FAQs

Overview

This chapter presents reporting-related Frequently Asked Questions (FAQs).

The following abbreviations are used for database records:

- ACDR—AgentConnectionDetail record in the AgentConnectionDetail table

- ASDR—AgentStateDetail record in the AgentStateDetail table

- CCDR—ContactCallDetail record in the ContactCallDetail table

- CQDR—ContactQueueDetail record in the ContactQueueDetail table

- CRDR—ContactRoutingDetail record in the ContactRoutingDetail table

General

Q. How is the number of days calculated in Historical reports?

A. The number of days is calculated by an SQL function that counts the number of calendar days. Fractions of a day are counted as an entire day. This table provides an example.

Time Range	Number of Days
10 a.m. (1000) on 5/15 to 10 a.m. (1000) on 5/16	Two days
12:00:00 a.m. (0000) on 5/15 to 11:59:59 p.m. (1159:59) on 5/15	One day
12:00:00 a.m. (0000) on 5/15 to 12:00:00 a.m. (0000) on 5/16	Two days

Q. Which reason codes are supported for reports?

A. When reason codes are configured, agents enter the reason codes when explicitly transitioning to Logout state or to Not Ready state. These reason codes are stored in the ASDR.

The following reports provide the details:

- **Agent Login Logout Activity Report**—Presents the logout reason code in detail.

- **Agent Not Ready Reason Code Summary Report**—Presents summary information for the Not Ready reason code.

- **Agent State Detail Report**—Presents Logout reason code and Not Ready reason code in detail.

Note Not Ready codes are systemwide and cannot be configured to be hidden from certain agents.

In the following cases, reason codes are not stored. In these cases, the reasonCode field in the ASDR contains a value of –1.

Case	Agent State in ASDR
Browser crashes	Logout
Agent logs out when logged in to another computer or phone	Logout
Normal agent login	Not Ready
Agent receives an IVR call on the ICD extension, fails to answer, and that results in RNA	Not Ready
Agent goes off-hook on ICD extension to place a call	Not Ready
Agent fails to answer an ACD call within the specified timeout period	Not Ready

Case	Agent State in ASDR
Agent does not answer an ICD call	Not Ready
Agent's phone goes down	Not Ready or Logout
Supervisor changes the agent's state from the Cisco Finesse Supervisor Desktop	Not Ready or Logout

Q. Which database is used for Unified CCX?

A. Unified CCX uses IBM Informix Dynamic Server (IDS) database.

Q. Why is the **Contact Service Queue Service Level Report**, which is available in previous versions of Unified CCX, no longer available in the current version?

A. The information that was in this report is distributed among the *Contact Service Queue Service Level Priority Summary Report*, the *Contact Service Queue Activity Report*, and the *Contact Service Queue Call Distribution Summary Report*.

Q. Why is the **Skill Routing Activity Report**, which is available in previous versions of Unified CCX, no longer available in the current version?

A. The information that was in this report is available in the *Contact Service Queue Activity Report* or in the *Contact Service Queue Activity Report* when filtered to show Skill Groups only.

Q. What can cause more than one record to have the same node ID, session ID, and sequence number?

A. In the following scenarios, more than one record can have the same node ID, session ID, and sequence number:

- A call is conferenced to a CTI route point.

- A call rings at an agent's phone, but the agent does not pick up. The call is categorized as Ring No Answer (RNA) to the agent.

Q. Why are some of the selected filter parameters not included in the generated report?

A. The length of each parameter to the report must not exceed 800 characters. If the selected parameters exceed this value, then the database server truncates the parameter to the first 800 characters.

The stored procedure receives only the first 800 characters of the chosen parameters; the rest are not included in the generated report.

Q. How can I export historical data to my own data warehouse?

A. Use third-party database administration tools such as SQuirreL SQL Client or AGS Server Studio to export Unified CCX historical data to your own data warehouse. Use `uccxhruser` as the username to connect to db_cra database.

Q. Can I connect the embedded Unified Intelligence Center to 3rd party databases or a different Unified CCX / Unified IP-IVR deployment for reporting purpose?

A. No, it is not supported with embedded Unified Intelligence Center but is supported with standalone Unified Intelligence Center.

Q. Can I use 3rd party software to access Unified CCX IBM Informix Dynamic Server (IDS) database for reporting purpose?

A. Yes, but it should be used with discretion keeping in mind the impact on the system.

Availability of Reporting Data

Q. Which report shows calls per hour per CSQ? For example: `7:00 a.m. to 8:00 a.m., 25 calls; 8:00 a.m. to 9:00 a.m., 35 calls; and 9:00 a.m. to 10:00 a.m., 34 calls.`

A. The **Contact Service Queue Activity Report by Interval** shows this information. To generate this report for one-hour intervals, set its Interval Length filter parameter to sixty (60) minute intervals.

Q. How can I determine telephone numbers of calling parties?

A. The Call ANI fields on the **Abandoned Call Detail Activity Report** and the **Agent Detail Report** show this information.

Q. How is the following scenario reported? A call is in queue and it is routed to an available agent who does not answer the call, so the call is redirected to another agent.

A. The scenario appears in the following reports:

- The **Agent Detail Report** shows two lines:

  - For the agent who did not answer the call—Ring time is greater than 0; talk time, hold time, and work time are each zero.

  - For the agent who answered the call—Talk time is greater than 0.

- The **Agent Summary Report** shows the following:

  - The call was presented to the agent who did not answer the call, but was not handled by that agent.

  - The call was presented to and handled by the agent who answered the call.

- The **CSQ Agent Summary Report** shows the call as Ring No Answer (RNA) for the first agent.

Q. How can I determine the start time and the end time for a call with multiple legs?

A. The following fields identify the various legs of a call:

- The sessionID fields in the Unified CCX database tables contain the same value for a particular call. These fields identify all the database records that relate to a call.

- The sessionSeqNum fields in the Unified CCX database tables start at 0 and increment by 1 for each leg of a call.

- The startDateTime field of the CCDR stores the start time of a call. The sessionSeqNum is equal to 0, and the sessionID value identifies the call.

- The endDateTime field of the CCDR with the highest sessionSeqNum and the same sessionID value stores the end time of a call.

Note The way in which sessionID and sessionSeqNum values are written to the database depend on the call scenario. For more information and examples, see the "Interpret Database Records" section of *Cisco Unified Contact Center Express Report Developer Guide*, located at: https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_installation_and_configuration_guides_list.html.

Q. Which report displays information on menu choices?

A. You can create a custom report to show menu choices. Use the **Set Session Info** step in a workflow to store the custom variables entered by the callers. The contents of such custom variables are stored in the customVariable fields in the CCDR. Use the information in the CCDR customVariable fields when you create custom reports.

The following is an example of how to prepare a report to show information for a menu with three choices (1, 2, and 3):

1. For a workflow, define a variable of type **session** and name it **this_session**.

2. Place a **Get Contact Info** step at the beginning of the workflow.

3. Set the **Session** attribute to variable **this_session**.

4. Define a **Menu** step that has three branches and place a **Set Enterprise Call Info** step in each branch.

5. In the **General** tab of the **Set Enterprise Call Info** step, click **Add**.

6. In the branch for caller-choice 1, enter **1** in the **Value** field, and choose **Call.PeripheralVariable1** from the **Name** drop-down list.

7. In the branch for caller-choice 2, enter **2** in the **Value** field, and choose **Call.PeripheralVariable2** from the **Name** drop-down list.

8. In the branch for caller-choice 3, enter **3** in the **Value** field, and choose **Call.PeripheralVariable3** from the **Name** drop-down list.

9. Create a custom report that will show the values of the customVariable1, customVariable2, and customVariable3 fields in the CCDR.

If calls are to be transferred between workflows and multiple menu choices can be made for a single session, take care to preserve previously entered menu choices. For example, place a **Get Session Info** step at the beginning of the workflow. If the _ccdrVar1 variable is null, there were no previous entries.

If it is not null, when you add a new choice, determine a format for associating a menu choice to a sequence number. In this way, you will be able to prepare accurate reports.

Q. If a Unified CCX system does not include a license for Historical reports, is data still written to the Unified CCX databases?

A. Yes.

Q. Which report has information on agent Service Level Agreements (SLAs), such as queue time threshold (caution, warning) and agent talk time SLA (caution, warning)?

A. There are no reports available, but the Unified CCX databases store this data. You can create a custom report to show this information.

Q. Which report has information about calls that were transferred by agents to another Contact Service Queue?

A. The **Detailed Call CSQ Agent Report** has information about transferred calls. The session ID remains the same for a transferred call, but the session sequence number increments by 1. This report also shows the agent who handled each call, and the CSQ to which the call was routed.

Q. A record that contains data is stored in memory and is ready to be written to the Unified CCX database, when is it written to the database?

A. • Call records (CCDR, CRDR, CQDR) are written after each call is completed.

> **Note** CCDRs are written after the agent leaves Work state, when applicable. Otherwise, they are written after the call ends.

  • Agent state records (ASDR) are written after agents change state.

  • Agent connection records (ACDR) are written when an agent leaves Work state or after the call completes if the agent does not go to Work state.

Q. Are there summary tables for daily data that contain the data for a specific day? Are these tables used to create weekly data tables? Are weekly data tables used to create monthly data tables?

A. The system stores detailed data. It does not summarize detailed tables to create daily, weekly, or monthly tables.

Q. Which monthly report shows statistics for service levels?

A. The **Contact Service Queue Activity by CSQ** or **Contact Service Queue Activity by Interval** shows information about service levels provided to handled calls. Schedule the **Contact Service Queue Activity by CSQ** or **Contact Service Queue Activity by Interval** to run monthly.

Q. Can I create custom Historical reports?

A. Yes. For more information about creating custom reports, see the "Create Custom Reports" section of *Cisco Unified Contact Center Express Report Developer Guide*, located at:

https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_installation_and_configuration_guides_list.html.

Data Reconciliation Among Reports

Q. Why does the **Detailed Call by Call CCDR Report** show more handled calls than the CSQ reports?

A. The CSQ reports show calls that are handled by agents after the calls are queued for a CSQ. The **Detailed Call by Call CCDR Report** shows these calls and also the calls that are marked as handled by a workflow script before they are queued for a CSQ.

Q. Why does the **Application Performance Analysis Report** show more presented, handled, and abandoned calls than the CSQ Reports?

A. The following are the two reasons:

- An incoming call can invoke multiple applications because each leg of the call invokes a different application. The call is counted once for each application.

- Calls that are hung up before being queued for any CSQ are marked as handled or abandoned depending on the workflow, and also depending on when they are hung up. Such calls do not have CRDRs or ACDRs and will not be counted for CSQ reports or agent reports. These calls will be counted for the **Application Performance Analysis Report** because the calls entered an application.

Q. Why does the **Agent Summary Report** show more handled calls than the CSQ reports?

A. Conference calls to agents result in one CRDR that has multiple ACDRs. The **Agent Summary Report** counts the number of ACDRs, but the CSQ reports count the number of CRDRs.

Q. How can I identify conference calls?

A. To identify conference calls, search for ACDRs with the same session ID and sequence number, with different agent IDs, and with talk time greater than 0.

Q. How to identify calls that were presented to an agent, but were not answered?

A. To identify calls that were not answered by an agent, search for ACDRs with talk time equal to zero. The **CSQ Agent Summary Report** shows the total number of Ring No Answer (RNA) calls for each agent and for each CSQ. In the **Agent Summary Report**, the number of Ring No Answer calls = Calls Presented − Calls Handled.

Q. Why is the total number of calls in the Calls Handled field in the **Contact Service Queue Activity Report** lower than the number in the Calls Handled Field in the **Agent Summary Report**?

A. The CSQ reports, including the **Contact Service Queue Activity Report** show activity at the CSQ level. The agent reports, including the **Agent Summary Report**, show activity at the agent level.

For handled calls, the **Agent Summary Report** counts the ACDRs with non-zero talk time (to exclude unanswered calls), and the **Contact Service Queue Activity Report** counts CQDRs with disposition equal to 2 (handled).

The number of such ACDRs may be larger than the number of such CQDRs for any of the following reasons:

- If you choose all the agents for the **Agent Summary Report**, but choose only one CSQ for the **Contact Service Queue Activity Report**, the **Agent Summary Report** will show more handled calls.

- There may be conference calls that involve multiple agents. In such cases, one CQDR has multiple associated ACDRs. An associated ACDR has the same sessionID and sessionSeqNum as the CQDR.

- Agent-to-Agent transfers will result in more ACDRs than CQDRs. If Agent1 picks up a call from CSQ1, one CQDR and one ACDR are created. When Agent1 transfers the call to Agent2, another ACDR is created, but no CQDR is created.

Q. Why do the **Agent Summary Report**, **Contact Service Queue Activity Report**, and **Application Performance Analysis Report** show different values for Calls Presented field?

A. The **Application Performance Analysis Report** shows the highest number of presented calls for the following reasons:

- An incoming call can invoke multiple applications, because each leg of the call can invoke a different application. The same call is counted once for each application.

- Some calls are terminated before they are queued. Such calls do not have CRDRs (because they are not queued) and are not counted for the **Contact Service Queue Activity Report**. These calls do not have ACDRs as well and are not counted on the **Agent Summary Report**.

The **Agent Summary Report** shows more presented calls than the **Contact Service Queue Activity Report** for either of the following reasons:

- The same call is queued to a certain CSQ, but is presented to multiple agents within the CSQ (because an agent did not answer). Such calls are counted once for the **Contact Service Queue Activity Report**, but counted once for each agent involved for the **Agent Summary Report**.

- There are conference calls that involved multiple agents.

Q. Why is the number of abandoned calls in the **Abandoned Call Detail Activity Report** higher than the number of abandoned calls in the **Contact Service Queue Activity Report**?

A. Some calls shown in the **Abandoned Call Detail Activity Report** are abandoned before they are routed to a CSQ (these calls have a blank Call Routed CSQ field), so they are not counted for any CSQ. The **Contact Service Queue Activity Report** shows calls that are abandoned while they are queued for a CSQ.

Q. Why is there a difference in maximum handle time between the **Contact Service Queue Activity Report** and the **Agent Summary Report**? For example, if Agent1 belongs only to CSQ1 and CSQ1 does not include any other agent. Why is the Max Handle Time field for Agent1 on the **Contact Service Queue Activity Report** different than the Handle Time—Max field for Agent1 on the **Agent Summary Report**?

A. Consider this example: An agent from another CSQ handled the call, in conference with Agent1, and then dropped out. In addition, Agent1 continued the call for longer than the longest talk time of the any call that the agent handled for CSQ1. In this case, the maximum Handle Time appears for Agent1 on the **Agent Summary Report**. It does not appear for CSQ1 on the **Contact Service Queue Activity Report** because Agent1 was conferenced in to the call, but the call was initially handled by another CSQ.

Q. If a call is queued in CSQ1 and CSQ2, and handled by an agent-based routing agent, the CSQ Unified CCX Stats real-time report shows a value of 1 for Contacts Dequeued for both CSQ1 and CSQ2, but the **Contact Service Queue Activity Report** shows a value of 0 for Calls dequeued for both CSQ1 and CSQ2, why is this so?

A. In this scenario, there are three CQDRs:

1. CQDR for CSQ1—With a disposition of Handled_by_other (5) (or of 4 if there is a dequeue step).

2. CQDR for CSQ2—With a disposition of Handled_by_other (5) (or of 4 if there is a dequeue step).

3. CQDR for agent—Who handled call through agent-based routing, with a disposition of Handled (2).

The **Contact Service Queue Activity Report** shows dispositions 4 and 5 as Calls Handled by Other, so it shows one call as handled by other for both CSQ1 and CSQ2. Calls Dequeued is 0 for both the CSQs (disposition 3 is reported as dequeued on the report).

The CSQ Unified CCX Stats real-time report counts calls marked as Handled_by_other as dequeued calls. In this report, Contacts Dequeued includes calls that were dequeued and handled by another CSQ, by an agent, or by a script.

Q. Why are the Calls Dequeued field values different in the **Contact Service Queue Activity Report by Interval** or **Contact Service Queue Activity by CSQ Report** and the **Contact Service Queue Activity Report**?

A.
- In the **Contact Service Queue Activity Report by Interval** and **Contact Service Queue Activity by CSQ Report** :

  Calls Dequeued = Calls dequeued via the dequeue step + calls handled by workflow script + calls handled by another CSQ.

- In the **Contact Service Queue Activity Report**:

  - Calls Dequeued = Calls dequeued via dequeue step

  - Calls handled by other = calls handled by workflow script + calls handled by another CSQ

Q. Why does the Talk Time field in the **Agent Summary Report** show 0, but the Talk Time field in the **Agent Detail Report** shows another value?

A. The **Agent Summary Report** shows ACD calls only, but the **Agent Detail Report** shows Unified CCX and Cisco Unified IP IVR calls. The calls in question are IVR calls, so they do not appear on **Agent Summary Report**.

Q. If an agent uses a unique reason code when going to Not Ready state to make outbound calls, why does the **Agent Not Ready Reason Code Summary Report** show a different duration for that reason code compared with the **Agent Detail Report** that shows the duration of outbound calls for the agent?

A. If the agent does not spend the entire duration of time in Not Ready state with the unique reason code making outbound calls, then the sum of the duration of outbound calls will be less than the duration that is spent in Not Ready state with the unique reason code.

Abandoned Call Detail Activity Report

Q. How can I correlate multiple abandoned call legs that belong to the same call?

A. Match the call start time in the **Abandoned Call Detail Activity Report** with the call start time in the **Detailed Call by Call CCDR Report**, and look up the session ID and session sequence number in the

Detailed Call by Call CCDR Report. Different call legs that belong to the same call have the same session ID, but different session sequence numbers.

Q. Why do the Initial Call Priority field or the Final Call Priority field show n/a for a call?

A. The call was abandoned before it was assigned a priority.

Q. What does it mean when the Agent Name field is blank?

A. The call was abandoned before it was routed to an agent.

Q. What does it mean when the Agent Name field contains a value?

A. The call was routed to an agent, the agent did not answer, and the caller hung up.

Q. Why is there a mismatch between the number of abandoned calls that are shown on the **Abandoned Call Detail Activity Report** and the number of calls that are shown on the **Contact Service Queue Activity Report**?

A. The values can differ because the **Contact Service Queue Activity Report** may mark a call as dequeued, while a Contact Call Detail record marks the call as abandoned. For example, consider the following workflow:

```
StartAccept
Prompt
Select Resource
-Connect
-Queue
--Play Prompt (Prompt2)
--Dequeue
--Play Prompt (Prompt3)
End
```

Scenario	Contact Service Queue Activity Report	Abandoned Call Detail Activity Report
Call is abandoned during Prompt2 or Prompt3	The Contact Queue Detail record marks the call as dequeued, but not as abandoned from any queue. So, the **Contact Service Queue Activity Report** shows the call as dequeued from all CSQs to which the call was routed.	The Contact Call Detail record marks the call as abandoned. So, the **Abandoned Call Detail Activity Report** shows the call as abandoned from all CSQs to which the call was routed.
Call gets aborted after being in the queue	Call is marked as aborted in the Contact Call Detail record. So, the CSQ reports display more abandoned calls than the **Abandoned Call Detail Activity Report**.	Call is marked as dequeued (if the call was dequeued before aborting) or abandoned in Contact Queue Detail record.

Q. When an agent transfers a call to another agent and the caller abandons the call, why is the call not displayed in the **Abandoned Call Detail Activity Report**?

A. When an agent transfers a call to another agent, and the caller abandons the call before the call is answered by the second agent, then the first phase of the call is marked as handled. The abandonment of the second

phase is not displayed in the **Abandoned Detail Call Activity Report**. This information cannot be seen in any other report.

Agent Call Summary Report

Q. Are the ACD—Transfer In and ACD—Transfer Out calls included for calculating Inbound ACD—Total field?

A. Yes, these calls are included for calculating the Inbound ACD—Total field.

Q. Why is the total number of inbound calls different than the number of calls handled on the **Contact Service Queue Activity by CSQ**?

A. The number of calls can differ for the following reasons:

- The Agent Call Summary Report shows calls that are presented to the agents, and the **Contact Service Queue Activity by CSQ** shows calls that are presented to the CSQs. If there are agents included in the Agent Call Summary Report who do not belong to the CSQs in the **Contact Service Queue Activity by CSQ**, then the **Agent Call Summary Report** shows more calls.

- If agent-based routing is configured, calls can go to agents directly, without going through a CSQ. In this case, the **Agent Call Summary Report** shows more calls.

- The **Agent Call Summary Report** can include transferred ACD calls. For example, if a call is queued for CSQ1, handled by Agent1, and transferred by Agent1 to Agent2 (without going through a CSQ), then one call is shown as handled on the **Contact Service Queue Activity Report** (through CSQ1 by Agent1). The same is shown twice on the **Agent Call Summary Report**—one as handled by Agent1 (through CSQ1), another as handled by Agent2 (not through a CSQ but as a direct transfer from Agent2).

Agent Detail Report

Q. Why are the Hold Time and the Work Time fields blank for a call?

A. The call was not an ACD call. (IVR calls include Agent-to-Agent calls and external calls made by an agent.) The Unified CCX database does not record hold time and work time for IVR calls.

Q. Why is Duration not equal to Talk Time + Hold Time + Work Time?

A. The value in the duration field is calculated as follows:

call end time – call start time

The call start time is when the call rings at the agent extension. The call end time is when the agent leaves Work state. Therefore, the call duration is equal to ring time + talk time + hold time + work time.

Q. How can I identify IVR calls?

A. The Hold Time and the Work Time fields are blank in the **Agent Detail Report** for IVR calls.

Agent Login Logout Activity Report

Q. Why does a less-than sign (<) precede the value in the Login Time field or a greater-than sign (>) precede the value in the Logout Time field?

A. A less-than sign (<) indicates that the agent logged in before the report start time. A greater-than sign (>) indicates that the agent logged out after the report end time.

For example, if the report start time is 8:00 a.m. (0800) and the report end time is 6:00 p.m. (1800):

- The agent logged in at 7:45 a.m. (0745), the Login Time field will show < 8am (or < 0800).

- If the agent logged out at 6:30 p.m. (1830), the Logout Time field will show > 6pm (or > 1800).

Agent State Summary by Agent Report

Q. Why do I see two rows for the agent with the same values?

A. The report template defines the view of the report. There are two kinds of summary rows (darker background) that are defined in the template. The summary row that follows after each agent summarizes details of the agent. The summary row that appears at the end of the report summarizes details of all the agents.

If there is a single row for the agent, then the summary row of the agent will have the same details as the above row.

Agent Summary Report

Q. How is the Average Logged In Time field calculated?

A. This value is calculated as the total logged-in time divided by the number of login sessions.

For example, if an agent logs in at 8:00 a.m. (0800) and logs out at 8:30a.m. (0830), logs in again at 9:15 a.m. (0915) and logs out at 10:00 a.m. (1000), then there are two login sessions. The first session lasts 30 minutes and the second session lasts 45 minutes. The average logged-in time is (30+45)/2 = 37.5 minutes.

Q. How is the Handle Time field calculated?

A. Handle time = Talk time + Hold time + Work time.

Q. How is the Idle Time—Avg field calculated?

A. This value is calculated as the total idle time divided by the number of idle sessions.

For example, if an agent goes to Not Ready state at 10:00 a.m. (1000) and goes to Ready state at 10:15 a.m. (1015), goes to Not Ready state at 11:00 a.m. (1100) and goes to Ready state at 11:05 a.m (1105),

then there are two idle sessions. The first session lasts 15 minutes and the second session lasts 5 minutes. The average idle time is (15+5)/2 = 10 minutes.

Q. Why do not the values of Talk Time—Avg and Talk Time—Max fields in the **Agent Summary Report** match the values of Talk Time field in the **Agent State Summary by Agent Report** or the **Agent State Summary by Interval Report**?

A. The talk time information in the **Agent Summary Report** comes from the talkTime field in the AgentConnectionDetail table. This value is the time that an agent spent on an incoming ACD call. The talk time information in the **Agent State Summary by Agent Report** or the **Agent State Summary by Interval Report** comes from AgentStateDetail table. These values show the time that an agent spent in the Talk state. These values will be different if the agent placed ACD calls on hold during the reporting period.

Q. Does the **Agent Summary Report** show information for IVR calls?

A. The **Agent Summary Report** shows information for ACD calls only. The **Agent Detail Report** shows information for Unified CCX and Cisco Unified IP IVR calls.

Application Performance Analysis Report

Q. What does it mean when the Application ID field shows the value –1 and the Application Name field is empty?

A. The Application ID field is –1, and the Application Name field is empty for Agent-to-Agent calls, IVR calls, Agent-to-Agent transfer/conference consult legs, or any other call that is not placed to a Unified CCX Route Point or associated with an application.

Q. Why is the value in the Calls Presented field lower than the total number of calls on the **Detailed Call by Call CCDR Report** for the same report period?

A. The **Application Performance Analysis Report** counts only incoming calls. The **Detailed Call by Call CCDR Report** counts incoming calls, outgoing calls (for example, outbound calls made by agents), and internal calls (for example, Agent-to-Agent consult calls).

Q. Why does the **Application Performance Analysis Report** show more abandoned calls than the **Contact Service Queue Activity Report** for the same report period?

A. The **Contact Service Queue Activity Report** includes only abandoned ACD calls. This report counts an ACD call as abandoned if the caller hangs up while queued for a CSQ or CSQs.

The **Application Performance Analysis Report** includes abandoned ACD calls and abandoned IVR calls. This report counts a call as abandoned if the call ends before it is answered by an agent or before it is marked as handled by a workflow.

Call Custom Variables Report

Q. What are the values from Custom Variable 1 through Custom Variable 10 fields?

A. These fields show the values of the custom variables that are specified in a workflow.

For example, a workflow may designate variable1 as the menu option that the caller chooses, and designate variable2 as the account number that the caller enters. In this case, Custom Variable 1 would show the

option value (such as 2) that the caller entered, and Custom Variable 2 would show the account number that was entered.

Common Skill CSQ Activity Report

Q. **Common Skill CSQ Activity Report** is similar to other CSQ reports—how is it useful?

A. This report provides additional information for multiple CSQs that are configured with the same call skill, but with different competence levels. An incoming call may be queued for the CSQ with the lowest-competence level. If no agent is available for a certain period, the call is queued for the next higher-competence level.

The summary line in the report displays the summarized statistics for the group of CSQs configured with common skills. A group of CSQs that is configured in this manner is called a logical CSQ.

Contact Service Queue Activity Report

Q. How are average queue time and maximum queue time calculated?

A. The average queue time for a CSQ is calculated as the sum of the queue times for all the calls presented divided by the number of calls presented. The maximum queue time for a CSQ is the longest queue time for a single call among the calls presented.

The individual queue time for each CSQ is stored in the CQDR table. For example, assume that an incoming call is queued for CSQ1 for 5 minutes, queued for CSQ2 for 10 minutes, and then it is handled by CSQ1. The queue time recorded for CSQ1 in the CQDR table is 5 minutes, and for CSQ2 is 10 minutes.

Q. How are average calls abandoned (Avg Abandon Per Day field) and maximum calls abandoned (Max Abandon Per Day field) calculated?

A. Average calls abandoned for a CSQ is an average value per day. It is calculated as the total number of calls abandoned for the CSQ divided by the number of days in the report period.

Maximum calls abandoned for a CSQ is calculated by determining the number of calls abandoned for each day in the report period and selecting the largest of these values.

Q. The system receives a call, queues it, and plays a prompt giving the caller the option to press 1 to leave a message. The caller presses 1 and leaves a message. In this scenario, is the call counted as abandoned or as handled?

A. By default, the call is counted as abandoned instead of handled, because it did not connect to an agent. However, if the workflow is designed to mark a call as handled after a caller leaves a message, the call will be counted as handled.

Q. If a workflow gives callers the option to transfer to a voice messaging system, is there a way to track the number of callers that make this transfer and leave a message?

A. You can design a workflow to store a caller's key input in one of the custom variables in the ContactCallDetail table. You can either generate the **Call Custom Variables Report** and manually count the rows that contain the desired information or you can create a custom report to provide this information.

Q. Will calls presented always equal calls handled + calls abandoned?

A. No. Calls presented = calls handled + calls abandoned + calls dequeued + calls handled by others.

"Calls handled" are the calls that were connected to an agent in a particular CSQ. "Calls handled by others" are the calls that were handled by some workflow in a script, and the calls that were queued for multiple CSQs and then handled by one of the other CSQs.

Q. Can the **Contact Service Queue Activity Report** show hourly data? And can hourly reports be generated automatically for each hour of each day?

A. To show hourly data for each day, schedule daily reports either for **Contact Service Queue Activity by CSQ Report** or for **Contact Service Queue Activity Report by Interval**. Set the Interval Length to 60 minutes. This setting will provide one report each day, divided into one-hour intervals.

Separate hourly reports are not available, but with the interval length set to 60 minutes, a daily report will display 24 intervals, one for each hour of the day.

Contact Service Queue Activity by CSQ Report

Q. Why does the same CSQ appear twice in the **Contact Service Queue Activity by CSQ Report** (and other CSQ reports)?

A. A CSQ has many attributes, including CSQ name, service level, resource selection criterion, and auto work. Some attributes, such as CSQ name and service level, are displayed in the report. Other attributes are not displayed in the report. However, changing any attribute of the CSQ causes a new line to show in the report. For example:

- If the service level is changed from 10 to 25, two lines of the same CSQ will show in the report. One line will show the old service level value and another line will show the new service level value.

- If Auto Work is changed from 1 to 0, two lines of the same CSQ will be shown in the report. As the Auto Work setting does not appear in the report, the same CSQ will appear twice.

Q. How do these four fields differ—Percentage of Service Level Met—Only Handled, Percentage of Service Level Met—With No Abandoned Calls, Percentage of Service Level Met—With Abandoned Calls Counted Positively, and Percentage of Service Level Met—With Abandoned Calls Counted Negatively?

A. A call is categorized as handled if it is either answered by an agent or marked as handled by a workflow. Handled calls can be divided into the following categories:

- Handled within service level

- Handled after service level

A call is categorized as abandoned if the call disconnects before an agent answers. Abandoned calls can be divided into the following categories:

- Abandoned within service level

- Abandoned after service level

Field	Description	Calculation
Percentage of Service Level Met—Only Handled	This field shows only handled calls. It does not include abandoned calls. This field shows the percentage of handled calls that were handled within the service level. The remaining fields differ in how they account for abandoned calls: not counted, meeting service level, or not meeting service level.	(Number of calls handled within service level / Number of calls handled) * 100%
Percentage of Service Level Met—With No Abandoned Calls	This field shows the percentage of presented calls (calls routed to a CSQ), not counting abandoned calls, that were handled within the service level. It does not include calls that were abandoned within the service level. This value is always less than or equal to the value in the Percentage of Service Level Met—Only Handled field	(Number of calls handled within service level / (Number of calls presented – Number of calls abandoned within service level)) * 100%
Percentage of Service Level Met—With Abandoned Calls Counted Positively	The field shows the calls that are abandoned within the service level as meeting the service level. It shows the percentage of presented calls that were handled or abandoned within the service level.	((Number of calls handled within service level + Number of calls abandoned within service level) / Number of calls presented) * 100%
Percentage of Service Level Met—With Abandoned Calls Counted Negatively	The field shows the calls that are abandoned within the service level as not meeting the service level. It shows the percentage of presented calls that were handled within the service level. This value is less than or equal to the Percentage of Service Level Met—With Abandoned Calls Counted Positively field.	(Number of calls handled within service level / Number of calls presented) * 100%

Q. How is an abandoned call counted if it is queued for multiple CSQs?

A. If a call is queued for multiple CSQs and is abandoned, it is counted as abandoned from all the CSQs for which it is queued.

For example, if a call is queued for CSQ1 and CSQ2 and the caller hangs up before being routed to an agent, then an abandoned call is counted for CSQ1 and for CSQ2.

Q. How is a dequeued call counted if it is queued for multiple CSQs?

A. If a call is queued for multiple CSQs and is handled by one of them, then the call is counted as dequeued from each of the other CSQs.

For example, if an incoming call is queued for CSQ1, CSQ2, and CSQ3 and is handled by an agent from CSQ2, then a dequeued call is counted for CSQ1 and for CSQ3.

Q. After the service level for a CSQ changes, why does the CSQ appear in the report twice—once with the old service level and again with the new service level?

A. The Unified CCX database maintains records of old and new service levels. When a new service level is configured, the old record is marked as inactive. The dateInactive field in the ContactServiceQueue

table shows the date and time that the new service level was configured. If the value in the dateInactive field is in the report period, the report shows the active (new) and inactive (old) CSQs.

Detailed Call by Call CCDR Report

Q. What are a session ID and a session sequence number?

A. A session ID is a unique identification number that the system assigns to a call. This number remains the same for the entire call. The system also assigns a sequence number to each leg of a call. Sequence numbers start at 0 and increment by 1 each time the call is transferred or redirected.

Q. Can a call be marked as handled if it is never queued for a CSQ?

A. Yes. You can design a workflow to mark such a call as handled.

Q. Why are the Hold Time and the Work Time fields blank?

A. The call was an IVR call. (IVR calls include Agent-to-Agent calls and external calls that are made by an agent.) The Unified CCX database does not record hold time and work time for IVR calls.

Q. Why does the report show duplicate calls?

A. The calls in the CCDR Report are not duplicates. They are conference calls, which have the same SessionID and Session Sequence Number, but different talk time because different agents participated in the same call. (The **Detailed Call by Call CCDR Report** shows the names of agents who participated in a conference call.)

Q. What does it mean when the Contact—Disposition is 3?

A. When the system removes stuck calls, which may have remained in the system because of missing events, the system writes a CCDR with the contact disposition dont_care (value = 3).

License Utilization Hourly Report

Q. What is the sampling frequency for the report?

A. Data is sampled per minute. The report aggregates the data over an hour (maximum of all samples within the hour).

Q. How are calls that are less than a minute treated?

A. If a call duration is less than a minute and its start and end times fall between two sampling points, then this call will not be considered for the statistics.

Traffic Analysis Report

Q. Why is there a difference between the Total Incoming Calls field in the **Traffic Analysis Report** and the Total Incoming Calls field in the **Application Performance Analysis Report**?

A. An incoming call can have multiple call legs. The **Traffic Analysis Report** counts a call with multiple legs as a single call. However, each call leg may invoke a different application, so the **Application Performance Analysis Report** counts each call leg as a call.

For example, if a call comes into an Auto Attendant and the caller selects a menu option for Musician Demonstration, then the call will have two call legs:

- Session ID = 1, sequence number = 0, application = "auto attendant"

- Session ID = 1, sequence number = 1, application = "musician demonstration"

This call is counted once for the **Traffic Analysis Report**. It is counted twice for the **Application Performance Analysis Report**—once for the "auto attendant" application and once for the "musician demonstration" application.