



***LifeSize® Multipoint 230™
User Guide***

July 2009

Copyright Notice

2009 LifeSize Communications Inc, and its licensors. All rights reserved.

LifeSize Communications has made every effort to ensure that the information contained in this document is accurate and reliable, but assumes no responsibility for errors or omissions. Information in this document is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless noted. This document contains copyrighted and proprietary information, which is protected by United States copyright laws and international treaty provisions. No part of the document may be reproduced or transmitted, in any form or by any means, electronic or mechanical, for any purpose, without the express written permission from LifeSize Communications.

Trademark Acknowledgments

LifeSize® is the trademark of LifeSize Communications Inc. All other trademarks are the property of their respective owners.

Patent Notice

For patents covering LifeSize® products, refer to <http://www.lifesize.com/support/legal>.

Contacting Customer Support

If you have questions, concerns, or need assistance, contact your LifeSize Channel Partner.

Providing Customer Feedback

LifeSize Communications welcomes your comments regarding our products and services. If you have feedback about this or any LifeSize product, please send it to feedback@lifesize.com. Contact information for LifeSize Communications is as follows:

Method	Address
Internet	http://www.lifesize.com
E-mail	support@lifesize.com
Phone	(877) LIFESIZE or (877) 543-3749 (512) 347-9300
Fax	(512) 347-9301

CONTENTS

About This Manual

Related Documentation	ix
Conventions Used in this Manual	ix

1 *Viewing LifeSize Multipoint 230 Status Information*

Viewing the Number of Current Conferences	2
Viewing the Number of Conference Participants	2
Viewing Board Status	3
Viewing Gatekeeper Connection Status	3
Viewing SIP Sever Connection Status	4
Viewing Ethernet Connection Status	4
Viewing Fan Operation Status	5
Viewing Chassis Temperature Status	5
Viewing Chassis Power Supply Status	6
Viewing LifeSize Multipoint Resource Usage	6
Viewing Current Users	6
Viewing System Version Information	7

2 *Configuring the LifeSize Multipoint 230 Environment*

Setting the User Interface Language	9
Setting the LifeSize Multipoint 230 Identifier	11
Setting the Time and Date on the LifeSize Multipoint 230	11
Changing Address Settings	12
Configuring Security for the LifeSize Multipoint 230	13

	Creating and Importing a Web Server Certificate	13
	How to Manage SNMP Trap Servers	14
	Viewing SNMP Trap Servers	14
	Configuring SNMP Trap Servers	14
	Modifying SNMP Trap Servers	14
	Deleting SNMP Trap Servers	15
	Configuring and Viewing Quality of Service	15
3	<i>Configuring Protocols for the LifeSize Multipoint 230</i>	
	Configuring H.323 Gatekeeper Protocol Settings	17
	Configuring SIP Proxy Settings	18
4	<i>Configuring Conference Management Settings for the LifeSize Multipoint 230</i>	
	Dialing Directly to the LifeSize Multipoint 230	21
	Defining Conference Creation Options	22
	Defining Ad Hoc Conference Termination Options	23
	Configuring Dynamic LifeSize Multipoint 230 Layouts	23
	How to Manage Services on the LifeSize Multipoint 230	24
	Services Overview	24
	Creating a New Service	24
	Deleting a Service	25
	How to Customize Services	26
	Configuring the Default Layout	26
	Enabling Personal Layouts	27
	Displaying Participant Names	27
	Configuring Presentation View	28
	Configuring Encryption Support	28
	Muting Participants on Joining a Conference	30
	Automatically Reconnecting Conference Participants	30
	Configuring PIN Settings	31

5	<i>Configuring Interactive Response Messages for the LifeSize Multipoint 230</i>	
	Setting a Text Overlay Language	33
	How to Manage Audio Messages	34
	Saving All Audio Messages	34
	Uploading Individual Audio Messages	34
	Uploading Audio Messages	35
	Available LifeSize Multipoint Messages	35
6	<i>Managing LifeSize Multipoint 230 Events</i>	
	Available SNMP Events	45
	Viewing the Events Log	52
	Viewing the Alarms Log	52
	Viewing Security Events	52
	Setting Event Security Levels	53
	Sending a Trap on a Specified Event	53
	Viewing Event Descriptions	54
	Viewing Alarm History	54
	Using the Event Display Filter	55
7	<i>Managing LifeSize Multipoint 230 User Profiles</i>	
	LifeSize Multipoint 230 User Types	57
	Viewing User Profiles	59
	Adding a User Profile	59
	Modifying a User Profile	59
	Enabling a User Profile	60
	Removing a User Profile	60
8	<i>Configuring Advanced Maintenance Settings for the LifeSize Multipoint 230</i>	
	Backing Up Your LifeSize Multipoint 230 Configuration	62

Restoring Your LifeSize Multipoint 230 Configuration	62
Restoring Factory Default Settings	63
How to Work with LifeSize Multipoint 230 Advanced Commands	63
Viewing Available Advanced Commands	64
Modifying Advanced Commands	68
Sending Advanced Commands	69
How to Manage LifeSize Multipoint 230 Software	69
Upgrading LifeSize Multipoint 230 Software	69
Restoring a Previous Software Version	70
Restarting the LifeSize Multipoint 230	70
Contacting Customer Support	71
Viewing Active Conferences	71
Creating a New Conference	72

9 *Dialing via the LifeSize Multipoint 230*

Meeting Participation via the LifeSize Multipoint 230	73
About Making an Ad Hoc Call	74
How to Dial from the LifeSize Multipoint 230 to H.323 Endpoints	74
How to Dial from the LifeSize Multipoint 230 to SIP Endpoints	76
Dialing from any IP Endpoint	78
Controlling Meetings with DTMF	79
Controlling Personal Video Layouts with DTMF	80

10 *Using the LifeSize Multipoint 230*

LifeSize Multipoint 230 Access Levels	84
Conference List Window	85
Viewing Existing Meetings	85
Monitoring a Specific Meeting	86
Creating a New Meeting	86
Conference Control Interface	87
Refreshing the Conference Control Interface	94
Controlling Conference Settings	95

Becoming a Moderator and Stopping Moderation	95
Creating Conferences from the Conference Control Interface	96
Configuring Participant Settings	96
Muting and Unmuting All Participants Audio Connections	97
Muting and Unmuting Individual Participants Audio Connections	97
Reconnecting Participants	97
Blocking Conference Admission	98
Deleting Conference Participants	98
Changing the Volume	99
Changing Participant Views	99
Configuring Sub-conferences	100
Blocking the Video Stream	101
Changing a Participant Name	101
Viewing Participant Call Information	102
Configuring Outgoing Bandwidth Settings	106
Viewing Conference Statistics	106
Using Advanced Invitation Settings	107
Using Quick Invites to Invite Conference Participants	107
Inviting Participants Using Advanced Settings	107
Cascading Conferences	109
Creating a Cascaded Conference	109
Inviting Participants to a Cascaded Conference	110
Viewing Participants in a Cascaded Conference	110
Defining Conference Views	111
Enabling or Disabling Dynamic Layouts	111
Changing the Main Conference Layout	112
Changing a Personal Conference Layout	112
Displaying Participant Names in Frames	112
Enabling or Disabling Auto-Switch Mode	113
Terminating Conferences	113
Signing Out of a Conference	113

11 *Troubleshooting the LifeSize Multipoint 230*

Resolving LifeSize Multipoint Gatekeeper Registration Failure	116
Resolving Front Panel LED Issues	116

Resolving LifeSize Multipoint Conference Initiation Failure	117
Resolving Conference Access Failure	118
Resolving Cascading Failure	118
Resolving Quality Issues in Cascaded Conferences	119
Resolving Endpoint Disconnection Issues	120
Resolving Unexpected Conference Termination	120
Resolving Presentation Issues	120
Resolving Unexpected SIP Call Disconnection	121
<i>Index</i>	123

ABOUT THIS MANUAL

The [LifeSize Multipoint 230 User Guide](#) describes how to configure and work with the LifeSize Multipoint 230.


RELATED DOCUMENTATION

The LifeSize Multipoint 230 documentation set is available on the LifeSize Utilities and Documentation CD-ROM and includes manuals and online helps. The manuals are available in PDF format.

Note You require Adobe Acrobat Reader version 6.0 or later to open the PDF files. You can download Acrobat Reader free of charge from www.adobe.com.

CONVENTIONS USED IN THIS MANUAL

The LifeSize Multipoint 230 is sometimes referred to as “the LifeSize Multipoint” in this manual. This manual uses the following conventions:

Convention	Description
Blue Headings in Upper Case	Level 1 headings introducing major sections.
	Pointing hand icon introduces a procedure.
orange link	Live links appear in orange.

1

VIEWING LIFESIZE MULTIPOINT 230 STATUS INFORMATION

- [Viewing the Number of Current Conferences](#) on page 2
- [Viewing the Number of Conference Participants](#) on page 2
- [Viewing Board Status](#) on page 3
- [Viewing Gatekeeper Connection Status](#) on page 3
- [Viewing SIP Sever Connection Status](#) on page 4
- [Viewing Ethernet Connection Status](#) on page 4
- [Viewing Fan Operation Status](#) on page 5
- [Viewing Chassis Temperature Status](#) on page 5
- [Viewing Chassis Power Supply Status](#) on page 6
- [Viewing LifeSize Multipoint Resource Usage](#) on page 6
- [Viewing Current Users](#) on page 6
- [Viewing System Version Information](#) on page 7

VIEWING THE NUMBER OF CURRENT CONFERENCES



Procedure

- 1 Click **Status**.
- 2 Locate the Utilization section.

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

VIEWING THE NUMBER OF CONFERENCE PARTICIPANTS



Procedure

- 1 Click **Status**.
- 2 Locate the Utilization section.

The Participants box displays the current number of calls on the LifeSize Multipoint.

VIEWING BOARD STATUS



Procedure

- 1 Click **Status**.
- 2 Locate the Status Map section.

A green tick next to the slot number indicates that the LifeSize Multipoint 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

- 1 Click **Status**.
- 2 Locate the Status Map section.

A green arrow next to the GK box indicates that the LifeSize Multipoint is registered to a gatekeeper.

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

VIEWING SIP SEVER CONNECTION STATUS



Procedure

- 1 Click **Status**.
 - 2 Locate the Status Map section.
A green arrow next to the SIP Server box indicates that the LifeSize Multipoint 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 LifeSize Multipoint has not attempted to register to a SIP server.
-

VIEWING ETHERNET CONNECTION STATUS



Procedure

- 1 Click **Status**.
 - 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

- 1 Click **Status**.
 - 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

- 1 Click **Status**.
 - 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

- 1 Click **Status**.
- 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 LIFESIZE MULTIPOINT RESOURCE USAGE



Procedure

- 1 Click **Status**.
- 2 Locate the Status Map section.

The CPU box indicates the percentage of LifeSize Multipoint resources currently occupied.

We recommend that this value does not exceed 90 percent.

VIEWING CURRENT USERS



Procedure

- 1 Click **Status**.
- 2 Locate the Logged users section.

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

VIEWING SYSTEM VERSION INFORMATION



Procedure

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

Viewing System Version Information

2

CONFIGURING THE LIFESIZE MULTIPOINT 230 ENVIRONMENT

- [Setting the User Interface Language](#) on page 9
- [Setting the LifeSize Multipoint 230 Identifier](#) on page 11
- [Setting the Time and Date on the LifeSize Multipoint 230](#) on page 11
- [Changing Address Settings](#) on page 12
- [Configuring Security for the LifeSize Multipoint 230](#) on page 13
- [Creating and Importing a Web Server Certificate](#) on page 13
- [How to Manage SNMP Trap Servers](#) on page 14
- [Configuring and Viewing Quality of Service](#) on page 15

SETTING THE USER INTERFACE LANGUAGE

You can configure the language that the LifeSize Multipoint supports. [Table 2-1](#) lists the languages that the LifeSize Multipoint supports.

Note 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.

Table 2-1 *Supported Languages in the LifeSize Multipoint Interface*

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



Procedure

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

Note You set the text overlay language at Configuration > Customization. For more information, see the [Setting a Text Overlay Language](#) section on page 33.

SETTING THE LIFESIZE MULTIPOINT 230 IDENTIFIER

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

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



Procedure

- 1 Click **Configuration**.
 - 2 Click **Setup**.
 - 3 Locate the Basics section.
 - 4 Enter an identifier in the **MCU Identifier** field (up to a maximum of 32 characters). For example, “London office.”
 - 5 Click **Apply**.
-

SETTING THE TIME AND DATE ON THE LIFESIZE MULTIPOINT 230



Procedure

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



Procedure

- 1 Click **Configuration**.
- 2 Click **Setup**.
- 3 Locate the Network section.
- 4 Perform any of these steps to change an IP address setting:
 - a Enter the IP addresses you want to assign to either LifeSize Multipoint in the **Primary IP address** and **Secondary IP address** fields.
 - b Enter the IP address of the router you want either LifeSize Multipoint to use in the **Router IP** field.
 - c Enter the subnet mask you want either LifeSize Multipoint to use in the **Subnet Mask** field.
- 5 To change or add DNS information, do the following steps:
 - a Enter the alias you want to assign to the current LifeSize Multipoint in the **DNS suffix** field.
 - b Enter the IP address of the primary DNS server that you want the LifeSize Multipoint to use in the **DNS server1** field.
 - c Enter the IP address of the back-up DNS server that you want the LifeSize Multipoint to use in the **DNS server2** field.
- 6 Select Ethernet port and duplex speed value you want to set in the **Port settings** field.

Note We recommend that you set the Port settings option to “Auto”.

- 7 Click **Apply**.
-

CONFIGURING SECURITY FOR THE LIFESIZE MULTIPPOINT 230



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

Procedure

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

CREATING AND IMPORTING A WEB SERVER CERTIFICATE



Procedure

- 1 Click **Configuration**.
 - 2 Click **Setup**.
 - 3 Locate the Security section.
 - 4 Click **Manage** to create a web server certificate with the wizard, click **Import** to import an existing certificate, or click **Export** to save an existing certificate to a file.
 - 5 Select **Enable HTTPS**.
 - 6 Click **Apply**.
-

HOW TO MANAGE SNMP TRAP SERVERS

- [Viewing SNMP Trap Servers](#) on page 14
- [Configuring SNMP Trap Servers](#) on page 14
- [Modifying SNMP Trap Servers](#) on page 14
- [Deleting SNMP Trap Servers](#) on page 15

VIEWING SNMP TRAP SERVERS



Procedure

- 1 Click **Configuration**.
 - 2 Click **Setup**.
 - 3 Locate the Trap servers section to view all configured SNMP trap servers to which the LifeSize Multipoint sends SNMP traps.
-

CONFIGURING SNMP TRAP SERVERS

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



Procedure

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

MODIFYING SNMP TRAP SERVERS



Procedure

- 1 Click **Configuration**.
- 2 Click **Setup**.

- 3 Locate the Trap servers section.
 - 4 Click the button in the Review column for the server you want to modify.
 - 5 Modify the required settings.
 - 6 Click **Apply** to save your settings.
-

DELETING SNMP TRAP SERVERS



Procedure

- 1 Click **Configuration**.
 - 2 Click **Setup**.
 - 3 Locate the Trap servers section.
 - 4 Click the button in the Review column for the server you want to delete.
 - 5 Click **Delete**.
 - 6 Click **Yes** 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 LifeSize Multipoint 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 LifeSize Multipoint for voice calls, video calls or both.



Procedure

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

- Default—The system assigns the default DiffServ Code Point value for each media type. The default settings represent LifeSize recommendations.
 - Custom—The system assigns your own DiffServ Code Point value for each media type.
- 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 LifeSize Multipoint sends out. The default value is 46.
 - 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 LifeSize Multipoint 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 LifeSize Multipoint sends out. The default value is 46.
- 7** Click **Apply**.
-

3

CONFIGURING PROTOCOLS FOR THE LIFESIZE MULTIPOINT 230

CONFIGURING H.323 GATEKEEPER PROTOCOL SETTINGS

- [Configuring H.323 Gatekeeper Protocol Settings](#) on page 17
- [Configuring SIP Proxy Settings](#) on page 18

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

Warning

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



Procedure

- 1 Click **Configuration**.
- 2 Click **Protocols**.
- 3 Locate the H.323 section.
- 4 Select **H.323** to enable the LifeSize Multipoint to operate with the H.323 protocol.

- 5 Enter the IP address and port number for the gatekeeper.
The default port is 1719.
 - 6 Click **Apply**.
-

CONFIGURING SIP PROXY SETTINGS



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

Procedure

- 1 Click **Configuration**.
- 2 Click **Protocols**.
- 3 Locate the SIP section.
- 4 Select **SIP** to enable LifeSize Multipoint communication with the SIP proxy.
- 5 Enter the SIP domain of the LifeSize Multipoint in the **Default SIP domain** field as defined in the SIP server.
The default is *multipoint.mycompany.com*.
- 6 Select **Locate automatically** to instruct the LifeSize Multipoint 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.

- 7 Select **Use registrar** to instruct the LifeSize Multipoint to register with a SIP registrar and to send service information to the registrar.
 - 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.
 - 9 Click **More**.
 - 10 Enter the number of the signaling port on which the LifeSize Multipoint communicates with the SIP proxy.
The default is 5060.
 - 11 Select **Use proxy digest authentication** to enable LifeSize Multipoint 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.
 - 12 Enter the LifeSize Multipoint user name and password.
The user name and password must match the name and password defined on the SIP proxy server.
 - 13 Select **Use registrar digest authentication** to enable LifeSize Multipoint authentication with a SIP registrar using user name and password.
Authentication is performed as defined in RFC 2617. This field is disabled by default.
 - 14 Select **Use ‘Empty Invite’ when sending Invite messages to endpoints** to enable the remote endpoint to indicate preferred audio and video channels.
 - 15 Select **Using Microsoft OCS** to enable the LifeSize Multipoint to work with Microsoft Office Communications Server (OCS).
 - 16 Click **Apply**.
-

Configuring SIP Proxy Settings

4

CONFIGURING CONFERENCE MANAGEMENT SETTINGS FOR THE LIFESIZE MULTIPOINT 230

- [Dialing Directly to the LifeSize Multipoint 230](#) on page 21
- [Defining Conference Creation Options](#) on page 22
- [Defining Ad Hoc Conference Termination Options](#) on page 23
- [Configuring Dynamic LifeSize Multipoint 230 Layouts](#) on page 23
- [How to Manage Services on the LifeSize Multipoint 230](#) on page 24
- [How to Customize Services](#) on page 26

DIALING DIRECTLY TO THE LIFESIZE MULTIPOINT 230

You can allow users to dial directly to the LifeSize Multipoint IP address via 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 via the LifeSize Multipoint IVR.

If the LifeSize Multipoint 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 LifeSize Multipoint cannot route to a valid conference is sent to the auto-attendant.



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Conference Control section.
 - 4 Select Enable auto attendant.
 - 5 Enter an auto-attendant number.
Use this option if the LifeSize Multipoint is already registered to an H.323 gatekeeper or SIP registrar.
 - 6 (Optional) Select **Prompt for conference PIN during conference creation** if you want the LifeSize Multipoint to prompt users for a PIN when accessing a conference using this auto-attendant number.
 - 7 Click **Apply**.
-

DEFINING CONFERENCE CREATION OPTIONS

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



Procedure

- 1 Click **Configuration**.
- 2 Click **Conferences**.
- 3 Locate the Conference Control section.
- 4 Click **More**.
- 5 Select a method by which users can create conferences in the **Users can create conference** field.
 - 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 LifeSize Multipoint 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.

6 Click **Apply**.

DEFINING AD HOC CONFERENCE TERMINATION OPTIONS



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Conference Control section.
 - 4 Click **More**.
 - 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.
 - 6 Click **Apply**.
-

CONFIGURING DYNAMIC LIFESIZE MULTIPOINT 230 LAYOUTS



Procedure

- 1 Click **Configuration**.
- 2 Click **Conferences**.
- 3 Locate the Conference Control section.
- 4 Click **More**.

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

- 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 via the Change link.
 - 6 Click **Apply**.
-

HOW TO MANAGE SERVICES ON THE LIFESIZE MULTIPOINT 230

- [Services Overview](#) on page 24
- [Creating a New Service](#) on page 24
- [Deleting a Service](#) on page 25

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.

CREATING A NEW SERVICE

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



Procedure

- 1 Click **Configuration**.
- 2 Click **Conferences**.
- 3 Locate the Services list section.
- 4 Click **Add new service**.

- 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.

- 6 (Optional) Select **Audio only** to force the conference to be audio-only.
 - 7 (Optional) Select **Display welcome screen** and enter your text in the welcome screen window.
 - 8 (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.
 - 9 (Optional) Enter the string \$ID to display the conference ID in the welcome screen.
 - 10 Click **Apply**.
 - 11 Click **Yes** to define your new service as the default service.
-

DELETING A SERVICE



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Services list section.
 - 4 Click the arrow in the Review column for the service that you want to delete.
 - 5 Click **Delete**.
 - 6 Click **Yes** in the message that appears.
The service is removed from the services list.
-

HOW TO CUSTOMIZE SERVICES

- [Configuring the Default Layout](#) on page 26
- [Enabling Personal Layouts](#) on page 27
- [Displaying Participant Names](#) on page 27
- [Configuring Presentation View](#) on page 28
- [Configuring Encryption Support](#) on page 28
- [Muting Participants on Joining a Conference](#) on page 30
- [Automatically Reconnecting Conference Participants](#) on page 30
- [Configuring PIN Settings](#) on page 31

CONFIGURING THE DEFAULT LAYOUT



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Services list section.
 - 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
 - 5 Click **More**.
 - 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 Click **OK**.
 - 7 Perform these steps to define a fixed layout for the conference:
 - a Select **Static** to define a fixed layout for the conference.
 - b Click **Select**.
 - c Select the required layout and click **OK**.
 - d Click **OK** again.
 - 8 Click **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.



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Services list section.
 - 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
 - 5 Click **More**.
 - 6 Select **Enable personal layout**.
 - 7 Click **OK**.
 - 8 Click **Apply**.
-

DISPLAYING PARTICIPANT NAMES

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.



Procedure

- 1 Click **Configuration**.
- 2 Click **Conferences**.
- 3 Locate the Services list section.
- 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
- 5 Click **More**.
- 6 Select **Display participants names**.
- 7 (Optional) Select **Constantly** to display the participant name continuously.

- 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.
 - 9 Click **OK**.
 - 10 Click **Apply**.
-

CONFIGURING PRESENTATION VIEW



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

Procedure

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

CONFIGURING ENCRYPTION SUPPORT

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

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

Encryption on the LifeSize Multipoint 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)

Note 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.



Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Services list section.
 - 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
 - 5 Click **More**.
 - 6 Select **Encryption**.
 - 7 Select the type of encryption from the Encryption mode field.
 - Best effort
 - Strong encryption required
 - 8 Click **OK**.
 - 9 Click **Apply**.
-

MUTING PARTICIPANTS ON JOINING A CONFERENCE



Procedure

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

AUTOMATICALLY RECONNECTING CONFERENCE PARTICIPANTS



Procedure

- 1 Click **Configuration**.
- 2 Click **Conferences**.
- 3 Locate the Services list section.
- 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
- 5 Click **More**.

You can instruct the LifeSize Multipoint to automatically call disconnected terminals to attempt a reconnection.

The LifeSize Multipoint attempts reconnection three times.

- 6 Select **Auto reconnect dropped participants**.
 - 7 Click **OK**.
 - 8 Click **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.

Procedure

- 1 Click **Configuration**.
 - 2 Click **Conferences**.
 - 3 Locate the Services list section.
 - 4 Locate the service that you want to modify in the Services list section or click **Add new service**.
 - 5 Click **More**.
 - 6 Select **Force conference PIN protection** if you want the user to enter a PIN when creating or entering a conference using this service.
 - 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.
 - 8 Click **OK**.
 - 9 Click **Apply**.
-

How to Customize Services

5

CONFIGURING INTERACTIVE RESPONSE MESSAGES FOR THE LIFESIZE MULTIPOINT 230

- [Setting a Text Overlay Language](#) on page 33
- [How to Manage Audio Messages](#) on page 34

SETTING A TEXT OVERLAY LANGUAGE



Procedure

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

HOW TO MANAGE AUDIO MESSAGES

- [Saving All Audio Messages](#) on page 34
- [Uploading Individual Audio Messages](#) on page 34
- [Uploading Audio Messages](#) on page 35
- [Available LifeSize Multipoint Messages](#) on page 35

SAVING ALL AUDIO MESSAGES

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



Procedure

- 1 Click **Configuration**.
 - 2 Click **Customization**.
 - 3 Locate the Audio messages section.
 - 4 Click **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 LifeSize Multipoint.



Procedure

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

UPLOADING AUDIO MESSAGES

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



Procedure

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

AVAILABLE LIFESIZE MULTIPOINT MESSAGES

Table 5-1 LifeSize Multipoint Audio Messages

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 <i>Connected indication</i> sound)
Wrong PIN, disconnecting	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

How to Manage Audio Messages

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 <i>Connected Indication</i> and the <i>Enter meeting PIN</i> 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 via DTMF) and you do not dial any number for a period of time
Error indication	Tone		Single participant	a DTMF command has failed

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
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 via DTMF, but there is already another moderator for the meeting
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 ** via 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 ** via 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 via DTMF and a moderator PIN is defined

How to Manage Audio Messages

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
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 via 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 via DTMF) in a meeting whose admission is blocked and you do not enter any command for a period of time
Join sub-conference	You have joined a sub-conference.		Single participant	a participant joins a sub-conference
Leave sub-conference	You have left the sub-conference.		Single participant	a participant leaves a sub-conference
Reserved				For future use
Reserved				For future use
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

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
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 via DTMF
Muted	Muted		Single participant	you mute yourself via DTMF
Unmuted	Unmuted		Single participant	you unmute yourself via 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 via DTMF) and you do not enter any command for a period of time
Meeting admission blocked	Admission to the meeting is now blocked.		Single participant	you block admission to the meeting via DTMF
Meeting admission allowed	Admission to the meeting is now allowed.		Single participant	you allow admission to the meeting via DTMF

How to Manage Audio Messages

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
Dialing	Dialing.		Single participant	you invite a participant via 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 via 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 via DTMF) and you do not enter any command for a period of time
Mute/Unmute 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 via 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 via DTMF
All unmuted	All participants are now unmuted.		Single participant	you unmute all participants via DTMF
Silent				

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
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 LifeSize Multipoint 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 LifeSize Multipoint Auto Attendant with audio only
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 followed by the pound sign. Enter only the pound sign if you do not want PIN protection.	Creating a new meeting Enter PIN code (optional)	Single participant	you choose to create a new meeting during an Auto Attendant session
Create meeting failed	Failed to create a meeting.	Failed to create a meeting –[reason]. To join an existing meeting enter meeting ID Reason is one of: <ul style="list-style-type: none"> ■ No resources ■ Not allowed ■ Other When the reason is “other”, no reason is displayed.	Single participant	during Auto Attendant session, when meeting creation fails. Possible reasons: No resources — LifeSize Multipoint is out of resources Not allowed — LifeSize Multipoint is configured to disallow meeting creation by dial-in.

How to Manage Audio Messages

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
Create meeting – invalid PIN code	You have entered an invalid PIN. Enter a valid PIN using digits only followed by the pound sign.	The PIN code is invalid. Enter valid PIN code.	Single participant	during Auto Attendant session, when creating a 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]. Reason is one of: <ul style="list-style-type: none"> ■ No endpoint support ■ Other When the reason is “other”, no reason is displayed.	Single participant	during Auto Attendant session, after user has selected a meeting, when the transfer to the selected meeting fails
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
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.			

Message Name	Recorded Message	Displayed Message	Played for ...	Played when ...
Meeting end in 1 min	The meeting is about to end in less than one minute.			
Disconnecting	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 automatically	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

6

MANAGING LIFEsize MULTIPPOINT 230 EVENTS

- [Available SNMP Events](#) on page 45
- [Viewing the Events Log](#) on page 52
- [Viewing the Alarms Log](#) on page 52
- [Viewing Security Events](#) on page 52
- [Setting Event Security Levels](#) on page 53
- [Sending a Trap on a Specified Event](#) on page 53
- [Viewing Event Descriptions](#) on page 54
- [Viewing Alarm History](#) on page 54
- [Using the Event Display Filter](#) on page 55

AVAILABLE SNMP EVENTS

[Table 6-1](#) lists trap event indications by category.

[Table 6-2](#) lists trap event indications by ID number.

Table 6-1 *LifeSize Multipoint Trap Events by Category*

Category	ID	Type	Trap is sent when...
Info	1	Power up	The LifeSize Multipoint has begun operation.
Info	2	Power down	The LifeSize Multipoint 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.
Info	7	Warm start	The LifeSize Multipoint has been reset via the Administrator interface.
Info	8	Cold start	The LifeSize Multipoint has been reset using the button on the front panel.
Info	10	Cpu usage	CPU usage reaches the 90 percent threshold set in the LifeSize Multipoint.
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 LifeSize Multipoint.

Category	ID	Type	Trap is sent when...
Info	18	Incompatible sw burn attempt	An attempt to burn a version of the LifeSize Multipoint software onto incompatible hardware occurs.
Info	19	MP registration blocked	The media processor registration to the LifeSize Multipoint failed.
Info	27	TFTP connection failed	The LifeSize Multipoint fails to connect to a Cisco TFTP server.
Info	33	Low memory	Memory usage reaches the 90 percent threshold set in the LifeSize Multipoint.
Alarm	5	Gatekeeper registration state change	A change occurs in the registration status of the LifeSize Multipoint 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 N/A under power or inserted into the N/A under power.
Alarm	15	Over heating	The configured temperature thresholds for the device are exceeded. Overheating can cause serious damage to the functioning of the device.

Available SNMP Events

Category	ID	Type	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.
Security	14	Service table changed	The service table has been modified.
Security	20	User logged in	A user successfully logs in to the system via the web interface.
Security	21	User logged out	A user logs out of the system via 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 via the web interface.
Security	25	Configuration import	Configuration is imported via 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 via 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 via the  icon.


Category	ID	Type	Trap is sent when...
Security	30	Default configuration restored	A user selects the Restore factory defaults option via the  icon.

Table 6-2 LifeSize Multipoint Trap Events by ID

Category	ID	Type	Trap is sent when...
Info	1	Power up	The LifeSize Multipoint has begun operation.
Info	2	Power down	The LifeSize Multipoint 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 LifeSize Multipoint 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 LifeSize Multipoint has been reset via the Administrator interface.
Info	8	Cold start	The LifeSize Multipoint has been reset using the button on the front panel.

Available SNMP Events

Category	ID	Type	Trap is sent when...
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 LifeSize Multipoint.
Alarm	11	Network problem	A problem occurs on the network.
Alarm	12	Hot swap	A blade has been removed from the N/A under power or inserted into the N/A 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.
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 LifeSize Multipoint.
Info	18	Incompatible sw burn attempt	An attempt to burn a version of the LifeSize Multipoint software onto incompatible hardware occurs.
Info	19	MP registration blocked	The media processor registration to the LifeSize Multipoint failed.

Category	ID	Type	Trap is sent when...
Security	20	User logged in	A user successfully logs in to the system via the web interface.
Security	21	User logged out	A user logs out of the system via 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 via the web interface.
Security	25	Configuration import	Configuration is imported via the web interface.
Security	26	User account locked	A user account is disabled.
Info	27	TFTP connection failed	The LifeSize Multipoint fails to connect to a Cisco TFTP server.
Security	28	Audio prompts uploaded	A user uploads a new set of audio messages via 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 via the  icon.
Security	30	Default configuration restored	A user selects the Restore factory defaults option via the  icon.
Alarm	31	Fan problem	A problem occurs with one of the chassis fans.

Viewing the Events Log

Category	ID	Type	Trap is sent when...
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 LifeSize Multipoint.

VIEWING THE EVENTS LOG



The LifeSize Multipoint displays up to 100 events.

Procedure

- 1 Click **Events**.
- 2 Click **All**.

VIEWING THE ALARMS LOG



Procedure

- 1 Click **Events**.
- 2 Click **Alarms**.

VIEWING SECURITY EVENTS




Procedure

- 1 Click **Events**.
- 2 Click **Security**.

SETTING EVENT SECURITY LEVELS



Procedure

- 1 Click **Events**.
 - 2 Click **All, Alarms** or **Security**.
 - 3 Click the link in the Type column for the event that you want to configure or click the  icon.
 - 4 Click the arrow in the Review column for the event that you want to modify.
 - 5 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.
 - 6 Click **Apply**.
 - 7 Click **Close**.
-


SENDING A TRAP ON A SPECIFIED EVENT



Procedure

- 1 Click **Events**.
- 2 Click **All, Alarms** or **Security**.

Viewing Event Descriptions

- 3 Click the link in the ID column for the event that you want to configure or click the  icon.
 - 4 Click the arrow in the Review column for the event that you want to modify.
 - 5 Select the box in the Trapped column.
 - 6 Click **Apply**.
 - 7 Click **Close**.
-

VIEWING EVENT DESCRIPTIONS



Procedure

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

VIEWING ALARM HISTORY



Procedure

- 1 Click **Events**.
 - 2 Click **Alarms**.
 - 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



Procedure

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

Using the Event Display Filter

7

MANAGING LIFESIZE MULTIPPOINT 230 USER PROFILES

- [LifeSize Multipoint 230 User Types](#) on page 57
- [Viewing User Profiles](#) on page 59
- [Adding a User Profile](#) on page 59
- [Modifying a User Profile](#) on page 59
- [Enabling a User Profile](#) on page 60
- [Removing a User Profile](#) on page 60

LIFESIZE MULTIPPOINT 230 USER TYPES

Users must have authorization to access the LifeSize Multipoint.

Users are either Administrators or Operators. [Table 7-1](#) describes each access level.

Table 7-1 *LifeSize Multipoint Access Levels*

Access Level	Privileges
Administrator	<ul style="list-style-type: none"> ■ Full access to the LifeSize Multipoint Administrator interface. ■ Full Operator-level access to the Conference Control interface. ■ Telnet access to the LifeSize Multipoint. ■ You can assign Administrator authorization to up to ten users.
Operator	<ul style="list-style-type: none"> ■ Access to the Conference Control interface using the Create Conference window. ■ Access to view details of all conferences hosted on the LifeSize Multipoint and to cascaded conferences hosted on participating LifeSize Multipoint. ■ 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

- 1 Click **Users**.
 - 2 Click the arrow in the Review column for the user profile you want to view.
-

ADDING A USER PROFILE



Procedure

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

MODIFYING A USER PROFILE



Procedure

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

ENABLING A USER PROFILE



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

Procedure

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

REMOVING A USER PROFILE



You cannot delete an administrator profile.

Procedure

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

8

CONFIGURING ADVANCED MAINTENANCE SETTINGS FOR THE LIFEsize MULTIPOINT 230

- [Backing Up Your LifeSize Multipoint 230 Configuration](#) on page 62
- [Restoring Your LifeSize Multipoint 230 Configuration](#) on page 62
- [Restoring Factory Default Settings](#) on page 63
- [How to Work with LifeSize Multipoint 230 Advanced Commands](#) on page 63
- [How to Manage LifeSize Multipoint 230 Software](#) on page 69
- [Restarting the LifeSize Multipoint 230](#) on page 70
- [Contacting Customer Support](#) on page 71
- [Viewing Active Conferences](#) on page 71
- [Creating a New Conference](#) on page 72


BACKING UP YOUR LIFESIZE MULTIPOINT 230 CONFIGURATION



You can save LifeSize Multipoint 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 LifeSize Multipoint or to configure a similar LifeSize Multipoint.

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

Procedure

- 1 Click the  icon.
 - 2 Select **Backup configuration**.
 - 3 Save the configuration settings file to your chosen location.
The .zip extension is automatically appended to the file name.
-


RESTORING YOUR LIFESIZE MULTIPOINT 230 CONFIGURATION



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

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


Procedure

- 1 Click the  icon.
 - 2 Select **Restore configuration**.
 - 3 Click **Browse**.
 - 4 Navigate to and select the configuration file you want to import.
The file must have an .ini extension.
 - 5 Click **Restore**.
 - 6 Click **Continue** 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.
 - 7 Click **OK** to complete the restore procedure.
-

RESTORING FACTORY DEFAULT SETTINGS



Procedure

- 1 Click the  icon.
 - 2 Select **Restore factory defaults**.
 - 3 Click **Continue** 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.
 - 4 Click **OK** to complete the restore procedure.
-

HOW TO WORK WITH LIFESIZE MULTIPOINT 230 ADVANCED COMMANDS

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

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

- [Viewing Available Advanced Commands](#) on page 64
- [Modifying Advanced Commands](#) on page 68
- [Sending Advanced Commands](#) on page 69

**VIEWING AVAILABLE
ADVANCED
COMMANDS**

Table 8-1 lists all available advanced commands.



Procedure

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

Table 8-1 List of Available Advanced Commands

Command	Description	Parameters	Default
H323 RAS port number	Sets the H.323 RAS port number.		1719
H323 SIG port number	Sets the H.323 Signaling port number		1720
Registration mode			
Aspect ratio conversion mode	Same conversion method used for both Standard Definition and High Definition users.	BlackBars—no info loss Crop—no black bars	
Conference control Web refresh interval	Indicates the length of time (in seconds) after which the Conference Control interface refreshes automatically.		10
DTMF forwarding	Indicates the target of DTMF forwarding.	to all—All endpoints in the conference. to gateways—To gateways only. to none—DTMF is disabled.	none

Command	Description	Parameters	Default
DuoVideo		disable enable	Disabled
Enable in-band DTMF detection	Enables support for in-band DTMF signaling.	Always Only during IVR	Always
First audio announcement interval (msec)	Indicates the length of time (in milliseconds) between the start of the conference and the first audio announcement.		Disabled
Font align	Determines whether text overlay (TOL) on a video screen is positioned away from picture borders.	All—Text positioned away from horizontal and vertical borders. Horizontal—Text positioned away from horizontal borders and centered horizontally. Vertical—Text positioned away from vertical borders and centered vertically. None—Text is always positioned bottom center.	All
G.728 mode	Determines the form of encoding for the G.728 audio codec RTP header.	Non-standard—For use if you experience audio problems when using VCON endpoints with the G.728 audio codec. Standard—For normal G.728 use with all endpoints except VCON products.	
H.239 live role support		disable enable	

How to Work with LifeSize Multipoint 230 Advanced Commands

Command	Description	Parameters	Default
H.323 hide stack	Disables H.323 stack prints.		H.323 Stack printing is disabled by default.
H.323 show stack	Enables H.323 stack prints. These print the protocol stack info and errors and are useful for debugging stack issues		
H323 show status	Prints a snapshot of H.323 stack-related information.		
HD Minimal Rate	If a user joins a conference at a call rate that is below the defined minimum for the HD service, the LifeSize Multipoint considers the call a standard definition call.	Any number in the range 256-2048.	512
Handle DTMF after XML notification	Instructs the LifeSize Multipoint to send DTMF signals to an external server and other specified destinations.	no—LifeSize Multipoint sends DTMF signals to the external server only. yes—LifeSize Multipoint sends DTMF signals to the external server and to the destination set by the DTMF forwarding advanced command.	
NTP synchronization period	Sets the Network Time Protocol synchronization period (in seconds) between the MVP and the NTP server.		21600


Command	Description	Parameters	Default
Notify level	Sets the LifeSize Multipoint log notify level filter	Fatal—LifeSize Multipoint cannot continue to provide service (unrecoverable error). Error—User functionality problem (for example, call connect failure or no resources available). Warning—User functionality problem but the LifeSize Multipoint 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.	Debug 3
RTP Base Port			
SIP bandwidth attribute type		AS None TIS	
SIP hide stack	Disables SIP stack prints.		SIP Stack printing is disabled by default.
SIP show stack	Enables SIP stack prints		
SIP show status	Prints a snapshot of SIP stack related information.		
SIP video capability description type			

Command	Description	Parameters	Default
Set MTU size	Determines the maximum packet size across the network.		1500
Set terminal baudrate	Sets the baudrate of a serial terminal.	High (57600) Low (9600)	Low (9600)
Waiting room announcement interval (msec)	Indicates the length of time (in milliseconds) between waiting room announcements.		
Support RFC 2833 capability	Enables support for in-band DTMF signaling via packets within the audio channel as defined in the RFC 2833 standard.	disable or enable	enable

MODIFYING ADVANCED COMMANDS




Procedure

- 1 Click the  icon.
- 2 Select **Advanced parameters**.
- 3 Click the arrow in the Review column for the advanced command that you want to modify.
- 4 Modify the value for the parameter in the **Value** field.
- 5 Click **Apply**.

SENDING ADVANCED COMMANDS



Procedure

- 1 Click the  icon.
 - 2 Select **Advanced parameters**.
 - 3 Locate the CLI section and click **More**.
 - 4 Enter a command in the **Command** field.
 - 5 Enter a parameter value for the command (where applicable) in the **Parameter** field.
 - 6 Enter a value for the parameter (where applicable) in the **Value** field.
 - 7 Click **Execute**.
-


HOW TO MANAGE LIFESIZE MULTIPOINT 230 SOFTWARE

- [Upgrading LifeSize Multipoint 230 Software](#) on page 69
- [Restoring a Previous Software Version](#) on page 70

UPGRADING LIFESIZE MULTIPOINT 230 SOFTWARE



Procedure


- 1 Click the  icon.
- 2 Select **Update software**.
- 3 Click **Browse** and navigate to required LifeSize Multipoint upgrade package.
- 4 Click **Update**.
The system shuts down for a few minutes and then restarts automatically.
All active conferences are disconnected.

- 5 Click **Continue**.
 - 6 As soon as the update process has finished, the LifeSize Multipoint reboots and reloads with the new software version.
-

RESTORING A PREVIOUS SOFTWARE VERSION




Procedure

- 1 Click the  icon.
 - 2 Select **Update software**.
 - 3 Click **Roll back**.
The system shuts down for a few minutes and then restarts automatically.
All active conferences are disconnected.
 - 4 Click **Continue**.
 - 5 As soon as the update process has finished, the LifeSize Multipoint reboots and reloads with the new software version.
-

RESTARTING THE LIFESIZE MULTIPOINT 230




Procedure

- 1 Click the  icon.
 - 2 Select **Restart unit**.
The system shuts down for a few minutes and then restarts automatically.
All conferences are disconnected.
 - 3 Click **Continue**.
-

CONTACTING CUSTOMER SUPPORT



Procedure

- 1 Click the  icon.
- 2 Select **Contact Customer Support**.
The Contacting Customer Support window displays the Customer Support contact details.
- 3 (Optional) Click **Create** to create a snapshot file of bundled logs and configuration files which you can send to LifeSize Customer Support for debugging purposes.

The snapshot file is approximately 10 MB in size and contains the following information about the LifeSize Multipoint system:

- Inventory file
 - Configuration files
 - Log files for the previous 24 hours
 - All initialization log files
 - All exception log files
 - Events and alarms logs
-

VIEWING ACTIVE CONFERENCES




Procedure

- 1 Click **Manage Conferences**.
 - 2 Click the link in the Conference ID column for the conference you want to view.
-

CREATING A NEW CONFERENCE



Procedure

- 1 Click **Manage Conferences**.
 - 2 Click the  icon.
 - 3 Follow the procedure described in the [Creating a New Meeting](#) section on page 86.
-

9

DIALING VIA THE LIFESIZE MULTIPOINT 230

MEETING PARTICIPATION VIA THE LIFESIZE MULTIPOINT 230

- [Meeting Participation via the LifeSize Multipoint 230](#) on page 73
- [About Making an Ad Hoc Call](#) on page 74
- [Controlling Meetings with DTMF](#) on page 79
- [Controlling Personal Video Layouts with DTMF](#) on page 80

You can participate in video meetings hosted on the LifeSize Multipoint from any phone, terminal, or endpoint on any type of network to which the LifeSize Multipoint connects. The LifeSize Multipoint can accept calls from H.323 and Session Initiation Protocol (SIP) endpoints, and with gateway support, from phones and terminals on H.320 and PSTN networks in the same meeting.

You can participate in a meeting by dialing from a phone, from an endpoint application, or by using the LifeSize Multipoint Meeting Control interface.

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

The Auto Attendant feature allows you to access the video Interactive Voice Response (IVR) mechanism by dialing the IP address of the LifeSize Multipoint from your endpoint.

When the LifeSize Multipoint works with a gatekeeper, you can configure a leading number in the LifeSize Multipoint web interface at Configuration > Conferences > Auto attendant number. Dialing this number allows direct access to the video IVR.

ABOUT MAKING AN AD HOC CALL

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

Alternatively, you can use the “auto-attendant” mechanism to dial directly from an H.323 or SIP endpoint to the LifeSize Multipoint via the LifeSize Multipoint IP address or via the number configured at **Configuration > Conferences > Auto attendant number** (set to 1800 by default). When you dial via the auto-attendant mechanism, you do not need to register to an H.323 gatekeeper or SIP registrar.

Users can initiate multi-point meetings that run unattended and do not require advance configuration. Users simply dial a number and the LifeSize Multipoint automatically sets up the meeting. Anyone else who dials that number can join the meeting 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 meeting. A common practice is to use the telephone extension number of the meeting creator as the unique number.

- [How to Dial from the LifeSize Multipoint 230 to H.323 Endpoints](#) on page 74
- [How to Dial from the LifeSize Multipoint 230 to SIP Endpoints](#) on page 76
- [Dialing from any IP Endpoint](#) on page 78

- [Starting or Joining an Ad Hoc Meeting with H.323 Endpoints](#) on page 75
- [Inviting Multiple H.323 Endpoints with a Single Dial String](#) on page 75

HOW TO DIAL FROM THE LIFESIZE MULTIPOINT 230 TO H.323 ENDPOINTS

STARTING OR JOINING AN AD HOC MEETING WITH H.323 ENDPOINTS



Procedure

- 1 Verify the meeting ID number and the service prefix.
The meeting ID number is composed of a service prefix number and a unique number (or numbers) identifying the meeting.
For example, you can dial 601234 where
60 is the service prefix.
1234 is the unique meeting number.
 - 2 Dial in to the meeting using the meeting ID number.
As soon as the LifeSize Multipoint accepts the call, you are connected to the existing meeting, or the LifeSize Multipoint creates a new meeting with this meeting identifier.
-

INVITING MULTIPLE H.323 ENDPOINTS WITH A SINGLE DIAL STRING



Procedure

- 1 Dial this string to invite a single participant:
<meeting ID number> + <*> + <invited participant number>
 - 2 Dial this string to invite multiple participants in one action.
<meeting ID number> + <*> + <invited participant number 1>+ <*>
+ <invited participant number 2>+ <*> + <invited participant number
3>
-

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

HOW TO DIAL FROM THE LIFESIZE MULTIPOINT 230 TO SIP ENDPOINTS

- [Starting or Joining an Ad Hoc Meeting with SIP Endpoints](#) on page 76
- [Inviting Multiple SIP Endpoints with a Single Dial String](#) on page 76
- [Dialing into the LifeSize Multipoint 230 Configured as a SIP-compliant Endpoint](#) on page 77
- [Dialing into the LifeSize Multipoint 230 Configured as a Separate SIP Domain](#) on page 78

STARTING OR JOINING AN AD HOC MEETING WITH SIP ENDPOINTS



Procedure

- 1 Verify the meeting ID number and the service prefix.
The meeting ID number is composed of a service prefix number and a unique number (or numbers) identifying the meeting.
For example, you can dial 601234 where
60 is the service prefix.
1234 is the unique meeting number.
 - 2 Verify the LifeSize Multipoint domain name.
 - 3 Dial in to the meeting using the meeting ID number and the LifeSize Multipoint domain name in this format:
<meeting ID number> @ <mcu.domain.com>
As soon as the LifeSize Multipoint accepts the call, you are connected to the existing meeting, or the LifeSize Multipoint creates a new meeting with this meeting identifier.
-

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 LifeSize Multipoint domain. The LifeSize Multipoint adds the default domain to the dialed string when a user name is dialed without a domain:



Procedure

- 1 Dial this string to invite a single participant:
 <meeting ID number> + <*> + <invited participant and SIP domain>
 where the invited participant and SIP domain are in the format
 user@mcu.domain.com
- 2 Dial this string to invite multiple participants in one action.
 <meeting ID number> + <*> + <invited participant number 1>+ <*>
 + <invited participant number 2>+ <*> + <invited participant number
 3>

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

DIALING INTO THE LIFESIZE MULTIPOINT 230 CONFIGURED AS A SIP-COMPLIANT ENDPOINT

Administrators can configure the LifeSize Multipoint as a SIP-compliant endpoint. Users can start or join an ad hoc meeting by dialing into this LifeSize Multipoint 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

- 1 Dial a meeting on the LifeSize Multipoint from a SIP endpoint by dialing the meeting ID.
 - 2 Add the default domain to the dial string.
 For example, dial
 601234@default.domain
 where
 602134 is the LifeSize Multipoint meeting ID (service prefix + unique meeting identifier).
 default.domain is the default domain of the LifeSize Multipoint on which the meeting is hosted.
-

DIALING INTO THE LIFESIZE MULTIPOINT 230 CONFIGURED AS A SEPARATE SIP DOMAIN

Administrators can configure the LifeSize Multipoint as a separate SIP domain. Users can start or join an ad hoc meeting by dialing into this LifeSize Multipoint from a SIP-compliant endpoint.



Procedure

- 1 Dial the meeting ID.
- 2 Add the unique LifeSize Multipoint domain as defined in the proxy or Domain Name Server (DNS) server to the dial string.

For example, dial

meeting.id@mcu.domain.com

DIALING FROM ANY IP ENDPOINT

You can start or join an ad hoc meeting 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).

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



Procedure

- 1 To start or join a meeting, dial the meeting ID number.

For example, dial 601234.

As soon as the LifeSize Multipoint accepts the call, you connect to the existing meeting or the LifeSize Multipoint creates a new meeting with this meeting identifier.

–or–

- 2 To start or join a meeting and invite a participant, dial the meeting 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 LifeSize Multipoint accepts the call, you connect to the existing meeting or the LifeSize Multipoint creates a new meeting with this meeting identifier.

–or–

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

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

As soon as the LifeSize Multipoint accepts the call, you are connected to the existing meeting or a new meeting is created with this meeting identifier.

–or–

- 4 Access the LifeSize Multipoint Auto Attendant by dialing from the endpoint to the LifeSize Multipoint IP address, or to the number configured at **Configuration > Conferences > Auto attendant number** (set to 1800 by default).

Click **0** to create a new meeting, or to select a meeting to join from the list of existing meetings.

CONTROLLING MEETINGS WITH DTMF

You can control LifeSize Multipoint meetings 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 LifeSize Multipoint passes out-of-band DTMF signals to all endpoints in the meeting, to gateways only or does not pass DTMF signals.

The gateway inserts in-band signals on receiving the DTMF from the LifeSize Multipoint. The audio bridge receives these in-band signals and responds accordingly.

[Table 9-1](#) shows available DTMF control signals.

Table 9-1 *DTMF Controls*

During a meeting press * followed by:	
*	Listen to available options
1	Become Moderator/stop moderating
2	Mute/unmute your line
3	Control your volume
4	Show/hide participant names
5	Terminate the meeting (Moderator only)
6	Change the main video layout for the meeting
7	Block/unblock admission to meeting (Moderator only)
8	Invite a new participant (Moderator only)
9	Mute/unmute all participants (Moderator only)
#	Return to the meeting

CONTROLLING PERSONAL VIDEO LAYOUTS WITH DTMF



Procedure

- 1 Click **0** on your endpoint remote control to activate the personal video layout mechanism.
- 2 Continue to click **0** to rotate through these personal video display options:
 - Enlarged Main View
 - Same Sized Screen
 - Full screen
 - Fixed 4 Participants

- Fixed 6 Participants
 - Fixed 9 Participants
- 3 Stop clicking to select the option that you require.
 - 4 (Optional) Click # to shrink the size of the video display to better fit your endpoint screen.
-

Controlling Personal Video Layouts with DTMF

10

USING THE LIFESIZE MULTIPOINT 230

This section describes how to create, join and manage video conferences on the LifeSize Multipoint.

- [LifeSize Multipoint 230 Access Levels](#) on page 84
- [Conference List Window](#) on page 85
- [Viewing Existing Meetings](#) on page 85
- [Monitoring a Specific Meeting](#) on page 86
- [Creating a New Meeting](#) on page 86
- [Conference Control Interface](#) on page 87
- [Refreshing the Conference Control Interface](#) on page 94
- [Controlling Conference Settings](#) on page 95
- [Configuring Participant Settings](#) on page 96
- [Viewing Conference Statistics](#) on page 106
- [Using Advanced Invitation Settings](#) on page 107
- [Cascading Conferences](#) on page 109
- [Defining Conference Views](#) on page 111
- [Terminating Conferences](#) on page 113
- [Signing Out of a Conference](#) on page 113

LIFESIZE MULTIPOINT 230 ACCESS LEVELS

There are four ways to interact with the LifeSize Multipoint user interfaces according to the following access levels:

- Administrator
- Operator
- Moderator
- User

Table 10-1 describes each access level.

Table 10-1 LifeSize Multipoint Access Levels

Access Level	Privileges
Administrator	<ul style="list-style-type: none"> ■ Full access to the LifeSize MultipointAdministrator interface. ■ Full Operator-level access to the Conference Control interface.
Operator	<ul style="list-style-type: none"> ■ Access to the Conference Control interface using the Create Conference window. ■ Access to view details of all conferences hosted on the LifeSize Multipoint and to cascaded conferences hosted on participating LifeSize Multipoints. ■ 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.
Moderator	<ul style="list-style-type: none"> ■ Access to view conference details of conferences hosted on the LifeSize Multipoint and to cascaded conferences hosted on participating LifeSize Multipoints for which access authorization is granted. ■ Moderator-level access to conferences when the user has a valid Moderator PIN or no other user is a Moderator. ■ Ability to invite other participants to a conference.
User	<ul style="list-style-type: none"> ■ View-only access to conferences hosted on the LifeSize Multipoint for which authorization is granted. ■ Ability to invite other participants to a conference.

CONFERENCE LIST WINDOW

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.

VIEWING EXISTING MEETINGS



Procedure

- 1 Launch your browser and enter the IP address of the LifeSize Multipoint.

The LifeSize Multipoint login window appears.

- 2 Enter your name and password.
- 3 Click **Go**.
- 4 Click **Manage Conferences**.

The list of current meetings appears in the Conference List window.

MONITORING A SPECIFIC MEETING



Procedure

- 1 Launch your browser and enter the IP address of the LifeSize Multipoint.
The LifeSize Multipoint login window appears.
 - 2 Click the Create link.
 - 3 Enter the ID and PIN (if necessary) for the meeting you require.
 - 4 Click **Go**.
 - 5 Select the meeting you require from the Conference List window.
-

CREATING A NEW MEETING



Procedure

- 1 Launch your browser and enter the IP address of the LifeSize Multipoint.
The LifeSize Multipoint login window appears.
 - 2 Click the **Create** link.
 - 3 Click **Create Conference**.
 - 4 Select a service prefix from the list.
 - 5 Enter an ID number for this meeting in the **Unique Number** field.
-

Note You cannot use an existing meeting number.

- 6 (Optional) Enter a PIN for accessing the meeting in the **Conference Password** field.

- 7 (Optional) Enter a PIN for moderating the meeting in the **Moderator Password** field.

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

- 8 (Optional) Enter a description of the meeting in the **Conference Description** field.
 - 9 (Optional) Click **Advanced** to configure additional settings for the meeting such as conference duration, time-out and dialing policy settings.
 - 10 Click **Create** to launch your meeting.
-

CONFERENCE CONTROL INTERFACE

From the LifeSize Multipoint Conference Control interface, you can:

- View active conferences hosted on the LifeSize Multipoint or on cascaded LifeSize Multipoints.
- View conference participant details.
- Create conferences.
- Control conference connections.
- Monitor and manage conference behavior.

While all users can use the Conference Control interface, access to conference management features is controlled by authorization access levels: Administrator, Operator, Moderator 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.

Conference Control Interface

Figure 10-1 shows the Conference Control interface.

Figure 10-2 to Figure 10-5 show the elements of the Conference Control interface in more detail.

Table 10-2 lists these elements in numerical order of the labels in Figure 10-2 to Figure 10-5.

Figure 10-1 Conference Control Interface Elements

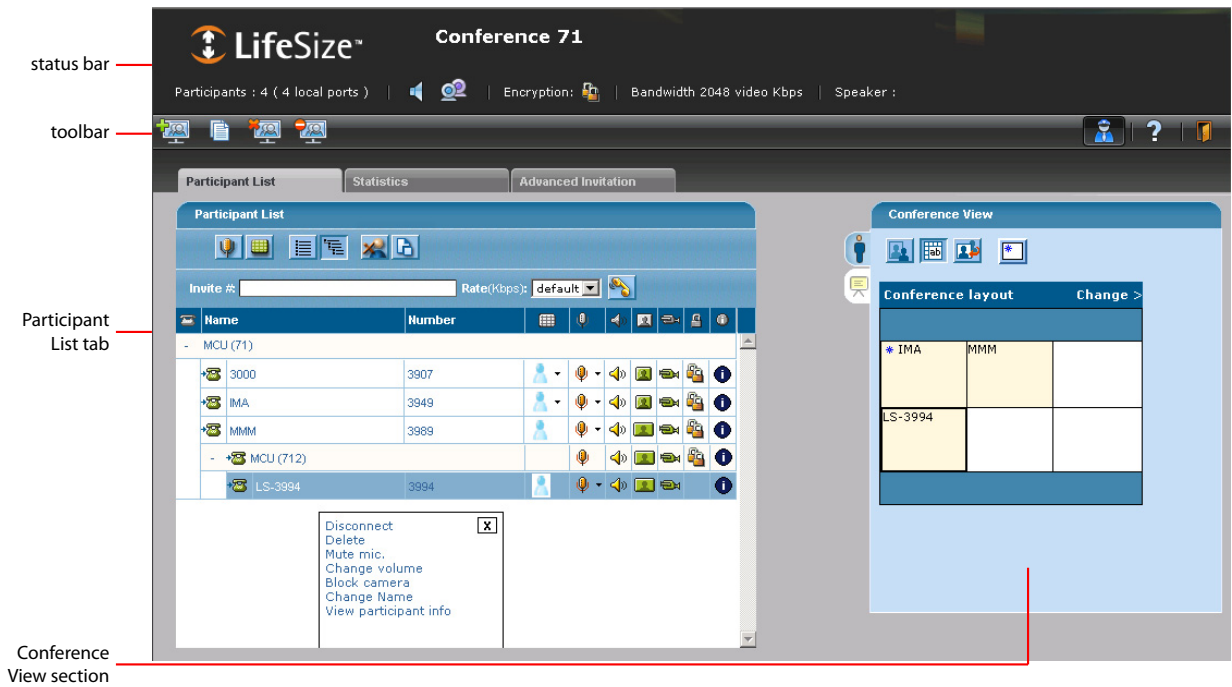


Figure 10-2 Conference Control Status Bar

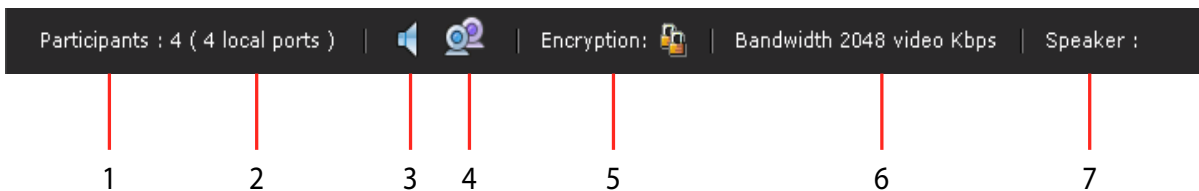


Figure 10-3 Conference Control Toolbar

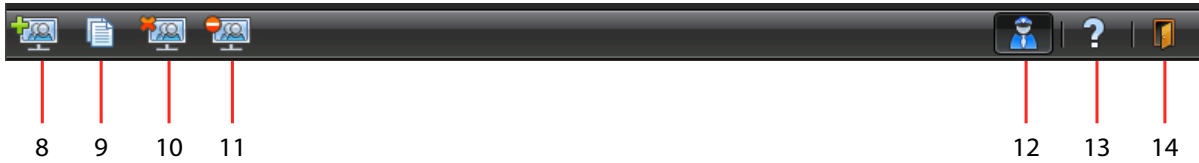


Figure 10-4 Conference Control Participant List Tab

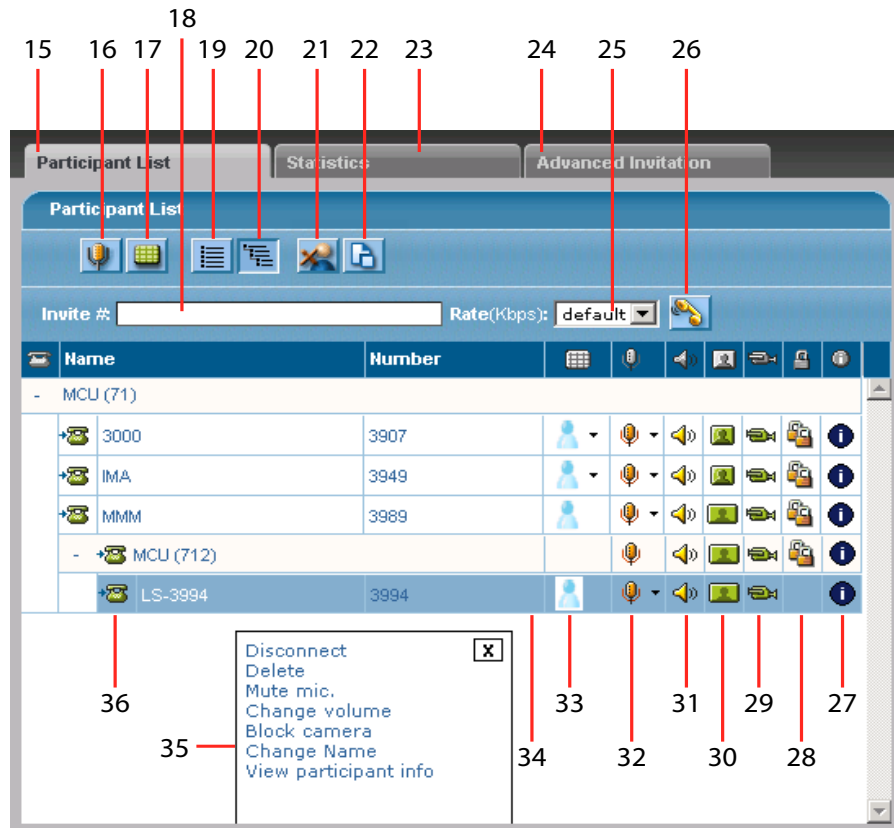


Figure 10-5 Conference Control Conference View

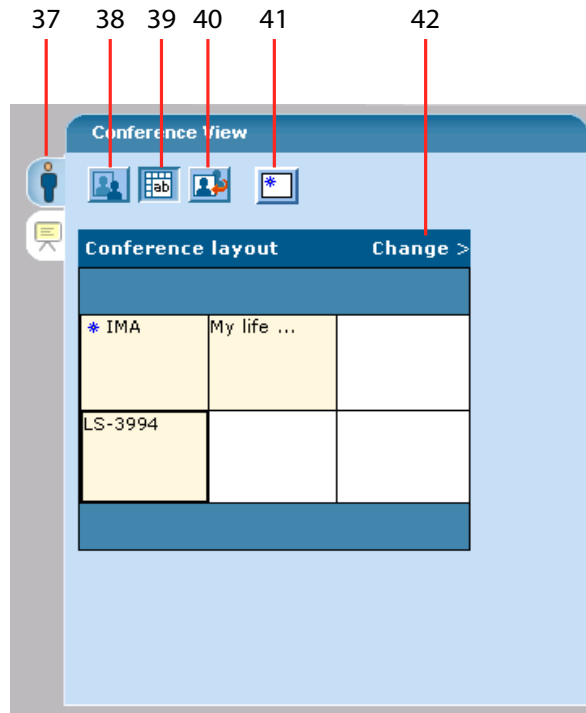


Table 10-2 *Conference Control Interface Elements*

Numbered Label	Description
1	Participants field. Displays the number of participants in the current conference.
2	Local ports field. Displays the number of ports on this LifeSize Multipoint allocated to this conference.
3	Media type icon indicating that this conference supports audio. An error symbol appears if a media processing error occurs in the LifeSize Multipoint.
4	Media type icon indicating that this conference supports video. An error symbol appears if a media processing error occurs in the LifeSize Multipoint.
5	Encryption field. Displays the level of encryption for this conference.
6	Bandwidth field. Displays the bandwidth the current conference is using.
7	Speaker field. Displays the participant currently speaking in the conference.
8	Create Conference button.
9	View Conference List button. Click to view the Create Conference window.
10	Terminate Conference button.
11	Conference Admission button.
12	Become Moderator/Stop Moderating button.
13	Help button.
14	Sign out button.
15	Participant List tab.
16	Mute/Unmute button.

Numbered Label	Description
17	Change Participant View button.
18	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.
19	Normal View. Click to display all conference participants in a single level list. Cascaded participants are displayed without any indication of the cascaded LifeSize Multipoint connection. Available only when a conference is cascaded.
20	Tree View. Click to display conference participants in an expandable tree showing cascaded LifeSize Multipoint connections to the conference. Select the plus sign (+) next to the name of the cascaded LifeSize Multipoint to expand the tree showing the cascaded conference participant details. Available only when a conference is cascaded.
21	Delete Participant button.
22	Move participants to sub-conference button. Click to view the Select sub-conference dialog box.
23	Statistics tab.
24	Advanced Invitation tab.
25	Rate(Kbps) field.
26	Invite button. Click to invite the number entered in the Invite # field.
27	Participant info column. Click the icon
28	Encryption column. Displays the level of encryption that the endpoints require.

Numbered Label	Description
29	<p>Video Image column.</p> <p>Displays video image icons that indicate whether the video stream from the participant to the LifeSize Multipoint is enabled or blocked.</p> <p>Displays video quality warning icons—medium or poor video quality—that indicate the current quality of the IP network video connection for the participant.</p>
30	<p>Video Display column.</p> <p>Displays video display icons that indicate whether the conference video display sent to the participants is enabled or blocked.</p> <p>Displays video quality warning icons—medium or poor video quality—that indicate the current quality of the IP network video connection for the participant.</p> <p>Different icons used to indicate standard definition and high definition participants.</p>
31	<p>Audio Out column. Displays Audio Out icons that indicate whether the conference audio connections to the participants are enabled or muted.</p>
32	<p>Audio In column.</p> <p>Displays Mute icons for participants whose audio is not muted and Unmute icons for participants whose audio is muted.</p> <p>These icons are clickable by Moderator to mute/unmute audio channel of remote speakers of a participant.</p> <p>Icon indicates the active speaker.</p>
33	<p>Location in View column. Indicates whether the conference layout or the personal layout is displayed for the specified participant.</p>
34	<p>Number column. Displays the endpoint numbers of the conference participants.</p>
35	<p>Actions pop-up</p>
36	<p>Participant connection status icons: Connected, Disconnecting or Disconnected.</p>

Numbered Label	Description
37	Main layout display frame.
38	Enable self-see button. Click to enable the self-see feature.
	Note No Self-See available for HD endpoints.
39	Display participants name in frame button. Click to display the name of endpoints or participants in specific positions of the video layout frame.
40	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.
41	Voice activated frame button. Drag and drop the icon to the preferred position of the voice-activated image in the video display layout.
42	Change Participant View 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.

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 closes 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.

CONTROLLING CONFERENCE SETTINGS

With Moderator-level access, for conferences already in progress, you can control conference activity and initiate events such as inviting participants. When you are a Moderator, 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. Moderator-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:

- [Becoming a Moderator and Stopping Moderation](#) on page 95
- [Creating Conferences from the Conference Control Interface](#) on page 96

BECOMING A MODERATOR AND STOPPING MODERATION

Moderator access can be PIN-protected. Administrators and Operators can jointly be Moderators simultaneously.



Procedure

- 1 In the Conference Control interface, click **Become Moderator** (12 in [Figure 10-3](#) on page 89) to take control of that conference.
 - 2 A dialog box requesting a PIN might appear if Moderator access is PIN-protected. Enter the PIN.
 - 3 To release control of the conference, click **Stop Moderation**.
-

CREATING CONFERENCES FROM THE CONFERENCE CONTROL INTERFACE



Moderators, Operators, and Administrators can create a new conference from the **Conference Control** interface.

Procedure

- 1 In the Conference Control interface, click **Create Conference** (8 in [Figure 10-3](#) on page 89).
 - 2 Follow the steps in
-

CONFIGURING PARTICIPANT SETTINGS

- [Muting and Unmuting All Participants Audio Connections](#) on page 97
- [Muting and Unmuting Individual Participants Audio Connections](#) on page 97
- [Reconnecting Participants](#) on page 97
- [Blocking Conference Admission](#) on page 98
- [Deleting Conference Participants](#) on page 98
- [Changing the Volume](#) on page 99
- [Changing Participant Views](#) on page 99
- [Configuring Sub-conferences](#) on page 100
- [Blocking the Video Stream](#) on page 101
- [Changing a Participant Name](#) on page 101
- [Viewing Participant Call Information](#) on page 102
- [Configuring Outgoing Bandwidth Settings](#) on page 106

MUTING AND UNMUTING ALL PARTICIPANTS AUDIO CONNECTIONS



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

Procedure

- 1 Access the Conference Control interface.
- 2 On the control bar, click **Mute/Unmute** (16 in [Figure 10-4](#) on page 89) to mute all participants or enable the audio connection for all participants.

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

MUTING AND UNMUTING INDIVIDUAL PARTICIPANTS AUDIO CONNECTIONS



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

Procedure

- 1 Access the Conference Control interface.
 - 2 In the Participants List section, select a participant.
 - 3 Right click and select **Mute mic** from the pop-up (35 in [Figure 10-4](#) on page 89).
or
 - 4 Click the microphone icon (32 in [Figure 10-4](#) on page 89) in the Participant List row.
-

RECONNECTING PARTICIPANTS

If participants are disconnected from a conference, users with Moderator-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 LifeSize Multipoint automatically calls disconnected terminals to attempt a reconnection.



Procedure

- 1 Access the Participant List tab.
 - 2 Click **Disconnect** (21 in [Figure 10-4](#) on page 89) icon to attempt a reconnection.
-

BLOCKING CONFERENCE ADMISSION

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



Procedure

- 1 Access the control bar.
 - 2 Click **Conference Admission** (11 in [Figure 10-3](#) on page 89).
No further participants can join the conference. To readmit participants, click **Conference Admission** again.
-

DELETING CONFERENCE PARTICIPANTS

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



Procedure

- 1 In the Participants List section, click the participant you want to remove.
 - 2 On the control bar, click **Delete Participant** (21 in [Figure 10-4](#) on page 89).
—or—
 - 3 In the Participants List section, select a participant.
 - 4 Right click and select **View participant info** from the pop-up (35 in [Figure 10-4](#) on page 89).
-

CHANGING THE VOLUME

In the Conference Control interface, users with Moderator-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 LifeSize Multipoint port. In a cascaded conference, changing this setting affects all remote participants on other LifeSize Multipoint. Once you change this setting, the new setting remains in effect until that endpoint leaves the LifeSize Multipoint.



Procedure

- 1 In the Participant List tab, select the participant whose volume you want to change.
 - 2 Right click and select **Change volume** from the pop-up (35 in [Figure 10-4](#) on page 89).
 - 3 The gain control scroll bar dialog box appears, with a gain span of -5 to +5.
 - 4 Drag the scroll bar to the right to increase the gain; drag the slide bar to the left to decrease the gain.
 - 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 Moderator-level access can change the conference view layout for an individual conference participant or all conference participants while the conference is in progress.

Note Multiple view are not available to high definition participants. High definition participants can only see the main participant layout.



Procedure

- 1 If you wish to change the conference view for specific conference participants only, select those participant(s) in the Participant List table.
- 2 Click **Change Participants View** (17 in [Figure 10-4](#) on page 89).

- 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.
 - 4 Click **OK**.
-

CONFIGURING SUB-CONFERENCES

In the Participant List tab, users with Moderator-level access can create a sub-conference within a conference. The LifeSize Multipoint supports audio sub-conferences to which the Moderator 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 LifeSize Multipoint can support up to three sub-conferences per conference according to the service configuration.

The LifeSize Multipoint 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

- 1 Select the required participant in the Participant List tab.
- 2 Click **Move participants to sub-conference** (22 in [Figure 10-4](#) on page 89).
The Select sub-conference dialog box appears.
- 3 From the list, select the required sub-conference.
- 4 Click **OK**.
A new Sub-conf column appears in the Participant List with a list of all available sub-conferences for that participant.

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

- 1 In the Participant List tab, select the participant that you want to block.
 - 2 Right click and select **Block camera** from the pop-up (35 in [Figure 10-4](#) on page 89)
- or–
- Click **Video Image** (29 in [Figure 10-4](#) on page 89).
-

CHANGING A PARTICIPANT NAME



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

Procedure

- 1 In the Participant List tab, select the participant whose name you want to change.
 - 2 Right click and select **Change Name** from the pop-up (35 in [Figure 10-4](#) on page 89).
 - 3 Enter the new name in the **Change name** field.
 - 4 Click **OK**.
-

VIEWING PARTICIPANT CALL INFORMATION

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



Procedure

- 1 Select the required participant in the Participant List tab.
- 2 Right click and select **View participant info** from the pop-up (35 in [Figure 10-4](#) on page 89).
–or–
- 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 10-3](#) lists the statistics displayed.

Table 10-3 *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.

Group	Field	Description
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.

Configuring Participant Settings

Group	Field	Description
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).
Data	Data protocol	Indicates whether the protocol used if the participant is participating in data sharing.

Group	Field	Description
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 Moderator-level access can configure the bandwidth rate at which they invite other participants to the conference.



Procedure

- 1 In the Participant List tab
 - a Enter the alias or number of the participant being invited in the Invite field (18 in [Figure 10-4](#) on page 89).
 - b Select the required bandwidth in the Rate(Kbps) field (25 in [Figure 10-4](#) on page 89).
 - c Click **Invite** (23 in [Figure 10-4](#) on page 89).–or–
 - 2 In the Advanced Invitation tab
 - a Enter the alias or number of the participant being invited in the Invite field.
 - b Select the required bandwidth in the Kbps field.
 - c Click **Invite**.
-

VIEWING CONFERENCE STATISTICS

Users with Moderator-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

- 1 In the Participants List section, click **Statistics** (23 in [Figure 10-4](#) on page 89) to view conference statistics.
 - 2 Click **Update** to refresh the information displayed.
-

USING ADVANCED INVITATION SETTINGS

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](#) on page 107
- [Inviting Participants Using Advanced Settings](#) on page 107

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

- 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 (**).
 - 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.
Select a new bandwidth rate in the **Rate(kbps)** field.
 - 3 Click Invite (26 in [Figure 10-4](#) on page 89).
-

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.



Procedure

- 1 Click **Advanced Invitation** (24 in [Figure 10-4](#) on page 89) in the Conference Control interface.
- 2 Enter the participant contact numbers in the first **Invite #** field.
You can enter multiple numbers separated by the invite sign (**).

- 3 Enter the name you want to appear when the participant enters the conference in the **Display Name** field.
- 4 Select the bit rate in the **Kbps** field that the LifeSize Multipoint uses when inviting a participant to a conference.
Select **default** for optimal bit rate performance.
- 5 Select a cascaded LifeSize Multipoint conference in the **Multipoint** field to which invited participants connect.

Note This step is only for cascaded conferences.

- 6 (Optional) To configure advanced features, follow these additional steps;
Additional control features appear in the Advanced Invitation tab (24 in [Figure 10-4](#) on page 89).
 - Click **Change** (42 in [Figure 10-5](#) on page 90) in the Conference View section.
A dialog box appears displaying a list of the current layouts available in the current conference.
 - Drag and drop the **Voice activated frame** button (41 in [Figure 10-5](#) on page 90) 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.
- 7 Repeat [Step 1](#) to [Step 6](#) for each Invite # field until you configure all required the participant invites.
 - 8 Click **Invite** (26 in [Figure 10-4](#) on page 89) to send the invitations.
-

CASCADING CONFERENCES

Users with Moderator-level access can increase LifeSize Multipoint call capacity by cascading LifeSize Multipoint. 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 LifeSize Multipoint 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 LifeSize Multipoint users can see this status in the Create Conference window or Conference Control interface. This status, however, only appears if it was the local LifeSize Multipoint that was lost. If the slave LifeSize Multipoint is lost, then the user of the master LifeSize Multipoint can view which participants are without audio/video in the Participant List tab. If the master LifeSize Multipoint is lost, then slave LifeSize Multipoints do not receive any indication that there has been a failure.

- [Creating a Cascaded Conference](#) on page 109
- [Inviting Participants to a Cascaded Conference](#) on page 110
- [Viewing Participants in a Cascaded Conference](#) on page 110

CREATING A CASCADED CONFERENCE



Procedure

- 1 Access the Participant List tab.
- 2 Invite another conference on the host LifeSize Multipoint or on another LifeSize Multipoint 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

- 1 Click **Advanced Invitation** (24 in [Figure 10-4](#) on page 89) in the Conference Control interface.
 - 2 In the **Multipoint** 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 LifeSize Multipoint connection.
- **Tree View**—Conference participants appear in an expandable tree view showing cascaded LifeSize Multipoint connections to the conference. Click the plus sign (+) next to the name of the cascaded LifeSize Multipoint to expand the tree showing cascaded conference participant details.



Procedure

- 1 Access the Participant List tab.
 - 2 Click **Normal View** (19 in [Figure 10-4](#) on page 89) to display cascaded conference participants in a single list or **Tree View** (20 in [Figure 10-4](#) on page 89) to display conference participants in a tree view.
-

DEFINING CONFERENCE VIEWS

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

- [Enabling or Disabling Dynamic Layouts](#) on page 111
- [Changing the Main Conference Layout](#) on page 112
- [Changing a Personal Conference Layout](#) on page 112
- [Displaying Participant Names in Frames](#) on page 112
- [Enabling or Disabling Auto-Switch Mode](#) on page 113

ENABLING OR DISABLING DYNAMIC LAYOUTS

Users with Moderator-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.



Procedure

- 1 Access the Conference View section of the Participant List tab.
 - 2 Click **Change** (42 in [Figure 10-5](#) on page 90).
A pop-up appears, displaying a list of currently available layouts for the current conference.
 - 3 Click **Dynamic Layout** to enable (if not selected) or disable (if already selected) dynamic layout for this conference.
-

CHANGING THE MAIN CONFERENCE LAYOUT

In the Conference View section, users with Moderator-level access can change the main layout for the current conference.



Procedure

- 1 In the Conference View section of the Participant List tab, click **Change** (42 in [Figure 10-5](#) on page 90).
A pop-up appears, displaying a list of currently available layouts for the current conference.
 - 2 Click the layout of your choice.
The conference adjusts to the new selection.
-

CHANGING A PERSONAL CONFERENCE LAYOUT

In the Conference View section, users with can change their own personalized layout for the current conference.



Procedure

- 1 Select the required participant in the Participant List tab.
 - 2 Click **Location in View** (22 in [Figure 10-4](#) on page 89).
 - 3 Select **Personal layout** and select the required video display from the listed options.
-

DISPLAYING PARTICIPANT NAMES IN FRAMES

In the Conference View section, users with Moderator-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 when you configure text overlay in the service.

**Procedure**

- 1 Access the Conference View section of the Participant List tab.
 - 2 Click **Display participant names in frame** (39 in [Figure 10-5](#) on page 90).
-

ENABLING OR DISABLING AUTO-SWITCH MODE

In the Conference View section, users with Moderator-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**

- 1 Access the Conference View section of the Participant List tab.
 - 2 Click **Auto-switch** (40 in [Figure 10-5](#) on page 90) to enable (if not already selected) or disable (if already selected) auto-switch mode.
-

TERMINATING CONFERENCES

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

**Procedure**

- 1 Access the Create Conference window.
 - 2 Click **Terminate Conference** next to the conference name to end the conference.
-

SIGNING OUT OF A CONFERENCE

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

**Procedure**

- 1 Access the control toolbar.
 - 2 Click **Sign out** (14 in [Figure 10-3](#) on page 89).
-

Signing Out of a Conference

11

TROUBLESHOOTING THE LIFESIZE MULTIPOINT 230

- [Resolving LifeSize Multipoint Gatekeeper Registration Failure](#) on page 116
- [Resolving Front Panel LED Issues](#) on page 116
- [Resolving LifeSize Multipoint Conference Initiation Failure](#) on page 117
- [Resolving Conference Access Failure](#) on page 118
- [Resolving Cascading Failure](#) on page 118
- [Resolving Quality Issues in Cascaded Conferences](#) on page 119
- [Resolving Endpoint Disconnection Issues](#) on page 120
- [Resolving Unexpected Conference Termination](#) on page 120
- [Resolving Presentation Issues](#) on page 120
- [Resolving Unexpected SIP Call Disconnection](#) on page 121

**RESOLVING
LIFE SIZE
MULTIPOINT
GATEKEEPER
REGISTRATION
FAILURE**

This section describes what to do if the LifeSize Multipoint fails to register with the LifeSize Gatekeeper.

Possible Causes	Verification Steps
The gatekeeper address is set incorrectly.	Verify the gatekeeper IP address settings.
TCP/IP setup issue.	Verify that the LifeSize Multipoint is assigned a unique IP address. Verify that the subnet mask and default gateway subnet mask are set correctly.
LAN or cable problem	Verify the switch port settings. Verify that the Ethernet cable is straight through. Try another Ethernet cable.
LifeSize Gatekeeper is in Predefined mode.	Verify that the LifeSize Multipoint is predefined in the LifeSize Gatekeeper.

**RESOLVING FRONT
PANEL LED ISSUES**

This section describes what to do if LifeSize Multipoint module front panel LEDs are off at all times, including during the power off, power on cycle.

Possible Causes	Verification Steps
Power supply problem	Make sure that the power supply LED is green. Check the AC cable and fuse.
The LifeSize Multipoint module is not inserted correctly in the LifeSize Multipoint 230 chassis, or a back plane pin is bent.	Open the telecom latch screws and extract the LifeSize Multipoint module from its slot. Verify that there are no bent pins on the back plane (using a flashlight, if necessary). Re-insert the LifeSize Multipoint module carefully closing the latches.

RESOLVING LIFE SIZE MULTIPOINT CONFERENCE INITIATION FAILURE

This section describes what to do if LifeSize Multipoint conference initiation fails.

Possible Causes	Verification Steps
In ad hoc conferences, the LifeSize Gatekeeper is set to reject all calls.	Verify that the Accept calls option is checked in Gatekeeper > Settings > Calls.
The LifeSize Multipoint is set to work with an external authorization server, but no authorization server is configured.	Verify that the External conference authorization policy option is set to None in Maintenance > Advanced parameters > External conference policy authorization.
The LifeSize Multipoint is set to work with an external authorization server, but the authorization server is not configured properly to work with the LifeSize Multipoint.	Verify that the LifeSize Multipoint IP address is correctly configured in the authorization server.
In ad hoc conferences, the initiating LAN endpoint is not registered with the LifeSize Gatekeeper.	Verify that the initiating endpoint appears in the LifeSize Gatekeeper Endpoints table correctly.
In ad hoc conferences, the LifeSize Multipoint service is not defined in the LifeSize Gatekeeper Services table.	Verify that the service is defined in the LifeSize Multipoint. Verify that the LifeSize Multipoint service prefix appears in the LifeSize Gatekeeper Services table. If it does not, add it manually. Verify that the service prefix is not a subset of another service prefix.
There are not enough LifeSize Multipoint resources available for the desired conference.	Verify that current calls are not utilizing all resources by checking the available LifeSize Multipoint capacity and then trying to disconnect other calls in order to find the problem.

RESOLVING CONFERENCE ACCESS FAILURE

This section describes what to do if an endpoint cannot be invited to a conference or dial into the conference.

Possible Causes	Verification Steps
The LifeSize Gatekeeper is set to reject all calls.	Verify that the Accept calls option is checked in Gatekeeper > Settings > Calls.
The endpoint is not registered with the LifeSize Gatekeeper.	Verify that the invited/dialing endpoint appears in the LifeSize Gatekeeper table of registered endpoints. Verify that the endpoint is online.
The LifeSize Multipoint is configured to work with an authorization server, but the endpoint is not authorized and therefore the authorization server rejects the call.	Check if the endpoint is authorized in the authorization server.
The endpoint is currently in a call.	Confirm that the endpoint is not busy/in a call.
There are not enough LifeSize Multipoint resources available for the desired conference.	Remove one of the current participants to verify that the endpoint can join successfully.

RESOLVING CASCADING FAILURE

This section describes what to do if LifeSize Multipoint conference cascading fails.

Possible Causes	Verification Steps
The invited conference does not exist, and the remote LifeSize Multipoint is not in Ad Hoc (Scheduler, Web, Control API and dial-in) mode.	If ad hoc conferencing is not allowed for the remote LifeSize Multipoint, and the remote conference does not exist, create the conference and then cascade it (web/dial invite).
Service prefixes are not unique and there is service prefix conflict.	Verify that all cascaded LifeSize Multipoint modules have unique service prefixes.

Possible Causes	Verification Steps
The remote LifeSize Multipoint module is not registered with its gatekeeper.	Verify proper registration of all LifeSize Multipoint modules with their respective gatekeepers.
Not enough ports are available to accomplish cascading.	Check that the number of free ports on each LifeSize Multipoint used is not zero.
Note Cascading requires one port from each conference.	
Services are not synchronized.	Verify that service definitions do not include differences such as H.235 being enabled on one conference only.

This section describes what to do if a cascaded conference suffers long delays or bad lip synchronization.

Possible Causes	Verification Steps
Unsuitable topology used (for example, chain topology used unnecessarily).	<p>One single central LifeSize Multipoint should invite all other cascaded LifeSize Multipoints.</p> <p>We recommend that you do not have more than one level of cascaded LifeSize Multipoints.</p> <p>Use a star topology, where the central LifeSize Multipoint is in the center of the star, and other cascaded LifeSize Multipoint modules are on the arms of the star.</p>

RESOLVING QUALITY ISSUES IN CASCADED CONFERENCES

RESOLVING ENDPOINT DISCONNECTION ISSUES

This section describes what to do if endpoints unexpectedly drop out of the LifeSize Multipoint conference.

Possible Causes	Verification Steps
Unreliable network link.	Check network link quality (round trip time should be less than 300 msec).

RESOLVING UNEXPECTED CONFERENCE TERMINATION

This section describes what to do if a conference on the LifeSize Multipoint unexpectedly terminates.

Possible Causes	Verification Steps
The LifeSize Multipoint unexpectedly drops out of the LifeSize Gatekeeper endpoints database.	Uncheck the Check that endpoint is online every n seconds option in Gatekeeper > Settings > Advanced. Uncheck the Check that call is alive every n seconds option in Gatekeeper > Settings > Calls. Uncheck the TTL option in Gatekeeper > Settings > Advanced.
The Ad hoc conferences terminate when option at Configuration > Conferences is set to Conference creator leaves and the conference creator has left the conference.	Set the Ad hoc conferences terminate when option at Configuration > Conferences to Last participant leaves .

RESOLVING PRESENTATION ISSUES

This section describes what to do if you cannot start or receive a presentation during a conference.

Possible Causes	Verification Steps
H.239 functionality is not enabled on your endpoint.	Verify that H.239 is enabled on the endpoint. Make a point-to-point call to another endpoint and verify that you can start a presentation.

Possible Causes	Verification Steps
Presentation is not configured in the LifeSize Multipoint service used in your conference.	Configure the service to support presentation at Configuration > Conferences > Services list > More > Enable presentation views.
LifeSize Multipoint presentation definitions in the service are not supported by your endpoint (frame rate, frame size, codec).	Check that your endpoint supports the frame size, frame rate and video codec as defined in the service.

This section describes what to do if a SIP call unexpectedly disconnects after 30 seconds.

Possible Causes	Verification Steps
DNS is not fully configured on the LifeSize Multipoint and user agents.	Verify that DNS is configured on user agent and LifeSize Multipoint.

RESOLVING UNEXPECTED SIP CALL DISCONNECTION

Resolving Unexpected SIP Call Disconnection

INDEX

A

- access levels
 - See user types 84
- actions 85
- address settings
 - changing 12
- Advanced Invitation tab 92, 107, 110
- audio announcement interval 65
- auto switch 113

B

- block admission 98
- block video stream 101

C

- cascaded conferences 109
 - view participants 110
- Chinese 9
- cold start 46, 49
- Conference Control interface
 - Advanced Invitation tab 107
 - Moderator-level options 95
 - refresh 94
- conference description 85
- conference ID number 75, 76, 85
- conference layouts
 - See layouts 112
- Conference List window 85
- conference procedures
 - block admission 98
 - block video stream 101
 - disable dynamic layouts 111

- enable dynamic layouts 111
- invite from SIP endpoint 76
- invite multiple H.323 endpoints 75, 77
- invite using quick invite 107
- join ad hoc conference with H.323 endpoint 75, 76
- mute audio connection 97
- unmute 97
- conference statistics 106
- Conference View section 111
- configuration procedures
 - configure dynamic layouts 23
 - configure H.323 gatekeeper settings 17
 - configure PIN settings 31
 - configure SIP Proxy settings 18
 - import settings 62
 - methods for creating conferences 23
 - select language 9
- Create Conference window
 - terminate conference 113

D

- deleting participants 98
- dialing conventions
 - IP-based endpoints 78
- DTMF
 - conference control 79
 - control signals 79
 - enable in-band DTMF (RFC 2833) 68
 - forwarding 64
 - handle after XML 66
- dynamic layouts 23, 111

E

encryption 85, 91
 support 28
English 9
external programs 13

F

factory default settings 63
font align 65
FTP 13

G

G.728 mode 65

H

H.323 advanced commands
 hide stack 66
 show stack 66
 show status 66
H.323 endpoints
 inviting 75, 77
 joining ad hoc 75, 76
H.323 gatekeepers
 conference registration 23
HTTPS 13
 Import Certificate 13
 Manage Certificate 13

I

ICMP 13
importing configuration settings 62
invite
 from SIP endpoint 76
 multiple participants with single dial string
 75, 76, 77
 using quick invite 107
invite sign 75, 77
IP-based endpoints
 dialing conventions 78

J

Japanese 9

L

language support 9
layouts
 changing 112
 display name in video layout frame 27, 112
link down 46, 49
link up 46, 49
log notify level filter 67

M

media processor
 registration failure 47, 50
media types 85
mute 97

N

NTP synchronization period 66

P

packet size
 maximum across network 68
participant
 current number of 85
Participant List tab 91, 109
PIN
 settings 31
PIN Settings tab 31
Portuguese 9
presentation
 view 28
protocol settings 17

Q

QualiVision 93
quick invite 107

R

- reconnect participants 97
- remove participants 98
- restoring factory default settings 63
- Russian 9

S

- saving configuration settings 62
- Select sub-conference dialog box 92, 100
- service prefix number 75, 76
- services configuration 24
- Services tab 24
- SIP advanced commands
 - hide stack 67
 - show stack 67
 - show status 67
- SIP endpoints
 - inviting 76
- SIP Proxy
 - settings 18
- SNMP 13
- Spanish 9
- Statistics tab 92
- sub-conference 100
- system procedures
 - change address settings 12
 - configure external program access 13
 - configure security 13

T

- Telnet 13
- terminal baud rate 68
- text-based commands
 - See advanced commands 63

U

- unmute 97
- user interface language 9
- user types 84
 - administrators 58, 84

- conference participants 84
 - Moderators 84
 - operators 84
 - operators 58

V

- viewing
 - conference statistics 106
 - participants in cascaded conference 110

W

- warm start 46, 49
- web refresh interval 64
- web server certificate
 - creating 13
 - importing 13

X

- XML 66