



## **Configuration Guide for Cisco Unified Videoconferencing 5000 MCU Release 7.0**

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## **Accessing the MCU Interface**

### Procedure

- Step 1 Launch your browser and enter the IP address or the name of the MCU followed.
- Step 2 Enter the Administrator user name and password in the appropriate fields and select Go.

The default global user name is admin. The default password is password.



If you try to sign in as an Administrator and another Administrator is currently signed in, the MCU signs you in as a Read only user. The words "Read Only" appear at the top of the window and a pop-up displays the IP address of the Administrator already signed in. Read only users cannot edit MCU settings.





## Viewing Cisco Unified Videoconferencing 5000 MCU Status Information

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## **Viewing the Number of Current Conferences**

### Procedure

- Step 1 Select Status.
- **Step 2** Locate the Utilization section.

The Conferences box displays the number of conferences currently hosted on the MCU.

## **Viewing the Number of Conference Participants**

#### Procedure

Step 1	Select <b>Status</b> .
Step 2	Locate the Utilization section.

The Participants box displays the current number of calls on the MCU.

## **Viewing Board Status**

### Procedure

**Step 2** Locate the Status Map section.

A green tick next to the slot number indicates that the MCU board in the specified chassis slot is correctly installed and operational.

A red cross next to the slot number indicates that an installation or operational error has occurred for the board in the specified chassis slot.

## Viewing Gatekeeper Connection Status

#### Procedure

Step i Scietti Status.	Step 1	Select	Status.
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**Step 2** Locate the Status Map section.

A green arrow next to the Gatekeeper box indicates that the MCU is registered to a gatekeeper.

A red cross next to the Gatekeeper box indicates a gatekeeper registration error.

## **Viewing SIP Sever Connection Status**

### Procedure

- Step 1 Select Status.
- **Step 2** Locate the Status Map section.

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A green arrow next to the SIP Server box indicates that the MCU is registered to a SIP server.

A red cross next to the SIP Server box indicates a SIP server registration error.

A dotted line to the SIP Server box without a tick or a cross indicates that the MCU has not attempted to register to a SIP server.

## Viewing Ethernet Connection Status

### Procedure

Step 1 Select Status.

**Step 2** Locate the Status Map section.

The Ethernet box indicates the status of the Ethernet connection.

The Ethernet connection speed is displayed below the Ethernet box.

## **Viewing Fan Operation Status**

### Procedure

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**Step 2** Locate the Status Map section.

The Fan box indicates the operational status of the fan.

A green tick indicates normal operation.

A red cross indicates that one or more fans have failed. The Fan problem SNMP trap lists the specific fan affected.

The average speed for all fans is displayed below the Fan box.

## **Viewing Chassis Temperature Status**

### Procedure

Step 1 Select Status.

**Step 2** Locate the Status Map section.

The Temperature box indicates the temperature status of the chassis.

A green tick indicates normal operation.

A red cross indicates the ambient chassis temperature has risen above the high temperature threshold. The chassis temperature is displayed below the Temperature box.

## **Viewing Chassis Power Supply Status**

### Procedure

 Step 1
 Select Status.

 Step 2
 Locate the Status Map section.

 The PSU box indicates the operational status of the chassis power supply unit.

 A green tick indicates normal operation.

 A red cross indicates an error in at least one of the power supply units.

## **Viewing MCU Resource Usage**

#### Procedure

Step 1	Select Status.
Step 2	Locate the Status Map section.
	The CPU box indicates the percentage of MCU resources currently occupied.
	We recommend that this value does not exceed 90 percent.

## **Viewing Current Users**

#### Procedure

 Step 1
 Select Status.

 Step 2
 Locate the Logged users section.

 A list displays all of the users currently logged in to the MCU.

## **Viewing System Version Information**

- Step 1 Select Status.
- Step 2 Locate the Product Information section to view software and serial number version information.

Viewing System Version Information







## **Configuring the Cisco Unified Videoconferencing 5000 MCU Environment**

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## **Setting the User Interface Language**

You can configure the language that the MCU supports. Table 3-1 lists the languages that the MCU supports.



To view Chinese or Japanese fonts properly in the Administrator interface, the computer on which the web browser is running must support the relevant languages. On a Microsoft Windows operating system, you can set the default language in Control Panel > Regional and Language Options.

Language	Administrator Interface	Conference Control Interface	Text Overlay on Conference Video
English	*	*	*
Chinese (simplified)	*	*	*
Japanese	*	*	*
Portuguese	*	*	
Spanish	*	*	
Russian	*	*	

Table 3-1	Supported	Languages in	the	мси	Interface
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#### Procedure

- **Step 1** Select **Configuration** in the MCU user interface.
- Step 2 Select Setup.
- **Step 3** Locate the Basics section.
- **Step 4** Select a language in the Default user interface language field.
- Step 5 Select Apply.



You set the text overlay language at Configuration > Customization. For more information, see the "Setting a Text Overlay Language" section on page 6-1.

## Setting the Cisco Unified Videoconferencing 5000 MCU Identifier

You can set the MCU identifier. This identifies the MCU in the following situations:

- During gatekeeper/SIP registration.
- When inviting endpoints into a conference.
- In the text overlay for the cascaded MCU in cascaded conferences.

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the Basics section.

**Step 4** Enter an identifier in the **MCU Identifier** field (up to a maximum of 32 characters). For example, "London office."

Step 5 Select Apply.

# Setting the Time and Date on the Cisco Unified Videoconferencing 5000 MCU

### Procedure

Step 1	Select Configuration.
Step 2	Click Setup.
Step 3	Locate the Basics section.
Step 4	(Optional) Select <b>Set manually</b> in the Date and time section.
Step 5	Click Get local time or click the calendar icon and set the required time settings.
Step 6	(Optional) Select Set NTP server to synchronize the time with a network server clock.
Step 7	Enter the IP address of the required NTP server.
Step 8	Select a time zone.
Step 9	Click Apply.

## **Changing Address Settings**

You can change IP address information, DNS information and Ethernet port speed and duplex settings for both Media Blades.

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the Network section.
- **Step 4** Perform any of these steps to change an IP address setting:
  - a. Enter the IP addresses you want to assign to either MCU in the **Primary IP address** and **Secondary IP address** fields.
  - **b.** Enter the IP address of the router you want either MCU to use in the **Router IP** field.
  - c. Enter the subnet mask you want either MCU to use in the Subnet Mask field.

#### **Step 5** To change or add DNS information, do the following steps:

- a. Enter the alias you want to assign to the current MCU in the DNS suffix field.
- **b.** Enter the IP address of the primary DNS server that you want the MCU to use in the **DNS server1** field.
- c. Enter the IP address of the back-up DNS server that you want the MCU to use in the DNS server2 field.

**Step 6** Select Ethernet port and duplex speed value you want to set in the **Port settings** field.



We recommend that you set the Port settings option to "Auto".

Step 7 Select Apply.

## **Configuring Security for the Cisco Unified Videoconferencing 5000 MCU**

You can configure the access that external programs have to the MCU. These external programs include Telnet, Simple Network Management Protocol (SNMP), File Transfer Protocol (FTP) and ICMP (Internet Control Message Protocol or "ping").

#### Procedure

Step 1	Select Configuration.
Step 2	Select Setup.
Step 3	Locate the Security section.
Step 4	Select the access level you want the MCU to support from the Security mode field.
	• Standard—Allows SNMP, Telnet, FTP, and ICMP to access the MCU.
	• High (no Telnet or FTP)—Allows access to the MCU only through SNMP and ICMP.
	• Maximum (no Telnet, FTP, SNMP, or ICMP)—Disallows external programs to access the MCU.
Step 5	Select Apply.

## **Creating and Importing a Web Server Certificate**

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the Security section.

- **Step 4** Select **Manage** to create a web server certificate with the wizard, select **Import** to import an existing certificate, or select **Export** to save an existing certificate to a file.
- Step 5 Select Enable HTTPS.
- Step 6 Select Apply.

## How to Manage SNMP Trap Servers

- Viewing SNMP Trap Servers, page 3-5
- Configuring SNMP Trap Servers, page 3-5
- Modifying SNMP Trap Servers, page 3-6
- Deleting SNMP Trap Servers, page 3-6

## **Viewing SNMP Trap Servers**

### Procedure

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the Trap servers section to view all configured SNMP trap servers to which the MCU sends SNMP traps.

## **Configuring SNMP Trap Servers**

You can specify the IP address and port number for multiple SNMP trap servers to which the MCU sends SNMP traps.

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the Trap servers section.
- Step 4 Select Add new server... .
- Step 5 Enter the IP address and port for the SNMP trap server.The default port for SNMP servers is 162.
- **Step 6** Select **Apply** to save your settings.

## **Modifying SNMP Trap Servers**

### Procedure

Step 1	Select Configuration.
Step 2	Select Setup.
Step 3	Locate the Trap servers section.
Step 4	Select the button in the Review column for the server you want to modify.
Step 5	Modify the required settings.
Step 6	Select <b>Apply</b> to save your settings.

## **Deleting SNMP Trap Servers**

### Procedure

Step 1	Select Configuration.
Step 2	Select Setup.
Step 3	Locate the Trap servers section.
Step 4	Select the button in the Review column for the server you want to delete.
Step 5	Select <b>Delete</b> .
Step 6	Select <b>Yes</b> to confirm the deletion.

## **Configuring and Viewing Quality of Service**

You can assign a Quality of Service (QoS) priority level to video and voice calls using either pre-configured system settings or by creating your own settings.

QoS settings involve configuring the MCU to add a QoS DiffServ Code Point value in the IP header of outbound packets. Routers on the network that support QoS can give preferential treatment for bandwidth, latency and jitter to such coded packets and facilitate the efficient transmission of packets. You can set QoS parameters on the MCU for voice calls, video calls or both.

- Step 1 Select Configuration.
- Step 2 Select Setup.
- **Step 3** Locate the QoS section.
- Step 4 Select Enable QoS support.
- Step 5 Set the required DiffServ Code Point value for each media type by selecting one of these options:

- Auto attendant service—The system assigns the default DiffServ Code Point value for each media type. The default settings represent Cisco recommendations.
- Custom—The system assigns your own DiffServ Code Point value for each media type.
- **Step 6** (Optional, if you selected Custom) Do the following:
  - Enter a whole number from 0 to 63 in the Voice priority field of the Video calls section to set the DiffServ Code Point value of voice packets that the MCU sends out. The default value is 34.
  - Enter a whole number from 0 to 63 in the Video priority field of the Video calls section to set the DiffServ Code Point value of video packets that the MCU sends out. The default value is 34.
  - Enter a whole number from 0 to 63 in the Voice priority field of the Audio calls section to set the DiffServ Code Point value of voice packets that the MCU sends out. The default value is 46.

Step 7 Select Apply.









## **Configuring Protocols for the Cisco Unified Videoconferencing 5000 MCU**

- Configuring H.323 Gatekeeper Protocol Settings, page 4-1
- Configuring SIP Proxy Settings, page 4-2

## **Configuring H.323 Gatekeeper Protocol Settings**

You can configure the protocol settings of an H.323 gatekeeper to set how the MCU and the gatekeeper interact.



- Changing gatekeeper settings does not reset the MCU, but might disconnect active calls.
- You do need to reset the MCU to disable support for the H.323 protocol.

- Step 1 Select Configuration.
- Step 2 Select Protocols.
- **Step 3** Locate the H.323 section.
- **Step 4** Select **H.323** to enable the MCU to operate with the H.323 protocol.
- **Step 5** Enter the IP address and port number for the gatekeeper.
  - The default port is 1719.
- Step 6 Select Apply.

## **Configuring SIP Proxy Settings**

You can configure settings for SIP registrar profiles which set how the MCU and the registrar interact.

#### Procedure

- Step 1 Select Configuration.
- Step 2 Select Protocols.
- Step 3 Locate the SIP section.
- **Step 4** Select **SIP** to enable MCU communication with the SIP proxy.
- Step 5 Enter the SIP domain of the MCU in the Default SIP domain field as defined in the SIP server. An example of a SIP domain is company.com.
- **Step 6** Select **Locate automatically** to instruct the MCU to automatically locate one of the SIP proxy servers that are present in the domain,

or

Select **Specify** and enter the following:

- An IP address or host name of the SIP proxy, for example proxy.company.com.
- The communication port number of the SIP proxy address. The default port is 5060.
- The transport connection type for sending messages to the SIP proxy according to the type supported by the SIP proxy—UDP or TCP.

This field is mandatory. The default is UDP.

**Note** The Locate automatically option works only if you have configured a valid IP address at Configuration > Setup > Network > DNS server1 or DNS server2.

- **Step 7** Select **Use registrar** to instruct the MCU to register with a SIP registrar and to send service information to the registrar.
- **Step 8** Enter the following information:
  - The IP address or the host name of the SIP registrar in the **IP address** field.

This field is mandatory.

- The communication port number of the SIP registrar address.
- The transport connection type for sending registration requests to the registrar according to the type supported by the SIP registrar—UDP or TCP.

This field is mandatory. The default is UDP.

- Step 9 Select More.
- **Step 10** Enter the number of the signaling port on which the MCU communicates with the SIP proxy. The default is 5060.
- **Step 11** Select **Use proxy digest authentication** to enable MCU authentication with a SIP proxy server using user name and password.

Authentication is performed as defined in RFC 2617. This field is disabled by default.

**Step 12** Enter the MCU user name and password.

The user name and password must match the name and password defined on the SIP proxy server.

**Step 13** Select **Use registrar digest authentication** to enable MCU authentication with a SIP registrar using user name and password.

Authentication is performed as defined in RFC 2617. This field is disabled by default.

- **Step 14** Select **Use 'Empty Invite' when sending Invite messages to endpoints** to enable the remote endpoint to indicate preferred audio and video channels.
- **Step 15** Select **Using Microsoft OCS** to enable the MCU to work with Microsoft Office Communications Server (OCS).
- Step 16 Select Apply.

Configuring SIP Proxy Settings







## **Configuring Conference Management Settings for the Cisco Unified Videoconferencing 5000 MCU**

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- Defining Conference Creation Options, page 5-2
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- Configuring Dynamic Cisco Unified Videoconferencing 5000 MCU Layouts, page 5-3
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- How to Customize Services, page 5-5

## Dialing Directly to the Cisco Unified Videoconferencing 5000 MCU

You can allow users to dial directly to the MCU IP address using the "auto-attendant" mechanism without the need to register to an H.323 gatekeeper or SIP registrar.

Users specify the conference they want to create or join using the MCU IVR.

If the MCU is already registered to an H.323 gatekeeper or SIP registrar, you can still allow users to access the auto-attendant mechanism by specifying an auto-attendant number which is registered with the appropriate H.323 gatekeeper or SIP registrar. Any call that the MCU cannot route to a valid conference is sent to the auto-attendant.

### Procedure

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Conference Control section.
- Step 4 Select Enable auto attendant.
- **Step 5** Enter an auto-attendant number.

Use this option if the MCU is already registered to an H.323 gatekeeper or SIP registrar.

**Step 6** (Optional) Select **Prompt for conference PIN during conference creation** if you want the MCU to prompt users for a PIN when accessing a conference using this auto-attendant number.

Step 7 Select Apply.

## **Defining Conference Creation Options**

You can determine how participants are allowed to create a conference.

### Procedure

Step 1	Select Configuration.			
Step 2	Select Conferences.			
Step 3	Locate the Conference Control section.			
Step 4	Select More.			
<b>Step 5</b> Select a method by which users can create conferences in the Users can create conference				
	• Scheduler only—Enables conference creation only using a conference scheduling application			
	• Scheduler, Web and Control API—Enables conference creation using a conference scheduling application, the Conference Control interface, or an external application that uses the MCU API.			
	• Scheduler, Web and Control API and Dial-in (default)—Enables all the conference creation methods listed above, as well as dial-in for ad-hoc conference creation.			
Step 6	Select Apply.			

## **Defining Ad Hoc Conference Termination Options**

#### Procedure

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Conference Control section.
- Step 4 Select More.
- **Step 5** Select a method through which dial-in (ad hoc) conferences terminate in the **Terminate ad hoc conference when** field.
  - Last participant leaves—The conference terminates when the last participant leaves the conference.
  - Conference creator leaves—The conference terminates when the conference creator leaves the conference.

Step 6 Select Apply.

## Configuring Dynamic Cisco Unified Videoconferencing 5000 MCU Layouts

You can define dynamic meeting layouts for video callers. A dynamic meeting layout changes automatically as participants join or leave the meeting.

### Procedure

Step 1	Select Configuration.			
Step 2	Select Conferences.			
Step 3	Locate the Conference Control section.			
Step 4	Select More.			
Step 5	Select a set of dynamic layouts from the Select a set of dynamic layouts for all services field.			
	• Enlarged main view—Selects a set of layouts in which the main video frame is the largest frame in the display.			
	• Same-sized view—Selects a set of layouts in which all video frames are the same size.			
	• Customized set—Enables you to create your own set from the available layouts.			
	You can change the layouts included in your customized set using the Change link.			

Step 6 Select Apply.

# How to Manage Services on the Cisco Unified Videoconferencing 5000 MCU

- Services Overview, page 5-3
- Creating a New Service, page 5-4
- Configuring the Auto Attendant Service, page 5-5
- Deleting a Service, page 5-5

## **Services Overview**

A service can be regarded as a conference template. A service is the mechanism that defines the qualities and capabilities of a conference. A service is identified by its prefix. The service prefix number is incorporated into the conference ID to specify the service for the conference. A description of the service indicates the main attributes of the service or the target use for the service.

The MCU comes with several predefined services: one service for the SCCP protocol, one service for Cisco Unified MeetingPlace, and the remainder for audio and video conferencing. The predefined services are factory tuned to be suitable in most cases for audio and video calls. We recommend starting with these services and modifying them as necessary to suit your needs.

When using an SCCP service the following limitations apply:

- No support for presentation view (H.239)
- No support for T.120 data collaboration
- No support for H.235 encryption
- Maximum resolution supported is CIF
- Maximum call rate supported is 768 Kbps
- The G.722.1 and G.723 audio codecs are not available
- No support for conference PINs
- No support for dial out

## **Creating a New Service**

A new service has default settings which are suitable for most conferences and usually no further configuration is needed.

Step 1	Select Configuration.						
Step 2	Select Conferences.						
Step 3	Locate the Services list section.						
Step 4	Select Add new service.						
Step 5	Enter a prefix for the service and a description of the service in free text.						
	Note The service prefix is used as part of the dialing plan of your enterprise. Ensure that the prefix does not conflict with other prefixes used in your network.						
Step 6	(Optio	nal) Select Audio only to force the conference to be audio-only.					
Step 7	(Optional) Select SCCP service to enable the conference to support the SCCP protocol.						
Step 8	(Optional) Select <b>Display welcome screen</b> and enter your text in the welcome screen window.						
Step 9	(Optional) Enter the string \$DESC to display the conference description in the welcome screen.						
	You define the conference description in the Conference Control web user interface at Create Conference > Conference Description.						
	If you do not define a conference description, the \$DESC string displays the conference ID by default.						
Step 10	(Optio	nal) Enter the string \$ID to display the conference ID in the welcome screen.					
Step 11	Select	Apply.					

## **Configuring the Auto Attendant Service**

### Procedure

Step 1	Select Configuration.
Step 2	Select Conferences.
Step 3	Locate the Services list section.
Step 4	Select <b>Review</b> for the service you want to use as the Auto attendant service.
Step 5	Select the Set as Auto attendant service link.
Step 6	Select OK.

## **Deleting a Service**

### Procedure

Select Configuration.
Select Conferences.
Locate the Services list section.
Select the arrow in the Review column for the service that you want to delete.
Select <b>Delete</b> .
Select <b>Yes</b> in the message that appears.
The service is removed from the services list.

## **How to Customize Services**

- Configuring the Default Layout, page 5-6
- Enabling Personal Layouts, page 5-6
- Displaying Participant Names, page 5-7
- Configuring Presentation View, page 5-7
- Configuring Encryption Support, page 5-8
- Muting Participants on Joining a Conference, page 5-9
- Automatically Reconnecting Conference Participants, page 5-9
- Configuring PIN Settings, page 5-10

## **Configuring the Default Layout**

#### Procedure

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Services list section.
- **Step 4** Locate the service that you want to modify in the Services list section or select **Add new service**.
- Step 5 Select More.
- **Step 6** Perform these steps to enable the conference layout to change automatically as participants join or leave:
  - a. Select Dynamically adjusted.
  - **b.** Select the maximum number of participants to which the conference layout expands from the **Max displayed streams** field.
  - c. Select OK.
- **Step 7** Perform these steps to define a fixed layout for the conference:
  - a. Select Static to define a fixed layout for the conference.
  - b. Select Select.
  - c. Select the required layout and select OK.
  - d. Select **OK** again.

Step 8 Select Apply.

## **Enabling Personal Layouts**

System administrators can enable conference participants to create a personalized layout during a conference. Personalized layouts do not affect the layouts of any other conference participant. When this feature is disabled, neither the operator nor the participant can create or control personal layouts in conferences that use this service.

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Services list section.
- **Step 4** Locate the service that you want to modify in the Services list section or select **Add new service**.
- Step 5 Select More.
- Step 6 Select Enable personal layout.

Step 7 Select OK.

Step 8 Select Apply.

## **Displaying Participant Names**

Procedure

System administrators can enable conference participants with Moderator-level access to display a participant's name at the bottom of each sub-frame when the conference starts. This feature is enabled by default.

#### Step 1 Select Configuration. Step 2 Select Conferences. Step 3 Locate the Services list section. Step 4 Locate the service that you want to modify in the Services list section or select Add new service. Step 5 Select More. Step 6 Select Display participants names. Step 7 (Optional) Select **Constantly** to display the participant name continuously. Step 8 (Optional) Select On location changes for and an interval in seconds to continue to display the participant name after the location of the participant video frame changes during a conference. Select OK. Step 9 Select Apply. Step 10

## **Configuring Presentation View**

You can configure a service to support presentation view (H.239).

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Services list section.
- **Step 4** Locate the service that you want to modify in the Services list section or select **Add new service**.
- Step 5 Select More.
- **Step 6** Select **Enable presentation view** and a presentation video codec.

Step 7Select OK.Step 8Select Apply.

## **Configuring Encryption Support**

### Restrictions

The MCU supports encrypted calls over IP networks. You can configure the service to be encrypted and the encryption mode required.

Encryption configuration options are not available for SCCP services.

The encryption conforms to the H.235 standard and supports the AES encryption algorithm with an encryption key of 128 bits.

Encryption on the MCU can operate in one of the following modes:

- Disabled—No encryption. The supported capability for this mode is Priority 1: no encryption.
- Best effort—This mode implements a "best effort" encryption algorithm. If an endpoint supports encryption, it connects with encryption. If not, it connects without encryption. The supported capabilities for this mode are AES 128 keys of lengths 512 bits or 1024 bits:
  - Priority 1: AES 128
  - Priority 2: No encryption
- Strong encryption required—This mode only allows AES 128 encrypted calls. Endpoints that do not support AES 128 are not allowed to connect. The supported capability for this mode is AES 128 keys of 1024 bits.

These channels support encryption:

- Audio channel
- Video channel
- Far End Camera Control (FECC)



All channels (audio, video, FECC, incoming, and outgoing) on the same call must have the same encryption levels. If the encryption on all channels cannot be achieved, the call disconnects.

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Services list section.
- **Step 4** Locate the service that you want to modify in the Services list section or select **Add new service**.
- Step 5 Select More.
- Step 6 Select Encryption.

#### **Step 7** Select the type of encryption from the Encryption mode field.

- Best effort
- Strong encryption required
- Step 8 Select OK.
- Step 9 Select Apply.

## **Muting Participants on Joining a Conference**

### Procedure

Step 1	Select Configuration.				
Step 2	Select Conferences.				
Step 3	Locate the Services list section.				
Step 4	Locate the service that you want to modify in the Services list section or select Add new service.				
Step 5	Select More.				
Step 6	Select <b>Auto mute joining participant</b> to instruct the MCU to initially mute all participants joining the conference.				
	Once the conference begins, the conference Moderator can unmute selected participants. This is useful for lectures.				
Step 7	(Optional) Deselect <b>Auto mute first joining participant</b> to instruct the MCU to initially mute all conference participants except the first participant that joins the conference.				
Step 8	Select <b>OK</b> .				
Step 9	Select Apply.				

## **Automatically Reconnecting Conference Participants**

You can instruct the MCU to automatically call disconnected terminals to attempt a reconnection. The MCU attempts reconnection three times.

- Step 1 Select Configuration.
- Step 2 Select Conferences.
- **Step 3** Locate the Services list section.
- Step 4 Locate the service that you want to modify in the Services list section or select Add new service.
- Step 5 Select More.
- Step 6 Select Automatically reconnect dropped participants.

Step 7 Select OK.

Step 8 Select Apply.

## **Configuring PIN Settings**

You can define a policy for the use of PINs for accessing a conference.

PINs can contain up to 32 characters.

Step 1	Select Configuration.			
Step 2	Select Conferences.			
Step 3	Locate the Services list section.			
Step 4	Locate the service that you want to modify in the Services list section or select Add new service.			
Step 5	Select More.			
Step 6	Select <b>Force conference PIN protection</b> if you want the user to enter a PIN when creating or entering a conference using this service.			
Step 7	Select Ask for conference PIN on invite if you want invitees to enter a PIN when they join a conference.			
	Leave deselected if you want only dial-in participants to enter the conference PIN.			
Step 8	Select OK.			
Step 9	Select Apply.			





## **Configuring Interactive Response Messages for the Cisco Unified Videoconferencing 5000 MCU**

- Setting a Text Overlay Language, page 6-1
- How to Manage Audio Messages, page 6-1

## **Setting a Text Overlay Language**

### Procedure

Step 1	Select Configuration.			
Step 2	Select Customization.			
Step 3	Locate the Video display messages section.			
Step 4	Select the required language.			
	Set to English by default.			
Step 5	Select Apply.			

## **How to Manage Audio Messages**

- Saving All Audio Messages, page 6-2
- Uploading Individual Audio Messages, page 6-2
- Uploading Audio Messages, page 6-3
- Available MCU Messages, page 6-3

## **Saving All Audio Messages**

You can save all audio messages currently in use on the MCU and download them to your computer in a single zip file.

#### Procedure

- Step 1 Select Configuration.
- Step 2 Select Customization.
- **Step 3** Locate the Audio messages section.
- **Step 4** Select **Save** next to the Save messages pack file field to save the zip file containing the audio messages to a specified location on your computer.

## **Uploading Individual Audio Messages**

You can upload individual audio messages from your computer to the MCU.

Files must be in the following formats:

- .wav file
- G.711 (CCITT)
- μ-Law
- 8-bit
- Sampling rate 8 kHz
- Mono

- Step 1 Select Configuration.
- Step 2 Select Customization.
- **Step 3** Locate the Audio messages section.
- **Step 4** Locate the Message files section.
- **Step 5** Locate the audio message that you want to save.
- **Step 6** Select the arrow in the Review column.
- Step 7 Select Browse.
- Step 8 Navigate to the file that you want to save and select Save.
- Step 9 Select Apply.

## **Uploading Audio Messages**

You can upload audio message packs from your computer to the MCU.

Files must be in the following formats:

- .wav file
- G.711 (CCITT)
- µ-Law
- 8-bit
- Sampling rate 8 kHz
- Mono

### Procedure

- Step 1 Select Configuration.
- Step 2 Select Customization.
- **Step 3** Locate the Audio messages section.
- **Step 4** Locate the Messages pack section.
- **Step 5** Select **Browse** in the Update messages pack file field and navigate to the message pack file that you want to upload.
- Step 6 Select Open.
- Step 7 Select Apply.

## **Available MCU Messages**

Table 6-1	MCU Audio	Messages
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Message Name	Recorded Message	Displayed Message	Played for	Played when
Connected indication	Sound		Single participant	a participant first connects to a meeting
Enter meeting PIN	Thank you for attending the meeting. Enter the meeting PIN followed by the pound sign.	Enter PIN code	Single participant	a participant connects to a PIN-protected meeting (played after the Connected indication sound)
Wrong PIN, disconnecti ng	Incorrect PIN. Disconnecting.	Incorrect PIN code. Disconnecting	Single participant	a participant tries to join a PIN-protected meeting after entering the wrong PIN three times in a row

Message Name	Recorded Message	Displayed Message	Played for	Played when
Wrong PIN, enter a valid one.	Incorrect PIN. Enter the correct PIN followed by the pound sign.	Incorrect PIN code. Enter PIN code.	Single participant	a participant tries to join a PIN-protected meeting after entering the wrong PIN (less than three times in a row)
First participant in meeting	Thank you for attending the meeting. You are the first participant. Please hold.		Single participant	the first participant joins the meeting (after the Connected Indication and the Enter meeting PIN messages)
First participant and moderator	Thank you for attending the meeting. You are the first participant. You have moderation privileges.		Single participant	the first participant joined the meeting using the moderator PIN instead of the meeting PIN
New participant joined	Tone		All participants	a new participant has joined the meeting
Participant left	Tone		All participants	a participant has left the meeting
Success indication	Tone		Single participant	a DTMF command has succeeded
Enter party number	To dial out, please dial the number of the party you wish to invite to the meeting, followed by the pound sign.		Single participant	you are in invite mode (after dialing *8 using DTMF) and you do not dial any number for a period of time
Error indication	Tone		Single participant	a DTMF command has failed
Moderator privileges required	This action requires moderator privileges.		Single participant	you perform a DTMF command that requires moderator privileges without first becoming a moderator
Another moderator exists	Another participant is already moderating the meeting.		Single participant	you try to become the moderator using DTMF, but there is already another moderator for the meeting

Message Name	Recorded Message	Displayed Message	Played for	Played when
Meeting control menu	To return to the meeting – press pound. To become the moderator – press 1. To mute or unmute your line – press 2. To control the volume of your line – press 3. To show or hide participants' names - press 4.		Single participant	you are in DTMF command mode (after dialing * or ** using DTMF) and you do not enter any command for a period of time
Meeting control menu (personal layout disabled)	To return to the meeting - press pound. To become the moderator - press 1. To mute or unmute your line - press 2. To control the volume of your line - press 3.		Single participant	you are in DTMF command mode (after dialing * or ** using DTMF) and you do not enter any command for a period of time
Enter moderator PIN	Enter the moderator PIN followed by the pound sign.		Single participant	you try to become the moderator using DTMF and a moderator PIN is defined
Moderator menu	To return to the meeting - press pound. To stop moderating - press 1. To mute or unmute your line - press 2. To control the volume of your line - press 3. To show or hide participants' names - press 4. To terminate the meeting - press 5. To change the main video layout - press 6. To block admission to the meeting - press 7. To dial out - press 8. To mute/unmute all lines except yourself - press 9.		Single participant	you are in DTMF moderator mode (i.e. after becoming the moderator using DTMF) and you do not enter any command for a period of time
Moderator menu (blocked meeting)	To return to the meeting - press pound. To stop moderating - press 1. To mute or unmute your line - press 2. To control the volume of your line - press 3. To show or hide participants' names - press 4. To terminate the meeting - press 5. To change the main video layout - press 6. To allow admission to the meeting - press 7. To dial out - press 8. To mute/unmute all lines except yourself - press 9.		Single participant	you are in DTMF moderator mode (i.e. after becoming the moderator using DTMF) in a meeting whose admission is blocked and you do not enter any command for a period of time
Join sub-confere nce	You have joined a sub-conference.		Single participant	a participant joins a sub-conference

Message Name	Recorded Message	Displayed Message	Played for	Played when
Leave sub-confere nce	You have left the sub-conference.		Single participant	a participant leaves a sub-conference
Join not allowed	For security reasons, please join from the MeetingPlace web conferencing interface. Goodbye.			Reserved for Cisco Unified MeetingPlace
No video resources	All video resources are currently in use. Please try again later.			Reserved for Cisco Unified MeetingPlace
Meeting terminating	The meeting is about to terminate.		All participants	a meeting is about to terminate
Organizer not yet joined	Please wait for the meeting moderator.		Single participant	you join a meeting in a waiting room mode before the moderator has joined
Organizer joined, meeting starts	The meeting will now begin.		All participants	the moderator joins a meeting in waiting room mode
Organizer left, meeting paused	You have been moved to the waiting room, please wait.		All participants	the moderator leaves a meeting in waiting room mode
Organizer back, meeting resumed	The meeting will now resume.		All participants	the moderator returns to a meeting in waiting room mode
Wrong moderator PIN	You have entered an incorrect moderator PIN.		Single participant	you have entered the wrong moderator PIN
You are the moderator	You are now the moderator.		Single participant	you have become the moderator of the meeting using DTMF
Muted	Muted		Single participant	you mute yourself using DTMF
Unmuted	Unmuted		Single participant	you unmute yourself using DTMF
Volume control menu	To decrease the volume, press zero. To increase, press one.		Single participant	you are in volume control mode (after dialing *3 using DTMF) and you do not enter any command for a period of time

Message Name	Recorded Message	Displayed Message	Played for	Played when
Meeting admission blocked	Admission to the meeting is now blocked.		Single participant	you block admission to the meeting using DTMF
Meeting admission allowed	Admission to the meeting is now allowed.		Single participant	you allow admission to the meeting using DTMF
Dialing	Dialing.		Single participant	you invite a participant using DTMF
Invalid input	Invalid input.		Single participant	you press an invalid key during a DTMF command
Stopped moderating	You are no longer the meeting moderator.		Single participant	you have stopped moderating the meeting using DTMF
Change layout menu	Change layout. Please enter the number of participants to be seen on the screen or press zero for automatic layout.		Single participant	you are in change layout mode (after dialing *6 using DTMF) and you do not enter any command for a period of time
Mute/Unmu te All menu	To mute all participants except yourself, press zero. To un-mute all participants, press 1.		Single participant	you are in mute/unmute all mode (after dialing *9 using DTMF) and you do not enter any command for a period of time
All muted	All participants are now muted.		Single participant	you mute all participants using DTMF
All unmuted	All participants are now unmuted.		Single participant	you unmute all participants using DTMF
Silent				
Meeting selection	Thank you for calling. To create a new meeting or join by ID, press nine. To select a meeting from the list, press the entry number.		Single participant	you dial the MCU Auto Attendant (with video)
Enter meeting ID	Enter the meeting ID followed by the pound sign.	Enter meeting ID	Single participant	you choose to create or join a meeting by ID during an Auto Attendant session, or when you dial the MCU Auto Attendant with audio only

Message Name	Recorded Message	Displayed Message	Played for	Played when
Invalid meeting ID	You have entered an incorrect meeting ID.	The meeting ID is invalid.	Single participant	you enter an invalid meeting ID during an Auto Attendant session
Create meeting PIN	To create a PIN code to protect this meeting, enter a PIN code	Creating a new meeting	Single participant	you choose to create a new meeting during an Auto
	followed by the pound sign. Enter only the pound sign if you do not want PIN protection.	Enter PIN code (optional)		Attendant session
Create meeting	Failed to create a meeting.	Failed to create a meeting –[reason].	Single participant	during Auto Attendant session, when meeting
failed		To join an existing meeting enter		creation fails. Possible reasons:
		meeting ID Reason is one of:		<b>No resources</b> —MCU is out of resources
		• No resources		Not allowed—MCU is
		• Not allowed		meeting creation by dial-in.
		• Other		
		When the reason is "other", no reason is displayed.		
Create meeting –	You have entered an invalid PIN Enter a valid PIN using digits	The PIN code is invalid.	Single participant	during Auto Attendant session, when creating a
invalid PIN code	only followed by the pound sign.	Enter valid PIN code.		new meeting and entering an invalid meeting PIN code (PIN code should be digits only)
Failed to connect to the meeting	Failed to connect to the meeting. Disconnecting.	Failed to connect to the meeting –[reason].	Single participant	during Auto Attendant session, after user has selected a meeting, when the
		Reason is one of:		transfer to the selected meeting fails
		• No endpoint support		incering runs
		• Other		
		When the reason is "other", no reason is displayed.		
Invalid meeting ID - try again	You have entered an incorrect meeting ID. Please enter your meeting ID followed by the pound sign.		Single participant	during Auto Attendant session, after user has entered an invalid meeting ID

Message Name	Recorded Message	Displayed Message	Played for	Played when
Create meeting failed - reenter meeting	Failed to create a meeting. To join an existing meeting, enter your meeting ID followed by the pound sign.		Single participant	during Auto Attendant session, after meeting creation has failed (audio only caller)
Meeting ends in 10 min	The meeting is about to end in less than ten minutes.			
Meeting ends in 5 min	The meeting is about to end in less than five minutes.			
Meeting ends in 2 min	The meeting is about to end in less than two minutes.			
Meeting end in 1 min	The meeting is about to end in less than one minute.			
Disconnecti ng	Disconnecting			
No Input from user	I did not hear your entry.			
No video resources, connected as audio only	You are connected with audio only due to resource limitations. Please contact your system administrator if needed.			there are no video resources and the participant connected using audio only
Termination due to failure	The meeting is about to terminate due to a temporary failure. Please redial the meeting ID and report the incident to your system administrator.			
Meeting extended automaticall y	The meeting has been automatically extended.			
Meeting extended by moderator	The meeting has been extended by the moderator.			
Please hold	Thank you, please hold.			

How to Manage Audio Messages

Configuration Guide for Cisco Unified Videoconferencing 5000 MCU Release 7.0





## Managing Cisco Unified Videoconferencing 5000 MCU Events

- Available SNMP Events, page 7-1
- Viewing the Events Log, page 7-6
- Viewing the Alarms Log, page 7-6
- Viewing Security Events, page 7-6
- Setting Event Security Levels, page 7-7
- Sending a Trap on a Specified Event, page 7-7
- Viewing Event Descriptions, page 7-8
- Viewing Alarm History, page 7-8
- Using the Event Display Filter, page 7-8

## **Available SNMP Events**

Table 7-1 lists trap event indications by category.

Table 7-2 lists trap event indications by ID number.

 Table 7-1
 MCU Trap Events by Category

Category	ID	Туре	Trap is sent when
Info	1	Power up	The MCU has begun operation.
Info	2	Power down	The MCU is shutting down.
Info	3	Link down	Standard SNMP MIB trap indicating that the network connection is down with details about the cause and time of connection loss.
Info	4	Link up	Standard SNMP MIB trap indicating that the network connection has been reestablished.

Category	ID	Туре	Trap is sent when
Info	7	Warm start	The MCU has been reset using the Administrator interface.
Info	8	Cold start	The MCU has been reset using the button on the front panel.
Info	10	Cpu usage	CPU usage reaches the 90 percent threshold set in the MCU.
Info	13	Abnormal disconnection	A call disconnects for a reason other than normal, busy, or no answer.
Info	16	General alarm	A system failure is detected.
Info	17	Corrupt web data	Corrupt web files are present in the MCU.
Info	18	Incompatible sw burn attempt	An attempt to burn a version of the MCU software onto incompatible hardware occurs.
Info	19	MP registration blocked	The media processor registration to the MCU failed.
Info	27	TFTP connection failed	The MCU fails to connect to a Cisco TFTP server.
Info	33	Low memory	Memory usage reaches the 90 percent threshold set in the MCU.
Alarm	5	Gatekeeper registration state change	A change occurs in the registration status of the MCU with the gatekeeper.
Alarm	6	Ethernet state change	The network returns after going down. Indicates the time at which the network was restored.
Alarm	9	MP connection	Communication with a registered media processor has broken.
Alarm	11	Network problem	A problem occurs on the network.
Alarm	12	Hot swap	A blade has been removed from the Cisco Unified Videoconferencing 5230 chassis under power or inserted into the Cisco Unified Videoconferencing 5230 chassis under power.

Category	ID	Туре	Trap is sent when
Alarm	15	Over heating	The configured temperature thresholds for the device are exceeded. Overheating can cause serious damage to the functioning of the device.
Alarm	31	Fan problem	A problem occurs with one of the chassis fans.
Alarm	32	Power supply problem	A problem occurs with one of the power supply units.
Security	14	Service table changed	The service table has been modified.
Security	20	User logged in	A user successfully logs in to the system using the web interface.
Security	21	User logged out	A user logs out of the system using the web interface.
Security	22	Authentication failed	A user tries to log in to the web interface and authentication fails.
Security	23	Configuration changed	A configuration change is uploaded from the web interface.
Security	24	Configuration export	Configuration is exported using the web interface.
Security	25	Configuration import	Configuration is imported using the web interface.
Security	26	User account locked	A user account is disabled.
Security	28	Audio prompts uploaded	A user uploads a new set of audio messages using configuration > Customization > Audio messages > Update messages pack file, or a user modifies an existing message file.
Security	29	Version update	A user selects the Update software option using the X icon.
Security	30	Default configuration restored	A user selects the Restore factory defaults option using the X icon.

Category	ID	Туре	Trap is sent when
Info	1	Power up	The MCU has begun operation.
Info	2	Power down	The MCU is shutting down.
Info	3	Link down	Standard SNMP MIB trap indicating that the network connection is down with details about the cause and time of connection loss.
Info	4	Link up	Standard SNMP MIB trap indicating that the network connection has been reestablished.
Alarm	5	Gatekeeper registration state change	A change occurs in the registration status of the MCU with the gatekeeper.
Alarm	6	Ethernet state change	The network returns after going down. Indicates the time at which the network was restored.
Info	7	Warm start	The MCU has been reset using the Administrator interface.
Info	8	Cold start	The MCU has been reset using the button on the front panel.
Alarm	9	MP connection	Communication with a registered media processor has broken.
Info	10	Cpu usage	CPU usage reaches the 90 percent threshold set in the MCU.
Alarm	11	Network problem	A problem occurs on the network.
Alarm	12	Hot swap	A blade has been removed from the Cisco Unified Videoconferencing 5230 chassis under power or inserted into the Cisco Unified Videoconferencing 5230 chassis under power.
Info	13	Abnormal disconnection	A call disconnects for a reason other than normal, busy, or no answer.
Security	14	Service table changed	The service table has been modified.

### Table 7-2MCU Trap Events by ID

Category	ID	Туре	Trap is sent when
Alarm	15	Over heating	The configured temperature thresholds for the device are exceeded. Overheating can cause serious damage to the functioning of the device.
Info	16	General alarm	A system failure is detected.
Info	17	Corrupt web data	Corrupt web files are present in the MCU.
Info	18	Incompatible sw burn attempt	An attempt to burn a version of the MCU software onto incompatible hardware occurs.
Info	19	MP registration blocked	The media processor registration to the MCU failed.
Security	20	User logged in	A user successfully logs in to the system using the web interface.
Security	21	User logged out	A user logs out of the system using the web interface.
Security	22	Authentication failed	A user tries to log in to the web interface and authentication fails.
Security	23	Configuration changed	A configuration change is uploaded from the web interface.
Security	24	Configuration export	Configuration is exported using the web interface.
Security	25	Configuration import	Configuration is imported using the web interface.
Security	26	User account locked	A user account is disabled.
Info	27	TFTP connection failed	The MCU fails to connect to a Cisco TFTP server.
Security	28	Audio prompts uploaded	A user uploads a new set of audio messages using configuration > Customization > Audio messages > Update messages pack file, or a user modifies an existing message file.
Security	29	Version update	A user selects the Update software option using the <b>X</b> icon.
Security	30	Default configuration restored	A user selects the Restore factory defaults option using the <b>X</b>

Category	ID	Туре	Trap is sent when
Alarm	31	Fan problem	A problem occurs with one of the chassis fans.
Alarm	32	Power supply problem	A problem occurs with one of the power supply units.
Info	33	Low memory	Memory usage reaches the 90 percent threshold set in the MCU.

## **Viewing the Events Log**

The MCU displays up to 100 events.

### Procedure

Step 1	Select Events.
Step 2	Select All.

## **Viewing the Alarms Log**

#### Procedure

Step 1	Select Events.
Step 2	Select Alarms.

## **Viewing Security Events**

Step 1	Select Events.
Step 2	Select Security.

## **Setting Event Security Levels**

### Procedure

Select Events.
Select <b>All</b> , <b>Alarms</b> or <b>Security</b> and select the link in the Type column for the event that you want to configure,
or
Select All and select the 🗐 icon.
Select the arrow in the Review column for the event that you want to modify.
Select an option from the list in the Severity column.
• Cleared—One or more previously reported alarms have been cleared.
• Info—Notification of a non-erroneous event.
• Critical—A service-affecting event has occurred and requires immediate corrective action.
• Major—A service-affecting event has occurred and requires corrective action to prevent the condition becoming more serious.
• Minor—A non-service-affecting event has occurred and requires corrective action to prevent the condition becoming more serious.
• Warning—A potential or impending service-affecting event has been detected, but no significant events have occurred yet. Action should be taken to further diagnose and correct the problems to prevent the condition becoming more serious.
Select Apply.
Select Close.

## Sending a Trap on a Specified Event

Step 1	Select	Events
oleh i	Select	Evenus

- Step 2 Select All, Alarms or Security.
- Step 3 Select the link in the Type column for the event that you want to configure or select the 📰 icon.
- Step 4 Select the arrow in the Review column for the event that you want to modify.
- **Step 5** Select the box in the Trapped column.
- Step 6 Select Apply.
- Step 7 Select Close.

## **Viewing Event Descriptions**

### Procedure

Step 1	Select Events.
Step 2	Select All, Alarms or Security.
Step 3	Select the icon in the Info column for the event description that you want.

## **Viewing Alarm History**

### Procedure

Step 1	Select Events.
Step 2	Select Alarms.
Step 3	Select the Show history box.
	When Show history is selected, the Alarms tab displays all alarm events.
	When Show history is deselected, the Alarms tab displays only alarm events that are still current.

## **Using the Event Display Filter**

- Step 1 Select Events.
- Step 2 Select All.
- Step 3 Select Filter settings.
- **Step 4** Select the information that you want to display on the events log.
- Step 5 Select Apply.





## Managing Cisco Unified Videoconferencing 5000 MCU User Profiles

- Cisco Unified Videoconferencing 5000 MCU User Types, page 8-1
- Viewing User Profiles, page 8-2
- Adding a User Profile, page 8-2
- Modifying a User Profile, page 8-3
- Enabling a User Profile, page 8-3
- Removing a User Profile, page 8-3

## **Cisco Unified Videoconferencing 5000 MCU User Types**

Users must have authorization to access the MCU.

Users are either Administrators or Operators. Table 8-1 describes each access level.

Access Level	Privileges
Administrator	• Full access to the MCU Administrator interface.
	• Full Operator-level access to the Conference Control interface.
	• Telnet access to the MCU.
	• You can assign Administrator authorization to up to ten users.

### Table 8-1 MCU Access Levels

Access Level	Privileges
Operator	• Access to the Conference Control interface using the Create Conference window.
	• Access to view details of all conferences hosted on the MCU and to cascaded conferences hosted on participating MCU.
	• Ability to create a new conference from the Conference Control access window, the Create Conference window, or the Conference Control interface.
	• Moderator-level access to all conferences while moderator controls are simultaneously held by other users.
	• Ability to invite other participants to a conference.
	• You can assign Operator authorization to up to 50 users.

## **Viewing User Profiles**

#### Procedure

Step 1	Select Users.
Step 2	Select the arrow in the Review column for the user profile you want to view.

## **Adding a User Profile**

Step 1	Select Users.
Step 2	Select Add new user.
Step 3	Select an authority level for the new user-Administrator or Operator.
Step 4	Enter a password and confirm it.
Step 5	Select Apply.

## **Modifying a User Profile**

### Procedure

Step 1	Select Users.
Step 2	Select the arrow in the Review column for the user profile you want to modify.
Step 3	Modify the required settings.
Step 4	Select Apply.

## **Enabling a User Profile**

You must enable a user profile before that user can access the MCU web user interface.

### Procedure

Step 1	Select Users.
Step 2	Select the Active box for the user profile you want to enable.
Step 3	Select Apply.

## **Removing a User Profile**

### Restrictions

You cannot delete an administrator profile.

Step 1	Select Users.
Step 2	Select the arrow in the Review column for the user profile you want to remove.
Step 3	Select Delete.
Step 4	Select Yes in the message that appears.
	The user profile is removed from the authorized users list.

**Removing a User Profile** 







## **Configuring Advanced Maintenance Settings for the Cisco Unified Videoconferencing 5000 MCU**

- Backing Up Your Cisco Unified Videoconferencing 5000 MCU Configuration, page 9-1
- Restoring Your Cisco Unified Videoconferencing 5000 MCU Configuration, page 9-2
- Restoring Factory Default Settings, page 9-2
- How to Work with Advanced Commands for the Cisco Unified Videoconferencing 5000 MCU, page 9-3
- How to Manage Cisco Unified Videoconferencing 5000 MCU Software, page 9-7
- Restarting the Cisco Unified Videoconferencing 5000 MCU, page 9-8
- Contacting Customer Support, page 9-8

## Backing Up Your Cisco Unified Videoconferencing 5000 MCU Configuration

You can save MCU configuration settings to a file and then export this file to a storage device on your network. You can use the saved configuration file to restore the settings to the current MCU or to configure a similar MCU.

The exported file is a .zip file that includes a .val file and a .xml file.

### Procedure

- **Step 1** Select the **K** icon.
- Step 2 Select Backup configuration.
- **Step 3** Save the configuration settings file to your chosen location.

The .zip extension is automatically appended to the file name.

## **Restoring Your Cisco Unified Videoconferencing 5000 MCU Configuration**

You can import the settings of a saved MCU configuration file from a storage device on your network. You can use the saved configuration file to restore the settings to the current MCU or to configure another MCU.

The imported file is a .zip file that includes a .val file and a .xml file.

### Procedure

Step 1	Select the <b>X</b> icon.
Step 2	Select Restore configuration.
Step 3	Select Browse.
Step 4	Navigate to and select the configuration file you want to import.
	The file must have an .ini extension.
Step 5	Select Restore.
Step 6	Select <b>Continue</b> to upload the new configuration settings.
	The restore procedure causes all current configuration to be permanently lost.
	The system shuts down for a few minutes and then restarts automatically.
	All active conferences are disconnected.
Step 7	Select <b>OK</b> to complete the restore procedure.

## **Restoring Factory Default Settings**

Step 1	Select the <b>K</b> icon.
Step 2	Select Restore factory defaults.
Step 3	Select <b>Continue</b> to upload the new configuration settings, or select <b>Cancel</b> to abort the restore procedure.
	The restore procedure causes all current configuration to be permanently lost.
	The system shuts down for a few minutes and then restarts automatically.
	All active conferences are disconnected.
Step 4	Select <b>OK</b> to complete the restore procedure.

# How to Work with Advanced Commands for the Cisco Unified Videoconferencing 5000 MCU

You can send text-based commands used for the enhanced control of the MCU.

Note

We recommend that only advanced users or users who have consulted with Cisco Customer Support perform actions involving advanced commands.

- Viewing Available Advanced Commands, page 9-3
- Modifying Advanced Commands, page 9-6
- Sending Advanced Commands, page 9-6

## **Viewing Available Advanced Commands**

 Table 9-1 lists all available advanced commands.

### Procedure

- **Step 1** Select the **Select** icon.
- Step 2 Select Advanced parameters.

### Table 9-1 List of Available Advanced Commands

Command	String	Description	Parameters	Default
H323 RAS port number	h323rasport	Sets the H.323 RAS port number.		1719
H323 SIG port number	h323sigport	Sets the H.323 Signaling port number.		1720
Registration mode	h323gkregmode			
SIP support video fast update	sipsupportvfu		disable enable	Enabled
Minimal new speaker interval	minnewspeakerinterval	Sets the minimum length of time (in milliseconds) an attendee must wait before becoming the active speaker.		3000

Command	String	Description	Parameters	Default	
Enable DTMF conference control	dtmfconferencecontrolenable		disable enable	Enabled	
Register conference ID	mcuregisterconfname	Registers conference ID (on the Gatekeeper or SIP server).	disable enable	Enabled	
Participants join conference policy	mcujoinpolicy		All Invite Only	All	
External conference policy authorization	externalconferenceauthorization		None Notify Authorize	None	
Unit location	boardlocation	Indicates where the unit is physically located.	String	None	
SNMP read password	snmpreadpassword	SNMP read community	String	RVGET2	
SNMP write password	snmpwritepassword	SNMP write community	String	RVSET2	
H.323 status show	h323statusshow	Prints a snapshot of H.323 stack-related information.			
H.323 stack show	h323stackshow	Enables H.323 stack prints.		H.323 stack	
H.323 stack hide	h323stackhide	Disables H.323 stack prints.		printing is disabled by default.	
SIP status show	sipstatusshow	Prints a snapshot of SIP stack-related information.			
SIP stack show	sipstackshow	Enables SIP stack prints.		SIP stack printing is	
SIP stack hide	sipstackhide	Disables SIP stack prints.		by default.	

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How to Work with Advanced Commands for the Cisco Unified Videoconferencing 5000 MCU

Command	String	Description	Parameters	Default
H.239 Live Mode	h239livemode		disable enable	Enabled
H.239 Duo Video	h239duovideo		disable enable	Disabled
Unit Notify Level	notifylevel	Sets the MCU log notify level filter	Fatal—MCU cannot continue to provide service (unrecoverable error).	Debug 3
			Error—User functionality problem (for example, call connect failure or no resources available).	
			Warning—User functionality problem but the MCU can continue to provide service.	
			Info—Status prints for Customer Support use.	
			Advanced—Like Info but more detailed.	
			Debug 1 through Debug 4—Debug levels.	
Waiting Room Indication Timeout	setwaitingroomindtimeout	Indicates the length of time (in milliseconds) between waiting room announcements.		
Display Cascaded Endpoint Name	cascadedisplayendpointname	When enabled, the text overlay on the subframe from the slave conference is the endpoint name.	disable enable	Enabled
Handle DTMF After Notification	handledtmfafternotification	Instructs the MCU to send DTMF signals to an external server and other specified destinations.	no—MCU sends DTMF signals to the external server only. yes—MCU sends DTMF signals to the external server and to the destination set by the DTMF forwarding advanced command.	

Command	String	Description	Parameters	Default
DTMF Forwarding Target	dtmfforwardto	Indicates the target of DTMF forwarding.	to all—All endpoints in the conference.	None
			to gateways—To gateways only.	
			to none—DTMF is disabled.	
DTMF Detection	dtmfalwaysopen		disable	Enabled
Before Authentication			enable	
CS Logging	cslog	Display	start	
		Customer Support-relevant	stop	
		logs.	status	

## **Modifying Advanced Commands**

### Procedure

Step 1	Select the <b>X</b> icon.
Step 2	Select Advanced parameters.
Step 3	Select the arrow in the Review column for the advanced command that you want to modify.
Step 4	Modify the value for the parameter in the Value field.
Step 5	Select Apply.

## **Sending Advanced Commands**

### Procedure

Step 1 Select the x icon.
Step 2 Select Advanced parameters.
Step 3 Locate the CLI section and select More.
Step 4 Enter a command in the Command field.
Step 5 Enter a parameter value for the command (where applicable) in the Parameter field.
Step 6 Enter a value for the parameter (where applicable) in the Value field.

## How to Manage Cisco Unified Videoconferencing 5000 MCU Software

- Upgrading Cisco Unified Videoconferencing 5000 MCU Software, page 9-7
- Restoring a Previous Software Version, page 9-7

## **Upgrading Cisco Unified Videoconferencing 5000 MCU Software**

### Procedure

Step 1	Select the <b>X</b> icon.
Step 2	Select Update software.
Step 3	Select Browse and navigate to required MCU upgrade package.
Step 4	Select Update.
	The system shuts down for a few minutes and then restarts automatically.
	All active conferences are disconnected.
Step 5	Select Continue.
Step 6	As soon as the update process has finished, the MCU reboots and reloads with the new software version.

## **Restoring a Previous Software Version**

Step 1	Select the <b>X</b> icon.
Step 2	Select Update software.
Step 3	Select Roll back.
	The system shuts down for a few minutes and then restarts automatically.
	All active conferences are disconnected.
Step 4	Select Continue.
Step 5	As soon as the update process has finished, the MCU reboots and reloads with the new software version.

## **Restarting the Cisco Unified Videoconferencing 5000 MCU**

#### Procedure

Step 1	Select the 🔀 icon.
Step 2	Select <b>Restart unit</b> .
	The system shuts down for a few minutes and then restarts automatically.
	All conferences are disconnected.
Step 3	Select <b>Continue</b> .

## **Contacting Customer Support**

#### Procedure

Step 1	Select the <b>X</b> icon.
Step 2	Select Contact Customer Support.
	The Contacting Customer Support window displays the Customer Support contact details.
Step 3	(Optional) Select <b>Create</b> to create a snapshot file of bundled logs and configuration files which you can send to Cisco Customer Support for debugging purposes.
	The snapshot file contains the last 24 hours of MCU activity and is approximately 10 MB in size. The snapshot file contains the following information about the MCU system:
	• Inventory file
	Configuration files

- Log files for the previous 24 hours
- All initialization log files
- All exception log files

Events and alarms logs



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