Reporting in a Multichannel Environment

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Multichannel Options

When you include multichannel applications in a deployment, you can configure agents to handle nonvoice tasks such as chat and email in addition to voice calls.

Supported multichannel applications include:

- **Enterprise Chat and Email**: This application enables organizations to intelligently route and process inbound emails, webform inquiries, faxes, and letters. It also enables text chat messaging and page-push abilities. Agents can assist customers while on the phone, by navigating through web pages that the customer is currently browsing.
- **Third-party multichannel applications**: These applications use the Task Routing APIs to send new task requests and control agent state and task activity. Third-parties can develop applications to submit any type of task request for routing, such as chat, email, or SMS.

Media Routing Domains

Media Routing Domains (MRDs) organize how Unified CCE routes requests for each communication medium, such as voice and email, to agents.

You assign each skill group or precision queue to an MRD. Unified CCE then can route a task to an agent who is associated both with a specific skill group or precision queue and with a specific medium.

The Voice MRD is created by default for all deployments. You configure MRDs for each of the other media in your deployment, such as chat, email, or SMS.

You can report on activity for all of the configured MRDs.

Multichannel Reporting Data

Unified CCE databases store information about agent activity and tasks routed by Unified CCE, including nonvoice tasks such as chat and email. Reports contain a Media field, when appropriate, to identify the MRD of each task included in the report.

The following table describes major differences between voice and nonvoice tasks in reports.

Table 1: Report Data for Multichannel Applications

Type of Data	Data for Voice Tasks	Data for Nonvoice Tasks
Task direction	Task direction can be both incoming (agent receives a call) and outgoing (agent places a call). **Note** Calls placed by Outbound Option appear as incoming calls because of the manner in which the Outbound Option Dialer places calls between agents and customers.	Task direction is always incoming, and values of report fields pertaining to outgoing nonvoice tasks are set to null.
Session ownership changes	The ownership of a voice task can change through the life of the call. Agents can transfer the call or conference in another agent.	The ownership of a nonvoice task routed to Unified CCE from third-party multichannel applications that use the Task Routing APIs can change during the life of the task. Agents can transfer these tasks. Agents cannot conference these tasks, and supervisors cannot barge in or intercept the tasks. Nonvoice Enterprise Chat and Email tasks do not change session ownership. These tasks cannot be transferred or conferenced and supervisors cannot barge into or intercept the task. **Note** While it is possible for a Enterprise Chat and Email agent to allow another agent to join a session and then drop the session, leaving the second agent and the caller in session together, this is not the same as a voice call transfer. Unified CCE software interprets this scenario as two different sessions, one for the original agent and one for the second agent. Also, while Enterprise Chat and Email agents can forward messages to other agents, this is not the same as a voice call transfer. Unified CCE interprets message forwarding as two different sessions, one for the original agent and one for the receiving agent.

Type of Data	Data for Voice Tasks	Data for Nonvoice Tasks
Short calls	Voice calls are considered to be short calls if they disconnect within the time boundaries defined in the Agent Desk Settings for short tasks.	The Agent Desk Settings for short tasks do not apply to nonvoice tasks. The concept of short calls is not applicable for these tasks. Values of report fields pertaining to short calls are set to zero.
Service Level	You determine which Service Level type you want to use for voice tasks.	For third-party multichannel applications that use the Task Routing APIs, you determine the Service Level type you want to use. For Enterprise Chat and Email, the Service Level is always set to “ignore abandoned calls”.

Report Data for Multiple Tasks

Because multichannel agents can be configured to handle more than one task at once, task duration fields in reports can display a value greater than the reporting interval for nonvoice tasks. For example, the half-hour duration fields can have a value greater than 30 minutes.

The Voice MRD is not interruptible. An agent handling a voice call cannot be interrupted with a task from another MRD.

If the deployment includes third-party multichannel applications that use the Task Routing APIs:

- For nonvoice MRDs, agents can be configured at login to handle multiple concurrent nonvoice tasks.

  If an agent is engaged in several concurrent chat tasks, the reports contain data for each of the tasks.

- A nonvoice MRD can be configured to be interruptible; an agent handling a task in that MRD can be interrupted with a task from another MRD. The agent is configured at login to either accept or ignore interrupts:
  - **Accept:** The agent's state changes to Interrupted for the original task, and the time on that task stops while the agent is Interrupted.
  - **Ignore:** The agent's state is Active for both tasks, and the time on the original task does not stop.

If the deployment includes Enterprise Chat and Email:

- Chat is not interruptible. However, agents can be configured to handle multiple concurrent chat tasks.

  If an agent is engaged in several concurrent chat tasks, the reports contain data for each of the tasks.

- Email is interruptible. An agent handling an email can be interrupted with a voice call or a chat.

  Reports show the agent as Active for both the email and voice or chat task.

Report Templates for Multichannel Applications

Cisco Unified Intelligence Center templates report on all voice and multichannel skill groups, agents, and tasks.

You can filter these Unified Intelligence Center report templates by Media Routing Domain:

- Agent Real Time
- Agent Skill Group Real Time
- Enterprise Skill Group Real Time
- Peripheral Skill Group Real Time All Fields
- Precision Queue Real Time All Fields
- Agent Precision Queue Historical All Fields
- Agent Skill Group Historical All Fields
- Peripheral Skill Group Historical All Fields
- Precision Queue Abandon Answer Distribution Historical
- Precision Queue Interval All Fields
- Skill Group Abandon-Answer Distribution Historical
- Precision Queue - Live Data
- Skill Group - Live Data

Reports generated from Unified Intelligence Center templates do not contain details about specific events that transpire during a task. For example, the reports show that an agent handled a task in the chat Media Routing Domain, but do not provide the text of a chat message.

Note If your deployment uses Enterprise Chat and Email for multichannel functionality, you can use the reporting tool provided with that application to view more details about the task events.