

# **Cisco Prime Collaboration Reports**

- Prerequisites to Generate the Cisco Prime Collaboration Reports, page 1
- Update CDR Data Source Credentials, page 2
- Call Classification, page 5
- Configure SFTP Settings, page 14
- Administrative Reports, page 15
- CDR & CMR Call Report, page 16
- NAM & Sensor Report, page 27
- Session Reports/Conference Reports, page 36
- TelePresence Endpoint Reports, page 37
- Launch CUCM Reports, page 38
- Miscellaneous Reports, page 38
- Scheduled Reports, page 48
- Access Data for Reports that Contain More than 2,000 Records, page 50
- Troubleshoot File Download Issues, page 50

# Prerequisites to Generate the Cisco Prime Collaboration Reports

You can use the Cisco Prime Collaboration reports to identify problem areas, locate most commonly used and least used endpoints, and determine ideal locations and required endpoint types for future deployment. Prerequisites:

- Update data source credentials. See Update CDR Data Source Credentials.
- (For voice call reports) Categorize calls, add Dial Plan, configure Gateway Codes. See Call Classification.
- Configure SFTP. See Configure SFTP Settings.
- Unified CM devices must be in managed state.

- Switches that are connected to Cisco 1040 sensors must be in managed state in Cisco Prime Collaboration Assurance.
- Cisco Prime Collaboration Assurance must be added as billing server in Unified CM.

# **Update CDR Data Source Credentials**

Cisco Prime Collaboration collects SCS (number of seconds where loss is greater than 5%) from Cisco Unified CM clusters, Cisco 1040 Sensors, and Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM). It sends SNMP traps when the voice quality of a call fails to meet a user-defined quality threshold.

Cisco 1040 sensor monitors the active RTP streams between IP phones and calculates the MOS using the ITU G107 R-factor algorithm. The sensor then forwards the MOS for each monitored stream every 60 seconds to Cisco Prime Collaboration.

Cisco Unified CM calculates the MOS value for an entire call using the Cisco Voice Transmission Quality (CVTQ) algorithm. At the termination of a call, Cisco Unified CM stores the data in Call Detail Records (CDRs) and Call Management Records (CMRs) (for more information on CDR and CMR, see the Cisco Unified Communications Manager Call Detail Records Administration Guide.

You need not provide the credentials for Cisco 1040 Sensors to enable data collection from them. However, for Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) and Cisco Unified CM publisher servers, you must:

 Keep the credentials up-to-date. (Any time you update credentials on a Cisco Prime Network Analysis Module (Prime NAM), or Cisco Prime Virtual Network Analysis Module (Prime vNAM) server, you must also update the corresponding credentials in Cisco Prime Collaboration.)

To update the credentials, choose CDR Source Settings > Manage Call Quality Data Sources.

For Cisco Prime Collaboration Release 11.5 and later

To update the credentials, choose Alarm & Report Administration > CDR Source Settings > Manage Call Quality Data Sources.



Add, Edit, Delete, and Import options are not applicable for NAM, if you have installed Cisco Prime Collaboration in MSP mode.

# Add a Data Source Credential

To add a credential for Prime NAM server:

Step 1

Choose Assurance Administration > CDR Source Settings > Manage Call Quality Data Sources. For Cisco Prime Collaboration Release 11.5 and later

Choose Alarm & Report Administration > CDR Source Settings > Manage Call Quality Data Sources.

**Step 2** Click Add, and enter the required data.

Step 3 Click OK.

Step 4Click the Refresh button for the credential details to reflect on the user interface.<br/>To edit or delete a credential, check the checkbox of the credential of your choice, and then click Edit or Delete.

## Add Multiple Data Source Credentials

You can add multiple data source credentials, by importing a csv file with Prime NAMs details.

The csv file should contain the following details for each Prime NAMs server:

- Display Name
- IP Address
- Hostname
- Protocol
- User Name
- Password

To add credentials for multiple Prime NAMs :

 Step 1
 Choose Assurance Administration > CDR Source Settings > Manage Call Quality Data Sources.

 For Cisco Prime Collaboration Release 11.5 and later
 Choose Alarm & Report Administration > CDR Source Settings > Manage Call Quality Data Sources.

- Step 2 Click Import.
- **Step 3** In the **Import** dialog box, browse to the local csv file, and click **Import**.
- **Step 4** Click the **Refresh** button for the credential details to reflect on the user interface.

# Use Data Source Credentials to Troubleshoot Problems and Verify Credentials

Any problem that prevents Cisco Prime Collaboration from contacting and connecting to data sources can interrupt the collection and analysis of call data and configuration data. Use the information on the Data Source Management page to:

• Verify that credentials are valid and that Cisco Prime Collaboration is actively obtaining data.

- Troubleshoot if you notice potential problems with data source credential status or with reports (such as an unusual time gap).
- Step 1Obtain more information by clicking the status links on the Data Source Management page.The information that you obtain could explain the problem or indicate the need for troubleshooting.
- Step 2 Perform the following troubleshooting: For a Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM)—Check whether the:
  - Credentials on a Viewing Sensor Stream Correlation Data have changed; if so, update the credentials in Cisco Prime Collaboration.
  - Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) is reachable; if not, take steps to ensure that the Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) is reachable.

For a Cisco Unified CM—Do the following:

- Confirm that the last successful contact Cisco Prime Collaboration had with the cluster was recent. When the last contact status is Success, in some cases, Cisco Prime Collaboration might not be receiving data, but simply waiting to receive data.
- Verify that credentials for the cluster on Cisco Unified CM match those in Cisco Prime Collaboration, and correct, if necessary.
- Verify that DNS parameters are specified correctly on the Cisco Prime Collaboration server and the Cisco Unified CM hostname has been added to DNS. (Cisco Prime Collaboration must be able to resolve the IP address for Cisco Unified CM to obtain the correct name.)
- Check whether any known problems exist that prevent successful data exchange between a cluster and Cisco Prime Collaboration.
- Wait or take preventive action when the call data status shows that Cisco Prime Collaboration is discarding data. Cisco Prime Collaboration discards data when receiving old data from Unified CM 6.x and later. This can happen after the connection between Cisco Prime Collaboration and Cisco Unified CM is reestablished after a break. Cisco Unified CM first sends old files to Cisco Prime Collaboration.
- Credentials that Cisco Prime Collaboration relies upon might change on a Cisco Unified CM platform. If this happens, check with your Unified CM administrator to obtain the correct credentials. If necessary, update the credentials in Cisco Prime Collaboration.

#### **Step 3** Verify the credentials:

a) Choose Assurance Administration > CDR Source Settings > Manage Call Quality Data Sources. For Cisco Prime Collaboration Release 11.5 and later

Choose Alarm & Report Administration > CDR Source Settings > Manage Call Quality Data Sources.

- b) Select the data source for which you want to verify credentials.
- c) Click Verify.

# **Call Classification**

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Cisco Prime Collaboration uses call classification to categorize calls in Call Detail Record (CDR) reports. Cisco Prime Collaboration determines whether a call fits in system-defined call categories by analyzing the following data:

- Details from CDRs
- Device types of the source and target endpoints
- Direction of the call (incoming or outgoing)
- Protocol (H.323, MGCP, or SIP)



**Note** CDR reports older than seven days are purged.

The following table lists system-defined call category types and names, and describes the calls included in the category type.

Category Type	Description	Category Name
Voicemail	Calls to or from voicemail.	Unity Voicemail—Calls that meet system-defined criteria for a voicemail call, such as calls to and from Cisco Unity and Cisco Unity Connection. Note You can add user-defined category names to this category type.
Conference	Calls to or from a conferencing system.	Conference Bridge—Calls that meet system-defined criteria for a call involving a conference bridge. <b>Note</b> You can add user-defined category names to this category type.
ICT	Calls to or from an intercluster trunk (ICT).	<ul> <li>ICT GK Controlled—ICT calls that are gatekeeper controlled.</li> <li>ICT Non-GK Controlled—ICT calls that are not gatekeeper controlled.</li> </ul>

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VG/Trunk-Outgoing	Calls to a voice gateway or a trunk; only OffNet calls are included. <b>Note</b> User-defined dial plans are applied to calls in the VG/Trunk-Outgoing call category.	<ul> <li>MGCP Gateway Outgoing—Calls to an MGCP voice gateway.</li> <li>H.323 Gateway Outgoing—Calls to an H.323 voice gateway.</li> <li>H.323 Trunk Outgoing—Calls to an H.323 trunk.</li> <li>SIP Trunk Outgoing—Calls to a SIP trunk.</li> </ul>
VG/Trunk-Incoming	Includes calls from a voice gateway or a trunk; only OffNet calls are included.	<ul> <li>MGCP Gateway Incoming—Calls from an MGCP voice gateway.</li> <li>H.323 Gateway Incoming—Calls from an H.323 voice gateway.</li> <li>H.323 Trunk Incoming—Calls from an H.323 trunk.</li> <li>SIP Trunk Incoming—Calls from a SIP trunk.</li> </ul>
Tandem	A tandem call occurs when both endpoints are voice gateways or trunks.	Tandem.
OnNet Trunk	Calls where one endpoint is a trunk and the call is not an OffNet call. For example, the trunk could be used to connect to WebEx or to a PBX.	<ul><li>OnNet H.323 Trunk.</li><li>OnNet SIP Trunk.</li></ul>
Internal	Calls that do not fall into any of the above categories. For example, calls where one endpoint is an IP phone and the other endpoint is a voice gateway and the call is not an OffNet call.	Internal.
Unknown	For system-related reasons, Prime Collaboration could not determine the device type of the endpoints.	Unknown.

Cisco Prime Collaboration places a call in the user-defined call category if:

- The call has already been categorized as an Internal, VG/Trunk-Outgoing, or OnNet Trunk call.
- A user-defined dial plan is assigned to the cluster in which the call occurred.

# Understand OffNet and OnNet Calls

A call is considered to be OffNet when at least one endpoint is a gateway or a trunk and when any of the following is also true of the endpoint:

- The Call Classification parameter is set to Offnet in the gateway configuration—or the trunk configuration—in Unified CM (Administration).
- In Unified CM, both of the following are true:

Call Classification parameter is set to System Default in the gateway or trunk configuration.

System Default service parameter is set to Offnet.

• The endpoint is an analog gateway.

Any call that does not meet the criteria for an OffNet call is considered to be an OnNet call.

# **Call Category Creation**

You can create a call category when you add a dial pattern to a dial plan.

To add a call category, choose Assurance Administration > CDR Analysis Settings > Set Call Category.

For Cisco Prime Collaboration Release 11.5 and later

Choose Alarm & Report Administration > CDR Analysis Settings > Set Call Category.

# **Dial Plan Addition**

A dial plan must have a unique name, can include a set of toll-free numbers, and must include a set of dial patterns. A dial pattern identifies a call category name and type and specifies the rule or pattern that a directory number must match for the call to be included in the category.

Cisco Prime Collaboration provides a default dial plan as a starting point from which you can define your own dial plans. The default dial plan includes default dial patterns: call category names, types, and rules. As you configure a dial plan, you can update the call categories and add, modify, and delete the rules that are specified in the default dial plan.

You can create multiple dial plans. You can assign only one dial plan to each cluster, but you can assign the same dial plan to multiple clusters.

To add a dial plan, choose Assurance Administration > CDR Analysis Settings > Dial Plan Configuration.

For Cisco Prime Collaboration Release 11.5 and later

To add a dial plan, choose Alarm & Report Administration > CDR Analysis Settings > Dial Plan Configuration.

To assign a dial plan, choose Assurance Administration > CDR Analysis Settings > Dial Plan Assignment.

For Cisco Prime Collaboration Release 11.5 and later

To assign a dial plan, choose Alarm & Report Administration > CDR Analysis Settings > Dial Plan Assignment.

## **Understand the Default Dial Plan**

When you add a dial plan, a copy of the default dial plan is displayed for you to update. You can:

- Define your own call category names; however, you must select from the available call category types
- · Add, update, or delete dial patterns

Changes that you make while configuring a dial plan have no effect on the default dial plan, which is based on the North American Numbering Plan (NANP).

The following table provides the default dial plan values.

Condition	No. of Chars	Default Pattern	Call Category Name	Call Category Type	Explanation	Priority
>	3	011!	International	International	If the number of digits dialed is greater than 3 and starts with 011, the call is classified as International.	1
=	7	!	Local	Local	If the number of digits dialed is equal to 7 and the pattern is ! (more than one digit; in this case, 7 digits), the call is classified as Local.	2

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=	10	T!	Toll Free	Toll Free	If the number of digits dialed is equal to 10 and the pattern is T! (more than one digit; in this case, a 10-digit number that starts with a toll-free number that is defined in the dial plan), the call is classified as Toll Free.	3
	10	G!	Local	Local	If the number of digits dialed is equal to 10 and the pattern is G! (more than one digit; in this case, a 10-digit number that starts with a gateway code that has been defined in Cisco Prime Collaboration), the call is classified as Local.	4

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=	10	!	Long Distance	Long Distance	If the number of digits dialed is equal to 10 and the pattern is ! (more than one digit; in this case, a 10-digit number), the call is classified as Long Distance.	5
	11	T!	Toll Free	Toll Free	If the number of digits dialed is equal to 11 and the pattern is T! (more than one digit; in this case, an 11-digit number that starts with a toll-free number that is defined in the dial plan), the call is classified as Toll Free.	6

=	11	XG!	Local	Local	If the number of digits dialed is equal to 11 and the pattern is XG! (more than one digit; in this case, an 11-digit number that starts with any single digit followed by a gateway code that has been defined in Cisco Prime Collaboration), the call is classified as Local.	7
=	11	!	Long Distance	Long Distance	If the number of digits dialed is equal to 11 and the pattern is ! (more than one digit; in this case, an 11-digit number), the call is classified as Long Distance.	8



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Cisco Prime Collaboration classifies the call as Toll Free if the toll-free code is defined in the dial plan that is assigned to the cluster.

### Add a Dial Pattern to a Dial Plan

You can add a dial pattern to a dial plan that you want to add or edit.

Step 1Choose Assurance Administration > CDR Analysis Settings > Dial Plan Configuration. Click Add.<br/>For Cisco Prime Collaboration Release 11.5 and later

Choose Alarm & Report Administration > CDR Analysis Settings > Dial Plan Configuration. Click Add.

The Add Dial Pattern dialog box is displayed.

- **Step 2** Create a dial pattern by supplying data in these fields:
  - Condition-Applies to the number of characters. Select one:
    - Left Arrow (<)—Less than
    - Right Arrow (>) —Greater than
    - Equals symbol (=)—Equal to
  - Number of Chars—Enter the total number of digits and non-numeric characters, including plus (+), pound (#), asterisk (\*), comma (,), and the at symbol (@). Expresses the number of characters in the directory number to which the dial pattern applies.
  - Pattern—Enter the pattern to apply to the digits, where:
    - G indicates that the digits identify a gateway code.
    - T indicates that Cisco Prime Collaboration should compare the digits with the toll-free numbers configured in the dial plan.
    - •! signifies multiple digits (any number that is more than 1 digit in length, such as 1234 or 5551234).
    - X signifies a single-digit number (such as 0, 1, or 9).
  - Call Category Name—Select one of the following radio buttons and supply data as required:
    - Existing—Select an existing call category name.
    - New-Enter a unique name and select a call category type.

Step 3 Click OK.

#### Apply Dial Patterns to VG/Trunk-Outgoing, Internal, and OnNet Trunk Calls

The following table shows how dial patterns are applied from a user-defined dial plan to a call in the Internal, VG/Trunk-Outgoing, or OnNet Trunk call category.

Cisco Prime Collaboration Applies Dial Patterns of This Category Type	To the Directory Number that is the	In a Call That Is in This System-Defined Category
Conference	Destination	VG/Trunk-Outgoing
Emergency     International		
• Local		
Long Distance     Service		
• Toll Free		
• Voicemail		
• Conference	Source	
• Voicemail		
Conference	• Source	• Internal
• Voicemail	Destination	• OnNet Trunk

# **Configure Gateway Codes**

Cisco Prime Collaboration uses the gateway codes that you configure to determine the call classification for an external call.



**Note** To view the gateways for which gateway codes are already configured, select clusters and click **View**. The Gateway Code report displays only Media Gateway Control Protocol (MGCP), and H323 gateways. The analog Signaling Connection Control Part (SCCP) gateway is not displayed.

To configure gateway codes:

Step 1

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Choose Assurance Administration > CDR Analysis Settings > Gateway Code Configuration. For Cisco Prime Collaboration Release 11.5 and later

Choose Alarm & Report Administration > CDR Analysis Settings > Gateway Code Configuration.

Step 2 On the Gateway Code Summary page, select a cluster and click Manage Gateway Code.

Step 3 Enter the gateway code, and then click Apply.

# **Configure SFTP Settings**

If you are using Unified Communications Manager to monitor calls, you must configure SFTP settings. To configure SFTP settings:

Choose Assurance Administration > CDR Source Settings > CUCM SFTP Credentials. Step 1 For Cisco Prime Collaboration Release 11.5 and later Choose Alarm & Report Administration > CDR Source Settings > CUCM SFTP Credentials. Step 2 Enter the required information. For field descriptions, see the table for SFTP Settings Page - Field Descriptions. Step 3 Click Apply. A popup message window is displayed to confirm whether you want to update the SFTP credentials across all the managed Unified Communications Manager publishers. In FIPS mode, the popup message window is displayed to confirm whether you want to manually update the SFTP credentials on all Call Quality Data Sources that are managed in Cisco Prime Collaboration. Cisco Prime Collaboration Assurance is added as a billing server in the managed Unified Communications Note Manager publishers. Step 4 Click Yes.

## **SFTP Settings Page - Field Descriptions**

The following table describes the fields in the SFTP Settings page.

Tal	le	e 1:	SF	TP	Setti	ngs	Page	- Field	I D	escri	ptions	i
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Fields	Description
Low-Volume Schedule	Hours
<day> <timerange></timerange></day>	For each day of the week, timerange indicates the hours during which Cisco Prime Collaboration Assurance processes fewer records. During the low-volume schedule, Cisco Prime Collaboration Assurance performs database maintenance.
Miscellaneous	

Fields	Description
Wait for Diagnostic Report (min)	Number of minutes that Cisco Prime Collaboration Assurance continues to search, when there is a large volume of data, before displaying the matching records found for a diagnostic report.
Report Data Retention Period (days)	Number of days that data is retained in the Cisco Prime Collaboration database before being purged.
SFTP	
Username	You cannot change the username from smuser.
	This same username, smuser, must be configured in Cisco Unified Communications Manager.
Change password check box	The default password is smuser. If you change the password here, you must also change the password for smuser in Cisco Unified Communications Manager.
	For Cisco Prime Collaboration Release 11.5 and later
	Cisco Prime Collaboration Assurance automatically updates the password in Unified Communications Manager when Cisco Prime Collaboration Assurance is added as a billing server in the managed Unified Communications Manager publishers. However in FIPS mode, you must manually update the password on all Call Quality Data Sources that are managed in Cisco Prime Collaboration Assurance.

# **Administrative Reports**

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The following administrative reports are available:

Report	Description
System Status Report	Provides information about failed processes, data purging, notifications, phone licensing, and system limits.
	It provides information about synthetic, phone status, and IP SLA Voice tests for the following test results only:
	• Synthetic test: If the test failed to run because of High CPU Utilization in the Cisco Prime Collaboration server.
	• Phone Status test: If the SAA source device is not reachable.
	• IP SLA Voice Test:
	• If the configuration is incorrect.
	• If the device has low memory.
	• If the source device is not responding.
	• If the device has rebooted.
	For the following parameters of System Limits:
	• Port - Ethernet ports are categorized under this parameter.
	• Interfaces - Voice interfaces are categorized under this parameter.
Who Is Logged On Report	Helps you to identify users who are currently logged into Cisco Prime Collaboration.
Process Status	Shows the status of processes that are currently running on Cisco Prime Collaboration.

# **CDR & CMR Call Report**

Cisco Prime Collaboration Assurance can process only CDR and CMR data of last 24 hours. CDR reports displays call details such as call category type, call class, call duration, termination type, call release code, and so on. CMR reports can be cross launched from Top 5 Voice Call Quality Location and CDR reports can be cross launched from Top 5 Call Failure Location. You can also cross launch CMR reports from ServiceQualityThresholdCrossed alarm . The report loads up to 40 records initially, you can scroll down to view more records.

You can select any grade from the generated report to view the details of CMR reports for that particular CDR Record in an inline CMR (popover).

CMR report generate reports that include all call data from the clusters or reports that include a subset of call data.

The following table describes the fields of CDR call reports.

Field	Description
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Grade	Based on voice call grade settings. Select one of the following:
	<ul> <li>Good—The call value is less than the threshold value of long call SCSR (%) or short call SCSR (%) . The value of this grade appears in green color.</li> </ul>
	• Acceptable—The call value is greater than or equal to threshold value of long call SCSR (%) or short call SCSR (%). The value of this grade appears in orange color.
	• Poor—The call value is greater than the threshold value of long call SCSR (%) or short call SCSR (%). The value of this grade appears in red color.
	• N/A—The SCSR (%) value is not available or is negative.
	• All— Select all the grade.
	For more information see Overview of Voice Call Grade Settings
Cluster ID	Unified Communications Manager cluster.

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Caller/Called	• <b>Directory Number</b> —Directory number where the call was made.
	• <b>Device Type</b> —Type of device making the call.
	• <b>Signaling IP</b> —IP address of the device that originated the call signaling. For IP Phones, this field specifies the address of the phone. For PSTN calls, this field specifies the address of the H.323 gateway.
	• <b>B-Channel</b> —B-channel number of the MGCP gateway, or NA, if not applicable.
	• Media IP—IP address where the call originated.
	• Codec—Codec name.
	• Media Port—Port through which the call originated.
	• <b>Device Pool</b> —Device pool where the call originated.
	• Device Location—Location where the call originated. When you select the Quick Filter from Show drop-down menu, search option is available for Caller/Called Device Location.
	• Device Name—Name of the device.
	• Termination Cause—String that describes why the call was terminated.
Caller Video/Called Video	• Video Codec— Video Codec name.
	• Video Bandwidth— Bandwidth of the video.
	• Video IP— IP address where the video originated.
	• Video Port— Port through which the video originated.
	• Video Resolution— Resolution of the video.
Call Class	One of these:
	• Offnet
	• Onnet
	<b>Note</b> For more information, see Understand OffNet and OnNet Calls, on page 7.

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Time Period	Date and time that the call started with respect to the Cisco Prime Collaboration server local time zone (not the time zone in which Cisco Unified CM resides). The maximum time limit is 7 days.
Call Duration(s)	Length of the call, in seconds.
Call Category Names	A comma-separated list of the categories to which the call belongs. For more information, see Call Classification, on page 5 and Call Category Creation, on page 7
Call Category Types	A comma-separated list of the category types to which the call categories belongs. For more information see Call Classification, on page 5 and Call Category Creation, on page 7

The following table describes the fields of CMR reports.

Field	Description
MOS	Average MOS value during the sample duration. The value might be N/A or not available if the sample duration is very short. MOS reflects the experience of the listener.
Minimum MOS	The minimum MOS score within the sample duration. The value might be N/A or not available if the sample duration is very short.

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Grade	Based on voice call grade settings. Select one of the following:
	• Good—The call value is less than the threshold value of long call SCSR (%) or short call SCSR (%). The value of this grade appears in green color.
	• Acceptable—The call value is greater than or equal to threshold value of long call SCSR (%) or short call SCSR (%). The value of this grade appears in orange color.
	• Poor—The call value is greater than the threshold value of long call SCSR (%) or short call SCSR (%). The value of this grade appears in red color.
	• N/A—The SCSR (%) value is not available or is negative.
	• All— Select all the grade.
	For more information see Overview of Voice Call Grade Settings
Caller/Called	• <b>Directory Number</b> —Directory number where the call was made.
	• <b>Device Type</b> —Type of device making the call.
	• <b>Signaling IP</b> —IP address of the device that originated the call signaling. For IP Phones, this field specifies the address of the phone. For PSTN calls, this field specifies the address of the H.323 gateway.
	• <b>B-Channel</b> —B-channel number of the MGCP gateway, or NA, if not applicable.
	• Media IP—IP address where the call originated.
	• Codec—Codec name.
	• Media Port—Port through which the call originated.
	• <b>Device Pool</b> —Device pool where the call originated.
	• Device Location—Location where the call originated. When you select the Quick Filter from Show drop-down menu, search option is available for Caller/Called Device Location.
	• <b>Device Name</b> —Name of the device.

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Listener DN/IP	<ul> <li>Identifies the endpoint-called or caller-for which MOS and impairment details are reported; one of these:</li> <li>IP address of the listener.</li> <li>Directory number of the listener.</li> </ul>
Jitter (ms)	Milliseconds of jitter during the sample duration.
Packet Loss	Number of packets lost due to network transmission during the sample duration. Computed based on observed RTP sequence number analysis.
Max Jitter (ms)	Maximum milliseconds of jitter during the sample duration.
Conceal Seconds	Number of seconds that have concealment events (lost frames) from the start of the voice stream (includes severely conceal seconds).
Severely Conceal Seconds	Number of seconds during which a significant amount of concealment (greater than fifty milliseconds) was observed.
Conceal Ratio	Ratio of concealment frames to total frames.
Latency	Delay
Cluster	Unified Communications Manager cluster.
Time Period	Date and time that the call started with respect to the Cisco Prime Collaboration server local time zone (not the time zone in which the Unified Communications Manager resides).
Call Duration(s)	Length of the call, in seconds.
Caller Termination Cause	String that describes why the call was terminated on the caller endpoint
Called Termination Cause	String that describes why the call was terminated on the called endpoint. See Call termination cause codes section in Cisco Unified Communications Manager Call Details Record Administration Guide for the cause codes for failed calls.

Video attributes	Endpoints Report contain video attributes (for video endpoints) such as:
	Video duration
	Video packets lost
	• Video jitter
	• Video round trip time
	Video RX Resolution
	Video RX Frames Lost
Severely Conceal Seconds Ratio (%)	A metric to measure the voice quality. It is the ratio of Severely Conceal seconds(SCS) and total call duration.
Conceal Seconds Ratio (%)	A metric to measure the network quality. It is the ratio of Conceal seconds(CS) and total call duration.

# Note

All the columns may not appear in CDR & CMR reports by default. To view other fields, click settings button and choose columns.

#### For Cisco Prime Collaboration Release 11.5 and later

The Location field displays the location that is configured on a device pool instead of the location that is configured on the device, when you set the device location to one of the system locations (Hub\_None, Phantom, or Shadow).

Note

• Cisco Prime Collaboration displays a user defined location instead of Hub\_None in Unified Communications Manager for the following features and reports:

- CDR & CMR Reports
- Top 5 Poor Voice Call Quality Locations
- Top 5 Call Failure Locations
- Unregistered Phone Troubleshooting: Top 5 locations
- · Global Search by location
- If the device location is set to Hub\_None and is not associated with any user defined device pool in Unified Communications Manager, Cisco Prime Collaboration displays the Device Location as Hub\_None. Cisco Prime Collaboration also displays Hub\_None as a valid location in Global Search by location option and in Unified Communications Manager troubleshooting view.

You can filter the fields of report using Quick Filter options. For more information, see the Quick Filter section in Filters.

The CDR & CMR report can be exported in both CSV and PDF format. The maximum number of records that can be exported to a PDF file is 30,000. The maximum number of records that you can export to CSV is 200,000.

To export the report, click the **Export** tool button in the right-hand pane of the report window. If your client system seems unresponsive when you try to export files, see Troubleshoot File Download Issues.

The supported video codecs in CDR & CMR report are listed in the following:

- AAC
- G711Alaw 56k
- G711Alaw 64k
- G711Ulaw 56k
- G711Ulaw 64k
- G722 48k
- G722 56k
- G722 64k
- G722.1 24k
- G722.1 32k
- G723.1
- G726 16K
- G726 24K
- G726 32K
- G728
- G729
- G729AnnexA
- G729AnnexAwAnnexB
- G729AnnexB
- GSM
- GSM Enhanced Full Rate
- GSM Full Rate
- GSM Half Rate
- iSAC
- H.264
- H.265

# **Generate CDR & CMR Reports**

To generate CDR & CMR call report:

 Step 1
 Choose Assurance Reports > CDR & CMR Reports.

 For Cisco Prime Collaboration Release 11.5 and later

 Choose Reports > CDR & CMR Reports.

The CDR & CMR Reports page is displayed.

**Step 2** Enter the information in the fields described below:

#### Table 2:

Field	Description
Display	Select CDR/CMR from the Display
Cluster	Select the Clusters from Cluster. The default value is All.
Location/Devicepool	Select the Location or Devicepool from Location/DevicePool. The default value is Location. If you select Location from Location/DevicePool then select any location from Location. If you select Devicepool from Location/DevicePool then select any devicepool from Devicepool. You can also search Location/Devicepool from the search option available in Location or Devicepool. The default value for Location or Devicepool is Any.
Device Type	Select the devices from Device Type. The default value is Any.
Endpoint	Select Directory Number or IP Address from the Endpoint. The default value is Directory Number.
Caller	Enter the Directory Number or Caller IP address. The default value of Directory Number is * and default value of IP address is *.*.*.*.
	Directory Number can include any combination of alphanumeric characters and special characters like +,*, @, _, -, .
	For Directory Number search, use uppercase X as a single-digit wildcard; use * as multiple-digit wildcard. For example 1100X or 11*.
	For IP address search, the * wildcard applies to the entire octet. For example: 172.30.*.* or 2005:0420:2e00:0094:*:*:*:*.

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Field	Description
Called	Enter the Directory Number or Called IP address. The default value of Directory Number is * and default value of IP address is *.*.*.
	Directory Number can include any combination of alphanumeric characters and special characters like $+,*,$ $@, \_, -, .$
	For Directory Number search, use uppercase X as a single-digit wildcard; use * as multiple-digit wildcard. For example 1100X or 11*.
	For IP address search, the * wildcard applies to the entire octet. For example: 172.30.*.* or 2005:0420:2e00:0094:*:*:*:*.
Call Category	Select the name or type from the Call Category. The default value is Name.
Category Name/Type	Select the Category name or Category Type. The default value is All.
Grade	Select Good, Acceptable, Poor, All or N/A. The default value is All.
Jitter	Select the range from Jitter and enter the value in milliseconds. The default range is greater than or equal to zero.
Packet Loss	Select the range from Packet Loss and enter the value in the field. The default range is greater than or equal to zero.
Conceal Seconds	Select the range and enter the value in seconds field. The default range is greater than or equal to zero.
Conceal Ratio	Select the range from Conceal ratio and enter the value in the field. The default range is greater than or equal to zero.
Call Type	Select Audio, Video or Any. The default value is Any.
Call Class	Select On-Net, Off-Net, or Any. The default value is Any.
Call Duration	Select the value of call duration from Call Duration and enter the time in secs field. The default value is Any.
Termination Type	Select Success, Failed, or Any. The default value is Any.
Termination Cause Code	Select the cause code from Termination Cause Code. The default value is All.

Field	Description
Time Period	Select <b>Call Connect Time</b> or <b>Call Disconnect Time</b> . The default value is <b>Call Connect Time</b> . In case of cross launch from Top N dashlet, the default value is <b>Call Disconnect Time</b> .
	Call Connect Time—time when the call originates.
	Call Disconnect Time—time when the call ends.
	Select Past or Enter the Start Time and End Time. The default value is Past.
	The default value for the Start Time is one hour less than Current Time and End Time is Current Time.
	You can select Past in Minutes, Hour(s), or Days. The default value for Past is 1 Hour(s).
	For example, if you select Past as 8 Hour(s) at 10 p.m today then it displays the records from 2 p.m to 9.59 p.m today.
	If you select Past as 1 day at 10 a.m today then it displays the records from 12 a.m through 11.59 p.m of previous day.

The Jitter, Packet Loss, Conceal Seconds, Conceal Ratio fields are applicable only for CMR Filter and Call Category, Call Type, Call Class, Call Duration, Termination Type, and Termination Cause Code fields are applicable only for CDR Filter.

#### Step 3 Click Apply Filter.

The CDR & CMR report is generated.

When records are not available for the selected filter, it displays no data available.

CDR & CMR report displays only the records of last 7 days.

# Troubleshoot

1 Issue: CDR & CMR report displays Grade as N/A.

**Recommended Action**: Check if Severely Conceal Seconds Ratio value is not received from the endpoint or CMRs are not present.

**2** Issue: CDR records in older version has grades Unknown, No MOS, Short Call, but the user cannot see the same grades after upgrading to 11.0.

**Recommended Action**: After upgrade to 11.0 the Unknown, No MOS, Short Call grades will change to N/A.

**3** Issue: Severely Conceal Seconds Ratio is x% and call is graded as Poor Call but in actual the call is not a poor call.

**Recommended Action**: You can configure threshold values for Severely Conceal Seconds Ratio from Voice Call Grade Page under CDR Analysis Settings.

4 Issue: Call grading is incorrect.

**Recommended Action**: Cross check the threshold values for Severely Conceal Seconds Ratio against Severely Conceal Seconds Ratio value in the CMR Report for the calls.

5 Issue: CDR/CMR Records are not received.

Recommended Action: Perform one of the following:

• Add PCA as billing server in the Unified CM, if it is not added.

When you add PCA as billing server, check the **resend on failure** option in the Unified CM to avoid any failure of CDR delivery.

- Verify if SFTP username/password is same in Cisco Prime Collaboration Assurance and billing server in Unified CM.
- Check if CDR repository manager or CDR agent services are up in Unified CM.
- Check if "CDR Enabled Flag" and "Call Diagnostics Enabled" options are set correctly in Unified CM.
- Check If any firewall settings blocks the file transfer, if it blocks then correct this at the network infrastructure level.
- If Data collection of a cluster is in Failed state in Call Quality Data source management page then run rediscovery for that publisher.
   See the Setting Up Devices for Cisco Prime Collaboration Assurance 11.0 wiki page for Cisco Prime Collaboration Assurance 11.0, and Configure Devices for Prime Collaboration Assurance 11.5 for Cisco Prime Collaboration Assurance 11.5.

# NAM & Sensor Report

NAM & Sensor report displays the name of the sensor that collected the data, MOS, jitter, and time stamp.



This report is not applicable if you have installed Cisco Prime Collaboration in MSP mode.

#### For Cisco Prime Collaboration Release 11.5 and later

Cisco Prime NAM/vNAM is not supported in FIPS compliant setup.

To generate NAM & Sensor report, choose Assurance Reports > NAM & Sensor Reports. Enter the values in required fields and click Generate Report.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > NAM & Sensor Reports.

The following table describes the fields of NAM & Sensor reports.

Field

Description

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Name	Descriptive name for the sensor that collected the data and analyzed the MOS. Note The name Cisco $1040 + < last 6 digits from$ MAC address > identifies a Cisco 1040 that automatically registered with Cisco Prime Collaboration.
ID	1040 MAC address or Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) IP address.
Speaker/Listener	Directory Number—Displayed when the device is managed by a Unified Communications Manager that:
	<ul> <li>Is added to Cisco Prime Collaboration with the proper credentials</li> </ul>
	• Has not been suspended from monitoring.
	Device Type—Can provide the device type or one of these:
	• N/A—Some error prevents Cisco Prime Collaboration from obtaining the device type.
	• Unavailable-This is the first time Cisco Prime Collaboration has seen this phone and the device type is not yet known; or the corresponding Unified CM:
	Has not been added to Cisco Prime Collaboration.
	• Did not provide a valid device type to Cisco Prime Collaboration.
	IP Address—If an IP address is clickable, click it to launch the Detailed Device View page or Phone Detail window.
	UDP Port—Transport layer port that is the source of the media stream.
	Device Name.
Time	Time at which the sensor calculated MOS.
TOS	Type of Service (TOS).
MOS	Average MOS value during the sample duration. The value might be N/A or not available if the sample duration is very short. MOS reflects the experience of the listener. Click the value to open a Sensor Stream Correlation window.

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Minimum MOS	The minimum MOS score within the sample duration. The value might be N/A or not available if the sample duration is very short.
Primary Degradation Cause	One of these:
	• Jitter
	Packet loss
	• None—Jitter and packet loss values are both 0 (zero).
	The value might be N/A or not available if the sample duration is very short.
Grade	Based on voice call grade settings. Select one of the following:
	• Good—The call value is less than the threshold value of long call SCSR(%) or short call SCSR(%).
	• Acceptable—The call value is greater than or equal to threshold value of long call SCSR(%) or short call SCSR(%).
	• Poor—The call value is greater than the threshold value of long call SCSR(%) or short call SCSR(%).
	• N/A—The SCSR(%) value is not available or is negative.
	• All— Select all the grade.
	For more information see Overview of Voice Call Grade Settings.
Jitter (ms)	Milliseconds of jitter during the sample duration.
Packet Loss	Number of packets lost due to network transmission during the sample duration. Computed based on observed RTP sequence number analysis.
Sample Duration(s)	Number of seconds, between the first and last packet that is analyzed. The value is usually 60, but can be less for an initial or final stream.
Max Jitter (ms)	Maximum milliseconds of jitter during the sample duration.
Adjusted Packet Loss(%)	Percentage packet loss due to high jitter. Computed based on a reference jitter buffer with a fixed length delay. This value is not affected by network loss.

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Packet Loss (%)	Percent of packet loss. (Packets lost divided by total packets expected expressed as a percent.)
SSRC	Synchronization source ID-Identifies the source of a stream of RTP packets.
Listener DN/IP	Identifies the endpoint-called or caller-for which MOS and impairment details are reported; one of these:
	• IP address of the listener.
	• Directory number of the listener.
Cluster	Unified Communications Manager cluster.
Caller/Called	• <b>Directory Number</b> —Directory number where the call was made.
	• <b>Device Type</b> —Type of device making the call.
	• Signaling IP—IP address of the device that originated the call signaling. For IP Phones, this field specifies the address of the phone. For PSTN calls, this field specifies the address of the H.323 gateway.
	• <b>B-Channel</b> —B-channel number of the MGCP gateway, or NA, if not applicable.
	• Media IP—IP address where the call originated.
	• <b>Media Port</b> —Port through which the call originated.
	• <b>Device Pool</b> —Device pool where the call originated.
	• Location—Location where the call originated.
Select Time Range	Date and time that the call started with respect to the Cisco Prime Collaboration server local time zone (not the time zone in which the Unified CM resides). The maximum time limit is 7 days.
Call Duration(s)	Length of the call, in seconds.

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Impairment Details	• Jitter (ms)—Milliseconds of jitter during the call.
	• <b>Packet Loss</b> —Number of packets lost during the call.
	• <b>Concealment Seconds</b> —Number of seconds that have concealment events (lost frames) from the start of the voice stream (includes severely concealed seconds).
	• Severely Concealed Seconds—Number of seconds during which a significant amount of concealment (greater than fifty milliseconds) was observed.
	• Latency—Delay
	• Concealment Ratio—Ratio of concealment frames to total frames.
Call Release Code	• Caller Termination Cause -String that describes why the call was terminated on the caller endpoint.
	• Called Termination Cause -String that describes why the call was terminated on the called endpoint. See Call termination cause codes section in Cisco Unified Communications Manager Call Details Record Administration Guidee for the cause codes for failed calls.
Call Category Names	A comma-separated list of the categories to which the call belongs. For more information, seeCall Classification, on page 5 and Call Category Creation, on page 7
Call Category Types	A comma-separated list of the category types to which the call categories belongs. For more information see Call Classification, on page 5 and Call Category Creation, on page 7
Call Class	One of these:
	• Offnet
	• Onnet
	<b>Note</b> For more information, see Understand OffNet and OnNet Calls, on page 7.
Severely Conceal Seconds Ratio (%)	A metric to measure the voice quality. It is the ratio of Severely Conceal seconds(SCS) and the duration.

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Conceal Seconds Ratio (%)	A metric to measure the network quality. It is the ratio
	of Conceal seconds(CS) and duration.

The NAM & Sensor report can be exported in CSV format.

To export the report, click the **Export** tool button in the right-hand pane of the report window. Select **ALL** or enter the value in **Range** radio button and click **OK**. If your client system seems unresponsive when you try to export files, see Troubleshoot File Download Issues.

## **Understand Sensor Reports**

Two RTP streams—incoming and outgoing—make up a single voice call. Sensors capture voice traffic in various ways:

- Cisco 1040s listen to RTP voice traffic on Switch Port Analyzer (SPAN) ports that have been configured to mirror voice traffic. Depending on the phone ports and the voice VLANs that a SPAN port mirrors, a Cisco 1040 might listen to only one or both RTP streams, calculating MOS and sending data to Cisco Prime Collaboration at 60-second intervals.
- Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) can also capture data from SPAN ports. Alternatively, you can configure Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) to use other means of data capture. For a Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) to provide the data that Cisco Prime Collaboration needs, RTP stream monitoring must be enabled on the Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM). Cisco Prime Collaboration obtains data from Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM) at 60-second intervals.

Sensor reports display the MOS that a sensor calculated for RTP streams on a minute-by-minute basis. For each interval, a sensor report displays one or two rows of data, depending on whether data from only one or both RTP streams was captured. Each row identifies the sensor that collected the data, the endpoints involved, MOS, milliseconds of jitter, and the time stamp.

## View Sensor Stream Correlation Data

To launch a Sensor Stream Correlation window, generate a sensor report and click the Grade value for the stream that interests you.

**Note** If a "Cannot find server" page appears instead of a Sensor Stream Correlation page, see Enable the Sensor Stream Correlation Window to Display.

Cisco Prime Collaboration correlates data from sensors against one another and against Unified CM call records and displays tables with the following information:

• Stream summary—A subset of the data that was displayed on the sensor report. Additionally, the source synchronization ID (SSRC) for the stream is listed. An SSRC identifies the source of a stream of RTP packets and remains unique during an RTP conference.

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**Note** Another SSRC is assigned to RTP streams sent when the listener endpoint and UDP port are the source of a stream of RTP packets. The Sensor Stream Correlation window correlates data for one SSRC only.

• Call record-Information from the Unified CM CDR that correlates to the stream.



**Note** If the call is not complete yet, No Call Detail Record found for these streams appears in the table heading.

• Stream details—Details from one or more sensors where the SSRC matches the one in the stream summary.

The following table lists the data that is displayed in the Stream Summary table.

#### Table 3: Stream Summary

Column	Description
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Speaker/Listener	<ul> <li>Directory Number-Displayed when the device is managed by a Unified Communications Manager that: <ul> <li>Is added to Cisco Prime Collaboration with the proper credentials.</li> <li>Has not been suspended from monitoring.</li> </ul> </li> <li>IP Address-Depending on the device type, an IP Phone Details page or a Detailed Device View opens.</li> <li>UDP Port-Transport layer port that is the source of the media stream.</li> <li>Device Type-Can provide the device type or one of these: <ul> <li>N/A-Some error prevents Cisco Prime Collaboration from obtaining the device type.</li> <li>Unavailable-This is the first time that Cisco Prime Collaboration has seen this phone and the device type is not yet known; or the corresponding Unified CM:</li> <li>Has not been added to Cisco Prime Collaboration.</li> <li>Did not provide a valid device type to Cisco Prime Collaboration.</li> </ul> </li> </ul>
TOS	Type of service.
Codec	Codec name.
SSRC	Synchronization Source ID-Identifies the source of a stream of RTP packets.

The following table lists data from the CDR, if available. If the call has not completed yet, No Call Detail Record found for these streams appears in the table heading and the row is blank.

#### Table 4: Call Record

Column	Description
Call Disconnect	The time that the call disconnected. Zero (0) is displayed if the call never connected.
Cluster ID	Unified CM cluster ID.

Caller Signaling IP	IP address of the device that originated the call signaling. For Cisco Unified IP Phones, this field specifies the address of the phone. For PSTN calls, this field specifies the address of the H.323 gateway.
Caller B-Channel	B-channel number of the MGCP gateway, or NA, if not applicable.
Called Signaling IP	IP address of the device that terminates the call signaling.
Called B-Channel	B-channel number of the MGCP gateway, or NA, if not applicable.
Call Duration (s)	Length of the call, in seconds.
Caller Termination Cause	Populated when the originating party releases the call. <b>Note</b> Termination causes might not be populated.
Called Termination Cause	Populated when the terminating party releases the call or the call is rejected. Note Termination causes might not be populated.

The following table lists data from streams with an SSRC that matches the one in Stream Summary table.

Column	Description
Sensor Name	Display name of the Cisco 1040 or Cisco Prime Network Analysis Module (Prime NAM) or Cisco Prime Virtual Network Analysis Module (Prime vNAM).
Time	Time at which the sensor calculated the MOS.
MOS	Average MOS in the sample duration.
Minimum MOS	Minimum MOS in the sample duration.
Primary Degradation Cause	Jitter, Packet Loss, or None when jitter and packet loss values are zero (0).
Jitter (ms)	Milliseconds of jitter.
Packet Loss	Number of packets lost. (Actual packet loss for the sample duration.)
Sample Duration (s)	Number of seconds elapsed between the first and last packets that are analyzed.
Max Jitter (ms)	Maximum jitter, in milliseconds.

### Table 5: Stream Details

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Adjusted Packet Loss (%)	Percentage packet loss due to high jitter. Computed based on a reference jitter buffer with a fixed length delay. This value is not affected by network loss.
Packet Loss (%)	Percentage packet loss. (Actual packets lost divided by total packets expected expressed as a percent.)

#### **Enable the Sensor Stream Correlation Window to Display**

When you try to open a Sensor Stream Correlation window, if a window opens displaying a message such as "The page cannot be found", you can resolve the problem by disabling the proxy server setting in your browser. The setting is found in Internet Options on the Connection tab.

# **Session Reports/Conference Reports**

You can use Conference reports to view All Conference Summary report and Conference Detail report.

The following reports can be generated for Conference reports:

## All Session/Conference Summary Report

The Conference Summary report provides information about the in-progress and completed conferences. The reports are available for four weeks.

This report includes the following information: endpoint name, device ID, total utilization, average duration, and longest conference.

It displays the scheduled duration of the scheduled conference. For an Ad hoc conference this value is displayed as "NA". It also displays utilized scheduled time in % which denotes the scheduled time utilization in percentage.

You can view the following additionally:

- IP address Displays the IP Address of the selected endpoint that participated in the conference.
- Protocol Displays the protocol used for the conference. This is displayed in the Participated conferences of Endpoint pane.

Ensure that the visibility of the phones is set to Full, to view the preceding details.

You can view the following additionally

- Received Video DSCP The last received DSCP value of the video device(s) in the conference. This is only applicable for Cisco Unified IP Phones 8941 and 8945, Cisco DX Series, and Cisco TelePresence TX Series.
- Received Audio DSCP The last received DSCP value of the audio device in the conference. This is only applicable for Cisco Unified IP Phones 8941 and 8945, Cisco DX Series, and Cisco TelePresence TX Series.
- Peak Packet Loss The highest value of packet loss (in percentage) that occurred in the conference.

To generate the Conference Summary report, choose Assurance Reports > Session Reports > All Session Summary Report . For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Conference Reports > Conference Summary Report.

# **Session/Conference Detail Report**

The Conference Detail report provides the following details: conference ID, duration, start/end time, conference type, status, and alarm severity.

To generate the Conference Detail report, choose Assurance Reports > Session Reports > Session Detail Report.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Conference Reports > Conference Detail Report.

# **TelePresence Endpoint Reports**

You can use TelePresence reports to view endpoint utilization, and no show endpoints summary. The following reports can be generated for TelePresence endpoints:

## **Endpoint Utilization Report**

The Endpoint Utilization report enables you to identify the most utilized and least utilized endpoints. Average utilization of an endpoint is calculated using the following formula:

• For system-defined (1 day, 1 week, 4 weeks) reports:

(Total number of utilization in minutes / [maximum utilization \* 60]) \* 100

• For custom reports:

(Total number of utilization in minutes / [maximum utilization \* 60 \* number of days]) \* 100

- ° 1 day: The maximum utilization is ten hours.
- •1 week: The maximum utilization is 50 hours.
- •4 weeks: The maximum utilization is 200 hours.
- Custom report: The maximum utilization is 7.14 hours per day.

It displays the utilized scheduled time in % which denotes the scheduled time utilization in percentage.

You can customize the endpoint utilization settings. To do so, select an endpoint model (endpoint(s) of a particular model) and then click the **Change Utilization** button. You can select the number of working hours in a day and the number of working days in a week.

To generate the Endpoint Utilization report, choose Assurance Reports > Telepresence Endpoint Reports > Endpoints Utilization Report.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Telepresence Endpoint Reports > Endpoints Utilization Report.

## **No Show Endpoint Summary Report**

The No Show Endpoints Summary report provides information about the endpoints that did not participate in the scheduled conferences. This report is generated based on the scheduled completed conferences data.

To generate the No Show Endpoints Summary report, choose Assurance Reports > Telepresence Endpoint Reports > No Show Endpoint Summary Report.

For Cisco Prime Collaboration Release 11.5 and later

To generate the No Show Endpoints Summary report, choose **Reports** > **Telepresence Endpoint Reports** > **No Show Endpoint Summary Report**.

# Launch CUCM Reports

Launch CUCM Reports enables you to cross launch to the reporting pages for the Cisco Unified Communications Manager clusters.

Go to Assurance Reports > Launch CUCM Reports, and click a cluster name to open the Cisco Unified Reporting application.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Launch CUCM Reports.

# **Miscellaneous Reports**

You can use Miscellaneous reports to view Other Reports, UCM/CME Phone Activity Reports, and Voice Call Quality Event History Reports.

## UCM/CME Phone Activity Reports

UCM/CME Phone Activity reports provide information about the audio and video phones that have undergone a status change during the last 30 days.

If you have deployed Cisco Prime Collaboration in enterprise mode, the Phone Activity reports display the domain name, except the Export Audio Phones report.

If you have deployed Cisco Prime Collaboration in MSP mode, the Phone Activity reports display the customer name, except the Export Audio Phones report.

The following Activity reports are available:

## Audio Phone Move Report

The Audio Phone Move report displays the details of IP phones that have been moved in the last 30 days. It also displays the Extension, Cisco Unified CM address, switch address, and switch ports used before and after the move.

The Audio Phone Move report shows the time at which the IP phone move was detected, and not the time at which the move occurred.

Cisco Prime Collaboration obtains fresh data for the Audio Phone Move report every 5 minutes. You can also close the report and regenerate it to refresh the data.

To generate the Audio Phone Move report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Move.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Move.



Note

Audio Phone Move report is not supported for the phones that do not support CDP.

### **Audio Phone Audit Report**

The Audio Phone Audit report shows the changes that have occurred in the managed IP phone network. For example, this report shows the IP phones that have been added or deleted from your network, IP phone outage status, and so on. Phone status changes occur, for instance, when a phone becomes unregistered with the Cisco Unified CM.

To generate the Audio Phone Audit report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Audit.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Audit.



The IP Phone Audit report is not supported for Cisco Wireless IP Phone 7920.

## **Removed IP Phones Report**

The Removed IP Phones report lists phones that have been removed during the last 30 days.

Cisco Prime Collaboration gathers the information used in this report every 5 minutes.

To generate the Removed IP Phones report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Removed IP Phones.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Removed IP Phones.

Note

The Removed IP Phone report is not supported for Cisco Wireless IP Phone 7920.

### Audio Phones Extension Changes Report

The Audio Phones Extension Changes Report lists the audio phones for which extension numbers were changed during the last 30 days.

Cisco Prime Collaboration gathers the information used in this report every 5 minutes.

To generate the Audio Phones Extension Changes Report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Extension Changes.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Extension Changes.

Note

The Audio Phones Extension Changes Report is not supported for Cisco Wireless IP Phone 7920.

### Duplicate MAC/IP Address Report

The Duplicate MAC/IP Address report lists the attributes of all IP phones that have:

- Duplicate MAC addresses; that is, a phone that has the same MAC address as another phone but a different IP address.
- Duplicate IP addresses; that is, a phone that has the same IP address as another phone but a different MAC address.

Cisco Prime Collaboration does not show a multihomed host as a phone with a duplicate MAC address.

For the Duplicate MAC/IP Address report to display the correct information, the switch to which the phone is connected must be monitored by Cisco Prime Collaboration. If the switch is not monitored by Cisco Prime Collaboration, the report will not display any information.

To generate the Duplicate MAC/IP Address report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Duplicate MAC/IP.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Duplicate MAC/IP.

## **Suspect Phones Report**

The Suspect Phones report displays the attributes of all IP phones that:

- · Have not registered with a Cisco Unified CM.
- Have made an unsuccessful attempt to register with a Cisco Unified CM.

To generate the Suspect Phones report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Suspect Phones.

#### For Cisco Prime Collaboration Release 11.5 and later

#### Choose **Reports** > **Miscellaneous Reports** > **UCM/CME Phone Activity Reports** > **Suspect Phones**.

Some IP phones appear marked as Suspect when they are not. To correct this, make sure that the Cisco Unified CM is managed by Cisco Prime Collaboration.

- If the Cisco Unified CM is not managed by Cisco Prime Collaboration, add it to Cisco Prime Collaboration.
- If the Cisco Unified CM is managed by Cisco Prime Collaboration but is not reachable, this can be due to loss of connectivity. Make sure that connectivity with Cisco Prime Collaboration is restored.



The Suspect Phones report is not supported for Cisco Wireless IP Phone 7920.

## **Export Audio Phones Report**

You can export 24-hours IP audio phone status report in the PDF and/or CSV file format for the following:

• Suspect IP Phones: IP audio Phones that have:

· Not registered with Cisco Unified CM.

- Made an unsuccessful attempt to register with a Cisco Unified CM.
- Duplicate MAC/IP Address Phones: IP audio phones that have:
  - The same MAC address as another phone but a different IP address.
  - The same IP address as another phone but a different MAC address.
- Extension Number Changes: Audio IP phones for which extension numbers were changed.
- IP Phone Audit: Changes that have occurred in your managed IP phone network. For example, this report shows the IP phones that have been added or deleted from your network, IP phone outage status, and so on.
- IP Phone Move: Audio IP phones that have been moved. The report shows the time at which the IP phone move was detected, and not the time at which the move occurred.
- Removed IP Phones: IP audio phones that have been removed from Cisco Unified CM.
- All IP Phones/Lines: Details of all IP audio phones and its configured lines.



The maximum number of records that can be exported to a PDF file is 2,000. The maximum number of records that you can export to CSV is 30,000.



Choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Export Audio Phones. The Export Settings (for Export Audio Phones) page appears, displaying the information described in the following table.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Export Audio Phones.

Graphical User Interface Element	Description/Action
Report Type	Select a report type.

Save at	<ul> <li>Enter a location for storing the reports on the server where Cisco Prime Collaboration Assurance is installed; the default location is /opt/emms/cuom/PhoneStatusChangeReports.</li> <li>Note If you configure export settings to save files outside of default location, be sure to log into the Cisco Prime Collaboration Assurance server, create the folder that you entered on the Export Settings page, and provide write permission to the folder for the user. If you do not, Cisco Prime Collaboration cannot create the export files.</li> </ul>
E-mail to	Enter one or more complete e-mail addresses separated by commas.

#### Step 2 Click Apply.

### What to Do Next

You can download the reports by clicking the Download Report button.

## **Export Video Phones Report**

You can export 24-hours video phone status report in the PDF and/or CSV file format for the following:

- Extension Number Changes: Video phones for which extension numbers were changed.
- Video Phone Audit: Changes that have occurred in your managed video phone network. For example, this report shows the video phones that have been added or deleted from your network, video phone outage status, and so on.
- Video Phone Move: Video phones that have been moved. The report shows the time at which the video phone move was detected, and not the time at which the move occurred.
- Removed Video Phones: Video phones that have been removed from Cisco Unified CM.
- Video Phones/Lines: Details of all Video phones and its configured lines.



**Note** The maximum number of records that can be exported to a PDF file is 2,000. The maximum number of records that you can export to CSV is 30,000.

Step 1

Choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Export Video Phones. The Export Settings (for Export Video Phones) page appears, displaying the information described in the following table. For Cisco Prime Collaboration Release 11.5 and later

Graphical User Interface Element	Description/Action
Report Type	Select a report type.
Save at	<ul> <li>Enter a location for storing the reports on the server where Cisco Prime Collaboration Assurance is installed; the default location is</li> <li>/opt/emms/cuom/PhoneStatusChangeReports.</li> <li>Note If you configure export settings to save files outside of default location, be sure to log into the Cisco Prime Collaboration Assurance server, create the folder that you entered on the Export Settings page, and provide write permission to the folder for the user. If you do not, Cisco Prime Collaboration cannot create the export files.</li> </ul>
E-mail to	Enter one or more complete e-mail addresses separated by commas.

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Export Video Phones.

### Step 2 Click Apply.

#### What to Do Next

You can download the reports by clicking the Download Report button.

## **Video Phone Move Report**

The Video Phone Move report displays video phones that have been moved in the last 30 days. It also displays the Extension, Cisco Unified Communications Manager address, switch address, and switch ports used before and after the move.

The Video Phone Move report shows the time at which the video phone move was detected, and not the time at which the move occurred.

Information for the Video Phone Move report is gathered every 5 minutes using Video Phone Movement Tracking.

Video Phone Movement Tracking is used to:

- · Check all the switches and Cisco Unified CM
- Identify the list of changes
- Generate the data on video phone moves

To generate the Video Phone Move report, choose **Reports** > **Miscellaneous Reports** > **UCM/CME Phone Activity Reports** > **Video Phone Move**.

<u>}</u> Tip

Tip Video Phone Move report is not supported for the phones that do not support CDP.

### Video Phone Audit Report

The Video Phone Audit report shows the changes that have occurred in the managed video phone network. For example, this report shows you the video phones that have been added or deleted from your network, changes in video phone status, and so on. Phone status changes occur, for instance, when a phone becomes unregistered with the Cisco Unified CM.

To generate the Video Phone Audit report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Video Phone Audit.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Audio Phone Move.

## **Removed Video Phones Report**

The Removed Video Phones report lists phones that have been removed during the last 30 days.

Cisco Prime Collaboration gathers fresh data for the Video Phone Move report every 5 minutes. You can also close the report and regenerate it to refresh the data.

To generate the Removed Video Phones report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Removed Video Phones.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Removed Video Phones.

### Video Extension Changes Report

The Video Extension Changes report lists the video phones for which extension numbers were changed during the last 30 days.

To generate the Video Extension Changes report, choose Assurance Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Video Extension Changes.

For Cisco Prime Collaboration Release 11.5 and later

Choose Reports > Miscellaneous Reports > UCM/CME Phone Activity Reports > Video Extension Changes.

## Understand the Time Period Covered by Audio IP Phone Activity Reports

For Cisco Prime Collaboration Release 11.1 and earlier

When you generate an Audio IP Phone or Video IP Phone Activity report, your results can be affected by the time zones in which each of following resides:

- Your client system—Cisco Prime Collaboration calculates the time period (previous 24 hours through previous 7 to 30 days, depending on the report) for Phone Activity reports based on the date and time on your client system.
- Prime Collaboration system—Cisco Prime Collaboration records some audits, such as extension number changes, based on the time that the change is detected on the Cisco Prime Collaboration system.
- Cisco Unified Communications Manager—Cisco Prime Collaboration records some audits, such as phone moves, based on the time on Cisco Unified CM that changes were detected.

If any of these systems is not in the same time zone as your system, you must take the time zone difference into account when you generate and view Phone Activity reports.



Note

If the audit date and time on the Cisco Prime Collaboration system is inconsistent with those shown in the Audio IP Phone or Video IP Phone Audit report, make sure that all Cisco Unified CM in the network are set to synchronize.

## Track Phone Status when Cisco Unified CM Is Down

#### For Cisco Prime Collaboration Release 11.1 and earlier

If a Cisco Unified CM that is configured with a backup goes down, audio and video IP phones fail over to the backup Cisco Unified CM.

Cisco Prime Collaboration stores audit records for the phones that register with the backup and these status changes are included in IP Phone and Video Phone Audit reports.

Cisco Prime Collaboration does not store audit records in the following cases:

- An entire Cisco Unified CM cluster goes down.
- A Cisco Unified CM for which a backup is not configured goes down.

Therefore, status changes for the phones registered to Cisco Unified CM in these situations are not included in Audio IP Phone Status and Video IP Phone Activity reports.

## Voice Call Quality Event History Reports

You can search the Event History database for Voice Call Quality events based on:

- MOS
- Destination
- Codec
- Phone model
- Sensor(not applicable if you have installed Cisco Prime Collaboration in the MSP mode)
- Date
- Export

To generate Call Quality Event History report, choose Assurance Reports > Miscellaneous Reports > Voice Call Quality Event History Reports.

#### For Cisco Prime Collaboration Release 11.5 and later

#### Choose Reports > Miscellaneous Reports > Voice Call Quality Event History Reports.

The Voice Call Quality Event History report is a scrollable table that lists up to 2,000 records, based on your search criteria.

To view database contents beyond 2,000 records, choose Assurance Reports > Miscellaneous Reports > Voice Call Quality Event History Reports > Export, click Export. If more than 1,000 records match your search criteria, a popup window reports the total number of matching records found.

#### For Cisco Prime Collaboration Release 11.5 and later

Choose **Reports** > **Miscellaneous Reports** > **Voice Call Quality Event History Reports** > **Export**.

When you export Voice Call Quality Event History Reports In Internet Explorer browser, the **Windows** Security popup window may prompt for your credentials. The report is downloaded even if you cancel the Windows Security popup window.

For the Save at field, enter a location for storing the reports on the server where Cisco Prime Collaboration Assurance is installed; the default location is /opt/emms/cuom/ServiceQualityReports.



Note

If you configure export settings to save files outside of default location, be sure to log into the Cisco Prime Collaboration Assurance server, create the folder that you entered on the Export Settings page, and provide write permission to the folder for the user. If you do not perform these tasks, Cisco Prime Collaboration cannot create the export files.

For the E-mail to field, enter one or more complete e-mail addresses separated by commas.

To download the report, click **Download Report**.

If you have deployed Cisco Prime Collaboration in the enterprise mode, the Call Quality Event History reports can be viewed for a specific domain selected from the global selector (drop-down). However, when you export the report, using the export option, the reports are not filtered based on the domain selected from the global selector.

If you have deployed Cisco Prime Collaboration in the MSP mode, the Call Quality Event History reports contain customer details such as, customer name. The reports can be viewed for a specific customer selected from the global selector (drop-down). However, when you export the report, using the export option, the reports are not filtered based on the customer selected from the global selector. Also, in this mode, you cannot search the Event History database for Voice Call Quality events based on Sensor.

## **Other Reports**

Other reports provide information about CTI applications, Cisco Analog Telephone Adaptor (ATA) devices, and Cisco 1040 sensors if you have deployed Cisco Prime Collaboration in Enterprise mode.



If you have deployed Cisco Prime Collaboration in MSP mode, you cannot generate reports for Cisco 1040 sensors.

To generate these reports, choose Assurance Reports > Miscellaneous Reports > Other Reports and select a report.

For Cisco Prime Collaboration Release 11.5 and later Choose Reports > Miscellaneous Reports > Other Reports.

### **CTI Applications Report**

The CTI Applications report lists CTI applications that are registered with Cisco Unified CM.

The following applications are registered to Cisco Unified CM as CTI devices or CTI ports:

- Cisco Personal Assistant
- Cisco Customer Response Applications
- Cisco IP Contact Center
- Cisco Emergency Responder

### ATA Devices Report

The ATA Devices report provides information about the ATA devices that are registered with Cisco Unified CM.

## Cisco 1040 Sensors Report

The Cisco 1040 Sensors report provides information about Cisco 1040 sensors that are deployed in your network. Before you generate Cisco 1040 Sensors Report, see prerequisites in Prerequisites to Generate the Cisco Prime Collaboration Reports.



This report is not applicable if you have installed Prime collaboration in MSP mode.

When a web interface is accessible for an IP phone, you can open it from Cisco 1040 sensor report by clicking the hyperlink for one of the following:

- Extension number
- MAC address
- IP address

## **Conferencing Device Video Port Utilization Report**

This report is generated based on the hourly utilization of conferencing devices.

#### **Average Utilization**

- 1 day: Average utilization of hour  $1 + \text{hour } 2 + \dots + \text{hour } 24) / 24$ .
- 1 week: Average hourly utilization of each hour in the week is aggregated and divided by (7 x 24).
- 4 weeks: Average hourly utilization of each hour in the 4 weeks is aggregated and divided by (7 x 24 x 4).

• Custom period: Average hourly utilization of each hour in the custom period is aggregated and divided by (24 x number of days in custom period).



The utilization is shown as 100% even if the utilization is more than 100%.

#### **Peak Utilization**

- 1 day: The peak utilization is analyzed from individual peak values of each of the 24 hours.
- 1 week: The peak utilization is analyzed from individual peak values of each of the 7\*24 hours.
- 4 weeks: The peak utilization is analyzed from individual peak values of each of the 7\*24\*4 hours.
- Custom periods: The peak utilization is analyzed from individual peak values of each hour in the custom period.

To generate the Conferencing Device Utilization report, choose Assurance Reports > Miscellaneous Reports > Other Reports > Conferencing Device Utilization Report.

#### For Cisco Prime Collaboration Release 11.5 and later

#### Choose Reports > Miscellaneous Reports > Other Reports > Conferencing Device Utilization Report.

Click the value of the Average Utilization or Peak Utilization columns to launch the Detailed Video Port Utilization graph. You can choose to view Hourly Average Utilization, Peak Utilization, or actual data (click **All**). You can also use the slider and select a small time interval also (such as a minute) to view actual data for that interval.

# Scheduled Reports

Scheduled reports are utilization and inventory reports that you can schedule from the Report Launch Pad. You can generate them according to your scheduling preferences, and download or send them to the configured e-mail ID. These reports can be exported in both CSV and PDF format (except the Conference Detail Report, which can be exported only in CSV format). The data for these reports will be available for 30 days only.

These reports are not enabled by default. You can generate the reports on the spot or enable scheduling to generate them on predefined days.

Report Title	Description	
Utilization Reports (Under Reports selector, select Utilization > Endpoint, and Endpoint No Show to see the Monthly Utilization and Monthly No Show Reports.)		
Monthly Utilization Report	Provides aggregate monthly reports on the utilization of the endpoints. The aggregate value is calculated by <i>Total utilization for all months</i> / 12.	
Monthly No Show Report	Provides aggregate monthly reports on the nonparticipation of endpoints in scheduled conferences. The average aggregate value is calculated by <i>Total no show for all months</i> / 12.	

The following scheduled reports are available:

Report Title	Description			
Conference Detail Report	Provides details on the conference statistics for all completed conferences.			
Inventory Reports				
Managed Devices Report	Provides information about managed devices. If a device is unknown, only the IP address is displayed. Use this report to find devices for which credentials have been updated.			
Unmanaged Devices Report	Provides information about unmanaged devices. Use this report to identify devices for which credentials need to be updated.			
Endpoints	Provides information on the endpoints as displayed in the Endpoints Diagnostic page. For more information, see the Endpoint Diagnostics Dashboard section.			
Event History Reports				
All Events	Provides history of all the events that occurred in last one day, one week, or one month.			



Scheduled Utilization reports (Monthly Utilization, Monthly No Show, and Conference Detail reports) are applicable for both video phones and TelePresence endpoints. Endpoint details will be populated in these reports based on the license that you purchased.

## **Generate Scheduled Reports**

You can define the reporting period, the report generation date, and the frequency according to your preferences. To generate a scheduled report:

**Step 1** Select a report from the Reports pane.

- **Step 2** Click the Settings tab under the Report Details pane, and click Enable Scheduling.
- **Step 3** Schedule the report generation using options in the Scheduler and Settings pane.
- **Step 4** Do either of the following:

- Click Save.
- Generate the report on the spot:
  - ° Click Run Now (adjacent to the report you want to generate).
  - ° Click the Run History tab under the Report Details pane.

• Download the report.

To create a customized scheduled report, select a report from the Reports quick display in the left corner only, and click New under the Reports pane. Enter the required information and click Submit. Instances of the run report are queued as jobs under the Job Management page. You can manage and monitor these jobs from the Job Management page (System Administration > Job Management).

# Access Data for Reports that Contain More than 2,000 Records

Cisco Prime Collaboration reports display up to 2,000 records. If more than 2,000 records are returned when you generate a report, Cisco Prime Collaboration displays an informational message before displaying the report.

In this case, you can:

- Enter more specific filters to generate a report with fewer records.
- Export the report data to a CSV file to access the additional records. To open the export window, click the Export icon in the top right of the report window. You can export up to 30,000 records to a CSV file.



If your client system seems unresponsive when you try to export files, see Troubleshoot File Download Issues.

# **Troubleshoot File Download Issues**

If you try to export a report or other data to a file from Cisco Prime Collaboration and either the export dialog box or the window that prompts you to save the export file does not appear, use these procedures to try to fix the problem.

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	If you set the custom levels of security in Internet Explorer to medium or greater, the option, Automatic prompt to file download, is disabled. If you try to download a PDF or CSV file to a client system where Adobe Acrobat Reader or Microsoft Excel not installed, nothing happens. The PDF file or the spreadsheet is not displayed nor is a window that prompts you to save the file. To enable file download windows to display, do this on your desktop:	
Step 2	If you are using Internet Explorer, Automatic prompt to file download is enabled, and the window that prompts you to save the file still does not appear, do this:	