



# Cisco Unified Reporting Administration Guide

---

This guide provides an overview of the Cisco Unified Reporting web application, describes how to use the application, and provides procedures for completing various reporting tasks. The guide, which serves as a reference and procedural guide for administrators of Cisco Unified Communications Manager, includes the following topics:

- [What is Cisco Unified Reporting?](#)
- [Data Sources](#)
- [Output Format](#)
- [System Requirements](#)
- [Supported Browsers](#)
- [Reports](#)
- [Understanding the User Interface](#)
- [Accessing Cisco Unified Reporting](#)
- [Accessing On-Line and Report Help](#)
- [Identifying a Report](#)
- [Viewing and Generating Reports](#)
- [Printing a Report](#)
- [Downloading and Archiving Reports](#)
- [Uploading Reports](#)
- [Logging Out](#)
- [Where to Find More Information](#)



# What is Cisco Unified Reporting?

Cisco Unified Reporting web application, which is accessed at the Cisco Unified Communications Manager console, generates reports for troubleshooting or inspecting cluster data.

This convenient tool provides a snapshot of cluster data without requiring multiple steps to find the data. The tool design facilitates gathering data from existing sources, comparing the data, and reporting irregularities.

A report combines data from one or more sources on one or more servers into one output view. For example, you can view a report that shows the *hosts* file for all servers in the cluster.

The application gathers information from the publisher server and each subscriber server. A report provides data for all active cluster nodes that are accessible at the time that the report is generated.

**Note**

---

On Cisco Unified Communications Manager Business Edition servers, the Cisco Unified Reporting application captures data for Cisco Unified Communications Manager only. Due to size constraints, the application does not capture data for Cisco Unity Connection. You can use the tool to gather important information about your Cisco Unified Communications Manager installation.

---

Some reports run checks to identify conditions that could impact cluster operations. Status messages indicate the outcome of every data check that is run.

Only authorized users can access the Cisco Unified Reporting application. By default, this includes administrator users in the Standard Unified CM Super Users group. As an authorized user, you can view reports, generate new reports, or download reports at the graphical user interface (GUI).

**Note**

---

Administrator users in the Standard Unified CM Super Users group can access all administrative applications in the Cisco Unified Communications Manager Administration navigation menu, including Cisco Unified Reporting, with a single signon to one of the applications.

---

Cisco Unified Reporting includes the following capabilities:

- A user interface for generating, archiving, and downloading reports
- Notification message if a report will take excessive time to generate or consume excessive CPU

## Data Sources

Reports that Cisco Unified Reporting generates may use any of the following sources:

- RTMT counters
- CDR\_CAR
- CUCM DB
- disk files
- OS API calls
- network API calls
- *prefs* (Windows registry)

- CLI
- RIS

The Report Descriptions report in the System Reports list provides the information sources for a report, as described in [Accessing On-Line and Report Help](#).

## Output Format

This release supports HTML output for reports.

## System Requirements

Cisco Unified Reporting runs as an application on the Cisco Tomcat service. The Cisco Tomcat service gets activated at Cisco Unified Communications Manager installation. Ensure that Cisco Unified Communications Manager is running on all servers in the cluster.

The report subsystem gathers information from other servers by using an RPC mechanism via HTTPS. Ensure the HTTPS port is open and the Cisco Tomcat service is running on the server to successfully generate a report.

To access the application, you access Cisco Unified Communications Manager Administration in a browser window. Cisco Unified Reporting uses HTTPS to establish a secure connection to the browser.

## Supported Browsers

The Cisco Unified Reporting application supports the same Microsoft Windows operating system browsers that Cisco Unified Communications Manager Administration uses to connect to the Cisco Unified Communications Manager server:

- Microsoft Internet Explorer (IE) 6
- Microsoft Internet Explorer (IE) 7
- Netscape 7.1



### Note

Because of the way IE 7 handles certificates, this browser displays an error status after you import the server certificate. This status persists if you reenter the URL or refresh or relaunch the browser and does not indicate an error. Refer to the *Cisco Unified Communications Manager Security Guide* for more information.

## Reports

For a complete description of reports that are available on your system and the data that gets captured in a report, access the **Report Descriptions** report, as described in the [Viewing and Generating Reports](#) procedure.

[Table 1](#) describes the types of system reports that display in Cisco Unified Reporting after you install Cisco Unified Communications Manager. You can view and generate any of the report types in [Table 1](#).

**Table 1**      **Standard Reports That Display in Cisco Unified Reporting**

<b>Report</b>	<b>Description</b>
Report Descriptions	Provides troubleshooting and detailed information about the reports that display.
Unified CM Cluster Overview	Provides an overview of the Cisco Unified Communications Manager cluster; for example, this report provides the Cisco Unified Communications Manager version that is installed in the cluster, the hostname or IP address of all servers in the cluster, a summary of hardware details, and so on.
Unified CM Data Summary	Provides a summary of data that exists in the Cisco Unified Communications Manager database, according to the structure of the menus in Cisco Unified Communications Manager Administration. For example, if you configure three credential policies, five conference bridges, and ten shared-line appearances, you can see that type of information in this report.
Unified CM Database Replication Debug	Provides debugging information for database replication. <b>Tip</b> For this report, generation may spike CPU and take up to 10 seconds per server in the cluster.
Unified CM Database Status	Provides a snapshot of the health of the Cisco Unified Communications Manager database. Generate this report before an upgrade to ensure that the database is healthy.
Unified CM Device Counts Summary	Provides the number of devices by model and protocol that exist in the Cisco Unified Communications Manager database.
Unified CM Extension Mobility	Provides a summary of Cisco Extension Mobility usage; for example, the number of phones that have a Cisco Extension Mobility user logged in to them, the users that are associated with Cisco Extension Mobility, and so on.
Unified CM GeoLocation Policy	Provides a list of records from the GeoLocation Logical Partitioning Policy Matrix.
Unified CM GeoLocation Policy with Filter	Provides a list of records from the GeoLocation Logical Partitioning Policy Matrix for the selected GeoLocation policy.
Unified CM Lines Without Phones	Provides a list of lines that are not associated with a phone.
Unified CM Multi-Line Devices	Provides a list of phones with multiple line appearances.
Unified CM Phone Feature List	Provides a list of supported features for each device type in Cisco Unified Communications Manager Administration.
Unified CM Phones With Mismatched Load	Provides a list of all phones that have a mismatched firmware load.
Unified CM Phones Without Lines	Provides a list of all phones in the Cisco Unified Communications Manager database that do not have lines that are associated with them.
Unified CM Shared Lines	Provides a list of all phones in the Cisco Unified Communications Manager database with at least one shared-line appearance.

**Table 1** Standard Reports That Display in Cisco Unified Reporting (continued)

Report	Description
Unified CM Table Count Summary	Provides a database-centric view of data. This report proves useful for administrators or AXL API developers that understand database schema.
Unified CM User Device Count	Provides information about associated devices; for example, this report lists the number of phones with no users, the number of users with one phone, and the number of users with more than one phone.
Unified CM Voice Mail	Provides a summary of voice-messaging-related configuration in Cisco Unified Communications Manager Administration; for example, this report lists the number of configured voice mail ports, the number of message waiting indicators, the number of configured voice messaging profiles, the number of directory numbers that are associated with voice message profiles, and so on.
Unified CM Device Distribution Summary	Provides a summary of how devices are distributed throughout the cluster; for example, this report shows which devices are associated with the primary, secondary, tertiary servers, and so on.

## Understanding the User Interface

Figure 1 shows the GUI elements for Cisco Unified Reporting:

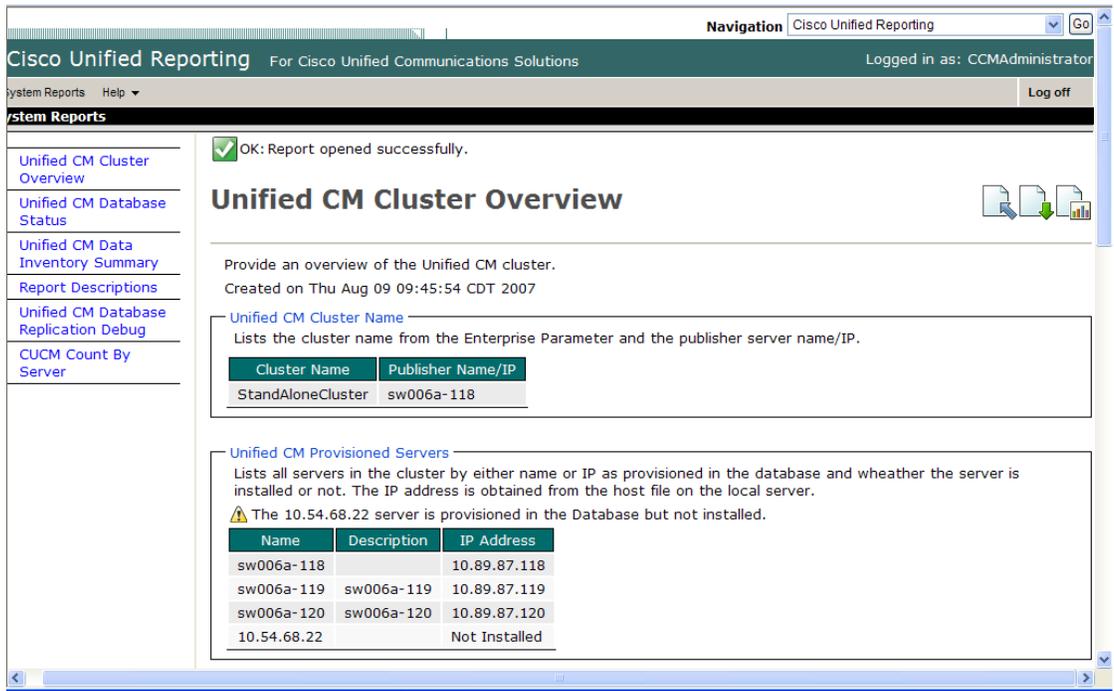
- Report categories (in this example, System Reports) and the on-line Help option display at the left side of the menu bar.
- The Log off function displays at the right side of the menu bar.
- The list of reports for a selected category displays in the left pane, under the category name.
- When opened, a report displays the report name, a date and time stamp, and a brief description of the report.
- The report organizes data into information groups, which specify the data item or source.
- Status messages display for an information group. See [Status Messages and Status Icons](#) for more information.
- Operations icons display in the top right corner of the window for the operations that are available at that window. See [Operation Icons](#) for more information.
- The Report Descriptions report displays in the list of reports. This report provides more detailed information for the reports that are installed as well as troubleshooting information. See [Accessing On-Line and Report Help](#) for more information.



### Note

Figure 1 provides an example of the Cisco Unified Reporting interface. The report categories, available reports, and report data will vary, depending on release.

Figure 1 User Interface



## Status Messages and Status Icons

Status messages display for an operation or data check. Status icons identify the message type for quick scanning of a report.



This icon indicates a successful operation or data check.



This icon indicates that the operation or data check invoked an advisory message. The icon displays for each data item in an information group that invokes an advisory message.



This icon indicates an unsuccessful operation or data check. The icon displays for each data error that is found in an information group.



This icon provides information for an operation or data check.

## Operation Icons

The interface displays these icons for report operations. You can view the icon caption when you move the mouse over the icon. If an operation is not available for a window, the icon does not display.



Upload Report icon. See [Uploading Reports](#) for this procedure.



Download Report icon. See [Downloading and Archiving Reports](#) for this procedure.



Generate Report icon. See [Viewing and Generating Reports](#) for this procedure.

## Accessing Cisco Unified Reporting

The system uses the Cisco Tomcat service to authenticate users before allowing access to the web application. You can access the application

- by choosing **Cisco Unified Reporting** in the Navigation menu in Cisco Unified Communications Manager Administration.
- by choosing **File > Cisco Unified Reporting** at the Cisco Unified Real-Time Monitoring Tool (RTMT) menu.
- by entering **https://<server name or IP address>:8443/cucreports/** and then entering your authorized username and password.

If you get a security alert that the site is not trusted, the server certificate has not yet downloaded. Refer to the *Cisco Unified Communications Manager Security Guide* for certificate download procedures.

The web application deploys to all servers in a cluster at installation. Reports get generated from database records. If the database on the publisher server is down, you can generate a report for the active nodes.



### Note

By default, only administrator users in the Standard Unified CM Super Users group can access Cisco Unified Reporting. You can set up a new administrator account for Cisco Unified Reporting in the Application User Configuration window in Cisco Unified Communications Manager Administration.

### Additional Information

See [Related Topics](#) for related information and procedures.

## Accessing On-Line and Report Help

The GUI provides two types of on-line help: administrative help and report help.

- To access the administrative help, choose the **Help > This Page** link in the menu bar. You can use the topics list in the navigation frame or the up (previous) and down (next) arrows in the content frame to find additional information.
- To access report help, select the **Report Descriptions** link in the list of reports. This report provides descriptions for the report, for each information group, and for each data item, as well as the data sources, symptoms of related problems, and remedies.



### Note

The Report Descriptions link provides common fixes for the symptoms that are listed. You may still need to contact TAC for additional assistance.

### Additional Information

See [Related Topics](#) for related information and procedures.

## Identifying a Report

You can identify a report in Cisco Unified Reporting by the report name and the date-and-time stamp. The application stores a local copy of the most recent report for you to view.

You can archive the local copy of the most recent report or a new report to your hard disk, as described in [Downloading and Archiving Reports](#). When you archive a report, you can rename archived files or store them in different folders for identification purposes.

### Additional Information

See [Related Topics](#) for related information and procedures.

## Viewing and Generating Reports

The following procedure describes how to view a local copy of a report or how to generate and view a new report. You can also use this procedure to obtain descriptions of the reports that are available on your system and the data that gets captured in a report.

To view more detailed information for the reports that are installed on your system as well as troubleshooting information, use the following procedure and choose the **Report Descriptions** report. [Table 1](#) in the [Reports](#) section also provides basic descriptions for the system reports.

When you select a report type, if a local copy of a previously generated report exists, the message “A local copy of report with name <filename> already exists.” displays with a link to the local copy. If no local copy exists, the application prompts you to generate a new report. Consider the following information when viewing and generating reports:

- Because the Report Descriptions report is dynamically generated from the database, you can also generate a new Report Descriptions report.
- During a fresh install or upgrade, the application does not save a local copy of the most recent report.
- If you want to view a report that is archived to your hard disk, you must upload the report to the server to view it in the browser window. See [Uploading Reports](#) for this procedure.

The following procedure describes how to view a local copy of a report or how to generate and view a new report. You can also use this procedure to obtain descriptions of the reports that are available on your system and the data that gets captured in a report.

### Before You Begin

The application requires you to use a web browser to view a report (see [Supported Browsers](#)).

To view or generate a report, ensure the Cisco Tomcat service is running on at least one server (see [System Requirements](#)).

### Procedure

- 
- Step 1** In Cisco Unified Reporting, select a report category.  
The list of reports displays.
- Step 2** In the list of reports, click the report to view.  
If a previous version of this report exists, the message “A local copy of report with name <filename> already exists.” displays.  
If a previous version of the report does not exist, the message “A report by name <filename> does not exist. Generate a new report.” displays.
- Step 3** Perform one of the following actions:
- To view the report with the date and time stamp shown, click the link for the report name. The report displays.
  - To generate and view a new report, click the **Generate a New Report** link or **Generate Report** (bar chart) icon.  
The application notifies you whether a report will take excessive time to generate or consume excessive CPU time. A progress bar displays while the report generates. The new report displays, and the date and time updates.
- Step 4** Click the **View Details** link to expose details for a section that does not automatically display; click **View Details** again to close the section display.  
If the green checkmark icon displays for an information group, you can choose not to view the details for that group. This icon indicates that the data check for that information group was successful.
- 

### Next Steps

If the report shows an unsuccessful data check for an item, access the Report Descriptions report for possible remedies, as described in [Accessing On-Line and Report Help](#).

### Additional Information

See [Related Topics](#) for related information and procedures.

## Printing a Report

To print a report, open the report in the browser, as described in [Viewing and Generating Reports](#), and use the browser print function. Be sure to click the **View Details** link to expose all the data that you want to print before printing.

**Additional Information**

See the [Related Topics](#) for related information and procedures.

# Downloading and Archiving Reports

Downloading a report downloads the raw XML data file to your hard disk. You archive reports by downloading them and storing them on your hard drive.

**Procedure**

**Step 1** In Cisco Unified Reporting, navigate to the report that you want to download. Click the report that you want to download in the list of reports.

If a previous version of this report exists, an info message “*A local copy of report with name <filename> already exists.*” displays.

If a previous version of the report does not exist, the message “*A report by name <filename> does not exist. Generate a new report.*” displays.

**Step 2** Perform one of the following actions:

- To download the report with the date and time stamp that is shown, click the **Download Report** (green arrow) icon.
- To generate and download a new report, click the **Generate a New Report** link or the **Generate Report** (bar chart) icon. When the new report displays, click the **Download Report** (green arrow) icon in the report window.



**Note** You do not need to click the **View Details** link to expose report details before a download. All the data gets captured in the downloaded file.

**Step 3** In the File Download dialog box, click **Open** to open the file or **Save** to save the file. (**Open** will save the file to a temporary location on your disk; **Save** will save the file to the location that you designate.)

If you clicked **Open**, the XML file for the report displays. If you clicked **Save**, go to [Step 4](#).

**Step 4** To change the file name or the location where your file is stored on your hard disk, enter a new location or rename the file (optional). A progress bar shows the download in progress.

When the download completes, click **Close** in the Download Complete window or click **Open** to open the folder that contains the file and view the XML report. You can navigate to the file location and click the filename link to view the XML report file at any time.



**Note** Be careful not to change the contents in the XML file, or your report may not display properly.

**Next Steps**

For technical assistance, you can attach the downloaded file in an e-mail or upload the file to another server.

To view a downloaded or archived file in your browser, upload the file to your server as described in [Uploading Reports](#).

**Additional Information**

See the [Related Topics](#) for related information and procedures.

## Uploading Reports

You upload an XML report file that is stored on your hard drive to view the file in your browser.

**Procedure**

- 
- Step 1** In Cisco Unified Reporting, display the **Upload Report** (blue arrow) icon by accessing any reports window in Cisco Unified Reporting.
- Step 2** Click the **Upload Report** icon in the report window.
- Step 3** To find the .xml file location, click **Browse** or enter the path for the file to upload.
- Step 4** Click **Upload**. A progress bar shows the upload in progress.  
When the upload to the server completes, the Upload Results window displays the uploaded filename.
- Step 5** Click **Continue**. The uploaded file displays in the browser window.
- 

**Next Steps**

You can compare an uploaded report and a newly generated report side-by-side during an upgrade, for example.

**Additional Information**

See the [Related Topics](#) for related information and procedures.

## Logging Out

To log out of Cisco Unified Reporting, click **Log off** on the menu bar.

**Additional Information**

See the [Related Topics](#) for related information and procedures.

## Where to Find More Information

**Related Topics**

- [What is Cisco Unified Reporting?](#)
- [Data Sources](#)
- [Output Format](#)
- [Accessing Cisco Unified Reporting](#)
- [Supported Browsers](#)
- [Reports](#)

- [Understanding the User Interface](#)
- [Accessing Cisco Unified Reporting](#)
- [Accessing On-Line and Report Help](#)
- [Identifying a Report](#)
- [Viewing and Generating Reports](#)
- [Printing a Report](#)
- [Downloading and Archiving Reports](#)
- [Uploading Reports](#)
- [Logging Out](#)
- [Understanding Real-Time Monitoring Tool, \*Cisco Unified Real-Time Monitoring Tool Administration Guide\*](#)
- [Installing and Configuring Real -Time Monitoring Tool, \*Cisco Unified Real-Time Monitoring Tool Administration Guide\*](#)
- [Understanding Serviceability Reports Archive, \*Cisco Unified Serviceability Administration Guide\*](#)
- [Configuring Serviceability Reports Archive, \*Cisco Unified Serviceability Administration Guide\*](#)

#### **Additional Cisco Documentation**

Refer to the following documentation about related Cisco IP Telephony applications and products:

- *Cisco Unified Serviceability Administration Guide*
- *Cisco Unified Communications Manager Administration Guide*
- *Cisco Unified Communications Manager System Guide*
- *Data Migration Assistant User Guide*
- *Cisco Unified Communications Operating System Administration Guide*
- *Command Line Interface Reference Guide for Cisco Unified Solutions*
- *Troubleshooting Guide for Cisco Unified Communications Manager*
- Any release notes, installation/upgrade, and configuration guides for the applications that you want to integrate with Cisco Unified Communications Manager.

## **Obtaining Documentation, Obtaining Support, and Security Guidelines**

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

# Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

Further information regarding U.S. export regulations may be found at [http://www.access.gpo.gov/bis/ear/ear\\_data.html](http://www.access.gpo.gov/bis/ear/ear_data.html).

---

CCDE, CCENT, Cisco Eos, Cisco HealthPresence, the Cisco logo, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0812R)

*Cisco Unified Reporting Administration Guide*

Copyright © 2009 Cisco Systems, Inc. All rights reserved.

