Cisco Unified Reporting Administration Guide, Release 10.0(1)

First Published: December 03, 2013

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Text Part Number: OL-31055-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: http://www.cisco.com/go/trademarks. Third-party trademarks mentioned 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. (1110R)

© 2014 Cisco Systems, Inc. All rights reserved.

CONTENTS

Preface

Preface v

Purpose v

Audience v

Organization v

Related Documentation vi

Conventions vi

Obtain Support vii

CHAPTER 1

Cisco Unified Reporting Web Application 1

Consolidated Data Reporting 1

Data Sources Used to Generate Reports 1

Supported Output Format 2

CHAPTER 2

Access Unified Reporting 3

Prerequisites 3

System Requirements 3

Required Access Permissions 4

Sign In From Administration Interface 4

UI Components 5

CHAPTER 3

Manage Reports 7

Supported Reports 7

Unified Communications Manager Reports 7

IM and Presence Service Reports 10

View Report Descriptions 11

Generate New Report 11

View Saved Report 12

Download New Report 12

Download Saved Report 13

Upload Report 14

Preface

- Purpose, page v
- Audience, page v
- Organization, page v
- Related Documentation, page vi
- Conventions, page vi
- Obtain Support, page vii

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.

Chapter	Description
Cisco Unified Reporting Web Application, on page 1	This chapter provides an overview of the functions that are available through the Cisco Unified Reporting.
Access Unified Reporting, on page 3	This chapter provides information about prerequisites, signing on to the administrator interface, and the UI components of Cisco Unified Reporting.

Chapter	Description
Manage Reports, on page 7	This chapter provides procedures for managing reports, as well as information on the types of supported reports.

Related Documentation

For further information about related Cisco IP telephony applications and products, refer to the Cisco Unified Communications Manager Documentation Guide for your release at

`http://cisco.com/en/US/products/sw/voicesw/ps556/products_documentation_roadmaps_list.html`

Conventions

This document uses the following conventions.

Convention	Description
boldface font	Commands and keywords are in boldface.
italic font	Arguments for which you supply values are in italics.
[ ]	Elements in square brackets are optional.
{ x | y | z }	Alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in screen font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.
italic screen font	Arguments for which you supply values are in italic screen font.
^	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.
< >	Nonprinting characters, such as passwords, are in angle brackets.

Notes use the following conventions:

Note Means reader take note. Notes contain helpful suggestions or references to material not covered in the publication.

Timesavers use the following conventions:

Timesaver Means the described action saves time. You can save time by performing the action described in the paragraph.

Tips use the following conventions:

Tip Means the information contains useful tips.

Cautions use the following conventions:

Caution Means reader be careful. In this situation, you might do something that could result in equipment damage or loss of data.

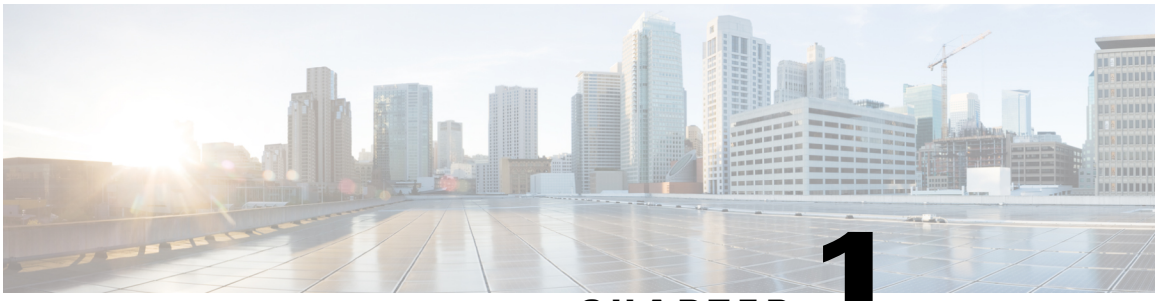
Warnings use the following conventions:

Warning This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents.

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`



CHAPTER 1

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 1
- 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 IM and Presence Service consoles, generates consolidated reports for troubleshooting or inspecting cluster data.

Note Unless stated otherwise, the information, notes, and procedures in this guide apply to Unified Communications Manager and IM and Presence Service.

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 nodes in a cluster at installation time. Reports are generated from database records.

Data Sources Used to Generate Reports

The application captures information from any of the following sources on the publisher node and each subscriber node.

- RTMT counters
- CDR_CAR (Unified Communications Manager only)
- Unified Communications Manager DB (Unified Communications Manager only)

- IM and Presence DB (IM and Presence Service only)
- disk files
- OS API calls
- network API calls
- prefs
- CLI
- RIS

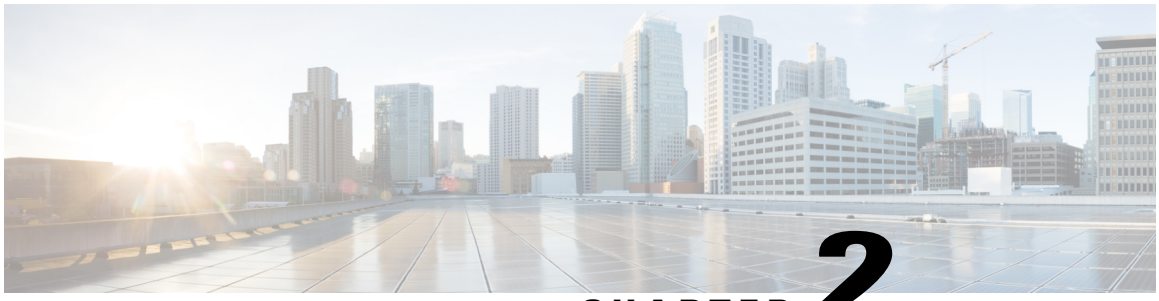
The report includes data for all active clusters that are accessible at the time that you generate the report. If the database on the publisher node is down, you can generate a report for the active nodes. The Report Descriptions report in the System Reports list provides the information sources for 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.” After you download a report, you can rename downloaded files or store them in different folders for identification purposes.

Related Topics

Manage Reports, on page 7



CHAPTER 2

Access Unified Reporting

This chapter provides information to help you 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.

System Requirements

Cisco Tomcat Service

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

HTTPS

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

To enable HTTPS, you must download a certificate that identifies the node during the connection process. You can accept the node certificate for the current session only, or you can download the certificate to a trust folder (file) to secure the current session and future sessions with that node. The trust folder stores the certificates for all your trusted sites. For more information about HTTPS, see the “Introduction” chapter in the *Cisco Unified Communications Manager Administration Guide*.

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 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, Microsoft Vista SP2, and Microsoft Windows 7
- 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 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 Service, 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 Unified Communications Manager, administrator users in the Standard CCM Super Users group can access administrative applications in the Unified Communications Manager Administration navigation menu, including Cisco Unified Reporting, with a single sign-on to one of the applications.

Sign In From Administration Interface

Perform either of the following steps to sign in to Cisco Unified Reporting from the Administration interface.

- For Unified Communications Manager, select **Cisco Unified Reporting** from the navigation menu in the Cisco Unified CM Administration interface.
- 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.

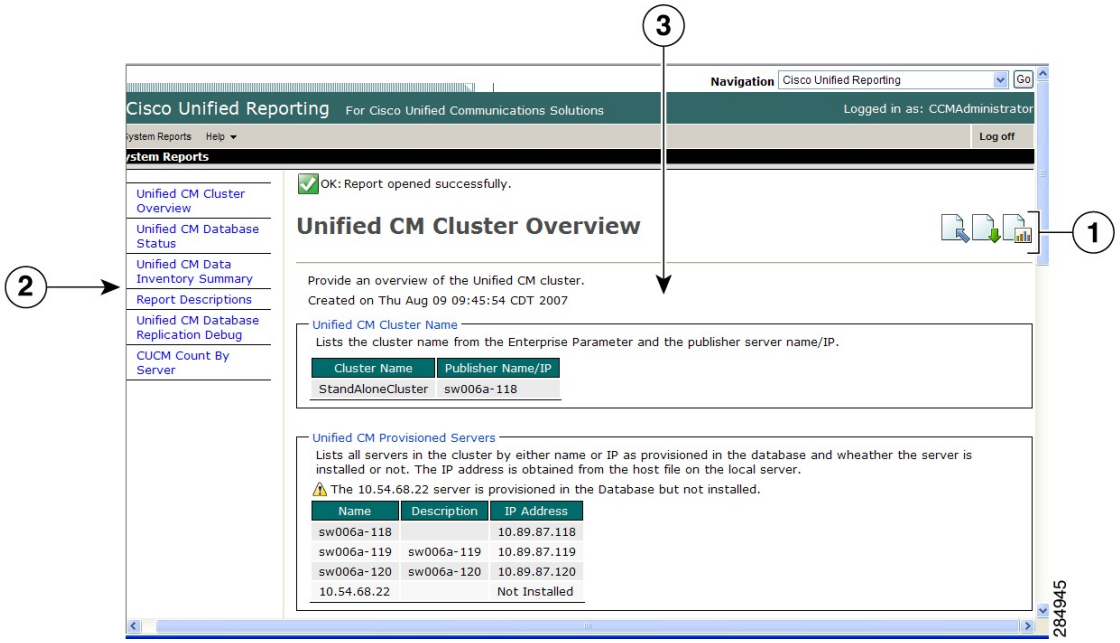
Before You Begin

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

UI Components

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

Figure 1: UI Components

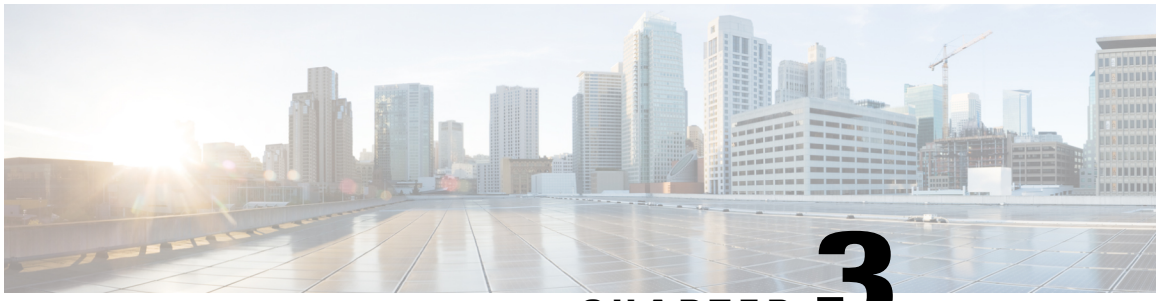


1 Upload, Download, Generate icons

2 Report List

3 Report Details

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



CHAPTER 3

Manage Reports

This chapter provides information to help you manage reports.

- Supported Reports, page 7
- View Report Descriptions, page 11
- Generate New Report, page 11
- View Saved Report, page 12
- Download New Report, page 12
- Download Saved Report, page 13
- Upload Report, page 14

Supported Reports

This section details the supported reports for Cisco Unified Communications Manager and Cisco Unified Communications Manager IM and Presence Service. 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 Communications Manager Reports

The following table describes the types of system reports that appear in Cisco Unified Reporting after you install Unified Communications Manager.

Table 1: Unified Communications Manager Reports That Appear in Cisco Unified Reporting

Report	Description
Report Descriptions	Provides troubleshooting and detailed information about the reports that appear.
Security Diagnostic Tool	Provides a summary view of information about security components.

Report	Description
Unified CM Cluster Overview	Provides an overview of the Unified Communications Manager cluster. This report includes the following details: • The Unified Communications Manager or IM and Presence Service versions that are installed in the cluster • The hostname or IP address of all nodes in the cluster • A summary of hardware details
Unified CM Data Summary	Provides a summary of data that exists in the Unified Communications Manager database, according to the structure of the menus in 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. **Tip** For this report, generation may spike CPU and take up to 10 seconds per node in the cluster.
Unified CM Database Status	Provides a snapshot of the health of the 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 Unified Communications Manager database.
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, and tertiary nodes.
Unified CM Directory URI and GDPR Duplicates	Provides a detailed list of duplicated User Directory URIs, Learned Directory URIs, Learned Numbers, and Learned Patterns on the system.
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.

Report	Description
Unified CM Phone Category	Provides a listing of phone models in a given category for use with the Universal Device Templates. When enabling self provisioning for a user, you may choose to allow any or all of these categories of phones by providing a template for each category.
Unified CM Phone Feature List	Provides a list of supported features for each device type in Unified Communications Manager Administration.
Unified CM Phone Locale Installers	Provides a list of Cisco Unified IP Phone firmware versions supported by the installed Phone Locale Packages.
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 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 Unified Communications Manager database with at least one shared-line appearance.
Unified CM Table Count Summary	Provides a database-centric view of data. This report is 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 Users Sharing Primary Extensions	Provides a list of users that share a primary extension on the system.
Unified CM VG2XX Gateway	Provides a summary of gateway endpoint security profiles.
Unified CM Voice Mail	Provides a summary of voice-messaging-related configuration in Unified Communications Manager Administration; for example, this report lists the number of configured voicemail 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 Confidential Access Level Matrix	Provides all information about the Confidential Access Level Matrix.

IM and Presence Service 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 Unified Communications Manager.

Note From Release 10.0(1), the IM and Presence cluster information is available from the Cisco Unified Communications Manager node. From Cisco Unified Communications Manager, select **Cisco Unified Reporting** > **System Reports** > **Unified CM Cluster Overview**.

You can view and generate any of the report types in the following table.

Table 2: IM and Presence Service Reports That Display in Cisco Unified Reporting

Report	Description
Report Descriptions	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.
IM and Presence Database Replication Debug	Provides debugging information for database replication. **Tip** For this report, generation may spike CPU and take up to 10 seconds per node in the cluster.
IM and Presence Database Status	Provides a snapshot of the health of the IM and Presence Service database. Generate this report before an upgrade to ensure that the database is healthy.
IM and Presence Table Count Summary	Provides a database-centric view of data. This report proves useful for administrators or AXL API developers that understand the database schema.
Presence Configuration Report	Provides configuration information about IM and Presence Service users. • Users that are synced from Cisco Unified Communications Manager • Users that are enabled for IM and Presence Service • Users that are enabled for Microsoft remote call control • Users that are enabled for calendaring information in IM and Presence Service Click **View Details** to see the list of users in sortable columns.
Presence Usage Report	Provides usage information for logged-in XMPP clients and third-party APIs. Click **View Details** to see the list of XMPP clients and third-party APIs in sortable columns.

Report	Description
Presence Limits Warning Report	Provides information about users that have met or exceeded the configuration limits for the maximum number of contacts or watchers. Click **View Details** to see the list of users in sortable columns.

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.

Note Re-enter your Cisco Unified Communications Manager Administration login credentials if you are prompted to re-login when you select an IM and Presence Service report.

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 node 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.

Procedure

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

Step 2 Select a report.

Note Re-enter your Cisco Unified Communications Manager Administration login credentials if you are prompted to re-login when you select an IM and Presence Service 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 appear.

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.

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 node 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 appear.

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 After the new report appears, 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. The data are 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 After the download completes, select **Open** to open the XML report.

Note Do not change the contents in the XML file, or your report may not appear properly on the screen.

What to Do Next

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

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

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 After the download completes, select **Open** to open the XML report.

Note Do not change the contents in the XML file, or your report may not appear properly.

What to Do Next

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

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

Upload Report

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

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.