User Guide for Cisco Unified Videoconferencing 3500 MCU Release 5.1

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Customer Order Number:
Text Part Number: OL-11900-01

User Guide for Cisco Unified Videoconferencing 3500 MCU Release 5.1

Preface

Revised: November 27, 2006, OL-11900-01

Purpose

This guide describes how to work with the Cisco Unified Videoconferencing 3500 MCU Conference Control web user interface.

Audience

This guide is intended for end users who need instructions about how to perform operations on conferences Cisco Unified Videoconferencing 3500 MCU Conference Control web user interface.

Organization

This manual is organized as follows:

Chapter	Description
Chapter 1, "Dialing via the Cisco Unified Videoconferencing 3500 MCU"	Describes the dialing conventions used when working with the Cisco Unified Videoconferencing 3500 MCU.
Chapter 2, "Introducing the Conference Control Interface"	Provides a general overview of the Cisco Unified Videoconferencing 3500 MCU Conference Control web user interface.
Chapter 3, "Working with the Conference Control Interface"	Describes how to perform operations on conferences via the Cisco Unified Videoconferencing 3500 MCU Conference Control web user interface.

Document Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in **boldface**.
italic font	Arguments for which you supply values are in *italics*.
[ ]	Elements in square brackets are optional.
{ x | y | z }	Alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
`screen` font	Terminal sessions and information the system displays are in `screen` font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.
italic screen font	Arguments for which you supply values are in *italic screen* font.
^	The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords are in angle brackets.

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. This section explains the product documentation resources that Cisco offers.

Cisco.com

You can access the most current Cisco documentation at this URL:

http://www.cisco.com/techsupport

You can access the Cisco website at this URL:

http://www.cisco.com

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Product Documentation DVD

The Product Documentation DVD is a library of technical product documentation on a portable medium. The DVD enables you to access installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the HTML documentation and some of the PDF files found on the Cisco website at this URL:

http://www.cisco.com/univercd/home/home.htm

The Product Documentation DVD is created and released regularly. DVDs are available singly or by subscription. Registered Cisco.com users can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at the Product Documentation Store at this URL:

http://www.cisco.com/go/marketplace/docstore

Ordering Documentation

You must be a registered Cisco.com user to access Cisco Marketplace. Registered users may order Cisco documentation at the Product Documentation Store at this URL:

http://www.cisco.com/go/marketplace/docstore

If you do not have a user ID or password, you can register at this URL:

http://tools.cisco.com/RPF/register/register.do

Documentation Feedback

You can provide feedback about Cisco technical documentation on the Cisco Technical Support & Documentation site area by entering your comments in the feedback form available in every online document.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you will find information about how to do the following:

- Report security vulnerabilities in Cisco products
- Obtain assistance with security incidents that involve Cisco products
- Register to receive security information from Cisco

A current list of security advisories, security notices, and security responses for Cisco products is available at this URL:

http://www.cisco.com/go/psirt

To see security advisories, security notices, and security responses as they are updated in real time, you can subscribe to the Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed. Information about how to subscribe to the PSIRT RSS feed is found at this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you have identified a vulnerability in a Cisco product, contact PSIRT:

- For emergencies only—security-alert@cisco.com

  An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- For nonemergencies—psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

Tip We encourage you to use Pretty Good Privacy (PGP) or a compatible product (for example, GnuPG) to encrypt any sensitive information that you send to Cisco. PSIRT can work with information that has been encrypted with PGP versions 2.*x* through 9.*x*.

Never use a revoked encryption key or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

If you do not have or use PGP, contact PSIRT to find other means of encrypting the data before sending any sensitive material.

Product Alerts and Field Notices

Modifications to or updates about Cisco products are announced in Cisco Product Alerts and Cisco Field Notices. You can receive Cisco Product Alerts and Cisco Field Notices by using the Product Alert Tool on Cisco.com. This tool enables you to create a profile and choose those products for which you want to receive information.

To access the Product Alert Tool, you must be a registered Cisco.com user. (To register as a Cisco.com user, go to this URL: http://tools.cisco.com/RPF/register/register.do) Registered users can access the tool at this URL: http://tools.cisco.com/Support/PAT/do/ViewMyProfiles.do?local=en

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day at this URL:

http://www.cisco.com/techsupport

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

http://tools.cisco.com/RPF/register/register.do

Note Use the **Cisco Product Identification Tool** to locate your product serial number before submitting a request for service online or by phone. You can access this tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link, clicking the **All Tools (A-Z)** tab, and then choosing **Cisco Product Identification Tool** from the alphabetical list. This tool offers three search options: by product ID or model name; by tree view; or, for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Tip Displaying and Searching on Cisco.com

If you suspect that the browser is not refreshing a web page, force the browser to update the web page by holding down the Ctrl key while pressing F5.

To find technical information, narrow your search to look in technical documentation, not the entire Cisco.com website. On the Cisco.com home page, click the **Advanced Search** link under the Search box and then click the **Technical Support & Documentation** radio button.

To provide feedback about the Cisco.com website or a particular technical document, click **Contacts & Feedback** at the top of any Cisco.com web page.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests, or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411
Australia: 1 800 805 227
EMEA: +32 2 704 55 55
USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—An existing network is “down” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of the network is impaired while most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Online Subscription Center is the website where you can sign up for a variety of Cisco e-mail newsletters and other communications. Create a profile and then select the subscriptions that you would like to receive. To visit the Cisco Online Subscription Center, go to this URL:

  http://www.cisco.com/offer/subscribe

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco channel product offerings. To order and find out more about the *Cisco Product Quick Reference Guide*, go to this URL:

  http://www.cisco.com/go/guide

- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

  http://www.cisco.com/go/marketplace/

- Cisco Press publishes a wide range of general networking, training, and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

  http://www.ciscopress.com

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:

  http://www.cisco.com/ipj

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

  http://www.cisco.com/en/US/products/index.html

- Networking Professionals Connection is an interactive website where networking professionals share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:

  http://www.cisco.com/discuss/networking

- "What's New in Cisco Documentation" is an online publication that provides information about the latest documentation releases for Cisco products. Updated monthly, this online publication is organized by product category to direct you quickly to the documentation for your products. You can view the latest release of "What's New in Cisco Documentation" at this URL:

  http://www.cisco.com/univercd/cc/td/doc/abtunicd/136957.htm

- World-class networking training is available from Cisco. You can view current offerings at this URL:

  http://www.cisco.com/en/US/learning/index.html

Dialing via the Cisco Unified Videoconferencing 3500 MCU

This section describes the following topics:

Accessing Conferences via the Cisco Unified Videoconferencing 3500 MCU

You can participate in video conferences hosted on the Cisco Unified Videoconferencing 3500 MCU from any phone, terminal, or endpoint on any type of network to which the MCU connects. The MCU can accept calls from H.323, Skinny Client Control Protocol (SCCP), and Session Initiation Protocol (SIP) endpoints, and with Cisco IPVC video gateway support, from phones and terminals on H.320 and PSTN networks in the same conference.

You can participate in a conference by dialing from a phone, from an endpoint application, or by using the MCU Conference Control interface.

With appropriate access rights, you can also create conferences, invite other participants and conferences, and use an extensive range of conference control features for enhancing the video conferencing experience.

Making an Ad Hoc Conference Call with the 3500 MCU

All users can create or join an ad hoc (also called dial-in) conference simply by dialing the conference number. Users can invite single or multiple participants in the same operation.

Users can initiate multi-point conferences that run unattended and do not require advance configuration. Users simply dial a number and the MCU automatically sets up the conference. Anyone else who dials that number can join the conference at any time, provided that network resources are available. All that the user requires is a suitable service number—that an Administrator supplies—to combine with a unique number for the conference. A common practice is to use the telephone extension number of the conference creator as the unique number.

Related Topics

- Cisco Unified Videoconferencing 3500 MCU Dialing Conventions for H.323 Endpoints, page 1-2
- Dialing Conventions for SIP Endpoints, page 1-3
- Using Dialing Conventions with any IP-based Endpoint, page 1-5

Cisco Unified Videoconferencing 3500 MCU Dialing Conventions for H.323 Endpoints

This section describes the dialing conventions relating to H.323 endpoints, including the following topics:

- Starting or Joining an Ad Hoc Conference with H.323 Endpoints, page 1-2
- Inviting Multiple H.323 Endpoints with a Single Dial String, page 1-2

Starting or Joining an Ad Hoc Conference with H.323 Endpoints

To start or join an ad hoc conference with H.323 endpoints, you dial in using the conference ID number. The conference ID number is composed of a service prefix number that indicates the conference call type and capabilities and a unique number (or numbers) identifying the conference:

```
<Service prefix> + <Unique number>
```

A conference ID can consist of any combination of the characters 1-9, *, and #. It can be up to 256 characters in length.

For example, you can dial:

601234

where:

- 60 is the service prefix.
- 1234 is the unique conference number.

As soon as the Cisco Unified Videoconferencing 3500 MCU accepts the call, you are connected to the existing conference, or the Cisco Unified Videoconferencing 3500 MCU creates a new conference with this conference identifier.

Note The Cisco Unified Videoconferencing 3500 MCU comes with two predefined services 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.

Inviting Multiple H.323 Endpoints with a Single Dial String

With an H.323 endpoint, you can create or join an ad hoc conference and invite single or multiple participants in the same operation using the invite sign (**). You use the invite sign to separate the called numbers in the dialed string:

```
<conference ID number> + <**> + <invited participant number>
```

For example, you can dial:

6012345678**

where:

- **601234** is the conference ID number.
- ** is the invite sign.
- **5678** is the invited participant number.

Note You can invite multiple participants in one action by using the invite sign to separate each individual participant number.

Dialing Conventions for SIP Endpoints

You can dial to the Cisco Unified Videoconferencing 3500 MCU from SIP endpoints. You can also invite SIP endpoints to ad hoc conferences on the Cisco Unified Videoconferencing 3500 MCU when each is registered with a SIP proxy server on the IP network. The Cisco Unified Videoconferencing 3500 MCU domain name should be registered on a Domain Name System (DNS) or Microsoft Real Time Communications (RTC) server.

This section includes the following topics:

Starting or Joining Ad Hoc Conferences with SIP Endpoints

When starting or joining an ad hoc conference, the dialed string should contain the conference ID number and the Cisco Unified Videoconferencing 3500 MCU domain name:

```
<conference ID number> @ <mcu.domain.com>
```

For example, you can dial:

601234@mcu.domain name

where:

- **601234** is the conference ID number.
- **@mcu.domain.com** is the name that the DNS server resolves to a unique IP address.

Inviting Multiple SIP Endpoints with a Single Dial String

You can dial from a SIP endpoint and invite an H.323 or SIP endpoint when the inviting SIP endpoint is registered in the Cisco Unified Videoconferencing 3500 MCU domain. The Cisco Unified Videoconferencing 3500 MCU adds the default domain to the dialed string when a user name is dialed without a domain:

```
<conference ID number> + <**> + <invited SIP endpoint>
```

For example, you can dial:

601234**john@mcu.domain.com

where:

- **601234** is the conference ID number.
- ** is the invite sign.
- **john@mcu.domain**.com is the invited participant and domain.

Dialing into the Cisco Unified Videoconferencing 3500 MCU Configured as a SIP-compliant Endpoint

Administrators can configure the Cisco Unified Videoconferencing 3500 MCU as a SIP-complaint endpoint. Users can start or join an ad hoc conference by dialing into this Cisco Unified Videoconferencing 3500 MCU from their SIP endpoint. This procedure assumes that the SIP Proxy responsible for the network is capable of routing calls according to the dialed prefix. Check with your SIP Proxy vendor for compliance.

Procedure

Step 1 Dial a conference on the Cisco Unified Videoconferencing 3500 MCU from a SIP endpoint by dialing the conference ID.

Step 2 Add the default domain to the dial string.

For example, dial:

601234@default.domain

where:

- **602134** is the Cisco Unified Videoconferencing 3500 MCU conference ID (service prefix + unique conference identifier).
- **default.domain** is the default domain of the Cisco Unified Videoconferencing 3500 MCU on which the conference is hosted.

Dialing into the Cisco Unified Videoconferencing 3500 MCU Configured as a Separate SIP Domain

Administrators can configure the Cisco Unified Videoconferencing 3500 MCUCisco Unified Videoconferencing 3500 MCU as a separate SIP domain. Users can start or join an ad hoc conference by dialing into this Cisco Unified Videoconferencing 3500 MCU from a SIP-complaint endpoint.

Procedure

Step 1 Dial the conference ID.

Step 2 Add the unique Cisco Unified Videoconferencing 3500 MCU domain as defined in the proxy or Domain Name Server (DNS) server to the dial string.

For example, dial:

conference.id@mcu.domain.com

Using Dialing Conventions with any IP-based Endpoint

You can start or join an ad hoc conference from any IP-based endpoint. When dialing from an IP endpoint, configure the dialing software, IP phone, or other device with the appropriate network configuration details (H.323 gatekeeper IP address or SIP proxy IP).

Procedure

To start or join a conference with an IP endpoint, choose one of the following steps:

Step 1 To start or join a conference, dial the conference ID number.

For example, dial 601234.

As soon as the Cisco Unified Videoconferencing 3500 MCU accepts the call, you connect to the existing conference or the Cisco Unified Videoconferencing 3500 MCU creates a new conference with this conference identifier.

–or–

Step 2 To start or join a conference and invite a participant, dial the conference ID number followed by the invite sign (**) and the number of the participant you want to invite.

For example, dial **601234**5678**

As soon as the Cisco Unified Videoconferencing 3500 MCU accepts the call, you connect to the existing conference or the Cisco Unified Videoconferencing 3500 MCU creates a new conference with this conference identifier.

–or–

Step 3 To start or join a conference and invite a participant on the Integrated Services Digital Network (ISDN), Public Switched Telephone Network (PSTN) or cell phone network, dial the conference ID number followed by the invite sign (**), the appropriate gateway service prefix, and the ISDN line number.

For example, dial **601234**867655001** (<Conference ID number> + <**> + <Gateway service prefix + line number>).

As soon as the Cisco Unified Videoconferencing 3500 MCU accepts the call, you are connected to the existing conference or a new conference is created with this conference identifier.

Controlling 3500 MCU Conferences with DTMF

You can control Cisco Unified Videoconferencing 3500 MCU conferences using Dual Tone Multi-Frequency (DTMF) signals from your endpoint remote control or key pad.

Depending on how you set the DTMF forwarding advanced command, the Cisco Unified Videoconferencing 3500 MCU passes out-of-band DTMF signals to all endpoints in the conference, to gateways only or does not pass DTMF signals.

The gateway inserts in-band signals on receiving the DTMF from the Cisco Unified Videoconferencing 3500 MCU. The audio bridge receives these in-band signals and responds accordingly.

Table 1-1 shows available DTMF control signals.

Table 1-1 DTMF Controls

During a conference press * followed by:	
*	Listen to available options.
1	Take/release Chair Control.
2	Mute/unmute your line.
3	Control your volume.
4	Control lecture mode
7	Block/unblock admission to conference (for Chair Control-level users only).
8	Invite a new participant (for Chair Control-level users only).
9	Mute/unmute all participants (for Chair Control-level users only).
#	Exit this menu.

Introducing the Conference Control Interface

This section describes the following topics:

Accessing the Cisco Unified Videoconferencing 3500 MCU Conference Control Interface

All users can access the Conference Control interface.

Procedure

Step 1 Launch your browser and enter the IP address of the Cisco Unified Videoconferencing 3500 MCU.

The Cisco Unified Videoconferencing 3500 MCU access window appears.

Step 2 Perform one of the following actions:

- To monitor a conference, follow these steps:
  - In the Conference ID field, enter the number of the conference you want to monitor.
  - In the Password field, enter the PIN for the conference you want to monitor.
  - Click **Go**.
- To create a new conference, click **Create conference**.
- To sign in with Operator or Administrator authorization click **Sign in**.

Viewing Online Help from the 3500 MCU Conference Control Window

You can view online help about the Create Conference window.

Procedure

Step 1 Access the Create Conference window.

Step 2 On the control bar, click **Help**.

Related Topics

- Conference Control Interface for the 3500 MCU, page 2-6

Cisco Unified Videoconferencing 3500 MCU Access Levels

There are four ways to interact with the Cisco Unified Videoconferencing 3500 MCU user interfaces according to the following access levels:

- Administrator
- Operator
- Chair Control
- User

Table 2-1 describes each access level.

Table 2-1 MCU Access Levels

Access Level	Privileges
Administrator	• Full access to the Cisco Unified Videoconferencing 3500 MCU Administrator interface. • Full Operator-level access to the Conference Control interface.
Operator	• Access to the Conference Control interface using the Create Conference window. • Access to view details of all conferences hosted on the Cisco Unified Videoconferencing 3500 MCU and to cascaded conferences hosted on a participating Cisco Unified Videoconferencing 3500 MCU. • Ability to create a new conference from the Conference Control access window, the Create Conference window, or the Conference Control interface. • Chair Control-level access to all conferences while chair control is simultaneously held by other users. • Ability to invite other participants to a conference.

Table 2-1 MCU Access Levels (continued)

Access Level	Privileges
Chair Control	• Access to view conference details of conferences hosted on the Cisco Unified Videoconferencing 3500 MCU and to cascaded conferences hosted on a participating Cisco Unified Videoconferencing 3500 MCU for which access authorization is granted. • Chair Control level-access to conferences when the user has a valid Chair Control PIN or the conference chair is not held by another user. • Ability to invite other participants to a conference.
User	• View-only access to conferences hosted on the Cisco Unified Videoconferencing 3500 MCU for which authorization is granted. • Ability to invite other participants to a conference.

Conference List Window on the 3500 MCU

All users can access the Conference List window where they can join an existing conference or create a new conference. Administrator or Operator-level users can use the Conference List window to select conferences to monitor and control from the list of conferences currently running, or create a new conference.

The number of currently-running conferences appears in the Number of Conferences field. The Conference List window displays information about each conference in a table format with the following columns:

- **Conference ID**—Conference ID number. Each ID number is a hyperlink that you can select to display the Conference Control interface for that conference.
- **Description**—Description of the conference entered by the user who created it.
- **Participants**—The number of participants currently attending the conference.
- **Media Types**—Icons indicate the type of media supported by the conference: voice, video and data.
- **Encryption**—Indicates the level of encryption currently in use for the conference: best effort, encryption required, or strong encryption required.
- **Actions**—Indicates the actions that can be taken.

Creating Conferences from the Create Conference Window

Users with Chair Control-level access or Administrators can create a conference using available predefined services in the Create Conference window. Such users can also optionally set a PIN for accessing the new conference and a PIN for obtaining Chair Control of the new conference.

Figure 2-1 and Table 2-2 list the elements in the Create Conference window.

Figure 2-1 Create Conference Window Elements

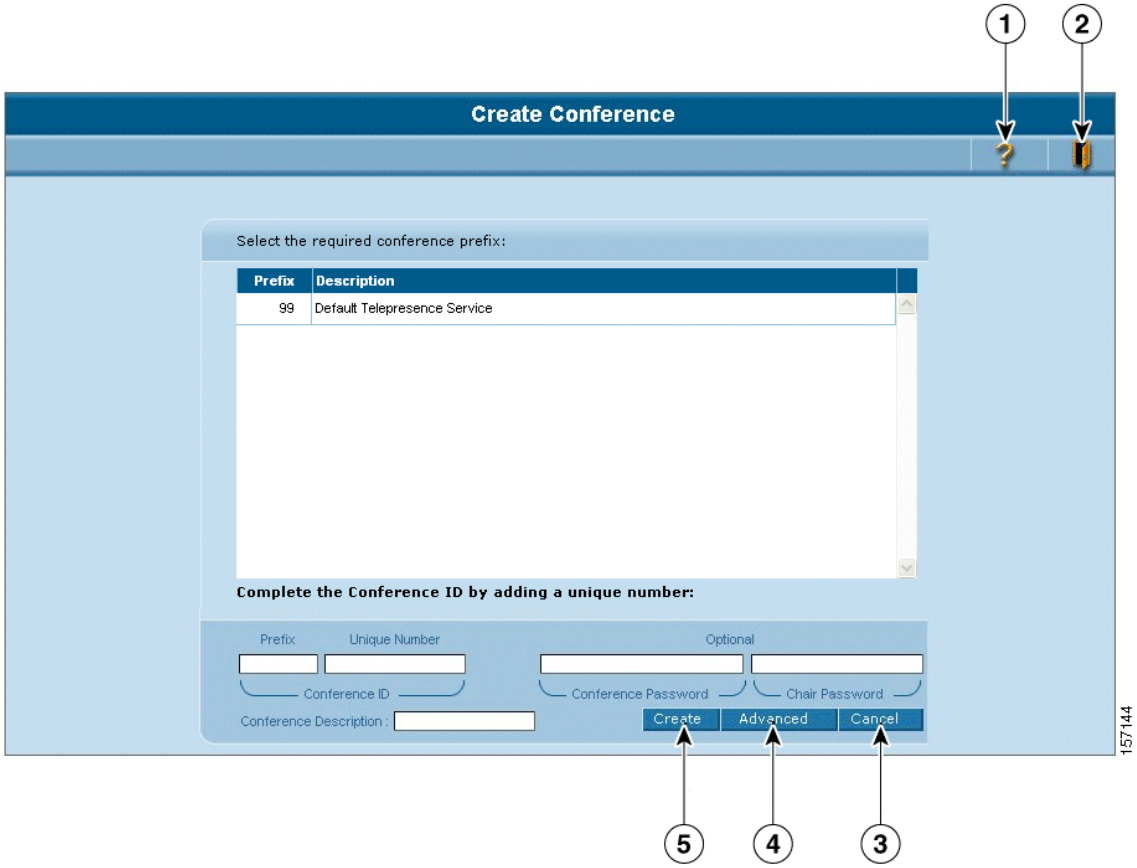

Table 2-2 Create Conference Window Elements

Number	Description
1	Sign out button
2	Help button
3	Cancel button
4	Advanced button
5	Create button

Before You Begin

Have an Administrator configure Cisco Unified Videoconferencing 3500 MCU services if there are not already existing ones.

Procedure

Step 1 Launch your browser and enter the IP address of the Cisco Unified Videoconferencing 3500 MCU.

The Cisco Unified Videoconferencing 3500 MCU access window appears.

Step 2 Click **Create conference**.

The Create Conference window appears, displaying available pre-configured service prefixes and their descriptions.

Step 3 Choose a service prefix from the list of pre-configured ones.

The prefix appears in the Prefix field.

Step 4 In the Unique Number field, enter a number for this conference.

Note You cannot use an existing conference number.

Step 5 (Optional) In the Conference Password field, enter a PIN used for accessing the conference.

Step 6 (Optional) In the Chair Password field, enter a PIN used for obtaining Chair Control in the new conference.

Note You can also configure a default Chair Control PIN for a service profile in the Administrator interface.

Step 7 (Optional) In the Conference Description field, you can enter text describing the conference that appears in the Create Conference window.

Step 8 (Optional) You can configure additional settings for a new conference such as conference duration, time-out, and dialing policy settings:

- Click **Advanced**.

The **Advanced Features** dialog box appears.

- (Optional) In the **Conference Duration** section, click **Unlimited** or **Min** and set the time limitation (in minutes) for the conference.
- (Optional) Select **Terminate Conference when empty** to end a conference after it is vacant for the number of minutes you enter in the field in this setting.
- (Optional) Select **Disallow dial-in to the conference** to prevent participants dialing in to the conference. Attendance is thus by invitation only. This ensures that users dialing the wrong number do not join this conference by mistake.
- Click **OK**.

Step 9 Click **Create**.

Note If an error message appears, stating that no resources are available, check whether the MCU or the appropriate EMP is registered or online in the Media Processing tab in the Administrator interface.

Terminating Conferences

You can disconnect an inactive or unused conference in the Create Conference window.

Procedure

Step 1 Access the Create Conference window.

Step 2 Click the **Terminate Conference** button (11 in Table 2-2 on page 2-7) next to the conference name to end the conference.

Signing Out of the Create Conference Window

You can exit the Create Conference window by clicking the **Sign out** button.

Procedure

Step 1 Access the Create Conference window.

Step 2 On the control bar, click **Sign out**.

Conference Control Interface for the 3500 MCU

From the Cisco Unified Videoconferencing 3500 MCU Conference Control interface, you can:

- View active conferences hosted on the Cisco Unified Videoconferencing 3500 MCU or on a cascaded Cisco Unified Videoconferencing 3500 MCU.
- View conference participant details.
- Create conferences.
- Control conference connections.
- Monitor and manage conference behavior.

While all users can view the Conference Control interface, access to conference management features is controlled by authorization access levels: Administrator, Operator, Chair Control and User.

Note The Conference Control interface is best viewed in full screen mode (1024 x 768 fps).

Note You can view multiple Conference Control interface browser windows at the same time to monitor different conferences. We recommend, however, that you close windows you are not currently viewing to avoid confusion and carrying out operations in the wrong conference.

Figure 2-2 shows the Conference Control interface.

Figure 2-3 to Figure 2-6 show the elements of the Conference Control interface in more detail.

Table 2-3 on page 2-9 lists these elements in numerical order of the labels in Figure 2-3 to Figure 2-6.

Table 2-4 on page 2-11 lists these elements in alphabetical order.

Figure 2-2 Conference Control Interface Elements

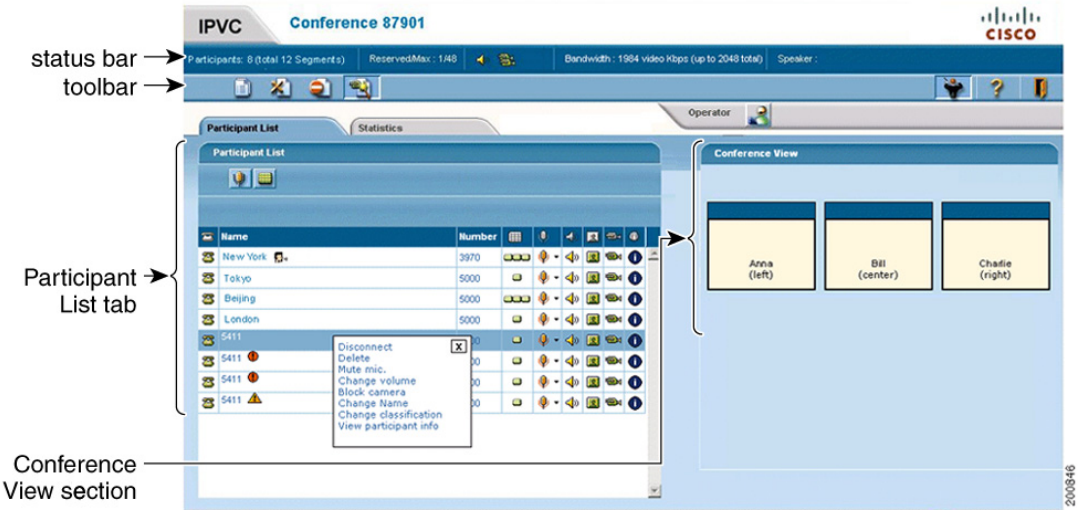

Figure 2-3 Conference Control Status Bar

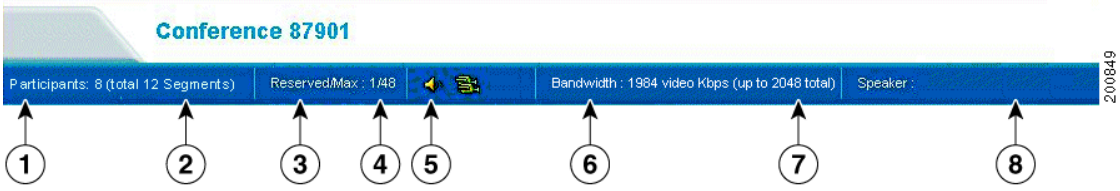

Figure 2-4 Conference Control Toolbar

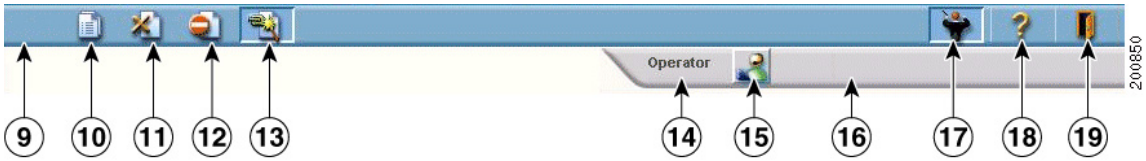

Figure 2-5 Conference Control Participant List Tab

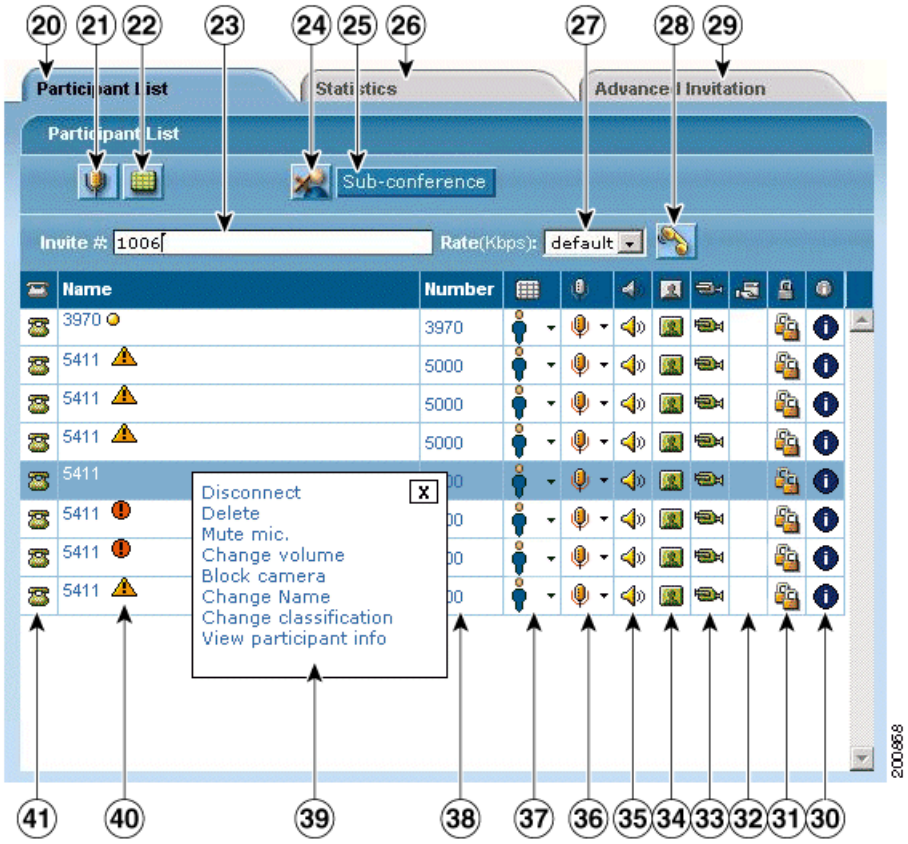

Figure 2-6 Conference Control Conference View

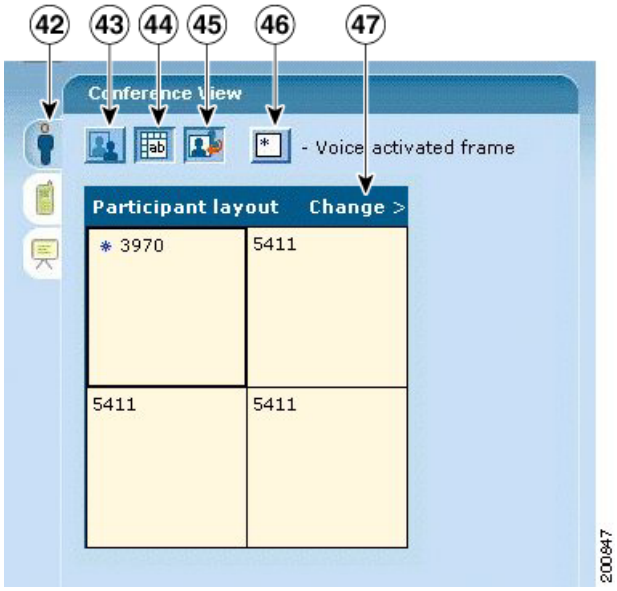

Table 2-3 Conference Control Interface Elements by Number

Numbered Label	Description
Status Bar	
1	Participants field. Displays number of participants in the current conference.
2	Reserved/Max field. Displays the reserved number of participants and maximum number of participants for this conference.
3	Media type icon indicating that this conference supports voice. An error symbol appears if a media processing error occurs in the MCU.
4	Media type icon indicating that this conference supports video. An error symbol appears if a media processing error occurs in the MCU.
5	Media type icon indicating that this conference supports T.120 data sharing.
6	Encryption field. Displays the level of encryption for this conference: best effort, encryption required or strong encryption required.
7	Bandwidth field. Displays the bandwidth the current conference is using.
8	Speaker field. Displays the participant currently speaking in the conference.
Toolbar	
9	Create Conference button.
10	View Conference List button. Click to view the Create Conference window. See the "Conference List Window on the 3500 MCU" section on page 2-3 for more information.
11	Terminate Conference button.
12	Conference Admission button.
13	Enable/Disable QualiVision button. Select to enable or disable the Cisco QualiVision feature for improved video quality.
14	Operator tab. Click the icon in the tab to invite the operator to join the conference to answer queries and provide support. The operator E.164 number is pre-configured by the network administrator under Settings > Basics > Operator.
15	Operator button.
16	Join data conference (Data Sharing) button.
17	Take Control/Release Control button.
18	Help button.
19	Sign out button.
Participant List Tab	
20	Participant List tab.
21	Mute/Unmute button.
22	Change Participant View button.

Table 2-3 Conference Control Interface Elements by Number (continued)

Numbered Label	Description
23	Invite # field. Enter the number of the participant you wish to invite to the conference. You can invite multiple participants at the same time by separating each number with the invite sign (**). The invite sign is configurable. For more information, see the "Using Quick Invites to Invite Conference Participants" section on page 3-13.
24	Delete Participant button.
25	Sub-conference button. Click to view the Select sub-conference dialog box. See the "Configuring Sub-Conferences" section on page 3-9 for more information.
26	Statistics tab.
27	Rate(Kbps) field.
28	Invite button. Click to invite the number entered in the Invite # field (23).
29	Advanced Invitation tab.
30	Participant info column. Click the icon
31	Encryption column. Displays the level of encryption that the endpoints require: best effort, encryption required, or strong encryption required.
32	T.120 data sharing column. Indicates that the participant supports T.120 data sharing.
33	Video Image column. Displays video image icons that indicate whether the video stream from the participant to the Cisco Unified Videoconferencing 3500 MCU is enabled or blocked. If the video image icon has a star, then QualiVision is enabled for the video stream from the participant to the Cisco Unified Videoconferencing 3500 MCU.
34	Video Display column. Displays video display icons that indicate whether the conference video display sent to the participants is enabled or blocked. If the video display icon has a star, then QualiVision is enabled for the video stream from the Cisco Unified Videoconferencing 3500 MCU to the participant.
35	Audio Out column. Displays Audio Out icons that indicate whether the conference audio connection to the participants are enabled or muted.
36	Audio In column. Displays Mute icons for participants whose audio is not muted and Unmute icons for participants whose audio is muted.
37	Location in View column. Indicates the conference view displayed to the participants.
38	Number column. Displays the endpoint numbers of the conference participants.
39	Actions pop-up
40	Name column. Displays the names of the endpoint.
41	Participant connection status icons: Connected, Disconnecting or Disconnected.
Conference View	
42	Layout display frame.
43	Enable self-see button. Click to enable the self-see feature.
44	Display participants name in frame button. Click to display the name of endpoints or participants in specific positions of the video layout frame.

Table 2-3 Conference Control Interface Elements by Number (continued)

Numbered Label	Description
45	Auto-switch button. The auto-switch mode displays all the participants of a large conference in Continuous Presence (CP) mode display in the video layout on a rotating basis.
46	Voice activated frame button. Drag and drop the icon to the preferred position of the voice-activated image in the video display layout.
47	Change button. Select to display a list of layouts available in the current conference. Select the required layout. The conference view layout adjusts according to your selection. For more information, see the Changing Conference Layouts, page 3-17.

Table 2-4 Conference Control Interface Elements by Name

Description	Numbered Label
Actions pop-up.	39
Advanced Invitation tab.	29
Audio In column. Displays Mute icons for participants whose audio is not muted and Unmute icons for participants whose audio is muted.	36
Audio Out column. Displays Audio Out icons that indicate whether the conference audio connection to the participants are enabled or muted.	35
Auto-switch button. The auto-switch mode displays all the participants of a large conference in Continuous Presence (CP) mode display in the video layout on a rotating basis.	45
Bandwidth field. Displays the bandwidth the current conference is using.	7
Change button. Select to display a list of layouts available in the current conference. Select the required layout. The conference view layout adjusts according to your selection. For more information, see the "Changing Conference Layouts" section on page 3-17.	47
Change Participant View button.	22
Conference Admission button.	12
Create Conference button.	9
Delete Participant button.	24
Display participants name in frame button. Click to display the name of endpoints or participants in specific positions of the video layout frame.	44
Enable self-see button. Click to enable the self-see feature.	43
Encryption column. Displays the level of encryption that the endpoints require: best effort, encryption required or strong encryption required.	31
Encryption field. Displays the level of encryption for this conference: best effort, encryption required or strong encryption required.	6
Help button.	18
Invite button. Click to invite the number entered in the Invite # field.	28

Table 2-4 Conference Control Interface Elements by Name (continued)

Description	Numbered Label
Invite # field.Enter the number of the participant you wish to invite to the conference. You can invite multiple participants at the same time by separating each number with the invite sign (**). The invite sign is configurable. For more information, see the "Using Quick Invites to Invite Conference Participants" section on page 3-13.	23
Join data conference (Data Sharing) button.	16
Layout display frame.	42
Location in View column. Indicates the conference view displayed to the participants.	37
Media type icon indicating that this conference supports video.	4
Media type icon indicating that this conference supports voice.	3
Mute/Unmute button.	21
Name column. Displays the names of the endpoint.	40
Number column. Displays the endpoint numbers of the conference participants.	38
Operator button. Select the icon to invite the operator to join the conference to answer queries and provide support. The operator number is pre-configured by the network administrator.	14, 15
Participant connection status icons: Connected, Disconnecting or Disconnected.	41
Participants field. Displays number of participants in the current conference.	1
QualiVision button. Select to enable or disable the Cisco QualiVision feature for improved video quality.	13
Rate(Kbps) field.	27
Reserved/Max field. Displays the reserved number of participants and maximum number of participants for this conference.	2
Sign out button.	19
Speaker field. Displays the participant currently speaking in the conference.	8
Statistics tab.	26
Sub-conference button. Click to view the Select sub-conference dialog box. See the "Configuring Sub-Conferences" section on page 3-9 for more information.	25
T.120 data sharing column. Indicates that the participant supports T.120 data sharing.	32
T.120 data sharing icon. Indicates that the conference supports T.120 data sharing.	5
Take Control/Release Control button.	17
Terminate Conference button.	11
Voice activated frame button. Drag and drop the icon to the preferred position of the voice-activated image in the video display layout.	46

Table 2-4 Conference Control Interface Elements by Name (continued)

Description	Numbered Label
Video Display column. Displays Video Display icons that indicate whether the conference video display sent to the participants is enabled or blocked. If the Video Display icon has a star, then QualiVision is enabled for the video stream from the Cisco Unified Videoconferencing 3500 MCU to the participant.	34
Video Image column. Displays Video Image icons that indicate whether the video stream from the participant to the Cisco Unified Videoconferencing 3500 MCU is enabled or blocked. If the Video Image icon has a star, then QualiVision is enabled for the video stream from the participant to the Cisco Unified Videoconferencing 3500 MCU.	33
View Conference List button. Click to view the Create Conference window. See the "Conference List Window on the 3500 MCU" section on page 2-3 for more information.	10
Voice activated frame button. Drag and drop the icon to the preferred position of the voice-activated image in the video display layout.	46

Working with the Conference Control Interface

This section describes the following topics:

Control Conference Interface Basics for the Cisco Unified Videoconferencing 3500 MCU

The following sections describe the tasks that users with appropriate access levels can perform in the Conference Control interface:

Accessing the Conference Control Interface

You can access the Conference Control interface from any Java-enabled web browser.

Procedure

Step 1 Access the Cisco Unified Videoconferencing 3500 MCU interface.

Note The Conference Control interface is best viewed in full screen mode (1024 x 768 fps).

Step 2 Click **Enter a conference**.

The Cisco Unified Videoconferencing 3500 MCU Conference Control access window appears.

Step 3 Choose one of the following two methods.

– To access an existing conference:

- In the Conference ID field, enter the conference ID.
- In the Password field, enter the PIN, if applicable.
- Click **Go**.

–or–

– To create a new conference:

- Click **Create Conference** (button 9 in Figure 2-4 on page 2-7).
- The Create Conference window appears.
- Choose a service prefix from the list of pre-configured services.
- In the Unique Number field, enter a unique number for the conference.

Note You cannot use a number already in use by another conference.

- Click **Create**.

Refreshing the Conference Control Interface

By default, the Conference Control interface refreshes itself every 10 seconds to provide updated information. To refresh information instantly, click the tab in the interface that you are viewing. You can configure the refresh interval by using the Conference control Web refresh interval advanced command.

Note Do not click **Refresh** in your web browser. This exits the Conference Control interface and returns you to the access window.

For Microsoft Windows systems, if you have enabled the Start Navigation sound, and a continuous clicking sound is heard when the Conference Control interface automatically refreshes, disable this setting in the Sounds and Multimedia section of the Control Panel.

Viewing Online Help from the Conference Control Interface

You can view help information for a selected tab in the Conference Control interface.

Procedure

Step 1 In the Conference Control interface, click the tab you want to view help information for:

- Participant List (tab 20 in Figure 2-5 on page 2-8)
- Statistics (tab 26 in Figure 2-5 on page 2-8)
- Advanced Invitation (tab 29 in Figure 2-5 on page 2-8).

Step 2 Click **Help** (button 18 in Figure 2-4 on page 2-7).

Controlling Conference Settings with the 3500 MCU

With Chair Control-level access, for conferences already in progress, you can control conference activity and initiate events such as inviting participants. When you obtain Chair Control, you can edit participant connections, create new conferences, and audio sub-conferences, and change video layout and the position of participant images. You can block conference admission, block audio and video streams, and terminate the conference. You can split the existing conference and transfer some participants to the new conference. Chair Control-level access also provides additional viewing and configuration options in the Conference Control interface.

The following sections describe the tasks that users with appropriate access levels can perform to control conference activities in the Conference Control interface:

Taking and Releasing Chair Control

Chair Control access can be PIN-protected. Administrators and Operators can jointly hold Chair Control simultaneously.

Procedure

Step 1 In the Conference Control interface, click **Take Control** (button 17 in Figure 2-4 on page 2-7) to take control of that conference.

Step 2 A dialog box requesting a PIN might appear if chair control access is PIN-protected. Enter the PIN.

Step 3 To release control of the conference, click **Release Control** (button 17 in Figure 2-4 on page 2-7).

Creating Conferences from the Conference Control Interface

Chair Controls, Operators, and Administrators can create a new conference from the Conference Control interface.

Procedure

Step 1 In the Conference Control interface, click **Create Conference** (button 9 in Figure 2-4 on page 2-7).

Step 2 The Create Conference window appears.

Step 3 Follow the steps in the "Creating Conferences from the Create Conference Window" section on page 2-3.

Inviting an Operator to a Conference

Users with Chair Control-level access can invite an Operator to join a conference to answer questions and provide support. An Administrator pre-configures the Operator number.

Note If an Operator is not pre-configured by an Administrator, the call to the Operator does not connect.

Procedure

Step 1 Access the Conference Control interface.

Step 2 Click **Operator** (button 14 in Figure 2-4 on page 2-7).

The Operator appears in the Participant List.

Configuring T.120 Data Collaboration

From the Conference Control interface, users with Chair Control-level access can open a T.120 data sharing session in Microsoft NetMeeting or join a session if one already exists for the conference. T.120 data collaboration over the video conference connection enhances the conference by providing data-sharing tools. Participants in a T.120 data collaboration video conference can simultaneously view diagrams, graphic presentations, and slide lectures. In addition, private text chats, white board exchanges, or rapid file transfers can occur while the video conference proceeds.

Users with Chair Control-level access can set up a T.120 data conference in the Conference Control interface.

Procedure

Step 1 Access the Conference Control interface.

Step 2 Click **Join Data Conference** (button 16 in Figure 2-4 on page 2-7).

Configuring Participant Settings with the 3500 MCU

The Participant List tab in the Conference Control interface contains the following sections:

- Participant List section, which displays information about conference participants. Users with Chair Control-level access can view and edit media connections for each participant. Table 3-1 describes the information that appears in the Participants List section.
- Conference Views section, which displays information about the conference layout and view.

Table 3-1 on page 3-5 lists the elements that appear in the Participants List section. The number after each element refers to the corresponding label in Figure 2-3 on page 2-7 to Figure 2-6 on page 2-8.

Table 3-1 Participants List Section Columns

Numbered Label	Column	Description
41	Status	Displays status icons for the connection status of each conference participant. Disconnected participants remain in the Participant List for the duration of the conference, enabling you to reconnect participants without sending repeat invitations. You can rearrange the list of participants in the Participant List by clicking the icon in the title of this column.
40	Name	The name of the conference participant. This column can include: • The dial out icon to indicate that the Cisco Unified Videoconferencing 3500 MCU invited the specified participant. • The current speaker indication icon that indicates that the specified participant is currently the active speaker. • Video quality warning icons—medium or poor video quality—that indicate the current quality of the IP network video connection for the participant.
38	Number	Displays the endpoint numbers of the conference participants.
37	Change Participant View	Indicates the conference view that appears to the participant. When the conference is configured with more than one view, you can choose available views from a list.
36	Audio In	Indicates whether the voice of the selected participant is muted or enabled.

Table 3-1 Participants List Section Columns (continued)

Numbered Label	Column	Description
35	Audio Out	Indicates whether the conference audio connection is muted or enabled.
34	Video Display	Indicates whether the conference video display sent to the participant is blocked or unblocked. If the icon contains a star, then QualiVision is enabled for the video stream from the Cisco Unified Videoconferencing 3500 MCU to the participant.
33	Video Image	Indicates whether the video stream that the participant is sending to the conference is blocked or unblocked.
32	Data Sharing	Indicates that the participant supports T.120 data sharing.

The following sections describe the tasks that users with appropriate access level can perform in the Participant List tab:

- Muting and Unmuting Participant Audio Connections, page 3-6
- Reconnecting Participants, page 3-7
- Blocking Conference Admission, page 3-7
- Deleting Conference Participants, page 3-7
- Changing the Volume, page 3-8
- Changing Participant Views, page 3-8
- Configuring Sub-Conferences, page 3-9
- Blocking the Video Stream, page 3-9
- Changing a Participant Name, page 3-10
- Changing Video Quality Classification, page 3-10
- Viewing Participant Call Information, page 3-10
- Configuring Outgoing Bandwidth Settings, page 3-12

Muting and Unmuting Participant Audio Connections

In the Participant List tab, users with Chair Control-level access can mute or enable the audio connection to the conference of all participants in the conference.

Procedure

Step 1 Access the Conference Control interface.

Step 2 On the control bar, click **Mute** (button 21 in Figure 2-5 on page 2-8) to mute all participants or Unmute (21) to enable the audio connection for all participants.

Users with Chair Control-level access can also mute or enable the audio connection of an individual participant in a conference.

Procedure

Step 1 In the Participants List section, select a participant.

Step 2 Right click and select **Mute mic** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8).

Reconnecting Participants

If participants are disconnected from a conference, users with Chair Control-level access can reconnect them in the Participant List tab.

Note When the Enable auto-reconnect option is configured in the conference service, then the Cisco Unified Videoconferencing 3500 MCU automatically calls disconnected terminals to attempt a reconnection.

Procedure

Step 1 Access the Participant List tab.

Step 2 Click **Disconnect** (button 41 in Figure 2-5 on page 2-8) icon to attempt a reconnection.

Blocking Conference Admission

Users with Chair Control-level access can block the admission of additional participants in a conference in the Conference Control interface.

Procedure

Step 1 Access the control bar.

Step 2 Click **Conference Admission** (button 12 in Figure 2-4 on page 2-7).

No further participants can join the conference. To readmit participants, click **Conference Admission** again.

Deleting Conference Participants

In the Participant List tab, users with Chair Control-level access can remove participants from conferences.

Procedure

Step 1 In the Participants List section, click the participant you want to remove.

Step 2 On the control bar, click **Delete Participant** (24 in Figure 2-5 on page 2-8).

–or–

Step 3 In the **Participants List** section, select a participant.

Step 4 Right click and select **View participant info** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8).

Changing the Volume

In the Conference Control interface, users with Chair Control-level access can control the volume of participating endpoints (manual gain control) in a conference. For a regular conference, your setting only affects the location that is connected to a specific Cisco Unified Videoconferencing 3500 MCU port. In a cascaded conference, changing this setting affects all remote participants on other Cisco Unified Videoconferencing 3500 MCUs. Once you change this setting, the new setting remains in effect until that endpoint leaves the Cisco Unified Videoconferencing 3500 MCU.

Procedure

Step 1 In the Participant List tab, select the participant whose volume you want to change.

Step 2 Right click and select **Change volume** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8).

Step 3 The gain control scroll bar dialog box appears, with a gain span of -5 to +5.

Step 4 Drag the scroll bar to the right to increase the gain; drag the slide bar to the left to decrease the gain.

Step 5 Close the gain control slide bar dialog box.

Changing Participant Views

In the Participant List tab, if a conference supports multiple views, users with Chair Control-level access can change the conference view layout for an individual conference participant or all conference participants while the conference is in progress.

Procedure

Step 1 If you wish to change the conference view for specific conference participants only, select those participant(s) in the Participant List table.

Step 2 Click **Change Participants View** (button 21 in Figure 2-5 on page 2-8).

The Change Participants View dialog box displays.

Step 3 Select **Selected Participants** to change the conference view layout for the conference participants you selected in 1,

–or–

Select **All** to change the conference view layout for all conference participants.

Step 4 Click **OK**.

Configuring Sub-Conferences

In the Participant List tab, users with Chair Control-level access can create a sub-conference within a conference. The Cisco Unified Videoconferencing 3500 MCU supports audio sub-conferences to which the Chair Control can divert selected participants in the existing conference to a private audio sub-conference session. The connection to the main conference remains active.

Note The Cisco Unified Videoconferencing 3500 MCU can support up to three sub-conferences per conference according to the service configuration.

The Cisco Unified Videoconferencing 3500 MCU hides sub-conference session participants from the other participants in the video layout. They can return to the conference at any time and reoccupy any previously held positions in the main conference video display. While in a sub-conference, participants can continue viewing and hearing the main conference.

Note This option is available only when a conference is configured to support sub-conferences

Procedure

Step 1 In the Participant List tab, select the required participant.

Step 2 Right click and select **Move to sub-conference** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8).

The Select sub-conference dialog box appears.

Step 3 From the list, select the required sub-conference.

Step 4 Click **Ok**.

A new Sub-conf column appears in the Participant List with a list of all available sub-conferences for that participant.

Step 5 In the Sub-conf column, select a sub-conference for that participant.

Step 6 To return the participant to the main conference, in the Sub-conf list, select **Main**.

When all participants return to the main conference and none remain in the sub-conference, the Sub-conf column disappears from the Participant List.

Blocking the Video Stream

In the Participant List tab, users with Chair Control-level access can block the video stream sent by a participant to a conference. For example, a participant video connection might affect conference processing and degrade performance. You can block the participant's video until problems at the participant's endpoint are resolved.

Procedure

Step 1 In the Participant List tab, select the participant that you want to block.

Step 2 Right click and select **Block camera** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8)

–or–

Click **Video Image** (icon 33 in Figure 2-5 on page 2-8).

Changing a Participant Name

In the Participant List tab, users with Chair Control-level access can change the name of conference participants.

Procedure

Step 1 In the Participant List tab, select the participant whose name you want to change.

Step 2 Right click and select **Change Name** from the pop-up (pop-up 39 in Figure 2-5 on page 2-8).

The Change Name dialog box appears.

Step 3 In the Change name field, enter the new name.

Step 4 Click **OK**.

Changing Video Quality Classification

In the Participant List tab, users with Chair Control-level access can change the video quality classification associated with a conference participant.

Procedure

Step 1 In the Participant List tab, select the required participant.

Step 2 Right click and select **Change classification** from the pop-up see pop-up (39 in Figure 2-5 on page 2-8).

The Video Quality Classification dialog box appears.

Step 3 In the Change to class field, select the new video quality classification.

Step 4 Click **OK**.

Viewing Participant Call Information

Users with Chair Control-level access, can view a comprehensive set of participant call statistical information.

Procedure

Step 1 In the Participant List tab, select the required participant.

Step 2 Right click and select **View participant info** from the pop-up see pop-up (39 in Figure 2-5 on page 2-8).

–or–

Step 3 Click the information icon in the **Participants List** section for the selected participant.

The Call Information dialog box for the specified participant appears.

Table 3-2 lists the statistics displayed.

Table 3-2 Participant Information Statistics

Group	Field	Description
Endpoint Information	Type	Participant endpoint type.
	IP address	Participant endpoint IP address.
	Description	Participant description (displays the endpoint vendor identifier, if available).
	Connect time	Time at which the participant connected to the conference.
Basic Call Information		
Audio	Audio Codec	Audio codecs sent to and received by the participant.
	Audio rate	Total audio bandwidth sent and received by the participant.
	Audio Packets loss count	Total lost audio packets sent to and received by the participant.
	Audio Jitter (curr/min/max)	Accumulated audio packets sent to and received from the participant. Includes the current value and average values for the minimum and maximum number of packets sent to and received from the participant.
Video	Video codec	Video codecs sent to and received by the participant.
	Video resolution	Picture size of video sent and received by the participant.
	Video frame rate	Frame rate of video sent to and received by the participant.
	Video rate	Total video bandwidth sent and received by the participant.
	Video packets loss count	Total lost video packets sent to and received by the participant.
	Video jitter (curr/min/max)	Accumulated video packets sent to and received from the participant. Includes the current value and average values for the minimum and maximum number of packets sent to and received from the participant.
	2nd video codec	The second video codec sent to and received by the participant (if used).

Table 3-2 Participant Information Statistics (continued)

Group	Field	Description
Data	Data protocol	Indicates whether the protocol used if the participant is participating in data sharing.
Advanced Call Information		
Audio	Audio out of order packets count	Total audio packets sent to and received from the participant out of sequence.
	Audio packets count	Total audio packets sent and received by the participant.
	Audio bytes count	Total audio bytes sent and received by the participant.
	Audio IP address	IP address and port to which audio is sent to the participant.
Video	Video out of order packets count	Total video packets sent to and received from the participant out of sequence.
	Video fast update requests count	Total Video Fast Update (VFU) requests sent and received by the participant.
	Video packets count	Total video packets sent and received by the participant.
	Video bytes count	Total video packets sent and received by the participant.
	Video IP address	IP address and port to which video is sent to the participant.
	Qualivision state	Encryption level used.
Data	Data IP address (Local/Remote)	IP address of the participant data sharing terminal.
	FECC	Indicates whether Far End Camera Control is in use.

Configuring Outgoing Bandwidth Settings

Users with Chair Control-level access can also configure the bandwidth rate at which they invite other participants to the conference.

Procedure

Step 1 In the **Participant List** tab

- Enter the name of the participant being invited in the Invite field.
- Select the required bandwidth in the Rate(Kbps) field (field 27 in Figure 2-5 on page 2-8).
- Click **Invite** (button 28 in Figure 2-5 on page 2-8).

–or–

Step 2 In the Advanced Invitation tab,

- Enter the name of the participant being invited in the Invite field.

- Select the required bandwidth in the Kbps field.
- Click **Invite**.

Viewing Conference Statistics with the 3500 MCU

Users with Chair Control-level access, can view a comprehensive set of statistical information in the Statistics tab. Statistics frequently update automatically and enable you to monitor conference performance.

Procedure

Step 1 In the **Participants List** section, click **Statistics** (26 in Figure 2-5 on page 2-8) to view conference statistics.

Step 2 Click **Update** to refresh the information displayed.

Using Advanced Invitation Settings with the 3500 MCU

The following sections describe the tasks that users with appropriate access level can perform in the Advanced Invitation tab:

- Using Quick Invites to Invite Conference Participants, page 3-13
- Inviting Participants Using Advanced Settings, page 3-14

Using Quick Invites to Invite Conference Participants

In the Participant List tab of the Conference Control interface, all users can use the quick invite feature to send an invitation to participate in a conference.

Procedure

Step 1 In the Invite # field, enter the participant number you want to invite. You can invite multiple participants by separating them with the invite sign (**).

Step 2 (Optional) You can select a bandwidth rate lower than the current conference rate at which the invited participant joins the conference. You can thus invite individual participants with lower connection capabilities. In the Rate(kbps) field, choose a new bandwidth rate.

Step 3 Click **Invite** (button 28 in Figure 2-5 on page 2-8).

Related Topics

- Inviting Participants Using Advanced Settings, page 3-14

Inviting Participants Using Advanced Settings

All users can invite multiple participants into a conference at the same time in the Advanced Invitation tab of the Conference Control interface. As each invite field can accommodate multiple participant numbers with separators, you can use this tab to invite a large number of participants at the same time. All users can also select a lower bandwidth rate with which to connect individual participants.

In the Advanced Invitation tab, all users can also drag and drop participant images into preferred positions in the layout of each conference view that the conference supports. All users can also set the layout which invited participants see when joining a conference.

In a cascaded conference, all users can choose which Cisco Unified Videoconferencing 3500 MCU actually invites the participant.

Procedure

Step 1 In the Conference Control interface, click **Advanced Invitation** (tab 29 in Figure 2-5 on page 2-8).

Step 2 In the first Invite # field, enter the participant contact numbers. You can enter multiple numbers separated by the invite sign (**).

Step 3 In the Display Name field, enter the name you want to appear when the participant enters the conference.

Step 4 In the Kbps field, choose the bit rate that the Cisco Unified Videoconferencing 3500 MCU uses when inviting a participant to a conference. Choose **default** for optimal bit rate performance.

Step 5 In the **MCU** field, choose a cascaded Cisco Unified Videoconferencing 3500 MCU conference to which invited participants connect.

Note This step is only for cascaded conferences.

Step 6 (Optional) To configure advanced features, follow these additional steps;

Additional control features appear in the **Advanced Invitation** tab (tab 29 in Figure 2-5 on page 2-8).

- In the **Participant Layout** area click **Change** (button 34 in Figure 2-5 on page 2-8).

A dialog box appears displaying a list of the current layouts available in the current conference.

- Drag and drop the Voice activated frame button (button 46 in Figure 2-6 on page 2-8) into the preferred position in the Layout display frame that appears in the Conference View section.

Note You can set a position for the participant image in all layouts that the conference currently supports.

- At the end of each participant row, choose from the list the number of the conference video layout you want to display to the participant upon entry into the conference. Choose **L** to display the local view of a slave conference.

A slave conference on an EMP-enabled Cisco Unified Videoconferencing 3500 MCU has two views:

- The local (slave Cisco Unified Videoconferencing 3500 MCU conference) CP view
- The view that the master Cisco Unified Videoconferencing 3500 MCU broadcasts.

An Operator of the slave conference should be able to switch the view for each participant in the slave conference so that the participant can see the view broadcasted by the master or the local view. This feature is useful in large cascaded conferences where each site has a local operator. Most participants at the local site see the view broadcasted by the master Cisco Unified Videoconferencing 3500 MCU, but the local operator can see the local view of local participants.

You can enable a local view of a slave conference in the **Edit View** dialog box.

Step 7 Repeat step 1 to step 6 for each Invite # field until you configure all required the participant invites.

Step 8 Click **Invite** (button 28 in Figure 2-5 on page 2-8) to send the invitations.

Related Topics

- Using Quick Invites to Invite Conference Participants, page 3-13

Cascading Conferences with the 3500 MCU

Users with Chair Control-level access can increase Cisco Unified Videoconferencing 3500 MCU call capacity by cascading Cisco Unified Videoconferencing 3500 MCUs. This option supports the bridging of several separate conferences to create very large conferences through IP connections (H.323 and SIP) and also through ISDN/PSTN connections (H.320) when operating in conjunction with a gateway.

In the Conference Control interface, cascading a conference works the same way as inviting a single participant into an existing conference. Once you create a cascaded conference, you can use the Cisco Unified Videoconferencing 3500 MCU to set the conference to which invited participants are connected, providing precision control of resources. In a cascaded conference, you can view participants in a tree view that displays each participant according to the conference to which each is connected.

Note If a failure occurs in a cascaded conference, local Cisco Unified Videoconferencing 3500 MCU users can see this status in the Create Conference window or Conference Control interface. This status, however, only appears if it was the local EMP or MCU that was lost. If the EMP of a slave Cisco Unified Videoconferencing 3500 MCU is lost, then the user of the master Cisco Unified Videoconferencing 3500 MCU can view which participants are without audio/video in the Participant List tab. If the EMP of the master Cisco Unified Videoconferencing 3500 MCU is lost, then slave Cisco Unified Videoconferencing 3500 MCUs do not receive any indication that there has been a failure.

Procedure

Step 1 Access the **Participant List** tab.

Step 2 Invite another conference on the host Cisco Unified Videoconferencing 3500 MCU or on another Cisco Unified Videoconferencing 3500 MCU by typing the number in the Invite # field and clicking **Dial**.

The invited conference and connected participants appear in the host conference participant list in the Participant List tab.

Inviting Participants to a Cascaded Conference

All users can invite participants to a cascaded conference in the Advanced Invitation tab of the Conference Control interface.

Procedure

Step 1 In the Conference Control interface, click **Advanced Invitation** (tab 29 in Figure 2-5 on page 2-8).

Step 2 In the **MCU** column, choose the conference to which the invited participant connects upon acceptance of the conference invite.

Viewing Participants in a Cascaded Conference

In the Conference Control interface, you can view participants in a cascaded conference in a hierarchical display in one of the following two ways:

- **Normal View**—All conference participants appear in a single list. Cascaded participants appear without any indication of the cascaded Cisco Unified Videoconferencing 3500 MCU connection.
- **Tree View**—Conference participants appear in an expandable tree view showing cascaded Cisco Unified Videoconferencing 3500 MCU connections to the conference. Click the plus sign (+) next to the name of the cascaded Cisco Unified Videoconferencing 3500 MCU to expand the tree showing cascaded conference participant details.

Procedure

Step 1 Access the **Participant List** tab.

Step 2 Click **Normal View** to display cascaded conference participants in a single list.

Defining Conference Views with the 3500 MCU

The following sections describe the tasks that users with appropriate access level can perform in the Conference View section:

Enabling or Disabling Dynamic Layouts

Users with Chair Control-level access can enable or disable dynamic layouts for a conference. A dynamic layout seamlessly switches the conference video image between a wide range of layouts to correspond with the number of participants in attendance at any given time during the conference. The video image switches to a layout with frames equal to the number of participant images, to a maximum of 16. The layout changes accordingly as participants join or leave a conference.

A dynamic layout conserves bandwidth, eliminates the display of empty frames in the video image, and makes optimum use of the video image for displaying participant images. This type of layout switching is suitable for a conference with a high rate of participant traffic joining and leaving the conference or an adaptive service used for a variety of conference sizes.

Note This feature is available with EMP support.

Procedure

Step 1 Access the **Conference View** section of the **Participant List** tab.

Step 2 Click **Change** (button 47 in Figure 2-5 on page 2-8).

A pop-up appears, displaying a list of currently available layouts for the current conference.

Step 3 Click **Dynamic Layout** to enable (if not selected) or disable (if already selected) dynamic layout for this conference.

Changing Conference Layouts

In the **Conference View** section, users with Chair Control-level access can change the layout for the current conference.

Procedure

Step 1 In the **Conference View** section of the **Participant List** tab, click **Change** (button 47 in Figure 2-5 on page 2-8).

A pop-up appears, displaying a list of currently available layouts for the current conference.

Step 2 Click the layout of your choice.

The conference adjusts to the new selection.

Displaying Participant Names in Frames

In the **Conference View** section, users with Chair Control-level access can choose to display the name of endpoints or participants in specific positions of the video layout frame.

Note This feature is visible only with EMP support and when you configure text overlay in the service.

Procedure

Step 1 Access the **Conference View** section of the **Participant List** tab.

Step 2 Click **Display participant names in frame** (button 44 in Figure 2-6 on page 2-8).

Enabling or Disabling Auto-Switch Mode

In the **Conference View** section, users with Chair Control-level access can enable the auto-switch mode for a conference. The auto-switch mode displays all the participants of a large conference in Continuous Presence (CP) mode display in the video layout on a rotating basis. Participant images can be replaced at preset intervals.

Procedure

Step 1 Access the **Conference View** section of the **Participant List** tab.

Step 2 Click **Auto-switch** (button 46 in Figure 2-6 on page 2-8) to enable (if not already selected) or disable (if already selected) auto-switch mode.

Terminating Conferences with the 3500 MCU

In the Conference Control interface, users with Chair Control-level access can terminate a conference, which ends that conference and disconnects the participants.

Procedure

Step 1 Access the control bar.

Step 2 Click **Terminate Conference** (button 11 in Figure 2-4 on page 2-7).

Signing Out of a Conference with the 3500 MCU

When you finish configuring or viewing details of the current conference, you can sign out.

Procedure

Step 1 Access the control bar.

Step 2 Click **Sign out** (button 19 in Figure 2-4 on page 2-7).

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