



Peripheral-Specific Support

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TDM peripherals

Different peripheral manufacturers provide varying levels of support for CTI specific features. You must take these differences into account when writing a CTI OS client application. As far as possible, the CTI OS Server and agent desktop simulate the hardphone behavior of the peripheral in question. The CTI OS Supervisor Desktop for Unified CCE is specific to Unified CCE and is currently not supported on the TDM switches because they do not, in general, provide the Supervisory features that Unified CCE provides.



Note The peripherals mentioned in this chapter are the ones that CTI OS supports. Please contact Cisco CTI Product Management if you are interested in CTI OS support for a peripheral not mentioned here.

This chapter provides the following information:

- Peripheral-specific equivalents for some common Unified ICM terms
- A list of Unified ICM features that some peripherals do not support
- A table of CTI call event types that are unavailable for different peripheral types
- A table of CTI OS client control requests that are unsupported by different peripheral types
- Differences and limitations in the level of CTI support provided by various peripherals—including a list of CTI Server agent states and the corresponding terminology/functionality associated with the various peripherals

General Unified ICM Support

This section describes differences in how various peripherals implement Unified ICM functionality.

Peripheral-Specific Terminology

Different peripheral manufacturers use different terminology for Unified ICM terms such as agents, skill groups, and services. For example, other manufacturers might call a service an application, a split, or a gate. The following table lists several Unified ICM terms and provides peripheral-specific equivalents.

Table 1: Unified ICM and Peripheral-Specific Terminology

Unified ICM Term	Peripheral-Specific Equivalent
Agent	Agent
Peripheral target	Unified CCE: Agent Target Others: Trunk group and DNIS ¹
Service	Aspect Contact Server: Application Avaya DEFINITY ECS: Vector Directory Number (VDN) Avaya Aura CC (Symposium): Application
Skill group	Aspect Contact Server: Agent group Avaya DEFINITY ECS: Skill group or hunt group ² Avaya Aura CC (Symposium): Skill Set Others: Skill group
Trunk	Aspect Contact Server: Instrument ³ Avaya Aura CC (Symposium): None Others: Trunk
Trunk group	Avaya Aura CC (Symposium): Route Others: Trunk group

¹ The Aspect Contact Server maps a trunk group and DNIS to a Call Control Table (CCT). The DEFINITY ECS uses the trunk group and DNIS for incoming calls.

² If an ECS is running in Expert Agent Selection (EAS) mode, a skill group maps to an ECS skill group; otherwise, it maps to a hunt group.

³ A CallCenter instrument can be a trunk, a teleset, or a workstation.

In some cases, the Unified ICM concept is very close to the corresponding ACD feature. For example, the Unified ICM concept of a service is very similar to the Aspect concept of an application. In other cases, the ACD does not have a feature that maps exactly to the Unified ICM feature. In these cases, you might choose a different mapping than shown in the table above. For example, although it might make sense to associate each VDN on a DEFINITY ECS with an Unified ICM service, you could also map each hunt group to a service.

On an Avaya DEFINITY ECS running in EAS mode, each skill group may have multiple subgroups depending on the switch configuration. Unified ICM emulates this by automatically creating additional skill groups for these peripheral types.

Unified ICM Feature Limitations

Some ACDs have limitations that prevent them from making full use of specific features of Unified ICM. The following table summarizes these limitations for those ACDs.

Table 2: Unified ICM Features Not Supported for Specific Peripherals

Peripheral Type	Restrictions
Aspect Contact Server	Only one skill group assignment per agent
Avaya DEFINITY ECS	None
Unified CCE System PG	Does not support Trunks or Trunk Groups
Avaya Aura CC (Symposium)	No Peripheral Service Level reporting No Trunk Group Real Time or Trunk Group Half Hour data elements

CTI OS Support

This section describes how different peripheral types implement and support CTI OS functionality. It includes the following information:

- A table of call event types that are unavailable for different peripheral types
- A table of client control requests that are unsupported by different peripheral types
- A list of other peripheral-specific differences and limitations
- A table of agent states

Call Events

The following table lists the call events that are not available from different peripheral types:

- The entry “none” indicates that the event is available from all supported peripherals.
- A single asterisk (*) indicates that the event is available from the starred peripheral, subject to the restrictions/limitations listed in the [Peripheral-Specific Limitations and Differences, on page 5](#).
- A double asterisk (**) indicates that the event is available from Aspect when the PG is configured to use the Aspect Event Link.

Table 3: Call Events Not Available to Specific Peripherals

Unavailable Event	Peripherals
AGENT_PRE_CALL	Aspect, DEFINITY, Avaya Aura CC (Symposium), IVR
AGENT_PRE_CALL_ABORT	Aspect, DEFINITY, Avaya Aura CC (Symposium), IVR

Unavailable Event	Peripherals
AGENT_STATE	None
BEGIN_CALL	None
CALL_CLEARED	Aspect*
CALL_CONFERENCED	Aspect**,IVR
CALL_CONNECTION_CLEARED	None
CALL_DATA_UPDATE	None
CALL_DELIVERED	Aspect*
CALL_DEQUEUED	DEFINITY, Avaya Aura CC (Symposium), Unified CCE, IVR
CALL_DIVERTED	Aspect, Unified CCE, Avaya Aura CC (Symposium)
CALL_ESTABLISHED	IVR
CALL_FAILED	Aspect, Avaya Aura CC (Symposium), IVR
CALL_HELD	Aspect**, IVR
CALL_ORIGINATED	Aspect, DEFINITY*, Avaya Aura CC (Symposium)
CALL_QUEUED	Unified CCE, IVR
CALL_REACHED_NETWORK	Aspect, Avaya Aura CC (Symposium), IVR
CALL_RETRIEVED	Aspect**, IVR
CALL_SERVICE_INITIATED	Aspect**, DEFINITY*, IVR
CALL_TRANSFERRED	IVR
CALL_TRANSLATION_ROUTE	Unified CCE
END_CALL	None
RTP_STARTED_EVENT	Aspect, Avaya Aura CC (Symposium), IVR
RTP_STOPPED_EVENT	Aspect, Avaya Aura CC (Symposium), IVR
SYSTEM	None

Client Control Requests

The following table lists the client control requests that are not supported by the different peripheral types.

Table 4: Client Control Requests Not Available to Specific Peripherals

Unavailable Request	Peripherals
ALTERNATE_CALL	Avaya Aura CC (Symposium)
ANSWER_CALL	IVR
CLEAR_CALL	IVR
CLEAR_CONNECTION	IVR
CONFERENCE_CALL	IVR
CONSULTATION_CALL	IVR
DEFLECT_CALL	Aspect, Avaya Aura CC (Symposium), IVR
HOLD_CALL	IVR
MAKE_CALL	IVR
MAKE_PREDICTIVE_CALL	IVR
QUERY_AGENT_STATE	IVR
QUERY_DEVICE_INFO	IVR
RECONNECT_CALL	IVR
RETRIEVE_CALL	IVR
SEND_DTMF_SIGNAL	Aspect, Avaya Aura CC (Symposium), IVR
SET_AGENT_STATE	IVR
SNAPSHOT_CALL	IVR
SNAPSHOT_DEVICE	IVR
TRANSFER_CALL	IVR

Peripheral-Specific Limitations and Differences

This section lists CTI OS-related restrictions and implementation differences for various peripherals.



Note

- MAKE_CALL is only supported when the agent is in the NotReady state for an UCCE peripheral.
- MAKE_CALL is not supported for the remaining peripherals supported by CTI OS.
- The call continues to be active even after a party is released from the conference.

Aspect Contact Server

- AgentExtension and AgentInstrument are defined as the port number that the teleset is connected to.
- Events marked by an asterisk (*) are available when the PG is configured to use the Aspect EventLink.
- Call Alerting (Call Delivered, LocalConnectionState = LCS_ALERTING) is available when the EventLink is used.
- Outbound calls on some trunk types do not always provide Call Cleared events. Interflow calls that are accepted, but handled by the originating site, sometimes also do not provide Call Cleared events.
- Outbound calls require that you specify the CallPlacementType in an outbound request.
- Conference calls can have a maximum of three parties.
- In a single-step/blind transfer of a call, the initial call must come in over a trunk (be a CCT call) and the dialed number must go to a CCT.
- In a regular call transfer, the consult call can be either a CCT call or an agent_inside call.
- Alternate call operations require that the initial call is a CCT call. The second call (consult call) can be either a CCT call or an agent_inside call.
- In the MAKE_PREDICTIVE_CALL_REQ message, the AnswerDetectControl1 field must contain the binary value of the Application Bridge AD_PARAM setting, and the AnswerDetectControl2 field must contain the binary value of the Application Bridge ANS_MAP setting.
- Transfer and Conference behavior is modeled after hardphone behavior. To initiate a Transfer or a Conference, use the MakeCall control (Transfer Init and Conference Init buttons are unavailable) to make a second (consult) call. After you make this call, the Transfer Complete and Conference Complete buttons are available to complete the desired action.

Avaya DEFINITY ECS

- AgentExtension and AgentInstrument are defined as the station extension.
- DEFINITY ECS events are the same with or without EAS (Expert Agent Selection).
- Both EAS and non-EAS versions maintain a list of preconfigured agent groups. When you log in with EAS, the agent is automatically logged in to all preconfigured Agent groups. When you log in without EAS, the agent is logged in to only those groups that you specify in the login request.
- The Cisco Peripheral Interface Module (PIM)—the Cisco proprietary interface between a peripheral and the Peripheral Gateway (PG)—does support call events on inside calls only when Unified ICM monitors the agent's station (agent station appears in the Unified ICM Peripheral Monitor Table), when the call goes through a monitored VDN, or when the call is originated by a CTI MakeCallReq. An agent on the switch originates Inside calls. Inside calls include consult calls before a transfer or conference. After the transfer or conference completes, you can see call events for the merged ACD call.
- Auto Answer agents must have the phone off the hook or you cannot log in to the agent. Manual Answer agents must leave the phone on the hook.
- Applications must wait a time interval of three times the refresh rate (defined in the Avaya Call Management System) between login or logout attempts. Failure to do so may cause the PIM to miss the login event and result in a failed call request.

- If a third-party action fails, an ASAI cause value returns for CTI OS clients that access a DEFINITY ECS switch. If you have a copy of the *DEFINITY Technical Reference Manual*, you can determine the actual cause of the failure by performing the following steps:
 - Refer to the following table of “DEFINITY Cause Values” to obtain the DEFINITY ECS value that corresponds to the returned ASAI cause value.
 - Refer to the following table “Third-party request/section in DEFINITY manual” to find the chapter of the *DEFINITY Technical Reference Manual* that discusses the third-party action that you attempted.
 - Refer to the chapter specified in the table “Third-party request/section in DEFINITY manual” for an explanation of the DEFINITY ECS cause value.

Table 5: DEFINITY Cause Values

ASAI Value	DEFINITY ECS Value	Cause Value	Description
-MAX_LONG	none	*C_NUSE_LONG	The ECS does not return a value.
0	CS0/28	*C_INVLDNUM	Invalid origination or destination address.
1	CS0/111	*C_PROTERR	Capability sequence was violated or underlying protocol error was detected; the ECS returned an unrecognized value.
2	CS3/40	*C_RESUNAVL	Resources to fulfill service are not available.
3	CS0/50	*C_FACUNSUB	Capability is implemented but not subscribed to by requester.
4	CS3/79	*C_SER_UNIMP	Incompatible options selected.
5	CS0/96	*C_MAND_INFO	One of the required parameters is missing.
6	CS0/100	*C_INVLDIE	Value specified in parameter is not allowed or defined.
7	CS3/63	*C_SERV_UNAVIL	Domain or call is being monitored by another adjunct.
8	CS3/86	*C_CALLID_TERM	Call is no longer in active state.
9	CS0/98	*C_INCOM_ST	Message not compatible with call state.
10	CS0/81	*C_INVALID_CRV	Invalid call identifier (sao_id) also known as cluster_id is used or call does not exist.

ASAI Value	DEFINITY ECS Value	Cause Value	Description
11	CS3/80	*C_INCOM_OPT	Incompatible options used to establish the call.
12	CS0/102	*C_REC_TIMER	Timer expired.
13	CS3/15	*C_NOLOGIN	Agent not logged in to split.
14	CS3/11	*C_NOSPLIT_MEM	Agent not member of specified split or split number specified incorrectly.
15	CS0/17	*C_USER_BUSY	Domain or call is being monitored by another adjunct.
16	CS0/18	*C_NOUSE_RESP	Originating address does not respond to service.
17	CS3/43	*C_PERM_DENIED	Permission checks for service have failed.
18	CS3/87	*C_CLUST_TERM	Association terminated because service is not active.
19	CS3/27	*C_OUT_OF_SERV	Domain was removed by administration.
20	CS3/12	*C_INCS_AGT_ST	Agent not in compatible state.
21	CS3/13	*C_MAXLOGIN	Agent logged in to maximum number of splits.
22	CS3/14	*C_INC_PASWD	Invalid login password.
23	CS3/16	*C_AGT_STATE	Request to put agent in the state that the agent is already in.
24	CS3/41	*C_BAD_ADMIN	ACD not provisioned or optioned.
25	CS0/16	*C_NORMAL	Normal termination; call routed successfully.
26	CS0/42	*C_NETCONJ	Association terminated because of network congestion.
27	CS0/99	*C_BAD_IE	Unknown information element detected.
28	CS3/22	*C_QUEFULL	Queue is full.
29	CS3/42	C_REORDER_DENIAL	Reorder/Denial.
30	CS3/46	C_ADMIN_PROGRESS	Administration is in progress; request cannot be serviced.

ASAI Value	DEFINITY ECS Value	Cause Value	Description
31	CS3/53	C_FEATURE_REJECTED	The ECS has rejected a request from the adjunct.
32	CS0/1	C_UNASSIGNED_NUM	Unassigned number.
33	CS0/21	C_CALL_REJECTED	Call rejected.
34	CS0/22	C_NUM_CHANGED	Number changed.
35	CS0/31	C_NORMAL_UNSPECIF	Normal, unspecified.
36	CS0/34	C_NO_CIRCUIT	No circuit or channel available.
37	CS0/41	C_TEMP_FAILURE	Temporary Failure.
38	CS0/58	C_BEARER_CAP_UNAVAIL	Bearer capability not presently available.
39	CS0/88	C_INCOMPAT_DESTINATION	Incompatible destination.
40	CS0/95	C_INVALID_MESSAGE	Invalid message, unspecified (backward compatibility).
41	CS0/97	C_NON_EXIST_MESSAGE	Message nonexistent/ not implemented.
42	CS0/127	C_UNSPECIFIED	Unspecified.
43	CS3/19	C_NO_ANSWER	No answer.
44	CS3/20	C_NO_TRUNKS	Trunks not available.
45	CS3/21	C_NO_CLASSIFIERS	Classifiers not available.
46	CS3/30	C_REDIRECT	Redirected.
47	CS3/38	C_NETWORK_OUT_OF_ORDER	Network out of order.
48	Undefined	*C_CAUSE_UNKNOWN	Undefined value returned from the ECS.
49	CS0/52	*C_OUT_CALL_BARRED	Outgoing call was barred.
50	CS3/23	C_REMAINS_IN_Q	Call remains in queue.
51	CS0/65	C_BEARER_SVC_NOT_IMPL	Bearer service not implemented.

ASAI Value	DEFINITY ECS Value	Cause Value	Description
52	CS3/17	C_TIMED_ANSWER	Assumed answer based on internal timer.
53	CS3/18	C_VOICE_ENERGY_ANSWER	Voice energy detected by the ECS.
54	CS0/82	C_NO_TONE_CHANNEL	Channel or tone do not exist (no tone connected to the specified call).
55	CS3/24	C_ANSWERING_MACHINE	Answering machine detected.
56	CS0/29	C_FACILITY_REJECTED	Facility rejected.
57	CS3/25	C_FORWARD_BUSY	Redirection cause.
58	CS3/26	C_COVER_BUSY	Redirection cause.
59	CS3/28	C_COV_DONT_ANS	Redirection cause.
60	CS3/31	C_FORWARD_ALL	Redirection cause.
61	CS3/8	C_LISTEN_ONLY	Single-Step Conference listen only.
62	CS3/9	C_LISTEN_TALK	Single-Step Conference listen-talk.

For example, an ASAI value of 15 corresponds to the DEFINITY ECS value of CS0/17 (C_USER_BUSY).

Table 6: Third-Party Request/Section in DEFINITY Manual

Third-party Action or Request	Chapter in Manual
Third-party actions via Call Control: Auto Dial (3PAD), Clear (3PCC), Deflect (Redirect) (3PREDIR), Drop (Selective Drop) (3PSD), Listen-Disconnect, Listen-Reconnect, Selective Hold (3PSH), Make Call (3PMC) (or Predictive Call), Relinquish Control (3PRC), Reconnect (Retrieve) (3PR), Send DTMF (3PSDS), Take Control (3PTC)	Chapter 4: ASAI and Call Control
Third-Party actions via Domain Control: Auto Dial (3PAD), Domain Control (3PDC), Answer (3PANS), Merge (Transfer/Conference) (3PM)	Chapter 5: ASAI and Domain Control
Call Routing (RT_REQ, RT_SEL, RT_END)	Chapter 7: ASAI and Call Routing
Agent State change: Login, Logout, Change Workmode: NotReady (AUX), Ready (AVAIL), WorkReady (ACW), and so forth.) Activating/Canceling Call Forwarding Activating/Canceling Send All Calls	Chapter 8: ASAI and Request Feature Capabilities
Value Queries	Chapter 9: ASAI and Value Query Capabilities

Third-party Action or Request	Chapter in Manual
Set Value: Message Waiting Indicator (MWI) Set Billing Type	Chapter 10: ASAI and Set Value Capabilities

For example, Chapter 8, “ASAI and Request Feature Capabilities” discusses third-party login requests.

When TSAPI interface of Avaya peripheral is used, PIM maps CSTA error is returned by TSAPI CSTA APIs to ASAI error codes. The following tables display the mapping API by API bases.

Table 7: Third Party Answer - cstaAnswerCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension is specified in the alerting call.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the parameters was invalid]
INVALID_CSTA_CONNECTION_IDENTIFIER (13) - An incorrect callID or an incorrect deviceID is specified.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the parameters was invalid]
GENERIC_STATE_INCOMPATIBILITY (21) - The station user did not go off-hook within five seconds and cannot be forced off-hook.	GENERIC_OPERATION_REJECTION (71)	C_NOUSE_RESP(16) [Originating address does not respond to service]
INVALID_OBJECT_STATE (22) - The specified connection at the station is not in alerting, connected, held, or bridged state.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
NO_CALL_TO_ANSWER (28) - The call was redirected to coverage within the five-second interval.	GENERIC_OPERATION_REJECTION (71)	C_INVALID_CRV(10) [Invalid call identifier (sao_id), also known as cluster_id is used or call does not exist]
GENERIC_SYSTEM_RESOURCE_AVAILABILITY (31) - The client attempted to add a seventh party to a call with six active parties.	GENERIC_OPERATION_REJECTION (71)	C_RESUNAVL(40) [Resources to fulfill service are not available]
RESOURCE_BUSY (33) - The user at the station is busy on a call or there is no idle appearance available.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified for alerting a call corresponds to a SIP station and the "Type of 3PCC Enabled" for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]
MISTYPED_ARGUMENT_REJECTION (74) - DYNAMIC_ID is specified in alerting call.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

Table 8: Third Party Drop - cstaClearConnection

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
GENERIC_UNSPECIFIED (0) - The specified data provided for the userInfo parameter exceeds the maximum size. For private data versions 2-5, the maximum length for userInfo is 32 bytes. Beginning with private data version 6, the maximum length was increased to 96 bytes.	GENERIC_OPERATION_REJECTION (71)	C_INVLDIE(6) [Value specified in parameter is not allowed or defined]
INVALID_OBJECT_STATE (22) - The specified connection at the station is not currently active (is either in alerting or held state) so it cannot be dropped.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
NO_ACTIVE_CALL (24) - The connectionID contained in the request is invalid. CallID may be incorrect too.	GENERIC_OPERATION_REJECTION (71)	C_INVALID_CRV(10) [Invalid call identifier (sao_id), also known as cluster_id is used or call does not exist]
NO_CONNECTION_TO_CLEAR (27) - The connectionID contained in the request is invalid. CallID may be correct, but deviceID is wrong.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
RESOURCE_BUSY (33) - The switch is busy with another CSTA request. This happens when two AE Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, and so on) to the same device.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]

Table 9: Third Party Merge - cstaConferenceCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension is specified in heldCall or activeCall.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
INVALID_CSTA_CONNECTION_IDENTIFIER (13) - The controlling deviceID, in heldCall, or activeCall has not been specified correctly.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
GENERIC_STATE_INCOMPATIBILITY (21) - Both calls are alerting, both calls are being service-observed, or an active call is in a vector processing stage.	GENERIC_OPERATION_REJECTION (71)	C_REORDER_ENIAL(29) [Reorder/Denial]
INVALID_OBJECT_STATE (22) - The connections specified in the request are not in valid states for the operation to take place. For example, it does not have one call active and one call in the held state as required.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
RESOURCE_BUSY (33) - The switch is busy with another CSTA request. This can happen when two AE Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, Conference Call, and so on) to the same device.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]
CONFERENCE_MEMBER_LIMIT_EXCEEDED (38) - The request attempted to add a seventh party to an existing six-party conference call. If a station places a six-party conference call on hold and another party adds another station (so that there are again six active parties on the call which is the limit of the Communication Manager), then the station with the call on hold will not be able to retrieve the call.	GENERIC_OPERATION_REJECTION (71)	C_REORDER_DENIAL (29) [Reorder/Denial]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in activeCall and heldCall corresponds to a SIP station and the "Type of 3PCC Enabled" for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
MISTYPED_ARGUMENT_REJECTION (74) - DYNAMIC_ID is specified in heldCall or activeCall.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

Table 10: Third Party Hold - cstaHoldCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension is specified in activeCall.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
INVALID_CSTA_CONNECTION_IDENTIFIER (13) - The connection identifier contained in the request is invalid or does not correspond to a station.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
NO_ACTIVE_CALL (24) - The party to be put on hold is not currently active (for example, in the alerting state) so it cannot be put on hold.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
RESOURCE_BUSY (33) - The switch is busy with another CSTA request. This can happen when two AEI Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, and so on) for the same device.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in activeCall corresponds to a SIP station and the "Type of 3PCC Enabled" administered for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]
OUTSTANDING_REQUEST_LIMIT_EXCEEDED (44) - The client attempted to put a third party on hold while two parties are on hold already, on an analog station.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
MISTYPED_ARGUMENT_REJECTION (74) - DYNAMIC_ID is specified in inactiveCall.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

Table 11: Third Party Make - cstaMakeCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
GENERIC_UNSPECIFIED (0) - The specified data provided for the userInfo parameter exceeds the maximum allowable size. For private data versions 2-5, the maximum length of userInfo is 32 bytes. Beginning with private data version 6, the maximum length of userInfo is 96 bytes.	GENERIC_OPERATION_REJECTION (71)	C_INVLDIE(6) [Value specified in parameter is not allowed or defined]
INVALID_CALLING_DEVICE (5) - The callingDevice is out of service or not administered correctly in the switch.	GENERIC_OPERATION_REJECTION (71)	C_OUT_OF_SERV(19) [Domain was removed by Administration]
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension is specified in callingDevice.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
GENERIC_STATE_INCOMPATIBILITY (21) - The originator does not go off-hook within five seconds after originating the call and cannot be forced off-hook.	GENERIC_OPERATION_REJECTION (71)	C_NOUSE_RESP(16) [Originating address does not respond to service]
RESOURCE_BUSY (33) - The user is busy on another call and cannot originate this call, or the switch is busy with another CSTA request. This can happen when two AE Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, Make Call, and so on) for the same device.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in callingDevice corresponds to a SIP station and the "Type of 3PCC Enabled" administered for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]

Table 12: Third Party Retrieve - cstaRetrieveCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension is specified in heldCall.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [Invalid origination or destination address]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_CONNECTION_IDENTIFIER (13) - The connectionID contained in the request is invalid.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [Invalid origination or destination address]
GENERIC_STATE_INCOMPATIBILITY (21) - The user was on-hook when the request was made and did not go off-hook within five seconds (call remains on hold).	GENERIC_OPERATION_REJECTION (71)	C_NOUSE_RESP(16) [Originating address does not respond to service]
NO_ACTIVE_CALL (24) - The specified call at the station is cleared and so it cannot be retrieved.	GENERIC_OPERATION_REJECTION (71)	C_INVALID_CRV(10) [Invalid call identifier (sao_id) also known as cluster_id is used or call does not exist]
NO_HELD_CALL (25) - The specified connection at the station is not in the held state (for example, in the alerting state) and so it cannot be retrieved.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
RESOURCE_BUSY (33) - The switch is busy with another CSTA request. This can happen when two AE Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, Conference Call, and so on) for the same device.	GENERIC_OPERATION_REJECTION (71)	C_USER_BUSY(15) [Domain or call is being monitored by another adjunct]
CONFERENCE_MEMBER_LIMIT_EXCEEDED (38) - The client attempted to add a seventh party to a six-party conference call.	GENERIC_OPERATION_REJECTION (71)	C_RESUNAVL(40) [Resources to fulfill service are not available]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in heldCall corresponds to a SIP station and the "Type of 3PCC Enabled" administered for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]
MISTYPED_ARGUMENT_REJECTION (74) - DYNAMIC_ID is specified in heldCall.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

Table 13: Third Party Transfer - cstaTransferCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier or extension was specified in heldCall or activeCall.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
INVALID_CSTA_CONNECTION_IDENTIFIER (13) - The controllingdeviceID in activeCall or heldCall has not been specified correctly.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
GENERIC_STATE_INCOMPATIBILITY (21) - The request failed due to one of the following reasons: <ul style="list-style-type: none"> • Both calls are alerting • Both calls are being service-observed • An active call is in a vector-processing stage • The Trunk-to-Trunk Transfer feature is not enabled on Avaya Communication Manager 	GENERIC_OPERATION_REJECTION (71)	C_REORDER_DENIAL (29) [Reorder/Denial]
INVALID_OBJECT_STATE (22) - The connections specified in the request are not in valid states for the operation to take place. For example, the transferring device does not have one active call and one held call as required.	GENERIC_OPERATION_REJECTION (71)	C_INCOM_ST(9) [Message not compatible with call state]
INVALID_CONNECTION_ID_FOR_ACTIVE_CALL (23) - The callID inactiveCall or heldCall has not been specified correctly.	GENERIC_OPERATION_REJECTION (71)	C_INVLDNUM(0) [One of the entered parameters was invalid]
RESOURCE_BUSY (33) - The switch is busy with another CSTA request. This can happen when two AE Services servers are issuing requests (Hold Call, Retrieve Call, Clear Connection, Transfer Call, and so on) for the same device.	GENERIC_OPERATION_REJECTION (71)	C_REORDER_DENIAL(29) [Reorder/Denial]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in activeCall and heldCall corresponds to a SIP station and the "Type of 3PCC Enabled" administered for the station is not set to "Avaya".	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
MISTYPED_ARGUMENT_REJECTION (74) - DYNAMIC_ID is specified in heldCall or activeCall.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

Table 14: Third Party Clear - cstaClearCall

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
NO_ACTIVE_CALL (24) - The callID of the connectionID specified in the request is invalid.	GENERIC_OPERATION_REJECTION (71)	C_INVALID_CRV(10) [Invalid call identifier (sao_id) also known as cluster_id is used or call does not exist]

Table 15: Third Party Set Agent State - cstaSetAgentState

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
<p>GENERIC_UNSPECIFIED (0) - The request failed due to one of the following reasons:</p> <ul style="list-style-type: none"> • The request attempted to log out an ACD agent who is already logged out • The request attempted to log an ACD agent into a split of which they are not a member • The request attempted to log in an ACD agent with an incorrect password • The request attempted to log in an ACD agent at a station where the Auto Answer feature is enabled, but the station is not off-hook. 	GENERIC_UNSPECIFIED (0)	<p>C_NOLOGIN [for agent logout request when agent not logged in]</p> <p>C_INC_PASWD(22) [for agent login request]</p> <p>C_INCS_AGT_ST [for any other set agent state requests]</p>

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
<p>GENERIC_OPERATION (1) - The request attempted to log in an ACD agent that is already logged in.</p>	<p>For TP login Request:</p> <ul style="list-style-type: none"> • SPECIFIED_EXTENSION_ALREADY_IN_USE(283) [Other Agent is already logged in on device] • SPECIFIED_AGENT_ALREADY_SIGNED_ON(259) [Same Agent is logged on same device] • GENERIC_OPERATION_REJECTION (71) [station not in service] <p>For non TP login Request:</p> <ul style="list-style-type: none"> • GENERIC_OPERATION (1) 	<p>For TP login Request:</p> <ul style="list-style-type: none"> • C_CAUSE_UNKNOWN [Other Agent is already logged in on device/Same Agent is logged on same device - not to be used] • C_OUT_OF_SERV [Station not in service] • C_AGT_STATE (23) [for all requests other than login]
<p>VALUE_OUT_OF_RANGE (3)</p> <p>The request failed due to one of the following reasons:</p> <ul style="list-style-type: none"> • The workMode private parameter is not valid for the agentMode • The reason code is outside of the acceptable range (1- 9 or 1-99). (CS0/100) 	<p>INVALID_AGENT_WORKMODE [for work-mode change requests]</p> <p>INVALID_AGENT_REASON_CODE [for logout requests]</p>	<p>C_CAUSE_UNKNOWN (Not to be used)</p>
<p>OBJECT_NOT_KNOWN (4)</p> <p>The request failed due to one of the following reasons:</p> <ul style="list-style-type: none"> • service request did not specify a valid on-PBX station for the ACD agent in device • agentGroup or device parameters were NULL • agentID parameter was NULL when agentMode was set to AM_LOG_IN 	<p>GENERIC_UNSPECIFIED_REJECTION (70)</p>	<p>C_INVLDNUM(0) [One of the entered parameters was invalid]</p>
<p>INVALID_CSTA_DEVICE_IDENTIFIER (12) - An invalid device identifier has been specified in the device.</p>	<p>GENERIC_UNSPECIFIED_REJECTION (70)</p>	<p>C_INVLDNUM(0) [One of the entered parameters was invalid]</p>

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
INVALID_FEATURE (15) - The feature is not available for the agentGroup or the enablePending feature is not available for the switch version.	GENERIC_UNSPECIFIED_REJECTION (70)	C_SERV_UNAVIL(7) [Domain or call is being monitored by another adjunct]
INVALID_OBJECT_TYPE (18) (CS3/80) - A reason code was specified, but the specified workMode was not WM_AUX_WORK or AM_LOG_OUT.	GENERIC_UNSPECIFIED_REJECTION (70)	C_INCOM_OPT(11) [Incompatible options used to establish the call]
GENERIC_STATE_INCOMPATIBILITY (21) <ul style="list-style-type: none"> • A work mode change was requested for a non-ACD agent • The Agent station is maintenance busy or out of service 	GENERIC_UNSPECIFIED_REJECTION (70)	C_MAXLOGIN(21) [for login requests - Agent logged in to maximum number of splits] C_INCS_AGT_ST [for all other requests other than login]
GENERIC_SYSTEM_RESOURCE_AVAILABILITY (31) - The request cannot complete due to lack of available switch resources.	GENERIC_UNSPECIFIED_REJECTION (70)	C_RESUNAVL(2) [Resources to fulfill service are not available]
RESOURCE_BUSY (33) - The service attempted to change the state of an ACD agent that is currently on a call.	GENERIC_UNSPECIFIED_REJECTION (70)	C_USER_BUSY(17) [Domain or call is being monitored by another adjunct]
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The device identifier specified in device corresponds to a SIP station and the "Type of 3PCC Enabled" administered for the station is not set to "Avaya".	GENERIC_UNSPECIFIED_REJECTION (70)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]

The following errors apply to every CSTA Service that is supported by the TSAPI Service.

Table 16: Common Switch-related CSTA Service Errors

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
GENERIC_UNSPECIFIED (0) - An error has occurred. The TSAPI Service could not provide a specific error value.	GENERIC_UNSPECIFIED (0)	C_CAUSE_UNKNOWN

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
GENERIC_OPERATION (1) - The CTI protocol is broken d or the service invoked is not consistent with a CTI application association.	GENERIC_OPERATION (1)	C_PROTERR(1) [Capability sequence was violated or underlying protocol error was detected; an unrecognized value was returned by the ECS]
REQUEST_INCOMPATIBLE_WITH_OBJECT (2) - The service request does not correspond to a CTI application association.	GENERIC_UNSPECIFIED_REJECTION (70)	C_FEATURE_REJECTED (31) [The ECS has rejected a request from the adjunct]
VALUE_OUT_OF_RANGE (3) - Communication Manager detects that a required parameter is missing from the request or an out-of-range value has been specified.	GENERIC_UNSPECIFIED_REJECTION (70)	C_MAND_INFO(5) [One of the required parameters is missing]
OBJECT_NOT_KNOWN (4) - The TSAPI Service detects that a required parameter is missing in the request. For example, the deviceIDof a connectionID is not specified in a service request.	GENERIC_UNSPECIFIED_REJECTION (70)	C_MAND_INFO(5) [One of the required parameters is missing]
INVALID_FEATURE (15) - The TSAPI Service detects a CSTA Service request that is not supported by Communication Manager.	GENERIC_UNSPECIFIED_REJECTION (70)	C_SERV_UNAVIL(7) [Domain or call is being monitored by another adjunct]
GENERIC_SYSTEM_RESOURCE_AVAILABILITY (31) - The request cannot be completed due to lack of available switch resources.	GENERIC_UNSPECIFIED_REJECTION (70)	C_RESUNAVL(2) [Resources to fulfill service are not available]
RESOURCE_OUT_OF_SERVICE (34) - An application can receive this error code when a single CSTA Service request is ending abnormally due to protocol error.	GENERIC_UNSPECIFIED_REJECTION (70)	C_PROTERR(1) [Capability sequence was violated or underlying protocol error was detected; an unrecognized value was returned by the ECS]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
NETWORK_BUSY (35) - Communication Manager is not accepting the request at this time because of processor overload. The application may wish to retry the request but should not do so immediately.	GENERIC_UNSPECIFIED_REJECTION (70)	C_NETCONJ
GENERIC_SUBSCRIBED_RESOURCE_AVAILABILITY (41) - The TSAPI Service could not acquire the license(s) needed to satisfy the request.	GENERIC_OPERATION_REJECTION (71)	C_FACUNSUB(3) [Capability is implemented but not subscribed to by requester]
OUTSTANDING_REQUEST_LIMIT_EXCEEDED (44) - The given request cannot be processed due to a system resource limit on the device.	GENERIC_OPERATION_REJECTION (71)	C_RESUNAVL(2) [Resources to fulfill service are not available]
GENERIC_UNSPECIFIED_REJECTION (70) - This is a TSAPI Service internal error, but it cannot be more specific. The system administrator should check the AE Services OAM error logs for more information about this error.	GENERIC_UNSPECIFIED_REJECTION (70)	C_CAUSE_UNKNOWN
GENERIC_OPERATION_REJECTION (71) - This is a TSAPI Service internal error, but not a defined error. The system administrator should check the TSAPI Service error logs for more information about this error.	GENERIC_OPERATION_REJECTION (71)	C_CAUSE_UNKNOWN
DUPLICATE_INVOCATION_REJECTION (72) - The TSAPI Service detects that the invokeID in the service request is being used by another outstanding service request. This service request is rejected. The outstanding service request with the same invokeID is still valid.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]
UNRECOGNIZED_OPERATION_REJECTION (73) - The TSAPI Service detects that the service request from a client application is not defined in the API. A CSTA request with a 0 or negative invokeID will receive this error.	GENERIC_OPERATION_REJECTION (71)	C_SER_UNIMP(4) [Incompatible options selected]

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
<p>RESOURCE_LIMITATION_REJECTION (75) - The TSAPI Service detects that it lacks internal resources such as the memory or data records to process a service request. A system administrator should check the TSAPI Service error logs for more detailed information about this error. This failure may reflect a temporary situation. The application should retry the request.</p>	<p>GENERIC_OPERATION_REJECTION (71)</p>	<p>C_TEMP_FAILURE(37) [Temporary Failure]</p>
<p>ACS_HANDLE_TERMINATION_REJECTION (76) - The TSAPI Service detects that anacsOpenStream session is terminating. The TSAPI Service sends this error for every outstanding CSTA request of this ACS Handle.</p> <p>For example, a user may power off the PC before the application issues anacsCloseStream request and waits for the confirmation event. In this case, the acsCloseStream is issued by the TSAPI Service on behalf of the application and there is no application to receive this error. If an application issues anacsCloseStream request and waits for its confirmation event, the application will receive this error for every outstanding request.</p>	<p>GENERIC_OPERATION_REJECTION (71)</p>	<p>C_CAUSE_UNKNOWN</p>
<p>SERVICE_TERMINATION_REJECTION (77) - The TSAPI Service detects that it cannot provide the service due to the failure or shutting down of the communication link between the Telephony Server and Communication Manager. The TSAPI Service sends this error for every outstanding CSTA request that effects every ACS Handle. Although the link is down or Communication Manager is out of service, the TSAPI Service remains loaded and advertised. When the TSAPI Service is in this state, all CSTA Service requests from a client will receive a negative acknowledgment with this error code.</p>	<p>GENERIC_OPERATION_REJECTION (71)</p>	<p>C_CAUSE_UNKNOWN</p>

CSTA Error Code Returned by TSAPI	ICM CSTA error code	Mapped Cause ASAI Value
<p>REQUEST_TIMEOUT_REJECTION (78) - The TSAPI Service did not receive the response of a service request sent to Communication Manager more than 30 seconds ago. The request is canceled and negatively acknowledged with this error code. When this occurs, the communication link between the TSAPI Service and Communication Manager may be out of service or congested. Congestion may occur when TSAPI applications exceed the capacity of the TSAPI Service.</p>	<p>GENERIC_OPERATION_REJECTION (71)</p>	<p>C_REC_TIMER(12) [Timer expired]</p>
<p>REQUESTS_ON_DEVICE_EXCEEDED_REJECTION (79) - The TSAPI Service processes one service request at a time for every device. The TSAPI Service queues CSTA requests for a device. Only a limited number of CSTA requests are queued on a device. If this number is exceeded, the incoming client request is negatively acknowledged with this error code. Usually an application sends one request and waits for its completion before it makes another request. The MAX_REQS_QUEUED_PER_DEVICE parameter has no effect on this class of applications.</p> <p>Situations of sending a sequence of requests without waiting for their completion are rare. However, if this is the case, set the MAX_REQS_QUEUED_PER_DEVICE parameter to a proper value. The default value for MAX_REQS_QUEUED_PER_DEVICE is 4.</p>	<p>GENERIC_OPERATION_REJECTION (71)</p>	<p>C_QUEFULL(28) [Queue is full]</p>

Unified CCE System PG

- MAKE_CALL is only supported when the agent is in the NotReady state. An agent cannot make new calls when in wrapup mode.
- Consult and blind transfers are supported. However, placing a call on hold, making a new call, and then completing the transfer is not supported.

- The consult call must be in the Talking state before the Transfer/Conference can be completed. Therefore, if an Alternate is done in the middle of a Transfer/Conference, the operation can only be completed after a second Alternate is done to restore status quo.
- Completing a conference or a transfer to a consulted agent on hold is not supported.
- Transferring conferences to an unobserved party is not supported.
- Overlapping transfer and conference consult operations on the same parties are not supported. For example, Agent A calls Agent B. During the conversation, Agent A must conference consult Agent C. Agent B feels that Agent D has more information, so Agent B then transfer consults to Agent D. To end the call, Agent A completes the conference and Agent B completes the transfer. This would fail.
- Only the conference initiator can add parties to the conference.
- Calls do not get queued at the Unified CM but instead at some queue point. Because of this, skill group queue statistics are not available via the `QUERY_SKILL_GROUP_STATISTICS_REQ`. CTI can monitor service controlled VRUs to get queued and dequeued events, as well as established events.
- `RTP_STARTED_EVENT` and `RTP_STOPPED_EVENT` are particular to Unified CCE to support recording vendors.
- `AGENT_PRECALL_EVENT` and `AGENT_PRECALL_ABORT_EVENT` are particular to Unified CCE. They provide call context data before the routed call arrives.
- A `CALL_CONNECTION_CLEARED_EVENT` may be received with a cause of `CEC_REDIRECTED` for the following cases:
 - Agent calls a CTI Route Point and call is directed to another resource
 - Agent calls an VRU and the VRU redirects the call
 - Agent calls a number with a forwarding option turned on
- You can only monitor devices that have agents logged in via CTI OS. The Unified ICM Peripheral Monitor Table is not supported for the Unified CCE PG.
- The Unified CM Shared line feature (agents share the same extension) is not supported.
- Agent Desk Settings control some agent behaviors. These are configured in Unified ICM and downloaded by the agent desktop upon startup. `WrapupInMode` is the wrapup mode variable for incoming calls and `WrapupOutMode` is the wrapup mode variable for outgoing calls. The valid values for these parameters are:
 - **REQUIRED**

For either incoming or outgoing calls, the agent has no option but to go to the Wrapup state when a call ends. While the agent is on the call, all agent state buttons are disabled. While the agent is in the wrapup state, the Ready and NotReady buttons must be enabled.

Clicking either the Ready or NotReady buttons must dismiss the Wrapup dialog box and put the agent in the state that was chosen. However, if the wrapup timer was enabled in the PG configuration and timeout occurs before an agent state is chosen, the agent state automatically changes as follows:

 - If the timeout occurred at the end of an incoming call, the agent state changes to Ready.
 - If the timeout occurred at the end of an outgoing call, the agent state changes to NotReady.

- **REQUIRED_WITH_DATA**

The same as **REQUIRED**, but the agent must input some data into the Wrapup dialog box before exiting the dialog box and going to a Ready or NotReady state. This applies only to WrapupInMode.

- **OPTIONAL**

For either incoming or outgoing calls, the agent can only enter any after call state—Wrapup, Ready or NotReady—by clicking the appropriate button.

- **NOT_ALLOWED**

For either incoming or outgoing calls, the agent is only able to enter the Ready or NotReady states. The wrapup button is disabled.

Points of note for API users:

- If the wrapup mode is **REQUIRED_WITH_DATA**, SetAgentState for returning to ready or not ready fails with an error code of **CF_WRAPUP_DATA_REQUIRED** (280) if there is no wrapup data entered into a call.
- If Logout Reason or NotReady Reasons are required, an error of **CF_REASON_CODE_REQUIRED** (281) is received if the reasons are not assigned in set agent state request. You must also create Logout Reason and NotReady Reason dialog boxes in the Reason Code if you require these properties.

For more information about reason code and wrapup modes, see the *Administration Guide for Cisco Unified Contact Center Enterprise*.

- The PG also uses the Supervisor Interface periodically to interrogate the switch to examine agent configuration change. The period interval is controlled by the Windows Registry entry “MonitorGroupTimerQuery”. If there is an agent skill group assignment change, the PG knows only when it next interrogates the switch.

UCCE Error Codes

The following table provides a brief description of the error message and what they indicate.

Table 17: Error Code Indicator

Error	Indicates
PERERR_TELDRIVE	The telephony driver layer generated the error.
PERERR_JTCLIENT	The JTAPI client generated the error.
PERERR_JTAPPLAY	The JTAPI application layer generated the error.
PERERR_GW_E	The JTAPI gateway generated the error.
PERERR_CM	Cisco Unified Communications Manager generated the error.

The following table lists error codes and their descriptions.



Note Some of these values appear over two lines due to space limitations.

Table 18: Error Code Description

Return Value/ Code	Error Message	Description
-1 PERERR_UNKNOWN	Unknown Peripheral Error.	The Peripheral error specified does not exist.
10001 PERERR_TELDRIVE_LOCKTPSERVICES	A logic error occurred prior to Locking TP Services.	The TP Services cannot be locked by the thread because they are already locked. This is a serious logic condition and should be reported/resolved.
10002 PERERR_TELDRIVE_LOCKINSTANCE	A logic error occurred prior to Locking the Client Instance.	The Client Instance cannot be locked by the thread because it is already locked. This is a serious logic condition and should be reported/resolved.
10003 PERERR_TELDRIVE_LOCKTELDRIVELAYER	A logic error occurred prior to Locking the Telephony Driver Layer.	The Telephony Driver Layer cannot be locked by the thread because it is already locked. This is a serious logic condition and should be reported/resolved.
10004 PERERR_TELDRIVE_NOINSTRUMENTFOR EXTENSION	The extension number specified is not associated with any known instrument.	An instrument with the number specified cannot be found for any instrument. Perhaps an invalid extension was specified.
10101 PERERR_TELDRIVE_AGENTALREADYLOGGEDOUT	The agent is already LOGGED out.	An attempt was made to log out an agent that is already logged out. This attempt failed.
10102 PERERR_TELDRIVE_AGENTALREADYSIGNEDON	The agent is already LOGGED ON.	An attempt was made to log in an agent that is already logged in. This attempt failed.
10103 PERERR_TELDRIVE_AGENTAVAILORWORK	The requested function cannot be performed since the agent is AVAILABLE or in a CALL WORK State.	This can occur when an agent tries to make a call from an AVAILABLE, or WORK state.
10104 PERERR_TELDRIVE_AGENTCANTGOUNAVAILABLE	The Agent cannot go UNAVAILABLE due to possible calls.	When this error occurs, the ROUTER did not approve the agent going unavailable. Typically retrying this makes it succeed.
10105 PERERR_TELDRIVE_AGENTNOTINATEAM	Agent is not a TEAM member– cannot make supervisor call.	The agent is trying to make a supervisor assist call but is not a member of a team.

Return Value/ Code	Error Message	Description
10106 PERERR_TELDRIVE_AGENTRESERVED	Agent is RESERVED – cannot make call.	This error occurs when the agent is trying to make a call or consult call but is currently RESERVED for an incoming call.
10107 PERERR_TELDRIVE_AGENTTEAMNOTFOUND	Internal Logic Error – Agent Team not found.	The agent team specified in the agent object cannot be found. This indicates an internal error that should be reported and resolved.
10108 PERERR_TELDRIVE_BADSTATETRANSITION	The state transition is invalid from the current state.	The routine ValidateAgentPrevalentStateTransition determined that the desired transition was illegal from the current state.
10109 PERERR_TELDRIVE_CALLTYPENOTVALIDFOR DIALPLAN	The agent is attempting to make a call that is not valid for their defined call plan.	The call type that the call was classified into is not allowed for the dialed Number Plan used.
10111 PERERR_TELDRIVE_CANTGOREADYFROM CURRENTSTATE	Cannot transition to READY from current state.	Based upon transition rules, the agent cannot go READY. Examples: You cannot go READY from TALKING.
10112 PERERR_TELDRIVE_CANTLOGOUTFROM CURRENTSTATE	The agent cannot log out from the current state.	The agent must be NOT READY in order to log out.
13042 PERERR_GW_E_THREADCLEARCALL_DROP_EXCEPTION	JTAPI Gateway – Error on CLEAR CALL operation – Exception.	The routine run in object ThreadClearCall got an exception (not of type CiscoJtapiException) on a call to "drop".
13044 PERERR_GW_E_THREADCLEARCONNECTION_UNKNOWN_CONNECTION	JTAPI Gateway – Error on CLEARCONNECTION operation – Unknown connection ID.	
13045 PERERR_GW_E_THREADCONFERENCECALL_ACTIVE_CONN_NOT_TALKING	JTAPI Gateway – Error on CONFERENCE operation – ACTIVE connection not in proper state.	The connection specified in the active connection is not in the TALKING state.
13046 PERERR_GW_E_THREADCONFERENCECALL_BAD_ACTIVE_CONNECTION	JTAPI Gateway – Error on CONFERENCE operation – ACTIVE connection not found.	
13047 PERERR_GW_E_THREADCONFERENCECALL_BAD_HELD_CONNECTION	JTAPI Gateway – Error on CONFERENCE operation – HELD connection not found.	
13048 PERERR_GW_E_THREADCONFERENCECALL_CREATECALL_NULL_CALL	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got a null call returned from "createcall".

Return Value/ Code	Error Message	Description
13049 PERERR_GW_E_THREAD CONFERENCECALL_ EXCEPTION_ADDPARTY	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "addparty".
13050 PERERR_GW_E_THREAD CONFERENCECALL_ EXCEPTION_CONFERENCE_NEW	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "conference" for the NEW call.
13051 PERERR_GW_E_ THREADCONFERENCECALL_ EXCEPTION_CONFERENCE_HELD	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "conference" for the HELD call.
13052 PERERR_GW_E_ THREADCONFERENCECALL_ EXCEPTION_CONSULT	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "consult".
13053 PERERR_GW_E_ THREADCONFERENCECALL_ EXCEPTION_CREATECALL	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "consult".
13054 PERERR_GW_E_ THREADCONFERENCE CALL_EXCEPTION_ SETCONFERENCEENABLE	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "setconferenceenable".
13055 PERERR_GW_E_ THREADCONFERENCE CALL_EXCEPTION_ SETTRANSFERCONTROLLER	JTAPI Gateway – Error on CONFERENCE operation.	The routine run in object ThreadConferenceCall got an exception (not of type CiscoJTapiException) on a call to "settransfercontroller".
13056 PERERR_GW_E_THREAD CONFERENCECALL_ HELD_CONN_NOT_HELD	JTAPI Gateway – Error on CONFERENCE operation – HELD connection not HELD	The connection passed for the held connection is not in the HELD state.
13057 PERERR_GW_E_THREAD CONFERENCECALL_ NULL_DIALED_NUMBER	JTAPI Gateway – Error on CONFERENCE operation – Invalid Dialed Number.	A NULL dialed number was specified for the consultation number.
13058 PERERR_GW_E_THREAD CONSULTATIONCALL_ CREATECALL_NULL_CALL	JTAPI Gateway – Operation error on CONSULT operation.	The routine run in object ThreadConsultationCall got a null call returned from "createCall".

Return Value/ Code	Error Message	Description
13059 PERERR_GW_E_THREAD CONSULTATIONCALL_ EXCEPTION_CONSULT	JTAPI Gateway – Error on CONSULT operation.	The routine run in object ThreadConsultationCall got an exception on a call to "settransfercontroller".
13060 PERERR_GW_E_THREAD CONSULTATIONCALL_ EXCEPTION_CREATECALL	JTAPI Gateway – Error on CONSULT operation.	The routine run in object ThreadConsultationCall got an exception on a call to "createCall".
13061 PERERR_GW_E_THREAD CONSULTATIONCALL_ EXCEPTION_SET CONFERENCEENABLE	JTAPI Gateway – Error on CONSULT operation.	The routine run in object ThreadConsultationCall got an exception on a call to "setConferenceEnable".
13062 PERERR_GW_E_THREAD CONSULTATIONCALL_ INVALID_CONSULT_TYPE	JTAPI Gateway – Error on CONSULT operation – Invalid Consult type.	The type specified is not TRANSFER or CONFERENCE.
13063 PERERR_GW_E_THREAD CONSULTATIONCALL_ NO_ACTIVE_CONNECTION	JTAPI Gateway – Error on CONSULT operation – No Active Connection.	The ACTIVE connection specified in the request does not exist.
13064 PERERR_GW_E_THREAD ESCAPESERVICE_ CREATECALL_NULL_CALL1	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got a NULL call returned from "createCall" (method "CreateNewCall" in class ThreadEscapeService).
13065 PERERR_GW_E_THREAD ESCAPESERVICE_ CREATECALL_NULL_CALL2	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got a NULL call returned from "createCall" (method "CreateConsultCall" in class ThreadEscapeService).
13066 PERERR_GW_E_THREAD ESCAPESERVICE_ CREATECALL_NULL_CALL3	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got a NULL call returned from "createCall" (method "CreateBlindConferenceCall" in class ThreadEscapeService).
13067 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CONFERENCE	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "conference" (method "CreateBlindConferenceCall" in class ThreadEscapeService).
13068 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CONNECT	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "connect" (method "CreateNewCall" in class ThreadEscapeService).
13069 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CONSULT1	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "consult" (method "CreateConsultCall" in class ThreadEscapeService).
13070 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CONSULT2	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "consult" (method "CreateBlindConferenceCall" in class ThreadEscapeService).

Return Value/ Code	Error Message	Description
13071 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CREATECALL1	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "createCall" (method "CreateNewCall" in class ThreadEscapeService).
13072 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CREATECALL2	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "createCall" (method "CreateConsultCall" in class ThreadEscapeService).
13073 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_CREATECALL3	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "createCall" (method "CreateBlindConferenceCall" in class ThreadEscapeService).
13074 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_GETADDRESS	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "getAddress" (method "CreateNewCall" in class ThreadEscapeService).
13075 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_GETTERMINALS	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got an exception on a call to "getTerminals" (method "CreateNewCall" in class ThreadEscapeService).
13076 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_SEICONFERENCEENABLE1	JTAPI Gateway – Error on SUPERVISOR (escape) operation	Got an exception on a call to "setConferenceEnable" (method "CreateConsultCall" in class ThreadEscapeService).
13077 PERERR_GW_E_THREAD ESCAPESERVICE_ EXCEPTION_SEICONFERENCEENABLE2	JTAPI Gateway – Error on SUPERVISOR (escape) operation	Got an exception on a call to "setConferenceEnable" (method "CreateBlindConference" in class ThreadEscapeService).
13078 PERERR_GW_E_THREAD ESCAPESERVICE_ INVALID_EMERGENCY_ ALERT_TYPE	JTAPI Gateway – Error on SUPERVISOR (escape) operation – Invalid Alert Type.	The Alert type specified was not CONSULT or BLIND_CONFERENCE.
13079 PERERR_GW_E_THREAD ESCAPESERVICE_ INVALID_SUPERVISOR_ ASSIST_TYPE	JTAPI Gateway – Error on SUPERVISOR (escape) operation – Invalid Alert Type.	The Alert type specified was not CONSULT or BLIND_CONFERENCE.
13080 PERERR_GW_E_THREAD ESCAPESERVICE_ NO_TERMINAL_LIST	JTAPI Gateway – Error on SUPERVISOR (escape) operation.	Got a NULL terminal list from "getTerminals" (method "CreateNewCall" in class ThreadEscapeService).
13081 PERERR_GW_E_THREAD HOLDCALL_ CALL_NOT_CONTROLLED	JTAPI Gateway – Error on HOLD operation – Uncontrolled Call.	The call specified is not a controlled call.

Return Value/ Code	Error Message	Description
13082 PERERR_GW_E_THREAD HOLDCALL_EXCEPTION_HOLD	JTAPI Gateway – Error on HOLD operation – Exception.	Got an exception on a call to "hold" (method "run" in class ThreadHoldCall).
13083 PERERR_GW_E_THREAD MAKECALL_ CREATECALL_NULL_CALL	JTAPI Gateway – Error on MAKE CALL operation – Can't create call.	Got a NULL call returned from "createCall" (method "run" in class ThreadMakeCall).
13084 PERERR_GW_E_THREAD MAKECALL_ CREATE_CALL_FAILURE	JTAPI Gateway – Error on MAKE CALL operation – Can't create call.	Got an exception on a call to "createCall" (method "run" in class ThreadMakeCall).
13085 PERERR_GW_E_THREAD MAKECALL_ GENERIC_CM_ERROR	JTAPI Gateway – Error on MAKE CALL operation – Exception.	Got an exception on a call to "connect" (method "run" in class ThreadMakeCall).
13086 PERERR_GW_E_THREAD MAKECALL_ NULL_TERMINAL_LIST	JTAPI Gateway – Error on MAKE CALL operation.	Got a NULL terminal list returned from "getTerminals" (method "run" in class ThreadMakeCall).
13087 PERERR_GW_E_THREAD MAKECALL_ PROVIDER_GETADDRESS	JTAPI Gateway – Error on MAKE CALL operation.	Got an exception on a call to "getAddress" (method "run" in class ThreadMakeCall).
13088 PERERR_GW_E_THREAD MAKECALL_ PROVIDER_GETTERMINAL	JTAPI Gateway – Error on MAKE CALL operation.	Got an exception on a call to "getTerminals" (method "run" in class ThreadMakeCall).
13089 PERERR_GW_E_THREAD REDIRECTCALL_ EXCEPTION_REDIRECT	JTAPI Gateway – Error on REDIRECT operation – Exception.	Got an exception on a call to "redirect" (method "run" in class ThreadRedirectCall).
13090 PERERR_GW_E_THREAD RETRIEVECALL_ CALL_NOT_CONTROLLED	JTAPI Gateway – Error on RETRIEVE operation – Uncontrolled Call.	The call specified is not a controlled call.
13091 PERERR_GW_E_THREAD RETRIEVECALL_ EXCEPTION_UNHOLD	JTAPI Gateway – Error on RETRIEVE operation – Exception.	Got an exception on a call to "unhold" (method "run" in class ThreadRetrieveCall).
13092 PERERR_GW_E_THREAD SENDDTMF_EXCEPTION_ GENERATEDTMF	JTAPI Gateway – Error on SEND DTMF operation – Exception.	Got an exception on a call to "generateDTMF" (method "run" in class ThreadSendDTMF).
13093 PERERR_GW_E_THREAD SENDDTMF_ INVALID_CONNECTION	JTAPI Gateway – Error on SEND DTMF operation – Invalid Connection ID.	The method "run" in class ThreadSendDTMF got a null connection from a call to "findTerminalConnection".
13094 PERERR_GW_E_THREAD SENDDTMF_ NOT_MEDIATERMINAL CONNECTION	JTAPI Gateway – Error on SEND DTMF operation – No Media.	

Return Value/ Code	Error Message	Description
13095 PERERR_GW_E_THREAD SUPERVISECALL_ACTIVE_ CONN_NOT_TALKING	JTAPI Gateway – Error on SUPERVISE operation – ACTIVE connection not in proper state.	The connection specified in the active connection is not in the TALKING state.
13096 PERERR_GW_E_THREAD SUPERVISECALL_ ALREADY_BARGED_IN	JTAPI Gateway – Error on SUPERVISE operation – Cannot Barge in, already barged into.	The call specified on the barge in request has already been barged into.
13097 PERERR_GW_E_THREAD SUPERVISECALL_ CREATECALL_NULL_CALL	JTAPI Gateway – Error on SUPERVISE operation – Can't create call.	The routine run in object ThreadSuperviseCall got a null call returned from "createcall".
13098 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_ANSWER1	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "answer" (method "DirectSupervisorBargeIn" in class ThreadSuperviseCall).
13099 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_ANSWER2	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "answer" (method "BargeInBlindConferenceCall" in class ThreadSuperviseCall).
13100 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_CONFERENCE1	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "conference" (method "SupervisorBargeInCall" in class ThreadSuperviseCall).
13101 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_CONFERENCE2	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "conference" (method "DirectSupervisorBargeIn" in class ThreadSuperviseCall).
13102 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_CONSULT	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "conference" (method "DirectSupervisorBargeIn" in class ThreadSuperviseCall).
13103 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_CREATECALL	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "createCall" (method "DirectSupervisorBargeIn" in class ThreadSuperviseCall).
13104 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_DISCONNECT1	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "disconnect" (method "DropSupervisorCall" in class ThreadSuperviseCall).
13105 PERERR_GW_E_THREAD SUPERVISECALL_ EXCEPTION_DISCONNECT2	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "disconnect" (method "InterceptCall" in class ThreadSuperviseCall).

Return Value/ Code	Error Message	Description
13106 PERERR_GW_E_THREAD SUPERVISECALL_EXCEPTION_SET CONFERENCEENABLE	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "disconnect" (method "DirectSupervisorBargeIn" in class ThreadSuperviseCall).
13107 PERERR_GW_E_THREAD SUPERVISECALL_HELD_CONN_NOT_HELD1	JTAPI Gateway – Error on SUPERVISE operation – HELD connection is not HELD.	The connection specified for the HELD call is not in the held state (method "BargeInCall" class ThreadSuperviseCall).
13108 PERERR_GW_E_THREAD SUPERVISECALL_HELD_CONN_NOT_HELD2	JTAPI Gateway – Error on SUPERVISE operation – HELD connection is not HELD.	The connection specified for the HELD call is not in the held state (method "DirectSupervisorBargeIn" class ThreadSuperviseCall).
13109 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_ACTION	JTAPI Gateway – Error on SUPERVISE operation – Invalid action. The action specified was not CLEAR, BARGE_IN or INTERCEPT.	
13110 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_ACTIVE_CONNECTION	JTAPI Gateway – Error on SUPERVISE operation – No ACTIVE connection.	The connection specified in the active connection does not exist.
13111 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_AGENT_CALLID1	JTAPI Gateway – Error on SUPERVISE operation – Bad Call ID.	The call ID in the agent object is invalid (method "BargeInCall" class ThreadSuperviseCall).
13112 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_AGENT_CALLID2	JTAPI Gateway – Error on SUPERVISE operation – Bad Call ID.	The call ID in the agent object is invalid (method "DirectSupervisorBargeIn" class ThreadSuperviseCall).
13113 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_AGENT_CONNECTION1	JTAPI Gateway – Error on SUPERVISE operation – Bad Connection ID.	The connection ID in the agent object is invalid (method "BargeInCall" class ThreadSuperviseCall).
13114 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_AGENT_CONNECTION2	JTAPI Gateway – Error on SUPERVISE operation – Bad Connection ID.	The connection ID in the agent object is invalid (method "InterceptCall" class ThreadSuperviseCall).
13115 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_HELD_CONNECTION	JTAPI Gateway – Error on SUPERVISE operation – Invalid HELD connection.	The connection ID in the agent object is invalid (method "BargeInCall" class ThreadSuperviseCall).
13116 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_SUPERVISOR_CONNECTION1	JTAPI Gateway – Error on SUPERVISE operation – Invalid Supervisor connection.	The connection ID in the agent object is invalid (method "DropSupervisorCall" class ThreadSuperviseCall).

Return Value/ Code	Error Message	Description
13117 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_SUPERVISOR_CONNECTION2	JTAPI Gateway – Error on SUPERVISE operation – Invalid Supervisor connection.	The connection ID in the agent object is invalid (method "BargeInCall" class ThreadSuperviseCall).
13118 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_SUPERVISOR_CONNECTION3	JTAPI Gateway – Error on SUPERVISE operation – Invalid Supervisor connection.	The connection ID in the agent object is invalid (method "DirectSupervisorBargeIn" class ThreadSuperviseCall).
13119 PERERR_GW_E_THREAD SUPERVISECALL_INVALID_SUPERVISOR_CONNECTION4	JTAPI Gateway – Error on SUPERVISE operation – Invalid Supervisor connection.	The connection ID in the agent object is invalid (method "BargeInBlindTransferCall" class ThreadSuperviseCall).
13120 PERERR_GW_E_THREAD SUPERVISECALL_SUPERVISOR_NOT_TALKING	JTAPI Gateway – Error on SUPERVISE operation – Supervisor Connection not TALKING.	The supervisor's connection is not in the talking state (method "DirectSupervisorBargeIn" class ThreadSuperviseCall).
13121 PERERR_GW_E_THREAD TRANSFERCALL_ACTIVE_CONN_NOT_TALKING	JTAPI Gateway – Error on SUPERVISE operation – Connection not TALKING.	The connection is not in the talking state (method "BargeInCall" class ThreadSuperviseCall).
13122 PERERR_GW_E_THREAD TRANSFERCALL_EXCEPTION_SETTRANSFER_CONTROLLER	JTAPI Gateway – Error on SUPERVISE operation – Exception.	The method "run" in class ThreadTransferCall got an exception on a call to "setTransferController".
13123 PERERR_GW_E_THREAD TRANSFERCALL_EXCEPTION_TRANSFER1	JTAPI Gateway – Error on SUPERVISE operation – Exception.	The method "run" in class ThreadTransferCall got an exception on a call to "transfer" with the HELD call specified.
13124 PERERR_GW_E_THREAD TRANSFERCALL_EXCEPTION_TRANSFER2	JTAPI Gateway – Error on SUPERVISE operation – Exception.	Got an exception on a call to "transfer" with the ACTIVE call specified (method "run" in class ThreadTransferCall).
13125 PERERR_GW_E_THREAD TRANSFERCALL_HELD_CONN_NOT_HELD	JTAPI Gateway – Error on TRANSFER operation HELD connection not HELD.	The connection passed for the held connection is not in the HELD state.
13126 PERERR_GW_E_THREAD TRANSFERCALL_INVALID_ACTIVE_CONNECTION	JTAPI Gateway – Error on TRANSFER operation – No ACTIVE.	The connection specified in the active connection does not exist.
13127 PERERR_GW_E_THREAD TRANSFERCALL_INVALID_HELD_CONNECTION	JTAPI Gateway – Error on TRANSFER operation Invalid HELD connection.	The connection ID in the agent object is invalid.

Return Value/ Code	Error Message	Description
20000 PERERR_CM_UNSPECIFIED	An unspecified Call Manager – error occurred on the operation.	
20001 PERERR_CM_TIMEOUT	A time-out Call Manager – occurred on the operation.	An operation exceeded the time limit that was configured/allocated for that operation.
20002 PERERR_CM_NO_ACTIVE_DEVICE_FOR_THIRDPARTY	Call Manager – Undescribed Error.	
20003 PERERR_CM_EXISTING_FIRSTPARTY	Call Manager – Line was specified that was not found.	
20004 PERERR_CM_ILLEGAL_HANDLE	Call Manager – Handle is unknown to the system.	
20005 PERERR_CM_UNDEFINED_LINE	Call Manager – Undescribed Error.	
20006 PERERR_CM_ILLEGAL_CALLINGPARTY	Call Manager – Attempt to originate call using a calling party that is not on the device.	
20007 PERERR_CM_CALL_ALREADY_EXISTS	Call Manager – Another call already exists on the line.	
20008 PERERR_CM_LINECONTROL_FAILURE	Call Manager – Line control refuses to let a new call because of its state (probably bug).	
20009 PERERR_CM_ILLEGAL_CALLSTATE	Call Manager – Line is not in a legal state to invoke the command.	
20010 PERERR_CM_CALLHANDLE_NOTINCOMINGCALL – Call Manager	Attempt to answer a call that either does not exist or is not in the correct state.	
20011 PERERR_CM_TRANSFERFAILED_DESTINATION_UNALLOCATED	Call Manager – Attempt to transfer to a directory number that is not registered.	
20013 PERERR_CM_TRANSFERFAILED_DESTINATION_BUSY	Call Manager – Attempt to transfer to a busy destination.	
20014 PERERR_CM_TRANSFERFAILED	Call Manager – Transfer failed.	Probable cause is one of the call legs was hung up or disconnected from the far end.

Return Value/ Code	Error Message	Description
20015 PERERR_CM_HOLDFAILED	CallManager – Hold was rejected by line control or call control.	
20017 PERERR_CM_RETRIEVE_FAILED	CallManager – Retrieve was rejected by line control or call control.	
20018 PERERR_CM_DB_NO_MORE_DEVICES	CallManager – Error No longer used.	
20020 PERERR_CM_DB_ILLEGAL_DEVICE_TYPE	CallManager – Error No longer used.	
20021 PERERR_CM_DB_ERROR	CallManager – Device query contained an illegal device type.	
20022 PERERR_CM_CANNOT_TERMINATE_MEDIA_ON_PHONE	CallManager – Media cannot be terminated by an application when the device has a physical phone (the phone always terminates the media).	
20025 PERERR_CM_UNKNOWN_GLOBAL_CALL_HANDLE	CallManager – Error no longer used.	
20026 PERERR_CM_DEVICE_NOT_OPEN	CallManager – Command issued on a line that must be open.	
20027 PERERR_CM_ASSOCIATED_LINE_NOT_OPEN	CallManager – Undescribed Error.	
20028 PERERR_CM_SSAPI_NOT_REGISTERED	CallManager – Redirect command was issued when the internal supporting interface was not initialized.	
20029 PERERR_CM_REDIRECT_CALL_DOES_NOT_EXIST	CallManager – Attempt to redirect a call that does not exist or is no longer active.	
20048 PERERR_CM_REDIRECT_CALLINFO_ERR	CallManager – Internal error returned from call control.	
20049 PERERR_CM_REDIRECT_ERR	CallManager – Internal error returned from call control.	
20050 PERERR_CM_REDIRECT_CALL_CALL_TABLE_FULL	CallManager – Internal error returned from call control.	
20051 PERERR_CM_REDIRECT_CALL_PROTOCOL_ERROR	CallManager – Internal error returned from call control.	

Return Value/ Code	Error Message	Description
20052 PERERR_CM_REDIRECT_CALL_UNKNOWN_DESTINATION	CallManager – Attempt to redirect to an unknown destination.	
20053 PERERR_CM_REDIRECT_CALL_DIGIT_ANALYSIS_TIMEOUT	CallManager – Internal error returned from call control	
20054 PERERR_CM_REDIRECT_CALL_MEDIA_CONNECTION_FAILED	CallManager – Internal error returned from call control.	
20055 PERERR_CM_REDIRECT_CALL_PARTY_TABLE_FULL	CallManager – Internal error returned from call control.	
20056 PERERR_CM_REDIRECT_CALL_ORIGINATOR_ABANDONED	CallManager – Far end hung up on the call being redirected.	
20057 PERERR_CM_REDIRECT_CALL_UNKNOWN_PARTY	CallManager – Internal error returned from call control.	
20058 PERERR_CM_REDIRECT_CALL_INCOMPATIBLE_STATE	CallManager – Internal error returned from call control.	
20059 PERERR_CM_REDIRECT_CALL_PENDING_REDIRECT_TRANSACTION	CallManager – Internal error returned from call control.	
20060 PERERR_CM_REDIRECT_CALL_UNKNOWN_ERROR	CallManager – Internal error returned from call control.	
20061 PERERR_CM_REDIRECT_CALL_NORMAL_CLEARING	CallManager – Internal error returned from call control.	
20062 PERERR_CM_REDIRECT_CALL_UNRECOGNIZED_MANAGER	CallManager – Internal error returned from call control.	
20063 PERERR_CM_REDIRECT_CALL_DESTINATION_BUSY	CallManager – Redirect destination is busy.	
20064 PERERR_CM_REDIRECT_CALL_DESTINATION_OUT_OF_ORDER	CallManager – Redirect destination is out of order.	
20065 PERERR_CM_CANNOT_OPEN_DEVICE	CallManager – Device open failed because the associated device is shutting down (unregistering).	
20066 PERERR_CM_TRANSFER_FAILED_OUTSTANDING_TRANSFER	CallManager – Existing transfer still in progress.	

Return Value/ Code	Error Message	Description
20067 PERERR_CM_TRANSFER_FAILED_CALLCONTROL_TIMEOUT	CallManager – Expected response from call control not received during a transfer.	
20068 PERERR_CM_CALLHANDLE_UNKNOWN_TO_LINECONTROL	CallManager – Attempt to redirect call that was unknown to line control.	
20069 PERERR_CM_OPERATION_NOT_AVAILABLE_IN_CURRENT_STATE	CallManager – Undescribed Error.	
20070 PERERR_CM_CONFERENCE_FULL	CallManager – Undescribed Error.	
20071 PERERR_CM_MAX_NUMBER_OF_CTI_CONNECTIONS_REACHED	CallManager – Undescribed Error.	
20080 PERERR_CM_INCOMPATIBLE_PROTOCOL_VERSION	CallManager – Undescribed Error.	
20081 PERERR_CM_UNRECOGNIZABLE_PDU	CallManager – QBE protocol error (bug).	
20082 PERERR_CM_ILLEGAL_MESSAGE_FORMAT	CallManager – QBE protocol error (bug).	
20094 PERERR_CM_DIRECTORY_TEMPORARY_UNAVAILABLE	CallManager – Undescribed Error.	
20095 PERERR_CM_DIRECTORY_LOGIN_NOT_ALLOWED	CallManager – Undescribed Error.	
20096 PERERR_CM_DIRECTORY_LOGIN_FAILED	CallManager – Login to the directory server failed when opening the provider.	
20097 PERERR_CM_PROVIDER_NOT_OPEN	CallManager – Attempt to issue a CTI command before the provider was open.	
20098 PERERR_CM_PROVIDER_ALREADY_OPEN	CallManager – Attempt to reopen a provider.	
20099 PERERR_CM_NOT_INITIALIZED	CallManager – Attempt to open a provider before CTI initialization completes.	
20100 PERERR_CM_CLUSTER_LINK_FAILURE	CallManager – Link failed to one of the call managers in the cluster (network error).	

Return Value/ Code	Error Message	Description
20101 PERERR_CM_LINE_INFO_DOES_NOT_EXIST	CallManager – Undescribed Error.	
20102 PERERR_CM_DIGIT_GENERATION_ALREADY_IN_PROGRESS	CallManager – Undescribed Error.	
20103 PERERR_CM_DIGIT_GENERATION_WRONG_CALL_HANDLE	CallManager – Undescribed Error.	
20104 PERERR_CM_DIGIT_GENERATION_WRONG_CALL_STATE	CallManager – Undescribed Error.	
20105 PERERR_CM_DIGIT_GENERATION_CALLSTATE_CHANGED	CallManager – Undescribed Error.	
20112 PERERR_CM_RETRIEVE_FAILED_ACTIVE_CALL_ON_LINE	CallManager – Undescribed Error.	
20113 PERERR_CM_INVALID_LINE_HANDLE	CallManager – Undescribed Error.	
20114 PERERR_CM_LINE_NOT_PRIMARY	CallManager – Undescribed Error.	
20115 PERERR_CM_CFWDALL_ALREADY_SET	CallManager – Undescribed Error.	
20116 PERERR_CM_CFWDALL_DESTN_INVALID	CallManager – Undescribed Error.	
20117 PERERR_CM_CFWDALL_ALREADY_OFF	CallManager – Undescribed Error.	
20119 PERERR_CM_DEVICE_OUT_OF_SERVICE	CallManager – Undescribed Error.	
20120 PERERR_CM_MSGWAITING_DESTN_INVALID	CallManager – Undescribed Error.	
20121 PERERR_CM_DARES_INVALID_REQ_TYPE	CallManager – Undescribed Error.	
20122 PERERR_CM_CONFERENCE_FAILED	CallManager – Undescribed Error.	
20123 PERERR_CM_CONFERENCE_INVALID_PARTICIPANT	CallManager – Undescribed Error.	

Return Value/ Code	Error Message	Description
20124 PERERR_CM_CONFERENCE_ALREADY_PRESENT	CallManager – Undescribed Error.	
20125 PERERR_CM_CONFERENCE_INACTIVE	CallManager – Undescribed Error.	
20126 PERERR_CM_TRANSFER_INACTIVE	CallManager – Undescribed Error.	
20153 PERERR_CM_COMMAND_NOT_IMPLEMENTED_ON_DEVICE	CallManager – Device does not support the command.	Undescribed Error.
20512 PERERR_CM_PROVIDER_CLOSED	CallManager – Undescribed Error.	
20513 PERERR_CM_PROTOCOL_TIMEOUT	CallManager – Undescribed Error.	
24095 PERERR_CM_GENERAL	CallManager – Unknown CallManager Failure on Operation.	An error response was received for a request issued to the call manager, but no error code could be extracted. This is always the case in the Encore Release. Please refer to the JTAPI log for more information.

Avaya Aura CC (Symposium)

- The Peripheral Gateway (and thus CTI OS clients) do not receive a CallEstablished Event for an off-switch call. As a result of this limitation, some features—such as blind conference or transfer operation off-switch—are not supported. The soft phone receives no notification that the call has been connected off-switch, and thus the application requires manual intervention from the agent (who heard a dial-tone, a ring, or an answer, and so forth) before completing the conference or transfer operation.
- The Transfer button is not enabled after an off-switch consult.
- Single-step/blind transfer or conference is not supported. Transfer and conference calls must be consultative.
- Consultative Transfer to a supervisor is not supported.
- Users cannot transfer to an AgentID.
- Users cannot put a conference or consultative call on hold, therefore the button is disabled.
- There is a delay when switching from the NotReady state to the Ready state.
- There is no equivalent to the AACC state WalkAway. The ACD gives a NOT_READY state to Unified ICM, but the switch rejects a request to set WalkAway to Not_Ready.
- Third-party call control and agent control requests issued through the CTI Server interface sometimes return a Peripheral error code in the failure indication message if the request fails. For the Avaya Aura CC (Symposium), this Peripheral error code is either a Status value or a Cause value. Generally, Status values are returned for call requests such as MakeCall and Cause values are returned for agent control

requests such as SetAgentState. The Avaya Aura CC (Symposium) Status and Cause values are defined in the two following tables.

- The ALTERNATE_CALL request is not supported with the Avaya Aura CC (Symposium) (for more information, see [Call Events, on page 3](#)).

Table 19: Avaya Status Values

Status Value (hex/dec)	Description
Invalid Parameters	
0A00 / 2560	Invalid calling TN
0A01 / 2561	Invalid calling DN; wrong DN specified
0A02 / 2562	Incomplete calling DN
0A03 / 2563	Invalid called DN
0A04 / 2564	Incomplete called DN
0A05 / 2565	Invalid called TN
0A06 / 2566	Invalid origination manner
0A07 / 2567	Invalid destination manner
0A08 / 2568	Invalid origination user type
0A09 / 2569	Invalid customer number
0A0A / 2570	System or data base error
Unsuccessful Call Origination	
0B00 / 2816	Origination party busy
0B01 / 2817	Origination resource blocking
0B02 / 2818	Origination set is maintenance busy
0B03 / 2819	500/2500 set is onhook
0B04 / 2820	Origination DN busy
0B05 / 2821	Origination is ringing
0B06 / 2822	Unable to disconnect origination (that is, already disconnected)
0B07 / 2823	Origination access restriction blocking
0B08 / 2824	Origination call on permanent hold
0B0A / 2826	System or data base error

Status Value (hex/dec)	Description
0B0B / 2827	Origination receiving end to end signaling
0B0C / 2828	The call is currently in an ACD queue
0B0E / 2830	Origination set invoked hold
0B14 / 2836	Transfer key not configured
0B15 / 2837	Transfer key not idle
0B16 / 2838	Set active in conference call
0B17 / 2839	Transfer or MPO/TSA class of service not configured
0B18 / 2840	Cannot put call on hold
0B1D / 2845	No active call exists on set
0B1E / 2846	No held call exists on set
Unsuccessful Call Termination	
0C00 / 3072	Terminating party is busy
0C01 / 3073	Destination resource blocking
0C02 / 3074	Destination in invalid state
0C07 / 3079	Destination access restriction blocking
0D0A / 3338	System or database error
Network Interceptions	
0C08 / 3080	Unassigned number
0C09 / 3081	No route to destination
0C0A / 3082	No user responding
0C0B / 3083	Number changed
0C0C / 3084	Destination out of service
0C0D / 3085	Invalid number format
0C0E / 3086	No circuit available
0C0F / 3087	Network out of order
0C10 / 3088	Temporary failure
0C11 / 3089	Equipment congestion
Network Interceptions with In-Band Information	

Status Value (hex/dec)	Description
0C19 / 3097	Terminating party is busy
0C1A / 3098	Unassigned number
0C1B / 3099	No route to destination
0C1C / 3100	No user responding
0C1D / 3101	Number changed
0C1E / 3102	Destination out of service
0C1F / 3103	Invalid number format
0C20 / 3104	No circuit available
0C21 / 3105	Network out of order
0C22 / 3106	Temporary failure
0C23 / 3107	Equipment congestion
0C24 / 3108	Interworking, unspecified
0CFE / 3326	Other cause
Unsuccessful Conference or Transfer Operation	
0D00 / 3328	Cannot complete conference
0D01 / 3329	Cannot initiate transfer
0D02 / 3330	Cannot complete transfer
0D03 / 3331	Cannot retrieve original call
0D04 / 3332	Fast Transfer initiation failed
0D05 / 3333	Fast Transfer completion failed
0D0B / 3339	Hold Request failed

Table 20: Avaya Cause Values

Cause Value (hex/dec)	Description
1002 / 4098	Access restricted
1003 / 4099	Resource unavailable
1004 / 4100	Invalid customer number
1005 / 4101	Invalid origination address

Cause Value (hex/dec)	Description
1006 / 4102	Invalid destination address
1007 / 4103	Invalid manner
1008 / 4104	Unsuccessful retrieve original
1009 / 4105	Unsuccessful transfer
100A / 4106	Unsuccessful conference
100B / 4107	Unsuccessful answer request
100C / 4108	Unsuccessful release request
1070 / 4208	Refer to Connection Status IE
2004 / 8196	The target DN is invalid
2005 / 8197	The target DN is not AST
2006 / 8198	The Customer Number is invalid
2007 / 8199	The feature could not be invoked
2008 / 8200	The feature is not configured on the set
2009 / 8201	The requested feature is out of valid range
200A / 8202	The target set is not ACD agent
200B / 8203	The target set is a Virtual Agent
200C / 8204	The set is maintenance busy
200D / 8205	Set is in wrong state for invocation
200E / 8206	Set is in target state
200F / 8207	No NRDY/RDY while ACD set is logged out
2010 / 8208	Package C customer cannot use NRDY with IDN call
2011 / 8209	Feature IE is missing or invalid
2012 / 8210	DN IE is missing or invalid
2013 / 8211	Agent ID IE is missing or invalid
2014 / 8212	Agent ID is invalid
2015 / 8213	CFW DN IE is invalid
2016 / 8214	The Call Forward DN is too long
2017 / 8215	The Call Forward DN is invalid

Cause Value (hex/dec)	Description
2018 / 8216	User is invoking Call Forward
2019 / 8217	MSB/MSI not supported for 500/2500 sets
201A / 8218	500/2500 ACD agent already changed status
201B / 8219	500/2500 ACD agent set is being rung
201C / 8220	User is manually logging in 500 /2500 ACD set

Swap Feature in Avaya Aura Contact Center (Symposium) ACD

The Swap feature enables the agents to swap or alternate between customer calls and consult calls, both from hardphones as well as softphones.

The Swap feature deploys a CTI toolbar with Unified ICM, offering most of the phone set functionalities. One of the most important functionalities is that it allows the agent to swap or alternate between primary and consult calls during a Consultation Call.

The agent performing the transfer must carry out a swap, or alternate between the primary key (ACD or DN) and the secondary key of transfer. On the phone set, an agent can perform a swap by using the transfer or primary key of the used line (ACD or DN).



Note The Swap feature is not supported when CTI OS is used with the Avaya Aura Contact Center (Symposium).

Dependencies and Patches for Swap Feature Support in Softphones and Hardphones

The following patches are required for Swap feature support.

Symposium SCCS 5.0:

- SU 05
- SUS0501/02/03
- NN_SCCS_5.0_DP_050302_S (mandatory)
- NN_SCCS_5.0_DP_050301_S (optional)

NCCM 6.0:

- SU03
- SUS0301
- PEP_030130_RU

Nortel CS1000 Succession 4.0 or 4.5:

- MPLR20429
- MPLR21764

Enabling Swap Feature on Unified ICM

You can enable the Swap feature with the help of Config REGISTRY Key called NortelSwapPatchInstalled. This key is created when you install the patch. Set the value of this registry key to 1 before starting the PG.

If there are multiple instances of the Avaya Aura Contact Center PG in the same box, you must set the registry NortelSwapPatchInstalled to 1 for all the PG instances. This allows the CTI OS Server to enable the alternate button on the client desktop.

Agent States

This section presents the agent-state terminology and functionality used by CTI OS Server and how it corresponds to the terminology and functionality of various call center peripherals.

Table 21: Agent State Functionality and Call Center Terminology

State	Peripheral-Specific Equivalent
<p>Available</p> <p>The agent is ready to accept a call.</p>	<p>Aspect Contact Server: Avail</p> <p>Avaya DEFINITY ECS: AVAIL</p> <p>Avaya Aura CC (Symposium): Idle</p>
<p>BusyOther</p> <p>The agent is busy performing a task associated with another active Skill Group.</p>	<p>Aspect Contact Server: MSG (if Aspect Event Link is not being used)</p> <p>Avaya DEFINITY ECS: OTHER</p> <p>Avaya Aura CC (Symposium): No equivalent</p>
<p>Hold</p> <p>The agent currently has all calls on hold.</p>	<p>Aspect Contact Server: HOLD</p> <p>Avaya DEFINITY ECS: No equivalent</p> <p>Avaya Aura CC (Symposium): On Hold, On Hold Walkaway</p>
<p>Login</p> <p>The agent has logged in to the ACD. It does not necessarily indicate that the agent is ready to accept calls.</p>	<p>Although viewed as a state by CTI Server, this state is more of an event, and is not treated as a state by the switches.</p>
<p>Logout</p> <p>The agent has logged out of the ACD and cannot accept any additional calls.</p>	<p>Aspect Contact Server: Signed Off</p> <p>Avaya DEFINITY ECS: No equivalent</p> <p>Avaya Aura CC (Symposium): Logout</p>
<p>NotReady</p> <p>The agent is logged in but is unavailable for any call work.</p>	<p>Aspect Contact Server: Idle</p> <p>Avaya DEFINITY ECS: AUX</p> <p>Avaya Aura CC (Symposium): Not Ready Walkaway (however, this state requires the agent to click Hold and physically unplug the headset – because a physical act is involved, a software request to set the agent state to NotReady fails), Emergency</p>

State	Peripheral-Specific Equivalent
<p>Reserved</p> <p>The agent is reserved for a call that arrives at the ACD shortly.</p>	<p>Aspect Contact Server: RSVD</p> <p>Avaya DEFINITY ECS: No equivalent</p> <p>Avaya Aura CC (Symposium): Call Presented</p>
<p>Talking</p> <p>The agent is currently talking on a call (inbound, outbound, or inside).</p>	<p>Aspect Contact Server: Talking ACD1, Talking ACD2, Talking ACT1, Talking ACT2, Talking Out1, Talking Out2, Talking Inside, Supervisor Line, MSG, HELP (MSG and HELP correspond to Talking only if Aspect Event Link is being used.)</p> <p>Avaya DEFINITY ECS: AUX-IN, AUX-OUT, ACD-IN, ACD-OUT, ACW-IN, ACW-OUT, DACD</p> <p>Avaya Aura CC (Symposium): Active, Consultation</p>
<p>Unknown</p> <p>The agent state is currently unknown.</p>	<p>Aspect Contact Server: No equivalent</p> <p>Avaya DEFINITY ECS: UNKNOWN</p> <p>Avaya Aura CC (Symposium): No equivalent</p>
<p>WorkNotReady</p> <p>The agent is performing after-call work and is not ready to receive a call after the work is complete.</p>	<p>Aspect Contact Server: No equivalent</p> <p>Avaya DEFINITY ECS: No equivalent</p> <p>Avaya Aura CC (Symposium): No equivalent</p>
<p>WorkReady</p> <p>The agent is performing after-call work and is ready to receive a call after the work is complete.</p>	<p>Aspect Contact Server: Wrap-up</p> <p>Avaya DEFINITY ECS: ACW, DACW</p> <p>Avaya Aura CC (Symposium): Not Ready, Break, Busy</p>