



System Configuration Overview

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About System Configuration

This document provides information about the tasks that you need to perform in order to configure the call control system. It contains information such as task flows, procedures, and prerequisites.

For information about system planning, see <http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-implementation-design-guides-list.html>.

Configuration Tools Overview

The procedures in this guide require you to use the following two configuration tools:

- Cisco Unified Communications Manager Administration
- Cisco Unified Serviceability

This chapter provides a brief description of the tools and how to access them.

Cisco Unified Communications Manager Administration

Cisco Unified Communications Manager Administration Administration is a web-based application that allows you to make individual, manual configuration changes to the Unified Communications Manager nodes. The procedures in this guide describe how to configure features using this application.

If you need to perform bulk configuration tasks and want to automate the configuration process, you can use the Unified Communications Manager Bulk Administration Tool (BAT) to make a large number of configuration changes at the same time. For more information, see [Bulk Administration Guide for Cisco Unified Communications Manager](#).

Log In to Cisco Unified CM Administration

Use the following procedure to log in to Cisco Unified Communications Manager Administration. After you log in to Cisco Unified Communications Manager Administration, messages may display that indicate the current state of licenses for Unified Communications Manager in the main window. For example, Unified Communications Manager may identify the following situations:

- Unified Communications Manager currently operates with starter (demo) licenses, so upload the appropriate license files.
- Unified Communications Manager currently operates with an insufficient number of licenses, so upload additional license files.
- Unified Communications Manager does not currently use the correct software feature license. In this case, the Cisco CallManager service stops and does not start until you upload the appropriate software version license and restart the Cisco CallManager service.

Use the following procedure to browse into the server and log in to Cisco Unified CM Administration.

Procedure

Step 1 Start your preferred operating system browser.

Step 2 In the address bar of the web browser, enter the following case-sensitive URL:

```
https://<Unified CM-server-name>:{8443}/ccadmin/showHome.do
```

where: <Unified CM-server-name> equals the name or IP address of the server

Note You can optionally specify a port number.

Step 3 A Security Alert dialog box displays. Click the appropriate button.

Step 4 At the main Cisco Unified CM Administration window, enter the username and password that you specified during Unified Communications Manager installation and click **Login**. (If you want to clear the content of both fields, click **Reset**.)

Note For security purposes, Cisco Unified Communications Manager Administration logs you out after 30 minutes of inactivity, and you must log back in.

Cisco Unified Communications Manager Serviceability

Some procedures in this guide require you to use the Cisco Unified Serviceability application to start or restart services on the Unified Communications Manager nodes.

Cisco Unified Serviceability is a web-based troubleshooting tool that provides the following functionality:

- Saves alarms and events for troubleshooting and provides alarm message definitions.
- Saves trace information to log files for troubleshooting.
- Monitors real-time behavior of components through the Cisco Unified Real-Time Monitoring Tool (Unified RTMT).

- Provides audit capability by logging configuration changes to the system by a user or due to result of the user action. This functionality supports the Information Assurance feature of Unified Communications Manager and Cisco Unity Connection.
- Provides feature services that you can activate, deactivate, and view through the **Service Activation** window.
- Generates and archives daily reports; for example, alert summary or server statistic reports.
- Allows Unified Communications Manager, IM and Presence Service and Cisco Unity Connection to work as a managed device for Simple Network Management Protocol (SNMP) remote management and troubleshooting.
- Monitors the disk usage of the log partition on a node (or all nodes in the cluster).
- Monitors the number of threads and processes in the system; uses cache to enhance the performance.
- **Unified Communications Manager only:** Generates Unified Communications Manager reports for Quality of Service, traffic, and billing information through Cisco Unified Communications Manager CDR Analysis and Reporting.

Log into Cisco Unified Communications Manager Serviceability

Use the following procedure to log in to Cisco Unified Serviceability.

Procedure

- Step 1** Start your preferred operating system browser.
- Step 2** In the address bar of the web browser, enter the following case-sensitive URL:
`https://<Unified CM-server-name>:{8443}/ccmadmin/showHome.do`
where: <Unified CM-server-name> equals the name or IP address of the server
- Step 3** A Security Alert dialog box displays. Click the appropriate button.
- Step 4** From Cisco Unified CM Administration, choose **Cisco Unified Serviceability** from the Navigation menu drop-down list and click **Go**.
- Step 5** Enter the username and password that you specified during Unified Communications Manager installation and click **Login**.
- Note** For security purposes, the system logs you out after 30 minutes of inactivity, and you must log back in.
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System Configuration High-Level Flow

Complete your system configuration in the following order. The steps link to sections with configurations for a group of common system components.

Procedure

	Command or Action	Purpose
Step 1	Initial Configuration Task Flow	Complete the configurations in this part of the guide to configure the initial parameters for the system, such as licensing, server information, device pools, and port settings.
Step 2	Inbound and Outbound Calling Configuration	Complete the configurations in this part of the guide to configure gateways and survivable remote telephony systems.
Step 3	Dial Plan Configuration	Complete the configurations in this part of the guide to configure the elements of the dial plan, including the route plan, hunt pilots transformations, and URI dialing.
Step 4	Call Admission Control Configuration	Complete the configurations in this part of the guide to configure call admission control.
Step 5	End User Configuration	Complete the configurations in this part of the guide to configure roles and access control groups, and to configure end users and their profiles.
Step 6	Endpoint Device Configuration	Complete the configurations in this part of the guide to configure endpoint devices such as analog telephone adaptors (ATAs), Cisco IP Phones, third-party SIP phones, and software-based endpoints. This part also describes how to configure templates and profiles for endpoint devices, and how to enable diagnostics and reporting for Cisco IP phones.
Step 7	Integrate Applications	Complete the configurations in this part of the guide to configure Cisco Unified Communications Manager to work with other applications, such as CTI applications, Cisco Unity Connection, Cisco IM and Presence Service, Unified Contact Center Enterprise and Express, and Cisco TelePresence.
Step 8	Media Resources Configuration Task Flow	Complete the configurations in this part of the guide to configure audio and video resources, annunciators, transcoders, media termination points, and conference bridges.
Step 9	Registering Devices	Complete the configurations in this part of the guide to automatically register endpoint devices, or to manually register endpoint devices.

	Command or Action	Purpose
Step 10	Advanced Call Handling Configuration	Complete the configurations in this part of the guide to configure call controls, including how calls are advertised, queued, and throttled. This part also describes how to configure logical partitioning, calling party normalization, geolocation conveyance, automated alternate routing (AAR), and multilevel precedence and preemption (MLPP).
Step 11	Cisco Unified Communications Manager TCP and UDP Port Usage Overview IM and Presence Service Port Usage Overview	This part of the guide provides information about the ports that Unified Communications Manager and the IM and Presence Service use for intracenter connections and for communication with external applications or devices.

