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Purpose

This document provides information about using the Cisco Unified Reporting web application.

Audience

This document provides information for network administrators who are responsible for managing and supporting the Cisco Unified Reporting web application. Network engineers, system administrators, or telecom engineers use this guide to learn about, and administer, the Cisco Unified Reporting features. This guide requires knowledge of telephony and IP networking technology.

Organization

The following table shows how this guide is organized:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco Unified Reporting web application, on page 1</td>
<td>This chapter provides an overview of the functions that are available through the Cisco Unified Reporting.</td>
</tr>
<tr>
<td>Access Unified Reporting, on page 3</td>
<td>This chapter provides information about prerequisites, signing on to the administrator interface, and the UI components of Cisco Unified Reporting.</td>
</tr>
</tbody>
</table>
This chapter provides procedures for managing reports, as well as information on the types of supported reports.

### Related documentation


### Conventions

This document uses the following conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>boldface font</td>
<td>Commands and keywords are in boldface.</td>
</tr>
<tr>
<td>italic font</td>
<td>Arguments for which you supply values are in italics.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Elements in square brackets are optional.</td>
</tr>
<tr>
<td>{ x</td>
<td>y</td>
</tr>
<tr>
<td>[ x</td>
<td>y</td>
</tr>
<tr>
<td>string</td>
<td>A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.</td>
</tr>
<tr>
<td>screen font</td>
<td>Terminal sessions and information the system displays are in screen font.</td>
</tr>
<tr>
<td><strong>boldface screen</strong> font</td>
<td>Information you must enter is in <strong>boldface screen</strong> font.</td>
</tr>
<tr>
<td>italic screen font</td>
<td>Arguments for which you supply values are in italic screen font.</td>
</tr>
<tr>
<td>^</td>
<td>The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>Nonprinting characters, such as passwords, are in angle brackets.</td>
</tr>
</tbody>
</table>

Notes use the following conventions:
Obtain support

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 Unified Reporting web application

This chapter provides an overview of the Cisco Unified Reporting web application.

- Consolidated data reporting, page 1
- Data sources used to generate reports, page 2
- Supported output format, page 2

Consolidated data reporting

The Cisco Unified Reporting web application, which is accessed at the Cisco Unified Communications Manager and Cisco Unified Communications Manager with IM and Presence consoles, generates consolidated reports for troubleshooting or inspecting cluster data.

Note

Unless stated otherwise, the information, notes, and procedures in this guide apply to Cisco Unified CM and Unified CM with IM and Presence.

This tool provides an easy way to take a snapshot of cluster data. The tool gathers data from existing sources, compares the data, and reports irregularities. When you generate a report in Cisco Unified Reporting, the 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 Cisco Unified Reporting web application deploys to all servers in a cluster at installation time. Reports are generated from database records.

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.
Data sources used to generate reports

The application captures information from any of the following sources on the publisher server and each subscriber server:

- RTMT counters
- CDR_CAR (Cisco Unified CM only)
- Cisco Unified CM DB (Cisco Unified CM only)
- IM and Presence DB (IM and Presence only)
- disk files
- OS API calls
- network API calls
- prefs
- CLI
- RIS

The report includes data for all active cluster nodes that are accessible at the time that you generate the report. If the database on the publisher server is down, you can generate a report for the active nodes. The Report Descriptions report in the System Reports list provides the information sources for a report.

Supported output format

This release supports HTML output for reports. 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 download the local copy of the most recent report or a new report to your hard disk, as described in Download new report, on page 12. When you download a report, you can rename downloaded files or store them in different folders for identification purposes.
Access Unified Reporting

This chapter provides information to access Cisco Unified Reporting.

- Prerequisites, page 3
- Sign in from administration interface, page 4
- UI components, page 5

Prerequisites

Make sure that prerequisites are met before you access Cisco Unified Reporting.

Related Topics

- System requirements, on page 3
- Required access permissions, on page 4

System requirements

Cisco Tomcat service

Cisco Unified Reporting runs as an application on the Cisco Tomcat service, which activates when you install Cisco Unified Communications Manager and the IM and Presence Service. Ensure that these products are running on all servers in the cluster.

HTTPS

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 the Administration interface in a browser window. Cisco Unified Reporting uses HTTPS to establish a secure connection to the browser.
Web browsers

Cisco Unified Reporting for Cisco Unified Communications Manager supports the following operating system browsers:

- Microsoft Internet Explorer (IE) 7 when running on Microsoft Windows XP SP3
- Microsoft Internet Explorer (IE) 8 when running on Microsoft Windows XP SP3 or Microsoft Vista SP2
- Firefox 3.x when running on Microsoft Windows XP SP3, Microsoft Vista SP2 or Apple Mac OS X
- Safari 4.x when running on Apple Mac OS X

For the IM and Presence Service, use Microsoft Internet Explorer version 6.0 or a later release, or Mozilla Firefox version 3.0 or a later release to access the Cisco Unified IM and Presence Reporting interface. Other browsers are not supported.

Required access permissions

The Cisco Unified Reporting application uses the Cisco Tomcat service to authenticate users before allowing access to the web application. Only authorized users can access the Cisco Unified Reporting application. For Cisco Unified Communications Manager, by default, only administrator users in the Standard CCM Super Users group can access Cisco Unified Reporting to view and create reports. For IM and Presence, users in the Standard CUReporting group can access Cisco Unified Reporting.

As an authorized user, you can use the Cisco Unified Reporting user interface to view reports, generate new reports, or download reports.

Note

For Cisco Unified Communications Manager, administrator users in the Standard CCM Super Users group can access all administrative applications in the Cisco Unified CM Administration navigation menu, including Cisco Unified Reporting, with a single sign-on to one of the applications.

Sign in from administration interface

Perform this procedure to sign in to Cisco Unified Reporting from the Administration interface.

Before You Begin

Ensure that you are authorized to access the Cisco Unified Reporting application.

Procedure

Step 1
For Cisco Unified Communications Manager, select **Cisco Unified Reporting** from the navigation menu in the administration interface.

Step 2
For the IM and Presence Service, select **Cisco Unified IM and Presence Reporting** from the navigation menu in the Cisco Unified CM IM and Presence Administration interface.
UI components

The following figure shows the UI components for Cisco Unified Reporting.

**Figure 1: UI Components**

1. Upload, Download, Generate icons
2. Report List
3. Report Details

---

**Note**

The report categories, available reports, and report data vary, depending on release.
Manage reports

This chapter provides information to manage reports.

- Supported reports, page 7
- View report descriptions, page 10
- Generate new report, page 10
- View saved report, page 11
- Download new report, page 12
- Download saved report, page 12
- Upload report, page 13

Supported reports

This section details the supported reports for Cisco Unified Communications Manager and IM and Presence Service on Unified CM. You can identify a report in Cisco Unified Reporting by the report name and the date-and-time stamp. Cisco Unified Reporting stores a local copy of the most recent report for you to view.

Unified CM reports

The following table 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 the following table.

Table 1: Unified CM reports that display in Cisco Unified Reporting

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Descriptions</td>
<td>Provides troubleshooting and detailed information about the reports that display.</td>
</tr>
<tr>
<td>Report</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Unified CM Cluster Overview</td>
<td>Provides an overview of the Cisco Unified CM cluster; for example, this report provides the Cisco Unified CM 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.</td>
</tr>
<tr>
<td>Unified CM Data Summary</td>
<td>Provides a summary of data that exists in the Cisco Unified CM database, according to the structure of the menus in Cisco Unified CM 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.</td>
</tr>
<tr>
<td>Unified CM Database Replication Debug</td>
<td>Provides debugging information for database replication. <strong>Tip</strong> For this report, generation may spike CPU and take up to 10 seconds per server in the cluster.</td>
</tr>
<tr>
<td>Unified CM Database Status</td>
<td>Provides a snapshot of the health of the Cisco Unified CM database. Generate this report before an upgrade to ensure that the database is healthy.</td>
</tr>
<tr>
<td>Unified CM Device Counts Summary</td>
<td>Provides the number of devices by model and protocol that exist in the Cisco Unified CM database.</td>
</tr>
<tr>
<td>Unified CM Extension Mobility</td>
<td>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.</td>
</tr>
<tr>
<td>Unified CM GeoLocation Policy</td>
<td>Provides a list of records from the GeoLocation Logical Partitioning Policy Matrix.</td>
</tr>
<tr>
<td>Unified CM GeoLocation Policy with Filter</td>
<td>Provides a list of records from the GeoLocation Logical Partitioning Policy Matrix for the selected GeoLocation policy.</td>
</tr>
<tr>
<td>Unified CM Lines Without Phones</td>
<td>Provides a list of lines that are not associated with a phone.</td>
</tr>
<tr>
<td>Unified CM Multi-Line Devices</td>
<td>Provides a list of phones with multiple line appearances.</td>
</tr>
<tr>
<td>Unified CM Phone Feature List</td>
<td>Provides a list of supported features for each device type in Cisco Unified CM Administration.</td>
</tr>
<tr>
<td>Unified CM Phones With Mismatched Load</td>
<td>Provides a list of all phones that have a mismatched firmware load.</td>
</tr>
<tr>
<td>Unified CM Phones Without Lines</td>
<td>Provides a list of all phones in the Cisco Unified CM database that do not have lines that are associated with them.</td>
</tr>
<tr>
<td>Unified CM Shared Lines</td>
<td>Provides a list of all phones in the Cisco Unified CM database with at least one shared-line appearance.</td>
</tr>
</tbody>
</table>
### 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 CM 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.

### Related Topics

IM and Presence reports, on page 9

## IM and Presence reports

The following table describes the types of system reports that display in Cisco Unified Reporting after you install the IM and Presence Service on Cisco Unified CM. You can view and generate any of the report types in the following table.

**Table 2: IM and Presence reports that display in Cisco Unified Reporting**

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Descriptions</td>
<td>Provides troubleshooting and detailed information about the reports that display. 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.</td>
</tr>
<tr>
<td>IM and Presence Cluster Overview</td>
<td>Provides an overview of the IM and Presence cluster. This report, for example, tells you which IM and Presence version is installed in the cluster, the hostname or IP address of all servers in the cluster, a summary of hardware details, and so on.</td>
</tr>
<tr>
<td>IM and Presence Database Replication Debug</td>
<td>Provides debugging information for database replication.</td>
</tr>
<tr>
<td>Tip</td>
<td>For this report, generation may spike CPU and take up to 10 seconds per server in the cluster.</td>
</tr>
</tbody>
</table>
Related Topics

Unified CM reports, on page 7

View report descriptions

Cisco Unified Reporting provides report help. The Report Descriptions link 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
You may still need to contact TAC for additional help on report problems.

Procedure

Step 1 Select System Reports
Step 2 Select the Report Descriptions link in the list of reports.
Step 3 Select the Generate Report icon.
The report generates and is displayed.

Generate new report

You can generate and view a new report.

Before You Begin

Ensure that the Cisco Tomcat service is running on at least one server and you are using a supported web browser to view the report.

The application notifies you if 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.

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM and Presence Database Status</td>
<td>Provides a snapshot of the health of the IM and Presence database. Generate this report before an upgrade to ensure that the database is healthy.</td>
</tr>
<tr>
<td>IM and Presence Table Count</td>
<td>Provides a database-centric view of data. This report proves useful for administrators or AXL API developers that understand the database schema. Summary</td>
</tr>
</tbody>
</table>
Manage reports

View saved report

Procedure

- **Step 1** Select *System Reports* from the menu bar.
- **Step 2** Select a report.
- **Step 3** Select the *Generate Report* (bar chart) icon in the *Reports* window.
- **Step 4** Select the *View Details* link to expose details for a section that does not automatically display.

What to Do Next

If the report shows an unsuccessful data check for an item, select the *Report Descriptions* report and review the troubleshooting information and possible remedies. Because the report descriptions report is dynamically generated from the database, you can also generate a new report descriptions report.

Related Topics

- Prerequisites, on page 3
- View report descriptions, on page 10
- Download new report, on page 12

View saved report

You can view a copy of an existing report.

**Note**

During a fresh install or upgrade, the Cisco Unified Reporting application does not save a local copy of the most recent report.

Before You Begin

Ensure that the Cisco Tomcat service is running on at least one server and you are using a supported web browser to view the report.

Procedure

- **Step 1** Select *System Reports* from the menu bar.
- **Step 2** Select the report that you want to view from the reports list.
- **Step 3** Select the link for the report name (dated and time stamped).
- **Step 4** Select the *View Details* link for details for a section that does not automatically display.

What to Do Next

Download a new or saved report.

If the report shows an unsuccessful data check for an item, select the *Report Descriptions* report and review the troubleshooting information for possible remedies.
Download new report

To download a new report, you store it locally on your hard drive. Downloading a report downloads the raw XML data file to your hard drive.

Procedure

Step 1 Generate the new report.

Step 2 When the new report displays, select the Download Report (green arrow) icon in the Reports window.

Note You do not need to click the View Details link for report details before you download the document. All the data is captured in the downloaded file.

Step 3 Select Save to save the file to the location on your disk that you designate.

To change the filename 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.

The file downloads to your hard disk.

Step 4 When the download completes, select Open to open the XML report.

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

What to Do Next

To view a downloaded report file in your browser, upload the file to your server.

Note

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

Related Topics

Generate new report, on page 10
Upload report, on page 13

Download saved report

To download saved reports, you download the report and store it locally on your hard drive. Downloading a report downloads the raw XML data file to your hard disk.
Procedure

**Step 1** Open and view the details of the existing report.

**Step 2** Select the **Download Report** (green arrow) icon in the **Reports** window.

**Step 3** Select **Save** to save the file to the location on your disk that you designate.

To change the filename 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.

The file downloads to your hard disk.

**Step 4** When the download completes, select **Open** to open the XML report.

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

What to Do Next

To view a downloaded report file in your browser, upload the file to your server.

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

Related Topics

- Generate new report, on page 10
- Download new report, on page 12
- Upload report, on page 13

Upload report

To view a downloaded report in your browser window, you must upload the report to the server.

**Before You Begin**

Download a report to your hard drive.

**Procedure**

**Step 1** Select **System Reports** from the menu bar.

**Step 2** Access any report to display the **Upload Report** (blue arrow) icon in the **Reports** window.

**Step 3** Select the **Upload Report** icon.

**Step 4** To locate the .xml file, select **Browse** to navigate to its location on your hard drive.

**Step 5** Select **Upload**.

**Step 6** Select **Continue** to display the uploaded file in the browser window.
What to Do Next
You can compare an uploaded report and a newly generated report side-by-side during an upgrade.

Related Topics
- Download new report, on page 12
- Download saved report, on page 12