CHAPTER 3

Active Meeting Management API

The active meeting management API enables real-time management of meetings that are currently in progress. In contrast, the *scheduling* API enables you to schedule and modify *future* meetings.

With the active meeting management API, you can develop client applications for monitoring and controlling active meetings, typically by concierge or service desk personnel.

Topics in this section include:

Obtaining the WSDL File

You can access the WSDL file for the active meeting management API at **http://***administration-server-hostname-or-IP-address***:8080/ctxapi/api/v1_1/amm?wsdl**

The WSDL file provides a complete and accurate definition of the API that is supported by your Cisco TelePresence Exchange System. In the event of any discrepancies between the WSDL file and this document, you should follow the WSDL file definition.

API Methods

All active meeting management API methods are described in alphabetical order in the following sections:

dropParticipant

This method removes a specified participant from an active meeting and hangs up on the endpoint of the participant.

Table 3-1 describes the input parameters for the Drop Participant service request.

Table 3-1 Drop Participant Request Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting. You can obtain the meeting key via the getMeeting method in the *scheduling* API.
participant	String	E.164 number or URI of the endpoint.

The Drop Participant service returns a success or fault message. There is no response data returned.

echo

The Echo service allows the system to confirm that the CDR API service is active. For additional details about this service, see the "echo" section on page 1-5.

getActiveMeetings

This method provides information about all active meetings. You can filter results by including values for the optional parameters in the request.

Table 3-2 describes the fields in the Get Active Meetings request.

Table 3-2 Get Active Meetings Request Parameters

Parameter	Type	Description
meetingId	String	(Optional) Meeting identifier that the meeting participant enters to join the meeting after dialing the access number.
accessNumber	String	(Optional) Dial-in number that meeting participants call to join the meeting.

Table 3-2 Get Active Meetings Request Parameters (continued)

Parameter	Type	Description
scheduler	String	(Optional) Email address of the meeting scheduler.
startingTimeWindowFrom	String	(Optional) Earliest start time of meetings that you want the system to return in the response.
startingTimeWindowTo	String	(Optional) Latest start time of meetings that you want the system to return in the response.
startingIndex	Integer	(Optional) Specify the index of the first entry to be returned.
numberToReturn	Integer	(Optional) Specify the number of entries to be returned.

The service response returns a Get Active Meetings Result, which includes a list of activeMeeting elements. Table 3-3 describes the activeMeeting element.

Table 3-3 activeMeeting Element

Parameter	Type	Description
bridgeResource	String	Provisioned name of the media resource that is providing the meeting bridge and media bridge resources for a meeting.
bridgeResourceType	Enumeration	Media bridge resource type. One of the following values: • **CTMS**—Cisco TelePresence Multipoint Switch • **TPS**—Cisco TelePresence Server MSE 8710 • **TPS_8510**—Cisco TelePresence MCU MSE 8510
endTime	Date/time string	Scheduled end time of the meeting.
meetingId	String	Meeting identifier that the meeting participant enters to join the meeting after dialing the access number.
meetingKey	Integer	Unique key that the system uses to identify the meeting. You can obtain the meeting key via the getMeeting method in the *scheduling* API.
numberOfParticipants	Integer	The number of participants that are currently attending the meeting.
schedulerOrganizationKey	Integer	Unique key that the system assigned to the organization of the meeting scheduler.
startTime	String	Start time of the meeting. For a Rendezvous meeting, this is the start time of the current meeting *instance*.
subject	String	Text subject of the meeting.

getCurrentMeetingStatus

This method obtains status information about the specified active meeting.

Table 3-4 describes the fields in the Get Current Meetings request.

Table 3-4 Get Current Meetings Request Parameters

Parameter	Type	Description
meetingKey	String	Enter the unique key that the system uses to identify the meeting.

The service returns a GetCurrentMeetingStatusResult in the service response, which includes a list of apiMeetingStatus elements. Table 3-5 describes the apiMeetingStatus element.

Table 3-5 apiMeetingStatus Element

Parameter	Type	Description
activeParticipants	Complex	Contains one or more participantsInCurrentMeeting elements. This element is described in Table 3-6.
bridgeResourceName	String	Provisioned name of the media resource that is providing the meeting bridge and media bridge resources for a meeting.
bridgeResourceType	Enumeration	Media bridge resource type. One of the following values: • **CTMS**—Cisco TelePresence Multipoint Switch • **TPS**—Cisco TelePresence Server MSE 8710 • **TPS_8510**—Cisco TelePresence MCU MSE 8510
endTime	Date/time string	Scheduled end time of the meeting.
meetingId	String	Meeting identifier that the meeting participant enters to join the meeting after dialing the access number.
organizationKey	Integer	Unique key that the system uses to identify the organization.
scheduledProvisionedEndpoints	Complex	Contains one or more apiProvisionedEndpoint elements. This element is described in Table 3-7.
unscheduledProvisionedEndpoints	Complex	Contains one or more apiUnprovisionedEndpoint elements. This element is described in Table 3-8.
startTime	String	Start time of the meeting. For a Rendezvous meeting, this is the start time of the current meeting *instance*.
subject	String	Text subject of the meeting.

Table 3-6 describes the participantsInCurrentMeeting element.

Table 3-6 participantsInCurrentMeeting Element

Parameter	Type	Description
numScreens	Int	Number of media bridge resource segments that are reserved for a scheduled participant or that are allocated for an active participant. Each segment represents one screen of video transmission or one 30-fps data channel.
number	String	E.164 number or URI of the endpoint.
videoBandwidth	Int	Video bandwidth used by the participant. This parameter is relevant only for Meet-Me meeting calls. For a SIP endpoint, the value is determined based on the last maximum negotiated bandwidth from the SIP messages exchanged between the client and MCU. For an H323 or ISDN endpoints, the value is reported from the MCU.
isMuted	Boolean	Set to TRUE if the active participant is currently muted. **Note** Mute status is not available for participants on the Cisco TelePresence Multipoint Switch (CTMS).
isHost	Boolean	Set to TRUE if the participant joined the meeting as the host.
joinTime	String	Time that the meeting participant joined the meeting. The time is in ISO8601 format. **Note** The Cisco TelePresence Exchange System does not consider the participant as having joined the meeting until after any interaction with the IVR prompts is complete.
isDialout	Boolean	Set to TRUE if the Cisco TelePresence Exchange System dialed out to reach the endpoint.

Table 3-7 describes the apiProvisionedEndpoint element.

Table 3-7 apiProvisionedEndpoint Element

Parameter	Type	Description
endpointName	String	Endpoint name.
mediaProfileKey	String	Unique key of the media profile associated with this endpoint.
number	String	E.164 number or URI of the endpoint.

Table 3-8 describes the apiUnprovisionedEndpoint element.

Table 3-8 apiUnprovisionedEndpoint Element

Parameter	Type	Description
dialOut	Boolean	Set to TRUE if the system dialed out to the participant.
mediaProfileKey	String	Unique key of the media profile associated with this endpoint.
number	String	E.164 number or URI of the endpoint.
organizationKey	String	Unique key of the organization associated with this endpoint.
ports	Int	Number of ports of bandwidth to allocate for the endpoint.

getVersion

The Get Version service returns the product software version. For additional details about this service, see the "getVersion" section on page 1-5.

lockMeeting

This method blocks any more users from dialing into a specified meeting. Dial-out endpoints are not affected by whether a meeting is locked or unlocked.

Table 3-9 describes the input parameters for the Lock Meeting service request.

Table 3-9 Lock Meeting Request Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.

The Lock Meeting service returns a success or fault message. There is no response data returned.

modifyActiveMeeting

This method modifies a specified meeting that is currently in progress. Table 3-10 describes the input parameters for the Modify Active Meeting service request. Except where otherwise specifically noted in the table, null parameter values are set for fields that you do not want to change.

Note The Modify Active Meeting service request must include the meeting key of the meeting that you want to modify.

Note When modifying a meeting, any endpoint lists that were previously defined for the meeting must be specified completely, even if there are no changes. A null value cannot be used to indicate that there are no changes to the endpoint lists.

Table 3-10 modifyActiveMeeting Element

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
newDuration	String	(Optional) New duration of meeting, in minutes.
newProvisionedEndpoints	Complex	Contains one or more apiProvisionedEndpoint elements. This element is described in Table 3-7. **Note** The list must include all of the provisioned endpoints for the meeting (not just the added and changed endpoints). Any of the original endpoints that are not included in the list will be removed from the meeting.
newUnprovisionedEndpoints	Complex	Contains one or more apiUnprovisionedEndpoint elements. This element is described in Table 3-8. **Note** The list must include all of the unprovisioned endpoints for the meeting (not just the added and changed endpoints). Any of the original endpoints that are not included in the list will be removed from the meeting.
newRemoteEndpointList	Complex	Contains one or more endpoints from a remote system. **Note** The list must include all of the remote endpoints for the meeting (not just the added and changed endpoints). Any of the original endpoints that are not included in the list will be removed from the meeting.

Table 3-10 modifyActiveMeeting Element (continued)

Parameter	Type	Description
newAdditionalCapacity	Integer	(Optional) Number of additional segments of media bridge capacity to allocate for the meeting. Use this parameter to reserve media bridge resources for endpoints that you do not add to the meeting but that you expect to join the meeting. To determine how many segments to add for each endpoint, use the following guidelines, depending on which media resource provides the meeting bridge: • Cisco TelePresence Multipoint Switch—Add 4 segments for each three-screen endpoint and 2 segments for each single-screen endpoint. • Cisco TelePresence MCU MSE 8510—Add 1 segment for each endpoint. Only single-screen endpoints are supported. • Cisco TelePresence Server MSE 8710—Add 3 segments for each three-screen endpoint and 1 segment for each single-screen endpoint.
newLayoutID	Integer	(Optional) Enter a default value for the screen layout. This value will be used if the meeting is hosted on a Cisco TelePresence MCU MSE 8510, which supports a variety of screen layout options. For details on the layout values, see the "Custom Layouts" section on page 2-5.
newIsHostRoleEnabled	Boolean	(Optional) Element set to TRUE if the host role is enabled.
newHostPin	String	(Optional) Enter a numerical host PIN for the meeting. By default, the system will create a random PIN. **Note** Only set a host PIN if the host role is enabled.

Table 3-10 modifyActiveMeeting Element (continued)

Parameter	Type	Description
newMeetingExtensionEnabledType	Complex	(Optional) Whether meeting extensions are enabled for the meeting. One of the following values: • **DISABLE**—Disables meeting extensions for the meeting. • **ENABLE**—Enables meeting extensions for the meeting. • **INHERIT**—Inherits the setting (either DISABLE or ENABLE) from the organization of the meeting scheduler.
newMeetingExtensionPeriod	Integer	(Optional) Number of minutes to extend the meeting if participants are still in the meeting when it is scheduled to end.
newMaxMeetingExtensionsAllowed	Integer	(Optional) Maximum number of times that the meeting can be extended.
newSchedulerOrgKey	String	(Optional) Organization key of the scheduler.

The service returns a Modify Active Meeting Result. Table 3-11 describes the Modify Active Meeting Result.

Table 3-11 Modify Active Meeting Result Parameters

Parameter	Type	Description
capacityAllocated	Integer	Number of segments of media bridge capacity that is allocated to the meeting.

muteAllExcept

This method mutes all participants in a meeting except a list of specified participants.

Table 3-12 describes the input parameters for the Mute All Except service request.

Table 3-12 Mute All Except Request Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
participant	String	E.164 number (such as “14085551234”) or URI of the endpoint. **Note** you can specify multiple participants.

The Mute All Except service returns a success or fault message. There is no response data returned.

muteParticipant

This method mutes a list of specified participants.

Table 3-13 describes the input parameters for the Mute Participant service request.

Table 3-13 Mute Participant Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
participant	String	E.164 number (such as “14085551234”) or URI of the endpoint. **Note** you can specify multiple participants.

The Mute Participant service returns a success or fault message. There is no response data returned.

redialParticipant

This method initiates a dial-out call to a specified participant.

Table 3-14 describes the input parameters for the Redial Participant service request.

Table 3-14 Redial Participant Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
participant	String	E.164 number (such as “14085551234”) or URI of the endpoint. **Note** you can specify multiple participants.

The Redial Participant service returns a success or fault message. There is no response data returned.

sendEndpointText

This method sends text to display on all endpoints that are in the meeting.

Note The endpoint text display feature is not supported for meetings that are hosted on a Cisco TelePresence Multipoint Switch.

Table 3-15 describes the input parameters for the Send Endpoint Text service request.

Table 3-15 Send Endpoint Text Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
endpointMessage	String	Text message that you want to display in the meeting.

The Send Endpoint Text service returns a success or fault message. There is no response data returned.

sendEndpointTextToParticipant

This method sends text to display on one or more specified endpoints.

Note The endpoint text display feature is not supported for meetings that are hosted on a Cisco TelePresence Multipoint Switch.

Table 3-16 describes the input parameters for the Send Endpoint Text To Participant service request.

Table 3-16 Send Endpoint Text To Participant Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
participant	String	E.164 number (such as “14085551234”) or URI of the endpoint. **Note** you can specify multiple participants.
endpointMessage	String	Text message that you want to display in the meeting.

The Send Endpoint Text To Participant service returns a success or fault message. There is no response data returned.

unlockMeeting

This method enables new participants to dial into a previously locked meeting. Dial-out endpoints are not affected by whether a meeting is locked or unlocked.

Table 3-17 describes the input parameters for the Unlock Meeting service request.

Table 3-17 Unlock Meeting Request Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.

The Unlock Meeting service returns a success or fault message. There is no response data returned.

unMuteAll

This method unmutes all participants in a meeting.

Table 3-18 describes the input parameters for the Unmute All service request.

Table 3-18 Unmute All Request Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.

The Unmute All service returns a success or fault message. There is no response data returned.

unMuteParticipant

This method unmutes one or more specified participants in a meeting.

Table 3-19 describes the input parameters for the Unmute Participant service request.

Table 3-19 Unmute Participant Parameters

Parameter	Type	Description
meetingKey	String	Unique key that the system uses to identify the meeting.
participant	String	E.164 number (such as "14085551234") or URI of the endpoint. **Note** you can specify multiple participants.

The Unmute Participant service returns a success or fault message. There is no response data returned.

Error Handling

The Cisco TelePresence Exchange System API communicates an error condition to the client by returning a SOAP fault message. The fault message contains an API Active Meetings Management Exception, which is described in Table 3-20.

Table 3-20 API ActiveMeetingsManagement Exception

Parameter	Type	Description
cause code	String	(Optional) Provides more detailed information about an exception return code. The cause codes are listed in the "Cause Codes" section on page 3-14.
erc	String	Exception return code. **Note** For information on API Active Meetings Management Exception values, see the "Exception Values" section on page 3-13.

Table 3-20 API ActiveMeetingsManagement Exception (continued)

Parameter	Type	Description
message	String	English text message that provides additional information about the exception code. The content of the message varies depending on the exception code. **Note** This message is not localized. Therefore, Cisco recommends that the message string not be displayed to the end user directly, due to the possibility that the portal may cater to multiple languages.
value map	String	(Optional) A name/value map in which each element is a pair of strings (a key and a value). The key identifies the type of entity, and the value identifies the specific instance that caused the exception. Possible key values are as follows: MEETING_KEY ENDPOINT_KEY ORGANIZATION_KEY SERVICE_PROVIDER_KEY REGION_KEY MEETING_ENDPOINT_KEY SERVICE_NUMBER_KEY RESERVATION_TYPE_KEY MEDIA_PROFILE_KEY SUBSCRIPTION_KEY

Exception Values

Table 3-21 describes the exception values.

Table 3-21 API Active Meeting Management Exception Values

Exception Value	Description or Cause Code
ERC_EXCEPTION	General exception. See the message string for more information about the exception.
ERC_MISSING_PARAMETER	One or more of the required parameters are missing.
ERC_INVALID_VALUE	Generic exception for a bad parameter value from the client.
ERC_INVALID_DATE_TIME	The date and time in the request are invalid.
ERC_LICENSE_ERROR	The Cisco TelePresence Exchange System requires a valid meeting service license.
ERC_SERVICE_PROVIDER_NOT_FOUND	The service provider in the request does not match a provisioned service provider in the system.
ERC_ORGANIZATION_NOT_FOUND	The organization in the request does not match a provisioned service provider in the system.
ERC_RESTORE_IN_PROGRESS	A database restore is in progress; therefore, no requests can be handled. When the restore is complete, requests can be handled. A database restore may take several minutes.

Table 3-21 API Active Meeting Management Exception Values (continued)

Exception Value	Description or Cause Code
ERC_STRING_TOO_LONG	The parameter string is too long.
ERC_NOT_FOUND	The provided key does not resolve to a valid item.
ERC_BRIDGE_COMMUNICATION_ERROR	An error occurred while calling an API method on the bridge resource. For example, if your bridge is an unsupported version, then it may return an error when the Cisco TelePresence Exchange System tries to call a particular method.
ERC_INTERNAL_ACTIVE_MEETINGS_MANAGEMENT_EXCEPTION	General exception; see the message text for more information.
ERC_MODIFICATION_EXCEPTION	General exception; see the message text for more information.
ERC_MISMATCHED_SERVICE_PROVIDER	The service provider in the request does not match the provisioned service provider that is associated with the specified resource (endpoint or region).
ERC_CALL_CONTROL_EXCEPTION	Internal exception related to the call-control part of Cisco TelePresence Exchange System. See the message text for more information.
ERC_CANNOT_ACCESS_OR_CONTROL_ACTIVE_MEETING	Unable to retrieve active meeting status necessary for controlling participants in an active meeting.

Cause Codes

The list of possible cause codes includes the following:

CANNOT_ADD_UNSUPPORTED_ENDPOINT
CANNOT_CHANGE_DROP_PARTICIPANTS_ON_HOST_EXIT
CANNOT_CHANGE_MEETING_EXTENSION_SETTING
CANNOT_DECREASE_ADDITIONAL_CAPACITY
CANNOT_DECREASE_BANDWIDTH
CANNOT_DECREASE_CAPACITY
CANNOT_REMOVE_EXISTING_ENDPOINT
INVALID_ACTIVE_MEETING
LICENSE_NOT_VALID
LICENSE_SERVER_NOT_ACCESSIBLE
MUTE_FAILED
MUTE_ALL_EXCEPT_FAILED
UNMUTE_FAILED
UNMUTE_ALL_FAILED
DROP_PARTICIPANT_FAILED
REDIAL_PARTICIPANT_FAILED
SEND_ENDPOINT_TEXT_FAILED
LICENSING_EXCEPTION
BRIDGE_TYPE_NOT_VALID
MEETING_NOT_ACTIVE