



Cisco Unified Contact Center Express Reporting User Guide, Release 12.5(1)

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Preface

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Change History

This table lists changes made to this guide. Most recent changes appear at the top.

Change	See	Date
Initial Release of Document for Release 12.5		January 2020
Cisco SocialMiner (SM) has been renamed as Customer Collaboration Platform (CCP).	Preface >> Related Documents	
Added Unified License Consumption Report.	Historical Reports >> System Reports >> Unified License Consumption Report	
Introduced Customer Journey Analyzer.	Customer Journey Analyzer	
Updated Live Data Reports.	Live Data Reports	
Unified CCX Engine updates the changed records every three seconds.	Manage and Run Reports>>Live Data Reports	

About This Guide

The *Cisco Unified Contact Center Express Report User Guide* describes how to generate Cisco Unified Intelligence Center reports for Cisco Unified Contact Center Express (Unified CCX). This guide also describes how to schedule and visually customize existing stock reports, and create dashboards. In addition, this guide provides answers to a variety of frequently asked questions.

Audience

This document is intended for Unified CCX users who use Cisco Unified Intelligence Center reports to run reports. The user can generate reports, filter data in a report, and schedule a report.

Conventions

This manual uses the following conventions.

Convention	Description
boldface font	<p>Boldface font is used to indicate commands, such as user entries, keys, buttons, and folder and submenu names. For example:</p> <ul style="list-style-type: none"> • Choose Edit > Find • Click Finish.
<i>italic</i> font	<p>Italic font is used to indicate the following:</p> <ul style="list-style-type: none"> • To introduce a new term. Example: A <i>skill group</i> is a collection of agents who share similar skills. • For emphasis. Example: <i>Do not</i> use the numerical naming convention. • An argument for which you must supply values. Example: IF (<i>condition, true-value, false-value</i>) • A book title. Example: See the <i>Cisco Unified Contact Center Express Installation Guide</i>.

Convention	Description
window font	<p>Window font, such as Courier, is used for the following:</p> <ul style="list-style-type: none"> Text as it appears in code or information that the system displays. Example: <pre><html><title> Cisco Systems, Inc. </title></html></pre> File names. Example: <pre>tserver.properties.</pre> Directory paths. Example: <pre>C:\Program Files\Adobe</pre>
string	Nonquoted sets of characters (strings) appear in regular font. Do not use quotation marks around a string or the string will include the quotation marks.
[]	Optional elements appear in square brackets.
{ 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.
< >	<p>Angle brackets are used to indicate the following:</p> <ul style="list-style-type: none"> For arguments where the context does not allow italic, such as ASCII output. A character string that the user enters but that does not appear on the window such as a password.
^	The key labeled Control is represented in screen displays by the symbol ^. For example, the screen instruction to hold down the Control key while you press the D key appears as ^D.

Related Documents

Document or Resource	Link
Cisco Unified Contact Center Express Documentation Guide	https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_documentation_roadmaps_list.html
Cisco Unified CCX documentation	https://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html

Document or Resource	Link
Cisco Unified Intelligence Center documentation	https://www.cisco.com/en/US/products/ps9755/tsd_products_support_series_home.html
Cisco Finesse documentation	https://www.cisco.com/en/US/products/ps11324/tsd_products_support_series_home.html
Cisco Customer Collaboration Platform documentation Note From Unified CCX Release 12.5(1), CCP documents are available in the Cisco Unified CCX documentation folder.	https://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html
Cisco Unified CCX Virtualization Information	https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-cisco-unified-contact-center-express.html
Cisco Unified CCX Compatibility Information	https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-device-support-tables-list.html

Documentation and Support

To download documentation, submit a service request, and find additional information, see *What's New in Cisco Product Documentation* at <https://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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CHAPTER 1

Getting Started

- [Overview, on page 1](#)
- [Authorized Users, on page 2](#)
- [Start Unified Intelligence Center, on page 2](#)
- [Trust Self-Signed Certificate, on page 3](#)
- [View Cisco Unified Intelligence Center Help, on page 5](#)
- [Get Help on Cisco Unified Intelligence Center, on page 5](#)
- [Get Help on a Report, on page 5](#)

Overview

Unified CCX users can access reports using Cisco Unified Intelligence Center and Cisco Finesse. Unified Intelligence Center is a comprehensive, end-to-end reporting solution for Unified CCX. You can access Historical and Live Data reports.

With Unified Intelligence Center, you can complete the following tasks:

- Generate and view reports.
- Filter data in the reports by setting parameters.
- View help for a report.
- Create and view dashboards.
- View permalinks for reports and dashboards.
- Configure thresholds for grid data cells.
- Schedule reports to run at selected intervals.
- Import reports.
- Export reports and report folders.

Customer Journey Analyzer (Trials)

Unified Intelligence Center users can use the reporting platform to launch Customer Journey Analyzer using **Analyzer** icon from the left navigation pane.

Customer Journey Analyzer mines historical data from multiple data sources and systems to generate specific business views of data. The Analyzer visually displays trends to help you identify patterns and gain insight for continuous improvement.

You can customize the default Analyzer URL using the CLI **set cuic analyzer url <urlname>**.

For more information on the CLI, see *Cisco Unified Contact Center Express Administration and Operations Guide* at

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-maintenance-guides-list.html>.

Authorized Users

The following user groups can access the reports:

- Agents—User can access the Live Data agent reports.
- Supervisors—User can access the Live Data agent and supervisor reports.



Note To access Unified Intelligence Center Live Data reports, the supervisor should be assigned an agent extension.

- Reporting users—User can access Historical reports and Live Data reports.



Note

- Live Data reports can only be run by agents, supervisors, and reporting users.
- For more information on the maximum number of reporting users supported to run Live-Data Reports concurrently on Cisco Unified Intelligence Center, see the *Reporting Scaling Considerations* section in *Solution Design Guide for Cisco Unified Contact Center Express*.

Start Unified Intelligence Center

Access Unified Intelligence Center only after the administrator completes the post installation tasks for Unified CCX.

Procedure

Step 1 Open a web browser.

Step 2 Use one of the following methods to access Unified Intelligence Center:

- Enter the URL `https://<host address>` and click **Cisco Unified Contact Center Express Reporting**.
- Enter the URL `https://<host address>:8444/cuicui/Main.jsp`.

Note

Host address is the DNS name or IP address of the Unified CCX node.

Unified Intelligence Center does not support HTTP.

Step 3 Enter your username and password.

Step 4 Click **Sign In**.

Trust Self-Signed Certificate

When you access a server for the first time, the procedure to trust a self-signed certificate is as follows:



Note The following steps are for an Windows operating system.

Procedure

Step 1 Start Unified Intelligence Center.

Step 2 Perform the following steps to trust the self-signed certificate:

Option	Description
If you use Internet Explorer or Microsoft Edge:	<p>a. A page appears that states there is a problem with the website's security certificate. Click Continue to this website (not recommended).</p> <p>The Sign In page opens and a certificate error appears in the address bar of your browser.</p> <p>b. Click Certificate Error, and then click View Certificates.</p> <p>The Certificate dialog box appears.</p> <p>c. On the Certificate dialog box, click Install Certificate.</p> <p>The Certificate Import Wizard appears.</p> <p>d. Click Next.</p> <p>e. Select Place all certificates in the following store, and then click Browse.</p> <p>f. Select Trusted Root Certification Authorities, and click OK.</p> <p>g. Click Next.</p> <p>h. Click Finish.</p> <p>A Security Warning dialog box appears that asks if you want to install the certificate.</p> <p>i. Click Yes.</p> <p>A Certificate Import dialog box that states the import was successful appears.</p> <p>j. Click OK.</p>

Option	Description
	<p>k. Enter your credentials and click Sign In.</p>
If you use Firefox:	<p>a. A page appears that states this connection is untrusted.</p> <p>b. Click I Understand the Risks, and then click Add Exception.</p> <p>c. On the Add Security Exception dialog box, ensure the Permanently store this exception check box is checked.</p> <p>d. Click Confirm Security Exception.</p> <p>The page that states this connection is untrusted automatically closes.</p> <p>e. Enter your credentials and click Sign In.</p>
If you use Chrome:	<p>a. A page appears that states there is a problem with the website's security certificate. Click, Advanced > Proceed to <Hostname> (Unsafe).</p> <p>The Sign In page opens and a certificate error appears in the address bar of your browser.</p> <p>b. Click on the Certificate Error, and then click, Certificate (Invalid).</p> <p>The Certificate dialog box appears.</p> <p>c. In the Details tab, click Copy to File.</p> <p>The Certificate Export Wizard appears.</p> <p>d. Click Next.</p> <p>e. Keep the default selection DER encoded binary X.509 (.CER) and click Next.</p> <p>f. Click Browse and select the folder in which you want to save the certificate.</p> <p>g. Enter a recognizable File name and click Save.</p> <p>h. Click Next.</p> <p>i. Click Finish.</p> <p>A successful export message appears.</p> <p>j. Click OK and close the Certificate Export Wizard.</p> <p>k. Browse to the folder where you have saved the certificate (.cer file), right click on the file, and click Install Certificate.</p> <p>The Certificate Import Wizard appears.</p> <p>l. Keep the default selection Current User and click Next.</p> <p>m. Select Place all certificates in the following store and click Browse.</p> <p>The Select Certificate Store dialog box appears.</p> <p>n. Select Trusted Root Certification Authorities and click OK.</p> <p>o. Click Next.</p> <p>p. Click Finish.</p>

Option	Description
	<p>A Security Warning dialog box appears that asks if you want to install the certificate.</p> <p>q. Click Yes.</p> <p>A Certificate Import dialog box that states the import was successful appears.</p> <p>r. Click OK.</p> <p>s. Enter your credentials and click Sign In.</p>

View Cisco Unified Intelligence Center Help

In Cisco Unified Intelligence Center, two types of help are available:

- **Application-specific help:** This help content explains how to use Unified Intelligence Center in general.
- **Report-specific help/Template help:** This help content explains how to use the report. The help can describe the fields or provide details of the relationship between the fields, or it can explain how to interpret the data in the report. This help is available only if it has been created for the report.

For more information on how to add the template help to report, see *Add Template Help* section.

Get Help on Cisco Unified Intelligence Center

- Click the **Help** icon on the top right corner of each of the entity listing page to view help contents specific to that entity.
- Click the **Online Help** button on the home page to access the help window for Cisco Unified Intelligence Center.



Note Ensure to accept the certificate to view the help content.

Get Help on a Report

To get help on a report, perform the following steps

Procedure

- Step 1** From the **Reports** page, click the required report to open the report in the run mode.
- Step 2** Click the **Template Help** icon in the report toolbar.

The report template help appears in a new browser window.

You can configure template help for the report from the **Reports** page > **Add Help**. For more information, see *Add Template Help* section.



CHAPTER 2

Dashboards

- [Overview, on page 7](#)
- [Dashboard Actions, on page 8](#)
- [Add Widgets to Dashboard, on page 10](#)
- [Run a Report from the Dashboard, on page 13](#)

Overview

In Cisco Unified Intelligence Center, Dashboard is an interface that allows you to add reports, web pages (URLs), web widgets, and notes in a consolidated view.

All actions on the Dashboards interface are based on your role and on the user permissions for Dashboards and for Folders.

Access Dashboards

From the left navigation pane, click **Dashboards** to access the list of all the available Dashboards. This list includes the dashboards that you have created and the dashboards created by other users on which you have View permissions.



Note

- You must be assigned with the **Dashboard Designer** role to create Dashboards.
 - To view Dashboards created by other users, you must have **View** permissions for the dashboard and its parent folder.
 - Cisco Unified Intelligence Center does not provide a default Dashboard.
-

Run Dashboards

To run a Dashboard, click the Dashboard name. When the Dashboard is in the run mode, use the toolbar to:

- Edit the Dashboard.
- Refresh the Dashboard data.
- Maximize the Dashboard view.

Press **Esc** to restore the original view.

Before You Upgrade

Cisco Unified Intelligence Center 12.5 supports a maximum of ten widgets per Dashboard. Hence, for Dashboards with more than ten widgets in versions before 12.5, ensure to split those Dashboards with a maximum of ten widgets each before upgrade.

Consider a Dashboard with 15 widgets in Unified Intelligence Center versions before 12.5. Before upgrading to version 12.5, use the **Save As** feature to clone the Dashboard and manage the widgets up to ten per Dashboard.

Unsupported Widgets

The Cisco Unified Intelligence Center 12.5 interface for Dashboards does not support the following widgets:

- Schedule Report widgets
- URL widgets containing Dashboard permalinks (Nested Dashboards)

Migration Limitations

To address injection vulnerabilities, the **Custom Widget** feature in **Dashboards** is disabled by default. If any custom widgets were added to the **Dashboards** in versions earlier to Unified Intelligence Center 12.5, those widgets are visible in the read-only mode post upgrade to version 12.5. You can opt to retain or delete them.

To enable the **Custom Widget** feature, use the CLI **set cuic properties dashboard-customwidget-enabled** and set the parameter value to "on". For more information, see *Administration Console User Guide for Cisco Unified Intelligence Center* at

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-maintenance-guides-list.html>.

Dashboard Actions

The following table lists various actions that you can perform from the Dashboard.



Note You can open a maximum of ten tabs at a time.

Table 2: Dashboard Actions

Action	Description
Dashboard-level actions	
New	

Action	Description
Dashboard	<p>Creates a new Dashboard.</p> <p>The New Dashboard wizard allows you to:</p> <ul style="list-style-type: none"> • Provide Dashboard properties; Name and Description. • Add widgets to the Dashboard. <p>For more information, see <i>Add Widgets to Dashboard</i>.</p>
Folder	<p>Creates a new Folder. Use this feature to categorize Dashboards.</p> <p>Note When you move or save the folders to a different location, the drop-down lists all the folders. You can only navigate into the folders on which you have the Edit permission.</p>
Toolbar actions	
Refresh	Refreshes the Dashboards page.
Favorites	<p>To easily access your Dashboards, you can tag Dashboards as Favorites.</p> <p>Click the star icon beside the Dashboard name to add to Favorites.</p>
Search	Searches for a particular Dashboard.
Ellipsis (...) actions	
Edit	<p>Edits the Dashboard details. In the edit mode, you can:</p> <ul style="list-style-type: none"> • Add, remove, and modify widgets. • Click the icon next to the Dashboard name to edit the Dashboard properties; name and description. <p>After editing the Dashboard, click Save.</p>
Save As	Saves a copy of the Dashboard.
Rename	Renames a Dashboard or a Folder.
Move	<p>Moves Dashboard or Folder from one folder to another.</p> <p>Note You can move a Dashboard or a Folder only if you have Edit permission on the parent folder of the Dashboard or Folder being moved.</p>

Action	Description
Delete	<p>Deletes a Dashboard or a Folder.</p> <p>Note You can delete a Dashboard or a Folder only if you have Edit permission on the parent folder of the Dashboard or Folder being deleted.</p>
Permissions	<p>Assigns appropriate permissions to access and manage the Dashboard.</p> <p>Groups—Grants View and Edit permissions for the Dashboard to various groups.</p> <ul style="list-style-type: none"> • Security Administrators can grant these permissions to various groups. • Entity owners can grant these permissions to groups that they are directly associated with. <p>Users—Grants View and Edit permissions for the Dashboard to various users. Applicable only to Security Administrators.</p> <p>Note</p> <ul style="list-style-type: none"> • Higher permissions (View and Edit) from either an individual user or the user group takes precedence. • Only the first 200 records (alphabetical order) are displayed in the Members or Groups panel. To view more records, see Configure > Groups. • When you modify a permission and want to switch between Groups and Users tabs, you will be prompted to either save or discard the changes.
Permalinks	<p>Displays the Dashboard permalink.</p> <p>Note You can access permanent hyperlink only from a web browser. You cannot access it from an application such as Microsoft Excel to pull data or display a Dashboard.</p> <p>For more information, see Permalink for a Dashboard.</p>

Add Widgets to Dashboard

You can add Reports, Web pages, Notes, and Custom Widgets to a Dashboard. In addition, you can resize and reposition the widgets to suit your needs. The default widget size depends on the available space on the Dashboard canvas.



Note You can add a maximum of ten widgets per Dashboard.

To add widgets to the Dashboard, perform the following steps:

Procedure

Step 1 From the left navigation pane, click **Dashboards**.

Step 2 In the **Dashboards** tab,

- To add widgets to a new Dashboard, click **New > Dashboard**.
- To add widgets to an existing Dashboard, click the ellipsis icon beside the required Dashboard and click **Edit**.

Step 3 On the Dashboard canvas, click on the plus icon.

Step 4 In the **Add Widgets** dialog box, add the required widgets:

Widget Type	Steps
Report View	<p>Displays an existing report on the Dashboard.</p> <ol style="list-style-type: none"> a. Click the Report View icon. b. In the Add Report View dialog box, select the Report and the Views from the corresponding drop-down list. c. Click Done. <p>Note</p> <ul style="list-style-type: none"> • For a Report widget, you can click the icons on the widget header to view the existing filter information, manage filters, and play or pause the running of report. • The Manage filters and the View filter information icons appear only when you hover on the report widget. • For Grid view reports, you can increase or decrease the font size of the report data. The default font size is set to 10. Post upgrade to Cisco Unified Intelligence Center 12.0 or later, this setting overrides the font size set during the grid view creation. • In the edit mode, from the Report widget header, use the ellipsis icon to access Filter and modify the filter criteria. • Drilldown reports are not supported.

Widget Type	Steps
Note	<p>Adds notes to the Dashboard.</p> <ol style="list-style-type: none"> a. Click the Note icon. b. In the Add a Note dialog box, enter Note Title and Note Body. c. Click Done.
Web page	<p>Displays a web page on the Dashboard.</p> <ol style="list-style-type: none"> a. Click the Web page icon. b. In the Add a Web page dialog box, enter Web URL, the address of the web page that you want to display on the Dashboard. c. Click Done. <p>Limitations for web page widget:</p> <ul style="list-style-type: none"> • The websites enabled with "X-Frame-Options", will not be displayed on the Dashboard. • The web URLs provided without prefixing a protocol (HTTPS) will by default use the protocol of the Cisco Unified Intelligence Center application. • When Cisco Unified Intelligence Center is in HTTPS mode, you cannot configure HTTP based widget URLs in Dashboard. • You cannot add Dashboard permalink as web page widget. <p>For information on viewing report permalinks in Dashboards as web page widgets, see <i>View Report Permalinks in Dashboards</i>.</p>

Widget Type	Steps
Custom Widget	<p>Adds custom widgets to the Dashboard.</p> <ol style="list-style-type: none"> a. Click the Custom Widget icon. b. In the Add Custom Widget dialog box, enter Widget Title and Code Snippet. <p>Note In the Code Snippet box, you can enter any markup/code snippet of the widget that you want to show on the Dashboard. For example, HTML, XML RSS feed, JavaScript, and so on.</p> <p>Maximum Limit: 1000 characters.</p> <ol style="list-style-type: none"> c. Click Done. The embedded code appears on the Dashboard. <p>By default, this widget type is disabled. You can enable the Custom Widget feature using the CLI set cuic properties dashboard-customwidget-enabled on.</p> <p>For more information, see <i>Administration Console User Guide for Cisco Unified Intelligence Center</i> at https://www.cisco.com/c/en/us/products/collateral/unified-intelligence-center/products-admin-guide.html</p>

Step 5 Click **Save**.

Run a Report from the Dashboard

Running a report from the Dashboard depends on the **Skip filter during the report execution** check box during the report filter selection:

- If this check box is checked for a report, the system bypasses the filter and runs that report using the default filter.
- If this check box is unchecked for a report, for the first access, the system prompts you to choose a **Filter** to run that report.



Note

- The **Skip filter during the report execution** check box is not checked for any of the stock reports. If you do not want a Dashboard report to require filter selection upon first use, you must create a new report, set the default filter, and check the **Skip filter during the report execution** check box.
- The **Filter** prompt displays the corresponding icon to denote the type of report view, such as, Grid, Chart, Pie, and so on.
- In both these scenarios, from the ellipsis icon on the Report widget header you can access **Filter** to edit the filter criteria.

Click the **Filter** button to display the filter criteria in the **Filter Data** dialog box based on the following validations:

- Displays the filter criteria screens based on the selected report query type.
- Populates with the default filter criteria if the default filter is set for that report.

Edit Filter Data

You can edit the report filter data from the Dashboard in the following two ways:

- **Run mode**—Click the filter icon on the report widget header.
- **Edit mode**—Click the ellipsis icon and select **Filter** from the available menu options.

Modify the required filter criteria and click **Run**. The report refreshes reflecting the modified filter criteria.



Note When you edit the report filter for a Dashboard during Create, Edit, or Run mode, the filter settings are stored in the browser cache and is specific to the individual user. Hence, the next time you sign in and run the Dashboard, the report widget uses the filter information stored in the browser cache and generates the report (without prompting you to update the filter criteria). The browser cache is retained up to 30 days.

Every time you run the report, the filter data in the browser cache is validated for permissions. If there is a permission mismatch, an error message appears that the filter you selected before is no longer valid and select the filters again.

Also, if any other user sign-in to the same browser, that user cannot view your filter settings.

The filter settings stored in your browser cache are cleared only:

- If you have not used the Dashboard for the last 30 days.
- If you manually clear the cache.

For more information on Report Filters, see *Report Filters*.



CHAPTER 3

Manage and Run Reports

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Report Actions

The following table lists various actions that you can perform from the Reports.



Note You can open a maximum of ten tabs at a time.

Table 3: Report Actions

Action	Description
Report-level actions	
New	
Report	Creates a new report in the selected folder. Note You cannot create reports inside the Stock folder. You can only import reports into the Stock folder. To edit or customize reports, clone the report and edit the cloned version.

Action	Description
Folder	<p>Creates a new Folder. Use this feature to categorize reports.</p> <p>Note When you move or save the folders to a different location, the drop-down lists all the folders including the disabled folders. You can navigate to subfolders with Edit permissions.</p> <p>Note You cannot create folders inside the Stock folder.</p>
Toolbar actions	
Refresh	<p>Refreshes the Reports page.</p> <p>Applies to all folder levels (root, sub folder, and report).</p>
Favorites	<p>To easily access your reports, you can tag Reports as your Favorites.</p> <p>Click the star icon beside the Report name to add to Favorites.</p>
Search	Searches for a particular the Report.
Import	<p>Imports a report.</p> <p>To import a report, you need the Report Designer, Report Definition Designer, and Value List Collection Designer roles and the Edit permission on the target folder where you want to import these reports.</p> <p>For more information, see <i>Import Reports</i>.</p> <p>Note Applies to all folder levels (root, subcategory, and report).</p>
Ellipsis(...) actions	
Edit	<p>Edits the Report details. In the edit mode, you can add, modify, and delete report details, views and thresholds, and filters.</p> <p>After editing the Report, click Finish.</p> <p>Note You cannot edit a Stock report.</p>

Action	Description
Save As	<p>Saves a copy of the report with a different name.</p> <p>Note</p> <ul style="list-style-type: none"> • By default, the reporting users do not have permission to create a subfolder in the Reports root folder. To get permissions, contact your administrator. • You cannot perform the Save As action to move contents (reports or folders) into the Stock folder and its subfolders. <p>Note</p> <p>The report description does not support the following special characters:</p> <ul style="list-style-type: none"> • Parentheses (()) • Angle brackets (<,>) • Forward slash (/) • Question mark (?) • Quotes ("") • Any scripts; JavaScript
Clone Report Definition	<p>If you want to create a copy of the Report Definition that is associated with the report being saved:</p> <ol style="list-style-type: none"> 1. Click the Clone Report Definition check box. 2. Enter the new Report Definition Name and select the Report Definition Location. 3. Click Save. <p>The new report gets associated to the cloned Report Definition.</p>
Rename	<p>Renames a folder or a report.</p> <p>Note</p> <p>You cannot rename a Stock folder or a Stock report.</p> <p>Note</p> <p>Applies to the root-level folder.</p>
Move	<p>Moves Report or Folder from one folder to another.</p> <p>Note</p> <ul style="list-style-type: none"> • You can move a Report or a Folder only if you have Edit permission on the parent folder of the Report or Folder being moved. • You cannot move custom folders or reports from within the Stock folder (and its subfolders) to other locations and the other way.

Action	Description
Set Default Filters	<p>Creates report filters.</p> <p>For more information, see <i>Report Filters</i>.</p> <p>Note You can also set the default filter by checking the Set as Default check box in the Choose Filter dialog box during the report run mode.</p>
Add Help	<p>Hosts the help page for Report Templates. For more information, see <i>Add Template Help</i>.</p>
Delete	<p>Deletes a report or a folder.</p> <p>Note</p> <ul style="list-style-type: none"> • You can delete a Report or a Folder only if you have Edit permission on the parent folder of the Report or Folder being deleted. • Stock folder cannot be deleted. Stock report can be deleted.
Permissions	<p>Assigns appropriate permissions to access and manage the Report.</p> <p>Groups—Grants View and Edit permissions for the Report.</p> <ul style="list-style-type: none"> • Security Administrators can grant these permissions to various groups. • Entity owners can grant these permissions to groups that they are directly associated with. <p>Users—Grants View and Edit permissions for the Report to various users. Applicable only to Security Administrators.</p> <p>Note</p> <ul style="list-style-type: none"> • Higher permissions (View and Edit) from either an individual user or the user group takes precedence. • Only the first 200 records (alphabetical order) are displayed in the Members or Groups panel. To view more records, see Configure > Groups. • When you modify a permission and want to switch between Groups and Users tabs, you will be prompted to either save or discard the changes.
Permalinks	<p>Displays the Report permalink. For more information, see <i>Permalink for a Report</i>.</p> <p>Note You can access permanent hyperlink only from a web browser.</p>
Export	<p>Export any custom report or report folders. Reports and report folders are exported in a ZIP file format. To export a report or a report folder, you need the REPORT DESIGNER role. For more information, see <i>Export Reports and Folders</i>.</p>

Add Template Help

You can configure individual help files to each Cisco Unified Intelligence Center report. You can either host the help page separately and point the report to it or create and upload the help page along with the report.

This help content is specific to the report and can contain explanation on:

- How to use the report
- Field description
- Details of the relationship between the fields
- How to interpret the report data or
- Any other report related information

You can upload only files in ZIP formats. ZIP files can contain multiple HTML files. The HTML page contents support rich text including images.



Note Help files does not support videos and other interactive content.

To configure the help page for a report, perform the following steps:

Procedure

-
- Step 1** From the left navigation pane, click **Reports**.
 - Step 2** Click the Ellipsis icon (...) next to the report row for which you want to create the help page and click **Add Help**.
 - Step 3** In the **Add Help** dialog box,
 - If you want to set an external help page as the report help, select the **URL** option and enter the external URL location.
 - If you want to upload the help file, select the **Choose file** option and click **Browse** to upload a ZIP file (with HTML files).
 - Step 4** After uploading the file, click **Save**.

Note

When you run the report, click the "?" icon (Template Help) on the Reports toolbar to view the configured help file.

Report Filters

Filter Types

Report filters in Unified Intelligence Center are used to present selective data. You can define the filter to filter the data that you want to display in the report. There are two ways to view the Filter page.

- Before the report is generated: You can set and refine the default filter values using the **Actions > Set Default Filter** option.
- After the report is generated: You can refine the filter values using the filter icon.



Note You cannot view filters if the Report Designer has selected the **Skip filter during the report processing** check box during the report filter selection.

Cisco Unified Intelligence Center supports the following types of report filters:

- Date & Time
- Key Criteria
- Field Filters
- Parameters

Filter parameters are displayed based on the selected query type in the Report Definition for that report.

Table 4: Filter tabs

Report Definition Query Type	Applicable Filter Tabs
Database Query	Date & Time, Key Criteria, Field Filters
Live Data or Real Time Streaming	Key Criteria, Field Filters
Stored Procedure	Parameters

Date & Time



Note • Cisco Unified Intelligence Center uses the browser locale to display the Date & Time format in the filter page. If Cisco Unified Intelligence Center does not support the browser locale language, then the locale selected in the Cisco Unified Intelligence Center application is used.

To configure Date and Time filters for a report, perform the following steps:

Procedure

-
- Step 1** After creating the report, click **Set Default Filter** from the ellipsis **Actions**.
- Step 2** In the **Date & Time** filter wizard, select the **Date Range** and **Time Range** options.
- The options available in the **Date Range** and **Time Range** filter are predefined.
 - Selection of the **Custom** option allows you to customize the **Date Range** and **Time Range** details.
You can select the days of the week (Days > Custom) only if the time interval spans more than a day.
For reports that are based on the query type Anonymous Block, you cannot select days of the week. For more information, see *Cisco Unified Intelligence Center Report Customization Guide* at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-user-guide-list.html>.
- Step 3** Check the **Skip filter during the report execution** check box if you want to skip filter selection during the running of report.
- Note**
In the **Choose Filter** dialog box (report run mode), you can check the **Set as Default** check box to set the report filter as the default.
- Step 4** Click **Next**.
-

Key Criteria

Use the **Key Criteria** tab in the filter to select value lists or collections. A collection is a pre-configured group of values.



Note Key Criteria fields are predefined filters and are displayed in the filter screen if they are defined in the Report Definition.

To configure Key Criteria filters, perform the following steps:

Procedure

-
- Step 1** After creating the report, click **Set Default Filter** from the ellipsis **Actions**.
- Step 2** In the **Date & Time** filter wizard, select the **Date Range** and **Time Range** options and click **Next**.
- Step 3** In the **Key Criteria** filter wizard, select the collections or values from the **Available** selection box.
- Note**
Do not set multiple filter parameters; set any one filter parameter.
- Step 4** Use the arrows to move the selected collections or values to the **Selected** selection box.

Step 5 You can also select multiple collections or values.

Step 6 Click **Next**.

Field Filters

Use the **Field Filters** tab to filter any field in the report. Based on the selected field type (date, numeric/decimal, boolean, or string), different operators are available. For example, you can filter calls in queue for greater than two minutes or on all agents in the hold state to filter out the less important information.



Note You can configure Field Filters in reports:

- Only for SQL Query based reports.
 - To filter a text, date, boolean, or a decimal field.
-

To configure Field Filters, perform the following steps:

Procedure

Step 1 After creating the report, click **Set Default Filter** from the ellipsis **Actions**.

Step 2 In the **Date & Time** filter wizard, select the **Date Range** and **Time Range** options and click **Next**.

Step 3 In the **Key Criteria** filter wizard, select the collections or values from the **Available** selection box and click **Next**.

Step 4 In the **Field Filters** wizard, select the filter according to the following criteria.

Filter criteria/operators depend on the selected field type (date, numeric/decimal, boolean, or string).

- For **Date**, the options available in Date Range filter are predefined. Using the Date Range drop-down list, select from Custom, Today, Yesterday, This Week, Last Week, This Month, Last Month, Year to Date, or Last Year.
Only Custom will allow the user to customize the Calendar, Time Range and Days certain days of the week.
- For **Decimal**, select an Operator from Equal To, Not Equal To, Less Than, Less Than or Equal To, or Greater Than and then enter a value; for example, Operator = Greater Than and Value = 16.5.
- For **String**, select an Operator from Equal To, Not Equal To, or Matches and then enter a value for the string; for example, Operator = Matches and Value = Team Green.
 - If you select Matches as the Operator, you must specify an SQL pattern to match the string field. The system appends the wild card character % automatically to the beginning and end of the string. You can also use any SQL wild card pattern in between the string.
 - If the filter field is associated with a **Value List**, then specify any value or move one, all, or some items in the list to the Selected column to filter.

Note

Use only the Matches operator to filter the report data records with leading or trailing spaces. Do not use the Equal To or Not Equal To operators in such scenarios as Unified Intelligence Center trims the filter criteria before running the SQL query and hence does not fetch the matching results.

- For **Boolean**, select True or False from the Operator list.

Step 5 Using the **Operator** drop-down list, select the criteria.

Note

If you select **Matches** operator, you can use any Microsoft SQL wildcard pattern to filter the data. The wildcard character % is added to the beginning and end of every string that is used to filter the data.

Step 6 In the **Value** field, enter a value against which the data in the field will be filtered.

Step 7 Click **Run**.

Report Types

There are three types of reports based on the query types:

- Historical report
- Live Data report

Report Components

These reports consist of the following components:

- **Data Source**

The Data Source defines the sources that contain the data for the report. Unified Intelligence Center supports three types of data sources: Microsoft SQL Server, IBM Informix, and Streaming. The data source should be pre-configured for you. If it is not, contact your administrator to configure the appropriate data source.



Note Additional data sources are not supported.

- **Report Definitions**

Each report has a Report Definition, which represents how data is retrieved from the data source for that report template. In addition to specifying how data is retrieved (by a simple MS SQL query or stored procedure query), a report definition contains the dataset that is obtained. This includes the fields, filters, formulas, refresh rate, and key criteria field for the report.

- **Reports**

Reports show data returned by Report Definitions. This data is extracted by database queries.

- **Time Zone Conversions**

The time zone conversion happens if there is a difference between the user and the data source time zones.

Daylight savings time consideration for Database Query Reports: The Daylight savings time offset at the start of the date range is considered for the time zone conversion when the report is filtered. If the daylight savings change occurs somewhere in between the filter date and time ranges, the time zone offsets will not be computed properly if the user and the data source are in different time zones. In this case, you will have to split the time filter such that separate report invocations are run before and after the daylight savings time change.



Note The daylight savings time offset depends on the latest system time zone library.



Note Daylight savings start date or end date may (when the data is recorded) create an additional row (in the report output) due to the time zone value change in the SQL database. This applies to any template report, as well as for any query type (Anonymous block, Database Query, Stored Procedure, Real Time Streaming) that these template reports would use. For confirmation that SQL had time zone value change, use the Report Options icon from the report summary page and run the SQL command in AW node to validate the change in the time zone.

Example 1:

User time zone: Australia/Sydney

Data source time zone: America/New_York

Daylight savings time changes: +1 hour for Sydney at 2013-10-06 02:00 a.m. DST +1 hour is already on for New York

Filter selected by the user: 2013-10-06 to 2013-10-06, 12:00 a.m. to 11:59 p.m.

Query formed in data source time zone: 2013-10-05 10:00:00 a.m. to 2013-10-06 09:59:59 a.m.

Report displayed in user time zone: 2013-10-06 12:00 a.m. to 2013-10-07 12:59 a.m.

In this case, the report will display an extra hour of data as Sydney Daylight savings time is off at the start of the date range and on at the end of the date range.

Example 2:

User time zone: Australia/Sydney

Data source time zone: America/New_York

Daylight savings time changes: +1 hour on for Sydney at 2013-10-06 02:00 a.m. DST +1 hour is already on for New York

Filters selected : 2013-10-06 to 2013-10-10, 03:00 a.m. to 11:59 p.m.

Query formed in data source timezone: 2013-10-05 12:00:00 p.m to 2013-10-06 08:59:59 a.m.

Report displayed in user time zone: 2013-10-06 03:00 a.m. to 2013-10-06 11:59 p.m.

In this case, the conversion happens as expected as there is no Daylight savings time change in between the date ranges.

Example 3:

User time zone: America/New_York

Data source time zone: IST

Daylight savings time changes: +1 hour DST at 2013-03-03 02:00 a.m. and off at 2013-11-03 02:00 a.m. for New York. No Daylight savings time changes for IST.

Filter selected by the user : 2013-11-03 to 2013-11-03, 01:30 a.m. to 05:30 p.m.

Query formed in data source time zone: 2013-11-03 11:00:00 a.m. to 2013-11-03 02:59:59 a.m.

Report displayed in user time zone: 2013-11-03 01:30 a.m. to 2013-11-03 04:30 p.m.

In this case, the report will display one hour less of data as New York Daylight savings time is on at the start of the date range and off at the end of the date range.

• Report Views

A report can be presented in multiple formats (grid and charts). Each view can have its own set of fields. A single report can have multiple views.

• Report Help

You can attach a help page specifically for your report. For more information, see *Add Template Help*.

Historical and Real Time Reports

Historical report

Retrieves data from the historical data source. Reports are populated with interval data that has a default refresh rate of 15 minutes. Historical reports have an upper limit of 8000 rows.



Note Real-time report is not applicable for Unified CCX.

Live Data Reports

Live Data report—Receives data from streaming data source. Live Data reports supports only grid view.

- Live Data reports do not automatically respond to changes in the system time. If the server or client time is changed or adjusted, the report must be refreshed to accurately display the duration field values. For example, during a daylight saving time (DST) change, active live data reports do not display correct values in the duration field. Live data reports must be refreshed to update.

- Unified CCX Engine updates the changed records every three seconds. The unchanged records are updated every 15 seconds so that the sliding window fields (such as, **Average Talk Time-Long Term**, **Average Talk Time-Short Term** in Team Summary report) have the updated data.

A sliding window is a time period that stretches back in time from the present. For example, the **Average Talk Time-Long Term** field with a sliding window of 30 minutes indicates the average time that an agent spent in Talking state in the last 30 minutes.

- In Live Data reports, the time in the auto increment fields (such as **Login Duration** in Team Summary report, **Total Talk Time** in Agent Statistics report) is incremented every second. When there is an update from Unified CCX Engine, there may be fluctuations in these fields. That is, the time may advance by few seconds and revert to the actual time published by Unified CCX Engine.

For more details on how to create permalinks for live data reports (Cisco Finesse gadget equivalent), see the *Permalink for a Report* section in this guide.

Manage Reports

Create Reports

All actions on the Reports interface are based on user role and on the user's object permissions for reports and for categories.



Note By default, reporting users do not have permission to create a subfolder in **Reports**. An Administrator can create a subfolder and grant access.

To create a new report, perform the following steps:

Procedure

Step 1 In the left navigation pane, choose **Reports**.

Step 2 Navigate to the folder where you want to create the report.

Step 3 From the **Reports** toolbar, click **New > Report**.

To edit an existing report, navigate to the report, click the ellipsis icon beside the report and click **Edit**.

Step 4 In the **Create New Report** window, enter the **Report Name** and **Description**.

Note

The report name must be unique to Cisco Unified Intelligence Center.

Step 5 Click **Next**.

Step 6 In the **Basic Details** tab, enter or select the report details.

Note

Use the arrows to select the appropriate Report Definition.

- Step 7** Click **Next**.
- Step 8** In the **Manage Views** tab, create the report views and click **Next**.
For more information, see [Report Views](#).
- Step 9** In the **Thresholds** tab, create report thresholds and click **Finish**.
For more information, see [Report Thresholds](#).
The newly created report is listed in the **Reports** page.
-

Report Views

There are two types of report views:

- Grid View
- Chart View



Note Do not delete the Report Definition fields that are currently associated with any of the manually created report views. If deleted, you must reapply the Data Fields for all the manually created report views to save the report.

For default grid views, the deleted field is removed automatically from the Data Fields list retaining any other fields in the Selected Field list. Hence, no additional action is required to save the report.

Create a Grid View

Grids are tabular presentations of the data in rows and columns. By default, all Cisco stock reports have a grid view. For custom reports, a default grid is created from the SQL query in the Report Definition.



Note Grouping and font size is not supported in Live Data reports.

You can create a Grid View while creating or editing a report.

To create a Grid View, perform the following steps:

Procedure

- Step 1** Create or edit a report.
- Step 2** Enter the report details in the **Basic Details** screen and click **Next**.
The **Manage Views** screen appears with a default grid view.

Note

You can access Report permalinks only after completing the report creation. Report permalinks allow you to share your report with other users and view reports of other users. For more information, see [Permalink for a Report](#).

Step 3 You can edit the default view (**Actions** column > **Edit View**) or click **Create New** > **Grid view** to create a new grid view.

The **Edit Grid View** or the **New Grid View** screen appears depending on your selection for edit or create.

Step 4 Enter the **Name** and **Description** in the respective fields.

Note

Maximum length allowed for the grid view **Name**: 50 characters.

Step 5 From the **Font** selection box, you can select the font size from the list to display the grid data.

Step 6 Use the arrow buttons to select fields from the **Available** value list box to move to the **Selected** field list.

Step 7 You can use the following features to improve grid view display:

- **Header**—Use this feature to add (+) or delete (-) a header for the selected fields. This helps in categorizing the field set.

Note

You cannot save the view with empty headers.

Post upgrade to Cisco Unified Intelligence Center 12.0 or later, any empty headers that exist in the report views in prior releases are not migrated.

- **Edit** icon—In the Selected value list box, click the **Edit** icon (hover on the field value) if you want to edit the **Display Name** and **Column Width** for the selected field and click **Done**.

Note

For Header fields, you can only edit the Display Name.

- **Sort Grid by Field**—Select the **Sort Grid by Field** check box to sort the selected report columns in either **Ascending** or **Descending** order. Selecting this check box enables the drop-down list to be populated with the values from the **Selected** value list box. You can select only one value for sorting.

Step 8 Click **Save**.

The **Report Views** screen appears.

Step 9 Click **Finish**.

Create a Chart View

Cisco Unified Intelligence Center supports the following chart types:

- **Bar**—Bar charts display discontinuous events and show the differences between events rather than trends. Bar charts are oriented vertically and can be stacked horizontally or clustered one below the other.
- **Pie/Donut**—Pie charts display quantities as proportions of a whole. The circle (pie) represents 100% of the data, with each quantity represented as a wedge of the appropriate size. Pie charts take decimal or numeric fields only. A pie chart cannot have more than 50 wedges. An error occurs if your data set and chart editor selections generate a pie chart with more than 50 wedges.

A doughnut chart is another display representation of a pie chart.

- **Column**—Column charts display discontinuous events and show the differences between events rather than trends. Column charts are oriented horizontally and can be stacked vertically or clustered side by side.

- **Dial Gauge/Numeric**—A gauge chart displays the dial representation of the report results as per the defined threshold.

The Numeric chart displays the report results in a number format highlighted as per the defined threshold.

- **Line charts**—Line charts display continuous quantities over time against a common scale. Use the Line charts to show trends.



Note

- Live Data reports do not support chart view.
 - In the vertically oriented charts, for Cyrillic characters, the data labels in the Horizontal Axis field may be hidden or garbled. This is a known limitation. Hence, for Cyrillic characters, use the horizontally oriented charts.
-

To create a Chart View, perform the following steps:

Procedure

Step 1 Create or edit a report.

Step 2 Enter the report details in the **Basic Details** screen and click **Next**. The **Manage Views** screen appears with a default grid view.

Note

You can access Report permalinks only after completing the report creation. Report permalinks allow you to share your report with other users and view reports of other users. For more information, see *Permalink for a Report*.

Step 3 Click **Create New > Chart view**.

Step 4 In the **Create New Chart View** screen, click the required chart type. For more information, see *Chart Types*.

Step 5 Enter the Chart Information; **Name**, **Description** and click **Next**.

Note

Maximum length allowed for the chart view **Name**: 50 characters.

For Cartesian type charts (Bar, Column, and Line), select the **Group Data** check box to group data:

- **By a field**—Select this option to create a chart view where the vertical axis shows fields with footer formula configured for line or column chart and horizontal axis with footer formula for bar chart.
- **By label field**—Select this option to create a chart view where the vertical axis shows fields of decimal data type for Line or Column chart. In Bar chart, the horizontal axis shows fields of decimal type.

Note

For Pie charts, you can only **Group Data by Label Field**.

Step 6 In the **Add Data Fields** screen, select the **Label Field** from the drop-down list and **Data Fields** from the list box and click **Next**.

Step 7 In the **Preview and Format** screen, enter or select appropriate information based on the selected chart type.

For more information, see *Chart Types*.

Note

For the following Data Fields, the Column Type (Stacked and Grouped) feature is unavailable.

- Date and Time
- Boolean

Step 8 Click **Save**.

Chart Types

Chart Type	Chart Information	Add Data Fields	Preview and Format
Bar	Yes	Yes	Yes
Column	Yes	Yes	Yes
Line	Yes	Yes	Yes
Gauge/Numeric	No	Yes Note To configure a Gauge chart, Report Definition must have at least one decimal field with a footer configured.	Yes To set the chart view for Dial Gauge/Numeric, perform the following steps: <ol style="list-style-type: none"> 1. Enter the Range. By default, min is 0 and max is 100. 2. Define the zones. When the chart value is within any of the defined thresholds, <ul style="list-style-type: none"> • The gauge pointer points to the corresponding color set in the threshold. • The Numeric text is displayed in the corresponding color set in the threshold. 3. Click Save.
Pie	Yes	Yes Note To configure a Pie chart, Report Definition must have at least one decimal field configured.	Yes You can select Pie or Donut as the display type for this report.

Report Thresholds

You can set a threshold indicator for a field to display if the field value meets the threshold condition. There are nine colors instead of the color palette for the threshold color selection in this release. Threshold indicators can be set only for view type **Grid** and **Chart > Gauge**.

For setting field threshold indicators for a **Chart > Gauge** view, see [Create a Chart View](#).

For setting field threshold indicators for a **Grid** view, perform the following steps:

Procedure

- Step 1** From the **Manage Views** screen, after adding the report views, click **Next**. The **Thresholds** screen appears.
- Step 2** Select a view to which you want to set the threshold and select the field name from the **Create new threshold** list. The screen refreshes with a new panel for the selected field name.
- Step 3** Select a field operator and set a condition from the Operator list.

Operator	Description
Matches	<p>The Matches operator accepts Regular Expressions.</p> <p>Note that the Regular Expressions does not support:</p> <ul style="list-style-type: none"> • Flags (i, g, m, n, y), OR/AND any combinations of these flags. • Leading and trailing forward slash (/). <p>Example:</p> <ul style="list-style-type: none"> • Valid Pattern → \w+\s • Invalid Pattern → ^\w+\s/g <p>(As it contains leading and trailing forward slash (/) and a "g" flag.)</p>
String fields; Always, Equal, Not Equal	In Report Definition, if the %format is defined for any field, then while setting the thresholds for that field, ensure to enter the decimal format of the percentage to render the condition in the report.
Decimal fields; Always, Equal, Not Equal, Greater Than, Less Than, Greater Than Equal To, Less Than or Equal To, Between	<p>For example:</p> <p>In Report Definition, if %format is defined for the field "SL" (Service Level) and you want to apply thresholds to this field to indicate "Red" if SL is less than 60%, set the following:</p> <ol style="list-style-type: none"> a. Define the threshold for the SL field. b. Set the Operator to Less Than. c. Enter the percentage value as 0 . 60. d. Select "Red" in the No Fill drop-down.

Operator	Description
	e. Click Done .

Step 4 Choose the options from **No Fill** and edit the threshold fields.

Note

You can set conditions on the same or different fields:

- condition on same field: threshold and condition on the same field.
- condition on different field: threshold for a field, based on the condition on the different field.
- multi conditions on same field: apply threshold for a field based on the condition on different fields.

Caution

When you upgrade to Unified Intelligence Center version 11.6 or later, all the threshold colors are retained for reports that are created in the earlier versions. But, when you modify the threshold, all the old threshold color selection are lost within the report. Hence, you must reconfigure the threshold color selection for that report.

For existing reports, perform the above mentioned steps to add more thresholds.

Note

Threshold configuration supports upto 30 thresholds for a field.

To edit an existing threshold from a report run already, click **Report options** and select **Manage Thresholds**.

Step 5 Format the text in the field to appear when it matches the threshold condition. Use the following options:

- **Text Bold**—Select this check box to highlight the report field in bold.
- **Text/Background Color**—Select a color from the drop-down for the text/background color in the field.
- **Text Substitute**—Enter a new string if you want the text in the field to be replaced with it when it matches the threshold condition.
 - Syntax to add an html hyperlink as text substitute: `cisco`
 - Syntax to add an empty space as text substitute: ` `
- **Image Location**—Enter the URL path of the image if you want the text to be replaced with an image.

Note

Supports only image URLs reachable from Unified Intelligence Center server. Maximum size limit allowed for the image is 5MB.

Step 6 Click **Done**.

Step 7 Click **Finish**.

Run Report

Report Actions - Run Mode

The following table lists all the menu items and actions you can perform when you run a report.

Table 5: Report Actions

Action	Description
Report options	
Edit View	Displays the Edit View dialog box. You can modify the current report view and click Done to instantly view the modified view.
Save View As	Clones the existing report view. In the Save View dialog box, enter the Name and Description for the cloned view and click Save . The report page refreshes with the cloned view.
Create Chart View	For the report that is run, you can directly create a chart view if you have Edit permissions. After you create the chart view, the report page refreshes with the newly created chart view and gets listed in the view list. Note This feature is disabled for Live Data reports. For more information, see <i>Create a Chart View</i> .
Group By	Add/remove/update grouping configurations for the current view (columns). Cisco Unified Intelligence Center grid reports support up to three levels of grouping. If you are grouping the column with Date or Date time data type, you can group records on a Daily/Weekly/Monthly basis. For more information, see <i>Group By</i> .
Manage Thresholds	Sets a threshold indicator for a field to display if the field value meets the threshold condition. Threshold indicators can be set only for views of type Grid and Gauge. For more information, see <i>Report Thresholds</i> .
SQL	Displays the SQL code used to run this report.
Export	Exports the already run grid report data into your local disk in a .xlsx format. Note <ul style="list-style-type: none"> When you export a report to an Excel file format, to read the exported report, the client system's locale must match with the browser's locale (where you had exported the report). When reports are exported to excel in Report viewer, the custom formatting of DECIMAL data type is not applied.

Action	Description
Report menu	
Run or Pause the report	Click to run or pause the report respectively. Note Report running times out after three minutes. Rerun the report by modifying the filter, and if the problem persists, contact your administrator.
Print Report	Prints the report using your default printer. Note Reports in chart view supports only landscape mode in A3 size paper for printing.
Manage Filters	Displays Choose Filter dialog box to modify filter criteria for this report. For more information, see <i>Report Filters</i> .
Refresh	Refreshes the Report page.
View Filter Information	Displays the filter information of the report.
Online Help	Displays the configured template help. You can configure template help for the report from the Reports page > Add Help . For more information, see <i>Add Template Help</i> .
Only Thresholds	Enable this toggle button to view only rows with matching threshold values in the report. By default, this check box is unchecked for every report. Note This button is disabled for the grouped view.

Group By

For a report that is run, use the **Group By** option to add/remove/update grouping configurations for the current view. Cisco Unified Intelligence Center grid reports support up to three levels of grouping.

If you're grouping the column with Date or Date Time data type, you can group records on a Daily/Weekly/Monthly basis.



- Note**
- Live data reports don't support grouping.
 - Grouped fields cannot be hidden.

To group the report data, perform the following steps:

Procedure

-
- Step 1** From the report that is run, click the **Report options** icon and select the **Group By** option.
- Step 2** In the **Group By** dialog box, specify the **Number of Levels** you want to group the report. Depending on the number of levels selected, the Level, Grouped By, Sub Group, and Show Expanded columns are activated.

Cisco Unified Intelligence Center grid reports support up to three levels of grouping.

- Step 3** To group the report data by values in a particular column, select the required column name from the **Grouped By** list.

If you select a date or date and time value from the list, you can select any one of the following from the **Sub Group** column:

- None—The report data is grouped by the absolute date or date time values.
- Daily—The report data is grouped by day.
- Weekly—The report data is grouped by week.
- Monthly—The report data is grouped by month.

By default, the **Show Expanded** option is selected and you can uncheck the option if necessary. The **Show Expanded** column allows you to view the reports that are run with the group expanded.

Enable the **Show Summary Only** toggle button to display only the summary row in the report.

For example, if you group by Agent Team and enable the **Show Summary Only** toggle button, only the summary data row for each team is displayed.

Note

If any of the fields have a footer formula defined in the report definition, then a group level summary is also displayed for such fields using that formula.

- Step 4** Click **Save**.

Note

- For the grouped view, the **Only Thresholds** check box is disabled.
- Thresholds aren't displayed in a grouped field and on summary rows.
- You cannot perform a drill-down from a report with grouped fields.

Trust Self-Signed Certificate for Live Data Reports

When you generate Live Data reports for the first time, an error message appears after approximately 30 seconds.

Procedure

Perform the following steps to trust the self-signed certificate:

Option	Description
If you use Internet Explorer:	<p>a. When you click Run, the following message appears:</p> <p>Internet Explorer blocked this website from displaying content with security certificate errors.</p> <p>b. Click Show content.</p>
If you use Firefox:	<p>a. When you click Run, the following message appears:</p> <p>Please accept the certificate(s) from <hostname> to view streaming data source status.</p> <p>b. Click OK.</p> <p>A page appears with a warning that there is a potential security risk.</p> <p>c. Click Advanced and then click Accept the Risk and Continue.</p> <p>The page that states potential security risk automatically closes.</p>
If you use Edge:	<p>a. When you click Run, the following message appears:</p> <p>Please accept the certificates from <hostname> to view streaming data source status.</p> <p>b. Click OK.</p> <p>A page appears that states this site is not secure.</p> <p>c. Click the Details link.</p> <p>The error details are displayed.</p> <p>d. Click the Go on to the webpage link.</p> <p>The page that states this site is not secure automatically closes.</p>
If you use Chrome:	<p>a. When you click Run, the following message appears:</p> <p>Please accept the certificate(s) from <hostname> to view streaming data source status.</p> <p>b. Click OK.</p> <p>A page appears states that your connection is not private.</p> <p>c. Click Advanced, and then click,</p> <p>In Chrome, Proceed to <hostname> (unsafe) link.</p> <p>In Microsoft Edge , Continue to <hostname> (unsafe) link.</p>

Option	Description
	The page that states this connection is not private, closes automatically.

Import Reports

You can import the Unified Intelligence Center report, which is in either .xml or .zip file format.

The imported report retrieves data for the following entities:

- Report
- Report Definition
- Value Lists
- Views
- Thresholds
- Drilldowns
- Template Help



Note

- Each report template help folder has a size limit of 3 MB. If the folder size exceeds this limit, the system does not load the help content.
- You cannot import Report Filters and Collections.
- You cannot use the same names for the custom Value List, Report, or Report Definition that exist in the stock report templates. If the same names are used, it leads to the stock report template import failure.

To import reports, perform the following steps:

Procedure

- Step 1** In the left navigation pane, choose **Reports**.
- Step 2** In the **Reports** listing page, click **Import**.
- Step 3** Click **Browse** to select the file (.xml or .zip format) to be imported.

Note

The maximum file size for the .zip file format is 60 MB and for .xml file format is 3 MB.

- Step 4** Select the required file and click **Open**.
- Step 5** Select the file location from the **Save to Folder** list to save the file.

- Step 6** Click **Upload**.
Once the file is successfully uploaded, the table gets populated with the corresponding report template, current available version, and incoming version of the files being imported.
- Step 7** Select a Data Source for the Report Definition only if the Report Definition for the report being imported is not defined in the Unified Intelligence Center.
- Step 8** Select a Data Source for the Value List that is defined in the Report Definition.

Note

Selection of a Data Source for the Value List is mandatory:

- If the Value List does not use the same Data Source as the Report Definition.
- For Real Time Streaming Report Definitions.

- Step 9** Select the files to import or overwrite.
- Overwrite—If the report being imported exists in the Unified Intelligence Center.
 - Import—If the report being imported is the new set of report files.

- Step 10** Click **Import**.

Note

- If the system does not have report definitions, new report definitions are created in **Report Definitions > Imported Report Definitions** folder.
- Importing a report to a different version of Unified Intelligence Center is not supported. However, when you upgrade Unified Intelligence Center, report templates continue to work in the upgraded version.
- Importing manually edited XMLs is not supported.

Export Reports and Folders

You can export any custom or stock report or report folders from the Unified Intelligence Center. Reports and report folders are exported in a ZIP file format.

When you export a folder, the reports in the folder are grouped as ZIP files. The grouping is based on the data source that is used by the report definition and the value lists.

**Note**

- For customized reports, you must update the version numbers of the value list and report definition before you export the report. Else, the export will not overwrite the existing reports.
- While exporting folders, ensure that all the Value Lists in the report definitions or folders point to the same data source respectively.



Caution Do not modify the exported report (XML file) for customization purposes. However, if necessary, you can modify only the EntityVersion of the Report, Report Definition, and ValueList.

When you export a report, the following data that is associated with the report are exported:

- Report
- Report Definition
- Value Lists
- Views
- Thresholds
- Drilldowns
- Template Help (if not bundled, an empty folder is created in the zip file)



Note Report Filters and Collections are not exported along with the report.

To export a report or a folder, perform the following steps:

Procedure

-
- Step 1** From the left navigation panel, click **Reports**.
- Step 2** Navigate to the report or the report folder that you want to export and click the ellipsis icon beside the report and click **Export**.
- Note**
If necessary, you can rename the report or the report folder. Do not change the file extension (Reports or report folder: zip).
- Step 3** Click **OK**.
The exported file is downloaded into your specified local folder.
-



CHAPTER 4

Schedule Reports

- [Overview](#), on page 41
- [Schedules Actions](#), on page 42
- [Create a Schedule for a Report](#), on page 42
- [Daylight Saving Time and Scheduled Reports](#), on page 46

Overview

You can automate the generation of reports on a regular and recurring basis by setting up a schedule. The Schedules entity lets you run large dataset reports once to be sent to, and viewed by, many users.

Only users with Report Designer and System Configuration Administrator roles can access the Schedules entity. System Configuration Administrators can perform all schedule-related functions on any reports. They can view, edit, and run any scheduled report and can create a schedule for any report. Report designers can create a schedule only for those reports that they created or for which they have View permissions.



Attention

- You can't schedule Live Data reports.
 - Scheduled reports run only on the publisher node.
-

You can schedule reports to:

- Run at predetermined times
- Automatically email reports
- Save reports to remote location



Note

The schedules run based on the server time zone and hence on the Schedules page, the column **Next Scheduled Run** reflects the server time zone.

Schedules Actions

Action	Description
Toolbar Actions	
Search	Searches for a Schedule.
All	Lists all the schedules (Large, Disabled, Email, and SFTP).
Large Schedules	Lists all large schedules.
Disabled	Lists all disabled schedules.
Email	Lists all the schedules configured for email distribution.
SFTP	Lists all the schedules configured to be saved in a remote location.
Refresh	Refreshes the Schedules page.
New	Creates a new schedule. For more information, see <i>Create a Schedule for a Report</i> .
Ellipsis (...) Actions	
Edit	Edits a schedule. You can also click on the Schedule Name to edit the schedule details. In the edit mode, you can click the icon next to the Schedule name to edit the Schedule properties; Name and Schedule Type.
Enable or Disable	Enables or disables a schedule.
Delete	Deletes a schedule.

Create a Schedule for a Report

Procedure

-
- Step 1** In the left navigation page, click **Schedules**.
- Step 2** Click **New**.
- Step 3** In the **Create New Schedule** dialog box, enter a name for the Scheduler, and select the **Scheduler Type**. The available Scheduler Types are:
- **Large Schedule**
 - Visible only for System Configuration Administrator.
 - Use Large Schedules for large reports with over 8000 rows.

Note

Large Schedules have an upper limit of 25000 rows.

- Large Schedules support only the CSV file formats.
- System Config Administrators can create a maximum of six Large Schedules. You can contact your administrator to increase or decrease the number of Large Schedules.
- You can limit Large Schedules to a frequency of once a day.

Important

When there are multiple Large Schedules, ensure not to schedule them simultaneously.

- **Regular Schedule**

Step 4 Click Next.

Step 5 In the **Report Scheduling** tab, select the report to be scheduled, set the filter data, and configure the schedule details.

Field	Description
Report	
Report	Select the report to be scheduled.
Set Filter	Select this check box to enable the Filter Criteria button. Click the Filter Criteria button to set the filter criteria for the report. For more information on setting filters for a report, see <i>Report Filters</i> . Note If unchecked, the default filter is used.
Schedule	
Start Date	Click the calendar icon to select the Start Date . Note The Start Date uses the user's time zone settings. If no time zone is set for the user, the reporting server time zone is applied.
End Date	Select an option for the End Date : <ul style="list-style-type: none"> • None—indicates no end date. • By—click the calendar icon to select the end date.

Field	Description
Recurrence	<p>Specify the recurrence pattern for the scheduled report.</p> <p>Note Schedules that reach the end date are purged after a 24-hour retention period.</p> <ul style="list-style-type: none"> • Once—Specify the time of day for the single occurrence. • Daily—Specify a number for recurrence of days; for example, every four days. • Weekly—Specify the number of weeks and the days of the week that you want the scheduled report to be run. • Monthly—Select a day of the month and specify the number of months that you want the scheduled report to run. <p>Note Use Last to specify the last day of the month.</p>
Frequency	<p>Specify the number of times the report must run on the scheduled days.</p> <p>Note The maximum frequency with which you can schedule a report is once in every five minutes.</p> <p>The maximum frequency with which you can run Large Schedule is once per day.</p>

Step 6 Click **Next**.

Step 7 In the **Destination Setting** tab, set up a schedule to email the scheduled report and save the report CSV format in a remote location.

You can configure the email server in the Unified CCX Administration Console. Contact the administrator for assistance or for more information, see the *SMTP Configuration* section in *Cisco Unified Contact Center Express Administration and Operations Guide*, located at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-maintenance-guides-list.html>.

Field	Description
Email	
Email Distribution	<p>Enable the switch and enter the recipient email addresses.</p> <p>Note Email page validation occurs when the email address is entered in the Email Distribution field. No validation is performed if there is no email ID entered in the Email Distribution field.</p>
Email View	<p>Select the view of the report that you want to email.</p> <p>Note Only grid views can be scheduled.</p>

Field	Description
Email Subject	Enter text for the subject line.
Email File Type	<p>Select the type of file.</p> <ul style="list-style-type: none"> • INLINE HTML—Sends the report in HTML format. <ul style="list-style-type: none"> • The historical report has an upper limit of 8000 rows. • The real-time report has an upper limit of 3000 rows. • XLS—Sends the report as a Microsoft Excel file attachment. <p>Note The custom formatting of DECIMAL data type is not applied for reports exported in excel.</p> <ul style="list-style-type: none"> • The historical report has an upper limit of 8000 rows. • The real-time report has an upper limit of 3000 rows. • PDF—Sends the report as a PDF file attachment in either landscape or portrait orientation. <p>Note The maximum number of PDF reports that you can schedule to be sent by email at a given time is 10.</p> <p>The generated PDF attachments have the following limitations:</p> <ul style="list-style-type: none"> • Uses standard font sizes. 10 pixels for the landscape orientation and 8 pixels for the portrait orientation. The PDF bypasses the font size that is set in the grid view editor to keep the font output printer-friendly. <p>Note PDF supports images only in the HTTP format.</p> <ul style="list-style-type: none"> • Retains rows that fit on the page for the selected orientation. Columns that do not fit on the page are truncated. • Only 1000 rows are supported for a PDF file attachment. An email message is sent if the scheduled report exceeds 1000 rows. • Does not support word-wrap for columns. In case of larger text, you can customize the column width in the grid editor to avoid overlaps. As a result, the customization may reduce the number of columns that are shown in the PDF.
Remote Location	
Protocol	Enable the switch and select SFTP to establish secure connection to the remote location.
Report View	Select the view of the report to be posted.

Field	Description
Host	Enter the IP address of the remote location.
Port	Enter a Port number for the SFTP. The default port number is 22.
Directory Path	Enter the location on the host to save your .csv file. Directory Path must be an absolute path.
User Name, Password	Enter a username and the corresponding password for the host. Maximum Password Length: 50 characters.
Test Connection	Click to test the connection.

Note

- Date Time format in a scheduled report of type CSV is: Day_of_week Month Date_of_Month HH:MM:SS SERVER_TIMEZONE YYYY. For Example, Fri Oct 24 01:00:00 EDT 2014.
- The time field in a scheduled report of type CSV is displayed in seconds only.

Note

Scheduled Reports generated using **Remote Location** option does not support formatted reports. To get formatted reports, use **Email** as the **Destination Setting**.

Note

When you edit a scheduled report and click **Save**, the scheduler runs and emails the scheduled report to all the recipients that are configured in the **Email Distribution** field.

Step 8

Click **Save**.



Note Scheduler relies on the Refresh Rate parameter in the Report Definition. You can configure the Refresh Rate parameter lower than the Scheduler Frequency.

Daylight Saving Time and Scheduled Reports

Daylight saving time affects the scheduled reports in the following ways:

1. Reports that are scheduled to run daily during a particular time of the day are skipped for the day when the clock advances (for example, due to daylight saving). For example, for a report that is scheduled to run at 10:30 p.m. daily, if the clock advances by 1 hour then the report that is scheduled to run at 10:30 p.m. will be skipped for that day.
2. Reports that are scheduled to run only once, are updated with a new schedule time with some offset if it falls in the period that advances. For example, if the clock advances by one hour for a report scheduled to run once at 10:30 p.m., then the schedule report run time updates to 11:30 p.m.



CHAPTER 5

Permalinks

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- [Permalink for a Dashboard](#), on page 47
- [Permalink for a Report](#), on page 48
- [View Report Permalinks in Dashboards](#), on page 50
- [Create Live Data Report Permalink for Finesse](#), on page 50
- [Permalinks for Supervisor Live Data Reports](#), on page 51

Overview

Permalinks in Cisco Unified Intelligence Center are permanent hyperlinks.

Unified Intelligence Center supports the following types of permalinks for reports:

- **Excel Link:** This permalink is generated only for grid view.
- **HTML Link:** This permalink is generated for grid view, gauge view, and chart view.
- **XML Link:** This permalink is generated only for the grid view. It is used where the data is required in XML format.



Note For Live Data reports, you will only have the HTML permalink. HTML permalink for Live Data reports always require authentication.



Note Due to security reasons, permalinks from one Unified Intelligence Center cannot be displayed in the dashboard of another Unified Intelligence Center instance.

Permalink for a Dashboard

Dashboard permalinks help you to share your Dashboards with other users and view Dashboards of other users.

**Note**

- You can access the Dashboard permalink only from a web browser.
- Authenticated Dashboard permalinks are not supported in Cisco Finesse.
- When an unauthenticated Dashboard permalink is accessed in an authenticated browser session, access to the permalink is controlled by the logged in user's permissions.
- To use Permalink (both Authenticated and Unauthenticated) for Dashboards, you must do the following for each report:
 - Set Default Filter
 - Select **Skip filter during the report execution**

To view the Dashboard permalink, perform the following steps:

Procedure

- Step 1** From the left navigation pane, click **Dashboards**.
- Step 2** Click the ellipsis icon beside the required Dashboard and click **Permalinks**.
- Step 3** In the **Permalinks** dialog box, click **HTML** to display the Dashboard permalink in the **Link** text box.

Note

- By default, all Dashboards are authentication enabled. When the **Authenticate Permalink** check box is enabled, users accessing the permalink are prompted to enter their credentials to view the Dashboard.
- When you clear the **Authenticate Permalink** check box for a Dashboard, users can view that Dashboard using the permalink, without authentication.

Sharing an unauthenticated permalink of your Dashboard shares even the authenticated report permalinks added into the Dashboard.

- For Dashboards that contain Live Data report, ensure to select the **Authenticate Permalink** check box.

- Step 4** Copy and paste the permalink in any browser to view the Dashboard.
- Step 5** Click **Save**.

Permalink for a Report

Report permalinks help you to share your report with other users and view reports of other users.

**Note**

- Authenticated report permalinks are not supported in Cisco Finesse.
- Authenticated Excel report permalink is not supported in SSO.
- Authenticated Excel report permalink is not supported on Office 365.
- When an unauthenticated Report permalink is accessed in an authenticated browser session, access to the permalink is controlled by the logged in user's permissions.
- You cannot drill down to another report from a report permalink.

To view the Report permalink, perform the following steps:

Procedure

Step 1 From the left navigation pane, click **Reports**.

Step 2 Click the ellipsis icon beside the required Report and click **Permalinks**.

Step 3 In the **Permalinks** dialog box, select from the available Link formats; HTML, Excel, XML to display the corresponding Report permalink in the **Link** text box.

Note

- By default, the **Authenticate Permalink** check boxes are checked to indicate that the default and variable permalink are authenticated.
- For Live Data reports, by default, the **Authenticate** check box is checked and disabled.

Step 4 To view the report,

- HTML and XML Permalink—Copy and paste the permalink (HTML and XML) in any browser
- Excel Permalink—

Note

- To import permalinks in Excel, use the permalinks with FQDN only.
- To embed excel permalink content as external data within excel on macOS, add **tomcat** certificate from Certificate Management to the trust store of macOS in case self-signed certificates are being used.

Excel—

- a. Access Excel and navigate to **Data > From Web**.
- b. In the **New Web Query > Address** field, paste the report permalink and click **Import**.

Excel 365—

- a. Access Excel 365 and navigate to **Data > From Web**.
- b. In the **From Web > URL** field, paste the report permalink and click **OK**.

Note

For the first time, you will be prompted to **Connect** in the Access Web Content dialog box.

- c. In the Navigator dialog box, click **Table View > Load**.

Step 5 Click **Save**.

For information on viewing report permalinks in Dashboards as web page widgets, see *View Report Permalinks in Dashboards*.

For more information on permalinks, see *Cisco Unified Intelligence Center Report Customization Guide* at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-intelligence-center/products-user-guide-list.html>.

View Report Permalinks in Dashboards

Viewing report permalinks in Dashboards as web page widgets depends on the authentication status of both reports and the dashboards. The following matrix provides different scenarios that supports viewing report permalinks in Dashboards.

	Authenticated Report Permalink Same Node	Authenticated Report Permalink Different Node	Unauthenticated Report Permalink Same Node	Unauthenticated Report Permalink Different Node
Un-Auth Dashboard	Not Supported	Not Supported	Supported	Supported
Auth Dashboard	Supported	Not Supported	Supported	Supported
Dashboard Viewer	Supported	Not Supported	Supported	Supported

Create Live Data Report Permalink for Finesse

For permalinks of supervisor stock reports, see *Permalinks for Supervisor Live Data Reports*. To create a permalink for saved stock reports, the procedure is as follows:

Procedure

- Step 1** Copy the permalink of the stock report that you want to customize from *Permalinks for Supervisor Live Data Reports* and paste it in a text editor.

Example:

Consider the below URL as the permalink. Copy and paste it in a text editor. The underlined ID is the value of viewID.

```
https://<Server Name>:8444/cuicui/permalink/?viewId=5C90012F10000140000000830A4E5B33
&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL
```

- Step 2** Click **Reports** in the left pane.
- Step 3** Navigate to the custom report.
- Step 4** Click the ellipsis icon beside the report and click **Edit**.
- Step 5** In the **List of Views > Manage Views** page, select HTML, Excel, or XML to display the corresponding Report permalink in the **Link** text box.
- Step 6** Copy the permalink of the customized report from the **Link** field, paste it in a text editor, and then copy the viewID value from this link.

Example:

Copy the underlined viewID value from the permalink of the customized report.

```
https://<Server Name>:8444/cuicui/permalink/?viewId=B27986B510000142000004D60A4E5B33
&linkType=htmlType&viewType=Grid
```

- Step 7** Replace the viewID value in the stock report permalink with the viewID value from the permalink of the customized report.

Example:

After replacing the viewID value with the viewID of the customized report, the customized report permalink appears as follows:

```
https://<Server Name>:8444/cuicui/permalink/?viewId=B27986B510000142000004D60A4E5B33
&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL
```

- Step 8** Add the customized gadget URL to Desktop Layout in the Finesse Administration console and save.
- Step 9** Log in to Finesse desktop and check the report.

Permalinks for Supervisor Live Data Reports

The following table presents the permalinks for supervisor reports. Replace <Server Name> with the IP or FQDN address of Unified CCX node.



Note Permalinks are not supported for agent reports.

Table 6: Permalinks for Supervisor Live Data Reports

Report	View	Permalink
Agent Outbound Team Summary Report	Since Midnight	https://<Server Name>:8444/cuicui/permalink/?viewId=FD919FB9100001440000005D0A4E5B29&linkType=htmlType&viewType=Grid
	Short and Long Term Average	https://<Server Name>:8444/cuicui/permalink/?viewId=FD919FB510000144000000470A4E5B29&linkType=htmlType&viewType=Grid

Report	View	Permalink
Chat Agent Statistics Report	—	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=F2F1FC17100001440000014E0A4E5D48&linkType=htmlType&viewType=Grid&ChatAgentStats.agentId=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=F2F1FC17100001440000014E0A4E5D48&linkType=htmlType&viewType=Grid&ChatAgentStats.agentId=CL
Chat CSQ Summary Report	—	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=E42ED788100001440000007B0A4E5CA1&linkType=htmlType&viewType=Grid&ChatQueueStatistics.queueName=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=E42ED788100001440000007B0A4E5CA1&linkType=htmlType&viewType=Grid&ChatQueueStatistics.queueName=CL
Team State Report	—	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=5C90012F10000140000000830A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=5C90012F10000140000000830A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL
Team Summary Report	Since Midnight	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=728283C210000140000000530A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=728283C210000140000000530A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL
	Short and Long Term Average	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=7291DCB410000140000000890A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=7291DCB410000140000000890A4E5B33&linkType=htmlType&viewType=Grid&ResourceIAQStats.resourceId=CL
Voice CSQ Agent Detail Report	—	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=9A7A14CE10000140000000ED0A4E5E6B&linkType=htmlType&viewType=Grid&VoiceCSQDetailsStats.agentId=CL&VoiceCSQDetailsStats.AgentVoiceCSQNames.agentVoiceCSQName=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=9A7A14CE10000140000000ED0A4E5E6B&linkType=htmlType&viewType=Grid&VoiceCSQDetailsStats.agentId=CL&VoiceCSQDetailsStats.AgentVoiceCSQNames.agentVoiceCSQName=CL
Voice CSQ Summary Report	Snapshot	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=C8E2DB1610000140000000A60A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=C8E2DB1610000140000000A60A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL
	Since Midnight	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=C8EF510810000140000000EB0A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=C8EF510810000140000000EB0A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL
	Short and Long Term Average	<a href="https://<ServerName>:8444/cuicui/permalink/?viewId=C8EE241910000140000000C30A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL">https://<ServerName>:8444/cuicui/permalink/?viewId=C8EE241910000140000000C30A4E5E6B&linkType=htmlType&viewType=Grid&VoiceIAQStats.esdName=CL



CHAPTER 6

Gadget Toolbar

- [Gadget Toolbar Improvements, on page 53](#)

Gadget Toolbar Improvements

Cisco Unified Intelligence Center provides you with a toolbar on Live Data reporting gadget on the Cisco Finesse Desktop.

You can remove this toolbar by configuring the parameter **hideGadgetToolbar** to *true* in the gadget URL.

For example: `<gadget>https://<Server Name>:8444/cuic/gadget/LiveData/LiveDataGadget.xml?gadgetHeight=150&hideGadgetToolbar=true&viewId=EF94123F10000164000000FD0A6B2D41&filterId=AgentCallLogDetailStats.agentID=loginId</gadget>`



Note If the parameter `hideGadgetToolbar` is unavailable in the gadget URL or if it is set to *false*, then the toolbar is displayed by default.

Reports View Selector

As a reporting gadget user, you can select and view multiple reports from the Reports View Selector on the toolbar.

The Reports View Selector is a drop-down list that displays the list of reports in the **Report name - View name** format. The Report View Selector list allows you to view the five report views.



-
- Note**
- For Historical Gadgets, only one view is supported.
 - To add a new report to the Reports View Selector, contact the Cisco Finesse Administrator.
-

Toolbar Hide or Unhide

The gadget toolbar displays an arrow tab in the center to hide and unhide the toolbar.

Click the arrow tab to hide the toolbar on the reporting gadget to get a clear view of the report.

When you click the arrow tab again, the toolbar becomes visible on the gadget. When you hover over the arrow tab, the hide and unhide message is displayed.

Pause and Play

You can pause and resume event updates in Live Data gadgets using the pause or play icons respectively. As a reporting user, the pause or play button works as follows:

- Pause - The updates are stopped.
- Play - The updates resume and are displayed on the gadget.



Note When the button is paused and updates are available on the gadget, a notification appears over the pause or play button.

Show Threshold Only

When you check the **Show Thresholds Only** box, only rows with matching threshold values are displayed in the report. By default, this check box is unchecked for every report.

Gadget Help

The gadget toolbar displays a Help icon. When you click the help icon, a window appears, displaying the report template help for the relevant reporting gadgets.



CHAPTER 7

Historical Reports

From the Unified CCX Release 11.6(1) onward, the following Historical Reports are now available for the supervisor to view data of the team and the CSQs that are assigned to the supervisor:

- Chat Agent Detail Report
- Chat Agent Summary Report
- Chat CSQ Activity Report
- Chat CSQ Agent Summary Report
- Email Agent Activity Report
- Email Contact Detail Report
- Email CSQ Activity Report
- Agent Call Summary Report
- Agent Detail Report
- Agent Summary Report
- Agent Login Logout Activity Report
- Agent Not Ready Reason Code Summary Report
- Agent State Detail Report
- Agent State Summary by Agent Report
- Agent State Summary by Interval Report
- Agent Wrap-up Data Summary Report
- Agent Wrap-up Data Detail Report
- Abandoned Call Detail Activity Report
- Common Skill CSQ Activity Report
- Contact Service Queue Activity by CSQ Report
- Contact Service Queue Activity Report
- Contact Service Queue Activity Report by Interval

- Contact Service Queue Call Distribution Summary
- Contact Service Queue Priority Summary
- Contact Service Queue Service Level Priority Summary Report
- CSQ Agent Summary Report
- Detailed Call CSQ Agent Report
- Outbound Agent Detail Performance Report
- Preview Outbound Agent Detail Performance Report
- Reason Code report by Agent grouping
- Reason code report by Reason code grouping
- Contact Service Queue Activity by Window Duration
- Agent All Fields Report
- CSQ All Fields Report
- Multichannel Agent Summary Report
- Wrap-Up Reasons Report for Chat and Email

**Note**

- To avoid any inconsistencies in the report data, view the historical reports during the off-peak hours.
- The supervisor can see the assigned agents and CSQs in the filter. The report generates data for the agents or CSQs that are assigned to the supervisor.

- [Chat Reports, on page 56](#)
- [Email Reports, on page 63](#)
- [Inbound Reports, on page 68](#)
- [Outbound Reports, on page 141](#)
- [System Reports, on page 156](#)
- [Multichannel Reports, on page 160](#)
- [Query Designs Historical Reports, on page 163](#)

Chat Reports

Chat Agent Detail Report

The Chat Agent Detail Report presents information about each chat contact that is handled by the chat agent.

Charts

The following chart is available:

Chart name	Description
Total Active, Accept Time by Agent	Displays the active time and accept time that an agent spends on all the chat contacts.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Chat Start Time	Time at which the agent accepts the chat.
Chat End Time	Time at which the agent ends the chat.
Duration	Elapsed time between the chat start time and the chat end time.
Contact ID	Unique contact ID that identifies the chat contact.
Chat Routed CSQ	Contact Service Queue (CSQ) that routed the chat contact to the agent.
Chat Skills	Skills that are associated with the agent for handling a chat contact.
Active Time	Time the agent spends chatting with the chat contact. Summary info —Sum of the records in this column.
Accept Time	Time taken by the agent to accept the chat contact after it is allocated to the desktop. Summary info —Sum of the records in this column.
Chat Type	Type of chat contact. There are two types—One-to-One and Group Chat.
Source	Origin of the chat. There are three types of chat source: <ul style="list-style-type: none"> • Bubble Chat —A chat popover that appears on the customer's web page that allows users to chat. • Fb Messenger—Messaging service from Facebook which can be used by end-users to chat with the Contact Center. • Other—includes Classic Chat and any third-party chat integrations.
Rating	Rating given by the customer for the chat.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for the agents who possess the specified skills.
Team Names	Displays information for the agents who belong to the specified teams.
Chat Type	Displays information for the specified one-to-one or group chat type.
Source	Displays information for the specified chat source.
Rating	Displays information for the specified rating.

Grouping Criteria

None

Chat Agent Summary Report

The Chat Agent Summary Report presents a summary of the activities of chat agents, including chat and agent state activities.

Charts

The following charts are available:

Chart name	Description
Average Accept and Active Chat Time for Agents	Displays the average time an agent takes to accept chat contact requests, and the average time the agent spends in Busy state.
Total Presented vs Handled Chats by Agent	Displays the number of chat contacts that are presented to an agent and the number of chat contacts that are handled by the agent.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Chats Presented	Number of chats that are presented to the agent.
Chats Handled	Number of chats that the agent accepted.
Group Chats Presented	Number of group chats that are presented to the agent.
Group Chats Handled	Number of group chats that the agent accepted.
Group Chats Declined	Number of group chats that the agent declined.

Field	Description
Active Time—Avg	Average chat time of the chats that the agent handled.
Active Time—Max	Longest chat time of a chat that the agent handled.
Accept Time—Avg	Average accept time of the chats that the agent accepted.
Accept Time—Max	Longest accept time of any chat that the agent accepted.
Avg Rating	Average of all the chat ratings received by the agent.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for the agents who possess the specified skills.
Team Names	Displays information for the agents who belong to the specified teams.

Grouping Criteria

None

Chat CSQ Activity Report

The Chat CSQ Activity Report presents a summary of presented, handled, and abandoned chats for each Contact Service Queue (CSQ). It displays the average and maximum time for chats that are queued and handled. It also displays the average rating of the rated chats routed to the CSQ.

Charts

The following charts are available:

Chart name	Description
Average Handle Time by CSQ	Displays the average handle time for chats that are handled in a CSQ.
Max Queue Time for Chats Presented by CSQ	Displays the chat with the longest queue time in a CSQ.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	Name of the CSQ.

Field	Description
CSQ ID	Unique ID of the CSQ.
Chats Presented	Number of chats that are routed to the CSQ regardless of whether an agent accepts the chat.
Queue Time—Avg	Average queue time for all chats that are routed to the CSQ.
Queue Time—Max	Longest queue time of any chat that is routed to the CSQ.
Chats Handled	Number of chats that are routed to agents through this CSQ and are accepted and handled by the agents.
Handle Time—Avg	Average handle time for all chats that the CSQ handled. Handle time is active chat time.
Handle Time—Max	Longest handle time of any chat that the CSQ handled.
Chats Abandoned	Number of chats that are routed to the CSQ and not accepted by an agent as either the chat submitter ended the chat before the agent accepted or was disconnected.
Avg Rating	Average rating of the rated chats handled by the CSQ.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

None

Chat CSQ Agent Summary Report

The Chat CSQ Agent Summary Report presents information about the chats that are handled in a Contact Service Queue (CSQ) by a chat agent. An agent can handle chat contacts for multiple CSQs. The report includes the average chat time, average accept time for handled chats, number of received chats, number of handled chats, and number of unanswered chats for each agent.

Charts

The following chart is available:

Chart name	Description
Chats Handled by CSQ and Agent	Displays the number of chats handled by each agent for a CSQ.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	Name of the CSQ.
CSQ ID	Unique ID of the CSQ.
Agent Name	First name and last name of the agent who handles chats for this CSQ.
Chat Received	Number of chats that are queued for this CSQ and are assigned to the agent.
Chat Handled	Number of chats that are queued for this CSQ and answered by the agent.
Average Active Chat Time	Average chat time for all the chats that the agent handled for this CSQ. Chat time is the elapsed time between the time an agent answers a chat and ends the chat. Average chat time = Total chat time / Number of chats handled
Chat No Answer	Number of chats that are connected to the agent, but not answered.
Average Acceptance Time	Elapsed time between the time that a chat alert is presented on the desktop and the time that the chat is answered by an agent or disconnected. This field is blank if the chat was not presented to an agent.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

None

Chat Traffic Analysis Report

The Chat Traffic Analysis Report presents information about incoming chat contacts to the Unified CCX system. The information is presented for each day, and includes information about the peak hour for that day.

Charts

The following charts are available:

Chart name	Description
Average Chat Duration by Date	Displays the average chat duration for a day.
Peak Chats by Date	Displays the hour that received the highest number of chats in a day.

Chart name	Description
Total Incoming Chats by Date	Displays the number of chats that are received by Unified CCX for a day.

Fields

The report includes a table that displays the following information:

Field	Description
Date	Date for which the information is displayed.
Total Incoming Chats	Number of chat contacts that are received daily by Unified CCX. Summary info —Sum of the records in this column.
Avg Chats (per Hour)	Average number of chat contacts that are received in an hour. Summary info —Maximum value in this column.
Peak Chats (per Hour)	Number of chat contacts that are received during the peak hour. Summary info —Maximum value in this column.
Peak Hour Time—Start	Start time of the peak hour (the hour when the largest number of chat contacts are received).
Peak Hour Time—End	End time of the peak hour (the hour when the largest number of chat contacts are received).
Chat Duration—Avg	Average chat duration for the day. Summary info —Maximum value in this column.
Chat Duration—Min	Duration of the shortest chat for the day. Summary info —Minimum value in this column.
Chat Duration—Max	Duration of the longest chat for the day. Summary info —Maximum value in this column.

Filter Criteria

None

Grouping Criteria

None

Email Reports

Email Agent Activity Report

The Email Agent Activity Report presents email statistics of the email-enabled agents for a day.

Charts

The following charts are available:

Chart Name	Description
Email Agent Activity by Agent State	Displays the time that agents spend in an agent state.
Email Agent Activity by Email	Displays the email statistics of an agent.

Fields

Visible Fields in Email Agent Activity Report

Field	Description
Agent Name	Name of the agent to whom the email messages are routed.
Agent Id	Login user ID of the agent.
Login Date	Date the agent logged in.
Duration—Logged-In	Total time the agent logged in. Summary info —Sum of the records in this column.
Duration—Not Ready	Total time the agent spent in the E-Mail Not Ready state. Summary info —Sum of the records in this column.
Duration—Ready	Total time the agent spent in the E-Mail Ready state. Summary info —Sum of the records in this column.
Number of Emails—Presented	Number of email messages that are presented to the agent. Summary info —Sum of the records in this column.
Number of Emails—Requeued	Number of email messages that the agent requeued. The requeue date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.
Number of Emails—Sent	Number of email messages that the agent replied and forwarded. The send date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.

Field	Description
Number of Emails—Discarded	Number of email messages that the agent discarded. The discarded date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.
Avg On Desk	Average on-desk time = Total time spent on handling email contacts/Number of emails sent, requeued and discarded.

Filter Criteria

You can filter using the following parameters:

Filter Parameter	Result
Time Offset	Displays the list of time zones. Select the one matching your timezone. If multiple values are selected, the first one takes effect.
Agent Name	Displays information for the specified agents.

Grouping Criteria

Data is grouped by the following fields:

Field	Result
Agent Name	Sorts data by agent name.
Login Date	Groups information by login date.

Email Contact Detail Report

The Email Contact Detail Report presents information about each email contact that is handled by the agent.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Contact ID	Unique social contact ID that identifies the email contact.
Sequence No	Number that the system assigns to each contact leg. The sequence number starts with 0 and increases by 1 for each leg of a contact, such as requeue.

Field	Description
CSQ Name	Name of the Contact Service Queue (CSQ) that routed the email contact to the agent.
Agent Name	First name and last name of the agent who responded to the email message.
Received	Date and time that the contact center received the email message.
Retrieved	Date and time that the agent retrieved the email message.
Replied	Date and time that the agent responded to the email message.
Discarded	Date and time that the agent discarded the email message.
Forwarded	Date and time that the agent forwarded the email message.
From Address	Email address of the customer who sent the email message.
Reply-To Address	Email address of the customer to whom the response is sent.
To Address	Email addresses in the To field, to which the email message was sent.
Recipients—To	Email address of the contact center to which the email message was sent.
Recipients—CC	Email addresses in the CC field, to which the email message was sent as a copy.
Recipients—Bcc	Email addresses in the Bcc field, to which the email message was sent as a blind copy.
Subject	Subject line of the received email message.
Contact Disposition	Disposition of the email contact.
Contact Type	Contact type of the email contact.

Filter Criteria

You can filter using any one of the following parameters:

Filter Parameter	Result
CSQ Name	Displays information for the specified CSQs.
Agent Name	Displays information for the specified agents.
Subject	Displays information for the specified subject or part of the subject. This parameter is case sensitive.

Grouping Criteria

None

Email CSQ Activity Report

The Email CSQ Activity Report presents email activity statistics of agents in a Contact Service Queue (CSQ) for each day.



Note Due to system errors, few of the emails presented to the agent may not display the contents in it. In such cases, agent has to close the email tab. These contacts are not accounted for the agent, and there will be a mismatch between the Retrieved, Sent, Requeued, and Discarded columns in the report.

Charts

The following charts are available:

Chart Name	Description
Email CSQ Agent Activity by Agent State	Displays the number of email messages that are handled in a category by the agents.
Email CSQ Agent Activity by CSQ	Displays the number of email messages that are handled in a category by the CSQs.
Email CSQ Agent Activity by Date	Displays the number of email messages that are handled in a category for a day.

Fields

Table 7: Visible Fields in Email CSQ Activity Report

Field	Description
CSQ Name	Name of the CSQ through which the email messages are routed.
Date	Date of each day in the interval.
Agent Name	Name of the agent to whom the email messages are routed.
Retrieved	Number of email messages that are routed through the CSQ to the agent and then retrieved by the agent. The retrieved date time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.
Requeued	Number of email messages that are requeued to the agent. The requeue date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.
Sent	Number of email messages that the agent replied and forwarded. The send date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.

Field	Description
Discarded	Number of email messages that the agent discarded. The discarded date and time determines whether the email message falls within the interval. Summary info —Sum of the records in this column.
Avg On Desk	Average on-desk time = On-desk time / Number of emails sent, requeued and discarded. On-desk time = Time the agent processed the email - Time the agent received the email. (This includes the emails sent, requeued and discarded by the agent.)

Filter Criteria

You can filter using the following parameters:

Filter Parameter	Result
Time Offset	Displays the list of time zones. Select the one matching your time zone. If multiple values are selected, the first one takes effect.
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

Data is grouped by the following fields:

Field	Result
CSQ Name	Sorts data by CSQ name.
Date	Sorts data by the dates within the CSQ.

Email Traffic Analysis Report

The Email Traffic Analysis Report gives the count of email messages received for the specified date or date range.

Chart

The following charts are available:

Chart name	Description
Email Inbox Traffic Analysis by Date Chart	Displays the number of email messages received for the specified date or date range.
Email Inbox Traffic Analysis by Email Address	Displays the number of email messages received by an email address.

Fields

The report includes a table that displays the following information:

Field	Description
Email Address	Email address to which the email messages are addressed.
Received Date	Date on which the email was received.
Email Count	Number of email messages that are received by an email address for the specified date or date range.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Email Addresses	Displays list of valid email addresses.

Grouping Criteria

Data is grouped by the following field:

Filter parameter	Result
Displays a list of valid email addresses	Groups data by email address.
Date	Displays information by date.

Inbound Reports

Abandoned Call Detail Activity Report

The Abandoned Call Detail Activity Report presents information about calls that are abandoned.

Charts

The following chart is available:

Chart name	Description
Calls Abandoned Each Day by Final Call Priority	Displays the number of abandoned calls and the final priority of these calls in a day.

Fields

The report includes a table that displays the following information:

Field	Description
Call Start Time	Date and time the call leg starts.
Called Number	Telephone number that the caller dials.
Call ANI	Originator's telephone number. (ANI = Automatic Number Identification)
Initial Call Priority	Priority that is assigned to the call by Unified CCX workflow when the call is received.
Call Routed CSQ	Contact Service Queue (CSQ) to which the call is queued.
Agent Name	Agent who is presented with the call before it is abandoned.
Call Skills	Skills that are associated with the CSQ to which the call is routed.
Final Call Priority	Priority of the call when it is abandoned.
Call Abandon Time	Date and time the call is abandoned.
Time to Abandon	Elapsed time between the time the call comes to the system and the time it is abandoned. Summary info —Average abandon time of all calls.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent Names	Displays information for the specified agents.

Grouping Criteria

None

Aborted Rejected Call Detail Report

The Aborted Rejected Call Detail Report presents information about each call that is aborted or rejected by the system.

Charts

The following chart is available:

Chart name	Description
Total Calls by Contact Disposition	Displays the number of calls that are aborted and rejected.

Fields

The report includes a table that displays the following information:

Field	Description
Node ID - Session ID - Sequence No	<p>Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster.</p> <p>Session ID is the unique session ID that the system assigns to a call.</p> <p>Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call.</p> <p>Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.</p>
Call Start Time	Date and time the call starts.
Call End Time	Date and time the call was disconnected, transferred, or redirected.
Contact Type	Contact type of a call.
Contact Disposition	Disposition of the call.
Abort/Reject Reason	Reason the call is aborted or rejected.
Originator DN (Directory Number)	<p>The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Originator Type is agent, this field shows the Unified CCX extension of the agent. If the call is attended at the non-IPCC extension, then the non-IPCC extension is displayed. If the call is made from a non-IPCC extension, then the non-IPCC extension is displayed. • If Originator Type is device, this field shows the CTI port number. • If Originator Type is unknown (through a gateway or an unmonitored device), this field shows the telephone number of the caller.
Destination DN	<p>The destination directory number. Destination Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Destination Type is agent, this field shows the Unified CCX extension of the agent. • If destination type is device, this field shows the CTI port number. • If destination type is unknown (through a gateway or an unmonitored device), this field shows the telephone number called.
Called Number	Number that is originally dialed by the caller. If the call is a transfer, the number that the call is transferred to is displayed.
Original Called Number	Number that is originally dialed by the caller—either a route point number or an agent extension.

Field	Description
Application Name	Unified CCX or Unified IP IVR application that is associated with the route point.
Call Routed CSQ	Contact Service Queue (CSQ) to which the call is routed. This field is blank if the call is aborted or rejected before being routed to a CSQ.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Contact Disposition	Displays information for the specified contact disposition.

Grouping Criteria

None

Agent All Fields Report

The Agent All Fields Report presents a historical view of the activity of selected agents, showing each agent's call summary details and agent state times. This report combines the fields that are displayed in other agent-related reports.

Charts

The following charts are available:

Chart name	Description
Agent All Fields Report - Call Summary Chart	Displays the call summary details such as Calls presented, calls handled, and calls abandoned by an agent.
Agent All Fields Report - State Summary Chart	Displays the total time that is spent by the agents on different states.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent_ID	Login ID of the agent.
Agent Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.

Field	Description
Calls Presented	<p>Calls that are sent to the agent, regardless of whether the agent selects the call.</p> <p>If a call connects to an agent, transfers to another agent, and then transfers back to the original agent, the value for the original agent increases by two (once for each time the call presents).</p>
Calls Handled	<p>Calls that are connected to the agent.</p> <ul style="list-style-type: none"> • If the agent establishes a conference with another agent, this value increases by one for the conferenced agent. • If the agent transfers a call and the call is transferred back to the agent, this value increases by two.
Calls Abandoned	Calls that are abandoned at the agent level.
Total Logged In Time	Total time that the agent is logged in to Unified CCX.
Average Logged In Time	Average logged-in time = Logged-in time of the agent / Number of logged-in sessions of the agent
Not Ready Time	Time that the agent spent in Not Ready state.
Not Ready Time (%)	Percentage of time that the agent spent in Not Ready state.
Ready Time	Time that the agent spent in Ready state.
Ready Time (%)	Percentage of time that the agent spent in Ready state.
Reserved Time	Time that the agent spent in Reserved state.
Reserved Time (%)	Percentage of time that the agent spent in Reserved state.
Talk Time	Time that the agent spent in Talking state.
Talk Time (%)	Percentage of time that the agent spent in the Talking state.
Work Time	Time that the agent spent in the Work state.
Work Time (%)	Percentage of time that the agent spent in the Work state.
Avg Handle Time	<p>Average handle time for all calls that the agent handled.</p> <p>Handle time = Talk time + Hold time + Work time</p>
Max Handle Time	Longest handle time of any call that the agent handled.
Avg Talk Time	<p>Average talk time for calls that the agent handled.</p> <p>Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.</p>
Max Talk Time	Longest talk time of any call that the agent handled.

Field	Description
Avg Hold Time	Average hold time for calls that the agent handled.
Max Hold Time	Longest hold time of any call that the agent handled.
Avg Work Time	Average time that an agent spent in Work state after calls.
Max Work Time	Longest time that an agent spent in Work state after a call.
Avg Idle Time	Average time that an agent spent in Not Ready state.
Max Idle Time	Longest time that an agent spent in Not Ready state.
Handle Ratio	Handle ratio = Calls that the agent handled / Calls that are routed to the agent
Total Inbound	Total calls that the agent receives. Total Inbound = Inbound Automatic Call Distribution (ACD) calls + Inbound non-ACD calls.
Inbound ACD-Total	Unified CCX calls that the agent receives.
Inbound ACD-Avg Talk Time	Average time that the agent spent in Talking state for received Unified CCX calls.
Inbound ACD-Avg Hold Time	Average time that the agent put the received Unified CCX calls on hold.
Inbound ACD-Avg Work Time	Average time that the agent spent in Work state for received Unified CCX calls.
Inbound Non-ACD On IPCC-Total	Non-Unified CCX calls that are received by the agent on a Unified CCX extension, including calls made by other agents and by outside parties.
Inbound Non-ACD On IPCC-Avg Talk Time	Average time that the agent spent in Talking state for non-Unified CCX calls received on a Unified CCX extension.
Inbound Non-ACD On IPCC-Max Talk Time	Maximum time that the agent spent in Talking state on a non-Unified CCX call received on a Unified CCX extension.
Inbound Non-ACD On Non-IPCC-Total	Non-Unified CCX calls received by the agent on a non-Unified CCX extension including calls that are made by other agents and by outside parties.
Inbound Non-ACD On Non-IPCC- Avg Talk Time	Average time that the agent spent in Talking state for non-Unified CCX calls received on a non-Unified CCX extension.
Inbound Non-ACD On Non-IPCC- Max Talk Time	Maximum time that the agent spent in Talking state on a received non-Unified CCX call that is received on a non-Unified CCX extension.
Outbound On IPCC-Total	Calls that the agent dials on a Unified CCX extension including both connected and attempted calls.
Outbound On IPCC-Avg Call Time	Average call time of the outbound calls on a Unified CCX extension.

Field	Description
Outbound On IPCC-Max Call Time	Maximum time that the agent spent in Talking state on an outbound call on a Unified CCX extension.
Outbound On Non-IPCC-Total	Calls that the agent dials on a non-Unified CCX extension including both connected and attempted calls.
Outbound On Non-IPCC-Avg Call Time	The average call time and the longest call time that is spent for the outbound calls on a non-Unified CCX extension.
Outbound On Non-IPCC-Max Call Time	Maximum time that the agent spent in Talking state on an outbound call on a non-Unified CCX extension.
ACD-Transfer In	Unified CCX calls that are transferred to the agent.
Non-ACD-Transfer In	Non-Unified CCX calls that are transferred to the agent.
ACD-Transfer Out	Unified CCX calls that the agent transfers out.
Non-ACD-Transfer Out	Non-Unified CCX calls that the agent transfers out.
ACD-Conference	Inbound Unified CCX conference calls in which the agent participates.
Non-ACD-Conference	Non-Unified CCX conference calls in which the agent participates.



Note The **Agent All Fields Report** calculates the total talking time of an agent within a time range. The total talking time depends on when the call was transferred to the agent, as mentioned in the following scenarios:

- If the call was transferred to the agent within the time range of the report, the talking time of the agent is included in the total talking time, even if the call was answered after the time range.
- If the call was transferred to the agent before the time range of the report the talking time of the agent is not included in the total talking time, even if the call was in progress during the time range.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Resource Group List	Displays information for agents who belong to the specified resource groups.
Agent List	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.

Grouping criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Agent Call Summary Report

The Agent Call Summary Report presents the summary of each call that is dialed and received by the agent.

- For inbound Unified CCX calls—Presents the average time that the agent spent in Talking and Work states, and the time that the agent put the calls on hold.
- For non-Unified CCX calls—Presents the average and maximum talk time for the agent.
- For outbound calls—Presents the average and maximum call time for the agent.

This report also presents the number of calls that are transferred in to and transferred out by the agent, and the number of conference calls in which the agent participated.

Charts

The following charts are available:

Chart name	Description
Average Talk, Hold, Work Time for Inbound ACD	Displays the average time that an agent spends in Talking and Work states, and the time that the agent put the calls on hold.
Avg, Max Call Time for Outbound on IPCC Calls	Displays the average and maximum time that an agent spends on dialed calls. The time includes time spent dialing, waiting for an answer, and talking.
Total Inbound, Outbound Calls by Agent	Displays the number of dialed and received calls for an agent.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent_ID	Login ID of the agent.
Extension IPCC	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Extension Non IPCC	Last active non-Unified CCX extension that Unified Communications Manager assigned to the agent. This field is blank if there are no calls to or from the non-Unified CCX extension.

Field	Description
Total Inbound	Total calls that the agent receives. Total Inbound = Inbound Automatic Call Distribution (ACD) calls + Inbound non-ACD calls.
Inbound ACD—Total	Unified CCX calls that the agent receives.
Inbound ACD—Avg Talk Time	Average time that the agent spent in Talking state for received Unified CCX calls.
Inbound ACD—Avg Hold Time	Average time that the agent put the received Unified CCX calls on hold.
Inbound ACD—Avg Work Time	Average time that the agent spent in Work state for received Unified CCX calls.
Inbound Non-ACD On IPCC—Total	Non-Unified CCX calls that are received by the agent on a Unified CCX extension, including calls made by other agents and by outside parties.
Inbound Non-ACD On IPCC—Avg Talk Time	Average time that the agent spent in Talking state for non-Unified CCX calls received on a Unified CCX extension.
Inbound Non-ACD On IPCC—Max Talk Time	Maximum time that the agent spent in Talking state on a non-Unified CCX call received on a Unified CCX extension.
Inbound Non-ACD On Non-IPCC—Total	Non-Unified CCX calls received by the agent on a non-Unified CCX extension including calls made by other agents and by outside parties.
Inbound Non-ACD On Non-IPCC—Avg Talk Time	Average time that the agent spent in Talking state for non-Unified CCX calls received on a non-Unified CCX extension.
Inbound Non-ACD On Non-IPCC—Max Talk Time	Maximum time that the agent spent in Talking state on a received non-Unified CCX call received on a non-Unified CCX extension.
Outbound On IPCC—Total	Calls that the agent dials on a Unified CCX extension including both connected and attempted calls.
Outbound On IPCC—Avg Call Time	Average call time of the outbound calls on a Unified CCX extension.
Outbound On IPCC—Max Call Time	Maximum time that the agent spent in Talking state on an outbound call on a Unified CCX extension.
Outbound On Non-IPCC—Total	Calls that the agent dials on a non-Unified CCX extension including both connected and attempted calls.
Outbound On Non-IPCC—Avg Call Time	The average call time and the longest call time spent for the outbound calls on a non-Unified CCX extension.
Outbound On Non-IPCC—Max Call Time	Maximum time that the agent spent in Talking state on an outbound call on a non-Unified CCX extension.
ACD—Transfer In	Unified CCX calls that are transferred to the agent.

Field	Description
ACD—Transfer Out	Unified CCX calls that the agent transfers out.
ACD—Conference	Inbound Unified CCX conference calls in which the agent participates.



Note Call time starts when an agent goes off-hook for a call and ends when the call terminates.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Resource Group Names	Displays information for agents who belong to the specified resource groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.

Grouping criteria

None

Agent Detail Report

The Agent Detail Report presents information about Automatic Call Distribution (ACD) and non-ACD calls that the agents handle, and ACD and non-ACD calls that the agents dial.

Charts

The following chart is available:

Chart name	Description
Agent Detail Report	Displays the average time that an agent spends in Talking and Work states, and the time the agent put the calls on hold.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.

Field	Description
Extension	Unified CCX extension that Unified Communications Manager assigned to the agent.
Call Start Time	Date and time the call leg rings at the agent extension.
Call End Time	Date and time the call leg is disconnected or transferred.
Duration	Elapsed time between the call start time and the call end time. Summary info —Sum of values in this column.
Called Number	Telephone number that the caller dials.
Call ANI	Originator's telephone number. (ANI = Automatic Number Identification)
Call Routed CSQ	Contact Service Queue (CSQ) that handled the call. A call is considered handled if the caller is connected to an agent while queued for this CSQ.
Other CSQs	If the call is queued to multiple CSQs, name of one of the CSQs to which the call was queued is displayed. Displays "... " to indicate there are more CSQs to which the call was queued.
Call Skills	Skills that are associated with the CSQ that handled the call.
Talk Time	<ul style="list-style-type: none"> Unified CCX calls—Elapsed time between the time an agent connects to the call and the time the call is disconnected or transferred, not including the hold time. Non-Unified CCX calls—The elapsed time from when an agent goes off-hook until the call is disconnected or transferred. Summary info —Sum of values in this column.
Hold Time	Total time the agent put the calls on hold. Not applicable for non-Unified CCX calls. Summary info —Sum of values in this column.
Work Time	Time that the agent spent in Work state after the call. Not applicable for non-Unified CCX calls. Summary info —Sum of values in this column.
Call Type	Type of call.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Resource Group Name	Displays information for agents who belong to the specified resource groups.

Filter parameter	Result
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.
Call Type	Displays information for the specified call types.

Grouping Criteria

None

Agent Login Logout Activity Report

The Agent Login Logout Activity Report presents each agent's login and logout date and time for each login session during the report period, and the reason code that an agent entered when logging out.

Charts

The following chart is available:

Chart name	Description
Agent Login Logout Activity Report	Displays total logged-in time for each agent.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Agent Login Details—LBLT	Less-than sign (<) indicates that the agent logged in before the report period. (LBLT = Logged In Before Login Time)
Agent Login Details—Login Time	Date and time that the agent logged in.
Agent Logout Details—LOALT	Greater-than sign (>) indicates that the agent is still logged in when the report is generated. (LOALT = Logged Out After Logout Time)
Agent Logout Details—Logout Time	Date and time that the agent logged out.

Field	Description
Logout Reason	The reason selected by the agent moving to Logout state. This displays the reason code if the reason is unavailable. A blank space indicates that: <ul style="list-style-type: none"> No logout reason code is configured. Agent was unable to enter a reason.
Logged-In Duration	Elapsed time between the login time and the logout time. Summary info —Sum of values in this column.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Agent Not Ready Reason Code Summary Report

The Agent Not Ready Reason Code Summary Report presents the time that each agent spent logged in. It shows the time that the agents spent in Not Ready state by Reason Code (RC). By default, up to eight predefined reason codes are displayed and additional information is categorized as Other Reason Codes.

This report can show information for each 30 or 60 minute interval within the report period.

The report displays reason code filters as the column headers for those selected reason codes in the grid view. If the reason code filters are not selected, then the column headers first display the system defined reasons codes. The statistics for the reason codes that are selected in the filter are accurately calculated and displayed in the report. This behavior is however different in the chart view where the report headers do not get dynamically modified based on the report filter parameter.

To resolve this issue, create a custom grid view on the Agent Not Ready Reason Code Summary Report, renaming the default column headers to be descriptive of the user-defined reason codes. Then, select the matching reason codes from the Reason Code Value List that is populated in the filter. User-defined reason codes must be in the AgentStateDetail table to appear in the Reason Code Value List.

Note that there is no mapping between the header and the reason code that is selected in the filter. As a result, reason codes must be selected in the filter in the same order as the headers are defined in the view. Also, all

reason codes must be selected in the filter if they have headers in the report, or the time in the selected reason codes will appear in the incorrect column as they are filled left to right in the grid.



Note After logging out of Finesse, ensure to logout of Jabber as well. If you don't logout of Jabber and restart Finesse, agent reports may have issues.

Charts

The following chart is available:

Chart name	Description
Agent Not Ready Reason Code Summary Report	Displays the time agent spent in Not Ready state by reason code. Up to eight reason codes are displayed, and additional reason codes are listed under Other Reason Codes .

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
Total Logged-in	Total time that the agent is logged in to Unified CCX. Summary info —Sum of values in this column.
Total Not Ready	Total time that an agent spent in Not Ready state. Summary info —Sum of values in this column.
Time in RC <i>n1</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n1</i> . Summary info —Sum of values in this column.
Time in RC <i>n2</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n2</i> . Summary info —Sum of values in this column.
Time in RC <i>n3</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n3</i> . Summary info —Sum of values in this column.

Field	Description
Time in RC <i>n4</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n4</i> . Summary info —Sum of values in this column.
Time in RC <i>n5</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n5</i> . Summary info —Sum of values in this column.
Time in RC <i>n6</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n6</i> . Summary info —Sum of values in this column.
Time in RC <i>n7</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n7</i> . Summary info —Sum of values in this column.
Time in RC <i>n8</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n8</i> . Summary info —Sum of values in this column.
Time in RC <i>n9</i>	Time that an agent spent on the secondary line for the system-defined RC <i>n9</i> . Summary info —Sum of values in this column.
Time in RC <i>n10</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n10</i> . Summary info —Sum of values in this column.
Time in RC <i>n11</i>	Time that an agent spent in Not Ready state for the system-defined RC <i>n11</i> . Summary info —Sum of values in this column.
Time in Other RCs	Time that an agent spent in Not Ready state for reasons that are not shown in the previous eight columns. Summary info —Sum of values in this column.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>
Resource Group Names	Displays information for agents who belong to the specified resource groups.
Agent List	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.
Reason Codes	Displays information for up to 11 selected reason codes. Additional reason codes are listed under Time in Other RCs.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Agent State Detail Report

The Agent State Detail Report presents information that is related to agent state changes.

Charts

The following chart is available:

Chart name	Description
Agent State Detail Report	Displays time spent by the agent in agent states.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
State Transition Time	Date and time that the agent moved to a state.
Agent State	State of the agent—Logged-In, Logout, Not Ready, Ready, Reserved, Talk, or Work.
Reason	The reason selected by the agent when moving to Logout state or Not Ready state. This displays the reason code if the reason is unavailable. A blank indicates that: <ul style="list-style-type: none"> • No logout reason code is configured. or • Agent was unable to enter a reason code. or • Reason codes for all other states except Not Ready and Logout.
Duration	Time that the agent spent in a state.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Resource Group Names	Displays information for agents who belong to the specified resource groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.

Grouping Criteria

None

Agent State Summary by Agent Report

The Agent State Summary by Agent Report presents the length and percentage of time that the agent spent in all the states.

Charts

The following chart is available:

Chart name	Description
Time Spent in Agent State by Agent	Displays the time spent by the agent in each agent state.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
Total Logged In Time	Total time that the agent is logged in to Unified CCX. Summary info —Sum of values in this column.
Not Ready Time—Not Ready	Time that the agent spent in Not Ready state. Summary info —Sum of values in this column.
Not Ready Time—% Not Ready	Percentage of time that the agent spent in Not Ready state. Summary info —Overall percentage.
Ready Time—Ready	Time that the agent spent in Ready state. Summary info —Sum of values in this column.
Ready Time—% Ready	Percentage of time that the agent spent in Ready state. Summary info —Overall percentage.
Reserved Time—Reserved	Time that the agent spent in Reserved state. Summary info —Sum of values in this column.

Field	Description
Reserved Time—% Reserved	Percentage of time that the agent spent in Reserved state. Summary info —Overall percentage.
Talk Time—Talking	Time that the agent spent in Talking state. Summary info —Sum of values in this column.
Talk Time—% Talking	Percentage of time that the agent spent in Talking state. Summary info —Overall percentage.
Work Time—Work	Time that the agent spent in Work state. Summary info —Sum of values in this column.
Work Time—% Work	Percentage of time that the agent spent in Work state. Summary info —Overall percentage.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>

Filter parameter	Result
Resource Group Names	<p>Displays information for agents who belong to the specified resource groups.</p> <ul style="list-style-type: none"> • For logged-in and idle time, displays information of the agent, only for the time when the agent belonged to one of the selected resource groups. • For all other report parameters, displays information of the agent without considering the time when the agent belonged to one of the selected resource groups.
Agent Names	Displays information for the specified agents.
Skill Names	<p>Displays information for agents who possess the specified skills.</p> <ul style="list-style-type: none"> • For logged-in and idle time, this report displays information of the agent, only for the time when the agent was associated with one of the selected skills. • For all other report parameters, this report displays information of the agent without considering the time when the agent was associated with one of the selected skills.
Team Names	<p>Displays information for agents who belong to the specified teams.</p> <ul style="list-style-type: none"> • For logged-in and idle time, this report displays information of the agent, only for the time when the agent belonged to one of the selected teams. • For all other report parameters, this report displays information of the agent without considering the time when the agent belonged to one of the selected teams.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Agent State Summary by Interval Report

The Agent State Summary by Interval Report presents the duration and percentage of time that the agent spent in the agent states.

Charts

The following chart is available:

Chart name	Description
Time Spent in Agent State by Interval	Displays the time spent by agents in agent states.

Fields

The report includes a table that displays the following information:

Field	Description
Interval Start Time	Start date and time of each 30 or 60 minute interval or the report range's begin date and time.
Interval End Time	End date and time of each 30 or 60 minute interval or the report range's end date and time.
Agent Name	First name and last name of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Total Logged In Time	Total time that the agent is logged in to the Unified CCX. Summary info —Sum of values in this column.
Not Ready Time—Time	Time that the agent spent in Not Ready state. Summary info —Sum of values in this column.
Not Ready Time—%	Percentage of time that the agent spent in Not Ready state. Summary info —Overall percentage.
Ready Time—Time	Time that the agent spent in Ready state. Summary info —Sum of values in this column.
Ready Time—%	Percentage of time that the agent spent in Ready state. Summary info —Overall percentage.
Reserved Time—Time	Time that the agent spent in Reserved state. Summary info —Sum of values in this column.
Reserved Time—%	Percentage of time that the agent spent in Reserved state. Summary info —Overall percentage.
Talk Time—Time	Time that the agent spent in Talking state. Summary info —Sum of values in this column.
Talk Time—%	Percentage of time that the agent spent in Talking state. Summary info —Overall percentage.

Field	Description
Work Time—Time	Time that the agent spent in Work state. Summary info —Sum of values in this column.
Work Time—%	Percentage of time that the agent spent in Work state. Summary info —Overall percentage.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>
Resource Group Names	Displays information for agents who belong to the specified resource groups. The report displays information only for the time when the agent was part of one of the selected resource groups.
Agent Names	Displays information for the selected agents.
Skill Names	Displays information for agents who possess the selected skills. The report displays information only for the time when the agent possessed one of the selected skills.
Team Names	Displays information for agents who belong to the selected teams. The report displays information only for the time when the agent was part of one of the selected teams.

Grouping Criteria

None

Agent Summary Report

The Agent Summary Report contains a summary of agent activities, including call and agent state activities.



Note The average talk time, maximum talk time, hold time, and others are only for inbound Automatic Call Distribution (ACD) calls that are received by the agent. These values are incremented for every inbound call, but for outbound calls the field values are not incremented. The values are zero.

Charts

The following charts are available:

Chart name	Description
Average Talk Time, Hold Time & Work Time by Agent	Displays the average time that an agent spends in Talking and Work states, and the time the agent puts the calls on hold.
Call Handle Ratio by Agent	Displays the number of calls handled by an agent divided by the number of calls routed to that agent.
Total Calls Handled by Agent	Displays the number of calls handled by an agent.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Average Logged in Time	Average logged-in time = Logged-in time of the agent / Number of logged-in sessions of the agent
Calls Handled	<p>Calls that are connected to the agent.</p> <ul style="list-style-type: none"> • If the agent establishes a conference with another agent, this value increases by one for the conferenced agent. • If the agent transfers a call and the call is transferred back to the agent, this value increases by two. <p>Summary info—Sum of values in this column.</p>

Field	Description
Calls Presented	<p>Calls that are sent to the agent, regardless of whether the agent picks up the call.</p> <p>If a call is connected to an agent, transferred to another agent, and then transferred back to the original agent, the value for the original agent increases by two (once for each time the call was presented).</p> <p>Summary info—Sum of values in this column.</p>
Handle Ratio	<p>Handle ratio = Calls that the agent handled / Calls that are routed to the agent</p> <p>Summary info—Overall percentage.</p>
Handle Time—Avg	<p>Average handle time for all calls that the agent handled.</p> <p>Handle time = Talk time + Hold time + Work time</p>
Handle Time—Max	Longest handle time of any call that the agent handled.
Talk Time—Avg	<p>Average talk time for calls that the agent handled.</p> <p>Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.</p>
Talk Time—Max	Longest talk time of any call that the agent handled.
Hold Time—Avg	Average hold time for calls that the agent handled.
Hold Time—Max	Longest hold time of any call that the agent handled.
Work Time—Avg	Average time that an agent spent in Work state after calls.
Work Time—Max	Longest time that an agent spent in Work state after a call.
Idle Time—Avg	Average time that an agent spent in Not Ready state.
Idle Time—Max	Longest time that an agent spent in Not Ready state.

Filter Criteria

You can filter using any one of the following parameters:



Note For Top N and Bottom N parameters, specify the number (N) of agents. For example, if you specify 3 for the Top N Calls Handled/Presented Ratio parameter, the report shows the three agents with the largest ratios. If there are more than *n* agents, where *n* is the number that you specify, have identical largest or smallest values, the report shows the first *n* agents in alphabetical order.

Filter parameter	Result
Resource Group Names	<p>Displays information for agents who belong to the specified resource groups.</p> <ul style="list-style-type: none"> • For logged-in and idle time, displays information of the agent, only for the time when the agent belonged to one of the selected resource groups. • For all other report parameters, displays information of the agent without including the time when the agent belonged to one of the selected resource groups.
Agent Names	Displays information for the specified agents.
Skill Names	<p>Displays information for agents who possess the specified skills.</p> <ul style="list-style-type: none"> • For logged-in and idle time, displays information of the agent, only for the time when the agent was associated with one of the selected skills. • For all other report parameters, displays information of the agent without including the time when the agent was associated with one of the selected skills.
Team Names	<p>Displays information for agents who belong to the specified teams.</p> <ul style="list-style-type: none"> • For logged-in and idle time, this report displays information of the agent, only for the time when the agent belonged to one of the selected teams. • For all other report parameters, this report displays information of the agent without including the time when the agent belonged to one of the selected teams.
Top N Calls Handled / Presented Ratio	Displays information for agents with the largest ratios of calls handled to calls routed.
Bottom N Calls Handled / Presented Ratio	Displays information for agents with the smallest ratios of calls handled to calls routed.
Top N Avg Hold Time	Displays information for agents with the longest average hold times.
Bottom N Avg Hold Time	Displays information for agents with the shortest average hold times.
Top N Avg Talk Time	Displays information for agents with the longest average talk times.
Bottom N Avg Talk Time	Displays information for agents with the shortest average talk times.
Top N Avg Work Time	Displays information for agents with the longest average work times.
Bottom N Avg Work Time	Displays information for agents with the shortest average work times.
Top N Avg Handle Time	Displays information for agents with the longest average handle times.
Bottom N Avg Handle Time	Displays information for agents with the shortest average handle times.

Grouping Criteria

None

Agent Wrap-up Data Summary Report

The Agent Wrap Up Data Summary Report presents information about wrap-up reasons selected by the agents for voice calls.

Fields

The report includes a table that displays the following information:

Field	Description
Wrap-Up Reason	Name of the wrap-up reason selected by the agent.
Agent Name	Name of the agent who has selected the Wrap-Up Reason.
Agent ID	Login ID of the agent.
Total	Total number of calls for which wrap-up reasons are applied.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Wrap Up Data List	Displays statistics of the specified wrap-up data.
Agent Name	Displays information for the specified agents.

Grouping Criteria

Filter parameter	Result
Wrap-Up Reason	Groups information by Wrap-Up Reason.

Agent Wrap-up Data Detail Report

The details that an agent enters when the agent enters Work state after attending an Automatic Call Distribution (ACD) call is displayed in the Agent Wrap-up Data Detail Report. With the wrap-up data feature, the agent can enter the Work state to update data that is associated with the call. This report provides information about incoming ACD calls and preview outbound calls.

Charts

None.



Note Starting from Release 12.0(1), the **Total Calls by Agent and Wrap-up Data** chart is no longer available in the **Agent Wrap-up Data Detail Report**.

Fields

The report includes a table that shows the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Extension	Unified CCX extension that Unified Communications Manager assigned to the agent.
NodeID-SessionID-Seq Number	Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster. Session ID is the unique session ID that the system assigns to a call. Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call. Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.
Call Start Time	Date and time at which the call was connected to the agent.
Call End Time	Date and time at which the call was disconnected
Call ANI	Telephone number of the calling party. (ANI = Automatic Number Identification)
Called Number	Telephone number that is dialed by the calling party.
Call Routed CSQ	Contact Service Queue (CSQ) to which the call is routed and handled. A call can be queued to multiple CSQs.
Skills	Skills that are associated with the CSQ that handled the call.
Talk Time	Time that the agent spent in Talking state. Summary info —Sum of values in this column.
Hold Time	Time that the agent put the calls on hold. Summary info —Sum of values in this column.
Work Time	Time that the agent spent in Work state after the call. Summary info —Sum of values in this column.

Field	Description
Wrap-Up	Agents can select up to five wrap-up reasons for voice calls. Based on the selection, Reason 1 to Reason 5 columns in the Wrap-Up column displays the reasons.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Resource Group Names	Displays information for agents who belong to the specified resource groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Call Custom Variables Report

The Call Custom Variables Report shows information about custom variables set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call.

Charts

None

Fields

The report includes a table that shows the following information:

Field	Description
Node ID – Session ID – Sequence No	<p>Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster.</p> <p>Session ID is the unique session ID that the system assigns to a call.</p> <p>Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call.</p> <p>Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.</p>

Field	Description
Start Time	Date and time the call starts.
End Time	Date and time the call was disconnected, transferred, or redirected.
Contact Disposition	Disposition of the call.
Agent Name	First name and last name of the agent.
Application Name	Unified CCX or Unified IP IVR application that is associated with the route point.
Custom Variable 1	Contents of the variable <code>_ccdrVar1</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 2	Contents of the variable <code>_ccdrVar2</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 3	Contents of the variable <code>_ccdrVar3</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 4	Contents of the variable <code>_ccdrVar4</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 5	Contents of the variable <code>_ccdrVar5</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 6	Contents of the variable <code>_ccdrVar6</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 7	Contents of the variable <code>_ccdrVar7</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 8	Contents of the variable <code>_ccdrVar8</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.

Field	Description
Custom Variable 9	Contents of the variable <code>_ccdrVar9</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.
Custom Variable 10	Contents of the variable <code>_ccdrVar10</code> . This value is displayed if the variable is set by the Set Enterprise Call Info step in the workflow that the Unified CCX or Unified IP IVR application associated with this call or this leg invoked.

Filter Criteria



Note For the custom variable parameters, enter a whole string or a substring to search, and separate multiple strings with commas.

You can filter using any one of the following parameters:

Filter Parameter	Result
Original Called Number	Displays information for the specified original called numbers.
Called Number	Displays information for the specified called numbers.
Calling Number	Displays information for the specified calling numbers. The calling number is the same as the Originator DN.
Application Name	Displays information for the specified applications.
Contact Type	Displays information for the specified contact types.
Originator Type	Displays information for the specified originator types.
Destination Type	Displays information for the specified destination types.
Duration Greater Than Equal to T seconds	Displays calls with duration greater than or equal to the number of seconds specified by T.
Duration Less Than Equal to T seconds	Displays calls with duration less than or equal to the number of seconds specified by T.
Custom Variable 1	Displays calls for which Custom Variable 1 contains the string or any of the substrings.
Custom Variable 2	Displays calls for which Custom Variable 2 contains the string or any of the substrings.
Custom Variable 3	Displays calls for which Custom Variable 3 contains the string or any of the substrings.

Filter Parameter	Result
Custom Variable 4	Displays calls for which Custom Variable 4 contains the string or any of the substrings.
Custom Variable 5	Displays calls for which Custom Variable 5 contains the string or any of the substrings.
Custom Variable 6	Displays calls for which Custom Variable 6 contains the string or any of the substrings.
Custom Variable 7	Displays calls for which Custom Variable 7 contains the string or any of the substrings.
Custom Variable 8	Displays calls for which Custom Variable 8 contains the string or any of the substrings.
Custom Variable 9	Displays calls for which Custom Variable 9 contains the string or any of the substrings.
Custom Variable 10	Displays calls for which Custom Variable 10 contains the string or any of the substrings.
Any Custom Variable	Displays calls with any of the 10 custom variables containing the string or any of the substrings.

Grouping Criteria

None

Called Number Summary Activity Report

The Called Number Summary Activity Report presents information about all the numbers that are dialed by an inside or outside caller. This report includes information for calls to Unified CCX and Unified IP IVR applications, and calls to agents.

Charts

The following charts are available:

Chart name	Description
Average Call Duration by Called Number	Displays the average call time for a dialed number.
Total Calls by Called Number	Displays the number of calls to each number, including calls to applications and agents.

Fields

The report includes a table that displays the following information:

Field	Description
Called Number	Route point number associated with the application or extension of the destination agent.
Call Type	Call to an application or call to an agent.
Total Calls	Number of calls to each number. Summary info —Sum of values in this column.
Avg Calls (per day)	Average number of calls per day.
Avg Call Duration	Average duration of calls to each telephone number.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Time-Zone Offset	Displays the list of time zones. Select the one matching your timezone. If multiple values are selected, the first one takes effect.

Grouping criteria

None

Common Skill CSQ Activity Report

The Common Skill CSQ Activity Report presents summary information about calls presented, handled, and abandoned for each group of Contact Service Queues (CSQ). CSQ groups consist of CSQs that are configured with the same skills and with different competence levels. (Such groups consist of CSQs that are configured with the same skills and with different competence levels.)

This report is designed for customers who have logical CSQs configured. A logical CSQ is a group of CSQs configured with the same skill, but with different competence levels. When a call comes in to a script that uses the “logical CSQ” approach, it first goes to the CSQ with the lowest skill level. If the wait time exceeds the predefined threshold, then the call goes to the next higher skill level. The same incoming call can flow within the same group of CSQs.

This report shows information for each 30 or 60-minute interval within the report period. It is particularly useful for logical CSQs. If you do not have logical CSQs configured, you can use other CSQ reports (Contact Service Queue Activity Report and Contact Service Queue Activity Report by Interval/CSQ).

Charts

The following chart is available:

Chart name	Description
Common Skill CSQ Activity Report	Displays number of handled calls and abandoned calls for a day.

Fields

The report includes a table that displays the following information:

Field	Description
Skills	Skills that are associated with the CSQ to which the call is routed.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
CSQ Name	Name of the CSQ that routed the call to the agent.
Calls Presented—Total	Calls offered to each individual CSQ within the group, regardless of whether the agent answered the call. Summary info —Sum of values in this column.
Calls Presented—Avg Queue Time	Average queue time for the calls routed to the CSQ.
Calls Presented—Max Queue Time	Longest queue of all calls routed to the CSQ (abandoned, handled, aborted, or rejected).
Calls Handled—Total	Number of calls that are handled by the CSQ. A call is handled if a caller is connected to an agent while queued for this CSQ. Summary info —Sum of values in this column.
Calls Handled—Avg Handle Time	Average handle time for all calls that the CSQ handled. Handle time = Talk time+ Hold time + Work time Summary info —Overall average handle time = Total handle time / Total calls handled
Calls Handled—Max Handle Time	Longest handle time for any call that the CSQ handled. Summary info —Maximum value in this column.
Calls Abandoned—Total	Number of calls that are routed to the CSQ but are not answered by an agent because the caller hung up or is disconnected. Summary info —Sum of values in this column.
Calls Abandoned—Avg Queue Time	Average time that the calls spent in the queue before being abandoned.

Field	Description
Calls Abandoned—Max Queue Time	Maximum time a call spent in the queue before being abandoned.
Service Level—Percentage SL Met	(Calls handled within service level / Calls presented) * 100% Summary info —Overall percentage.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Skills	Sorts data by skills.

Contact Service Queue Activity by CSQ Report

The Contact Service Queue Activity by CSQ Report presents information about service levels, and the number and percentage of calls presented, handled, abandoned, and dequeued. It presents information for each 30 or 60 minute interval within the report period.



Note If you modify the minimum competence level of a CSQ skill while agents are actively receiving calls, the report will generate two separate entries for that CSQ: one using the original CSQ ID and another using the updated CSQ ID.

Charts

The following charts are available:

Chart name	Description
Calls Handled, Abandoned, and Dequeued by CSQ	Displays the number of calls handled, abandoned, and dequeued for a CSQ.
Total Calls That Met Service Level by CSQ	Displays the number of calls handled and calls handled within the time entered in the Service Level field for a CSQ. The Service Level field is set by the administrator.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Call Skills	Skills that are associated with the CSQ to which the call is routed.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
Service Level (sec)	Value that was entered in the Service Level field when the CSQ was set up in Unified CCX Administration. If the service level changes during the report period, the report shows the old and new service level values.
Calls Handled < Service Level	Calls that are handled within the time shown in the Service Level field. A call is handled when an agent picks up the call. Summary info —Sum of values in this column.
Calls Abandoned < Service Level	Calls that are abandoned within the time shown in the Service Level field. A call is abandoned if the call disconnects before connecting to an agent. Summary info —Sum of values in this column.

Field	Description
Percentage of Service Level Met—Only Handled	<p>Percentage of handled calls that were handled within the time shown in the Service Level field. This value is calculated as follows:</p> $\text{(Number of calls handled within service level / Number of calls handled)} \times 100\%$ <p>Summary info—Overall percentage of handled calls that met the handled service level.</p>
Percentage of Service Level Met—With No Abandoned Calls	<p>Percentage of presented calls, not counting abandoned calls, handled within the time shown in the Service Level field. This value is calculated as follows:</p> $\text{(Number of calls handled within the service level / (Number of calls presented - Number of calls abandoned within the service level))} \times 100\%$ <p>Summary info—Overall percentage of presented calls that met the handle service level (excluding the calls that met the abandoned service level).</p>
Percentage of Service Level Met—With Abandoned Calls Counted Positively	<p>Percentage of presented calls that are handled or abandoned within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field are considered to have met that service level. This value is calculated as follows:</p> $\text{([Number of calls handled within the service level + Number of calls abandoned within the service level] / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage of presented calls that met either the handled or the abandoned service level.</p>
Percentage of Service Level Met—With Abandoned Calls Counted Negatively	<p>Percentage of presented calls that are handled within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field have not met that service level. This value is calculated as follows:</p> $\text{(Number of calls handled within the service level / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage of presented calls that met the handled service level.</p>
Calls Presented	<p>Calls routed to the CSQ regardless of whether an agent picked up the call.</p> <p>Summary info—Sum of values in this column.</p>
Calls Handled—Handled	<p>Number of calls that are handled by the CSQ.</p> <p>Summary info—Sum of values in this column.</p>
Calls Handled—%	<p>Percentage of calls that were handled by the CSQ. The percentage is calculated as follows:</p> $\text{(Number of calls handled) / (Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage.</p>

Field	Description
Calls Abandoned—Abandoned	Number of calls that were routed to the CSQ and were abandoned. Summary info —Sum of values in this column.
Calls Abandoned—%	Percentage of calls that were routed to the CSQ and were abandoned. The percentage is calculated as follows: (Number of calls abandoned / Number of calls presented) x 100% Summary info —Overall percentage.
Calls Dequeued—Dequeued	Number of calls that were dequeued. Summary info —Sum of values in this column.
Calls Dequeued—%	Percentage of calls that were dequeued. The percentage is calculated as follows: (Number of calls dequeued / Number of calls presented) x 100% Summary info —Overall percentage.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

None

Contact Service Queue Activity by Window Duration

The Contact Service Queue Activity by Window Duration presents information about service levels, and the number and percentage of calls that are presented, handled, abandoned, and dequeued. It presents information for 30 or 60 minute interval within the report period. This report can be filtered for specific window duration for a single day or multiple days. Unlike other reports, the time part of interval filter will be considered as window duration in this report.

Charts

The following charts are available:

Chart name	Description
Calls Handled, Abandoned and Presented by Interval	Displays the number of calls that are handled, abandoned, and presented for a Contact Service Queue (CSQ).
Total Calls that met Service Level	Displays the number of handled calls that are handled within the time that is entered in the Service Level field for a CSQ. Service Level is set by the administrator.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ	CSQ to which the call is queued.
Date	Datewise grouping for corresponding intervals.
Interval Start Time	Start date and time of 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of 30 or 60 minute interval or the end date and time for the report range.
Calls Presented	Calls that are routed to the CSQ, regardless of whether an agent picked up the call. Summary info -Sum of values in this field.
Calls Handled-Handled	Number of calls that were handled by the CSQ. Summary info -Sum of values in this field.
Calls Handled < Service Level	Calls that are handled within the time shown in the Service Level field. A call is handled when an agent picks up the call. Summary info -Sum of values in this column.

Field	Description
Service Level (sec)	Value that was entered in the Service Level field when the CSQ was set up in Unified CCX Administration. If the service level changes during the report period, the report shows the old and new service level values.
Calls Abandoned-Abandoned	Number of calls that were routed to the CSQ and were abandoned. Summary info -Sum of values in this field.
Calls Abandoned < Service Level	Calls that are abandoned within the time shown in the Service Level field. A call is abandoned if the call disconnects before connecting to an agent. Summary info -Sum of values in this column.
Abandoned Rate-%	Percentage of calls that were routed to the CSQ and were abandoned. The percentage is calculated as follows: $(\text{Number of calls abandoned} / \text{Number of calls presented}) \times 100\%$ Summary info -Overall percentage.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range -Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes -Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes -Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either "Thirty (30) minutes" or "Sixty (60) minutes" option, the report may take more time to display results compared to the "Entire report range" option. To reduce processing time, generate the report for a shorter query interval.</p>
Time Zone	Displays list of all time zones. User has to select their respective time zone while generating this report.
CSQ List	Displays information for the specified CSQs.

Grouping criteria

Data is grouped by the following field:

Field	Result
CSQ Name	Sorts data by CSQ name.
Date	Sorts data by Interval Start Time.

Contact Service Queue Activity Report

The Contact Service Queue Activity Report presents a summary of calls that are presented, handled, abandoned, and dequeued from each Contact Service Queue (CSQ). It also shows the calls that are handled by workflows in other CSQs, and average and maximum time information for calls handled, abandoned, and dequeued.

Charts

The following charts are available:

Chart name	Description
Average Handle Time by CSQ	Displays the average handle time for handled calls for a CSQ.
Average Speed of Answer by CSQ	Displays the average speed of answer for handled calls for a CSQ.
Average Time to Abandon by CSQ	Displays the average time calls spent in the queue before being abandoned from a CSQ.
Average Time to Dequeue by CSQ	Displays the average time calls spent in the queue before being dequeued from a CSQ.
Max Queue Time For Call Presented by CSQ	Longest queue time the calls spent in queue for a CSQ.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Skills	Skills that are associated with the CSQ to which the call is routed.
Calls Presented	Number of calls routed to the CSQ, regardless of whether an agent picked up the call. Summary info —Sum of values in this column.
Avg Queue Time	Average queue time for all calls routed to the CSQ.

Field	Description
Max Queue Time	Longest queue time of any one call that was routed to the CSQ. Summary info —Maximum value in this column.
Calls Handled	Number of calls that are handled by this CSQ. A call is handled if a caller is connected to an agent while queued for this CSQ. Summary info —Sum of values in this column.
Avg Speed of Answer	Average answer speed = Total queue time / Calls handled
Avg Handle Time	Average handle time for all calls that the CSQ handled.
Max Handle Time	Longest handle time of any call that the CSQ handled. Handle time = Talk time + Hold time + Work time Summary info —Maximum value in this column.
Calls Abandoned	Calls that are routed to the CSQ that were not answered by an agent because the caller hung up or was disconnected. Summary info —Sum of values in this column.
Avg Time to Abandon	Average time the calls spent in the queue before being abandoned.
Max Time to Abandon	Longest time any one call spent in the queue before being abandoned. Summary info —Maximum value in this column.
Avg Abandon Per Day	Average abandoned calls in a day = Number of calls abandoned / Number of days
Max Abandon Per Day	Largest number of calls abandoned on a single day. Summary info —Maximum value in this column.
Calls Dequeued	Number of calls that are queued for a CSQ and then dequeued by the Dequeue step in a workflow. Summary info —Sum of values in this column.
Avg Time to Dequeue	Average time the calls spent in the queue before being dequeued.
Max Time to Dequeue	Longest time any one call spent in the queue before being dequeued. Summary info —Maximum value in this column.
Calls Handled by Other	Total of the following calls: <ul style="list-style-type: none"> • Calls that are queued for the CSQ, then dequeued by the Dequeue step in a workflow, then marked as handled by the Set Contact Info step in the workflow. • Calls that are queued for more than one CSQ and then handled by another CSQ. Summary info —Sum of values in this column.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.
CSQ Type	Includes these options: <ul style="list-style-type: none"> • Resource Group—Displays information for the CSQs that are configured with the Resource Pool Selection Model set to Resource Group in Unified CCX Administration. • Skill Group—Displays information for the CSQs that are configured with the Resource Pool Selection Model set to Resource Skills in Unified CCX Administration.

Grouping Criteria

Data is grouped by the following fields:

Field	Result
CSQ Name	Sorts data by CSQ name.
CSQ ID	Sorts data by CSQ ID within the CSQ.

Contact Service Queue Activity Report by Interval

The Contact Service Queue Activity Report by Interval presents information about service levels, and the number and percentage of calls that are presented, handled, abandoned, and dequeued. It presents information for each 30 or 60 minute interval within the report period.

Charts

The following charts are available:

Chart name	Description
Calls Handled, Abandoned and Dequeued by Interval	Displays the number of calls that are handled, abandoned, and dequeued for a Contact Service Queue (CSQ).
Total Calls that met Service Level by Interval	Displays the number of handled calls handled and calls that are handled within the time that is entered in the Service Level field for a CSQ. Service Level is set by the administrator.

Fields

The report includes a table that displays the following information:

Field	Description
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
CSQ Name	CSQ to which the call is queued.
Skills	Skills that are associated with the CSQ to which the call is routed.
Service Level (sec)	Value that was entered in the Service Level field when the CSQ was set up in Unified CCX Administration. If the service level changes during the report period, the report shows the old and new service level values.
Calls Handled < Service Level	Calls that are handled within the time shown in the Service Level field. A call is handled when an agent picks up the call. Summary info —Sum of values in this column.
Calls Abandoned < Service Level	Calls that are abandoned within the time shown in the Service Level field. A call is abandoned if the call disconnects before connecting to an agent. Summary info —Sum of values in this column.
Percentage of Service Level Met—Only Handled	Percentage of handled calls that are handled within the time shown in the Service Level field. This value is calculated as follows: $\left(\frac{\text{Number of calls handled within service level}}{\text{Number of calls handled}}\right) \times 100\%$ Summary info —Overall percentage of handled calls that met the handled service level.
Percentage of Service Level Met—With No Abandoned Calls	Percentage of presented calls, not counting abandoned calls, that are handled within the time shown in the Service Level field. This value is calculated as follows: $\left(\frac{\text{Number of calls handled within service level}}{\text{Number of calls presented} - \text{Number of calls abandoned within service level}}\right) \times 100\%$ Summary info —Overall percentage of presented calls that met the handle service level (excluding the calls that met the abandoned service level).
Percentage of Service Level Met—With Abandoned Calls Counted Positively	Percentage of presented calls that are handled or abandoned within the time shown in the Service Level field. For this value, calls that are abandoned within the time shown in the Service Level field have met that service level. This value is calculated as follows: $\left(\frac{[\text{Number of calls handled within service level} + \text{Number of calls abandoned within service level}]}{\text{Number of calls presented}}\right) \times 100\%$ Summary info —Overall percentage of presented calls that met either the handled or the abandoned service level.

Field	Description
Percentage of Service Level Met—With Abandoned Calls Counted Negatively	<p>Percentage of presented calls that are handled within the time shown in the Service Level field. For this value, calls that are abandoned within the time shown in the Service Level field have not met that service level. This value is calculated as follows:</p> $\text{(Number of calls handled within service level / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage of presented calls that met the handled service level.</p>
Calls Presented	<p>Calls that are routed to the CSQ, regardless of whether an agent picked up the call.</p> <p>Summary info—Sum of values in this field.</p>
Calls Handled—Handled	<p>Number of calls that were handled by the CSQ.</p> <p>Summary info—Sum of values in this field.</p>
Calls Handled—%	<p>Percentage of calls that were handled by the CSQ. The percentage is calculated as follows:</p> $\text{(Number of calls handled / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage.</p>
Calls Abandoned—Abandoned	<p>Number of calls that were routed to the CSQ and were abandoned.</p> <p>Summary info—Sum of values in this field.</p>
Calls Abandoned—%	<p>Percentage of calls that were routed to the CSQ and were abandoned. The percentage is calculated as follows:</p> $\text{(Number of calls abandoned / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage.</p>
Calls Dequeued—Dequeued	<p>Number of calls that were dequeued.</p> <p>Summary info—Sum of values in this field.</p>
Calls Dequeued—%	<p>Percentage of calls that were dequeued. The percentage is calculated as follows:</p> $\text{(Number of calls dequeued / Number of calls presented)} \times 100\%$ <p>Summary info—Overall percentage.</p>

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range—Displays information based on the set start and end time, but it does not display information for specific intervals within the report period. • Thirty (30) minutes—Displays information for 30 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes—Displays information for 60 minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either “Thirty (30) minutes” or “Sixty (60) minutes” option, the report may take more time to display results compared to the “Entire report range” option. To reduce processing time, generate the report for a shorter query interval.</p>
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

None

Contact Service Queue Call Distribution Summary

The Contact Service Queue Call Distribution Summary report presents the number and percentage of calls that are handled and dequeued in four configurable time intervals.

Charts

The following charts are available:

Chart name	Description
Total Calls Abandoned by Time Interval & CSQ	Displays the total number of calls that are abandoned in each time interval by a Contact Service Queue (CSQ).
Total Calls Handled by Time Interval and CSQ	Displays the number of calls that are handled in each time interval by a CSQ.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Call Skills	Skills that are associated with the CSQ to which the call is routed.
Calls Handled	Number of calls handled by the CSQ. A call is handled when an agent picks up the call. Summary info —Sum of values in this column.
Total/Percentage Calls Handled With Queue Time—0–15 sec	Number of handled calls with a queue time that is less than or equal to 15 seconds.
Total/Percentage Calls Handled With Queue Time—% 0–15 sec	Percentage of handled calls with a queue time that is less than or equal to 15 seconds.
Total/Percentage Calls Handled With Queue Time—0–30 sec	Number of handled calls with a queue time that is less than or equal to 30 seconds.
Total/Percentage Calls Handled With Queue Time—% 0–30 sec	Percentage of handled calls with a queue time that is less than or equal to 30 seconds.
Total/Percentage Calls Handled With Queue Time—0–45 sec	Number of handled calls with a queue time that is less than or equal to 45 seconds.
Total/Percentage Calls Handled With Queue Time—% 0–45 sec	Percentage of handled calls with a queue time that is less than or equal to 45 seconds.
Total/Percentage Calls Handled With Queue Time—0–60 sec	Number of handled calls with a queue time that is less than or equal to 60 seconds.
Total/Percentage Calls Handled With Queue Time—% 0–60 sec	Percentage of handled calls with a queue time that is less than or equal to 60 seconds.
Calls Abandoned	Calls that are abandoned from the CSQ. A call is abandoned if it was routed to the CSQ, but was not answered by an agent because the caller hung up or was disconnected. Summary info —Sum of values in this column.
Total/Percentage Calls Abandoned With Queue Time—0–15 sec	Number of abandoned calls with a queue time that is less than or equal to 15 seconds.
Total/Percentage Calls Abandoned With Queue Time—% 0–15 sec	Percentage of abandoned calls with a queue time that is less than or equal to 15 seconds.
Total/Percentage Calls Abandoned With Queue Time—0–30 sec	Number of abandoned calls with a queue time that is less than or equal to 30 seconds.

Field	Description
Total/Percentage Calls Abandoned With Queue Time—% 0–30 sec	Percentage of abandoned calls with a queue time that is less than or equal to 30 seconds.
Total/Percentage Calls Abandoned With Queue Time—0–45 sec	Number of abandoned calls with a queue time that is less than or equal to 45 seconds.
Total/Percentage Calls Abandoned With Queue Time—% 0–45 sec	Percentage of abandoned calls with a queue time that is less than or equal to 45 seconds.
Total/Percentage Calls Abandoned With Queue Time—0–60 sec	Number of abandoned calls with a queue time that is less than or equal to 60 seconds.
Total/Percentage Calls Abandoned With Queue Time—% 0–60 sec	Percentage of abandoned calls with a queue time that is less than or equal to 60 seconds.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.
Time Interval In Seconds	Specify the number of seconds. The default value is 15 seconds.

Grouping Criteria

None

Contact Service Queue Priority Summary

The Contact Service Queue Priority Summary report presents the number of calls that are routed to each Contact Service Queue (CSQ). It also presents the number of calls and the average calls per day by priority that are routed to each CSQ.

Charts

The following chart is available:

Chart name	Description
Total Calls Presented by CSQ and Call Priority	Displays the number of calls that are routed for each call priority in a CSQ.

Fields

The report includes a table that displays the following information:



Note If the call priority is N/A, then the call was abandoned before a priority is assigned.

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Call Skills	Skills that are associated with the CSQ to which the call is routed.
Total Calls Presented	Calls that are presented to the CSQ, whether or not an agent picked up the call. Summary info —Sum of values in this column.
Priority 1 (Low)—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 1 (Low)—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 2—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 2—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 3—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 3—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 4—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 4—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 5—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 5—Avg	Average number of calls that are routed by this priority in a day to each CSQ.

Field	Description
Priority 6—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 6—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 7—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 7—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 8—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 8—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 9—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 9—Avg	Average number of calls that are routed by this priority in a day to each CSQ.
Priority 10 (High)—Total	Number of calls that are routed by this priority in a day to each CSQ. Summary info —Sum of values in this column.
Priority 10 (High)—Avg	Average number of calls that are routed by this priority in a day to each CSQ.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Contact Service Queue Name	Displays information for the specified CSQs.

Grouping Criteria

Data is grouped by the following field:

Field	Result
CSQ Name	Sorts data by CSQ name.
CSQ ID	Sorts data by CSQ ID within the CSQ.

Contact Service Queue Service Level Priority Summary Report

The Contact Service Queue Service Level Priority Summary Report presents information about the number and percentage of calls that are handled within the service level, and the number and percentage of calls that are handled within the service level for each call priority for a Contact Service Queue (CSQ).

Charts

The following charts are available:

Chart name	Description
Percentage of Calls That Met Service Level	Displays the percentage of calls that are handled within the time entered in the Service Level field for a CSQ.
Total Calls That Met Service Level	Displays the number of calls that are handled within the time entered in the Service Level field for a CSQ.

Fields

The report includes a table that displays the following information:



Note If the call priority is N/A, then the call was abandoned before a priority is assigned.

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Call Skills	Skills that are associated with the CSQ to which the call is routed.
Service Level (sec)	Value that was entered in the Service Level field when the CSQ was set up in Unified CCX Administration. If the service level changes during the report period, the report shows the old and new service level values.
Calls Presented	Calls that are routed to the CSQ, regardless of whether an agent picked up the call.
Total Service Level Met	Calls that are answered within the time set in the Service Level field in Unified CCX Administration.
% Service Level Met	$(\text{Calls handled within service level} / \text{Calls presented}) \times 100\%$
Number and % Of Calls Met SL For Each Call Priority—Priority 1 (Low)	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 1	Percentage of calls with this call priority that are answered within the service level time.

Field	Description
Number and % Of Calls Met SL For Each Call Priority—Priority 2	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 2	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 3	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 3	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 4	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 4	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 5	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 5	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 6	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 6	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 7	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 7	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 8	Number of calls with this call priority that are answered within the service level time.

Field	Description
Number and % Of Calls Met SL For Each Call Priority—% Priority 8	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 9	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 9	Percentage of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—Priority 10 (High)	Number of calls with this call priority that are answered within the service level time.
Number and % Of Calls Met SL For Each Call Priority—% Priority 10	Percentage of calls with this call priority that are answered within the service level time.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Contact Service Queue Name	Displays information for the specified CSQs.

Grouping Criteria

None

CSQ Agent Summary Report

The CSQ Agent Summary Report presents information about calls that are handled in each Contact Service Queue (CSQ) for each agent. An agent can handle calls for multiple CSQs. This report includes the average and total talk time for handled calls, average and total work time after calls, total ring time of calls routed, number of calls put on hold, average and total hold time for calls put on hold, and number of unanswered calls.

Charts

The following chart is available:

Chart name	Description
Calls Handled by CSQ and Agent	Displays the number of calls that are handled by agents for a CSQ.

Fields

The report includes a table that shows the following information:

Field	Description
CSQ Name	CSQ to which the call is queued.
CSQ ID	Unique ID of the CSQ.
Agent Name	First and last name of the agent who handled calls for this CSQ.
Extension	Unified CCX extension that Unified Communications Manager assigned to the agent.
Calls Handled	Calls that are queued for this CSQ and answered by this agent during the report period.
Talk Time—Avg	Average talk time for all calls that the agent handled for this CSQ. Talk time is the elapsed time between the time that an agent answers a call and the time the call is disconnected or transferred, not including hold time. Average talk time = Total talk time / Number of calls handled
Talk Time—Total	Total talk time for all calls that the agent handled for this CSQ.
Work Time—Avg	Average time that an agent spent in Work state after calls. Average work time = Total work time / Number of handled calls
Work Time—Total	Total time that an agent spent in Work state after receiving calls.
Total Ring Time	Elapsed time between the time that a call rang and the time the call was answered by an agent, routed to another agent, or disconnected. This field is blank if the call was not routed to an agent.
Calls On Hold	Calls that the agent put on hold.
Hold Time—Avg	Average hold time for calls that the agent put on hold. Not applicable to non-Unified CCX calls. Average hold time = Total hold time / Number of calls put on hold.
Hold Time—Total	Total time that the call is on hold. Not applicable to non-Unified CCX calls.
Ring No Answer	Calls that were routed to the agent and the agent did not answer.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.

Grouping Criteria

None

CSQ All Fields Report

The CSQ All Fields Report presents the CSQ related data such as call statistics, Service Level and key fields like Average Queue Time, Average Speed of Answer, Calls Handled and Calls Abandoned under Service Level. This report combines the fields of all CSQ related reports.

Charts

The following charts are available:

Chart name	Description
CSQ All Fields Report - Call Summary Chart	Displays the Calls Presented, Calls Handled, Calls Abandoned and Calls Dequeued Summary.
CSQ All Fields Report - Calls within Service Level	Displays the total calls handled and abandoned within service level.

Fields

The report includes a table that displays the following information:

Field	Description
CSQ Name	CSQ to which the call is queued.
Service Level (sec)	Value that was entered in the Service Level field when the CSQ was set up in Unified CCX Administration. If the service level changes during the report period, the report shows the old and new service level values.
Calls Presented	Calls routed to the CSQ regardless of whether an agent picked up the call.
Calls Handled	Number of calls that are handled by the CSQ.
Percentage Handled	Percentage of calls that were handled by the CSQ. The percentage is calculated as follows: $(\text{Number of calls handled}) / (\text{Number of calls presented}) \times 100\%$
Avg Handled Time	Average handle time for all calls that the CSQ handled. Handle time = Talk time + Hold time + Work time
Max Handled Time	Longest handle time for any call that the CSQ handled.
Calls Abandoned	Number of calls that were routed to the CSQ and were abandoned.
Percentage Abandoned	Percentage of calls that were routed to the CSQ and were abandoned. The percentage is calculated as follows: $(\text{Number of calls abandoned} / \text{Number of calls presented}) \times 100\%$

Field	Description
Avg Abandoned Time	Average time that the calls spent in the queue before being abandoned.
Max Abandoned Time	Maximum time a call spent in the queue before being abandoned.
Calls Dequeued	Number of calls that were dequeued.
Percentage Dequeued	Percentage of calls that were dequeued. The percentage is calculated as follows: $(\text{Number of calls dequeued} / \text{Number of calls presented}) \times 100\%$
Avg Dequeued Time	Average time that the calls spent in the queue before being dequeued.
Max Dequeued Time	Maximum time a call spent in the queue before being dequeued.
Avg Speed of Answer	Average answer speed = Total queue time / Calls handled
Calls Handled < Service Level	Calls that are handled within the time shown in the Service Level field. A call is handled when an agent picks up the call.
Calls Abandoned < Service Level	Calls that are abandoned within the time shown in the Service Level field. A call is abandoned if the call disconnects before connecting to an agent.
Avg Abandon Per Day	Average abandoned calls in a day = Number of calls abandoned / Number of days
Max Abandon Per Day	Largest number of calls abandoned on a single day.
Calls Handled by Other	Total of the following calls: <ul style="list-style-type: none"> • Calls that are queued for the CSQ, then dequeued by the Dequeue step in a workflow, then marked as handled by the Set Contact Info step in the workflow. • Calls that are queued for more than one CSQ and then handled by another CSQ.
Avg Queue Time	Average queue time for all calls routed to the CSQ.
Max Queue Time	Longest queue time of any one call that was routed to the CSQ.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
CSQ Names	Displays information for the specified CSQs.

Grouping criteria

Data is grouped by the following field:

Field	Result
CSQ Name	Sorts data by CSQ name.

Detailed Call by Call CDR Report

The Detailed Call by Call CDR Report presents most of the information that is contained in the Contact Call Detail Record (CCDR), which is stored in the Unified CCX database. This report also includes information from the contact routing and the agent connection detail records. The information in this report is for each leg of a call. (A call transfer or redirect initiates a new leg.)

Charts

The following charts are available:

Chart name	Description
Number of Calls by Contact Disposition	Displays the percentage of calls that were handled, abandoned, aborted, and rejected.
Number of Calls by Originator Type	Displays the percentage of calls that were originated by an agent, a device (for example, a test call), and an unknown origin (for example, calls received through a gateway).

Fields

The report includes a table that displays the following information:

Field	Description
Node ID - Session ID - Sequence No	Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster. Session ID is the unique session ID that the system assigns to a call. Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call. Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.
Start Time	Date and time the call starts.
End Time	Date and time the call disconnected, transferred, or redirected.
Contact—Type	Contact type of a call.
Contact—Disposition	Disposition of a call.
Originator—Type	Originator of the call.
Originator—ID	Login identification of the agent who originated the call, if Originator Type is 1.

Field	Description
Originator—DN	Originator telephone number.
Destination—Type	Destination of the call.
Destination—ID	Login identification of the agent who received the call, if Destination Type is 1.
Destination DN Destination—Directory Number	Destination telephone number.
Called Number	If the call was a transfer, this field shows the number that the call was transferred to. In other cases, this information is the same as the Original Called Number.
Original Called Number	Number that is originally dialed by the caller—either a route point number or an agent extension.
Application Name	Unified CCX or Unified IP IVR application that is associated with the route point.
Queue Time	Elapsed time between the time a call entered the Contact Service Queue (CSQ) and the time that the call rang. This value is zero for other calls. Summary info —Sum of values in this column.
Talk Time	Elapsed time between the time that an agent answered the call and the time the call was disconnected or transferred, not including hold time. This value is 0 for other calls. Summary info —Sum of values in this column.
Hold Time	Elapsed time between the time that an agent first put the call on hold and the time the agent last took the call off hold, not including talk time. This field is blank for other calls. Summary info —Sum of values in this column.
Work Time	Time that an agent spent in Work state after the call. This field is blank for other calls. Summary info —Sum of values in this column.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Original Called Number	Displays information for the specified original called numbers.
Called Number	Displays information for the specified called numbers.

Filter parameter	Result
Calling Number	Displays information for the specified calling numbers. Calling number is the same as Originator DN.
Application Name	Displays information for the specified applications.
Contact Type	Displays information for the specified contact types.
Originator Type	Displays information for the specified originator types.
Destination Type	Displays information for the specified destination types.
Duration Greater Than or Equal to T seconds	Displays calls with a duration greater than or equal to the number of seconds specified by T.
Duration Less Than or Equal to T seconds	Displays calls with a duration less than or equal to the number of seconds specified by T.

Grouping criteria

None

Detailed Call CSQ Agent Report

The Detailed Call CSQ Agent Report presents call information about the Contact Service Queue (CSQ) that a call was routed to and the agent that handled the call.

Charts

The following chart is available:

Chart name	Description
Total Calls by Called Number	Displays the number of calls to a called number.

Fields

The report includes a table that displays the following information:

Field	Description
Node ID - Session ID - Sequence No	<p>Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster.</p> <p>Session ID is the unique session ID that the system assigns to a call.</p> <p>Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call.</p> <p>Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.</p>
Call Start Time	Date and time the call starts.

Field	Description
Call End Time	Date and time the call disconnected, transferred, or redirected.
Contact Disposition	Disposition of the call.
Originator DN (Calling Number)	<p>The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Originator Type is agent, this field shows the Unified CCX extension of the agent. If the call is attended at the non-IPCC extension, then the non-IPCC extension is displayed. If the call is made from a non-IPCC extension, then the non-IPCC extension is displayed. • If Originator Type is device, this field shows the CTI port number. • If Originator Type is unknown (through a gateway or an unmonitored device), this field shows the telephone number of the caller.
Destination (DN)	<p>The destination directory number. Destination Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Destination Type is agent, this field shows the Unified CCX extension of the agent. • If destination type is device, this field shows the CTI port number. • If destination type is unknown (through a gateway or an unmonitored device), this field shows the telephone number called.
Called Number	Number that is originally dialed by the caller. If the call is a transfer, then the number that the call is transferred to is displayed.
Application Name	Unified CCX or Unified IP IVR application that is associated with the route point.
CSQ Names	Name or names of the CSQ or queues for which the call was queued. This field displays up to five CSQs separated by commas. The CSQ that handled the call is marked with an asterisk (*) and appears at the beginning of the list. This field is blank if the call is not queued for any CSQ.
Queue Time	<p>Elapsed time between the time a call entered the Contact Service Queue (CSQ) and the time that the call rang.</p> <p>Summary info—Sum of values in this column.</p>
Agent Name	First name and last name of the agent.
Ring Time	<p>Elapsed time between the time that a call rang and the time that the call was answered by an agent, routed to another agent, or disconnected. This field is blank if the call was not routed to an agent.</p> <p>Summary info—Sum of values in this column.</p>

Field	Description
Talk Time	Time that the agent spent in Talking state. Summary info —Sum of values in this column.
Work Time	Time that the agent spent in Work state. Summary info —Sum of values in this column.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Called Number	Displays information for the specified original called numbers.
Calling Number	Displays information for the specified calling numbers. Calling number is the same as Originator DN.
Application Name	Displays information for the specified applications.
Contact Type	Displays information for the specified contact types.
Originator Type	Displays information for the specified originator types.
Destination Type	Displays information for the specified destination types.
Agent Name	Displays information for the specified agents.
CSQ Name	Displays information for the specified CSQs.
Duration Greater Than or Equal to T seconds	Displays calls with a duration that is greater than or equal to the number of seconds specified by T.
Duration Less Than or Equal to T seconds	Displays calls with a duration that is less than or equal to the number of seconds specified by T.

Grouping Criteria

None

Priority Summary Activity Report

The Priority Summary Activity Report presents call information for each call priority.

Charts

The following chart is available:

Chart name	Description
Total Calls by Call Priority	For each priority level that is assigned, the percentage of calls that received that priority is displayed.

Fields

The report includes a table that displays the following information:



Note If there is more than one call priority the data will be repeated for all the call priorities.

Field	Description
Call Priority	Final priority that the Unified CCX workflow assigns to the call when the call is received.
Total Calls	Number of calls that are assigned a particular priority level as their final priority level.
Avg Calls (per day)	Daily average number of calls that received a particular priority level as their final priority level.
Total Multi Priority Calls	Calls that ended with a different priority level than the priority that was assigned when the call was received.
Avg Priority Changes	Average number of calls per day that ended with a different priority level than the priority that was assigned when the call was received.
Max Priority Changes	Maximum difference between a priority level assigned to a call when it was received and the priority level set when the call ended.
Avg Multi Priority Calls	Average difference between a priority level assigned to a call when it was received and the priority level set when the call ended.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Priority List	Displays information for the calls assigned their final priority level. Priority levels range from 1 (lowest) to 10 (highest).

Grouping Criteria

None

Reason report by Agent Grouping

The Reason Report by Agent Grouping presents the time that each agent spent logged in. It shows the time that the agents spent in the Not Ready state based on the Reason selected. The logged in time is the same as the total of the time spent by the agent in multiple reasons during the same interval.

This report can show information for each 30 or 60 minute interval within the report period.

Charts

The following chart is available:

Chart name	Description
Reason Report - Agent Grouping Chart	Displays the time that agent spent in the Not Ready state based on the selected reasons.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Log in ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
Total Logged-in	Total time that the agent is logged in to Unified CCX.
Reason	<p>The reason selected by the agent when moving to Not Ready state. This displays the reason code if the reason is unavailable. A blank is due to any one of the following:</p> <ul style="list-style-type: none"> • Agent was unable to select a reason. • Reason codes for all other states except Not Ready. <p>Note A reason code is displayed if the label is unavailable.</p>
Duration	<p>Total time that an agent spent in the Not Ready state for the corresponding reason code.</p> <p>Summary info- Sum of values in this column.</p>

Filter criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	<p>The following options are available:</p> <ul style="list-style-type: none"> • Entire report range -Displays information based on the set start and end time, but it doesn't display information for specific intervals within the report period. • Thirty (30) minutes -Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes -Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either "Thirty (30) minutes" or "Sixty (60) minutes" option, the report may take more time to display results compared to the "Entire report range" option. To reduce processing time, generate the report for a shorter query interval.</p>
Resource Group Names	Displays information for agents who belong to the specified resource groups.
Agent List	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.
Reasons	Displays the list of reasons including predefined reasons. This also displays the reason code if the reason is unavailable.

Grouping criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.

Reason Code	State	Event	Event Description
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT_READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.

Reason Code	State	Event	Event Description
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32755	Not Ready	CALL_ENDED	<p>Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:</p> <ul style="list-style-type: none"> • Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. • The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.

Reason Code	State	Event	Event Description
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.

Reason report by Reason Grouping

The **Reason Report by Reason Grouping** report presents the total time that each agent spent in the **Not Ready** state across each of the selected reason. This report also shows the total logged in time of the agents. If agents don't spend any time on the selected reason, those agents are excluded in the report.

This report can show information for each 30 or 60 minute interval within the report period.

Charts

The following chart is available:

Chart name	Description
Reason Report - Reason Grouping Chart	Displays the time that agent spent in Not Ready state based on the reason selected.

Fields

The report includes a table that displays the following information:

Field	Description
Reason	The reason selected by the agent when switching to Not Ready State. This displays the reason code if the reason is unavailable. Note A reason code is displayed if a label is unavailable.
Interval Start Time	Start date and time of each 30 or 60 minute interval or the start date and time for the report range.
Interval End Time	End date and time of each 30 or 60 minute interval or the end date and time for the report range.
Agent Name	First name and last name of the agent.
Agent ID	Log in ID of the agent.
Extension	Last active Unified CCX extension that Unified Communications Manager assigned to the agent.
Total Logged-in	Total time that the agent is logged in to Unified CCX.

Field	Description
Duration	Total time that an agent spent in the Not Ready state for the corresponding reason selected. Summary info- Sum of values in this column.

Filter criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	The following options are available: <ul style="list-style-type: none"> • Entire report range -Displays information based on the set start and end time, but it doesn't display information for specific intervals within the report period. • Thirty (30) minutes -Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. • Sixty (60) minutes -Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on. <p>Note If you choose either "Thirty (30) minutes" or "Sixty (60) minutes" option, the report may take more time to display results compared to the "Entire report range" option. To reduce processing time, generate the report for a shorter query interval.</p>
Resource Group Name	Displays information for agents who belong to the specified resource groups.
Agent List	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Team Names	Displays information for agents who belong to the specified teams.
Reasons	Displays the list of reasons including predefined reasons. This also displays the reason code if the reason is unavailable.

Grouping criteria

Data is grouped by the following field:

Field	Result
Reason	Sorts data by reason.

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT_READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>

Reason Code	State	Event	Event Description
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32755	Not Ready	CALL_ENDED	<p>Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:</p> <ul style="list-style-type: none"> • Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. • The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.

Reason Code	State	Event	Event Description
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.

Traffic Analysis Report

The Traffic Analysis Report presents information about incoming calls to the Unified CCX system. The information is provided for each day in the report range and includes information about the peak hour of the day.

Charts

The following charts are available:

Chart name	Description
Average Call Duration by Date	Displays the average length of calls for a day.
Peak Calls by Date	Displays the number of calls that are received in the peak hour for a day.
Total Incoming Calls by Date	Displays the total number of calls that are received by the Unified CCX system for a day.

Fields

The report includes a table that displays the following information:

Field	Description
Date	Date for which information is provided.
Total Incoming Calls	Total number of calls that are received by the Cisco Unified CCX system for the day. Summary info —Sum of values in this column.
Avg Calls (per hour)	Average number of calls that are received during each hour for the day. Summary info —Maximum value in this column.
Peak Calls (by hour)	Number of calls that are received during the peak hour. Summary info —Maximum value in this column.
Peak Hour—Start	Start time of the hour in a day during which the largest number of calls were received.
Peak Hour—End	End time of the hour in a day during which the largest number of calls were received.
Call Duration—Avg	Average call length for the day. Summary info —Maximum value in this column.
Call Duration—Min	Length of the shortest call for the day. Summary info —Minimum value in this column.
Call Duration—Max	Length of the longest call for the day. Summary info —Maximum value in this column.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Time Offset	Displays the list of time zones. Select the one matching your timezone. If multiple values are selected, the first one takes effect.

Grouping Criteria

None

Outbound Reports

Agent Outbound Campaign Summary Report

The Agent Outbound Campaign Summary Report provides call statistics for agent-based progressive and predictive outbound campaigns.



Note The report displays data only for the campaigns for which at least one contact is dialed out in the selected time range.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Campaign	Name of the agent outbound campaign.
Contacts—Total	<p>Total number of contacts that are imported for the campaign. The number of contacts include all the contacts that were imported at the time the report is generated and is independent of the end date that you choose when you generated the report.</p> <p>Contacts—Total = Imported contacts in the campaign that are yet to be dialed out (including the contacts that are marked for retry or callback) + Contacts that are deleted from the start date + Contacts that are closed by the system from the day before the start date (either the contacts are dialed out successfully or the maximum number of attempts are made to dial the contact).</p> <p>Summary info—Sum of the records in this column.</p>
Contacts—Attempted	<p>Number of attempted outbound contacts.</p> <p>Summary info—Sum of the records in this column.</p>
Contacts—Remaining	<p>Number of contacts that are yet to be dialed out including the contacts that are marked for retry, callback, and the contacts that will never be dialed out as they are deleted from the campaign after importing.</p> <p>The contacts include data till the time the report is generated and is independent of the end date that is chosen while generating the report.</p> <p>If there are no contacts that are to be retried or called back, then Total contacts = Attempted contacts + Remaining contacts.</p> <p>Summary info—Sum of the records in this column.</p>

Field	Description
Contacts—% Attempted	Percentage of attempted outbound calls. Attempted % = (Attempted / Total Contacts) * 100 Summary info —Overall attempted percentage.
Calls—Voice	Number of outbound calls that are detected as live voice and connected to the IVR trigger. Summary info —Sum of the records in this column.
Calls—Answering Machine	Number of outbound calls that reach an answering machine. Summary info —Sum of the records in this column.
Calls—Invalid	Number of outbound calls that reach an invalid number. Summary info —Sum of the records in this column.
Calls—Fax/Modem	Number of outbound calls that reach a fax or modem. Summary info —Sum of the records in this column.
Calls—No Answer	Number of outbound calls that are not answered. Summary info —Sum of the records in this column.
Calls—Busy	Number of outbound calls that receive a busy signal. Summary info —Sum of the records in this column.
Calls—Failed	Number of outbound calls that failed. Summary info —Sum of the records in this column.
Calls—Customer/Agent Abandoned	Number of outbound calls that are considered abandoned, since the call was disconnected either by the customer or agent within the Abandoned Call Wait Time that is configured in the Unified CCX Application Administration web interface. Summary info —Sum of the records in this column.
Calls—System Abandoned	Number of outbound calls that are abandoned by the system. Summary info —Sum of the records in this column.
Calls—Requested Callback	Number of calls that are marked for callback. Note A call that is accepted by the agent, marked for callback, later routed to and accepted by another agent (at the callback time), and again marked for callback is counted twice toward the number of callback calls. Summary info —Sum of the records in this column.
Talk Time—Avg	Average time in HH:MM:SS that the agent spends talking on outbound calls. Duration of all calls that are Agent Accepted and classified as Voice.

Field	Description
Talk Time—Max	Longest time in HH:MM:SS that the agent spends talking on an outbound call for the campaign. Duration of all calls that are Agent Accepted and classified as Voice. Summary info —Maximum value in this column.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign List	Displays the list of agent-based outbound campaigns.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Campaign	Sorts data by campaign name.

Agent Outbound CDR Report

The Agent Outbound CDR Report provides progressive and predictive agent outbound call-related information, which is stored in the Unified CCX database. This report provides information for each leg of a call.



Note Unified CCX does not support the translation or modification of the phone number that is used to dial out the outbound calls. This is due to the voice translation rules that are configured in the gateway. Inconsistent behavior is observed in the Answering Machine Treatment also when the translation rules are configured. You can use either of the below two supported methods to modify a dialed number in the gateway:

- To remove the initial digits of the phone number use forward-digits or digit-strip in the dial peer configuration.
- To add a prefix to the phone number use prefix in the dial peer configuration.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Node ID-Session ID-Sequence Number	Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster. Session ID is the unique session ID that the system assigns to a call. Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call. Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.
Start Time	Date and time the call starts.
End Time	Date and time the call is disconnected or transferred.
Contact Disposition	Disposition of a call.
Originator—Type	Originator of the call.
Originator—ID	Login ID of the agent. This field is populated only if Originator—Type is 1. This field is populated only if the call is transferred from the script to an agent.
Originator—Directory Number	Originator's telephone number.
Destination—Type	Destination of the call.
Destination—ID	Login ID of the agent. This field is populated only if Destination—Type is 1. This field is blank unless the call is made to a extension where the agent is logged in.
Destination—Directory Number	Destination telephone number.
Call Status	Status of the contact that was imported to dial out an outbound call. The call status value is updated with the most recent status of the contact.
Call Result	Call result value for the outbound call. The call result value is updated for each call that was placed for an outbound contact.
Campaign Name	Name of the agent outbound campaign.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign Name	Displays the list of agent-based outbound campaigns.

Grouping Criteria

None

Agent Outbound Half Hourly Report

The Agent Outbound Half Hourly Report provides information about progressive and predictive agent outbound calls for every half hour in the time range when the campaign is active.



Note The campaign may stop few seconds after the specified End Time. Therefore, the report may provide information for an additional half hour interval. This half hour interval has information for the outbound calls that are dialed out before the campaign End Time, response for which is received after the campaign End Time.

Charts

The following chart is available:

Chart Name	Description
Total Attempted, Abandoned, Voice Calls by Campaign	Number of attempted calls, abandoned calls, and voice calls for a campaign.

Fields

The report includes a table that describes the following information:

Field	Description
Campaign Name	Name of the agent outbound campaign for which the data is recorded.
Start Time	Start date and time of the interval.
End Time	End date and time of the interval.
Total Attempted Calls	Number of attempted calls. Summary info —Sum of the records in this column.
Total Live Voice Calls	Number of voice calls. Summary info —Sum of the records in this column.
Total Abandoned Calls	Number of system abandoned calls. Summary info —Sum of the records in this column.
Lines Per Agent	Displays the LPA (Lines Per Agent) value for a campaign at the end of the half hour interval. For Progressive campaigns, the LPA value is configured through the Unified CCX Application Administration web interface. For Predictive campaigns, the LPA value is calculated by the predictive algorithm.
Abandoned Rate	Call abandon rate since the statistics were last reset. $\text{Abandon rate} = (\text{Abandoned} / \text{Voice} + \text{Abandoned}) \times 100$

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign Name	Displays half-hourly information for the specified progressive or predictive campaigns.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Campaign	Sorts data by campaign name.

IVR Outbound Campaign Summary Report

The IVR Outbound Campaign Summary Report presents call statistics for each outbound Interactive Voice Response (IVR) campaign. This report displays the call summary for progressive and predictive outbound campaigns.



Note The report displays data only for the campaigns for which at least one contact is dialed out in the selected time range.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Campaign	Name of the outbound IVR campaign.
Contacts—Total	<p>Total number of contacts that are imported for the campaign. The number of contacts include all the contacts that were imported at the time the report is generated and is independent of the end date that you choose when you generated the report.</p> <p>Contacts—Total = Imported contacts in the campaign that are yet to be dialed out (including the contacts that are marked for retry or callback) + Contacts that are deleted from the start date + Contacts that are closed by the system from the day before the start date (either the contacts are dialed out successfully or the maximum number of attempts are made to dial the contact).</p> <p>Summary info—Sum of the records in this column.</p>

Field	Description
Contacts—Attempted	Number of attempted outbound IVR contacts. Summary info —Sum of the records in this column.
Contacts—Remaining	Number of contacts that are yet to be dialed out including the contacts that are marked for retry, callback, and the contacts that will never be dialed out as they are deleted from the campaign after importing. The contacts include data till the time the report is generated and is independent of the end date that is chosen while generating the report. If there are no contacts that are to be retried or called back, then Total contacts = Attempted contacts + Remaining contacts. Summary info —Sum of the records in this column.
Contacts—% Attempted	Percentage of attempted outbound IVR calls. $\text{Attempted \%} = (\text{Attempted} / \text{Total Contacts}) * 100$ Summary info —Overall attempted percentage
Calls—Voice	Number of outbound calls that are detected as live voice and connected to the IVR trigger. Summary info —Sum of the records in this column.
Calls—Answering Machine	Number of outbound IVR calls that reach an answering machine. Summary info —Sum of the records in this column.
Calls—Invalid	Number of outbound IVR calls that reach an invalid number. Summary info —Sum of the records in this column.
Calls—Fax/Modem	Number of outbound IVR calls that reach a fax or modem. Summary info —Sum of the records in this column.
Calls—No Answer	Number of outbound IVR calls that are not answered. Summary info —Sum of the records in this column.
Calls—Busy	Number of outbound IVR calls that receive a busy signal. Summary info —Sum of the records in this column.
Calls—Failed	Number of outbound IVR calls that failed. Summary info —Sum of the records in this column.
Calls—Customer Abandoned	Number of outbound IVR calls that are abandoned by the customer. Summary info —Sum of the records in this column.
Calls—System Abandoned	Number of outbound IVR calls that are abandoned by the system. Summary info —Sum of the records in this column.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign List	Displays information for the specified outbound IVR campaigns.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Campaign	Sorts data by campaign name.

IVR Outbound CDR Report

The IVR Outbound CDR Report provides Interactive Voice Response (IVR) call-related information, which is stored in the Unified CCX database. This report provides information for each leg of a call.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Node ID-Session ID-Sequence Number	Node ID is the unique numeric ID, which starts from 1, that the system assigns to each Unified CCX server in the cluster. Session ID is the unique session ID that the system assigns to a call. Session sequence number is the number that the system assigns to each call leg. The session sequence number increases by 1 for each leg of a call. Together, these three values uniquely identify an Automatic Call Distribution (ACD) call that is processed by the system.
Start Time	Date and time the call starts.
End Time	Date and time the call is disconnected or transferred.
Contact Disposition	Disposition of a call.
Originator—Type	Originator of the call.
Originator—ID	Login ID of the agent. This field is populated only if Originator—Type is 1. This field is populated only if the call is transferred from the script to an agent.
Originator Directory Number	Originator's telephone number.

Field	Description
Destination—Type	Destination of the call.
Destination—ID	Login ID of the agent. This field is populated only if Destination—Type is 1. This field is blank unless the call is made to a extension where the agent is logged in.
Destination—Directory Number	Destination telephone number.
Trigger Directory Number	Number that is dialed by the outbound IVR dialer. It can be either a route point number or the dialed telephone number.
Application Name	Unified CCX or Unified IP IVR application that is associated with the route point.
Call Status	Status of the contact record.
Call Result	Last call result that was placed for this record.
Campaign Name	Name of the IVR outbound campaign.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign List	Displays the list of IVR-based outbound campaigns.

Grouping Criteria

None

IVR Outbound Half Hourly Report

The IVR Outbound Half Hourly Report presents information about predictive outbound Interactive Voice Response (IVR) calls for every half hour in the report range.



Note This report is available if you have selected the predictive dialer type in Unified CCX.

Charts

The following chart is available:

Chart Name	Description
Total Attempted, Abandoned, Voice Calls by Campaign	Number of attempted calls, abandoned calls, and voice calls for a campaign.

Fields

The report includes a table that displays the following information:

Field	Description
Campaign Name	Name of the predictive campaign for which the data is recorded.
Start Time	Start date and time of the interval.
End Time	End date and time of the interval.
Total Attempted Calls	Number of attempted calls. Summary info —Sum of the records in this column.
Total Live Voice Calls	Number of voice calls. Summary info —Sum of the records in this column.
Total Abandoned Calls	Number of abandoned calls. Summary info —Sum of the records in this column.
Lines Per Port	Number of contacts that can be dialed out for each available port. Lines per port = Abandoned calls / Voice calls
Abandoned Rate	Call abandon rate since the statistics were last reset. Abandon rate = (Abandoned / Voice + Abandoned) x 100

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign Name	Displays half-hourly information for the specified predictive campaigns.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Campaign	Sorts data by campaign name.

Outbound Agent Detail Performance Report

The Outbound Agent Detail Performance Report provides detailed statistics for each agent by campaign (progressive and predictive). The report also provides the total call details, campaign call details for each agent, and a summary row of the call details for each agent for all agent-based progressive and predictive campaigns. This report is available with the Outbound feature.

Charts

The following chart is available:

Chart Name	Description
Calls Transferred By Campaign And Agent	Displays the number of calls that are transferred by each agent for a campaign.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Campaign	Name of the campaign.
RNA	Number of outbound calls that the agent did not answer. Ring-no-answer (RNA). Summary info —Sum of the records in this column.
Transfer	Number of outbound calls that are transferred from another agent. The other agent dials the outbound call and transfers it to the agent. Summary info —Sum of the records in this column.
Talk Time—Avg	Average time in HH:MM:SS that the agent spends talking on outbound calls. Duration of all calls that are Agent Accepted and classified as Voice.
Talk Time—Max	Longest time in HH:MM:SS that the agent spends talking on an outbound call for the campaign. Calls that are Agent Accepted and classified as Voice are considered.

Filter Criteria

You can filter using any one of the following parameters:

Filter Parameter	Result
Campaign Names	Displays information for the specified campaigns.
Agent Names	Displays information for the specified agents.
Resource Group Names	Displays information for the agents who belong to the specified resource groups.
Skill Names	Displays information for the agents who have the specified skills.
Team Names	Displays information for the agents who belong to the specified teams.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Preview Outbound Agent Detail Performance Report

The Preview Outbound Agent Detail Performance Report presents detailed statistics for each agent by campaign. The report also presents the total call details, campaign call details for each agent, and a summary row of the call details for each agent for all campaigns. This report is available with the Outbound feature.

Charts

The following chart is available:

Chart Name	Description
Calls Accepted By Campaign And Agent	Displays the number of calls that are accepted by each agent for a campaign.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Campaign	Name of the campaign.
Offered	Number of outbound calls that are offered to the agent. Summary info —Sum of the records in this column.
Accepted	Total number of outbound calls that are accepted by the agent. Summary info —Sum of the records in this column.
Rejected	Number of outbound calls that are rejected by the agent. Summary info —Sum of the records in this column.
Closed	Number of outbound contacts that are closed by the agent. Summary info —Sum of the records in this column.
RNA	Number of outbound calls the agent did not answer. Ring-no-answer (RNA). Summary info —Sum of the records in this column.

Field	Description
Transfer	Number of outbound calls that are transferred from another agent. The agent did not dial an outbound call; the other agent dials the outbound call and transfers it to the agent. Summary info —Sum of the records in this column.
Talk Time—Avg	Average time in HH:MM:SS the agent spends talking on outbound calls. Duration of all calls that are Agent Accepted and classified as Voice.
Talk Time—Max	Longest time in HH:MM:SS the agent spends talking on an outbound call for the campaign. Calls that are Agent Accepted and classified as Voice are considered.

Filter Criteria

You can filter using any one of the following parameters:

Filter Parameter	Result
Campaign Names	Displays information for the specified campaigns.
Agent Names	Displays information for the specified agents.
Resource Group Names	Displays information for the agents who belong to the specified resource groups.
Skill Names	Displays information for the agents who have the specified skills.
Team Names	Displays information for the agents who belong to the specified teams.

Grouping Criteria

Data is grouped by the following field:

Field	Result
Agent Name	Sorts data by agent name.

Preview Outbound Campaign Summary Report

The Preview Outbound Campaign Summary Report presents call summary statistics for each campaign. This report is available with the Unified Outbound Preview Dialer (Outbound) feature.

Charts

The following chart is available:

Chart Name	Description
Calls Accepted, Rejected, Closed by Campaign	Displays the number of calls that are accepted, rejected, or closed for a campaign.

Fields

The report includes a table that displays the following information:

Field	Description
Campaign	Name of the campaign.
Total	<p>Total number of contacts that are imported for the campaign. The number of contacts include all the contacts that were imported at the time the report is generated and is independent of the end date that you choose when you generated the report.</p> <p>Contacts—Total = Imported contacts in the campaign that are yet to be dialed out (including the contacts that are marked for retry or callback) + Contacts that are deleted from the start date + Contacts that are closed by the system from the day before the start date (either the contacts are dialed out successfully or the maximum number of attempts are made to dial the contact).</p> <p>Summary info—Sum of the records in this column.</p>
Available	<p>Number of contacts that are yet to be dialed out including the contacts that are marked for retry, callback, and the contacts that will never be dialed out as they are deleted from the campaign after importing.</p> <p>The contacts include data till the time the report is generated and is independent of the end date that is chosen while generating the report. If there are no contacts that are to be retried or called back, then Total contacts = Attempted contacts + Available contacts.</p> <p>Summary info—Sum of the records in this column.</p>
Attempt	<p>Number of outbound contact records that were tried atleast once .</p> <p>Summary info—Sum of the records in this column.</p>
% Attempt	<p>The percentage of attempted outbound calls.</p> <p>$\% \text{ Attempt} = (\text{Attempted} / \text{Total Contacts}) \times 100$</p> <p>Summary info—Overall percentage</p>
Accepted	<p>Number of outbound calls that are accepted by agents.</p> <p>Summary info—Sum of the records in this column.</p>
Rejected	<p>Number of outbound calls that are skipped or rejected by agents.</p> <p>Summary info—Sum of the records in this column.</p>
Closed	<p>Number of outbound contacts that are closed by agents.</p> <p>Summary info—Sum of the records in this column.</p>
Voice	<p>Number of successful outbound calls.</p> <p>Summary info—Sum of the records in this column.</p>

Field	Description
Answering Machine	Number of daily outbound calls with a classification of Answering Machine. The agent clicks Accept and selects a classification of Answering Machine for this contact. Summary info —Sum of the records in this column.
Fax/Modem	Number of outbound calls with a classification of Fax/Modem. The agent clicks Accept and selects a classification of Fax/Modem for this contact. Summary info —Sum of the records in this column.
Invalid	Number of outbound calls for the day with a classification of Invalid. The agent clicks Accept and selects a classification of Invalid for this contact. Summary info —Sum of the records in this column.
Requested Callback	Number of calls that are marked for callback. Note A call that is accepted by the agent, marked for callback, later routed to and accepted by another agent (at the callback time), and again marked for callback is counted twice toward the number of callback calls. Summary info —Sum of the records in this column.
Not Home	Number of outbound contacts where the person who answers the phone is not the customer. Summary info —Sum of the records in this column.
Wrong Number	Number of outbound contacts where the person who answers the phone indicates that the customer does not live there. Summary info —Sum of the records in this column.
Busy	Number of outbound calls where the response is a busy signal. Summary info —Sum of the records in this column.
Talk Time—Avg	Average time in HH:MM:SS the agent spends talking on outbound calls. Duration of all calls that are Agent Accepted and classified as Voice.
Talk Time—Max	Longest time in HH:MM:SS the agent spends talking on an outbound call for the campaign. Duration of all calls that are Agent Accepted and classified as Voice. Summary info —Maximum value in this column.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Campaign Names	Displays information for the specified campaigns.

Grouping Criteria

None

System Reports

Application Performance Analysis Report

The Application Performance Analysis Report presents call statistics for each Unified CCX or Unified IP IVR application.

Charts

The following charts are available:

Chart Name	Description
Average Call Duration by Application	Displays average call duration for an application.
Calls Handled vs Abandoned by Application	Displays the number of calls that are handled and the number of calls that are abandoned for an application.
Calls Presented by Application	Displays the number of received calls for an application.

Fields

The report includes a table that displays the following information:

Field	Description
Application ID	Identification number that is assigned to the application by Unified CCX.
Application Name	Name of the Unified CCX or Unified IP IVR application.
Calls Presented	Number of calls that are received by the application including internal calls. It includes calls that are handled by the application and the calls that are abandoned while in the application. A call can invoke more than one application and is counted for each of them. Summary info —Sum of values in this column.
Calls Handled	Number of calls that are handled by the application including internal calls. Summary info —Sum of values in this column.
Calls Abandoned	Number of calls that are abandoned, aborted, or rejected while in the application. Summary info —Sum of values in this column.

Field	Description
Abandon Rate (per hour)	Average number of calls that are abandoned each hour while in the application. Summary info —Maximum value in this column.
Avg Call Duration	Average time that elapsed from the time the call enters this workflow until the call exits this workflow when the caller hangs up or when the call enters another workflow. Summary info —Maximum value in this column.

Filter Criteria

None

Grouping Criteria

None

Application Summary Report

The Application Summary Report presents call statistics for each Unified CCX or Unified IP IVR application. It includes information for presented, handled, abandoned, flow-in, and flow-out calls. It also includes information about call talk time, work time, and abandon time.

Charts

The following chart is available:

Chart Name	Description
Calls Presented by Application	Displays the number of calls received by each Unified CCX or Unified IP IVR application.

Fields

The report includes a table that displays the following information:

Field	Description
Application Name	Name of the Unified CCX or Unified IP IVR application.

Field	Description
Called Number	<p>For outbound calls that are transferred to a Unified CCX route point and handled by an application, the telephone number that is dialed by the caller who initiated the original outbound call.</p> <p>For incoming calls that are handled by an application:</p> <ul style="list-style-type: none"> • If the call is placed from a Unified Communications Manager phone, the telephone number that is dialed by the caller. • If the call is placed from outside of VoIP network (for example, from the PSTN of a TDM PBX), the Unified Communications Manager directory number to which the VoIP gateway routes the call.
Calls Presented	<p>Number of calls that are received by the application including internal call. This number is equal to the number of calls that are handled by the application plus the number of calls that are abandoned while in the application.</p> <p>Summary info—Sum of values in this column.</p>
Flow-In	<p>Number of calls that are redirected to this application from another application by a workflow. It does not include calls that come from another agent or an external system such as a voice messaging system.</p> <p>Summary info—Sum of values in this column.</p>
Flow-Out	<p>Number of calls that this application sends to another application or external destination without being handled by an agent.</p> <p>Summary info—Sum of values in this column.</p>
Calls Handled	<p>Number of calls that are handled by the application including internal calls.</p> <p>Summary info—Sum of values in this column.</p>
Avg Speed Of Answer	<p>Average queue time to answer calls by agents. Calls that did not connect to an agent are not included in this calculation.</p> <p>Average queue time = Queue time / Number of calls</p>
Avg Talk Time	<p>Average talk time of all the calls that are handled by an agent. Talk time is the elapsed time between the time that an agent connects to a call and the time the call is disconnected or transferred, not including hold time.</p> <p>Average talk time = Total talk time / Number of calls handled by the agents</p>
Avg Work Time	<p>Average time an agent spends in Work state after disconnecting/transferring calls.</p> <p>Average work time = Total work time / Number of calls handled by the agents</p>
Calls Abandoned	<p>Number of calls that are abandoned by the application.</p> <p>Summary info—Sum of values in this column.</p>
Avg Abandon Time	<p>Average duration of calls before they are abandoned.</p>

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Application Name	Displays information for the specified applications.

Grouping Criteria

None

Unified License Consumption Report

The License Consumption Report presents aggregated historical license utilization information, as per the registered license type. This report has two views, Perpetual and Flex. By default, Perpetual License view is displayed. Select appropriate license view as per the license that is procured. The values in the report are aggregated at 15 min interval.



Note A blank field indicates that no data is available at the given time interval.
A blank report is displayed, if a wrong license view is selected.

Fields of Perpetual License Consumption

This view includes a table that has the following information:

Field	Description
Date	The displayed date is the date on which the license information is aggregated. The license information is grouped by date.
Time	The time at which the system persisted the information. The license information is aggregated for the default time range (15 min).
Maximum Inbound Ports	Maximum number of inbound ports that are used for the given time interval.
Maximum Agent Seats	Maximum number of inbound seats that are used by agents and supervisors for the given time interval.
Maximum Outbound Ports	Maximum number of outbound ports that are used by IVR campaigns for the given time interval.

Fields of Flex License Consumption

This view includes a table that has the following information:



Note This view is not applicable for Classic licensing with Flex option; use Perpetual view.

Field	Description
Date	The displayed date is the date on which the license information is aggregated. The license information is grouped by date.
Time	The time at which the system persisted the information. The license information is aggregated for the default time range (15 min).
Maximum Standard Seats	Maximum number of Standard seats that are used for the given time interval.
Maximum Premium Seats	Maximum number of Premium seats that are used for the given time interval.
Maximum Inbound Ports	Maximum number of inbound ports that are used for the given time interval.
Maximum Outbound Ports	Maximum number of outbound ports that are used by IVR campaigns for the given time interval.

Filter Criteria

None

Grouping Criteria

Data is grouped by date.

Multichannel Reports

Wrap-Up Reasons for Chat and Email

The Wrap-Up Reasons Report for Chat and Email presents a summary of Wrap-Up Reasons applied by an agent for the chats and emails. It also displays the total number of the Wrap-Up Reasons used for chats and emails.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Category	Name of the category to which the selected Wrap-Up Reason belongs to.
Wrap-Up Reason	Name of the Wrap-Up Reason applied by the agent.
Agent Name	Name of the agent who applied the Wrap-Up Reason.
Agent ID	Log in ID of the agent.

Field	Description
Chat	Number of chats to which Wrap-Up Reasons were applied.
Email	Number of emails to which Wrap-Up Reasons were applied.
Total	Total number of the chats and emails to which the Wrap-Up Reasons were applied.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Wrap-Up Category	Displays information for the specified Wrap-Up Category.
Agent Name	Displays information for the specified Agent Name.

Grouping Criteria

You can group using the following parameters:

Filter parameter	Result
Category	Displays information for the specified Category.
Wrap-Up Reason	Displays information for the specified Wrap-Up Reason.

Multichannel Agent Summary Report

The Multichannel Agent Summary Report presents a summary of the agent performance over inbound, outbound, chat, and email channels.

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Inbound Calls—Presented	<p>Calls that are sent to the agent, regardless of whether the agent picks up the call.</p> <p>If a call is connected to an agent, transferred to another agent, and then transferred back to the original agent, the value for the original agent increases by two (once for each time the call was presented).</p>

Field	Description
Inbound Calls—Handled	<p>Calls that are connected to the agent.</p> <ul style="list-style-type: none"> • If the agent establishes a conference with another agent, this value increases by one for the conferenced call. • If the agent transfers a call and the call is transferred back to the agent, this value increases by two.
Inbound Calls—RNA	Calls that were routed to the agent and the agent did not answer.
Inbound Calls—Handle Time Max	Longest handle time of any call that the agent handled.
Inbound Calls—Handle Time Avg	<p>Average handle time for all calls that the agent handled.</p> <p>Handle time = Talk time + Hold time + Work time.</p>
Outbound Calls—RNA	Ring-no-answer(RNA). Number of outbound calls that the agent did not answer.
Outbound Calls—Talk Time Max	Longest talk time of any call that the agent handled.
Outbound Calls—Talk Time Avg	<p>Average talk time for all calls that the agent handled.</p> <p>Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.</p>
Chat—Presented	Number of chats that are presented to the agent.
Chat—Handled	Number of chats that the agent accepted.
Chat—Not Answered/Declined	Number of chats that are presented to the agent, but not answered or declined.
Chat—Active Time Max	Longest chat time of a chat that the agent handled.
Chat—Active Time Avg.	Average chat time of the chats that the agent handled.
Email—Presented	Number of email messages that are presented to the agent.
Email—Handled	Number of email messages that the agent replied and forwarded. The send date and time determines whether the email message falls within the interval.
Email—Discarded	Number of email messages that the agent discarded. The discarded date and time determine whether the email message falls within the interval.
Email—Requeued	Number of email messages that the agent requeued. The requeue date and time determines whether the email message falls within the interval.

Filter Criteria

You can filter using any one of the following parameters:

Filter parameter	Result
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for the agents who possess the specified skills.
Team Names	Displays information for the agents who belong to the specified teams.

Grouping Criteria

None

Query Designs Historical Reports

Conventions Used in This Chapter

The following conventions are used in this chapter:

- Database table names - Explanations of report fields in this chapter refer to various Unified CCX database tables. In some cases, these explanations use abbreviations for database table names. The table below lists the database tables that this chapter refers to and shows the abbreviations that are used.

For detailed information about the Unified CCX database tables, refer to *Cisco Unified Contact Center Express Database Schema Guide*.

Table 8: Database Tables

Database table name	Abbreviation used in this chapter
AgentConnectionDetail	ACD
AgentStateDetail	ASD
Campaign	—
ContactCallDetail	CCD
ContactQueueDetail	CQD
ContactRoutingDetail	CRD
ContactServiceQueue	CSQU
DialingList	—
MonitoredResourceDetail	MRD
Resource	—
ResourceGroup	RG
ResourceSkillMapping	RSM

Database table name	Abbreviation used in this chapter
Skill	—
SkillGroup	SG
TextAgentConnectionDetail	TACD
TextAgentStateDetail	TASD
TextContactDetail	TCD
TextContactQueueDetail	TCQD
EEMContactEmailDetail	EEMCED
EEMQueueAgentDetail	EEMQAD
EEMEmailAgentStateDetail	EEMEASD

- Database table fields - Explanations in this chapter specify fields in the CiscoUnified CCX database tables as follows:

table.field

where *table* is the name or abbreviation of the database table (see above) and *field* is the name of the field. For example,

- CSQU.skillGroupID means the skillGroupID field in the ContactServiceQueue table
 - Resource.resourceID means the resourceID field in the Resource table
- Report field names - In an explanation of a report field, a report field name in **bold type** indicates that field in the same report.

Chat Reports

Chat Agent Detail Report

The Chat Agent Detail report contains detailed information for the chat contacts received by all the chat agents. The report contains one row per chat contact for each of the agents.



Note Chat Agent Detail report is available in Unified CCX Premium license package.

[Table 9: Chat Agent Detail Report, on page 165](#) shows how the information in the Chat Agent Detail report is obtained or calculated.

Table 9: Chat Agent Detail Report

Field	Explanation
Agent Name(Agent ID)	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Call Summary Report Filter Parameters, on page 183. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs. Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Chat Start Time	Time at which the chat contact is offered to an agent. It is obtained from the startdatetime field of the TACD table.
Chat End Time	Time at which agent ends the chat. It is obtained from the enddatetime field of the TACD table.
Duration	<p>Chat time period which is calculated as follows:</p> <p>Chat End Time – Chat Start Time</p> <p>Displayed as hh:mm:ss.</p>
Contact ID	Contact ID which uniquely identifies a chat contact. It is obtained from the Contact ID field of the TACD table.
Chat Routed CSQ	CSQ through which the chat contact was routed to an agent. It is obtained from the csqname field of the contactservicequeue table.
Chat Skills	Skills associated with an agent for handling a chat contact. This is obtained from the skillname field of the skill table.
Active Time	Talk time for the chat agent. This is obtained from the talk time field of the TACD table.
Accept Time	Time the agent spent in accepting the chat contact. This is obtained from the acceptTime field of the TACD table.
Chat Type	Type of the chat contact. This is obtained from the contactType field of the TCD table.

Chat Agent Summary Report

The Chat Agent Summary report provides a summary line per chat agent. It includes the number of chats assigned and handled by an agent, active time, and accept time.



Note Chat Agent Summary report is available in Unified CCX Premium license package.

[Table 10: Chat Agent Summary Report](#), on page 166 shows how the information in the Chat Agent Summary report is obtained or calculated.

Table 10: Chat Agent Summary Report

Field	Explanation
Agent Name(Agent ID)	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Call Summary Report Filter Parameters, on page 183. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs. Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Chats Presented	Number of chats presented to the agent. It is calculated by counting the number of TextAgentConnectionDetail records (TACDR) for the chat agent after joining with TextContactDetail records (TCDR) based on contactid, contactseqnum, and mediatype, which is 1 (chat_type) and the disposition can be handled (value = 2), rejected (value = 5), and abandoned (value = 1).
Chats Handled	Number of chats handled by the agent. It is calculated by counting the number of TACDR with talk time > 0 for the agent after joining with TCDR based on contactid, contactseqnum and mediatype = 1 (chat_type) and disposition = 2 (handled). The contact type of TCDR should be of type chat (value = 1).
Active Time—Avg	Average talk time for the chat agent. It is calculated by taking the average talk time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type)
Active Time—Max	Maximum talk time for the chat agent. It is calculated by taking the maximum talk time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type)
Accept Time—Avg	Average time the agent spent in accepting the chat contact. It is calculated by taking the average accept time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type).
Accept Time—Max	Maximum time the agent spent in accepting the chat contact. It is calculated by taking the maximum accept time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type).

Field	Explanation
Group Chats Presented	Number of group chats presented to the agent. It is calculated by counting the number of TextAgentConnectionDetail records (TACDR) for the chat agent after joining with TextContactDetail records (TCDR) based on contactid, contactseqnum, and mediatype, which is 1 (chat_type) and disposition can be either handled (value = 2), rejected (value = 5), or declined (value = 9) .
Group Chats Handled	Number of group chats handled by the agent. It is calculated by counting the number of TACDR with talk time > 0 for the agent after joining with TCDR based on contactid, contactseqnum and mediatype = 1 (chat_type) and disposition = 2 (handled) and 8 (agent leaves the group chat). The contact type of TCDR should be of type group chat (value = 5).
Group Chats Declined	Number of group chats declined by the agent. It is calculated by counting the number of TACDR for the agent after joining with TCDR based on contactid, contactseqnum and mediatype = 1 (chat_type) and disposition = 9 (declined).

Chat Contact Service Queue Activity Report

The Chat Contact Service Queue Activity report shows one line for each CSQ that is configured in Unified CCX. A CSQ can be configured based on resource skill.

[Table 11: Chat Contact Service Queue Activity Report Query Design, on page 167](#) shows how the information in the Chat Contact Service Queue Activity report is obtained or calculated.

[Table 12: Chat Contact Service Queue Activity Report Filter Parameter , on page 168](#) explains how the Chat Contact Service Queue Activity report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#)

Table 11: Chat Contact Service Queue Activity Report Query Design

Field	Explanation
CSQ Name	The CSQ.recordID uniquely identifies a CSQ. Obtain this value as described in Table 12: Chat Contact Service Queue Activity Report Filter Parameter , on page 168 . CSQ name is stored in CSQ.csqName.
Chats Presented	Chats Presented is calculated using the sum of Chats Handled and Chats Abandoned.
Avg Queue Time	Calculated as total TCQD.queueTime / Total number of TCQD records with TCQD.queueTime greater than zero.
Max Queue Time	Join TCD and TCQD on contactId, contactseqnum, and nodeID to find TCQD records during the report period. (For these records, the values of the corresponding TCD.startdatetime is within the report period.) For each CSQ, determine the maximum value stored in TCQD.queueTime.
Chats Handled	Join TCQD and TACD on contactId, contactseqnum, qindex, and nodeID with TCQD.disposition is 2 (handled), and TACD.talkTime greater than zero. This process provides the chats handled by agents. For each CSQ, count the number of TCQD records to determine the number of chats handled by the CSQ.

Field	Explanation
Avg Handle Time	Join TCQD and TACD on contactId, contactseqnum, qindex, and nodeID with TCQD.disposition is 2 (handled), and TACD.talkTime greater than zero. This process provides the chats handled by agents. For each CSQ, calculate the average of TACD.talkTime to determine the average time for chats handled by the CSQ. If Chats Handled is zero, this field is zero.
Max Handle Time	Join TCQD and TACD on contactId, contactseqnum, qindex, and nodeID with TCQD.disposition is 2 (handled), and TACD.talkTime greater than zero. This process provides the chats handled by agents. For each CSQ, maximum of TACD.talkTime determine the value of this field. If Chats Handled is zero, this field is zero.
Chats Abandoned	For each CSQ, count the number of TCQD records where TCQD.disposition = 1 to determine the number of chats abandoned from the CSQ.

You can filter the Chat Contact Service Queue Activity report by the following parameter:

Table 12: Chat Contact Service Queue Activity Report Filter Parameter

Filter parameter	Result
All CSQs (default, no filter parameter)	Search the CSQ table to find the distinct CSQ.csqName with CSQ.queueType is equal to 2 and CSQ.dateinactive is NULL. This action determines all the active chat CSQs.
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID.

Chat CSQ Agent Summary Report

An agent can handle chat contacts for multiple CSQs. The Chat CSQ Agent Summary report table provides information about chat contacts handled in each CSQ for each agent.

[Table 13: Chat CSQ Agent Summary Report Query Design, on page 168](#) explains how to obtain and calculate the information in the Chat CSQ Agent Summary report.

[Table 14: Chat CSQ Agent Summary Report Filter Parameter, on page 169](#) explains how the Chat CSQ Agent Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 13: Chat CSQ Agent Summary Report Query Design

Field	Explanation
CSQ Name	The CSQ.recordID uniquely identifies a CSQ. Obtain this value as described in Table 14: Chat CSQ Agent Summary Report Filter Parameter, on page 169 . CSQ name is stored in CSQ.csqName.

Field	Explanation
Agent Name	Chat record tables (TACD and TASD) refer to agents by resource ID. Given Resource.resourceID, search the Resource table for the corresponding Resource.resourceName and Resource.resourceLoginID. These two fields uniquely identify an agent. The agent name is stored in Resource.resourceName.
Chat Received	<p>A received chat contact has a TCCD record, a TCQD record for the CSQ that the chat contact was routed to, and a TACD record for the agent who received the chat contact.</p> <p>Join TCCD and TCQD on contactID, contactSeqNum, and nodeID to find the TCQD record for the CSQ to which the chat contact was routed. Join TCQD and TACD on contactID, contactSeqNum, nodeID, and qIndex to find the agent who handled the chat contact. To uniquely identify a CSQ, the CSQ record ID is stored in TCQD.csqrecordid.</p> <p>To uniquely identify an agent, the resource ID is stored in TACD.resourceid.</p> <p>For each CSQ-Agent combination (CSQ is identified by CSQ.recordID, and agent is identified by Resource.resourceName), count the number of TACD records to determine the number of chat contacts handled by the specified CSQ-Agent combination.</p>
Chat Handled	Same calculation as for chat contacts received, but in the search criteria, TACD.talkTime is greater than zero.
Average Active Chat Time	<p>If chat contacts handled is not zero then this field is calculated as Total Talk Time divided by Chat Contacts Handled.</p> <p>If Chat Contacts Handled is zero, this field is zero.</p>
Chat No Answer	<p>Same calculation as for chat contacts Received, but in the search criteria, TACD.talkTime is zero, and TACD.acceptTime is greater than zero.</p> <p>For each CSQ-Agent combination, count the number of TACD records. This result is the number of chat contacts that got no answer.</p>
Average Acceptance Time	<p>If chat contacts Handled is not zero then this field is calculated as Total Accept Time divided by Chat Contacts Handled.</p> <p>If Chat Contacts Handled is zero then this field is zero.</p>

Table 14: Chat CSQ Agent Summary Report Filter Parameter

Field	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time and with CSQ.queueType equal to 2. This action determines the active chat CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqname contains values that are in the list. Obtain the corresponding CSQ.recordID.

Chat Traffic Analysis Report

The Chat Traffic Analysis report shows information about incoming chat contacts to the Unified CCX system.

Table 15: Chat Traffic Analysis Report Query Design, on page 170 shows how the information in the Chat Traffic Analysis report is obtained or calculated.

If the selected report Start Date and report End Date exceeds the date range available in the database, the report start date and report end date are automatically adjusted to match the date range that is available in the database. For example, if data is available in the database only from start date x to end date y, and if the selected start date is earlier than x and the selected end date is later than y, the report start date and report end date are automatically adjusted to x and y respectively.

For information about the database table names and field names that are shown in this section, see the Conventions Used in This Chapter, on page 163 .

Table 15: Chat Traffic Analysis Report Query Design

Field	Explanation
Date	Date of each day in the report period.
Total Incoming Chat Contacts	For each day, count the number of TCCD records with a unique contactID with the Contact Type field set to the value of 1 (incoming contact).
Avg Chats (per hour)	Calculated as total incoming contacts divided by the number of hours in a day. The first day or the last day of the report period may be a partial day depending on the start time and the end time selected by the user. Any other day within the report period has 24 hours.
Peak Chats (per hour)	Divide each day into 1-hour intervals. The number of incoming chat contacts within each interval is determined by counting the number of TCCD records with a unique contactID in the interval. The peak hour is the interval with the largest number of incoming chat contacts. This field displays the number of chat contacts in the peak hour.
Peak Hour Start Time	Divide each day into 1-hour intervals. The number of incoming chat contacts within each interval is determined by counting the number of TCCD records with a unique contactID in the interval. The peak hour is the interval with the largest number of incoming chat contacts. This field displays the start time of the peak hour.
Peak Hour End Time	Divide each day into 1-hour intervals. The number of incoming chat contacts within each interval is determined by counting the number of TCCD records with a unique contactID in the interval. The peak hour is the interval with the largest number of incoming chat contacts. This field displays the end time of the peak hour.
Avg Chat Duration	The contact duration for a chat contact is calculated as the sum of TACD.talkTime for all the contacts connected to an agent. It is zero for all other contacts. Average contact duration for a day is calculated as the sum of contact durations for all incoming contacts on that day divided by the number of incoming contacts on that day.
Min Chat Duration	The contact duration for a chat contact is calculated as the sum of TACD.talkTime for all the contacts connected to an agent. It is zero for all other contacts. Minimum contact duration for a day is the shortest contact duration of all incoming contacts for that day.
Max Chat Duration	The contact duration for a chat contact is calculated as the sum of TACD.talkTime for all the contacts connected to an agent. It is zero for all other contacts. Maximum contact duration for a day is the longest contact duration of all incoming contacts for that day.

Email Reports

Email Agent Activity Report

The Email Agent Activity Report presents email statistics of the email-enabled agents for a day.

[Table 16: Email Agent Activity Report Query Design, on page 171](#) shows how the information in the Email Agent Activity Report is obtained or calculated.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 16: Email Agent Activity Report Query Design

Field	Explanation
Agent Name	Name of the agent. It is obtained from Agent Names filter selected by user and then mapped with resource and textagentstatedetail tables.
Agent Id	Login user ID of the agent. It is obtained from textagentstatedetail table.
Login Date	Date the agent logged in. It is obtained from textagentstatedetail table after grouping by statechangedatetime.
Logged-In	Total time the agent logged in. It is calculated from textagentstatedetail table. It is sum of ready, notready, reserved, busy and partial busy state time.
Not Ready	Total time the agent spent in the E-Mail Not Ready state. It is obtained from textagentstatedetail table.
Ready	Total time the agent spent in the E-Mail Ready state. It is obtained from textagentstatedetail table.
Time Spent On Desk	It is sum of busy and partial busy duration. It is obtained from textagentstatedetail table. Note This is a hidden field.
Presented	Number of email messages that are presented to the agent. It is obtained from TextAgentConnectionDetail table.
Requeued	Number of email messages that the agent requeued. It is obtained from TextContactDetail table where disposition is 2 (Handled) and dispositionReason is email_requeue_transfer or email_requeue_agent_disconnected.
Sent	Number of response email messages that the agent sent. It is obtained from TextContactDetail table where disposition is 2 (Handled) and dispositionReason is email_agent_replied.
Discarded	Number of email messages that the agent discarded. The discarded date and time determines whether the email message falls within the interval. It is obtained from the textcontactdetail table where disposition = 4 and dispositionReason = email_agent_discarded.
Avg On Desk	Avg On Desk = Total time spent on handling email contacts/Number of emails sent and requeued by agent. It is obtained from TextAgentConnectionDetail.

Email Contact Detail Report

The Email Contact Detail Report presents information about each email contact that is handled by the agent.

[Table 17: Email Contact Detail Report Query Design, on page 172](#) shows how the information in the Email Contact Detail Report is obtained or calculated.

[Table 18: Email Contact Detail Report Filter Parameters, on page 173](#) explains how the Email Contact Detail Report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 17: Email Contact Detail Report Query Design

Field	Explanation
Contact ID	Contactid which uniquely identifies an email contact. It is obtained from the contactid field of the textcontactdetail table.
Sequence No	Number that the system incrementally assigns to each contact leg. It is obtained from the contactseqnum field of the textcontactdetail table.
CSQ Name	Name of the Contact Service Queue (CSQ) that routed the email contact to the agent. It is obtained from the contactservicequeue table based on the csqrecordid field from the textcontactqueuedetail table.
Agent Name	First name and last name of the agent who sent the response email message. It is obtained from the resource table based on the resourceid field from the textagentconnectiondetail table.
Received	Date and time the contact center received the email contact. It is obtained from the textcustomerdetails table.
Retrieved	Date and time the agent retrieved the email contact. It is obtained from the enddatetime field of the textagentconnectiondetail table.
Replied	Date and time the agent sent the response email message. It is obtained from the enddatetime field of the textcontactdetail table.
Discarded	Date and time that the agent discarded the email message. It is obtained from the enddatetime column from the textcontactdetail table where disposition = 4 and dispositionReason = email_agent_discarded.
From	Email address of the customer who sent the email message. It is obtained from the textcustomerdetails table.
Reply-To	Email address of the customer to which the response email message is sent. It is obtained from the textcustomerdetails table.
To	Email address of the contact center to which the email message was sent. It is obtained from the accountuserid field of the contactservicequeue table based on the csqrecordid field from the textcontactqueuedetail table.
Subject	Subject line of the received email message. It is obtained from the textcustomerdetails table.
Contact Type	Contact type of the email contact. It is obtained from the contacttype field of the textcontactdetail table.

Field	Explanation
Contact Disposition	Disposition of the email contact. It is obtained from the contactdisposition field of the textcontactdetail table.

Table 18: Email Contact Detail Report Filter Parameters

Filter parameter	Explanation
CSQ Name	To report on specific email CSQ or CSQs, obtain the list of CSQ names from the user selection for this parameter. Search the contactservicequeue table to find the records with the queuetypename “Email” and match the csqname with the values that are in the list. In the report query, use the recordid field to get the ID of the CSQ.
Agent Name	To report on specific email agents, obtain the list of agent names from the user selection for this parameter. Search the resource table to find the records with the resourcename that matches with the values that are in the list. In the report query, use the resourceid field to get the ID of the agent.
Subject	This is a case-sensitive filter to search for the records that the user specifies in the search string for subject.

Email CSQ Activity Report

The Email CSQ Activity Report presents email activity statistics of agents in a Contact Service Queue (CSQ) for each day.

[Table 19: Email CSQ Activity Report Query Design, on page 173](#) shows how the information in the Email CSQ Agent Activity Report is obtained or calculated.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 19: Email CSQ Activity Report Query Design

Field	Explanation
CSQ Name	Name of the Contact Service Queue (CSQ) that routed the email contact to the agent. It is obtained from the contactservicequeue table based on the csqrecordid field from the textcontactqueuedetail table.
Date	Date of each day in the interval.
Agent Name	Name of the agent to whom the email messages are routed. It is obtained from the resource table based on the resourceid field from the textagentconnectiondetail table.
Retrieved	Number of email messages that are routed through the CSQ to the agent and then retrieved by the agent. It is obtained by taking the sum of the records obtained querying the tables textagentconnectiondetail, textcontactdetail and textcontactqueuedetail for the given date time interval.

Field	Explanation
Requeued	Number of email messages that are requeued to the agent. It is calculated by taking the sum of records obtained by querying textcontactdetail table for contactdisposition 2 and dispositionreason that contains the text 'email_requeue' where the contactid and contactseqnum in textcontactdetail matches with the contactid and contactseqnum of textagentconnectiondetail and textcontactqueuedetail tables.
Sent	Number of response email messages that the agent sent. It is calculated by taking the sum of records obtained by querying textcontactdetail table for contactdisposition 2 and dispositionreason 'email_agent_replied' where the contactid and contactseqnum in textcontactdetail matches with the contactid and contactseqnum of textagentconnectiondetail and textcontactqueuedetail tables.
Discarded	Number of email messages that the agent discarded. The discarded date and time determines whether the email message falls within the interval. It is obtained from the textcontactdetail table where disposition = 4 and dispositionReason = email_agent_discarded.
Avg On Desk	Average time agent spent on desk to reply to email once the agent receives it. It is obtained by summing the talktime field in textagentconnectiondetail table and dividing by the total number of emails requeued and sent.
Time Spent On Desk	Sum of the time that the agent spends in email processing state to respond to all the emails. It is obtained by taking the sum of talktime in textagentconnectiondetail table for all the emails handled by the agent the given date time interval. Note This is a hidden field.

Email Traffic Analysis Report

The Email Traffic Analysis Report gives the count of email messages received for the specified date or date range.

[Table 20: Email Traffic Analysis Report, on page 174](#) shows how the information in the Email Traffic Analysis report is obtained or calculated.

[Table 21: Email Traffic Analysis Report Filter Parameter, on page 175](#) explains how the Email Traffic Analysis report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 20: Email Traffic Analysis Report

Field	Explanation
Email Address	Obtained from ContactServiceQueue.accountuserid for email CSQs.
Received Date	Obtained from TextCustomerDetails.insertionDate.
Email Count	Count of ContactServiceQueue.accountuserId where the csq type is 'Email'.

Table 21: Email Traffic Analysis Report Filter Parameter

Filter parameter	Explanation
Email Address	ContactServiceQueue.accountuserid for email CSQs.

Inbound Reports

Abandoned Call Detail Activity Report

The Abandoned Call Detail Activity report contains one row per abandoned call. An abandoned call is a call for which CCD.contactDisposition is set to 1 (abandoned).

[Table 22: Abandoned Call Detail Activity Report Query Design, on page 175](#) shows how the information in the Abandoned Call Detail Activity report is obtained or calculated.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 22: Abandoned Call Detail Activity Report Query Design

Field	Explanation
Call Start Time	Obtained from CCD.startDateTime.
Called Number	Obtained from CCD.calledNumber.
Call ANI	For ACD calls, obtained from CCD.originatorDN. For IVR calls, this field is set to the extension of the originating agent as follows: join CCD.originatorID with Resource.resourceID, and CCD.profileID with Resource.profileID to obtain Resource.extension.
Initial Call Priority	Join CCD and CRD on sessionID, sessionSeqNum, nodeID, and profileID. Note A call may be abandoned without being assigned a call priority. In this case, CRD.origPriority will be blank and this Initial Call Priority field will show “n/a.”
Call Routed CSQ	Join CCD and CQD on sessionID, sessionSeqNum, nodeID, and profileID. Additional search criteria are CCD.contactDisposition is 1 (abandoned), CQD.disposition is 1 (abandoned) or 3 (dequeued), and CQD.targetType is 0 (CSQ type). The CSQ information is stored in CQD.targetID. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID to obtain CSQ name, which is stored in CSQ.csqName. Note A call may be abandoned without being presented to any CSQ. In this case, this Call Routed CSQ field will be blank. If a call has been routed to multiple CSQs, the Call Routed CSQ field displays the CSQ name followed by ellipsis (for example: CSQ025...).

Field	Explanation
Agent Name	Join CCD and ACD on sessionID, sessionSeqNum, nodeID and profileID to include only calls with CCD.contactDisposition set to 1 (abandoned). Join ACD and Resource on resourceID and profileID to obtain the name of the agent who was presented with the call, which is stored in Resource.resourceName. Note A call may be abandoned without being presented to any agent. In this case, this agent Name field will be blank.
Call Skills	This field shows the list of skills that belong to the CSQ shown in Call Routed CSQ . Join CQD.targetID with CSQU.recordID, and CQD.profileID with CSQU.profileID to obtain CSQU.skillGroupID. Join CSQU.skillGroupID with SG.skillGroupID to obtain SG.skillIID. Join SG.skillIID with Skill.skillIID to obtain the list of call skills, which is stored in Skill.skillName. Note This Call Skills field will be blank for a call that is abandoned without being presented to a CSQ and for a call that is abandoned after it is presented a resource-based CSQ.
Final Call Priority	Join CCD and CRD on sessionID, sessionSeqNum, nodeID, and profileID. Note A call may be abandoned without being assigned a call priority. In this case, CRD.finalPriority will be blank and this Final Call Priority field will show “n/a.”
Call Abandon Time	Obtained from CCD.endDateTime.

Aborted and Rejected Call Detail Report

The Aborted and Rejected Call Detail report provides detailed information about each call that is aborted or rejected by the system. A call is aborted if an exception occurs in the workflow that is processing a call. A call is rejected if system resources reach maximum capacity (for example, the maximum number of CTI ports is reached).

[Table 23: Aborted and Rejected Call Detail Report Query Design, on page 176](#) shows how the information in the Aborted and Rejected Call Detail report is obtained or calculated.

[Table 24: Aborted and Rejected Call Detail Report Filter Parameter, on page 179](#) explains how the Aborted and Rejected Call Detail report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 23: Aborted and Rejected Call Detail Report Query Design

Field	Explanation
Node ID	Obtained from CCD.nodeID.
Session ID	Obtained from CCD.sessionID.
Sequence No	Obtained from CCD.sessionSeqNum.

Field	Explanation
Call Start Time	Obtained from CCD.startDateTime.
Call End Time	Obtained from CCD.endDateTime.
Contact Type	Obtained from CCD.contactType.
Contact Disposition	Obtained from CCD.contactDisposition. If CCD.contactDisposition is 4, this field displays Aborted. If CCD.contactDisposition is 5 or greater, this field displays Rejected.

Field	Explanation
Abort/Reject Reason	<p>For aborted calls, CCD.contactDisposition is 4, and this field displays the value stored in CCD.dispositionReason.</p> <p>For rejected calls, CCD.contactDisposition is 5 or greater, and this field displays the text according to the following mapping. The description for each reject reason is also explained below:</p> <p>5—Reject: No Trigger - Trigger is not recognized or has been removed</p> <p>6—Reject: Channels Not Ready - Channels Not Ready - Group(s) are not ready</p> <p>7—Reject: Trigger Timeout - Trigger timeout expires before attempting to get the channel</p> <p>8—Reject: Channels Busy - No channel(s) available</p> <p>9—Reject: No Channel License - No channel license is available to process the call</p> <p>10—Reject: Remote Timeout - CTI Accept Timer expires</p> <p>11—Reject: Software Error - Internal software error</p> <p>12—Reject: Trigger Max Session - Trigger has reached its maximum session</p> <p>13—Reject: Trigger Failed - JTAPI Subsystem redirect to CTI port fails</p> <p>14—Reject: Setup Timeout - Setup Timeout: JTAPI Subsystem Accept timer expires</p> <p>15—Reject: Setup Failed - JTAPI Subsystem Accept fails</p> <p>16—Reject: Resource Invalid - Resource address is invalid</p> <p>17—Reject: Resource Not Acknowledging - Resource is not acknowledging</p> <p>18—Reject: Resource Busy - Resource is busy</p> <p>19—Reject: Contact Not Offered - Contact is not successfully offered, either because the destination is not acknowledging the offering or it does not receive it</p> <p>20—Reject: Internal Error - PlaceCall gets an internal error</p> <p>21—Reject: Contact Rejected in Script - Rejected by script</p> <p>22—Reject: Agent reject Outbound call - Outbound call rejected by agent</p> <p>23—Reject: Agent Skipped Outbound Call - Outbound call skipped by agent</p> <p>24—Reject: Agent clicked Cancel Reservation for Outbound call.</p> <p>Note The event occurred when the campaign got disabled or deleted or when the associated CSQ got deleted before the agent clicked Cancel Reservation. This is because CCDR will be written only when the call is disconnected.</p> <p>25-98—Reserved.</p>

Field	Explanation
Originator DN (DN = Directory Number)	<p>The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Originator Type is agent, this field shows the Unified CCX extension of the agent. If the call is attended at the non-IPCC extension, then the non-IPCC extension is displayed. If the call is made from a non-IPCC extension, then the non-IPCC extension is displayed. • If Originator Type is device, this field shows the CTI port number. • If Originator Type is unknown (through a gateway or an unmonitored device), this field shows the telephone number of the caller.
Destination DN	<p>The destination directory number. Destination Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Destination Type is agent, this field shows the Unified CCX extension of the agent. • If destination type is device, this field shows the CTI port number. • If destination type is unknown (through a gateway or an unmonitored device), this field shows the telephone number called.
Called Number	Obtained from CCD.calledNumber.
Original Called No.	Obtained from CCD.origCalledNumber.
Application Name	Obtained from CCD.applicationName.
Call Routed CSQ	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records with a CCD.startDateTime value that is within the report period. Join CQD and CRD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex to obtain CQD.targetID, and join CQD.profileID with CQD.targetType = 0 (CSQ type). CQD.targetID contains the recordID of the CSQ that handled the call. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID to obtain the CSQ name, which is stored in CSQ.csqName.

Table 24: Aborted and Rejected Call Detail Report Filter Parameter

Filter parameter	Explanation
Contact Disposition	<p>To report on aborted calls only, obtain CCD records with CCD.contactDisposition = 4.</p> <p>To report on rejected calls only, obtain CCD records with CCD.contactDisposition >= 5.</p> <p>To report on both aborted and rejected calls, obtain CCD records with CCD.contactDisposition >= 4.</p>

Agent Call Summary Report

The Agent Call Summary report shows, for each agent specified, summary information about each call that was received (an inbound call) and each call that was made (an outbound call) by the agent. This report also shows the number of calls transferred to the agent and transferred out (to another route point or another agent) by the agent, and the number of conference calls in which the agent participated.

[Table 25: Agent Call Summary Report Query Design, on page 180](#) shows how the information in the Agent Call Summary report is obtained or calculated.

[Table 26: Agent Call Summary Report Filter Parameters, on page 183](#) explains how the Agent Call Summary report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see [Conventions Used in This Chapter, on page 163](#).

Table 25: Agent Call Summary Report Query Design

Field	Explanation
Agent Name	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Call Summary Report Filter Parameters, on page 183. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs. Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Extension	<p>For agents who have not had their extension changed, obtained from Resource.extension.</p> <p>For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.</p>
Total Inbound	<p>Calculated as follows:</p> <p>Total inbound ACD calls + Total inbound IVR calls.</p>
Inbound ACD— Total	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, count the number of ACD records to determine the total number of inbound ACD calls received by each agent.</p>
Inbound ACD—Avg Talk	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, calculate the sum of the values in ACD.talkTime, then divide by the number of ACD records for that agent.</p>

Field	Explanation
Inbound ACD—Avg Hold	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, calculate the sum of the values in ACD.holdTime, then divide by the number of ACD records for that agent.</p>
Inbound ACD—Avg Work	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, calculate the sum of the values in ACD.workTime, then divide by the number of ACD records for that agent.</p>
Inbound Non-ACD—Total	<p>Search CCD for records for which the value of startDateTime is within the report period and destinationType is 1 (agent). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the results for these fields obtained from Inbound ACD—Total. Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.</p> <p>For each agent, count the number of CCD records to determine the number of total inbound IVR calls.</p>
Inbound Non-ACD—Avg Talk Time	<p>Talk time of an IVR call is stored in CCD.connectTime.</p> <p>Search CCD for records in which the value of startDateTime is within the report period and destinationType is 1 (agent). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the result obtained from Inbound ACD—Total. Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.</p> <p>For each agent, calculate the sum of the values stored in CCD.connectTime, then divide by the number of CCD records for that agent.</p>
Inbound Non-ACD—Max Talk Time	<p>Talk time of an IVR call is stored in CCD.connectTime.</p> <p>Search CCD for records for which the value of startDateTime is within the report period and destinationType is 1 (agent). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the result obtained from Inbound ACD—Total. Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.</p> <p>For each agent, determine the maximum value stored in CCD.connectTime.</p>

Field	Explanation
Outbound—Total	<p>Search CCD for records in which the startDateTime is within the report period, and originatorType is 1 (agent). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, count the number of CCD records.</p>
Outbound—Avg Call Time	<p>Search CCD for records in which the startDateTime is within the report period, and originatorType is 1 (agent). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, calculate the sum of the values stored in CCD.connectTime, then divide by the number of CCD records for that agent.</p>
Outbound—Max Call Time	<p>Search CCD for records in which the startDateTime is within the report period, and originatorType is 1 (agent). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, determine the maximum value stored in CCD.connectTime.</p>
ACD Transfer-In	<p>For ACD calls that are transferred in, CCD.contactType = 5 (transfer-in), and an ACD record is present.</p> <p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, count the number of ACD records for which the corresponding CCD records have contactType = 5 (transfer-in).</p>
ACD Transfer-Out	<p>For ACD calls that are transferred out, CCD.transfer = 1, and an ACD record is present.</p> <p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, count the number of ACD records for which the corresponding CCD records have transfer = 1.</p>
ACD Conference	<p>For ACD conference calls, CCD.conference = 1, and an ACD record is present.</p> <p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to find ACD records within the report period. (For such records, the corresponding CCD.startDateTime value is within the report period.) Join ACD.resourceID with Resource.resourceID and ACD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p> <p>For each agent, count the number of ACD records for which the corresponding CCD records have conference = 1.</p>

Table 26: Agent Call Summary Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filter parameter)	To report on all agents, obtain the list of resource IDs and profile IDs as follows: Search the Resource table for agents who are active (Resource.active is 1) or who are deleted after report start time (Resource.dateInactive is later than the report start time). In this way, the report does not include agents who are deleted before the report start time.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

Agent Detail Report

The Agent Detail report contains detailed information for calls received and calls made by an agent. The report contains one row per call and includes Unified CCX and Cisco Unified IP IVR calls.

For ACD calls, the ACD table records all the calls handled by an agent.

For IVR calls, the CCD table records all the calls made by or received by an agent. If an agent makes an IVR call, the agent's resource ID appears in CCD.originatorID. If the agent receives an IVR call, the agent's resource ID appears in CCD.destinationID.

[Table 27: Agent Detail Report Query Design, on page 184](#) shows how the information in the Agent Detail report is obtained or calculated.

Table 28: Agent Detail Report Filter Parameters, on page 186 explains how the Agent Detail report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the Conventions Used in This Chapter, on page 163.

Table 27: Agent Detail Report Query Design

Field	Explanation
Agent Name	<p>For ACD calls, an agent is identified by the combination of ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.</p> <p>For IVR calls, if an agent is the originator of the call, the agent is identified by CCD.originatorID and CCD.profileID, when CCD.originatorType = 1 (agent type). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p> <p>If an agent is the destination of an IVR call, the agent is identified by CCD.destinationID and CCD.profileID, when CCD.destinationType = 1 (agent type). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p>
Extension	<p>For ACD calls, an agent is identified by the combination of ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.</p> <p>For IVR calls, if an agent is the originator of the call, the agent is identified by CCD.originatorID and CCD.profileID, when CCD.originatorType = 1 (agent type). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p> <p>If an agent is the destination of an IVR call, the agent is identified by CCD.destinationID and CCD.profileID, when CCD.destinationType = 1 (agent type). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.extension.</p>
Call Start Time	<p>For ACD calls, obtained from ACD.startDateTime.</p> <p>For IVR calls, obtained from CCD.startDateTime.</p>
Call End Time	<p>For ACD calls, obtained from ACD.endDateTime.</p> <p>For IVR calls, obtained from CCD.startDateTime.</p>
Duration	<p>Calculated as follows:</p> <p>Call End Time – Call Start Time</p> <p>Displayed as hh:mm:ss.</p>
Called Number	<p>For ACD calls, agent identification is stored in ACD (see Agent Name earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.calledNumber.</p> <p>For IVR calls, agent identification is stored in CCD (see Agent Name earlier in this table). The value of this field is obtained directly from CCD.calledNumber.</p>

Field	Explanation
Call ANI	<p>For ACD calls, agent identification is stored in ACD (see Agent Name earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.originatorDN.</p> <p>For IVR calls, agent identification is stored in CCD (see Agent Name earlier in this table). The value of this field is obtained directly from CCD.originatorDN.</p> <p>For internal calls (CCD.contactType = 3), but the CCD.ornatorDN field is blank. This field is set to the extension of the agent who originates the call, as follows:</p> <p>Join CCD.originatorID with Resource.resourceID, join and CCD.profileID with Resource.profileID to obtain the extension of the originating agent, which is stored in Resource.extension.</p>
Call Routed CSQ	Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type), and CQD.disposition = 2 (handled). The combination of CQD.targetID and CQD.profileID uniquely identifies a CSQ. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID to obtain the CSQ name, which is stored in CSQ.csqName.
Other CSQs	Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type), and CQD.disposition is not 2 (not handled) to obtain the CSQ for which the call was queued but not handled. The combination of CQD.targetID and CQD.profileID uniquely identifies a CSQ. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID to obtain the CSQ name, which is stored in CSQ.csqName. Multiple CSQ names are represented by "...".
Call Skills	Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type), and CQD.disposition = 2 (handled) to obtain a skill group ID, which is stored in CSQ.skillGroupID. Join CSQ.skillGroupID with SG.skillGroupID to get SG.skillID. Join SG.skillID with Skill.skillID to get the list of skill names, stored in Skill.skillName. Multiple skill names are separated by commas.
Talk Time	<p>For ACD calls, obtained from ACD.talkTime.</p> <p>For IVR calls, shows the value of Duration if CCD.contactDisposition = 2 (handled). Shows zero if CCD.contactDisposition = 1 (abandoned).</p>
Hold Time	<p>For ACD calls, obtained from ACD.holdTime.</p> <p>Blank for IVR calls.</p>
Work Time	<p>For ACD calls, obtained from ACD.workTime.</p> <p>Blank for IVR calls.</p>
Call Type	<ul style="list-style-type: none"> • Inbound ACD—Call has an ACD record present. • Inbound Non-ACD—CCD.destinationType = 1 (agent type), CCD.destinationID is a resource ID, and there is no corresponding ACD record. (A corresponding ACD record has the same sessionID, sessionSeqNum, nodeID, and profileID.) • Outbound—CCD.originatorType = 1 (agent type), and CCD.originatorID is a resource ID. • Transfer-In—CCD.contactType = 5 (transfer-in), and there is a corresponding ACD record. • Transfer-Out—CCD.transfer = 1, and there is a corresponding ACD record. • Conference—CCD.conference = 1, and there is a corresponding ACD record.

Table 28: Agent Detail Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filter parameter)	To report on all agents, obtain the list of resource IDs and profile IDs from the Resource table.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.
Call Type	To report on a specific call type or types, obtain the call types from the user selection for this parameter. (Up to 6 call types can be selected.) Call types that are not selected will be eliminated before the final result set is displayed. The elimination process is based on the classification criteria described in the Call Type field in Table 27: Agent Detail Report Query Design, on page 184 .

Agent Login Logout Activity Report

The Agent Login Logout Activity report contains detailed information about the login and logout activities of agents. The login and logout information is stored in the ASD table.

[Table 29: Agent Login Logout Activity Report Query Design, on page 187](#) shows how the information in the Agent Login Logout Activity report is obtained or calculated.

[Table 30: Agent Login Logout Activity Report Filter Parameters, on page 187](#) explains how the Agent Login Logout Activity report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 29: Agent Login Logout Activity Report Query Design

Field	Explanation
Agent Name	Join ASD.agentID with Resource.resourceID to obtain the agent name, which is stored in Resource.resourceName.
Extension	For agents who have not had their extension changed, obtained from Resource.extension. For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.
Login Time	Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See agent Name for the relationship between resourceID/profileID and resourceName/ resourceLoginID.) Login Time is stored in ASD.eventDateTime where ASD.eventType = 1. If the agent logged in before the report start time, this field is displayed as < report start time .
Logout Time	Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See Agent Name for the relationship between resourceID/profileID and resourceName/ resourceLoginID.) Login Time is stored in ASD.eventDateTime where ASD.eventType = 7. If the agent logged out after the report end time, this field is displayed as: > report end time .
Logout Reason Code	This field is obtained from ASD.reasonCode when ASD.eventType = 7 (logout).
Logged-In Duration	<ul style="list-style-type: none"> • If the agent logged in before the report start time and logged out after the report end time—Logged-In Duration = report end time – report start time • If the agent logged in before the report start time and logged out during the report period—Logged-In Duration = Logout Time – report start time • If the agent logged in during the report period and logged out after the report end time—Logged-In Duration = report end time – Login Time • If the agent logged in and out during the report period—Logged-In Duration = Logout Time – Login Time

Table 30: Agent Login Logout Activity Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filter parameter)	To report on all agents, obtain the list of resource IDs as follows: Search the Resource table for records with resourceType set to 1 (agent). Resource ID is stored in Resource.resourceID. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs as follows: Obtain the list of resource group name(s) from the user selection for this parameter. Find the corresponding RG.resourceGroupID(s). Join RG.resourceGroupID with Resource.resourceGroupID to find agents belonging to the selected resource group(s). The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.

Filter parameter	Explanation
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs as follows: Obtain the list of agent names from the user selection for this parameter. Find the corresponding Resource.resourceID(s). Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Skill Names	To report on agents who possess a specific skill or skills, obtain the list of resource IDs as follows: Obtain the list of skill names from the user selection for this parameter. Find the corresponding Skill.skillID(s). Join Skill.skillID with RSM.skillID, RSM.resourceSkillMapID with Resource.resourceSkillMapID to find the agents who possess the selected skill(s). The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records in which Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and join Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. The Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

Agent Not Ready Reason Code Summary Report

The Agent Not Ready Reason Code Summary report provides information about the length of time each agent spent in Not Ready state during the report period. This report also shows the length of time that agents spent in Not Ready state for the reasons indicated by the reason codes that agents entered when going to Not Ready state. The report shows detailed information for each of up to eight reason codes, and displays consolidated information for other reason codes. By default, the report shows information for eight predefined reason codes. However, you can specify the eight reason codes for which the report shows detailed information.

[Table 31: Agent Not Ready Reason Code Summary Report Query Design, on page 189](#) shows how the information in the Agent Not Ready Reason Code Summary report is obtained or calculated.

[Table 32: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 191](#) explains how the Agent Not Ready Reason Code Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 31: Agent Not Ready Reason Code Summary Report Query Design

Field	Explanation
Agent Name	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 32: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 191. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent.</p> <p>Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs.</p> <p>Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Extension	<p>For agents who have not had their extension changed, obtained from Resource.extension.</p> <p>For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.</p>
Interval Start Time	<p>Beginning of an interval.</p> <p>End users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)</p>
Interval End Time	<p>End of an interval.</p> <p>End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)</p>

Field	Explanation
Total Logged-in	<p>Login time is stored in ASD.eventDateTime with eventType set to 1 (log in). Logout time is stored in ASD.eventDateTime with eventType set to 7 (log out).</p> <p>The calculation of the logged-in time for a single session depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent logs in and logs out during the interval: Total Logged-in Time = logout time – login time • An agent logs in before the interval and logs out after the interval: Total Logged-in Time = Interval End Time – Interval Start Time • An agent logs in before the interval and logs out during the interval: Total Logged-in Time = logout time – Interval Start Time • An agent logs in during the interval and logs out after the interval: Total Logged-in Time = Interval End Time – login time <p>If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.</p>
Total Not Ready	<p>Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See agent Name in this table for the relationship between resourceID/profileID and resourceName/resourceLoginID.) Not Ready state is identified by ASD.eventType = 2.</p> <p>The time spent in Not Ready state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Not Ready state during the interval: Total Not Ready Time = time out of Not Ready state – time in Not Ready state • An agent goes in to Not Ready state before the interval and goes out of Not Ready state after the interval: Total Not Ready Time = Interval End Time – Interval Start Time • An agent goes in to Not Ready state before the interval and goes out of Not Ready state during the interval: Total Not Ready Time = time out of Not Ready state – Interval Start Time • An agent goes in to Not Ready state during the interval and goes out of Not Ready state after the interval: Total Not Ready Time = Interval End Time – time in to Not Ready state <p>If an agent goes to Not Ready state multiple times during the interval, this field displays the sum of the time spent in each Not Ready state.</p>

Field	Explanation
Time in RC n1 Time in RC n2 Time in RC n3 Time in RC n4 Time in RC n5 Time in RC n6 Time in RC n7 Time in RC n8	<p>Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See Agent Name in this table for the relationship between resourceID/profileID and resourceName/resourceLoginID.) Not Ready state is identified by ASD.eventType = 2. The reason code is stored in ASD.reasonCode.</p> <p>By default, this report sorts the predefined Not Ready reason codes in numerical order and displays the first eight reason codes.</p> <p>You can specify other reason codes to report by selecting Filter Parameter Reason Code.</p>
Time in Other RCs	<p>Sum of the duration spent in Not Ready reason codes that are not shown in the Time in RC n1 through Time in RC n8 fields. The total time spent in different reason codes adds up to Total Not Ready Time (Time in Reason Code 1 + Time in Reason Code 2 + ... + Time in Reason Code 8 = Total Not Ready Time).</p> <p>Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See Agent Name in this table for the relationship between resourceID/profileID and resourceName/resourceLoginID.) Not Ready state is identified by ASD.eventType = 2. The reason code is stored in ASD.reasonCode. For this calculation, do not consider values that have been listed in the previous eight fields.</p>

Table 32: Agent Not Ready Reason Code Summary Report Filter Parameter

Filter parameter	Explanation
All Agents (default, no filter parameter)	<p>To report on all agents, obtain the list of resource IDs and profile IDs as follows:</p> <p>Search and display the Resource table for agents who are active (Resource.active is 1) or who are deleted after report start time (Resource.dateInactive is later than the report start time). In this way, the report does not include agents who are deleted before the report start time.</p>
Interval Length	<p>Entire report range—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.</p> <p>Thirty (30) minute intervals—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on.</p> <p>Sixty (60) minute intervals—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.</p>

Filter parameter	Explanation
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.
Reason Code	To report on a specific reason code or codes, obtain the list of reason codes from the user selection for this parameter. Find ASD records for which the ASD.eventType is 2 (Not Ready) and for which the value stored ASD.reasonCode is found in the selected list.

Agent State Detail Report

The Agent State Detail report shows detailed information about when an agent changed from one state to another.

[Table 33: Agent State Detail Report Query Design, on page 193](#) shows how the information in the Agent State Detail report is obtained or calculated.

[Table 34: Agent State Detail Report Filter Parameters, on page 194](#) explains how the Agent State Detail report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 33: Agent State Detail Report Query Design

Field	Explanation
Agent Name	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 34: Agent State Detail Report Filter Parameters, on page 194. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs. Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Extension	<p>For agents who have not had their extension changed, obtained from Resource.extension.</p> <p>For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.</p>
State Transition Time	<p>Obtained from ASD.eventDateTime.</p> <p>For agent identification, join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain Resource.resourceName and Resource.resourceLoginID, the combination of which uniquely identifies an agent.</p>
Agent State	<p>Obtained from ASD.eventType. The mapping between the numeric ASD.eventType and the displayed text is as follows:</p> <ul style="list-style-type: none"> 1—Logged-in 2—Not Ready 3—Ready 4—Reserved 5—Talking 6—Work 7—Logout
Reason	<p>Obtained from the reasoncodelabelmap table. If the reason mapping is not available, then the reason code is obtained from the agentstatedetail table and displayed.</p>

Field	Explanation
Duration	<p>Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State</p> <p>The calculation of the duration depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes to Agent State before the report start time and goes out of that state after the report end time: Duration = report end time – report start time • An agent goes to Agent State before the report start time and goes out of that state during the report period: Duration = time agent goes out of Agent State – report start time • An agent goes to Agent State during the report period and goes out of that state after the report end time: Duration = report end time – Transition Time • An agent goes to Agent State and out of Agent State during the report period: Duration = time agent goes out of Agent State – Transition Time

Table 34: Agent State Detail Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filter parameter)	To report on all agents, obtain the list of resource IDs and profile IDs as follows: Search and display the Resource table for agents who are active (Resource.active is 1) or who are deleted after report start time (Resource.dateInactive is later than the report start time). In this way, the report does not include agents who are deleted before the report start time.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.

Filter parameter	Explanation
Team Name	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

Agent State Summary Report (by Agent and Interval)

The Agent State Summary report (by Agent) and the Agent State Summary report (by Interval) show the length and percentage of time that each agent spent in each of the following agent states: Not Ready, Ready, Reserved, Talk, and Work. These reports also show the total length of time that each agent was logged in.

In the Agent State Summary report (by Agent), information presented is sorted first by agent, then by interval.

In the Agent State Summary report (by Interval), information presented is sorted first by interval, then by agent.

[Table 35: Agent State Summary Reports Query Design, on page 195](#) shows how the information in the Agent State Summary reports is obtained or calculated.

[Table 36: Agent State Summary Reports Filter Parameters, on page 199](#) explains how the Agent State Summary reports filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 35: Agent State Summary Reports Query Design

Field	Explanation
Agent Name	Join ASD.agentID with Resource.resourceID to obtain the agent name, which is stored in Resource.resourceName.
Extension	For agents who have not had their extension changed, obtained from Resource.extension. For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.
Interval Start Time	Beginning of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)
Interval End Time	End of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)

Field	Explanation
Total Logged-in Time	<p>Login time is stored in ASD.eventDateTime with eventType set to 1 (log in). Logout time is stored in ASD.eventDateTime with eventType set to 7 (log out).</p> <p>The calculation of the logged-in time for a single session depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent logs in and logs out during the interval: Total Logged-in Time = logout time – login time • An agent logs in before the interval and logs out after the interval: Total Logged-in Time = Interval End Time – Interval Start Time • An agent logs in before the interval and logs out during the interval: Total Logged-in Time = logout time – Interval Start Time • An agent logs in during the interval and logs out after the interval: Total Logged-in Time = Interval End Time – login time <p>If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.</p>
Not Ready Time	<p>Total time that an agent spent in Not Ready state during the interval, and the percentage of total logged-in time that an agent spent in Not Ready state.</p> <p>The time that an agent goes to Not Ready state is stored in ASD.eventDateTime with eventType set to 2. The time spent in Not Ready state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Not Ready state during the interval: Total Not Ready Time = time out of Not Ready state – time in to Not Ready state • An agent goes in to Not Ready state before the interval and goes out of Not Ready state after the interval: Total Not Ready Time = Interval End Time – Interval Start Time • An agent goes in to Not Ready state before the interval and goes out of Not Ready state during the interval: Total Not Ready Time = time out of Not Ready state – Interval Start Time • An agent goes in to Not Ready state during the interval and goes out of Not Ready state after the interval: Total Not Ready Time = Interval End Time – time in to Not Ready state <p>If an agent goes to Not Ready state multiple times during the interval, this field displays the sum of the time spent in each Not Ready state.</p> <p>The percentage is calculated as: (Not Ready Time / Total Logged-in Time) * 100%</p>

Field	Explanation
Ready Time	<p>Total time that an agent spent in Ready state during the interval, and the percentage of total logged-in time that an agent spent in Ready state.</p> <p>The time that an agent goes to the Ready state is stored in ASD.eventDateTime with eventType set to 3. The time spent in Ready state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Ready state during the interval: Total Ready Time = time out of Ready state – time in to Ready state • An agent goes in to Ready state before the interval and goes out of Ready state after the interval: Total Ready Time = Interval End Time – Interval Start Time • An agent goes in to Ready state before the interval and goes out of Ready state during the interval: Total Ready Time = time out of Ready state – Interval Start Time • An agent goes in to Ready state during the interval and goes out of Ready state after the interval: Total Ready Time = Interval End Time – time in to Ready state <p>If an agent goes to Ready state multiple times during the interval, this field displays the sum of the time spent in each Ready state.</p> <p>The percentage is calculated as: (Ready Time / Total Logged-in Time) * 100%</p>
Reserved Time	<p>Total time an agent spent in the Reserved state during the interval, and the percentage total logged-in time that an agent spent in Reserved state.</p> <p>The time that an agent goes to the Reserved state is stored in ASD.eventDateTime with eventType set to 4. The time spent in Reserved state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Reserved state during the interval: Total Reserved Time = time out of Reserved state – time in to Reserved state • An agent goes in to Reserved state before the interval and goes out of Reserved state after the interval: Total Reserved Time = Interval End Time – Interval Start Time • An agent goes in to Reserved state before the interval and goes out of Reserved state during the interval: Total Reserved Time = time out of Reserved state – Interval Start Time • An agent goes in to Reserved state during the interval and goes out of Reserved state after the interval: Total Reserved Time = Interval End Time – time in to Reserved state <p>If an agent goes to the Reserved state multiple times during the interval, this field displays the sum of the time spent in each Reserved state.</p> <p>The percentage is calculated as: (Reserved Time / Total Logged-in Time) * 100%</p>

Field	Explanation
Talk Time	<p>Total time an agent spent in the Talk state during the interval, and the percentage of total logged-in time that an agent spent in Talk state.</p> <p>The time that an agent goes to the Talk state is stored in ASD.eventDateTime with eventType set to 5. The time spent in Talk state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Talk state during the interval: Total Talk Time = time out of Talk state – time in to Talk state • An agent goes in to Talk state before the interval and goes out of Talk state after the interval: Total Talk Time = Interval End Time – Interval Start Time • An agent goes in to Talk state before the interval and goes out of Talk state during the interval: Total Talk Time = time out of Talk state – Interval Start Time • An agent goes in to Talk state during the interval and goes out of Talk state after the interval: Total Talk Time = Interval End Time – time in to Talk state <p>If an agent goes to the Talk state multiple times during the interval, this field displays the sum of the time spent in each Talk state.</p> <p>The percentage is calculated as: (Talk Time / Total Logged-in Time) * 100%</p>
Work Time	<p>Total time an agent spent in the Work state during the interval, and the percentage of total logged-in time that an agent spent in Work state.</p> <p>The time that an agent goes to the Work state is stored in ASD.eventDateTime with eventType set to 6. The time spent in Work state depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes in to and out of Work state during the interval: Total Work Time = time out of Work state – time in to Work state • An agent goes in to Work state before the interval and goes out of Work state after the interval: Total Work Time = Interval End Time – Interval Start Time • An agent goes in to Work state before the interval and goes out of Work state during the interval: Total Work Time = time out of Work state – Interval Start Time • An agent goes in to Work state during the interval and goes out of Work state after the interval: Total Work Time = Interval End Time – time in to Work state <p>If an agent goes to the Work state multiple times during the interval, this field displays the sum of the time spent in each Work state.</p> <p>The percentage is calculated as: (Work Time / Total Logged-in Time) * 100%</p>

Field	Explanation
Summary	For the Agent State Summary report (by Agent): Summation of data in each report field across all intervals. For the Agent State Summary report (by Interval): Summation of data in each report field during each interval.
Grand Total	Summation of data in all report fields for all intervals.

Table 36: Agent State Summary Reports Filter Parameters

Filter parameter	Explanation
All Agents (default, no filter parameter)	To report on all agents, obtain the list of resource IDs as follows: Search the Resource table for records with resourceType set to 1 (agent). Resource ID is stored in the Resource.resourceID field. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Interval Length	Options are entire report period (default), 30 minutes, 60 minutes.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs as follows: Obtain the list of resource group name(s) from the user selection for this parameter. Find the corresponding RG.resourceGroupID(s). Join RG.resourceGroupID with Resource.resourceGroupID to find agents belonging to the selected resource group(s). The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs as follows: Obtain the list of agent names from the user selection for this parameter. Find the corresponding Resource.resourceID(s). Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Skill Names	To report on agents who possess a specific skill or skills, obtain the list of resource IDs as follows: Obtain the list of skill names from the user selection for this parameter. Find the corresponding Skill.skillID(s). Join Skill.skillID with RSM.skillID and join RSM.resourceSkillMapID with Resource.resourceSkillMapID to find the agents who possess the selected skill(s). The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ASD.resourceID to obtain other call-related data.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records in which Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and join Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. The Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

Agent Summary Report

The Agent Summary report contains one row per agent. Each row contains a summary of the activities of an agent.

The ACD table contains information of the agents who handled ACD calls. This table provides the basic data for the Agent Summary report.

[Table 37: Agent Summary Report Query Design, on page 200](#) shows how the information in the Agent Summary report is obtained or calculated.

[Table 38: Agent Summary Report Filter Parameters, on page 202](#) explains how the Agent Summary report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 37: Agent Summary Report Query Design

Field	Explanation
Agent Name	Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to get ACD.resourceID and ACD.profileID. ACD.resourceID contains the resource ID of the agent who handled the call. Join ACD.resourceID with Resource.resourceID, and ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.
Extension	For agents who have not had their extension changed, obtained from Resource.extension. For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.
Avg Logged-In Time	<p>The ASD provides the times that each agent logs in and logs out. The length of time between log in and log out is the agent logged-in time. Login time is stored in ASD.eventDateTime with eventType set to 1 (log in). Logout time is stored in ASD.eventDateTime with eventType set to 7 (log out).</p> <p>The calculation of the average logged-in time depends on the agent activity, as follows. In these calculations, t1 is the report start time and t2 is the report end time.</p> <ul style="list-style-type: none"> • An agent logs in before t1 and logs out between t1 and t2: $\text{Logged-in duration} = \text{logout time} - t1$ • An agent logs in between t1 and t2 and logs out after t2: $\text{Logged-in duration} = t2 - \text{login time}$ • An agent logs in between t1 and t2 and logs out between t1 and t2: $\text{Logged-in duration} = \text{logout time} - \text{login time}$ • An agent logs in before t1 and logs out after t2: $\text{Logged-in duration} = t2 - t1$ <p>The average logged-in time for an agent is calculated as follows: Calculate the total logged-in time for an agent during the report period and divide by the number of logged-in sessions.</p>

Field	Explanation
Calls Handled	Join ACD and CCD on sessionID, sessionSeqNum, profileID, and nodeID. For each agent, count the number of unique CCD.sessionID that meet the following criteria: <ul style="list-style-type: none"> • CCD.startDateTime is in the report period • CCD.contactDisposition is 2 (handled) • ACD.talkTime is greater than zero
Calls Presented	Join ACD and CCD on sessionID and sessionSeqNum, profileID, and nodeID. For each agent, count the number of unique CCD.sessionID with CCD.startDateTime falling within the report period.
Handle Ratio	Call Handled divided by Calls Presented .
Handle Time—Avg	Each call handled by an agent has an ACD record. The handle time of a call is calculated as follows: ACD.talkTime + ACD.holdTime + ACD.workTime The average handle time is the sum of the handle times of all the calls handled by the agent within the report period divided by the number of calls handled within the report period.
Handle Time—Max	Each call handled by an agent has an ACD record. The handle time of a call is calculated as follows: ACD.talkTime + ACD.holdTime + ACD.workTime The maximum handle time for an agent is the longest handle time of all calls handled by the agent within the report period.
Talk Time—Avg	Talk time of a call is obtained from ACD.talkTime. The average talk time for an agent is the sum of talk times of all calls handled by the agent within the report period divided by the number of calls handled within the report period.
Talk Time—Max	Talk time of a call is obtained from ACD.talkTime. Maximum talk time for an agent is the longest talk time of all the calls handled by the agent within the report period.
Hold Time—Avg	Hold time of a call is obtained from ACD.holdTime. Average hold time for an agent is the sum of the hold times of all calls handled by the agent within the report period divided by the number of calls handled calls within the report period.
Hold Time—Max	Hold time of a call is obtained from ACD.holdTime. The maximum hold time for an agent is the longest hold time of all calls handled by the agent within the report period.
Work Time—Avg	Work time of a call is obtained from ACD.workTime. The average work time for an agent is the sum of work times of all calls handled by the agent within the report period divided by the number of calls handled within the report period.
Work Time—Max	Work time of a call is obtained from ACD.workTime. The maximum work time for an agent is the longest work time of all the calls handled by the agent within the report period.

Field	Explanation
Idle Time—Avg	<p>The ASD records the date and time that an agent goes to a specific state. Idle time is the time spent in the Not Ready state (2). While in the Not Ready state (2), an agent can go to Ready state (3), Reserved state (4), or Logout state (7).</p> <p>An idle session begins when an agent goes to Not Ready state and ends when the agent goes to the next state (Ready, Reserved, or Logout). The length of time that the agent spends in Not Ready state is the duration of an idle session.</p> <p>The average idle time for an agent is the sum of the durations of all of an agent's idle sessions within the report period divided by the number of idle sessions within the report period.</p>
Idle Time—Max	<p>The ASD records the date and time that an agent goes to a specific state. Idle time is the time spent in the Not Ready state (2). While in the Not Ready state (2), an agent can go to Ready state (3), Reserved state (4), or Logout state (7).</p> <p>An idle session begins when an agent goes to Not Ready state and ends when the agent goes to the next state (Ready, Reserved, or Logout). The length of time that the agent spends in Not Ready state is the duration of an idle session.</p> <p>The maximum idle time for an agent is the longest duration of the idle sessions within the report period.</p>

Table 38: Agent Summary Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filtering parameters)	<p>To report on all agents, obtain the list of resource IDs and profile IDs as follows:</p> <p>Search and display the Resource table for agents who are active (Resource.active = 1) or who are deleted after the report start time (Resource.dateInactive later than the report start time, which means that the agent is still active during the report period). In this way, the report does not include agents who are deleted before the report start time.</p>
Resource Group Names	<p>To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents who belong to the selected resource group(s). Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Agent Names	<p>To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of agent names from the user selection for this parameter. These values are found in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.</p>

Filter parameter	Explanation
Skill Names	<p>To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records whose Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents who have the selected skill(s). Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who were active during the report start time.</p>
Team Names	<p>To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of team names from the user selection for this parameter. Search the Team table to find records in which Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and join Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. The Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.</p> <p>This report displays only the active agents and the agents who are deleted after the report start time.</p>
Top N Calls Handled/Presented Ratio	<p>To report on N agents who rank highest in the calls handled/presented ratio, obtain the list of resource IDs as follows:</p> <p>Rank the agents by the calls handled/presented ratio in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the top N agents. The value of resource ID is stored in Resource.resourceID.</p> <p>Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.</p>
Bottom N Calls Handled/Presented Ratio	<p>To report on N agents who rank lowest in the calls handled/presented ratio, obtain the list of resource IDs as follows:</p> <p>Rank the agents by the calls handled/presented ratio in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the bottom N agents. The value of resource ID is stored in Resource.resourceID.</p> <p>Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.</p>
Top N Avg Hold Time	<p>To report on N agents who rank highest in average hold time, obtain the list of resource IDs as follows:</p> <p>Rank the agents by average hold time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the top N agents. The value of resource ID is stored in Resource.resourceID.</p> <p>Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.</p>
Bottom N Avg Hold Time	<p>To report on N agents who rank lowest in average hold time, obtain the list of resource IDs as follows:</p> <p>Rank the agents by average hold time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the bottom N agents. The value of resource ID is stored in Resource.resourceID.</p> <p>Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.</p>

Filter parameter	Explanation
Top N Avg Talk Time	To report on N agents who rank highest in average talk time, obtain the list of resource IDs as follows: Rank the agents by average talk time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the top N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Bottom N Avg Talk Time	To report on N agents who rank lowest in average talk time, obtain the list of resource IDs as follows: Rank the agents by average talk time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the bottom N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Top N Avg Work Time	To report on N agents who rank highest in average work time, obtain the list of resource IDs as follows: Rank the agents by average work time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the top N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Bottom N Avg Work Time	To report on N agents who rank lowest in average work time, obtain the list of resource IDs as follows: Rank the agents by average work time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the bottom N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Top N Avg Handle Time	To report on N agents who rank highest in average handle time, obtain the list of resource IDs as follows: Rank the agents by average handle time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the top N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Bottom N Avg Handle Time	To report on N agents who rank lowest in average handle time, obtain the list of resource IDs as follows: Rank the agents by average handle time in descending order. In case of a tie, order the agents alphabetically by Resource.resourceLoginID. Select the bottom N agents. The value of resource ID is stored in Resource.resourceID. Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.

Agent Wrap-up Data Detail Report

The Agent Wrap-up Data Detail report shows the details entered by an agent when entering the work state after attending an ACD. This report is available with the Agent Wrap-up feature.

[Table 39: Agent Wrap-up Data Detail Report Query Design, on page 205](#) shows how the information in the Agent Wrap-up Data Detail report is obtained or calculated.

Table 40: [Agent Wrap-up Data Detail Report Filter Parameters, on page 206](#) explains how the Agent Wrap-up Data Detail report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 39: Agent Wrap-up Data Detail Report Query Design

Field	Explanation
Agent Name	<p>For ACD calls, an agent is identified by the combination of ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.</p> <p>For IVR calls, if an agent is the originator of the call, the agent is identified by CCD.originatorID and CCD.profileID, when CCD.originatorType = 1 (agent type). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p> <p>If an agent is the destination of an IVR call, the agent is identified by CCD.destinationID and CCD.profileID, when CCD.destinationType = 1 (agent type). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p>
Extension	<p>For ACD calls, an agent is identified by the combination of ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.</p> <p>For IVR calls, if an agent is the originator of the call, the agent is identified by CCD.originatorID and CCD.profileID, when CCD.originatorType = 1 (agent type). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p> <p>If an agent is the destination of an IVR call, the agent is identified by CCD.destinationID and CCD.profileID, when CCD.destinationType = 1 (agent type). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.extension.</p>
Node ID	Obtained from CCD.nodeID.
Session ID	Obtained from CCD.sessionID.
Sequence No.	Obtained from CCD.sessionSeqNum.
Call Start Time	Obtained from ACD.startDateTime.
Call End Time	Obtained from ACD.endDateTime.
Call ANI	Agent identification is stored in ACD (see Agent Name earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.originatorDN.
Called Number	Agent identification is stored in ACD (see Agent Name earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.calledNumber.
Call Routed CSQ	Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type), and CQD.disposition = 2 (handled). The combination of CQD.targetID and CQD.profileID uniquely identifies a CSQ. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID to obtain the CSQ name, which is stored in CSQ.csqName.

Field	Explanation
Talk Time	Obtained from ACD.talkTime.
Hold Time	Obtained from ACD.holdTime.
Work Time	Obtained from ACD.workTime.
Wrap-up Data	Obtained from ACD.callWrapupData.

Table 40: Agent Wrap-up Data Detail Report Filter Parameters

Filter parameter	Explanation
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Skill Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Team Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.

Agent Wrap-up Data Summary Report

The Agent Wrap-up Data Summary report displays shows detailed information about Wrap-up data. This report is available with the Agent Wrap-up feature.

[Table 41: Agent Wrap-up Data Summary Report Query Design, on page 207](#) shows how the information in the Agent Wrap-up Data Summary report is obtained or calculated.

[Table 42: Agent Wrap-up Data Summary Report Filter Parameter, on page 207](#) explains how the Agent Wrap-up Data Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 41: Agent Wrap-up Data Summary Report Query Design

Field	Explanation
Wrap-up Data	Obtained from ACD.callWrapupData.
Total ACD Calls	For the selected Wrap-up data, count the number of ACD records.
Total Handle Time	For the selected Wrap-up data, for all ACD records, calculate (ACD.talkTime + ACD.holdTime + ACD.workTime).
Average Handle Time	Total Handle Time / Total ACD Calls.
Max Handle Time	For the selected Wrap-up data, for all ACD records, find the one with maximum (talkTime + holdTime + workTime).
Total Talk Time	For the selected Wrap-up data, for all ACD records, determine the total ACD.talkTime.
Average Talk Time	Total Talk Time / Total ACD Calls.
Max Talk Time	For the selected Wrap-up data, for all ACD records, find the one with the maximum ACD.talkTime.
Total Talk Time as % of Total Handle Time	(Total Talk Time / Total Handle Time) * 100%
Total Work Time	For the selected Wrap-Up data, for all ACD records, determine the total ACD.workTime.
Average Work Time	Total Work Time / Total ACD Calls.
Max Work Time	For the selected Wrap-up data, for all ACD records, find the one with the maximum ACD.workTime.
Total Work Time as % of Total Handle Time	(Total Work Time / Total Handle Time) * 100%

Table 42: Agent Wrap-up Data Summary Report Filter Parameter

Filter parameter	Explanation
Wrap-up Data	To report on a specific Wrap-up data, obtain the list of data from the user selection for this parameter. Look up these selections in the ACD table, and include the corresponding ACD records.

Call Custom Variables Report

The Call Custom Variables report shows information about custom variables that are set by the Set Enterprise Call step in the workflow that the Unified CCX or Cisco Unified IP IVR application associated with a call invoked. This information comes from the CCD table.

[Table 43: Call Custom Variables Report Query Design, on page 208](#) shows how the information in the Call Custom Variables report is obtained or calculated.

[Table 45: Call Custom Variables Report Filter Parameters, on page 209](#) explains how the Call Custom Variables report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 43: Call Custom Variables Report Query Design

Field	Explanation
Node ID	Obtained from CCD.nodeID
Session ID	Obtained from CCD.sessionID.
Sequence No.	Obtained from CCD.sessionSeqNum.
Start Time	Obtained from CCD.startDateTime.
End Time	Obtained from CCD.endDateTime.
Contact Disposition	Obtained from CCD.contactDisposition.
Agent Name	Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to obtain ACD.resourceID and ACD.profileID. ACD.resourceID contains the resource ID of the agent who handled the call. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName. Blank for ACD calls that were not handled by any agent and for IVR calls.
Application Name	Obtained from CCD.applicationName.
Custom Variable 1	Obtained from CCD.customVariable1.
Custom Variable 2	Obtained from CCD.customVariable2.
Custom Variable 3	Obtained from CCD.customVariable3.
Custom Variable 4	Obtained from CCD.customVariable4.
Custom Variable 5	Obtained from CCD.customVariable5.
Custom Variable 6	Obtained from CCD.customVariable6.
Custom Variable 7	Obtained from CCD.customVariable7.
Custom Variable 8	Obtained from CCD.customVariable8.
Custom Variable 9	Obtained from CCD.customVariable9.
Custom Variable 10	Obtained from CCD.customVariable10.

Called Number Summary Activity Report

The Called Number Summary Activity report contains one row per called number. The called number is stored in CCD.origCalledNumber.

Outgoing calls are not included in this report.

Table 44: Called Number Summary Activity Report Query Design, on page 209 shows how the information in the Called Number Summary Activity report is obtained or calculated.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 44: Called Number Summary Activity Report Query Design

Field	Explanation
Called Number	Obtained from CCD.calledNumber
Call Type	Obtained from CCD.destinationType. The value 1 (agent) indicates an IVR call. The value 2 (device) indicates an ACD call. The value 3 (unknown) indicates an outgoing call or a call to an unmonitored device, and is not reported.
Total Calls	For each unique CCD.calledNumber, count the number of CCD records.
Avg Calls (per day)	Total calls divided by the number of days in the report period. The number of days in the report period is calculated as follows. This information is displayed in units of days, rounded up to the next integer. $\frac{\text{report end time} - \text{report start time}}{\text{24 hours}}$ For example, if the report start time and the report end time are on the same day, the number of days is 1.
Avg Call Duration	Duration of a call is obtained from CCD.connectTime. Average call duration of a called number is calculated by the sum of CCD.connectTime of all calls for that called number, divided by the number of calls to that number.

Table 45: Call Custom Variables Report Filter Parameters

Filter parameter	Result
Original Called Number	To report on a specific original called number or numbers, obtain the list of original called numbers from the user selection for this parameter. Find CCD records whose value stored in CCD.origCalledNumber is in the selected list.
Called Number	To report on a specific called number or numbers, obtain the list of called numbers from the user selection for this parameter. Find CCD records whose value stored in CCD.calledNumber is in the selected list.
Calling Number	To report on a specific calling number or numbers, obtain the list of calling numbers from the user selection for this parameter. Find at CCD records whose value stored in CCD.originatorDN is in the selected list.
Application Name	To report on a specific application name or names, obtain the list of application names from the user selection for this parameter. Find CCD records whose value stored in CCD.applicationName is in the selected list.

Filter parameter	Result
Contact Type	<p>To report on a specific contact type or types, obtain the list of contact type names from the user selection for this parameter. The numeric ID is mapped to contact type name as follows:</p> <ul style="list-style-type: none"> 1—incoming 2—outgoing 3—internal 4—redirect-in 5—transfer-in 6—outbound preview <p>Find CCD records for which the value stored in CCD.contactType is in the selected list.</p>
Originator Type	<p>To report on a specific originator types, obtain the list of originator types from the user selection for this parameter. The numeric ID is mapped to originator type name as follows:</p> <ul style="list-style-type: none"> 1—agent 2—device 3—unknown <p>Find CCD records for which the value stored in CCD.originatorType is in the selected list.</p>
Destination Type	<p>To report on a specific destination type, obtain the list of destination type from the user selection for this parameter. The numeric ID is mapped to destination type name is as follows:</p> <ul style="list-style-type: none"> 1—agent 2—device 3—unknown <p>Find at CCD records for which the value stored in CCD.destinationType is in the selected list.</p>
Duration Greater Than or Equal to T seconds	<p>To report on calls with duration greater than or equal to T seconds, obtain the value of T from the user input for this parameter. The call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find CCD records with call duration greater than or equal to T.</p>
Duration Less Than or Equal to T seconds	<p>To report on calls with duration less than or equal to T seconds, obtain the value of T from the user input for this parameter. The call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find CCD records with call duration less than or equal to T.</p>
Custom Variable 1	<p>Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable1 matches the user input either partially or wholly.</p>
Custom Variable 2	<p>Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable2 matches the user input either partially or wholly.</p>
Custom Variable 3	<p>Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable3 matches the user input either partially or wholly.</p>
Custom Variable 4	<p>Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable4 matches the user input either partially or wholly.</p>

Filter parameter	Result
Custom Variable 5	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable5 matches the user input either partially or wholly.
Custom Variable 6	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable6 matches the user input either partially or wholly.
Custom Variable 7	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable7 matches the user input either partially or wholly.
Custom Variable 8	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable8 matches the user input either partially or wholly.
Custom Variable 9	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable9 matches the user input either partially or wholly.
Custom Variable 10	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in CCD.customVariable10 matches the user input either partially or wholly.
Any Custom Variable	Obtain the string from the user input for this parameter. Find CCD records for which the value stored in any of the 10 custom variables matches the user input either partially or wholly. The value of custom variable is stored in CCD.customVariablen, where n = 1 to 10.

Common Skill Contact Service Queue Activity Report (by Interval)

The Common Skill Contact Service Queue Activity report (by Interval) shows summary information about calls presented, calls handled, and calls abandoned for each group of contact service queues (CSQs). (Such a group consists of CSQs that are configured with the same skill or skills and with different competence levels.)

[Table 46: Common Skill Contact Service Queue Activity Report \(by Interval\) Query Design, on page 211](#) shows how the information in the Common Skill Contact Service Queue Activity report (by Interval) is obtained or calculated.

[Table 47: Common Skill Contact Service Queue Activity Report \(by Interval\) Filter Parameters, on page 213](#) explains how the Common Skill Contact Service Queue Activity report (by Interval) filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 46: Common Skill Contact Service Queue Activity Report (by Interval) Query Design

Field	Explanation
Interval Start Time	Beginning of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)
Interval End Time	End of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)

Common Skill Contact Service Queue Activity Report (by Interval)

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 47: Common Skill Contact Service Queue Activity Report (by Interval) Filter Parameters, on page 213 . CSQ name is stored in CSQ.csqName.
Skills (Competence Level)	CSQU.recordID is used to obtain CSQU.skillGroupID. Join CSQU.skillGroupID with SG.skillGroupID to obtain SG.skillID. Join SG.skillID with Skill.skillID to obtain the list of skill names, which is stored in Skill.skillName. Competence level is obtained from SG.competenceLevel.
Calls Presented— Total	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls presented to that CSQ.
Calls Presented— Queue Time Avg	Queue Time is stored in CQD.queueTime. Determine the sum of CQD.queueTime values for all calls presented to this CSQ, then divide by Calls Presented—Total , if calls presented is not zero. If it is zero, this field is set to zero.
Calls Presented— Queue Time Max	Maximum value stored in CQD.queueTime, for all calls presented to this CSQ.
Calls Handled— Total	Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.
Calls Handled— Handle Time Avg	Handle time of a call is calculated as (ACD.talkTime + ACD.holdTime + ACD.workTime). Determine the sum of handle times for all calls handled by this CSQ, then divide by Calls Handled—Total , if calls handled is not zero. If it is zero, this field is set to zero.
Calls Handled— Handle Time Max	Handle time of a call is calculated as (ACD.talkTime + ACD.holdTime + ACD.workTime). This field is set to the maximum value of handle time for all calls handled by this CSQ.
Calls Abandoned— Total	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls abandoned from the CSQ.

Field	Explanation
Calls Abandoned— Queue Time Avg	Queue Time is stored in CQD.queueTime. Determine the sum of CQD.queueTime values for all calls abandoned from this CSQ, then divide by Calls Abandoned—Total , if calls abandoned is not zero. If it is zero, this field is set to zero.
Calls Abandoned— Queue Time Max	Maximum value stored in CQD.queueTime, for all calls abandoned from this CSQ.
Service Level— Percentage SL Met	Join CQD and ACD on sessionID, sessionSeqNum, nodeID, profileID, and qIndex. Additional search criteria is CQD.targetType is 0 (CSQ type) and CQD.metServiceLevel is 1. For each CSQ identified by the combination of CQD.targetID and CQD.profileID, determine the number of CQD records, which is the number of Calls Handled Within Service Level. This field is calculated as follows, if Calls Presented—Total is not zero: (Calls Handled Within Service Level / Calls Presented) * 100% If Calls Presented—Total is zero, this field is set to zero.
Summary for Skills	Summation of statistics for all CSQs within the same logical CSQ group.

Table 47: Common Skill Contact Service Queue Activity Report (by Interval) Filter Parameters

Filter parameter	Explanation
Interval Length	Options are entire report period (default), 30 minutes, 60 minutes.
CSQ Names	To report on a specific CSQ or CSQs, obtain the list of the CSQ names from the user selection for this parameter. Join CSQ.recordID with CQD.targetID, and join CSQ.profileID with CQD.profileID to obtain the CQD records for the specified CSQs. For these CQD records, CQD.targetType should be 0 (CSQ type). Join CQD and CCD on sessionID, sessionSeqNum, nodeID, and profileID to obtain other information stored in the CCD table.

Contact Service Queue Activity Report

The Contact Service Queue Activity report shows one line for each CSQ that is configured in Unified CCX. A CSQ can be configured based on resource group or based on resource skill.

[Table 48: Contact Service Queue Activity Report Query Design, on page 214](#) shows how the information in the Contact Service Queue Activity report is obtained or calculated.

[Table 49: Contact Service Queue Activity Report Filter Parameter, on page 218](#) explains how the Contact Service Queue Activity report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 48: Contact Service Queue Activity Report Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 49: Contact Service Queue Activity Report Filter Parameter, on page 218 . CSQ name is stored in CSQ.csqName.
Call Skills	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 49: Contact Service Queue Activity Report Filter Parameter, on page 218 . Join CSQ.skillGroupID with SG.skillGroupID to obtain SG.skillID. Join SG.skillID with Skill.skillID to obtain the list of skill names, which are stored in Skill.skillName. Multiple skill names are separated by commas.
Calls Presented	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls presented to that CSQ.
Average Queue Time	Calculated as total queue time / Calls Presented . To obtain total queue time, Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, calculate the sum of the values stored in CQD.queueTime.
Max Queue Time	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, determine the maximum value stored in CQD.queueTime.
Calls Handled	Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.

Field	Explanation
Avg Speed of Answer	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in ACD.ringTime to obtain total ring time, and calculate the sum of the values stored in CQD.queueTime to obtain total queue time.</p> <p>If Calls Handled is not zero, the Avg Speed of Answer is calculated as:</p> $\text{total queue time} / \text{Calls Handled}$ <p>Here total queue time includes the total ring time. If Calls Handled is zero, this field is zero.</p>
Avg Handle Time	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in ACD.talkTime, ACD.holdTime, and ACD.workTime to obtain the total handle time for all calls handled. Handle time for a call is defined as talk time + hold time + work time.</p> <p>If Calls Handled is not zero, this field is calculated as:</p> $\text{total handle time} / \text{Calls Handled}$ <p>If Calls Handled is zero, this field is zero.</p>
Max Handle Time	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the handle time for each call as follows:</p> $\text{ACD.talkTime} + \text{ACD.holdTime} + \text{ACD.workTime}$ <p>This field shows the maximum handle time for all calls handled by this CSQ.</p>

Field	Explanation
Calls Abandoned	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls abandoned from the CSQ.</p>
Avg Time to Abandon	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in CQD.queueTime to obtain total queue time for abandoned calls.</p> <p>If Calls Abandoned is not zero, this field is: $\text{total queue time} / \text{Calls Abandoned}$</p> <p>If Calls Abandoned is zero, this field is zero.</p>
Max Time to Abandon	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, find the maximum value stored in CQD.queueTime.</p>
Avg Abandon Per Day	<p>Calculated as Calls Abandoned / number of days during report period.</p> <p>The number of days is calculated as follows. This information is displayed in units of days, rounded up to the next integer.</p> $\text{report end time} - \text{report start time}$ <p>For example, if the report start time and the report end time are on the same day, the number of days is 1.</p>

Field	Explanation
Max Abandon Per Day	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ and each day during the report period, count the number of CQD records to determine the number of calls abandoned from the CSQ. CCD.startDateTime is used to determine on which day a call is abandoned.</p> <p>For each CSQ, find the maximum number of calls abandoned on a particular day during the report period.</p>
Calls Dequeued	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls dequeued from the CSQ.</p>
Avg Time to Dequeue	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in CQD.queueTime to determine queue time.</p> <p>If Calls Dequeued is not zero, this field is calculated as:</p> $\text{total queue time} / \text{Calls Dequeued}$ <p>If Calls Dequeued is zero, this field is zero.</p>
Max Time to Dequeue	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, determine the maximum value stored in CQD.queueTime.</p>

Field	Explanation
Calls Handled by Other	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are: CQD.targetType is 0 (CSQ type), and CQD.disposition is 4 (handled by script) or 5 (handled by another CSQ).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls handled by script or another CSQ.</p>

Table 49: Contact Service Queue Activity Report Filter Parameter

Filter parameter	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID and CSQ.profileID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time. This action determines the active CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.
CSQ Types	<p>To report on a specific CSQ type or types, obtain the list of CSQ.recordID and CSQ.profileID from the user selection for this parameter as follows:</p> <ul style="list-style-type: none"> • If user selects Resource Group, search the CSQ table for records with CSQ.resourcePoolType = 1 (resource group type). • If user selects Skill Group, search the CSQ table for records with CSQ.resourcePoolType = 2 (skill group type). • If user selects both Resource Group and Skill Group, search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.

Contact Service Queue Activity Reports (by CSQ and Interval)

The Contact Service Queue Activity report (by CSQ) and the Contact Service Queue Activity report (by Interval) show information about service levels, and about the number and percentage of calls presented, handled, abandoned, and dequeued.

In the Contact Service Queue Activity report (by CSQ), information presented is sorted first by CSQ, then by interval.

In the Contact Service Queue Activity report (by Interval), information presented is sorted first by interval, then by CSQ.

[Table 50: Contact Service Queue Activity Reports Query Design, on page 219](#) shows how the information in the Contact Service Queue Activity reports is obtained or calculated.

[Table 51: Contact Service Queue Activity Reports Filter Parameters, on page 221](#) explains how the Contact Service Queue Activity reports filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 50: Contact Service Queue Activity Reports Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 50: Contact Service Queue Activity Reports Query Design, on page 219 . CSQ name is stored in CSQ.csqName.
Call Skills	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 51: Contact Service Queue Activity Reports Filter Parameters, on page 221 . Join CSQ.skillGroupID with SG.skillGroupID to get SG.skillID. Join SG.skillID with Skill.skillID to obtain the list of skill names, which is stored in Skill.skillName. Multiple skill names are separated with commas.
Interval Start Time	Beginning of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)
Interval End Time	End of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)
Service Level (sec)	Obtained from CSQU.serviceLevel.
Calls Hand < SL	Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex. Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.metServiceLevel is 1. For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.
Calls Aband < SL	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.disposition is 1 (abandoned), and CQD.targetType is 0 (CSQ type). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records with CQD.metServiceLevel = 1.
Percentage of Service Level Met— Only Handled	Considers calls that were handled only, regardless of whether they were handled within the service level. This value does not consider calls that were abandoned. This value is calculated as follows: $(\text{number of calls handled within service level} / \text{number of calls handled}) * 100\%$
Percentage of Service Level Met— Without Abandon	Does not include information for calls that were abandoned within the service level. This value is calculated as follows: $(\text{number of calls handled within service level} / (\text{number of calls presented} - \text{number of calls abandoned within service level})) * 100\%$
Percentage of Service Level Met— Positive Abandon	Considers calls that were abandoned within the service level as meeting the service level. This value is calculated as follows: $((\text{number of calls handled within service level} + \text{number of calls abandoned within service level}) / \text{number of calls presented}) * 100\%$

Field	Explanation
Percentage of Service Level Met— Negative Abandon	<p>Considers calls that were abandoned within the service level as not meeting the service level.</p> <p>This value is calculated as follows: $(\text{number of calls handled within service level} / \text{number of calls presented}) * 100\%$</p>
Calls Presented	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (For these records, the corresponding CCD.startDateTime is during the report period.) The additional search criterion is CQD.targetType is 0 (type CSQ).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. CSQ record ID and profile ID are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls presented to that CSQ.</p>
Calls Handled	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition = 2 (handled) and ACD.talkTime greater than zero. This process determines the calls handled by agents. To obtain the CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. CSQ record ID and profile ID are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.</p> <p>The percentage is calculated as follows: $(\text{calls handled} / \text{calls presented}) * 100\%$</p>
Calls Abandoned	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.disposition is 1 (abandoned), and CQD.targetType is 0 (CSQ type). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.</p> <p>The percentage is calculated as follows: $(\text{calls abandoned} / \text{calls presented}) * 100\%$</p>
Calls Dequeued	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued via Dequeue step), 4 (call handled by workflow script and therefore dequeued from this CSQ), or 5 (handled by another CSQ and therefore dequeued from this CSQ). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.</p> <p>The percentage is calculated as follows: $(\text{calls dequeued} / \text{calls presented}) * 100\%$</p>

Table 51: Contact Service Queue Activity Reports Filter Parameters

Filter parameter	Explanation
All CSQs (default, no filter)	To report on all agents, obtain the list of resource IDs and profile IDs as follows: Search and display the Resource table for agents who are active (Resource.active = 1) or who are deleted after report start time (Resource.dateInactive is later than report start time, which means that agent is still active during the report period). In this way, the report does not include agents who are deleted before the report start time.
Interval Length	Options are entire report period (default), 30 minutes, 60 minutes.
CSQ Name	To report on a specific CSQ or CSQs, obtain the list of the CSQ names from the user selection for this parameter. Join CSQ.recordID with CQD.targetID, and join CSQ.profileID with CQD.profileID to obtain the CQD records for the specified CSQs. For these CQD records, CQD.targetType should be 0 (CSQ type). Join CQD and CCD on sessionID, sessionSeqNum, nodeID, and profileID to obtain other information stored in the CCD table.

Contact Service Queue Call Distribution Summary Report

The Contact Service Queue Call Distribution Summary report shows the number and percentage of calls handled and dequeued in four different time intervals. The time interval lengths can be configured by users.

[Table 52: Contact Service Queue Call Distribution Summary Report Query Design, on page 221](#) shows how the information in the Contact Service Queue Call Distribution Summary report is obtained or calculated.

[Table 53: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 225](#) explains how the Contact Service Queue Call Distribution Summary report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 52: Contact Service Queue Call Distribution Summary Report Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 53: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 225 . CSQ name is stored in CSQ.csqName.
Call Skills	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 53: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 225 . Join CSQ.skillGroupID with SG.skillGroupID to obtain SG.skillID. Join SG.skillID with Skill.skillID to obtain the list of skill names, which are stored in Skill.skillName. Multiple skill names are separated by commas.

Field	Explanation
Calls Handled	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.</p>
Total Calls Handled With Queue Time 0–T sec	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to T seconds.</p>
Percentage Calls Handled With Queue Time 0–T sec	<p>If Calls Handled is not zero, this field is calculated as</p> $(\text{Total Calls Handled with Queue Time in 0–T seconds} / \text{Calls Handled}) * 100\%$ <p>If Calls Handled is zero, this field is zero.</p>
Total Calls Handled With Queue Time 0–2T sec	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 2T seconds.</p>
Percentage Calls Handled With Queue Time 0–2T sec	<p>If Calls Handled is not zero, this field is calculated as:</p> $(\text{Total Calls Handled with Queue Time in 0–2T seconds} / \text{Calls Handled}) * 100\%$ <p>If Calls Handled is zero, this field is zero.</p>
Total Calls Handled With Queue Time 0–3T sec	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 3T seconds.</p>

Field	Explanation
Percentage Calls Handled With Queue Time 0–3T sec	<p>If Calls Handled is not zero, this field is calculated as: $(\text{Total Calls Handled with Queue Time in 0–3T seconds} / \text{Calls Handled}) * 100\%$</p> <p>If Calls Handled is zero, this field is zero.</p>
Total Calls Handled With Queue Time 0–4T sec	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 4T seconds.</p>
Percentage Calls Handled With Queue Time 0–4T sec	<p>If Calls Handled is not zero, this field is calculated as: $(\text{Total Calls Handled with Queue Time in 0–4T seconds} / \text{Calls Handled}) * 100\%$</p> <p>If Calls Handled is zero, this field is zero.</p>
Calls Abandoned	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls abandoned from the CSQ.</p>
Total Calls Abandoned With Queue Time 0–T	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to T seconds.</p>
Percentage Calls Abandoned With Queue Time 0–T	<p>If Calls Abandoned is not zero, this field is calculated as: $(\text{Total Calls Abandoned with Queue Time 0–T seconds} / \text{Calls Abandoned}) * 100\%$</p> <p>If Calls Abandoned is zero, this field is zero.</p>

Field	Explanation
Total Calls Abandoned With Queue Time 0–2T sec	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 2T seconds.</p>
Percentage Calls Abandoned With Queue Time 0–2T sec	<p>If Calls Abandoned is not zero, this field is calculated as: (Total Calls Abandoned with Queue Time 0–2T seconds / Calls Abandoned) * 100%</p> <p>If Calls Abandoned is zero, this field is zero.</p>
Total Calls Abandoned With Queue Time 0–3T sec	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 3T seconds.</p>
Percentage Calls Abandoned With Queue Time 0–3T sec	<p>If Calls Abandoned is not zero, this field is calculated as: (Total Calls Abandoned with Queue Time 0–3T seconds / Calls Abandoned) * 100%</p> <p>If Calls Abandoned is zero, this field is zero.</p>
Total Calls Abandoned With Queue Time 0–4T sec	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records in which the value stored in CQD.queueTime is less than or equal to 4T seconds.</p>
Percentage Calls Abandoned With Queue Time 0–4T sec	<p>If Calls Abandoned is not zero, this field is calculated as: (Total Calls Abandoned with Queue Time 0–4T seconds / Calls Abandoned) * 100%</p> <p>If Calls Abandoned is zero, this field is zero.</p>

Table 53: Contact Service Queue Call Distribution Summary Report Filter Parameters

Filter parameter	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID and CSQ.profileID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time. This action determines the active CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.
Time Interval (sec) T	Obtained from user input for this parameter. Indicates the length of the time interval, in number of seconds.

Contact Service Queue Priority Summary Report

The Contact Service Queue Priority Summary report shows the total number of calls presented to each CSQ selected. It also shows the total number of calls by priority and the average number of calls per day, by priority, that were presented to each CSQ.

[Table 54: Contact Service Queue Priority Summary Report Query Design, on page 225](#) shows how the information in the Contact Service Queue Priority Summary report is obtained or calculated.

[Table 55: Contact Service Queue Priority Summary Report Filter Parameter, on page 226](#) explains how the Contact Service Queue Priority Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 54: Contact Service Queue Priority Summary Report Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 55: Contact Service Queue Priority Summary Report Filter Parameter, on page 226 . CSQ name is stored in CSQ.csqName.
Call Skills	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 55: Contact Service Queue Priority Summary Report Filter Parameter, on page 226 . Join CSQ.skillGroupID with SG.skillGroupID to get SG.skillID. Join SG.skillID with Skill.skillID to get the list of skill names, stored in Skill.skillName. Multiple skill names are separated by commas.
Total Calls Presented	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (The corresponding CCD records have CCD.startDateTime during the report period). Additional search criterion is CQD.targetType is 0 (CSQ type). For each CSQ, which is uniquely identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records to determine the number of calls presented to each CSQ.

Field	Explanation
Total Number of Calls by Priority (Priority 1 through Priority 10)	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (The corresponding CCD records have CCD.startDateTime during the report period.)</p> <p>Join CQD and CRD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex. Additional search criterion is CQD.targetType is 0 (CSQ type).</p> <p>For each CSQ (identified by CQD.targetID and CQD.profileID) and each call priority (identified by CRD.finalPriority), count the number of CQD records to determine the number of calls presented to each CSQ for each call priority.</p>
Average Number of Calls by Priority (Priority 1 through Priority 10)	<p>If the number of days within the report period is not zero, this field is calculated as follows:</p> $(\text{Total Calls Presented by Call Priority} / \text{number of days within report period}) * 100\%$ <p>If the number of days within the report period is zero, this field is zero.</p> <p>Number of days within report period is the maximum value stored in CQD.queueTime for all calls abandoned from this CSQ.</p>

Table 55: Contact Service Queue Priority Summary Report Filter Parameter

Filter parameter	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID and CSQ.profileID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time. This action determines the active CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Name	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.

Contact Service Queue Service Level Priority Summary Report

The Contact Service Queue Service Level Priority Summary report contains information about the total number and percentage of calls that are handled within a service level and the number and percentage of calls that are handled within service level for each call priority.

[Table 56: Contact Service Queue Service Level Priority Summary Report Query Design, on page 227](#) shows how the information in the Contact Service Queue Service Level Priority Summary report is obtained or calculated.

[Table 57: Contact Service Queue Service Level Priority Summary Report Filter Parameter, on page 228](#) explains how the Contact Service Queue Service Level Priority Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 56: Contact Service Queue Service Level Priority Summary Report Query Design

Field	Explanation
CSQ Name (Call Skills)	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 57: Contact Service Queue Service Level Priority Summary Report Filter Parameter, on page 228 . CSQ name is stored in CSQ.csqName.
Service Level (sec)	Obtained from CSQ.serviceLevel
Calls Presented	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (The corresponding CCD records have CCD.startDateTime during the report period.) Additional search criterion is CQD.targetType is 0 (CSQ type). For each CSQ, which is uniquely identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records to determine the number of calls presented to each CSQ.
Total Service Level Met	Join CCD, CQD, and ACD on sessionID, sessionSeqNum, nodeID, and profileID. Join CQD and ACD also on qIndex. Additional search criteria are: CCD.contactDisposition is 2 (handled), CQD.targetType is 0 (CSQ type), CQD.disposition is 2 (handled), and ACD.talkTime is greater than zero. For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records whose value in CQD.metServiceLevel is 1. This is the number of calls handled by each CSQ which met the specified service level.
Percent SL Met	If Calls Presented is not zero, this field is calculated as: $(\text{Total Service Level Met} / \text{Calls Presented}) * 100\%$ If Calls Presented is zero, this field is zero.
Number of Calls that Met Service Level for Each Call Priority (Priority 1 through Priority 10)	Join CCD, CQD, and ACD on sessionID, sessionSeqNum, nodeID, and profileID. Join CQD and ACD also on qIndex. Join CRD also on sessionID, sessionSeqNum, nodeID, profileID, and qIndex. The call priority is stored in CRD.finalPriority. Additional search criteria are, CCD.contactDisposition is 2 (handled), CQD.targetType is 0 (CSQ type), CQD.disposition is 2 (handled), and ACD.talkTime is greater than 0. For each CSQ (identified by CQD.targetID and CQD.profileID), and each call priority (identified by CRD.finalPriority), count the number of CQD records for which the value of CQD.metServiceLevel is 1. This total is the number of calls handled by each CSQ for each call priority which met the specified service level.
Percentage of Calls that Met Service Level for Each Call Priority (Priority 1 through Priority 10)	If total calls presented for each call priority is not zero, this field is calculated as follows: $(\text{number of calls that met SL for each call priority} / \text{total calls presented for each call priority}) * 100\%$ If total calls presented for each call priority is zero, this field is zero. Total calls presented for each call priority is calculated as follows: For each CSQ (identified by CQD.targetID and CQD.profileID) and each call priority (identified by CRD.finalPriority), count the number of CQD records. This total is the number of calls handled by each CSQ for each call priority which met the specified service level.

Table 57: Contact Service Queue Service Level Priority Summary Report Filter Parameter

Filter parameter	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID and CSQ.profileID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time. This action determines the active CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.

CSQ-Agent Summary Report

An agent can handle calls for multiple CSQs. The CSQ-Agent Summary report shows, for each agent, information about calls handled in each CSQ.

[Table 58: CSQ-Agent Summary Report Query Design, on page 228](#) shows how the information in the CSQ-Agent Summary report is obtained or calculated.

[Table 59: CSQ-Agent Summary Report Filter Parameter, on page 230](#) explains how the CSQ-Agent Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 58: CSQ-Agent Summary Report Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 59: CSQ-Agent Summary Report Filter Parameter, on page 230 . CSQ name is stored in CSQ.csqName.
Agent Name	Call record tables (ACD and ASD) refer to agent by resource ID and profile ID. Given Resource.resourceID and Resource.profileID, search the Resource table for corresponding Resource.resourceName and Resource.resourceLoginID. These two fields uniquely identify an agent. The agent name is stored in Resource.resourceName. Note Note: One resourceName/resourceLoginID combination may have multiple resourceID/profileID combinations, because when an agent has a certain attribute changed (for example, extension or resource group), a resource ID is created and the old one is set to Deactivated.
Extension	Given Resource.resourceName and Resource.resourceLoginID, search the Resource table for the corresponding Resource.extension. If an agent extension changed, display the most recent extension assigned to the agent.

Field	Explanation
Calls Handled	<p>A handled call has a CCD record, a CQD record for the CSQ that the call is routed to, and an ACD record for the agent who handles the call. The talk time in ACD should be greater than zero.</p> <p>Join CCD and CQD on sessionID, sessionSeqNum, nodeID, and profileID to find the CQD record for the CSQ to which the call is routed. Join CQD and ACD on sessionID, sessionSeqNum, nodeID, profileID, and qIndex to find the agent who handles the call. Additional search criteria are CQD.disposition is 2 (handled), CQD.targetType is 0 (CSQ type), and ACD.talkTime is greater than zero.</p> <p>To uniquely identify a CSQ, the CSQ record ID and profile ID are stored in CQD.targetID and CQD.profileID.</p> <p>To uniquely identify an agent, obtain resource ID and resource login ID as follows: join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to find Resource.resourceName and Resource.resourceLoginID.</p> <p>For each CSQ-Agent combination (CSQ is identified by CSQ.recordID/CSQ.profileID, and agent is identified by Resource.resourceName/Resource.resourceLoginID), count the number of ACD records to determine the number of calls handled by the specified CSQ-Agent combination.</p>
Talk Time Avg	<p>If Calls Handled is not zero, this field is calculated as Total Talk Time / CallsHandled.</p> <p>If Calls Handled is zero, this field is zero.</p>
Talk Time Total	Same calculation as for Calls Handled , but instead of counting the number of ACD records, calculate the sum of the values stored in ACD.talkTime.
Work Time Avg	<p>If Calls Handled is not zero, this field is calculated as Total Work Time / Calls Handled.</p> <p>If Calls Handled is zero, this field is zero.</p>
Work Time Total	Same calculation as for Calls Handled , but instead of counting the number of ACD records, calculate the sum of the values stored in ACD.workTime.
Total Ring Time	Same calculation as for Calls Handled , but instead of counting the number of ACD records, calculate the sum of the values stored in ACD.ringTime.
Calls On Hold	<p>Same calculation as for Calls Handled. An additional search criterion is ACD.holdTime is greater than zero.</p> <p>For each CSQ-Agent combination, count the number of ACD records. The result is the number of calls put on hold by the specified CSQ-Agent combination.</p>
Hold Time Avg	<p>If Calls on Hold is not zero, this field is calculated as Total Hold Time / Calls on Hold.</p> <p>If Calls on Hold is zero, this field is zero.</p>
Hold Time Total	Same calculation as for Calls on Hold , but instead of counting the number of ACD records, add up the values stored in ACD.holdTime.
RNA	<p>Same calculation as for Calls Handled, but the search criteria should be: ACD.talkTime is zero, and ACD.ringTime is greater than zero.</p> <p>For each CSQ-Agent combination, count the number of ACD records. This result is the number of calls that go to Ring No Answer (RNA).</p>

Table 59: CSQ-Agent Summary Report Filter Parameter

Filter parameter	Explanation
All CSQs (default, no filter parameter)	Search the CSQ table to find CSQ.recordID and CSQ.profileID for CSQs with CSQ.dateInactive set to null or set to a date/time later than the report start time. This action determines the active CSQs and CSQs that are deleted after the report start time (they are still active during the report period).
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID.

CSQ All Fields Report

[Table 60: CSQ All Fields Report Query Design, on page 230](#) shows how the information in the CSQ All Fields Report is obtained or calculated.

[Table 61: CSQ All Fields Report Filter Parameter, on page 235](#) explains how the CSQ All fields Report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 60: CSQ All Fields Report Query Design

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 61: CSQ All Fields Report Filter Parameter, on page 235 . CSQ name is stored in CSQ.csqName.
Service Level (sec)	Obtained from CSQU.serviceLevel.
Calls Presented	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, count the number of CQD records to determine the number of calls presented to that CSQ.

Field	Explanation
Calls Handled	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.</p>
Calls Handled-%	The percentage is calculated as follows: (calls handled / calls presented) * 100%
Calls Handled-Avg Handle Time	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in ACD.talkTime, ACD.holdTime, and ACD.workTime to obtain the total handle time for all calls handled. Handle time for a call is defined as talk time + hold time + work time.</p> <p>If Calls Handled is not zero, this field is calculated as:</p> $\text{total handle time} / \text{Calls Handled}$ <p>If Calls Handled is zero, this field is zero.</p>
Calls Handled-Max Handle Time	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the handle time for each call as follows:</p> $\text{ACD.talkTime} + \text{ACD.holdTime} + \text{ACD.workTime}$ <p>This field shows the maximum handle time for all calls handled by this CSQ.</p>

Field	Explanation
Calls Abandoned-Abandoned	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.disposition is 1 (abandoned), and CQD.targetType is 0 (CSQ type). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.
Calls Abandoned-%	The percentage is calculated as follows: (calls abandoned / calls presented) * 100%
Calls Abandoned-Avg Abandoned Time	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, calculate the sum of the values stored in CQD.queueTime to obtain total queue time for abandoned calls. If Calls Abandoned is not zero, this field is: total queue time / Calls Abandoned If Calls Abandoned is zero, this field is zero.
Calls Abandoned-Max Abandoned Time	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned). The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively. For each CSQ, find the maximum value stored in CQD.queueTime.
Calls Dequeued-Dequeued	Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued via Dequeue step), 4 (call handled by workflow script and therefore dequeued from this CSQ), or 5 (handled) by another CSQ and therefore dequeued from this CSQ). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.
Calls Dequeued-%	The percentage is calculated as follows: (calls dequeued / calls presented) * 100%

Field	Explanation
Calls Dequeued-Avg Dequeued Time	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in CQD.queueTime to determine queue time.</p> <p>If Calls Dequeued is not zero, this field is calculated as: $\text{total queue time} / \text{Calls Dequeued}$</p> <p>If Calls Dequeued is zero, this field is zero.</p>
Calls Dequeued-Max Dequeued Time	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, determine the maximum value stored in CQD.queueTime.</p>
Avg Speed of Answer	<p>Join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID with CCD.contactDisposition is 2 (handled), and ACD.talkTime greater than zero. This process provides the calls handled by agents. To obtain CSQ information, join ACD with CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex, with CQD.targetType = 0 (CSQ type) and CQD.disposition = 2 (handled).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in ACD.ringTime to obtain total ring time, and calculate the sum of the values stored in CQD.queueTime to obtain total queue time.</p> <p>If Calls Handled is not zero, the Avg Speed of Answer is calculated as: $\text{total queue time} / \text{Calls Handled}$</p> <p>Here total queue time includes the total ring time. If Calls Handled is zero, this field is zero.</p>
Calls Handled < Service Level	<p>Join ACD and CQD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex. Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.metServiceLevel is 1. For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records.</p>

Field	Explanation
Calls Abandoned < Service Level	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to determine CQD records during the report period. (Corresponding CCD records have CCD.startDateTime during the report period.) Additional search criteria are CQD.disposition is 1 (abandoned), and CQD.targetType is 0 (CSQ type). For each CSQ identified by the combination of CQD.targetID and CQD.profileID, count the number of CQD records with CQD.metServiceLevel = 1.</p>
Avg Abandon Per Day	<p>Calculated as Calls Abandoned / number of days during report period.</p> <p>The number of days is calculated as follows. This information is displayed in units of days, rounded up to the next integer.</p> <p>report end time – report start time</p> <p>For example, if the report start time and the report end time are on the same day, the number of days is 1.</p>
Max Abandon Per Day	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values that are within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type) and CQD.disposition is 1 (abandoned).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ and each day during the report period, count the number of CQD records to determine the number of calls abandoned from the CSQ. CCD.startDateTime is used to determine on which day a call is abandoned.</p> <p>For each CSQ, find the maximum number of calls abandoned on a particular day during the report period.</p>
Calls Handled by Other	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (These records have corresponding CCD.startDateTime values within the report period.) Additional search criteria are: CQD.targetType is 0 (CSQ type), and CQD.disposition is 4 (handled by script) or 5 (handled by another CSQ).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, count the number of CQD records to determine the number of calls handled by script or another CSQ.</p>

Field	Explanation
Average Queue Time	<p>Calculated as total queue time / Calls Presented.</p> <p>To obtain total queue time, Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, calculate the sum of the values stored in CQD.queueTime.</p>
Max Queue Time	<p>Join CCD and CQD on sessionID, sessionSeqNum, profileID, and nodeID to find CQD records during the report period. (For these records, the values of the corresponding CCD.startDateTime is within the report period.) Additional search criterion: CQD.targetType is 0 (type CSQ).</p> <p>The combination of CSQ record ID and profile ID uniquely identifies a CSQ. These values are stored in CQD.targetID and CQD.profileID, respectively.</p> <p>For each CSQ, determine the maximum value stored in CQD.queueTime.</p>

Table 61: CSQ All Fields Report Filter Parameter

Filter Parameter	Explanation
CSQ Names	Obtain the list of CSQ names from the user selection for this parameter. Search the CSQ table to find records for which CSQ.csqName contains values that are in the list. Obtain the corresponding CSQ.recordID and CSQ.profileID

Detailed Call by Call CDR Report

The Detailed Call by Call CDR report shows most of the information that is contained in the CCD table. This report also includes information from the CRD and the ACD tables. The report contains one row per call leg (a call transfer or redirect initiates a new call leg).

[Table 62: Detailed Call by Call CDR Report Query Design, on page 235](#) shows how the information in the Detailed Call by Call CDR report is obtained or calculated.

[Table 63: Detailed Call by Call CDR Report Filter Parameter, on page 237](#) explains how the Detailed Call by Call CDR report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 62: Detailed Call by Call CDR Report Query Design

Field	Explanation
Node ID	Obtained from CCD.nodeID.
Session ID	Obtained from CCD.sessionID.
Sequence No.	Obtained from CCD.sessionSeqNum.

Field	Explanation
Start Time	Obtained from CCD.startDateTime.
End Time	Obtained from CCD.endDateTime.
Contact T	Obtained from CCD.contactType.
Contact D	Obtained from CCD.contactDisposition.
Originator T	Obtained from CCD.originatorType.
Originator ID	Obtained from CCD.originatorID. If originator type is 1 (agent), CCD.originatorID is a resource ID. join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to display the agent login ID, which is stored in Resource.resourceLoginID.
Originator DN (DN = directory number)	If CCD.originatorType is Device (2) or Unknown (3), obtained from CCD.originatorDN. If CCD.originatorType is Agent (1), join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.extension.
Destination T	Obtained from CCD.destinationType.
Destination ID	Obtained from CCD.destinationID. If destination type is 1 (agent), CCD.destinationID is a resource ID. join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to display the agent login ID, which is stored in Resource.resourceLoginID.
Destination DN	If CCD.destinationType is Device (2) or Unknown (3), obtained from CCD.destinationDN. If CCD.destinationType is Agent (1), join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID and obtain Resource.extension.
Called Number	Obtained from CCD.calledNumber.
Original Called No.	Obtained from CCD.origCalledNumber.
Application Name	Obtained from CCD.applicationName.
Queue Time	Join CCD and CRD on sessionID, sessionSeqNum, nodeID, and profileID to obtain value stored in CRD.queueTime. Blank for IVR calls.
Talk Time	For ACD calls, join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to obtain the value in ACD.talkTime. For IVR calls, there is no ACD record. Talk time of handled IVR calls (where CCD.contactDisposition set to 2) is calculated as (CCD.endDateTime – CCD.startDateTime). For abandoned IVR calls (where CCD.contactDisposition set to 1), talk time is zero.
Hold Time	For ACD calls, join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to obtain the value in ACD.holdTime. Blank for IVR calls.

Field	Explanation
Work Time	For ACD calls, join CCD and ACD on sessionID, sessionSeqNum, profileID, and nodeID to obtain the value in ACD.workTime. Blank for IVR calls.sessionID, sessionSeqNum, nodeID, and profileID to obtain value stored in CRD.queueTime.

Table 63: Detailed Call by Call CDR Report Filter Parameter

Filter parameter	Explanation
Original Called Number	To report on a specific original called number or numbers, obtain the list of original called numbers from the user selection for this parameter. Find each CCD record for which the value stored in CCD.origCalledNumber is in the selected list.
Called Number	To report on a specific called number or numbers, obtain the list of called numbers from the user selection for this parameter. Find each CCD record for which the value stored in CCD.calledNumber is in the selected list.
Calling Number	To report on a specific calling number or numbers, obtain the list of calling numbers from the user selection for this parameter. Find each CCD record for which the value stored in CCD.originatorDN is in the selected list.
Application Name	To report on a specific application name or names, obtain the list of application names from the user selection for this parameter. Find each CCD record for which the value stored in CCD.applicationName is in the selected list.
Contact Type	To report on a specific contact type or types, obtain the list of contact type names from the user selection for this parameter. The mapping between numeric ID and contact type name is as follows: 1—incoming 2—outgoing 3—internal 4—redirect-in 5—transfer-in 6—outbound preview Find each CCD record for which the value stored in CCD.contactType is in the selected list.
Originator Type	To report on a specific originator type or types, obtain the list of originator type or types from the user selection for this parameter. The mapping between numeric ID and originator type name is as follows: 1—agent 2—device 3—unknown Find each CCD record for which the value stored in CCD.originatorType is in the selected list.

Filter parameter	Explanation
Destination Type	To report on a specific destination type or types, obtain the list of destination type or types from the user selection for this parameter. The mapping between numeric ID and destination type name is as follows: 1—agent 2—device 3—unknown Find each CCD records for which the value stored in CCD.destinationType is in the selected list.
Duration Greater Than or Equal to T seconds	To report on calls with durations greater than or equal to T seconds, obtain the value of T from the user input for this parameter. Call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find CCD records with call duration greater than or equal to T.
Duration Less Than or Equal to T seconds	To report on calls with durations less than or equal to T seconds, obtain the value of T from the user input for this parameter. The call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find at CCD records with call duration less than or equal to T.

Detailed Call CSQ Agent Report

The Detailed Call, CSQ, Agent report shows detailed call information about the CSQ that a call was routed to and the agent that handled the call.

[Table 64: Detailed Call, CSQ, Agent Report Query Design, on page 238](#) shows how the information in the Detailed Call, CSQ, Agent report is obtained or calculated.

[Table 65: Detailed Call, CSQ, Agent Report Filter Parameters, on page 240](#) explains how the Detailed Call, CSQ, Agent report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 64: Detailed Call, CSQ, Agent Report Query Design

Field	Explanation
Node ID	Obtained from CCD.nodeID.
Session ID	Obtained from CCD.sessionID.
Sequence No.	Obtained from CCD.sessionSeqNum.
Call Start Time	Obtained from CCD.startDateTime.
Call End Time	Obtained from CCD.endDateTime.
Contact Disp	Obtained from CCD.contactDisposition.

Field	Explanation
Originator DN (Calling Number)	<p>The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Originator Type is agent, this field shows the Unified CCX extension of the agent. If the call is attended at the non-IPCC extension, then the non-IPCC extension is displayed. If the call is made from a non-IPCC extension, then the non-IPCC extension is displayed. • If Originator Type is device, this field shows the CTI port number. • If Originator Type is unknown (through a gateway or an unmonitored device), this field shows the telephone number of the caller.
Destination DN	<p>The destination directory number. Destination Type can be agent, device, or unknown.</p> <ul style="list-style-type: none"> • If Destination Type is agent, this field shows the Unified CCX extension of the agent. • If destination type is device, this field shows the CTI port number. • If destination type is unknown (through a gateway or an unmonitored device), this field shows the telephone number called.
Called Number	Obtained from CCD.calledNumber.
App. Name	Obtained from CCD.applicationName.
CSQ Names	Join CCD and CQD on sessionID, sessionSeqNum, nodeID, and profileID. Find CQD records with targetType = 0 (CSQ type). The CSQ information is stored in CQD.targetID and CQD.profileID. Join CQD.targetID with CSQ.recordID, and join CQD.profileID with CSQ.profileID. The CSQ name is stored in CSQ.csqName. Multiple CSQ names are separated by commas.
Queue Time	Join CCD and CQD on sessionID, sessionSeqNum, nodeID, and profileID. Queue Time is stored in CQD.queueTime.
Agent Name	Join CCD and ACD on sessionID, sessionSeqNum, nodeID, and profileID to obtain ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain agent name, which is stored in Resource.resourceName.
Ring Time	Join CCD and ACD on nodeID, sessionID, sessionSeqNum, and profileID. The value is stored in ACD.ringTime.
Talk Time	<p>For ACD calls, join CCD and ACD on nodeID, sessionID, sessionSeqNum, and profileID. The value is stored in ACD.talkTime.</p> <p>For IVR calls, there is no ACD record for the call. If the call is handled (CCD.contactDisposition = 2), this field is calculated as (Call End Time – Call Start Time), and shows the result in hh:mm:ss. Otherwise, this field shows zero.</p>
Work Time	Join CCD and ACD on nodeID, sessionID, sessionSeqNum, and profileID. The value is stored in ACD.workTime.

Table 65: Detailed Call, CSQ, Agent Report Filter Parameters

Filter parameter	Explanation
Called Number	To report on a specific called number or numbers, obtain the list of called numbers from the user selection for this parameter. Find CCD records for which the value stored in CCD.calledNumber is in the selected list.
Calling Number	To report on a specific calling number or numbers, obtain the list of calling numbers from the user selection for this parameter. Find CCD records for which the value stored in CCD.originatorDN is in the selected list.
Application Name	To report on a specific application name or names, obtain the list of application names from the user selection for this parameter. Find CCD records for which the value stored in CCD.applicationName is in the selected list.
Contact Type	To report on a specific contact type or types, obtain the list of contact type names from the user selection for this parameter. The mapping between numeric ID and contact type name is as follows: 1—incoming 2—outgoing 3—internal 4—redirect-in 5—transfer-in 6—outbound preview Find CCD records for which the value stored in CCD.contactType is in the selected list.
Originator Type	To report on a specific originator type or types, obtain the list of originator types from the user selection for this parameter. The mapping between numeric ID and originator type name is as follows: 1—agent 2—device 3—unknown Find CCD records for which the value stored in CCD.originatorType is in the selected list.
Destination Type	To report on a specific destination type or types, obtain the list of destination types from the user selection for this parameter. The mapping between numeric ID and destination type name is as follows: 1—agent 2—device 3—unknown Find CCD records for which the value stored in CCD.destinationType is in the selected list.
Agent Name	To report on a specific agent or agents, find Resource records in which values in resourceName match the user input for this parameter. Join Resource.resourceID with ACD.resourceID, join and Resource.profileID with ACD.profileID to obtain the corresponding ACD records for the specified agents. Join ACD and CCD on sessionId, sessionSeqNum, nodeID, and profileID to obtain other information stored in the CCD table.

Filter parameter	Explanation
CSQ Name	To report on a specific CSQ or CSQs, find for CSQ records in which values in csqName match the user input for this parameter. Join CSQ.recordID with CQD.targetID, and join CSQ.profileID with CQD.profileID to obtain the CQD records for the specified CSQs. For these CQD records, CQD.targetType should be 0 (CSQ type). Join CQD and CCD on sessionID, sessionSeqNum, nodeID, and profileID to obtain other information stored in the CCD table.
Duration Greater Than or Equal to T seconds	To report on calls with durations greater than or equal to T seconds, obtain the value of T from the user input for this parameter. The call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find CCD records with call duration greater than or equal to T.
Duration Less Than or Equal to T seconds	To report on calls with durations less than or equal to T seconds, obtain the value of T from the user input for this parameter. The call duration is calculated as CCD.endDateTime minus CCD.startDateTime, in number of seconds. Find CCD records with call duration less than or equal to T.

Reason Report by Agent Grouping Report

The Reason Report by Agent Grouping shows information about the time that each agent spent in Not Ready state based on the Reason selected. This report can show information for each 30 or 60 minute interval within the report period.

[Table 66: Reason Report by Agent Grouping Query Design, on page 242](#) shows how the information in the Reason Report by Agent Grouping report is obtained or calculated.

[Table 67: Reason Report by Agent Grouping Filter Parameters, on page 244](#) explains how the Reason Report by Agent Grouping report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 66: Reason Report by Agent Grouping Query Design

Field	Explanation
Agent Name	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 32: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 191. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent.</p> <p>Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs.</p> <p>Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Agent ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Agent Extension	<p>For agents who have not had their extension changed, obtained from Resource.extension.</p> <p>For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.</p>
Interval Start Time	<p>Beginning of an interval.</p> <p>End users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)</p>
Interval End Time	<p>End of an interval.</p> <p>End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)</p>

Field	Explanation
Total Logged-in	<p>Login time is stored in ASD.eventDateTime with eventType set to 1 (log in). Logout time is stored in ASD.eventDateTime with eventType set to 7 (log out).</p> <p>The calculation of the logged-in time for a single session depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent logs in and logs out during the interval: Total Logged-in Time = logout time – login time • An agent logs in before the interval and logs out after the interval: Total Logged-in Time = Interval End Time – Interval Start Time • An agent logs in before the interval and logs out during the interval: Total Logged-in Time = logout time – Interval Start Time • An agent logs in during the interval and logs out after the interval: Total Logged-in Time = Interval End Time – login time <p>If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.</p>
Reason	<p>Obtained from the reasoncodelabelmap table. If the reason mapping is not available, then the reason code is obtained from the agentstatedetail table and displayed.</p>
Duration	<p>Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State</p> <p>The calculation of the duration depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes to Agent State before the report start time and goes out of that state after the report end time: Duration = report end time – report start time • An agent goes to Agent State before the report start time and goes out of that state during the report period: Duration = time agent goes out of Agent State – report start time • An agent goes to Agent State during the report period and goes out of that state after the report end time: Duration = report end time – Transition Time • An agent goes to Agent State and out of Agent State during the report period: Duration = time agent goes out of Agent State – Transition Time

Table 67: Reason Report by Agent Grouping Filter Parameters

Field	Explanation
Interval Length	<p>Entire report range—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.</p> <p>Thirty (30) minute intervals—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on.</p> <p>Sixty (60) minute intervals—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.</p>
Resource Group Names	<p>To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Agent List	<p>To report on a specific resource name or names, obtain the list of resource names and profile IDs as follows:</p> <p>Obtain the list of resource names from the user selection for this parameter. Search the Resource table to find records for which RN.resource contains values found in the list. Resource Name and profile ID of agents are stored in Resource.resourcename and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Skill Names	<p>To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>

Field	Explanation
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.
Reasons	To report on a specific reason or reasons, obtain the list of reason labels or reason codes as follows: Obtain the list of reasons from the user selection for this parameter. Search the reasoncodelabelmap table to find the reason labels for which reasoncodelabelmap.label contains values found in the list. If the reason mapping is not available, search the agentstatedetail table to find the reason code for which agentstatedetail.code contains values found in the list.

Reason Report by Reason Grouping Report

The Report Reason by Reason Grouping shows information about the time that each agent spent in Not Ready State across each of the selected reason. This report can show information for each 30 or 60 minute interval within the report period.

[Table 68: Reason Report by Reason Grouping Query Design, on page 245](#) shows how the information in the Reason Report by Reason Grouping report is obtained or calculated.

[Table 69: Reason Report by Reason Grouping Filter Parameters, on page 247](#) explains how the Reason Report by Reason Grouping report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 68: Reason Report by Reason Grouping Query Design

Field	Explanation
Reason	Obtained from the reasoncodelabelmap table. If the reason mapping is not available, then the reason code is obtained from the agentstatedetail table and displayed.
Interval Start Time	Beginning of an interval. End users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)
Interval End Time	End of an interval. End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)

Field	Explanation
Agent Name	<p>For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 32: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 191. Agent Name is stored in Resource.resourceName.</p> <p>Note When an attribute of an agent changes (for example, extension or resource group), the agent will have multiple entries in the Resource table. In this case, each entry will have a different resource ID, so several resource IDs can belong to one agent, and Resource.resourceID will not uniquely identify an agent. Also, one agent may belong to different application profiles, and will have different Resource.profileID entries. Therefore, the combination of Resource.resourceID and Resource.profileID is not sufficient to uniquely identify an agent. The combination of Resource.resourceName and Resource.resourceLoginID is used to uniquely identify an agent.</p> <p>Resource.resourceName itself is not sufficient to do so because different agents may have the same first and last names, but have different resource login IDs.</p> <p>Resource.resourceLoginID by itself does not uniquely identify an agent because a generic resource login ID (for example, supportagent003) may be used for different agents at different times. The combination of two uniquely identifies an agent.</p>
Agent Login ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Agent Extension	<p>For agents who have not had their extension changed, obtained from Resource.extension.</p> <p>For agents who have had their extension changed at some time, the extension that is assigned to the agent during the report period.</p>
Total Logged-in	<p>Login time is stored in ASD.eventDateTime with eventType set to 1 (log in). Logout time is stored in ASD.eventDateTime with eventType set to 7 (log out).</p> <p>The calculation of the logged-in time for a single session depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent logs in and logs out during the interval: Total Logged-in Time = logout time – login time • An agent logs in before the interval and logs out after the interval: Total Logged-in Time = Interval End Time – Interval Start Time • An agent logs in before the interval and logs out during the interval: Total Logged-in Time = logout time – Interval Start Time • An agent logs in during the interval and logs out after the interval: Total Logged-in Time = Interval End Time – login time <p>If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.</p>

Field	Explanation
Duration	<p>Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State</p> <p>The calculation of the duration depends on the agent activity, as follows:</p> <ul style="list-style-type: none"> • An agent goes to Agent State before the report start time and goes out of that state after the report end time: Duration = report end time – report start time • An agent goes to Agent State before the report start time and goes out of that state during the report period: Duration = time agent goes out of Agent State – report start time • An agent goes to Agent State during the report period and goes out of that state after the report end time: Duration = report end time – Transition Time • An agent goes to Agent State and out of Agent State during the report period: Duration = time agent goes out of Agent State – Transition Time

Table 69: Reason Report by Reason Grouping Filter Parameters

Field	Explanation
Interval Length	<p>Entire report range—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.</p> <p>Thirty (30) minute intervals—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on.</p> <p>Sixty (60) minute intervals—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.</p>
Resource Group Names	<p>To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>

Field	Explanation
Agent List	<p>To report on a specific resource name or names, obtain the list of resource names and profile IDs as follows:</p> <p>Obtain the list of resource names from the user selection for this parameter. Search the Resource table to find records for which RN.resource contains values found in the list. Resource Name and profile ID of agents are stored in Resource.resourcename and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Skill Names	<p>To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Team Names	<p>To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.</p>
Reasons	<p>To report on a specific reason or reasons, obtain the list of reason labels or reason codes and profile IDs as follows:</p> <p>Obtain the list of reasons from the user selection for this parameter. Search the reasoncodelabelmap table to find the reason labels for which reasoncodelabelmap.label contains values found in the list. If the reason mapping is not available, search the agentstatedetail table to find the reason code for which agentstatedetail.code contains values found in the list.</p>

Priority Summary Activity Report

The Priority Summary Activity report contains one row per call priority.

[Table 70: Priority Summary Activity Report Query Design, on page 249](#) shows how the information in the Priority Summary Activity report is obtained or calculated.

[Table 71: Priority Summary Activity Report Filter Parameter, on page 249](#) explains how the Priority Summary Activity report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 70: Priority Summary Activity Report Query Design

Field	Explanation
Call Priority	Obtained from CRD.finalPriority. It is a value from 1 through 10.
Total Calls	Join CCD and CRD on sessionID, sessionSeqNum, nodeID, and profileID to find CRD records during the report period. (Corresponding CCD records have startDateTime during the report period.) For each call priority identified by CRD.finalPriority, count the number of CRD records.
Avg Calls	Total calls divided by the number of days in the report period. The number of days is calculated as follows. This information is displayed in units of days, rounded up to the next integer. report end time – report start time For example, if the report start time and the report end time are on the same day, the number of days is 1.
Total Number of Calls (Per Day) with Different Original and Final Priorities	Original call priority is stored in CRD.origPriority and final call priority in CRD.finalPriority. Count the number of CRD records with CRD.finalPriority different than CRD.origPriority in the report period.
Average Number of Calls (Per Day) with Different Original and Final Priorities	Total number of calls with different original and final call priorities divided by the number of days in the report period. The number of days is calculated as follows. This information is displayed in units of days, rounded up to the next integer. report end time – report start time For example, if the report start time and the report end time are on the same day, the number of days is 1.
Maximum Difference Between Original and Final Priorities Experienced by All Calls	Original call priority is stored in CRD.origPriority and final call priority in CRD.finalPriority. For a single call, the difference between original and final priorities is calculated as the absolute value of (CRD.finalPriority – CRD.origPriority) This field shows the largest number of all calls in the report period.
Average Difference (Per Call) Between Original and Final Priorities Experienced by All Calls	Original call priority is stored in CRD.origPriority and final call priority in CRD.finalPriority. For a single call, the difference between original and final priorities is calculated as the absolute value of (CRD.finalPriority – CRD.origPriority). This field is calculated as sum of the difference (absolute value) for all calls in the report period, divided by the number of calls.

Table 71: Priority Summary Activity Report Filter Parameter

Filter parameter	Explanation
Call Priority Levels	To report on a specific call priority or priorities, obtain the list of call priorities from the user selection for this parameter. Query the CRD table to include only the selected call priority or priorities.

Traffic Analysis Report

The Traffic Analysis report shows information about incoming calls to the Unified CCX system.

[Table 72: Traffic Analysis Report Query Design, on page 250](#) shows how the information in the Traffic Analysis report is obtained or calculated.

If the selected report Start Date and report End Date exceeds the date range available in the database, the report start date and report end date is automatically adjusted to match the date range available in the database. For example: If data is available in the database only from the start date x and end date y and if the selected start date is earlier than x and selected end date is later than y, then the report start date and report end date is automatically adjusted to x and y respectively.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 72: Traffic Analysis Report Query Design

Field	Explanation
Date	Date of each day in the report period.
Total Incoming Calls	For each day, count the number of CCD records with the unique sessionID with the Contact Type field set to the value of 1 (incoming call).
Avg Calls (per hour)	Calculated as total incoming calls divided by the number of hours in the day. The first day or the last day of the report period may be a partial day, depending on the start time and the end time selected by the user. Any other day within the report period has 24 hours.
Peak Calls (per hour)	Divide each day into one-hour intervals. The number of incoming calls within each interval is determined by counting the number of CCD records with unique sessionIDs in the interval. The peak hour is the interval with the largest number of incoming calls. This field displays the number of calls in the peak hour.
Peak Hour Start	Divide each day into one-hour intervals. The number of incoming calls within each interval is determined by counting the number of CCD records with unique sessionIDs in the interval. The peak hour is the interval with the largest number of incoming calls. This field displays the start time of the peak hour.
Peak Hour End	Divide each day into one-hour intervals. The number of incoming calls within each interval is determined by counting the number of CCD records with unique sessionIDs in the interval. The peak hour is the interval with the largest number of incoming calls. This field displays the end time of the peak hour.
Call Duration Avg	A call may have multiple call legs. The call duration for a call is calculated as sum of CCD.connectTime for all the call legs. Average call duration for a day is calculated as the sum of call durations for all incoming calls on that day divided by the number of incoming calls on that day.
Call Duration Min	A call may have multiple call legs. The call duration for a call is calculated as sum of CCD.connectTime for all the call legs. Minimum call duration for a day is the shortest call duration of all incoming calls for that day.

Field	Explanation
Call Duration Max	A call may have multiple call legs. The call duration for a call is calculated as sum of CCD.connectTime for all the call legs. Maximum call duration for a day is the longest call duration of all incoming calls for that day.

Outbound Reports

Agent Outbound Campaign Summary Report

The Agent Outbound Campaign Summary report provides call statistics for agent-based progressive and predictive outbound campaigns.

[Table 73: Agent Outbound Campaign Summary Report Query Design, on page 251](#) shows how the information in the Agent Outbound Campaign Summary report is obtained or calculated.

[Table 74: Agent Outbound Campaign Summary Report Filter Parameters, on page 252](#) explains how the Agent Outbound Campaign Summary report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 73: Agent Outbound Campaign Summary Report Query Design

Field	Explanation
Campaign	For each outbound call, campaignID is recorded in CCDR. Campaign Name is obtained from the Campaign table, given the campaignID. the mapping between campaignName and campaignID is one-to-one.
Contacts—Total	For a given campaignID, total number of DialingList records with a unique dialingListID and that have the specified campaignID. Active and inactive records are included in the calculation. Records are marked inactive when callStatus becomes 3 (closed) or 5 (max calls).
Contacts—Attempted	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 1 (voice), 2 (fax), 3 (answering machine), 4 (invalid), 11 (busy), 15 (no answer), 16 (system abandoned), 17 (fail) or 18 (customer abandoned).
Contacts—Remaining	For a given campaignID and profileID, count the number of DialingList records with callStatus = 1 (pending), 2 (active), 4 (callback), 6 (retry) or 7 (unknown).
Contacts—% Attempted	(Attempted / Total Records) * 100%
Calls—Voice	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 1 (voice).
Calls—Answering Machine	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 3 (answering machine).
Calls—Invalid	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 4 (invalid).

Field	Explanation
Calls—Fax/Modem	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 2 (fax).
Calls—No Answer	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 15 (no answer).
Calls—Busy	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 11 (busy).
Calls—Failed	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 17 (failed).
Calls—Customer Abandoned	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 18 (customer abandoned).
Calls—System Abandoned	For a given campaignID, sessionID, profileID, and Contact Type set to the value of 8 (agent outbound), count the number of CCD records with CCD.callResult = 16 (system abandoned).
Requested Callback	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 8 (requested callback).
Average Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice). For these records, calculate the average talk time using ACD.talkTime.
Maximum Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice). For these records, obtain the maximum ACD.talkTime.

Table 74: Agent Outbound Campaign Summary Report Filter Parameters

Filter parameter	Explanation
Campaign List	Obtain the list of campaign names from the user selection for this parameter. Look up the correspondingcampaignID in the Campaign table, and use these campaignIDs only for report generation.

Agent Outbound CDR Report

The Agent Outbound CDR report shows most of the information that is contained in the CCD table. This report also includes information from the DialingList and Campaign tables. The report contains one row per call leg (a call transfer or redirect initiates a new call leg).

[Table 75: Agent Outbound CDR Report Query Design, on page 253](#) shows how the information in the Agent Outbound CDR report is obtained or calculated.

[Table 76: Agent Outbound CDR Report Filter Parameter, on page 254](#) explains how the Agent Outbound CDR report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 75: Agent Outbound CDR Report Query Design

Field	Explanation
Node ID	Obtained from CCD.nodeID.
Session ID	Obtained from CCD.sessionID.
Sequence No.	Obtained from CCD.sessionSeqNum.
Start Time	Obtained from CCD.startDateTime.
End Time	Obtained from CCD.endDateTime.
Contact D	Obtained from CCD.contactDisposition.
Originator T	Obtained from CCD.originatorType.
Originator ID	Obtained from CCD.originatorID. If originator type is 1 (agent), CCD.originatorID is a resource ID. join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to display the agent login ID, which is stored in Resource.resourceLoginID.
Originator DN (DN = directory number)	If CCD.originatorType is Device (2) or Unknown (3), obtained from CCD.originatorDN. If CCD.originatorType is Agent (1), join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.extension.
Destination T	Obtained from CCD.destinationType.
Destination ID	Obtained from CCD.destinationID. If destination type is 1 (agent), CCD.destinationID is a resource ID. join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to display the agent login ID, which is stored in Resource.resourceLoginID.
Destination DN	If CCD.destinationType is Device (2) or Unknown (3), obtained from CCD.destinationDN. If CCD.destinationType is Agent (1), join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID and obtain Resource.extension.
Call Status	Obtain the dialingListID from the CCD table. Find the record in the DialingList table corresponding to the dialingListID obtained from the CCD table. Get the call status value from this record in the DialingList table. The value of the call status is stored in DialingList.callStatus.
Call Result	Obtained from CCD.callResult.
Campaign Name	Obtain the campaignID from the CCD table. Find the record in the Campaign table corresponding to the campaignID obtained from the CCD table. The value of the campaign name is stored in Campaign.campaignName.

Table 76: Agent Outbound CCCR Report Filter Parameter

Filter parameter	Explanation
UCCX Agent Campaign List	Obtained from Campaign.campaignName. If Campaign.campaignType is 1 (agent based outbound campaign) and Campaign.dialerType is 1 (progressive) or 2 (predictive).

Agent Outbound Half Hourly Report

The Agent Outbound Half Hourly report shows detailed statistics for all the progressive and predictive agent outbound calls for every half hour.

[Table 77: Agent Outbound Half Hourly Report Query Design, on page 254](#) shows how the information in the Agent Outbound Half Hourly report is obtained or calculated.

[Table 78: Agent Outbound Half Hourly Report Filter Parameters, on page 254](#) explains how the Agent Outbound Half Hourly report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 77: Agent Outbound Half Hourly Report Query Design

Field	Explanation
Campaign Name	Obtain the campaignID from the CampaignData table. Find the record in the Campaign table corresponding to the campaignID obtained from the CampaignData table. Get the campaign name from this record in the Campaign table. The value of the campaign name is stored in Campaign.campaignName.
Start Time	Obtained from CampaignData.startDateTime.
End Time	Obtained from CampaignData.endDateTime.
Total Attempted Calls	Obtained from CampaignData.attemptedCalls.
Total Live Voice Calls	Obtained from CampaignData.voiceCalls.
Total Abandoned Calls	Obtained from CampaignData.abandonedCalls.
Lines Per Agent	Obtained from CampaignData.linesPerAgent.
Abandoned Rate	Obtained from CampaignData.abandonedRate.

Table 78: Agent Outbound Half Hourly Report Filter Parameters

Filter parameter	Explanation
Campaign Name	Obtain the campaignID from the CampaignData table. Find the record in the Campaign table corresponding to the campaignID obtained from the CampaignData table. Get the campaign name from this record in the Campaign table. The value of the campaign name is stored in Campaign.campaignName.

Outbound Agent Detail Performance Report

The Outbound Agent Detail Performance report presents detailed statistics for each agent by campaign (progressive and predictive). The report also presents the total call details, campaign call details for each agent, and a summary row of the call details for each agent for all agent based progressive and predictive campaigns.

[Table 79: Outbound Agent Detail Performance Report Query Design, on page 255](#) shows how the information in the Outbound Agent Detail Performance report is obtained or calculated.

[Table 80: Outbound Agent Detail Performance Report Filter Parameters, on page 255](#) explains how the Outbound Agent Detail Performance report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 79: Outbound Agent Detail Performance Report Query Design

Field	Description
Agent Name	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. The agent that dials for the campaign is recorded in ACD.resourceID. Join ACD.resourceID with Resource.resourceID to obtain Resource.resourceName.
Campaign	For a given campaignID, look up the campaign name in the Campaign table.
RNA	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is 12 (ring no answer).
Transfer	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is 8 (requested callback), or 20 (transfer) and contactType = 5 (transfer-in).
Talk Time—Avg	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice), 8 (requested callback), or 20 (transfer) and resourceID for this agent. For these records, calculate the average talk time using ACD.talkTime.
Talk Time—Max	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice), 8 (requested callback), or 20 (transfer) and resourceID for this agent. For these records, obtain the maximum ACD.talkTime.

Table 80: Outbound Agent Detail Performance Report Filter Parameters

Filter Parameter	Result
Campaign Names	Obtain the list of agent based progressive and predictive campaign names from the user selection for this parameter. Look up the corresponding campaignID in the Campaign table, and use these campaignIDs only for report generation.

Filter Parameter	Result
Agent Names	<p>To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.</p>
Resource Group Names	<p>To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Skill Names	<p>To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.</p>
Team Names	<p>To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows:</p> <p>Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.</p>

Outbound Campaign Summary Report

The Outbound Campaign Summary report provides summary statistics for each campaign over a specified time period. This report is available with the Cisco Unified OUTD feature.

[Table 81: Outbound Campaign Summary Report Query Design, on page 257](#) shows how the information in the Outbound Campaign Summary report is obtained or calculated.

[Table 82: Outbound Campaign Summary Report Filter Parameter, on page 258](#) explains how the Outbound Campaign Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 81: Outbound Campaign Summary Report Query Design

Field	Explanation
Campaign Name	For each outbound call, campaignID is recorded in CCDR. Campaign Name is obtained from the Campaign table, given the campaignID. The mapping between campaignName and campaignID is one-to-one.
Total Records	For a given campaignID, total number of DailingList records with a unique dialingListID and that have the specified campaignID. Active and inactive records are included in the calculation. Records are marked inactive when callStatus becomes 3 (closed) or 5 (max calls).
Available	For a given campaignID, total number of DialingList records with a unique dialingListID and that have the specified campaignID. Also, DailingList.callStatus must be one of the following values (it cannot be 3 (closed) or 5 (max calls): 1 = pending 2 = active 4 = callback 6 = retry 7 = unknown
Attempted	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records in which callResult is not 9 (agent skip) or 10 (agent close). This number is the same as Accepted. From this number, deduct duplicate records with the same dialingListID so that a given dialingListID occurs only once in the final result.
Attempted %	(Attempted / Total Records) * 100%
Accepted	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult not equal to 9 (agent reject) or 10 (agent close).
Rejected	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 9 (agent reject).
Closed	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 10 (agent close).
Voice	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 1 (voice).
Answering Machine	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 3 (answering machine).
Fax/Modem	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 2 (fax/modem).

Field	Explanation
Invalid	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 4 (invalid).
Requested Callback	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 8 (requested callback).
Customer Not Home	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 7 (customer not home).
Wrong Number	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 6 (wrong number).
Busy	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records with ACD.callResult = 11 (busy).
Average Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice). For these records, calculate the average talk time using ACD.talkTime.
Maximum Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice). For these records, obtain the maximum ACD.talkTime.

Table 82: Outbound Campaign Summary Report Filter Parameter

Filter parameter	Explanation
Campaign Name	Obtain the list of campaign names from the user selection for this parameter. Look up the corresponding campaignID in the Campaign table, and use these campaignIDs only for report generation.

Preview Outbound Agent Detail Performance Report

The Preview Outbound Agent Detail Performance report shows detailed statistics for each agent by campaign. It also shows the total call details and campaign call details for preview outbound campaigns. This report is available with the Cisco Unified Outbound Dialer (Cisco Unified OUTD) feature.

[Table 83: Preview Outbound Agent Detail Performance Report Query Design, on page 259](#) shows how the information in the Preview Outbound Agent Detail Performance report is obtained or calculated.

[Table 84: Preview Outbound Agent Detail Performance Report Filter Parameters, on page 259](#) explains how the Preview Outbound Agent Detail Performance report filter parameters obtain data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 83: Preview Outbound Agent Detail Performance Report Query Design

Field	Explanation
Agent Name	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. The agent that dials for the campaign is recorded in ACD.resourceID. Join ACD.resourceID with Resource.resourceID to obtain Resource.resourceName.
Campaign Name	For a given campaignID, look up the campaign name in the Campaign table.
Offered	Calculated as (Accepted + Rejected + Closed)
Accepted	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is not 9 (agent reject) or 10 (agent close).
Rejected	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult = 9 (agent reject).
Closed	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult = 10 (agent close).
RNA	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is not 12 (transfer).
Transfer	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is not 13 (ring no answer).
Average Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice) and resourceID for this agent. For these records, calculate the average talk time using ACD.talkTime.
Maximum Talk Time	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice) and resourceID for this agent. For these records, obtain the maximum ACD.talkTime.

Table 84: Preview Outbound Agent Detail Performance Report Filter Parameters

Filter parameter	Explanation
Campaign Name	Obtain the list of campaign names from the user selection for this parameter. Look up the corresponding campaignID in the Campaign table, and use these campaignIDs only for report generation.
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.

Filter parameter	Explanation
Resource Group Names	To report on a specific resource group or groups, obtain the list of resource IDs and profile IDs as follows: Obtain the list of resource group names from the user selection for this parameter. Search the ResourceGroup table to find records for which RG.resourceGroupName contains values found in the list. Join RG and Resource on resourceGroupID and profileID to find the list of agents that belong to the selected resource group or groups. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

System Reports

Application Performance Analysis Report

The Application Performance Analysis report shows information about calls received by each Unified CCX or Cisco Unified IP IVR application. It contains one row per call application. The information is stored in the CCD table.

[Table 85: Application Performance Analysis Report Query Design, on page 260](#) shows how the information in the Application Performance Analysis report is obtained or calculated.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 85: Application Performance Analysis Report Query Design

Field	Explanation
Application ID	Obtained from CCD.applicationID.
Application Name	Obtained from CCD.applicationName.
Call Presented	Each application is identified by the combination of CCD.applicationID and CCD.applicationName. For each application, count the number of CCD records to determine the total number of calls presented to the application.

Field	Explanation
Calls Handled	Each application is identified by the combination of CCD.applicationID and CCD.applicationName. For each application, count the number of CCD records with CCD.contactDisposition = 2 (handled) to determine the total number of calls presented to the application.
Calls Abandoned	Each application is identified by the combination of CCD.applicationID and CCD.applicationName. For each application, count the number of CCD records with CCD.contactDisposition = 1 (abandoned) or 4 (aborted) to determine the total number of calls presented to the application.
Abandon Rate (per hour)	Calculated as follows: Calls Abandoned / number of hours within the report period
Avg Call Duration	Call duration is stored in CCD.connectTime. Average call duration of an application is calculated as the sum of CCD.connectTime for all calls in that application, divided by the number of calls.

Application Summary Report

The Application Summary report provides summary call statistics for each Unified CCX or Cisco Unified IP IVR application.

[Table 86: Application Summary Report Query Design, on page 261](#) shows how the information in the Application Summary report is obtained or calculated.

[Table 87: Aborted and Rejected Call Detail Report Filter Parameter, on page 263](#) explains how the Application Summary report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 86: Application Summary Report Query Design

Field	Explanation
Application Name	Obtained from CCD.applicationName.
Called Number	Obtained from CCD.origCalledNumber.
Calls Presented	The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application. For each application, count the number of CCD records to obtain the number of calls presented to the application.
Flow-In	The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application. For each application, count the number of CCD records in which CCD.contactType is 4 (redirect in).
Flow-Out	The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application. For each application, count the number of CCD records in which CCD.flowout is 1.
Calls Handled	The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application. For each application, count the number of CCD records in which CCD.contactDisposition is 2 (handled).

Field	Explanation
Avg Speed Answer	<p>This field includes only calls connected to agents.</p> <p>Join CCD, CRD, and ACD on sessionID, sessionSeqNum, profileID, and nodeID. Find ACD records with ACD.talkTime greater than zero (so that RNAs are excluded).</p> <p>To calculate total queue time, add the values stored in CRD.queueTime.</p> <p>To obtain total ring time, add the values stored in ACD.ringTime.</p> <p>To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.</p> <p>Average speed to answer is calculated as:</p> <p>total queue time / number of calls connected to agents.</p> <p>If number of calls connected to agents is zero for this application, this field is zero.</p>
Avg Talk Time	<p>Join CCD, CRD, and ACD on sessionID, sessionSeqNum, profileID, and nodeID. Find ACD records with ACD.talkTime greater than zero (so that RNAs are excluded).</p> <p>To obtain total talk time, add up the values stored in ACD.talkTime.</p> <p>To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.</p> <p>Average talk time is calculated as:</p> <p>Total talk time / number of calls connected to agents.</p> <p>If number of calls connected to agents is zero for this application, this field is zero.</p>
Avg Work Time	<p>Join CCD, CRD, and ACD on sessionID, sessionSeqNum, profileID, and nodeID. Find ACD records with ACD.talk time greater than zero (so that RNAs are excluded).</p> <p>To obtain total work time, add up the values stored in ACD.workTime.</p> <p>To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.</p> <p>Average work time is calculated as:</p> <p>Total work time / number of calls connected to agents.</p> <p>If number of calls connected to agents is zero for this application, this field is zero.</p>
Calls Abandoned	<p>The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application.</p> <p>For each application, count the number of CCD records in which CCD.contactDisposition is 1 (abandoned), 4 (aborted), or 5 or greater (rejected).</p>

Field	Explanation
Avg Abandon Time	<p>The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application.</p> <p>For each application, calculate the sum of the values in CCD.connectTime where the CCD.contactDisposition is 1 (abandoned), 4 (aborted), or 5 or greater (rejected) to obtain the total abandon time.</p> <p>If Calls Abandoned is not zero, this field is calculated as:</p> <p>Total abandon time / Calls Abandoned.</p> <p>If Calls Abandoned is zero, this field is zero.</p>

Table 87: Aborted and Rejected Call Detail Report Filter Parameter

Filter parameter	Explanation
Application Name	To report on a specific application or applications, obtain the list of application names from the user selection for this parameter. Find CCD records for which values stored in CCD.applicationName are found in the selected list.

Multichannel Reports

Wrap-Up Reasons for Chat and Email Report

[Table 88: Wrap-Up Reasons for Chat and Email Query Design, on page 263](#) shows how the information in the Wrap-Up Reasons for Chat and Email report is obtained or calculated.

[Table 89: Wrap-Up Reasons for Chat and Email Filter Parameter, on page 264](#) explains how the Wrap-Up Reasons for Chat and Email report parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 88: Wrap-Up Reasons for Chat and Email Query Design

Field	Explanation
Category	Name of the Wrap-Up Category. This is obtained from the wrapupcategory table where wrapupreasons.categoryid matches with wrapupcategory.recordid.
Wrap-Up Reason	<p>Wrap-Up Reason for a category which meets the following criteria:</p> <ul style="list-style-type: none"> textagentwrapupdetail.reasonid = wrapupreasons.reasonid textagentwrapupdetail.wrapuptime between the start and end time wrapupreasons.categoryid = wrapupcategory.recordid
Agent Name	Name of the agent from the resource table for the resourceid obtained from the textwrapupdetail table.

Field	Explanation
Agent ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Chat	Chat count is retrieved based on TextAgentWrapupDetail.mediatype where mediatype=1 and which meets the following criteria: <ul style="list-style-type: none"> • textagentwrapupdetail.reasonid = wrapupreasons.reasonid • textagentwrapupdetail.wrapuptime between the start and end time • wrapupreasons.categoryid = wrapupcategory.recordid
Email	Email count is retrieved based on TextAgentWrapupDetail.mediatype where mediatype=3 and which meets the following criteria: <ul style="list-style-type: none"> • textagentwrapupdetail.reasonid = wrapupreasons.reasonid • textagentwrapupdetail.wrapuptime between the start and end time • wrapupreasons.categoryid = wrapupcategory.recordid • textagentwrapupdetail.mediatype=3
Total	Sum of chat and email counts.

Table 89: Wrap-Up Reasons for Chat and Email Filter Parameter

Field	Explanation
Wrap-Up Category	To report on a specific Wrap-Up Category, obtain the list of Wrap-Up Category names that are available in the wrapupcategory table. Select the Wrap-Up category for which the report needs to be displayed.
Agent Name	To report on a specific Agent Name, obtain the list of agent names that are available in the resource table. Select the agent name for whom the report needs to be displayed.

Multichannel Agent Summary Report

[Table 90: Multichannel Agent Summary Report Query Design, on page 265](#) shows how the information in the Multichannel Agent Summary Report is obtained or calculated.

[Table 90: Multichannel Agent Summary Report Query Design, on page 265](#) explains how the Multichannel Agent Summary Report filter parameter obtains data.

For information about the database table names and field names that are shown in this section, see the [Conventions Used in This Chapter, on page 163](#).

Table 90: Multichannel Agent Summary Report Query Design

Field	Explanation
Agent Name	<p>For ACD calls, an agent is identified by the combination of ACD.resourceID and ACD.profileID. Join ACD.resourceID with Resource.resourceID, and join ACD.profileID with Resource.profileID to obtain the agent name, which is stored in Resource.resourceName.</p> <p>For IVR calls, if an agent is the originator of the call, the agent is identified by CCD.originatorID and CCD.profileID, when CCD.originatorType = 1 (agent type). Join CCD.originatorID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p> <p>If an agent is the destination of an IVR call, the agent is identified by CCD.destinationID and CCD.profileID, when CCD.destinationType = 1 (agent type). Join CCD.destinationID with Resource.resourceID, and join CCD.profileID with Resource.profileID to obtain Resource.resourceName.</p>
Agent ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Inbound Calls—Presented	Join ACD and CCD on sessionID and sessionSeqNum, profileID, and nodeID. For each agent, count the number of unique CCD.sessionID with CCD.startDateTime falling within the report period.
Inbound Calls—Handled	Join ACD and CCD on sessionID, sessionSeqNum, profileID, and nodeID. For each agent, count the number of unique CCD.sessionID that meet the following criteria: <ul style="list-style-type: none"> • CCD.startDateTime is in the report period • CCD.contactDisposition is 2 (handled) • ACD.talkTime is greater than zero
RNA (Inbound calls)	Join ACD and CCD tables on sessionID, sessionSeqNum, profileID, and nodeID. For each agent, count the number of unique CCD.sessionID with CCD.startDateTime falling within the report period and acd.rna='t'
Inbound Calls—Handle Time Max	<p>Each call handled by an agent has an ACD record. The handle time of a call is calculated as follows:</p> $\text{ACD.talkTime} + \text{ACD.holdTime} + \text{ACD.workTime}$ <p>The maximum handle time for an agent is the longest handle time of all calls handled by the agent within the report period.</p>
Inbound Calls—Handle Time Avg	<p>Each call handled by an agent has an ACD record. The handle time of a call is calculated as follows:</p> $\text{ACD.talkTime} + \text{ACD.holdTime} + \text{ACD.workTime}$ <p>The average handle time is the sum of the handle times of all the calls handled by the agent within the report period divided by the number of calls handled within the report period.</p>

Field	Explanation
RNA (Outbound Calls)	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records. Count the number of ACD records for this agent (as identified in ACD.resourceID) where callResult is 12 (ring no answer).
Outbound Calls—Talk Time Max	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice), 8 (requested callback), or 20 (transfer) and resourceID for this agent. For these records, obtain the maximum ACD.talkTime.
Outbound Calls—Talk Time Avg	For a given campaignID, determine from the CCD table the sessionID, sessionSeqNum, profileID, and nodeID values. Use these values to look up the associated ACD records with callResult = 1 (voice), 8 (requested callback), or 20 (transfer) and resourceID for this agent. For these records, calculate the average talk time using ACD.talkTime.
Chat—Presented	Number of chats presented to the agent. It is calculated by counting the number of TextAgentConnectionDetail records (TACDR) for the chat agent after joining with TextContactDetail records (TCDR) based on contactid, contactseqnum, and mediatype, which is 1 (chat_type) and the disposition can be handled (value = 2), rejected (value = 5), and abandoned (value = 1).
Chat—Handled	Number of chats handled by the agent. It is calculated by counting the number of TACDR with talk time > 0 for the agent after joining with TCDR based on contactid, contactseqnum and mediatype = 1 (chat_type) and disposition = 2 (handled). The contact type of TCDR should be of type chat (value = 1).
Chat No Answered/Declined	<p>Chat No Answered/Declined is the sum of the counts of chats not answered, group chats declined, and group chats not answered. This is calculated by counting the number of TextAgentConnectionDetail records (TACDR) for the chat agent after joining with TextContactDetail records (TCDR) based on contactid, contactseqnum, mediatype (which is 1 for chat) and the contactdisposition.</p> <p>The Disposition values are:</p> <ul style="list-style-type: none"> • 5 for chat not answered • 9 for group chat declined • 11 for group chat not answered
Chat—Active Time Max	Maximum talk time for the chat agent. It is calculated by taking the maximum talk time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type)
Chat—Active Time Avg.	Average talk time for the chat agent. It is calculated by taking the average talk time of all the TACDR for the agent after joining with TCDR based on contactid, contactseqnum, and mediatype = 1 (chat_type)

Field	Explanation
Email—Presented	Number of email messages that are presented to the agent. It is obtained from TextAgentConnectionDetail table.
Email—Handled	Number of response email messages that the agent sent. It is obtained from TextContactDetail table where disposition is 2 (Handled) and dispositionReason is email_agent_replied.
Email—Discarded	Number of email messages that the agent discarded. The discarded date and time determines whether the email message falls within the interval. It is obtained from the TextContactDetail table where disposition = 4 and dispositionReason = email_agent_discarded.
Email—Requeued	Number of email messages that the agent requeued. It is obtained from TextContactDetail table where disposition is 2 (Handled) and dispositionReason is email_requeue_transfer or email_requeue_agent_disconnected.

Table 91: Multichannel Agent Summary Report Filter Parameter

Field	Explanation
Agent Names	To report on a specific agent or agents, obtain the list of resource IDs and profile IDs as follows: Obtain the list of agent names from the user selection for this parameter. These values are in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.
Skill Names	To report on agents with a specific skill or skills, obtain the list of resource IDs and profile IDs as follows: Obtain the list of skill names from the user selection for this parameter. Search the Skill table to find records for which Skill.skillName contains values found in the list. Join Skill and RSM on skillID and profileID to find resourceSkillMapID. Join RSM and Resource on resourceSkillMapID and profileID to find the list of agents that have the selected skill or skills. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively. This report displays only agents who are active and agents who are deleted after the report start time.
Team Names	To report on a specific team or teams, obtain the list of resource IDs and profile IDs as follows: Obtain the list of team names from the user selection for this parameter. Search the Team table to find records whose Team.teamName contains values found in the list. Join Team.teamID with Resource.assignedTeamID, and Team.profileID with Resource.profileID to find the list of agents who belong to the selected team or teams. Resource ID and profile ID of agents are stored in Resource.resourceID and Resource.profileID, respectively.

Queue Management Audit Trail Report

The Queue Management Audit Trail Report presents the details of the CSQs and agents skills that were modified. The report includes a table that displays the following information:

Table 92: Fields

Field	Description
Event Time	Time (in GMT) at which the CSQ or the agent skills were modified.
Modified By	Role and the name of the person, who modified the CSQ or the agent's skill.
Operation Type	Type of modification, Add or Remove.
Agent Name	Agent for whom the CSQ or the skills were modified.
CSQ	Name of the CSQ to which the agent was added or removed.
Skills	The skills that were added or removed. The skills can be of the respective CSQ or agent.
Details	Informs whether the agent was added or removed from the queue due to the modification of skills.

Filter criteria

You can filter using the following parameters:

Table 93:

Filter parameter	Result
Date Range	Displays information for the specified duration.
Time Range	Displays information for the specified duration.
Modified By	Displays information for the specified role.
Agent Names	Displays information for the specified agents.
CSQ Names	Displays information for the specified CSQs.
Team Names	Displays information of agents for the specified teams.
Logged in User	Displays information that belongs to the logged-in user.

Grouping criteria

None.



CHAPTER 8

Live Data Reports

- [Agent Reports, on page 269](#)
- [Supervisor Reports, on page 282](#)

Agent Reports

Agent CSQ Statistics Report

The Agent CSQ Statistics Report presents the current day's call queue statistics, since midnight, of the Contact Service Queues (CSQ) to which the agent is associated.

The Agent CSQ Statistics Report does not report any outbound campaign calls or any type of calls that were transferred or conferenced.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Agent ID	Login ID of the agent.
CSQ Name	Name of the CSQ.
Calls Waiting	Number of calls in queue for a CSQ.
Longest Call in Queue	Elapsed wait time of the oldest call in the queue.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Team Name	Displays information for the CSQs that belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Recent State History Report

The Recent State History Report presents the agent state and duration in that state and the reason (where applicable) for the current day, since midnight.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Agent ID	Login ID of the agent. Note This field is not listed in Gadget View.
Start Time	Time the agent state is initiated.
State	State of the agent—Login, Logout, Not Ready, Ready, Reserved, Talking, or Work.
Reason	The reason selected by the agent moving to Logout state or Not Ready state. This displays the reason code if the reason label is unavailable. A blank is due to any one of the following: <ul style="list-style-type: none"> • No logout reason code is configured. • Agent was unable to enter a reason. • Reason codes for all other states except Not Ready and Logout. <p>To view a list of reason codes and their descriptions, see the “Predefined” reason codes section below.</p>

Field	Description
Duration	Time duration that the agent was in that state. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.

Reason Code	State	Event	Event Description
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.

Reason Code	State	Event	Event Description
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32755	Not Ready	CALL_ENDED	Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases: <ul style="list-style-type: none"> Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.

Reason Code	State	Event	Event Description
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.

Related Topics

[Field Filters](#), on page 22

Recent Call History Report

The Recent call History Report presents the recent call history details like the start time, duration of the call, type of call, phone number, contact disposition, queue and Wrap-Up reasons for the current day, since midnight.

The following call based scenarios are not reported:

- Consult calls between any two agents.
- Outbound campaign calls and any such type of calls that were transferred or conferenced.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Agent ID	Login ID of the agent.
Type	Type of the call. For example, Inbound or Outbound.
Number	Phone number of the call. To view a list of reason codes and their descriptions, see the “Predefined” reason codes section below.
Disposition	Contact disposition type of the call.
Wrap-Up Reason	Wrap-Up Reasons entered by the agent.
Queue	Queue details that the call was routed to.
Start Time	Start time of the call.

Field	Description
Duration	Time duration of the call. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Agent Statistics Report

The Agent Statistics Report presents performance statistics of the agents for the current day, since midnight.

Charts

None

Fields

The report includes a table that display the following information:

Field	Description
Agent ID	Login ID of the agent.
Calls Offered	Calls sent to the agent, regardless of whether the agent picks up the call.
Calls Handled	Calls connected to the agent.
Talk Time—Avg	Average time the agent spent in Talking state. Average talk time = Total time in Talking state / Calls handled
Talk Time—Max	Longest time the agent spent in Talking state.

Field	Description
Talk Time—Total	Total time the agent spent in Talking state.
Hold Time—Avg	Average time the agent put the calls on hold. Average hold time = Total time the calls were on hold / Calls handled
Hold Time—Max	Longest time the agent put a call on hold.
Hold Time—Total	Total time the agent put the calls on hold.
Ready—Avg	Average time the agent spent in Ready state. Average ready time = Total time the agent spent in Ready state / Number of times the agent moved to Ready state
Ready—Max	Longest time the agent spent in Ready state.
Ready—Total	Total time the agent spent in Ready state.
Not Ready—Avg	Average time the agent spent in Not Ready state. Average not ready time = Total time the agent spent in Not Ready state / Number of times the agent moved to Not Ready state
Not Ready—Max	Longest time the agent spent in Not Ready state.
Not Ready—Total	Total time the agent spent in Not Ready state.
After Call Work—Avg	Average time the agent spent in Work state. Average work time = Total time in Work state / Calls completed
After Call Work—Max	Longest time the agent spent in Work state.
After Call Work—Total	Total time the agent spent in Work state.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Agent Team Summary Report

The Agent Team Summary Report presents the agent state and the reason (where applicable). An agent can view details of all the agents in the team.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
State	State of the agent—Logged-In, Logout, Not Ready, Ready, Reserved, Talking, or Work.
Reason	<p>The reason selected by the agent when moving to Logout state or Not Ready state. This displays the reason code if the reason is unavailable. A blank is due to one of the following:</p> <ul style="list-style-type: none"> • No logout reason code is configured. • Agent was unable to select a reason. • Reason codes for all other states except Not Ready and Logout. <p>To view a list of reason codes and their descriptions, see the “Predefined” reason codes section below.</p>

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT_READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>

Reason Code	State	Event	Event Description
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32755	Not Ready	CALL_ENDED	<p>Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:</p> <ul style="list-style-type: none"> • Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. • The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.

Reason Code	State	Event	Event Description
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.

Related Topics

[Field Filters](#), on page 22

Supervisor Reports

Agent Outbound Team Summary Report

The Agent Outbound Team Summary Report provides performance statistics of the agents in the team for direct preview, progressive, and predictive outbound campaigns. The following two views are available for this report:

- **Short and Long Term Average**—Provides the performance statistics of the agents who handle outbound calls for the current day based on short term and long term values.
- **Since Midnight**—Provides the performance statistics of the agents in the team who handle outbound calls for the current day, beginning at midnight.

**Note**

- Your administrator can set the short term value to 5, 10, or 15 minutes.
- Long term value is set to 30 minutes.

Charts

None

Fields

The following view-wise tables are included in the report.

Table 94: Short and Long Term Average

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Average Talk Time—Short Term	Average time the agent spent in Talking state for outbound calls in the last 5, 10, or 15 minutes.
Average Talk Time—Long Term	Average time the agent spent in Talking state for outbound calls in the last 30 minutes.
Average Hold Time—Short Term	Average time the agent put the outbound calls on hold in the last 5, 10, or 15 minutes.
Average Hold Time—Long Term	Average time the agent put the outbound calls on hold in the last 30 minutes.

Table 95: Since Midnight

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Talk Time—Avg	Average time the agent spent in Talking state for outbound calls. Average talk time = Total time in Talking state / calls handled
Talk Time—Max	Longest time the agent spent in Talking state for outbound calls.
Talk Time—Total	Total time the agent spent in Talking state for outbound calls.
Hold Time—Avg	Average time the agent put the outbound calls on hold. Average hold time = Total time calls were put on hold / calls handled
Hold Time—Max	Longest time the agent put an outbound call on hold.
Hold Time—Total	Total time the agent put the outbound calls on hold.
After Call Work Time—Avg	Average time the agent spent in Work state for outbound calls. Average work time = Total time in Work state / calls completed
After Call Work Time—Max	Longest time the agent spent in Work state for outbound calls.

Field	Description
After Call Work Time—Total	Total time the agent spent in Work state for outbound calls.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Chat Agent Statistics Report

The Chat Agent Statistics Report provides agent statistics.

Charts

None

Fields

The report includes a table that displays the following information:

- Visible fields—These fields are displayed in the report.
- Hidden fields—These fields are not displayed in the report. You can customize the report to display these fields. For more information, see the *Cisco Unified Contact Center Express Report User Guide*, located at:

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-user-guide-list.html>.

Table 96: Visible Fields in Chat Agent Statistics Report

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.

Field	Description
Current State	State of the agent—Logged-In, Logout, Not Ready, Ready, Partial Busy, Busy, Reserved.
Duration	Time that the agent spent in the current state. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.
Current Active Contacts	Number of contacts that the agent is handling.
Contacts Presented	Number of contacts that are offered to the agent since midnight.
Contacts Handled	Number of contacts that are handled by the agent since midnight. A contact is marked handled if a contact is connected to an agent.
Contacts Abandoned	Number of contacts that are routed to the CSQ since midnight but are not answered by an agent, because the customer ends the chat or the customer is disconnected. This also includes the number of group chats that were abandoned when these were routed to a CSQ. They are abandoned when the group chat is not accepted by the second agent. This can be due to, either the chat submitter or the first agent ended the chat before the second agent accepted or was disconnected.
Contacts RNA	Number of contacts that the agent did not answer since midnight. Ring-no-answer (RNA).
Contacts Declined	Number of group chat contacts that are declined by the agent since midnight.

Table 97: Hidden Fields in Chat Agent Statistics Report

Field	Description
Login Duration	Elapsed time between the login time and the logout time since midnight.
CSQs Serving	List of CSQs that the agent is serving.
Agent Utilization—Not Ready	Percentage of time that the agent spent in Not Ready state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Ready	Percentage of time that the agent spent in Ready state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Partial Busy	Percentage of time that the agent spent in Partial Busy state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.

Field	Description
Agent Utilization—Busy	Percentage of time that the agent spent in Busy state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Chat CSQ Summary Report

The Chat CSQ Summary Report provides agent statistics and contact statistics for a Contact Service Queue (CSQ).

Charts

None

Fields

The report includes a table that displays the following information:

- Visible fields—These fields are displayed in the report.
- Hidden fields—These fields are not displayed in the report. You can customize the report to display these fields. For more information, see the *Cisco Unified Contact Center Express Report User Guide*, located at:

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-user-guide-list.html>.

Table 98: Visible Fields in Chat CSQ Summary Report

Field	Description
CSQ Name	Name of the CSQ.
Contacts Waiting	Number of contacts in queue for a CSQ.

Field	Description
Contacts Abandoned	Number of contacts that are routed to the CSQ since midnight but are not answered by any agent. This is because either the customer has ended the chat before an Agent accepts or is disconnected (due to time out or network disruptions).
Agents—Logged-In	Number of agents in Logged-In state.
Agents—Not Ready	Number of agents in Not Ready state.
Agents—Ready	Number of agents in Ready state.
Agents—Partial Busy	Number of agents in Partial Busy state. An agent is set to Partial Busy state when the agent has not reached the maximum number of chat sessions that is set by the administrator.
Agents—Busy	Number of agents in Busy state. An agent is set to Busy state when the agent reaches the maximum number of chat sessions that is set by the administrator.
Agents—Reserved	Number of agents in Reserved state.

Table 99: Hidden Fields in Chat CSQ Summary Report

Field	Description
Contacts Total	Number of contacts routed to the CSQ since midnight.
Contacts Handled	Number of contacts that are handled by the CSQ since midnight. A contact is marked handled if a contact is connected to an agent while queued for this CSQ.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Queue Name	Displays information for the CSQs that belong to the specified queues.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Email Agent Statistics Report

The Email Agent Statistics Report provides the email statistics of the agents.

Charts

None

Fields

The report includes a table that displays the following information:

- Visible fields—These fields are displayed in the report.
- Hidden fields—These fields are not displayed in the report. You can customize the report to display these fields. For more information, see the *Cisco Unified Contact Center Express Report User Guide*, located at:

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-user-guide-list.html>.

Table 100: Visible Fields in Email Agent Statistics Report

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
State	State of the agent—Not Ready, Ready, Partial Busy, Busy, Reserved.
Duration	Time that the agent spent in the current state. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.
Active Emails	Number of email messages that the agent is handling.
Emails Presented	Number of email messages that are presented to the agent since midnight. Note The number of emails that are presented include new and requeued emails.
Emails Handled	Number of email messages that are handled by the agent since midnight.
Emails Discarded	Number of email messages discarded by the agent or by the system during service disruption. The system discarded emails would be requeued into the system when the service is restored.
Emails Requeued	Number of email messages that the agent requeued since midnight.

Table 101: Hidden Fields in Email Agent Statistics Report

Field	Description
Login Duration	Elapsed time between the login time and the logout time since midnight.

Field	Description
CSQs Serving	List of CSQs that the agent is serving.
Agent Utilization—Not Ready	Percentage of time that the agent spent in Not Ready state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Ready	Percentage of time that the agent spent in Ready state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Partial Busy	Percentage of time that the agent spent in Partial Busy state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Busy	Percentage of time that the agent spent in Busy state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.
Agent Utilization—Reserved	Percentage of time that the agent spent in Reserved state since midnight. It is calculated every minute and is one of the components that add up to the agent's total login duration.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Email CSQ Summary Report

The Email CSQ Summary Report presents the email activity summary of agents in a Contact Service Queue (CSQ).

Charts

None

Fields

The report includes a table that displays the following information:

- Visible fields—These fields are displayed in the report.
- Hidden fields—These fields are not displayed in the report. You can customize the report to display these fields. For more information, see the *Cisco Unified Contact Center Express Report User Guide*, located at:

<https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-user-guide-list.html>.

Table 102: Visible Fields in Email CSQ Summary Report

Field	Description
CSQ Name	Name of the Email CSQ.
Emails in Queue	Number of email messages in queue. (This includes the emails requeued by the agent.) Note System requeues email messages that are in agents desktop when agents sign off or loose connectivity.
Emails in Process	Number of email messages that are assigned to agents.
Emails Discarded	Number of email messages that have been discarded, both by agents and due to service disruptions.
Agents-Logged In	Number of agents in Logged-In state.
Agents-Not Ready	Number of agents in Not Ready state.
Agents-Ready	Number of agents in Ready state.
Agents-Partial Busy	Number of agents in Partial Busy state. Agents are set to Partial Busy state as soon as an email is assigned to them. They will continue to be in this state until they clear all the emails assigned to them or the state changes to Busy.
Agents-Busy	Number of agents in Busy state. Agents are set to Busy state when the number of emails reach the maximum limit set. Agents state is changed to Partial Busy as soon as the number of assigned email messages is one less than the maximum limit set.

Table 103: Hidden Fields in Email CSQ Summary Report

Field	Description
Emails Total	Number of email messages routed to the CSQ since midnight.

Field	Description
Emails Handled	Number of email messages that are handled by the CSQ since midnight. An email is marked handled if it is responded by an agent while queued for this CSQ.

Filter Criteria

You can filter using the following parameter:

Filter Parameter	Result
Queue Name	Displays information for the CSQs that belong to the specified queues.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Team State Report

The Team State Report presents each agent state and the time spent in a state. The supervisor can see agents of all the assigned teams.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Login Duration (since midnight)	Time the agent logged in since midnight.
Current State	State of the agent—Logged-In, Logout, Not Ready, Ready, Reserved, Talking, or Work.
Duration	Time that the agent spent in the current state. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Team Summary Report

The Team Summary Report presents performance statistics of all the agents in the team. The following two views are available for this report:

- **Short and Long Term Average**—Presents the performance statistics of the team members for the current day based on short term and long term values.
- **Since Midnight**—Presents the performance statistics for the current day, since midnight.



Note

- Your administrator can set the short term value to 5, 10 or 15 minutes.
- Long term value is set to 30 minutes.

Charts

None

Fields

The following are the view-wise tables that are part of the report:

Table 104: Short and Long Term Average

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Login Duration (since midnight)	Total login duration of the agent, since midnight.

Field	Description
Average Talk Time—Short Term	Average time the agent spent in Talking state in the last 5, 10 or 15 minutes.
Average Talk Time—Long Term	Average time the agent spent in Talking state in the last 30 minutes.
Average Hold Time—Short Term	Average time the agent put the calls on hold in the last 5, 10 or 15 minutes.
Average Hold Time—Long Term	Average time the agent put the calls on hold in the last 30 minutes.

Table 105: Since Midnight

Field	Description
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Login Duration	Total login duration of the agent.
Calls Offered	Number of calls that are sent to the agent, regardless of whether the agent answered the call.
Calls Handled	Number of calls that are answered by the agent.
Average Ring Time	Average ring time of calls before the calls were answered. Average ring time = Total ring time / Calls handled
Talk Time—Avg	Average time the agent spent in Talking state. Average talk time = Total time in Talking state / Calls handled
Talk Time—Max	Longest time the agent spent in Talking state.
Talk Time—Total	Total time the agent spent in Talking state.
Hold Time—Avg	Average time the agent put the calls on hold. Average hold time = Total time calls were put on hold / Calls handled
Hold Time—Max	Longest time the agent put a call on hold.
Hold Time—Total	Total time the agent put the calls on hold.
Ready Time—Avg	Average time the agent spent in Ready state. Average ready time = Total time the agent spent in Ready state / Number of times the agent moved to Ready state
Ready Time—Max	Longest time the agent spent in Ready state.
Ready Time—Total	Total time the agent spent in Ready state.

Field	Description
Not Ready Time—Avg	Average time the agent spent in Not Ready state. Average not ready time = Total time the agent spent in Not Ready state / Number of times the agent moved to Not Ready state
Not Ready Time—Max	Longest time the agent spent in Not Ready state.
Not Ready Time—Total	Total time the agent spent in Not Ready state.
After Call Work Time—Avg	Average time the agent spent in Work state. Average work time = Total time in Work state / Calls completed
After Call Work Time—Max	Longest time the agent spent in Work state.
After Call Work Time—Total	Total time the agent spent in Work state.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22

Voice CSQ Agent Detail Report

The Voice CSQ Agent Detail Report presents the agent current state, duration in the state and the reason code where applicable.



Note If an agent is configured in two or more CSQs, the Supervisor is able to view on which CSQ the agent is in Talking state.

Charts

None

Fields

The report includes a table that displays the following information:

Field	Description
CSQ	Name of the Contact Service Queue (CSQ).
Agent Name	First name and last name of the agent.
Agent ID	Login ID of the agent.
Current State	State of the agent—Logged-In, Logout, Not Ready, Ready, Reserved, Talking (from CSQ: <CSQ Name>), or Work.
Duration	Time that the agent spent in the current state. Note Finesse Desktop client machines should be time synchronized with a reliable NTP server for the correct updates to the Duration fields within Live Data reports.
Reason	The reason selected by the agent when moving to Logout state or Not Ready state. This displays the reason code if the reason is unavailable. A blank is due to any one of the following: <ul style="list-style-type: none"> • No logout reason code is configured. • Agent was unable to enter a reason. • Reason codes for all other states except Not Ready and Logout. <p>To view a list of reason codes and their descriptions, see the “Predefined” reason codes section below.</p>

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
Agent ID	Displays information for the agents who belong to the specified teams.



Note Filter parameters are applicable only for CUIC based reports and not Finesse live data.

Grouping Criteria

None

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT_READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>

Reason Code	State	Event	Event Description
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32755	Not Ready	CALL_ENDED	<p>Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:</p> <ul style="list-style-type: none"> • Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. • The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.

Reason Code	State	Event	Event Description
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.

Related Topics

[Field Filters](#), on page 22

Voice CSQ Summary Report

The Voice CSQ Summary Report presents agent statistics and call statistics for a Contact Service Queue (CSQ). The following three views are available for this report:

- **Snapshot**—Presents the performance statistics of the agents that are associated with the specified CSQs.
- **Short and Long Term Average**—Presents the call statistics of the CSQ for the current day based on short term and long term values.
- **Since Midnight**—Presents the call statistics of the CSQ, since midnight.



Note

- Your administrator can set the short term value to 5, 10 or 15 minutes.
- Long term value is set to 30 minutes.

Charts

None

Fields

The following are the view-wise tables that are part of the report:

Table 106: Snapshot

Field	Description
CSQ Name	Name of the CSQ.
Waiting Calls	Number of calls in queue for a CSQ.
Longest Call in Queue	Elapsed wait time of the oldest call in the queue.
Agents Logged In	Number of agents in Logged-In state.
Agents Talking	Number of agents in Talking state.
Agents Ready	Number of agents in Ready state.
Agents Not Ready	Number of agents in Not Ready state.
Agents in After Call Work	Number of agents in Work state.
Agents Reserved	Number of agents in Reserved state.

Table 107: Short and Long Term Average

Field	Description
CSQ Name	Name of the CSQ.
Calls Abandoned—Short Term	Number of abandoned calls in the last 5, 10 or 15 minutes.
Calls Abandoned—Long Term	Number of abandoned calls in the last 30 minutes.
Calls Dequeued—Short Term	Number of dequeued calls in the last 5, 10 or 15 minutes.
Calls Dequeued—Long Term	Number of dequeued calls in the last 30 minutes.
Average Contact Handling Time—Short Term	Average handle time of the calls that are routed to the CSQ in the last 5, 10 or 15 minutes.
Average Contact Handling Time—Long Term	Average handle time of the calls that are routed to the CSQ in the last 30 minutes.
Average Waiting Duration—Short Term	Average wait time of the calls that are routed to the CSQ in the last 5, 10 or 15 minutes.
Average Waiting Duration—Long Term	Average wait time of the calls that are routed to the CSQ in the last 30 minutes.

Field	Description
Service Level—Short Term	Service level is measured in the last 5, 10 or 15 minutes. The most recent service level is displayed in case there are no calls in the measurement window.
Service Level—Long Term	Service level in the last 30 minutes.

Table 108: Since Midnight

Field	Description
CSQ Name	Name of the CSQ.
Waiting Calls	Number of calls in queue for a CSQ.
Abandoned Calls	Number of calls that are abandoned for a CSQ.
Handled Calls	Number of calls that are answered by the agents in the CSQ.
Total Calls	Number of calls that are presented to the CSQ.
Longest Call in Queue	Longest wait time of any call before it is answered.
Longest Handle Time	Longest talk time of any call that the agent handled.

Filter Criteria

You can filter using the following parameter:

Filter parameter	Result
CSQ Name	Displays information for the CSQs that belong to the specified queues.

Grouping Criteria

None

Related Topics

[Field Filters](#), on page 22



CHAPTER 9

FAQs

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Overview

This chapter presents reporting-related Frequently Asked Questions (FAQs).

The following abbreviations are used for database records:

- ACDR—AgentConnectionDetail record in the AgentConnectionDetail table
- ASDR—AgentStateDetail record in the AgentStateDetail table
- CCDR—ContactCallDetail record in the ContactCallDetail table
- CQDR—ContactQueueDetail record in the ContactQueueDetail table
- CRDR—ContactRoutingDetail record in the ContactRoutingDetail table

General

- Q.** How is the number of days calculated in Historical reports?
- A.** The number of days is calculated by an SQL function that counts the number of calendar days. Fractions of a day are counted as an entire day. This table provides an example.

Time Range	Number of Days
10 a.m. (1000) on 5/15 to 10 a.m. (1000) on 5/16	Two days
12:00:00 a.m. (0000) on 5/15 to 11:59:59 p.m. (1159:59) on 5/15	One day
12:00:00 a.m. (0000) on 5/15 to 12:00:00 a.m. (0000) on 5/16	Two days

- Q.** Which reason codes are supported for reports?
- A.** When reason codes are configured, agents enter the reason codes when explicitly transitioning to Logout state or to Not Ready state. These reason codes are stored in the ASDR.

The following reports provide the details:

- **Agent Login Logout Activity Report**—Presents the logout reason code in detail.
- **Agent Not Ready Reason Code Summary Report**—Presents summary information for the Not Ready reason code.
- **Agent State Detail Report**—Presents Logout reason code and Not Ready reason code in detail.



Note Not Ready codes are systemwide and cannot be configured to be hidden from certain agents.

In the following cases, reason codes are not stored. In these cases, the reasonCode field in the ASDR contains a value of -1.

Case	Agent State in ASDR
Browser crashes	Logout
Agent logs out when logged in to another computer or phone	Logout
Normal agent login	Not Ready
Agent receives an IVR call on the ICD extension, fails to answer, and that results in RNA	Not Ready
Agent goes off-hook on ICD extension to place a call	Not Ready
Agent fails to answer an ACD call within the specified timeout period	Not Ready

Case	Agent State in ASDR
Agent does not answer an ICD call	Not Ready
Agent's phone goes down	Not Ready or Logout
Supervisor changes the agent's state from the Cisco Finesse Supervisor Desktop	Not Ready or Logout

- Q.** Which database is used for Unified CCX?
- A.** Unified CCX uses IBM Informix Dynamic Server (IDS) database.
- Q.** Why is the **Contact Service Queue Service Level Report**, which is available in previous versions of Unified CCX, no longer available in the current version?
- A.** The information that was in this report is distributed among the *Contact Service Queue Service Level Priority Summary Report*, the *Contact Service Queue Activity Report*, and the *Contact Service Queue Call Distribution Summary Report*.
- Q.** Why is the **Skill Routing Activity Report**, which is available in previous versions of Unified CCX, no longer available in the current version?
- A.** The information that was in this report is available in the *Contact Service Queue Activity Report* or in the *Contact Service Queue Activity Report* when filtered to show Skill Groups only.
- Q.** What can cause more than one record to have the same node ID, session ID, and sequence number?
- A.** In the following scenarios, more than one record can have the same node ID, session ID, and sequence number:
- A call is conferenced to a CTI route point.
 - A call rings at an agent's phone, but the agent does not pick up. The call is categorized as Ring No Answer (RNA) to the agent.
- Q.** Why are some of the selected filter parameters not included in the generated report?
- A.** The length of each parameter to the report must not exceed 800 characters. If the selected parameters exceed this value, then the database server truncates the parameter to the first 800 characters.

The stored procedure receives only the first 800 characters of the chosen parameters; the rest are not included in the generated report.

- Q.** How can I export historical data to my own data warehouse?
- A.** Use third-party database administration tools such as SQuirreL SQL Client or AGS Server Studio to export Unified CCX historical data to your own data warehouse. Use **uccxhruser** as the username to connect to db_cra database.
- Q.** Can I connect the embedded Unified Intelligence Center to 3rd party databases or a different Unified CCX / Unified IP-IVR deployment for reporting purpose?
- A.** No, it is not supported with embedded Unified Intelligence Center but is supported with standalone Unified Intelligence Center.
- Q.** Can I use 3rd party software to access Unified CCX IBM Informix Dynamic Server (IDS) database for reporting purpose?
- A.** Yes, but it should be used with discretion keeping in mind the impact on the system.

Availability of Reporting Data

- Q.** Which report shows calls per hour per CSQ? For example: 7:00 a.m. to 8:00 a.m., 25 calls; 8:00 a.m. to 9:00 a.m., 35 calls; and 9:00 a.m. to 10:00 a.m., 34 calls.
- A.** The **Contact Service Queue Activity Report by Interval** shows this information. To generate this report for one-hour intervals, set its Interval Length filter parameter to sixty (60) minute intervals.
- Q.** How can I determine telephone numbers of calling parties?
- A.** The Call ANI fields on the **Abandoned Call Detail Activity Report** and the **Agent Detail Report** show this information.
- Q.** How is the following scenario reported? A call is in queue and it is routed to an available agent who does not answer the call, so the call is redirected to another agent.
- A.** The scenario appears in the following reports:
- The **Agent Detail Report** shows two lines:
 - For the agent who did not answer the call—Ring time is greater than 0; talk time, hold time, and work time are each zero.
 - For the agent who answered the call—Talk time is greater than 0.
 - The **Agent Summary Report** shows the following:
 - The call was presented to the agent who did not answer the call, but was not handled by that agent.
 - The call was presented to and handled by the agent who answered the call.
 - The **CSQ Agent Summary Report** shows the call as Ring No Answer (RNA) for the first agent.
- Q.** How can I determine the start time and the end time for a call with multiple legs?
- A.** The following fields identify the various legs of a call:

- The sessionID fields in the Unified CCX database tables contain the same value for a particular call. These fields identify all the database records that relate to a call.
- The sessionSeqNum fields in the Unified CCX database tables start at 0 and increment by 1 for each leg of a call.
- The startDateTime field of the CCDR stores the start time of a call. The sessionSeqNum is equal to 0, and the sessionID value identifies the call.
- The endDateTime field of the CCDR with the highest sessionSeqNum and the same sessionID value stores the end time of a call.



Note The way in which sessionID and sessionSeqNum values are written to the database depend on the call scenario. For more information and examples, see the "Interpret Database Records" section of *Cisco Unified Contact Center Express Report Developer Guide*, located at: https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_installation_and_configuration_guides_list.html.

- Q.** Which report displays information on menu choices?
- A.** You can create a custom report to show menu choices. Use the **Set Session Info** step in a workflow to store the custom variables entered by the callers. The contents of such custom variables are stored in the customVariable fields in the CCDR. Use the information in the CCDR customVariable fields when you create custom reports.

The following is an example of how to prepare a report to show information for a menu with three choices (1, 2, and 3):

1. For a workflow, define a variable of type **session** and name it **this_session**.
2. Place a **Get Contact Info** step at the beginning of the workflow.
3. Set the **Session** attribute to variable **this_session**.
4. Define a **Menu** step that has three branches and place a **Set Enterprise Call Info** step in each branch.
5. In the **General** tab of the **Set Enterprise Call Info** step, click **Add**.
6. In the branch for caller-choice 1, enter **1** in the **Value** field, and choose **Call.PeripheralVariable1** from the **Name** drop-down list.
7. In the branch for caller-choice 2, enter **2** in the **Value** field, and choose **Call.PeripheralVariable2** from the **Name** drop-down list.
8. In the branch for caller-choice 3, enter **3** in the **Value** field, and choose **Call.PeripheralVariable3** from the **Name** drop-down list.
9. Create a custom report that will show the values of the customVariable1, customVariable2, and customVariable3 fields in the CCDR.

If calls are to be transferred between workflows and multiple menu choices can be made for a single session, take care to preserve previously entered menu choices. For example, place a **Get Session Info** step at the beginning of the workflow. If the `_ccdrVar1` variable is null, there were no previous entries.

If it is not null, when you add a new choice, determine a format for associating a menu choice to a sequence number. In this way, you will be able to prepare accurate reports.

- Q.** If a Unified CCX system does not include a license for Historical reports, is data still written to the Unified CCX databases?
- A.** Yes.
- Q.** Which report has information on agent Service Level Agreements (SLAs), such as queue time threshold (caution, warning) and agent talk time SLA (caution, warning)?
- A.** There are no reports available, but the Unified CCX databases store this data. You can create a custom report to show this information.
- Q.** Which report has information about calls that were transferred by agents to another Contact Service Queue?
- A.** The **Detailed Call CSQ Agent Report** has information about transferred calls. The session ID remains the same for a transferred call, but the session sequence number increments by 1. This report also shows the agent who handled each call, and the CSQ to which the call was routed.
- Q.** A record that contains data is stored in memory and is ready to be written to the Unified CCX database, when is it written to the database?
- A.**
 - Call records (CCDR, CRDR, CQDR) are written after each call is completed.



Note CCDRs are written after the agent leaves Work state, when applicable. Otherwise, they are written after the call ends.

- Agent state records (ASDR) are written after agents change state.
 - Agent connection records (ACDR) are written when an agent leaves Work state or after the call completes if the agent does not go to Work state.
- Q.** Are there summary tables for daily data that contain the data for a specific day? Are these tables used to create weekly data tables? Are weekly data tables used to create monthly data tables?
- A.** The system stores detailed data. It does not summarize detailed tables to create daily, weekly, or monthly tables.
- Q.** Which monthly report shows statistics for service levels?
- A.** The **Contact Service Queue Activity by CSQ** or **Contact Service Queue Activity by Interval** shows information about service levels provided to handled calls. Schedule the **Contact Service Queue Activity by CSQ** or **Contact Service Queue Activity by Interval** to run monthly.
- Q.** Can I create custom Historical reports?
- A.** Yes. For more information about creating custom reports, see the "Create Custom Reports" section of *Cisco Unified Contact Center Express Report Developer Guide*, located at:

https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_installation_and_configuration_guides_list.html.

Data Reconciliation Among Reports

- Q.** Why does the **Detailed Call by Call CDR Report** show more handled calls than the CSQ reports?
- A.** The CSQ reports show calls that are handled by agents after the calls are queued for a CSQ. The **Detailed Call by Call CDR Report** shows these calls and also the calls that are marked as handled by a workflow script before they are queued for a CSQ.
- Q.** Why does the **Application Performance Analysis Report** show more presented, handled, and abandoned calls than the CSQ Reports?
- A.** The following are the two reasons:
- An incoming call can invoke multiple applications because each leg of the call invokes a different application. The call is counted once for each application.
 - Calls that are hung up before being queued for any CSQ are marked as handled or abandoned depending on the workflow, and also depending on when they are hung up. Such calls do not have CRDRs or ACDRs and will not be counted for CSQ reports or agent reports. These calls will be counted for the **Application Performance Analysis Report** because the calls entered an application.
- Q.** Why does the **Agent Summary Report** show more handled calls than the CSQ reports?
- A.** Conference calls to agents result in one CRDR that has multiple ACDRs. The **Agent Summary Report** counts the number of ACDRs, but the CSQ reports count the number of CRDRs.
- Q.** How can I identify conference calls?
- A.** To identify conference calls, search for ACDRs with the same session ID and sequence number, with different agent IDs, and with talk time greater than 0.
- Q.** How to identify calls that were presented to an agent, but were not answered?
- A.** To identify calls that were not answered by an agent, search for ACDRs with talk time equal to zero. The **CSQ Agent Summary Report** shows the total number of Ring No Answer (RNA) calls for each agent and for each CSQ. In the **Agent Summary Report**, the number of Ring No Answer calls = Calls Presented – Calls Handled.
- Q.** Why is the total number of calls in the Calls Handled field in the **Contact Service Queue Activity Report** lower than the number in the Calls Handled Field in the **Agent Summary Report**?
- A.** The CSQ reports, including the **Contact Service Queue Activity Report** show activity at the CSQ level. The agent reports, including the **Agent Summary Report**, show activity at the agent level.

For handled calls, the **Agent Summary Report** counts the ACDRs with non-zero talk time (to exclude unanswered calls), and the **Contact Service Queue Activity Report** counts CQDRs with disposition equal to 2 (handled).

The number of such ACDRs may be larger than the number of such CQDRs for any of the following reasons:

- If you choose all the agents for the **Agent Summary Report**, but choose only one CSQ for the **Contact Service Queue Activity Report**, the **Agent Summary Report** will show more handled calls.

- There may be conference calls that involve multiple agents. In such cases, one CQDR has multiple associated ACDRs. An associated ACDR has the same sessionID and sessionSeqNum as the CQDR.
- Agent-to-Agent transfers will result in more ACDRs than CQDRs. If Agent1 picks up a call from CSQ1, one CQDR and one ACDR are created. When Agent1 transfers the call to Agent2, another ACDR is created, but no CQDR is created.

Q. Why do the **Agent Summary Report**, **Contact Service Queue Activity Report**, and **Application Performance Analysis Report** show different values for Calls Presented field?

A. The **Application Performance Analysis Report** shows the highest number of presented calls for the following reasons:

- An incoming call can invoke multiple applications, because each leg of the call can invoke a different application. The same call is counted once for each application.
- Some calls are terminated before they are queued. Such calls do not have CRDRs (because they are not queued) and are not counted for the **Contact Service Queue Activity Report**. These calls do not have ACDRs as well and are not counted on the **Agent Summary Report**.

The **Agent Summary Report** shows more presented calls than the **Contact Service Queue Activity Report** for either of the following reasons:

- The same call is queued to a certain CSQ, but is presented to multiple agents within the CSQ (because an agent did not answer). Such calls are counted once for the **Contact Service Queue Activity Report**, but counted once for each agent involved for the **Agent Summary Report**.
- There are conference calls that involved multiple agents.

Q. Why is the number of abandoned calls in the **Abandoned Call Detail Activity Report** higher than the number of abandoned calls in the **Contact Service Queue Activity Report**?

A. Some calls shown in the **Abandoned Call Detail Activity Report** are abandoned before they are routed to a CSQ (these calls have a blank Call Routed CSQ field), so they are not counted for any CSQ. The **Contact Service Queue Activity Report** shows calls that are abandoned while they are queued for a CSQ.

Q. Why is there a difference in maximum handle time between the **Contact Service Queue Activity Report** and the **Agent Summary Report**? For example, if Agent1 belongs only to CSQ1 and CSQ1 does not include any other agent. Why is the Max Handle Time field for Agent1 on the **Contact Service Queue Activity Report** different than the Handle Time—Max field for Agent1 on the **Agent Summary Report**?

A. Consider this example: An agent from another CSQ handled the call, in conference with Agent1, and then dropped out. In addition, Agent1 continued the call for longer than the longest talk time of the any call that the agent handled for CSQ1. In this case, the maximum Handle Time appears for Agent1 on the **Agent Summary Report**. It does not appear for CSQ1 on the **Contact Service Queue Activity Report** because Agent1 was conferenced in to the call, but the call was initially handled by another CSQ.

Q. If a call is queued in CSQ1 and CSQ2, and handled by an agent-based routing agent, the CSQ Unified CCX Stats real-time report shows a value of 1 for Contacts Dequeued for both CSQ1 and CSQ2, but the **Contact Service Queue Activity Report** shows a value of 0 for Calls dequeued for both CSQ1 and CSQ2, why is this so?

A. In this scenario, there are three CQDRs:

1. CQDR for CSQ1—With a disposition of Handled_by_other (5) (or of 4 if there is a dequeue step).
2. CQDR for CSQ2—With a disposition of Handled_by_other (5) (or of 4 if there is a dequeue step).

3. CQDR for agent—Who handled call through agent-based routing, with a disposition of Handled (2).

The **Contact Service Queue Activity Report** shows dispositions 4 and 5 as Calls Handled by Other, so it shows one call as handled by other for both CSQ1 and CSQ2. Calls Dequeued is 0 for both the CSQs (disposition 3 is reported as dequeued on the report).

The CSQ Unified CCX Stats real-time report counts calls marked as Handled_by_other as dequeued calls. In this report, Contacts Dequeued includes calls that were dequeued and handled by another CSQ, by an agent, or by a script.

- Q.** Why are the Calls Dequeued field values different in the **Contact Service Queue Activity Report by Interval** or **Contact Service Queue Activity by CSQ Report** and the **Contact Service Queue Activity Report**?
- A.**
- In the **Contact Service Queue Activity Report by Interval** and **Contact Service Queue Activity by CSQ Report** :
Calls Dequeued = Calls dequeued via the dequeue step + calls handled by workflow script + calls handled by another CSQ.
 - In the **Contact Service Queue Activity Report**:
 - Calls Dequeued = Calls dequeued via dequeue step
 - Calls handled by other = calls handled by workflow script + calls handled by another CSQ
- Q.** Why does the Talk Time field in the **Agent Summary Report** show 0, but the Talk Time field in the **Agent Detail Report** shows another value?
- A.** The **Agent Summary Report** shows ACD calls only, but the **Agent Detail Report** shows Unified CCX and Cisco Unified IP IVR calls. The calls in question are IVR calls, so they do not appear on **Agent Summary Report**.
- Q.** If an agent uses a unique reason code when going to Not Ready state to make outbound calls, why does the **Agent Not Ready Reason Code Summary Report** show a different duration for that reason code compared with the **Agent Detail Report** that shows the duration of outbound calls for the agent?
- A.** If the agent does not spend the entire duration of time in Not Ready state with the unique reason code making outbound calls, then the sum of the duration of outbound calls will be less than the duration that is spent in Not Ready state with the unique reason code.

Abandoned Call Detail Activity Report

- Q.** How can I correlate multiple abandoned call legs that belong to the same call?
- A.** Match the call start time in the **Abandoned Call Detail Activity Report** with the call start time in the **Detailed Call by Call CDR Report**, and look up the session ID and session sequence number in the

Detailed Call by Call CDR Report. Different call legs that belong to the same call have the same session ID, but different session sequence numbers.

- Q.** Why do the Initial Call Priority field or the Final Call Priority field show n/a for a call?
- A.** The call was abandoned before it was assigned a priority.
- Q.** What does it mean when the Agent Name field is blank?
- A.** The call was abandoned before it was routed to an agent.
- Q.** What does it mean when the Agent Name field contains a value?
- A.** The call was routed to an agent, the agent did not answer, and the caller hung up.
- Q.** Why is there a mismatch between the number of abandoned calls that are shown on the **Abandoned Call Detail Activity Report** and the number of calls that are shown on the **Contact Service Queue Activity Report**?
- A.** The values can differ because the **Contact Service Queue Activity Report** may mark a call as dequeued, while a Contact Call Detail record marks the call as abandoned. For example, consider the following workflow:

```
StartAccept
Prompt
Select Resource
-Connect
-Queue
--Play Prompt (Prompt2)
--Dequeue
--Play Prompt (Prompt3)
End
```

Scenario	Contact Service Queue Activity Report	Abandoned Call Detail Activity Report
Call is abandoned during Prompt2 or Prompt3	The Contact Queue Detail record marks the call as dequeued, but not as abandoned from any queue. So, the Contact Service Queue Activity Report shows the call as dequeued from all CSQs to which the call was routed.	The Contact Call Detail record marks the call as abandoned. So, the Abandoned Call Detail Activity Report shows the call as abandoned from all CSQs to which the call was routed.
Call gets aborted after being in the queue	Call is marked as aborted in the Contact Call Detail record. So, the CSQ reports display more abandoned calls than the Abandoned Call Detail Activity Report .	Call is marked as dequeued (if the call was dequeued before aborting) or abandoned in Contact Queue Detail record.

- Q.** When an agent transfers a call to another agent and the caller abandons the call, why is the call not displayed in the **Abandoned Call Detail Activity Report**?
- A.** When an agent transfers a call to another agent, and the caller abandons the call before the call is answered by the second agent, then the first phase of the call is marked as handled. The abandonment of the second

phase is not displayed in the **Abandoned Detail Call Activity Report**. This information cannot be seen in any other report.

Agent Call Summary Report

- Q.** Are the ACD—Transfer In and ACD—Transfer Out calls included for calculating Inbound ACD—Total field?
- A.** Yes, these calls are included for calculating the Inbound ACD—Total field.
- Q.** Why is the total number of inbound calls different than the number of calls handled on the **Contact Service Queue Activity by CSQ**?
- A.** The number of calls can differ for the following reasons:
- The **Agent Call Summary Report** shows calls that are presented to the agents, and the **Contact Service Queue Activity by CSQ** shows calls that are presented to the CSQs. If there are agents included in the **Agent Call Summary Report** who do not belong to the CSQs in the **Contact Service Queue Activity by CSQ**, then the **Agent Call Summary Report** shows more calls.
 - If agent-based routing is configured, calls can go to agents directly, without going through a CSQ. In this case, the **Agent Call Summary Report** shows more calls.
 - The **Agent Call Summary Report** can include transferred ACD calls. For example, if a call is queued for CSQ1, handled by Agent1, and transferred by Agent1 to Agent2 (without going through a CSQ), then one call is shown as handled on the **Contact Service Queue Activity Report** (through CSQ1 by Agent1). The same is shown twice on the **Agent Call Summary Report**—one as handled by Agent1 (through CSQ1), another as handled by Agent2 (not through a CSQ but as a direct transfer from Agent2).

Agent Detail Report

- Q.** Why are the Hold Time and the Work Time fields blank for a call?
- A.** The call was not an ACD call. (IVR calls include Agent-to-Agent calls and external calls made by an agent.) The Unified CCX database does not record hold time and work time for IVR calls.
- Q.** Why is Duration not equal to Talk Time + Hold Time + Work Time?
- A.** The value in the duration field is calculated as follows:
- call end time – call start time

The call start time is when the call rings at the agent extension. The call end time is when the agent leaves Work state. Therefore, the call duration is equal to ring time + talk time + hold time + work time.

- Q.** How can I identify IVR calls?
A. The Hold Time and the Work Time fields are blank in the **Agent Detail Report** for IVR calls.

Agent Login Logout Activity Report

- Q.** Why does a less-than sign (<) precede the value in the Login Time field or a greater-than sign (>) precede the value in the Logout Time field?
A. A less-than sign (<) indicates that the agent logged in before the report start time. A greater-than sign (>) indicates that the agent logged out after the report end time.

For example, if the report start time is 8:00 a.m. (0800) and the report end time is 6:00 p.m. (1800):

- The agent logged in at 7:45 a.m. (0745), the Login Time field will show < 8am (or < 0800).
- If the agent logged out at 6:30 p.m. (1830), the Logout Time field will show > 6pm (or > 1800).

Agent State Summary by Agent Report

- Q.** Why do I see two rows for the agent with the same values?
A. The report template defines the view of the report. There are two kinds of summary rows (darker background) that are defined in the template. The summary row that follows after each agent summarizes details of the agent. The summary row that appears at the end of the report summarizes details of all the agents.

If there is a single row for the agent, then the summary row of the agent will have the same details as the above row.

Agent Summary Report

- Q.** How is the Average Logged In Time field calculated?
A. This value is calculated as the total logged-in time divided by the number of login sessions.

For example, if an agent logs in at 8:00 a.m. (0800) and logs out at 8:30a.m. (0830), logs in again at 9:15 a.m. (0915) and logs out at 10:00 a.m. (1000), then there are two login sessions. The first session lasts 30 minutes and the second session lasts 45 minutes. The average logged-in time is $(30+45)/2 = 37.5$ minutes.

- Q.** How is the Handle Time field calculated?
A. Handle time = Talk time + Hold time + Work time.

- Q.** How is the Idle Time—Avg field calculated?
A. This value is calculated as the total idle time divided by the number of idle sessions.

For example, if an agent goes to Not Ready state at 10:00 a.m. (1000) and goes to Ready state at 10:15 a.m. (1015), goes to Not Ready state at 11:00 a.m. (1100) and goes to Ready state at 11:05 a.m (1105),

then there are two idle sessions. The first session lasts 15 minutes and the second session lasts 5 minutes. The average idle time is $(15+5)/2 = 10$ minutes.

- Q.** Why do not the values of Talk Time—Avg and Talk Time—Max fields in the **Agent Summary Report** match the values of Talk Time field in the **Agent State Summary by Agent Report** or the **Agent State Summary by Interval Report**?
- A.** The talk time information in the **Agent Summary Report** comes from the talkTime field in the AgentConnectionDetail table. This value is the time that an agent spent on an incoming ACD call. The talk time information in the **Agent State Summary by Agent Report** or the **Agent State Summary by Interval Report** comes from AgentStateDetail table. These values show the time that an agent spent in the Talk state. These values will be different if the agent placed ACD calls on hold during the reporting period.
- Q.** Does the **Agent Summary Report** show information for IVR calls?
- A.** The **Agent Summary Report** shows information for ACD calls only. The **Agent Detail Report** shows information for Unified CCX and Cisco Unified IP IVR calls.

Application Performance Analysis Report

- Q.** What does it mean when the Application ID field shows the value -1 and the Application Name field is empty?
- A.** The Application ID field is -1, and the Application Name field is empty for Agent-to-Agent calls, IVR calls, Agent-to-Agent transfer/conference consult legs, or any other call that is not placed to a Unified CCX Route Point or associated with an application.
- Q.** Why is the value in the Calls Presented field lower than the total number of calls on the **Detailed Call by Call CDR Report** for the same report period?
- A.** The **Application Performance Analysis Report** counts only incoming calls. The **Detailed Call by Call CDR Report** counts incoming calls, outgoing calls (for example, outbound calls made by agents), and internal calls (for example, Agent-to-Agent consult calls).
- Q.** Why does the **Application Performance Analysis Report** show more abandoned calls than the **Contact Service Queue Activity Report** for the same report period?
- A.** The **Contact Service Queue Activity Report** includes only abandoned ACD calls. This report counts an ACD call as abandoned if the caller hangs up while queued for a CSQ or CSQs.

The **Application Performance Analysis Report** includes abandoned ACD calls and abandoned IVR calls. This report counts a call as abandoned if the call ends before it is answered by an agent or before it is marked as handled by a workflow.

Call Custom Variables Report

- Q.** What are the values from Custom Variable 1 through Custom Variable 10 fields?
- A.** These fields show the values of the custom variables that are specified in a workflow.

For example, a workflow may designate variable1 as the menu option that the caller chooses, and designate variable2 as the account number that the caller enters. In this case, Custom Variable 1 would show the

option value (such as 2) that the caller entered, and Custom Variable 2 would show the account number that was entered.

Common Skill CSQ Activity Report

- Q.** **Common Skill CSQ Activity Report** is similar to other CSQ reports—how is it useful?
- A.** This report provides additional information for multiple CSQs that are configured with the same call skill, but with different competence levels. An incoming call may be queued for the CSQ with the lowest-competence level. If no agent is available for a certain period, the call is queued for the next higher-competence level.

The summary line in the report displays the summarized statistics for the group of CSQs configured with common skills. A group of CSQs that is configured in this manner is called a logical CSQ.

Contact Service Queue Activity Report

- Q.** How are average queue time and maximum queue time calculated?
- A.** The average queue time for a CSQ is calculated as the sum of the queue times for all the calls presented divided by the number of calls presented. The maximum queue time for a CSQ is the longest queue time for a single call among the calls presented.

The individual queue time for each CSQ is stored in the CQDR table. For example, assume that an incoming call is queued for CSQ1 for 5 minutes, queued for CSQ2 for 10 minutes, and then it is handled by CSQ1. The queue time recorded for CSQ1 in the CQDR table is 5 minutes, and for CSQ2 is 10 minutes.

- Q.** How are average calls abandoned (Avg Abandon Per Day field) and maximum calls abandoned (Max Abandon Per Day field) calculated?
- A.** Average calls abandoned for a CSQ is an average value per day. It is calculated as the total number of calls abandoned for the CSQ divided by the number of days in the report period.

Maximum calls abandoned for a CSQ is calculated by determining the number of calls abandoned for each day in the report period and selecting the largest of these values.

- Q.** The system receives a call, queues it, and plays a prompt giving the caller the option to press 1 to leave a message. The caller presses 1 and leaves a message. In this scenario, is the call counted as abandoned or as handled?
- A.** By default, the call is counted as abandoned instead of handled, because it did not connect to an agent. However, if the workflow is designed to mark a call as handled after a caller leaves a message, the call will be counted as handled.
- Q.** If a workflow gives callers the option to transfer to a voice messaging system, is there a way to track the number of callers that make this transfer and leave a message?
- A.** You can design a workflow to store a caller's key input in one of the custom variables in the ContactCallDetail table. You can either generate the **Call Custom Variables Report** and manually count the rows that contain the desired information or you can create a custom report to provide this information.
- Q.** Will calls presented always equal calls handled + calls abandoned?
- A.** No. $\text{Calls presented} = \text{calls handled} + \text{calls abandoned} + \text{calls dequeued} + \text{calls handled by others}$.

“Calls handled” are the calls that were connected to an agent in a particular CSQ. “Calls handled by others” are the calls that were handled by some workflow in a script, and the calls that were queued for multiple CSQs and then handled by one of the other CSQs.

- Q.** Can the **Contact Service Queue Activity Report** show hourly data? And can hourly reports be generated automatically for each hour of each day?
- A.** To show hourly data for each day, schedule daily reports either for **Contact Service Queue Activity by CSQ Report** or for **Contact Service Queue Activity Report by Interval**. Set the Interval Length to 60 minutes. This setting will provide one report each day, divided into one-hour intervals.

Separate hourly reports are not available, but with the interval length set to 60 minutes, a daily report will display 24 intervals, one for each hour of the day.

Contact Service Queue Activity by CSQ Report

- Q.** Why does the same CSQ appear twice in the **Contact Service Queue Activity by CSQ Report** (and other CSQ reports)?
- A.** A CSQ has many attributes, including CSQ name, service level, resource selection criterion, and auto work. Some attributes, such as CSQ name and service level, are displayed in the report. Other attributes are not displayed in the report. However, changing any attribute of the CSQ causes a new line to show in the report. For example:
- If the service level is changed from 10 to 25, two lines of the same CSQ will show in the report. One line will show the old service level value and another line will show the new service level value.
 - If Auto Work is changed from 1 to 0, two lines of the same CSQ will be shown in the report. As the Auto Work setting does not appear in the report, the same CSQ will appear twice.
- Q.** How do these four fields differ—Percentage of Service Level Met—Only Handled, Percentage of Service Level Met—With No Abandoned Calls, Percentage of Service Level Met—With Abandoned Calls Counted Positively, and Percentage of Service Level Met—With Abandoned Calls Counted Negatively?
- A.** A call is categorized as handled if it is either answered by an agent or marked as handled by a workflow. Handled calls can be divided into the following categories:
- Handled within service level
 - Handled after service level

A call is categorized as abandoned if the call disconnects before an agent answers. Abandoned calls can be divided into the following categories:

- Abandoned within service level
- Abandoned after service level

Field	Description	Calculation
Percentage of Service Level Met—Only Handled	This field shows only handled calls. It does not include abandoned calls. This field shows the percentage of handled calls that were handled within the service level. The remaining fields differ in how they account for abandoned calls: not counted, meeting service level, or not meeting service level.	$(\text{Number of calls handled within service level} / \text{Number of calls handled}) * 100\%$
Percentage of Service Level Met—With No Abandoned Calls	This field shows the percentage of presented calls (calls routed to a CSQ), not counting abandoned calls, that were handled within the service level. It does not include calls that were abandoned within the service level. This value is always less than or equal to the value in the Percentage of Service Level Met—Only Handled field	$(\text{Number of calls handled within service level} / (\text{Number of calls presented} - \text{Number of calls abandoned within service level})) * 100\%$
Percentage of Service Level Met—With Abandoned Calls Counted Positively	The field shows the calls that are abandoned within the service level as meeting the service level. It shows the percentage of presented calls that were handled or abandoned within the service level.	$((\text{Number of calls handled within service level} + \text{Number of calls abandoned within service level}) / \text{Number of calls presented}) * 100\%$
Percentage of Service Level Met—With Abandoned Calls Counted Negatively	The field shows the calls that are abandoned within the service level as not meeting the service level. It shows the percentage of presented calls that were handled within the service level. This value is less than or equal to the Percentage of Service Level Met—With Abandoned Calls Counted Positively field.	$(\text{Number of calls handled within service level} / \text{Number of calls presented}) * 100\%$

- Q.** How is an abandoned call counted if it is queued for multiple CSQs?
- A.** If a call is queued for multiple CSQs and is abandoned, it is counted as abandoned from all the CSQs for which it is queued.
- For example, if a call is queued for CSQ1 and CSQ2 and the caller hangs up before being routed to an agent, then an abandoned call is counted for CSQ1 and for CSQ2.
- Q.** How is a dequeued call counted if it is queued for multiple CSQs?
- A.** If a call is queued for multiple CSQs and is handled by one of them, then the call is counted as dequeued from each of the other CSQs.
- For example, if an incoming call is queued for CSQ1, CSQ2, and CSQ3 and is handled by an agent from CSQ2, then a dequeued call is counted for CSQ1 and for CSQ3.
- Q.** After the service level for a CSQ changes, why does the CSQ appear in the report twice—once with the old service level and again with the new service level?
- A.** The Unified CCX database maintains records of old and new service levels. When a new service level is configured, the old record is marked as inactive. The dateInactive field in the ContactServiceQueue

table shows the date and time that the new service level was configured. If the value in the dateInactive field is in the report period, the report shows the active (new) and inactive (old) CSQs.

Detailed Call by Call CDR Report

- Q. What are a session ID and a session sequence number?
- A. A session ID is a unique identification number that the system assigns to a call. This number remains the same for the entire call. The system also assigns a sequence number to each leg of a call. Sequence numbers start at 0 and increment by 1 each time the call is transferred or redirected.
- Q. Can a call be marked as handled if it is never queued for a CSQ?
- A. Yes. You can design a workflow to mark such a call as handled.
- Q. Why are the Hold Time and the Work Time fields blank?
- A. The call was an IVR call. (IVR calls include Agent-to-Agent calls and external calls that are made by an agent.) The Unified CCX database does not record hold time and work time for IVR calls.
- Q. Why does the report show duplicate calls?
- A. The calls in the CDR Report are not duplicates. They are conference calls, which have the same SessionID and Session Sequence Number, but different talk time because different agents participated in the same call. (The **Detailed Call by Call CDR Report** shows the names of agents who participated in a conference call.)
- Q. What does it mean when the Contact—Disposition is 3?
- A. When the system removes stuck calls, which may have remained in the system because of missing events, the system writes a CDR with the contact disposition dont_care (value = 3).

License Utilization Hourly Report

- Q. What is the sampling frequency for the report?
- A. Data is sampled per minute. The report aggregates the data over an hour (maximum of all samples within the hour).
- Q. How are calls that are less than a minute treated?
- A. If a call duration is less than a minute and its start and end times fall between two sampling points, then this call will not be considered for the statistics.

Traffic Analysis Report

- Q. Why is there a difference between the Total Incoming Calls field in the **Traffic Analysis Report** and the Total Incoming Calls field in the **Application Performance Analysis Report**?
- A. An incoming call can have multiple call legs. The **Traffic Analysis Report** counts a call with multiple legs as a single call. However, each call leg may invoke a different application, so the **Application Performance Analysis Report** counts each call leg as a call.

For example, if a call comes into an Auto Attendant and the caller selects a menu option for Musician Demonstration, then the call will have two call legs:

- Session ID = 1, sequence number = 0, application = “auto attendant”
- Session ID = 1, sequence number = 1, application = “musician demonstration”

This call is counted once for the **Traffic Analysis Report**. It is counted twice for the **Application Performance Analysis Report**—once for the “auto attendant” application and once for the “musician demonstration” application.



APPENDIX **A**

Report Reference Values List

- [Report Reference Values List, on page 321](#)

Report Reference Values List

Call Priority

Calls are assigned a default priority of 1, unless a different priority is set in the workflow.

- **1**—Lowest.
- **10**—Highest.
- **N/A**—Call is abandoned before a priority is assigned.

Call Result

- **1**—Customer answers and is connected to an agent.
- **2**— Fax machine or modem is detected.
- **3**— Answering machine is detected.
- **4**— Network reports an invalid number.
- **5**—Customer does not want to be called again.
- **6**—Call connected, but wrong number.
- **7**—Call connected, but reached the wrong person.
- **8**—Customer requests callback.
- **11**—Busy tone is detected.
- **15**—Customer phone timed out because either the customer did not answer or there is a gateway failure.
- **16**—Call is abandoned because either the Interactive Voice Response (IVR) port is not available or Unified CCX fails to transfer the call to the IVR port.
- **17**— Call failed due any one of the following reasons:
 - Dialer asked the Gateway to cancel a call that has not yet been placed

- Gateway has declined the call
 - Gateway is down or Gateway has timed out while placing the call
 - Gateway failure or configuration issues at the Gateway.
 - After an Answering Machine is detected, the call is disconnected from the Gateway with a **Bye** request before the Termination Tone from Answering Machine is detected.
- **18**—Customer abandons the call. Customer disconnects the call within the Abandoned Call Wait Time that is configured in the Unified CCX Application Administration web interface.

Call Status

- **1**—Pending. Call is pending.
- **2**—Active. Record is sent to the outbound subsystem for dialing.
- **3**—Closed. Record is closed.
- **4**—Callback. Record is marked for a callback.
- **5**—Max Calls. Maximum attempts are made for the record, so it is closed.
- **6**—Retry. Call is redialed immediately whenever there is any miss in the callbacks for **Retries with Delay**.
- **7**—Unknown. If the outbound system is restarted with active records then the records are moved to Unknown state.
- **8**—Retries with Delay. Call is redialed because the contact was either busy or did not answer, or the customer or the system abandoned the call.

Retry time is set according to the corresponding configuration in the Unified CCX Application Administration web interface.

Call Type

- **1 = Conference.**—Conference call.
- **2 = Inbound ACD.**—Unified CCX call that is handled by an agent.
- **3 = Inbound non-ACD on IPCC.**—Non-Unified CCX call that is received by the agent on a Unified CCX extension.
- **4 = Inbound non-ACD on non-IPCC.**—Non-Unified CCX call that is received by the agent on a non-Unified CCX extension.
- **5 = Outbound on IPCC.**—Call that an agent dials on a Unified CCX extension.
- **6 = Outbound on non-IPCC.**—Call that an agent dials on a non-Unified CCX extension.
- **7 = Transfer-In.**—Call that is transferred to an agent.
- **8 = Transfer-Out.**—Call that the agent transfers out.

Contact Disposition

The following are the contact dispositions and their respective values based on the outcome of the call:

- **1**—Abandoned
- **2**—Handled
- **4**—Aborted
- **5 to 98**—Rejected
- **99**—Cleaned

Contact Type

- **1 = Incoming.** Outside call that is received by Unified CCX.
- **2 = Outgoing.** Call that originated from the Unified CCX Computer Telephony Interface (CTI) port, other than the call that is made within the system.
- **3 = Internal.** Call that is transferred or conferenced between agents, or a call that is made within the system.
- **4 = Redirect.** A previous call leg that redirected the call to this leg.
- **5 = Transfer-in.** A previous call leg that transferred the call to this leg.
- **6 = Preview Outbound.** Call that originated from a Unified CCX agent phone to an outside destination, after an agent accepts a preview call.
- **7 = IVR Outbound.** Call that originated from a Unified CCX outbound dialer to an outside destination for an IVR outbound campaign.

Destination Telephone Number / Destination DN and Destination Type

- **1 = Agent.** Call that is presented to an agent. Displays the Unified CCX extension or the non-Unified CCX extension of the agent.
- **2 = Device.** Call that is presented to a route point. Displays the CTI port number that is associated with the route point on which the call is answered.
- **3 = Unknown.** Call that is presented either to an outside destination through a gateway or to an unmonitored device. Displays the telephone number that is dialed.

Monitoring Session Status

- **Normal – Monitored**—Monitoring is completed successfully.
- **Normal – Agent RNA**—Agent did not answer the call.
- **Error – Unable to Stop Monitoring**—Supervisor presses the * key to terminate the monitoring session, but it fails to terminate.
- **Error – Unable to Monitor New Call**—Supervisor chooses to monitor a new call, but the system fails to respond.

- **Error – Agent Logged Off**—The agent whom supervisor wants to monitor has logged off.
- **Error – Network Problem**—Monitoring session is not successful due to network problems.
- **Error – VoIP Server Unable to Communicate**—Monitoring session is not successful because the server with the Unified CCX Monitoring component fails to communicate.
- **Error – Monitoring Not Allowed**—Supervisor attempts to monitor an agent or a CSQ that is not on the Allowed list.
- **Error – Agent Not Logged In**—The agent whom supervisor intends to monitor is not logged in.
- **Error – Invalid Input**—Supervisor enters an input that the system does not recognize.
- **Error – Other**—Errors that are not defined in any of the above messages.

Originator Telephone Number / Originator DN and Originator Type

- **1 = Agent.** Call that originated from an agent. Displays the Unified CCX extension of the agent.
- **2 = Device.** Call that originated from a device that is not associated to an agent or from a device that is associated to an agent, but the agent is not currently logged in. Displays the Computer Telephony Interface (CTI) port number that is associated with the route point that the caller dialed.
- **3 = Unknown.** Call that originated from an outside caller through a gateway or from an unmonitored device. Displays the telephone number of the caller.

Predefined Reason Codes

Reason Code	State	Event	Event Description
22	Logout	SUP_AGT_TO_LOGOUT	Supervisor changes an agent's state to Logout.
33	Ready/Not Ready	SUP_AGT_TO_READY/SUP_AGT_TO_NOT READY	Supervisor changes an agent's state to either Ready or Not Ready.
255	Logout	—	The system issues this reason code when the agent is forcibly logged out when there is a connection failure between the Cisco Finesse Desktop and the Cisco Finesse Server.
32741	Logout	ICD_EXTENSION_CONFLICT	If an agent has already logged in and another agent tries to login with the same extension number, then the previously logged in agent will be logged out by the system.
32742	Not Ready	AGT_SEC_LINE_OFFHOOK	Agent's state is changed from Ready state to Not Ready state when the monitored Non ICD lines are used for Incoming or Outgoing calls.
32745	OUTBOUND	OUTBOUND_WORK_REASONCODE	This reason code is set when an agent goes into the Work state to select a wrap up code after ending an outbound call.

Reason Code	State	Event	Event Description
32746	OUTBOUND	AGENT_RESERVED_OUTBOUND_DIRECT_PREVIEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.
32747	OUTBOUND	AGENT_RESERVED_OUTBOUND	This reason code is set when an agent goes into a Reserved state for an agent progressive or predictive outbound call.
32748	Logout	AGENT_DELETED	Agent is logged out from Unified CCX as the agent is deleted from Unified Communications Manager. This event is triggered when Unified CCX synchronizes the agent information with Unified Communications Manager.
32749	Not Ready	CANCEL_FEATURE	<p>Agent's state changes from Talking to Not Ready because the Cancel feature is triggered during an Interactive Call Distribution (ICD) consult call between two agents.</p> <p>When the consulting agent presses the Cancel softkey on the phone, the consulted agent is no longer associated with the ICD call, and the consulted agent's state changes to Not Ready. This feature is available only on some of the newer phones.</p>
32750	Not Ready	AGT_IPCC_EXT_CHANGED	Agent is logged out from Unified CCX because the agent's Unified CCX extension changes in Unified Communications Manager.
32751	Ready	AGENT_SKIPS	Agent receives a preview outbound call and skips the call.
32752	Ready	CANCEL_RESERVATION	Agent receives a preview outbound call, decides to cancel the reservation, and presses the Cancel Reservation button on the desktop.

Reason Code	State	Event	Event Description
32753	Not Ready	LINE_RESTRICTED	<p>Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the line remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>
32754	Not Ready	DEVICE_RESTRICTED	<p>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</p> <p>Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.</p> <p>If Allow Control of Device from CTI is not checked in the Default Device Profile Configuration window in Unified Communications Manager, the device remains restricted and cannot be controlled. You can modify this setting for devices that register with Unified Communications Manager. See the <i>Cisco Unified Communications Manager Administration Guide</i>, located at: https://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.</p>

Reason Code	State	Event	Event Description
32755	Not Ready	CALL_ENDED	<p>Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:</p> <ul style="list-style-type: none"> • Agent 1 is in Not Ready state and gets a consult call from Agent 2. After handling the call, Agent 1 moves back to Not Ready state. • The Automatic Available option is disabled for the agent. After handling a call, agent moves to Not Ready state.
32756	Not Ready	PHONE_UP	Agent's phone becomes active after it was in Phone Down state.
32757	Not Ready	CM_FAILOVER	Unified Communications Manager fails over, and the agent is moved to Not Ready state.
32758	Not Ready	WORK_TIMER_EXP	Agent's state changes from Work to Not Ready. This change occurs if the Work state for that agent's CSQ is associated with an expired wrap-up timer.
32759	Not Ready	PHONE_DOWN	Agent's phone stops functioning and the agent is placed in the Unavailable state.
32760	Not Ready	AGT_LOGON	Agent logs in and is automatically placed in the Not Ready state.
32761	Not Ready	AGT_RCV_NON_ICD	Agent is logged in to the desktop or IP phone and receives a call that is not queued on the Unified CCX platform.
32762	Not Ready	AGT_OFFHOOK	Agent goes off hook to place a call. If the agent enters a reason, that reason is displayed. If the agent does not select any reason, the system issues this reason code.
32763	Not Ready	AGT_RNA	Agent fails to answer a Unified CCX call within the specified timeout period.
32764	Logout	CRS_FAILURE	Active server becomes the standby server, and the agent loses connection to the Unified CCX platform.
32765	Logout	CONNECTION_DOWN	IP Phone Agent or desktop stops functioning, or connection is disrupted.

Reason Code	State	Event	Event Description
32766	Logout	CLOSE_FINESSE_DESKTOP	Agent manually logs out from the Finesse Desktop using the default Logout (without any custom reason label) option.
32767	Logout	AGT_RELOGIN	Agent is logged in to one device (computer or phone) and tries to log in to a second device.



APPENDIX **B**

Glossary

A

Abandoned call

- For an agent-based call (Unified CCX call), a call is considered abandoned if it is not answered by an agent or the caller hangs up or the call is disconnected.
- For Unified IP IVR call, a call is considered abandoned if it does not reach the workflow step that sets the Handled flag.
- If a call has more than one leg that is abandoned, for example, a Unified IP IVR call that is processed by different applications, each abandoned leg is counted as an abandoned call.

Abandoned chat

An abandoned chat is a chat that is routed to the CSQ but not accepted by an agent, because the chat submitter ended the chat before an agent accepted.

Abandoned IVR call

The system abandons a call when a customer answers the phone if an IVR port is not available to play the prompts to the customer. So, Unified CCX fails to transfer the call to the IVR port.

Aborted call

A call is aborted if an exception occurs in the workflow that is processing a call, for example, `UndefinedPromptException` or `ApplicationMaxSessionsException`. In such cases, Unified CCX sets up media and plays the error message to the caller.

Accepted outbound call

A call is considered accepted if the agent clicks Accept when presented with the call. A call that is routed to an agent, skipped or rejected by that agent, routed to another agent, and then accepted by that agent is counted once.

ACD or ICD call

Automatic Call Distribution (ACD) or Incoming Call Distribution (ICD) calls are calls that are processed through a workflow and queued to the agent. Calls are dialed to an ICD route point number.

Agent-initiated reason codes

Agent enters reason codes when moving to Logout or Not Ready state. For more information, see the *Cisco Finesse Administration Guide*, located at:

<https://www.cisco.com/c/en/us/support/customer-collaboration/finesse/products-user-guide-list.html>.

Attempted IVR contact

A contact is considered attempted if the contact is dialed out by the IVR dialer. If the same contact is retried, the attempt does not fall under the Attempted category. Even though a contact is retried multiple times, the attempted contact is counted only once.

Attempted outbound call

- A contact is considered attempted when an outbound call is placed to the customer, regardless of the outcome. A call record is considered attempted if an agent clicks Accept for this contact.
- A contact that is routed to and accepted by an agent is considered attempted by the system. If the contact is marked for callback and later called by the same or another agent, this call record is still attempted once.

C

Closed outbound call

A call is considered closed if the agent clicks either Skip-Close or Reject-Close. These contacts are not dialed again.

D

Dequeued call

A call is dequeued from a particular CSQ for the following reasons:

- The call is dequeued by a Dequeue step in a workflow.
- The call is marked as handled by a workflow.
- The call is queued for more than one CSQ and is handled by an agent in another CSQ.

F

Failed IVR call

- Dialer asks the gateway to cancel a call that is not yet placed.
- Gateway declined the call.
- Gateway is down or Gateway timed out while the call is being placed.
- Gateway failure or configuration issues at the Gateway.

H

Handled call

A call is considered handled:

- When the call state is one of these—Voice, Answering Machine, Invalid Number, or Fax/Modem.
- Call reaches the workflow step that defines the call as handled.
- Call is handled by an agent.

Handled chat

A chat is considered handled if an agent accepts the chat that is presented by the chat submitter while the chat submitter is queued for this CSQ.

I**IP Phone Agent (IPPA)**

IP Phone Agent is an agent who has access to only a phone and not Cisco Finesse Agent Desktop.

N**Non-ACD or non-ICD call**

A call that is not dialed to an ICD route point number. For example, an internal call between agents or an outbound call.

Non-Unified CCX call

A call that is dialed to the agent's non-Unified CCX extension.

O**Offered call**

Outbound calls that are offered to the agent, including accepted, rejected, and closed calls.

A contact that is offered to an agent multiple times, possibly because the agent skipped the call and the call is looped back to the same agent, is counted once for each time the contact is presented.

P**Presented call**

Calls sent to the agent irrespective of whether the agent answers the call. If a call is connected to an agent, transferred to another agent, and then transferred back to the original agent, the value for the original agent increases by two (once for each time the call was presented)

R**Rejected call**

A call is considered as rejected when Unified Communications Manager or Unified CCX resources are not sufficient for accepting incoming calls as system resources reach their maximum capacity, for example, insufficient number of CTI ports.

Rejected outbound call

A call is considered rejected if the agent clicks either Reject or Skip or Cancel Reservation. These contacts are dialed again. If a contact is rejected by multiple agents, then the field is incremented each time the contact is rejected.

S**Service Level Agreement (SLA)**

The percentage of calls answered within the amount of time that is specified in the service level threshold for a CSQ.

Successful outbound call

The agent accepts the call, and selects a classification of Voice for this contact. The calls that are marked with this classification are a subset of accepted calls.

System-generated reason codes

Built-in reason codes are generated when the Unified CCX server moves an agent to Logout state or Not Ready state. The Agent State Detail table includes a valid reason code for these two states. Reason code for other states is zero.

T**Talk time**

Talk time is the elapsed time between the time that an agent connects to a call and the time the call is disconnected or transferred, not including hold time.

U**Unified CCX call**

A call that is dialed to the agent's Unified CCX extension.

W**Wait time**

Wait time is the time that elapsed between the time a call entered the queue and the time the call was answered by an agent or was disconnected.



APPENDIX C

Data Reconciliation between Reports

This appendix explains the differences between reports in Unified CCX. These differences are not limitations of the product but are inherent in the way these reports are designed and are intended to work.

Calls Reported

Each report type includes different types of calls in its calculations. The following table lists the report types and the calls that they include:

Report Type	Report Name	Reported Call Types			
		ACD Calls	ACD + Non-ACD Calls	Inbound	Outbound ¹
Historical reports	Contact Service Queue Activity Report	Y	N	Y	N
	CSQ Agent Summary Report	Y	N	Y	N
	Agent Detail Report	N	Y	Y	Y
	Agent Call Summary Report	N	Y	Y	Y
	Agent Summary Report	Y	N	Y	N
	Detailed Call by Call CCDR Report	N	Y	Y	Y
	Detailed Call CSQ Agent Report	N	Y	Y	Y

¹ Does not include outbound preview calls.

Consult Transfer

Consult transfer is reported in different ways in different reports. Consider the following call flow.

Call Flow Example

A caller calls into a Call Center Route Point, which queues the call in CSQ and routes it to agent1. Agent1 talks to the caller, initiates a consult transfer to agent2, talks to agent2, and completes the transfer. Agent2 talks to the caller and then drops the call.

This scenario will be reported as follows:

Report	Data Presented
Detailed Call by Call CCDR Report (System perspective)	<ol style="list-style-type: none"> 1. One call record with type = 1 (incoming) for the call between the caller and agent1. 2. One call record with type = 3 (internal) for the consult call between the two agents. 3. One call record with type = 5 (transferred-in) for the call between the caller and agent2.
Agent Detail Report (Agent perspective)	<ol style="list-style-type: none"> 1. For agent1: <ol style="list-style-type: none"> a. One call record for call with the caller (Inbound + transfer-out) to indicate that this call was transferred out to another agent. b. One call record for the consult call with agent2 (outbound). 2. For agent2: <ol style="list-style-type: none"> a. One call record for the consult call with agent1 (Inbound Non-ACD). Consult calls are always Non-ACD in Historical reports. b. One call record for the call with the caller (Inbound + transfer-in) to indicate that a transferred call was received.