication with the Amazon S3 service can be successfully completed for read, write, and delete access. The field is not available unless you have specified a bucket name.

Note: You can also create a new bucket when you create a [retention policy in Policy Editor](#).

Modify Bucket

To modify an existing bucket, select the bucket and click **Modify Bucket**. The S3 Keys Editing dialog appears. You can modify the **Account ID** and the **Secret Key**.

Note: You cannot modify the region endpoints.

Delete Bucket

To delete an existing bucket, select the bucket and click **Delete Bucket**.

Enable HTTPS exchanges

This check box determines whether the exchanges between Amazon S3 cloud services and Interaction Recorder Server are HTTP or HTTPS. By default, HTTPS is selected.

Note The S3 Bucket name cannot contain periods as Amazon's SSL wildcard certificate only matches buckets that do not contain periods.

Policy Editor

Double-click on **Configuration** to open the Interaction Recorder Policy Editor. Interaction Recorder Policy Editor is a single, simple user interface used for creating Policies.

Access the help from the Policy Editor interface for more information.

Who can see and listen to recordings

The following table summaries the conditions under which users can see recordings.

Under these conditions...			You can see...			
You have the Monitor Columns security right	The EnableSupervisoryRecordAndMonitor server parameter is enabled	You are a supervisor	Your own recording	A supervisor's recording	A non-supervisor's recording	A system recording by Interaction Recorder
No	(Any)	(Any)	Yes	No	No	No
Yes	No	(Any)	Yes	Yes	Yes	Yes
Yes	Yes	No	Yes	No	No	No
Yes	Yes	Yes	Yes	Yes	Yes	No

Note: Users can always see their own recordings. If the **EnableSupervisoryRecordandMonitor** server parameter is turned on, then only supervisors can see recordings for other users.

For more information about the **EnableSupervisoryRecordAndMonitor** parameter, see [Packaged Server Parameters](#).

For more information about the **Monitor Columns** security right, see [Assign security rights](#)

Related topics

[Interaction Recorder](#)



Interaction Screen Recorder

Interaction Screen Recorder adds screen recording capability to Interaction Recorder. In addition to Interaction Recorder features including multi-media recording for phone calls, emails, faxes, and Web chats, Screen Recorder provides another contact center solution.

Synchronizing the audio recording of an agent with the workstation activity, screen recording provides a complete management tool. Screen Recorder assists contact center managers and supervisors in improving their contact center's productivity and assessing agents' skills.

Configuring Screen Recorder

Capture settings and location for Screen Recorder is configured on the Screen Recording Configuration Settings page. Screen Recorder is applied to Recording Rules in Interaction Recorder Selector.

Related topics

[Screen Recording Configuration](#)



Screen Recording

Use this page to configure Interaction Screen Recorder.

General

From the **Default Regional Location** drop-down list, select the location for which region screen recordings will use if Interaction Recorder cannot determine the region based on the interaction or station.

Capture Settings

Use the following fields to configure these settings.

Capture Rate (fps)

Use this box to type or select the capture rate in frames per second (fps). The default is 1 fps. The available values are: 0.25, 0.5, 1, 2, 4, or 8 fps. Here is a chart of the capture rate settings to consider for storage capacity (The higher the setting the more storage used):

Capture Rate Settings	
Setting	Equals
0.25	1 frame every 4 seconds
0.5	1 frame every 2 seconds
1	1 frame per second
2	2 frames per second
4	4 frames per second
8	8 frames per second

Mouse Capture Rate

Use this box to type or select the mouse capture rate in times per frame. The default is 4. The available values are: 1, 2, 4, 8, or 16.

Compression

Use this box to set the compression rate. The default is set to 9. The available options are any integer from 0—no compression, to 9—maximum compression.

Stop Recording When Agent Becomes Available

Configure this setting to control the recording of an agent's screen. Set the value to **Yes** to stop the recording when the agent becomes available. When the value is set to **Yes**, the recording stops even if the agent is in lag time.

If the value is set to **No**, the recording continues when the agent becomes available; the number of seconds the recording continues is set by Lag Time.

Lag Time (sec)

Use this box to add configurable lag time at the end of an interaction for screen capture. The Interaction Recorder Server terminates a screen recording when the lag time expires. The default is **120** seconds (2 minutes). The available options are any integer from 0 to 3600 (60 minutes).

Note: As a result of internal batch processing, your agents might experience up to an additional 10 seconds of lag time during screen recordings. For example, if you set the lag time to be 15 seconds your agents might experience a lag time from between 15 seconds to 25 seconds during screen recordings.

Color Depth (bpp)

Use this box to set the color depth in bits per pixel (bpp). The default is set to Native. The available options are: Auto, 8-bit, 16-bit, and 24-bit. The values will be stored as 0, 8, 16, and 24.

Max simultaneous screen recordings per agent

Use the drop-down list to set the value for the maximum number of simultaneous screen recordings per Interaction Screen Recorder Capture Client. When the maximum limit is reached, every new screen recording stops the oldest one in progress.



Remote Content Server

You configure Interaction Recorder Remote Content Service through Interaction Administrator. The **Remote Content Server Configuration** dialog box contains the following fields:

Alternate Fully Qualified

If you are using PureConnect Cloud, enter a replacement fully-qualified domain name (FQDN) for this Interaction Recorder Remote Content Service server in your domain.

In a PureConnect Cloud environment, this feature enables Interaction Recorder to retrieve and play the recording from this Interaction Recorder Remote Content Service server.

Active Locations

Select the check box for the region where you want Interaction Recorder Remote Content Service to reside. You create regions through the **Regionalization** sub-container under the container for your CIC server.

Note: For Interaction Recorder Remote Content Service to function properly, it must reside in the same region as the media server from which it processes recordings.

Entries are automatically added when a Remote Content Service starts. After the service appears, you can use this page to specify directories. For more information, see *Interaction Recorder Remote Content Service Installation and Configuration Guide* in the **Technical Reference Documents** section of the PureConnect Documentation Library on the CIC server.

Disable Screen Capture Transfers from this RCS

Select this check box if you want to prevent Interaction Recorder Remote Content Service from transferring screen recordings from the computers on which they are recorded.

Disable Other Recording Transfer from this RCS

Enable this check box if you want to prevent this Interaction Recorder Remote Content Service instance from transferring any recordings—other than screen recordings—from the servers on which they are recorded.

Related topics

[Configuring Remote Content Services](#)

[Regionalization](#)



Interaction Optimizer

Customer Interaction Center and Interaction Optimizer provide a complete workforce management solution. Interaction Optimizer uses forecasting, scheduling, and real-time schedule adherence allowing a contact center to plan for and ensure optimal staffing and service levels at any given time.

Workforce management process overview

At a high level, the workforce management (or workforce optimization) process involves the following step:

- **Select Your Service Level Objective:** Determine the appropriate service level based on the specific services provided, and on the analysis of forecasting data and real-time adherence. Service level is expressed as “X percent of interactions answered in Y seconds”.
- **Collect Data:** CIC's Stat Server collects ACD data that shows the number of ACD interactions received, the interaction duration, and the interaction patterns.
- **Forecast Interaction Load:** Use volume forecasting based on the collected ACD data to determine accurate predictions for future interaction load.
- **Forecast Headcounts:** Use ACD simulation or Erlang_C based on volume forecast to determine accurate staffing level predictions.
- **Publish and Manage Schedules:** Generate schedules based on forecasting, make adjustments if necessary, and publish the schedules.
- **Analyze Performance:** Use data obtained from the agents' adherence to the schedule, and determine the schedule's accuracy regarding the actual interactions received. Based on this information, make adjustments to the volume and headcount forecasts for generating the next week's schedule.

Configure your options and monitor results

Note: Beginning in CIC 4.0 SU6, most Interaction Optimizer functionality, including configuration settings, is available only through IC Business Manager.

To fulfill the workforce management functions, use the following applications:

- **Interaction Administrator:** Use Interaction Administrator to configure:
 - [Optimizer Database](#)
 - [Agents](#)
- **Interaction Optimizer:** Use the **Interaction Optimizer** module in the **Interaction Center Business Manager** application to do the following:
 - Configure client options
 - Configure server options
 - Map status messages to activity types
 - Manage special days (day classifications)
 - Configure scheduling units
 - Configure forecast and schedule entries
 - Complete the steps to create forecasts and schedules
 - Manage time-off requests
 - Make normal scheduling edits
 - Apply time off requests
 - Publish the schedule
 - View real-time adherence (RTA) events on current or previous schedules
 - Use intraday monitoring to compare activity
- **Interaction Supervisor:** Use Interaction Supervisor to view or monitor:
 - User and Schedule Statistics
 - Real Time Adherence Events
 - Time Off Requests
 - Reports

- **CIC Clients:** Use Interaction Desktop to:
 - View Published Schedules
 - Submit Time Off Requests

Note: Interaction Optimizer availability and behavior depends on how it is licensed, and how access control is configured. For more information, see the *Interaction Optimizer Technical Reference* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

For more information

For information on configuring and running Interaction Optimizer, see the Interaction Optimizer help.

For more information on Interaction Supervisor, see the Interaction Supervisor help.

For more information on the CIC clients, see the Interaction Desktop help and the Interaction Connect help.

Interaction Optimizer Configuration



Interaction Optimizer Configuration

Use the following page in the **Advanced Configuration** dialog box in the Interaction Optimizer Configuration container to configure database options for Interaction Optimizer. These configuration parameters affect the performance of the Interaction Optimizer forecasting and scheduling engine.

- [Database](#)



Interaction Optimizer Database Configuration

This page displays the settings that control the behavior of Interaction Optimizer database transactions.

Note: Change these values only at the request of a certified PureConnect Customer Care representative.

IC Data Source

This is the data source that Interaction Optimizer uses to locate the tables of data necessary to generate volume and headcount forecasts, and to generate schedules. The data source is set during installation.

Transaction Timeout (seconds)

This setting is the number of seconds before a database transaction will timeout. Database performance could be involved in a transaction timeout, but there could also be overall databases problem, network load issues, etc.

The default value for this setting is 10 seconds. Acceptable values are 10 through 3600 seconds.

Web Server URI

This is the URL for Interaction Optimizer - Web Edition. When you type the URL here, agents see the Interaction Optimizer web applications in Interaction Desktop My Schedule view.

Note: If you specify a web address for any other website, an error message appears.

When you specify the URL for Interaction Optimizer - Web Edition, then Interaction Desktop no longer displays the .NET version of the My Schedule view. If you clear this field, Interaction Desktop displays the original My Schedule view again.

Defaults

Click this button to return these settings to the default values.



Agents

Use this page to add agent schedule exceptions (constraints) to weekly shift definitions. The scheduling engine uses these settings when it generates schedules for agents.

Examples

Daily agent constraint example

John Smith is one of many agents who are assigned to a weekly shift definition. However on Tuesdays, John must leave an hour early (4:00 P.M.) to attend physical therapy sessions. You can add this exception as a **Daily Agent Constraint** by setting the **Latest Shift Stop Time** value to 4:00 P.M.

Weekly agent constraint example

Sally Jones is normally paid for 40 hours a week. She is one of many agents assigned to a weekly shift definition. However every day of the week for several weeks, Sally will be attending a "Lunch and Learn" session during her lunch break. These sessions are considered paid time. You can add this exception as a **Weekly Agent Constraint** by setting the **Minimum Paid Time** value to 45 hours.

Agent Configurations

The **User Name** box contains the names of the agents for whom agent schedule exceptions have been configured. Click **Add** to select agents and then configure the schedule exceptions. Click **Remove** to remove an agent and the schedule exceptions.

Agent Configuration Settings

Select Daily Agent Constraints or Weekly Agent Constraints. Then complete the corresponding details.

Daily Agent Constraints

Do one of the following things:

- To add a constraint, click **Add**. Complete the **Daily Agent Availability Constraints** dialog box.
- To edit a constraint, select the constraint and then click **Edit**.
- To remove a constraint, select the constraint and then click **Remove**.

Weekly Agent Constraints

Specify the requirements for paid time, shift time, and shift days for the selected weekly shift definition.

Note: There are default values for each of the configurable items, however the defaults are **not** enabled unless you select the corresponding check boxes. By default the scheduling engine uses the maximums of the maximums and minimums of the minimums to generate schedules for agents.

Minimum Paid Time

Select this check box to set the agent's desired minimum number of paid hours per week. In the box, type any value between 0 and 168. The default value is 20 hours.

Desired Maximum Paid Time

Select this check box to set the agent's desired maximum number of paid hours per week. In the box, type any value between 0 and 168. The default value is 40 hours. For example, an agent might want to work 50 paid hours a week to earn extra income.

Note: If the desired service level cannot be met, the scheduling process schedules agents above their maximum number of desired paid time hours. See **Absolute Maximum Paid Time**.

Absolute Maximum Paid Time

Select this check box to specify the agent's absolute maximum paid time in hours per week. In the box, type any value between 0 and 168. The default value is 50 hours. For example, a company may not allow any agent to work more than 40 paid hours a week.

Note: The scheduling process observes the absolute maximum paid time hours regardless if the agents can meet the desired service level. See the **Desired Maximum Paid Time**.

Minimum Time Between Shifts

Select this check box to set the minimum number of hours between shifts for the agent. In the box, type any value between 0 and 168. The default value is 12 hours. For example, a company might allow agents to work a 3:00 P.M. to 11:00 P.M. shift on Monday, and then another shift at 7:00 A.M. to 3:00 P.M. on Tuesday. In this case, set the minimum time between shifts to 8 hours.

Maximum days

Select this check box to set the maximum number of days that the agent can work. In the box, type any value between 1 and 7. The default value is 7 days.

Related topics

[Service level](#)

[Agent constraints versus shift constraints](#)

[Daily Agent Availability Constraints dialog box](#)

[Agent Activity Configuration dialog box](#)



Daily Agent Availability Constraints

Use this page to configure the availability constraints for the selected agent. Occasionally, agents have work schedule conflicts that need to be accounted for in the shift schedule. These conflicts are less common to schedule around than the more general shift constraints that apply to everyone. Click [here](#) for more information on the differences in agent constraints vs. shift constraints.

Interaction Optimizer uses the most constrained value of the daily agent availability constraints and the daily shift constraints, using the maximum of the minimums and the minimums of the maximums.

For example, if an agent's minimum paid time in the daily agent availability constraint has a value of 0, but the agent's minimum paid time in the daily shift constraint has a value of 2, the daily shift constraint value of 2 is used because it's more constrained.

See [Agents](#) for a daily agent constraint example.

Shift Configuration

Use this section to set start, stop and paid time for this agent. Hours and minutes can be specified in each field. Click on the hours position or the minutes position, then click the up or down arrow keys. Each active day that is assigned a constraint, is listed as an **Active Day** in the **Agent Configuration** dialog box.

Earliest Shift Start Time

Select this check box to set the earliest time in the AM or PM hour this agent will be allowed to start the shift. 8:00 AM is the default value for this setting.

Latest Shift Stop Time

Select this check box to set the latest time in the AM or PM hour this agent can end the shift. 5:00 PM is the default value for this setting.

Minimum Paid Time

Select this check box to set the minimum time in hours this agent can be paid for this shift. 4 hours is the default value for this setting. For example, a value of 0 means that the agent is not required to have any paid time for that day.

Maximum Paid Time

Select this check box to set the maximum time in hours this agent can be paid for this shift. 10 hours is the default value for this setting.

Active Days

Select the days that this agent is available for a shift.

Activities

This section lists the scheduled activities during a shift for the selected agent. The Activity Type, Earliest Start, Latest Start, and Activity Length are displayed. Click [Add](#) to add a new activity, click **Edit** to change the existing activity, or click **Remove** to remove an activity for the selected agent.



Agent Activity Configuration

Use this page to configure an agent activity. An agent activity is an activity that a specific agent completes during the agent's shift.

An agent activity is different than a shift activity. A shift activity is a reoccurring activity for all agents in the shift. The settings for agent activities either compliment or override the settings for shift activities.

Activity Type

Select an activity type from the list. Activity types are mapped to agent status in Activity Types.

Length

Set the duration of the activity. Use the format HH:MM. The default length is 1 hour. The minimum length is 5 minutes.

Start Time Configuration

Use the section to specify the start time settings for this activity for this agent. Select the hour or minute position to change the time.

Use Relative Times

Select this check box to use times relative to start times. If selected, *Earliest Start Time From Shift Start* and *Latest Start Time From Shift Start* appear below. If this check box is not selected, absolute times are used. Absolute times are represented by A.M. and P.M. By default, this check box is not selected.

If the agent is assigned different shifts, then use relative time so that the settings are valid for all of the agent's shifts. For example, select **2:00 hours from shift start** rather than **10:00 A.M.**

Earliest Start Time (From Shift Start)

Select the hour or minute position, and then use the up and down arrows to set the earliest time this activity can start. The default value for this field is 8:00 A.M.

Latest Start Time (From Shift Start)

Select the hour or minute position, and then use the up and down arrows to set the latest time this activity can start. The default value for this field is 9:00 A.M.

Start Time Increment

Select the hour or minute position, and then use the up and down arrows to set the increment in minutes that this activity can start. The default value for this field is 15 minutes. The system uses this increment during schedule generation. To avoid excessive work or time for schedule generation, the number of possible start times can not exceed 50.

For example, if the earliest activity start time is 9:00 A.M., the latest start time is 10:15 A.M., the start time increment is 15 minutes, and the length is 15 minutes, then the scheduling process would first try scheduling this activity at 9:00, then at 9:15, then at 9:30 and so on every 15 minutes until 10:15.

Counts Toward Paid Time

Select this check box if this activity counts toward paid time. For example, lunch is normally not considered paid time. By default, this check box is not selected (enabled).

Counts Toward Contiguous Work Time

Select this check box if this activity counts toward contiguous work time. For example, if an agent needs to attend a meeting from 7:00 A.M. to 8:00 A.M., then start a shift at 8:00 A.M., then this meeting is considered contiguous work time. By default, this check box is not selected.

Schedule generation uses this setting when it assigns activities to an agent. It factors in the minimum and maximum contiguous work time constraints settings in Daily Shift Constraints.

Replaces Shift Activity of the Same Type

Select this check box if this activity should replace another activity of the same type. For example, if this is a lunch activity type, and an agent needs to take lunch exactly at 12:00 P.M., but the weekly shift definition specifies lunch anytime between 11:30 and 1:30, then the schedule generation will force the lunch activity in the 12:00 to 1:00 time slot.

If this check box is not selected and this activity type exists in the **Activities** section of the Daily Shift Constraints, then the agent will have this activity scheduled in addition to existing activities. By default, this check box is not selected.

Attendance Requirement Type

Select any of the following values:

- **Unspecified:** This is the default selection. This option does the following things:
 - It *discards* schedules that have agent activities that have been skipped (all remaining activities to be scheduled do not have a start time greater than or equal to the current time).
 - It *suppresses* schedules that end in agent activities that are both non-paid and non-contiguous.
 - It *suppresses* schedules that have unscheduled agent activities that are both paid and contiguous.
- **Do Not Schedule:** This option causes the scheduling engine to ignore this agent activity.
- **Optional:** This option causes the scheduling engine to keep schedules that meet minimum constraints and that have optional, unscheduled agent activities.
- **Include:** This option causes the scheduling engine to discard potential schedules that do not contain the scheduled agent activity.

Note: If required **Include** activities occur during a paid time-off request, then the required activities are ignored. Instead, a schedule containing the time-off request is created.

Description

Enter a description of the activity. You can enter up to 2000 characters.

The description appears in a tooltip when a user moves their cursor over an activity in a schedule in Interaction Desktop. It also appears if you double-click an activity to edit it.

Related topics

[Shift activities versus agent activities](#)

Interaction Optimizer

Interaction Optimizer has add-on module in IC Business Manager that supports a wide range of workforce management functionality. Within the module, you can make configuration changes, work with schedules, and evaluate intraday differences between forecast and actual values. Use the intuitive user interface to make all the normal scheduling edits, apply time off requests, and then publish the schedule.

The new interface also allows you to see real-time adherence (RTA) events on current or previous schedules, and to use intraday monitoring to compare actual activity of the day to forecast activity of the day.

Note: Beginning in CIC 4.0 SU6, most Interaction Optimizer functionality, including configuration settings, is available only through IC Business Manager.

For more information on configuring and using Interaction Optimizer, see the *Interaction Optimizer* help.

Related topics

[Database Configuration](#)

[Daily Agent Availability Constraints](#)

[Agent Activity Configuration](#)



Interaction Conference Configuration

Interaction Conference is an application plug-in, that allows you to host scheduled conference calls for internal and external use. The Interaction Conference container appears in new and update installations if you have installed Interaction Conference and CIC detects your Interaction Conference feature license.

Use this container to configure global conference settings that apply to all conferences.

Note: To configure these conference settings, the Interaction Conference administrative access right must be granted. This administrative access right is available at the default user, user, roles, and workgroup configuration levels. See [Admin Access Categories](#) in the **Admin Access** page for more information.

Enable call control for all conferences

Select this check box to add call control options (mute, disconnect, etc.) next to names of conference attendees in the Interaction Conference web application. By default, this option is not enabled.

Require account codes for all conferences

Select this check box to associate specific account codes (as defined in Account Codes Configuration) to conferences. By default, this option is not enabled.

Configure Access Type

Select the access type in the drop-down list. The type selected here determines whether conference attendees are required to supply a personal identification number (PIN) to enter the conference, and is the default access type for all conferences. PIN numbers may be required, not required, or optionally required by individual conferences. When PINs are used, conference attendees are granted a system-generated PIN number in a notification email message. The options are:

- **Require PIN:** (Default) This option sets PIN usage as a requirement, meaning that all conferences will require a PIN by default.
- **Disallow PIN:** This option sets the default for all conferences not to allow PIN usage.
- **PIN Optional:** This option sets PIN usage as optional, meaning that conferences may or may not require them. Select this option if you want the option to use PINs on a case-by-case basis. If you select this option, use the **Require a PIN for these conferences** setting in **Conference Rooms Configuration** dialog box to determine whether a conference requires a PIN.

Conference Resource Limit

This setting determines the maximum number of conference resources that Interaction Conference can use on the CIC server. This must be less than or equal to the total number of conference resources on the CIC server. To find the number of conference resources available, click on the Telephony Resources container in Interaction Administrator. In HMP environments, the number of conference resources is determined by license. You cannot leave this field blank - you must enter a positive integer. Typically, one conference resource is required for each conference invitee.

Enforce Resource Limit When Joining a Conference

When an Interaction Conference user creates a new conference, that person can optionally specify the number of conference resources to use for that conference. The default value is 10, but it can be set to any number (up to the Conference Resource Limit). Select this check box to enforce the limit set in the Resources field on the New Conference configuration page.

Resources:

Default notification sender address

If a conference host does not have a valid email address, Interaction Conference uses the **Default notification sender address** specified in this field to send notifications when a conference is created, updated, or deleted. This might be a CIC Administrator or a department manager's email address to use as a fallback for notifications.

Related Topics:

[Conference Room Configuration](#)

[Interaction Conference](#)



Conference Room Configuration

You must define at least one conference room before scheduling an [Interaction Conference](#). Additional conference rooms can be defined at any time.

Use this container to configure conference rooms and associated settings.

Note: To configure these conference room settings, the Interaction Conference Room administrative access right must be granted. This administrative access right is available at the default user, user, roles, and workgroup configuration levels. See [Admin Access Categories](#) in the **Admin Access** page for more information.

To create a conference room:

1. Double-click the *Configuration* entry in the Interaction Conference container. The **Conference Room Configuration** name dialog box appears.
2. Enter a descriptive name in the **Display Name** field. This is the name that appears in notification email messages sent to conference attendees, when a conference is scheduled to use this room.
3. If the [general configuration settings](#) allow PIN numbers to be defined, you may optionally check **Require a PIN for these conferences**. When checked, attendees must specify a personal identification number when joining a conference held in this room. Selecting this check box also allows more than one conference to occur at the same time in the room because the PINs route each caller to the correct conference.
4. Conference rooms can be physical (a room with a station phone on your premises) or virtual, meaning that the conference is associated with a telephone number. When you select **Physical**, the **Station** drop list is enabled. When you select **Virtual**, you can specify a telephone number. The telephone number associated with a conference room must be configured in your telephony hardware (in a gateway, for example) to route calls to the CIC server running Interaction Conference. Do not use a telephone number in more than one conference room.

Note: To add one or more phone numbers to the Phone Numbers text box, type the number in the second text box under Phone Numbers, then click **Add**. You can remove a number by highlighting it in the list and clicking **Remove**. You can determine the order which phone numbers are used by moving a phone number up or down in the list by highlighting it in the list and clicking **Move Up** or **Move Down**.

Special Considerations for Toll-Free Numbers

Special considerations apply to the use of toll-free numbers in Interaction Conference.

- Due to the limitation of call routing in CIC, callers cannot directly reach a physical room using a toll free number. However, a physical station can call into a virtual room that is configured to be reached by a toll free number.
 - Use toll free numbers with virtual rooms so guests can call directly to that conference room.
5. To limit the resources available for the room (by default, resources are unlimited up to the limit set in [general configuration settings](#)):
 - Select the **Specify Resource Limit** radio button.
 - In the corresponding text box, type the maximum number of resources to allow.

If necessary, you can select the **Disable this room** option to prevent the conference room from appearing in the list of available rooms, but without deleting the configuration.

Click **OK** to save changes.

Related topics

[Interaction Conference Configuration](#)

[Setting Default Conference Options](#)

[Station Configuration](#)

[Interaction Conference](#)

[Interaction Conference Email Templates](#)

Interaction Conference Email Templates

Interaction Conference allows the administrator to define email templates for meeting invitations and cancellations. Features include:

- The ability to create separate templates for invitations, updates, and cancellations.
- The ability to create separate templates (of all three types) for use by hosts and guests.

To create an email template:

1. Double-click the *Configuration* entry in the Interaction Conference container. The **Interaction Conference Configuration** dialog box appears.
2. Click the **Email Templates** tab.
3. Click **Add**. The New Template dialog box is displayed.
4. Design the template:
 - a. In the **Name** text box, type a name for the template.
 - b. In the **Subject** text box, type a default subject for the e-mail message (e.g., "Meeting invitation").
 - c. In the **Body** text box, type the default text of the e-mail message, inserting macros (4) as needed:
 - **Additional numbers**: Phone numbers, other than the main conference number, on which attendees can call into the conference.
 - **Date**: The date of the conference.
 - **Host**: The host of the conference.
 - **Invitee**: The name of the invitee (the recipient of the email message).
 - **Invitees**: The names of the invitees (the recipients of the email message).
 - **Notes**: Any explanatory notes about the conference.
 - **Phone**: The main (or only) phone number that attendees should use to call into the conference.
 - **PIN**: The PIN number attendees should use to gain access to the conference.
 - **Room**: The room identifier for the conference.
 - **Time**: The time at which the conference will be held.
 - **Title**: The title of the conference.
 - d. Click **OK**. Interaction Administrator creates the new template and lists it on the **Email Templates** tab of the Interaction Conference Configuration dialog box.
5. In the Selected Templates area, use the list boxes to assign the template to a message type.

Related Topics

[Conference Room Configuration](#)

[Setting Default Conference Options](#)

Setting Default Conference Options

Use Interaction Conference configuration to set default options for conferences. You can also either allow conference organizers to change the options or prevent them from doing so by using the **Lock** check box.

To set default conference options:

1. Double-click the *Configuration* entry in the Interaction Conference container. The **Interaction Conference Configuration** dialog box appears.
2. Click the **Default Conference Options** tab.
3. Select the desired options:

Lock - Select the Lock check box to prevent conference organizers from changing the setting beside the Lock check box. These options will appear in the selected state by grayed out so the conference organizer cannot change them in the Interaction Conference Web Administrator interface.

Host Required to Start - Select this check box to delay starting a conference until a host attendee has joined.

Enforce End - Select this check box to automatically terminate a conference call at the specified ending time. . If the ending is enforced, Interaction Conference automatically plays a warning message two minutes before the end of the conference.

Allow Mute - Select one of the options to determine the default audio behavior for guests joining the conference and the level of control hosts have on muting.

Start Muted – Select this option to mute all guests by default. Conference guests enter the conference muted, but the conference host may unmute individual participants. Use this option if you plan to have more than 20 unmuted participants in the conference. The host can selectively unmute up to 20 participants to speak.

Manual – Select this option to give the host manual control over muting individual guests in the conference. In this case, guests join the conference unmuted. If there are more than 20 participants, only the first 20 to join the conference are audible. The 21st participant who is a guest (and other guests after) will hear a prompt that they are joining the conference muted. If the conference host un-mutes a host or guest, and there are 20 audible participants, Interaction Conference automatically mutes an audible guest who has been unmuted the longest to stay within the 20-audible-caller limit.

Note: This limit on 20 unmuted callers is temporary and is expected to be removed in a subsequent update.

No – Select this option to prevent hosts from muting any guests in the conference.

Record - Select one of the options to determine the default call recording behavior for conferences.

Yes, send to all – Select this option to have CIC record the conferences and send the recording to all of the hosts and guests listed on the conference.

Yes, send to hosts – Select this option to have CIC record the conference and send the recording to all of the hosts listed on the conference.

No – Select this option to not record conferences by default.

Announce Entry - Select one of the options to determine the default announcement behavior when a guest or host joins a conference. By default, CIC plays a tone as each person joins a conference.

None – Select this option if you do not want any audio alert or notification when someone joins a conference.

Tone – (Default) Select this option if you want CIC to play a tone when someone joins a conference.

Name – Select this option if you want guests and hosts to be prompted to say their name before joining the conference. Interaction Conference will then play that name for the rest of the conference participants to hear as they join.

Announce Exit - Select one of the options to determine the default behavior when a guest or host exits a conference. By default, CIC plays a tone as each person exits a conference.

None – Select this option if you do not want any audio alert or notification when someone exits a conference.

Tone – (Default) Select this option if you want CIC to play a tone when someone exits a conference.

Name – Select this option if you want to hear the name of the guests and hosts as they exit the conference.

Announce Number of Attendees - Select one of the options to determine the default behavior if Interaction Conference announces (by playing a prompt) the number of attendees in the conference.

None – (Default) Select this option if you do not want CIC to play an announcement of the number of attendees on a call.

To Hosts – Select this option if you want CIC to announce the number of attendees only to the hosts on the call.

To All – Select this option if you want CIC to announce the number of attendees to all guests and hosts on the call

4. Click **OK** to save the changes.

Related topics

[Interaction Conference Configuration](#)

[Interaction Conference](#)

Overview of Interaction Analyzer

Interaction Administrator allows you to define the keywords that Interaction Analyzer uses to monitor conversations between agents and customers. You can assign scores to keywords to indicate their importance, and define thresholds for each keyword to indicate how certain Interaction Analyzer must be in its identification of a keyword. When a keyword is spoken in a phone conversation associated with a workgroup queue, Interaction Analyzer detects the word or phrase and identifies and marks the location in the recording where the word or phrase was spoken. CIC subsystems use this information to evaluate customer interactions.

Note: For more information regarding Interaction Analyzer, see the *Interaction Analyzer Technical Reference* in the PureConnect Documentation Library.

Related topics

[Keyword concepts](#)

[Manage keyword sets](#)

[Manage keywords](#)

Keyword concepts

This section contains the following help topics:

[Keyword considerations](#)

[Keyword definitions](#)

[Keyword examples](#)

[Keyword organization](#)

Keyword considerations

This topic describes factors to consider to ensure you are monitoring the most important keywords and phrases for your contact center.

Factors to consider include:

- [Purpose of your contact center](#)
- [Problems and effectiveness](#)
- [Meaningfulness of keywords](#)
- [Keywords from other areas of your business](#)
- [Agent training](#)
- [Customer Feedback](#)
- [Basic keywords](#)

Purpose of your contact center

One factor to consider is the purpose of your contact center. What is it supposed to achieve? Your contact center may be designed for:

- Technical support/Customer support
- Sales/Lead generation

- Information services
- Complaints
- Collections
- Notifications/Dispatching
- Order taking/Event registrations
- Appointment scheduling
- Surveys/Market research
- Donations/Charities
- Screenings

With all of the possibilities, you must determine the areas on which you want to focus. Do you want to monitor agent interactions to see who is performing well and who is not? Do you want to monitor customer interactions to see what their concerns are or if they are upset? Perhaps, you want to monitor both sides of the interaction to measure many different aspects of your contact center.

Regardless of these considerations, the most important thing you can do is determine those factors upon which you define the success or failure of your contact center.

Problems and effectiveness

In your contact center, there are many factors for you to consider to determine the effectiveness of your contact center and how your business is meeting customer needs. The following list provides insight into what keyword categories you could monitor:

- **Customer satisfaction** – Are your customers happy at the end of a call? Are they going to be repeat customers? What do they think about your company, product, or service?
- **Customer problems** – What negative words are customers using in interactions? What products or services do customers mention? Do customers threaten legal action? What common problems are customers experiencing? What questions do customers most often ask?
- **Customer loss** – Do your customers mention competitors or their products? Are customers canceling accounts or stopping service? Do customers demand refunds? Do customers keep calling back?
- **Agent effectiveness** – Are your agents using positive words? Are the agents using the provided script? Do customers praise the agents who helped them? Do agents use words and phrases that indicate apathy to customer problems? Do customers ask to speak to managers or supervisors?
- **Agent satisfaction** – Are some agents getting too many difficult calls? Are agents using positive words that indicate their satisfaction? Are agents using negative words when becoming frustrated? Do customers thank agents for their help?
- **Agent training** – Are agents using personalized language when addressing customers? Do agents use the same words as their customers? Do agents know what to say to customers? Do agents know the solutions to problems? Are agents retaining customers or losing them?

What keywords are involved in the answers to these factors? What would a customer likely say in these situations? What would an agent say? Do you want to track every indication of someone using words that indicate emotion? The answers vary according to the purpose of your contact center, and in what you deem important.

Meaningfulness of keywords

When thinking of possible keywords and phrases, determine which are often-used keywords and what information the keyword provides to you.

For example, for a technical support contact center, you could track the word "problem". However, doesn't everyone who calls into that contact center have a problem? What other information does it provide? Instead, try to identify keywords that define the nature of the problem. Is there a specific problem that most customers are having? Does this problem affect customer retention or repeat business?

Careful analysis of recorded interactions and listening to live conversations helps you identify what keywords are most often said, which have the most impact to your business, and which of these differentiate normal interactions from interactions with more importance.

Keywords from other areas of your business

To leverage the most out of Interaction Analyzer for your business, consider what words or phrases are important to other departments. For example, are customers asking questions about a certain product? If so, these calls could be valuable sales leads or indicate the success of a marketing campaign.

Other business units can benefit greatly from the keywords you define. Consider asking for input from these other units and ensure

valuable customer information is passed on to them. Customer satisfaction and successful sales are great. Business intelligence and customer metrics are even better.

Agent training

How well do you train your agents? Do they read from a script? Are they trained to use certain words and phrases in their interactions? Are the agents able to resolve customer problems or answer their questions? If you answer "yes" to any of these questions, you already have a set of keywords you can monitor. Monitoring the use of these keywords and phrases can indicate the success of your training methods. It also can help determine which agents need refresher training.

Customer Feedback

Determine which keywords and phrases are important to the direction of your business. Are customers asking for the same new features? Do customers complain about the same things? Are agents constantly defending the position of the company or a business practice?

Ensure you define both positive and negative keywords. Monitoring positive customer keywords enables you to track the general happiness of your customers with your contact center. Conversely, monitoring negative customer keywords helps you identify common problems and agent ineffectiveness.

Collecting this information is valuable to your business. It indicates if your business is achieving or failing to meet customer needs. This data can inform you as to where your business must go and what services, products, or solutions it offers.

Basic keywords

When you determine keyword phrases you want to monitor, think about how that phrase can be said in different ways. One of the most important aspects in creating keyword phrases is to define only those words that are always said. The following examples show how some keyword phrases can be dissected to contain only important words. The optional portions of these phrases are displayed within parentheses.

- *(They/The company/My boss)* didn't train me *(for/to/on)*
- I completely understand *(the situation/your concerns/the problem/the trouble)*
- *(Since/Because)* you are a valued *(customer/client/partner)*
- Your satisfaction is *(important/very important/our main concern/my goal)*
- Is there anything else *(I can do/I can help you with/causing you problems)*
- You're not listening *(to me/ to a word I say/at all)*

Related topics

[Keyword organization](#)

[Keyword definitions](#)

[Example keywords](#)

Interaction Analyzer keyword definitions

This topic provides descriptions of the various methods you can use to create keywords for use in Interaction Analyzer.

- [Interaction Analyzer keyword entry](#)
- [Interaction Analyzer keyword spelling entries](#)
- [Keyword synonyms](#)
- [Keyword acronyms](#)
- [Keyword punctuation](#)
- [Keyword numbers](#)
- [Keyword contractions](#)
- [Keyword abbreviations](#)
- [Interaction Analyzer anti-spellings](#)
- [User-defined pronunciations](#)

Interaction Analyzer keyword entry

You enter keywords, up to 120 characters, through the Interaction Analyzer interface of Interaction Administrator or Interaction Center Server Manager. Spell keywords as you would enter them in any document intended for communication. The speech recognition engine uses that spelling entry to match it to its usual phonetic pronunciation.

Interaction Analyzer keyword spelling entries

You can also add multiple spelling entries of a keyword, depending on the different ways in which a person pronounces a word, such as *data*. For this word, some people pronounce it as *dayta* while others pronounce it as *dahta*. The dictionary through which Interaction Analyzer compares pronunciations already handles many words with multiple pronunciations. However, if you enter terms that are specific to a specialized field, such as medicine or science, you may need to provide alternate spelling entries or user-defined pronunciations to ensure recognition by Interaction Analyzer.

Keyword synonyms

One method you must avoid regarding spelling entries is that of synonyms. For example, if you wanted a keyword of *home*, do not enter the following synonyms as alternate spelling entries:

- House
- Abode
- Domicile
- Casa
- Hacienda
- Chateau
- Castle
- Shack
- Hut
- Home
- Condominium
- Apartment
- Dwelling

Do not enter synonyms as alternate spelling entries because Interaction Analyzer determines the spotability factor by the lowest, least discernible entry. In the previous example, the lowest, least discernible spelling entry would be "Hut." Instead, create a keyword set with the name of **home** and enter each synonym as a keyword. This method insures that each synonym keyword has a separate spotability factor and confidence threshold, and can be further discerned through more spelling entries and user-defined pronunciations.

Keyword acronyms

If you want to create a keyword that contains an acronym that is pronounced as separate letters, enter the acronym with either periods or spaces between letters.

Examples:

- F.B.I.
- I D
- E.T.A.
- E U
- C.O.D.
- H T T P
- F.T.P.

For acronyms that are pronounceable as a word, enter the acronym as you would any other keyword without spaces or periods between letters. Letter case is not important.

Examples:

- SCSI (scuzzy)
- RAM
- PIN
- NASA
- SCUBA

In the case of mixed pronunciation acronyms, such as DVD-ROM, you must enter the acronym so that the portion pronounced as

letters contain spaces or periods between letters while the portion pronounced as a single word does not, as in the following example:

D.V.D.-ROM

Keyword punctuation

Interaction Analyzer ignores any punctuation characters in keywords. These characters include commas, periods, exclamation points, hyphens, dashes, question marks, colons, semicolons, special characters (\$, %, &, (,), @), and quotation marks.

Keyword numbers

Each digit that you enter in a keyword is recognized as a word. For example, if you enter **H20**, Interaction Analyzer recognizes this keyword as "H two O." However, if you enter multiple digits, Interaction Analyzer recognizes each number separately. For example, if you enter **100**, Interaction Analyzer recognizes this keyword as "one, zero, zero", not "one-hundred." Likewise, "21" is identified as "two, one", not "twenty-one."

Keyword contractions

Interaction Analyzer recognizes contractions when you enter them as keywords. Words such as "don't," "can't," "won't," "couldn't," "it's," and "I'll" are acceptable.

Keyword abbreviations

Interaction Analyzer does not recognize abbreviations, such as Dr., Mrs., Mr., Jr., Sr., and others.

Interaction Analyzer anti-spellings

After you define keywords, you have the option of entering anti-spellings that specify similar-sounding words that you do not want mistaken for that keyword. These words could confuse Interaction Analyzer, which could mark them incorrectly as instances of that keyword; these mistakes are *false positives*.

For example, the following table presents some keywords and possible anti-spellings that you can add to the definitions:

Keyword	Anti-keywords
Lawyer	Lower Loiter Foyer Employer
Surely	Charlie Surly Purely Journey
Guarantee	Warranty Guillotine Green tea
Unfair	Conveyor Unveil Affair A fare On there

Additionally, you can also specify anti-spellings where the keyword is part of a larger word. For example, consider the word

form. You probably would not want Interaction Analyzer to spot this word when it is a part of larger words, such as *uniform*, *formatted*, and *formation*. In this case, if Interaction Analyzer does spot the keyword within the larger words, you can enter the larger words as anti-spellings.

Do not try to determine anti-spellings when you define a keyword. Instead, when your keywords are used in real interactions in a test environment or in the contact center, you can analyze recordings, identify words mistaken as keywords, and then add them as anti-spellings to the keyword definitions.

If you eventually enter anti-spellings in a keyword definition, you can also consult numerous websites that list other rhyming words for that specific keyword.

Interaction Analyzer keyword user-defined pronunciations

When you define keywords, Interaction Analyzer also enables you to enter phonetic, user-defined spellings, which are referred to as *pronunciations*. The set of phonemes that Interaction Analyzer uses is a customized version of ARPAbet. ARPAbet was a project that used ASCII characters to define the phonemes that make up all possible sounds in the English (US) language. The Interaction Analyzer phonemes differ from ARPAbet to provide more robust keyword spotting and to support languages other than English (US).

Some languages have sequences of letters that are pronounced differently when they appear in different words. For example, in English (US), *tough*, *cough*, *dough*, *through*, and *bough* are all similar in their spellings ("ough"), but have different pronunciations. Using user-defined pronunciations enables Interaction Analyzer to identify these words correctly. For example, the following table displays how these words are specified using phonemes:

Word	Pronunciation
tough	t ah f
cough	c ao f
dough	d ow
through	th r uw
bough	b aw

Note: The example words in the previous table are common and already phonetically-defined in the Interaction Analyzer dictionary. The example words are for conceptual purposes only.

User-defined pronunciations are also useful for the different dialects that you can encounter in a language. For example, consider the English (US) word "lawyer" (l ao y er). Someone from the New England region of the United States could pronounce the word as "lahyah" (l aa y ah) while someone from the Deep South of the United States could pronounce it "lawryer" (l ao r y uh r). User-defined spellings enable you to define the keyword further so that Interaction Analyzer can correctly produce a match.

Important!

There are words in the medical and scientific fields that are based on Latin and Greek, but the associated pronunciations transformed over centuries of usage, such as *peritonitis*. If Interaction Analyzer has difficulty identifying the keyword based on the correct spelling, enter user-defined pronunciations to ensure proper identification of those unique keywords.

Defining multiple words in pronunciations

If you want to create a pronunciation or anti-pronunciation, which use phonemes, and it consists of multiple words, you must enter a **wd** character string between each word. This character string enables Interaction Analyzer to focus on the phonemes for each word, which provides a more accurate comparison, instead of the entire phrase.

For example, "Hi my name is" would be entered as "hh ay **wd** m ay **wd** n ey m **wd** ih s." Enter a user-defined pronunciation only for keywords that Interaction Analyzer does not recognize.

Related topics

[Keyword considerations](#)

[Keyword organization](#)

[Keyword examples](#)

Keyword examples

This topic provides example keywords and phrases you might set up for use in Interaction Analyzer to spot usage when spoken by agents, customers, or both. Use these examples to help you think about what keywords and phrases are important to your contact center or business and then build upon it.

Note: These keywords are only examples and do not represent a comprehensive collection of keywords that can achieve the goals for your contact center.

Examples are provided for the following keyword categories:

- [Agent greetings](#)
- [Agent training issues](#)
- [Call conclusion](#)
- [Call escalation](#)
- [Competitors](#)
- [Cursing](#)
- [First Call Resolution \(FCR\)](#)
- [Marketing](#)
- [Negative statements](#)
- [Positive statements](#)
- [Problem identification](#)
- [Problem resolution](#)
- [Sales](#)
- [Service improvement](#)
- [Threats](#)
- [Upset customer](#)

The following tables contain example keywords, sorted by category and keyword set name.

Example Keyword Set Category: Agent greetings

Keyword Set Name	Keywords
(Agent) Collections Statements	• This is your final • You are obligated to • Garnish • We will send this account to collections • We are demanding full payment on this account • Forfeiture of discount • Final deadline • Offer expires • Last chance • No choice but to • Shut off • Suspended
(Agent) Opening Statements	• Hi my name is • Hello my name is • How are you today • My goal is to
(Agent) Sales Pitch	• You will be able to enjoy • You will only be charged • We have a variety of • It's a wonderful service • Won't take much of your time • For special customers like you • What can I do to get you to • All I need is your • Could I have your credit card number • What would convince you • You can't go wrong
(Agent) Survey Pitch	• What is the reason for your call today • How do you like • How would you rate • What is the most important

Example Keyword Set Category: Agent training issues

Keyword Set Name	Keywords
(Customer) Broken Trust	• You said • You told me • Wait a minute • Wait a second • Ask me that before • Asked me that before • You even listening • You listening • You're not listening • Don't know what you're doing • I don't care • Don't give me • You don't understand • Report you • I didn't get my • I did not receive
(Agent) Excuses	• I just work here • It's not my job • I'm just doing my job • I'm new here • I just started here • They didn't train me
(Agent) Improper Statements	• Calm down • Hold on • Can't do that • Lost your record • Lost your file • File is lost • Shut up
(Agent) Lack of Knowledge	• I don't know • Beats me • Let me get back to you later • Let me call you back later • I guess so

Example Keyword Set Category: Call conclusion

Keyword Set Name	Keywords
(Agent) Ending Statements	• Have a great day • Again, my name is

Example Keyword Set Category: Call escalation

Keyword Set Name	Keywords
(Customer) Redirection Requests	• Your supervisor • A supervisor • Your manager • A manager • Let me speak to • Let me talk to • I want to talk • I want to speak • Transfer me to someone who • I demand

Example Keyword Set Category: Competitors

Keyword Set Name	Keywords
Competitor Names	• <i>XYZ Company</i> • <i>111 Corporation</i> • <i>ABC Incorporated</i>
Competitor Products	• <i>Product Name 1</i> • <i>Product Name 2</i> • <i>Product Name 3</i>

Example Keyword Set Category: Cursing

Keyword Set Name	Keywords
Cursing	• Darn • Heck • Freak • Crap • Sucks • Shove it

Example Keyword Set Category: First Call Resolution (FCR)

Keyword Set Name	Keywords
(Customer) Subsequent Call	• Last time • Called before • Calling again • Calling back • Called back • Keep calling • Time I've called

Example Keyword Set Category: Marketing

Keyword Set Name	Keywords
(Agent) Ad Placement	• How did you hear about • What referred you to our • How you heard about • Did you see our
(Customer) Ad Placement	• I saw your • I heard your • I read your • On your Web site

Example Keyword Set Category: Negative statements

Keyword Set Name	Keywords
(Agent) Astonishment	• You're kidding me • Got to be kidding • That's unbelievable • You're putting me on • No way
(Agent) Condescension	• You're not the only one • How I feel • That's too bad • Aren't you just • Why are you so
(Agent) Poor Attitude	• I don't care • I don't believe you • Sucks to be you • I'd hate to be you • Tell someone who cares • I can't handle this • Out of luck • You should call back • That isn't my responsibility • Will tell you the same thing
(Customer) Collection Excuses	• Unemployed • Bankruptcy • I don't have a job • Lost my job • Was fired • Laid off

Example Keyword Set Category: Positive statements

Keyword Set Name	Keywords
(Agent) Action	• Right away • I will make sure • I am going to • What we can do • I will address this • The best thing I can do • What I will do for you

(Agent) Adverbs	• Definitely • Absolutely • Surely • Certainly • Quickly • Positively
(Agent) Advice	• I would suggest • I recommend • Your best option is • As soon as you receive • To avoid this problem • All you need to do is • The best thing you can do
(Agent) Cooperation	• Let's work on this together • We can resolve this • Let's figure out what • Let's look at this together • Let's go ahead and • Let's take care • We can fix this
(Agent) Empathy	• I see • I understand • Understand the inconvenience • I completely understand • How can I help you • I'm sorry to hear that • Sorry for the inconvenience • You are a valued
(Agent) General	• Please • Thank you • I appreciate your patience
(Agent) Reassurance	• Rest assured • I will try my best • More than glad • More than happy • Based on our experience • I will ensure that • I assure you that • Your satisfaction is • We value • Of course • Guarantee
(Customer) Trust	• Trust you • I can believe that • Straightforward • Honest with me • Honest with you

Example Keyword Set Category: Problem identification

Keyword Set Name	Keywords
(Customer) Account Identification	• My account number is • My number is • My user name is • My customer ID is • My account is
Product Identification	• <i>Product name 1</i> • <i>Product name 2</i> • <i>Product name 3</i>

Example Keyword Set Category: Problem resolution

Keyword Set Name	Keywords
(Agent) Resolution Indicators	• Is there anything else I can help you with • I'm glad I could help
(Customer) Resolution Indicators	• I'm happy • I'm pleased • Great • Amazing • Amazed • Excellent • Fantastic • Perfect • Working now • It works • Wonderful • Relieved • Terrific • Fabulous • Satisfied • Outstanding • That was easy • Very helpful • I appreciate • Thank you • Thanks • Thankful • That's better • That's much better • You deserve a • You really know • Great job • Good work • Job well done

Example Keyword Set Category: Sales

Keyword Set Name	Keywords
(Customer) Loss of Business	• Cancel my account • Canceling my account • Close my account • Cancel my service • Stop service • Money back • Refund • I'll never purchase • I'll never buy • Never get another • Hears about this • Better Business Bureau
(Customer) Referral	• I'll tell everyone • I'll tell my • Will love this • For my friends
(Customer) Repeat Business	• Where can I get • When can I get • When does • I'm going to order • I'll order • Get another • Next version • Next release • Next update
(Customer) Sale Success	• When will I receive • What can I expect • My credit card number is • I'll go with • Purchase • I'll buy

Example Keyword Set Category: Service improvement

Keyword Set Name	Keywords
(Customer) Suggestions	• It would be great if • What you should do is • Would be better if • Would be so much better if • Want to see • Want to hear about • Like to see • You should consider • You should make

Example Keyword Set Category: Threats

Keyword Set Name	Keywords
Legal Action	• Attorney • Lawyer • Legal action • I'll sue you • I'll sue your • Take you to court • Lawsuit
Threats	• Come down there • I'll find you • Kill you • Don't make me • I'll get you • Get even • Blow up • Revenge • Pay back • Hurt you • Where it hurts • Blow you away • Gun down • Shoot you • Stab you

Example Keyword Set Category: Upset customer

Keyword Set Name	Keywords
(Customer) Emotional Words	• Unacceptable • Frustrated • Unfair • Isn't fair • You people • Angry • Makes me mad • Makes me so mad • Outraged • I don't understand • Ridiculous • Upset • Ticked off • Is that the best • Unhappy
(Customer) Time Issues	• I can't wait • I don't have time • Take all day • Hours and hours • Put me on hold • Can you hurry • Waste my time • Wasting my time • Taking so long • Do you know what time it is

Related topics

- [Keyword considerations](#)
- [Keyword definitions](#)
- [Keyword organization](#)

Keyword organization

This topic contains the purpose of categories, keyword set names, and keywords. The following table displays a brief example of how you can use categories and keyword set names to organize your keyword definitions:

Category	Keyword set name	Keywords
Marketing	(Agent) Ad placement	- Where did you see our ad - Where you saw our ad - How did you hear about us
	(Customer) Ad placement	- I saw your ad - I saw your commercial - I read your ad - I heard your commercial
Sales	(Agent) Sale success	

Manage keyword sets

This section contains the following help topics:

- [View keyword sets](#)
- [Add a keyword set](#)
- [Copy a keyword set](#)
- [Delete a keyword set](#)
- [Search for a keyword set](#)
- [Modify a keyword set](#)
- [Add keyword set notes](#)
- [Managing custom attributes](#)

View keyword sets

The **View Keyword Sets** page displays keyword sets in a list in the master view, and displays details of the currently selected keyword set in the details view. You can take actions on the keyword sets in the list view, such as add, delete, and copy and paste, and you can add a new keyword set. You can change the way the list is displayed, such as change visible columns, sort by column, and filter.

To view keyword sets

- Under Interaction Analyzer, click **Keyword Sets** or click **Interaction Analyzer** in the breadcrumbs if available.
- The **View Keyword Sets** page appears.

Related topics

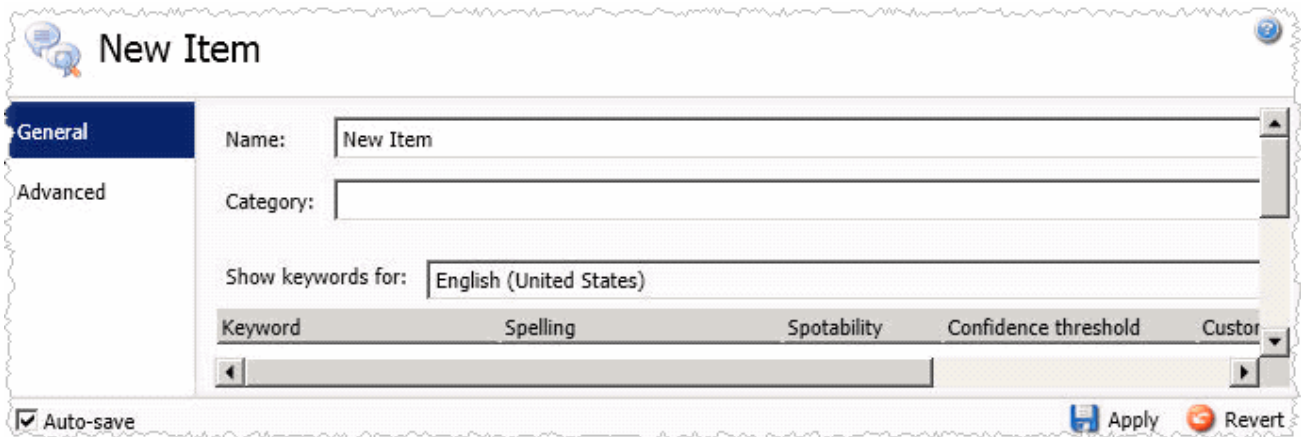
- [Add a keyword set](#)
- [Search for a keyword set](#)

Add a keyword set

Important: It is strongly recommended to define keywords, keyword set names, and categories before attempting to enter keywords. This can save a great deal of time, as opposed to entering keywords without having a defined structure.

To add a keyword set

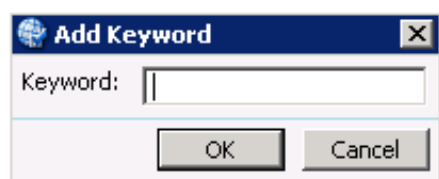
1. In the upper-right pane of Keyword Sets, click . A **New Item** is created in the lower pane. This new item is a keyword set, which enables you to enter multiple keywords and phrases.



2. In the **Name** box, type the name to assign to this keyword set.

The keyword set name must be unique from other keyword set names and be descriptive enough to enable you to identify the types of keywords it contains. This name is only for your use in locating keywords through this administrative interface. Other CIC products associated to Interaction Analyzer do not use the keyword set name.
3. In the **Category** box, type the name of the category to assign to this keyword set. See [Keyword categories](#) for more information about categories, their purpose, and how they are used.

4. On the right side of the lower pane, click . The **Add Keyword** dialog box appears.



5. In the **Keyword** box, type a keyword or phrase you want Interaction Analyzer to monitor and then click **OK**. The keyword is added to the current keyword set.
6. In the lower-right corner of the lower pane, click  to apply your changes.

Copy a keyword set

To copy a keyword set

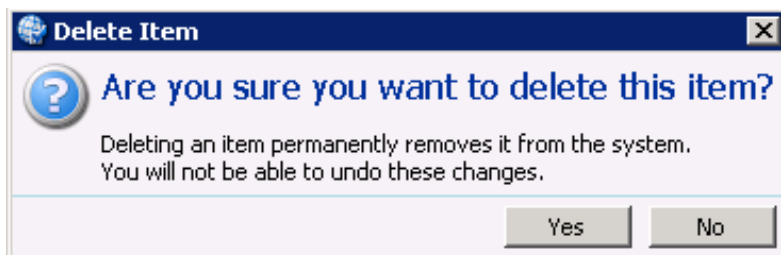
1. Under Interaction Analyzer, click **Keyword Sets** or click **Interaction Analyzer** in the [breadcrumbs](#) if available.
2. In the upper pane, click the **Keyword Set** you want to copy and then click . The selected keyword set is copied to the Clipboard.
3. In the upper pane, click . A **New item** is created in the lower pane that contains the information from the copied keyword set.
4. Type a new name for the keyword set in the **Name** box, make any other desired changes, and click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Delete a keyword set

To delete a keyword set

1. Under Interaction Analyzer, click **Keyword Sets** or click **Interaction Analyzer** in the [breadcrumbs](#) if available.
2. In the upper pane, click the **Keyword Set** you want to delete and then click . The Delete Item dialog box appears.



3. Click **Yes**. The selected keyword set is deleted.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Search for a keyword set

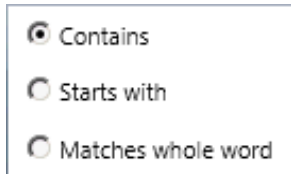
This topic contains the steps for searching for a keyword set by name or category.

The filter options for searching for a keyword set are:

- **Contains** – Searches for keyword set names that contain the characters you specify in the **Name** box.
- **Starts with** – Searches for keyword set names that start with the characters you specify in the **Name** box.
- **Matches whole word** – Searches for keyword set names that match the entire word you specify in the **Name** box.

To search for a keyword set by name

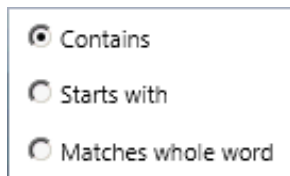
1. In the upper-right pane of Keyword Sets, click  to the right of the **Name** box and select one of the filter options.



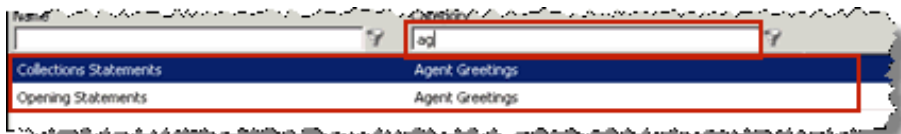
2. Type the keyword set name to search for in the **Name** box. As you are typing characters, keyword set names that match what you are typing appear below the **Name** box.
3. Click the desired **Keyword Set** to display its information in the lower pane.

To search for a keyword set by category

1. In the upper-right pane of Keyword Sets, click  to the right of the **Category** box and select one of the options.



2. Type the category to search for in the **Category** box. As you are typing characters, categories that match what you are typing appear below the **Category** box.



3. Click the desired **Keyword Set** to display its information in the lower pane.

Related topics

[Keyword definitions](#)

[Keyword organization](#)

Modify a keyword set

This topic contains the steps for modifying keyword sets, keyword categories, and keywords. It also contains steps for deleting a keyword from a keyword set.

Important: It is strongly recommended to define keywords, keyword set names, and categories before attempting to enter keywords. This can save a great deal of time, as opposed to entering keywords without having a defined structure.

To modify a keyword set

1. Under Interaction Analyzer, click **Keyword Sets** or click **Interaction Analyzer** in the [breadcrumbs](#) if available.
2. Click the **Keyword Set** to modify. The keyword set appears in the lower pane.

The screenshot shows a web application interface for 'Agent Training Issues'. At the top, there's a navigation bar with 'Agent Training Issues' and 'Broken Trust' highlighted. Below this, there's a table with two rows: 'Collections Statements' and 'Opening Statements', both linked to 'Agent Greetings'. The main area is titled 'Agent Training Issues' and has a left sidebar with 'General' and 'Advanced' tabs. The 'General' tab is active, showing fields for 'Name' (Agent Training Issues) and 'Category' (Broken Trust). Below these is a dropdown for 'Show keywords for:' set to 'English (United States)'. A table lists keywords with columns for 'Keyword', 'Spelling', 'Spotability', 'Confidence threshold', 'Customer score', 'Agent score', and 'Advanced'. Two keywords are listed: 'You said' and 'You told me', both with a 60% confidence threshold and scores of 0. At the bottom right, there are 'Apply' and 'Revert' buttons.

Keyword	Spelling	Spotability	Confidence threshold	Customer score	Agent score	Advanced
You said	You said		60 %	0	0	
You told me	You told me		60 %	0	0	

- To modify the keyword set name, in the **Name** box, type the name to assign to this keyword set.
- The keyword set name must be unique from other keyword set names and be descriptive enough to enable you to identify the types of keywords it contains. This name is only for your use in locating keywords through this administrative interface. Other CIC products associated with Interaction Analyzer do not use the keyword set name.
- To modify the category, in the **Category** box, type the category name to assign to this keyword set. See *Keyword organization* for more information about categories, their purpose, and how they are used.
- To modify a keyword in this keyword set, click the **Keyword** to modify and make your changes. For more information, see [Setting the Confidence Threshold for a Keyword](#) and Set the Score for a Keyword.

3. In the lower-right corner of the lower pane, click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

To delete a keyword from a keyword set

1. In the upper pane, click the **Keyword Set** that contains the keyword to delete. The selected keyword set appears in the lower pane.

2. In the lower pane, click the **Keyword** to delete and then click . The selected keyword is removed from the keyword set.



Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Related topics

- [Add a keyword set](#)
- [Keyword considerations](#)
- [Keyword definitions](#)
- [Keyword organization](#)
- [Set the score for a keyword](#)

Add keyword set notes

This topic contains the steps for adding notes about changes you make to the keyword set.

To add keyword set notes

1. In the upper-right pane of Keyword Sets, click the **Keyword Set** for which to add a note. The keyword set appears in the lower pane.
2. In the lower pane, click **Advanced** in the left navigation box. The Custom Attributes and History bars appear.
3. Click **History**. The **Notes** box appears.
4. Click in the **Notes** box and type information regarding changes you made to the keyword set.
5. In the lower-right corner of the lower pane, click  to apply your changes. The last modified and created dates are automatically updated.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Related topics

- [Manage custom attributes](#)
- [Modify a keyword set](#)

Manage custom attributes

This topic contains the steps for adding, modifying, and deleting a custom attribute for a keyword set.

To access custom attributes

1. In the upper-right pane of Keyword Sets, click the **Keyword Set** for which to add, modify, or delete a custom attribute. The keyword set appears in the lower pane.
2. In the lower pane, click **Advanced** in the left navigation box. The **Custom Attributes** and **History** bars appear.
3. Click **Custom Attributes**. The Custom Attributes appear.

To add a custom attribute

1. Click  to the right of the Custom Attributes box. The **Name** and **Value** boxes are available for entry.
2. Click in the **Name** box and type a unique name for the custom attribute.
3. Click in the **Value** box and type a value for the custom attribute.
4. In the lower-right corner of the lower pane, click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane..

To modify a custom attribute

1. Click in the **Name** box of the custom attribute to modify and type a unique name for the custom attribute.
2. Click in the **Value** box of the custom attribute to modify and type a value for the custom attribute.
3. In the lower-right corner of the lower pane, click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane..

To delete a custom attribute

- Click the **Custom Attribute** you want to delete and then click . The selected custom attribute is deleted.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Related topics

[Add keyword set notes](#)

[Modify a keyword set](#)

Manage keywords

This section contains the following help topics:

- [Set the score for a keyword](#)
- [Set the confidence threshold for a keyword](#)
- [Modify advanced keyword definition settings](#)

Set the score for a keyword

This topic contains the steps for setting the score of a keyword or phrase. It is through scoring that Interaction Supervisor displays score statistics, including the largest positive and negative scores and the cumulative score in the real-time workgroup queue view.

Scoring allows you to assign a degree of importance to the keywords and phrases you defined. For example, you want to assign a low score to keywords and phrases that indicate a customer is becoming upset. Conversely, you want to assign a high score to words and phrases that indicate a customer is responding in a positive manner. You can assign point values to keywords and phrases for both agents and customers.

You can assign to a keyword or phrase any point value from +/-1 to +/-100. Scoring is used to determine which calls need the most attention from the contact center supervisor, who monitors the workgroup queue using a few simple metrics.

Note: The maximum cumulative score an Interaction can have is -99999 to 99999. Assigned point values should be within a reasonable range so the cumulative score for the entire Interaction does not exceed the maximum value.

To set scores for a keyword

1. In the upper-right pane of Keyword Sets, click the **Keyword Set** that contains the keyword for which to set a score. The keyword set appears in the lower pane.
2. In the lower pane, click the **Customer score** or **Agent score** for the keyword for which to set a score. The keyword entry is highlighted and the scoring field is available to edit.

Tip: If you assign the keyword set to one channel, it is not necessary for you to set a score for both channels.

3. Assign the score by typing a number in the box or using the up and down arrows to increase or decrease the value.

4. In the lower-right corner of the lower pane, click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Related topics

[Keyword considerations](#)

[Keyword definitions](#)

[Keyword organization](#)

Set the confidence threshold for a keyword

This topic contains the steps for setting the confidence threshold for a keyword. The confidence threshold feature allows you to specify how much certainty Interaction Analyzer uses in reporting an instance of the defined keyword. See Interaction Analyzer confidence threshold for more information about this feature.

Important: The confidence threshold does not affect the spotability factor of a keyword. The feature only informs Interaction Analyzer how certain it must be to report an identification during real-time analysis of the interaction.

Confidence thresholds use a percentage value to determine the amount of scrutiny that Interaction Analyzer uses. A high percentage value indicates that Interaction Analyzer reports the associated keyword if it matches perfectly. A low percentage value indicates that Interaction Analyzer reports the associated keyword if it loosely matches that keyword. The default percentage value for any newly defined keyword is 50%.

To alter the confidence threshold for a defined keyword:

1. In the upper-right pane of Keyword Sets, click the **Keyword Set** that contains the keyword for which to set the confidence threshold. The keyword set appears in the lower pane.
2. In the lower pane, click and hold the left mouse button on the slider control for the keyword for which to set the confidence threshold.
3. Move the slider control to the right to increase the confidence threshold or to the left to decrease the confidence threshold.
4. In the lower-right corner of the lower pane, click  to apply your changes.

Tip: You can undo your changes by clicking  in the lower right corner of the lower pane.

Related topics

[Keyword considerations](#)

[Keyword definitions](#)

[Keyword organization](#)

Modify advanced keyword definition settings

Once you define a keyword, you can add additional settings for that keyword, such as more accurate spellings and anti-spellings of the keyword. This topic contains the steps for setting these advanced features.

Important: Do not attempt to use these advanced features unless Interaction Analyzer is having difficulty in identifying the keyword or is mistaking other words for the keyword. Only through careful analysis can you determine the additions that you must make for the keyword definition.

To modify the advanced settings for a keyword definition

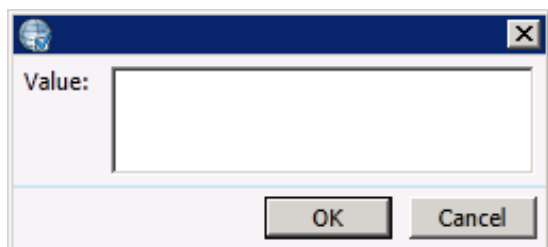
1. In the upper pane of Keyword Sets, click the keyword set that contains the keyword that you want to modify.

The screenshot shows the 'Keyword Sets' interface. At the top, there's a search bar and a list of keyword sets. The '(Agent) Opening statements' set is selected. Below this, the 'General' tab is active, showing the Name and Category. The 'Advanced' tab is also visible. A table lists keywords with their Spelling, Spotability, Confidence threshold, Customer score, and Agent score. The 'Hi my name is' keyword is highlighted. Below the table, there's a 'Configuration category' dropdown set to 'Spellings' and a text input field for alternative spellings. At the bottom, there's an 'Auto-save' checkbox and 'Save' and 'Revert' buttons.

2. In the lower pane, select the advanced button for the keyword definition that you want to modify.
A new set of controls is displayed below the selected keyword definition.
3. In the **Configuration category** list box, select the advanced feature that you want to modify:
 - **Spellings** – This feature allows you to enter an alternative spelling for the defined keyword. For example, if the keyword is "read the fine print", you could enter a new spelling of "reed the fine print" to ensure Interaction Analyzer does not identify the alternative pronunciation of "red the fine print".
 - **User-Defined Pronunciations** – This feature enables you to enter the phonetic spelling of the keyword as defined through phonemes. For more information on the ARPAbet phonemes, see the *Interaction Analyzer Technical Reference* in the PureConnect Documentation Library. When you enter a pronunciation that consists of more than one word, you must enter a **wd** character string between each word. For more information about defining multiple words in a pronunciation, see the *Interaction Analyzer Technical Reference* in the PureConnect Documentation Library.
 - **Anti-Spellings** – This feature enables you to enter spellings that Interaction Analyzer must not mistake for the keyword. For example, if the keyword is "lawyer," you can enter "employer" as an anti-spelling if Interaction Analyzer is mistaking that word for the keyword.
 - **User-Defined Anti-Pronunciations** – This feature enables you to enter phonemes as a series of sounds that Interaction Analyzer must not mistake for the keyword. For example, if the keyword is "lawyer" and an anti-spelling of "employer" has not corrected the misinterpretation of the keyword, you would enter "eh m p l o y er" in this field. For more information about phonemes, the *Interaction Analyzer Technical Reference* in the PureConnect Documentation Library.

Note: For each advanced configuration item you add, the keyword count for this definition increases. For example, if you defined a keyword without any advanced configuration, Interaction Analyzer counts it as one keyword. For each spelling, user-defined pronunciation, anti-spelling, or user-defined anti-pronunciation item that you add, Interaction Analyzer increments the cost by 1.

4. To add an entry for the selected advanced feature, click the green **Add** icon to the right of these controls. A dialog box is displayed that enables you to enter the text for the selected advanced feature.



5. In the **Value** box, type the text that you want to add as an entry and click **OK**. The entry is added to the selected advanced feature.
6. Click **Save**.
The advanced configuration for the selected keyword is saved.

Related topics

[Keyword definitions](#)

[Keyword organization](#)

Integrations

Salesforce CTI Configuration

Report Management

Report Management allows you to create custom parameters and related report metadata. The report management help includes these help topics:

- [Report Configuration](#)
- [Report Configuration Export](#)
- [Report Configuration Import](#)
- [Report System Settings](#)

For more information about configuring reports, see the *PureConnect Reporting Technical Reference* in the PureConnect Documentation Library.

Report Configuration

Use Report Management to create custom parameters and related report metadata. The reports configured in Report Management are run in Interaction Reporter in IC Business Manager. The Report Configuration page allows you to edit and manage metadata related to a report.

Report Configuration page

The Report Configuration page has two views, the master view and the details view.

Master View

The master view displays a list of report **Categories** and the **Reports** associated with them.

You can take actions on the master view. The actions include: Adding, Editing, Copying, Deleting, and Ordering Categories and Reports in the lists.

Note: In order to edit a report, you must click the lock icon to unlock the report. You can unlock reports if you have the **Interaction Report Administrator** security right. For more information, see [Assign security rights](#).

If Genesys updates the definition of a standard report, the new version will overwrite any customizations that have been made to it. Therefore, if you want to create a custom report, first copy a standard report. On the **General** details tab, change the value in the **File Name** field. Then make your customizations and save the report. Your copied report will not be overwritten by future PureConnect releases.

Details View

The details view displays specific information about the item selected in the master view, grouped by tabs.

Report Management groups the metadata information in the details view in the following tabs:

- [General](#)
- [Parameters](#)
- [Flexible Columns](#)
- [Sections](#)
- [Tables](#)
- [Custom Data](#)
- [Advanced](#)

General Tab

The General details tab contains basic information for the selected report. The detailed information for the fields on this tab is described in the following table.

General Tab	
Field	Description
Name	Name of the report
SubTitle	Subtitle of the report
Description	Description of the report
Friendly Key	A unique value that easily identifies the instance in the database
Assembly Name	The assembly within which the report exists
Class Name	The class name that identifies the report with the assembly
Orientation	Identifies if the report is printed in landscape or portrait
IC Data Source	The CIC data source of the report
File Name	This is the file name of a Crystal Reports report. All Crystal Reports reports must have a file name with an .RPT extension. This field is not used for Active reports.

Parameters Tab

The Parameters details tab contains metadata information for report parameters. The parameter list displays parameters for the selected report in the master view. The parameter information is defined in sub-tabs by: General, Data, Custom Data, Miscellaneous, SQL Table Columns, and the sub-tab fields are defined in the following table. You can take actions on the Parameters tab. The actions include: Adding, Editing, Deleting, and Ordering Parameters in the list.

Parameters Tab		
Sub-tab	Field	Description
General	Name	Name of the parameter
	Description	Description of the parameter
	Friendly Key	A unique value that easily identifies the instance in the database
	Assembly Name	The assembly that houses the parameter
	Class Name	The class name of the parameter within the defined assembly
	Required	Check box to select if the parameter is required to run the report
Data	Source	The source of the parameter, user supplied or fixed
	Data Type	The type of data the parameter is expecting, for example, number, date, or string
	Default Value	Default value for the parameter
	Convert Date to GMT	Check box to select if the datetime value of the parameter should be converted to GMT (does not work for reports that use stored procedures, such as Crystal Reports and Active reports)
Custom Data	Custom Data 1	A bucket field that can be used for any purpose when building your own parameters
	Custom Data 2	A bucket field that can be used for any purpose when building your own parameters
	Custom Data 3	A bucket field that can be used for any purpose when building your own parameters
Miscellaneous	Allow Sample	A check box to indicate if the parameter allows for a search of distinct values from the reports stored procedure that uses the stored procedure sample
	Allow Or	A check box to indicate if the parameter supports OR logic
	Allow And	A check box to indicate if the parameter supports AND logic
	Parameter Type	Drop-down box to select parameter type, Filter, Informational, or Threshold
	Visible	A check box to select if the parameter is visible within IC Business Manager
	User Control Assembly Name	The assembly that houses the parameter
	User Control Class Name	The class name of the parameter within the defined assembly
SQL Table Columns	Column Name	The name of the parameter in the Crystal template that maps to the data in the database column.
	Column Name2	An additional column name to use if the parameter references two columns in the stored procedure

Note: You can configure secure report parameters to limit which data users can report on. For more information, see [Configure secure report parameters](#).

Flexible Columns Tab

The Flexible Columns details tab contains metadata information for the selected report. The detailed information for the fields on this tab is described in the following table. You can take actions on the Flexible Columns tab. The actions include: Adding, Editing, and Deleting Flexible Columns in the list.

Flexible Columns Tab	
Field	Description
Name	Name of the flexible column as used by metadata
Description	Description of the flexible column
Flexible Column Name	Name of the flexible column as shown on the report

Sections Tab

The Sections details tab contains metadata information for the selected report. The detailed information for the fields on this tab is described in the following table. You can take actions on the Sections tab. The actions include: Adding, Editing, and Deleting Sections in the list.

Sections Tab	
Field	Description
Name	Name of the report section
Section Visible	Check box that indicates if the report section is visible in the final report

Tables

The Tables details tab displays the where the data used to build Crystal Reports comes from. For active reports, the fields in the Tables detail tab are unavailable.

Custom Data Tab	
Field	Description
Table Name	Name of the database table
IC Data Source	Name of the CIC data source.

Custom Data Tab

The Custom Data details tab contains metadata information for the selected report. The detailed information for the fields on this tab is described in the following table. You can take actions on the Custom Data tab. The actions include: Adding, Editing, and Deleting Custom Data elements in the list.

Custom Data Tab	
Field	Description
Name	Name of the custom data
Description	Description of the custom data
Custom Data	A bucket field that can be used for any purpose when building your own report
Encrypted	A check box that indicates if the data put in the custom data field should be encrypted when saving to the database

Advanced Tab

The Advanced details tab contains metadata information for the selected report. The detailed information for the fields on this tab is described in the following table.

Note: Most of the fields on this details tab are for Active reports only. They do not apply to Crystal Reports.

Advanced Tab	
Field	Description
Report Visible	Check box that indicates if the report is visible in IC Business Manager
Report Type	A list that displays the report type: Active Report or Crystal Report.
Stored Procedure	Stored procedure the report runs to retrieve its data
Stored Procedure Count	Stored procedure run to indicate the size of the total return of the reports stored procedure
Stored Procedure Samp	Stored procedure that returns a subset of the report's stored procedure, usually a collection of single distinct values
Linked Report Friendly Key	This value represents a Friendly Key of another report. The Linked Report Friendly Key is used to link reports, such as when a summary report might have detail links that a user can click to see all the information for a particular detail.
Allow Edit Params	A check box that indicates if the user can edit the report's parameters within IC Business Manager
Allow Count Button	A check box that indicates if the report allows for the stored_procedure_count sproc to be run in IC Business Manager
Require ACL	A check box, selected for true, indicates that the Access Control List is checked to verify that the user has permission to view the report from the report list in Interaction Reporter.
Report Timeout Period	The period of time, in seconds, before the report times out—default is 1800
Notes	User notes field

Related Topics

[Report Configuration Export](#)

[Report Configuration Import](#)

[Report System Settings](#)

[Report Management](#)

[Restrict report results with secure parameters](#)

Report Configuration Export

Use Report Configuration Export to export the report configuration metadata to an XML format file.

Select the reports to export

To export the metadata for one or more reports, expand the report category and select the reports to be exported to XML format. For example:

You can use **Select All** to select all reports to be exported. And you can use the **De-Select All** to clear your selections and select again.

Specify the destination folder

Next, specify the destination folder and file name, and export the file.

1. In the **Export File Destination** field, click **Browse**.
2. In the **Save As** dialog, navigate to the destination folder.
3. In the **File Name** field, name your export file. The default file name is **ReportConfiguration.xml**.
4. Click **Save**. The full path name is displayed in the Export File Destination field.
5. Click **Export**. The **Export Completed** confirmation message is displayed.

Related Topics

[Report Configuration](#)

[Report Configuration Import](#)

[Report System Settings](#)

[Report Management](#)

Report Configuration Import

Use Report Configuration Import to import the report configuration metadata from a previously exported XML format file.

Note: Only supported data types, as listed in the following section, are accepted by the report configuration import feature. If an unknown data type occurs in imported data, an error message appears and the details of the error are logged to the Interaction Administrator log.

Supported data types

The following table lists each supported data type and its corresponding numeric value as it is stored in the `data_type` column of the `RPT_Parameters` table.

Data type	Numeric value
None	0
Boolean	1
Date	2
ICWorkflowName	3
Number	4
String	5
Time	6
User	7
DistributionQueue	8
Role	9
Guid	10
Duration	11
CrystalString	12

Import an exported file

To import the metadata from an exported file, follow these steps.

1. In the **Select File** field click **Browse**.
2. In the **Open** dialog, navigate to the saved exported XML file.
3. Select the file to be imported, and click **Open**. The report **Categories/Reports** are displayed in the list.
4. Click **Accept Import**. The **Import Complete** confirmation message is displayed.

Related Topics

[Report Configuration](#)

[Report Configuration Export](#)

[Report System Settings](#)

[Report Management](#)

Report System Settings

Use Report System Settings to update reporting system settings, to configure the value for the first day of your work week and set the value for report timeout.

Update Report System Settings

To set the values for report system settings, follow these steps.

1. To set the first day of the week, in the **First Day of Week** drop-down list, select the day to begin your week.
2. To set the report timeout period, use the up and down arrows and select the timeout period in seconds.
3. Click **Save** to save your selections, or click **Revert** to cancel your changes.

Related Topics

[Report Configuration](#)

[Report Configuration Export](#)

[Report Configuration Import](#)

[Report Management](#)

Configure secure report parameters

You can configure report parameters that limit which data users see based on the ACLs to which they have access. Secure report parameters are available for all Crystal Reports that use queue parameters.

Example

Suppose your call center managers want to monitor how workgroups are handling their queues. The Queue Detail Report shows this information, but because it indicates employee performance, you want to limit access to it. To ensure that only the users who should see the report can see the sensitive information, you can configure the report to use secure report parameters. You then assign the user queue ACL to only those users who should see the report results. When a user attempts to run the report in IC Business Manager, the user can select only the workgroups that they have access to.

Secure and unsecure parameter classes

To configure a Crystal Reports report that uses queue parameters, you must indicate a parameter class name.

For each secure parameter class name, there is a corresponding unsecure parameter name.

- If you choose a secure parameter class name, then the user is presented with a list of valid parameter choices based on their access level.
- If you choose an unsecure parameter class name, then a user type any value for the parameter when the user runs the report. This potentially allows the user to report on sensitive information, or to run reports using invalid (non-existent) parameter values.

The following table displays the secure parameter classes and their corresponding unsecure parameter classes

Secure Parameter Class Name	Unsecure Parameter Class Name
SecuredAutoCompleteUsersComboBox	AutoCompleteUsersComboBox
SecuredDistributionQueueComboBox	DistributionQueueComboBox
SecuredUserList	UsersList

For more information on the SecuredUserList parameter, see [Configure the visibility of user data in reports](#)

Parameter class and control class

For each secure parameter, you must specify both the parameter class name and the control class.

- The parameter class name indicates that the parameter is secure.
- The control class name indicates which type of field the user sees in IC Business Manager.

The following are the secure parameter class names:

- `ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredAutoCompleteUsersComboBox`
- `ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredDistributionQueueComboBox`
- `ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredUserList`

The following are the control class names that work with secure parameters

- `AutoCompleteComboBox`

Note: Secure report parameters are available in CIC 2016 R3 and later releases. If you configured Crystal Reports that use queue parameters for an earlier version of CIC, you must edit those reports to use either the secure or unsecure parameters.

Configure the Queue Detail Report to limit which workgroups a user can report on

This section shows the configuration steps in order to limit which workgroups a user can report on. You can substitute other secure report parameters, reports, and ACLs as necessary.

Configure the report

1. **Report Management > Report Configuration > Categories > Queue Reports**
2. Select the **Queue Detail Report**. This report takes a workgroup as a parameter.
3. On the Parameters tab, click **Workgroup**.
4. On the General tab, in the **Class Name** box, type
`ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredDistributionQueueComboBox`.
5. On the Miscellaneous tab, in the **User Control Class Name** box, type
`ININ.Reporting.Historical.Engine.Module.Parameters.Views.AutoCompleteComboBox`.
6. Click **Save**.

Configure the user

1. **Users > User Configuration > Security > Access Control**
2. In the **Search** box, type workgroup queue.
3. Under the **Search** column, select the workgroups on which the user can report.
4. Click **Close**.

Configure the User Call Detail Report to limit which users and workgroups a user can report on

Configure the report

1. **Report Management > Report Configuration > Categories > User Reports**
2. Select the **User Call Detail Report**. This report takes a workgroup as a parameter.
3. On the Parameters tab, click **User**.
4. On the General tab, in the **Class Name** box, type
`ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredAutoCompleteUsersComboBox`.
5. On the Miscellaneous tab, in the **User Control Class Name** box, type
`ININ.Reporting.Historical.Engine.Module.Parameters.Views.AutoCompleteComboBox`.
6. Click **Save**.

Configure the user

1. **Users > User Configuration > Security > Access Control**
2. In the **Search** box, type user queue.
3. Under the **Search** column, select the users and workgroups on which the user can report.

4. Click **Close**.

Related topics

[Report Configuration](#)

[Configure the visibility of user data in reports](#)

Glossary

ACD term

Automatic Communication Distribution is a system that routes interactions based on agent availability, caller input, agent skill levels, volume of interactions, time of day, agent groups, trunk line, or other variables. Several subroutines provided with the CIC clients offer ACD functionality.

For more information on ACD processing, see the *white paper ACD Processing: CIC's Automatic Communication Distribution* and the *ACD Processing Technical Reference* in the PureConnect Documentation Library on the CIC server.

DND

Abbreviation for Do Not Disturb. In status messages, the DND attribute tells the Interaction Processor to play one of the "unavailable" audio messages and not send calls to this station. A "non-DND" status indicates the user is available to take calls or is, at least, in the office.

CIC Port Number

CIC's registered port number for TCP/IP communications is **2633** with the string **interintelli**. System administrators may need to know this number to allow external users access to the CIC if a firewall exists between the remote user and the CIC server.

CIC Registry Entries

Interaction Designer provides a tool palette called System tools. These tools, such as GetDSAttr, Lookup, etc., enable advanced users to access CIC configuration information stored in registry entries on the server.

Caution

As an advanced technical support administrator or VAR, you may need to verify CIC's registry entries on the CIC server or workstations running a CIC client. This should be done with extreme care and only under direction from an authorized PureConnect Customer Care technical support representative since any modifications to these entries can render the system inoperable.

CIC Server Registry Entries

Start the registry editor on a CIC server. The CIC registry entries, created primarily by the Interaction Administrator and the CIC installation program, are stored in the following tree structure:

HKEY_LOCAL_MACHINE --> SOFTWARE --> Interactive Intelligence

CIC Client Registry Entries

Start the registry editor on a workstation running a CIC client. Interaction Client registry entries are stored in the following tree structure:

HKEY_USERS--> Default --> Interactive Intelligence

Immediate Mode

A T 1 channel using immediate response requires the called party to be ready to receive call identification data immediately when an incoming call arrives from the central phone office (CO). For outgoing calls, the caller sends the phone number expecting the CO to immediately receive the call without waiting for an acknowledgment signal (wink) from the CO.



Initialization Function

Initialization functions are functions that perform some system initialization when the CIC system starts. These functions are contained in DLLs that must be registered on the CIC server in Interaction Administrator. Multiple initialization functions can be called during system initialization.

Wink Mode

A wink is a very brief signal sent by CIC to the phone company after it detects an incoming call. This signal is part of an optional digital handshake protocol. After CIC initiates an outgoing call, the phone company sends a wink signal back to CIC to verify the connection. Use of the wink signal depends on the T1 service and implementation provided by the phone company.

Diagnosing Problems

Solving problems

If you experience problems on the IC server, use the Windows Event Viewer to look for an explanation of these problems. For example, if an error occurs on a T-1 trunk or line, the CIC Telephony Services module writes a message to the Windows 2008 event log as a Telephony Services event.

All software and hardware systems register errors in the Windows 2008 Event Log. If CIC modules are running on different Windows 2008 servers, the server running the IC AdminServerU.exe is the primary repository of CIC events. If AdminServerU.exe is not available, distributed CIC modules will log events to the local Windows 2008 event log.

To view the Windows 2008 event log:

1. From the Start menu, select Programs, Administrative Tools (Common), and Event Viewer.
2. In the navigation pane, expand Windows Logs, and select Application to display CIC event sources.
3. Once the Events are displayed, double-click on an event entry in the log to display the Event Detail dialog box. This dialog box contains detailed information about the event.

Note: Detailed event information might be requested by a PureConnect Customer Care representative. For more information on Event Viewer, see the Event Viewer help.

Restarting the Server

If your CIC server experiences a problem that requires restarting the server, we recommend a complete power cycle of the server.

If PureConnect Customer Care staff ask you to turn on tracing for a particular subsystem, see [Using LogSnipper](#) for more details.

IC subsystem Logs and the LogSnipper application

Each IC subsystem keeps a log of its actions in the \\IC\\Logs\\[date] directory where date represents the log date. For example, the TsServerU subsystem's activities on December 10, 2018 are logged in \\IC\\Logs\\2018-12-10\\TsServer.ininlog. Each subsystem logs a basic level of detail that can be increased with the Trace Configuration utility. If tracing is set to a verbose mode or if many actions are logged, the log files can grow to be very large and difficult to open with standard text file editors (such as Notepad).

LogSnipper is an application that extracts a portion of an IC subsystem trace log and saves it to a file. It is useful when you troubleshoot a specific time period within a large trace log.

If PureConnect Customer Care asks you to extract a portion of a trace log, you will need to use LogSnipper. For complete up-to-date information, see the white paper Using LogSnipper located on your PureConnect Documentation Library on the CIC server.

Troubleshooting ICESLib-based Containers

Some configuration containers in Interaction Administrator are ICESLib-based and therefore connect to Session Manager instead of Notifier. For these containers, it's best to use the Session Manager log to find a resolution:

People Containers

- AccountCodesConfiguration
- AccountCodes
- ClientTemplates
- ResponseManagement
- Skills
- ACGs
- Wrapup Categories
- Wrapup Codes

Analyzer Containers

- KeywordSets

System Configuration Containers

- ProblemReporter
- Layouts

Integrations Containers

- Salesforce Configuration

Errors with other containers may indicate that Interaction Administrator is having trouble parsing information.

Change log

Date	Changes
11-November-2011	4.0 GA Concurrent Licensing Added support for concurrent licensing for licenses that apply to users. Concurrent licensing is where the license is assigned to a user but isn't consumed until the user logs in. The license can be assigned to more users than there are licenses available; however the number of users who can log in is limited by the total number of concurrent licenses. For example, ten concurrent Contact Center Level 1 (CC1) licenses could be assigned to 100 users. Only the first ten users will be able to log in and get a CC1 license. The 11th user will fail to acquire the license. Assigned and concurrent licensing can be mixed on a single CIC server with the limitation that a single user must use either the concurrent or assigned mode. It is not possible for a single user to mix the two modes. For more information, see License Configuration. Interaction Analyzer Added the following configuration options for Interaction Analyzer: • Define lists of keywords and phrases, called keyword sets. • Associate defined keyword sets with workgroups by channel (agent, customer, or both sides of the conversation). Security Management • Updated the Access Control Details dialog box to allow configuration of which specific features are available through the Advanced Access Details options. • Updated the Access Control dialog box for the Queues category to display the Modify and View rights side by side. • Added ability to specify more details and control a user's rights by function, instead of just assigning a user Modify rights to a particular user or queue. • Added the following Modify rights (for an ACD Workgroup): ◦ Activate Others ◦ Activate Self ◦ Disconnect ◦ Pickup ◦ Transfer • Added the following Access Control Rights: ◦ User Statistics - Allows access to user statistics. ◦ Change User Status - Allows access to change a user's status. ◦ Monitor - Allows control to record, listen, join, and coach for user, workgroup, station, and line queue ◦ Workgroup Statistics - Allows control to workgroup statistics. ◦ View in Search - Allows control over which objects appear in Transfer Dialog Search. ◦ Attendant Profile Search - Allows access to attendant profiles in Transfer Dialog Search. ◦ Status Column - Allows access to status columns for a specific user in Interaction Client. • Added the following Security Rights to control access to features that were present in prior releases but did not have configuration options: ◦ Personal Rule - Allows access to Personal Rules from Interaction Client. ◦ Response Management - Allows access to the Response Management option in Interaction Client. ◦ Orbit Queue - Allows user to place objects in an orbit queue. ◦ Workgroup/Profile Tab - Allows user access to workgroup/profile information. ◦ Tracker - Allows access to Interaction Tracker from within Interaction Client. ◦ Coach Interaction - Allows the user to coach someone. ◦ Conference Calls - Allows the user to create a conference call. ◦ Speed Dials - Allows the user to create a speed dial page in Interaction Client. ◦ Status Notes - Allows the user to set status notes. ◦ Park Interaction - Allows the user to park an object.

	- Added a column to the Security Rights dialog box to indicate the objects from which a specific security right was inherited. For example, it can show that a user inherited the Receive Voicemail security right from the default user and the workgroup operator. - Added a search function to allow users to search and filter the list with available objects based on custom search criteria. As soon as a user starts typing the name of a workgroup or user, the resulting list displays only information that matches the search criteria. For more information, see Access control rights and Security rights.
18-April-2012	4.0 SU 1 Access Control Groups (ACG) Added ACG feature. ACGs provide a new way for customers to cleanly and easily delegate administrative rights to members in their organizations. With ACGs, a customer can allow certain users to have administrative rights on certain objects in the environment without giving them unwanted access to other objects or departments in the same environment. For more information, see Access Control Groups.
06-September-2012	4.0 SU 2 Forward and Follow Me security rights Added phone number classifications for the "Available", "Forward", and "Available, Follow Me" statuses to allow administrators to configure separate call classifications for when the user is logged on and when using one of the statuses . Users can still have rights to place International calls, but would not be able to set their "Available", "Forward", and "Available, Follow Me" numbers to International numbers automatically. Logon Authentication Added configuration options that affect client authentication methods. Administrators can configure the system to not allow CIC user name and passwords and only allow Windows authentication. It is also possible to configure the system to disallow cached credentials, requiring users to always enter their password when starting Interaction Client. For more information, see Login Authentication Configuration. SIP Line Inbound Identity Moved SIP Line Inbound Identity configuration to the SIP Line configuration. This change adds flexibility to the configuration of call identification for data and routing purposes, and adds tighter integration possibilities. Some examples of settings that are available are: - Whether to use only the numeric portion - Whether to use the original or most recent redirection header - Whether to use the Request URI or the To header for the DNIS - Whether redirection information trumps the DNIS - Whether to use P-Asserted-Identity or the From header for the ANI - Whether to set the ANI to Unknown if the address is non-numeric - Whether the line is for general use or station connections

28-February-2013	4.0 SU 3 Audible Tones for Recordings Added a configuration option to insert audible tones into a conversation between an agent and a customer. It also allows adding tones into the recording. You can define and configure the tone setting and then associate it with one or more ACD Queues. For more information, see Workgroup Configuration. Managed IP Phones Firmware Added ability to select from a list of approved Polycom firmware versions for a specified model to apply to a managed IP phone or group of managed IP phones. This feature allows you to control CIC 4.0 Service Update (SU) deployment to managed IP (Polycom) phones. For example, you can leave the phones on an older firmware version when an SU is first deployed, then set a few phones to the new firmware to test it, and then push out all of the phones when ready. The selectable firmware feature also allows you to test for a regression by pushing a test phone back to an older firmware version for verification purposes. For more information, see General settings: AudioCodes and Genesys phones or templates. Managed SIP Proxy for Multiple Regions/Locations Added ability to have a single managed SIP proxy provide failover service for multiple CIC regions/locations. For more information, see Registration Groups and SIP Proxy Configuration - General.
27-November-2013	4.0 SU 4 Report Management Added ability to use Report Management in Interaction Administrator to modify, export, and re-import metadata from Interaction Reporter reports. Report Management allows users to modify basic report properties and import new reports or custom reports developed using Visual Studio. Note that development of custom reports requires Active Reports 6, which is available from Grape City. For more information, see Report Management. SMS (Text Message) enhancements Added the following enhancements to SMS routing: • Support for SMS routing as chat, which allows a customer and an agent to have a chat-like conversation using SMS. • Support and configuration for multiple HTTP-based SMS brokers. • Support for configuration of basic SMS routing rules, based on ANI, DNIS, or the body of the text message. • Routing options include Chat, Generic Object, and Handler. • Text masking supported with SMS Chat Routing. For more information, see SMS.

07-July-2014	4.0 SU 6 Echo Cancellation Configuration Added ability to enable or disable echo cancellation and dominant speaker detection globally for conference calls hosted through Interaction Media Server. The configuration option, Optimize Audio for Conference, appears on the Telephony Parameters tab of the Server Configuration dialog box. It globally controls dominant speaker detection with echo cancellation for conference calls. For more information, see General telephony parameters. G.711 faxing (T.30) Added support for G.711 Fax (T.30 Fax). Many SIP carriers do not support, or are discontinuing support, for the T.38 fax-over-IP standard (T.30 encapsulation). Receiving fax calls in these scenarios requires T.30 fax support. As of this service update, you can receive faxes from carriers that do not support T.38. You can set your fax protocol preference to T.30, T.38, or T.38 followed by T.30. If the carrier or gateway does not support T.38, then the latter option automatically falls back to T.30. This fax protocol setting is available in line configuration, default station configuration, and station configuration. For more information, see SIP line options. MRCP regionalization and selection rules Added ability to configure rules that determine which MRCP server locations to use. Selection of MRCP servers is then based on the location where the audio will be streamed. Previously, the rules for selecting an MRCP server were not customizable, and preferred fallback locations were not configurable. For more information, see MRCP Servers Configuration.
04-November-2014	CIC 2015 R1 Media Server version and license type Added the version and license type for Interaction Media Servers connected to CIC servers to the Servers Configuration dialog box of the Media Servers object. Administrators can use this information to determine the versions and license types of multiple Interaction Media Server instances connected to the CIC server. For more information, see Servers Configuration Properties.
11-August-2015	CIC 2015 R4 SAML Metadata Import Added ability to import an identity provider's XML file containing authentication details into Interaction Administrator to simplify the process of adding identity providers. Using the identity provider's XML metadata, Interaction Administrator allows users to pick and choose claims instead of having to add them manually. For more information, see Configure an Identity Provider.

03-November-2015	CIC 2016 R1 Change Log enhancements Added ability to create reports or database queries that display information about licenses, granted system rights, and historical workgroup membership moves, additions, changes, and more, in relation to Users, Workgroups, Skills, or Licenses. For more information, see About the Enhanced Interaction Administrator Change Log. For examples of database views that show license and other change log history data, see Database views for the Enhanced Interaction Administrator Change Log. Warning! Enable the enhanced Interaction Administrator change log only during non-peak production hours and only if all CIC clients are upgraded to CIC 2016 R1. Enabling this log is an intensive operation that requires significant computing resources. If you enable this feature before you upgrade all CIC clients to CIC 2016 R1 or later versions, then the CIC clients that run earlier versions of CIC will log incomplete audit data. ETL Report Log (Log 50) Removed the UI control for Log 50 so that the log is no longer visible in Interaction Administrator. Log 50 represents the CIC ETL (Extract Transform Load) process. It is not yet fully functional and disables automatically upon upgrade to CIC 2016 R1 or later versions.
03-May-2016	CIC 2016 R3 PureCloud for CIC Integration (Phase 1) Added ability to integrate CIC with PureCloud. For more information, see About PureCloud for CIC.
09-August-2016	CIC 2016 R4 Interaction Dialer Report Secure Campaign Name parameter Added the Secure Campaign Name parameter to allow users to select campaigns that they have access to and run a report. If the user does not have access to view a campaign, that campaign is not available from the campaign parameter list and the user is not able to run a report for that campaign. For more information, see Report Management. Interaction Recorder AWS configuration - Added support for Amazon Web Services (AWS) Version 4 with region endpoint to the Interaction Recorder Cloud Services configuration options for Amazon S3. For more information, see Cloud Services Configuration. - Added the ability to configure a regional endpoint for each Amazon S3 bucket to the Interaction Recorder container. An administrator must select which region endpoint to associate with their S3 bucket configuration. Per the Amazon "AWS Regions and Endpoints" documentation, specifying a regional endpoint can help reduce data latency in the application when accessing or storing recordings with the AWS S3 service. For more information, see Cloud Services Configuration. - Added ability in the Interaction Recorder Policy Editor to specify the region endpoint for any Amazon S3 bucket for the retention policy store media action. For more information, see Policy Editor. Paired PureCloud Organization options Added the ability for administrators to disable the integration or pair to a different PureCloud organization on the PureCloud Configuration tab in the PureCloud Configuration dialog box. For more information, see PureCloud Configuration. PureCloud Bridges and Connectors Statuses Added the Bridge Status tab in the PureCloud Configuration dialog box to allow CIC administrators to check the status of an organization's bridges and connectors. For more information, see Bridge Status.

01-November-2016	CIC 2017 R1 Interaction Recorder HTTPS Support for Export, Playback, and Archiving Added configuration options to the Interaction Recorder container to help secure communication paths when accessing recordings for playback, archiving, and exporting. For more information, see Recording Generation. Reporting: ACD Exceptions Added the ability for CIC administrators to enable tracking of ACD exceptions and use that data to help improve call center efficiency. Tracked exceptions include transfers, flow-ins, flow-outs, and abandons. Administrators can enable tracking of ACD exceptions in Interaction Tracker configuration. Tracking is disabled, by default, but we encourage administrators to use this option to identify bottlenecks in their call centers. For more information, see Items Tracked. Administrators can choose to keep the data. For more information, see Data Purging.
07-February-2018	CIC 2017 R2 Change Log Enhancements Added ability to create reports or database queries that display information about Default User changes, and Roles additions, changes, and more. For more information, see About the Enhanced Interaction Administrator Change Log. This enhancement is an expansion of the Interaction Administrator Change Log Enhancement added in CIC 2016 R1. For more information, see http://help.genesys.com/cic/mergedProjects/wh_rn/desktop/interaction_administrator_change_log_enhancements.htm. Warning! Enable the enhanced Interaction Administrator change log only during non-peak production hours and only if all CIC clients are upgraded to CIC 2016 R1. Enabling this log is an intensive operation that requires significant computing resources. If you enable this feature before you upgrade all CIC clients to CIC 2016 R1 or later versions, then the CIC clients that run earlier versions of CIC will log incomplete audit data.
02-May-2017	CIC 2017 R3 Interaction Fax Max Cover Page Size server parameter Added the Max Cover Page Size server parameter to set the maximum size of a cover page in Interaction Fax. The default for this parameter is 10,000 KB. If the cover page for a fax exceeds the value set in this parameter, the fax does not send. For more information, see Optional General Sever Parameters. Polycom Phone advanced options Added the following advanced options for Polycom phones capable of 4.0 or newer firmware: • Boot Server Type • Boot Server Option • Boot Server Option Type • Provisioning URL For more information, see Advanced options: Polycom phones or templates.

08-August-2017	CIC 2017 R4 Interaction Process Automation PAS_LoadBalanceThreshold server parameter Added the PAS_LoadBalanceThreshold server parameter to control the load balancing of running process instances among off-servers. Set this parameter to the maximum number of process instances that must occur before load balancing occurs between off servers. For more information, see Optional General Server Parameters.
31-October-2018	CIC 2018 R1 Interaction Web Portal Timeout Values Added the ability to specify the length of time that Interaction Web Portal performs an operation before timing out and returning an error. You can set the timeout value for searching, loading, and binding. If you do not set a timeout value, Interaction Web Portal uses the following defaults: • 8000 milliseconds for searching (for example, searching for a user, workgroup, or interaction). • 4000 milliseconds for loading a view or page. • 4000 milliseconds for binding to the LDAP connection. For more information, see "Additional Information" in LDAP Data Source Configuration. Weak Cipher Suites not supported Removed the following weak cipher suites: • TLS_RSA_WITH_3DES_EDE_CBC_SHA • TLS_RSA_WITH_DES_EDE_CBC_SHA • TLS_RSA_WITH_RC4_128_SHA • TLS_RSA_EXPORT_WITH_DES40_CBC_SHA If you activated any of these weaker cipher suites previously, they still appear in Interaction Administrator as activated but they do not comply with PCI policy. Once you deactivate any of these weaker cipher suites, the cipher suite is no longer available. For more information, see Modify TLS cipher suites.
20-February-2018	CIC 2018 R2 Custom Amazon Simple Storage Service (Amazon S3) regions and endpoints Added the ability to add custom Amazon S3 Regions and Endpoints in the S3 Bucket Configuration in Interaction Administrator Cloud Services Configuration. For more information, see Cloud Services Configuration. Interaction Text to Speech (ITTS) enhanced models Added support for ITTS enhanced models to provide more natural sounding voices for a better caller experience. CIC uses these models, trained with Deep Neural Networks, by default. To opt out and use GMM models instead, add the EnableEnhancedTTS server parameter and set its value to "False". No action is required to use the new DNN models. For more information, see EnableEnhancedTTS in Optional General Server Parameters. PureConnect data privacy feature Added the PureConnect data privacy feature to allow customers to suppress the trace logging of data that might be sensitive. You enable this feature using server parameters. For more information, see Server parameters to suppress logging of sensitive data. For more information about data privacy, see "PureConnect data privacy feature" in the Security Precautions Technical Reference. To access the technical reference, you must log on to the Genesys Product Information website. Workgroup Overview sort option in IC Business Manager To enhance performance, IC Business Manager no longer sorts the Workgroup Overview. To sort that view automatically, add the AutoSortWorkgroupOverview server parameter, and set its value to "True". For more information, see AutoSortWorkgroupOverview in Optional General Server Parameters.

21-August-2018	CIC 2018 R4 Social Media - Added support to PureConnect to allow receipt of Facebook and Twitter messages and direct message as interactions. - Added the following social media options: ACD Social Media license to specify whether users can receive ACD-routed social media interactions. Workgroup Queue Service Level configuration for social conversations and direct messages. Interaction Tracker items tracked now include social conversations and direct messages. For more information, see the PureConnect Social Media Technical Reference. Widgets Added the following widget rights to control access to widget configuration in Interaction Connect: Widgets Configuration Administrator Access right allows a user to display the Widgets view in Interaction Connect. Widget Configuration Master Security right allows a user to create widgets and configure widget properties. For more information, see Widgets in the <i>Interaction Connect</i> documentation.
03-April-2019	Added information under Optional General Server Parameter for new parameter, Prevent IC Server from Moving Recordings by Region.
03-April-2019	Added note for two View Wrap-up Codes for call segments that end in a transfer.
15-April-2019	Added Enable MWI option to AudioCodes and Genesys phones or templates topic.
29-April-2019	Added Reco Input Timeout Multiplier server parameter to Optional General Server Parameters topic.
10-May-2019	Updated Analytics Configuration for retention settings.
22-July-2019	- Updated UseDNISStringComparison parameter to more accurately describe how CIC evaluates the parameter. For more information, see Optional General Server Parameters. - Added a note to indicate that users cannot enter these forced authorization codes through client applications. For more information, see Set up forced authorization codes. - Added a note about not using the machine name for the station name when you are not using machine name based licensing. For more information, see the following: Add a station Station name Import SIP Stations from a CSV List - Changed user name limitation from 64 characters to 50 characters. For more information, see Add a user.
06-September-2019	Updated topics for replacement of PureCloud bridge with Genesys Cloud.
01-October-2019	Made developer edits to Genesys Cloud topics.
14-October-2019	Added note about character limit to Add a wrap-up code and Add-a wrap-up category help topics.
04-December-2019	Updated Analytics Configuration descriptions
21-January-2020	Updated CIC Client Button Configuration and CIC Client Buttons topics for configuration of PureConnect for Salesforce custom buttons.
31-January-2020	Added Note to Call History Max Time description in Optional General Server Parameters. Note: The Call History Max Time server parameter which controls only the amount of data ClientServices needs to store in memory, avoiding Out Of Memory issues on CIC Server. It does not control the amount of call history displayed in the Call History view in the CIC client.

Miscellaneous topics



Accumulator Name

Enter a meaningful and unique name for this accumulator. Accumulators, similar to system registers, count events as they occur in Interaction Processor.

Actions

Alerting Action

Select a action to start each time a non-ACD call enters an alerting state (for example, the station rings) in a user queue or a workgroup queue. Actions in this list are defined in the **Actions** container in the Interaction Administrator hierarchy.

Disconnected Action

Select an action to start each time a call moves from the Connected state to a Disconnected state. Actions in this list are defined in the **Actions** container in the Interaction Administrator hierarchy.



Wrap-up Status

Use this page to configure the behavior of after call work status for this workgroup.

Status

Select a status message from the list to assign to an agent (and display in the agent's My Status box) while the agent is in the After Call Work (ACW) time. The ACW time begins after an ACD call is terminated; this is when the optional DDE Disconnected Action begins. When the specified ACW period ends, the agent's status message is set to Available again. The selected status message should have the "Status is ACW (After Call Work)" attribute set on the [Status Message Configuration](#) page.

Note: If an agent is in an After Call Work (ACW) status at the time a Switchover occurs, the agent's status will not automatically be set to Available after the specified ACW period ends. The agent will need to manually change his status to Available. Supervisors should check for agents who have forgotten to do so after the Switchover event.

Time

Type the number of seconds to allow a CIC client user to finish any After Call Work (ACW) associated with the previous call before becoming available to receive a new call. For example, a value of 180 seconds allows call agents three minutes between the time they end a call and the time they appear on the available list for taking a new call.

If you specify no time, each Workgroup member is considered available to receive calls as soon as the current call is disconnected. You cannot set a Wrap-Up Time until you select a compatible Status in Wrap-Up Status entry box.

Exempt held interactions

Click this box to allow agents who have ACD interactions on hold to receive new ACD interactions within the parameters listed below. The default CIC client behavior is for the agent with held interactions to be unavailable and for the agent with the highest

computed score among those remaining in the workgroup to receive the next ACD interaction.

This feature does not apply to **direct interactions** that an agent puts on hold.

Max number of exempt interactions

Type the maximum number of interactions an agent in a given workgroup can have on hold and still receive another ACD interaction. The default is **1**.

For example, if you set this parameter to **3**, then a workgroup agent could have **three** interactions on hold and still receive an additional ACD interaction. An agent with **four** interactions on hold would **not** receive another interaction until the number of interactions on hold dropped to **three** or fewer.

Grace Period before new interaction

Type the period of pause in seconds before the workgroup agent receives the next interaction. The default is **10** seconds.

Agent score change amount

Type the value you want to add to the computed agent score for each interaction on hold. You might use this to ensure a more even distribution of interactions among the workgroup members. The default is **-10**.

For example, if Agent A has a score of 75 with one interaction on hold and Agent B has a score of 70 with no interactions on hold, applying the Agent Priority change would add -10 (for each held interaction, in this case one call) to Agent A's score, reducing it to 65. Agent B, with no held interactions and a score of 70, would then receive the next ACD interaction.

Direct calls

If Agent C, with a score of 80, receives a **direct** (non-ACD) call and puts the call on hold, the CIC client regards Agent C as unavailable while that direct call is connected because the **Exempt held interactions** feature is not applied to direct calls.

Screen Pop Input Configuration

Use this page to add or edit input values for this screen pop action.

Name

Enter a unique and meaningful name for this input value. The Name identifies one of the parameters passed to the plug-in in the CIC client as input for the screen pop. It is the first part of a name-value pair. It could be something as nondescript as "ID1." It's the identifier that the program uses internally for that parameter which gets passed to the screen pop. The name-value pair could be something like ID1-<Call-ANI>.

Friendly Name

This is the name as displayed to the user in the CIC clients. The Friendly Name is a descriptive name that the end user (such as a call center agent) sees for the name, such as "Customer ID Number."

Override (Attendant)

Choose to use the default input value (below) and if it can be overridden in Interaction Attendant. You can also restrict the override values, or force a value, by not allowing overriding. Override sets whether or not an Attendant user can choose to override the value of a parameter passed to the screen pop as part of the name-value pair. If the Attendant user can override the value, the screen pop creator can also limit override values to a specific list.

Click "Allow override with restricted values (Multiple choice)" to display another text box with associated buttons (Add, etc.). In this text box, the screen pop creator can assemble the list of allowed values for the name-value pair.

Default Value

Default value is the default value in the name-value pair. The pull-down list contains choices such as <Call-ANI>. The options available depend on the **Override** setting above.

Active Directory Attributes

The **Active Directory Attributes** dialog box displays a list of default attributes that are used to synchronize SIP stations with Active Directory user entries.

Click **Add** to add attributes that are not part of the default attributes. Click **Edit** to edit existing attributes.

Note: To add an attribute, the attribute must be specified in the Active Directory schema.

Use the attribute check box to include (select) or ignore (de-select) any attribute variables when synchronizing the SIP Station with the Active Directory user association. For example, you might want to ignore an attribute if it has not been defined in the schema, or you don't want to reflect the data in Active Directory.

Click **Remove** to delete an attribute. The default attributes cannot be removed.

Mostly all attributes can have metadata tied with them. The metadata is basically a pick list and a default value to set when a new SIP user association is created. The pick list will appear as a combo box in the CE Phone Settings dialogs.

The attributes that do not support the metadata are those that are tied to the data within the SIP station entry. These attributes are:

- SIP Account Name
- SIP Account Password
- SIP URI

Related topics

[Attribute metadata](#)

Add a Response Management Item

There are two kinds of response management items:

- [Message](#) - Message items are standard text responses that you often use when interacting with customers. For example, you can save a message that contains your typical office hours, phone number, and email address.
- [File](#) - File items are pointers to files on a network that you frequently share with customers. For example, you can share a file by attaching it to an email message, or by sending it to external chat participants.

Add an identity provider

Type a unique name for your identity provider.

Add Calling Number Filter

Use this page to add or edit a calling number filter.

Number

If you are filtering by a single number, select this option.

Range

If you are filtering by a range of numbers, select this option.

First Number

If you are filtering a range of numbers, then enter the first number in the range. For example, enter "3175551212."

Second Number

If you are filtering a range of numbers, then enter the last number in the range. For example, enter "3175555555".

Add or Edit CE Phone Data Source

Use this page to add a data source to this global SIP Station. When you edit the data source, you cannot change the data source name.

Data Source Name

Enter a unique data source name to correspond with the user account to log on to Active Directory.

Server section

Use the **Server** section to provide the **Server Name** and the **LDAP Port**. The default LDAP port is 389, and if a secure SSL connection is made the default port is 636. Click **Use Default** to set the port value to a value based on **This server requires a secure connection (SSL)** check box. Typically, if you are binding to an LDAP Active Directory server, the server defaults are acceptable. If you are binding to another Active Directory server, (for example, ADAM) the port may be changed.

Select the **This server requires a secure connection (SSL)** check box to provide a secure connection to bind to. This means data is encrypted between the Active Directory server and its clients. The default connection LDAP Port (389) passes data in clear text. The Active Directory server must be set up to run in secure mode. This requires setting up certificates and public keys between the server and the client. For a secure connection, the server name should be the fully qualified domain name, (for example, homeplace.homeplaceDC.inin.com).

Note: Please see the Microsoft documentation for details on SSL configuration.

Account Information section

Use the **Account Information** section to set up the credentials (user name and password) of a user that has permission to bind with Active Directory. The user name can be the domain\user name typically used to log on to Windows or the distinguished name (DN) of a user within Active Directory. For example, a user DN - CN=XICAdmin,CN=Users,DC=homeplaceDC,DC=ININ,DC=COM.

Search section

Use the **Search** section to enter the DN of the root to search for users and enter the maximum number of records to return for a search.

Add New Broker Account

The settings on this page allow you to configure multiple accounts registered to the same broker, which may use the same broker interface and communication ports. Each broker may have an unlimited number of accounts. This page allows you to add, remove, or modify accounts.

Account ID

Type the identification number of the account as specified by the broker provider. The value you specify must be unique among all other account IDs on this broker. If a broker provider does not provide or use an account ID, then choose an arbitrary account identification.

Local Address

Type the phone number that represents this account entry. This setting is optional, but if you do specify a number, it must be unique among the other local addresses on this account. The local address serves two purposes:

- CIC populates it on an outbound message if the broker profile requires its specification.
 - CIC populates it on inbound messages to create a pairing between the external party and an internal account. If the broker does not provide a local address on incoming messages, CIC uses this value for the message's local address.
-

Login

Type the user name to use for logging in to this account. You can leave this field blank if the broker does not require account validation.

Password

Type the password that is associated with the login to use for logging in to this account. You can leave this field blank if the broker does not require account validation.

Confirm Password

Type the password again.

Add Station Appearance

Use the page to add a new appearance or to edit an existing appearance.

Select Primary Station

Select an existing SIP station from the list.

Label

Type a descriptive label for the appearance.

Call Appearances

Use the Up and Down arrows to adjust the number of call appearances.

Identification Address

Click **Edit** to choose a predefined format or use an alternate format for the identification address for this SIP station line appearance.

Connection Address

Type the SIP address that is used to call the SIP device. This address is used by the Interaction Center to initiate calls to this SIP station. If MWI is enabled, this value is also used to send MWI notifications.

Connection Settings

Do one of the following:

- Select **Obtain Settings Automatically** to allow the station's address and contact line information to be automatically obtained from the SIP URI message contact header. The SIP URI message contact header is found in the SIP station's INVITE message or REGISTER message. This option is useful if SIP stations use DHCP and can change IP addresses frequently.
- Select **Use the Following Settings** to manually select the station's address and contact line. Then complete the following information:
 - **Address:** Complete the **User Portion**, **Host**, and **Port** boxes.
 - **Contact Line:** Select an existing SIP line to use its settings for the registration information.

Related topics

[SIP station session](#)



Add User - Roles

Select the user name to which you want to assign this role.

Related topics

[About roles](#)



Add Utilization

Use the **Add Utilization** dialog box to add an interaction such as call, chat, email, callback, work item, or generic object. Agents can handle multiple interactions simultaneously and in any combination. Using the **Agent Utilization** feature, you can set how much of an agent's attention would be required for each of the interaction types as a percentage.

For example, if you set the chat utilization for an agent to 25%, it means that the agent can handle up to four chats simultaneously. If you set an event type to 100%, it means that the agent can handle only one such event at a time.

The percentages might vary from agent to agent based on their experience. Agents are available to the extent that the sum of the percentage utilization of all their current interactions is less than 100. For example, if an agent is configured so that phone calls are set to 100 percent, chats to 25 percent, and emails to 10 percent, then the agent could, at any given time, process one phone call, or four chats, or two chats, and five emails, or one chat and seven emails, and so forth.

Interaction

In the **Interaction** box, select an interaction.

Utilization %

In the **Utilization %** box, select the percentage to assign to the interaction. By default, the **Utilization %** is 100%.

Set the percent utilization for Calls to **51% or more** when either or both of the following conditions apply:

- You have selected **Auto answer** for the agent.
- You have selected **Exempt held interactions** for the agent.

Under the above conditions and at less than 51% utilization, if an agent is on a call and another call comes in, the CIC clients put the first call on hold automatically and connects the incoming call.

Since calls on hold (held interactions) are exempt and do not count against the agent's percent utilization, the CIC clients will continue putting active calls on hold automatically and connecting new calls to that agent.

Setting 51% or more utilization ensures that an agent handles only one call at a time. Setting it at 50% allows the CIC clients to assign two calls simultaneously to the agent, one active and one on hold (achievable by some agents).

Note: When you set call utilization to 50% or less and set the Max. Assign to 1, then only 1 call is allowed for the agent at a time.

Maximum assignable

In the **Maximum assignable** box, type the maximum number of interactions for this interaction type. By default, the value of **Max. Assign** is "1" for call interaction type. The default value of **Max. Assign** for all other interaction types is "0."

Note: The utilization settings that you assign at the user level override the utilization settings (including the specific interaction type) that you assign at the workgroup level.



Add Workgroup - Roles

Select a workgroup name to which you want to assign this role.

Related topics

[About roles](#)

Add or remove access to client queues

To add or remove view access or modify access for specific queues that appear in the CIC clients

1. On the **Access Control** property page, select the view or modify queue category for the notebook page that you wish to control. The **Available** list contains all the client queues that do not yet appear on the notebook pages. The **Currently Selected** list contains the queues that the user can see or modify in the CIC clients.

Note: You cannot remove the inherited properties that appear in the **Inherited** list.

2. Do one of the following:
 - To add a client queue, select it in the **Available** list and then click **Add**.
 - To remove a client queue, select it in the **Currently Selected** list and then click **Remove**.
3. Repeat these steps for each client queue that you want to control.

Add skills to an ACD agent

You can add skills to an agent in two places:

- In the **Skills Configuration** dialog box that appears when you add a skill
- In the **ACD Configuration** dialog box for each user or workgroup

To assign skills to an agent in the **Skills Configuration** dialog box, see [Creating skills and assigning them to owners](#)

To add skills to an ACD agent in the ACD Configuration dialog:

Skill names must be defined in the **Skills** container in Interaction Administrator before they can be assigned to a user (for example, an ACD agent).

1. Double-click a user name from the list of CIC users in Interaction Administrator.
2. Select the ACD configuration property page.
3. Below the **Skills** box, click **Add**.
The **Add Skill** list appears.
4. Select a skill name and click **OK**. The selected skill name appears in the **Skills** box.
5. In the **Proficiency** box, type a number between 1 and 100.
6. In the **Desire to Use** box, type a number between 0 and 100.
7. Click **OK**.

For more information, see the *ACD Processing* white paper found in the PureConnect Documentation Library on the CIC server.

Related topics

[Overview of skills](#)

Adding Skills to an ACD Workgroup

This procedure assumes one or more workgroups have been defined in Interaction Administrator. Skill names must be defined in the **Skills** container in Interaction Administrator before they can be assigned to a workgroup (for example, an ACD queue monitored by ACD agents who belong to that workgroup).

To add skills to an ACD workgroup

1. In **Workgroup Names** list, double-click a workgroup name.
2. Click the **ACD configuration** tab.
3. Below the **Skills** box, click **Add**.
The **Add Skill** list appears.
4. Select a skill name and then click **OK**.
The selected skill name appears in the **Skills** box.
5. In the **Proficiency** box, type a number between 1 and 100.
6. In the **Desire to Use** box, type a number between 0 and 100.
7. In the **Weight** box, type a positive or negative decimal number (for example, -1.5, 0.0, 1.5, and so on.)
8. Click **OK**.

Related topics

[Overview of skills](#)

Administrator access control groups: Collective category

The following table describes the administrator access control groups in the **Collective** category.

Collective Category	
Group	Description
Collective	Determines if the home site can be edited.
Peer Sites	Determines if the peer sites can be edited

Related topics

[Home site](#)

[Peer sites](#)

Administrator access control groups: Attendant category

The following table describes the administrator access control groups in the **Attendant** category.

Attendant Category	
Group	Description
Attendant Defaults Configuration	Determines whether the user can edit the speech recognition default settings in the Attendant container.

Administrator access control groups: Analyzer category

The following table describes the administrator access control groups in the **Analyzer** category.

Analyzer Category	
Group	Description
Analyzer Keyword Sets	Determines which Interaction Analyzer Keyword Sets can be edited.

Related topics

[Interaction Analyzer keyword sets](#)

Administrator access control groups:Conference category

The following table describes the administrator access control groups in the **Conference** category.

Conference Category	
Group	Description
Interaction Conference	Determines if Interaction Conference configuration can be edited.
Interaction Conference Rooms	Determines if Interaction Conference Rooms configuration can be edited.

Related topics

[Interaction Conference configuration](#)

[Interaction Conference Rooms configuration](#)

Administrator access control groups:Dialer category

The following table describes the administrator access control groups in the **Dialer** category.

Dialer Category	
Group	Description
Call Lists	Determines if Interaction Dialer contact lists can be viewed. Each contact list is a collection of properties that convey to Interaction Dialer details about the table used to store contact phone numbers.
Campaigns	Determines if Interaction Dialer campaigns can be viewed and managed. Each campaign is a collection of properties that tell Interaction Dialer how to process a contact list.
Dialer Configuration	Determines if Interaction Dialer configurations can be configured in Interaction Dialer Manager. The Interaction Dialer container is visible when this right is unassigned, but Dialer configuration objects cannot be created or changed. This right also determines access to Dialer features in Interaction Administrator Web Edition.
Policy Sets	Determines if Interaction Dialer policy sets can be viewed and managed. Policies define conditions and behaviors that control the processing of individual contact records.
Rule Sets	Determines if Interaction Dialer rule sets can be viewed and managed. Policies define conditions and behaviors that control the processing of individual contact records.
Schedules	Determines if Interaction Dialer schedules can be viewed and managed. A schedule is a collection of time settings that determine when campaigns are running (on), not running (off), or partially on (placing only scheduled calls).
Scripts	Determines if Interaction Dialers base scripts can be viewed and managed in Interaction Dialer Manager. A base script defines the appearance and functionality of the Interaction Scripter Client.
Skill Sets	Determines if Interaction Dialer skill sets can be viewed and managed in Interaction Dialer Manager. A skill set manages skills from a campaign's point of view by identifying which CIC skills will be used to select contacts.
Stage Sets	Determines if Interaction Dialer stage sets can be viewed and managed in Interaction Dialer Manager. Stages identify each segment of a call that statistics can be collected upon. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned by name to one or more campaigns..
Zone Sets	Determines if Interaction Dialer zone sets can be viewed or managed in Interaction Dialer Manager. A zone set is a collection of entries that specify when it is appropriate for an outbound Dialer to call a particular time zone.

Administrator access control groups: Optimizer category

The following table describes the administrator access control groups in the **Optimizer** category.

Optimizer Category	
Group	Description
Optimizer Advanced Configuration	Determines if advanced configuration can be edited.
Optimizer Agents	Determines if agent configuration can be edited.
Optimizer Scheduling Units	This set of access rights allows you to delegate the responsibility of assigning access control rights for Optimizer scheduling units to other users. To set this up, edit the user record for the person ("the Manager") who will administer the Optimizer scheduling units. In the Administrator Access dialog, select the Optimizer scheduling units that you want the Manager to be able to assign to other users. When the Manager logs in, they will be able to edit the records of the users they are managing and assign the specific actions those users can take for those scheduling units in the Access Control dialog.

Related topics

[Advanced configuration](#)

[Agent configuration](#)

Administrator access control groups:People category

The following table describes the administrator access control groups in the **People** category.

People Category	
Group	Description
Account Codes	Determines if account codes can be edited.
Client Buttons	Determines if CIC client buttons can be edited.
Client Configuration	Determines if CIC client configuration can be edited.
Client Configuration Templates	Determines if CIC client configuration templates can be edited.
Default User	Determines if the default user can be edited.
Password Policies	Determines if password policies can be edited.
Password Policies Configuration	Determines if password policy configuration can be edited.
Problem Reporter	Determines if problem reporter can be edited.
Queue Columns	Determines if queue columns can be edited.
Roles	Determines if roles can be edited.
Skills	Determines if skills can be edited.
Users	Determines if users can be edited.
Workgroups	Determines if workgroups can be edited.
Wrap-up Categories	Determines if wrap-up categories can be edited.
Wrap-up Codes	Determines if wrap-up codes can be edited.

Related topics

[Account codes](#)

[Client buttons](#)

[Client configuration](#)

[Client configuration templates](#)

[Default user](#)

[Password policies](#)

[Password policy configuration](#)

[Problem reporter](#)

[Queue columns](#)

[Roles](#)

[Skills](#)

[Users](#)

[Workgroups](#)

[Wrap-up categories](#)

[Wrap-up codes](#)

Administrator access control groups:Recorder category

The following table describes the administrator access control groups in the **Recorder** category.

Recorder Category	
Group	Description
Interaction Recorder	Determines if Interaction Recorder can be configured.

Related topics

[Interaction Recorder](#)

Administrator access control groups:Resource category

The following table describes the administrator access control groups in the **Resource** category.

Resource Category	
Group	Description
Image Resources	Determines if image resources can be accessed.

Administrator access control groups:Server category

The following table describes the administrator access control groups in the **Server** category.

Server Category	
Group	Description
Audio Sources	Determines if audio source configuration can be edited.
Default IP Phone	Determines if default IP phone configuration can be edited.
Default Location	Determines if default location configuration can be edited.
Default Station	Determines if default station configuration can be edited.
Identity Providers	Determines if identity provider configuration can be edited.
IP Phone Registration Groups	Determines if IP phone registration group configuration can be edited.
IP Phone Ring Sets	Determines if IP phone ring set configuration can be edited.
IP Phone Templates	Determines if IP phone template configuration can be edited.
IP Phones	Determines if IP phone configuration can be edited.
Interaction Process Automation	Determines if IPA configuration can be edited.
Interaction Tracker	Determines if Interaction Tracker configuration can be edited.
License Allocation	Determines if License Allocation configuration can be edited.
Line Groups	Determines if line group configuration can be edited.
Lines	Determines if line configuration can be edited.
Locations	Determines if location configuration can be edited.
Log Retrieval Assistant	Determines if log retrieval configuration can be edited.
SIP Bridges	Determines if SIP bridges configuration can be edited.
SIP Proxies	Determines if SIP proxies configuration can be edited.
Secure Input Forms	Determines if secure input forms configuration can be edited.
Selection Rules	Determines if selection rule configuration can be edited.
Server Parameters	Determines if server parameter configuration can be edited.
Servers	Determines if server configuration can be edited.
Station Groups	Determines if station group configuration can be edited.
Station Templates	Determines if station template configuration can be edited.
Stations	Determines if station configuration can be edited.
Structured Parameters	Determines if structured parameter configuration can be edited.

Related topics

[Audio source configuration](#)

[Default IP phone configuration](#)

[Default location configuration](#)

[Default station configuration](#)

[IP phone registration group configuration](#)

[IP phone ring set configuration](#)

[IP phone template configuration](#)

[IP phone configuration](#)

[IPA configuration](#)

[Interaction Tracker configuration](#)

[License Allocation configuration](#)

[Line group configuration](#)

Line configuration

[Location configuration](#)

[Location configuration](#)

[Log retrieval configuration](#)

[SIP bridges configuration](#)

[SIP proxies configuration](#)

[Secure input forms configuration](#)

[Selection rule configuration](#)

[Server parameter configuration](#)

[Server configuration](#)

Station group configuration

[Station template configuration](#)

[Station configuration](#)

[Structured parameter configuration](#)

Administrator access control groups:Survey category

The following table describes the administrator access control groups in the **Survey** category.

Survey Category	
Group	Description
Interaction Feedback	Determines if Interaction Feedback configuration can be edited.

Related topics

[Interaction Feedback configuration](#)

Administrator access control groups:System category

The following table describes the administrator access control groups in the **System** category.

System Category	
Group	Description
Accumulators	Determines if accumulator configuration can be edited.
Actions	Determines if actions configuration can be edited.
Client Templates	Determines if CIC client templates configuration can be edited.
Contact Data Manager	Determines if contact data manager configuration can be edited.
Contact List Sources	Determines if contact list source configuration can be edited.
DID/DNIS Mappings (Web Administrator only)	Determines if DID/DNIS mappings configuration can be edited. Applies only to Interaction Administrator Web Edition.
e-FAQ	Determines if e-FAQ configuration can be edited.
Fax Configuration	Determines if fax configuration can be edited.
Fax Groups	Determines if fax groups configuration can be edited.
Handlers	Determines if handler configuration can be edited.
IC Data Sources	Determines if CIC data source configuration can be edited.
Initialization Functions	Determines if initialization configuration can be edited.
Interaction Files	Determines if interaction files configuration can be edited.
Interaction Messages	Determines if interaction messages configuration can be edited.
Interaction URLs	Determines if interaction URLs configuration can be edited.
MRCP	Determines if MRCP configuration can be edited.
MRCP Servers	Determines if the MRCP server can be edited.
Mail Configuration	Determines if mail configuration can be edited.
Media Servers	Determines if media servers configuration can be edited.
New Layout	Determines if the user can add new layouts.
Phone Numbers	Determines if phone numbers configuration can be edited.
Report Logs	Determines if report logs configuration can be edited.
Reports	Determines if reports configuration can be edited.
Response Management	Determines if response management configuration can be edited.
Secure Token Server	Determines if secure token server configuration can be edited.
SMS Broker	Determines if SMS broker configuration can be edited.
SMS Configuration	Determines if SMS configuration can be edited.
Schedules	Determines if schedules configuration can be edited.
Session Managers	Determines if session managers configuration can be edited.
Speech Recognition	Determines if speech recognition configuration can be edited.

Status Messages	Determines if status message configuration can be edited.
System Configuration	Determines if system configuration can be edited.
System Parameters	Determines if system parameter configuration can be edited.
Tables	Determines if table configuration can be edited.
Voice Modules	Determines if voice module configuration can be edited.
Web Services	Determines if an administrator can view and change the web services configuration.
Web Services Parameters	Determines if web service parameters configuration can be edited.

Related topics

[Accumulator configuration](#)

[Actions configuration](#)

[Client templates configuration](#)

[Contact data manager configuration](#)

[Contact list source configuration](#)

[Fax configuration](#)

[Fax groups configuration](#)

[Handler configuration](#)

[CIC data source configuration](#)

[Initialization configuration](#)

[Interaction files configuration](#)

[Interaction messages configuration](#)

[Interaction URLs configuration](#)

[MRCP configuration](#)

[Mail configuration](#)

[Media servers configuration](#)

[Phone numbers configuration](#)

[Report logs configuration](#)

[Reports configuration](#)

[Response management configuration](#)

[SMS broker configuration](#)

[Schedules configuration](#)

[Session managers configuration](#)

[Speech recognition configuration](#)

[Status message configuration](#)

[System configuration](#)

[System parameter configuration](#)

[Table configuration](#)

[Web service parameters configuration](#)

[e-FAQ configuration](#)



Alert workgroup members to incoming call

When an incoming call is for members of a workgroup and the workgroup has a queue, you can specify how the system should alert members to the new call. The following assumes that the workgroup is created.

1. Under **People**, double-click the **Workgroups subcontainer**.
2. In the list view window, double-click the workgroup that can receive calls. The **Workgroup Configuration** dialog box appears.
3. On the **Configuration** tab, select the **Workgroup has Queue** check box.
4. In the list, select one of the following options:
 - **Custom**: This is the default setting.
 - **Group Ring**: CIC alerts all of the users in the workgroup simultaneously.
 - **Sequential**: CIC rings one station at a time.
 - **ACD**: CIC uses ACD processing to determine which agent should receive the call.

Note: If you select ACD, then CIC alerts only agents who are in the Available state.

5. Click **OK**.



ANI/DNIS Format String

Type an ANI/DNIS format string. Valid strings must contain two tokens, one ANI token and one DNIS token. Identify the ANI token using one or more '+' characters and the DNIS token using one or more '-' characters. Tokens cannot exceed 32 characters. You may delimit tokens with separators. Valid separator characters are 0-9, A-D, *, #.

Common string patterns

A common ANI/DNIS token string pattern is *+++++*---*, where "+++++" are the 10 ANI digits and "---" are the four DNIS digits. The ANI could be much longer in length if it includes an Access Code or Account Code in the calling number. Ten digits are common. The DNIS digit count could be as long as seven digits or more. The order of the digit strings could arrive reversed, with DNIS digits first then ANI digits.

Example: For example, a typical event might be a customer call from 317-555-1212, using your number 444-1234. If you were using the format string pattern *+++++*---* you would receive the formatted string *3175551212*1234*. This would parse as 10 ANI characters (in this case, the customer's number) followed by four DNIS characters (in this case, the last four digits of the number the customer used to call in). This allows you to identify the caller and the inbound line the caller used to contact you.

Limitations

The capabilities of the telephone switch at the caller's end can affect the number of digits of either type that the caller can transmit. Older switches may limit the number of digits. As a result, you may need to negotiate with a customer to determine what format strings are possible, given the capabilities of your respective equipment.

Tip: Click the drop-down menu to see some other sample strings.

Answering Machine Silence Timeout

Use this parameter to set the time in milliseconds before plays resume after answering machine detection. Contact a authorized support representative for more information on this server parameter.

Assign a Station Line Group

Use this page to create a new station line group or select an existing line group.

Create a new line group

Select this option to create a new station line group, and click **Next** to go to [Create a New Line Group](#).

Select a line group from the following list

Select this option to add an existing line group to this location. Choose the line group from the drop-down menu, and click **Next** to go to [Define Settings for the Station Line Group](#).

Assigning Limited CIC Administration Rights to Users

CIC master administrators can give other CIC users rights to view, add, and modify some or all CIC configuration containers in Interaction Administrator. Only master administrators can grant these rights. To do this:

1. Start Interaction Administrator with a valid CIC master administrator account.
2. Select a specific User, or a Workgroup and open its dialog box. Likewise, you can select the Default User Configuration, but only if you really intend to give all CIC users some administrative rights.
3. On the Admin Access page, select the Category drop-down list and choose an Interaction Administrator category on which to give the current user administrative rights.
4. Determine if the current user (or group) should have access to the Admin Access page and the Access Control page on the selected user (such as, workgroup, user, or default user) accounts.

Later, when the CIC users who have been given these rights log in and run Interaction Administrator, they will see only those containers, property pages, and configuration entries they have been given permission to access.

Associate Active Directory User

Use this page to associate the active directory user for this CE Phone. You can perform the following actions:

1. Select the CE Phone Data Source
2. Search for Users
3. View search results

CE Phone Data Source

Select the CE Phone Active Directory data source from the drop-down list. This list is populated from the CE Phone Active Directory data sources that have been defined in the global [CE Phone Administration](#) page. You can also click **Add One** to add a new association or click **Edit** to edit the existing association.

Search

Next, perform a search to narrow the list of users. Use the optional search filter by specifying basic LDAP search syntax. If no search filter syntax is entered, then all users are searched for.

Note: The scope of the users and the number of users returned in the search results are specified as part of the search parameters within the data source.

Search Results

Select a user from the search results list to associate with the SIP station.

Note: The system does not perform a verification if users associated with multiple SIP stations.

Attribute Metadata

Use this page to manage attribute metadata. Most attributes have metadata associated with them.

Select the metadata from a pick list and select a default value from the drop-down list to use when a new SIP user association is created. This information appears as a combo box in the CE Phone Administration tab in SIP station configuration.

Note: The following attributes do not support metadata. These attributes are associated to the data within the SIP station entry:

- SIP Account Name
- SIP Account Password
- SIP URI

AudioCodes and Genesys Board Configuration

Use this page to configure AudioCodes and Genesys boards.

MAC Address

Enter the MAC address in the format as XX-XX-XX-XX-XX-XX.

Master

Use this check box if this board is the clock master for the bus.

H.100 Termination

If checked, the AudioCodes or Genesys card will provide software termination of the H.100 bus. This check box should only be checked if the corresponding card is physically located at the end of all telephony cards installed in a server and is the last card on the H.100 bus.

IP Address

Enter the IP address assigned to the board. It is in the dotted decimal form, for example, 10.12.1.15.

Subnet Mask

Enter the Subnet mask of the network to which the AudioCodes or Genesys board is attached. It is in the dotted decimal form, for example 255.255.0.0.

Default Gateway

Enter the IP address of the default gateway machine. It is the dotted decimal form, for example, 10.12.1.1.

Server

Enter the server name where the AudioCodes or Genesys board is installed.

Port Duplex

Select the port duplex from the hardware list control. Each board should be configured for "Half", "Full", or "Auto", where "Auto" is the default.



Button Display

These button display options can be set at the Default User, User, Role or Workgroup level. These options determine which button displays on the **My Interactions** tab in the CIC clients.

Show Pickup Button

Select this option+ to display the **Pickup** button in the CIC clients. This allows users to answer the current call, or to take the current call off hold.

Show Disconnect Button

Select this option to display the **Disconnect** button in the CIC clients. This allows users to disconnect the current call.

Show Hold Button

Select this option to display the **Hold** button in the CIC clients. This allows users to place the selected call on hold.

Show Transfer Button

Select this option to display the **Transfer** button in the CIC clients. This allows users to open the Transfer window where they can select a transfer recipient and the type of transfer operation they want to perform. This button also controls access to the **Park** button. Users that have the ability to transfer and it also allows them add the **Park** button to the client.

Show Voice Mail Button

Select this option to display the **Voice Mail** button in the CIC clients. This allows users to transfer a call to their voicemail account.

Show Listen Button

Select this option to display the **Listen** button in the CIC clients. This allows users to listen to a caller leaving a message in their voicemail account, or to a conversation between two parties. The parties being listened to are not aware that they are being listened to.

Show Record Button

Select this option to display the **Record** button in the CIC clients. This allows user to record the currently selected call. The recording is saved as a .wav file. After the call is completed, the .wav file is attached to an email that is sent to the user.

Show Pause Button

Select this option to display the **Pause** button in the CIC clients. This allows users to control a recording session. Clicking **Pause** the first time briefly stops the recording session.

Show Mute Button

Select this option to display the **Mute** button in the CIC clients. This allows users to disable the mouthpiece on their telephones so that the other party or parties cannot hear what is being said.

Show Private Button

Select this option to display the **Private** button in the CIC clients. This allows users to prevent other Interaction Client users from recording or listening to their conversation. Depending upon the CIC configuration, a notification could be sent to the CIC administrator that the user is conducting a secure call.

Show Assistance Button

Select this option to display the **Assistance** button in Interaction Desktop. This allows Users who are members of a Workgroup to request assistance from a supervisor. When the agent presses the Assistance button, the request for help appears to all the available supervisors in the Workgroup. When a supervisor answers the request a dialog appears on the agent's screen.

Show Join Button

Select this option to display the **Join** button in the Interaction Desktop Client and Interaction Connect. This allows users who are Supervisors to join in on an interaction between other agents. The **Join** option is not available in Cisco TAPI configurations.

Show Coach Button

Select this option to display the Coach button on the toolbar in the Interaction Desktop and Interaction Connect. This allows users to add themselves to another agent's call on any user or station queue they have permission to monitor. This enables them to provide advice to the agent without the customer knowing that anyone is assisting on the call.

Show Secure Recording Button

Select this option to display the **Secure Pause** button on the toolbar in Interaction Desktop and Interaction Connect. This allows agents to initiate the secure recording pause by pressing the button. When pressed, all recordings of the interaction (and all recordings of any other monitors of this interaction, etc.) are paused for a configured period of time (see **Secure Recording Pause Duration** in [Recording Processing Configuration](#)). By default, this button is not displayed.

Select All

To display all of the buttons on the **My Interactions** tab in the CIC clients, click **Select All**.

Note: Each CIC client displays only the buttons it supports.

Clear All

To clear the option boxes, when all the boxes are selected, click **Clear All**.

Note: If an option was inherited (indicated by a gray check mark) the box will not be cleared.

Call Detail Record Log (1)

The Call Detail Record log contains data on each call placed through CIC.

For detailed information on this and other reports logs, see the *PureConnect Reporting Data Dictionary Technical Reference* located in the PureConnect Documentation Library.



Call Forwarding Roles

Configuring a Role for call forwarding

A role can be configured to forward calls, of members assigned to the role, to another extension. If a member of the role is not available, if a member's extension is busy, or if there is no answer at the member's extension, the call can be forwarded to another extension.

For example, this might be helpful if executive calls need to be forwarded to a specific must answer extension. A role could be created for executives. On the Call Forwarding page, you might enter the extension for the administrative assistant that answers forwarded calls.

Forward calls to

Type the extension to forward calls to in the box.

When in a "Do Not Disturb" status

Select this box to forward calls when the member of the role's workstation is in a Do Not Disturb (DND) status, such as Away from desk. To select which calls to forward when there is a DND status, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.

When on the phone

Select this box to forward calls when the member of the role's workstation is in use. To select which calls to forward when the line is busy, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.

When calls are not answered

Select this box to forward calls that are not answered. To select which calls to forward when the phone rings and there is no answer, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.



Call Forwarding Users

Configuring a User's profile for call forwarding

You can configure a User's profile to forward calls if their workstation is unavailable, busy, or there is no answer.

Forward calls to

Type the extension to forward calls to in the box.

When in a "Do Not Disturb" status

Select this box to forward calls when the user's workstation is in a Do Not Disturb (DND) status, such as Away from desk. To select which calls to forward when there is a DND status, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.

When on the phone

Select this box to forward calls when the user's workstation is in use. To select which calls to forward when the line is busy, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.

When calls are not answered

Select this box to forward calls that are not answered. To select which calls to forward when the phone rings and there is no answer, click the drop-down arrow and:

Select	To
Internal	Forward all internal calls.
External	Forward all external calls.
All	Forward internal and external calls.

Override

You can override Call Forwarding permissions that the user has inherited. If a permission is inherited, a check box is selected and the option is not available (grayed).

To override an inherited permission, select the **Override** check box. The inherited permissions are removed, and the check boxes are available.

Go to Main Help Window

The Help topic you requested was not found. Click [here](#) to go to the Index to find a topic.



CE Phone Data Source Usage

Use this page display a list of SIP stations that are associated with a particular user entry. The following is an example shows the results of the usage button.



CE Phone Data Sources

The CE Phone Data Sources dialog box allows you to [Add](#) or [Edit](#) an existing data source, as well as remove it. Click [Usage](#) to display a list of SIP stations that are associated with a particular user entry.



CE Phone Desired Settings - More

The **More Settings** tab on this dialog box shows the additional (non-default) attributes. These attributes are associated with a user, but not necessarily associated with a user's CE Phone requirements.

Click **Edit** to open the [Edit Attribute](#) dialog box.



CE Phone Desired Settings

The **Default Setting** tab on this dialog box shows the default attributes. The values in the drop-down lists are the values defined in the global [CE Phone Administration Attributes](#) dialog box.

Click on the **More Settings** tab to display additional attributes.

Note: SIP Account Name, SIP Account Password and SIP URI attributes are read-only. These are values set in the SIP Station configuration.



CE Phone Edit Attribute

Use this page to change the **Desired Value** of an attribute. The values in the drop-down lists are the values defined in the global [CE Phone Administration Attributes](#) dialog box.

Change Management Note

Ultimately change control is a function of risk management. The processes your organization uses in mitigating risk is entirely dependent upon the level of risk your organization is willing to accept when executing any procedures related to a production-level change. With that in mind, any change control procedure recommended by this or any other organization, is merely done so by suggestion, as these recommendations should be balanced against your organizations existing risk assessments and business continuity requirements. The level of control you implement surrounding changes made in your environment should be constructed jointly and severally, with your minimum business requirements, well documented and distributed, and regularly reviewed and revised when dictated by business needs.

Updating Configuration Values

Most configuration values entered in Interaction Administrator property sheets can be modified at any time, including when the system is in use. When you modify a value in Interaction Administrator (such as add a new line, change a station number, and so on), Interaction Administrator generates a notification event to **Notifier** which in turn notifies the appropriate modules that need to recognize the change. These changes are dynamic in nature and are effective almost immediately. If you change a line or station attribute and that line or station is involved in a call when you save the change, the change will become effective as soon as that call leaves the station or disconnects.

Note: Path names, such as ResourcePath or ReportPath under System Parameters are NOT dynamic. Changes to path names are effective only after CIC has been restarted.

When you modify and re-publish active handlers with Interaction Designer, the handlers are automatically detected and used for all new interactions requiring those handlers. Interactions already using that handler will finish with the original handler.



CIC Data Source Type

Select one of the listed data source types:

- **ODBC** - select this for most relational databases that include an ODBC driver (for example an SQL Server)
- **JDBC** - select this if you are using Java applications that use JDBC drivers to access ODBC compliant databases (not used in CIC by default)
- **JDBC-ODBC** - select this if you are using the JDBC-ODBC bridge to let Java applications access ODBC compliant databases via ODBC drivers.
- **LDAP** - select if you want to set up contact directories that use an LDAP-enabled directory server.
- **MAPI** - Do not select this type. CIC no longer supports Microsoft Exchange MAPI-based integrations.
- **White Pages** - select if you have the appropriate white pages directory data on the CIC server.



Classification name

Enter a descriptive name for the phone number classification.

Related topics

[Overview of phone number classifications](#)



Client configuration template options

Click the links under *Related topics* for information about a specific set of configuration options.

Related topics

- [Alerting](#)
- [Voicemail/Fax Paging](#)
- [My Interaction Ring Sounds](#)
- [Calls](#)
- [Follow Me](#)
- [Call Coverage](#)
- [Personal Prompts](#)
- [Emails](#)
- [IP Phone](#)
- [Monitored Appearances](#)
- [Queues Pages](#)
- [Directories Pages](#)
- [General](#)
- [Plugins](#)
- [e-FAQ](#)
- [Interaction Tracker](#)
- [History](#)

Codecs

An ordered list of Codecs is displayed. Telephony Services (TS) will try to negotiate the connection to use the first Codec on the supported list. By default, no Codecs are selected. You must select one Codec for the mapping to be valid.

Codec List

Interaction Administrator will only store an ordered list of those Codecs (vocoders) that are checked. The **Up** and **Down** buttons are available to order this list. The options available are:

- G.711 mu-law
- G.711 a-law
- G.729AB
- G.723.1
- GSM 06.10
- G.726 32k
- G.722 (G.722 is supported between SIP endpoints, but is not supported for playing prompts or voicemail messages. If audio passes through a media server, it is passed through as G.722, but any plays or recordings are done using a narrowband codec.)

Only the G.711 and G.729 AB Codecs allow the frame size to be modified.

Note:

While you can use the Opus codec to create recordings with higher audio quality and dual-channel audio, you cannot use Opus as a codec for Voice over IP endpoints.

Click [Set Parameters](#) to change the codec parameters.

Click [here](#) for latency information.



Station Group Configuration

Use this page to select the configuration options for a station group.

Extension

Type a unique extension for the station group.

Notes: See DID/DNIS Routing for information on mapping DID/DNIS to station groups.

If the **Enable Regional Dialing** option is selected in **Regionalization - Location**, and a change to a station group extension creates an extension conflict, a message is displayed listing duplicate extensions. For later reference when resolving conflicts, click **Copy to Clipboard** to copy the listing, and then paste the content to a program that supports CSV (like Microsoft Excel).

Type

There are several types of station groups: **Group Ring**, **Sequential**, and **Round-robin**.

Type	Description
Group	Simultaneously alerts the members of a Workgroup that a call is available in the queue for that Workgroup. Selecting Group Ring disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available). The length of the Group Ring is determined by the Workgroup Offering Call Timeout setting. Note: There can be a maximum of 20 members (stations or users) in a workgroup that uses group ring.
Sequential	Alerts individual members of a Workgroup that a new call is available in the queue for that Workgroup. Members are alerted to the call in the order specified in Workgroup Configuration properties>Members page >under Currently Selected Users. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Sequential disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).The length of the Sequential Ring is determined by the Workgroup Offering Call Timeout setting.
Round Robin	Similar to linear hunt groups, CIC's Round Robin remembers the last user who was sent a call. Round Robin works in a loop, repeating the process down the through list, and then the process starts over with the next call. For example, a workgroup has three users (User1 - User3), all available for workgroup calls and are listed User1, User2, User3, in that order . If User1 received the last call but is available, the next alerting call will go to User2 if available. If User2 is not available, the call will go to User3. The next alerting call after that will go back to User1 if that user is available. If you select the Maintain Order option (in Workgroup Configuration properties --> Members --> Currently Selected Users), members are alerted to the call in the order specified in the list. For more information on alerting users in Workgroup queues, see Maintain Order in Workgroup Members Help. Selecting Round Robin disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).

- Choose **Group Ring** to simultaneously ring the stations in the group. All phones ring until the call times out after 1 minute. At that time, the prompt, "No one is available to take your call at this time" is played. The call is then routed back to the IVR system.
- Choose **Sequential** to ring stations one at a time, in the order specified in Station Group Configuration dialog, in the Currently Selected Stations box on the Members page. In the sequential **Retries** box, type the number of retries for calling each station before timing out. The default is 1. If the number of retries is reached and no one answers, the prompt, "No one is available to take your call at this time" is played and the call is routed back to the IVR System.
- Choose **Round-robin** to have CIC remember the last user who was sent a call. Round Robin works in a loop, repeating the process down through the list, and then the process starts over with the next call.

For example, a station group has three stations (Station1 - Station3), all available for workgroup calls and are listed Station1, Station2, Station3, in that order . If Station1 was alerted, then Station2 was alerted, even though both are now available, the next alerting call will go to Station3. Round-robin knows which station has been alerted and goes to the next available station in the list.

Selecting Round-robin disables the Agent Utilization, ACD Skills, and ACD Actions functions (the items on those tabs will not be available).The length of the Round-robin ring is determined by the Workgroup Offering Call Timeout setting.

Note: If you select the Maintain Order option for the workgroup members, then the members are alerted to the call in the order specified in the list. For more information on alerting users in workgroup queues, see *Workgroup Members*.

Station Timeout (sec)

This is the amount of time in seconds that each individual station will alert using any of the alert types. The default value is 15 seconds.

Must Answer

Select **Must Answer**, for Group Ring or Sequential, for the call to continue ringing. Also, **Must Answer** will only work if stations in the station group are available to be alerted. Selecting this option causes Round-robin and Sequential to try the members of the station group 3000 times.

Enhanced call routing to station phones

Station groups can contain station devices only. If a user is logged into a station group phone, a call to the station group will also appear in My Interactions in the user's CIC client, in the same way as regular calls. Users should always see a call to a station that they are logged into.

Related topics

[DID/DNIS Routing](#)

[Workgroup members](#)

Configure a report log

Report logs are predefined. By default, you do not have to customize or configure them. The Client DB Source fields are set during the IC Server installation, but you can change these values if your SQL Server data source configuration changes. To change these values, you can change the Data Destination and Client DB Source boxes.

Note: Each report log includes several empty "Custom" columns to accommodate sites that need to capture additional data (for example, custom call attributes). For information on adding custom data to a report log, see the *Advanced Reporting Guide* in the PureConnect Documentation Library.

To configure a report log

1. In the **System Configuration** container, click the **Report Logs** subcontainer.
2. Double-click the report log that you want to edit.
The **Report Log Configuration** dialog box appears. Complete boxes on the tabs. See the links under **Related topics** for complete information.
3. Click **OK**.

Related topics

[Configure basic report log information](#)

Configure advanced information

The **Advanced** tab information for custom attributes and history for the wrap-up category. Click the name of the details tab for field descriptions.

To configure advanced information

1. Click the **Advanced** detail tab to display the details view.
2. Click **Custom Attributes** section expander to display (or hide) the custom attributes section's contents, and complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.

HomeFax	5551212

3. Click **History** section expander to display (or hide) the history section's contents, and complete the following information:
 - View the **Created** and **Modified** dates for this category.
 - Type or view information in the **Notes** field for the category.
4. Save the new code or modified category.

If necessary, the new category or changes made to an existing category can be reverted.

Related topics

[Wrap-up categories: advanced field descriptions](#)

Configure advanced information

The **Advanced** details tab contains the custom attributes and history of the wrap-up code. Click the name of the details tab for field descriptions.

To configure advanced information

1. Click the **Advanced** details tab to display the details view.
2. Click the **Custom Attributes** section expander to display the custom attributes section's contents and then complete the following information:

- To create a custom attribute, click  and type an attribute name. You must also enter a value for the new attribute.

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3. Click **History** section expander to display (or hide) the history section's contents, and complete the following information:
 - View the **Created** and **Modified** dates for this wrap-up code.
 - Type or view information in the **Notes** field for the wrap-up code.
4. Save the wrap-up code.

If necessary, the new wrap-up code or changes made to an existing wrap-up code be reverted.

Related topics

[Wrap-up codes: advanced field descriptions](#)



Configure the properties of a Gmail domain

When you add or edit a Gmail domain, you configure its properties.

To configure the properties of a Gmail domain

1. In the **Name** box, type the name of your Gmail domain.
2. In the **Default sender** box, type any email account in your domain. When an external caller leaves you a message, this is the email account that appears as the "From" address in the interaction.
3. Click **Load JSON**. This loads the JSON file that you generated from the Google Developer Console in your Gmail account.
4. Click **OK**.

Related topics

[Configure a Gmail domain](#)

Configure the visibility of user data in reports

The **SecuredUserList** parameter allows you to restrict the user data that users can view in reports. The **SecuredUserList** parameter works with the Access Control List settings for a user. When you enable the **SecuredUserList** parameter for a report, the user running the report will see only the data for those user queues that you select in the user's Access Control List settings.

Note: You can configure any report that uses the **UserList** parameter to use the **SecuredUserList** parameter.

To configure a report to use the SecuredUserList parameter

1. In the **Report Management** container, open the **Report Configuration** subcontainer.
2. From the **Categories** list, select the category that contains the report you want to configure.
3. In the **Reports** list, select the report.
4. In the **Detail** pane, view the **Parameters** section.
5. Check the list of parameters for the **UserList** parameter. If it appears, then you can configure the report to use the **SecuredUserList** parameter.

The screenshot displays the 'Report Configuration' subcontainer within the 'Report Management' container. It is divided into two main sections: 'Categories' and 'Reports'.

Categories: A list of report categories is shown on the left. 'User Reports' is selected, indicated by a blue bar and a circled '1'.

Reports: A list of reports is shown on the right. 'User Call Detail' is selected, indicated by a blue bar and a circled '2'.

User Call Detail: The detailed report of user call traffic is shown below the reports list. The 'Parameters' section is selected, indicated by a blue bar and a circled '3'.

Parameters: A list of parameters is shown. 'User List' is selected, indicated by a blue bar and a circled '4'.

User List: The configuration details for the 'User List' parameter are shown. The 'Name' is 'User List', the 'Name Resource' is 'USER_LIST', the 'Description' is empty, the 'Description Resource' is empty, the 'Friendly Key' is 'UserList1', the 'Assembly Name' is 'ININ.Reporting.Historical.Engine.Module', the 'Class Name' is 'ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.UserList', the 'Required' checkbox is unchecked, and the 'License' is '_NO_LICENSE_REQUIRED_'.

Note: If the **UserList** parameter is not listed, you cannot configure the report to use the **SecuredUserList** parameter.

5. Click the **General** section.
6. Unlock the report.
7. In the **Class Name** field, change the field value to `ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredUserList`.
8. Click **Save**.

User Call Detail
Detailed report of user call traffic

General (5)

13 Developers

Parameters

Flexible Columns

Sections

Tables

Custom Data

Advanced

Name: User Call Detail

SubTitle:

Description: Detailed report of user call traffic

Friendly Key: UserCallDetail

Assembly Name: ININ.Reporting.Historical.Engine.Reports

Class Name: ININ.Reporting.Historical.Engine.Module.Parameters.ViewModels.SecuredUserList (7)

Orientation: Landscape

IC Data Source: IC Report Logs

File Name:

Last Run User:

Last Run Date: 2/11/2015 5:34:25 AM

Run Count: 0

Auto-save (8)

Save Revert

9. Continue with the next section to configure each user who should have access to the report.

Configure the user queue Access Control Lists for each user who runs the report

For each user who will run the report, you must enable the Access Control Lists that contain the allowable user data.

1. In the **Users** container, edit the record for the user who will run the report.
2. On the **Security** tab, click **Access Control**.
3. Search for "user queue."
4. For each user queue that the report use may see, select the check box in the **View** column.
5. Click **Close**.

Configuring Interaction Recorder Remote Content Services

You configure Interaction Recorder Remote Content Service through Interaction Administrator.

Do the following steps to configure Interaction Recorder Remote Content Service:

1. Open Interaction Administrator and log in as an administrative user.
2. In the navigation pane on the left side, expand the **Interaction Recorder** container.
3. In the Interaction Recorder container, select the **Remote Content Server** sub-container.
4. In the details pane on the right side, double-click the entry for the Interaction Recorder Remote Content Service server that you want to configure. The **Remote Content Server Configuration** dialog box for the selected server is displayed.

Note:

Customer Interaction Center uses only those Interaction Recorder Remote Content Service instances that are listed as Active. However, you can configure any listed instance, regardless of its state.

The **Remote Content Server Configuration** dialog box contains the following fields:

Alternate Fully Qualified

If you are using PureConnect Cloud), enter a replacement fully-qualified domain name (FQDN) for this Interaction Recorder Remote Content Service server in your domain.

In a PureConnect Cloud environment, this feature enables Interaction Recorder to retrieve and play the recording from this Interaction Recorder Remote Content Service server.

Active Locations

Using the appropriate check box, enable the regions for which you want this Interaction Recorder Remote Content Service server to move recordings from Interaction Media Servers.

Disable Screen Capture Transfers from this RCS

Enable this check box if you want to prevent this Interaction Recorder Remote Content Service instance from transferring screen recordings from the computers on which they are recorded.

Disable Other Recording Transfer from this RCS

Enable this check box if you want to prevent this Interaction Recorder Remote Content Service instance from transferring any recordings—other than screen recordings—from the servers on which they are recorded.

5. If you want to view or adjust the configuration for another defined Interaction Recorder Remote Content Service server, use the << and >> buttons in the lower left corner.
6. If you want Interaction Administrator to automatically save your configuration settings as you cycle through Remote Content Service servers, place a check mark in the **Confirm auto-save** check box.
7. When you finish configuring one or more Interaction Recorder Remote Content Service servers, select the **OK** button to save the configuration.

Related Topics

[Remote Content Server](#)



Contact List Entry Name

To add a contact list, in the Entry Name dialog box, select a list in the drop-down box and click **OK**.

Converting Voice Recordings

For CPU efficiency and best audio quality of prompts and music played over telephone handsets, we recommend you convert your audio source files. For example, convert .wav format to 8 bit mono 8kHz mu-law (or A-law outside of North America) format before you add the audio file to a prompt tool or Interaction Attendant application. Some audio formats can be converted automatically by the CIC system and telephony boards, but the dynamic conversion process may cause some loss of audio quality and require more CPU overhead.

To convert your audio source files:

1. Regardless of the starting format, convert it to Linear 16-bit (at the same sample rate as the starting format).
2. If the sample rate is anything other than 8 kHz, re-sample it to 8 kHz.
3. Finally, convert it from 16-bit Linear at 8 kHz to mu-Law (or A-law if you prefer).

If you are doing this manually with a sound editor, steps 1 and 3 are usually done automatically by the sound editor. For example, if you have an MP3 recording at 44.1 kHz sample rate, open it in the sound editor (which effectively converts it to 16-bit linear), re-sample the audio to 8 kHz using the sound editor, and then in the Save As... dialog convert it to mu-Law. If you using a command line utility, you might have to do all three steps individually.

The area that this most likely affects the quality of the output is the re-sampling.

Copy

Click the Copy button to copy the currently selected configuration entry in list view (right pane). You can copy and paste only one item at a time.

Note: If you copy and paste a workgroup, the workgroup members in the original workgroup are not copied to the destination workgroup. The problems with users inheriting rights are too complicated and require the administrator to deliberately add members into workgroups created this way.

Create a New Line Group

Use this page to create a new station line group.

Enter the New Line Group Name

Type the name of the new line group.

Select one or more SIP lines as members

Select the check box to add a SIP line as a member of the line group.

Click **Create a New Line...** to open the new Line Configuration pages. Click Next to go to [Ready to Create New Line Group](#).



Creating new report definitions

To create a new report definition for CIC call data:

Create the report template in Crystal Reports first.

1. Select the Reports container in Interaction Administrator.
2. Press Insert (or select the Edit and New Entry menus) to begin a new report definition.
3. In the Entry Name dialog box, enter a descriptive name for this report. This name will be sorted in with the existing reports under the Report Name column.
4. On the Report Configuration property page, enter a description of the report and the report file name.
5. On the Report Tables/Parameters property page, click Add under the Table Data field.
6. Select the IC Log table type to specify a CIC report log.
7. Enter or select values for the Table Definition property page and click OK.
8. On the Report Tables/Parameters property page, click Add under the Parameter Data field.
9. Enter or select values for the Parameter Definition property page and click OK.
10. Click OK to complete the report definition.

For more information see *PureConnect Reporting Technical Reference*, located in the PureConnect Documentation Library on the CIC server.



Daily

You can set a menu to run every day at a specific time and for a specified length of time.

Occurs

Every Day of the Week sets the menu to run every day of the week. You cannot change this option.

Time

Sets the length of time the menu is active. If you select **Start**, you must specify a start and end time.

If you select **All Day**, the start time and end time are grayed-out, therefore not available.

Note: If you set the end time to be before the start time, this causes the schedule to end on the next day as the start time. Interaction Administrator displays a warning message allowing you to cancel or continue with this time.

Date Range

Sets a start and end date the menu is active. For example, June 3, 2000 through June 6, 2000.

If you select a start date, and then select **No End Date**, the menu is active forever.



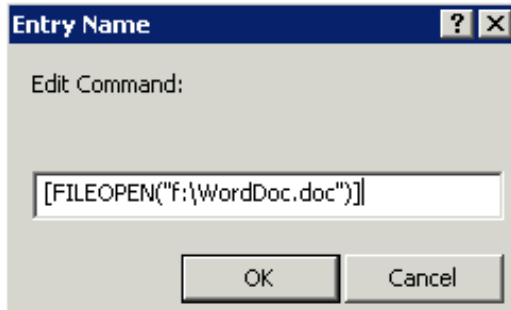
Action Configuration

Use these procedures to [define](#) and [register](#) an action that opens a Microsoft Word document when a call alerts on a user queue. Registering an action associates it with a specific queue. The action will be triggered automatically when an interaction alerts on the queue, or optionally when an interaction is disconnected.

To define an Action:

1. Start Interaction Administrator and login.
2. Click the **Actions** container. This container is a child of the System Configuration node.
3. Press **Insert** to define a new action. The Entry Name dialog appears, prompting to name the action. This name can be anything you like. For this example, type Example Screen Pop action in the text field.
4. Select DDE from the Type drop list. Click **OK**. The Action Configuration dialog appears.

5. Type the full path to the application in the Executable box. For example, the full path to Microsoft Word 2010 is C:\Program Files (x86)\Microsoft Office\Office14\Winword.exe.
6. The **Application** box specifies the name of the application that the DDE conversation should be initialized with. This is usually (but not always) the name of the executable file (without the .EXE extension). Refer to the application's documentation for details. For this example, type WINWORD in this box.
7. The **Topic** box prompts for the topic name of the DDE conversation. The text you enter in this box is based on names of DDE server topics supported by the executable. For specific information about topics supported by your application, refer to its documentation. For this example, type system in the Topic box, since that is a valid topic name that Microsoft Word recognizes.
8. Click **Add**. You are prompted to specify a command string that the DDE Server should execute.



Since command strings are unique to each DDE application, you'll need to consult the application's documentation for details. For this example, enter the following text as shown below.

```
[FILEOPEN ("f:\WordDoc.doc")]
```

This command string tells Microsoft word to the existing document at the path specified. Feel free to adapt this string to open a different document that already exists on agent PCs. If you specify a document that does not exist on an agent's PC, Microsoft Word will display an error message when the action executes, noting that the file is not found. It does not create a new document if the file specified does not exist.

9. Click **OK**. The text entered will appear in the Command List.
10. Click **Apply**.
11. Click **OK**.

At this point you have defined a new action, but it is not associated it with a queue. The next step is to register the action with a queue, so that CIC knows when to execute it.

To register an action:

1. 1. After defining an action in Interaction Administrator, click on the Workgroups or Users sub-container under People. Then double-click a workgroup or user to open its configuration details.

For a Workgroup configuration, select the **ACD** tab. Click **Actions**, and then select an action from the **Alerting Action** list. Click **Apply**.

For User configurations, select the **Options** tab. Then select an action from the **Alerting** list. Then click **Apply**.

2. Click **OK**. The action is now registered with a queue. At this point, you have successfully created an action and have associated it with a workgroup or user queue. Now, when a call alerts on the specified queue, a Word document will pop on the screen.

Related Topics

[DDE Action Configuration](#)

[Options](#)

[Actions](#)

Define a form field

This help topics describes how to add or edit a form field for a secure input form.

To define a form field to a secure input form

1. On the **General** tab of the **Secure Input Form Configuration** dialog box, click next to the **Input fields** list, do one of the following:
 - To add a new form field, click **Add**.
 - To edit an existing form field, select it in the **Input fields** list and then click **Edit**.
2. In the **Add Form Field** dialog box, in the **Field ID** field, type an identifier that CIC will use for the secure data field. The CIC clients use the field ID to identify data items sent to the validation service.
3. In the **Display Name** field, type the name of the field as it should appear on the secure input dialog box. Interaction Desktop uses the display name to identify data items on the secure input form for the agent.
4. Click **OK**.

Related topics

[Configure general information](#)



Define Settings for the Station Line Group

Use this page to see or edit the current station line group settings. The name of the line group is displayed at the top of the page, and a list of the current SIP line group members, active status, and access control summary information is shown. The options are:

Use proxy for station connections

Select this box to indicate that the proxy list configured in the line configuration in Interaction Administrator should be used to connect stations. See the SIP Station Transport topic for more information.

Modify Members...

Click this button to open the [Line Group Configuration Members](#) page to edit the line group memberships.

Edit Line...

Click this button to open the Line Configuration page to make changes to the selected line's configuration.

Click **Next** to go to [Review Changes](#).

Delete Entry (Delete)

Click the **Delete Entry** button to delete all selected configuration entries in the list view (right pane).



Dial plan object name

Type a descriptive name to appear in the **Dial Plan Object Name** box. The name can be any text or numbers you want, but it is often helpful to use the numbers or the number pattern this name represents.

Remember to adjust the order of the name once it appears in the list; CIC looks for a match with the converted (standardized) input starting at the top of this list.

Related topics

[Configure dial plan objects](#)

Dial Tone, Busy and Ringback Signals by Country

Refer to the following tables for dial tone, busy, and ringback signals by Country:

Dial Tone Signal by Country							
Country	Frequency	Second Frequency component (if used)	Period 1 On	Period 1 Off	Period 2 On	Period 2 Off	Amplitude
Belgium	450Hz		Continuous tone				-12dBm
France	440Hz		Continuous tone				-12dBm
Germany	425Hz		Continuous tone				-12dBm
Israel	400Hz		Continuous tone				-12dBm
Italy	425Hz		0.6sec	1.0sec	0.2sec	0.2sec	-12dBm
Japan	400Hz		Continuous tone				-20dBm
The Netherlands	150Hz	450Hz	Continuous tone				-12dBm
Norway	425Hz		Continuous tone				-12dBm
Singapore	270Hz	320Hz	Continuous tone				-12dBm
South Korea	350Hz	440Hz	Continuous tone				-12dBm
Sweden	425Hz		Continuous tone				-12dBm
Switzerland	425Hz		Continuous tone				-12dBm
Taiwan	350Hz	440Hz	Continuous tone				-12dBm
United States	350Hz	440Hz	Continuous tone				-12dBm
United Kingdom	350Hz		Continuous tone				-12dBm

Busy Signal by Country

Country	Frequency	Second Frequency component (if used)	Period 1 On	Period 1 Off	Period 2 On	Period 2 Off	Amplitude
Belgium	450Hz		0.15sec	0.15sec			-20dBm
France	440Hz		0.5sec	0.5sec			-20dBm
Germany	425Hz		0.5sec	0.5sec			-20dBm
Israel	400Hz		0.5sec	0.5sec			-20dBm
Italy	425Hz		0.5sec	0.5sec			-20dBm
Japan	400Hz		0.5sec	0.5sec			-5dBm
The Netherlands	425Hz		0.5sec	0.5sec			-20dBm
Norway	425Hz		0.5sec	0.5sec			-20dBm
Singapore	270Hz	320Hz	0.75sec	0.75sec			-20dBm
South Korea	480Hz	620Hz	0.5sec	0.5sec			-20dBm
Sweden	425Hz		0.25sec	0.25sec			-20dBm
Switzerland	425Hz		0.5sec	0.5sec			-20dBm
Taiwan	480Hz	620Hz	0.5sec	0.5sec			-20dBm
United States	480Hz	620Hz	0.5sec	0.5sec			-20dBm
United Kingdom	400Hz		0.4sec	0.4sec			-20dBm

Ring-back Signaling by Country

Country	Frequency	Second Frequency component (if used)	Cycle Duration	Period 1 On	Period 1 Off	Period 2 On	Period 2 Off	Amplitude
Belgium	450Hz		4.0sec	1.0sec	3.0sec			-20dBm
France	400Hz		5.0sec	1.65sec	3.35sec			-20dBm
Germany	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Israel	400Hz	450Hz	4.0sec	1.0sec	3.0sec			-20dBm
Italy	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Japan	384Hz	416Hz	3.0sec	1.0sec	2.0sec			-5dBm
The Netherlands	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Norway	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Singapore	400Hz		3.0sec	0.4sec	0.4sec	0.2sec	2.0sec	-20dBm
South Korea	440Hz	480Hz	3.0sec	1.0sec	2.0sec			-20dBm
Sweden	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Switzerland	425Hz		5.0sec	1.0sec	4.0sec			-20dBm
Taiwan	440Hz	480Hz	3.0sec	1.0sec	2.0sec			-20dBm
United States	440Hz	480Hz	6.0sec	2.0sec	4.0sec			-20dBm
United Kingdom	400Hz	450Hz	3.0sec	0.4sec	0.2sec	0.4sec	2.0sec	-20dBm

Importing Number Plan Status

On the Input Conversion configuration page, the Import button allows you to import (merge or replace) a complete phone number plan created by the Export button on that page. The Import operation analyzes the existing phone number objects compared to the imported objects. The Importing Status dialog box reports the number of missing, new, and replaced objects during the import.

If you want to cancel the import operation, click the Cancel button and no objects will be imported from the specified file. To complete the Import operation, click the **OK** button.

DID

Direct Inward Dialing (DID) is a feature that allows extensions in a company to have their own direct telephone number. This feature requires special DID lines from your local telephone company.

Criterion Definition

This page is displayed when a monitored value or other criterion is edited. It enables or disables scoring of a particular value, and manages settings that affect overall scoring when Director evaluates the value to determine whether or not it should route an interaction to the Enterprise Group.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Enable this criterion for scoring

When this option is checked, Director's scoring algorithm will evaluate this value. When scoring is disabled, a value of Not used appears in the Routing Criteria list.

Monitored Value Bias

Each monitored value has a bias, which is positive or negative. A plus indicates that higher values are more desirable from a scoring point of view. A minus indicates that lower values are more desirable.

Interactions go to the agent (in post-call) or queue (in pre-call) with the highest score. A positive (+) bias tends to increase the score; a negative (-) bias decreases the score.

Importance spin control

This control assigns a numeric value between 1 and 100 that weights the criteria's influence on the routing calculation. Assign more important criteria a higher weight. Importance works in conjunction with the bias setting to indicate whether a higher number is more desirable or less desirable—e.g. whether a higher number means you should get the call or a higher number means you shouldn't get the call. Higher weight makes a given factor affect the score more in whatever direction the bias specifies.

Click **OK** to save changes and close the dialog box. Click **Cancel** to discard changes and close the dialog box.

Related topics

[Enterprise Group Skill Specification](#)

[Skill Options](#)

Enterprise Group Skill Specification

This page collects specifics about a skill, required Agent proficiency and desire to use. Director uses this information to score the Enterprise Group when the targets the destination of a call. All interactions that enter the system via this Enterprise Group will initially require the listed skills.

Note: The Director tab and the associated overflow, skills, and error handling options in Workgroup Configuration appear only if Interaction Director is installed and a valid license exists.

Skill Name

Type the name of a skill or press browse (...) to open the Browse for Queue Skills dialog box.

Proficiency Minimum Value

A skill is characterized by minimum and maximum proficiency requirements. This control sets the Agent's minimum proficiency level.

Proficiency Maximum Value

Sets the Agent's maximum proficiency level. For example if the Skill is Spanish, in the 70-100 proficiency range, then Director would look for Agents whose language proficiency is 70 out of a possible 100-point range.

Proficiency Weight

This combination of positive or negative bias and importance weights the skill in term of proficiency. To set these parameters, press Edit to open the [Criterion Definition](#) dialog box.

Minimum Desire to Use Value

Sets the Agent's minimum Desire-to-use-Skill level. Values can range from 1-100.

Maximum Desire to Use Value

Sets the Agent's maximum Desire-to-use-Skill level. Values can range from 1-100.

Desire to Use Weight

This combination of positive or negative bias and importance weights the skill in term of the Agent's desire to use it. To set these parameters, press **Edit** to open the [Criterion Definition](#) dialog box.

Click **OK** to save changes and close the dialog box. Click **Cancel** to discard changes and close the dialog box.

Related topics

[Criterion Definition](#)

[Skill Options](#)

External Document Not Found

The document you have requested was not found in the \Documentation directory on your CIC server. This can occur for several reasons:

- You might be running this help file from a computer not connected to the CIC server. The PureConnect library is located in the PureConnect Documentation Library on the CIC server. If you want the external documents links to work correctly, copy this directory (and all the subdirectories) to the same folder from which you are running this help file.
- You do not have Adobe Acrobat Reader installed on the CIC server. The documents stored in the \Documentation directory are .PDF files and require Adobe Acrobat to be displayed.

Edit Owner Skills

To edit owner skills

1. Select the Skills container in the Interaction Administrator hierarchy.
2. Right-click on the Skill you want to edit in the skills list, then select **Properties**. Select the Edit and New Entry... menus to display the Enter Skill Name dialog box.
3. Click **Edit** on the **Skills Configuration** dialog box.
4. Change the **Proficiency** and/or **Desire to Use** values.
5. Click **OK** to save your changes.

Related topics

[Overview of skills](#)



Edit Utilization



Use the Edit Utilization dialog to change the percent utilization for a Call, Chat, Email, or other interaction type.

Interaction

The **Interaction** box displays the type of interaction you are configuring.

Utilization %

Use the **Utilization %** box to change the interaction type percentage.

Maximum assignable

Use the **Maximum assignable** box, to change the maximum number of interactions for this interaction type.

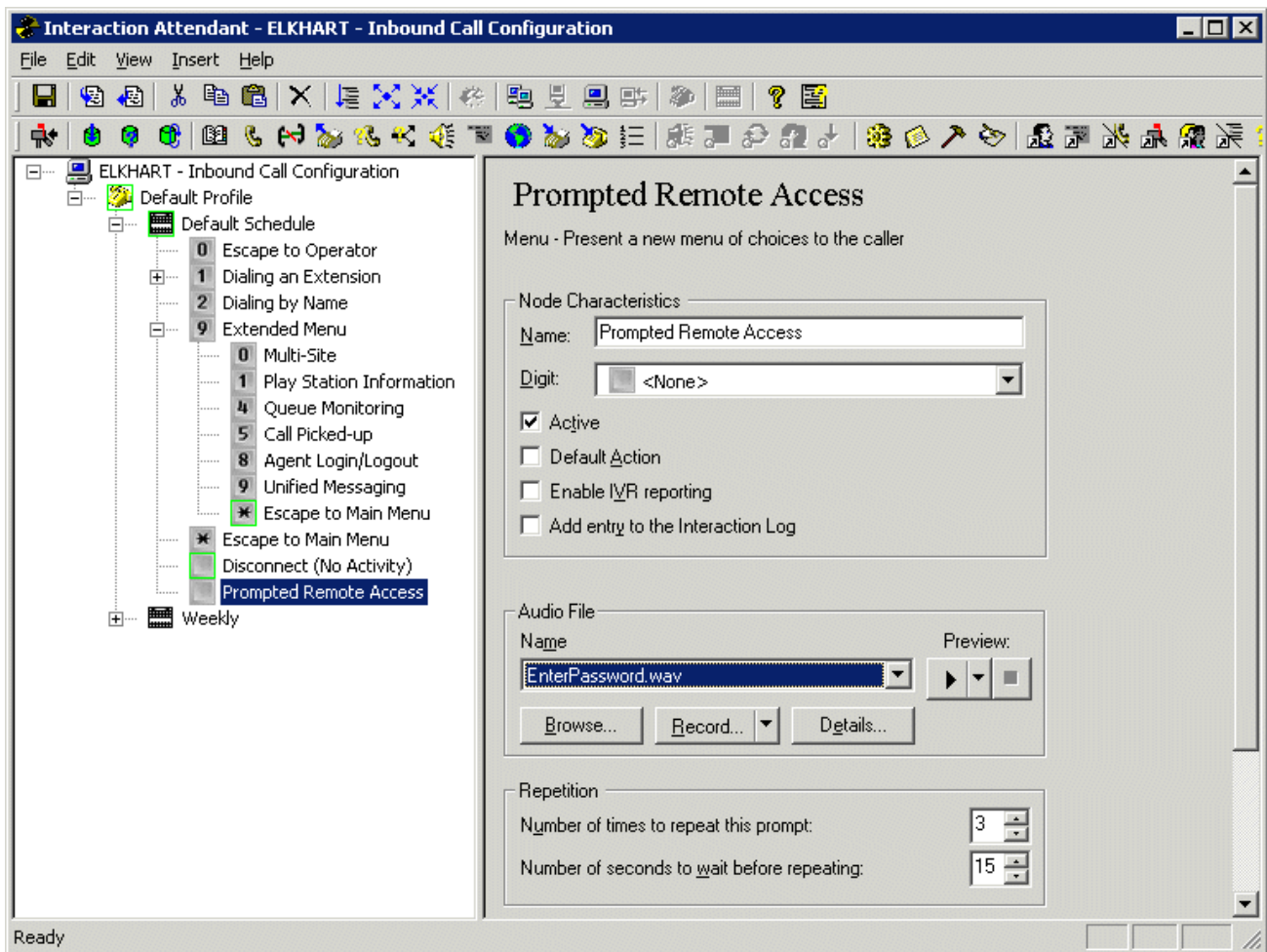
Enable Voicemail Password Prompts

The default Interaction Attendant menu does not prompt users for voice mail passwords. You can set up the system to prompt for passwords. There is one drawback: the audio prompt cannot be interrupted and users must wait until the prompt finishes before entering their security code.

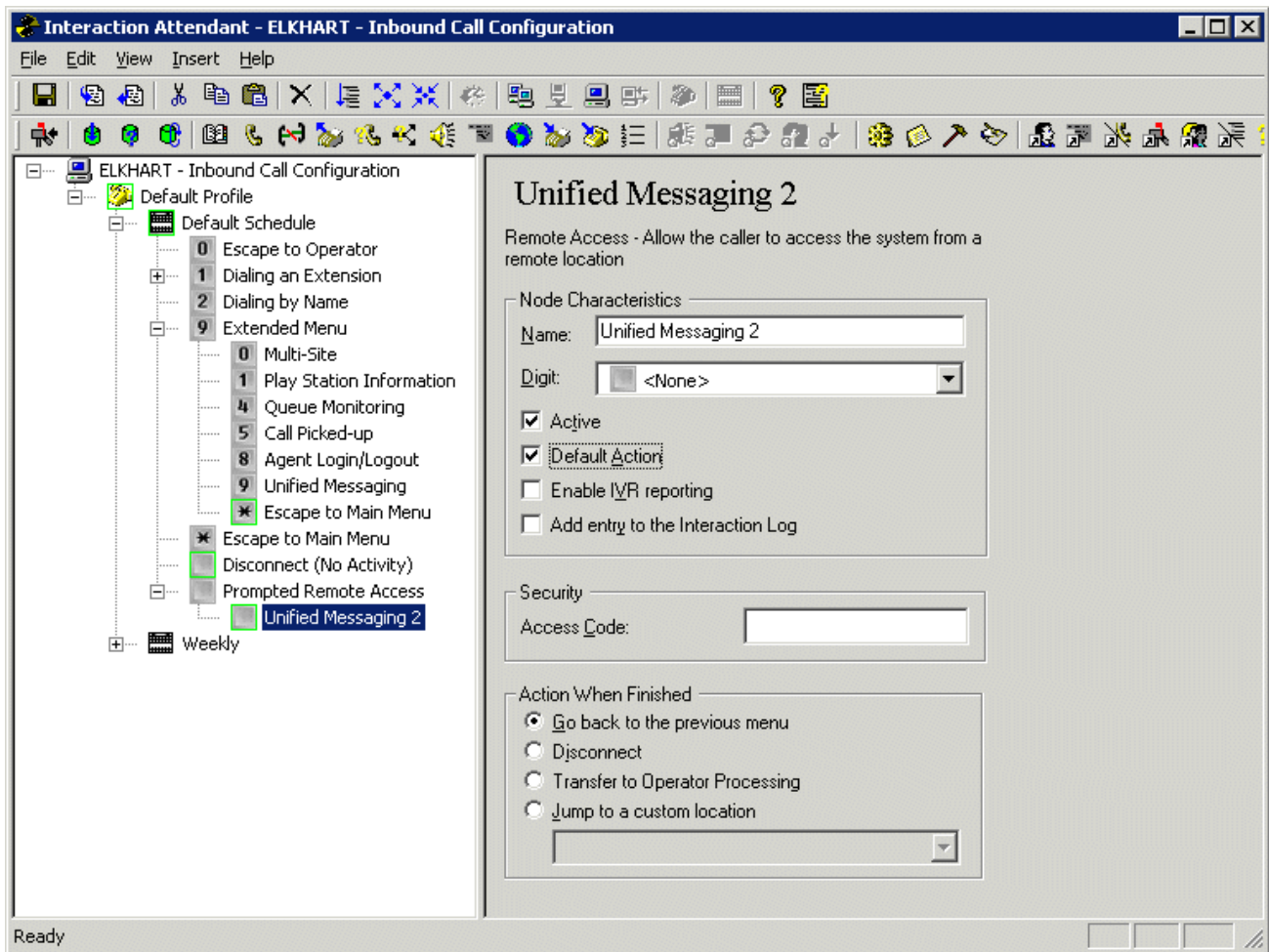
To play an audio prompt for password:

In Interaction Attendant, complete the following tasks:

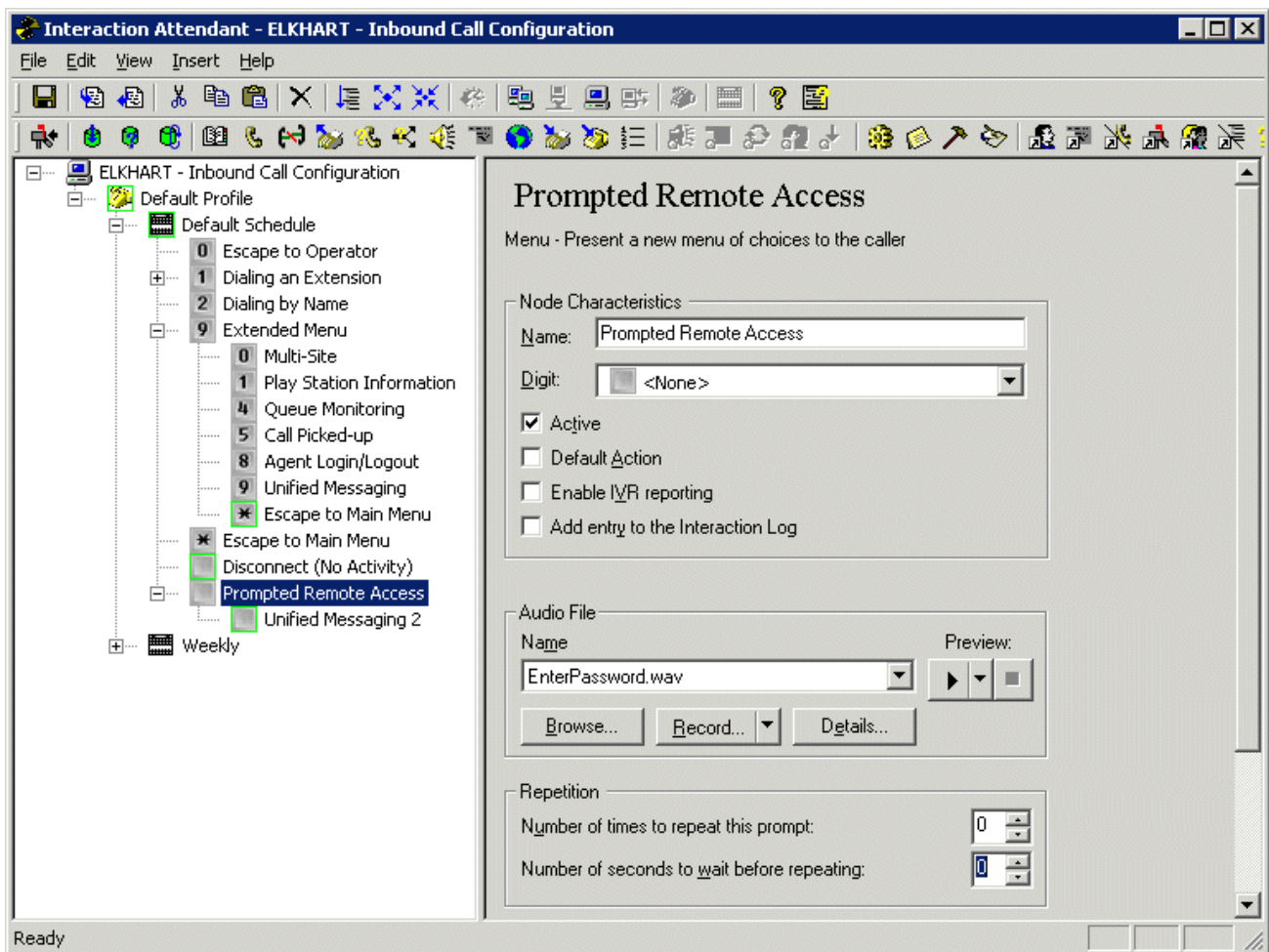
- Select the Default Schedule node. Insert a new menu node by selecting the **Insert** menu, then selecting **New Operation**, then **Play a Menu**. A new menu node appears.



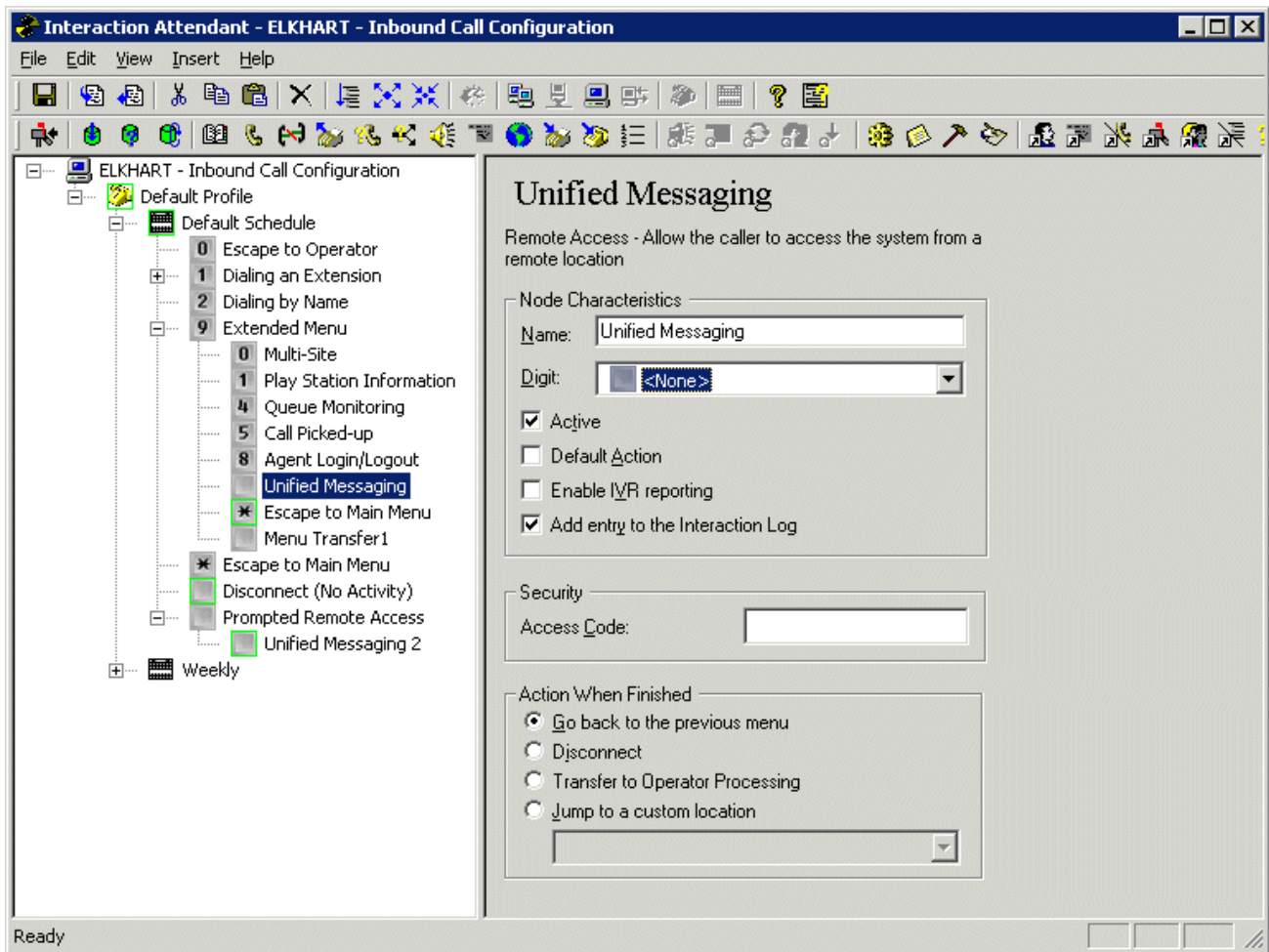
- Interaction Attendant Prompted Remote Access node.
- Rename the new menu node to **Prompted Remote Access**.
- In the Audio File section of the Prompted Remote Access node, in the **Name** field, select the pre-recorded .wav file that prompts a user to enter an extension and password.
- **Note:** This file is not supplied with Interaction Center. See the Interaction Attendant help for recording a prompt.
- Right-click on the Prompted Remote Access node. From the **Insert** menu, select **New Operation**, then **Remote Access**. A Remote Access node is inserted below the Prompted Remote Access node.
- Rename this new Remote Access node to **Unified Messaging 2**.
- In the Unified Messaging 2 node, select the **Default Action** check box.



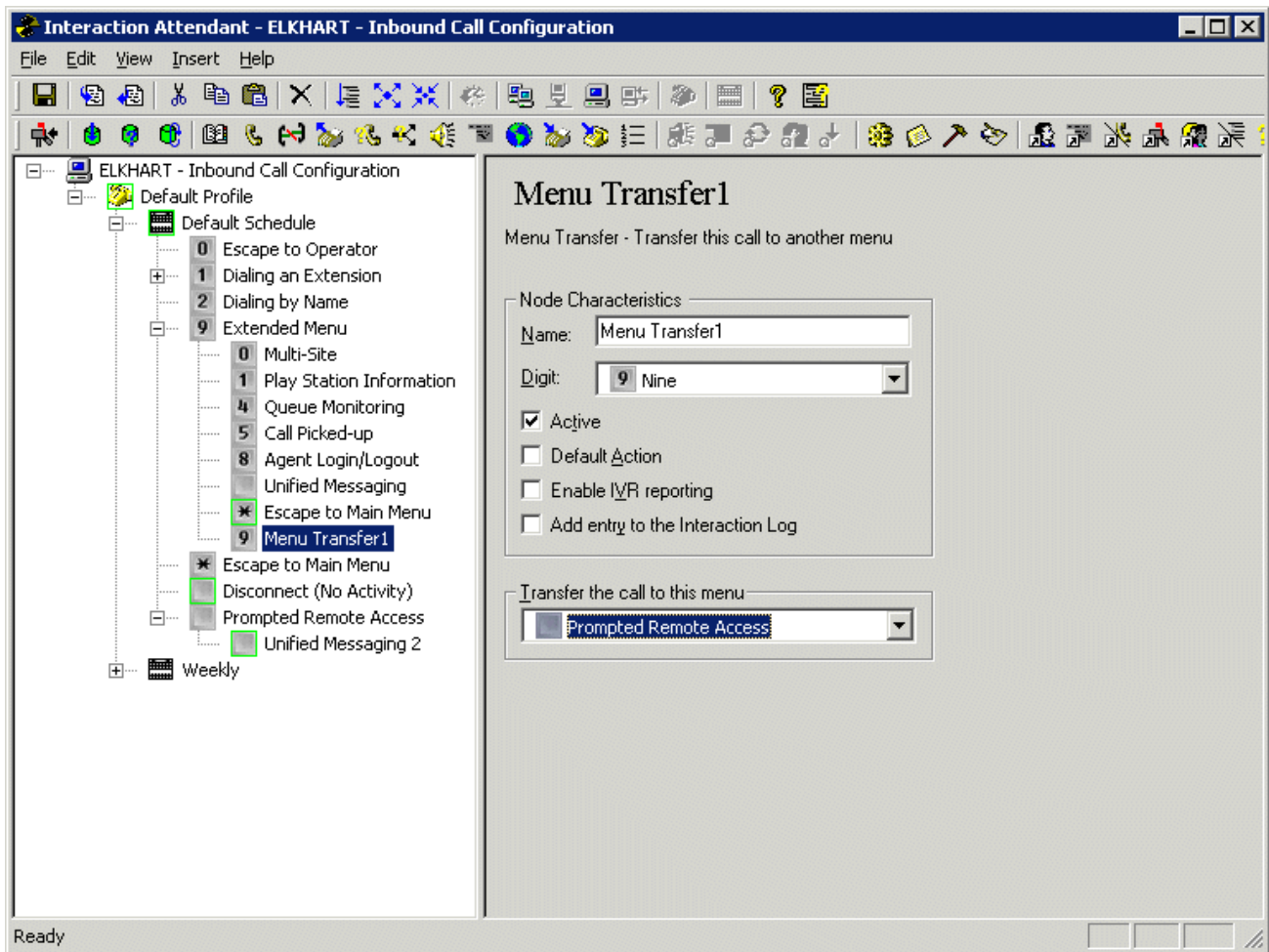
- Interaction Attendant Unified Messaging 2 node Default Action check box
- In the Prompted Remote Access node, set **Number of times to repeat this prompt** and **Number of seconds to wait before repeating** to 0.



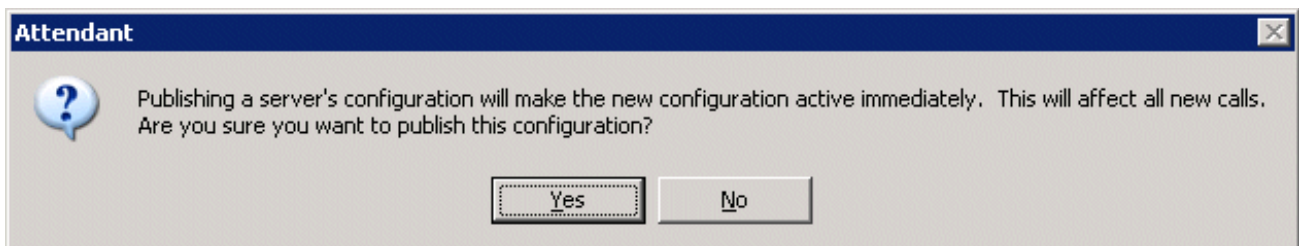
- Interaction Attendant Prompted Remote Access node Repetition options.
- Select the Extended Menu node, right-click and select **Insert > New Operation > Transfer to a Different Menu**. Menu Transfer 1 is inserted in the Extended Menu.
- Select the original Unified Messaging node and set **Digit** to **<None>**.



- Interaction Attendant original Unified Messaging node Digit setting
- Select the Menu Transfer 1 node and set **Digit** to **Nine**. Set **Transfer the call to this menu** to **Prompted Remote Access**.



- Interaction Attendant Menu Transfer 1 node Digit setting
- From the **File** menu, select **Publish**.



- In the Attendant dialog box, select **Yes**.

A status bar appears at the bottom of the Interaction Window until the publishing process finishes. A published Attendant profile completes the process of enabling voicemail password prompts.



Entry name

Type a descriptive name for the client configuration template.

Related topics

[Add a client configuration template](#)

[Overview of client configuration templates](#)

Estimated Call Time Interval

The ACD Statistics (Call or Queue) tools in a handler that provide callers with estimated wait time feedback uses this number of minutes in its wait time calculation. This is a rolling interval, which means the interval is the number of minutes prior to each use of the estimated wait time function as it is invoked on the CIC server. The ACD Statistics tools calculate the estimated wait time for a caller in a queue by taking the average time all callers waited in the queue during the current interval (for example, the previous 30 minutes from the time the ACD Statistics tool in a handler was invoked). The default setting for the interval is 30 minutes.

Exchanges

CIC no longer includes the Exchange configuration. It remains here for backward compatibility and to preserve any exchange lists users may have created. Dial plan configuration, which you can customize in the [Dial Plan](#) property page, replaces the Exchange functionality.

Local exchanges in the North American Numbering Plan (NANP) are three digit numbers in the range of 200 to 999. You may still want to contact your local telephone service provider to request a complete listing of local exchanges, and possibly a list of exchanges within the area code that are long distance charges from your site. This information can be useful when designing the dial plan entries that identify local calls.

Exchange Entry Name

Note: Starting with version 1.3, CIC no longer uses the Exchange configuration. It remains here for backward compatibility and to preserve any exchange lists users may have created. The [DID/DNIS Configuration property page](#) replaces this functionality.



Add fax support

To configure fax resources on a CIC server, add a new station and then select the appropriate type of fax station.

Interaction Desktop Client and Interaction Connect support faxes.

To add a fax station

1. In Interaction Administrator, under **Production**, select the **Stations** icon.
2. Press the **Insert** key, and then click **OK**. The Station wizard appears.
3. Follow the Station wizard prompts and enter the appropriate fax configuration data. See the help on each dialog box for details.

The Interaction Fax Viewer client application displays and sends faxes using the default properties in the Fax Configuration dialog boxes. Interaction Fax Viewer users can override these default values for the fax header, cover page address information, and all send options.

Related topics

[Fax Appearance](#)



Fax Appearance

Interaction Fax Viewer allows a user to control the appearance of each fax. If a user does not change the cover page field entries, header, or station ID in Interaction Fax Viewer, the fax uses the values entered on this page as the default text. Except for Station ID, any of the fields may be left blank.

Header

Type the text to appear in the top ¼ to ½ inch (0.635 to 1.27 cm) margin on each page, the area called the page header. The length of the text is limited to 20 characters. If this field is left blank, no text will appear at the top of each page.

Station ID

Type the sending fax phone number. This field is required since all fax transmissions must include the sending fax station's line number or other unique identification. This number is displayed on the receiving fax station's display window and fax log. Typically, it is the same number as the From Fax field.

From Name

Type the default name of the person sending the fax.

From Company

Type the default name of the company sending the fax.

From Fax

Type the default phone number for the sending fax device.

From Voice

Type the default voice phone number where the fax recipient should call to reach the person sending the fax.

Cover Page

Select the cover page (.I3C file) to use as the default cover page sent as the first page of each fax. If values are not specified by the sender in Interaction Fax Viewer, the values specified in the previous four fields (that is, From Name, From Company, From Fax, and From Voice) are used in the corresponding fields on the cover page.

Cover pages are stored in the same directory as the Interaction Fax Cover Page Editor (that is, the \bin directory under your IC root directory). Use the Interaction Fax Cover Page Editor (IFaxCovrA.exe) to create or modify cover pages.



Fax Receive Options

The values on this page control the fax server's behavior when an incoming fax is detected or received.

Timeout

Type the number of seconds the Interaction Fax Server should wait before reporting to a handler that all fax lines are busy when another incoming fax attempts to connect. The handler can then return a busy signal or attempt a different response.



Fax Send Options

The default send options of a fax, sent by the Interaction Fax Viewer, are controlled by the following fields:

Note: These fields and values appear in the Interaction Fax Viewer's Send Fax dialog box, on the Options page, where users can specify different values, if necessary.

Fax Speed

Select the fax transmission speed according to the fax modem capacity of the recipients. By default, the fax server uses the fastest (Best) transmission speed available on the fax modems. If necessary, you can specify another transmission speed.

Num. Retries

Type zero (0) or a positive whole number indicating how many times the server should try to send the fax if it fails to send it on the first attempt (for example, the line is busy or down).

No Answer Timeout

Type the number of seconds CIC should use to determine no answer when a dialed fax number rings but does not connect. If the dialed number does not answer within this amount of time, CIC will terminate the attempted call. The default value is 30 seconds, which represents approximately five rings (in North America).

Retry Delay (seconds)

Type zero (0) or a positive whole number indicating how many seconds the server should wait between the end of a fax failure and the next time it tries to send. The default value is 60 seconds.

Fax Group

Select the name of a default fax group for everyone to use, or select the asterisk (*), which means select any fax group. Fax group names are created in the [Fax Group Configuration](#) property page of Interaction Administrator.

Allow Faxes to be Sent During Peak Hours

Select this check box to allow faxes to be sent during peak hours (as defined in **Peak Hours**).

Peak Hours

Select peak hours by setting the **Begin** and **End** times in 24 hour (XX:XX) format. For example, begin time may be "12:00", and end time may be "05:59".



Fax Group Configuration

A fax group is a named group of fax resources.

Description

Type a sentence that describes the purpose of the fax group.

Available Fax Devices

Fax devices in this list are registered on the server but are not members of the current fax group. To add a fax device to this fax group and move it to the Currently Selected Fax Devices list:

- Double-click on the fax device name, or.
- Select a device name and click Add.

Currently Selected Fax Devices

Fax devices in this list are members of the current fax group. To remove a fax device from the current fax group, and move it back to the Available Fax Devices list:

- Double-click on the fax device name, or
- Select a device name and click Remove

Exporting Configuration Data

You should use Interaction Migrator to when exporting configuration data. Interaction Migrator is a versatile, release-independent utility that exports and imports CIC configuration data and custom handlers. Its uses include: 1) migrating CIC configuration data from one server to another as part of an update installation, and 2) recovery and version control.

For information on how to install and use Interaction Migrator, see *Interaction Migrator* in the **Technical Reference Documents** section of the PureConnect Documentation Library. For more information on updating, see *Interactive Update* in the **Technical Reference Documents** section of the PureConnect Documentation Library.

Filter

Click the filter button to display filters above each column in the display list. Enter the filter criteria to display only items matching the criteria. For example, you might want to display users with the user name beginning with "N". Enter "N" in the filter column for User Name. Only users with the name beginning with "N" are displayed in the list. Shortcut key: <F3>



Delete Handler

Delete this handler entry.

Warning

Be careful when removing handlers or the system might not work.



Mailboxes Selection

During CIC installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a user or workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox
- Interaction Message Store
- IMAP / SMTP
- Search for a mailbox in the following directories:

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store (formerly Voicemail Only or FBMC), LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes.

No mailbox

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a Display Name, then click **Assign Address** to generate the Interaction Message Store address for that Display Name.

Note: Special characters cannot be used in the name.

IMAP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox in the following directories:

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox in the following directories:** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX: "; an SMTP email address begins with "SMTP: "; a Notes email addresses begins with "Notes: "; and a GroupWise email address begins with "NGW: ".

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

- **Testing Directory Entry:** Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.
- **Testing Message Delivery:** Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.
- **Testing Message Retrieval:** Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)

Import Certificate

Identify the location of the Server Group certificate and private key you wish to use for this CIC server environment.

Multiple CIC server Environments

CIC servers in multiple CIC server environments require identical Server Group certificate and private keys to successfully connect to remote subsystems. Completing this dialog is part of the procedure for securely copying the Server Group certificate and private key from an existing CIC server to this CIC server using a USB key (or other temporary storage media that you have full control over). Instructions for this procedure are available in IC Setup Assistant help and in the *PureConnect Security Features Technical Reference* in the Technical Reference Documents section of the PureConnect Documentation Library.

Third Party Certificate Authority

If your company has already established its own root certificate authority and manages its own certificates, you can choose to use your own Server Group certificate and private key instead of the default CIC-generated Server Group certificate and private key. Follow the same procedure for securely copying the Server Group certificate and private key from a designated existing CIC server to this CIC server using a USB key as described in IC Setup Assistant help and Security Concepts in Interaction Center. In the procedure, you will copy your own Server Group certificate and private key to this CIC server.

If you are using your own Server Group certificate and private key, you must also specify the Type and Format information, and whether the private key is password protected.

Certificate Path

Browse to the directory location of the Server Group certificate (ServerGroupCertificate.cer) you wish to use for this CIC server environment.

If you are following the procedure to securely copy the Server Group certificate and private key files from a designated existing CIC server to this CIC server using a USB key, the directory location will be on the USB key, for example:

F:\ServerGroupCertificate.cer.

Certificate Type

Note: This field is applicable if you are using your own Server Group certificate and private key. Otherwise, use the default selection.

Select one of the following CIC-supported certificate file format storage types:

- X.509: Standard specification for public key certificates, in either DER or PEM format.
- PKCS 7: Contains one or more certificates in either DER or PEM format.
- PKCS 12: Defines a file format to store keys and certificates in either DER or PEM format.

Certificate Format

Note: This field is applicable if you are using your own Server Group certificate and private key. Otherwise, use the default selection.

Select one of the following CIC-supported certificate file encoding formats:

- DER – Binary encoding
- PEM – Base64 encoding

Private Key Path

Browse to the directory location of the Server Group private key (ServerGroupPrivateKey.bin) you wish to use for this CIC server environment.

If you are following the procedure to securely copy the Server Group certificate and private key files from a designated existing CIC server to this CIC server using a USB key, the directory location will be on the USB key, for example:

F:\ServerGroupPrivateKey.bin.

Private Key Format

Note: This field is applicable if you are using your own Server Group certificate and private key. Otherwise, use the default selection.

Select one of the following CIC-supported key file encoding formats:

- DER – Binary encoding
- PEM – Base64 encoding

My private key is password protected

Note: This field is applicable if you are using your own Server Group certificate and private key. Otherwise, use the default selection.

Select this check box if a password is attached to the Server Group private key file.

Password

Enter the server group private key password.

Import users

You can import users from the following:

- **Mail server distribution lists** - Use this option to Search for All Users or Search only for users in a distribution list
- **Windows** - Use this option to query for existing Windows users in your current domain. If not in a domain, these will be the users local to the machine.
- **A CSV user list** - Use this option to select the CSV user list that contains your CIC users and their attributes. For more information on CSV User Lists, see *CSV List Import Technical Reference* in the PureConnect Documentation Library.



Interaction Message Store Account

This dialog appears if you are using Interaction Message Store (formerly Voicemail Only or FBMC) for voicemail. It is displayed when you are selecting an Interaction Message Store user to receive voicemail for a Workgroup or for System messages.

Interaction Message Store Account

In the Interaction Message Store Account box, select the User you want to receive the voicemails for this Workgroup or for the System.

Note: If the Display Name is available, those names are listed in this box. Otherwise, the UserID is listed. Valid user name and address use only Alpha-numerical characters.

Current Selection

The User currently selected to receive messages, for this Workgroup or for the System, is displayed in this box.



Mailboxes Selection

During CIC installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a user or workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox is required
- Interaction Message Store
- IMAP / SMTP
- Search for a mailbox based on the following available directories

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store (formerly Voicemail Only or FBM), LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes.

No mail box is required

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a Display Name, then click **Assign Address** to generate the Interaction Message Store address for that Display Name.

Note: Special characters cannot be used in the name.

IMAP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX:"; an SMTP email address begins with "SMTP:."; a Notes email addresses begins with "Notes:."; and a GroupWise email address begins with "NGW:."

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

- **Testing Directory Entry:** Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.
- **Testing Message Delivery:** Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.
- **Testing Message Retrieval:** Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)



Information for a station template

Use this tab to enter the station template description.

Permanent

This check box designates if this template is static or permanent for a station based on the template. If this check box is selected therefore permanent, then the description cannot be changed at the individual station level.

Description

Enter a meaningful description of the station template.

Related topics

[Overview of station templates](#)

Delete Initialization Function

Delete this initialization function.

Warning

Do not remove the default CIC initialization functions or the system might not work.



Input conversion name

Enter a descriptive name to appear in the **Input Conversion Object Name** list. The name can be any text or numbers you want, but it is often helpful to use the numbers or the number pattern this name represents.

Remember to adjust the order of the name once it appears in the list; CIC looks for a match with the dialed input starting at the top of this list.

Related topics

[Configure an old dial plan](#)



Interaction Conference

These options can be set at the Default User, User, Role or Workgroup level. Use this page to configure Interaction Conference rights.

Conference Web Application User

Select this option to allow the user to create conferences, and modify conferences he or she has created.

Master Conference Administrator

Select this option to allow the user to create conferences and modify *all* conferences.

Note: See **Interaction Conference** and **Interaction Conference Rooms** [categories](#) in Admin Access for administrative rights. For more information about Interaction Conference Features, see the *Interaction Conference Administration help* and the *Interaction Conference User help* in the **PureConnect Documentation Library**.



Interaction Dialer

These options can be set at the Default User, User, Role or Workgroup level. Use this page to configure Interaction Conference rights.

Dialer Call List

Select this option to allow the user access to the call lists page in Interaction Administrator Web Edition for Dialer.

Dialer Script

Select this option to allow the user access to the scripts page in Interaction Administrator Web Edition for Dialer.



Interaction File Configuration

Type the complete (UNC) path and file name for a file that an agent can send to a Web visitor. This path must be relative for all client workstations that might access the file.

Note: The file must be in ASCII format.



Interaction File Name

Enter a descriptive name that represents a text file that an agent can send to a Web visitor during a Web interaction. For example, if visitors frequently ask an agent for a seminar price list during Web interactions, you might use the name "Seminar Price List" so agents can easily recognize the file.



Interaction Message Name

Enter a name that represents the content of the boilerplate text or document that an agent can select from the Responses tab in a Chat dialog. These names also appear under the Interaction Message Category on the Access Control property page for Users, Workgroups, and the Default User.

To change an Interaction message name:

1. Select the name on the right side of screen
2. Press **Delete**
3. Press **Insert** to create a new Interaction message entry.



Day Classification Entry Name

Enter a unique name for the new day classification.

Erlang C

This formula is considered the "standard" by which many contact centers operate. Developed by Danish mathematician A.K. Erlang in 1917 who studied delays in telephone traffic in central switching stations. It has become accepted by many industries as the first step in accurately predicting the number of servers required for many types of applications. "Server" in this case is someone or something that serves a client that arrives at random intervals, but the probability of arrival during a given interval is known. A "server" can be an agent in a contact center, an automated tollbooth on a bridge, a teller or ATM at a bank, etc. It returns the probability of a client waiting for an available resource.

Filters File Specifications

When creating a filter, give it a name, flag it if it is enabled, and note if the matching schedules should be kept (exclude="false" - default) or discarded (exclude="true").

Expressions **must** be in infix notation. The expression begin and end tags can be thought of as parentheses and can be used to override normal arithmetic/Boolean precedence.

The XML file must be in proper format and <, >, &, ', and " must be escaped with the five pre-existing entity references as follows:

```
< -> &lt;
> -> &gt;
& -> &amp;
' -> &apos;
" -> &quot;
```

Operators in order of precedence (from highest to lowest*):

1. <operator_begin_expression /> - left parenthesis
2. <operator_end_expression /> - right parenthesis
3. <operator_plus /> - addition
4. <operator_minus /> - subtraction
5. <operator_less_than /> - less than comparison
6. <operator_less_than_or_equal_to /> - less than or equal to comparison
7. <operator_greater_than /> - greater than comparison
8. <operator_greater_than_or_equal_to /> - greater than or equal to comparison
9. <operator_equal_to /> - equal to comparison
10. <operator_not_equal_to /> - not equal to comparison
11. <operator_and /> - logical AND
12. <operator_or /> - logical OR

Notes:

- Missing precedence order numbers represent place holders for precedence for currently non-supported operators.
- For string comparisons, only the equal to and not equal to operators are valid operators and all string comparisons are case-insensitive.
- Operands (with example values and types):

<operand_integer value="480" /> - integer; supported range is from 0 to 2147483647

<operand_literal value="john.doe" /> - literal string value

<operand_total_paid_time /> - total paid time across all scheduled activities

<operand_total_activity_time_type value="break" /> - total time (paid and unpaid) in a given activity specified by type

<operand_total_activity_time_id value="00000000000000000001" /> - total time (paid and unpaid) in a given activity specified by ID

<operand_activity_count_type value="break" /> - total count of a given activity specified by type; adjacent activities of the same type will be counted as one

<operand_activity_count_id value="00000000000000000001" /> - total count of a given activity specified by ID; adjacent activities of the same type will be counted separately

<operand_start_activity_type /> - start activity type

<operand_start_activity_id /> - start activity ID

<operand_end_activity_type /> - end activity type

<operand_end_activity_id /> - end activity ID

<operand_scheduling_unit_name /> - scheduling unit name

<operand_scheduling_unit_id /> - scheduling unit ID

<operand_shift_definition_name /> - shift definition name

<operand_shift_definition_id /> - shift definition ID

<operand_agent_name /> - agent name

<operand_agent_id /> - agent ID

- Supported activity types:

"break"

"meal"

"meeting"

"scheduled acd"

"scheduled non-acd"

"scheduled time off"

"training"

"unavailable"

"unscheduled"

"vacation"

Filter File Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<filters>
  <daily_filter name="meal filter" enabled="true" exclude="false">
    <operator_begin_expression />
    <operand_total_paid_time />
    <operator_less_than />
    <operand_integer value="330" />
    <operator_and />
    <operand_activity_count_type value="meal" />
    <operator_equal_to />
    <operand_integer value="0" />
    <operator_or />
    <operand_total_paid_time />
    <operator_greater_than_or_equal_to />
    <operand_integer value="330" />
  </daily_filter>
</filters>
```

```

<operator_and />
<operand_activity_count_type value="meal" />
<operator_equal_to />
<operand_integer value="1" />
<operator_end_expression />
<operator_and />
<operand_shift_definition_name />
<operator_equal_to />
<operand_literal value="day shift" />
</daily_filter>
</filters>

```

Additional Notes:

- If more than one filter is specified, it is advantageous, in terms of schedule generation times, to specify filters from highest to lowest order of impact (e.g., filters that you expect to filter out the majority of schedules should be at the top of the filter file).
- All times should be in minutes.
- When using the name version of the operand, as opposed to the ID version, non-unique values may cause filters to be applied where they are unexpected. Therefore, either the named objects have to be unique or they have to be uniquely scoped (e.g., by specifying a scheduling unit for the filter, the shift definition name may (or may not) be 'made' unique). The ID version of the operand can be used when it is not possible to make the name of the object unique.
- The filters engine only works on the set of possible schedules (e.g., if you don't see a particular schedule you want it may have been filtered out, or it may not have even been a valid possible schedule to begin with based on the given the shift constraints defined), and it does not modify schedules (e.g., it doesn't remove or add activities).
- Errors and/or warnings regarding loading, parsing, or utilizing filters are traced to the Interaction Administrator trace log under the PiOptimizer and ScheduleOptimizer topics. Only an initial load failure would be reported to the user via a message box. All other processing errors will only be logged to the Interaction Administrator trace log. The Interaction Administrator trace log should be the first place to start to troubleshoot any Interaction Optimizer issue including any involving the filters engine.
- By default, Optimizer tries to keep the schedule(s) if the exclude attribute is either not specified or invalid, etc.. For example, Optimizer assumes a filter is not enabled if the enabled attribute is either not specified or invalid. In other words, Optimizer assumes the exclude flag is false (meaning keep the schedule(s)).

Route Group

Every way an ACD interaction can route within a scheduling unit defines a different route group. Any given ACD can route interactions based on the media type of the interaction, and the set of skills needed to handle the interaction. Therefore, within any workgroup ACD queue, there will be one route group for every combination of media type and skill set. Within a scheduling unit, there can be multiple Workgroups. This means that the total number of possible route groups for a scheduling unit is (workgroups x media types x skill sets).

Interaction Volume data is captured and forecast by route group, therefore this data can be viewed by workgroup, by media type, and by skill set.



Scheduling Unit Entry Name

Enter a unique name for the new scheduling unit.

Service Level

Service level can be defined as a percentage of interactions answered within a number of seconds. For example, a service level may be 80/20, meaning 80% of interactions are answered in 20 seconds. There are many factors involved in selecting the desired service level, and service levels differ across industries. For more information on service level, see the *Interaction Optimizer Administration and Scheduling Guide* in the **Technical Reference Documents** section in the PureConnect Documentation Library on the CIC server.

Shift Activities vs. Agent Activities

Interaction Optimizer schedules both shift activities and agent activities if configured. If the same activity is configured for the agent and for the shift, and the **Replaces Shift Activity of Same Type** check box is selected in agent activity configuration, then the agent activity is scheduled and the shift activity will not be scheduled. For example, if a lunch activity is added to both the agent activity configuration and the shift activity configuration and this option is selected, the scheduling engine will not schedule two lunches for the agent. If this option is not selected, two lunches would be scheduled for the agent.

Shift Constraints vs. Agent Constraints

The shift constraints are the constraints that most (or all) of the agents assigned to a particular shift definition are scheduled by. The [agent constraints](#) are considered as the "exception" to the shift constraints. Many agents are assigned to one set of shift constraints, whereas agent constraints are assigned to one agent (specific to an agent). Agent constraints settings allow individual agents to have exceptions to the shift constraints as needed.

The scheduling engine uses the most constrained value, meaning the it uses the maximum of the minimum settings, and the minimum of the maximum settings.

Here are some examples:

Daily Agent Availability Constraints	Daily Shift Constraints	The Most Constrained Value Used
Minimum Paid Time = 4 hours	Minimum Paid Time = 3 hours	4 hours
Maximum Paid Time = 10 hours	Maximum Paid Time = 9 hours	9 hours
Earliest Shift Start Time = 9:00AM	Earliest Shift Start Time = 8:00AM	9:00AM
Latest Shift Stop Time = 7:00PM	Latest Shift Stop Time = 6:00PM	6:00PM

Staffing Groups

Staffing groups are created by the ACD simulation engine during the scheduling process. It is a way of organizing agents by their workgroup membership(s), skill(s) and media type(s). During the simulation process, agents are separated into staffing groups. As each interaction is handled by the simulated ACD, it is assigned to a staffing group based on the number of agents, as a percentage of total agents, in the group. If a staffing group with the particular combination of workgroup, skill and media type does not exist, the simulator will display an error message indicating which groups do not exist and the simulator will halt execution. If staffing groups are adequate to cover the types of calls which will enter ACD, agents will increase in the headcount forecast as the number of arriving calls increase, to the point that the configured service level cannot be met.

Test Daily Shift Constraints

Use this page to test the daily shift constraints that you just entered in Daily Shift Constraints.

This feature allows you to catch constraint issues that could possibly eliminate some, many or all schedules. The basic test (being less specific with the constraint settings) can confirm that at a minimum a schedule can be possible. Entering or specifying more constraints, allows you test more specific scenarios. You may also apply a [filter file](#) to the test.

For example, you might want to test to see if a 1 hour meeting on Saturday morning at 9:00 AM will result in any valid schedules. Enter the constraints in the **Test Daily Shift Constraints** dialog box, and click **Validate**.

Day:

Desired shift start time:

Desired activity start time(s)

Activity Type	Length	Paid	Contiguous	Start Time
Meeting	01:00	☐	☐	9:00 AM

Agent:

Filters file (optional):

The possible schedule results are returned:

Schedule Optimizer Information

- Total possible schedules: 22
- Eliminated schedules: 11
- Remaining potential schedules: 11
- Schedule elimination reasons:
 - Required activity skipped: 9
 - Maximum contiguous work time exceeded: 2

Based on this information, you know if you will have possible schedules, or if you will need to change the activity scheduling. By testing the constraints, it gives you an idea of schedule possibilities (or the lack of any possible schedules) based on the constraints you have entered.

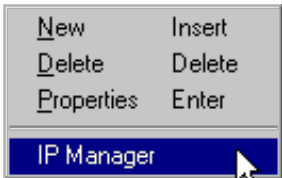
IP Manager - Current Activity

The IP Manager dialog can be useful when trying to identify potential problems with Handlers running on the CIC server. The **Current Activity** page shows you specific information about Handlers that are currently running on your system.

The **IP Manager** dialog is available when you select the Interaction Processor container or the Handlers container in the tree view (left pane).

To display the IP Manager dialogs:

- 1. Right-click in the data view (right pane)
- 2. In the pop-up menu click **IP Manager**.



The list on the Current Activity page displays:

Handler Name

This is the name of the handlers currently running on the CIC server. This list is very dynamic and is likely to change when you click the Refresh button.

Class

Handlers can be categorized as: **Notification**, **Timer**, **Subroutine**, **Web**, and **SystemInitialization** handlers. This column indicates the category of the named handler.

Identifier

This is the handler instance identifier.

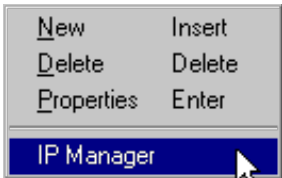
IP Manager - History

The IP Manager dialog can be useful when trying to identify potential problems with Handlers running on the CIC server. The History page can tell you which Handlers are used the most and other information about Handler usage over time.

Note: The IP Manager dialog is available when you select the Interaction Processor container or the Handlers container in the tree view (left pane).

To display the IP Manager dialogs:

- 1. right-click in the data view (right pane)
- 2. In the pop-up menu click **IP Manager**.



The following information is displayed under IP:

Notifier

Displays the name of the Notifier Server IP is running on.

Elapsed Time

This is the number hours:minutes:seconds a handler has been running.

Start Time

This is the time the handler started running.

Current Handlers

Displays the number of Handlers currently running.

Handlers Run

Displays the total number of Handlers run since the current session started.

The list displays the following information:

Handler Name

The names of the Handlers running in the current session (since CIC was started).

Class

Handlers can be categorized as: regular, subroutine, monitor, and timer handlers. This column indicates the category of the named handler.

Identifier

This is the handler object ID for the named handler.

Times Run

This is the number of times the named handler has run since the Start Time at the top of the History page.



Enter Security Specification Name

Type a name for the new IPA security specification, and then click **OK**. The **Security Specifications Configuration** dialog will then open.

Entry Name - Archives

Type the archive name then click **OK**.

Entry Name - Categories

Type the category name then click **OK**.

Entry Name - Questionnaire

Type the questionnaire name then click **OK**.

Entry Name - Recording Selection

Type the recording selection name then click **OK**.

Entry Name - Rules

Type the rule name then click **OK**.

Entry Name - Address

Type a Tracker address name and click **OK**.

Entry Name - Attribute

Type an attribute name and click **OK**.

Entry Name - iAddress

Type an iAddress name and click **OK**.

Entry Name - iAddress Subtype

Type an iAddress Subtype name and click **OK**.

Entry Name - Individual

Type a name for the individual and click **OK**.

Entry Name - Organization

Type an organization name and click **OK**.

Entry Name - Titles

Type a title name and click **OK**.

Language Entry

Enter the name of a language supported on this CIC system (in addition to the default language). The string you enter here will be referenced in handlers.

License Agents for the My Quality Results View in Interaction Connect

Starting with the 2018 R3 release, the **My Quality Results** view is available in Interaction Connect. Agents must have the Interaction Quality Monitoring Agent license to access the view.

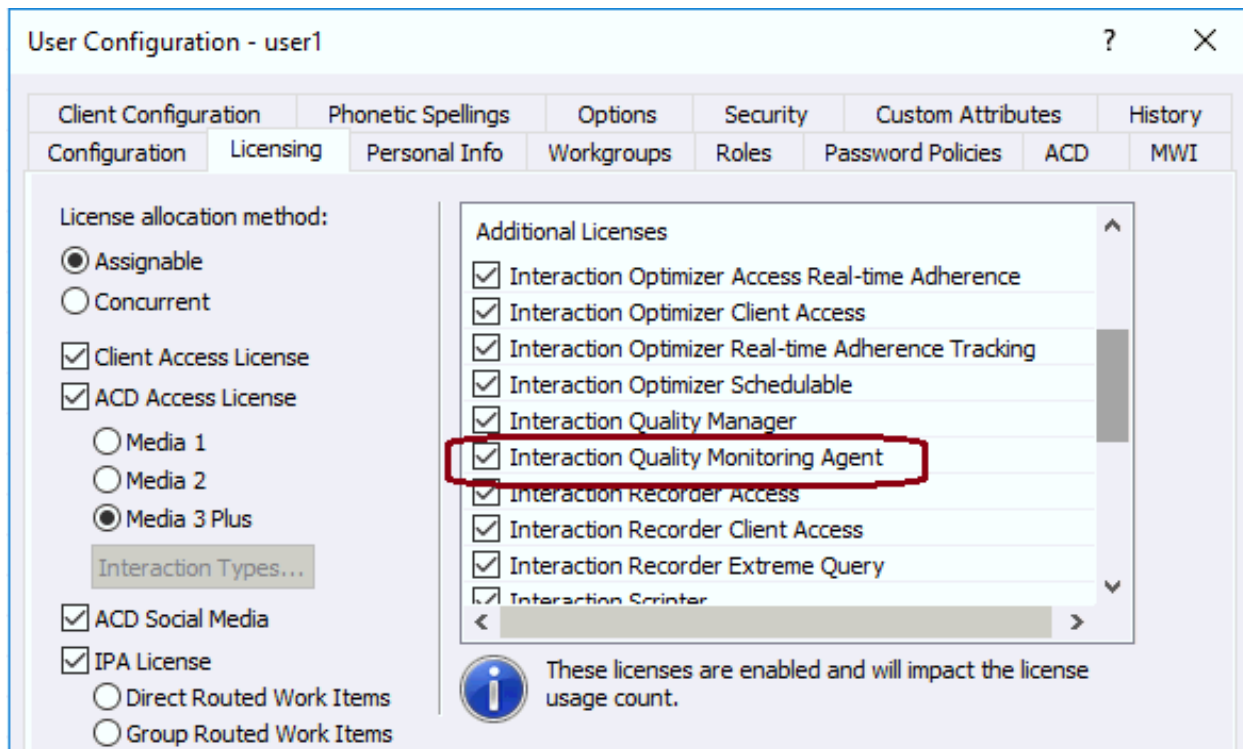
Notes:

- The feature does not require a new part number for the license. It does require a new license key under the CC1, CC2, CC3 line items.
- You need to regenerate a new server license file to add the Interaction Quality Monitoring Agent license, which is required for the My Quality Results view.
- Regenerating the server license does not assign the license to any individual agents. It only makes the new license string available on the server to be assigned to agents.
- Once an agent has the licensed assigned, the view is available to add to their workspace the next time they log in to Interaction Connect.
- See [Interaction Quality Agent Results](#) in the Interaction Connect Help for more details about the features.

You can assign the license to individual agents or to a batch of agents. Use whichever method works best for you to associate the license with agents.

Assign the license to an individual agent

1. In Interaction Administrator, click the **User Configuration** container, select the agent, and then click the **Licensing** tab.
2. Assign the **Interaction Quality Monitoring Agent** license.



Assign the license to a group of agents

In Interaction Administrator, click the **Licenses Allocation** container, and then double-click **Interaction Quality Monitoring Agent**.

Collective

Home Site

Peer Sites

IR_18R5_SQL2 - 2018 R5

Lines

Line Groups

Stations

Managed IP Phones

Registration Groups

SIP Bridges

Audio Sources

Server Parameters

Structured Parameters

Regionalization

Licenses Allocation

People

Default User

Roles

Users

Workgroups

Password Policies

Schedules

Secure Input Forms

Wrap-up

Client Buttons

Client Configuration

Queue Columns

Name	Assignable Allowed	Assignable Configured	Concurrent Allowed	Concurrent Configured	Concu
Client Access	20000	52	20000	0	0
Interaction Analyzer Access	20000	52	20000	0	0
Interaction Client Mobile Edition	20000	52	20000	0	0
Interaction Client Operator Add-On	20000	52	20000	0	0
Interaction Client Outlook Add-In	20000	52	20000	0	0
Interaction Data Extractor	20000	52	20000	0	0
Interaction Dialer Add-On	20000	52	20000	0	0
Interaction Feedback Access					
Interaction Optimizer Access Real-time					
Interaction Optimizer Client Access					
Interaction Optimizer Real-time Adherence					
Interaction Optimizer Schedulable					
Interaction Quality Manager					
Interaction Quality Monitoring Agent					
Interaction Recorder Access					
Interaction Recorder Client Access					
Interaction Recorder Extreme Query					
Interaction Scripter					
Interaction Supervisor iPad Edition					
Interaction Supervisor Plug-In: Historical					
Interaction Supervisor Plug-In: Interactive					
Interaction Supervisor Plug-In: Reporting					
Interaction Supervisor Plug-In: System S					
Interaction Supervisor Plug-In: Workgro					

License Configuration - Interaction Quality Monitoring Agent

Assignable

Concurrent

User Name

admin

operator

user 1

user 10

user 11

user 12

user 13

user 14

user 15

user 16

user 17

Add...

Delete

Station Name

Add...

Delete

Follow the steps in [License Configuration](#) to assign the license to a select group of agents.

License information

Click the License information button to see your current license information.

Line group name

Type a name that represents a group of lines (for example, Sales, Fax, and so on). You can use any combination of letters, numbers, and special characters.

Related topics

[Add a line group](#)



Line name

Type a descriptive name for this line. You can use any number of UTF-8 characters. For example, SIP1234A.

Line names are sorted alphanumerically in the **Lines** subcontainer. Therefore, you can use the line names to help you organize the lines. For example if you use a variety of line types, to help you identify different types of lines, use "TLS" and/or "SRTP" at the start of the line names.

CIC does not use line names in its line selection process. See *Line selection order* for an explanation of criteria CIC uses to select lines for outbound calls.

Note: Any number of UTF8 characters is acceptable within SIP headers, within URIs, and within quoted display names next to URIs.

If there are invalid UTF-8 characters inside quoted strings, they are converted to C-string notation for each character.

Related topics

[Add a SIP line](#)

[Line selection order](#)

Location Name

Enter the name of the physical location.

Locations Affect Dial Plan

Locations are used to restrict or filter access to portions of [dial plan](#) entries. The dial plan can be filtered using locations at two levels of entries:

1. Input Pattern
2. Dial Groups (line groups and dialed numbers)

Considerations

If a dial plan entry does not have <All> as Location Filter access then those specific options (patterns or dial groups) are removed from the dial plan and are not presented as dialing choices on dialing lookup in the describe number tool.

Any input pattern that has the <All> as Location Filter may require special care when defining the Dial Groups for the dial plan entry. For example in a 911 pattern, the default line groups specified should be local to the Location. Using 911 call routing makes sure the correct gateway or line is used for stations at a remote site.

Based on how the gateways are set up, locations filters can be used to route what is normally a long distance call over a SIP gateway, treating the call as a local call, avoiding any toll (toll avoidance).

Loquendo Configuration

Use this page to set Loquendo configuration options.

Enabled

This check box enables the use of this ASR engine. For performance reasons, only ASR engines for which there are ASR servers available should be enabled.

EIM Module DLL

This is the DLL that implements the engine integration component for this ASR engine. This field is populated by the install and should not be modified unless directed by support services.

Managed IP phone template concepts

To simplify the configuration of multiple phones, create templates to reflect different IP phone configurations.

For example:

- The CIC system has Polycom phones (perhaps a variety of Polycom models), SIP Soft Phones, and Interaction SIP Station phones.
- The CIC system has IP phones in a variety of locations.
- The audio stream on certain IP phones will be un-encrypted using RTP, and others will be encrypted using SRTP.

Certain IP phones will have regular station appearances, and others will have shared station appearances.

Related topics

[Configure managed IP phones](#)

[Add a managed IP phone or a managed IP phone template](#)

[Overview of configuration settings for managed IP phones and templates](#)

Managed IP phones and templates advanced options

Click the links below to see detailed explanations of the advanced options.

[AudioCodes and Genesys](#)

[Interaction SIP stations](#)

[Polycom phones](#)

Managed IP phones and templates information

Click the links below to see explanations of the information details.

[AudioCodes and Genesys](#)

[Interaction SIP stations](#)

[Polycom phones](#)

Managed IP phones and templates general settings

Click the links below to see detailed explanations of the general settings.

[AudioCodes and Genesys](#)

[Interaction SIP stations](#)

[Polycom phones](#)



Managed IP phones and templates SIP options

Click the links below to see detailed explanations of the SIP options.

[Polycom](#)

[Interaction SIP Station](#)

[AudioCodes](#)



Managing Handlers

In the [Handlers](#) and [Monitor Handlers](#) pages of the Server Configuration page you can activate and deactivate primary and monitor handlers. All published handlers are listed on these pages. Once you publish a handler using Interaction Designer, the handler appears in the Inactive Handlers list, unless it is already an Actively running handler. CIC begins to use Activated handlers as soon as another event occurs for which the handler is registered. If Interaction Processor is currently running older versions of the handler, those threads finish before the new handler is used. Any threads running on handlers you deactivate continue until the thread is finished.

After installing CIC and publishing all handlers, you must activate the primary handlers on the Handlers page and the monitor handlers on the Monitor Handlers page. The fastest way to do this is:

1. On the Handlers page, select all of the handlers in the Inactive Handlers list (for example, use the Shift key and multi-select the entire list) and add them to the Active Handlers list.
2. Look carefully at each entry in the Active Handlers list and double-click on the handlers that end with or contain the word "monitor". These are the monitor handlers. They should be in the Inactive Handlers list on this page.
3. On the Monitor Handlers page, only the monitor handlers should appear in the Inactive Handlers list. Select all of these handlers and click Add to move them to the Active Handlers list.

Note: You can also manage handlers the same way in Interaction Designer's Manage Handlers notebook, accessible from the Utilities menu.

Primary and Monitor Handlers

Primary handlers are generally handlers that act directly on objects such as calls within the system. Only one primary handler can be activated for a given initiator. For example, you cannot activate two primary handlers that both start with the Incoming Call initiator. Only one handler can act on the incoming call. This prevents two handlers from performing disparate actions on a single object. If you attempt to activate two handlers that start with the same initiator, CIC generates an error message in the event log.

Monitor handlers do not actively manipulate or modify objects in the system. Typically they retrieve call attributes and write that information to a database for reporting purposes, although they are not limited to reporting. CustomCallDisconnectMonitor determines if a call was recorded, and if so, where to send a copy of that recording. Since monitor handlers are not acting on objects, more than one monitor handler can use the same initiator. For example, CallDisconnectMonitor and CustomCallDisconnectMonitor both use the Call Monitor Initiator configured to start when a call disconnects.



Many number pattern collection name

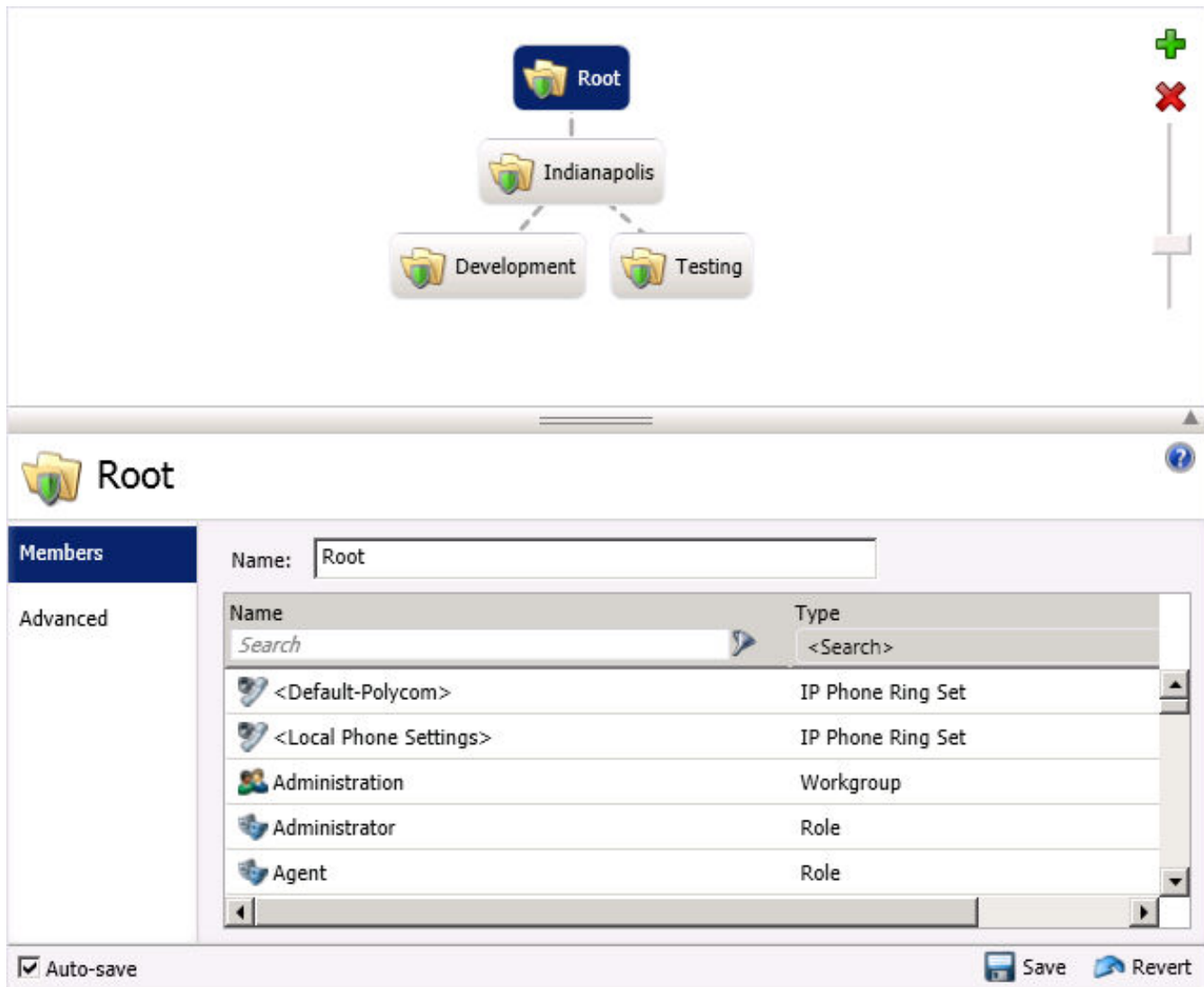
Type a descriptive name.

Related topics

[Configure input conversion objects](#)

Master Details Access Control Groups Page

The Access control Groups page in Interaction Administrator is displayed in a different format than the other configuration pages. Click on the area in the graphic to see an explanation of the page elements.



Master View

This is a list of objects (or items) that have details associated with them. The items are grouped and displayed in a list sorted by a specific attribute they all share.

Details View

The details view displays specific information about the item selected in the master view. The tabs allow for a general grouping of information about the item. The tabs may further group the information in an expander header.

Master View Filter

In some pages, the items displayed in the master view can be filtered to limit the number of items displayed. Use the column headers to search for specific items having the search attribute. The item, like user, role, workgroup, etc., determines the attribute column headings.

Master View Action Buttons

Actions associated with the items can be performed using the buttons displayed to the right of the master view. The buttons include add, copy, paste and delete.

Detail Tab

These tabs allow for a general grouping of information about the item selected in the master view. Click on a tab to display the associated information to the right of the tab.

Master Details Splitter

Use the splitter to adjust the viewing area of either the master view or the details view of the items.

Section Expander

If more than one section is available in the details view, the sections are separated by a title bar called a section expander. The section expander in the details view toggles the details, either hiding or displayed the information associated with the active tab.

Related Topics

[Access Group Configuration](#)

[Access Control Groups: Members](#)

[Access Control Groups: Members Field Descriptions](#)

[Access Control Groups: Advanced](#)

[Access Control Groups: Advanced Field Descriptions](#)

Media Server Config --> Properties

**Media Server**



[Status](#) [Config](#) [Logout](#) [Help](#)

Configuration

**Servers**

**Parameters**

**Properties**

**Diagnostics**

**Snmp**

**Administration**

**License**

Name	Value	Delete
AudioSourceBaseUri	D:\I3\IC\Resources\	☐
NotifierDscpValue ♦	2E (46, 101110) EF	☐
NotifierQosTaggingEnabled ♦	true	☐
ResourceBaseUriLocal	D:\I3\IC\Media\	☐
RtpPortRange	16384 - 32767 Add Value	☐
RtpQosDscpValue	2E (46, 101110) EF	☐
RtpQosTaggingEnabled	true	☐
Select or enter name of property: Add		
♦ - Requires restart to take effect.		
Apply Changes Cancel		

Media Server Config --> Servers

**Media Server**
INTERACTIVE INTELLIGENCE


[Status](#) [Config](#) [Logout](#) [Help](#)

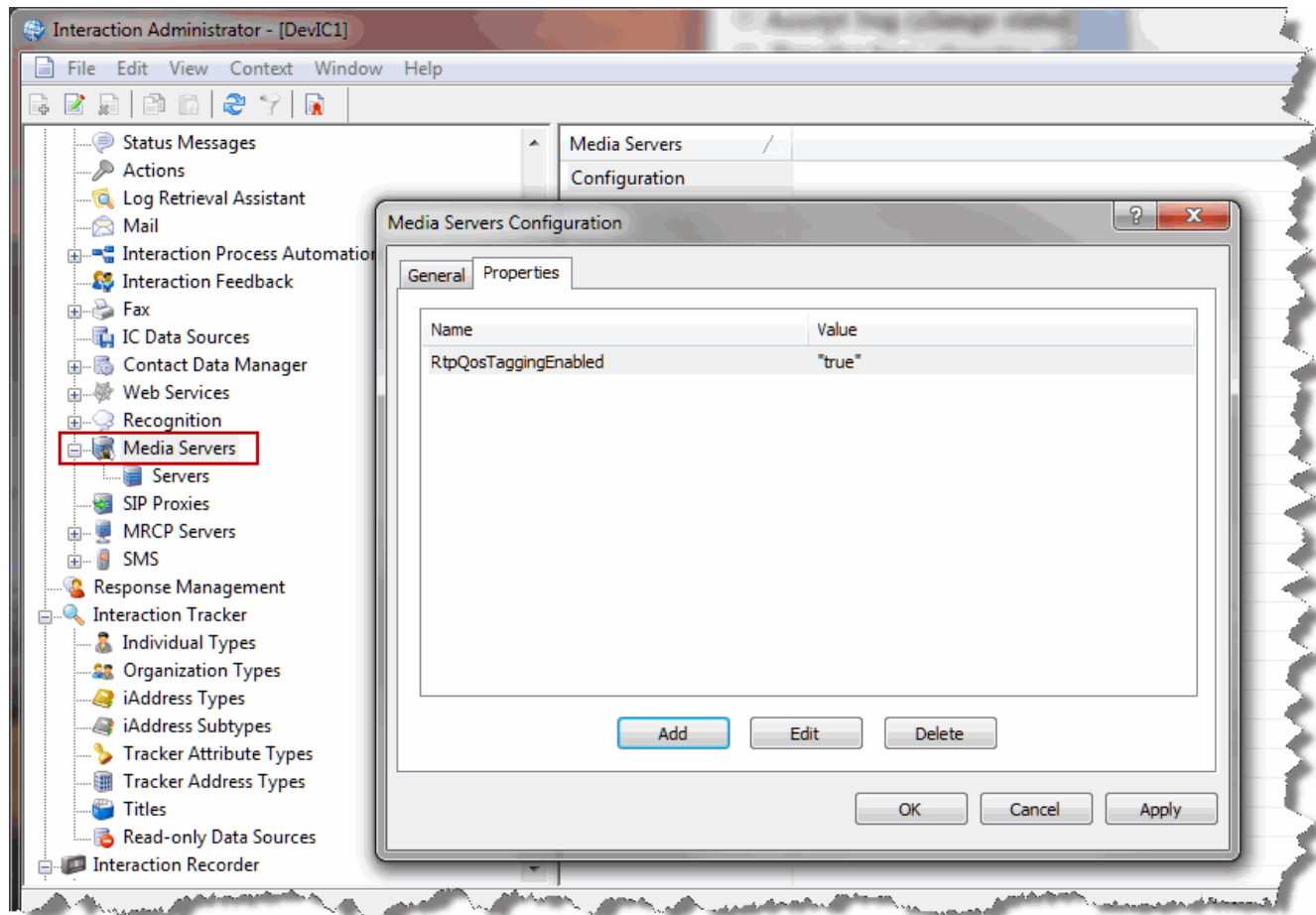
Configuration

**Properties of Command Server 1 (localhost)**

Servers
**Parameters**
**Properties**
**Diagnostics**
**Snmp**
**Administration**
**License**

Name	Value	Delete
RecordingMimeTypeDefault	audio/GSM	☐
Select or enter name of property: Add		
• - Requires restart to take effect.		
Apply Changes Cancel		

Media Servers Configuration Server Properties Graphic



Modify the Current Station Line Group

Use this page to change the current station line group settings. The options are:

- Modify the current line group settings: When this option is selected, the [Define Settings for the Station Line Group](#) page appears.
- Replace the line group with a newly created one: When this option is selected, the [Create a New Line Group](#) page appears.
- Replace the line group with a selected one: When this option is selected, choose the replacement line group from the drop-down menu and click **Next**. The [Define Settings for the Station Line Group](#) page appears.



Monthly

You can set a menu to run on relative and specific days of the month. Relative days can be the first, second, third, fourth, or last day in a month; while specific days can be a Monday through Sunday. For example, you can set a menu to activate the first Friday of every month.

Occurs

There are two options under **Occurs**:

Day List

Select to set a menu to run on certain days of the month. In the Day(s) box, type a number separated by commas. For example, 1,3,5. Where 1 is the first day of the month.

This works in conjunction with **Start** and **End** times and **Date Range**.

Relative

Select to set a menu to run on a relative and specific day every month. Relative days are first, second, third, fourth, and last day. Specific days are Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. For example, you can set a menu to run the first Friday of every month.

Works in conjunction with **Start** and **End** times and **Date Range**.

Time

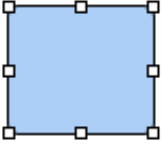
Sets the duration of time the menu is active. If you select **Start**, you must specify a start and end time. If you select a start time, and then select **All Day**, the menu is active 24 hours from the start time.

Note: If you set the end time to be before the start time, this causes the schedule to end on the next day as the start time. Interaction Administrator displays a warning message allowing you to cancel or continue with this time.

Date Range

Sets a start and end date the menu is active.

If you select a start date, and then select **No End Date**, the menu is active forever.

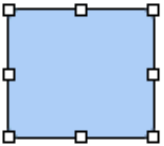


Add or Edit an MRCP Server Property

Use this page to add or edit MRCP server properties. These properties are the vendor-specific properties that are part of MRCP header. These custom server properties are not the same as custom attributes.

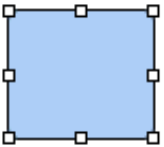
Related topics

[Custom attributes](#)



Enter Synthesizer Voice Name

Enter a unique synthesizer voice name for the vendor of this MRCP server and click **OK**.



Entry Name - MRCP Server

Enter a unique name for the new MRCP Server and click **OK**.

New MRCP Server

Use this page to create a new MRCP server.

Name

Enter a unique name for this MRCP server that you can easily identify.

Vendor

- **ININ** – Select this option if you are defining an installation of Interaction Media Streaming Server.
- **Third Party** – Select this option if you are defining an installation of any other MRCP server.

Related Topics

[Configuration](#)

[MRCP Servers](#)

New Entry (Insert)

Click the **New Entry** button to insert a new entry in the currently selected configuration container in the tree view.

Night Transfer

Calls received after hours, and are not answered, can be automatically transferred to another extension. By creating a station group, internal and external calls can be forwarded using Call Forwarding features.

For information on creating Station Groups for transferring after-hour calls, see the following topics:

[Overview of station groups](#)

[Call Forwarding Stations](#)



Mailboxes Selection

During CIC installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a user or workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox is required
- Interaction Message Store
- IMAP / SMTP
- Search for a mailbox based on the following available directories

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store (formerly Voicemail Only or FBM), LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes.

No mail box is required

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a Display Name, then click **Assign Address** to generate the Interaction Message Store address for that Display Name.

Note: Special characters cannot be used in the name.

IMAP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX:"; an SMTP email address begins with "SMTP:."; a Notes email addresses begins with "Notes:."; and a GroupWise email address begins with "NGW:."

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

- **Testing Directory Entry:** Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.
- **Testing Message Delivery:** Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.
- **Testing Message Retrieval:** Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)

OnHoldAudioRandomizationMonitor Handler

The handler contains a call attribute that holds a file name for a wave file that TS will play to a caller when the call is in a held state. By default this attribute is not set, so when a call is put into a held state, TS looks for a default file named SystemDefaultAudioOnHold.wav and plays it.

Eight other hold music wave files (named SystemAudioOnHold0.wav through SystemAudioOnHold7.wav where the digit part of the name spans from 0 to 7) are shipped. These wave files are what this randomizer handler uses. The handler runs each time a call goes to a connected state. When the call is "connected", the handler grabs the current time, uses values from the timestamp, applies a number between 0 and 7, and uses that number to construct a wave file name and then sets this file name as the call attribute. If the call goes on hold again, that file is what TS will use for the on-hold music. The handler runs again if the call is picked back up (connected).

You can customize the handler in one of two ways:

- Modify the handler and use a custom set of wave files - modify the handler using your own naming scheme and wave files, assigning names to the attribute
- Rename a custom set of wave files with our default wave file names (do not modify the handler) - copy your own versions of files named SystemAudioOnHold0.wav through SystemAudioOnHold7.wav to replace the existing wave files



Ordinal or wildcard syntax

While it is much easier to type and to read the wildcard character style rather than an ordinal list for the standardized phone number template, there are two constraints on using this style in other formatted phone number fields in the **Dial Plan** dialog box. Both the **Dial String** and the **Display String** fields substitute a different format of the phone number input that was converted via the input pattern. In both of these substitution strings, the number formatted with the wildcard characters (like the input pattern) must meet the following conditions:

1. The phone number template cannot contain any wildcard characters as part of the actual display string or dial string. For example, you could not display the letter 'x' as the extension separator in a phone number because X is a reserved formatting character. The following phone number template would be invalid in the **Display String** field on the **Dial Plan** dialog box; you would have to use an ordinal list to display that last 'x' character:

+33 0X XX XX XX XX xZ
2. The number and *order* of the wildcard characters must match between the input pattern and the substitution string. For example, if the input pattern contains 11 wildcard characters, the display string or dial string must also contain 11 wildcard characters. In addition, if the first wildcard character in the input pattern is 'N', then the first wildcard character in the substitution string must also be 'N', etc. If the second wildcard character in the input pattern is 'X', then the second character in the substitution string must be 'X', and so on.
In the following invalid example, the input pattern has 11 wildcard characters, but the display string has only eight since it does not include the area code.

Input Format Invalid Display String

+1NXXNXXXXXX/Z NXX-NXXXX /{Z}

Fortunately, the above conditions are met more often than not and it is usually safe to use the wildcard style of phone number template.

Efficiency with Ordinal Syntax

In some cases, it may be more efficient to use the ordinal number syntax instead of the wildcard syntax in the **Dial String** and **Display String** fields. This is because CIC compresses the phone number table data (each unique entry in each field) and sends that data to each relevant subsystem and each CIC client workstation when they start. The smaller the compressed table data, the faster the affected systems start. For example, if you have many input patterns that differ only in the exchange (for example, +1317872xxxx, +1317879xxxx, +1317845xxxx, and so on), you could reduce the number of unique dial strings stored by using the same dial string for all entries (for example, {6}{7}{8}xxxx) instead of individual dial string entries for each input pattern (for example, 872xxxx, 876xxxx, 845xxxx).

Overriding Inherited Skills for an ACD Agent

To override the default Proficiency and Desire to use levels an agent inherited from a Workgroup ACD skill assignment:

1. Double-click a user (such as, agent) name from the list of CIC users in Interaction Administrator.
2. Select the ACD configuration property page.
3. Below the Skills field, click the Add button to display the Add Skill drop-down list.
4. Select a skill name that matches one of the Inherited Skills (on the left side of the page) and click OK. The selected skill name appears in the Skills field.
5. Type a number between 1 and 100 in the Proficiency field and between 0 and 100 for the Desire to use entry field. These numbers override the default Proficiency and Desire to Use levels under the Inherited Skills on the left side of the screen.
6. Click OK to save the skill assignment.

Overview of classification alerts

When you configure a phone number classification, you can specify which users or workgroups to alert a call is made with the emergency classification.

Users configured to receive alerts for emergency calls made, receive an email notification similar to the following notification:

Subject: Classification Alert: Emergency

Importance: High

Classification Alert: Emergency

Local Name: Sonya Hamble

Local Number: 8103

RemoteName: Indianapolis IN

Remote Number: (317) 555-1212

User Id: Sonya.Hamble

Station: SonyaHambleSIP

Line: SIP Line 2

Note: Email notifications are sent regardless of user(s)' status or whether the user(s) are logged in to the CIC server.

For more information about how alert notifications appear in the CIC client, see the help for the CIC client.

Related topics

Overview of dial plan classifications

[Manage phone number classifications](#)

[Set up an emergency classification](#)



Overview of options

You can configure options for the default user, for a specific user, or for a workgroup.

The user configuration properties defined in these three containers are related to each other because all users inherit one or more properties from the Default User Configuration page. See [Configuration Property Inheritance](#) for an explanation of how these properties are related in each container.

For more information about the options that are available, click the links under *Related topics*.

Related topics

[Options for the default user](#)

[Options for a user](#)

[Options for a workgroup](#)

[Configure a user](#)



Overview of status messages

You configure statuses in the **Status Messages** container.

In the CIC clients, statuses indicate whether or not an agent is available to take calls. Agents select their own statuses, and statuses can also be automatically assigned to them. Depending on the situation, customers may also be able to see agent statuses. Statuses are also used for reporting purposes.

If you want to play the text of a status message to callers, record a prompt with this text and add it to the CustomIVRSetUserStatus handler in Interaction Designer.

Related topics

[Add a status message](#)

[Configuration](#)

[Multi-Language Support](#)

Delete Parameter

Click **OK** to delete this parameter. The only way to change the name of a [parameter](#) is to delete it and create a new one with the same field value.

Parameter Name

Each [parameter](#) has a descriptive name consisting of any combination of valid alphanumeric characters. This name is defined on the CIC server with a server level or system level scope, and the name can be referenced in any handler published on the server (for example, the System_HeldCallTimer handler).

Paste New Object

Type a new name for the object you copied and are ready to paste. You cannot create a duplicate name for this object. The new object will retain most of the configuration data in the original object, with a few exceptions.

Note: If you copy and paste a workgroup, the newly create workgroup will not preserve the list of members in the original workgroup. The problems with users inheriting rights are too complicated and require the administrator to deliberately add members into workgroups created this way.

Paste

Click the Paste button to paste the most recently copied configuration entry in the list view (right pane). This operation presents a dialog box for you to enter the new name of the pasted object.

Note: If you copy and paste a workgroup, the workgroup members in the original workgroup are not copied to the destination workgroup. The problems with users inheriting rights are too complicated and require the administrator to deliberately add members into workgroups created this way.



Peer site name

Type the name of the peer site, and then click **OK**.

Note: The name of the peer site must match an existing site name.

After you configure the peer site is configured, the peer site name appears in the list view window of the **Peer Sites** subcontainer. You can open a peer site and edit its properties. However, you cannot edit the name of the peer site name.

Related topics

[Collective concepts](#)

[Peer site configuration concepts](#)

[Configure a peer site](#)



Peer User Configuration

Users logged on to a peer site can refer to the following:

Extension

Shows the extension number associated with this user. When this user logs on to the network at any CIC client workstation, CIC detects that user's presence (by his or her extension) and routes calls to the workstation where the user logged on.

Status

Shows the status for the user.

Home Site

Shows the home site for the user.

Current Site

Shows the site onto which the user is logged.

Perform Customization Tasks for the Auto-attendant Menu

When Attendant is installed on an CIC system, a default auto-attendant menu is created if one does not already exist. The default menu is not created if CIC was updated from a previous release, and Attendant menus are already in place.

Note: See the *Pre-Install Survey/Setup Assistant* information that helps you customize your Auto-Attendant.

- The first-time installation process creates a CompanyOperator workgroup and an Operator user queue. Incoming calls are routed to the Operator queue first, and then roll to the CompanyOperator workgroup. If persons in your company assist the primary operator, you should add their names to the CompanyOperator workgroup.

Note: The Operator user queue does not need to be customized, but when you set up a user to monitor the "Operator" queue, make sure you change the "Operator" user's status in Interaction Administrator from "Do Not Disturb" to "Available".

You can *optionally* re-record voice prompts used in the default menu. Use the [Audio Controls](#) in Interaction Attendant to import, select, play, and record .wav files.

For more information, see the Interaction Attendant help.

Interaction Administrator Help

Predictive Routing

[Copyright and trademark](#)

Print Interaction Administrator Data

The print data feature allows you to print, display or export specific Interaction Administrator data to a CSV file. You can select the fields and the field order to include in the output.

Topics:

The **Topics:** drop-down list allows you to select which topic to print, display or export. Currently only two topics are available **Users Phone Directory** and **Stations Phone Directory**.

Fields:

The **Fields:** list displays the fields you can select to print, display or export. The field order represents the column order.

Users Phone Directory fields

- User Name
- Last Name
- First Name
- Phone
- Workstation
- Domain User
- Title
- Department
- Company
- Location (*see note*)
- IC Location (*see note*)

Note: The "Location" column is the physical location that is specified in the user's [Personal Info](#) section. The "IC Location" column is the location specified in the [user configuration](#).

Stations Phone Directory fields

- Station Name
- Type
- Phone
- Description

Print, Display or Export Data

To print, display or export data follow these steps:

1. Select the topic from the drop-down list.
2. Select (check) the fields to include in the output. The fields available depend on the topic selected. Use the **Up** and **Down** buttons to move the currently selected field if you wish to reorder the fields in the output. The checked field closest to the top of the list will be the first column of the output list, the second field will be the second column, etc. The sort order is based on the column order.
3. Once the topic is selected, the fields are selected and ordered, then chose one of the following options:
 - **Print** - Print sends the output to the printer.
 - **Save As** - Save As sends the output list to a file using the standard CSV file format.
 - **Display** - Display opens the application associated with the CSV file format in Windows and displays the output.
 - **Print by App** - Print by App prints the output using the application associated with the CSV file format in Windows.

Note: To use the Display or Print by App options, you must have an application associated with CSV file format.

Interaction Administrator preserves the most recently selected topic, fields and field order between sessions.

Printing Interaction Administrator Documentation

You can print all or part of the Interaction Administrator help from the Contents tab.

The [CIC printable documentation](#) available on the Product Information site, provides print versions in .pdf format of the CIC help systems. The source files for the quick reference guides are also available in .doc, .vsd, or .pub formats for partners who want to make their own customized versions of these documents.

Print Individual Topic Sections

To print individual sections of the online help system, start with the Help Contents tab on the Help Topics dialog, then:

1. Select a book title you wish to print. All of the topics under that book will be printed.
2. Click the Print button at the bottom of the help topics.

Properties (Enter)

Click the Properties button to open the configuration dialog box of the currently selected entry in the list view.

Queue Activation

CIC administrators, supervisors, and users with the appropriate administrative access controls can optionally activate and deactivate agents on a per queue basis without regard to the agent's Interaction Center status or state. For example, this feature enables authorized agents monitoring multiple queues to deactivate themselves from inactive or lower priority queues in order to monitor busy or high priority queues without changing their status or logging out of the inactive queue. It also enables supervisors and administrators to activate or deactivate other agents (via Interaction Supervisor and Interaction Administrator) in queues without regard to that agent's status or logged in state. This only works on ACD and Custom workgroup queues.

The activation and deactivation event criteria includes:

- When an agent activates or deactivates himself or herself via the Workgroup Activation dialog in the CIC clients. This requires that the agent's user account be given "Activate Self" Access Control in Interaction Administrator.
- When a supervisor activates or deactivates an agent via Interaction Supervisor. This requires that the supervisor's user account be given "Activate Others" Access Control in Interaction Administrator.
- When a user is added or removed from an ACD or Custom workgroup in Interaction Administrator. By default, users are added to workgroups in an Activated state.
- When an ACD or Custom workgroup is created or deleted in Interaction Administrator. By default, workgroups are created with users in an Activated state.

All ACD agent user accounts that are members of ACD or Custom workgroup queues and which are updated from a pre-IC 2.3 system are flagged as Activated when they are imported into the current release.

Note: Agent workgroup activation can be configured with handlers. See the **Workgroup Agent Activate** and **Workgroup Agent Deactivate** toolsteps in the Interaction Designer online help in the PureConnect Documentation Library on the CIC server.

Queue Announcements

The following rules apply when playing queue announcements for user queues:

- If the user has an "out-of-office" message recorded and activated in the CIC clients, then the "out-of-office" message is played to all callers entering the user's voicemail.
- If the user has recorded a "no answer" message in the CIC clients, then the "no answer" is played to callers.
- If the user does not have either the "out-of-office" message or the "no answer" message recorded, a status-based message is played to callers, falling back to "...is not available" if no more descriptive message can be played.

Both the "out-of-office" and the "no answer" messages can be recorded in the CIC clients or in the voicemail TUI.

Note: Queue announcements are also played for users who do not have voicemail rights. This is why the queue announcement is separate from the instructions to leave a message after the tone. So, for a user without voicemail rights, the above rules still apply, but after the caller hears the message, the caller will be sent to attendant processing rather than to voicemail.

Queue Column Name

Type a meaningful and unique name for the new queue column. It is recommended that the name reflects the associated attribute.



Ready to Create New Line Group

Click **Next** to create the new line group. Additional changes can be made to the line group in the [Define Settings for the Station Line Group](#) page.



Ready to Save the Station Line Group

Use this page to review the new station line group or any changes made to the existing station line group. Click **Finish** to save the changes, or click **Back** to make changes.

Refresh

Click the refresh button to refresh the entries in the list area. Shortcut key: <F5>.

Add SIP Proxy

Use this page to select a SIP proxy to add it to the associated location as a server endpoint. SIP proxies that are already logged on to and connected to the CIC server are displayed. If no SIP proxy servers are logged on to the CIC server, a message appears.

After a SIP proxy is added, it appears in the **Available endpoints** list.

Related topics

[SIP proxies](#)

[SIP proxy configuration - general](#)

[SIP proxy configuration - web configuration](#)

[Endpoints](#)

Additional Classifications

Use this page to view additional classifications that are associated with the dial plan that you selected to import. Click **Next** to continue.

Classification Configuration

Use this page to add or edit a phone number classification.

Display Text

Enter the text to be displayed for this classification.

Category

Select the classification category from the drop-down menu or enter a new category name in the text box.

Click **OK** when finished.

Override Import Merge Behavior

Use this page to override the default import merge behavior of the dial plan file you selected to import.

The import will merge any dial plan patterns, classifications, or number lists in the import file unless you select the options below to override the behavior.

Select **Replace entire dial plan (patterns and number lists)** to remove all dial plan patterns and number lists before adding the import patterns and lists.

Select **Skip classification merge** so that classifications in the import file will not merge with existing classifications. Any new classifications found in the import file will still be created.

Click **Next** to continue.



Review Import Changes

Use this page to review any import options you selected in the previous pages. Click **Back** to make any changes to your import options, or click **Finish** to apply the imported dial plan items and add them to your dial plan. At any time you want to stop the import process, click **Cancel**.

Codec Parameters

Use this page to modify the **Frame Size** (in milliseconds) and the **Frames per Packet** of a Codec. This option is available only for G.711 Codecs.

Notes:

If two devices each have a Codec defined, but there are no Codecs defined in the mapping between them, then they are not allowed to communicate directly to each other. This can be used to intentionally block traffic between some Codecs.

G.726 is only available with AudioCodes.

Packet and Frame size: Summary on packet size and frequency from the www.erlang.com website: "The frequency at which the voice packets are transmitted have a significant bearing on the bandwidth required. The selection of the packet duration (and therefore the packet frequency) is a compromise between bandwidth and quality. Lower durations require more bandwidth.

However, if the duration is increased, the delay of the system increases, and it becomes more susceptible to packet loss; 20ms is a typical figure." So, the more of the voice you put in a single packet (i.e., 60ms versus 20ms), the more of the voice you lose if that packet is lost.

MOS: The quality of transmitted speech is a subjective response of the listener. A common benchmark used to determine the quality of sound produced by specific Codecs is the mean opinion score (MOS). With MOS, a wide range of listeners judge the quality of a voice sample (corresponding to a particular Codec) on a scale of 1 (bad) to 5 (excellent). The scores are averaged to provide the MOS for that sample.

Select Values - Add Media Server

Use this page to select the media server you want to add as an endpoint to this location. If you select a server that is set as an endpoint in the Default Location, the server is added to this location as an endpoint and removed from the Default Location.

Add Numbers

Separate numbers by spaces or commas. Click **OK** when you are finished.

Select Values - Add Line

Use this page to select the line you want to add as an endpoint to this location. If you select a line that is set as an endpoint in the Default Location, the line is added to this location as an endpoint and removed from the Default Location.

Set Filter

This page allows you to filter the summary list based on a [Location](#) specification.

Select **Show all items (no filter)** to display all dial plan entries regardless of the Location.

Select **Show items that have the <All> location filter** to display dial plan entries that apply to all locations.

Select **Only show items with the following locations:** to display dial plan entries that apply only to the specific locations that you check.

Notes: Locations are used to restrict or filter access to portions of the master dial plan entries. The dial plan can be filtered at two levels of entries:

1. Input Pattern
2. Dial Groups (line groups and dialed numbers)

If a dial plan entry does not have <All> access then those specific options (patterns or dial groups) are removed from the dial plan.

Any input pattern that has the <All> filter may require special care when defining the Dial Groups for the dial plan entry. For example a 911 pattern, the default line groups specified should be local to the Location region.

Select Values - Add Station

Use this page to select the station you want to add as an endpoint to this location. If you select a station that is set as an endpoint in the Default Location, the station is added to this location as an endpoint and removed from the Default Location.



Remote Stations

Select the line group from the pull-down list to use by default for calls to remote stations.

Delete Report

Delete this report.

User Data Source Table Definition

Note: This is reserved for future use.

The program bases each report on a virtual table definition that is associated with a defined CIC report log. This page creates that table definition and associates it with an CIC report log.

Sequence Number

Each report generated by Crystal Reports uses one or more tables from its list of registered tables. The order in which the reports associated with each table are listed is the sequence number, with 0 (zero) being the first report in the list. Unless a report is associated with more than one table, the sequence number should be 0 (zero).

Table Name

Type a table name associated with this report log. The table name is an arbitrary label, but it may be helpful to make the table name reflect the report log name it is based on.

Log File Path

Type an explicit path to the log file only if Location Options is set to "Fixed to defined file." Use this field if a report log is in a different location than the standard log file location.

Log ID

Select the report log identifier (ID) number that specifies which report log this report is based on.

Location Options

A report can be based on report logs that are stored in various locations.

Automatically substitute at runtime

This is the default setting. Reports using this setting find the report log based on the ClientReportLogEICDataSource system parameter. This is the default setting and it is also the easiest to maintain if the report logs are ever moved to a different location.

Fixed to defined file

Set this value if you wish to specify an alternate log file by typing an explicit path and log file name in the Log File Path field. This setting overrides the path specified in the Server Output path field on the Report Log configuration Advanced page.

No actions taken for table

Use this only if you base a report on table data not included in a CIC report log.

Delete Report Log

Delete this report log.



Available Reports

Anyone with the appropriate access control permissions can run reports from the Interaction Reporting application. The standard packaged reports included with CIC can be divided into two basic groups: Individual User Reports and Supervisory reports.

Tip: See the Reporting online Help for detailed descriptions about all the packaged reports in CIC.

This section of the help contains the following information:

Report Names

Report Configuration

Report Tables/Parameters

Entry Name - Parameter Definitions

Report Table Type

Report Log Table Definition

Campaign Table Definition

Parameter Definition for Reports

Reverse White Pages Lookup

When an inbound line has caller ID service from the CO, CIC can display the caller's name to the user, or the caller's name and address in the voicemail form, if you have the appropriate white pages directory data on the CIC server. CIC uses a Telephony tool, called WhitePages, to take the inbound caller ID number as input and do a lookup in a text file called WhitePages.txt installed in the \Resources directory on the CIC share. If it finds a match, the tool's output is the caller's name (in the case of a call answered with a CIC client), or the name and address, in the case of a voicemail message.

The format of the WhitePages.txt file, along with customization instructions, is explained in the default WhitePages.txt file installed with IC. The WhitePages tool is included in the handlers that manage incoming calls and voicemail. See WhitePages in the Interaction Designer online help.

While the capacity of the WhitePages.txt file is significantly greater than the Windows registry, this file is not designed to hold large volumes of directory data for caller ID lookup in IC. Each entry in the table requires overhead of approximately 100 bytes of memory, so the maximum reasonable number of entries recommended for the WhitePages.txt file depends in part on the CPU speed and amount of available RAM on the CIC server. On average, each CIC server should be able to support up to several thousand entries in the WhitePages.txt file, while high-end servers might support up to 10,000 entries, depending on the load on the server.



Mailboxes Selection

During installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox that CIC should use for a User or Workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox is required
- Interaction Message Store
- IMAP \ SMTP
- Search for a mailbox based on the following available directories

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store (formerly Voicemail Only or FBMC), LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes.

No mail box is required

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a Display Name, then click **Assign Address** to generate the Interaction Message Store address for that Display Name.

Note: Special characters cannot be used in the name.

IMAP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX: "; an SMTP email address begins with "SMTP: "; a Notes email addresses begins with "Notes: "; and a GroupWise email address begins with "NGW: ".

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

Testing Directory Entry: Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.

Testing Message Delivery: Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.

Testing Message Retrieval: Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)



Review the Dial Plan Call Routing Changes

Use this page to review the call routing options and dial plan pattern changes. Click **Finish** to save your changes and close the Location Assistant, or click **Back** to make changes.



Role name

Type a name that represents a set of attributes and permissions that you want to assign to specified users or members of a workgroup.

An example of a role name might be **Agent** or **Sales**.

You may assign a role to default users, users, and members of workgroups during configuration.

Importing and Exporting XML Files

Interaction Administrator offers the ability to import and export response management files through the response management editor.

Importing

Import files must follow a specific XML schema for successful import. The document contains three levels: the document level, the node level, and the item level. These levels are hierarchical, meaning an item level entry cannot be a direct child of the document level, and a node entry must be the direct child of the document level:

- Document Level
 - Node level
 - Item level
 - Item level
- Node level
 - Item level
- Item level

Document Level

The document level must contain the item `I3_Response_Management_Document`. This XML node must have two attributes; title and description. The file attribute must match the name of the XML document. The description attribute may be empty, or it may contain a brief description of this file.

```
<I3_Response_Management_Document title="sample.xml" description="This is a sample response management XML file">
</I3_Response_Management_Document>
```

Node Level

Node level entries are used to group one or more response items into groups. They must start with the `ResMgt_Node` tag, and contain the node's name as the title attribute.

```
<ResMgt_Node title="TestNode1">
</ResMgt_Node>
```

Item Level

This level contains all response management items. Three different types of response items are supported; text, file, and URL. An item has to be indicated by the `ResMgt_Item` tag. The type is stored in the type attribute. The title attribute contains the 'question'. The 'answer' has to be contained in a CDATA node, as shown below:

```
<ResMgt_Item title="What is this?" type="text">
<![CDATA[ This is a test ]]>
```


</ResMgt_Item>

Sample Document

```
<I3_Response_Management_Document title="sample" description="This is a sample response management XML file">
  <ResMgt_Node title="TestNode">
    <ResMgt_Item title="What is this?" type="text">
      <![CDATA[This is a test text entry]]>
    </ResMgt_Item>
    <ResMgt_Item title="And what is this entry?" type="File">
      <![CDATA[file_entry.txt]]>
    </ResMgt_Item>
    <ResMgt_Item title="How does a URL entry look?" type="URL">
      <![CDATA[www.genesys.com]]>
    </ResMgt_Item>
  </ResMgt_Node>
  <ResMgt_Node title="TestNode2">
    <ResMgt_Item title="What is James Bond's number?" type="text">
      <![CDATA[007]]>
    </ResMgt_Item>
  </ResMgt_Node>
</I3_Response_Management_Document>
```

Exporting

Click **Export XML File...** and select the location to save the file. The file will be saved with the response management attributes in XML format.



Node Properties

To change the name of this node, select the text in the **Node Name** box, and type a new name.

S MIME in CIC

Support for S/MIME in CIC allows email messages that have been signed and/or encrypted to be opened, as long as CIC is provided with access to the digital certificates containing the public keys required for digital signature validation, and private keys for decryption.

Configure Fax Bus-devices

Configure the settings for the fax bus devices you selected.

- **Fax Names Preview** - The Add Stations Assistant by default names the fax stations according to the Name Prefix (FaxDevice_), then adds the board number followed by the port number. For example, FaxDevice_105_5 is the fax device on board number 105 and port number 5.
- **Name Prefix** - You can enter a name to use as a prefix for the fax device board number and port number. By default the prefix is FaxDevice.
- **Active** - Select this check box to activate the fax device. This enables the fax device to place and receive calls. Clear the check box to deactivate the fax device, preventing calls from coming in to or going out from the fax device station.

Converting Voice Recordings

For CPU efficiency and best audio quality of prompts and music played over telephone handsets, we recommend you convert your audio source files. For example, convert .wav format to 8 bit mono 8kHz mu-law (or A-law outside of North America) format before you add the audio file to a prompt tool or Interaction Attendant application. Some audio formats can be converted automatically by the CIC system and telephony boards, but the dynamic conversion process may cause some loss of audio quality and require more CPU overhead.

To convert your audio source files:

1. Regardless of the starting format, convert it to Linear 16-bit (at the same sample rate as the starting format).
2. If the sample rate is anything other than 8 kHz, re-sample it to 8 kHz.
3. Finally, convert it from 16-bit Linear at 8 kHz to mu-Law (or A-law if you prefer).

If you are doing this manually with a sound editor, steps 1 and 3 are usually done automatically by the sound editor. For example, if you have an MP3 recording at 44.1 kHz sample rate, open it in the sound editor (which effectively converts it to 16-bit linear), re-sample the audio to 8 kHz using the sound editor, and then in the Save As... dialog convert it to mu-Law. If you using a command line utility, you might have to do all three steps individually.

The area that this most likely affects the quality of the output is the re-sampling.

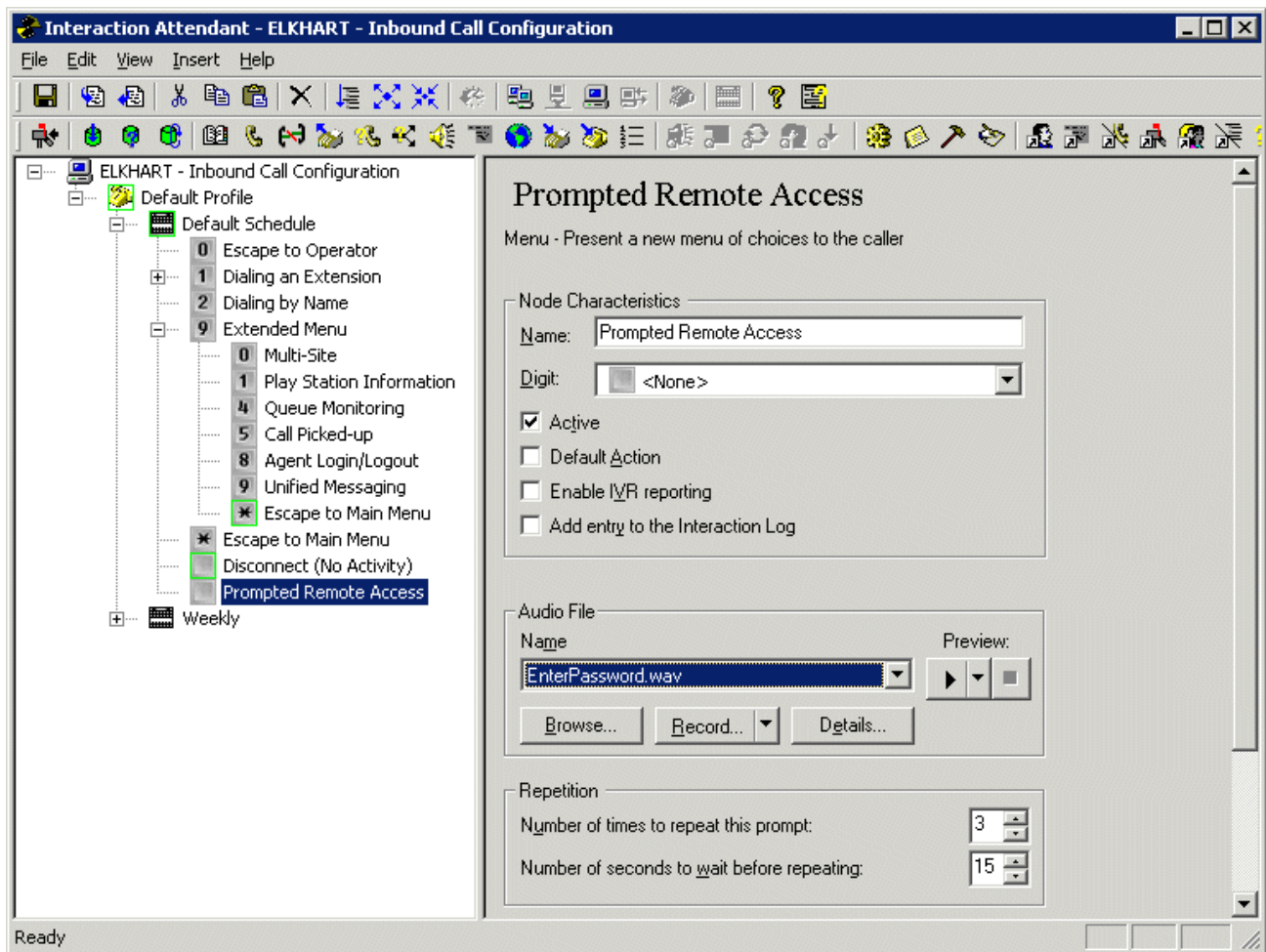
Enable Voicemail Password Prompts

The default Interaction Attendant menu does not prompt users for voice mail passwords. You can set up the system to prompt for passwords. There is one drawback: the audio prompt cannot be interrupted and users must wait until the prompt finishes before entering their security code.

To play an audio prompt for password:

In Interaction Attendant, complete the following tasks:

1. Select the Default Schedule node. Insert a new menu node by selecting the **Insert** menu, then selecting **New Operation**, then **Play a Menu**. A new menu node appears.

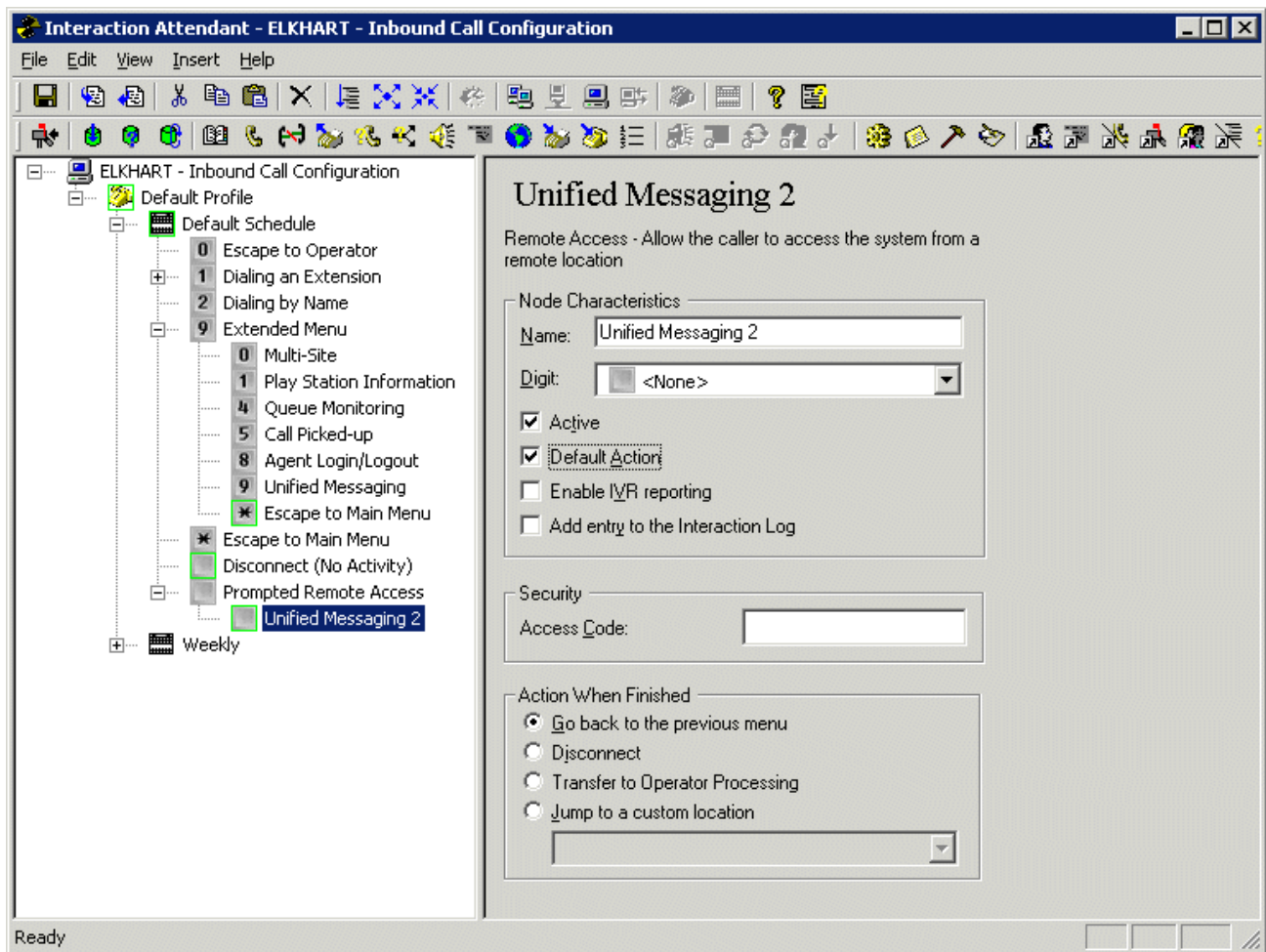


Interaction Attendant Prompted Remote Access node.

2. Rename the new menu node to **Prompted Remote Access**.
3. In the Audio File section of the Prompted Remote Access node, in the **Name** field, select the pre-recorded .wav file that prompts a user to enter an extension and password.

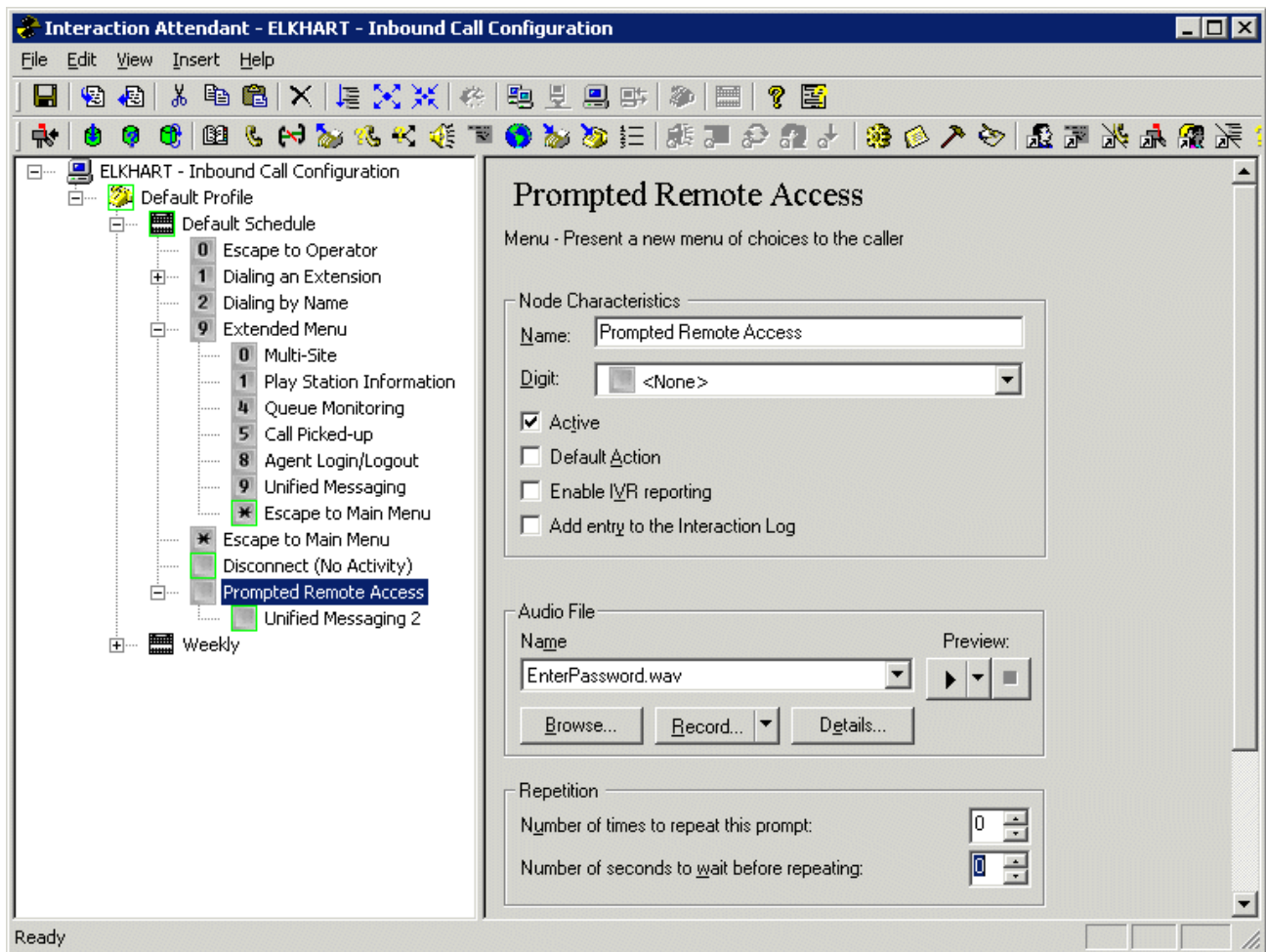
Note: This file is not supplied with Interaction Center. See the Interaction Attendant help for recording a prompt.

4. Right-click on the Prompted Remote Access node. From the **Insert** menu, select **New Operation**, then **Remote Access**. A Remote Access node is inserted below the Prompted Remote Access node.
5. Rename this new Remote Access node to **Unified Messaging 2**.
6. In the Unified Messaging 2 node, select the **Default Action** check box.



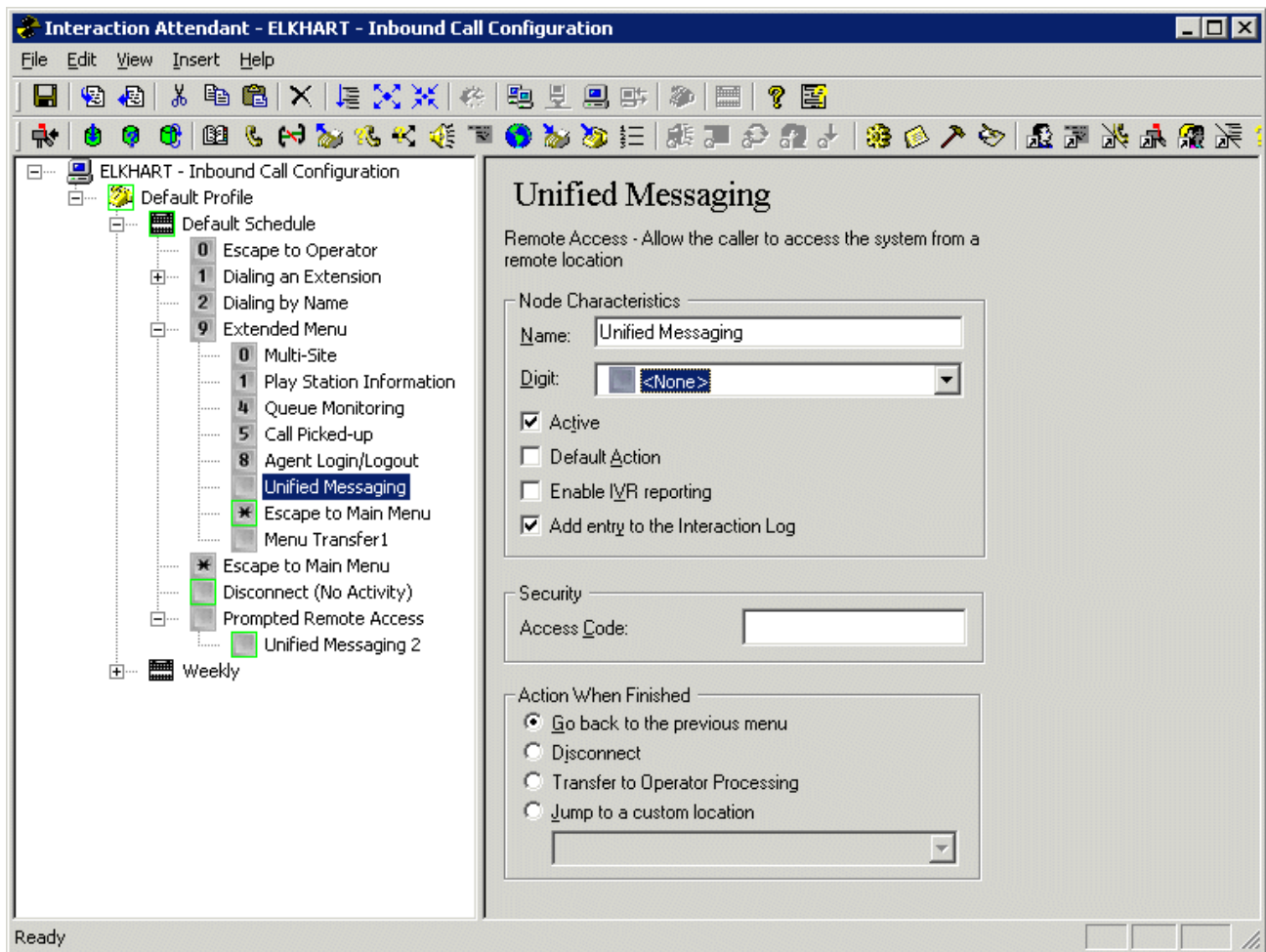
Interaction Attendant Unified Messaging 2 node Default Action check box

7. In the Prompted Remote Access node, set **Number of times to repeat this prompt** and **Number of seconds to wait before repeating** to 0.



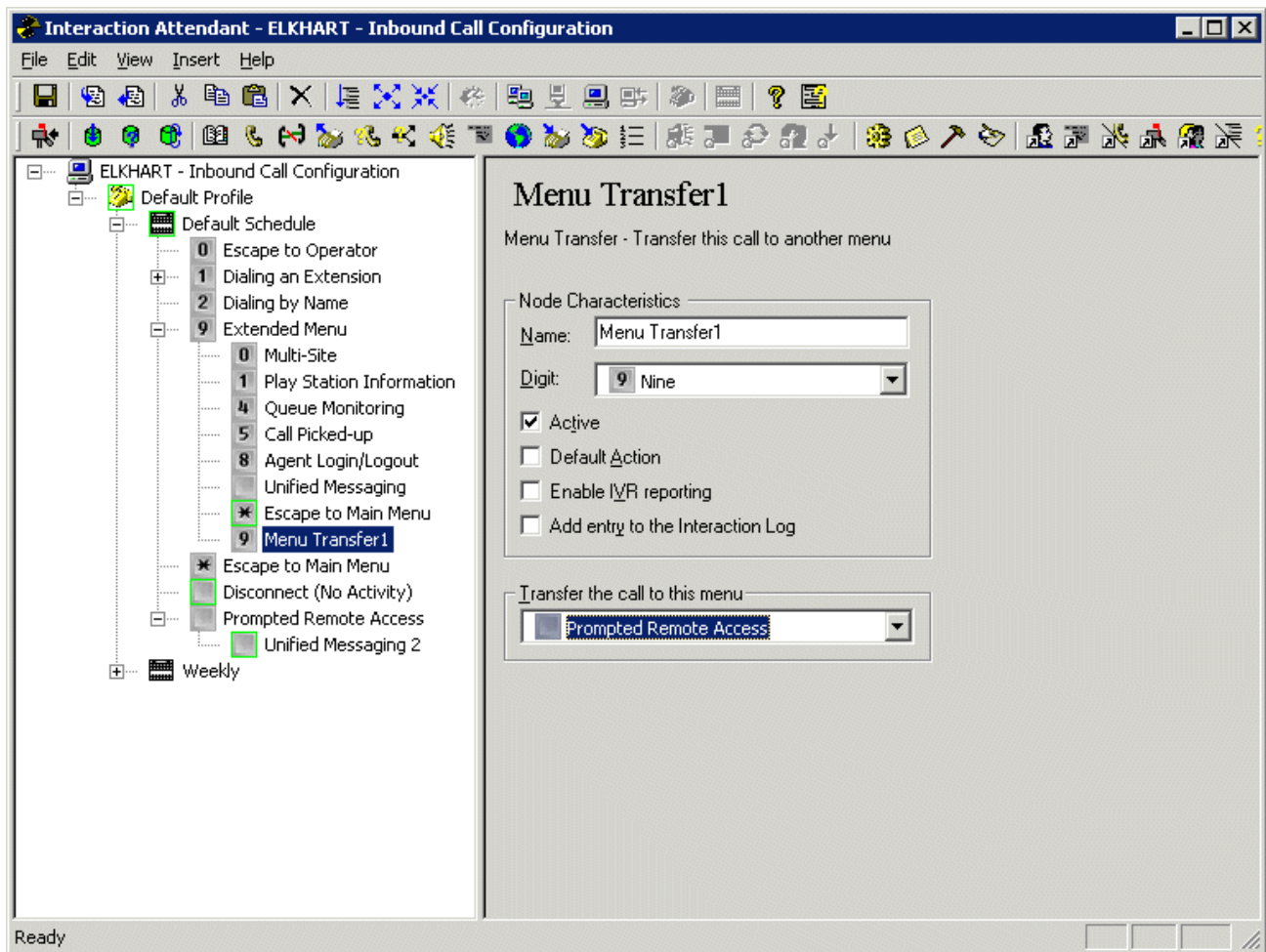
Interaction Attendant Prompted Remote Access node Repetition options.

8. Select the Extended Menu node, right-click and select **Insert > New Operation > Transfer to a Different Menu**. Menu Transfer 1 is inserted in the Extended Menu.
9. Select the original Unified Messaging node and set **Digit** to **<None>**.



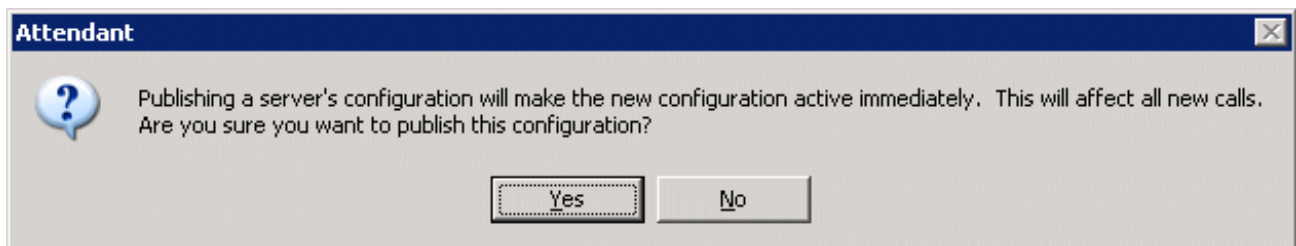
Interaction Attendant original Unified Messaging node Digit setting

10. Select the Menu Transfer 1 node and set **Digit** to **Nine**. Set **Transfer the call to this menu** to **Prompted Remote Access**.



Interaction Attendant Menu Transfer 1 node Digit setting

11. From the **File** menu, select **Publish**.



12. In the Attendant dialog box, select **Yes**.

A status bar appears at the bottom of the Interaction Window until the publishing process finishes. A published Attendant profile completes the process of enabling voicemail password prompts.

How Do I Set Up a Custom Status to Play a .WAV File?

This section contains the following information about creating and configuring a custom status to play a .WAV file in Interaction Administrator:

- [Overview of Custom Statuses](#)

How Do I Set Up Account Codes?

This section contains the following information about creating and configuring account codes in Interaction Administrator:

- [Overview of Account Codes](#)
- [Add an account code](#)

How Do I Set Up ACD Queues?

This section contains the following information about configuring ACD queues in Interaction Administrator:

- [Overview of ACD Queues](#)
- [Set Up ACD Queues](#)

How Do I Set Up CIC Features in Interaction Attendant?

The CIC system administrator can customize the following CIC default menu, but it is not required. CIC is fully-functional without customization.

If you choose to customize the default menu that ships with CIC, this section contains information you'll need to make modifications in Interaction Attendant:

- [Overview of the Default Auto-attendant Menu](#)
- [Perform Customization on the Default Auto-attendant Menu](#)
- [Re-record Prompts](#)
- [Enable Voicemail Password Prompts](#)

How Do I Set Up CIC Phone Features for Polycom Phones?

This section contains information about configuring Customer Interaction Center (CIC) phone features for Polycom Phones.

- [Overview of CIC Phone Features Configuration for Polycom Phones](#)
- [Set Up Call Park](#)
- [Set Up Group Call Pickup](#)
- [Set Up Shared Line Appearances](#)
- [Set Up Zone Paging](#)

How Do I Set Up Forced Authorization Codes ?

This section contains the following information about creating and configuring forced authorization codes in Interaction Administrator:

- [Overview of Forced Authorization Codes](#)
- [Set Up Forced Authorization Codes](#)

Perform Customization Tasks for the Auto-attendant Menu

When Attendant is installed on an CIC system, a default auto-attendant menu is created if one does not already exist. The default menu is not created if CIC was updated from a previous release, and Attendant menus are already in place.

Note: See the *Pre-Install Survey/Setup Assistant* information that helps you customize your Auto-Attendant.

- The first-time installation process creates a CompanyOperator workgroup and an Operator user queue. Incoming calls are routed to the Operator queue first, and then roll to the CompanyOperator workgroup. If persons in your company assist the primary operator, you should add their names to the CompanyOperator workgroup.

Note: The Operator user queue does not need to be customized, but when you set up a user to monitor the "Operator" queue, make sure you change the "Operator" user's status in Interaction Administrator from "Do Not Disturb" to "Available".

You can *optionally* re-record voice prompts used in the default menu. Use the [Audio Controls](#) in Interaction Attendant to import, select, play, and record .wav files.

For more information, see the Interaction Attendant help.

Preview User Results

Preview search results if you chose to search for users on a mail server or search for Windows users. If you chose to import users from a CSV list, then preview the import results.

Click **Finish** to view all new users in the User Worksheet.

Set Up a New Registration Group

To set up a new registration group, click the **Registration** in the Managed IP Phones container in Interaction Administrator, then right-click in the right pane:

1. Select **New** on the menu, and enter a unique and meaningful registration group **Name**.
2. Select the **Type** of registration from the drop-down menu. The options are "Regular" and "External".
3. Click **OK** and complete these tasks:
 - Click **Add** to define the new [registration settings](#) in the **Configuration** page.
 - Select the [appropriate values](#) in the **Options** page.
4. Click **OK** to save the new registration group configuration.

Related Topics

[Add Registration](#)

[Registration Group Configuration](#)

[Registration Group Options](#)

[Managed IP Phone Appearance Configuration](#)

[SIP Station Configuration](#)

[Managed IP Phone Configuration - General](#)

Set Up ACD Queues

To set up an ACD queue, you must enable an ACD queue for a new or existing workgroup.

Note: For information on setting up a new workgroup, see [Add a workgroup](#).

1. To enable an ACD queue, select the **Workgroups** Container in Interaction Administrator, select a workgroup, then right-click and select **Properties**.
2. Click the **Configuration** tab.
3. In the **Extension** box, type a unique extension number associated with this workgroup. This is the extension number that receives calls for the ACD queue. All calls made to this extension appear in the workgroup ACD queue.
4. In **Mailbox User**, if you are using unified messaging (such as Microsoft Exchange, IBM Notes, or IMAP 4 email client), select an email account to receive voicemail, faxes, and email sent to this Workgroup.
5. Select **Workgroup has Queue** and select **ACD** as the queue type.
6. Click the **Members** tab and select the members of the workgroup.

Note: You must assign at least one member.

7. Click the **Roles/Supervisors** tab and assign a role or a supervisor.

Note: This enables a designated user to assist other members of the workgroup.

8. Click the **Access Control** tab.
9. In **Category**, select **View Workgroup Queue**.
10. From the **Currently Available** list, select the name of the current workgroup and click **Add ->**. The name of the current workgroup appears in the **Currently Selected** list.

Tip: The name of a new workgroup does not appear in the Currently Available list until you have saved it by clicking **OK**.

Note: This step enables all members of the workgroup to view the ACD queue. See [Displaying an ACD queue](#).

11. Click **Apply** or **OK**.

Displaying an ACD Queue

For information on displaying ACD queues in the CIC clients, see the help system for the CIC client you are using.

Note: If you are a member of one or more ACD workgroups, interactions assigned to you from those workgroups appear in My Interactions. The ACD workgroup from which those interactions came is displayed in the Queue column.

Set Up Call Park

Call park enables a user to place the current call on hold in a specific orbit. An orbit can hold one call and is identified by a number assigned by the user who puts a call “in orbit.” Any user can then pick up that call from another station.

While on a connected call, a user can press the call park soft key and enter an orbit number. If that orbit is vacant, the system holds the call and removes it from the user’s queue. To pick up the call, a user presses the call park soft key and enters the orbit number.

Using other IVR digit sequences, users can also play a list of all the calls in orbit or hear details about a selected call in a specific orbit.

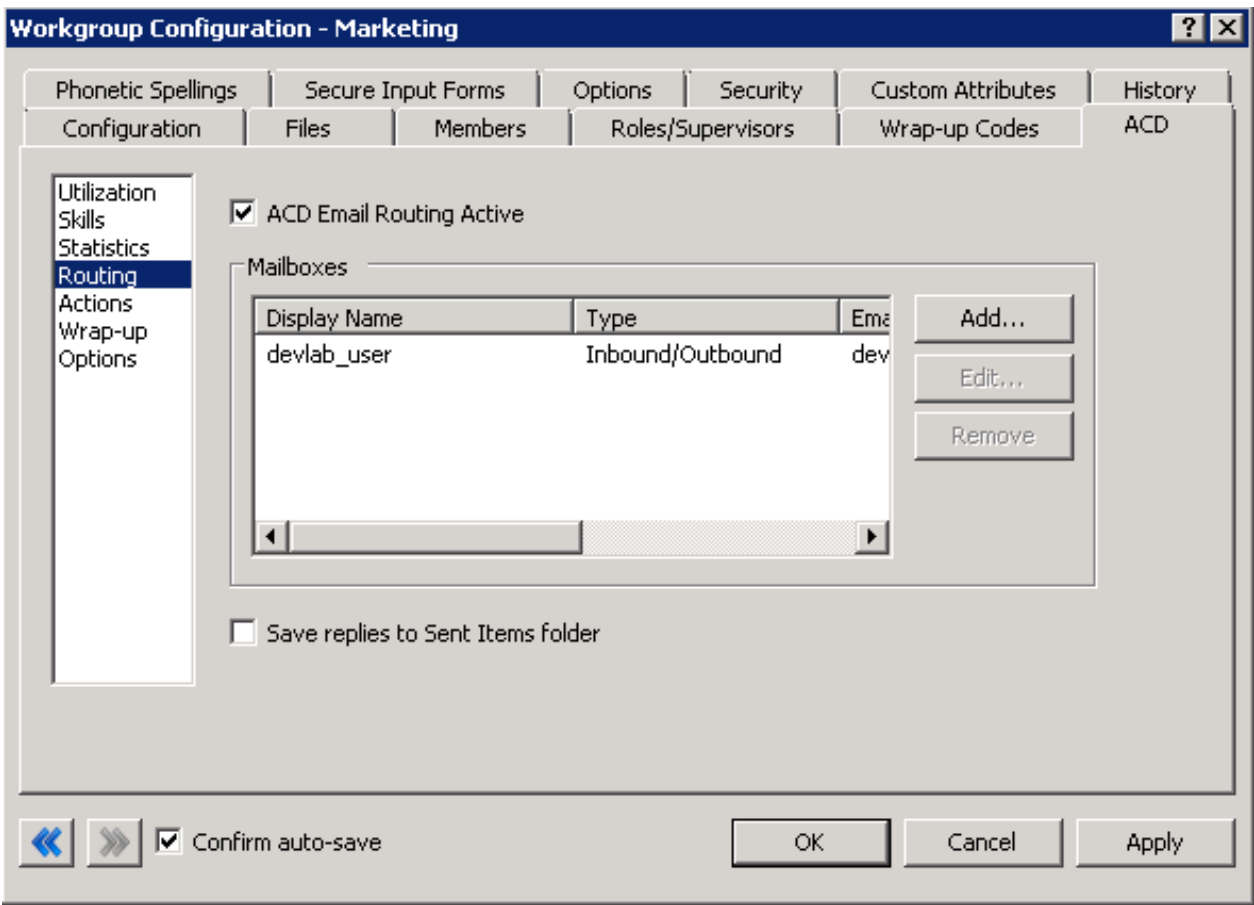
Configuration

No Interaction Administrator configuration settings are required for call park. For information on the settings required in the Polycom phone configuration files, see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.

Set Up Email Routing on ACD Queues

An ACD queue can be set up to deliver email addressed to a workgroup mailbox.

To configure email routing on an ACD queue, select the Workgroups Container in Interaction Administrator, select a workgroup, then right-click and select **Properties**. Click the **ACD** tab and perform the following tasks:



ACD tab of the Workgroup Configuration dialog box

- Select the **ACD E-Mail Routing Active** check box. This check box activates email routing. When activated, the program handles email arriving for the workgroup using the same rules as those for calls or faxes.
- Click **Add**.
- In the **ACD E-Mail Routing Mailbox** dialog box, select ... (browse button) next to the **Mailbox** field.

ACD E-Mail Routing Mailbox

Mailbox: [] ...

Inbound Folder: []

Queue Folder: []

☐ Allow to receive encrypted e-mail

OK Cancel

ACD E-Mail Routing Mailbox dialog box

In the **Mailbox Selection** dialog box, perform the following tasks:

Mailbox Selection

Select a mailbox option:

- ☐ Review Current Settings
- ☐ No mailbox is required
- ☐ Interaction Message Store
- ☐ IMAP
- ☒ Search for a mailbox based on the following available directories

Available Directories:

- ☒ Notes

Search by: ☒ Name ☐ Prefixed e-mail address

sta [Search]

Search by name results:

Display Name	Address
StarskyAdmin	NOTES:CN=StarskyAdmin/O=Notes65

Name: StarskyAdmin
Address: NOTES:CN=StarskyAdmin/O=Notes653dc@Not
Directory: x-inin-mail.Inotes.directory://CN=QF-NOTES653,
Message Store: x-inin-mail.Inotes.store://StarskyAdmin,Notes653d

[Search Directory] [Message Store]

OK Cancel Help

Mailbox Selection dialog box

Tip: For additional information on the process of selecting a mailbox, see [Mailbox Selection](#).

- Select **Search for a mailbox based on the following available directories**.
- Select **Name** in the **Search by** section.
- Enter part of a mailbox user's name in the text box. This must be a uniquely named email account reserved for email addressed to this workgroup.

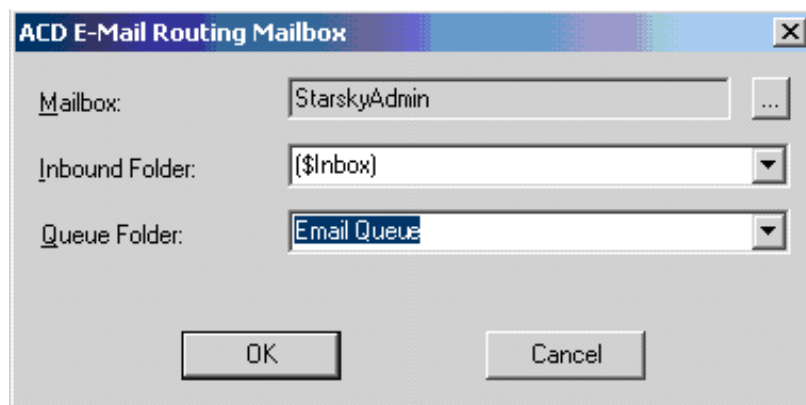
- Click **Search**.
- In the **Search by name results** section, select a name. When searching for a mailbox to select for ACD email routing, distribution lists and public folders are not listed in the search.
- Click **OK**.

Note: The following tasks are optional. You should not configure a **Queue Folder** unless your site specifically requires **Queue Folder** functionality.

In order to determine when new messages have been received, the Inbound Folder is polled at intervals defined by the **Polling Interval** setting on the **Mail Configuration** page. If a **Queue Folder** is defined, which is not required, new messages are moved into it prior to routing. By defining a **Queue Folder**, the number of messages in the **Inbound Folder** are reduced, and can in some circumstances increase the performance of the polling for new messages. There are however some drawbacks when defining a **Queue Folder**. For example, an inbound message with a read receipt request, may generate an auto-response with Exchange that the message was deleted without being read, which is not accurate.

Therefore, defining a **Queue Folder** should only be done in situations where there is a compelling reason for doing so, and only if the drawbacks are understood. Contact PureConnect Customer Care for more information.

In the **ACD E-Mail Routing Mailbox** dialog box, perform the following tasks:



ACD E-Mail Routing Mailbox dialog box

- Select an **Inbound Folder**. This is the receiving folder in the associated mailbox.
- Select a **Queue Folder**. This is the receiving folder for queued email.
- Click **OK** to activate ACD email routing.

In the Workgroup Configuration dialog box, click **OK**.

Set Up Forced Authorization Codes

To set up forced authorization codes you must enter phone number classifications in a server parameter, and then turn on forced authorization codes by user or by station. You can also turn on this feature by default user in the default user configuration.

Click the **Server Parameters** Container in Interaction Administrator. Double-click the **TollCallClassification** server parameter and complete this task.

□

Server Parameters container

- Enter the phone number classification value or values you wish to require forced authorization codes. You must enter these values exactly as they appear in the phone number classification page in the Phone Numbers container.

To Turn On This Feature By User Follow This Step:

To turn this feature on by user, click the Users Container in Interaction Administrator, and right-click the user you wish to modify. Click on the **User Rights 2** on the Security tab and complete this task.

□

Security tab of the User Configuration dialog box

- Check **Require Forced Authorization Codes** check box to turn on this feature.

Note: You can set up forced authorization codes by default user, by clicking the Default User container in Interaction Administrator, right-click Configuration and select Properties. Complete the same task as above.

To turn on this feature by station follow this step:

To turn this feature on by station, click the Stations Container in Interaction Administrator, and right-click the station you wish to modify. Click on the **Station Options** tab and complete this task.

□

Station Rights tab of the Station Configuration dialog box

- Check **Require Forced Authorization Code** check box to turn on this feature.

Once you have completed these tasks, selected users or stations require forced authorization codes to call specific phone number classifications.

Set Up Group Call Pickup

When group call pickup is enabled, a user can answer an alerting call on any phone in their station group. The user does not need to know the extension number of the ringing phone, but can simply press the Pickup and Group soft keys.

Note: A phone can belong to more than one station group. In the event of calls ringing on multiple station groups when a user does a group call pickup on a station belonging to those groups, the **oldest** call out of all those groups is picked up.

Configuration

You configure Group Call Pickup in both the Polycom phone configuration files and in Interaction Administrator (see [Station Group Configuration](#)). For more information on how to configure Group Call Pickup, see [Configuration of CIC Phone Features for Polycom Phones Technical Reference](#) in the PureConnect Documentation Library.

Set Up Message Waiting Indicators

To set up Message Waiting Indicators, you must configure MWI behavior at the Station Space, Station, and User levels in Interaction Administrator.

To set up Message Waiting Indicators

To set up Message Waiting Indicators at the default station level, click the **Stations** container in Interaction Administrator, and select the **Default Station**. Right-click **Configuration** and click the **Options** tab and complete the following tasks:

- Select the **Message Light** check box.
- Select the **Message Light Persistent** check box.

Note: If **Message Light Persistent** is checked, the message light stays on while any unread voicemail exists. When it is not checked, the message light turns off after the first unread voicemail is read.

To set up Message Waiting Indicators at the Station level, click the **Stations** container, right-click the station you want to modify, and select **Properties**. In the **Stations Configuration** dialog box complete the following tasks:

- Click the **Configuration** tab and from the **Phone Type** drop down list, select **Analog Caller ID** or **Analog (ADSI)**. *This task is not necessary on a SIP Station.*
- Click the **Station Options** tab and select the **Station has MWI message light** check box.

To set up Message Waiting Indicators at the User level, click the **People** container, then select the **Users** container. Right-click the user you want to modify, and select **Properties**. In the **User Configuration** dialog box, click the **MWI** tab and complete the following tasks:

- Select the **MWI Enabled** check box.
- Select **Send to Default or Logged Workstation**, **Send to SMDI**, or **Send to Following Address**.

Note: If you select **Send to Following Address**, you must enter the directory number. If you select **Send to SMDI**, you must enter Port and Phone Number. See the Interaction Administrator online help for more information.

Set Up Shared Line Appearances

Shared Line Appearances (SLAs) enable users to manage calls for other users. They can answer and make calls as if they were using a CIC station belonging to another user or using a group extension.

An SLA is associated with a line key on the Polycom phone. Users can have both shared and private lines associated with different line keys on the same phone.

Configuration

You configure SLAs in both the Polycom phone configuration files and in Interaction Administrator (see [Station Appearances](#)). For more information on how to configure SLAs, see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.

Set Up Zone Paging

Zone paging enables a user to make a live, one-way broadcast to a small, selected group of phones.

A user dials a short sequence of numbers (*901 + zone number) to initiate a zone page. After hearing a beep, the user speaks into the handset to begin the page. The zone page recipients hear it through their phones' speakers and do not have to pick up a handset.

Warning: Zone paging must initialize the phones so they go "off hook" to accept the page. The more phones there are in a zone, the greater the delay before the page is broadcast. Zone paging is not intended for live paging to an entire organization. It is intended for paging to a small geographical zone in the office or to a small group.

Note: Zone paging is supported only on Polycom® Soundpoint® IP600, Soundpoint® IP500/IP501, and Soundpoint® IP300/IP301 phones.

Configuration

You configure Zone Paging in both the Polycom phone configuration files and in Interaction Administrator. For more information on how to configure zone paging, see *Configuration of CIC Phone Features for Polycom Phones Technical Reference* in the PureConnect Documentation Library.

Tell Me About ACD Queues

Automatic Communication Distribution (ACD) is a system that intelligently routes interactions based on agent availability, caller input, agent skill levels, volume of interactions, time of day, agent groups, trunk line, costs, priority, or other variables. ACD quickly finds the best match between agent and interaction by calculating agents' scores and interaction scores. Several subroutines provided with the CIC clients offer ACD functionality.

An ACD queue is a workgroup queue that is set up to deliver ACD calls. ACD calls are routed to the appropriate Workgroup based on caller input. All members of that Workgroup (call agents) are expected to have a core set of skills required to handle any call on that queue. Further ACD processing directs the call to the most appropriate agent who is a member of that Workgroup based on each agent's User ACD configuration.

Tip: For more information on ACD processing, see *the white paper ACD Processing: CIC's Automatic Communication Distribution* and the *ACD Processing Technical Reference* in the PureConnect Documentation Library on the CIC server.

[I'm ready to set up an ACD Queue.](#)

Tell Me About Custom Statuses as .WAV Files

Administrators can define custom statuses using the Status Messages container in Interaction Administrator. Custom statuses are automatically supported by Mobile Office. By default, Mobile Office uses text-to-speech to play custom statuses. To improve the user experience, customers can play custom wave files instead of text-to-speech.

I'm ready to set up a custom status to play a .WAV file.

Tell Me About Forced Authorization Codes

Forced Authorization Codes require users to enter an extension and password if they are trying make a call you have classified in a server parameter. For example, if you are in an associate's office and want to make a long distance call, you have to enter your extension and password to make that call.

The server parameter, "TollCallClassification" contains the Long Distance, International, and Unknown values by default.

Note: Forced Authorization Codes apply to calls made at a station. These codes cannot be entered through any client applications, such as the CIC clients or Interaction Fax.

[I'm ready to set up forced authorization codes.](#)

Tell Me About CIC Phone Features Configuration for Polycom Phones

The phone features in Interaction Center include:

- Call Park
- Group Call Pickup
- Shared Line Appearances
- Zone Paging

Configuration

Configuration of CIC phone features for Polycom phones requires changes to the Polycom configuration files. In addition to changes to Polycom configuration files, some of the CIC phone features require certain configuration settings in Interaction Administrator.

[I'm ready to set up Call Park.](#)

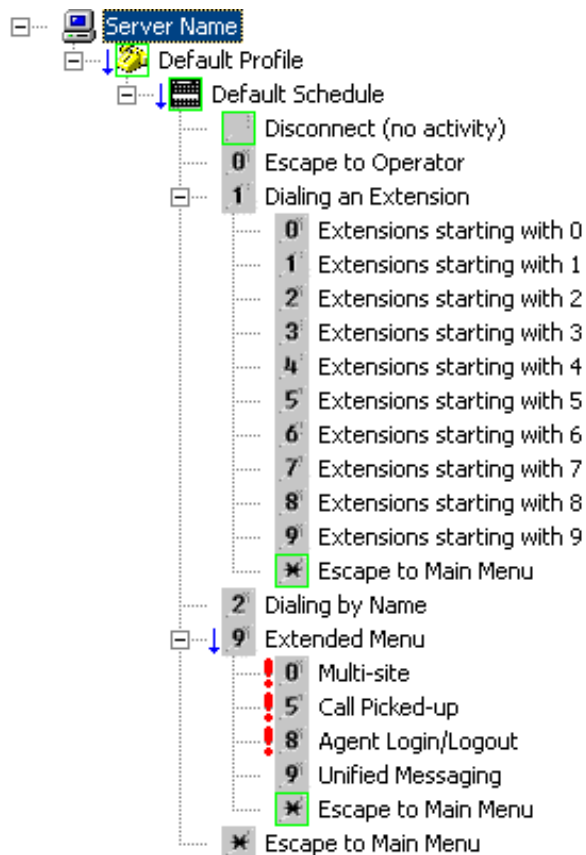
[I'm ready to set up Group Call Pickup.](#)

[I'm ready to set up Shared Line Appearances.](#)

[I'm ready to set up Zone Paging.](#)

Tell Me About the Default Auto-attendant Menu

This topic describes the default auto-attendant menu that is installed with CIC.



This is the default auto-attendant menu installed with CIC.

Digit(s) Pressed	Resulting Action
No Digit Pressed	Disconnect (no activity)
0	Operator User Queue
1	Dial an Extension
1 , 0	Extensions beginning with 0
1 , 1	Extensions beginning with 1
1 , 2	Extensions beginning with 2
1 , 3	Extensions beginning with 3
1 , 4	Extensions beginning with 4
1 , 5	Extensions beginning with 5
1 , 6	Extensions beginning with 6
1 , 7	Extensions beginning with 7
1 , 8	Extensions beginning with 8
1 , 9	Extensions beginning with 9
1 , *	Return to the Main Menu
2	Dial by Name
9	Extended Menu
9, 0	Multi-site
9, 1	Play Station Information
9, 4	Queue Monitoring
9, 5	Pickup Call
9, 8	Agent Login/ Logout
9, 9	Unified Messaging
9, *	Return Main Menu
*	Repeat Main Menu

Note: See the *Pre-Install Survey/Setup Assistant* information that helps you customize your Auto-Attendant.

[I'm ready to customize the Auto-attendant menu.](#)

Tell Me the Difference Between DID Fax and DID Non-fax Users

If you configure a user as fax-capable in Interaction Administrator, (there is a check box on the **Options** tab in the User configuration in Interaction Administrator called "Fax Capability"), then callers to that DID (Direct Inward Dial) agent hear a menu while CIC listens for a fax. CIC then places the call on the queue.

If you do not configure a user as fax-capable, the call goes directly to that user queue to alert (or voicemail if the user is not available) and the menu is skipped.

Fax-capable users do not lose any of the DID features, they only gain the additional menu option and the ability to listen for fax tone.

If you want to force ringback instead of playing the menu to the caller, turn on the Interaction Administrator server parameter, **DID Ringback Only**. When this server parameter is turned on, it will enable a ringback for an agent with DID, and it will disable the menu that plays.

Use the Standard Audio Controls to Re-record Prompts (Optional)

To re-record a prompt, open Interaction Attendant then open the Default Profile Form and complete these tasks:

- Click **Record** to start the new audio prompt.
- Create a new name for the prompt.
- Pickup your telephone handset and record the new prompt.
- Save the new prompt recording.
- Hang up your telephone handset.

Note: Pre-recorded prompts are provided with CIC for transfers to common department names, such as "Marketing", "Sales", "Technical Support", "Administration", "Customer Service", "Development", "Education", "Engineering", "Finance", and "Human Resources". These prompts (filenames are listed below) can be used with Setup Assistant to create the initial Attendant profile. You can also use text-to-speech for department names that are not provided in the pre-recorded prompts.

- PromptWorkgroup_Marketing.wav
- PromptWorkgroup_Sales.wav
- PromptWorkgroup_TechnicalSupport.wav
- PromptWorkgroup_Administration.wav
- PromptWorkgroup_CustomerService.wav
- PromptWorkgroup_Development.wav
- PromptWorkgroup_Education.wav
- PromptWorkgroup_Engineering.wav
- PromptWorkgroup_Finance.wav
- PromptWorkgroup_HumanResources.wav

See the Interaction Attendant Help for detailed information on each field in the Standard Audio Control.

For information on how to convert voice recordings, see the [Converting Voice Recordings](#) topic.



Schedule name

Type a descriptive name for a schedule. A schedule is the time and dates you want a telephone-based menu to run. You might schedule a menu to run on a holiday, after hours, or during lunch, so create a meaningful name, such as Christmas Eve.

Once a schedule is configured, the schedule name is available from Interaction Attendant for linking the schedule to a menu.



Mailboxes Selection

During CIC installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox User** field on the Users Configuration and the Workgroups Configuration pages, or if you click the **Select** button after clicking **Add** or **Edit** on the **Monitored Mailboxes** tab of the System Configuration page, or if you click on **Add** or **Edit** Mailboxes under **Routing** on the **ACD** tab of Workgroup Configuration (if the Workgroup has an ACD queue). Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a user or workgroup. This dialog box gives you multiple ways to configure the email account for a user or workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different. The options are:

- Review Current Settings
- No mailbox is required
- Interaction Message Store
- IMAP \ SMTP
- Search for a mailbox based on the following available directories

Available Directories may include Exchange, Notes, GroupWise, Interaction Message Store (formerly Voicemail Only or FBMC), LDAP, SMTP, or IMAP. For more information on Directories, [click here](#).

Review Current Settings

Select this option to review the current mailbox attributes.

No mail box is required

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list. When assigning a mailbox to a user, enter a Display Name, then click **Assign Address** to generate the Interaction Message Store address for that Display Name.

Note: Special characters cannot be used in the name.

IMAP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **IMAP**, you can assign the IMAP data store. Edit the IMAP Server, User ID, and Password.

Note: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **IMAP** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **IMAP** and select server, port, and enter the username *and* the password.

Search for a mailbox

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.

- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.
- When searching for a mailbox to select for ACD email routing or monitored mail, distribution lists and public folders are not listed in the search.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

- If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
- If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
- If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX:."; an SMTP email address begins with "SMTP."; a Notes email addresses begins with "Notes:."; and a GroupWise email address begins with "NGW:."

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Test

When associating a mailbox with a user (or workgroup, or ACD queue, or monitored mailbox, etc.), click this button to verify that the mailbox is valid and accessible. The verification process involves three tests:

- **Testing Directory Entry:** Is the directory entry valid? For example, a user may be having problems accessing their voicemail messages, because that user was removed or renamed in Active Directory. This test reveals such a case.
- **Testing Message Delivery:** Can an email message be sent to the user at this address? A test email message is sent to the user, and the user could manually verify that it is received.
- **Testing Message Retrieval:** Can the message store be opened and a list of folders retrieved?

A mailbox test dialog box is displayed showing if the three tests are successful.

Related Topics

[Monitored Mailboxes](#)

Section Expander

The section expander in the details view toggles the details, either hiding or displayed the information associated with the active tab.

Secure input form name

1. In the **New Secure Input Form** box, type a meaningful and unique name for the secure input form name.
2. From the **Form type** list, select one of the following:
 - **Simple:** Select this type to enable the form to receive text input.
 - **Custom:** Select this type if you have the CIC Client add-in to create custom secure input forms. Custom forms receive input with attributes that you specify in your code. For more information, see the *Secure Input Technical Reference* in the PureConnect Documentation Library.
3. Click **OK**.

Related topics

[Add a secure input form](#)

[Configure general information](#)

[Overview of secure input forms](#)

Select a Call Routing Feature

Use this page to select a call routing feature to assign to this location.

The call routing features that can be configured are:

- **Dial an emergency number from this location:** This local gateway routing option makes sure emergency classified calls are routed to the correct local gateway.

Dial local calls from this location: This local gateway routing option makes sure calls from this location are routed to the local PSTN base on the dial plan. For example, local calls from this location may be someone calling for a cab, calling home, or calling to order a pizza.

- **Use this location for toll avoidance from another location:** This routing option takes advantage of the IP link that connects two locations. Because SIP routing and voice data can be directed through this link, it's possible for a station at this location to make a call to a remote location, by being routed through a gateway. For example:

There are two locations; Indianapolis and Chicago. The Indianapolis location has a line (SIPIndy) and calls are routed through a gateway (10.0.0.90). The Chicago location has a line (SIPChicago) and calls are routed through a gateway (10.10.220.1). A call to 630-xxx-xxxx is made From the SIPIndy line and the 10.0.0.90 gateway. The dial plan is setup so that if a call is made to a 630 area code from Indianapolis, the call is routed to the Chicago location. The Chicago location then uses the SIPChicago line and the 10.10.220.1 gateway to call the number. Because the area code 630 is local to Chicago, the dial plan removes the area code and the call is classified as a local call.

If you select the **Dial an emergency number, from this location** or the **Dial local calls from this location** options and click **Next**, the [Select Dial Plan Patterns](#) page appears.

If you select the **Use this location for toll avoidance from another location** option and click **Next**, the [Select Toll Avoidance Location](#) page appears.

Select access control group for a managed IP phone or template

To select the access control group for a managed IP phone or managed IP phone template

1. As you add a managed IP phone or managed IP phone template, next to the **Access Control Group** field, click ... The **Select Access Control Group** dialog box appears.
2. Click the target access control group for the managed IP phone or managed IP phone template.
3. Click **OK**.

Related topics

[Access control groups](#)

[Add a managed IP phone or template](#)



Select Dial Plan Patterns

Use this page to select the patterns that the dial group and dial plan filter pattern will apply to. This defaults displayed on this page are based on the call routing feature selected on the previous [Select a Call Routing Feature](#) page.

If you selected **Dial an emergency number, 911, from this location**, the default values are based on any dial pattern that has the "Emergency" classification.

If you selected **Dial local calls from this location**, the default values are based on any dial pattern that has the "Local" classification.

If you selected **Use this location for toll avoidance from another location**, the default values are based on any dial pattern that has the "Local" classification, because you only want to route the remote calls to the local calls of the remote station.

Click **Filter** to change the default filter settings. After selecting the dial plan patterns for the call routing for this location, click **Next** to go to [Review](#) your settings.

Select Locations for Simulation

Use this page to select one or more [locations](#) to include in a simulation. Click **OK** to return to the [Conferences](#) page.



Select Station Create Options

Choose the station type and connection type.



Select Toll Avoidance Location

Use this page to select the remote location that can route these calls and the classification to use when making these remote calls. Since the calls are long distance, they are assigned a "Long Distance" as the classification. You can override the default classification.

Using the example in [Select a Call Routing Feature](#), you want Indianapolis to have access to the Chicago gateway. If a call is made to 630-xxx-xxxx from Indianapolis, the call is routed to the Indianapolis location and uses the SipIndy line. The call is classified as a local call.

Click **Next** to go to [Select Dial Plan Patterns](#).

Select Value - Add Workgroup

To add a Workgroup to this Role, in the **Add Workgroups** list select the Workgroup you want to add. You can select and add multiple Workgroups from this list. The dialog box expands, to display additional Workgroups, by using the size grip in the lower right corner of the window.

When you have selected all the Workgroups you want to add to this Role, click **OK**.

Select Values - Add Password Policy

To assign a Password Policy to this User, in the **Add Policy** list select the policy you want to add. You can select and add multiple Policies from this list. The dialog box expands, to display additional Policies, by using the size grip in the lower right corner of the window.

When you have selected all the Policies you want to assign to this User, click **OK**.

Select Values - Add Role

To assign a Role to this User, in the **Add Role** list select the Role you want to add. You can select and add multiple Roles from this list. The dialog box expands, to display additional Roles, by using the size grip in the lower right corner of the window.

When you have selected all the Roles you want to assign to this User, click **OK**.

Select Values - Add Roles

To assign a Role to this Workgroup, in the **Add Role** list select the Role you want to add. You can select and add multiple Roles from this list. The dialog box expands, to display additional Roles, by using the size grip in the lower right corner of the window.

When you have selected all the Roles you want to assign to this Workgroup, click **OK**.

Select Values - Add Supervisor

To add a Supervisor to this Workgroup, in the **Add Supervisor** list select the User/Supervisor you want to add. You can select and add multiple Supervisors from this list. The dialog box expands, to display additional Supervisors, by using the size grip in the lower right corner of the window.

When you have selected all the Supervisors you want to add to this Workgroup, click **OK**.

Select Values - Add User

To add a User to this Role, in the **Add Users** list select the User you want to add. You can select and add multiple Users from this list. The dialog box expands, to display additional Users, by using the size grip in the lower right corner of the window.

When you have selected all the Users you want to add to this Role, click **OK**.

Select Values

Select the peer site ID to add to this station or user. The peer sites available depend on the peer sites configured in [Peer Site Configuration](#).

Selection Rule Name

Enter a unique and meaningful name for the new selection rule.



AudioCodes and Genesys Hardware

Use this page to optionally configure AudioCodes and Genesys Hardware.

Enable Audio Codes IP Hardware

If this check box is enabled, CIC expects AudioCodes or Genesys hardware to be present in the server. It will attempt to locate and initialize all AudioCodes or Genesys boards that have been configured.

H.100 Bus Law Type

Select the Law Type to change the encoding scheme of the TDM bus. The default type is muLaw.

Starting Media Port

Select the starting port for AudioCodes or Genesys RTP sessions. The default value is 4000. If this port conflicts with other resources or applications, then set this value to change the starting port. This value must be an even number. AudioCodes or Genesys port assignments increment in pairs of three from the starting port and consecutively to the number of IP resources *10. For example, if the starting port was 4000, then the first IP resource will consume 4000, 4001, and 4002 for RTP, RTCP, and T38 fax, respectively. The next IP resource will consume 4010, 4011, 4012, and so on.

Change Firmware Paths

Click on this button to change the location of the IPM-260 firmware file. The default value is C:\server\IC\Server\Firmware\AudioCodes\ramIPM-260.cmp or C:\server\IC\Server\Firmware\Genesys\ramIPM-260.cmp.

Minimum Jitter Buffer Delay

This parameter sets the minimum value (in milliseconds) of the jitter buffer that is used by AudioCodes or Genesys dynamic jitter buffer algorithm. The value of the jitter buffer is never be lower than this value. Use the up and down arrows to change the value of this parameter.

- **40** - (Default)
- **0 to 150** - Range of values

Jitter Opt Factor

The jitter buffer optimization factor is a unit-less value that determines the operational response of the dynamic jitter buffer algorithm on AudioCodes or Genesys boards. If set to the maximum value, the jitter buffer delay tracks the network latencies to their maximum and stays there, thus minimizing packet loss but maximizing delay. When the lowest value is used, the jitter buffer increases delay only to compensate for clock drifts, and soon decays to its minimal setting again, thus minimizing delay but maximizing packet loss. Use the up and down arrows to change the value of this parameter. Acceptable values include:

- **7** - (Default)
- **0 through 12** - Range of values

Note: It is not recommended that this parameter be changed unless directed to do so by Interaction Intelligence's support organization.

Board Configuration

Click **Add** to add a board configuration, click **Edit** to make changes, or click **Delete** to remove a board configuration.



Server endpoints

Use this page to add servers as endpoints to this location. The purpose of server endpoints is to define the Codec communications between the server and other endpoints (i.e., lines or stations) recognized by CIC. The following servers are valid server endpoints:

- Home site
- Peer sites in a Multi-server Administration environment
- Media servers
- Speech Recognition servers
- SIP Proxies
- Session Manager servers

List of Media Servers

This list displays media servers that have been added as endpoints for this location.

Add Media Server

Click the **Add Media Server...** button to display a list of media servers (all logged in media servers will appear in the list) and their current location. By default, media servers are assigned to the <Default Location>. Select a media server and click **OK**.

Remove

Select a server from the list and click **Remove** to delete it as an endpoint.

List of SIP Proxies

This list displays SIP proxies that have been added as endpoints for this location.

Add SIP Proxy

Click the **Add SIP Proxy...** button to display a list of SIP proxies associated with this location. Select a SIP proxy and click **OK**.

Remove

Select a proxy server from the list and click **Remove** to delete it as an endpoint.

List of Session Managers

This list displays session manager servers that have been added as endpoints for this location.

Add Session Manager Server

Click the **Add...** button to display a list of session manager servers (all logged in session manager servers will appear in the list) and their current location. By default, session manager servers are assigned to the location of its FQDN, not the <Default Location>. Select a session manager server and click **OK**.

Remove

Select a server from the list and click **Remove** to delete it as an endpoint.

Related topics

[Location Configuration](#)

[Communications](#)

[Lines and Stations Endpoints](#)

[SIP Line Region](#)

[SIP Station Region](#)

[Regional Dial Plan](#)

[Home Site Configuration](#)

[Location Assistant](#)

[Peer Site Configuration](#)

[Media Server Configuration](#)

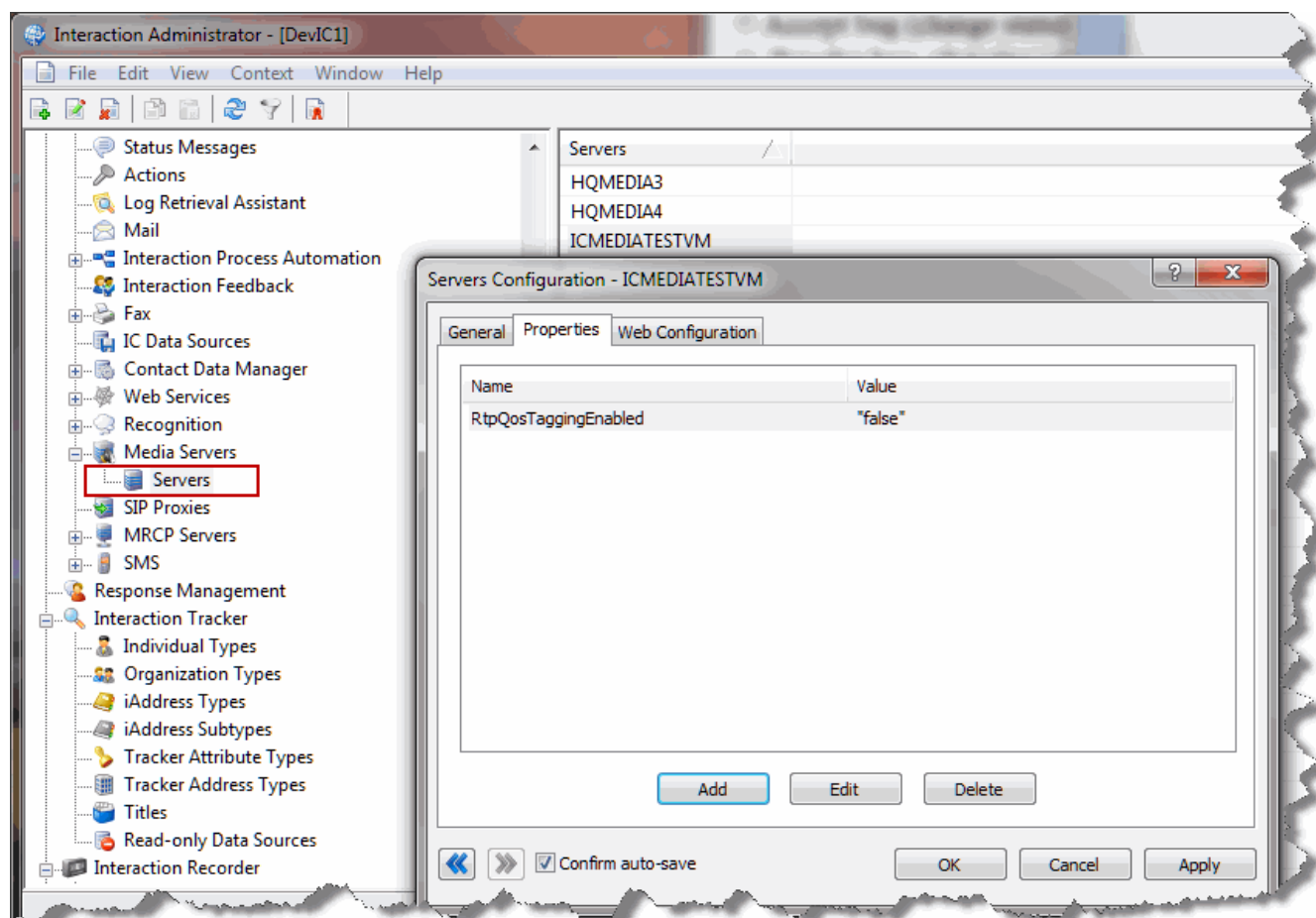
[SIP Proxies](#)

[Add Registration](#)

[Managed IP Phone Appearance Configuration](#)

[Session Manager](#)

Servers Configuration Properties Graphic



Set Password

Use this page to set passwords on multiple users at one time, either by specifying passwords, or by having Interaction Administrator generate passwords based on users' password policies.

Specify a new password

To specify new passwords, enter the password in **Password**, and re-enter it again in **Confirm**.

Email password to user(s)

Select this option to send an email message containing the new passwords to each user's mailbox. This option is selected by default.

Generate and email random password(s)

Select this option to generate a random password for all users, and to email the new passwords to each user. Selecting this option will generate passwords based on the users' password policy.

Click [Set Password Options](#) to configure email message options.

Click **OK** to create new passwords and to optionally send email messages to the users. A progress bar is displayed for multiple users and it reports any errors that occur. For example, "No mailbox: Can't send email."

Note: If you have master administrator rights, you can use a command line executable to report on password usage within a CIC organization. Run the PWCheckU executable from a command prompt in the CIC server path using a user log in switch, for example, "C:\ pwchecku -login adminuser 07158609." For more information about this utility, see the Product Information site.

Set Passwords

Determine how to create the CIC user's passwords. You have two options:

- **I want to skip the automatic assignment of user passwords.** If you select this option, any imported passwords are used.
- **Assign the same password for each new user account.** Select this option to use the same password for every account.

Notes: The CIC password is used for user authentication for remote access to voice mail, or if required, for the login to the CIC clients.

Note: If you have master administrator rights, you can use the a command line executable to report on password usage within a CIC organization. Run the PWCheckU executable from a command prompt in the CIC server path using a user log in switch, for example, "C:\ pwchecku -login adminuser 07158609." For more information about this utility, see the Product Information site.

For more information about passwords, see the *Security Precautions Technical Reference* in the PureConnect Documentation Library.

Setting the Called/Calling Party Type on a Per Call Basis

You can set the called/calling party numbering type and plan on a per call basis using the following instructions.

Modify the Dial Plan to create dial strings with this character sequence at the beginning of the string: !Xyxy.

- The '!' indicates that the next four characters are going to be used to set the Called Party Number Type and Plan as well as the Calling Party Number Type and Plan.
- The X (first character) is the Called Party Number Type. Valid Values are:

U = "Unknown"

I = "International"

N = "National"

- The y (second character) is the Called Party Numbering Plan. Valid Values are:

U = "Unknown"

E = "E.164"

T = "Telephony Numbering Plan"

- The x (Third character) is the Calling Party Number Type. Valid Values are:

U = "Unknown"

I = "International"

N = "National"

- y (Fourth character) is the Calling Party Numbering Plan. Valid Values are:

U = "Unknown"

E = "E.164"

T = "Telephony Numbering Plan"

Example: The Default Dial String format "!NENE{1}{2}{3}{4}{5}{6}{7}{8}{9}{10}{11}{12}{13}" is set the Called Party Number Type to National, the Called Party Numbering Plan is set to E.164, the Calling Party Number Type is set to National, and the Calling Party Numbering Plan is set to E.164.



SIP line certificates and port mappings concepts

To configure SIP line certificates and port mappings, you can do the following things:

- Configure TLS line certificates
- Configure authority certificates
- Map certificates to ports
- Sign a third-party certificate

For more information, see the related topics.

Related topics

[Configure TLS line certificates for a SIP line](#)

[SIP line TLS security options](#)

[Select certificate authorities for a SIP line](#)

[Configure a SIP line](#)

Protocol - SIP Line IP Parameters

Use this page to configure your SIP IP Parameters.

IP Parameters

IP Parameters can be UDP or TCP. Here's how to set the parameters:

Transport Protocol

Select **UDP** or **TCP**. If UDP is selected, the following additional fields must be defined. **Note:** Most of the following fields are grayed out if TCP is selected. **Default:** UDP

Receive Port

UDP/TCP: Port number for which the CIC SIP engine will be servicing requests.

Valid: 1024 to 65535

Default: 5060

T1 Timer

UDP: Timer value in milliseconds that represents the initial incremental delay between packet retransmission.

Valid: 500 to T2 (milliseconds)

Default: 500

T2 Timer

UDP: Timer value in milliseconds that represents the maximum incremental delay between packet retransmissions.

Valid: 4000 plus (milliseconds)

Default: 4000

Maximum Packet Retry

UDP: Maximum Packet Retry for requests

Valid: 0 to 10

Default: 10

Maximum Invite Retry

UDP: Maximum packet retry for INVITE and ACK requests

Valid: 0 to 6

Default: 6



SIP Station Session

Use this page to configure your SIP station and/or the associated managed IP phone sessions.

Use Global SIP Station Session Settings (Station Configuration Only)

Select this checkbox to inherit the values defined at the Global SIP Station level.

Use SIP Session Timer and SIP Session Timeout

If checked, an OPTIONS messages will be sent every Sip Session Timeout (default is 60) seconds to the remote device. If the remote device does not respond to the OPTIONS message, the call will be disconnected.

SIP Register Interval

Select the amount of time in days, hours, minutes or seconds. The default value is 1 day.

Disconnect on Broken RTP

This parameter determines if a VoIP call will remain active after audio has been disrupted. Audio is considered disrupted if no RTP, RTCP and no comfort noise packet is received from the remote device. By default, this parameter is turned on (checked).

Media Timing

This is the timing on an INVITE request that contains a new media description in the SIP message body in the existing signaling session. Select Normal or Delayed from the pull-down list. Delayed is the default value for this setting.

See the latest version of SIP Application Note on the Product Information site. Select the Documentation link for the product and release you are using to open the PureConnect Documentation Library, then select the Telephony Application Notes link.

Media reINVITE Timing

This is the type of timing on a re-INVITE request that contains a new media description in the SIP message body in the existing signaling session. Select Normal or Delayed from the pull-down list. Delayed is the default value for this setting.

See the latest version of SIP Application Note on the Product Information site. Select the Documentation link for the product and release you are using to open the PureConnect Documentation Library, then select the Telephony Application Notes link.

Terminate Analysis on Connect

Terminate Analysis on Connect is used to terminate the call analysis procedure when a SIP connection indication from the network is received. Select this box to enable this feature. The default is enabled.

For example, CIC makes its PSTN call via SIP calls through a SIP/ISDN gateway. This particular SIP/ISDN gateway only sends a SIP connect message back to CIC after the remote party answers the call. If call analysis is used, you would want to keep checked Terminate Analysis On Connect, so that call analysis terminates when the SIP connect message is received.

Another example, CIC makes its PSTN call via SIP calls through a SIP/analog gateway. This particular SIP/Analog gateway always sends a SIP connect message back to CIC prematurely, before the remote party answers the call. If call analysis is used, you would want to clear the Terminate Analyses On Connect checkbox, so that call analysis continues after the SIP connect message is received.

Tip: If the connection is to a station, the Terminate Analysis On Connect configured in the station is used.

Disable Media Server Passthru

Select this checkbox to this parameter to stop the media server from rewriting the SSRC header. This option is disabled (unchecked) by default.

Station Connections are Persistent

Select this box to maintain a persistent voice connection to the CIC server. The audio path will not disconnect until the station initiates the disconnection.

Clear this box to indicate when CIC determines that the audio path to the station is no longer needed, and CIC will initiate the disconnection.

Recommended setting

Operators: If you want to handle more calls than the phone is capable of handling. For example, if an operator wants to handle up to 20 simultaneous calls, then select this checkbox.

Call Center Agents: If call center agents are using an IP phone with a headset, and using a CIC client, this box should be selected.

Connection Call Warm Down Time

This value represents the number of seconds a connection call should remain connected after the regular call is disconnected. Once this timeout is expired, the connection call will be disconnected. The default value for this option is 5 seconds.

Note: This option is not used for persistent connection calls.

Call Appearances (does not apply to managed IP phones)

Select the number of call appearances the phone can handle. CIC will send up to the configured number of calls to the phone.

Note: If Persistent is selected, the number of call appearances will be 1.

Recommended setting

General: This value should be over 1 for experienced phone users only.

Cisco: The Cisco IP phone 7960 can have up to six line appearances (each line appearance is equivalent to a station). Each line appearance has a unique SIP address. Don't confuse [line appearances](#) with call appearances. Each line appearance handles 2 call appearances. Configure the phone to one line appearance and then this station configuration to 1 or 2 call appearances.

Pingtel: Pingtel Expressa IP phone has one line appearance that handles 4 call appearances. Set station configuration to 1, 2, 3, or 4 call appearances.

Related Topics:

[Media Server General Configuration](#)

Select a User or Workgroup Name

To select a User or Workgroup name:

1. Click the down arrow to display the list of names.
2. Click on a User or Workgroup name.
3. Click **OK**.

This name now appears in the Owners list box.



Select a skill

Select a skill to assign to this user or workgroup.

If the skill you want to assign does not appear in the list, exit this page. Then use the Skills container to add a new skill and assign it to the appropriate user or workgroup.

Note: You can select skills only for ACD workgroups.



Cellphone Configuration

When the SMSGateway is instructed to receive messages by the SMSServer, the SMSGateway first needs to select a Cellphone to receive from. Since a Cellphone is also used to send, the SMSGateway scans the Cellphone and if it's busy sending, it will try again a few seconds (**Cellphone Select Sleep**), and no more than a few times (**Cellphone Select Tries**) before declaring it cannot read the Cellphone.

Bluetooth connections may also be used, if Bluetooth support is available on the server and on the cell phone. In that case, SMS Gateway sees the Bluetooth devices as simple serial ports.

Note: A Bluetooth connection is substantially slower than direct cable connection.

The configuration settings on this page determine how the gateway uses attached phones.

Cellphone Select Tries

The number of attempts that the gateway shall make to select a cell phone before timing out. The default is 3 attempts.

Cellphone Select Sleep

The amount of time (in seconds) that the gateway should wait before trying to select again. The default is 5 seconds.

Timeout

The total amount of time that the gateway may spend attempting to connect before timing out. The default is 20 seconds.

Receive Sleep

The amount of time in seconds to wait between transmit/receive/sleep cycles. The default is 60 seconds.

Inbound Serial Port Selection

This setting determines the order that serial ports are selected. A round robin configuration passes attempts to utilize the next available port. In Sequential configurations, ports are used in order.



Serial Ports and Cellphones

This page configures the serial ports and cellphones that are connected to the gateway. Changing the order of the phones in this list affects the Inbound Serial Port Selection accordingly (the order that the phones are used in.)

Press Add or double-click an existing item to change its configuration. The Serial Port Configuration dialog will appear:

Serial Port (COM):

The COM port number of the serial port (COM1, COM2, etc.)

Speed

The baud rate that is compatible with the cell phone's serial port.

Parity

Parity determines the method, if any, that SMS Gateway shall use to check the accuracy of transmitted characters. In most cases, parity checking is not required. However, parity can be odd or even, or none.

Parity checking is used by a receiving device to detect transmission errors. When "None" is selected, the data is not changed for checksum purposes. Selecting Even parity arranges data so that the total count of "on" bits in each data character is an even number. This is controlled by setting the last or most significant bit (called the parity bit) to 0 or 1 as needed. Odd parity works the same way, except that the count of 1 bits results in an odd number.

Data Bits

The number of bits transmitted to identify a character, usually 7 or 8.

Stop Bits

The number of bits sent at the end of every byte transmitted. This signals the receiving hardware to resynchronize. Most serial devices use 1 stop bit.

Flow Control

Select Hardware flow control to use RTS/CTS handshaking between the server port and the cell phone. Alternately, you may select Software flow control to send bytes using XON-XOFF signaling.

Direction:

The Direction setting affects the flow of data bytes in the cable between 2 serial ports. Select "Both" (bi-directional) when there are 2 different flows (wires) available.

Send Timeout:

The duration in milliseconds to wait before timing out a send operation.

Receive Timeout:

The duration in milliseconds to wait before timing out a receive operation.

Phone Description:

Press the "..." button to browse for an .I3Cell configuration file, which is an XML file that describes how to communicate with that phone. The path to that file must be specified as a UNC path that the SMS Gateway has read access to.

Active check box

Check this box to activate the serial port/phone configuration.

Press **OK** to save the changes to the Serial Port settings. When control returns to the Serial Ports and Cellphones tab, optionally use the **Up** and **Down** buttons to change the order of the phones in the list. This affects the order the phones will be used in (the Inbound Serial Port Selection).



SMS Status Report

A Status Report message (SR) is an SMS message that comes from the SMS-C and/or the SMS Broker. It contains a status of sent messages. The use of this service is usually bound to the subscription the customer has with the SMS Broker.

Use this page to configure settings used when polling for status reports.

Address

This is the address of the server to connect to when polling.

Threads

This is the number of threads used for polling. This is how many threads can simultaneously poll the server. Typically, there is only one thread.

Note: If you need more than one thread, contact Netsize for additional functionality.

SRTP Cipher Suites

Use this page to enable weaker SRTP ciphers if the network has SRTP devices that won't support CIC's stronger, default AES ciphers.

Specify which cipher suites to use for encrypting SIP messages when using SRTP on the SIP lines. Use the **Move Up** and **Move Down** buttons to change the order of the cipher suites to use. Highlight the cipher suite to use as the default cipher, and click **Default**.



Define a validation certificate

This help topic explains how to add or edit a validation certificate.

To define a validation certificate

1. To complete the **Path** box, do one of the following:
 - Type the path to the validation certificate.
 - Click the browse button to navigate to the certificate's location.
2. Click **OK**.

Related topics

[Configure validation certificates](#)



Define a claim

This help topic explains how to add or edit a claim.

To define a claim

1. In the **Assertion** box, type the SAML assertion provided by the identity provider.
2. In the **User IC Setting group**, select one of the following CIC attributes that maps to the SAML assertion provided by the identity provider:
 - To select a standard CIC attribute (such as Email Address, User ID, or Windows Domain Account), select the **Use a common IC attribute** option button, and then select the attribute from the list.
 - To select a non-standard CIC attribute, select **Specify an IC attribute** option button, and then type the CIC attribute in the box.

Note: If you specify a CIC attribute, then the value you type here must exactly match the CIC attribute in the **Users** container. Use this option only if you are an advanced user.

3. Click **OK**.

Related topics

[Configure claims](#)



Define a SAML attribute

This help topic explains how to add or edit a SAML attribute.

To define a SAML attribute

1. In the **Name** list, select the name of the SAML attribute for which you want to define a value.
2. Do one of the following:
 - If the SAML attribute already has a value defined for it, select that value and then click **Edit**. The Edit Value dialog box appears.
 - If the SAML attribute does not already have a value defined for it, click **Add**. The New Value dialog box appears.
3. Continue with *Defining a value for a SAML attribute*.

Related topics

[New Value dialog box](#)

[Edit Value dialog box](#)

[Defining a value for a SAML attribute](#)

[Configure SAML attributes](#)



Define a value for a SAML attribute

This help topic explains how to add or edit a value for a SAML attribute.

To define a value

1. In the **Value** box, type the case-sensitive value.
2. Click **OK**.

Related topics

[Configure SAML attributes](#)



Define a connection

This help topic explains how to add or edit a connection for a secure token server.

To define a connection

1. In the **Address** box, type the IP address or the FQDN of the server that makes a connection to this CIC server.
2. In the **Maximum number of connections** box, select the number of connections that can be made from that machine to the CIC server.
3. Click **OK**.

Related topics

[Configure a connection for a secure token server](#)

Select Non-bus Device Fax Drivers

Select the type of fax driver from the list of identified, installed fax devices. If you installed a fax device, but it is not listed in the Driver box, exit Interaction Administrator and check the fax device hardware and software for proper installation. Then, restart the server with the fax device and driver installed, and configure the station again in Interaction Administrator.



CE Phone Administration

Use this page to manage global information maintained for CE Phone integration.

Click [Data Sources](#) to review or update the global Active Directory data sources for CE Phones. Click [Attributes](#) to review or update global CE Phone attributes stored in Active Directory.

Related topics

[CE Phone Administration](#)



Standalone Phone

If you selected **Standalone Phone** as the station type to configure a specific station to use as a station template, you need to complete the following information.

Configuration

Connection Type

This is the type of connection: **Station Board**, **Line**, or **SIP**. Depending on the selection you make, different options are displayed. This field may be grayed-out or unavailable.

Auto Conference

If this check box is selected, and if a call is already connected or held at the station, a conference is created between the new incoming call and the existing call(s). An announcement of the new call is played to the existing call(s) before the conference is established.

PIN

If you enabled auto Conference you must enter the **Personal Identification Number**.

Ring Always

Select this check box if you want the station telephone to always ring when the user receives a call, even if a CIC client is not running or if the Ring Telephone check box is not selected.

Clear this check box to allow the state of the Ring Always check box to determine if a user's default workstation telephone rings when a new interaction arrives for a user.

Drop Loop Current

Select this check box to enable the MSI station (one connected to a Dialogic MSI board) to drop the loop current after the remote caller disconnects. The Drop Loop Current condition would be desirable, for example, if the station board is into an analog voicemail system, which typically expects the loop current to drop on remote disconnects.

The Drop Loop Current check box appears only when you select the Station board connection type. The default condition is not to drop the loop current.

Phone Type

From the pull-down menu, select the type of telephone associated with this workstation.

- **Analog**

Select this for all POTS sets (that is, Plain Old Telephone System sets with no fancy features) that are not capable of displaying caller ID or other call data. You can select this for other types of phones (for example, ADSI, and so on) as well if you do not want CIC to send call data to the telephone.

- **Analog (Caller ID)**

Select this if the telephone is capable of displaying caller ID. If this option is selected, CIC sends the caller ID to the telephone between the first and second ring.

- **Analog (ADSI)**

Select this if the telephone is an ADSI (Analog Display Services Interface) phone with a display screen. If this option is selected, CIC sends the caller ID and caller name data (along with any other data the handler specifies) to the ADSI phone before the first ring.

Allocate Dedicated Voice Resource

Enabled only when you choose an Analog (CallerID) or Analog (ADSI) phone type.

Select this check box only if you are using a Caller ID phone or an ADSI phone with a display screen AND you want to guarantee that Caller ID (if available) will always be displayed on that screen with incoming calls. Caller ID and ADSI phones use an additional voice resource from the pool of available voice resources to display Caller ID data on the phone. At the moment when the Set Caller ID tool step in a handler is ready to send Caller ID to a phone, it must allocate a voice resource. If no voice resource is available at that moment, the call still alerts on the phone, but Caller ID data does not appear. You may optionally select this check box to dedicate a voice resource for a station (either a stand-alone Caller ID or ADSI phone or a workstation with one of these phones) if it is crucial that Caller ID always appears with each call. However, the dedicated voice resource will be used only for sending Caller ID and message waiting indicator signals to the phone, which may be an inefficient use of resources if your system is short of voice resources.

Note: Set Visual Indicator tool and Set Caller ID tool in the Telephony tools tab in Interaction Designer



Station group name

Type a name for the group of stations.

Related topics

[Add a station group](#)

Station Line Group Wizard

The Station Line Group Wizard determines existing station line group configuration, if any, and displays the information. If there is no existing configuration, then the wizard allows you to create a station line group.

If existing station line group configuration exists, the [Modify the Current Station Line Group](#) page appears.

If no station line group configuration exists, the [Assign a Station Line Group](#) page appears.



Station template name

Enter a meaningful name for this new station template.

Related topics

[Add a station template](#)



Delete Station

Click **OK** to delete this station.



Select Bus Device Fax Drivers

Select the type of fax driver from the list of identified, installed fax devices (such as AculabFax or DialogicFax).

If you installed a fax device, but it is not listed in the **Driver** box, exit Interaction Administrator and check the fax device hardware and software for proper installation. Then, restart the server with the fax device and driver installed, and configure the station again in Interaction Administrator.



Stand-Alone Fax Configuration

A stand-alone fax machine can be accessed as another station connected to the station board.

For each stand-alone fax, enter a physical extension and complete the selections for the connection you choose.

Note: Depending on the selection you make in the **Connection** box, different options are displayed.

Extension

Type a unique extension number for this station.

Connection

Choose one type of connection to configure: **Station Board**, **Line**, or **SIP**. Depending on the selection you make, different options are displayed.

Station Board and Line

The connection fields for a station specify the kind of device to which the station is connected. All stations are usually connected to a breakout box, which is connected to a station board on the CIC server, or to a channel bank device, which is connected to a T-1/E-1 line board on the CIC server, hence, the two Connection Types: Station Board and Line.

- If this station is connected to a station board, select the Type **Station Board** and specify the station board number and port.
- If this station is connected to a channel bank, which is in turn connected to the CIC server via a T-1/E-1 line, select the Type **Line** and then select the Line name (that is, the name of a T-1/E-1 channel configured in the Lines container) for this station.

Note: If the Connection Type is **Line** and this station is connected to a channel bank, you must select the FXS Loop Start protocol on the T-1/E-1 Interface for the line connected to the channel bank.

Type

Select **Line**, **SIP**, or **Station Board**, depending on how the station is connected to the CIC server (see the previous paragraphs).

Board

If you choose **Station Board**, type the number of the Dialogic station device interface board supporting this fax machine.

The board number corresponds to the digit(s) appended to the end of each Dialogic station device name (this number is *not* the same as the Dialogic board identification number (ID) set on the locator switch). Each properly installed Dialogic station interface board registers a device name on the server. Station board device names look like "msiB#C#". The board number is the number in the "B#" portion of the device name. For example, if the device name is "msiB1C8", the Station Board Number to type in this field is **1**.

All Dialogic device names can be seen in the System log of the Windows Server's Event Viewer program found in the Administrative Tools program group.

Port

If you choose **Station Board**, type the port number on the Dialogic station device interface board associated with this fax machine. The telephone station adapter ports connect each fax machine to a port on the station device interface board.

Drop Loop Current

Check this box to configure the msi station (one connected to a Dialogic msi board) to drop the loop current after the remote caller disconnects. The Drop Loop Current condition would be desirable, for example, if the station board is into an analog voicemail system, which typically expects the loop current to drop on remote disconnects.

The Drop Loop Current check box appears only when you select the Station board connection type. The default condition is not to drop the loop current

Line

Select the name of the T-1 or E-1 channel (defined in the Lines container) for this station. If the Line drop down list is empty, you must first create the T-1/E-1 channels (lines) in the Lines container.

Telephone

When you select **Line**, the **Telephone** box is displayed.

In the **Phone Type** box, select the type of telephone associated with this stand-alone phone.

Analog

Select this for all POTS sets (that is, Plain Old Telephone System sets with no fancy features) that are not capable of displaying caller ID or other call data. You can select this for other types of phones (for example, ADSI, and so on) as well if you do not want CIC to send call data to the telephone.

Analog (Caller ID)

Select this if the telephone is capable of displaying caller ID. If this option is selected, CIC sends the caller ID to the telephone between the first and second ring.

Analog (ADSI)

Select this if the telephone is an ADSI (Analog Display Services Interface) phone with a display screen. If this option is selected, CIC sends the caller ID and caller name data (along with any other data the handler specifies) to the ADSI phone before the first ring.

Active

Select this check box to activate the station. This enables the station to place and receive calls. Clear the check box to deactivate the station, preventing calls from coming in to or going out from the station.

Ring Always

This check box controls whether or not the telephone rings when incoming calls alert on that station.

Select this check box if you want the station telephone to always ring when the user receives a call, even if the CIC client is not running or if the Ring Telephone check box is not selected. Clear this check box if you do not want the station's telephone to ring, or to allow the state of the Ring Telephone check box to determine if the station's telephone rings.

SIP

You can define a SIP station for stand-alone fax machines. This option is only available on SIP-enabled CIC servers.

In the Extension box, type the extension. Under Connection, in the Type box select SIP. Press the Configure SIP Address button. In the SIP Address dialog, select the predefined format option.

Delete Status Message

Delete this Status Message.

Interaction Feedback Empty Path Message

If no path is entered for the prompts or recording paths, Interaction Administrator displays a message:

□

Press **Yes** to populate the configuration page with the default path(s), or click **No** to return to the [Interaction Feedback Settings](#) page and leave the path(s) blank.

Add a Column

Adds a column to the end of the current table.

Add a Row

Adds a row to the bottom of the current table.

Close the File

Closes the current table. If you made changes, it prompts to see if you want to save them.

Create a multi-value index

Create an index with one or more values per entry. Multiple entry indexes are slightly slower to search than indexes with unique entries.

Create a unique index

Creates an index of unique values for the currently selected column. All entries in this column must be unique. This is the fastest kind of index.

Delete the current column(s)

Delete the currently selected column(s) in the table. If necessary, you can use the Undo command to restore deleted columns in the current table editing session.

Delete the current row(s)

Delete the currently selected row(s) from the table. If necessary, you can restore the deleted rows using the Undo command.

Export a Table

Exports table data to a native Table Editor table for sharing with other CIC sites. The .i3TableEx format allows sharing of tables between systems.

This command stores an exact copy of the table, preserving all GUIDs (globally unique identifiers) so that they can be used again elsewhere. (Interaction Designer uses the GUIDs in the handlers to know exactly what table and columns are defined. This table is not read by IP. Instead it's a way to back up a table to a file and share it with other systems. For example, a VAR may define a table and some ahdnels to operate on that table. The VAR could then just distribute the handler and the i3TableEX files.

See [Export Data](#) for information on exporting data in other formats.

Export Data

Exports data in the current table to a file formatted with Comma Separated Values (.CSV) or Tab Separated Values (.TSV). The Save As dialog appears and allows you to select the file format and the location of the file.

Notes on exporting .CSV files:

If a comma separator is found, the entire field is exported surrounded with double quotes. If a double quote is found within that field, it will be escaped with an additional double quote. A .CSV import will interpret these conventions also.

File New

Create a new table.

File Open

Opens an existing table with an extension .i3tablex. By default, it looks in the path specified in the I3Table Path server parameter.

File Properties

Displays the properties for the current table. Table properties include:

- Description of the table
- Dimensions of the table
- Identifier number to uniquely identify the table
- Create Time to indicate the date and time the table was created
- Last Modified date and time

The table characteristics including the Column Labels, Index Type for each column, and the Globally Unique Identifier (GUID) for each column in the table.

File Save As

Displays the Save As... dialog, which allows you to specify a new name for a copy of the current table. Also creates a new GUIDs (globally unique identifiers) for all the columns, new Directory Service entries, and a new .i3table file. Interaction Processor loads the new table into memory.

Type a file name and click OK to save the file in the directory specified in the I3Table Path server parameter (\\server\IC\Server\I3Tables) by default.

File Save

Saves the current table to the registry and the i3table file.

Before saving the data, Table Editor checks the table for certain properties. If the table does not have an index or the appropriate type of index for the values in the indexed column, Table Editor prompts you to make adjustments on the table before saving it. If the data is OK, Table Editor overwrites the current .i3tablex table file.

If the file has not been saved before, the Save As... dialog appears and allows you to specify a new file name.

Import a table

Imports an existing Table Editor file in the native .i3TableEx file format. The imported table will overwrite the current table, so be sure to save the current table first. The Import Table command enables you to share data between CIC sites and to register tables in CIC, if the tables were created on a different CIC server.

Importing Data from Another Table

Import a table in the *i3TableEx* format. The table editor can import and export the entire contents of the table, column definitions plus data. This is a binary format that preserves the table's individuality. You may want to do this to save a copy of a table and revert back to it, share it with friends, share it with another CIC system, or as a VAR add value by supplying custom data to clients.

Importing Data from a Spreadsheet or Database

Import data from a spreadsheet or database. The Table Editor can import and export tabular data using CSV, comma delimited, and TSV, tab delimited formats. See [Import Data](#) for more information.

Import Data

Imports data from the specified file. Table Editor can import data from spreadsheets and databases saved as Comma Separated Values (.CSV) files and Tab Separated Values (.TSV) files. The Open dialog allows you to navigate and select the desired file.

Notes on importing .CSV files:

When importing a .CSV file, commas surrounded by double quotes are interpreted as a comma within that field. If a double quote is surrounded by additional double quotes, it is interpreted as a single double quote within that field. The .CSV export interprets these conventions also.

Keyboard Shortcuts

Save table data to disk	Ctrl+S
Undo the last edit	Ctrl+Z
Redo the previous Undo	Ctrl+Y
Cut the selected text	Ctrl+X
Copy the selected text	Ctrl+C
Paste the copied/cut text	Ctrl+V
Change (edit) the current cell	F2
Change/edit the current column label	F3
Select the column of the current cell	F4
Select the row of the current cell	F5

A Note about Keyboard Shortcuts

You can use the Copy and Paste keyboard shortcuts to create a user who has a set of security rights and access rights that are equal to or less than the rights that you have.

Redo edits

Restores edits removed by the Undo command. Use this command to restore edits removed by each Undo command in the current table editing session. This command does nothing if the Undo command was not first used in the current session.

Remove the index

Remove the unique or multi-value index from the currently selected column. Be sure at least one column in the table is indexed if you want CIC to search this table.

Save table data

Saves the current table in the default i3TableEx format. You can open this table on other CIC systems.

Show table properties

Display the current table properties.

Undo edits

Undoes the last edit to the most recently changed cell. Each click undoes changes to the previously edited cell. If necessary, you can undo virtually every cell edit in the current table editing session.

Notifier

The heart of the Interaction Center is a general-purpose event-processing engine, called the **Interaction Processor**. This engine has at its core a multi-threaded Notifier that serves as the central communication point for a collection of independent objects. Each object can register with the Notifier to tell what kinds of events it cares about - telephone events, email events, end-user events, and so on. The Notifier then watches for new events and forwards them to the appropriate objects. Objects communicate with the Notifier over the network (for example, using IP sockets or named pipes), which means that the Notifier and the various objects can all exist on entirely different machines.



Time Entry for Shift Start Time

Click on the hour or minute portion of the time you wish to set and then click on the up or down arrow to change the time. You can set the time to any hour/minute combination. This time marks the beginning of a shift and the shift ends at the beginning of the next shift. If you specify only one shift, it will last for 24 hours from the specified time.

Click **OK** to save the time and return to the Options page.



Tracing Configuration

Application tracing gathers and displays diagnostic information. You can set tracing at different levels which define the amount of detailed information gathered. You can configure trace levels for a user or for a workgroup, but user level settings override the workgroup settings. When a user is a member of multiple workgroups, the highest workgroup trace level setting is observed. If you define trace level settings for the user, those settings override the workgroup settings.

Example

A user is a member of three workgroups having IPA Designer trace levels set at 17, 26, and 55. With no trace level set for the user, the highest workgroup trace level is observed, so 55 in this case. If this user's IPA Designer trace level is then set at "29", "29" is the trace level observed, regardless of the workgroup's settings.

This is helpful for example, if a specific user needs to be excluded from a higher workgroup trace level because of her older, slower computer.

Use this page to set the trace levels for installed and licensed applications that use IceLib (Interaction Center Extension Library). Setting an application's trace level high can impact performance. A confirmation warning is displayed if the level could potentially affect the system. The following applications (if licensed and installed) are listed:

- Interaction Business Manager (includes all applications installed with Interaction Business Manager Applications install)
- CIC clients
- Interaction Desktop
- Interaction Fax
- Interaction Server Manager
- IPA Designer
- Interaction Voicemail Player
- SIP Softphone
- Web Client
- Mobile Web Client
- Native Mobile Client

Use Local Applications Settings

This check box indicates that the trace settings set at the individual application level are used, since application trace levels can also be set on the client workstation, outside of Interaction Administrator. See *Use Trace Configuration utility to set trace levels* in the **Log Viewer** online help for more information.

Common Trace Levels

This section allows a typical trace level to be selected for the associated client application. The numbers here represent numeric settings 0 through 100, with 100 being the highest level of tracing. For example, selecting "7) All", sets the trace level to "100". The options are:

- 7) All
- 6) Verbose Notes
- 5) Notes
- 4) Status
- 3) Warning
- 2) Error
- 1) Critical Error

Trace Level

This option is available to set the trace level for the associated client application to a specific level, such as "53", which is not represented by the typical trace level options above. Use the slider bar to adjust the setting.

Note: The Trace Configuration Utility is available on client workstations and can be used to manage the trace settings of Interaction Center applications installed. Access the utility in Log Viewer from the Tools menu, by clicking Launch TraceConfig. The utility (inintraceconfig.exe) can also be run the \ic\server\ share on the CIC server. For more information, see *Use Trace Configuration utility to set trace levels* in the **Log Viewer** online help.

Related Topics

[Options](#)

Tracing levels for the Polycom Syslog

The following are the available tracing levels for the Polycom Syslog.

Note: When you increase the tracing level, phone performance may be adversely affected. This is especially true if you increase multiple tracing levels simultaneously. Be sure to reduce the tracing level as soon as possible.

Tracing level	Description
0	Debug only. This is the highest level of tracing available.
1	High detail. The tracing includes significant detail about the class of event you selected.
2	Moderate detail. The tracing includes a medium amount of detail about the class of event you selected.
3	Low detail. The tracing includes the lowest amount detail about the class of event you selected.
4	Minor errors. The tracing shows only those errors from which the system will recover gracefully.
5	Major errors. The tracing shows those errors that will eventually incapacitate the system.
6	Fatal errors. The tracing shows those errors that immediately cause the system to crash.

Related topics

[Advanced options for Polycom phones](#)



Configure trusted access for a peer site

For more information on trusted access, see [Trusted access concepts](#).

To configure trusted access for a peer site

1. In the **Collective** container, double-click the **Peer Sites** container.
2. In the list view window, right-click the name of the peer site that you want to configure. The **Peer Site Configuration** dialog box appears.
3. Click the **Trusted Access** tab.
4. To allow users who have the **Publish** right for handlers to update production handlers or publish new handlers on the CIC server while they are logged on to this peer site, select the **Publish Handlers** check box.
5. To allow users who have the **Manage** right for handlers to add handlers to or remove handlers from the CIC server while they are logged on to this peer site, select the **Manage Handlers** check box.

To allow users who are master administrators to perform their master administrator responsibilities from this peer site, select the **Master Administrator** check box.

Click **OK**.

Related topics

[Trusted access concepts](#)

[Peer site concepts](#)

[Configure a peer site](#)

[Collective concepts](#)



Applying account codes in the Dial Plan

For account codes to work correctly, you must apply the Account Code Verification feature to a dial plan object. Follow these steps:



1. From Interaction Administrator tree view, under **System Configuration**, select **Phone Numbers**.
2. From list view, double-click **Configuration**. The Phone Number Configuration window appears.
3. Click the **Regional Dial Plan** tab.
4. Click **Dial Plan...**, and select a dial plan entry and click **Edit**. Optionally click **Add** to add a new dial plan entry.
5. In the **Regional Dial Plan - Edit Pattern** page, select **Account Code Verification**, and then click **OK**. Repeat steps 4 and 5 to apply account code verification to any other dial plan entry.
6. Click **OK**.

After you apply Account Code Verification to a dial plan entry, you can track that call type by using a verified account code that the user provides for the outbound call. For example, you might use this feature to track call types for billing purposes.

Note: You should **not** apply Account Code Verification to the **911** and **Intercom** Dial Plan entries.

Two Way Page

Two Way Page can be configured using [custom attributes](#) in User Configuration and/or Station Configuration. For complete instructions see *Set Up Two Way Intercom Page Feature* - ID:Q124394805700113 on the Product Information site.



Manage roles

Create a new role or modify an existing role by specifying its membership.

Roles

To create a new Role, click Add. In the Add Role Name dialog, and type a Role name that will represent a set of attributes and permissions that you want to assign to specified Users. An example of a Role name might be Agent or Sales.

To delete the selected Role, click Delete.

Note: IC Setup Assistant assigns Users to Roles only. You can assign Workgroups to Roles in Interaction Administrator.

Members Tab

Specify the membership of the selected Role.

Available

User names in the Available list are registered on the CIC server but are not members of this Role. To add one of these users to this

Role, select it and click . The name appears in Selected list.

Selected

User names in the Selected list are members of this Role. To remove a user from this Role, select it and click . The name appears in the Available list.



Manage Workgroups

Create a new Workgroup or modify an existing Workgroup by specifying its extension, alerting option, and Workgroup membership.

Workgroups

To create a new Workgroup, click Add. In the Add Workgroup Name dialog, type a name that describes the purpose and/or nature of the group. If a Workgroup queue is solely for ACD calls, for example, use ACD as part of the Workgroup name (for example, ACD - DB Support).

To delete the selected Workgroup, click Delete.

Configuration Tab

Specify the extension and alerting option for a selected Workgroup.

Workgroup Extension

Enter the selected Workgroup's extension. For example, you might give the Sales Workgroup an extension of 300. Calls to extension 300 go to the Sales Workgroup.

Alerting Options

When an incoming call is for members of a Workgroup and the Workgroup has a queue, you can specify how the system should alert members to the new call.

Sequential

Rings Workgroup members one at a time, in order of extension.

Round-robin

Remembers the last user who was sent a call. Round-robin works in a loop, repeating the process down the through list, and then the process starts over with the next call. (Similar to linear hunt groups.)

Group Ring

All users of the Workgroup are alerted simultaneously.

ACD

Sets the call to ACD processing on that queue.

Members Tab

Specify the membership of the selected Workgroup.

Available

User names in the Available list are registered on the CIC server but are not members of this Workgroup. To add one of these users

to this Workgroup, select it and click . The name appears in Selected list.

Selected

User names in the Selected list are members of this Workgroup. To remove a user from this Workgroup, select it and click . The name appears in the Available list.

Warning The system creates a workgroup called "_SystemRoutingHub_" for the routing of calls. This workgroup exists for internal reasons only.

Use the Standard Audio Controls to Re-record Prompts (Optional)

To re-record a prompt, open Interaction Attendant then open the Default Profile Form and complete these tasks:

- Click **Record** to start the new audio prompt.
- Create a new name for the prompt.
- Pickup your telephone handset and record the new prompt.
- Save the new prompt recording.
- Hang up your telephone handset.

Note: Pre-recorded prompts are provided with CIC for transfers to common department names, such as "Marketing", "Sales", "Technical Support", "Administration", "Customer Service", "Development", "Education", "Engineering", "Finance", and "Human Resources". These prompts (filenames are listed below) can be used with Setup Assistant to create the initial Attendant profile. You can also use text-to-speech for department names that are not provided in the pre-recorded prompts.

- PromptWorkgroup_Marketing.wav
- PromptWorkgroup_Sales.wav
- PromptWorkgroup_TechnicalSupport.wav
- PromptWorkgroup_Administration.wav
- PromptWorkgroup_CustomerService.wav
- PromptWorkgroup_Development.wav
- PromptWorkgroup_Education.wav
- PromptWorkgroup_Engineering.wav
- PromptWorkgroup_Finance.wav
- PromptWorkgroup_HumanResources.wav

See the Interaction Attendant online help for detailed information on each field in the Standard Audio Control.

For information on how to convert voice recordings, see the [Converting Voice Recordings](#) topic in this section.

NT User Account

Use this page to search for and select a NT user account to associate with the user configuration.

Select a Domain

Select a domain from the list or type in a domain name and click **Get Users**. CIC searches for all users in the selected domain.

Results

CIC displays a list of valid CIC accounts associated with the selected domain. Select the user from the list and click **OK**.



Interaction Optimizer

These options can be set at the Default User, User, Role or Workgroup level. Use this page to configure Interaction Optimizer rights.

Allow agents to specify schedule preferences

Select this option to allow agents to manage schedule preferences in the CIC clients. This feature is not available in Interaction Connect.



User Accounts

To select the User account for the current CIC user:

Type the first character of the name you are looking for. This selects the first name in the list that begins with that character. Scroll down until you find the account name for this User.

The first time the User Accounts dialog is used, it builds the list of User accounts on the domain and keeps that list in a cache until either:

- The user clicks the Refresh button to reload the list, *or*
- Interaction Administrator is stopped and restarted

Keeping the list in a cache instead of loading it from the system each time the dialog box opens prevents potentially long delays while the list is loaded. You can manually control when the account list is updated.



Recorder Policy

These Recorder policy options can be set at the Default User, User, Role or Workgroup level. Use this page to configure Interaction Recorder (IR) rights.

Recorder Master Administrator

Select this check box to give the user read/write/use access to IR Archives, Import Rules, and IR Selector.

Can View Recorder Audit Trail

Select this check box to allow the user to view an object's audit trail (if that object has one).

Can Use Recorder Queries

Select this check box to allow the user to view the Queries branch in the IR Client.

Can Use Interaction Recorder Selector

Select this check box to allow the user to use IR Selector in the IR Client.

Can Delete Recordings

Select this check box to allow the user to delete recordings.



Set Users Domain Name

To set the Domain User field for one CIC user:

Type the name of the domain used to connect CIC users to the CIC server (for example, i3domain) and click **OK**.

This action fills the Domain User field on the [User Configuration](#) property page with the combined domain/user name (for example, i3domain/TimB).

To set the Domain User field for two or more CIC users at the same time:

1. Press the **Ctrl** key or the **Shift** key while you select names from the IC Users list in Interaction Administrator.
2. Right-click and select **Set Users Domain Name**.
3. Type the name of the domain and click **OK**.

All selected users now have the Domain User field properly filled with the given domain name appended with a slash and the selected user name.



Tracker Policy

These Tracker policy options can be set at the Default User, User, Role or Workgroup level. Use this page to configure Interaction Tracker rights.

Add Individuals

Select this check box to give the user rights to add individuals in the Tracker Client.

Modify Individuals

Select this check box to give the user rights to modify individuals in the Tracker Client.

Delete Individuals

Select this check box to give the user rights to delete individuals in the Tracker Client.

Add Organizations

Select this check box to give the user rights to add organizations in the Tracker Client.

Modify Organizations

Select this check box to give the user rights to modify organizations in the Tracker Client.

Delete Organizations

Select this check box to give the user rights to delete organizations in the Tracker Client.

Modify Interactions

Select this check box to give the user rights to modify interactions in the Tracker Client.

View Other People's Private Interactions

Select this check box to give the user rights to view other people's private interactions in the Tracker Client.

Have Private Contacts

Select this check box to give the user rights to create private contacts in the Tracker Client.

Tracker Administrator

Select this check box to give the user administrator rights in the Tracker Client.

Can Use Related Interactions Page

Select this check box to give the user rights to the Related Interactions page in [Interaction Desktop](#).

Note: You can configure access to View User Interaction History in the [Access Control](#) page in User, Role, and Workgroup configuration.



User Worksheet - Mailbox Selection

During installation, if you chose unified messaging, to receive voice mail, faxes, and email, each CIC user and Workgroup account will have a uniquely named email account, which you specify on the **Mailboxes Selection** page.

This page appears when you click the button next to the **Mailbox** field in the User Worksheet. Since each user account can have multiple email accounts associated with it, you must specify the mailbox CIC should use for a User or Workgroup. This dialog box gives you multiple ways to configure the email account for a User or Workgroup.

Depending on what mail provider you selected during installation, the **Mailbox Selection** configuration options described below may be grayed-out or not available.

Select a Mailbox Option

Depending on which mailbox option you select, the contents of the screen on the right are different.

Review Current Settings

Select this option to review the current mailbox attributes.

No mailbox

If you do not want a mailbox associated with this entry, select this option. You may enter a name to be displayed, however there is no mailbox address associated with this entry.

Interaction Message Store

If you are assigning an existing voicemail account to the workgroup, ACD Workgroup or Monitored Mailbox, select the account from the list.

IMAP and/or SMTP

This option is available only if you selected IMAP during installation and you have at least one IMAP server configured. If you select **Interaction Message Store**, you can assign the IMAP date store. Edit the IMAP Server, User ID, and Password.

Notes: If the user's server, port, username, and password are not stored in LDAP, but the user's mailbox is on a server that supports PROXYAUTH, choose **Interaction Message Store** and select the server, port, and enter the username.

If the user's server, port, username, and password are not stored in LDAP, and the user's mailbox is not on a server that supports PROXYAUTH, choose **Message Store Only** and select server, port, and enter the username *and* the password.

User names and addresses must contain only valid (alpha-numerical) characters.

Search for a mailbox

You may search for a mailbox if you are adding or editing a Monitored Mailbox, adding or editing User Configuration, adding or editing Workgroup Configuration, or adding or editing ACD Routing Workgroup Configuration.

Note: If you selected IMAP during installation, there are several possibilities for assigning mailbox selection:

- If IMAP is being used and the user's server, port, username, and password are stored in LDAP, you select **Search for a mailbox...** on the left, and click the **Search Directory** button in the lower right to display the directory entry.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.
- If the user information is stored in LDAP, then select **Search for a mailbox...** on the left. Click the **Search Directory** button in the lower right to display the directory entry, and click the **Message Store** button in the lower right to assign the message store information.

Before searching, select the type of mailbox for the user or workgroup.

You may search by **Name** or **Prefixed email address**.

1. If you know the User account name, type either the full name or the first few characters of the name, and click **Search**.
2. If you wish to search a particular domain, type the domain\UserName (in this case, you must type the fully qualified User name) and click **Search**.
3. If you wish to search by the Prefixed email address, enter the provider type prefix. The prefix is different depending on the provider. For example, an Exchange email address begins with "EX: "; an SMTP email address begins with "SMTP: "; a Notes email addresses begins with "Notes: "; and a GroupWise email address begins with "NGW: ".

Note: If a user's mailbox is on an Exchange server or in GroupWise, you can still search for the user using an SMTP address (for Exchange) or a NGW address (for Groupwise).

From the list of matching email account names, select the email account to associate with this User, Workgroup, ACD Workgroup, or Monitored Mailbox. The selected name appears in the Mailbox display field.

Related Topics

[Monitored Mailboxes](#)

Using LogSnipper

Each CIC subsystem keeps a log of its actions in the \server\IC\Logs\[date] directory, where date represents the log date. For example, the TsServerU subsystem's activities on December 10, 2015 are logged in \server\IC\Logs\2015-12-10\TsServer.ininlog. Each subsystem logs a basic level of detail that can be increased with the Trace Configuration utility. If tracing is set to a verbose mode or if many actions are logged, the log files can grow to be very large and difficult to open with standard text file editors (such as Notepad).

LogSnipper is an application that extracts a portion of a CIC subsystem trace log and saves it to a file. It is useful when you troubleshoot a specific time period within a large trace log.

Note: If support asks you to extract a portion of a trace log, you will need to use LogSnipper.

Valid Status Behavior

If user is in a status (X), then they lose the rights to that status, their status will be changed to **Invalid Status**. If the user is given the right to that status again, the user's **Invalid Status** will automatically be reset to that status (X). A user can lose rights to a status when an administrator removes the access control right that controls which status settings are available to the user.

View Host ID

Clicking **View Host ID** displays the machine or host identification number. Click **Copy to Clipboard** to easily copy and paste the number.

Interaction Message Store Quotas

Interaction Message Store (formerly Voicemail Only or FBMC) is a method for storing and tracking user voicemail messages and faxes in Interaction Center.

If you chose voicemail only as your voicemail option, it was installed and configured during Interaction Center installation. At that time, the **FBMC Support** server parameter was set, and quotas for message storage space and message count were set.

You can change the values for **Maximum Storage Space** and **Maximum Message Count** on the **Quotas** page on the **Default User Configuration** dialog box.

Interaction Message Store quotas can be adjusted on the following configuration pages:

- Default User
- User
- Workgroups
- Roles

Related Topics

[Configuring Interaction Message Store](#)

[Interaction Message Store Mailboxes Configuration](#)



Interaction Message Store Quotas - Default User

If you are using Interaction Message Store (formerly Voicemail Only) for voicemail, use this page to configure maximum storage space and message count for the Default User.

Current Quotas

In the **Current Quotas** boxes, enter the maximum storage space and message count quotas for the Default User.

Maximum Storage Space

Enter the maximum amount of storage space, in bytes, to allocate for voicemail messages.

Maximum Message Count

Enter the maximum number of messages to allocate for voicemail messages.

No Limit

Select the appropriate box if you do not want to limit the storage space or message count, for voicemail messages.

Note: If a quota for storage space or message count has been configured for Default User, the value can be changed for a member of a workgroup or role. The inherited value will be displayed in the **Effective Quotas** box on the **Interaction Message Store Quotas** page for workgroups or roles.

If you change the value for a workgroup or role, the larger value will be displayed in the **Effective Quotas** box.

The **Effective Quotas** boxes display the actual quota that applies to the members of the workgroup or role.

Related Topics

[Configuring Interaction Message Store](#)

[Interaction Message Store Mailboxes Configuration](#)

Web Services Parameter Name

Type a descriptive and unique name consisting of any combination of valid alphanumeric characters. This name is referenced by the IC server.

Related Topics

[Web Services](#)

[Web Services Configuration](#)

[Web Services Parameters](#)



Weekly

You can set a menu to run every week on certain days or every week in a sequence of days.

Occurs

There are two options under **Occurs**:

Day List

Select to set a menu to run on certain days of the week. Select any day Monday through Sunday.

This works in conjunction with Start and End times and Date Range. Date Range is when the schedule is valid. Start and End times is when, within the day, they are valid.

Note: If Schedule is Active is clear, this schedule item will not be a candidate for evaluation, even if the date falls within the current date range.

Day Span

Select to set a contiguous set of days the menu is active. For example, from Friday through Monday.

This works in conjunction with Start and End times and Date Range.

Time

Select to set the duration of time the menu is active. If you select **Start**, you must specify a start and end time.

If you select a start time, and then select **All Day**, the menu is active 24 hours from the start time.

Note: If you set the end time to be before the start time, this causes the schedule to end on the next day as the start time. Interaction Administrator displays a warning message allowing you to cancel or continue with this time.

Date Range

Sets a start and end date the menu is active.

If you select a start date, and then select **No End Date**, the menu is active forever.

Delete Workgroup

Delete this Workgroup.



Workgroup Queue Service Level Configuration

Use this page to configure service level distribution and target for each interaction type.

Note: For each media type, you can specify up to 14 service levels. You must have a minimum of 1 service level for each type (call, callback, chat, and so on).

Service Level Distribution

This section allows the customization of service levels for each interaction type. Use the arrow keys to set the time for a new service level and click **Add**, or select an existing service level and click **Delete** to remove one.

Service Level Target

Use the arrow keys to set the time for the target or 'master' service level for each interaction type for this ACD workgroup. By specifying a master service level, you can determine how many interactions met the level, and how many did not. The default service level target for each interaction is:

- **Call:** 30 seconds
- **Callback:** 4 hours
- **Chat:** 30 seconds
- **Direct Message:** 4 hours
- **Email:** 4 hours
- **Generic:** 30 seconds
- **Social Conversation:** 4 hours
- Social Direct Message: 4 hours
- **Work Item:** 4 hours

Workstations: Lines Activation

To activate the lines displayed, click **OK**. If you do not want to activate the lines, click **Cancel**.

Workstations: Lines Deactivation

To ensure license compliance, Interaction Administrator will deactivate the lines in this list when you click **OK** or close this dialog.

Wrap-up categories: advanced field descriptions

This topic contains the descriptions for each field in the **Advanced** details view under the **View Wrap-up Categories** page.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

This date is automatically set when the user creates the initial configuration for this category. If the category was initially created during setup, the date could be blank.

Modified

This date is automatically updated each time the user clicks the **OK** button, presumably after making changes to the category configuration. To avoid updating this date, exit the property sheet by clicking **Revert**.

Note: If you click **Revert**, none of the changes made to this category since the changes were last saved are preserved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click **Save**, the **Last Modified** date is updated.

You must manually enter the date beside each entry in the **Notes** field to identify the date of each note.

Related topics

Configure advanced information

Wrap-up categories: configuration field descriptions

This topic contains the descriptions for each field in the **Configuration** details view under the **View Wrap-up Categories** page.

Name

This is a descriptive label that is associated with a category and that is displayed in the CIC clients. A wrap-up category is comprised of two parts: the wrap-up category name and the label. The label is displayed in the CIC clients. This wrap-up category name also appears in reports.

Category Label

This is a textual label for the wrap-up category. The description is displayed next to the wrap-up category in the Interaction Administrator list view.

Category

This is the wrap-up code category that the wrap-up codes are assigned. The category groups the codes. For example, the code may indicate a "Password Reset", and the code may belong to the "Finance Department" category. Codes must be configured to appear in wrap-up code configuration.

Access Control Group

An access control group (ACG) is a group of administrative rights. When an ACG is added to the category, the category and the code associated to the category take on those ACG's rights. The category can be assigned to only one ACG.

Note: Access Control Groups appear if they have been configured in your environment. If Access Control Groups have not been configured, this field does not appear.

Record Status

This field is reserved for Interaction Dialer use.

Phone Number Status

This field is reserved for Interaction Dialer use.

The Interaction Connected to an Actual Person

This field is reserved for Interaction Dialer use.

Increment the Attempts Counter

This field is reserved for Interaction Dialer use.

The Interaction was Successful

This field is reserved for Interaction Dialer use.

Multi-language Labels

The language field indicates the language to use for the translation of the category label. The value is a string that represents the language used and is displayed in the CIC clients.

Related topics

[Configure a wrap-up category](#)

Wrap-up codes: advanced field descriptions

This topic contains the descriptions for each field in the **Advanced** details view under the **View Wrap-up Codes** page.

Custom Attributes

Use customized attributes to reference other variables and settings through the IceLib interface. When adding a new attribute, use a unique name, otherwise an existing attribute with the same name will be overwritten. Click **Edit** to change the value of an existing custom attribute, or **Delete** to delete an existing custom attribute.

History

History provides a way to manually document configuration changes and when they occurred. Changes made in Interaction Administrator are also automatically logged in the Interaction Administrator Change Notification Log (Log ID 7). Later, authorized users can run reports against this log to summarize all configuration changes.

Created

This date is automatically set when the user creates the initial configuration for this code. If the code was initially created by IC Setup, the date could be blank.

Modified

This date is automatically updated each time you click **OK**. To avoid updating this date, exit the property sheet by clicking **Revert**.

Note: If you click **Revert**, none of your changes are saved.

Notes

Type notes about configuration settings and changes. If you change the configuration and click **Save**, the **Last Modified** date is updated.

To identify the date of a specific note, you must manually enter the date beside each entry in the **Notes** field.

Related topics

Configure advanced information

Wrap-up codes: configuration field descriptions

This topic contains the descriptions for each field in the **Configuration** details view under the **View Wrap-up Codes** page.

Name

This is a descriptive label associated with a code and is displayed in the CIC clients. A wrap-up code is comprised of three parts: the wrap-up code name, a digit string, and a label. The label is displayed in the CIC clients. This wrap-up code name also appears in the reports.

Digits

This is a sequence of unique digits for the new wrap-up code.

Code Label

This is a textual label for the wrap-up code. The description is displayed next to the wrap-up code in Interaction Administrator list view.

Category

This is the wrap-up code category that the new code belongs. The category groups the codes. For example, the code may indicate a "Password Reset", and the code may belong to the "Finance Department" category. Categories must be configured to appear in wrap-up configuration.

Access Control Group

An access control group (ACG) is a group of administrative rights. When an ACG is added to the code, the code takes on those ACG's rights. The code can be assigned to only one ACG.

Note: Access Control Groups appear if they have been configured in your environment. If Access Control Groups have not been configured, this field is not displayed.

The Right Party Was Contacted

This field is reserved for Interaction Dialer use.

Multi-language Labels

The language field indicates the language to use for the translation of the code label. The value is a string that represents the language used. It appears in the CIC clients.

Related topics

[Configure a wrap-up code](#)



Wrap-up Codes

Note: If you enabled the Enhanced Interaction Administrator Change log, then all of your changes on this page are tracked in that log. For more information, see [About the Enhanced Interaction Administrator Change Log](#).

To configure wrap-up codes for a workgroup

1. To prompt workgroup members to enter a wrap-up code for every interaction, select the **Wrap-up Active** check box.
2. In the **Keypad wait time** box, type the number of seconds that the TUI displays a message to prompt the agent to enter a wrap-up code. When the agent enters the wrap-up code, the TUI removes the prompt. The default is 30 seconds.

Note: The CIC clients also prompt the agent to enter a wrap-up code. The agent can choose whether to use the TUI or the CIC client to enter the wrap-up code. If this is confusing, you can turn off the TUI prompt. To do this, type 0 in the **Keypad wait time** box.

3. In the **Client wait time** box, type the number seconds that the CIC client displays a message to prompt the agent to enter a wrap-up code. When the agent enters the wrap-up code, the CIC client removes the prompt. The default is 30 seconds.
4. In the **Prompt name** box, type the name of the file that instructs the user to enter data.

Related topics

[Wrap-up codes overview](#)



Workgroup Wrap-up Code Entry Name

Type a descriptive label to use for the workgroup wrap-up code. This label is associated with a code and is displayed in the CIC clients.



Yearly

You can set a menu to run on specific and relative days during the year. For example, the last Tuesday of January 2010.

Occurs

There are two options under **Occurs**:

Day List

Sets a menu to run on certain days within some month. In the **Every** box, type a number. If you want your schedule to be in effect for the entire weekend, use comma delimited format. For example, 1,3,5. Where 1 is the first day of the month.

This option allows you to select a day of a month every year. For example, the 25th of December. Or the 4th of July.

In the month box, use the down arrow to select the month.

This works in conjunction with **Start** and **End** times and **Date Range**.

Relative

Sets a menu to run on a relative and specific day within some month. For example, the last Tuesday of December 2000.

Relative days are first, second, third, fourth, and last day. Specific days are Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. Specific months are January through December.

For example, you can set a menu to run the first Friday of March 2001.

This works in conjunction with **Start** and **End** times and **Date Range**.

Time

Sets the duration of time the menu is active. If you select **Start**, you must specify a start and end time.

If you select a start time, and then select **All Day**, the menu is active 24 hours from the start time.

Note: If you set the end time to be before the start time, this causes the schedule to end on the next day as the start time. Interaction Administrator displays a warning message allowing you to cancel or continue with this time.

Date Range

Sets a start and end date the menu is active.

If you select a start date, and then select **No End Date**, the menu is active forever.