Network Queuing and Reporting
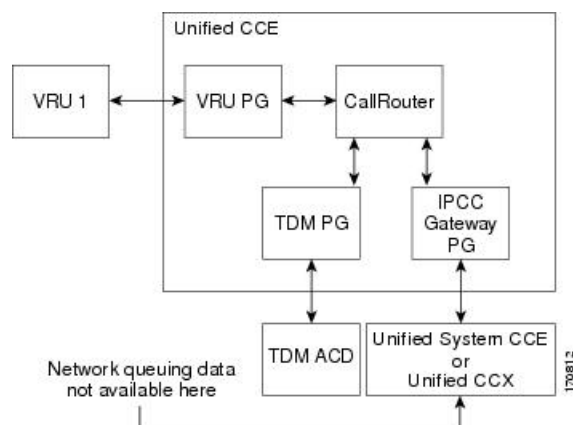
Network Queuing and Reporting

The existence of a network VRU in a Unified CCE deployment affects Unified CCE Call Type and Skill Group reporting.

How a call is sent to the VRU does not affect reporting; that is, it does not matter if the Unified CCE script used a Send To VRU node or a Translation Route To VRU node.

Figure 1: Network VRU in a Gateway Deployment

This chapter explains the Call Type metrics and Skill Group metrics and uses following the terms:

ICM-TR denotes a Unified ICM system in which all calls *are translation routed* when sent to an ACD.

ICM-Not-TR denotes a Unified ICM system in which some or all calls *are not translation routed* when sent to an ACD.

The Call Type and Skill Group reporting metrics that are affected by the existence of a network VRU include *queued* metrics, *at VRU* metrics, *answered* metrics, *service level* metrics, and *abandoned* metrics.

Network VRU and Call Type Metrics

All of the Call Type metrics apply to both Unified CCE and Unified ICM. In Unified CCE systems, Answer Wait Time, ASA, and Service Level include both the time spent in the network queue and the time spent in the ACD queue.

The measurement of Answer Wait Time for a call begins when the call is *queued*. The measurement of Service Level begins when the call *arrives* at the routing script, or when its call type is *changed*. This means that if self-service is performed on a call before the call is queued to an agent, the routing script must be set up to change the call type of the call when self-service is completed. Otherwise, the time spent in self-service negatively impacts the Service Level.

With regard to ICM-Not-TR systems, the Call Type abandoned metrics allow you to determine the number of calls that abandoned while queued in the CallRouter, but they do not allow you to determine the number of calls that abandoned while in self service, nor the number of calls that were abandoned after they leave the VRU and before an agent answers them. The Call Type answered metrics are always zero. The Call Type Service Level metrics are meaningless and can be ignored.

The following table shows the fields in the Call_Type_Real_Time table that affect reporting metrics by metric category:

Table 1: Call_Type_Real_Time Table and Reporting Metrics

Queued Metrics	At VRU Metrics/ Answered Metrics	Service Level Metrics	Abandoned Metrics
AvgRouterDelayQHalf	**At VRU :**	ServiceLevelAbandHalf	CallDelayAbandTimeHalf
AvgRouterDelayQNow	CallsAtVRUNow	ServiceLevelAbandTo5	CallDelayAbandTimeTo5
AvgRouterDelayQTo5	**Answered:**	ServiceLevelAbandToday	CallDelayAbandTimeToday
AvgRouterDelayQToday	AnsweredWaitTimeHalf	ServiceLevelCallsHalf	CTDelayAbandTimeHalf
CallsLeftQTo5	AnswerWaitTimeTo5	ServiceLevelCallsTo5	CTDelayAbandTimeTo5
CallsAtVRUNow	AnswerWaitTimeToday	ServiceLevelCallsToday	CTDelayAbandTimeToday
RouterCallsQNow	CallsAnsweredHalf	ServiceLevelCallsOfferedHalf	DelayAgentAbandTimeHalf
RouterCallsQNowTime	CallsAnsweredTo5	ServiceLevelCallsOfferedTo5	DelayAgentAbandTimeTo55
RouterLongestCallQ	CallsAnsweredToday	ServiceLevelCallsOfferedToday	DelayAgentAbandTimeToday
RouterQueueCallsHalf	CallsAtAgentNow	ServiceLevelHalf	DelayQAbandTimeHalf
RouterQueueCallsTo5		ServiceLevelTo5	DelayQAbandTimeTo5
RouterQueueCallsToday		ServiceLevelToday	DelayQAbandTimeToday
RouterQueueWaitTimeHalf			RouterCallsAbandQHalf
RouterQueueWaitTimeTo5			RouterCallsAbandQTo5
RouterQueueWaitTimeToday			RouterCallsAbandQToday
ServiceLevelCallsQHeld			RouterCallsAbandToAgentHalf
			RouterCallsAbandToAgentTo5
			RouterCallsAbandToAgentToday
			TotalCallsAbandHalf
			TotalCallsAbandTo5
			TotalCallsAbandToday

The following table shows the fields (by metric category) in the Call_Type_Interval table that affect reporting metrics:

Table 2: Call_Type_Interval Table and Reporting Metrics

Queued Metrics	At VRU Metrics/ Answered Metrics	Service Level Metrics	Abandoned Metrics
AvgRouterDelayQ CallsQHandled RouterQueueCalls RouterQueueCallType Limit RouterQueueGlobalLimit RouterQueueWaitTime	**At VRU :** CTVRUTime VRUTime **Answered:** AnsInterval1 - AnsInterval10 AnswerWaitTime CallsAnswered	ServiceLevelAband ServiceLevelCalls ServieLevelCallsOffered ServiceLevel	AbandInterval1 - AbandInterval10 CallDelayAbandTime CTDelayAbandTime DelayAgentAbandTime DelayQAbandTime RouterCallsAbandQ RouterCallsAbandToAgent TotalCallsAband

For additional information on the Call_Type_Real_Time and Call_Type_Interval table fields, see the *Database Schema Handbook for Cisco Unified Contact Center Enterprise*.

Network VRU and Skill Group Metrics

For a call that is queued by CVP, the Answer Wait Time and ASA metrics for the skill group do not include the time spent in the network queue. However, service level metrics for the skill group do include the time spent in the network queue.

The skill group abandoned metrics allow you to determine the number of calls that abandoned while queued to the CallRouter, but they do not allow you to determine the number of calls that abandoned after they left the VRU and before an agent answered them. The skill group answered metrics are always zero. The skill group service level metrics are meaningless and can be ignored.

Note   None of the skill group metrics include time spent in self-service or calls that ended during self-service, because a call is not associated with a skill group until it is queued, and a call is queued after self-service is complete.

The following table shows the fields (by metric category) in the Skill_Group_Real_Time table that affect reporting metrics:

Table 3: Skill_Group_Real_Time Table and Reporting Metrics

Queued Metrics	At VRU Metrics/ Answered Metrics	Service Level Metrics	Abandoned Metrics
CallsQueuedNow LongestCallQ RouterCallsQNow RouterLongestCallInQ	**At VRU:** None. **Answered:** AnswerWaitTimeTo5 CallsAnsweredTo5	ServiceLevelTo5 ServiceLevelCallsTo5 ServiceLevelCallsAbandTo5 ServiceLevelCallsDequeuedTo5 ServiceLevelRonaTo5 ServiceLevelCallsOfferedTo5	RouterCallsAbandQTo5 RouterCallsAbandToAgentTo5

The following table shows the fields (by metric category) in the Skill_Group_Interval table that affect reporting metrics:

Table 4: Skill_Group_Interval Table and Reporting Metrics

Queued Metrics	At VRU Metrics/ Answered Metrics	Service Level Metrics	Abandoned Metrics
CallsQueued RouterQueueCalls	**At VRU:** None. **Answered:** AnswerWaitTime CallsAnswered	ServiceLevel ServiceLevelCalls ServiceLevelCallsAband ServiceLevelCallsDequeued ServiceLevelError	AbandonRingCalls AbandonRingTime RouterCallsAbandQ RouterCallsAbandToAgent

For additional information about the Skill_Group_Real_Time and Skill_Group_Interval table fields, see the Database Schema Handbook for Cisco Unified Contact Center Enterprise at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-technical-reference-list.html.