



Introducing Cisco Instant Connect

Cisco Instant Connect provides voice interoperability among disparate systems. It offers an IP standards-based solution that interconnects voice channels, talk groups, and virtual talk groups (VTGs). It also provides powerful and flexible management of personnel and media resources.

This chapter provides an overview of Cisco Instant Connect. It also introduces the Administration Console, which gives you complete control over Cisco Instant Connect operation and administration. Read this chapter if you are setting up Cisco Instant Connect for the first time or if you want to learn about the basic components and concepts of Cisco Instant Connect.



Tip

If you use Cisco Instant Connect only for communicating with other users and you do not require any introductory material, go to [Chapter 4, “Performing Cisco Instant Connect Dispatcher Tasks.”](#) That chapter describes how to log in to Cisco Instant Connect, download the Dispatch Console, set up push-to-talk (PTT) channels for the Dispatch Console and Cisco Unified IP Phone, and complete your user profile.

This chapter includes the following sections:

- [Getting Started, page 1-1](#)
- [Cisco Instant Connect Terminology, page 1-3](#)
- [Cisco Instant Connect Overview, page 1-3](#)
- [Cisco Instant Connect Roles, page 1-7](#)
- [Linux User Roles, page 1-9](#)
- [Cisco Instant Connect Administration Console, page 1-9](#)

Getting Started

After you install Cisco Instant Connect, you perform a series of procedures to set up and configure it for use. The following table lists these procedures and provides references to more information about each one.

Use this information as a guide when you set up Cisco Instant Connect for the first time. Depending on your deployment, you may not need to perform each of these procedures.

	Procedure	Reference	Checkoff
	Become familiar with Cisco Instant Connect		
Step 1	Learn about the hardware and software components that are part of Cisco Instant Connect	See the “Cisco Instant Connect Overview” section on page 1-3	<input type="checkbox"/>
Step 2	Learn about the roles that Cisco Instant Connect users can have	See the “Cisco Instant Connect Roles” section on page 1-7	<input type="checkbox"/>
Step 3	Learn about the Administration Console, including how to access this application	See the “Cisco Instant Connect Administration Console” section on page 1-9	<input type="checkbox"/>
	Set Up and Configure Cisco Instant Connect		
Step 1	Configure locations	See the “Managing Locations” section on page 2-34	<input type="checkbox"/>
Step 2	Configure the multicast pool	See the “Managing the Multicast Pool” section on page 2-39	<input type="checkbox"/>
Step 3	Generate SSL certificates, if needed	See Appendix B, “Generating SSL Certificates”	<input type="checkbox"/>
Step 4	Configure UMS components, if needed	See the “Managing the UMS” section on page 2-45	<input type="checkbox"/>
Step 5	Create push-to-talk channels	See the “Managing PTT Channels and Channel Groups” section on page 2-2	<input type="checkbox"/>
Step 6	Determine user roles and add users	See the “Managing Roles for a User” section on page 3-9	<input type="checkbox"/>
Step 7	Create VTG templates	See the “Managing Inactive VTGs” section on page 4-4	<input type="checkbox"/>
Step 8	Ensure that the server is hosting the current version of the Dispatch Console	See the “Managing Dispatch Console Versions” section on page 2-127	<input type="checkbox"/>
Step 9	Configure the reporting feature, if needed	See the “Managing Reporting” section on page 2-140	<input type="checkbox"/>
Step 10	Configure the notifier, if needed	See the “Managing the Notifier” section on page 2-149	<input type="checkbox"/>
Step 11	Configure the RCS, if needed	See the “Managing the RCS” section on page 2-152	<input type="checkbox"/>
Step 12	Configure the ISSI gateway, if needed	See the “ISSI Gateway Overview” section on page 9-3	<input type="checkbox"/>
Step 13	Configure the DFSI gateway, if needed	See the “DFSI Gateway Overview” section on page 9-3	<input type="checkbox"/>
Step 14	Configure radios and radio descriptors	See Chapter 9, “Managing Radios and Radio Descriptors”	<input type="checkbox"/>
Step 15	Configure the policy engine, if needed	See Chapter 7, “Configuring and Managing the Policy Engine”	<input type="checkbox"/>
Step 16	Create operational views, if needed	See Chapter 6, “Configuring and Managing Cisco Instant Connect Operational Views”	<input type="checkbox"/>

	Procedure	Reference	Checkoff
Step 17	Set up Cisco Unified IP Phones, if needed	See Appendix A, “Setting Up and Using a Cisco Unified IP Phone as a Cisco Instant Connect Push-to-Talk Device”	<input type="checkbox"/>
Step 18	Configure keysets and keys, if needed	See the “Managing P25 Keys” section on page 2-54	<input type="checkbox"/>

Cisco Instant Connect Terminology

This document uses a variety of terms to describe Cisco Instant Connect features and functions. [Table 1-1](#) describes some of the common terms that you may see throughout this document.

Table 1-1 Cisco Instant Connect Terms

Term	Description
Channel	Consists of a single unidirectional or bidirectional path for sending and receiving signals. In Cisco Instant Connect, a channel represents one LMR gateway port that maps to a conventional radio physical radio frequency channel.
Talk Group	Comprises a subgroup of radio users who, under normal circumstances, coordinate actions only among users who are in the same talk group. Radio interface with other subgroups is not required. In Cisco Instant Connect, a channel maps to a logical talk group. All the participants who talk on the same radio frequency belong to a the same talk group.
Virtual Talk Group	Represents interoperability of a group of channels and maps to a voice channel that users attach to based on a specific incident. An end device (Dispatch Console, Cisco Unified IP Phone, mobile endpoint, or dial-in phone) joins the VTG based on the location that is configured in the Cisco Instant Connect server.
Group	When you use the Policy Engine telephony user interface (TUI), you may hear channels and VTGs referred to as groups.
Incident	An event that you identify in Cisco Instant Connect and for which various users can coordinate responses by using endpoints.

Cisco Instant Connect Overview

Cisco Instant Connect can be deployed in a variety of configurations. Your configuration depends on the types of communications devices that users employ, the media types that are used, your interoperability requirements, and so on. A Cisco Instant Connect deployment includes various hardware and software components to provide the functionality that you require, including some or all of the following:

- Cisco Instant Connect server—Provides the core functionality of the Cisco Instant Connect system. For more information, see the [“Cisco Instant Connect Server”](#) section on [page 1-4](#).
- Dispatch Console—Standalone PC-based software application that provides PTT functionality so that a dispatcher can coordinate communication among users that have a variety of end devices. For more information, see the [“Dispatch Console”](#) section on [page 1-5](#).

- LMR gateways—Provides radio network interoperability and application integration. For more information, see the [“LMR Gateways” section on page 1-5](#).
- Single device radio gateway—Provides radio network interoperability and application integration.
- UMS—Provides audio mixing and re-streaming services for end devices. For more information, see the [“UMS” section on page 1-5](#).
- Reporter—Prepares and lets you obtain a variety of reports regarding PTT operations. For more information, see the [“Reporter” section on page 1-6](#).
- Notifier—Sends alerts to users of various supported endpoints. For more information, see the [“Notifier” section on page 1-6](#).
- RCS—Manages control operations related to serial controlled radios, radio gateways, and fixed stations. For more information, see the [“RCS” section on page 1-6](#).
- ISSIG—Enables support for voice interoperability between P25 radio frequency subsystems that support the Inter-RF Subsystem Interface (ISSI). For more information, see the [“ISSIG” section on page 1-6](#).
- DFSIG—Enables support for voice interoperability between radio frequency subsystems that support conventional P25 radio systems. For more information, see the [“DFSIG” section on page 1-7](#).
- Networking components—Include switches, routers, firewalls, mobile access routers, wireless access points, and bridges. For more information, see the [“Networking Components” section on page 1-7](#).
- Cisco Unified Communications Manager functionality—Provides voice interoperability between radio and non-radio networks. For more information, see the [“Cisco Unified Communications Manager Functionality” section on page 1-7](#).
- Audio clients—Devices such as land mobile radios (LMRs) and Cisco Unified IP Phones that let users participate in VTGs. For more information, see the [“Audio Clients” section on page 1-7](#).
- Cisco Instant Connect for mobile devices—Standalone applications that run on Android and Apple devices and allow you to use those devices to participate in Cisco Instant Connect incidents, channels, VTG, and radios. For more information, see the Cisco Instant Connect documentation for your mobile device.
- Load balancing—You can deploy servers to load balance Cisco Instant Connect requests and provide redundant servers for high availability. For more information, see *Cisco Instant Connect Installation Guide*.

Cisco Instant Connect Server

Every Cisco Instant Connect deployment includes one or more Cisco Instant Connect servers. These servers are the center of all Cisco Instant Connect activity. The Cisco Instant Connect server software runs on the Cisco Linux operating system. It performs the functions that include the following:

- Hosts the Administration Console, which gives you control over operation and administration of Cisco Instant Connect
- Provides Cisco Instant Connect authentication and security services
- Stores data that is required for operation (depending on deployment type)

- Enables integration with various end devices
- Hosts Cisco Instant Connect APIs

Dispatch Console

The Dispatch Console is a PC-based software application that enables end-users, dispatch personnel, and administrators with a variety of communication devices to participate in an event. The Dispatch Console integrates with audio sources to provide dynamic PTT communications. It also provides rich media Cisco Instant Connect incident support, enabling the sharing of multimedia data such as video, photographs, and data.

You install the Dispatch Console on your PC after downloading the software from the Cisco Instant Connect server. For more information, see the [“Downloading the Dispatch Console” section on page 5-16](#). After you install the application for the first time, Cisco Instant Connect automatically alerts you when new versions become available.

The Cisco Instant Connect operator sets up user access to the Dispatch Console. The operator also assigns specific PTT channels that Dispatch Console users can monitor and use to participate in conferences with other Cisco Instant Connect users.

For more detailed information about the Dispatch Console, see *Dispatch Console User Guide* for this release.

LMR Gateways

LMR gateways provide radio network interoperability by using the Cisco IOS Hoot ‘n’ Holler feature. They provide a bridge between radio frequencies and IP multicast streams. They also provide keying signals to key radio transmissions. The LMR gateway functionality is often installed as an additional feature in a router.

UMS

A Unified Media Service (UMS) is controlled by the Cisco Instant Connect server and provides for:

- Mixing audio from multicast and SIP streams and broadcasting the mixed audio to other multicast and SIP streams
- Bridging multicast and unicast users
- Talker ID between multicast and SIP endpoints
- Radio control from SIP endpoints
- Creation of VTGs that are composed of diverse endpoints
- Proxy mixing for resource-constrained endpoints
- G.711 and G.729 transcoding services so that local end devices can participate in the same VTG

Reporter

The reporter is an optional Cisco Instant Connect component that captures and stores information for reports, and passes this information to the Cisco Instant Connect server, which prepares reports that you can download.

The reporter includes following components:

Report collector—Captures information about PTT events in the associated location, and pushes this information to the reporter database, which stores the raw data for reports.

Report engine—Stores and manages the reporter database for all report collectors, including itself.

Notifier

The notifier is an optional Cisco Instant Connect component that delivers alerts to client devices. Alerts are classified as Emergency, Major, Minor, or Information, and can include text, images, audio clips, and video clips.

RCS

The Radio Control Service (RCS) is an optional Cisco Instant Connect component that manages control operations related to serial controlled radios, radio gateways, and P25 fixed stations.

For serial radios and radio gateways that it manages, the RCS initiates the control connection, performs initialization, and manages radio control and status on a real-time basis. For P25 fixed stations that it manages, the RCS pushes fixed station provisioning to an already-provisioned DFSIG, and the DFSIG then handles all control with the fixed station.

ISSIG

The Cisco Instant Connect ISSI Gateway (ISSIG) is an optional Cisco Instant Connect component that enables voice interoperability between radio frequency subsystems that support the Inter-RF Subsystem Interface (ISSI).

The ISSIG includes the following components:

- P25 Gateway—Handles the transcoding between the G.711 codec of a multicast stream and the Improved Multi-Band Excitation (IMBE) codec
- RFSS Gateway—Handles the ISSI between the ISSI Gateway and a remote radio frequency subsystem (RFSS)

The ISSIG provides these interoperability modes:

- Proxy mode—Enables any Cisco Instant Connect endpoint to interoperate with a P25 device and provides transcoding between G.711 and the IMBE codecs.
- Native mode—Enables the Dispatch Console to communicate directly to a P25 endpoint without transcoding.

DFSIG

The Cisco Digital Fixed Station Interface Gateway (DFSIG) is an optional Cisco Instant Connect component that enables voice interoperability between radio frequency subsystems that support conventional P25 radio systems.

The DFSIG provide provides several interoperability modes and includes the following components:

- P25 Gateway—Handles the transcoding between the G.711 codec of a multicast stream and the Improved Multi-Band Excitation (IMBE) codec
- Console Arbitrator (CAR)—Handles the implementation of the DFSI standard and interoperability with DFSI-capable fixed stations

Networking Components

Networking components include switches, routers, firewalls, mobile access routers, and wireless access points, and bridges.

Cisco Unified Communications Manager Functionality

Cisco Unified Communication Manager and Cisco Unified Contact Center Express enable selected Cisco Unified IP Phone models to participate in channels and VTGs. These applications also serve as the JTAPI provider, which provide JTAPI call control support for calls to and from the dial engine.

Audio Clients

Audio clients are devices through which users communicate with Cisco Instant Connect. They include the Dispatch Console, radios, various Cisco Unified IP Phone models, and mobile clients.

Cisco Instant Connect Roles

Every Cisco Instant Connect user is assigned one or more roles. Roles define the Cisco Instant Connect features that a user can access and the functions that a user can perform. In this way, roles help to provide system security.

Table 1-2 describes the Cisco Instant Connect roles.

Table 1-2 Cisco Instant Connect Roles

Role	Description	Reference
User	Has the ability to maintain personal information, download the Dispatch Console client application, specify communication preferences that are used to configure audio devices, activate a policy, and view associated policies. Each Cisco Instant Connect user is assigned the user role. The user may have additional roles.	See Chapter 5, “Performing Cisco Instant Connect User Tasks.”
System administrator	Responsible for installing and setting up Cisco Instant Connect resources, such as servers, routers, multicast addresses, locations, and PTT channels. Also creates, edits, or deletes ops views, manages Cisco Instant Connect licenses and Dispatch Console versions, performs activities relating to the dial engine, and monitors the status of the system and its users via the activity log files and the Dashboard.	See Chapter 2, “Performing Cisco Instant Connect System Administrator Tasks.”
Ops view administrator	Has the ability to manage and monitor the activity logs that are filtered by ops views and accessible in the Administration Console.	See Chapter 6, “Configuring and Managing Cisco Instant Connect Operational Views.”
Operator	Responsible for setting up and managing users and user groups, granting access to Cisco Instant Connect and the Dispatch Console, assigning user channels, roles and ops views, and creating and managing policies.	See Chapter 3, “Performing Cisco Instant Connect Operator Tasks.”
Dispatcher	Responsible for setting up inactive VTG, activating VTGs to begin conferences, and adding or removing participants in VTG templates and active VTGs. Creates and manages policies. Also monitors active VTGs and events and can mute and unmute users, as necessary.	See Chapter 4, “Performing Cisco Instant Connect Dispatcher Tasks.”
All	Equivalent to being assigned each of the other Cisco Instant Connect roles.	—

Linux User Roles

Cisco Instant Connect supports the Linux user roles that [Table 1-3](#) describes.

Table 1-3 Linux User Roles

System User Roles and System Groups	Description
root user	The Cisco Instant Connect Linux user that has access to all files in the Cisco Instant Connect server. Strong passwords are enforced and Linux operating system password expiration rules apply to this user ID.
redis user	The Cisco Instant Connect Linux user that has full administrative permissions to the Redis database.
ipicsadmin user	The Cisco Instant Connect Linux user that, as part of the ipics Linux group, has full permission to the Cisco Instant Connect server folders, files, and scripts that are related to the Cisco Instant Connect application and database backup and restore operations. In addition, the ipicsadmin user has permission to read and write data from and/or to the Informix database. Cisco Instant Connect creates this Linux system user ID during the software installation process. The password for this user ID never expires.
ipicsdba user	The Cisco Instant Connect Linux user that belongs to both the informix Linux group, which includes full permission to the Cisco Instant Connect database server folders, files, and scripts, and the ipics Linux group, which includes permission to Cisco Instant Connect application-related folders, files, and scripts. In addition, the ipicsdba user has permission to read data, write data, create tables, and create databases in the Informix database instance. Cisco Instant Connect creates this Linux system user ID and generates the password during the software installation process. The password for this user ID never expires. To access the ipicsdba user, log in to the Cisco Instant Connect server by using the root user ID, and then enter su - ipicsdba (substitute user from root).
informix user	The Cisco Instant Connect Linux user that belongs to both the informix Linux group, which includes full permission to the Cisco Instant Connect database server folders, files, and scripts, and the ipics Linux group, which includes permission to Cisco Instant Connect application-related folders, files, and scripts. In addition, this user has full administrative permission to the Informix database instance. Cisco Instant Connect creates this Linux system user ID and generates the password during the software installation process. The password for this user ID never expires. To access the informix user, log in to the Cisco Instant Connect server by using the root user ID, and then enter su - informix (substitute user from root).

Cisco Instant Connect Administration Console

The Cisco Instant Connect server includes the Administration Console, which is a web-based application. You use the Administration Console to perform and manage Cisco Instant Connect activities, depending on your Cisco Instant Connect role.

This section includes the following topics:

- [Cisco Instant Connect Server Usage Guidelines, page 1-10](#)
- [Accessing the Administration Console, page 1-12](#)
- [Exiting the Administration Console, page 1-13](#)
- [Entering Required Information in Administration Console Windows, page 1-13](#)
- [Using Search Windows, page 1-13](#)
- [Navigating Item Lists, page 1-14](#)
- [Getting Help in the Administration Console, page 1-15](#)
- [Viewing Information about Cisco Instant Connect, page 1-15](#)
- [Administration Console Timeout, page 1-16](#)
- [Time Zones, page 1-16](#)

Cisco Instant Connect Server Usage Guidelines

Be aware of the following tips and guidelines when you use the Cisco Instant Connect server:

- The Cisco Instant Connect Administration Console contains the following tabs:
 - **Server tab**—Provides access to drawers and windows in which you perform Cisco Instant Connect administration and management activities. These activities include configuring and managing Cisco Instant Connect components, uploading licenses, managing the database, monitoring activity logs, setting system performance options, and monitoring system performance. You can also perform VTG, user, and Dispatch Console management operations.
 - **Policy Engine tab**—Provides access to drawers and windows in which you perform policy engine and dial engine administration and management activities. These activities include creating and managing policies, configuring SIP and dial engine parameters, managing prompts, and monitoring policy engine services, and managing tracing for the dial engine.
- Many of the Administration Console windows let you enter a variety of information. You might enter information by typing in fields, choosing from drop-down lists, or checking check boxes, depending on the window. An asterisk (*) next to a field, drop-down list, or check box indicates required information. You must provide this information before you can save your changes and exit the window.
- Most windows contain a **Save** button and a **Cancel** button. The **Save** button saves any changes that you make in a window and often closes the window. The **Cancel** button discards any changes that you have made and often closes the window.
- Many Cisco Instant Connect resources, such as channels, users, and VTGs, display in lists in the Administration Console. These lists include check boxes that you can check to select resources for which to perform certain functions. Most resource lists include a check box at the top of the list that allows you to select all resources at one time.
- Many of the Administration Console windows include drop-down lists. Some of these lists become available only after you perform certain functions. If you do not perform the required function, the drop-down list is dimmed to indicate that it is not available.
- For some resources, separate windows display in which you can take the following actions:
 - To move an item from one list to another list, click the item to highlight it and then click > or <, or double-click the item.

- To move several items from one list to another list at one time, Shift+click or Ctrl+click to select the items and then click > or <.
- To move all items from one list to another list at one time, click >> or <<.
- Cisco Instant Connect provides connection support for both multicast and unicast communications. Make sure that users are aware of the appropriate location information to use when they log in to Cisco Instant Connect from a Dispatch Console.
- When configuring IP multicast addresses, Cisco strongly recommends that you configure IP multicast addresses that are only in the 239.192.0.0 to 239.251.255.255 range. This address range is part of the Administratively Scoped Block, as specified by RFC 3171, and is intended for use in a local domain. This address range is less likely to cause an addressing conflict in an existing multicast domain. For more detailed information, see the [“Guidelines for Using IP Multicast Addresses with Cisco Instant Connect”](#) section on page 2-41.
- When adding users, channels, user groups, channel groups, or VTGs, names within each category must be unique. For example, no two user names can be the same, and no two channel names can be the same, but a user name and a channel name can be the same.
- Users who are in the same multicast domain are also in the same Cisco Instant Connect location.
- Cisco Instant Connect supports more than one UMS component in the same location.
- If a VTG becomes active or inactive unexpectedly, a policy may have activated or deactivated the VTG. For more information about policies, see [Chapter 8, “Using the Policy Engine.”](#)
- All time stamps that appear in the Administration Console web interface in Greenwich Mean Time (GMT).

Browser Guidelines

When you access the Administration Console by using a supported browser, follow the guidelines that this section describes.



Note

By default, the Administration Console times out after a period of no use. For more information, see the [“Administration Console Timeout”](#) section on page 1-16.

- Windows in the Administration Console do not refresh automatically. As a best practice, update your browser window often and before you perform any server administration functions to ensure that you are working with the most current information. If you attempt to perform an administration operation in a window that does not display the most current data, the operation may not succeed. If this situation occurs, update your browser window and retry the operation.
- To ensure that a current window displays the most up-to-date information, refresh it by clicking the button or tab that you used to display it. Some windows in the Administration Console provide a **Refresh** button, which you can use to refresh the window. Cisco Instant Connect does not support the use of the browser **Refresh** button to refresh a window in the Administration Console.
- The Administration Console uses browser pop-up windows for certain functionality. If you have any browser pop-up blocker enabled, you may be prevented from performing certain actions. To ensure that you are not blocked from performing administration tasks, disable any pop-up blocker before you use the Administration Console.

- Cisco Instant Connect does not support accessing the Administration Console in more than one browser session at the same time on the same machine. If you use multiple browser sessions to access the Administration Console, you may experience unexpected results. To ensure proper server operational behavior, do not open more than one browser session at a time on the same machine for Administration Console functions.
- To avoid browser-related memory issues, exit your browser and then restart it after prolonged use of the Administration Console.

Accessing the Administration Console

After you install Cisco Instant Connect, you can access the Administration Console from any computer that has IP connectivity to the Cisco Instant Connect server and meets the requirements that *Cisco Instant Connect Compatibility Matrix* specifies.

To access the Administration Console, perform the following procedure:

Procedure

- Step 1** Start Internet Explorer, and in the Address field, enter the fully qualified hostname (for example, cic1.cisco.com) or the IP address of the server on which Cisco Instant Connect is running.
- A fully qualified hostname is preferred. If you enter an IP address and the PC that you are using does not have a valid trust certificate from the server, a pop-up window prompts you to download a certificate. Follow the prompts to do so.
- The Authentication window displays.
- Step 2** In the Authentication window, enter your user name and password in the User Name and Password fields. Passwords are case-sensitive, so make sure to enter a password exactly as it is configured. User names and server hostnames are not case-sensitive.
- Step 3** Click **Log In**.
- The Administration Console displays. The My Profile window appears on the right. The left pane shows the available drawers in the Administration Console. The drawers that appear for you correspond to your roles, so you may not see all drawers in your window. The Policy Engine tab appears only if you have licensed the Cisco Instant Connect policy engine.

You can perform a variety of activities in the User Details window. [Table 1-4](#) describes these activities.

Table 1-4 User Details Window Activities

Activity	Reference
Update your user information	See the “Managing Your User Profile” section on page 5-2
Choose a tab and drawer to access additional windows	See the appropriate chapter: <ul style="list-style-type: none"> • Chapter 2, “Performing Cisco Instant Connect System Administrator Tasks” • Chapter 3, “Performing Cisco Instant Connect Operator Tasks” • Chapter 4, “Performing Cisco Instant Connect Dispatcher Tasks” • Chapter 5, “Performing Cisco Instant Connect User Tasks” • Chapter 7, “Configuring and Managing the Policy Engine” • Chapter 8, “Using the Policy Engine”
Obtain online help	See the “Getting Help in the Administration Console” section on page 1-15
Obtain information about Cisco Instant Connect	See the “Viewing Information about Cisco Instant Connect” section on page 1-15
Log out and exit from the Administration Console	See the “Exiting the Administration Console” section on page 1-13

Exiting the Administration Console

You can exit the Administration Console from any window within the application. To do so, click **Logout** in any Administration Console window.

Entering Required Information in Administration Console Windows

Many of the Administration Console windows let you enter a variety of information. You might enter information by typing in fields, choosing from drop-down lists, or checking check boxes, depending on the window.

An asterisk (*) next to a field, drop-down list, or check box indicates required information. You must provide this information before you can save your changes and exit the window.

Using Search Windows

Several activities that you perform in the Administration Console require you to locate or to identify items that the activities affect. For example, when you associate channels with a user, you must identify the channels that you want to associate.

To let you locate the items that you need, Cisco Instant Connect provides a Search or a Search Results window. This window pops up automatically when needed. It provides one or more fields that let you search for the item or items that you want based on a variety of criteria.

The following guidelines apply to Search or Search Results windows:

- These windows may contain one or more filter fields in which you can type characters. The names of these fields depend on the activity that you are performing and the information that you need to find.

In a filter field, you can enter a character string that includes the first few characters of the name that you want to find. Characters are not case-sensitive.

- The windows may contain one or more filter drop-down lists. These lists depend on the activity that you are performing and the information that you need to find.

From a filter drop-down list, you can choose the option that matches the item that you want to find. For example, if you are searching for a user and choose **Dispatcher** from a Roles drop-down list, Cisco Instant Connect finds users who are assigned the Dispatcher role.

- If you enter information in more than one filter field, Cisco Instant Connect finds only items that match all search criteria that you specify.
- To perform a search based on filters that you specify, click **Go** in the Filter area of a Search or a Search Results window. If you click **Go** without specifying any filters, Cisco Instant Connect locates all items of the type that you are searching for.
- To clear fields and reset drop-down lists to their default values, click **Clear Filter** in the Filter area of a Search or a Search Results window.
- The results of a search, except a search for locations, depend on the ops view to which you belong. Search for results for locations include all locations that match the search criteria, regardless of your ops view.
- Some search results depend on items that you can choose from the results list. For example, if you search for channels to associate with a user, the results do not include channels that disallow associations to users. Similarly, if you search for channels to add to a VTG, the results do not include channels that disallow associations to VTGs.
- To view the results in a results list at the bottom of a Search or a Search Results window, see the [“Navigating Item Lists” section on page 1-14](#).
- To choose one or more items that display in the results list in a Search or a Search Results window, check the check box next to each item.
- To exit a Search or a Search Results window, take one of these actions:
 - Click the **OK** button—The window closes and then results that you checked are entered in the window that you return to
 - Click the **Cancel** button—The window closes and the results that you checked are not in the window that you return to

Navigating Item Lists

Several windows in the Administration Console may display lists of information. For example, the Users window in the User Management drawer displays a list of Cisco Instant Connect users.

To view items in these lists, follow these guidelines:

- Lists are divided into *pages* of information. To specify how many rows of items are included in a page, choose the desired value from the Rows per page drop-down list at the top of the window, and then click **Go** next that list. You may need to use the scroll bar next to the result list to see all items in a page.
- You can navigate pages of information in a list by using the following navigation controls at the bottom of the list:
 - Page field—To go to a specific page, enter the page number and press **Enter**.
 - < (First Page button)—Displays the first page in the list. This button is not available when the first page is displayed.
 - < (Previous Page button)—Displays the previous page in the list. This button is not available when the first page is displayed.
 - > (Next Page button)—Displays the next page in the list. This button is not available when the last page is displayed.
 - >| (Last Page button)—Displays the last page in the list. This button is not available when the last page is displayed.

Getting Help in the Administration Console

You can access the Cisco Instant Connect help system from any window in the Administration Console. The help system provides online access to the information that is in this Reference Guide.

To access Cisco Instant Connect online help, click **Help** in any Administration Console window.

Viewing Information about Cisco Instant Connect

To view the following information about Cisco Instant Connect, click **About** in any Administration Console window:

- Cisco Instant Connect version that is running
- Ops view to which the logged-in user belongs
- Ops view to which the logged-in user is accessible
- Current server date and time
- Server operating system (this information appears only if you are assigned the Cisco Instant Connect system administrator role)
- Date and time of the most recent database backup (this information appears only if you are assigned the Cisco Instant Connect system administrator role)
- Link to third-party licensing information
- Additional legal notices

Administration Console Timeout

For increased system security, by default the Administration Console times out after 30 minutes of no use. In this situation, the current Administration Console window remains displayed, but Cisco Instant Connect prompts you to log back in when you attempt to perform a function. To log back in, enter your user name and password, and then click **Log In**. To exit the Administration Console, click **Logout** in any Administration Console window.

To change the default timeout period or to disable it so that there is no timeout period, navigate to **Administration > Options** in the Administration Console and modify the value of the Cisco Instant Connect Session Timeout Period option, and then click **Save**. See the “[Managing Cisco Instant Connect Options](#)” section on page 2-86 for more information.

Time Zones

The Administration Console displays dates and times in the time zone that you choose. For example, you can choose to display date and time in the local server time or in GMT.

If your Cisco Instant Connect deployment includes VMs that are in multiple timezones, we recommend that you use GMT for dates and times system wide. However, if all of your VMs are located in a single time zone, you may prefer to use local dates and times.

You set the time zone when you deploy a VM OVA image as part of the Cisco Instant Connect installation process. After installation, you can use the `timezone` CLI utility to change the timezone. This utility is located in the `/opt/cisco/ipics/bin/` folder on the Cisco Instant Connect server.

To use the `timezone` CLI utility, use an SSH client to access the Cisco Instant Connect server, log in as the root user, and enter these commands:

```
[root]# cd /opt/cisco/ipics/bin/  
[root]# ./timezone time-zone_constant
```

A list of available time-zone constants is available in the `/usr/share/zoneinfo` folder on your VM.

The time zones on all Cisco Instant Connect components VM must be the same. These components include the Instant Connect Server, UMS, RCS, Notifier, Reporter, database, location server, and so on.