

# **Historical Reports**

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# **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

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.

Field	Description
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:
	• 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.
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.

Filter parameter	Result
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.

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

Field	Description
CSQ Name	Name of the CSQ.
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.

Field	Description
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.

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

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.

Field	Description
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.

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

#### Fields

Field	Description
Date	Date for which the information is displayed.

Field	Description
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.

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.

Chart Name	Description
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.
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.

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**

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.
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.

Field	Description
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.

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 1: 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. <b>Summary info</b> —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. <b>Summary info</b> —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. <b>Summary info</b> —Sum of the records in this column.
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.

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

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.

Field	Description
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.

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

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.

Field	Description
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)	The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.
	• 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	The destination directory number. Destination Type can be agent, device, or unknown.
	• 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.
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.

You can filter using the following parameter:

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

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

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.
Calls Presented	Calls that are sent to the agent, regardless of whether the agent selects the call.
	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).
Calls Handled	Calls that are connected to the agent.
	• 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.

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Field	Description
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	Average handle time for all calls that the agent handled.
	Handle time = Talk time + Hold time + Work time
Max Handle Time	Longest handle time of any call that the agent handled.
Avg Talk Time	Average talk time for calls that the agent handled.
	Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.
Max Talk Time	Longest talk time of any call that the agent handled.
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.

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Field	Description
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.
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.

Field	Description
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.

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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.

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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

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.
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.

Field	Description
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.
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.

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

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

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.
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.
	<b>Summary info</b> —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.

Field	Description
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	• 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—Elapsed time between the time an agent connects to the call and the time 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.
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.
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:
	• 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.
	<b>Summary info</b> —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.

Filter paramet	ter	Result
Team Names		Displays information for agents who belong to the specified teams.

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.

#### 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 <b>Other Reason Codes</b> .

#### Fields

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

Field	Description
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 n1.
	Summary info—Sum of values in this column.
Time in RC n2	Time that an agent spent in Not Ready state for the system-defined RC n2.
	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 n3.
	Summary info—Sum of values in this column.
Time in RC n4	Time that an agent spent in Not Ready state for the system-defined RC n4.
	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 n5.
	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 n6.
	Summary info—Sum of values in this column.
Time in RC <i>n</i> 7	Time that an agent spent in Not Ready state for the system-defined RC n7.
	Summary info—Sum of values in this column.
Time in RC <i>n</i> 8	Time that an agent spent in Not Ready state for the system-defined RC n8.
	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 n9.
	Summary info—Sum of values in this column.

Field	Description
Time in RC <i>n10</i>	Time that an agent spent in Not Ready state for the system-defined RC n10.Summary infoSummary info
Time in RC <i>n11</i>	Time that an agent spent in Not Ready state for the system-defined RC n11. <b>Summary info</b> —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	The following options are available:
	• 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.
	• <b>Sixty (60) minutes</b> —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.
	<b>Note</b> 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.
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.

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: • 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.

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

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.

Field	Description
Not Ready Time—% Not Ready	Percentage of time that the agent spent in Not Ready state. <b>Summary info</b> —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. <b>Summary info</b> —Overall percentage.
Reserved Time—Reserved	Time that the agent spent in Reserved state. <b>Summary info</b> —Sum of values in this column.
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. <b>Summary info</b> —Overall percentage.
Work Time—Work	Time that the agent spent in Work state. <b>Summary info</b> —Sum of values in this column.
Work Time—% Work	Percentage of time that the agent spent in Work state. Summary info—Overall percentage.

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	The following options are available:
	• 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.
	<b>Note</b> 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.
Resource Group Names	Displays information for agents who belong to the specified resource groups.
	• 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	Displays information for agents who possess the specified skills.
	• 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	Displays information for agents who belong to the specified teams.
	• 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.

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

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.

Field	Description
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.
	<b>Summary info</b> —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.
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.

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	The following options are available:
	• 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.
	• <b>Sixty (60) minutes</b> —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.
	<b>Note</b> 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.

Filter parameter	Result
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.

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

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

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Field	Description
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	Calls that are connected to the agent.
	• 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.
	Summary info—Sum of values in this column.
Calls Presented	Calls that are sent to the agent, regardless of whether the agent picks up 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).
	Summary info—Sum of values in this column.
Handle Ratio	Handle ratio = Calls that the agent handled / Calls that are routed to the agent
	Summary info—Overall percentage.
Handle Time—Avg	Average handle time for all calls that the agent handled.
	Handle time = Talk time + Hold time + Work time
Handle Time—Max	Longest handle time of any call that the agent handled.
Talk Time—Avg	Average talk time for calls that the agent handled.
	Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.
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.

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	Displays information for agents who belong to the specified resource groups.
	• 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	Displays information for agents who possess the specified skills.
	• 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	Displays information for agents who belong to the specified teams.
	• 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.

Filter parameter	Result
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

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.

Field	Description
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.
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

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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 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 _ccdrVar1. 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 _ccdrVar2. 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 _ccdrVar3. 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 _ccdrVar4. 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 _ccdrVar5. 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 _ccdrVar6. 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 7	Contents of the variable _ccdrVar7. 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 _ccdrVar8. 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 9	Contents of the variable _ccdrVar9. 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 _ccdrVar10. 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.

Filter Parameter	Result
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.
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.

Chart name	Description
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

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	Average handle time for all calls that the CSQ handled.
Time	Handle time = Talk time+ Hold time + Work time
	<b>Summary info</b> —Overall average handle time = Total handle time / Total calls handled
Calls Handled—Max Handle	Longest handle time for any call that the CSQ handled.
Time	Summary info—Maximum value in this column.

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

### **Filter Criteria**

You can filter using any one of the following parameters:

Filter parameter	Result
Interval Length	The following options are available:
	• 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.
	• <b>Sixty (60) minutes</b> —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.
	<b>Note</b> 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.
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 agents are already receiving calls from a Contact Service Queue (CSQ) and you change the skill level of the CSQ, then the report displays one record with the old CSQ ID and another record with the new CSQ ID for the same CSQ.

### 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**

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.

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

Field	Description
Calls Handled—%	Percentage of calls that were handled by the CSQ. The percentage is calculated as follows:
	(Number of calls handled) / (Number of calls presented) x 100%
	Summary info—Overall percentage.
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	The following options are available:
	• 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.
	• <b>Sixty (60) minutes</b> —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.
	<b>Note</b> 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.

Filter parameter	Result
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

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.

Field	Description
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.
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:
	(Number of calls abandoned / 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	The following options are available:
	• 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.
	<ul> <li>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.</li> <li>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.</li> </ul>
	<b>Note</b> 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.
Time Zone	Displays list of all time zones. User has to select their respective time zone while generating this report.

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

### **Grouping criteria**

Data is grouped by the following field:

Field		Result
CSQ N	ame	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

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.

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Field	Description
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.
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.

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Field	Description
Calls Handled by Other	Total of the following calls:
	• 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	<ul> <li>Includes these options:</li> <li>Resource Group—Displays information for the CSQs that are configured with the Resource Pool Selection Model set to Resource Group in Unified CCX Administration.</li> <li>Skill Group—Displays information for the CSQs that are configured with the Resource Pool Selection Model set to Resource Skills in Unified CCX Administration.</li> </ul>

### **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
,	Displays the number of calls that are handled, abandoned, and dequeued for a Contact Service Queue (CSQ).

Chart name	Description
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

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:
	(Number of calls handled within service level / Number of calls handled) x 100%
	<b>Summary info</b> —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:
	(Number of calls handled within service level / (Number of calls presented – Number of calls abandoned within service level) x 100%
	<b>Summary info</b> —Overall percentage of presented calls that met the handle service level (excluding the calls that met the abandoned service level).

Field	Description
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:
	([Number of calls handled within service level + Number of calls abandoned within service level] / Number of calls presented) x 100%
	<b>Summary info</b> —Overall percentage of presented calls that met either the handled or the abandoned service level.
Percentage of Service Level Met—With Abandoned Calls Counted Negatively	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:
	(Number of calls handled within service level / Number of calls presented) x 100%
	<b>Summary info</b> —Overall percentage of presented calls that met the handled service level.
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—%	Percentage of calls that were handled by the CSQ. The percentage is calculated as follows:
	(Number of calls handled / Number of calls presented) x 100%
	Summary info—Overall percentage.
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—%	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 field.

Field	Description
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	The following options are available:
	• 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.
	<b>Note</b> 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.
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

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.

Field	Description
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.
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

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# **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.

Field	Description
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.
	<b>Summary info</b> —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.
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.

Field	Description
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	(Calls handled within service level / Calls presented) x 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.
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.

Field	Description
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.
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

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.

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Field	Description
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

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.

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Field	Description
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:
	(Number of calls handled) / (Number of calls presented) x 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:
	(Number of calls abandoned / Number of calls presented) x 100%
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:
	(Number of calls dequeued / Number of calls presented) x 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.

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Field	Description
Calls Handled by Other	Total of the following calls:
	• 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 CCDR Report**

The Detailed Call by Call CCDR 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).

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### Fields

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.
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 telephone number.
Destination—Directory 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.

Field	Description
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. <b>Summary info</b> —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.
	<b>Summary info</b> —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.
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

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.
Call Start Time	Date and time the call starts.
Call End Time	Date and time the call disconnected, transferred, or redirected.
Contact Disposition	Disposition of the call.
Originator DN (Calling Number)	The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.
	• 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)	The destination directory number. Destination Type can be agent, device, or unknown.
	• 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.

Field	Description
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	Elapsed time between the time a call entered the Contact Service Queue (CSQ) and the time that the call rang. Summary info—Sum of values in this column.
Agent Name	First name and last name of the agent.
Ring Time	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. <b>Summary info</b> —Sum of values in this column.
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.
	<b>Summary info</b> —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.

Filter parameter	Result
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.

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#### **Filter Criteria**

You can filter using the following parameter:

Filter parameter	Result	
	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

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.

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Field	Description	
Reason	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:	
	• Agent was unable to select a reason.	
	• Reason codes for all other states except Not Ready.	
	<b>Note</b> A reason code is displayed if the label is unavailable.	
Duration	Total time that an agent spent in the Not Ready state for the corresponding reason code.	
	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:	
	• 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.	
	<b>Note</b> 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.	
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.
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	AGENERESHADQUIBONDDRECIREMEW	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.

Reason Code	State	Event	Event Description
32749	Not Ready	CANCEL_FEATURE	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.
			When the consulting agent presses the <b>Cancel</b> 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.
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 <b>Cancel</b> <b>Reservation</b> button on the desktop.
32753	Not Ready	LINE_RESTRICTED	Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.
			Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.
			If <b>Allow Control of Device from CTI</b> is not checked in the <b>Default Device Profile</b> <b>Configuration</b> 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</i> <i>Administration Guide</i> , located at: https://www.cisco.com/en/US/products/sw/ voicesw/ps556/prod_maintenance_guides_ list.html.

Reason Code	State	Event	Event Description
32754	Not Ready	DEVICE_RESTRICTED	Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.
			Attention If an agent's device is added to the Restricted list, it affects the function of RmCm subsystem.
			If <b>Allow Control of Device from CTI</b> is not checked in the <b>Default Device Profile</b> <b>Configuration</b> 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</i> <i>Administration Guide</i> , located at: https://www.cisco.com/en/US/products/sw/ voicesw/ps556/prod_maintenance_guides_ list.html.
32755	Not Ready	CALL_ENDED	Agent moves to Not Ready state after handling a Unified CCX call. This event occurs in the following cases:
			• 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.

## **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

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.	
	<b>Note</b> 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.	
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:
	• 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.
	<b>Note</b> 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.
Resource Group Name	Displays information for agents who belong to the specified resource groups.

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Filter parameter	Result
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	AGNERSHADQUIBONDDRECIREMEW	This reason code is set when an agent goes into a Reserved state for a direct preview outbound call.

Reason Code	State	Event	Event Description
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	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.
			When the consulting agent presses the <b>Cancel</b> 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.
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 <b>Cancel</b> <b>Reservation</b> button on the desktop.

Reason Code	State	Event	Event Description
32753	Not Ready	LINE_RESTRICTED	Agent's phone line is flagged as a restricted device by the administrator of Unified Communications Manager.
			Attention If an agent's line is added to the restricted list, it affects the function of RmCm subsystem.
			If <b>Allow Control of Device from CTI</b> is not checked in the <b>Default Device Profile</b> <b>Configuration</b> 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</i> <i>Administration Guide</i> , located at: https://www.cisco.com/en/US/products/sw/ voicesw/ps556/prod_maintenance_guides_ list.html.
32754	Not Ready	DEVICE_RESTRICTED	<ul> <li>Agent's device is flagged as a restricted device by the administrator of Unified Communications Manager.</li> <li>Attention If an agent's device is added to the Restricted list, it affects the function of</li> </ul>
			RmCm subsystem. If <b>Allow Control of Device from CTI</b> is not checked in the <b>Default Device Profile</b> <b>Configuration</b> 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</i> <i>Administration Guide</i> , located at: https://www.cisco.com/en/US/products/sw/ voicesw/ps556/prod_maintenance_guides_ list.html.

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:
			• 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.

## **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

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.	
	<b>Summary info</b> —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.	

Field	Description	
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.	

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

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Field	Description
Campaign	Name of the agent outbound campaign.
Contacts—Total	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.
	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).
	Summary info—Sum of the records in this column.
Contacts—Attempted	Number of attempted outbound 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 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.

Field	Description
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.
	<b>Note</b> 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.
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.

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 CCDR Report

The Agent Outbound CCDR 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

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.

Field	Description
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.

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.
	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 progressive or predictive campaigns.

### **Grouping Criteria**

Data is grouped by the following field:

Field	Result
Campaign	Sorts data by campaign name.

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## **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

Field	Description
Campaign	Name of the outbound IVR campaign.
Contacts—Total	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.
	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).
	Summary info—Sum of the records in this column.
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.

Field	Description
Contacts—% Attempted	Percentage of attempted outbound IVR 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 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.

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 CCDR Report**

The IVR Outbound CCDR 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

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.
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.

Field	Description
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.

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**

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.

Field	Description
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

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:

Fie	ld	Result
Ag	gent Name	Sorts data by agent name.

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## **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

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).
	<b>Summary info</b> —Sum of the records in this column.
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.

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**

Field	Description
Campaign	Name of the campaign.

Field	Description
Total	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.
	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).
	Summary info—Sum of the records in this column.
Available	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 + Available contacts.
	Summary info—Sum of the records in this column.
Attempt	Number of outbound contact records that were tried atleast once .
	<b>Summary info</b> —Sum of the records in this column.
% Attempt	The percentage of attempted outbound calls.
	% Attempt = (Attempted / Total Contacts) x 100
	Summary info—Overall percentage
Accepted	Number of outbound calls that are accepted by agents.
	Summary info—Sum of the records in this column.
Rejected	Number of outbound calls that are skipped or rejected by agents.
	Summary info—Sum of the records in this column.
Closed	Number of outbound contacts that are closed by agents.
	Summary info—Sum of the records in this column.
Voice	Number of successful outbound calls.
	Summary info—Sum of the records in this column.
Answering Machine	Number of daily outbound calls with a classification of Answering Machine. The agent clicks <b>Accept</b> and selects a classification of Answering Machine for this contact.
	Summary info—Sum of the records in this column.

Field	Description
Fax/Modem	Number of outbound calls with a classification of Fax/Modem. The agent clicks <b>Accept</b> and selects a classification of Fax/Modem for this contact.
	<b>Summary info</b> —Sum of the records in this column.
Invalid	Number of outbound calls for the day with a classification of Invalid. The agent clicks <b>Accept</b> and selects a classification of Invalid for this contact.
	<b>Summary info</b> —Sum of the records in this column.
Requested Callback	Number of calls that are marked for callback.
	<b>Note</b> 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

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	<ul> <li>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.</li> <li>Summary info—Sum of values in this column.</li> </ul>
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.
Abandon Rate (per hour)	Average number of calls that are abandoned each hour while in the application.
	Summary info—Maximum value in this column.

Field	Description
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. <b>Summary info</b> —Maximum value in this column.

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
2 11	Displays the number of calls received by each Unified CCX or Unified IP IVR application.

#### Fields

Field	Description
Application Name	Name of the Unified CCX or Unified IP IVR application.
Called Number	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.
	<ul> <li>For incoming calls that are handled by an application:</li> <li>If the call is placed from a Unified Communications Manager phone, the telephone number that is dialed by the caller.</li> <li>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.</li> </ul>

Field	Description
Calls Presented	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.
	Summary info—Sum of values in this column.
Flow-In	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.
	Summary info—Sum of values in this column.
Flow-Out	Number of calls that this application sends to another application or external destination without being handled by an agent.
	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.
Avg Speed Of Answer	Average queue time to answer calls by agents. Calls that did not connect to an agent are not included in this calculation.
	Average queue time = Queue time / Number of calls
Avg Talk Time	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.
	Average talk time = Total talk time / Number of calls handled by the agents
Avg Work Time	Average time an agent spends in Work state after disconnecting/transferring calls.
	Average work time = Total work time / Number of calls handled by the agents
Calls Abandoned	Number of calls that are abandoned by the application.
	Summary info—Sum of values in this column.
Avg Abandon Time	Average duration of calls before they are abandoned.

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:

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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).

Field	Description
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.

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

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.
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.

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**

Field	Description	
Agent Name	First name and last name of the agent.	
Agent ID	Login ID of the agent.	
Inbound Calls—Presented	Calls that are sent to the agent, regardless of whether the agent picks up 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).	
Inbound Calls—Handled	Calls that are connected to the agent.	
	• 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.	

Field	Description	
Inbound Calls—Handle Time Avg	Average handle time for all calls that the agent handled.	
	Handle time = Talk time + Hold time + Work time.	
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	Average talk time for all calls that the agent handled.	
	Elapsed time between the time an agent connects to a call and time when the call is disconnected or transferred, not including hold time.	
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.	

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 *CiscoUnified Contact Center Express Database Schema Guide*.

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
Skill	_
SkillGroup	SG
TextAgentConnectionDetail	TACD
TextAgentStateDetail	TASD
TextContactDetail	TCD
TextContactQueueDetail	TCQD
EEMContactEmailDetail	EEMCED

#### Table 2: Database Tables

Database table name	Abbreviation used in this chapter
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 3: Chat Agent Detail Report, on page 110 shows how the information in the Chat Agent Detail report is obtained or calculated.

#### Table 3: Chat Agent Detail Report

Field	Explanation
Agent Name(Agent ID)	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 20: Agent Call Summary Report Filter Parameters, on page 127. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.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.
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	Chat time period which is calculated as follows:
	Chat End Time – Chat Start Time
	Displayed as hh:mm:ss.
Contact ID	Contact ID which uniquely identifies a chat contact. It is obtained from the Contact IDfield 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 4: Chat Agent Summary Report, on page 111 shows how the information in the Chat Agent Summary report is obtained or calculated.

#### Table 4: Chat Agent Summary Report

Field	Explanation
Agent Name(Agent ID)	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 20: Agent Call Summary Report Filter Parameters, on page 127. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.nesourceName 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.
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 5: Chat Contact Service Queue Activity Report Query Design, on page 112 shows how the information in the Chat Contact Service Queue Activity report is obtained or calculated.

Table 6: Chat Contact Service Queue Activity Report Filter Parameter, on page 113 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 108

Field	Explanation
CSQ Name	The CSQ.recordID uniquely identifies a CSQ. Obtain this value as described in Table 6: Chat Contact Service Queue Activity Report Filter Parameter , on page 113. 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.

#### Table 5: Chat Contact Service Queue Activity Report Query Design

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 6: 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 7: Chat CSQ Agent Summary Report Query Design, on page 113 explains how to obtain and calculate the information in the Chat CSQ Agent Summary report.

Table 8: Chat CSQ Agent Summary Report Filter Parameter, on page 114 explains how the Chat CSQ Agent Summary report filter parameter obtains data.

Table 7: 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 8: Chat CSQ Agent Summary Report Filter Parameter, on page 114. 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	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.
	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.
	To uniquely identify an agent, the resource ID is stored in TACD.resourceid.
	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.
Chat Handled	Same calculation as for chat contacts received, but in the search criteria, TACD.talkTime is greater than zero.
Average Active Chat Time	If chat contacts handled is not zero then this field is calculated as Total Talk Time divided by Chat Contacts Handled.
	If Chat Contacts Handled is zero, this field is zero.
Chat No Answer	Same calculation as for chat contacts Received, but in the search criteria, TACD. talkTime is zero, and TACD.acceptTime is greater than zero.
	For each CSQ-Agent combination, count the number of TACD records. This result is the number of chat contacts that got no answer.
Average Acceptance Time	If chat contacts Handled is not zero then this field is calculated as Total Accept Time divided by Chat Contacts Handled.
	If Chat Contacts Handled is zero then this field is zero.

#### Table 8: 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 9: Chat Traffic Analysis Report Query Design, on page 115 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.

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 shortest contact duration of all incoming contacts for that day.

Table 9: Chat Traffic Analysis Report Query Design

# **Email Reports**

# **Email Agent Activity Report**

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

Table 10: Email Agent Activity Report Query Design, on page 116shows how the information in the Email Agent Activity Report is obtained or calculated.

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.NoteThis 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.

Table 10: Email Agent Activity Report Query Design

# **Email Contact Detail Report**

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

Table 11: Email Contact Detail Report Query Design, on page 117 shows how the information in the Email Contact Detail Report is obtained or calculated.

Table 12: Email Contact Detail Report Filter Parameters, on page 118 explains how the Email Contact Detail Report filter parameters obtain data.

Table 11: 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.	
То	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 contact disposition field of the textcontact detail table.

#### Table 12: 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 13: Email CSQ Activity Report Query Design, on page 118 shows how the information in the Email CSQ Agent Activity Report is obtained or calculated.

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 14: Email Traffic Analysis Report, on page 119 shows how the information in the Email Traffic Analysis report is obtained or calculated.

Table 15: Email Traffic Analysis Report Filter Parameter, on page 120 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 108.

#### Table 14: 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 15: 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 16: Abandoned Call Detail Activity Report Query Design, on page 120 shows how the information in the Abandoned Call Detail Activity report is obtained or calculated.

Table 16: Abandoned Call Detail Activity Re	eport Query Design
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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.
	<b>Note</b> 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.
	<b>Note</b> 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).
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.
	<b>Note</b> A call may be abandoned without being presented to any agent. In this case, this agent Name field will be blank.

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Field	Explanation
Call Skills	This field shows the list of skills that belong to the CSQ shown in <b>Call Routed CSQ</b> .
	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.skillID. Join SG.skillID with Skill.skillID to obtain the list of call skills, which is stored in Skill.skillName.
	<b>Note</b> 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.
	<b>Note</b> 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 17: Aborted and Rejected Call Detail Report Query Design, on page 121 shows how the information in the Aborted and Rejected Call Detail report is obtained or calculated.

Table 18: Aborted and Rejected Call Detail Report Filter Parameter, on page 123 explains how the Aborted and Rejected Call Detail report filter parameter obtains data.

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

Field	Explanation
Originator DN (DN = Directory	The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.
Number)	• 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	The destination directory number. Destination Type can be agent, device, or unknown.
	• 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 18: Aborted and Rejected Call Detail Report Filter Parameter

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

### **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 19: Agent Call Summary Report Query Design, on page 124 shows how the information in the Agent Call Summary report is obtained or calculated.

Table 20: Agent Call Summary Report Filter Parameters, on page 127 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 108.

#### Table 19: Agent Call Summary Report Query Design

Field	Explanation
Agent Name	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 20: Agent Call Summary Report Filter Parameters, on page 127. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.resourceName and Resource.resourceLoginID is used to uniquely identify an agent. Resource.nesourceName 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.
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.
Total Inbound	Calculated as follows: Total inbound ACD calls + Total inbound IVR calls.
Inbound ACD— Total	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. For each agent, count the number of ACD records to determine the total number of inbound ACD calls received by each agent.
Inbound ACD—Avg Talk	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.
	For each agent, calculate the sum of the values in ACD.talkTime, then divide by the number of ACD records for that agent.

Field	Explanation
Inbound ACD—Avg Hold	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.
	For each agent, calculate the sum of the values in ACD.holdTime, then divide by the number of ACD records for that agent.
Inbound ACD—Avg Work	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.
	For each agent, calculate the sum of the values in ACD.workTime, then divide by the number of ACD records for that agent.
Inbound Non-ACD—Total	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.
	Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the results for these fields obtained from <b>Inbound ACD</b> — <b>Total</b> . Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.
	For each agent, count the number of CCD records to determine the number of total inbound IVR calls.
Inbound Non-ACD—	Talk time of an IVR call is stored in CCD.connectTime.
Avg Talk Time	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.
	Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the result obtained from <b>Inbound ACD</b> — <b>Total</b> . Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.
	For each agent, calculate the sum of the values stored in CCD.connectTime, then divide by the number of CCD records for that agent.
Inbound Non-ACD	Talk time of an IVR call is stored in CCD.connectTime.
Max Talk Time	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.
	Compare sessionID, sessionSeqNum, profileID, nodeID, and resourceID in this result set with the result obtained from <b>Inbound ACD</b> — <b>Total</b> . Eliminate all entries that are already counted in the calculation of total inbound ACD calls. The remaining value is the number of IVR calls.
	For each agent, determine the maximum value stored in CCD.connectTime.

Field	Explanation
Outbound—Total	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.
	For each agent, count the number of CCD records.
Outbound—Avg Call Time	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.
	For each agent, calculate the sum of the values stored in CCD.connectTime, then divide by the number of CCD records for that agent.
Outbound—Max Call Time	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.
	For each agent, determine the maximum value stored in CCD.connectTime.
ACD Transfer-In	For ACD calls that are transferred in, CCD.contactType = 5 (transfer-in), and an ACD record is present.
	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.
	For each agent, count the number of ACD records for which the corresponding CCD records have contactType = 5 (transfer-in).
ACD Transfer-Out	For ACD calls that are transferred out, CCD.transfer = 1, and an ACD record is present.
	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.
	For each agent, count the number of ACD records for which the corresponding CCD records have transfer = 1.
ACD Conference	For ACD conference calls, CCD.conference = 1, and an ACD record is present.
	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.
	For each agent, count the number of ACD records for which the corresponding CCD records have conference = 1.

#### Table 20: 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 21: Agent Detail Report Query Design, on page 128 shows how the information in the Agent Detail report is obtained or calculated.

Table 22: Agent Detail Report Filter Parameters, on page 130 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 108.

#### Table 21: Agent Detail Report Query Design

Field	Explanation
Agent Name	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.
	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.
	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.
Extension	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.
	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.
	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.
Call Start Time	For ACD calls, obtained from ACD.startDateTime.
	For IVR calls, obtained from CCD.startDateTime.
Call End Time	For ACD calls, obtained from ACD.endDateTime.
	For IVR calls, obtained from CCD.startDateTime.
Duration	Calculated as follows:
	Call End Time – Call Start Time
	Displayed as hh:mm:ss.
Called Number	For ACD calls, agent identification is stored in ACD (see <b>Agent Name</b> earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.calledNumber.
	For IVR calls, agent identification is stored in CCD (see <b>Agent Name</b> earlier in this table). The value of this field is obtained directly from CCD.calledNumber.

Field	Explanation
Call ANI	For ACD calls, agent identification is stored in ACD (see <b>Agent Name</b> earlier in this table). Join ACD and CCD on sessionID, sessionSeqNum, nodeID, and profileID. The value of this field is obtained from CCD.originatorDN.
	For IVR calls, agent identification is stored in CCD (see <b>Agent Name earlier</b> in this table). The value of this field is obtained directly from CCD.originatorDN.
	For internal calls (CCD.contactType = 3), but the CCD.orignatorDN field is blank. This field is set to the extension of the agent who originates the call, as follows:
	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.
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	For ACD calls, obtained from ACD.talkTime.
	For IVR calls, shows the value of Duration if CCD.contactDispostion = 2 (handled). Shows zero if CCD.contactDisposition = 1 (abandoned).
Hold Time	For ACD calls, obtained from ACD.holdTime.
	Blank for IVR calls.
Work Time	For ACD calls, obtained from ACD.workTime.
	Blank for IVR calls.
Call Type	<ul> <li>Inbound ACD—Call has an ACD record present.</li> <li>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.)</li> <li>Outbound—CCD.originatorType = 1 (agent type), and CCD.originatorID is a resource ID.</li> <li>Transfer-In—CCD.contactType = 5 (transfer-in), and there is a corresponding ACD record.</li> <li>Transfer-Out—CCD.transfer = 1, and there is a corresponding ACD record.</li> <li>Conference—CCD.conference = 1, and there is a corresponding ACD record.</li> </ul>

#### Table 22: 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 <b>Call</b> <b>Type</b> field in Table 21: Agent Detail Report Query Design, on page 128.

### **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 23: Agent Login Logout Activity Report Query Design, on page 131 shows how the information in the Agent Login Logout Activity report is obtained or calculated.

Table 24: Agent Login Logout Activity Report Filter Parameters, on page 131 explains how the Agent Login Logout Activity report filter parameters obtain data.

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> <li>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</li> <li>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</li> <li>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</li> <li>If the agent logged in and out during the report period—Logged-In Duration = Logout Time – Login Time</li> </ul>

#### Table 23: Agent Login Logout Activity Report Query Design

### Table 24: 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 25: Agent Not Ready Reason Code Summary Report Query Design, on page 133 shows how the information in the Agent Not Ready Reason Code Summary report is obtained or calculated.

Table 26: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 135 explains how the Agent Not Ready Reason Code Summary report filter parameter obtains data.

Table 25: Agent Not Ready	Reason Code Summary	Report Query Design
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Field	Explanation
Agent Name	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 135. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.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.
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	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).
	The calculation of the logged-in time for a single session depends on the agent activity, as follows:
	• 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 – <b>Interval Start Time</b>
	• An agent logs in during the interval and logs out after the interval:
	Total Logged-in Time = Interval End Time – login time
	If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.
Total Not Ready	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 time spent in Not Ready state depends on the agent activity, as follows:
	• 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 = <b>Interval End Time</b> – time in to Not Ready state
	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.

Field	Explanation
Time in RC n1	Join ASD.agentID with Resource.resourceID, and join ASD.profileID with Resource.profileID to obtain
Time in RC n2	state transition records for each agent, identified by Resource.resourceName and Resource.resourceLoginID. (See <b>Agent Name</b> in this table for the relationship between resourceID/profileID and
Time in RC n3	resourceName/resourceLoginID.) Not Ready state is identified by ASD.eventType = 2. The reason code
Time in RC n4	is stored in ASD.reasonCode.
Time in RC n5	By default, this report sorts the predefined Not Ready reason codes in numerical order and displays the first eight reason codes.
Time in RC n6	You can specify other reason codes to report by selecting Filter Parameter Reason Code.
Time in RC n7	
Time in RC n8	
Time in Other RCs	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).
	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 <b>Agent Name</b> 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.

#### Table 26: Agent Not Ready Reason Code Summary Report Filter Parameter

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.
Interval Length	<b>Entire report range</b> —Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.
	<b>Thirty (30) minute intervals</b> —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.
	<b>Sixty (60) minute intervals</b> —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.

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 27: Agent State Detail Report Query Design, on page 137 shows how the information in the Agent State Detail report is obtained or calculated.

Table 28: Agent State Detail Report Filter Parameters, on page 138 explains how the Agent State Detail report filter parameters obtain data.

#### Table 27: Agent State Detail Report Query Design

Field	Explanation
Agent Name	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 28: Agent State Detail Report Filter Parameters, on page 138. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.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.
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.
State Transition Time	Obtained from ASD.eventDateTime.
	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.
Agent State	Obtained from ASD.eventType. The mapping between the numeric ASD.eventType and the displayed text is as follows:
	1—Logged-in
	2—Not Ready
	3—Ready
	4—Reserved
	5—Talking
	6—Work
	7—Logout
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.

Field	Explanation
Duration	Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State
	The calculation of the duration depends on the agent activity, as follows:
	• 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 28: 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 29: Agent State Summary Reports Query Design, on page 139shows how the information in the Agent State Summary reports is obtained or calculated.

Table 30: Agent State Summary Reports Filter Parameters, on page 143 explains how the Agent State Summary reports filter parameters obtain data.

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.)

Table 29: Agent State Summary Reports Query Design

Field	Explanation
Total 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).
	The calculation of the logged-in time for a single session depends on the agent activity, as follows:
	• 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 – <b>Interval Start Time</b>
	• An agent logs in during the interval and logs out after the interval:
	Total Logged-in Time = Interval End Time – login time
	If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.
Not Ready Time	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.
	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:
	• 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
	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.
	The percentage is calculated as:
	(Not Ready Time / Total Logged-in Time) * 100%

Field	Explanation
Ready Time	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.
	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:
	• 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 – <b>Interval Start Time</b>
	• 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
	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.
	The percentage is calculated as:
	(Ready Time / Total Logged-in Time) * 100%
Reserved Time	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.
	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:
	• 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
	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.
	The percentage is calculated as:
	(Reserved Time / Total Logged-in Time) * 100%

Field	Explanation
Talk Time	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.
	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:
	• 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
	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.
	The percentage is calculated as:
	(Talk Time / Total Logged-in Time) * 100%
Work Time	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.
	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:
	• 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 – <b>Interval Start Time</b>
	• An agent goes in to Work state during the interval and goes out of Work state after the interval:
	Total Work Time = <b>Interval End Time</b> – time in to Work state
	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.
	The percentage is calculated as:
	(Work Time / Total Logged-in Time) * 100%

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 30: Agent State	Summary Reports	Filter Parameters
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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 31: Agent Summary Report Query Design, on page 144 shows how the information in the Agent Summary report is obtained or calculated.

Table 32: Agent Summary Report Filter Parameters, on page 146 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 108.

#### Table 31: 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	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).
	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.
	• An agent logs in before t1 and logs out between t1 and t2:
	Logged-in duration = logout time $- t1$
	• An agent logs in between t1 and t2 and logs out after t2:
	Logged-in duration = $t2 - login$ time
	• An agent logs in between t1 and t2 and logs out between t1 and t2:
	Logged-in duration = logout time – login time
	• An agent logs in before t1 and logs out after t2:
	Logged-in duration = $t2 - t1$
	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.

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:
	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	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).
	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.
	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.
Idle Time—Max	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).
	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.
	The maximum idle time for an agent is the longest duration of the idle sessions within the report period.

### Table 32: Agent Summary Report Filter Parameters

Filter parameter	Explanation
All Agents (default, no filtering parameters)	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 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.
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 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.
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 found in Resource.resourceName. Obtain the corresponding Resource.resourceID and Resource.profileID.

Filter parameter	Explanation
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 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.
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.
	This report displays only the active agents and the agents who are deleted after the report start time.
Top N Calls Handled/Presented Ratio	To report on N agents who rank highest in the calls handled/presented ratio, obtain the list of resource IDs as follows:
	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.
	Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Bottom N Calls Handled/Presented Ratio	To report on N agents who rank lowest in the calls handled/presented ratio, obtain the list of resource IDs as follows:
	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.
	Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Top N Avg Hold Time	To report on N agents who rank highest in average hold time, obtain the list of resource IDs as follows:
	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.
	Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.
Bottom N Avg Hold	To report on N agents who rank lowest in average hold time, obtain the list of resource IDs as follows:
Time	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.
	Join Resource.resourceID with ACD.resourceID and ACD.profileID to obtain other call-related data.

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	To report on N agents who rank lowest in average work time, obtain the list of resource IDs as follows:
Time	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	To report on N agents who rank lowest in average handle time, obtain the list of resource IDs as follows:
Time	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 33: Agent Wrap-up Data Detail Report Query Design, on page 149 shows how the information in the Agent Wrap-up Data Detail report is obtained or calculated.

Table 34: Agent Wrap-up Data Detail Report Filter Parameters, on page 150 explains how the Agent Wrap-up Data Detail report filter parameters obtain data.

Table 33: Agent Wrap-up Data Detail Report Query Design

Field	Explanation
Agent Name	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.
	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.
	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.
Extension	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.
	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.
	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.
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 <b>Agent Name</b> 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 <b>Agent Name</b> 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 34: 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 35: Agent Wrap-up Data Summary Report Query Design, on page 151 shows how the information in the Agent Wrap-up Data Summary report is obtained or calculated.

Table 36: Agent Wrap-up Data Summary Report Filter Parameter, on page 151 explains how the Agent Wrap-up Data Summary report filter parameter obtains data.

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 35: Agent Wrap-up Data Summary Report Query Design

#### Table 36: 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 37: Call Custom Variables Report Query Design, on page 152 shows how the information in the Call Custom Variables report is obtained or calculated.

Table 39: Call Custom Variables Report Filter Parameters, on page 153 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 108.

#### Table 37: 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 38: Called Number Summary Activity Report Query Design, on page 153 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 108.

Table 38: 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.
	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.
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 39: 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	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:
	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 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:
	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, 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:
	1—agent
	2—device
	3—unknown
	Find at 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 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.
Duration Less Than or Equal to T seconds	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.
Custom Variable 1	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.
Custom Variable 2	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.
Custom Variable 3	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.
Custom Variable 4	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.

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 40: Common Skill Contact Service Queue Activity Report (by Interval) Query Design, on page 155 shows how the information in the Common Skill Contact Service Queue Activity report (by Interval) is obtained or calculated.

Table 41: Common Skill Contact Service Queue Activity Report (by Interval) Filter Parameters, on page 157 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 108.

### Table 40: 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	<ul><li>End of an interval.</li><li>End-users can divide the report period into 30- or 60-minute intervals. (The default interval length is the entire report period.)</li></ul>

Field	Explanation
CSQ Name	The combination of CSQ.recordID and CSQ.profileID uniquely identifies a CSQ. Obtain these two values as described in Table 41: Common Skill Contact Service Queue Activity Report (by Interval) Filter Parameters, on page 157. 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 <b>Calls Presented</b> — <b>Total</b> , 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 <b>Calls Handled</b> — <b>Total</b> , 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.

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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 <b>Calls Abandoned</b> — <b>Total</b> , 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 <b>Calls Presented—Total</b> is zero, this field is set to zero.
Summary for Skills	Summation of statistics for all CSQs within the same logical CSQ group.

### Table 41: 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 42: Contact Service Queue Activity Report Query Design, on page 158 shows how the information in the Contact Service Queue Activity report is obtained or calculated.

Table 43: Contact Service Queue Activity Report Filter Parameter, on page 162 explains how the Contact Service Queue Activity report filter parameter obtains data.

### Table 42: 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 43: Contact Service Queue Activity Report Filter Parameter, on page 162. 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 43: Contact Service Queue Activity Report Filter Parameter, on page 162. 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	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, 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.
	If <b>Calls Handled</b> is not zero, the Avg Speed of Answer is calculated as:
	total queue time / Calls Handled
	Here total queue time includes the total ring time. If Calls Handled is zero, this field is zero.
Avg Handle Time	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, 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.
	If <b>Calls Handled</b> is not zero, this field is calculated as:
	total handle time / Calls Handled
	If <b>Calls Handled</b> is zero, this field is zero.
Max Handle Time	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, calculate the handle time for each call as follows:
	ACD.talkTime + ACD.holdTime + ACD.workTime
	This field shows the maximum handle time for all calls handled by this CSQ.

Field	Explanation
Calls Abandoned	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.
Avg Time to Abandon	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 <b>Calls Abandoned</b> is zero, this field is zero.
Max Time to Abandon	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.
Avg Abandon Per Day	Calculated as Calls Abandoned / number of days during 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.

Field	Explanation
Max Abandon Per Day	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 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.
	For each CSQ, find the maximum number of calls abandoned on a particular day during the report period.
Calls Dequeued	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).
	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 dequeued from the CSQ.
Avg Time to Dequeue	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).
	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 determine queue time.
	If <b>Calls Dequeued</b> is not zero, this field is calculated as:
	total queue time / Calls Dequeued
	If <b>Calls Dequeued</b> is zero, this field is zero.
Max Time to Dequeue	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).
	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.

Field	Explanation
Calls Handled by Other	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).
	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 script or another CSQ.

#### Table 43: 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	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:
	• 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 44: Contact Service Queue Activity Reports Query Design, on page 163shows how the information in the Contact Service Queue Activity reports is obtained or calculated.

Table 45: Contact Service Queue Activity Reports Filter Parameters, on page 165 explains how the Contact Service Queue Activity reports filter parameters obtain data.

Table 44: 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 44: Contact Service Queue Activity Reports Query Design, on page 163. 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 45: Contact Service Queue Activity Reports Filter Parameters, on page 165. 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	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.
Handled	This value is calculated as follows:
	(number of calls handled within service level / number of calls handled) * 100%
Percentage of Service	Does not include information for calls that were abandoned within the service level.
Level Met— Without Abandon	This value is calculated as follows:
	(number of calls handled within service level / (number of calls presented – number of calls abandoned within service level)) * 100%
Percentage of Service	Considers calls that were abandoned within the service level as meeting the service level.
Level Met— Positive Abandon	This value is calculated as follows:
	((number of calls handled within service level + number of calls abandoned within service level) / number of calls presented) * 100%

Field	Explanation
Percentage of Service Level Met— Negative Abandon	Considers calls that were abandoned within the service level as not meeting the service level.
	This value is calculated as follows:
	(number of calls handled within service level / number of calls presented) * 100%
Calls Presented	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).
	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.
	For each CSQ, count the number of CQD records to determine the number of calls presented to that CSQ.
Calls Handled	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).
	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.
	For each CSQ, count the number of CQD records to determine the number of calls handled by the CSQ.
	The percentage is calculated as follows:
	(calls handled / calls presented) * 100%
Calls 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.
	The percentage is calculated as follows:
	(calls abandoned / calls presented) * 100%
Calls 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.
	The percentage is calculated as follows:
	(calls dequeued / calls presented) * 100%

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 46: Contact Service Queue Call Distribution Summary Report Query Design, on page 165 shows how the information in the Contact Service Queue Call Distribution Summary report is obtained or calculated.

Table 47: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 169 explains how the Contact Service Queue Call Distribution Summary report filter parameters obtain data.

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: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 169. 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 47: Contact Service Queue Call Distribution Summary Report Filter Parameters, on page 169. 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.

Table 46: Contact Service Queue Call Distribution Summary Report Query Design

Field	Explanation
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.
Total Calls Handled With Queue Time 0–T sec	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 in which the value stored in CQD.queueTime is less than or equal to T seconds.
Percentage Calls Handled	If <b>Calls Handled</b> is not zero, this field is calculated as
With Queue Time 0–T sec	(Total Calls Handled with Queue Time in 0-T seconds / Calls Handled) * 100%
	If <b>Calls Handled</b> is zero, this field is zero.
Total Calls Handled With Queue Time 0–2T sec	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 in which the value stored in CQD.queueTime is less than or equal to 2T seconds.
U U	If <b>Calls Handled</b> is not zero, this field is calculated as:
With Queue Time 0–2T sec	(Total Calls Handled with Queue Time in 0–2T seconds / Calls Handled) * 100%
	If <b>Calls Handled</b> is zero, this field is zero.
Total Calls Handled With Queue Time 0–3T sec	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 in which the value stored in CQD.queueTime is less than or equal to 3T seconds.

Field	Explanation
Percentage Calls Handled With Queue Time 0–3T sec	If <b>Calls Handled</b> is not zero, this field is calculated as: ( <b>Total Calls Handled with Queue Time in 0–3</b> T seconds / Calls Handled) * 100% If <b>Calls Handled</b> is zero, this field is zero.
Total Calls Handled With Queue Time 0–4T sec	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 in which the value stored in CQD.queueTime is less than or equal to 4T seconds.
e	If <b>Calls Handled</b> is not zero, this field is calculated as:
With Queue Time 0–4T sec	(Total Calls Handled with Queue Time in 0–4T seconds / Calls Handled) * 100%
	If <b>Calls Handled</b> is zero, this field is zero.
Calls Abandoned	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.
Total Calls Abandoned With Queue Time 0–T	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 in which the value stored in CQD.queueTime is less than or equal to T seconds.
Percentage Calls Abandoned With Queue Time 0–T	If <b>Calls Abandoned</b> is not zero, this field is calculated as:
	(Total Calls Abandoned with Queue Time 0-T seconds / Calls Abandoned) * 100%
	If <b>Calls Abandoned</b> is zero, this field is zero.

Field	Explanation
Total Calls Abandoned With Queue Time 0–2T sec	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 in which the value stored in CQD.queueTime is less than or equal to 2T seconds.
Percentage Calls	If <b>Calls Abandoned</b> is not zero, this field is calculated as:
Abandoned With Queue Time 0–2T sec	(Total Calls Abandoned with Queue Time 0-2T seconds / Calls Abandoned) * 100%
11110 0 21 500	If <b>Calls Abandoned</b> is zero, this field is zero.
Total Calls Abandoned With Queue Time 0–3T sec	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 in which the value stored in CQD.queueTime is less than or equal to 3T seconds.
Percentage Calls	If <b>Calls Abandoned</b> is not zero, this field is calculated as:
Abandoned With Queue Time 0–3T sec	(Total Calls Abandoned with Queue Time 0-3T seconds / Calls Abandoned) * 100%
	If <b>Calls Abandoned</b> is zero, this field is zero.
Total Calls Abandoned With Queue Time 0–4T sec	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 in which the value stored in CQD.queueTime is less than or equal to 4T seconds.
Percentage Calls Abandoned With Queue Time 0–4T sec	If <b>Calls Abandoned</b> is not zero, this field is calculated as:
	(Total Calls Abandoned with Queue Time 0-4T seconds / Calls Abandoned) * 100%
	If <b>Calls Abandoned</b> is zero, this field is zero.

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.

### Table 47: Contact Service Queue Call Distribution Summary Report Filter Parameters

## **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 48: Contact Service Queue Priority Summary Report Query Design, on page 169 shows how the information in the Contact Service Queue Priority Summary report is obtained or calculated.

Table 49: Contact Service Queue Priority Summary Report Filter Parameter, on page 170 explains how the Contact Service Queue Priority Summary report filter parameter obtains data.

Table 48: 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 49: Contact Service Queue Priority Summary Report Filter Parameter, on page 170. 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 Priority Summary Report Filter Parameter, on page 170. 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)	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.) Join CQD and CRD on sessionID, sessionSeqNum, profileID, nodeID, and qIndex. Additional search criterion is CQD.targetType is 0 (CSQ type).
	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.
Average Number of Calls by Priority (Priority 1 through Priority 10)	If the number of days within the report period is not zero, this field is calculated as follows:
	(Total Calls Presented by Call Priority / number of days within report period) * 100%
	If the number of days within the report period is zero, this field is zero.
	Number of days within report period is the maximum value stored in CQD.queueTime for all calls abandoned from this CSQ.

#### Table 49: 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 50: Contact Service Queue Service Level Priority Summary Report Query Design, on page 171 shows how the information in the Contact Service Queue Service Level Priority Summary report is obtained or calculated.

Table 51: Contact Service Queue Service Level Priority Summary Report Filter Parameter, on page 172 explains how the Contact Service Queue Service Level Priority Summary report filter parameter obtains data.

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 51: Contact Service Queue Service Level Priority Summary Report Filter Parameter, on page 172. 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:
	(Total Service Level Met / 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 grater 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	If total calls presented for each call priority is not zero, this field is calculated as follows:
Met Service Level for Each Call Priority (Priority 1 through	(number of calls that met SL for each call priority / total calls presented for each call priority) * 100%
	If total calls presented for each call priority is zero, this field is zero.
Priority 10)	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 50: Contact Service Queue Service Level Priority Summary Report Query Design

### Table 51: 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 52: CSQ-Agent Summary Report Query Design, on page 172 shows how the information in the CSQ-Agent Summary report is obtained or calculated.

Table 53: CSQ-Agent Summary Report Filter Parameter, on page 174 explains how the CSQ-Agent Summary report filter parameter obtains data.

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: CSQ-Agent Summary Report Filter Parameter, on page 174. 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.
	<b>Note</b> 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	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.
	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.
	To uniquely identify a CSQ, the CSQ record ID and profile ID are stored in CQD.targetID and CQD.profileID.
	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.
	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.
Talk Time Avg	If <b>Calls Handled</b> is not zero, this field is calculated as Total Talk Time / CallsHandled.
	If <b>Calls Handled</b> is zero, this field is zero.
Talk Time Total	Same calculation as for <b>Calls Handled</b> , but instead of counting the number of ACD records, calculate the sum of the values stored in ACD.talkTime.
Work Time Avg	If Calls Handled is not zero, this field is calculated as Total Work Time / Calls Handled.
	If Calls Handled is zero, this field is zero.
Work Time Total	Same calculation as for <b>Calls Handled</b> , 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 <b>Calls Handled</b> , but instead of counting the number of ACD records, calculate the sum of the values stored in ACD.ringTime.
Calls On Hold	Same calculation as for <b>Calls Handled</b> . An additional search criterion is ACD.holdTime is greater than zero.
	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.
Hold Time Avg	If Calls on Hold is not zero, this field is calculated as Total Hold Time / Calls on Hold.
	If Calls on Hold is zero, this field is zero.
Hold Time Total	Same calculation as for <b>Calls on Hold</b> , but instead of counting the number of ACD records, add up the values stored in ACD.holdTime.
RNA	Same calculation as for <b>Calls Handled</b> , but the search criteria should be: ACD.talkTime is zero, and ACD.ringTime is greater than zero.
	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).

#### Table 53: CSO-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 54: CSQ All Fields Report Query Design, on page 174 shows how the information in the CSQ All Fields Report is obtained or calculated.

Table 55: CSQ All Fields Report Filter Parameter, on page 179 explains how the CSQ All fields Report filter parameter obtains data.

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: CSQ All Fields Report Filter Parameter, on page 179. 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.

Table 54: CSQ All Fields Report Query Design

Field	Explanation
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. This process determines 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-%	The percentage is calculated as follows: (calls handled / calls presented) * 100%
Calls Handled-Avg Handle Time	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, 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.
	If <b>Calls Handled</b> is not zero, this field is calculated as:
	total handle time / Calls Handled
	If <b>Calls Handled</b> is zero, this field is zero.
Calls Handled-Max Handle Time	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, calculate the handle time for each call as follows:
	ACD.talkTime + ACD.holdTime + ACD.workTime
	This field shows the maximum handle time for all calls handled by this CSQ.

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 <b>Calls Abandoned</b> is not zero, this field is:
	total queue time / Calls Abandoned
	If <b>Calls Abandoned</b> 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	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).
	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 determine queue time.
	If <b>Calls Dequeued</b> is not zero, this field is calculated as:
	total queue time / Calls Dequeued
	If <b>Calls Dequeued</b> is zero, this field is zero.
Calls Dequeued-Max Dequeued 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 within the report period.) Additional search criteria are CQD.targetType is 0 (CSQ type), and CQD.disposition is 3 (dequeued).
	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.
Avg Speed of Answer	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, 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.
	If <b>Calls Handled</b> is not zero, the Avg Speed of Answer is calculated as:
	total queue time / Calls Handled
	Here total queue time includes the total ring time. If <b>Calls Handled</b> is zero, this field is zero.
Calls Handled < Service Level	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.

Field	Explanation
Calls Abandoned < Service Level	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.
Avg Abandon Per Day	Calculated as Calls Abandoned / number of days during 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.
Max Abandon Per Day	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 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.
	For each CSQ, find the maximum number of calls abandoned on a particular day during the report period.
Calls Handled by Other	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).
	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 script or another CSQ.

Field	Explanation
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.

Table 55: 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 CCDR Report**

The Detailed Call by Call CCDR 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 56: Detailed Call by Call CCDR Report Query Design, on page 179 shows how the information in the Detailed Call by Call CCDR report is obtained or calculated.

Table 57: Detailed Call by Call CCDR Report Filter Parameter, on page 181 explains how the Detailed Call by Call CCDR report filter parameter obtains data.

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

Table 56: Detailed Call by Call CCDR Report Query Design

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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	If CCD.originatorType is Device (2) or Unknown (3), obtained from CCD.originatorDN.
(DN = directory number)	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), jCCD.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 57: Detailed Call by Call CCDR 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 58: Detailed Call, CSQ, Agent Report Query Design, on page 182 shows how the information in the Detailed Call, CSQ, Agent report is obtained or calculated.

Table 59: Detailed Call, CSQ, Agent Report Filter Parameters, on page 184 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 108.

#### Table 58: 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)	The originator directory number. This number is the same as the calling number. Originator Type can be agent, device, or unknown.
	• 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	The destination directory number. Destination Type can be agent, device, or unknown.
	• 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	For ACD calls, join CCD and ACD on nodeID, sessionID, sessionSeqNum, and profileID. The value is stored in ACD.talkTime.
	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.
Work Time	Join CCD and ACD on nodeID, sessionID, sessionSeqNum, and profileID. The value is stored in ACD.workTime.

#### Table 59: Detailed Call, CSO, 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.

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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 60: Reason Report by Agent Grouping Query Design, on page 186 shows how the information in the Reason Report by Agent Grouping report is obtained or calculated.

Table 61: Reason Report by Agent Grouping Filter Parameters, on page 188 explains how the Reason Report by Agent Grouping report filter parameters obtain data.

Field	Explanation
Agent Name	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 135. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.
Agent ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Agent 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.)

### Table 60: Reason Report by Agent Grouping Query Design

Field	Explanation
Total Logged-in	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).
	The calculation of the logged-in time for a single session depends on the agent activity, as follows:
	• 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 – <b>Interval Start Time</b>
	• An agent logs in during the interval and logs out after the interval:
	Total Logged-in Time = Interval End Time – login time
	If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.
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.
Duration	Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State
	The calculation of the duration depends on the agent activity, as follows:
	• 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

Field	Explanation
Interval Length	<b>Entire report range</b> —Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.
	<b>Thirty (30) minute intervals</b> —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.
	<b>Sixty (60) minute intervals</b> —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.
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 List	To report on a specific resource name or names, obtain the list of resource names and profile IDs as follows:
	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.
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.

#### Table 61: Reason Report by Agent Grouping Filter Parameters

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 62: Reason Report by Reason Grouping Query Design, on page 189 shows how the information in the Reason Report by Reason Grouping report is obtained or calculated.

Table 63: Reason Report by Reason Grouping Filter Parameters, on page 191 explains how the Reason Report by Reason Grouping report filter parameters obtain data.

Table 62: 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	For the agents specified, obtain the Resource.resourceID and Resource.profileID as described in Table 26: Agent Not Ready Reason Code Summary Report Filter Parameter, on page 135. Agent Name is stored in Resource.resourceName.
	<b>Note</b> 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.resource.Name 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.
Agent Login ID	Login user ID of the agent. It is obtained from TextAgentStateDetail table.
Agent 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.
Total Logged-in	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).
	The calculation of the logged-in time for a single session depends on the agent activity, as follows:
	• 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 – <b>Interval Start Time</b>
	• An agent logs in during the interval and logs out after the interval:
	Total Logged-in Time = <b>Interval End Time</b> – login time
	If an agent has multiple login sessions during the interval, this field displays the sum of the time spent in each login session.

Field	Explanation
Duration	Time agent goes out of the state specified in the Agent State field – Time Agent goes to Agent State
	The calculation of the duration depends on the agent activity, as follows:
	• 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 63: Reason Report by Reason Grouping Filter Parameters

Field	Explanation
Interval Length	<b>Entire report range</b> —Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period.
	<b>Thirty (30) minute intervals</b> —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.
	<b>Sixty (60) minute intervals</b> —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.
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.

Field	Explanation
Agent List	To report on a specific resource name or names, obtain the list of resource names and profile IDs as follows:
	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.
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 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.
Reasons	To report on a specific reason or reasons, obtain the list of reason labels or reason codes and profile IDs 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.

### **Priority Summary Activity Report**

The Priority Summary Activity report contains one row per call priority.

Table 64: Priority Summary Activity Report Query Design, on page 193 shows how the information in the Priority Summary Activity report is obtained or calculated.

Table 65: Priority Summary Activity Report Filter Parameter, on page 193 explains how the Priority Summary Activity report filter parameter obtains data.

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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	Total number of calls with different original and final call priorities divided by the number of days in the report period.
Original and Final Priorities	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 64: Priority Summary Activity Report Query Design

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### Table 65: 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 66: Traffic Analysis Report Query Design, on page 194 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.

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	<ul> <li>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.</li> <li>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.</li> </ul>
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 67: Agent Outbound Campaign Summary Report Query Design, on page 195 shows how the information in the Agent Outbound Campaign Summary report is obtained or calculated.

Table 68: Agent Outbound Campaign Summary Report Filter Parameters, on page 196 explains how the Agent Outbound Campaign Summary report filter parameters obtain data.

Table 67: 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 68: Agent Outbound Campaign Summary Report Filter Parameters

Filter parameter	Explanation
	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 Outbound CCDR Report

The Agent Outbound CCDR 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 69: Agent Outbound CCDR Report Query Design, on page 197 shows how the information in the Agent Outbound CCDR report is obtained or calculated.

Table 70: Agent Outbound CCDR Report Filter Parameter, on page 198 explains how the Agent Outbound CCDR report filter parameter obtains data.

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	If CCD.originatorType is Device (2) or Unknown (3), obtained from CCD.originatorDN.
(DN = directory number)	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), jCCD.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 69: Agent Outbound CCDR Report Query Design

#### Table 70: Agent Outbound CCDR Report Filter Parameter

Filter parameter	Explanation
UCCX Agent Campaign	Obtained from Campaign.campaignName.
List	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 71: Agent Outbound Half Hourly Report Query Design, on page 198 shows how the information in the Agent Outbound Half Hourly report is obtained or calculated.

Table 72: Agent Outbound Half Hourly Report Filter Parameters, on page 198 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 108.

#### Table 71: 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 72: 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 73: Outbound Agent Detail Performance Report Query Design, on page 199 shows how the information in the Outbound Agent Detail Performance report is obtained or calculated.

Table 74: Outbound Agent Detail Performance Report Filter Parameters, on page 199 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 108.

Table 73: 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 74: 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	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.

# **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 75: Outbound Campaign Summary Report Query Design, on page 201 shows how the information in the Outbound Campaign Summary report is obtained or calculated.

Table 76: Outbound Campaign Summary Report Filter Parameter, on page 202 explains how the Outbound Campaign Summary report filter parameter obtains data.

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).

#### Table 75: Outbound Campaign Summary Report Query Design

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 76: 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 CiscoUnified Outbound Dialer (Cisco Unified OUTD) feature.

Table 77: Preview Outbound Agent Detail Performance Report Query Design, on page 203 shows how the information in the Preview Outbound Agent Detail Performance report is obtained or calculated.

Table 78: Preview Outbound Agent Detail Performance Report Filter Parameters, on page 203 explains how the Preview Outbound Agent Detail Performance report filter parameters obtain data.

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 78: 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 79: Application Performance Analysis Report Query Design, on page 204 shows how the information in the Application Performance Analysis report is obtained or calculated.

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.

Table 79: Application Performance Analysis Report Query Design

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 80: Application Summary Report Query Design, on page 205 shows how the information in the Application Summary report is obtained or calculated.

Table 81: Aborted and Rejected Call Detail Report Filter Parameter, on page 207 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 108.

Field	Explanation						
Application Name	otained from CCD.applicationName.						
Called Number	btained 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).						

#### Table 80: Application Summary Report Query Design

Field	Explanation					
Avg Speed Answer	This field includes only calls connected to agents.					
	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).					
	To calculate total queue time, add the values stored in CRD.queueTime.					
	To obtain total ring time, add the values stored in ACD.ringTime.					
	To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.					
	Average speed to answer is calculated as:					
	total queue time / number of calls connected to agents.					
	If number of calls connected to agents is zero for this application, this field is zero.					
Avg Talk Time	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).					
	To obtain total talk time, add up the values stored in ACD.talkTime.					
	To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.					
	Average talk time is calculated as:					
	Total talk time / number of calls connected to agents.					
	If number of calls connected to agents is zero for this application, this field is zero.					
Avg Work Time	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).					
	To obtain total work time, add up the values stored in ACD.workTime.					
	To obtain the number of calls connected to agents, count the number of ACD records in the result set from the join.					
	Average work time is calculated as:					
	Total work time / number of calls connected to agents.					
	If number of calls connected to agents is zero for this application, this field is zero.					
Calls Abandoned	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 1 (abandoned), 4 (aborted), or 5 or greater (rejected).					

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Field	Explanation
Avg Abandon Time	The combination of CCD.applicationName and CCD.origCalledNumber uniquely identifies an application.
	For each application, calculate the sum of the values in CCD.connectTime where the CCD.contactDispostion is 1 (abandoned), 4 (aborted), or 5 or greater (rejected) to obtain the total abandon time.
	If Calls Abandoned is not zero, this field is calculated as:
	Total abandon time / Calls Abandoned.
	If Calls Abandoned is zero, this field is zero.

#### Table 81: 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 82: Wrap-Up Reasons for Chat and Email Query Design, on page 207 shows how the information in the Wrap-Up Reasons for Chat and Email report is obtained or calculated.

Table 83: Wrap-Up Reasons for Chat and Email Filter Parameter, on page 208 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 108.

Table 82: 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	Wrap-Up Reason for a category which meets the following criteria:
	<ul> <li>textagentwrapupdetail.reasonid = wrapupreasons.reasonid</li> </ul>
	• 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:
	• 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:
	• 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 83: 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 84: Multichannel Agent Summary Report Query Design, on page 209 shows how the information in the Multichannel Agent Summary Report is obtained or calculated.

Table 84: Multichannel Agent Summary Report Query Design, on page 209 explains how the Multichannel Agent Summary Report filter parameter obtains data.

Field	Explanation
Agent Name	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.
	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.
	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.
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:
	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	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.
Inbound Calls—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.

#### Table 84: Multichannel Agent Summary Report Query Design

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	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.
	The Disposition values are:
	• 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 85: 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 86: 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 87:

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.