

Collaboration Endpoint Software 9.5 OCTOBER 2018



# Application Programming Interface (API) Reference Guide

Cisco Collaboration Endpoint Software 9.5

#### What's in this guide?

The top menu bar and the entries in the table of contents are all hyperlinks, just click on them to go to the topic.

We recommend you visit our web site regularly for updated versions of the user documentation.

Go to: ▶ https://www.cisco.com/go/telepresence/docs

#### Table of Contents

Introduction	3
About this guide	4
What's new in CE9.5	5
What's new in CE9.4	9
What's new in CE9.3	15
What's new in CE9.2	22
What's new in CE9.1	29
What's new in CE9.0	35
About the API	42
API fundamentals Connecting to the API Password SSH Telnet for DX, MX, and SX series HTTP/HTTPS Ethernet ports RS-232 / serial connection User roles	43 43 43 43 44 44 44
API output	
Using the command line  API commands  Other commands.  Command line shortcuts  Searching  Value types and formats.	46 46 47
Multiline commands	49
Synchronous API calls	50

Events	5
Feedback mechanism Feedback expressions Terminal connections HTTP XMLAPI Authentication HTTP XMLAPI Session Authentication Getting status and configurations Sending commands and configurations	5 5 5 5
Feedback from codec over HTTP Registering for feedback Translating from terminal mode to XML	5
Dos and don'ts	5
xConfiguration commands	5
Description of the xConfiguration commands	
xCommand commands	17
Description of the xCommand commands	17
xStatus commands	27
Description of the xStatus commands	27
Appendices	36
Supported commands matrix	36
Startup scripts	42
The SystemTools commands	42
Disconnect cause types	42

Chapter 1

## Introduction



### About this guide

This guide introduces you to the Application Programming Interface (API) for the Collaboration Endpoint software, and serves as a reference guide for the command line commands.

The guide describes the API for on-premise registered video systems (CUCM, VCS) as well as video systems registered to Cisco's cloud service (Cisco Webex).

For Cisco Webex registered systems a subset of the API is available, and the user role (admin, integrator and roomcontrol) of the local user determines which commands are available. See the supported commands matrix in this guide to see an overview of which commands require which user roles \(\rightarrow\)"Supported commands matrix" on page 361

This guide applies to the following products:

- DX Series:
  - DX70
  - DX80
- MX Series:
  - MX200 G2
  - MX300 G2
  - MX700
  - MX800
- SX Series:
  - SX10 Quick Set
  - SX20 Quick Set
  - SX80 Codec
- · Room Series:
  - · Room Kit
  - Codec Plus<sup>1</sup>
  - Codec Pro<sup>2</sup>
  - Room 55
  - Room 55 Dual
  - Room 70
  - Room 70 G2

#### Downloading the user documentation

You can download the user documentation from the Cisco web site, go to:

▶ https://www.cisco.com/go/telepresence/docs

For Cisco Webex registred devices, go to:

▶ https://collaborationhelp.cisco.com

Guidelines for how to find the documentation on the Cisco web site are included in the Vuser documentation on the Cisco web site appendix.

<sup>&</sup>lt;sup>1</sup> Included in Room Kit Plus and Room Kit Plus Precision 60

<sup>&</sup>lt;sup>2</sup> Included in Room Kit Pro and Room Kit Pro Precision 60



#### What's new in CE9.5

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.5 (CE9.5) compared to CE9.4.

For more details, we recommend reading the Software release notes:

▶ https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

Presentation source compositing (Codec Plus, Codec Pro, MX200 G2, MX300 G2, MX700, MX800, Room 55, Room 55 Dual, Room 70, Room 70 G2, Room Kit, SX20, SX80)

With using two or more content sources and sending them as one image, you can create a new experience for sharing in meetings

This gives users more flexibility with what they present to remote sites. You can configure the presentation composition through In-Room Controls together with Macros or an external controller.

The number of sources is determined by the device in use:

- MX200 G2, MX300 G2, Room Kit and SX20: up to two sources
- Room 55, Room 55 Dual, Room 70, Room Kit Plus: up to three sources
- MX700, MX800, Room 70 G2, Room Kit Pro, and SX80: up to four sources

You can only compose content that has been shared through a VGA or HDMI cable.

#### Web audio console (Codec Pro, SX80)

The new audio console is natively available on the web interface of the high-end integrator devices. The audio console gives you simplified tools to route audio from an input to an output. The new audio console replaces the old java-based CE Console that is no longer maintained.

When you access the audio console for the first time you will see the default system audio routes. The audio console is controlled by an underlying macro which is saved and started once you select Choose to overwrite the current device configurations.

For more information, see ▶ the customization guide for CF9.5

Classroom scenario (Codec Plus, Codec Pro, Room 55 Dual, Room 70, Room 70 G2, SX80)

The Classroom mode uses macros to tailor a room setup that works well for presenting and teaching scenarios. The template provides easy setup, maintenance, and use of the room. Classroom works similarly to the existing Briefing Room mode but it doesn't require three screens.

#### Support for Korean keyboard (All products)

Korean keyboard input is now supported on Touch 10 controller when the user interface language is set to Korean.

#### Remote monitoring of screen status (SX20, SX80)

The remote monitoring of screen status that has been available for the Webex Room series and SX10 is now available for SX20 and SX80.

The codec can wake up the screen if it is in standby mode or put the screen to standby when the codec enters standby. The input source can also be changed automatically when a call is received.

CEC is disabled on the video system by default and must be enabled in the Video Output Connector [1] CEC Mode setting. Your screen must support CEC and it has to be enabled on it for remote monitoring to work.

#### Welcome banner (All products)

You can set up a welcome banner that the user sees after they sign in to the device's web interface or the command line interface. The banner can for example contain information that the user needs to get started or things they need to be aware of when changing settings.



#### xConfiguration changes in CE9.5

#### New configurations

Audio Input ARC[n] Mode (Codec Pro, Room 70 G2)

Audio Output ARC[1] Delay DelayMs (Codec Pro, Room 70 G2)

Audio Output ARC[1] Delay Mode (Codec Pro, Room 70 G2)

Audio Output ARC[1] Mode (Codec Pro, Room 70 G2)

Audio Output InternalSpeaker Mode (Room 70 G2)

Audio Output Line[1] Mode (Codec Plus, Room 55)

Audio Output Line[1] OutputType (Codec Plus, Room 55)

NetworkServices SSH HostKeyAlgorithm (All products)

RoomAnalytics PeopleCountOutOfCall (SX80, MX700ST)

#### Configurations that are removed

Audio Output InternalSpeaker Mode (Codec Pro)

Cameras SpeakerTrack ConnectorDetection CameraLeft (Codec Pro, Room 70 G2)

Cameras SpeakerTrack ConnectorDetection CameraRight (Codec Pro, Room 70 G2)

Cameras SpeakerTrack ConnectorDetection Mode (Codec Pro, Room 70 G2)

Cameras SpeakerTrack TrackingMode (Codec Pro, Room 70 G2)

#### Configurations that are modified

Audio Input Microphone[1..8] Equalizer ID (Codec Pro, Room 70 G2)

OLD: Integer, Max: 14, Min: 1, Step: 14 NEW: Integer, Max: 8, Min: 1, Step: 8

Audio Output Line[1..6] Level (Codec Pro, Room 70 G2)

OLD: Default: 0

NEW: Default: [1]: ; [2]: 4; [3]: ; [4]: 4; [5]: ; [6]: 4; [7]: ; [8]: 4; [9]: ; [10]: 4; [11]: ; [12]: 4;

Audio Ultrasound MaxVolume (Codec Pro, MX700ST, Room 70 G2, SX80)

OLD SX80, Codec Pro, Room 70 G2: Default: 70 NEW SX80, Codec Pro, Room 70 G2: Default: 60

OLD MX700ST: Default: 70

NEW MX700ST: Default: 66

OLD Room 70 G2: Integer: 0 - 90

NEW Room 70 G2: Integer: 0 - 80

Video Input Connector[3,4,5] PreferredResolution (Codec Pro, Room 70 G2)

OLD: Default: 3840\_2160\_30 NEW: Default: 1920\_1080\_60



#### Cisco Collaboration Endpoint Software

#### xCommand changes in CE9.5

#### New commands

Audio Equalizer List (SX80, Codec Pro, MX700, MX800, Room 70 G2)

Audio Equalizer Update (SX80, Codec Pro, MX700, MX800, Room 70 G2)

Provisioning RoomType Activate (Codec Plus, Room 70)

SystemUnit WelcomeBanner Clear (All products)

SystemUnit WelcomeBanner Get (All products)

SystemUnit WelcomeBanner Set (All products)

UserInterface Extensions Panel Close (All products)

UserInterface Message TextInput Response (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

UserManagement User Unblock (All Products)

Video CEC Output KeyClick (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

Video CEC Output SendActiveSourceRequest (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

#### Commands that are modified

Audio LocalInput AddConnector (Codec Pro, Room 70 G2)

OLD: ConnectorType (r): HDMI / Microphone / Line

NEW: ConnectorType (r): HDMI / Microphone / ARC

Audio LocalInput RemoveConnector (Codec Pro. Room 70 G2)

OLD: ConnectorType (r): HDMI / Microphone / Line

NEW: ConnectorType (r): HDMI / Microphone / ARC

Audio LocalOutput AddConnector (Codec Pro, Room 70 G2

OLD: ConnectorType (r): HDMI / Microphone

NEW: ConnectorType (r): HDMI / Microphone / ARC

Audio LocalOutput RemoveConnector (Codec Pro, Room 70 G2)

OLD: ConnectorType (r): HDMI / Microphone

NEW: ConnectorType (r): HDMI / Microphone / ARC

#### Audio Sound Play (All products)

OLD: Sound (r): Alert / Bump / Busy / CallDisconnect / CallInitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / Pairing / PresentationConnect / Ringing / SignIn / SpecialInfo / StartListening / TelephoneCall / VideoCall / VolumeAdjust / WakeUp

NEW: Sound (r): Alert / Bump / Busy / CallDisconnect / CallMitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / Pairing / PresentationConnect / Ringing / SignIn / SpecialInfo / StartListening / TelephoneCall / VideoCall / VolumeAdjust / WakeUp / Binding

Phonebook Search (SX80, Codec Plus, Codec Pro, Room Kit NOTE: Only when registered to Cisco Webex)

NEW: SearchFilter: All / Rooms / People

Presentation Start (All products)

OLD: ConnectorId: Integer, Multiple: undefined NEW: ConnectorId IntegerArray , Multiple: 1

SystemUnit FactoryReset (All products)

OLD: Keep: LiteralArray , Multiple: 6

NEW: Keep: LiteralArray, Multiple: 7

UserManagement User Modify (All products)

Removed: Unblock: False / True

Video Matrix Assign (SX20, SX80, Codec Plus, Codec Pro, Room Kit, MX200 G2, MX300 G2, MX700, MX800, Room 70 G2)

OLD: Sourceld (r): Integer, Multiple: undefined

NEW: Sourceld: IntegerArray, Multiple: 4

Video Matrix Unassign (SX20, Codec Plus, Room Kit, MX200 G2, MX300 G2)

OLD Codec Plus: Sourceld (r): Integer, Max: 4, Min: 1, Step: 1

NEW Code Plus: Sourceld (r): Integer, Max: 3, Min: 1, Step: 1

OLD MX200 G2, MX300 G2, Room Kit: Sourceld (r): Integer, Max: 4, Min: 1, Step: 1

NEW MX200 G2, MX300 G2, Room Kit: Sourceld (r): Integer, Max: 2, Min: 1, Step: 1

OLD SX20: Sourceld (r): Integer, Max: 3, Min: 1, Step: 1 NEW SX20: Sourceld (r): Integer, Max: 2, Min: 1, Step: 1

#### xStatus changes in CE9.5

#### New statuses

Audio Input Connectors ARC[n] EcReferenceDelay (All products)

Audio Output Connectors ARC[n] DelayMs (Codec Plus, Codec Pro, Room 70, Room 70 G2)

Audio Output Connectors ARC[n] Mode (Codec Plus, Codec Pro, Room 70, Room 70 G2)

Provisioning RoomType (Codec Plus, Room 70)

SystemUnit Software OptionKeys MultiSite (SX10, DX70, DX80)

Video Mute (All products)

Video Output Monitor[n] FirmwareVersion (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

Video Output Monitor[n] ModelName (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

Video Output Monitor[n] Position (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

Video Output Monitor[n] SerialNumber (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

Video Output Monitor[n] Temperature (SX20, SX80, MX200 G2, MX300 G2, MX700, MX800)

#### Statuses that are removed

Video Output Connector[n] ConnectedDevice CEC[n] PowerControl (All products)

#### Statuses that are modified

Peripherals ConnectedDevice[n] Type (All products)

OLD: Byod / Camera / ControlSystem / ISDNLink / Other / SpeakerTracker / TouchPanel NEW: Byod / Camera / ControlSystem / ISDNLink / Other / SpeakerTracker / TouchPanel / InputDevice

SystemUnit Software OptionKeys MultiSite (SX20, SX80, Codec Plus, Codec Pro, Room Kit, MX200 G2, MX300 G2, MX700, MX800, Room 55, Room 70, Room 70 G2)

OLD: False / True

NEW: False / True / NotApplicable

#### What's new in CE9.4

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.4 (CE9.4) compared to CE9.3.

For more details, we recommend reading the Software release notes:

https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

#### New products

- · Cisco Webex Codec Pro
- · Cisco Webex Room 70 Single G2
- Cisco Webex Room 70 Dual G2
- · Cisco Webex Room 55 Dual

#### Rebranding from Cisco Spark to Cisco Webex (All products)

Cisco Spark has changed its name to Cisco Webex, and the user interface elements that displayed *Spark* are changed to *Webex*. In the activation flow you now see Cisco Webex as a registration option instead of Cisco Spark.

The following products have gotten new names:

- · Cisco Spark Room Kit is now Cisco Webex Room Kit
- Cisco Spark Room Kit Plus is now Cisco Webex Room Kit Plus
- · Cisco Spark Codec Plus is now Cisco Webex Codec Plus
- · Cisco Spark Quad Camera is now Cisco Quad Camera
- Cisco Spark Room 55 and 70 are now Cisco Webex Room 55 and 70
- Cisco DX70 is now Cisco Webex DX70
- Cisco DX80 is now Cisco Webex DX80

## The maximum number of Proximity clients is increased (Codec Plus, Codec Pro, Room 55, Room 55 Dual, Room 70,

Room 70 G2, Room Kit)

A Cisco Webex Room Series device can have up to 30 paired clients simultaneously when the Proximity service *ContentShare ToClients* is disabled. If *ContentShare ToClients* is enabled, the limit of paired clients is 7 which is the same as in earlier software releases.

## CUCM provisioning of the admin settings lockdown configuration (All products)

The admin settings lockdown configuration, that was introduced in CE9.2.1, can now be provisioned from CUCM. You can lock a selection of the settings on the settings menu on all of your devices simultaneously when you configure them through CUCM.

Your CUCM may require a device package in order to expose the new fields for this configuration.

Support for content sharing using H.263 in a call between Cisco Webex Room Series and legacy MXP devices (Codec Plus, Codec Pro, Room 55, Room 55 Dual, Room 70, Room 70 G2. Room Kit)

Support for H.263 content sharing between MXP and Cisco Webex Room Series is now available. The Room Series previously had a limitation where it could not receive or share content in a separate content channel. Sharing content from a Room Series device to a MXP device would in earlier versions compose the presentation into the main video stream.

This is only supported in certain scenarios:

- Direct H.323 calls (IP dialing) between a Room Series device and a MXP device.
- MXP registered on VCS on H.323 and a Room Series device registered to the same VCS on either SIP or H.323. Note that making a H.323 to SIP call on a VCS requires that an interworking option key is installed on the VCS.

See • the CE9 release notes for information on other limitations related to this feature.



## Enable backlight compensation from the touch screen (DX70, DX80)

A new setting on the DX70 and DX80 main menu enables and disables backlight compensation. This is a fixed setting that increases (on) or decreases (off) the sensors brightness levels in order to compensate for sunlight or other bright light sources behind the user. The backlight compensation sets the sensor to a fixed level and it is not auto adjusted to the backlight.

## Changed default HTTP mode from HTTP+HTTPS to HTTPS (All products)

The default value of NetworkServices HTTP Mode is changed from HTTP+HTTPS to HTTPS. This is to increase the security of the room devices on default configuration. Upgrading from earlier software versions will not automatically change the default value and it will stay on HTTP+HTTPS to avoid breaking current HTTP implementations.

The change is seen on new systems running CE9.4.0 or later, or if the device is factory reset on CE9.4.0. The HTTP requests are redirect to HTTPS and on the first visit to the device's web interface, the device displays an "Insecure connection warning". To proceed to the web interface, you need to create an exception in your browser. This is a one-time operation unless you access the web interface with a different browser that has never visited the device web interface or if the device is factory reset.

#### In-Room Control update (All products)

You can add buttons for as many panels as you want on the home screen as well as on the in-call screen of the user interface.



#### System configuration changes in CE9.4

#### New configurations

Audio Input Microphone [n] PhantomPower (Codec Pro, Room 70 G2)

Audio Input HDMI [n] Mode (Room 55, Codec Pro)

Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo (Room 55, Codec Pro)

Audio Output HDMI [n] Delay DelayMs (Codec Pro)

Audio Output HDMI [n] Delay Mode (Codec Pro)

Audio Output Line [1] OutputType (Room 70, Room 55D)

Cameras Camera [1] Backlight DefaultMode (DX70, DX80)

Cameras Camera [1..2] Mirror (MX700, MX800)

Conference FarendMessage Mode (All products)

#### Configurations that are removed

NetworkServices HTTP Proxy Allowed (All products)

Video Output Connector [2] CEC Mode (DX70, DX80)

Video Output Connector [2] OverscanLevel (DX70, DX80)

Video Output Connector [2] Resolution (DX70, DX80)

#### Configurations that are modified

Audio Output Line [1] OutputType (Room Kit)

OLD: Default value: LineOut

NEW: Default value: Loudspeaker

OLD: Value space: LineOut / Subwoofer

NEW: Value space: LineOut / Loudspeaker / Recorder / Subwoofer

Audio Ultrasound MaxVolume (MX200 G2, MX300 G2, Codec Plus, Room 70)

OLD: Default value: 60 (MX200 G2, MX300 G2)

70 (Codec Plus, Room 55, Room 70)

NEW: Default value: 50 (MX200 G2, MX300 G2)

60 (Codec Plus, Room 70)

64 (Room 55)

OLD: Value space: Integer (0..80) (MX200 G2, MX300 G2)

Integer (0..90) (Room 55, Room 70)

NEW: Value space: Integer (0..70) (MX200 G2, MX300 G2)

Integer (0..80) (Room 70) Integer (0..84) (Room 55)

Network [1] DNS DNSSEC Mode (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN

Network [1] Speed (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR

NetworkServices HTTP Mode (All products)

OLD: Default value: HTTP+HTTPS

NEW: Default value: HTTPS

NetworkServices SNMP CommunityName (All products)

OLD: User role: ADMIN

NEW: User role: ADMIN, INTEGRATOR

NetworkServices SNMP Host [1..3] Address (All products)

OLD: User role: ADMIN

NEW: User role: ADMIN, INTEGRATOR

NetworkServices SNMP Mode (All products)

OLD: User role: ADMIN

NEW: User role: ADMIN, INTEGRATOR

NetworkServices SNMP SystemContact (All products)

OLD: User role: ADMIN

NEW: User role: ADMIN, INTEGRATOR



#### NetworkServices SNMP SystemLocation (All products)

OLD: User role: ADMIN

NEW: User role: ADMIN, INTEGRATOR

#### UserInterface ContactInfo Type (SX10, DX70, DX80)

OLD: Value space: Auto / DisplayName / IPv4 / IPv6 / None / SipUri / SystemName

NEW: Value space: Auto / DisplayName / E164Alias / H320Number / H323Id / IPv4 / IPv6 /

None / SipUri / SystemName

#### Video Output Connector [1] CEC Mode (SX10)

OLD: Default value: Off NEW: Default value: On

#### Video Output Connector [3] Resolution (SX80)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, INTEGRATOR, USER

#### Commands changes in CE9.4

#### New commands

Audio LocalInput Add (MX700, MX800)

Audio LocalInput AddConnector (MX700, MX800)

Audio LocalInput Remove (MX700, MX800)

Audio LocalInput RemoveConnector (MX700, MX800)

Audio LocalInput Update (MX700, MX800)

Audio LocalOutput Add (MX700, MX800)

Audio LocalOutput AddConnector (MX700, MX800)

Audio LocalOutput ConnectInput (MX700, MX800)

Audio LocalOutput DisconnectInput (MX700, MX800)

Audio LocalOutput Remove (MX700, MX800)

Audio LocalOutput RemoveConnector (MX700, MX800)

Audio LocalOutput Update (MX700, MX800)

Audio LocalOutput UpdateInputGain (MX700, MX800)

Audio RemoteOutput ConnectInput (MX700, MX800)

Audio RemoteOutput DisconnectInput (MX700, MX800)

Audio RemoteOutput UpdateInputGain (MX700, MX800)

Audio Setup Clear (MX700, MX800)

Call FarEndMessage Send (All products)

Provisioning RoomType Activate (SX80, MX700, MX800, Codec Pro, Room 70 G2)

Security FIPSMode Activate (All products)

Video Matrix Assign (Room Kit, Codec Pro, Room 70 G2)

Video Matrix Reset (Room Kit, Codec Pro, Room 70 G2)

Video Matrix Swap (Room Kit, Codec Pro, Room 70 G2)

Video Matrix Unassign (Room Kit, Codec Pro, Room 70 G2)

#### Commands that are removed

None.

#### Commands that are modified

Audio LocalInput Add (SX80)

NEW: Direct: On / Off

Audio LocalInput Update (SX80)

NEW: Direct: On / Off

OLD: AGC, Channels, MixerMode, Mute, Name: Required NEW: AGC, Channels, MixerMode, Mute, Name: Optional

Audio LocalOutput Update (SX80)

OLD: Channels, Loundspeaker, Name: *Required* NEW: Channels, Loundspeaker, Name: *Optional* 

Camera PositionSet (All products except DX70, DX80)

OLD: Zoom: 0 - 8500 NEW: Zoom: 0 - 11800

Conference DoNotDisturb Activate (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER
Conference DoNotDisturb Deactivate (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

SystemUnit FactoryReset (All products)

OLD: Keep: Certificates / LocalSetup / Network / Provisioning / SerialPort / Spark

NEW: Keep: Certificates / LocalSetup / Network / Provisioning / SerialPort / Spark / HTTP

SystemUnit SoftwareUpgrade (All products)

Removed: UserName, Password

UserManagement User Modify (All products)

NEW: Unblock: False / True

Video Selfview Set (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER OLD: OnMonitorRole: First / Second / Third

NEW: OnMonitorRole: First / Second / Third / Fourth

#### Status changes in CE9.4

#### New statuses

Audio Input LocalInput [n] Direct (SX80, MX700, MX800)

Audio Output Connectors HDMI [n] DelayMs (Room Kit, Codec Plus, Codec Pro, Room 70, Room 70 G2, Room 55D)

Audio Output Connectors HDMI [n] Mode (Room Kit, Codec Plus, Codec Pro, Room 70, Room 70 G2, Room 55D)

Audio Output Connectors InternalSpeaker [n] DelayMs (Room Kit, Codec Plus, Codec Pro, Room 70, Room 70 G2, Room 55D)

Audio Output Connectors InternalSpeaker [n] Mode (Codec Plus, Codec Pro, Room 55D, Room 70, Room 70 G2)

Audio Output MeasuredHdmiArcDelay (All products)

Audio Output MeasuredHdmiDelay (All products)

Audio Output ReportedHdmiCecDelay (All products)

Cameras Camera [n] LightingConditions (Room Kit, Room 55, Codec Plus, Codec Pro, Room 70, Room 70 G2, Room 55D)

Cameras Camera [n] Position Lens (Codec Pro, Room 70, Room 70 G2, Room 55D)

Network [n] IPv6 LinkLocalAddress (All products)

RoomPreset [n] Defined (All products except DX70 and DX80)

RoomPreset [n] Description (All products except DX70 and DX80)

RoomPreset [n] Type (All products except DX70 and DX80)

SystemUnit Hardware TemperatureThreshold (SX80, SX20, SX10, MX200 G2, MX300 G2, MX700, MX800, DX70, DX80)

#### Statuses that are removed

None.

#### Statuses that are modified

Diagnostics Message [n] Type (All products)

NEW: Value space: SparkActivationRequired and SparkConnectivity removed

Video Monitors (All products)

OLD: Valuespace: Dual / DualPresentationOnly / Single / Triple / TriplePresentationOnly NEW: Valuespace: Dual / DualPresentationOnly / Single / Triple / TriplePresentationOnly / Quadruple

Video Output Connector [n] MonitorRole (All products)

OLD: Valuespace: First / InternalSetup / PresentationOnly / Recorder / Second / Third NEW: Valuespace: First / InternalSetup / PresentationOnly / Recorder / Second / Third / Fourth

Video Selfview OnMonitorRole (All products)

OLD: Valuespace: First / Second / Third

NEW: Valuespace: First / Second / Third / Fourth

#### What's new in CE9.3

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.3 (CE9.3) compared to CE9.2.

For more details, we recommend reading the Software release notes:

▶ https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

## Backup and restore settings and custom elements (All products)

You can include custom elements as well as configurations in a backup file bundle (zip). You can choose which of the following elements to include in the bundle:

- · Branding images
- Macros
- Favorites
- · Sign-in banner
- · In-room control panels
- Configurations (all or a sub-set)

In previous software versions, you could only backup the configurations.

The backup file can either be restored manually from the video system's web interface, or you can generalize the backup bundle so that it can be provisioned across multiple video systems, for example using Cisco UCM or TMS.

You will find the backup and restore functionality under Maintenance > Backup and Restore on the video system's web interface.

#### Provisioning of custom elements (All products)

The backup bundle, as described above, can be provisioned to many video systems using Cisco UCM or TMS. It is important that device specific information is removed when creating a backup bundle intended for multiple video systems. If you include device specific information in such a bundle, you may end up with multiple video systems that cannot be reached

By provisioning a non-system specific backup bundle, you can for example, copy a video system's setup with macros, branding elements, and in-room control panels across multiple video systems.

Currently, provisioning via Cisco UCM will not restore any configurations, only the other custom elements; TMS will restore everything that is included in the backup bundle.

See the release note for more details about provisioning.

#### In-Room Control updates (All products)

The following functionality is added to the in-room control feature:

- You can add buttons for up to 20 panels in total. The buttons appear on the home screen or the in-call screen of the user interface depending on the panel type.
- As before, there are three types of in-room control panels: global panels (always available), in-call panels (available only when in call), and out-of-call panels (only available when not in a call). The entry point for the global panel has been removed from the status bar (top right corner of the user interface). Buttons to open global panels are added to both the home screen and the in-call screen instead, together with the buttons for the out-of-call only and in-call only panels, respectively.
- You can make standalone trigger-buttons, which are buttons that trigger an event directly, without opening a panel on the user interface.

Also the following features are added in the in-room control editor:

- Some new icons are available.
- A set of colors to choose from for the in-room-control buttons.
- · Double click text elements to edit text directly.
- Drag and drop in-room control XML files into the editor.

For a full description of in-room controls, see the in-room control / customization guide on

▶ https://www.cisco.com/go/in-room-control-docs



#### Support for ISDN Link (All products)

ISDN Link with software version IL1.1.7 is supported for all video systems that supports CE9.3.0.

As before, when using automatic pairing (which allows the ISDN Link to be automatically discovered by the video system) IPv6 must be enabled on the video system.

#### One Button to Push snooze (All products)

You are able to snooze an One Button to Push (OBTP) meeting reminder for 5 minutes. The snooze time cannot be changed. The reminder typically appears if you are in a call and a scheduled meeting is about to start. You can snooze the reminder for 5 minutes each time it appears until the meeting has ended.

#### Screen status monitoring and control (SX10)

SX10 now has the same CEC (Consumer Electronics Control) behavior as the video systems in the Room series.

The video system will use CEC to set the screen in standby when the system itself enters standby, and wake up the screen and select the correct video input when the video system itself wakes up from standby. CEC information from the screen is included in the video system's status. Of course, the screen must also support CEC and send the relevant information to the video system.

CEC is disabled on the video system by default, and must be enabled in the Video Output Connector [1] CEC Mode setting.

#### Adjust the call rate before making a call (All products)

As soon as you start typing in the Search or dial field, you can open a dialog and select a custom call rate. In earlier releases this was available only when selecting an entry from the Directory.

If you don't select a custom call rate, you get the rate set in the Conference DefaultCall Rate setting.

#### Select ring-tone and adjust ring-tone volume (All products)

You can select a ring-tone and adjust the ring-tone volume from the settings menu on the user interface. In the previous releases this was done from the web interface.

#### Resume a postponed upgrade (All products)

When you get a notification about software upgrade, you can choose *Upgrade now* or *Postpone*. If you postpone the upgrade, you can resume the upgrade from the *Settings* > *About this device* menu on the user interface when you are ready; you don't have to wait for 6 hours like you had to before.

If you don't manually resume the upgrade, the upgrade will start automatically after 6 hours.

## Prevent system information from being exposed in the user interface (All products)

You can prevent important system information from being exposed in the user interface, for example:

- IP addresses (video system, touch controller, UCM/VCS registrar)
- MAC address
- Serial number
- Software version

To enable this feature the following must be done:

- A passphrase must be set for all users with administrator rights
- UserInterface SettingsMenu Mode must be set to Locked
- · UserInterface Security Mode must be set to Strong

This feature also means that the IP address is not displayed on the screen when you disconnect a Touch controller.

## Accessibility: Flashing screen on incoming calls (All products)

You can configure the video system so that the screen and Touch controller flashes red / light grey when the system receives an incoming call. This feature is mainly targeting

hearing impaired users, making it easier for them to notice an incoming call.

The feature is disabled by default, and must be enabled by the *Accessibility IncomingCallNotification* setting.

#### Mirrored self-view (DX70 and DX80)

You can configure the video system to show the self-view image the way other people see you, or as you would see yourself in a mirror. Use the *Video Selfview Mirrored* setting. Mirrored self-view used to be available only for Cisco DX devices running Android software.

Mirroring only applies to the self-view image, and has no effect on the video that is sent to the far end.

#### One common API guide

We have gathered all API information in **one** API guide, that covers all products. This is in contrast to earlier releases were we have had one API guide per product.



#### System configuration changes in CE9.3

#### New configurations

Audio KeyClickDetector Attenuate (Room Kit, Codec Plus, Room 55, Room 70)

Audio KeyClickDetector Enabled (Room Kit, Codec Plus, Room 55, Room 70)

Cameras Camera [1..3] AssignedSerialNumber (Codec Plus, Room 70)

Cameras Camera [3] Backlight DefaultMode (Codec Plus, Room 70)

Cameras Camera [3] Brightness DefaultLevel (Codec Plus, Room 70)

Cameras Camera [3] Brightness Mode (Codec Plus, Room 70)

Cameras Camera [3] Focus Mode (Codec Plus, Room 70)

Cameras Camera [3] Gamma Level (Codec Plus, Room 70)

Cameras Camera [3] Gamma Mode (Codec Plus, Room 70)

Cameras Camera [3] Mirror (Codec Plus, Room 70)

Cameras Camera [3] Whitebalance Level (Codec Plus, Room 70)

Cameras Camera [3] Whitebalance Mode (Codec Plus, Room 70)

Network [1] DNS DNSSEC Mode (All products)

NetworkServices HTTP Proxy PACUrl (All products)

SystemUnit CrashReporting Mode (All products)

SystemUnit CrashReporting URL (All products)

UserInterface Accessibility IncomingCallNotification (All products)

UserInterface Security Mode (All products)

Video Selfview Mirrored (DX70/DX80)

#### Configurations that are removed

Provisioning HttpMethod (All products)

#### Configurations that are modified

NetworkServices HTTP Proxy Allowed (All products)

OLD: Default value: True
NEW: Default value: False

NetworkServices HTTP Proxy Mode (All products)

OLD: Value space: Manual/Off

NEW: Value space: Manual/Off/PACUrl/WPAD

Proximity Mode (Room 70)

OLD: Default value: Off

NEW: Default value: On

Standby WakeupOnMotionDetection (Room 70)

OLD: Default value: Off NEW: Default value: On

Video Input Connector[2] Name (Room 55)

OLD: Default value: "PC 1 (HDMI)"

NEW: Default value: ""

Video Input Connector[3] Name (Room 55)

OLD: Default value: "PC 2 (HDMI)"

NEW: Default value: ""

Video Input Connector[1] CEC Mode (Room 70)

OLD: Value space: Off/On NEW: Value space: On



#### Commands changes in CE9.3

#### New commands

Audio SoundsAndAlerts Ringtone Stop (All products)

Bookings NotificationSnooze (All products)

HttpFeedback Enable (All products)

Macros Macro RemoveAll (All products)

Provisioning Service Fetch (All products)

Standby ResetHalfwakeTimer (All products)

UserInterface Branding Clear (All products)

UserInterface Extensions Panel Clicked (All products)

UserInterface Extensions Panel Remove (All products)

UserInterface Extensions Panel Save (All products)

Video CEC Output KeyClick (SX10)

Video CEC Output SendActiveSourceRequest (Codec Plus, Room 55, Room 70, Room Kit, SX10)

Video Matrix Assign (Codec Plus)

Video Matrix Reset (Codec Plus)

Video Matrix Swap (Codec Plus)

Video Matrix Unassign (Codec Plus)

#### Commands that are removed

Provisioning StartUpgrade (All products)

#### Commands that are modified

Audio Sound Play (All products)

OLD: Sound: Alert / Bump / Busy / CallDisconnect / CallInitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / Pairing / PresentationConnect / Ringing / SignIn / SpecialInfo / TelephoneCall / VideoCall / VolumeAdjust / WakeUp

NEW: Sound: Alert / Bump / Busy / CallDisconnect / CallInitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / Pairing / PresentationConnect / Ringing / SignIn / SpecialInfo / TelephoneCall / VideoCall / VolumeAdjust / WakeUp / StartListening

Audio SoundsAndAlerts Ringtone Play (All products)

NEW: Loop: On / Off

Dial (DX70, DX80)

OLD: CallRate: 64 - 3072 NEW: CallRate: 64 - 6000

Dial (All products)

NEW: TrackingData: 0-255

Macros Macro Save (Codec Plus, DX70, DX80, MX200 G2, MX300 G2, MX700, MX800, Room 55, Room 70, Room Kit, SX20, SX80)

NEW: Transpile: False/True
Peripherals List (All products)
NEW: Type: Default: All

SystemUnit ProductPlatform Set (Codec Plus, Room 70)

OLD: Platform: ROOM70D / ROOM70S

NEW: Platform: ROOM70D / ROOM70S / ROOM55D

UserInterface Extensions Widget Action (All products)

OLD: Widgetld: 0..40 NEW: Widgetld: 0..255



UserInterface Extensions Widget SetValue (All products)

OLD: Widgetld: 0..40 NEW: Widgetld: 0..255

UserInterface Extensions Widget UnsetValue (All products)

OLD: Widgetld: 0..40 NEW: Widgetld: 0..255

Video Matrix Assign (MX200 G2, MX300 G2, MX800, MX700, SX20, SX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Video Matrix Reset (MX200 G2, MX300 G2, MX800, MX700, SX20, SX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Video Matrix Swap (MX200 G2, MX300 G2, MX800, MX700, SX20, SX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Video Matrix Unassign (MX200 G2, MX300 G2, MX800, MX700, SX20, SX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

#### Status changes in CE9.3

#### New statuses

Audio Input KeyClick Attenuate (Codec Plus, Room 55, Room 70, Room Kit)

Audio Input KeyClick Enabled (Codec Plus, Room 55, Room 70, Room Kit)

Audio Input KeyClick Detected (Codec Plus, Room 55, Room 70, Room Kit)

HttpFeedback [n] Status (All products)

Peripherals ConnectedDevice [n] UpgradeFailureReason (All products)

Peripherals ConnectedDevice [n] UpgradeURL (All products)

Provisioning RoomType (MX700, MX800, SX80)

Provisioning Software UpgradeStatus Urgency (All products)

Video Output Monitor [n] FirmwareVersion (Codec Plus, Room 55, Room 70, Room Kit, SX10)

Video Output Monitor [n] ModelName (Codec Plus, Room 55, Room 70, Room Kit, SX10)

Video Output Monitor [n] Position (Codec Plus, Room 55, Room Kit)

Video Output Monitor [n] SerialNumber (Codec Plus, Room 55, Room 70, Room Kit, SX10)

Video Output Monitor [n] Temperature (Codec Plus, Room 55, Room 70, Room Kit, SX10)

#### Statuses that are removed

MediaChannels Call [n] Channel [n] Netstat Drop (All products)

USB Device [n] State (SX20)

USB Device [n] Type (SX20)

#### Statuses that are modified

Cameras Camera [n] Flip (Codec Plus, MX700, MX800, Room 70, SX10, SX20, SX80)

OLD: String
NEW: Off/On

Diagnostics Message [n] Type (All products)

OLD: ANATOnVCS / AbnormalCallTermination / AudioInternalSpeakerDisabled / AudioPairingInterference / AudioPairingNoise / AudioPairingRate / AudioPairingSNR / AudioPairingTokenDecode / CAPFOperationState / CTLinstallation / CUCMVendorConfigurationFile / CallProtocolDualStackConfig / CallProtocolIPStackPlatformCompatibility / CallProtocolVcsProvisioningCompatibility /

CameraDetected / CameraId / CameraPairing / CameraSerial / CameraSoftwareVersion / CameraStatus / CamerasDetected / CaptivePortalDetected / CertificateExpiry / ConfigurationFile / ContactInfoMismatch / ControlSystemConnection / DefaultCallProtocolRegistered / ECReferenceDelay / EthernetDuplexMatches / FanStatus / FirstTimeWizardNotCompleted / H320GatewayStatus / H323GatekeeperStatus / HasActiveCallProtocol / HasValidReleaseKey / IPv4Assignment / IPv6Assignment / IPv6Mtu / ISDNLinkCompatibility / ISDNLinklpStack / ITLinstallation / InvalidSIPTransportConfig / IpCameraStatus / LockDown / MediaBlockingDetected / MediaPortRangeNegative / MediaPortRangeOdd / MediaPortRangeOverlap / MediaPortRangeTooSmall / MediaPortRangeValueSpace / MicrophoneReinforcement / MicrophonesConnected / MonitorDelay / NTPStatus / NetLinkStatus / NetSpeedAutoNegotiated / NetworkQuality / OSDVideoOutput / OutputConnectorLocations / PlatformSanity / PresentationSourceSelection / PresenterTrack / ProvisioningDeveloperOptions / ProvisioningStatus / RoomControl / SIPEncryption / SIPListenPortAndOutboundMode / SIPListenPortAndRegistration / SIPProfileRegistration / SIPProfileType / SelectedVideoInputSourceConnected / SipIceAndAnatConflict / SipOrH323ButNotBothEnabled / SoftwareUpgrade / SparkActivationRequired / SparkConnectivity / SpeakerTrackEthernetConnection / SpeakerTrackFrontPanelMountedCorrectly / SpeakerTrackMicrophoneConnection / SpeakerTrackVideoInputs / TCPMediaFallback / TLSVerifyRequiredCerts / TemperatureCheck / TouchPanelConnection / TurnBandwidth / UltrasoundSpeakerAvailability / ValidPasswords / VideoFromInternalCamera / VideoInputSignalQuality / VideoInputStability / VideoPortRangeNegative / VideoPortRangeOdd / VideoPortRangeTooSmall / VideoPortRangeValueSpace / WifiCARequired / ActiveMacros / AudioECRefDelay

NEW: ANATOnVCS / AbnormalCallTermination / AudioInternalSpeakerDisabled / AudioPairingInterference / AudioPairingNoise / AudioPairingRate / AudioPairingSNR / AudioPairingTokenDecode / CAPFOperationState / CTLinstallation / CUCMVendorConfigurationFile / CallProtocolDualStackConfig / CallProtocollPStackPlatformCompatibility / CallProtocolVcsProvisioningCompatibility / CameraDetected / CameraId / CameraPairing / CameraSerial / CameraSoftwareVersion / CameraStatus / CamerasDetected / CaptivePortalDetected / CertificateExpiry / ConfigurationFile / ContactInfoMismatch / ControlSystemConnection / DefaultCallProtocolRegistered / ECReferenceDelay / EthernetDuplexMatches / FanStatus / FirstTimeWizardNotCompleted / H320GatewayStatus / H323GatekeeperStatus / HasActiveCallProtocol / HasValidReleaseKey / IPv4Assignment / IPv6Assignment / IPv6Mtu / ISDNLinkCompatibility / ISDNLinklpStack / ITLinstallation / InvalidSIPTransportConfig / IpCameraStatus / LockDown / MediaBlockingDetected / MediaPortRangeNegative / MediaPortRangeOdd / MediaPortRangeOverlap / MediaPortRangeTooSmall / MediaPortRangeValueSpace / MicrophoneReinforcement / MicrophonesConnected / MonitorDelay / NTPStatus / NetLinkStatus / NetSpeedAutoNegotiated / NetworkQuality / OSDVideoOutput / OutputConnectorLocations / PlatformSanity / PresentationSourceSelection / PresenterTrack / ProvisioningDeveloperOptions / ProvisioningStatus / RoomControl



/ SIPEncryption / SIPListenPortAndOutboundMode / SIPListenPortAndRegistration / SIPProfileRegistration / SIPProfileType / SelectedVideoInputSourceConnected / SipIceAndAnatConflict / SipOrH323ButNotBothEnabled / SoftwareUpgrade / SparkActivationRequired / SparkConnectivity / SpeakerTrackEthernetConnection / SpeakerTrackFrontPanelMountedCorrectly / SpeakerTrackMicrophoneConnection / SpeakerTrackVideoInputs / TCPMediaFallback / TLSVerifyRequiredCerts / TemperatureCheck / TouchPanelConnection / TurnBandwidth / UltrasoundSpeakerAvailability / ValidPasswords / VideoFromInternalCamera / VideoInputSignalQuality / VideoInputStability / VideoPortRangeNegative / VideoPortRangeOdd / VideoPortRangeTooSmall / VideoPortRangeValueSpace / WifiCARequired / HTTPFeedbackFailed / HdmiCecModeNoSound / MacrosRuntimeStatus / MicrophoneOverloaded / SparkOffline / UltrasoundConfigSettings

#### What's new in CE9.2

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.2 (CE9.2) compared to CE9.1.

For more details, we recommend reading the Software release notes:

▶ https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

#### Macro framework (All products except SX10)

The macro framework allows users and integrators to write JavaScript macros in order to automate scenarios and customize endpoint behavior so that it suites an individual customer's requirements.

The combination of macros and powerful features such as listening for events/status changes, automating execution of commands and configurations, and providing local control functionality for the In-Room control feature, provides many possibilities for custom setups.

Minor behavioral changes, such as having the video system in Do Not Disturb for an infinite amount of time, can be easily realized by macros. Some other examples are: Reset configurations automatically, make a call at a certain time of the day, and issue alert or help messages depending on status changes.

The macro editor, which also provides several example macros, is available from the video system's web interface.

#### HDCP support (Room 55)

The video system's second HDMI input (Connector 3) can be configured to support HDCP (High-bandwidth Digital Content Protection) protected content. This allows customers to re-purpose the video system's screen by connecting devices such as a Google ChromeCast, an AppleTV, or an HDTV decoder. This type of content cannot be shared while in a call.

When the connector is configured to support HDCP, it is reserved for this type of content. This means that you cannot share any content from this specific connector while in a call, not even non-protected content from a laptop.

## Branding and halfwake customization (All products except SX10)

You can upload your own text and images to customize the appearance of the screen and user interface in both the halfwake state and the awake state.

In the Halfwake state you can:

- Add a background brand image to the screen and user interface
- Add a small logo in the bottom right corner of the screen and user interface.

In the Awake state you can:

- Add a small logo in the bottom right corner of the screen and user interface.
- Add a label or message in the bottom left corner of the screen (not the user interface).

**Source composition** (All products except DX70, DX80 and SX10)

You can compose up to four input sources (depending on how many input sources are available on the codec) into one image. This is the image that will be sent in the main video stream to the far end in a call. Source composition can only be enabled via the API, so we recommend creating a user interface extension combined with a macro to control the compositions on demand.

This feature replaces some of the functionality that was provided by the TC Console application for TC software.

#### HTTP Proxy support (All products)

You can set up the video system to go through a HTTP Proxy when registering it to Cisco's cloud service, Cisco Spark.



#### User interface features (All products)

- · The Settings panel is restructured.
- The Settings panel in the user interface (Touch 10 or on-screen) can be protected by the video system's admin password. If the password is blank, anyone can access the Settings and factory reset the system.
- If you select the Russian language on the user interface, you can choose between a Russian keyboard and a keyboard with a Latin character set.
- Arabic and Hebrew languages are added to the user interface. Also localized keyboards are included.
- Basic IEEE 802.1x settings are added to the Settings panel in the user interface.

## Cisco TelePresence Precision 60 Camera support (Codec Plus)

You can connect Cisco TelePresence Precision 60 cameras to Codec Plus. Note that you need a switch for the camera control cables if you have more than one camera. The People Count feature is not supported if Precision 60 is the only camera type connected to the codec.

#### Cisco Spark Quad Camera support (SX80)

You can connect a Cisco Spark Quad Camera to the SX80. Note that the Quad Camera uses only one of the codec's HDMI inputs, while the SpeakerTrack 60 camera uses two. The People Count feature (in call) is also available when using the Quad Camera.

Support for the Snap to Whiteboard feature (SX80, MX700/ MX800, Room Kit, Room Kit Plus, Room 55, Room 70)

The Snap to Whiteboard feature is now available for all products that have a camera with speaker track functionality: SX80 with Cisco TelePresence Speaker Track 60 camera or Cisco Spark Quad camera, MX700/MX800 with dual camera, Room Kit, Room Kit Plus, Room 55 and Room 70.

When the video system detects a person that is speaking close to the whiteboard, the camera view will switch to the whiteboard area. The wizard in the Settings panel on the Touch 10 user interface helps you to set up the feature and define where the whiteboard area is.

#### Briefing Room mode (SX80, MX700/MX800)

The Briefing Room feature, which was introduced already in TC software, has been reworked. The in-room control framework is used for creating the associated user interface elements.

MX700/MX800: As before, Briefing Room is supported only for dual camera systems. Also, you need a Precision 60 camera, and a total of three screens.

SX80: Briefing Room is supported when a speaker track camera, a Precision 60 camera, and three screens are connected. The speaker track camera can be either Cisco TelePresence SpeakerTrack 60 or Cisco Spark Quad Camera.

USB to Serial port support (Room Kit, Codec Plus, Room 55, Room 70)

You can connect a USB (Type A) to serial (D-sub 9) adapter to access the video systems API. Cisco recommends the UC232R-10 USB to RS232 (FTDI) adapter.

## Mute and unmute remote participants in a CMS hosted conference (Active Control) (All products)

When a video system is enabled for Active Control in a CMS (2.1 or later) conference you can mute and unmute remote participants from the participant list on the user interface (the feature must also be enabled on the CMS).

A video system that is running software version CE9.2 will not be unmuted directly. When you try to unmute such a video system remotely, a message will show up on its screen requesting the user to unmute the audio locally.

#### API commands for Custom input prompt (All products)

API commands are introduced to allow for an input prompt in the user interface: xCommand UserInterface Message TextInput \*. When issuing the display command a prompt with your custom text, a text input field for the user, and a submit button, shows up on the user interface. For example, you can prompt a user to leave feedback after an ended call. You can specify what type of input you want from the user: single line text, numeric, password, or PIN code.

The prompt can only be enabled via the API, so it is recommended to combine it with macros (not available for SX10) and either a custom user interface panel or an auto-triggered event.

#### Certificate upload via API (All products)

ASCII PEM formatted certificates can be installed directly using multiline API commands (xCommand Security Ceritificates CA Add, or xCommand Security Ceritificates Services Add). You can also upload certificates to a video system from its web interface, as before.

#### API commands for user management (All products)

You can create and manage user accounts directly using API commands (xCommand UserManagement User \*). As before, you can also do this from the video system's user interface.

#### Preview mode for In-Room Controls (All products)

The In-Room Control editor has a new preview mode. A virtual touch user interface shows how the design looks on the user interface. The user interface is interactive so that you can test the functionality. It produces real events on the video system, which can trigger any functionality you have created with a third-party control system or with a macro. A console in the right pane displays both the widget values when interacted with, and control system feedback messages.



#### Intelligent Proximity changes (All products)

A Proximity indicator is displayed on the screen (middle right) to inform that one or more clients are paired to the system with Cisco Proximity. The old indicator (top left), which was always shown when Proximity was enabled, has been removed.

You can no longer disable the Proximity services from the user interface.

The ultrasound settings have moved from Peripherals Pairing Ultrasound to Audio Ultrasound.

## Automatic factory reset when changing the call service (device activation) (All products)

The video system will automatically factory reset and restart when using the user interface to change the device activation method, for example from VCS to Cisco UCM. This will prevent conflicting configurations when provisioning the video system to a new service.

Changing the provisioning from the API will not automatically factory reset the video system.

## Support for separate RTP port ranges for audio and other media $(All\ products)$

You can configure the video system so that audio uses a different RTP port range than other media. The two ranges cannot overlap. As default, all media use the same RTP port range.

#### Configuration changes in CE9.2

#### New configurations

Audio Input HDMI[n] Mode (Codec Plus)

Audio Input HDMI[n] VideoAssociation MuteOnInactiveVideo (Room Kit, Codec Plus)

Audio Output InternalSpeaker Mode (Room 55)

Audio Ultrasound MaxVolume (All products)

Cameras Camera[1..2] Focus Mode (MX700/MX800)

Added for the integrated cameras

Cameras SpeakerTrack Whiteboard Mode (RoomKit, Codec Plus, Room 55)

Macros AutoStart (All products except SX10)

Macros Mode (All products except SX10)

NetworkServices HTTP Proxy Allowed (All products)

NetworkServices HTTP Proxy LoginName (All products)

NetworkServices HTTP Proxy Mode (All products)

NetworkServices HTTP Proxy Password (All products)

NetworkServices HTTP Proxy Url (All products)

Standby WakeupOnMotionDetection (All products)

UserInterface CustomMessage (All products)

UserInterface OSD HalfwakeMessage (All products)

UserInterface SettingsMenu Mode (All products)

Video Input Connector[n] CEC Mode (Room Kit, Codec Plus, Room 55)

Video Input Connector[n] HDCP Mode (Room 55)

#### Configurations that are removed

Conference MultiStream Mode (SX10, DX70/DX80)

#### Configurations that are modified

Audio Input MicrophoneMode (DX70/DX80)

OLD: User role: ADMIN

NEW: User role: ADMIN. INTEGRATOR

Audio Input Microphone[n] Level (Room Kit, Room 55)

OLD: Value space: 0..36 NEW: Value space: 0..26

Cameras Camera[n] Focus Mode (SX80, MX700/MX800, Codec Plus)

OLD: Value space: Auto/Manual

NEW: Value space: Auto/AutoLimited/Manual

Cameras SpeakerTrack Closeup (SX80, MX700/MX800, Room Kit, Codec Plus, Room 55)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras SpeakerTrack Whiteboard Mode (SX80, MX700/MX800)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, INTEGRATOR, USER

UserInterface Language (All products)

NEW: Arabic and Hebrew added to valuespace

UserInterface OSD Output (RoomKit)

OLD: Default value: 1

NEW: Default value: Auto

Video Input Connector[2] Name (Codec Plus, Room 55)

OLD: Default value: PC (HDMI1)

NEW: Default value: PC 1 (HDMI)

Video Input Connector[3] Name (Codec Plus, Room 55)

OLD: Default value: PC (HDMI2)

NEW: Default value: PC 2 (HDMI)

Video Output Connector[1] Resolution (MX200G2/MX300G2, DX70/DX80, Room 55)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, INTEGRATOR, USER

Video Selfview OnCall Mode (RoomKit)

OLD: Default value: Off NEW: Default value: On



#### Command changes in CE9.2

#### New commands

Cameras SpeakerTrack Whiteboard ActivatePosition (Room Kit, Codec Plus, Room 55)

Cameras SpeakerTrack Whiteboard AlignPosition (Room Kit, Codec Plus, Room 55)

Cameras SpeakerTrack Whiteboard SetDistance (Room Kit, Codec Plus, Room 55)

Cameras SpeakerTrack Whiteboard StorePosition (Room Kit, Codec Plus, Room 55)

Macros Log Clear (All products except SX10)

Macros Log Get (All products except SX10)

Macros Macro Activate (All products except SX10)

Macros Macro Deactivate (All products except SX10)

Macros Macro Get (All products except SX10)

Macros Macro Remove (All products except SX10)

Macros Macro Rename (All products except SX10)

Macros Macro Roles Set (All products except SX10)

Macros Macro Save (All products except SX10)

Macros Runtime Restart (All products except SX10)

Macros Runtime Start (All products except SX10)

Macros Runtime Status (All products except SX10)

Macros Runtime Stop (All products except SX10)

Message Send (All products)

Security Certificates CA Add (All products)

Security Certificates CA Delete (All products)

Security Certificates CA Show (All products)

Security Certificates Services Activate (All products)

Security Certificates Services Add (All products)

Security Certificates Services Deactivate (All products)

Security Certificates Services Delete (All products)

Security Certificates Services Show (All products)

Standby Halfwake (All products)

SystemUnit ProductPlatform Set (SX80, MX700/MX800, Codec Plus)

UserInterface Branding Delete (All products except SX10)

UserInterface Branding Get (All products except SX10)

UserInterface Branding Updated (All products except SX10)

UserInterface Branding Upload (All products except SX10)

UserInterface Extensions Widget Action (All products)

UserInterface Message TextInput Clear (All products)

UserInterface Message TextInput Display (All products)

UserManagement User Add (All products)

UserManagement User Delete (All products)

UserManagement User Get (All products)

UserManagement User List (All products)

UserManagement User Modify (All products)

Video CEC Input KeyClick (Room Kit, Codec Plus, Room 55)

Video CEC Output KeyClick (Room Kit, Codec Plus, Room 55)

#### Commands that are removed

UserInterface OSD Key Click (Room Kit, Codec Plus, Room 55)

UserInterface OSD Key Press (Room Kit, Codec Plus, Room 55)

UserInterface OSD Key Release (Room Kit, Codec Plus, Room 55)

#### Commands that are modified

Audio Microphones Mute (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER



Audio Microphones ToggleMute (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio Microphones Unmute (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio Sound Play (All products)

OLD: Sound: Alert / Bump / Busy / CallDisconnect / CallInitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / PresentationConnect / Ringing / SignIn / SpecialInfo / TelephoneCall / VideoCall / VolumeAdjust / WakeUp

NEW: Sound: Alert / Bump / Busy / CallDisconnect / CallInitiate / CallWaiting / Dial / KeyInput / KeyInputDelete / KeyTone / Nav / NavBack / Notification / OK / Pairing / PresentationConnect / Ringing / SignIn / SpecialInfo / TelephoneCall / VideoCall /

VolumeAdjust / WakeUp

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio Sound Stop (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio SoundsAndAlerts Ringtone List (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio SoundsAndAlerts Ringtone Play (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Audio SpeakerCheck (MX700/MX800)

OLD: Volume: Integer(1..10)

NEW: Volume: Integer(1..30)

Call Disconnect (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Camera PositionReset (SX80, SX20, SX10, MX200G2/MX300G2, MX700/MX800, Codec Plus)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Camera PositionSet (All products except DX70/DX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER Added: Lens: Wide / Center / Left / Right

Camera Ramp (All products except DX70/DX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras PresenterTrack ClearPosition (SX80, MX700/MX800)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras PresenterTrack Set (SX80, MX700/MX800)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras PresenterTrack StorePosition (SX80, MX700/MX800)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras SpeakerTrack Diagnostics Start (SX80, MX700/MX800, RoomKit, Codec Plus, Room 55)

OLD: User role: ADMIN. USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras SpeakerTrack Diagnostics Stop (SX80, MX700/MX800, RoomKit, Codec Plus, Room

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Cameras SpeakerTrack Whiteboard ActivatePosition (SX80, MX700/MX800)

Removed: Camera

Added: Camerald: Integer (1..7)

Cameras SpeakerTrack Whiteboard AlignPosition (SX80, MX700/MX800)

Removed: Camera

Added: Camerald: Integer (1..7)

Cameras SpeakerTrack Whiteboard StorePosition (SX80, MX700/MX800)

Removed: Camera

Added: Camerald: Integer (1..7)

Dial (All products)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Peripherals HeartBeat (All products)

OLD: User role: ADMIN, ROOMCONTROL, USER

NEW: User role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

SystemUnit Boot (All products)

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

 $SystemUnit\ FirstTimeWizard\ Stop\ (All\ products)$ 

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

UserInterface Extensions List (All products)

OLD: User role: INTEGRATOR, ROOMCONTROL, USER

NEW: User role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

UserInterface Message Prompt Display (All products)

Added: Duration: Integer(0..3600)

Video Input SetMainVideoSource (SX80, SX20, MX200G2/MX300G2, DX70/DX80, MX700/

MX800, Room Kit, Codec Plus, Room 55)

Added: Layout: Equal / PIP

OLD: User role: INTEGRATOR, USER

NEW: User role: ADMIN, INTEGRATOR, USER

Status changes in CE9.2

#### New statuses

Audio Input Connectors Microphone[n] EcReferenceDelay (Room Kit)

Cameras Camera[n] DetectedConnector (SX80, SX20, SX10, MX700/MX800, Codec Plus)

Cameras Camera[n] Position Lens (SX80, MX700/MX800, Codec Plus)

Cameras SpeakerTrack ActiveConnector (SX80, MX700/MX800, Room Kit, Codec Plus, Room

55)

Video Input Connector[n] ConnectedDevice CEC[n] LogicalAddress (Room Kit, Codec Plus, Room 55)

 $\label{thm:connectedDevice} \mbox{Video Output ConnectedDevice CEC[n] LogicalAddress \mbox{\it (All products)}}$ 

Video Output Connector[n] ConnectedDevice ScreenSize (All products)

#### Statuses that are removed

Video Input Connector[n] ConnectedDevice CEC[n] PowerControl (Room Kit, Codec Plus, Room 55)

Cameras SpeakerTrack LeftCamera VideoInputConnector (SX80, MX700/MX800)

Cameras SpeakerTrack RightCamera VideoInputConnector (SX80, MX700/MX800)

#### Statuses that are modified

Diagnostics Message[n] Type (All products)

Removed from valuespace: CamerasDetectedNoIr / UdpPortRangeViolation

Added to valuespace: CameraDetected / CertificateExpiry / MacrosRuntimeStatus / MediaPortRangeNegative / MediaPortRangeOdd / MediaPortRangeOverlap / MediaPortRangeTooSmall / MediaPortRangeValueSpace / MicrophonesConnected / SparkActivationRequired / VideoPortRangeNegative / VideoPortRangeOdd / VideoPortRangeTooSmall / VideoPortRangeValueSpace / UltrasoundConfigSettings

Video Input MainVideoSource (All products)

OLD: Value space: Integer

NEW: Value space: 1 / 2 / 3 / 4 / Composed

#### What's new in CE9.1

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.1 (CE9.1) compared to CE9.0.

For more details, we recommend reading the Software release notes:

▶ https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

Dual Screen experience and Active Control for CMS based meetings (All products except DX70/DX80, SX10, SX20, MX200/MX300)

Dual screen video systems can utilize both screens for video in a CMS based meeting. The video system receives two transcoded video streams and one content stream from the CMS, and utilizes both screens to render the streams.

With Active Control enabled, you get a participant list that shows all meeting participants and their current activity status, such as mute, sharing and active speaker indication. You can change the layout seamlessly from the touch interface by using the layout selection panels.

#### New wake-up experience (All products)

SX10/DX70: only Halfwake

Other products: Halfwake, and Standby with motion detection

The new wake-up experience introduces a *Halfwake* state, which leads to a calmer wake-up of the system, and gives users better guidance on how to get started.

When wake-up on motion detection is enabled the system will automatically wake to the *Halfwake* state when people enter the room. The system will also wake to this state when a user pairs a Cisco Proximity client to the system (also DX70).

#### Bluetooth headset support (DX70, DX80)

A Bluetooth headset can be used with the video system. The headset must support HFP (Hands Free Protocol). The user can enable Bluetooth and set the video system in Bluetooth pairing mode from the user interface.

## Support for the EAP authentication framework for wireless networks (DX70, DX80, Room Kit)

In addition to WPA-PSK and WPA2-PSK, the video system now supports the WPA-EAP authentication framework for Wi-Fi connections. In total the following methods are supported:

- · Open
- WPA-PSK (AES)
- · WPA2-PSK (AES)
- EAP-TLS
- · EAP-TTLS
- · EAP-FAST
- PEAP
- EAP-MSCHAPv2
- · EAP-GTC

Additions for Room Analytics (All products except SX10, DX70, DX80)

Detect people presence in the room: The video system has the capability to find whether there are people present in the room. The feature is based on ultrasound, and it does not keep record of who was in the room, only whether or not the room is in use.

People count (only Room Kit, Codec Plus, Room 55): The video system counts the number of people in the room when in a call, and when displaying the self-view picture. You can configure the video system to also count the number of people outside of call, but the video system cannot count the number of people when it is in standby. It does not keep record of who was in the room, only the number of faces that were detected.



#### Network port 2 can be disabled (DX70, DX80)

You can connect a computer to the network through the video system's second network port. Then you only need one network wall socket to support both the video system and the computer.

For security reasons, we recommend that you disable this network port if the video system is used in a public environment. This way, you prevent someone from connecting a computer to your network through the video system.



#### System configuration changes in CE9.1

#### New configurations

Cameras Camera Framerate (Room Kit)

NetworkPort [2] Mode (DX70, DX80)

RoomAnalytics PeopleCountOutOfCall (Room Kit)

RoomAnalytics PeoplePresenceDetector (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX20, SX80)

#### Configurations that are removed

None.

#### Configurations that are modified

Conference DefaultCall Rate (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX20, SX80)

OLD: Default value: 3072 NEW: Default value: 6000

Conference MultiStream Mode (MX700, MX800, Room Kit, SX80)

OLD: Valuespace: Off; Default value: Off
NEW: Valuespace: Auto/Off; Default value: Auto

Network[ 1] IEEE8021X Password (All products)

OLD: Valuespace: String(0, 32)
NEW: Valuespace: String(0, 50)

Peripherals Profile TouchPanels (SX80, Room Kit)

OLD: Default value: NotSet

NEW: Default value: Minimum1

#### Video Input Connector [n] PresentationSelection (All products)

OLD: Valuespace: AutoShare/Manual/OnConnect (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX10, SX20, SX80)

OLD: Valuespace: AutoShare/Desktop/Hidden/Manual/OnConnect (DX70, DX80)

NEW: Valuespace: AutoShare/Desktop/Manual/OnConnect (All products)

Video Output Connector [1..2] MonitorRole (Room Kit)

OLD: Default value: Connector [1]: First; Connector [2]: Second

NEW: Default value: Auto



System command changes in CE9.1

#### New commands

SystemUnit FirstTimeWizard Stop (All products)

UserInterface Extensions Set (All products)

#### Commands that are removed

Camera PositionReset (Room Kit)

Camera TriggerAutofocus (Room Kit)

#### Commands that are modified

Audio Select (DX70, DX80)

OLD: Device: Internal/HeadsetUSB/HeadsetAnalog/HandsetUSB

NEW: Device: Internal/HeadsetBluetooth/HeadsetUSB/HeadsetAnalog/HandsetUSB

Audio Volume Decrease (DX70, DX80)

OLD: Device: Internal/HeadsetUSB/HeadsetAnalog/HandsetUSB

NEW: Device: Internal/HeadsetBluetooth/HeadsetUSB/HeadsetAnalog/HandsetUSB

Audio Volume Increase (DX70, DX80)

OLD: Device: Internal/HeadsetUSB/HeadsetAnalog/HandsetUSB

NEW: Device: Internal/HeadsetBluetooth/HeadsetUSB/HeadsetAnalog/HandsetUSB

Audio Volume Set (DX70, DX80)

OLD: Device: Internal/HeadsetUSB/HeadsetAnalog/HandsetUSB

NEW: Device: Internal/HeadsetBluetooth/HeadsetUSB/HeadsetAnalog/HandsetUSB

Audio Volume SetToDefault (DX70, DX80)

OLD: Device: Internal/HeadsetUSB/HeadsetAnalog/HandsetUSB

NEW: Device: Internal/HeadsetBluetooth/HeadsetUSB/HeadsetAnalog/HandsetUSB

Dial (DX70, DX80)

OLD: CallRate: Integer (64..6000) NEW: CallRate: Integer (64..3072)

Cameras SpeakerTrack Diagnostics Start (MX700, MX800, Room Kit, SX80)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, USER

Cameras SpeakerTrack Diagnostics Stop (MX700, MX800, Room Kit, SX80)

OLD: User role: ADMIN, INTEGRATOR

NEW: User role: ADMIN, USER

Presentation Start (Room Kit)

OLD: ConnectorID: Integer (0..65534)

NEW: ConnectorID: Integer (1..2)

OLD: PresentationSource: Integer (0..65534)

NEW: PresentationSource: Integer (1..2)

Presentation Stop (Room Kit)

OLD: PresentationSource: Integer (0..65534)

NEW: PresentationSource: Integer (1..2)

SystemUnit FactoryReset (All products)

OLD: Keep: LocalSetup/Network/Spark/Provisioning

NEW: Keep: LocalSetup/Network/Spark/Provisioning/SerialPort/Certificates (not in use)

#### System status changes in CE9.1

#### New statuses

Audio Output Connectors Line ConnectionStatus (Room Kit)

Audio Output Connectors Line ConnectionStatus (Room Kit)

Audio Devices Bluetooth ActiveProfile (DX70, DX80)

Audio VolumeHeadsetBluetooth (DX70, DX80)

RoomAnalytics PeopleCount Current (Room Kit)

RoomAnalytics PeoplePresence (SX20, SX80, Room Kit, MX200, MX300, MX700, MX800)

SystemUnit Software OptionKeys Encryption (SX20, Room Kit, DX70, DX80)

Video Input Connector [n] ConnectedDevice CEC [n] DeviceType (Room Kit)

Video Input Connector [n] ConnectedDevice CEC [n] Name (Room Kit)

Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus (Room Kit)

Video Input Connector [n] ConnectedDevice CEC [n] Vendorld (Room Kit)

#### Statuses that are removed

Cameras Camera [n] Flip (Room Kit)

Cameras Camera [n] HardwarelD (Room Kit)

Cameras Camera [n] MacAddress (DX70, DX80, Room Kit)

Cameras Camera [n] Position Focus (Room Kit)

Cameras Camera [n] SerialNumber (Room Kit)

Cameras Camera [n] SoftwareID (Room Kit)

Video Input Source [n] TmdsClockPresent (Room Kit)

#### Statuses that are modified

Diagnostics Message Type (All products)

OLD: Value space: CAPFOperationState / CTLinstallation / CUCMVendorConfigurationFile / CallProtocolDualStackConfig / CallProtocollPStackPlatformCompatibility / CallProtocolVcsProvisioningCompatibility / Camerald / CameraPairing / CameraSerial / CameraSoftwareVersion / CameraStatus / CamerasDetected / ConfigurationFile / DefaultCallProtocolRegistered / EthernetDuplexMatches / FanStatus / PresenterTrack / H320GatewayStatus / H323GatekeeperStatus / HasValidReleaseKey / IpCameraStatus / IPv4Assignment / IPv6Assignment / IPv6Mtu / ISDNLinkCompatibility / ISDNLinkIpStack

/ ITLinstallation / InvalidSIPTransportConfig / LockDown / RoomControl / MediaBlockingDetected / NetLinkStatus / NetSpeedAutoNegotiated / NetworkQuality / NTPStatus / OSDVideoOutput / OutputConnectorLocations / ProvisioningDeveloperOptions / ProvisioningStatus / SIPEncryption / SIPListenPortAndOutboundMode / SIPProfileRegistration / SIPProfileType / SelectedVideoInputSourceConnected / SipIceAndAnatConflict / SIPListenPortAndRegistration / TCPMediaFallback / TemperatureCheck / TLSVerifvRequiredCerts / TouchPanelConnection / ControlSystemConnection / TurnBandwidth / UdpPortRangeViolation / UltrasoundSpeakerAvailability / ValidPasswords / VideoFromInternalCamera / VideoInputStability / VideoInputSignalQuality / SparkConnectivity / SpeakerTrackFrontPanelMountedCorrectly / SpeakerTrackMicrophoneConnection / SpeakerTrackVideoInputs / SpeakerTrackEthernetConnection / ANATOnVCS / ECReferenceDelay / AudioECRefDelay / AudioPairingNoise / AudioPairingRate / AudioPairingSNR / AudioPairingInterference / AudioPairingTokenDecode / AudioInternalSpeakerDisabled / AbnormalCallTermination / HasActiveCallProtocol / SipOrH323ButNotBothEnabled / PresentationSourceSelection / SoftwareUpgrade / PlatformSanity / ContactInfoMismatch / MicrophoneReinforcement / FirstTimeWizardNotCompleted / CaptivePortalDetected / MonitorDelay NEW: Value space: CAPFOperationState / CTLinstallation / CUCMVendorConfigurationFile / CallProtocolDualStackConfig / CallProtocollPStackPlatformCompatibility / CallProtocolVcsProvisioningCompatibility / Camerald / CameraPairing / CameraSerial / CameraSoftwareVersion / CameraStatus / CameraSDetected / CameraSDetectedNoIr / ConfigurationFile / DefaultCallProtocolRegistered / EthernetDuplexMatches / FanStatus / PresenterTrack / H320GatewayStatus / H323GatekeeperStatus / HasValidReleaseKey / IpCameraStatus / IPv4Assignment / IPv6Assignment / IPv6Mtu / ISDNLinkCompatibility / ISDNLinklpStack / ITLinstallation / InvalidSIPTransportConfig / LockDown / RoomControl / MediaBlockingDetected / NetLinkStatus / NetSpeedAutoNegotiated / NetworkQuality / NTPStatus / OSDVideoOutput / OutputConnectorLocations / ProvisioningDeveloperOptions / ProvisioningStatus / SIPEncryption / SIPListenPortAndOutboundMode / SIPProfileRegistration / SIPProfileType / SelectedVideoInputSourceConnected / SipIceAndAnatConflict / SIPListenPortAndRegistration / TCPMediaFallback / TemperatureCheck / TLSVerifyRequiredCerts / TouchPanelConnection / ControlSystemConnection / TurnBandwidth / UdpPortRangeViolation / UltrasoundSpeakerAvailability / ValidPasswords / VideoFromInternalCamera / VideoInputStability / VideoInputSignalQuality / SparkConnectivity / SpeakerTrackFrontPanelMountedCorrectly / SpeakerTrackMicrophoneConnection / SpeakerTrackVideoInputs / SpeakerTrackEthernetConnection / ANATOnVCS / ECReferenceDelay / AudioECRefDelay / AudioPairingNoise / AudioPairingRate / AudioPairingSNR / AudioPairingInterference / AudioPairingTokenDecode / AudioInternalSpeakerDisabled / AbnormalCallTermination / HasActiveCallProtocol / SipOrH323ButNotBothEnabled / PresentationSourceSelection / SoftwareUpgrade / PlatformSanity / ContactInfoMismatch / MicrophoneReinforcement /

FirstTimeWizardNotCompleted / CaptivePortalDetected / MonitorDelay / WifiCARequired



Standby State (All products)

OLD: Value space: Standby/EnteringStandby/Off

NEW: Value space: Standby/EnteringStandby/Halfwake/Off

#### What's new in CE9.0

This section provides an overview of the new and changed system settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.0 (CE9.0) compared to CE8.3.

For more details, we recommend reading the Software release notes:

▶ https://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/ products-release-notes-list.html

#### New features and improvements

#### Updated user interface

The user interfaces on the Touch 10, on screen, and on the integrated touch screen have been updated. The main menu items on the home screen have been replaced with more prominent activities.

Some of the setting have been removed from the Touch 10 advanced settings menu to align with the on-screen display menu.

#### Wakeup on motion detection

Wakeup on motion detection senses when a person walks into the conference room and the system wakes up automatically. You need to enable the following setting for this feature to work:

xConfiguration Standby WakeupOnMotionDetection

You can't manually place the system in standby when this feature is enabled.

#### Updated In-Room Control Editor

The In-Room Control editor is updated with a new look, improved logic and usability for producing a control interface more efficiently. In addition, a new directional pad widget and an In-Room Control simulator is added.

#### Added language support

We have added support for Potuguese (Portugal) to the on-screen display and Touch controller menus.

#### Other changes

- · Support for HTTPS client certificates has been added.
- Unplugging the presentation cable instantly stops the presentation sharing.



System configuration changes in CE9.0

New configurations

Cameras SpeakerTrack Closeup (MX700, MX800, SX80)

NetworkServices HTTPS Server MinimumTLSVersion (All products)

NetworkServices HTTPS StrictTransportSecurity (All products)

NetworkServices UPnP Mode (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)

Configurations that are removed

Audio Microphones PhantomVoltage (MX200 G2, MX300 G2, SX20)

Configurations that are modified

Cameras Camera [n] \* (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)

OLD: User role: ADMIN, USER

NEW: User role: ADMIN, INTEGRATOR

Cameras SpeakerTrack \* (MX700, MX800, SX80)

OLD: User role: ADMIN. USER

NEW: User role: ADMIN. INTEGRATOR

Conference MultiStream Mode (MX200 G2, MX300 G2, MX700, MX800, SX20, SX80)

OLD: Value space: Auto/Off
NEW: Value space: Off

UserInterface Language (All products)

NEW: Portuguese added to value space

xConfigurations with INTERATOR user role

A new user role - INTEGRATOR - is introduced in CE9.0. It has been added to the following

configurations:

Audio DefaultVolume (All products)

Audio Input HDMI [n] \* (MX700, MX800, SX80)

Audio Input Line [n] \* (MX700, MX800, SX20, SX80)

Audio Input Microphone [n] \* (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)

Audio MicrophoneReinforcement \* (MX700, MX800, SX80)

Audio Microphones Mute Enabled (All products)

Audio Output HDMI [n] \* (SX80)

Audio Output Line [n] \* (MX700, MX800, SX10, SX20, SX80)

Audio SoundsAndAlerts \* (All products)

Cameras Camera [n] \* (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)

Cameras SpeakerTrack \* (MX700, MX800, SX80)

Conference DefaultCall Rate (All products)

Conference DoNotDisturb DefaultTimeout (All products)

GPIO Pin [n] Mode (MX700, MX800, SX80)

Peripherals Profile \* (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)

SerialPort BaudRate (MX700, MX800, SX20, SX80)

SerialPort Mode (All products)

Standby \* (DX70, DX80, MX200 G2, MX300 G2, SX10, SX20, SX80)

Standby BootAction (MX700, MX800)

Standby Control (MX700, MX800)

Standby Delay (MX700, MX800)

Standby StandbyAction (MX700, MX800)

Standby WakeupAction (MX700, MX800)

SystemUnit Name (All products)

Time Zone (All products)

UserInterface OSD Output (All products)

Video Input Connector [n] CameraControl Camerald (All products)

Video Input Connector [n] CameraControl Mode (All products)

Video Input Connector [n] InputSourceType (All products)

Video Input Connector [n] Name (All products)

Video Input Connector [n] PresentationSelection (All products)

Video Input Connector [n] Quality (All products)

Video Input Connector [n] Visibility (All products)

Video Monitors (All products)

Video Output Connector [n] CEC Mode (All products)

Video Output Connector [n] MonitorRole (MX700, MX800, SX20, SX80)

Video Output Connector [n] Resolution (All products)

Video Presentation DefaultPIPPosition (All products)

Video Selfview Default \* (All products)

Video Selfview OnCall \* (All products)

<path> \* means that the change applies to all configurations starting with <path>.



## System command changes in CE9.0

#### New commands

Audio Microphones ToggleMute (All products)

Audio Volume ToggleMute (All products)

Audio Sound Play (All products)

Audio Sound Stop (All products)

Cameras AutoFocus Diagnostics Start (MX700, MX800, Room Kit, SX80)

Cameras AutoFocus Diagnostics Stop (MX700, MX800, Room Kit, SX80)

SystemUnit SignInBanner Clear (All products)

SystemUnit SignInBanner Get (All products)

SystemUnit SignInBanner Set (All products)

Video Output Monitor Backlight Set (MX700, MX800)

Video Output Monitor Brightness Set (MX700, MX800)

Video Output Monitor Color Blue Set (MX700, MX800)

Video Output Monitor Color Green Set (MX700, MX800)

Video Output Monitor Color Red Set (MX700, MX800)

Video Output Monitor Color Select (MX700, MX800)

Video Output Monitor Contrast Set (MX700, MX800)

Video Output Monitor CSC Select (MX700, MX800)

Video Output Monitor Gamma Set (MX700, MX800)

Video Output Monitor Reset (MX700, MX800)

Video Output Monitor Sharpness Set (MX700, MX800)

#### Commands that are modified

SystemUnit FactoryReset (All products)

NEW: Keep: LocalSetup, Network, Spark, Provisioning

#### xCommand with INTEGRATOR user role

Audio Microphones Mute (All products)

Audio Microphones ToggleMute (All products)

Audio Microphones Unmute (All products)

Audio Sound Play (All products)

Audio SoundsAndAlerts Ringtone List (All products)

Audio SoundsAndAlerts Ringtone Play (All products)

Audio Sound Stop (All products)

Cameras AutoFocus Diagnostics Start (MX700, MX800, Room Kit, SX80)

Cameras AutoFocus Diagnostics Stop (MX700, MX800, Room Kit, SX80)

Cameras PresenterTrack ClearPosition (SX80, MX700, MX800)

Cameras PresenterTrack Set (SX80, MX700, MX800)

Cameras PresenterTrack StorePosition (SX80, MX700, MX800)

Cameras SpeakerTrack Diagnostics Start (SX80, MX700, MX800)

Peripherals Connect (All products)

Peripherals List (All products)

Standby Activate (All products)

Standby Deactivate (All products)

SystemUnit Boot (All products)

UserInterface Extensions Clear (All products)

UserInterface Extensions List (All products)

UserInterface Extensions Widget SetValue (All products)

UserInterface Extensions Widget UnsetValue (All products)

UserInterface Message Alert Clear (All products)

UserInterface Message Alert Display (All products)

UserInterface Message Prompt Clear (All products)

UserInterface Message Prompt Display (All products)

UserInterface Message Prompt Response (All products)

UserInterface Message TextLine Clear (All products)

UserInterface Message TextLine Display (All products)

UserInterface Presentation ExternalSource Add (All products)



UserInterface Presentation ExternalSource List (All products)

UserInterface Presentation ExternalSource Remove (All products)

UserInterface Presentation ExternalSource RemoveAll (All products)

UserInterface Presentation ExternalSource Select (All products)

UserInterface Presentation ExternalSource State Set (All products)

UserManagement User Passphrase Change (All products)

Video Input SetMainVideoSource (DX70, DX80, MX200 G2, MX300 G2, MX700, MX800, SX20, SX80)

# System status changes in CE9.0

#### New statuses

Cameras PresenterTrack Availability (MX700, MX800, SX80)

Cameras PresenterTrack PresenterDetected (MX700, MX800, SX80)

Cameras PresenterTrack Status (MX700, MX800, SX80)

Video Output Connector [n] ConnectedDevice CEC [n] Name (All products)

Video Output Connector [n] ConnectedDevice CEC [n] Vendorld (All products)

#### Statuses that are modified

Diagnostics Message [n] Type (All Products)

OLD: CAPFOperationState, CTLinstallation, CUCMVendorConfigurationFile, CallProtocolDualStackConfig, CallProtocollPStackPlatformCompatibility, CallProtocolVcsProvisioningCompatibility, Camerald, CameraPairing, CameraSerial, CameraSoftwareVersion, CameraStatus, CamerasDetected, ConfigurationFile, DefaultCallProtocolRegistered, EthernetDuplexMatches, FanStatus, PresenterTrack, H320GatewayStatus, H323GatekeeperStatus, HasValidReleaseKey, IpCameraStatus, IPv4Assignment, IPv6Assignment, IPv6Mtu, ISDNLinkCompatibility, ISDNLinklpStack, ITLinstallation, InvalidSIPTransportConfig, LockDown, RoomControl, MediaBlockingDetected, NetLinkStatus, NetSpeedAutoNegotiated, NetworkQuality, NTPStatus, OSDVideoOutput, OutputConnectorLocations, ProvisioningStatus, SIPEncryption, SIPListenPortAndOutboundMode, SIPProfileRegistration, SIPProfileType, SelectedVideoInputSourceConnected, SipIceAndAnatConflict, TCPMediaFallback, TemperatureCheck, TLSVerifyRequiredCerts, TouchPanelConnection, ControlSystemConnection, TurnBandwidth, UdpPortRangeViolation, UltrasoundSpeakerAvailability, ValidPasswords, VideoFromInternalCamera, VideoInputStability, SparkConnectivity, SpeakerTrackFrontPanelMountedCorrectly, SpeakerTrackMicrophoneConnection. SpeakerTrackVideoInputs. SpeakerTrackEthernetConnection, ANATOnVCS, ECReferenceDelay, AudioECRefDelay, AudioPairingNoise, AudioPairingRate, AudioPairingSNR, AudioPairingInterference, AudioPairingTokenDecode, AudioInternalSpeakerDisabled, AbnormalCallTermination, HasActiveCallProtocol, SipOrH323ButNotBothEnabled, PresentationSourceSelection, SoftwareUpgrade, PlatformSanity, ContactInfoMismatch, MicrophoneReinforcement NEW: CAPFOperationState, CTLinstallation, CUCMVendorConfigurationFile, CallProtocolDualStackConfig, CallProtocollPStackPlatformCompatibility, CallProtocolVcsProvisioningCompatibility, Camerald, CameraPairing, CameraSerial, CameraSoftwareVersion, CameraStatus, CamerasDetected, ConfigurationFile, DefaultCallProtocolRegistered, EthernetDuplexMatches, FanStatus, PresenterTrack,

H320GatewayStatus, H323GatekeeperStatus, HasValidReleaseKey, IpCameraStatus,

IPv4Assignment, IPv6Assignment, IPv6Mtu, ISDNLinkCompatibility, ISDNLinklpStack, ITLinstallation, InvalidSIPTransportConfig, LockDown, RoomControl, MediaBlockingDetected, NetLinkStatus, NetSpeedAutoNegotiated, NetworkQuality, NTPStatus. OSDVideoOutput. OutputConnectorLocations. ProvisioningDeveloperOptions. ProvisioningStatus, SIPEncryption, SIPListenPortAndOutboundMode, SIPProfileRegistration, SIPProfileType, SelectedVideoInputSourceConnected, SiplceAndAnatConflict, SIPListenPortAndRegistration, TCPMediaFallback, TemperatureCheck, TLSVerifyRequiredCerts, TouchPanelConnection, ControlSystemConnection, TurnBandwidth, UdpPortRangeViolation, UltrasoundSpeakerAvailability, ValidPasswords, VideoFromInternalCamera, VideoInputStability, VideoInputSignalQuality, SparkConnectivity, SpeakerTrackFrontPanelMountedCorrectly, SpeakerTrackMicrophoneConnection, SpeakerTrackVideoInputs, SpeakerTrackEthernetConnection, ANATOnVCS, ECReferenceDelay, AudioECRefDelay, AudioPairingNoise, AudioPairingRate, AudioPairingSNR, AudioPairingInterference, AudioPairingTokenDecode, AudioInternalSpeakerDisabled, AbnormalCallTermination, HasActiveCallProtocol, SipOrH323ButNotBothEnabled, PresentationSourceSelection, SoftwareUpgrade, PlatformSanity, ContactInfoMismatch, MicrophoneReinforcement, FirstTimeWizardNotCompleted, CaptivePortalDetected, MonitorDelay

#### xStatus with INTEGRATOR user role

Audio Input Connectors Microphone[n] ConnectionStatus (MX200 G2, MX300 G2, SX10, SX20)

Audio Microphones Mute (All products)

Audio Output Connectors Line[n] DelayMs (All products)

Audio Volume (All products)

Call[n] FacilityServiceId (All products)

Call[n] ReceiveCallRate (All products)

Call[n] TransmitCallRate (All products)

Cameras Camera[n] Capabilities Options (All products)

Cameras Camera[n] Connected (All products)

Cameras Camera[n] Flip (MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] MacAddress (DX70, DX80, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] Manufacturer (All products)

Cameras Camera[n] Model (All products)



Cameras Camera[n] Position Focus (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] Position Pan (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] Position Tilt (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] Position Zoom (MX200 G2, MX300 G2, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] SerialNumber(DX70, DX80, MX700, MX800, Room Kit, SX10, SX20, SX80)

Cameras Camera[n] SoftwareID (All products)

Cameras PresenterTrack Availability (MX700, MX800, SX80)

Cameras PresenterTrack PresenterDetected (MX700, MX800, SX80)

Cameras PresenterTrack Status (MX700, MX800, SX80)

Cameras SpeakerTrack Availability (MX700, MX800, Room Kit, SX80)

Cameras SpeakerTrack LeftCamera VideoInputConnector (MX700, MX800, SX80)

Cameras SpeakerTrack RightCamera VideoInputConnector(MX700, MX800, SX80)

Cameras SpeakerTrack Status (MX700, MX800, SX80)

Conference DoNotDisturb (All products)

Conference Presentation Callld (All products)

Conference Presentation LocalInstance[n] SendingMode (All products)

Conference Presentation LocalInstance[n] Source (All products)

Conference Presentation Mode (All products)

GPIO Pin[n] State (MX700, MX800, SX80)

Peripherals ConnectedDevice[n] HardwareInfo (All products)

Peripherals ConnectedDevice[n] ID (All products)

Peripherals ConnectedDevice[n] Name (All products)

Peripherals ConnectedDevice[n] SoftwareInfo (All products)

Peripherals ConnectedDevice[n] Status (All products)

Peripherals ConnectedDevice[n] Type (All products)

Peripherals ConnectedDevice[n] UpgradeStatus(All products)

Standby State (All products)

SystemUnit State NumberOfActiveCalls (All products)

SystemUnit State NumberOfInProgressCalls (All products)

Time SystemTime (All products)

UserInterface Extensions Widget[n] Value (All products)

UserInterface Extensions Widget[n] WidgetId (All products)

Video ActiveSpeaker PIPPosition (All products)

Video Input Connector[n] Connected (All products)

Video Input Connector[n] SignalState (All products)

Video Input Connector[n] Sourceld (All products)

Video Input Connector[n] Type (All products)

Video Input Source[n] ConnectorId (All products)

Video Input Source[n] FormatStatus (All products)

Video Input Source[n] FormatType (All products)

Video Input Source[n] Resolution Height (All products)

Video Input Source[n] Resolution RefreshRate (All products)

Video Input Source[n] Resolution Width (All products)

Video Output Connector[n] Connected (All products)

Video Output Connector[n] ConnectedDevice CEC[n] DeviceType (All products)

Video Output Connector[n] ConnectedDevice CEC[n] Name (All products)

Video Output Connector[n] ConnectedDevice CEC[n] PowerControl (All products)

Video Output Connector[n] ConnectedDevice CEC[n] PowerStatus (All products)

Video Output Connector[n] ConnectedDevice CEC[n] Vendorld (All products)

Video Output Connector[n] ConnectedDevice Name (All products)

Video Output Connector[n] ConnectedDevice PreferredFormat (All products)

Video Selfview FullscreenMode (All products)

Video Selfview Mode (All products)

Video Selfview OnMonitorRole (All products)

Video Selfview PIPPosition (All products)

Chapter 2

# About the API



# API fundamentals

This chapter contains a top-level view of the mechanisms supported by the codec API.

Here you can read about how to access the API, how to use the command line and what the different parts of the API can be used for. This chapter also describes how to use the feedback functions that are available for the codec.

The API consists of four major groups:

- Commands
- Configurations
- Status
- Events

These four groups are hierarchically organized, which makes it easier to find related functionality. You can find the complete lists of all commands, configurations and statuses in the following chapters.

NOTE: The commands return values that may affect how the codec interacts with 3rd party systems. These may change from release to release and are not documented.

# Connecting to the API

There are several ways to access the codec API. Regardless of which method you choose, the structure of the API is the same. Choose the connection method that suits your application best. Before you start, please read this section about the different methods, as some of those may require additional configuration changes before being enabled.

The following configurations, apart from password, can be set from the System configuration menu on the web interface or from the command line interface. All of the examples are for the command line interface.

#### Password

The video system is delivered with a default user account with full credentials. The user name is admin, and initially, no password is set for the default user.

It is mandatory to set a password for the admin user in order to restrict access to system configuration. You should in addition set a password for any other user with similar credentials.

You can set the password on the codec's web interface. Open a web browser and enter the IP address of the video system in the address bar and sign in. Click your user name in the upper right corner and choose *Change password* in the drop down menu.

#### SSH

SSH is a secure TCP/IP connection and it is enabled by default on the codec. It can be disabled. You need a SSH client, such as PuTTY, to access the API over SSH.

xConfiguration NetworkServices SSH Mode:
<Off,On>

#### Telnet for DX, MX, and SX series

Telnet can be viewed as the equivalent of the serial protocol in the TCP/IP world. Telnet is disabled by default. Before connecting to the codec with Telnet you have to enable it.

To enable the Telnet service, configure the following setting on the codec. Changing this setting does not require a reboot of the device, but it may take some time to take effect.

xConfiguration NetworkServices Telnet Mode:
<Off,On>

## HTTP/HTTPS

As HTTP/HTTPS are connectionless protocols, there is no persistent connection. There are several ways of communicating with the API over HTTP.

In order to enable or disable the HTTP and HTTPS services, configure the following setting on the codec.

xConfiguration NetworkServices HTTP Mode:
<Off, HTTP+HTTPS, HTTPS>

#### Connecting

You can inspect the API by entering the IP address or host name of the codec in your web browser. In the web interface, you can find the API documents under the menu section *Integration > Developer API*. The HTTP POST and GET methods are used to execute commands and get feedback from the codec. This is described in \(\rightarrow\)"Using HTTP" on page 54 in this document.



## Ethernet ports

The main network port - Network port 1 - is always reserved for the connection to LAN. This applies to all video systems.

Some of our video systems have more than one network port. The additional ports can be used for peripheral devices like cameras, Touch 10, and more.

A device that is connected to such a network port gets a local IP address from the codec, and therefore is not part of the corporate network.

- A Cisco device is assigned a dynamic IP address in the range (DHCP): 169.254.1.41 to 169.254.1.240
- A non-Cisco device is assigned the dynamic IP address (DHCP): 169.254.1.30

NOTE: Only one non-Cisco device can get a dynamic IP address at a time.

 A non-Cisco device can be assigned a static IP address in the range: 169.254.1.241 to 169.254.1.254

This method can also be used to connect to the codec with SSH. In this case you can use the IP address 169.254.1.1.

#### Power over Ethernet (PoE)

The following products have one or more Ethernet ports that provide PoE:

- Codec Plus, Room 55, Room 55 Dual, Room 70 (marked with the Touch controller symbol ( ))
- Codec Pro, Room 70 G2 (2 ports: one marked with the Touch controller symbol ( ), the other with the letters "PoE")

#### RS-232 / serial connection<sup>2</sup>

Depending on the product the codec has either an USB or a standard COM-port for serial communication. It can be used without an IP address, DNS or a network. Serial connection is allowed by default.

xConfiguration SerialPort Mode: <Off/On>

For more details, refer to your products Administrator Guide.

#### Baud-rate and other serial port parameters

The serial port uses 115200 bps, 8 data bits, no parity and 1 stop bit. The default baud rate is set to 115200 bps.

The exception to this is SX20, where the serial port uses 38400 bps, 8 data bits, no parity and 1 stop bit. The default baud rate is set to 38400 bps.

The codec can give very much feedback. We therefore recommend keeping the connection at this speed or higher to avoid sluggishness.

On MX700, MX800, SX20, SX80, and the Room series, you can change the baud rate if required.

xConfiguration SerialPort BaudRate

During the initial boot sequence, the codec uses a baud rate of 38400 bps regardless of the baud rate you have set.

#### Login and password

You can choose whether login is required or not for serial connections. For security reasons the password prompting is turned on by default, but it can be turned off if preferred.

xConfiguration SerialPort LoginRequired: <Off/On>

#### User roles

A user account may hold one or a combination of user roles. A user account with full access rights, like the default admin user, should possess the ADMIN, USER and AUDIT roles.

These are the user roles:

ADMIN: A user with this role can create new users, change most settings, make calls, and search the contact lists. The user cannot upload audit certificates and change the security audit settings.

USER: A user with this role can make calls and search the contact lists. The user can modify a few settings, for example adjust the ringtone volume and set the time and date format.

AUDIT: A user with this role can change the security audit settings and upload audit certificates.

ROOMCONTROL: A user with this role can create in-room controls. The user has access to the In-room control editor and associated development tools.

INTEGRATOR: A user with this role has access to settings, commands and status that are required to set up advanced AV scenarios, and to integrate our video systems with 3rd party equipment. Such a user can also create in-room controls.

#### Cisco Webex registered systems

If a video system is registered to Cisco's cloud service (Cisco Webex), only local users with the INTEGRATOR and ROOMCONTROL user roles are available.

<sup>&</sup>lt;sup>1</sup> Depending on the video system, Network port 1 is marked with the number 1, the network symbol  $(\frac{p}{a}b)$ , or both.

<sup>&</sup>lt;sup>2</sup> Not available for DX70, DX80, Room 55 Dual, and Room 70.

# API output

The xPreferences is used to set preferences for the RS-232, Telnet and SSH sessions.

The output modes are:

Terminal: Line based output for use with line based control systems

XML: XML output for use with control systems that understand XML.

JSON: JSON format is convenient when integrating with web based systems.

The default output mode is terminal. To change this you have to define your preferences for each session individually. Examples in this guide are in terminal mode.

To set output mode to XML, issue the command:

xPreferences outputmode xml

To revert to terminal mode, issue the command:

xPreferences outputmode terminal

#### Example: Command in terminal mode

xCommand Audio Volume Set Level: 50

#### Example: Command in XML mode



# Using the command line

#### Help

To get a list of all supported top level commands you can type? or help after connecting to the video system using RS-232, Telnet or SSH (Example 1).

#### Bye

Typing the bye command closes the command line interface.

#### API commands

#### xConfiguration

Configurations are system settings, such as system name and network settings. These are persistent across boots. Refer to \(\rightarrow\)"Configurations" on page 48.

#### xCommand

Commands instruct the codec to execute actions, such as to dial a number or to search the phone book.

Refer to \( \)"Commands" on page 48.

#### xStatus

A status contains the current state of the codec, such as connected calls, the status of the gatekeeper registration, connected inputs and output sources.

Refer to ▶"Status" on page 48.

#### xFeedback

The Feedback commands are used to specify what parts of the configuration and status hierarchies to monitor. Feedback is only issued on the RS-232, Telnet or SSH session for which it is specified. If you are connecting to the codec with multiple sessions, you have to define feedback individually for each session. Refer to ▶"Feedback mechanism" on page 52.

#### Example 1:

?

- User Commands -

helpxcommandxconfigurationxeventxfeedbackxgetxmlxdocumentxpreferencesxtransactionxstatusbyeechologsystemtoolsOK

#### xPreferences

The xPreferences command is used to set preferences for the RS-232, Telnet and SSH sessions. Refer to \*API output" on page 45.

#### Echo <on/off>

If echo is set to On the key inputs are displayed when entering text in a command line interface.

If echo is set to Off user input is not displayed when entering text in a command line interface.

#### xEvent

The xEvent command returns information on which events are available for feedback. Refer to ▶"Events" on page 51.

#### xGetxml

The xGetxml request returns an XML document based on the location parameter attached to the request. The elements (or a complete document) matching the expression will be returned. Refer to \"Feedback mechanism" on page 52.

#### Other commands

#### Systemtools

The systemtools commands are a set of command line tools for administrative control and diagnostics. The commands can be used for advanced troubleshooting together with Cisco technical support. Systemtools are not a part of the programming API. Refer to ▶"The SystemTools commands" on page 422.

#### Log

The log command is used to enable advanced logs. It is only used for debugging the system.

#### Command line shortcuts

If your client supports it, there are some timesaving shortcuts you can use:

- Tab-completion to complete the commands and arguments.
- Arrow up and arrow down keys to navigate your command history.
- <CTRL-a>: Jump to the beginning of the line.
- <CTRL-e>: Jump to the end of the line.
- · <CTRL-r>: Incremental command history search.
- <CTRL-w>: Frase the current line.

# Searching

You can use // to search for elements anywhere in the status or configuration hierarchy (Example 1).

You can also combine multiple //'s (Example 2).

NOTE: The search shortcuts work well for inspecting the API, but should not be used in applications. We recommend that you always use the complete paths to avoid command ambiguity when upgrading to newer firmware releases.

#### Example 1:

List all configurations that include words that starts with OUT and HDMI:

xconfiguration //out//hdmi
\*c xConfiguration Audio Output HDMI 1 Level: 0
\*c xConfiguration Audio Output HDMI 1 Mode: On
\*c xConfiguration Audio Output HDMI 2 Level: 0

\*c xConfiguration Audio Output HDMI 2 Mode: Off \*\* end

# Example 2:

\*\* end

Get the resolution width of all connected sources for both inputs and outputs:

xStatus //vid//res//wid

\*s Video Input Source 1 Resolution Width: 1920

\*s Video Input Source 2 Resolution Width: 0

\*s Video Input Source 3 Resolution Width: 0

\*s Video Input Source 4 Resolution Width: 0

\*s Video Output Connector 1 Resolution Width: 1920

\*s Video Output Connector 2 Resolution Width: 1280

\*s Video Output Connector 3 Resolution Width: 1280

## Value types and formats

The system supports the following value types:

- Integer values: <x..y>
   Defines the valid range for an integer input. x = min value,
   y = max value.
- Literal values: <X/Y/../Z>
   Defines the possible values for a given configuration.
- String values: <S: x, y>
   Defines that the valid input for this configuration is a string with minimum length of x and maximum length of y characters. Strings can have rules that further specify their format and length.

#### Input values that contain spaces need to be quoted

Any values for configurations and commands containing spaces must be enclosed in quotes. Quotes are not necessary for values without spaces.

#### Example:

```
Correct: xCommand dial number: "my number contains spaces"
Correct: xCommand dial number: 12345
Incorrect: xCommand dial number: my number contains spaces
```

#### Case sensitivity

All commands are case-insensitive. All of the following commands will work.

XCOMMAND DIAL NUMBER: foo@bar.org xcommand dial number: foo@bar.org xCommand Dial Number: foo@bar.org

#### Commands

Commands instruct the codec to execute actions, such as to dial a number or to search the phone book. All commands start with the prefix xCommand followed by a command path.

Writing xCommand? on the command line will list all the top level commands.

To view the complete list of commands and their parameters, write xCommand ?? on the command line.

Command arguments are key-value pairs.

When issuing a xCommand, the command consists of one argument and one required parameter. In this document the command usage is described for all xCommands, with both required and optional parameters. The optional parameters are in brackets.

#### Example:

xCommand Dial Number: 123

xCommand is the command prefix. The command to be executed is Dial.

The example contains one argument, Number: 123. Number is the key and 123 is its value. The key/value pair is separated with ':'.

# Configurations

Configurations are system settings that are persistent across boots. Like commands, also configurations are structured in a hierarchy.

Writing xConfiguration? on the command line lists all the top level configurations.

Writing xConfiguration ?? lists all configurations and their value spaces.

Writing xConfiguration lists all configurations and their current values. To list out only some of the configurations, write xConfiguration followed by one or more parts of the configuration paths.

#### Example: Set the H323 Alias ID

Type:

xConfiguration H323 Profile 1 H323Alias ID: "changed@company.com"

#### Example: Get the H323 Alias ID

Type:

xConfiguration H323 Profile 1 H323Alias ID

Result:

\*c xConfiguration H323 Profile 1 H323Alias ID: "changed@company.com"

#### Status

A status contains the current state of the codec, such as connected calls, the status of the gatekeeper registration, connected inputs and output sources.

Writing xStatus? on the command line lists all top level statuses.

Writing xStatus lists all statuses and their current values.

To list out only some of the statuses, write xstatus followed by the relevant part of the status path (address expression):

xStatus <address expression>

<sup>\*\*</sup>end



# Multiline commands

Multiline commands are commands that support larger amounts of data as input than the single line commands. Typical use for these commands is to allow for provisioning of in-room control definitions, branding images (base64 encoded), macros, welcome banners, and security certificates.

To issue a multiline command, you start issuing it like any other XAPI command. However, once you enter the command, you have set the API into an input mode where anything you issue on the API after this is treated as input to that command, including line breaks. You now enter the payload for this command in accordance to the input format expected by this command

When done, finish with a line break("\n") and a separate line containing just a period ending with a line break (".\n"). The command will now be executed, and you will get a command result with an OK or ERROR depending on the command being executed successfully or not.

The commands that require multiline input format are marked as such in the command descriptions in this guide.

The multiline commands are marked as multiline in xCommand overview section in this guide.

#### Example: Set up welcome banner text

xCommand SystemUnit SignInBanner Set Hello!
This is the second line of text.
This is the third.
Thank you!

#### ΟK

- \*r SignInBannerSetResult (status=OK):
- \*\* end

# Synchronous API calls

The API works asynchronously. This means that there is no guarantee that command responses arrive in the same order as the commands were issued. The codec may also respond with feedback between your request and the response, in form of status changes or events, due to changes on the system.

For some applications it might be crucial to match requests with responses. The API therefore supports a response-tagging mechanism.

This mechanism works with all command types: xcommand, xconfiguration, and xstatus. A typical use of this would be to create a command queue in your application and assign unique IDs to every command sent to the codec. A listener then listens to all feedback from the codec and matches the ID on the response with the corresponding ID in the command queue. This enables matching the original request with the specific response.

```
Example:
   xcommand Video Layout Add | resultId="mytag 1"
   *r VideoLayoutAddResult (status=OK):
   LayoutId: 1
   ** resultId: "mytag 1"
   ** end
In XML mode the resultId is added as an attribute to the top-level XmlDoc tag:
   xgetxml /Configuration/Video/Layout/Scaling | resultId="mytag 2"
   <XmlDoc resultId="mytag 2">
   <Configuration item="1">
     <Video item="1">
         <Layout item="1">
              <Scaling item="1" valueSpaceRef="...">Off</Scaling>
         </Layout>
     </Video>
   </Configuration>
   </XmlDoc>
```

# **Events**

Event returns information about the events that are available for feedback. This overview presents examples of some the events that are available on the API.

To get an overview of the supported events:

- xEvent Lists the top level events
- xEvent <top level category> List all of the available events in that category
- xEvent \* Lists all available events on that codec

The result for events depends on the state of the codec.

#### Example 1: Outgoing Call Indication

Outgoing Call Indication is an event reported when an outgoing call is about to be dialled. Returns the CallId the call has been assigned.

- \*e OutgoingCallIndication CallId: x
- \*\* end

#### Example 2: Call Disconnect

Call Disconnect is an event reported when a call is disconnected. Returns the CallId of the disconnected call and reason for the call's disconnection.

- \*e CallDisconnect CallId: x CauseValue: 0 CauseString: "" CauseType: LocalDisconnect OrigCallDirection: "outgoing"
- \*\* end

#### Example 3: Call Successful

Call Successful is an event reported when a call is connected successfully, that is when all channels are up and established.

- \*e CallSuccessful CallId: 132 Protocol: "h223" Direction: "outgoing" CallRate: 768 RemoteURI: "h223:integratorHQ@company.com" EncryptionIn: "Off" EncryptionOut: "Off"
- \*\* end

#### Example 4: FECC Action request

FECC Action request is an event reported when far end is sending FECC commands.

\*e FeccActionInd Id: 132 Req: 1 Pan: 1 PanRight: 1 Tilt: 0 TiltUp: 0 Zoom: 0 ZoomIn: 0 Focus: 0 FocusIn: 0 Timeout: 300 VideoSrc: 0 m: 0 \*\* end

#### Example 5: TString message received

TString message received is an event reported when far end has sent a TString message.

\*e TString CallId: 132 Message: "ee"
\*\* end

#### Example 6: SString message received

SString message received is an event reported when far end has sent a SString message.

- \*e SString String: "ee" Id: 132
- \*\* end



# Feedback mechanism

To build solutions that can reliably keep the state between your application and the codec synchronized, you can set up a notification system to report the changes in the state of the codec.

The API supports notifications on the following:

- Configuration changes
- Status changes
- Event notifications

These notifications will not be sent unless you have explicitly told the codec to do so. You can subscribe to the feedback by registering feedback expressions. How you register feedback expressions varies according to the connection method used.

When using HTTP, the method of handling feedback differs slightly from what is presented in this section. See the "Feedback from codec over HTTP" on page 56 for more information.

WARNING: A codec may give very much feedback, especially when calls are connected and disconnected. Do only subscribe to the feedback you need.

Never register for all status feedback by issuing xFeedback register /Status. This may give the control application too much data to handle, which may lead to sluggish or unpredictable behavior.

#### Feedback expressions

The expression used when registering for feedback is a variant of the XPath language. The XPath language describes a way to select nodes from an XML/JSON document. The CE software contains three main feedback documents.

Document	API command	Path
Status	xStatus	/Status
Configuration	xConfiguration	/Configuration
Event	xEvent	/Event

The syntax for feedback registering is: xFeedback register <path>

Never register for all status feedback by issuing xFeedback register /Status.

It is safe to register for all configuration changes using xFeedback register /Configuration, as configuration changes will most likely not occur that often.

By going through some examples, we can see how this information can be used to build feedback expressions. A good way to verify the expressions is to point your browser to <a href="http://cip-address/getxml?location=path">http://cip-address/getxml?location=path</a> or to execute <a href="mailto:xgetxml">xgetxml</a> <a href="mailto:ygetxml">ygetxml</a>?path> from the terminal, and check that the output matches the nodes you want feedback on.

#### Example 1: Microphones Mute status

#### Terminal query

xStatus Audio Microphones Mute

\*s Audio Microphones Mute: Off

\*\* end

#### Equivalent feedback expression

xFeedback register /Status/Audio/Microphones/Mute

#### Example 2: Name of all video input connectors

#### Terminal guery

xConfiguration Video Input Connector Name

\*c xConfiguration Video Input Connector 1 Name: "NameA"

\*c xConfiguration Video Input Connector 2 Name: "NameB"

\*c xConfiguration Video Input Connector 3 Name:
"NameC"

\*c xConfiguration Video Input Connector 4 Name: "NameD"

\*c xConfiguration Video Input Connector 5 Name: "NameE"

\*\* end

#### Equivalent feedback expression

xFeedback register /Configuration/Video/Input/Connector/Name

#### Example 3: Name of video input connector 3

#### Terminal query

xConfiguration Video Input Connector 3 Name \*c xConfiguration Video Input Connector 3 Name:

"NameC"
\*\* end

# Equivalent feedback expression

xFeedback register /Configuration/Video/Input/ Connector[@item='3']/Name

#### Terminal connections

#### Managing feedback subscriptions

To register, list and deregister feedback expressions you use the command xFeedback and its corresponding sub commands.

The registered expressions are only valid for the currently active connection. If you open two Telnet sessions and register to get feedback in one session, you do not receive feedback in the other session. This also means that if you disconnect from a session, you have to re-register all expressions after reconnecting.

You can register up to 38 expressions.

#### Feedback output

The feedback output is exactly the same as you get when querying the system using the xConfiguration and xStatus commands. E.g., if you issue the command xStatus Standby Active on the command line the result is:

- \*s Standby Active: On
- \*\* end

If you have registered for feedback on status changes the feedback you get when the system goes to standby-mode will be exactly the same:

- \*s Standby Active: On
- \*\* end

This means that when you are programming against the device you only need to handle one format.

#### Example: Managing feedback subscriptions

A: Register feedback expressions.

Write in: xFeedback register /Status/Audio

Result: \*\* end

OK

Write in: xFeedback register /Event/CallDisconnect

Result: \*\* end

OK

Write in: xFeedback register /Configuration/Video/

MainVideoSource

Result: \*\* end

OK

B: List out currently registered expressions.

Write in: xFeedback list

Result: /Configuration/Video/MainVideoSource

/Event/CallDisconnect

/Status/Audio

\*\* end

OK

C: Deregister feedback expressions.

Write in: xFeedback deregister /Event/CallDisconnect

Result: \*\* end

OK

Write in: xFeedback deregister /Status/Audio

Result: \*\* end

OK

D: List the new feedback expressions.

Write in: xFeedback list

Result: /Configuration/Video/MainVideoSource

\*\* end

OK



# Using HTTP

The codec supports sending commands and configurations over HTTP and HTTPS. It is also possible to retrieve configurations and statuses this way. This interface exposes the same API as the command line, but in XML format.

#### HTTP XMLAPI Authentication

Access to the XMLAPI requires the user to authenticate using HTTP Basic Access Authentication as a user with 'ADMIN' role. Unauthenticated requests prompt a 401 HTTP response containing a Basic Access Authentication challenge. How to use HTTP Basic Access Authentication varies according to the HTTP library or tool that you are using.

If your application will be issuing multiple commands through the API, we highly recommend that you use Session Authentication (see below). The standard basic authentication does a full re-authentication per request, which may affect the performance of your application.

#### HTTP XMI API Session Authentication

Authenticating with your username and password combination for each API request might introduce too much latency for some use-cases. To mitigate this, the API supports a session-based authentication mechanism.

To open a session, issue a POST to http://<ip-address>/xmlapi/session/begin with Basic Access Authentication. The response sets a SessionId-cookie that can be used with subsequent requests.

Note that when using API Session Authentication, it is important to explicitly close the session when you are done. Failing to do so may cause the device to run out of sessions, as there are a limited number of concurrent sessions available, and they do not time out automatically.

#### URL cheat sheet

The following table contains the main URLs used when accessing the API over HTTP.

Method	URL	Description
GET	http:// <ip-address>/status.xml</ip-address>	Complete status document
GET	http:// <ip-address>/configuration.xml</ip-address>	Complete configuration document
GET	http:// <ip-address>/command.xml</ip-address>	Complete command document
GET	http:// <ip-address>/valuespace.xml</ip-address>	Complete valuespace document
GET	http:// <ip-address>/getxml?location=<path></path></ip-address>	Retrieve document based on a path
POST	http:// <ip-address>/putxml</ip-address>	Configurations and commands in HTTP body

#### Example: Starting a HTTP XMLAPI session

#### Request:

POST /xmlapi/session/begin HTTP/1.1

Authorization: Basic <Base64 encoded authentica-

tion string>

#### Response:

HTTP/1.1 204 No Content Server: nginx/1.8.0 Connection: keep-alive

Set-Cookie: SessionId=f08102c8ce5aaf8fba23a7238
cc2ef464b990e18bfbb7fb048820c0e28955c54; Path=/;

HttpOnly

This session counts toward the systems concurrent sessions limit

With an open session, provide the SessionId cookie to following requests. Your tool/library may do this automatically.

#### Example: Using a HTTP XMLAPI session

#### Request:

GET /configuration.xml HTTP/1.1

Cookie: SessionId=f08102c8ce5aaf8fba23a7238cc2ef46

4b990e18bfbb7fb048820c0e28955c54

#### Response:

HTTP/1.1 200 OK Server: nginx/1.8.0

Content-Type: text/xml; charset=UTF-8

Content-Length: 43549
Connection: keep-alive
<?xml version="1.0"?>

<Configuration product="Cisco Codec"
version="ce8.2.0" apiVersion="4">> ...

</Configuration>

To close a session after use, issue a POST to http://<ip-address>/xmlapi/session/end with the provided cookie.

## Example: Closing a HTTP XMLAPI session

#### Request:

POST /xmlapi/session/end HTTP/1.1

Cookie: SessionId=f08102c8ce5aaf8fba23a7238cc2ef46

4b990e18bfbb7fb048820c0e28955c54

#### Response:

HTTP/1.1 204 No Content Server: nginx/1.8.0 Connection: keep-alive

Set-Cookie: SessionId=; Max-Age=0; Path=/;

HttpOnly

# Getting status and configurations

Example 1: Get all status entries on the codec.

http://<ip-address>/getxml?location=/Status

Example 2: Get just the audio statuses of the codec.

http://<ip-address>/getxml?location=/Status/Audio

Example 3: Get all configurations of the codec.

http://<ip-address>/getxml?location=/Configuration

Example 4: Get all video configurations of the codec.

http://<ip-address>/getxml?location=/ Configuration/Video

# Sending commands and configurations

#### Using HTTP POST

When sending configurations and commands to the codec, it is important that the HTTP header Content-Type is set to text/xml, i.e. Content-Type: text/xml. The body of the POST should contain the XML content.

## Example 1: Changing the system name.

#### Request

```
POST /putxml HTTP/1.1
Content-Type: text/xml
<Configuration>
  <SvstemUnit>
    <Name>newName</Name>
  </SystemUnit>
</Configuration>
```

#### Example 2: Setting the camera position.

#### Request

```
POST /putxml HTTP/1.1
Content-Type: text/xml
<Command>
  <Camera>
   <PositionSet command="True">
      <CameraId>1</CameraId>
      <Pan>200</Pan>
     <Tilt>200</Tilt>
   </PositionSet>
 </Camera>
</Command>
```

#### Response

```
HTTP/1.1 200 OK
Content-Type: text/xml
Content-Length: 91
<?xml version="1.0"?>
<Command>
<CameraPositionSetResult item="1" status="OK"/>
</Command>
```



# Feedback from codec over HTTP

You can get the device to post http feedback messages (also known as webhooks) on changes to the API state, e.g. statuses, events and configuration updates. The HTTP Post feedback messages will be sent to the specified ServerURL. You can choose between events being posted in either XML or JSON format. You can subscribe to changes on multiple parts of the API by register up to 15 different feedback expressions.

#### Registering for feedback

The command for registering is xCommand HttpFeedback Register. The syntax for this command and its arguments are described in this section.

#### HttpFeedback Register syntax:

```
xCommand HttpFeedback Register
    FeedbackSlot: <1..4>
    ServerUrl(r): <S: 1, 2048>
    Format: <XML/JSON>
    Expression: <S: 1, 255>
    Expression: <S: 1, 255>
```

#### HttpFeedback Register arguments:

**FeedbackSlot:** The codec can register up to 4 slots of servers requesting HTTP feedback. Set the registering to one of them.

NOTE: Avoid using FeedbackSlot 3 in an environment where Cisco TelePresence Management Suite (TMS) is used as TMS uses this feedback slot to register its expressions.

**ServerUrl:** The URL to the HTTP server where you want the codec to post the HTTP feedback messages to.

**Format:** Set the format for the feedback from the HTTP server to XML or JSON.

**Expression 1-15:** The XPath expression specifies which parts of the Status, Configuration or Event documents are monitored. You can have from 1 to 15 XPath expressions

Register the expressions you want to receive feedback on. See the "Feedback mechanism" on page 52 section for more information about the expression formats.

**Example:** Registering feedback on configuration changes, disconnect events and call status changes.

```
POST /putxml HTTP/1.1
Content-Type: text/xml
<Command>
  <HttpFeedback>
    <Register command="True">
      <FeedbackSlot>1</FeedbackSlot>
      <ServerUrl>http://127.0.0.1/
      myhttppostscripturl</ServerUrl>
      <Format>XML</Format>
      <Expression item="1">/Configuration</
      Expression>
      <Expression item="2">/Event/
      CallDisconnect</Expression>
     <Expression item="3">/Status/Call</
      Expression>
    </Register>
  </HttpFeedback>
</Command>
```

#### Feedback output

When the codec notifies the registered HTTP server about changes, the body contains the same XML as when polling. There is however one small difference. The root-node contains an Identification node with children that specify the codec from which the notification originated. This means that you can handle multiple codecs with a single HTTP server LIRI

Example: Audio volume changed.

```
<Configuration xmlns="http://www.company.com/XML/</pre>
CUITI/2.0">
  <Identification>
   <SystemName>My System Name</SystemName>
   <MACAddress>00:00:de:ad:be:ef</MACAddress>
   <IPAddress>192.168.1.100</IPAddress>
   <ProductType>Cisco Codec</ProductType>
   <ProductID>Cisco Codec SX80</ProductID>
   <SWVersion>CE8.3.0.199465</SWVersion>
   <HWBoard>101401-5 [08]
   <SerialNumber>PH0000000
  </Identification>
  <Audio item="1">
   <Volume item="1">60</Volume>
  </Audio>
</Configuration>
```



# Translating from terminal mode to XML

#### Translating commands

The XML commands maintain the same structure as the terminal commands, but they use a parent-child relationship to describe the hierarchy. You can see this structure in the examples below.

#### Example 1: Setting up a call.

#### Terminal

#### Example 2: Assigning volume level

#### Terminal

#### Translating configurations

</Input>

</Configuration>

Translating from xConfiguration to XML is similar to commands, but with the addition of a special attribute item="NN" for specifying the index in arrays.

# Example: Configuring the input source type for video input connector 2.

#### Terminal



# Dos and don'ts

Here are some best practices when programming the Cisco DX, MX, SX, and Room series API.

#### AVOID remote control emulation

The use of xCommand UserInterface OSD Key Click and xCommand UserInterface OSD Key Press commands is highly discouraged. The commands are still available in the API, but we recommend the use of direct commands, as this ensures backwards compatibility in your integrations. Program against the codec, not the on-screen-display.

# DO use complete commands

You should always use complete commands when programming, i.e. always use xConfiguration Video instead of xconf vid. The shortcuts can be used for searches in the API on the command line, but not for programming. The reason for this is that you might end up with ambiguous code when additional commands are added to the API.

# DO NOT subscribe to unnecessary feedback

Subscribing to too much feedback may congest the control application. Although the amount of feedback may seem fine in the current version, the amount of feedback may grow in future releases.

# Chapter 3

# xConfiguration commands



# Description of the xConfiguration commands

In this chapter, you can find a complete list of the xConfiguration commands. The examples show either the default value or an example of a value.

We recommend you visit our web site regularly for updated versions of the manual.

Go to: https://www.cisco.com/go/telepresence/docs

Audio configuration	65
xConfiguration Audio DefaultVolume	65
xConfiguration Audio Input ARC [n] Mode	65
xConfiguration Audio Input HDMI [n] Level	66
xConfiguration Audio Input HDMI [n] Mode	66
xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo	67
xConfiguration Audio Input Line [n] Equalizer ID	6
xConfiguration Audio Input Line [n] Equalizer Mode	6
xConfiguration Audio Input Line [n] VideoAssociation MuteOnInactiveVideo	68
xConfiguration Audio Input Line [n] VideoAssociation VideoInputSource	68
xConfiguration Audio Input Line [n] Channel	69
xConfiguration Audio Input Line [n] Level	69
xConfiguration Audio Input Line [n] Mode	70
xConfiguration Audio Input Microphone [n] EchoControl Mode	70
xConfiguration Audio Input Microphone [n] EchoControl Dereverberation	7
xConfiguration Audio Input Microphone [n] EchoControl NoiseReduction	7
xConfiguration Audio Input Microphone [n] Equalizer ID	72
xConfiguration Audio Input Microphone [n] Equalizer Mode	
xConfiguration Audio Input Microphone [n] Level	72
xConfiguration Audio Input Microphone [n] Mode	73
xConfiguration Audio Input Microphone [n] Type	73
xConfiguration Audio Input Microphone [n] PhantomPower	74
xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnlnactiveVideo	74
xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource	
xConfiguration Audio Input MicrophoneMode	75
xConfiguration Audio KeyClickDetector Attenuate	
xConfiguration Audio KeyClickDetector Enabled	76

xConfiguration Audio Microphones Mute Enabled	7
xConfiguration Audio MicrophoneReinforcement Input Microphone [n] Mode	7
xConfiguration Audio MicrophoneReinforcement Output Line [n] Mode	7
xConfiguration Audio MicrophoneReinforcement Gain	7
xConfiguration Audio Output ARC [n] Delay DelayMs	7
xConfiguration Audio Output ARC [n] Delay Mode	7
xConfiguration Audio Output ARC [n] Mode	7
xConfiguration Audio Output HDMI [n] Delay DelayMs	7
xConfiguration Audio Output HDMI [n] Delay Mode	8
xConfiguration Audio Output HDMI [n] Level	8
xConfiguration Audio Output HDMI [n] Mode	8
xConfiguration Audio Output InternalSpeaker Mode	8
xConfiguration Audio Output Line [n] Channel	8
xConfiguration Audio Output Line [n] Delay DelayMs	8
xConfiguration Audio Output Line [n] Delay Mode	8
xConfiguration Audio Output Line [n] Equalizer ID	8
xConfiguration Audio Output Line [n] Equalizer Mode	8
xConfiguration Audio Output Line [n] Level	8
xConfiguration Audio Output Line [n] Mode	8
xConfiguration Audio Output Line [n] OutputType	8
xConfiguration Audio SoundsAndAlerts RingTone	
xConfiguration Audio SoundsAndAlerts RingVolume	8
xConfiguration Audio Ultrasound MaxVolume	8
Cameras configuration	
xConfiguration Cameras Camera [n] AssignedSerialNumber	8
xConfiguration Cameras Camera [n] Backlight DefaultMode	8

xConfiguration Cameras Camera [n] Brightness Mode	87
xConfiguration Cameras Camera [n] Brightness DefaultLevel	88
xConfiguration Cameras Camera [n] Flip	88
xConfiguration Cameras Camera [n] Focus Mode	89
xConfiguration Cameras Camera [n] Gamma Mode	89
xConfiguration Cameras Camera [n] Gamma Level	90
xConfiguration Cameras Camera [n] Mirror	90
xConfiguration Cameras Camera [n] Whitebalance Mode	9
xConfiguration Cameras Camera [n] Whitebalance Level	91
xConfiguration Cameras Camera Framerate	92
xConfiguration Cameras Preset TriggerAutofocus	92
xConfiguration Cameras SpeakerTrack Mode	93
xConfiguration Cameras SpeakerTrack Closeup	93
xConfiguration Cameras SpeakerTrack TrackingMode	94
xConfiguration Cameras SpeakerTrack ConnectorDetection Mode	92
xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft	95
xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight	95
xConfiguration Cameras SpeakerTrack Whiteboard Mode	96
Conference configuration	96
xConfiguration Conference AutoAnswer Mode	96
xConfiguration Conference AutoAnswer Mute	97
xConfiguration Conference AutoAnswer Delay	97
xConfiguration Conference DefaultCall Protocol	97
xConfiguration Conference DefaultCall Rate	98
xConfiguration Conference DoNotDisturb DefaultTimeout	98
xConfiguration Conference Encryption Mode	98
xConfiguration Conference FarEndControl Mode	99
xConfiguration Conference FarEndMessage Mode	99
xConfiguration Conference MaxReceiveCallRate	99
xConfiguration Conference MaxTransmitCallRate	100
xConfiguration Conference MaxTotalReceiveCallRate	100
xConfiguration Conference MaxTotalTransmitCallRate	10
xConfiguration Conference MultiStream Mode	10

GPIO configuration	102
xConfiguration GPIO Pin [n] Mode	102
H323 configuration	103
xConfiguration H323 Authentication Mode	103
xConfiguration H323 Authentication LoginName	103
xConfiguration H323 Authentication Password	103
xConfiguration H323 CallSetup Mode	104
xConfiguration H323 Encryption KeySize	104
xConfiguration H323 Gatekeeper Address	104
xConfiguration H323 H323Alias E164	104
xConfiguration H323 H323Alias ID	105
xConfiguration H323 NAT Mode	105
xConfiguration H323 NAT Address	106
Macros configuration	106
xConfiguration Macros Mode	106
xConfiguration Macros AutoStart	107
Network configuration	107
xConfiguration Network [n] DNS DNSSEC Mode	107
xConfiguration Network [n] DNS Domain Name	108
xConfiguration Network [n] DNS Server [m] Address	108
xConfiguration Network [n] IEEE8021X Mode	109
xConfiguration Network [n] IEEE8021X TIsVerify	109
xConfiguration Network [n] IEEE8021X UseClientCertificate	110
xConfiguration Network [n] IEEE8021X Identity	110
xConfiguration Network [n] IEEE8021X Password	110
xConfiguration Network [n] IEEE8021X AnonymousIdentity	111
xConfiguration Network [n] IEEE8021X Eap Md5	111
xConfiguration Network [n] IEEE8021X Eap Ttls	112
xConfiguration Network [n] IEEE8021X Eap TIs	112
xConfiguration Network [n] IEEE8021X Eap Peap	113
xConfiguration Network [n] IPStack	113



xConfiguration Network [n] IPv4 Assignment	114
xConfiguration Network [n] IPv4 Address	114
xConfiguration Network [n] IPv4 Gateway	114
xConfiguration Network [n] IPv4 SubnetMask	115
xConfiguration Network [n] IPv6 Assignment	115
xConfiguration Network [n] IPv6 Address	116
xConfiguration Network [n] IPv6 Gateway	116
xConfiguration Network [n] IPv6 DHCPOptions	116
xConfiguration Network [n] MTU	116
xConfiguration Network [n] QoS Mode	11
xConfiguration Network [n] QoS Diffserv Audio	11
xConfiguration Network [n] QoS Diffserv Video	118
xConfiguration Network [n] QoS Diffserv Data	118
xConfiguration Network [n] QoS Diffserv Signalling	119
xConfiguration Network [n] QoS Diffserv ICMPv6	119
xConfiguration Network [n] QoS Diffserv NTP	120
xConfiguration Network [n] RemoteAccess Allow	120
xConfiguration Network [n] Speed	12
xConfiguration Network [n] VLAN Voice Mode	12
xConfiguration Network [n] VLAN Voice VlanId	122
NetworkPort configuration	122
xConfiguration NetworkPort [n] Mode	122
NetworkServices configuration	123
xConfiguration NetworkServices CDP Mode	123
xConfiguration NetworkServices H323 Mode	123
xConfiguration NetworkServices HTTP Mode	123
xConfiguration NetworkServices HTTP Proxy LoginName	124
xConfiguration NetworkServices HTTP Proxy Password	124
xConfiguration NetworkServices HTTP Proxy Mode	124
xConfiguration NetworkServices HTTP Proxy Url	125
xConfiguration NetworkServices HTTP Proxy PACUrl	125
xConfiguration NetworkServices HTTPS Server MinimumTLSVersion	125

xConfiguration NetworkServices HTTPS StrictTransportSecurity	125
xConfiguration NetworkServices HTTPS VerifyServerCertificate	126
xConfiguration NetworkServices HTTPS VerifyClientCertificate	126
xConfiguration NetworkServices NTP Mode	127
xConfiguration NetworkServices NTP Server [n] Address	127
xConfiguration NetworkServices SIP Mode	127
xConfiguration NetworkServices SNMP Mode	128
xConfiguration NetworkServices SNMP Host [n] Address	128
xConfiguration NetworkServices SNMP CommunityName	129
xConfiguration NetworkServices SNMP SystemContact	129
xConfiguration NetworkServices SNMP SystemLocation	129
xConfiguration NetworkServices SSH Mode	129
xConfiguration NetworkServices SSH HostKeyAlgorithm	130
xConfiguration NetworkServices Telnet Mode	130
xConfiguration NetworkServices UPnP Mode	130
xConfiguration NetworkServices WelcomeText	131
Peripherals configuration	131
xConfiguration Peripherals Profile Cameras	131
xConfiguration Peripherals Profile Cameras	
-	132
xConfiguration Peripherals Profile ControlSystems	132
xConfiguration Peripherals Profile ControlSystems	132
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type. xConfiguration Phonebook Server [n] URL	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type. xConfiguration Phonebook Server [n] URL	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID. xConfiguration Phonebook Server [n] Type xConfiguration Phonebook Server [n] URL  Provisioning configuration xConfiguration Provisioning Connectivity	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type xConfiguration Phonebook Server [n] URL  Provisioning configuration xConfiguration Provisioning Connectivity xConfiguration Provisioning ExternalManager Address	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type xConfiguration Phonebook Server [n] URL  Provisioning configuration xConfiguration Provisioning Connectivity xConfiguration Provisioning ExternalManager Address xConfiguration Provisioning ExternalManager AlternateAddress	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type xConfiguration Phonebook Server [n] URL  Provisioning configuration xConfiguration Provisioning Connectivity xConfiguration Provisioning ExternalManager Address xConfiguration Provisioning ExternalManager AlternateAddress xConfiguration Provisioning ExternalManager Protocol	
xConfiguration Peripherals Profile ControlSystems xConfiguration Peripherals Profile TouchPanels  Phonebook configuration xConfiguration Phonebook Server [n] ID xConfiguration Phonebook Server [n] Type xConfiguration Phonebook Server [n] URL  Provisioning configuration xConfiguration Provisioning Connectivity xConfiguration Provisioning ExternalManager Address xConfiguration Provisioning ExternalManager AlternateAddress	



xConfiguration Provisioning Mode	136
xConfiguration Provisioning LoginName	136
xConfiguration Provisioning Password	136
Proximity configuration	137
xConfiguration Proximity Mode	137
xConfiguration Proximity Services CallControl	137
xConfiguration Proximity Services ContentShare FromClients	137
xConfiguration Proximity Services ContentShare ToClients	138
RoomAnalytics configuration	138
xConfiguration RoomAnalytics PeopleCountOutOfCall	138
xConfiguration RoomAnalytics PeoplePresenceDetector	139
SerialPort configuration	139
xConfiguration SerialPort Mode	139
xConfiguration SerialPort BaudRate	140
xConfiguration SerialPort LoginRequired	140
SIP configuration	140
xConfiguration SIP Authentication UserName	140
xConfiguration SIP Authentication Password	140
xConfiguration SIP DefaultTransport	141
xConfiguration SIP DisplayName	141
xConfiguration SIP Ice DefaultCandidate	141
xConfiguration SIP Ice Mode	141
xConfiguration SIP ListenPort	142
xConfiguration SIP Proxy [n] Address	142
xConfiguration SIP Turn Server	142
xConfiguration SIP Turn UserName	142
xConfiguration SIP Turn Password	143
xConfiguration SIP URI	143
Standby configuration	143
xConfiguration Standby BootAction	143

xConfiguration Standby Control	144
xConfiguration Standby Delay	144
xConfiguration Standby StandbyAction	144
xConfiguration Standby WakeupAction	144
xConfiguration Standby WakeupOnMotionDetection	145
xConfiguration Standby PowerSave	145
SystemUnit configuration	146
xConfiguration SystemUnit Name	146
xConfiguration SystemUnit CrashReporting Mode	146
xConfiguration SystemUnit CrashReporting Url	146
Time configuration	147
xConfiguration Time TimeFormat	
xConfiguration Time DateFormat	
xConfiguration Time Zone	
xConfiguration Time WorkDay Start	149
xConfiguration Time WorkDay End	
xConfiguration Time WorkWeek FirstDayOfWeek	149
xConfiguration Time WorkWeek LastDayOfWeek	149
UserInterface configuration	150
xConfiguration UserInterface Accessibility IncomingCallNotification	150
xConfiguration UserInterface ContactInfo Type	150
xConfiguration UserInterface CustomMessage	151
xConfiguration UserInterface KeyTones Mode	
xConfiguration UserInterface Language	151
xConfiguration UserInterface OSD HalfwakeMessage	151
xConfiguration UserInterface OSD Output	
xConfiguration UserInterface Security Mode	152
xConfiguration UserInterface SettingsMenu Mode	153
UserManagement configuration	153
xConfiguration UserManagement LDAP Admin Filter	153
xConfiguration UserManagement LDAP Admin Group	154



	xConfiguration UserManagement LDAP Attribute	15
	xConfiguration UserManagement LDAP BaseDN	15
	xConfiguration UserManagement LDAP Encryption	15
	xConfiguration UserManagement LDAP MinimumTLSVersion	15
	xConfiguration UserManagement LDAP Mode	15
	xConfiguration UserManagement LDAP Server Address	15
	xConfiguration UserManagement LDAP Server Port	15
	xConfiguration UserManagement LDAP VerifyServerCertificate	15
١	/ideo configuration	15
١	/ideo configurationxConfiguration Video DefaultMainSource	
١		15
١	xConfiguration Video DefaultMainSource	15 15
`	xConfiguration Video DefaultMainSource	15 15 15
`	xConfiguration Video DefaultMainSource	15 15 158 158
`	xConfiguration Video DefaultMainSource	15 15 15 15 15
•	xConfiguration Video DefaultMainSource xConfiguration Video Input Connector [n] CameraControl Camerald xConfiguration Video Input Connector [n] CameraControl Mode xConfiguration Video Input Connector [n] CEC Mode xConfiguration Video Input Connector [n] DviType	15 15 15 15 15

Configuration Video Input Connector [n] PreferredResolution	161
Configuration Video Input Connector [n] PresentationSelection	161
Configuration Video Input Connector [n] Quality	162
Configuration Video Input Connector [n] Visibility	163
Configuration Video Monitors	164
Configuration Video Output Connector [n] CEC Mode	165
Configuration Video Output Connector [n] MonitorRole	165
Configuration Video Output Connector [n] OverscanLevel	166
Configuration Video Output Connector [n] Resolution	166
Configuration Video Presentation DefaultSource	167
Configuration Video Selfview Default FullscreenMode	168
Configuration Video Selfview Default Mode	168
Configuration Video Selfview Default OnMonitorRole	169
Configuration Video Selfview Default PIPPosition	169
Configuration Video Selfview Mirrored	170
Configuration Video Selfview OnCall Mode	170
Configuration Video Selfview OnCall Duration	170

# Audio configuration

# xConfiguration Audio DefaultVolume

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define the default volume for the speakers. The volume is set to this value when you switch on or restart the video system. Use the controls on the user interface to change the volume while it is running. You may also use API commands (xCommand Audio Volume) to change the volume while the video system is running, and to reset to default value.

#### USAGE:

xConfiguration Audio DefaultVolume:  $\underline{\textit{DefaultVolume}}$  where

#### DefaultVolume:

Integer (0..100)

**Range:** Select a value between 1 and 100. This corresponds to the dB range from -34.5 dB to 15 dB, in steps of 0.5 dB. If set to 0 the audio is switched off.

Default value:

50

# xConfiguration Audio Input ARC [n] Mode

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

The ARC (Audio Return Channel) is an HDMI feature that lets you have an audio channel from external TVs. Define if the ARC channel on the HDMI output connector shall be enabled.

```
xConfiguration Audio Input ARC [n] Mode: Mode
where

<u>n</u>: Unique ID that identifies the ARC input.

Range: 1..3 [CodecPro]

Range: 3..3 for Room 70 Dual G2; 2..3 for Room 70 Single G2 [Room70G2]

Mode:

Off/On

Off: Disable ARC channel on the HDMI output.

On: Enable ARC channel on the HDMI output.

Default value:

On
```

# xConfiguration Audio Input HDMI [n] Level

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Set the gain on the HDMI input connector. The gain can be tuned in steps of 1 dB.

#### USAGE:

```
xConfiguration Audio Input HDMI [n] Level: Level
where

<u>n</u>: Unique ID that identifies the HDMI input.

Range: 1..3 [SX80]
Range: 1..5 [CodecPro]
Range: 2..3 for single camera systems; 3..3 for dual camera systems [MX700/MX800/MX800D]

Level:
Integer (-24..0)
Range: Select the gain in decibel (dB).
Default value:
0
```

## xConfiguration Audio Input HDMI [n] Mode

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room55

Requires user role: ADMIN, INTEGRATOR

Define if the audio on the HDMI input connector shall be enabled.

```
xConfiguration Audio Input HDMI [n] Mode: Mode
where

<u>n</u>: Unique ID that identifies the HDMI input.

Range: 1..3 [SX80]

Range: 2..3 for single camera systems; 3..3 for dual camera systems [MX700/MX800/MX800D]

Range: 2..3 [CodecPlus]

Range: 1..5 [CodecPro]

Range: 1..2 [Room55]

<u>Mode</u>:

Off/On

Off: Disable audio on the HDMI input.

On: Enable audio on the HDMI input.

Default value:

On [MX700/MX800/MX800D CodecPlus CodecPro Room55]

HDMI [1..2]: Off HDMI [3]: On [SX80]
```



# xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room55

Requires user role: ADMIN, INTEGRATOR

Use this setting to decide whether to stop the audio playback of a connected presentation source if that presentation source is not currently shown on-screen, or to always playback the audio as long as the presentation source is connected.

#### USAGE:

 $\verb|xConfiguration Audio Input HDMI [n]| VideoAssociation MuteOnInactiveVideo: \\ \textit{MuteOnInactiveVideo} \\$ 

#### where

n: Unique ID that identifies the HDMI input.

Range: 1..3 [SX80]

Range: 2..3 for single camera systems; 3..3 for dual camera systems [MX700/MX800/ MX800D I

Range: 2..3 [CodecPlus]
Range: 1..5 [CodecPro]
Range: 1..2 [Room55]

#### MuteOnInactiveVideo:

#### Off/On

*Off:* Audio is played, locally and to far end, as long as a presentation source is connected; you do not have to present the HDMI input source.

On: Audio is played, locally and to far end, only when the connected presentation source is shown on-screen.

#### Default value:

```
On [SX80 MX700/MX800/MX800D CodecPlus Room55]

HDMI[1-2]: Off HDMI[3-5]: On [CodecPro]
```

## xConfiguration Audio Input Line [n] Equalizer ID

Applies to: *SX80 MX700/MX800/MX800D* Requires user role: ADMIN, INTEGRATOR

Select the equalizer ID of the audio source that is connected to the line input.

#### **USAGE:**

```
xConfiguration Audio Input Line [n] Equalizer ID: ID where

<u>n</u>: Unique ID that identifies the audio line input.

Range: 1..4

<u>ID</u>:

Integer (1..8)

Set the equalizer ID.

Default value:
```

# xConfiguration Audio Input Line [n] Equalizer Mode

Applies to: SX80 MX700/MX800/MX800D Requires user role: ADMIN, INTEGRATOR

Define the equalizer mode for the audio source that is connected to the line input.

```
xConfiguration Audio Input Line [n] Equalizer Mode: Mode
where

<u>n</u>: Unique ID that identifies the audio line input.
Range: 1..4

Mode:
Off/On
Off: No equalizer.
On: Enable the equalizer for the audio source that is connected to the line input.
Default value:
Off
```



# xConfiguration Audio Input Line [n] VideoAssociation MuteOnInactiveVideo

Applies to: SX20 SX80 MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR

The audio source can be associated with a video source on the video input connector, and you can determine whether to play or mute audio depending on whether the video source is presented or not.

#### USAGE:

 $\verb|xConfiguration Audio Input Line [n]| VideoAssociation MuteOnInactiveVideo: \\ \textit{MuteOnInactiveVideo} \\$ 

#### where

n: Unique ID that identifies the audio line input.

Range: 1..4 [SX80 MX700/MX800/MX800D]

Range: 1..1 [SX20]

#### MuteOnInactiveVideo:

#### Off/On

*Off:* The audio source is not associated with a video source. The audio will be played locally and to far end regardless of whether the video source is presented.

**On:** The audio source is associated with a video source. The audio will be played (locally and to far end) when the associated video source is presented. The audio will be muted when the video source is not presented.

#### Default value:

```
Line[1,2]: On Line[3,4]: Off [SX80 MX700/MX800/MX800D]
On [SX20]
```

# xConfiguration Audio Input Line [n] VideoAssociation VideoInputSource

Applies to: SX20 SX80 MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR

The audio source can be associated with a video source on the video input connector.

#### **USAGE:**

```
\verb|xConfiguration Audio Input Line [n]| VideoAssociation VideoInputSource: \\ \textit{VideoInputSource}
```

#### where

n: Unique ID that identifies the audio line input.

Range: 1..4 [SX80 MX700/MX800/MX800D]

Range: 1..1 [SX20]

#### VideoInputSource:

```
1/2/3/4/5 [SX80 MX700/MX800/MX800D]
```

1/2 [SX20]

Select the video input connector to associate the audio source with.

#### Default value:

```
Line[1,2]: 4 Line[3,4]: 1 [SX80 MX700/MX800/MX800D] 2 [SX20]
```

# xConfiguration Audio Input Line [n] Channel

Applies to: *SX80 MX700/MX800/MX800D*Requires user role: ADMIN, INTEGRATOR

Define whether the audio source on the line input is a mono signal or part of a multichannel signal.

#### USAGE:

xConfiguration Audio Input Line [n] Channel: <u>Channel</u> where
<u>n</u>: Unique ID that identifies the audio line input.
Range: 1..4

Channel:

Left/Mono/Right

Left: The Audio Line input signal is the left channel of a stereo signal.

Mono: The Audio Line input signal is a mono signal.

Right: The Audio Line input signal is the right channel of a stereo signal.

Default value:

Left

# xConfiguration Audio Input Line [n] Level

Applies to: *SX80 MX700/MX800/MX800D*Requires user role: ADMIN, INTEGRATOR

Set the gain on the Line input connector. The gain should be adjusted to suit the output level of the connected audio source. The gain can be tuned in steps of 1 dB.

If the gain is set too high, the audio signal will be clipped. If the gain is set too low, the audio signal-to-noise ratio will be degraded; however, this is usually preferable to clipping.

The maximum input level with 0 dB gain is 22 dBu.

Example: If your audio source has a maximum output level of 8 dBu, then you should set the gain to 22 dBu - 8 dBu = 14 dB.

```
xConfiguration Audio Input Line [n] Level: Level
where

<u>n</u>: Unique ID that identifies the audio line input.
Range: 1..4

Level:
Integer (0..24)

Range: Select the gain in decibel (dB).
Default value:
10
```

# xConfiguration Audio Input Line [n] Mode

Applies to: *SX80 MX700/MX800/MX800D*Requires user role: ADMIN, INTEGRATOR

Define the mode for the audio input line.

#### USAGE:

```
xConfiguration Audio Input Line [n] Mode: Mode where

<u>n</u>: Unique ID that identifies the audio line input.

Range: 1..4

Mode:

Off/On

Off: Disable the Audio Line input.

On: Enable the Audio Line input.

Default value:

On
```

## xConfiguration Audio Input Microphone [n] EchoControl Mode

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

The echo canceller continuously adjusts itself to the audio characteristics of the room, and compensates for any changes it detects in the audio environment. If the changes in the audio conditions are significant, the echo canceller may take a second or two to re-adjust.

#### **USAGE:**

```
xConfiguration Audio Input Microphone [n] EchoControl Mode: \underline{\textit{Mode}} where
```

n: Unique ID that identifies the microphone input.

```
Range: 1..8 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
```

Range: 1..2 [SX20]

Range: 2..2 [SX10]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..3 [RoomKit Room55]

#### Mode:

Off/On

*Off:* Turn off the echo control. Recommended if external echo cancellation or playback equipment is used.

*On:* Turn on the echo control. Recommended, in general, to prevent the far end from hearing their own audio. Once selected, echo cancellation is active at all times.

Default value:

On



# xConfiguration Audio Input Microphone [n] EchoControl Dereverberation

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

The system has built-in signal processing to reduce the effect of room reverberation. Dereverberation requires that Audio Input Microphone [n] EchoControl Mode is enabled.

#### USAGE:

```
\verb"xConfiguration" Audio Input Microphone [n] EchoControl Dereverberation: \\ \textit{Dereverberation}
```

#### where

n: Unique ID that identifies the microphone input.

Range: 1..8 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..2 [SX20]

Range: 2..2 [SX10]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..3 [RoomKit Room55]

#### Dereverberation:

Off/On

Off: Turn off the dereverberation.

On: Turn on the dereverberation.

Default value:

Off

# xConfiguration Audio Input Microphone [n] EchoControl NoiseReduction

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

The system has built-in noise reduction, which reduces stationary background noise, for example noise from air-conditioning systems, cooling fans etc. In addition, a high pass filter (Humfilter) reduces very low frequency noise. Noise reduction requires that Audio Input Microphone [n] EchoControl Mode is enabled.

#### **USAGE:**

 $\verb|xConfiguration| Audio Input Microphone [n] EchoControl NoiseReduction: \\ NoiseReduction$ 

#### where

<u>n</u>: Unique ID that identifies the microphone input.

Range: 1..8 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..2 [SX20]

Range: 2..2 [SX10]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..3 [RoomKit Room55]

#### NoiseReduction:

Off/On

Off: Turn off the noise reduction.

On: Turn on the noise reduction. Recommended in the presence of low frequency noise.

Default value:

On

# xConfiguration Audio Input Microphone [n] Equalizer ID

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2
Requires user role: ADMIN. INTEGRATOR

Select the equalizer ID of the source that is connected to the microphone input.

#### USAGE:

```
xConfiguration Audio Input Microphone [n] Equalizer ID: <u>ID</u> where

<u>n</u>: Unique ID that identifies the microphone input.

Range: 1..8

<u>ID</u>:

Integer (1..8)

Set the equalizer ID.

Default value:
```

# xConfiguration Audio Input Microphone [n] Equalizer Mode

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the equalizer mode for the source that is connected to the microphone input.

#### **USAGE:**

```
xConfiguration Audio Input Microphone [n] Equalizer Mode: Mode
where

<u>n</u>: Unique ID that identifies the microphone input.

Range: 1..8

Mode:

Off/On

Off: No equalizer.

On: Enable the equalizer for the source that is connected to the microphone input.

Default value:

Off
```

# xConfiguration Audio Input Microphone [n] Level

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Set the gain on the Microphone input connector. The gain should be adjusted to suit the output level of the connected audio source. The gain can be tuned in steps of 1 dB.

If the gain is set too high, the audio signal will be clipped. If the gain is set too low, the audio signal-to-noise ratio will be degraded; however, this is usually preferable to clipping.

Note that unprocessed speech signals typically contain significant level variations, making it very important to allow for sufficient signal headroom.

The maximum input level with 0 dB gain differs depending on the product: -18 dBu (SX10, SX20, MX200G2/MX300G2, Room Kit, Codec Plus, Room 55, Room 70, Room 55 Dual), 22 dBu (SX80, MX700/MX800), 24 dBu (Codec Pro, Room 70 G2).

Example: If your microphone has a maximum output level of -44 dBu, and it is connected to an SX80, then you should set the gain to 22 dBu - (-44 dBu) = 66 dB.

```
xConfiguration Audio Input Microphone [n] Level: Level
where

<u>n</u>: Unique ID that identifies the microphone input.

Range: 1..8 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
Range: 1..2 [SX20]
Range: 2..2 [SX10]
Range: 1..3 [CodecPlus Room70/Room55D]
Range: 2..3 [MX200G2/MX300G2 RoomKit Room55]

Level:

Integer (0..26) [RoomKit CodecPlus Room55 Room70/Room55D]
Integer (0..24) [SX10 SX20 MX200G2/MX300G2]
Integer (0..70) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: Select the gain in decibel (dB).

Default value:

14 [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]
17 [SX10]
58 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
```

### xConfiguration Audio Input Microphone [n] Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Disable or enable audio on the microphone connector.

SX10, MX200G2, MX300G2, Room Kit, Room 55: Microphone [1] is the video system's internal microphone.

#### USAGE:

Default value: On

```
xConfiguration Audio Input Microphone [n] Mode: Mode
where
 <u>n</u>: Unique ID that identifies the microphone input.
    Range: 1..8 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
    Range: 1...2 [SX10 SX20]
    Range: 1..3 [RoomKit CodecPlus Room55 Room70/Room55D]
    Range: 1..1 [MX200G2/MX300G2]
 Mode:
    Off/On
    Off: Disable the audio input microphone connector.
    On: Enable the audio input microphone connector.
```

### xConfiguration Audio Input Microphone [n] Type

Applies to: SX80 MX700/MX800/MX800D Requires user role: ADMIN, INTEGRATOR

The microphone connectors are intended for electret type microphones. The microphone connector can be set to line or microphone mode.

#### **USAGE:**

```
xConfiguration Audio Input Microphone [n] Type: Type
where
 n: Unique ID that identifies the microphone input.
   Range: 1..8
```

Type:

Line/Microphone

Microphone: Select Microphone when you have 48 V Phantom voltage and the pre-amplification is On.

Line: Select Line when you have a standard balanced line input. The phantom voltage and pre-amplification is Off.

Default value:

Microphone

### xConfiguration Audio Input Microphone [n] PhantomPower

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Define whether or not to have phantom power (48 V +/- 1 V) on the microphone input.

#### USAGE:

 $\verb|xConfiguration Audio Input Microphone [n] PhantomPower: $$\underline{\textit{PhantomPower}}$$ where$ 

n: Unique ID that identifies the microphone input.

Range: 1..8

#### PhantomPower:

Off/On

*Off:* Disable the phantom power on the microphone input. Use this when connecting to equipment that do not need phantom power, such as external mixers.

*On:* Enable the phantom power on the microphone input. Use this when connecting directly to microphones that require phantom power, including the Cisco Table Microphone and Cisco Ceiling Microphone.

Default value:

On

# xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN. INTEGRATOR

The microphone can be associated with a video source on the video input connector, and you can determine whether to play or mute audio depending on whether the video source is presented or not. By default, audio is not muted.

#### USAGE:

 $\verb|xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo: \\ \textit{MuteOnInactiveVideo}$ 

where

n: Unique ID that identifies the microphone input.

Range: 1..8

MuteOnInactiveVideo:

Off/On

Off: No video source is associated.

On: A video source is associated, and the audio will be muted if the associated video source is not displayed.

Default value:

On



# xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Select the video input connector to associate the audio source with.

#### **USAGE:**

 $\verb|xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource: \\ VideoInputSource$ 

where

n: Unique ID that identifies the microphone input.

Range: 1..8

VideoInputSource:

1/2/3/4/5

Select the video input connector to associate the audio source with.

Default value:

1

### xConfiguration Audio Input MicrophoneMode

Applies to: DX70/DX80

Requires user role: ADMIN, INTEGRATOR

This setting applies only to DX80.

The DX80 has microphones in both legs. If you set the microphone mode to Focused, the microphones can be combined to focus sound sensitivity. As a result, the noise in the room is suppressed, and you can be heard better when sitting right in front of the video system. The voice of people not sitting right in front of the system will be suppressed.

If you set the microphone mode to Wide, the system behaves like any other system. The voice of people sitting beside you will be heard, and also more noise from the room.

We recommend that you use Focused mode when you are the only speaker. Use Wide mode when several speakers are in front of the system.

#### USAGE:

xConfiguration Audio Input MicrophoneMode: <u>MicrophoneMode</u> where

### MicrophoneMode:

Focused/Wide

**Focused:** Focused sound sensitivity, suppressing sound from sources that are not right in front of the video system.

Wide: Default microphone operation with normal sound sensitivity.

Default value:

Wide

### xConfiguration Audio KeyClickDetector Attenuate

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

The video system (codec) can detect clicking noise from a keyboard and automatically attenuate the microphone signal. This is useful when a meeting participant starts typing on the keyboard, because the noise can disturb the other participants. If the participant types on the keyboard and speaks at the same time the microphone signal will not be attenuated. Requires that the Audio KeyClickDetector Enabled setting is set to On.

#### USAGE:

#### Attenuate:

Off/On

Off: The attenuation of the microphone signal is disabled.

**On:** The system will attenuate the microphone signal if clicking noise from keyboards is detected. If voice or voice + keyboard clicks are detected the microphone signal will not be attenuated.

Default value:

On

### xConfiguration Audio KeyClickDetector Enabled

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

The video system (codec) can detect clicking noise from a keyboard and automatically attenuate the microphone signal. This is useful when a meeting participant starts typing on the keyboard, because the noise can disturb other participants. To enable attenuation on the microphone signal, set the Audio KeyClickDetector Attenuate to On.

#### **USAGE:**

 $\verb|xConfiguration|| Audio | KeyClickDetector|| Enabled: | \underline{\textit{Enabled}}| \\ where |$ 

#### Enabled:

Off/On

Off: The key click detection is disabled.

On: The system will detect clicking noise from keyboards.

Default value:

Off

### xConfiguration Audio Microphones Mute Enabled

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the microphone mute behavior on the video system.

#### USAGE:

xConfiguration Audio Microphones Mute Enabled:  $\underline{\it Enabled}$  where

#### Enabled:

True/InCallOnly

*True:* Muting of audio is always available.

*InCallOnly:* Muting of audio is only available when the device is in a call. When Idle it is not possible to mute the microphone. This is useful when an external telephone service/audio system is connected via the codec and is to be available when the codec is not in a call. When set to InCallOnly this will prevent the audio-system from being muted by mistake.

Default value:

True



### xConfiguration Audio MicrophoneReinforcement Input Microphone [n] Mode

Applies to: *SX80 MX700/MX800/MX800D*Requires user role: ADMIN, INTEGRATOR

Set the microphone reinforcement mode individually on each microphone. The signals from all microphones with Mode = On will be mixed and fed to the selected MicrophoneReinforcement outputs. Also consult the Audio MicrophoneReinforcement Output Line Mode setting.

#### USAGE:

xConfiguration Audio MicrophoneReinforcement Input Microphone [n] Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the microphone input.

Range: 1..8

#### <u>Mode</u>:

Off/On

On: The microphone signal will be fed to the selected MicrophoneReinforcement outputs, as well as to the far end.

Off: The microphone signal will be sent only to the far end. It will not be fed to the selected MicrophoneReinforcement outputs.

Default value:

Off

### xConfiguration Audio MicrophoneReinforcement Output Line [n] Mode

Applies to: *SX80 MX700/MX800/MX800D*Requires user role: ADMIN, INTEGRATOR

Set the microphone reinforcement mode individually on each line output. If Mode = On, the line output will add the microphone reinforcement mix to its ordinary output signal. Also consult the Audio MicrophoneReinforcement Input Microphone Mode setting.

#### USAGE:

xConfiguration Audio MicrophoneReinforcement Output Line [n] Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the microphone output.

Range: 1..4

#### Mode:

Off/On

On: This output will deliver far end audio, local presentation audio and the microphone reinforcement mix.

Off: This output will deliver far end audio and local presentation audio.

Default value:

Off

### xConfiguration Audio MicrophoneReinforcement Gain

Applies to: *SX80 MX700/MX800/MX800D* Requires user role: ADMIN, INTEGRATOR

The gain (in dB) that will be applied to the mixed microphone signal that is fed to the selected MicrophoneReinforcement outputs.

#### USAGF:

xConfiguration Audio MicrophoneReinforcement Gain:  $\underline{\textit{Gain}}$  where

#### Gain:

Integer (-54..15)

Use this gain to adjust the level of microphone signal that should be fed to the local output. The value -54 means "Off", and no signal will be fed from the microphone to the output.

Default value:

-54

### xConfiguration Audio Output ARC [n] Delay DelayMs

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

To obtain lip-synchronization, you can configure each ARC output with an extra delay that compensates for delay in other connected devices, for example TVs and external loudspeakers. The delay that you set here is either fixed or relative to the delay measured on or reported by an external monitor, as defined in the Audio Output ARC [n] Delay Mode setting.

#### **USAGE:**

```
xConfiguration Audio Output ARC [n] Delay DelayMs: <u>DelayMs</u> where

<u>n</u>: Unique ID that identifies the audio ARC output.

Range: 1..1

<u>DelayMs</u>:

Integer (0..290)

The delay in milliseconds.

Default value:

0
```

### xConfiguration Audio Output ARC [n] Delay Mode

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

You may add extra delay to an audio ARC output with the Audio Output ARC [n] Delay DelayMs setting. The extra delay added is either a fixed number of milliseconds, or a number of milliseconds relative to the detected delay on or reported by an external monitor.

#### USAGE:

```
xConfiguration Audio Output ARC [n] Delay Mode: \underline{\textit{Mode}} where \underline{\textit{n}}: Unique ID that identifies the audio ARC output. Range: 1..1 \underline{\textit{Mode}}:
```

Fixed/RelativeToHDMI

*Fixed:* Any extra delay (DelayMs) added to the output, will be a fixed number of millisecond.

**RelativeToHDMI:** Any extra delay (DelayMs) added to the output, will be relative to the detected delay on or reported by an external monitor. The actual delay is detected-delay + DelayMs. The Audio Output Connectors ARC [n] DelayMs status reports the actual delay.

Default value:

RelativeToHDMI [CodecPro]
Fixed [Room70G2]

### xConfiguration Audio Output ARC [n] Mode

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Use for audio playback on the Quad Camera. Define if the ARC channel on the HDMI input connector shall be enabled.

#### **USAGE:**

```
xConfiguration Audio Output ARC [n] Mode: Mode
where

<u>n</u>: Unique ID that identifies the audio ARC output.
Range: 1..1

Mode:
Auto/Off/On
Auto: The ARC channel is enabled on the HDMI input.
Off: Disable ARC channel on the HDMI input.
On: Enable ARC channel on the HDMI input.
Default value:
Auto
```

### xConfiguration Audio Output HDMI [n] Delay DelayMs

Applies to: CodecPro

Requires user role: ADMIN, INTEGRATOR

To obtain lip-synchronization, you can configure each HDMI output with an extra delay that compensates for delay in other connected devices, for example TVs and external loudspeakers. The delay that you set here is either fixed or relative to the delay measured on or reported by an external monitor, as defined in the Audio Output HDMI [n] Delay Mode setting.

```
xConfiguration Audio Output HDMI [n] Delay DelayMs: DelayMs where

<u>n</u>: Unique ID that identifies the audio line output.

Range: 1..3

<u>DelayMs</u>:

Integer (0..290)

The delay in milliseconds.

Default value:
```

### xConfiguration Audio Output HDMI [n] Delay Mode

Applies to: CodecPro

Requires user role: ADMIN, INTEGRATOR

You may add extra delay to an audio hdmi output with the Audio Output HDMI [n] Delay DelayMs setting. The extra delay added is either a fixed number of milliseconds, or a number of milliseconds relative to the detected delay on or reported by an external monitor.

#### USAGE:

xConfiguration Audio Output HDMI [n] Delay Mode:  $\underline{\textit{Mode}}$  where

 $\underline{\underline{\textit{n}}}\textsc{:}$  Unique ID that identifies the audio line output.

Range: 1..3

<u>Mode</u>:

Fixed/RelativeToHDMI

Fixed: Any extra delay (DelayMs) added to the output, will be a fixed number of millisecond.

**RelativeToHDMI:** Any extra delay (DelayMs) added to the output, will be relative to the detected delay on or reported by an external monitor. The actual delay is detected-delay + DelayMs. The Audio Output Connectors HDMI [n] DelayMs status reports the actual delay.

Default value:

Fixed

### xConfiguration Audio Output HDMI [n] Level

Applies to: SX80 Room70G2

Requires user role: ADMIN, INTEGRATOR

Set the gain on the HDMI input connector. The gain can be tuned in steps of 1 dB.

```
xConfiguration Audio Output HDMI [n] Level: Level
where

n: Unique ID that identifies the HDMI output.

Range: 1..3 [Room70G2]

Range: 1..2 [SX80]

Level:
Integer (-24..0)

Range: Select the gain in decibel (dB).

Default value:
0
```

### xConfiguration Audio Output HDMI [n] Mode

Applies to: SX80 CodecPro Room70G2 Requires user role: ADMIN, INTEGRATOR

Define if the audio channel on the HDMI output connector shall be enabled.

Room 70 G2: We recommend to keep the default setting for the connector(s) that are used for the internal screen(s). Room 70 Dual G2: Connector 1-2 are used for the internal screens and connector 3 is available for an external screen. Room 70 Single G2: Connector 1 is used for the internal screen and connector 2-3 are available for external screens.

#### USAGE:

Off/On [SX80]

```
xConfiguration Audio Output HDMI [n] Mode: <u>Mode</u>
where

<u>n</u>: Unique ID that identifies the HDMI output.

Range: 1..3 [CodecPro Room70G2]

Range: 1..2 [SX80]

<u>Mode</u>:

Auto/Off/On [CodecPro Room70G2]
```

Auto: There are some differences between Codec Pro and Room 70 G2.

Codec Pro - If all connectors are set to Auto and a Quad Camera is in use, the audio will be played on the camera. If, in addition, one or more screens are connected to the codec, the audio will be played on the camera, and the system will measure the delay on the first available screen that is connected to HDMI output 1, 2 or 3. The codec sends a signal to the screen and the screen sends the signal back on the Audio Return Channel (ARC). This delay measurement is used to synchronize the audio on the camera with the video on screen (lip-synch). Consumer Electronics Control (CEC) is used for the screen to use ARC. If all connectors are set to Auto and no Quad Camera is connected, the system will try HDMI 1, then HDMI 2, and finally HDMI 3 and play the audio on the first available screen. No additional lip-synchronization delay will be automatically added by the codec, instead this responsibility falls on the screen on which the audio is played out. Requirements: The camera control (Ethernet) from the Quad Camera must be connected to LAN through one of the codecs camera control connectors (Ethernet 2 or 3). The cameras HDMI output must be connected to the codecs camera input (HDMI 1), which is the ARC (Audio Return Channel) output connector, and the corresponding Video Input Connector [n] CEC Mode must be set to On. Audio Output InternalSpeaker Mode must be set to On and Audio Output ARC (1) Mode must be set to On or Auto.

Room 70 G2 - No automatic delay measurement is performed on these integrated systems, as the relationship between the internal loudspeaker system and screen(s) is fixed. Additional screens that are connected to the system will not be used for

audio output unless the connectors are explicitly added using the xAPI. Screens that are connected will play a stereo down mix of the audio that is played on the internal loudspeaker system. Ultrasonic signals will not play through the external outputs.

Off: The connector will not be used for audio out.

On: The connector will be used for audio out.

Default value:

```
Room 70 Dual G2: HDMI 1,2: On HDMI 3: Auto
Room 70 Single G2: HDMI 1: On HDMI 2,3: Auto [Room70G2]
Auto [CodecPro]
HDMI 1: On HDMI 2: Off [SX80]
```

### xConfiguration Audio Output InternalSpeaker Mode

Applies to: MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70G2

Requires user role: ADMIN

Define whether or not to use the video system's integrated speakers.

Codec Plus: The codec must be connected to a Cisco Quad Camera for this setting to apply.

Room 70 G2: We recommend to use the default setting. In addition, Audio Output ARC 1 Mode must be set to On, and the HDMI outputs corresponding to the internal monitor(s) must be set to On.

#### **USAGE:**

```
xConfiguration Audio Output InternalSpeaker Mode: <u>Mode</u>
where

<u>Mode</u>:
Auto/Off/On [Room70G2]
Off/On [RoomKit CodecPlus Room55]
```

Auto: The system will use the integrated speakers.
Off: Disable the video system's integrated speakers.

On: Enable the video system's integrated speakers.

Default value:

```
Auto [Room70G2]
On [RoomKit CodecPlus Room55]
```

### xConfiguration Audio Output Line [n] Channel

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Define whether the Audio Line output is a mono signal or part of a multichannel signal.

#### USAGE:

xConfiguration Audio Output Line [n] Channel:  $\underline{\textit{Channel}}$  where  $\underline{\textit{n}}$ : Unique ID that identifies the audio line output. Range: 1..6

Left/Mono/Right

Channel:

Left: The Audio Line output signal is the left channel of a stereo signal.

Mono: The Audio Line output signal is a mono signal.

Right: The Audio Line output signal is the right channel of a stereo signal.

Default value:

Line[1,3,5]: Left Line[2,4,6]: Right

### xConfiguration Audio Output Line [n] Delay DelayMs

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

To obtain lip-synchronization, you can configure each audio line output with an extra delay that compensates for delay in other connected devices, for example TVs and external loudspeakers. The delay that you set here is either fixed or relative to the delay on the HDMI output, as defined in the Audio Output Line [n] Delay Mode setting.

```
xConfiguration Audio Output Line [n] Delay DelayMs: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">DelayMs</a>: <a href="DelayMs">Integer (0..290)</a>) <a href="Delay in milliseconds">The delay in milliseconds</a>. <a href="DelayMs">Default value:</a>: <a href="DelayMs">O</a>
```



### xConfiguration Audio Output Line [n] Delay Mode

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

You may add extra delay to an audio line output with the Audio Output Line [n] Delay DelayMs setting. The extra delay added is either a fixed number of milliseconds, or a number of milliseconds relative to the detected delay on the HDMI output (typically introduced by the connected TV).

#### **USAGE:**

```
xConfiguration Audio Output Line [n] Delay Mode: \underline{\textit{Mode}} where
```

n: Unique ID that identifies the audio line output.

Range: 1..6 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20]

#### Mode:

Fixed/RelativeToHDMI

Fixed: Any extra delay (DelayMs) added to the output, will be a fixed number of millisecond.

**RelativeToHDMI:** Any extra delay (DelayMs) added to the output, will be relative to the detected delay on the HDMI output. The actual delay is HDMI-delay + DelayMs. The Audio Output Connectors Line [n] DelayMs status reports the actual delay.

#### Default value:

Fixed [SX80 MX700/MX800/MX800D]

RelativeToHDMI [SX10 SX20 CodecPro Room70G2]

### xConfiguration Audio Output Line [n] Equalizer ID

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Select the equalizer ID for the audio source that is connected to the output line.

#### USAGE:

```
xConfiguration Audio Output Line [n] Equalizer ID: ID where

<u>n</u>: Unique ID that identifies the audio line output.

Range: 1..6

<u>ID</u>:

Integer (1..8)

Set the equalizer ID.

Default value:
```

### xConfiguration Audio Output Line [n] Equalizer Mode

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Define the equalizer mode for the audio source that is connected to the output line.

```
xConfiguration Audio Output Line [n] Equalizer Mode: Mode where

<u>n</u>: Unique ID that identifies the audio line output.

Range: 1..6

Mode:

Off/On

Off: No equalizer.

On: Enable the equalizer for the audio output line.

Default value:

Off
```

### xConfiguration Audio Output Line [n] Level

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR

Set the gain on the Line output connector. The gain should be adjusted to fit the audio input level of the connected device. The gain can be tuned in steps of 1 dB.

The maximum output level with 0 dB gain differs depending on the product: 22 dBu (SX80, MX700/MX800), 8 dBu (Room 70, Room 55 Dual), 18 dBu (Codec Pro, Room 70 G2).

Example: If the audio device that is connected to an SX80 has max input level 10 dBu, then you should set the gain to 10 dBu - 22 dBu = -12 dB.

### USAGE:

```
xConfiguration Audio Output Line [n] Level: Level
where

<u>n</u>: Unique ID that identifies the audio line output.
Range: 1..6 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
Range: 1..1 [Room70/Room55D]

Level:
Integer (-24..0)
Range: Select the gain in decibel (dB).
Default value:
-10 [SX80 MX700/MX800/MX800D]
0 [CodecPro Room70/Room55D Room70G2]
```

### xConfiguration Audio Output Line [n] Mode

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the mode for the audio line output.

```
xConfiguration Audio Output Line [n] Mode: Mode
where

<u>n</u>: Unique ID that identifies the audio line output.

Range: 1..6 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
Range: 1..1 [RoomKit CodecPlus Room55 Room70/Room55D]

Mode:

Off/On

Off: Disable the audio line output.

On: Enable the audio line output.

Default value:

On
```

### xConfiguration Audio Output Line [n] OutputType

Applies to: RoomKit CodecPlus Room55 Room70/Room55D

Requires user role: ADMIN, INTEGRATOR

The output type should be set to match the connected device.

#### USAGE:

xConfiguration Audio Output Line [n] OutputType:  $\underline{\textit{OutputType}}$  where

 $\underline{n}$ : Unique ID that identifies the audio line output.

Range: 1..1

#### OutputType:

LineOut/Loudspeaker/Recorder/Subwoofer [RoomKit]

LineOut/Loudspeaker/Recorder [CodecPlus Room55 Room70/Room55D]

**Loudspeaker:** Use Loudspeaker if a loudspeaker is connected to the line output. In this mode, the output level on that connector follows the master volume control, and the output signal includes all system sounds (ringtones, webex assistant etc.).

**Recorder:** Use Recorder if a recorder is connected to the line output. In this mode, the output level is fixed, and system sounds are not included. What is included is the sound from local presentation sources, the local microphones as well as any far-end sources.

**Subwoofer:** Use Subwoofer if a subwoofer is connected to the line output. In this mode the bass is sent to LineOut and the rest of the audio range is played on the internal speaker.

*LineOut:* Use LineOut for other devices. In this mode, the internal speaker will play full range audio. The output level is fixed, and system sounds are not included. What is included is the sound from local presentation sources, as well as any far-end sources.

#### Default value:

Loudspeaker [RoomKit CodecPlus Room55]
LineOut [Room70/Room55D]

### xConfiguration Audio SoundsAndAlerts RingTone

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define which ringtone to use for incoming calls.

#### USAGE:

where

#### RingTone:

Sunrise/Mischief/Ripples/Reflections/Vibes/Delight/Evolve/Playful/Ascent/Calculation/Mellow/Ringer

Select a ringtone from the list.

Default value:

Sunrise

### xConfiguration Audio SoundsAndAlerts RingVolume

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define the ring volume for incoming calls.

#### **USAGE:**

 $\verb|xConfiguration| Audio SoundsAndAlerts RingVolume: $$\underline{\textit{RingVolume}}$ where$ 

#### RingVolume:

Integer (0..100)

Range: The value goes in steps of 5 from 0 to 100 (from -34.5 dB to 15 dB). Volume 0 = Off.

#### Default value:

50 [DX70/DX80 SX10 SX20 SX80 RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

40 [MX200G2/MX300G2]

30 [MX700/MX800/MX800D]

### xConfiguration Audio Ultrasound MaxVolume

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This setting applies to the Intelligent Proximity feature. Set the maximum volume of the ultrasound pairing message.

#### **USAGE:**

```
xConfiguration Audio Ultrasound MaxVolume: <u>MaxVolume</u> where
```

#### <u>MaxVolume</u>:

```
Integer (0..90) [ SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro]
Integer (0..70) [ SX10 MX200G2/MX300G2 RoomKit ]
Integer (0..80) [ Room70/Room55D Room70G2 ]
DX80: Integer (0..90) DX70: Integer (0..60) [ DX70/DX80 ]
Integer (0..84) [ Room55 ]
```

Select a value in the specified range. If set to 0, the ultrasound is switched off.

#### Default value:

```
70 [SX10 SX20 RoomKit]
60 [SX80 CodecPlus CodecPro Room70/Room55D Room70G2]
50 [MX200G2/MX300G2]
DX80: 70 DX70: 60 [DX70/DX80]
64 [Room55]
66 [MX700/MX800/MX800D]
```

# Cameras configuration

### xConfiguration Cameras Camera [n] AssignedSerialNumber

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D

Requires user role: ADMIN, INTEGRATOR

The camera ID is the number n in Camera [n]. By default, the camera ID is assigned automatically to a camera. If EDID information is not passed on from the camera to the codec, the camera ID is not persistent after a reboot. This means that a camera may get a new camera ID when the codec (video system) is restarted.

You should use the Cameras Camera AssignedSerialNumber setting to cater for configurations where the codec does not receive EDID information from multiple cameras. This setting allows you to manually assign a camera ID to a camera by associating the camera ID with the camera's serial number. The setting is persistent until the codec is factory reset.

Typical situations where the codec does not receive EDID information are: when you connect a Cisco TelePresence Precision 60 camera using 3G-SDI; when you connect a Cisco TelePresence Precision 40 (Cisco TelePresence PrecisionHD 1080p4xS2) camera; when you use an HDMI repeater that does not pass on EDID information.

#### USAGE:

 ${\tt xConfiguration~Cameras~Camera~[n]~AssignedSerialNumber:} \begin{tabular}{ll} $\tt xSignedSerialNumber" \\ \begin{tabular}{ll} $\tt where \\ \begin{tabular}{ll} $\tt xSignedSerialNumber: \\ \begin{tabular}{ll} $\tt AssignedSerialNumber: \\ \begin{tabular}{ll} $\tt xSignedSerialNumber: \\ \begin{tabular}{ll} \beg$ 

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro]

Range: 1..3 [CodecPlus Room70/Room55D]

#### AssignedSerialNumber:

String (0, 20)

The camera's serial number.

Default value:

11 11



### xConfiguration Cameras Camera [n] Backlight DefaultMode

Cisco Collaboration Endpoint Software

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

This configuration turns backlight compensation on or off. Backlight compensation is useful when there is much light behind the persons in the room. Without compensation the persons will easily appear very dark to the far end.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### USAGE:

xConfiguration Cameras Camera [n] Backlight DefaultMode:  $\underline{\textit{DefaultMode}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [DX70/DX80 SX10 SX20 MX200G2/MX300G2]

Range: 1..3 [CodecPlus Room70/Room55D]

#### DefaultMode:

Off/On

Off: Turn off the camera backlight compensation.

On: Turn on the camera backlight compensation.

Default value:

Off

### xConfiguration Cameras Camera [n] Brightness Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the camera brightness mode.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### USAGE:

xConfiguration Cameras Camera [n] Brightness Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]

Range: 1..3 [CodecPlus Room70/Room55D]

#### Mode:

Auto/Manual

Auto: The camera brightness is automatically set by the system.

*Manual:* Enable manual control of the camera brightness. The brightness level is set using the Cameras Camera [n] Brightness DefaultLevel setting.

Default value:

### xConfiguration Cameras Camera [n] Brightness DefaultLevel

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the brightness level. Requires the Cameras Camera [n] Brightness Mode to be set to Manual.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### USAGE:

```
where

<u>n</u>: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]

Range: 1..3 [CodecPlus Room70/Room55D]

<u>DefaultLevel</u>:

Integer (1..31)

The brightness level.

Default value:

20
```

### xConfiguration Cameras Camera [n] Flip

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

With Flip mode (vertical flip) you can flip the image upside down. Flipping applies both to the self-view and the video that is transmitted to the far end.

#### **USAGE:**

**Auto:** If the camera detects that it is mounted upside down, the image is automatically flipped. If the camera cannot auto-detect whether it is mounted upside down or not, the image is not changed.

Off: Display the image on screen the normal way.

*On:* Display the image flipped upside down. This setting is used when a camera is mounted upside down, but cannot automatically detect which way it is mounted.

Default value:

### xConfiguration Cameras Camera [n] Focus Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the camera focus mode.

#### **USAGE:**

xConfiguration Cameras Camera [n] Focus Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 CodecPro Room70G2]

Range: 2..7 for single camera systems; 3..7 for dual camera systems [MX700/MX800/MX800]

MX800D]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]
Range: 1..3 [CodecPlus Room70/Room55D]

#### <u>Mode</u>:

Auto/AutoLimited/Manual [SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus]
Auto/Manual [CodecPro Room70/Room55D Room70G2]

Auto: The auto focus works differently for different products. For Room 55 Dual, Room 70, Room 70 G2, and when using the Cisco Quad Camera with a codec (SX80 or Codec Plus), the camera will do single shot auto focusing once a call is connected, and when the view has changed. For SX10, SX20, MX200 G2, MX300 G2 and SX80 with a Cisco TelePresence Precision 40 or Cisco TelePresence PrecisionHD 12x camera, the camera will do single shot auto focusing once a call is connected, as well as after a pan, tilt, or zoom. For MX700/MX800 and when using a Cisco TelePresence Precision 60 camera with a codec (SX80 or Codec Plus), the camera will do continuous auto focusing. It will run auto focus once a call is connected, after pan, tilt, or zoom, and generally when the camera identifies a change in the scene.

AutoLimited: This mode only applies when using a Cisco TelePresence Precision 60 camera with a codec (SX80 or Codec Plus), and to MX700/MX800. In most cases this mode will operate the same way as auto focus. In some cases auto-limited will reduce the focus hunting that may occur. Problematic scenes have large areas with no or low contrast, for instance a painted wall with no details, or maybe a partly empty whiteboard. There's a slightly higher chance of background focus with this mode, compared to auto focus.

Manual: Turn the auto focus off and adjust the camera focus manually.

Default value:

Auto

### xConfiguration Cameras Camera [n] Gamma Mode

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

This setting enables gamma corrections. Gamma describes the nonlinear relationship between image pixels and monitor brightness.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### USAGE:

xConfiguration Cameras Camera [n] Gamma Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX20 MX200G2/MX300G2]
Range: 1..3 [CodecPlus Room70/Room55D]

#### Mode:

Auto/Manual

Auto: Auto is the default and the recommended setting.

*Manual:* In manual mode the gamma value is changed with the gamma level setting, ref. Cameras Camera [n] Gamma Level.

Default value:



### xConfiguration Cameras Camera [n] Gamma Level

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

By setting the Gamma Level you can select which gamma correction table to use. This setting may be useful in difficult lighting conditions, where changes to the brightness setting does not provide satisfactory results. Requires the Cameras Camera [n] Gamma Mode to be set to Manual.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### **USAGE:**

```
xConfiguration Cameras Camera [n] Gamma Level: Level where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX20 MX200G2/MX300G2]

Range: 1..3 [CodecPlus Room70/Room55D]

Level:

Integer (0..7)

Define the gamma level.

Default value:

0
```

### xConfiguration Cameras Camera [n] Mirror

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

With Mirror mode (horizontal flip) you can mirror the image on screen. Mirroring applies both to the self-view and the video that is transmitted to the far end. Mirroring is automatically disabled while speaker tracking is on.

This setting is not applicable when your video system has a Cisco Quad Camera.

#### USAGE:

xConfiguration Cameras Camera [n] Mirror:  $\underline{\textit{Mirror}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 CodecPro Room70G2]

Range: 2..7 for single camera systems; 3..7 for dual camera systems [MX700/MX800/ MX800D]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]
Range: 1..3 [CodecPlus Room70/Room55D]

### <u>Mirror</u>:

Auto/Off/On [SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Off/On [MX200G2/MX300G2]

**Auto:** If the camera detects that it is mounted upside down, the image is automatically mirrored. If the camera cannot auto-detect whether it is mounted upside down or not, the image is not changed. MX700/MX800 integrated cameras: Always display the image as other people see you.

Off: Display the image as other people see you. MX200 G2, MX700/MX800 integrated cameras: Display the image as you see yourself in a mirror.

**On:** Display the image as you see yourself in a mirror. MX200 G2, MX700/MX800 integrated cameras: Display the image as other people see you.

Default value:

Auto [SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

MX300G2: Off MX200G2: On [MX200G2/MX300G2]

### xConfiguration Cameras Camera [n] Whitebalance Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the camera white balance mode.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

#### USAGE:

xConfiguration Cameras Camera [n] Whitebalance Mode:  $\underline{\textit{Mode}}$  where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]
Range: 1..3 [CodecPlus Room70/Room55D]

Mode:

Auto/Manual

Auto: The camera will continuously adjust the white balance depending on the camera

*Manual:* Enables manual control of the camera white balance. The white balance level is set using the Cameras Camera [n] Whitebalance Level setting.

Default value:

Auto

### xConfiguration Cameras Camera [n] Whitebalance Level

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the white balance level. Requires the Cameras Camera [n] Whitebalance Mode to be set to manual.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

```
xConfiguration Cameras Camera [n] Whitebalance Level: Level where

<u>n</u>: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2]

Range: 1..3 [CodecPlus Room70/Room55D]

Level:

Integer (1..16)

The white balance level.

Default value:
```

### xConfiguration Cameras Camera Framerate

Applies to: RoomKit Room55
Requires user role: ADMIN

As default, the camera outputs 30 frames per second. This allows for good quality both in close-ups and overview pictures for normal bandwidths and lighting conditions. If the conditions are better, a 60 frames per second output from the camera may give a better overall quality.

#### **USAGE:**

xConfiguration Cameras Camera Framerate:  $\underline{\textit{Framerate}}$  where  $\underline{\textit{Framerate}}$ : 30/60

30: The camera outputs 30 frames per second.

60: The camera outputs 60 frames per second.

Default value:

30

### xConfiguration Cameras Preset TriggerAutofocus

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN

The current position (pan and tilt), zoom and focus are stored with a preset. Use this setting to determine if the camera should refocus or use the focus value that is stored with the preset.

#### **USAGE:**

 ${\tt xConfiguration~Cameras~Preset~TriggerAutofocus:} \ \underline{{\tt TriggerAutofocus}} \\ {\tt where}$ 

#### TriggerAutofocus:

Auto/Off/On

**Auto:** Whether the camera refocuses or not when selecting a preset, depends on the camera type.

*Off:* The focus value that is stored with the preset will be used. The camera will not refocus when selecting a preset.

*On:* The camera will refocus when selecting a preset. The focus value that is stored with the preset may be overridden.

Default value:

### xConfiguration Cameras SpeakerTrack Mode

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

This setting applies only when using a camera with support for speaker tracking.

Cisco Quad Camera: Speaker tracking uses automatic camera framing to select the best camera view based on how many people are in the room. The Quad Camera consists of two cameras and uses an audio tracking technique that finds and captures a close-up of the active speaker.

Cisco TelePresence SpeakerTrack 60 Camera: The dual camera assembly consists of two cameras and uses an audio tracking technique that finds and captures a close-up of the active speaker. When a change of speaker is detected, the system can switch automatically between the two cameras to always show the best camera view. Refer to the Cameras SpeakerTrack TrackingMode setting for different switching modes.

Systems with a built-in speakertrack camera (Room Kit, Room 55, Room 55 Dual, Room 70, Room 70 G2): Speaker tracking uses automatic camera framing to select the best camera view based on how many people are in the room. The camera uses an audio tracking technique that finds and captures a close-up of the active speaker.

MX700 and MX800 with a dual camera (speaker tracking): The dual camera assembly consists of two cameras and uses an audio tracking technique that finds and captures a close-up of the active speaker. When a change of speaker is detected, the system can switch automatically between the two cameras to always show the best camera view. Refer to the Cameras SpeakerTrack TrackingMode setting for different switching modes.

#### USAGF:

xConfiguration Cameras SpeakerTrack Mode:  $\underline{\textit{Mode}}$  where

Mode:

Auto/Off

**Auto:** Speaker tracking is switched on. The system will detect people in the room and automatically select the best camera framing. Users can switch speaker track on or off instantly in the camera control panel on the Touch controller.

*Off:* Speaker tracking is switched off. If you have a Cisco TelePresence SpeakerTrack 60 Camera, or MX700/MX800 with a dual camera (speaker tracking), the two cameras will operate as individual cameras.

Default value:

Auto

### xConfiguration Cameras SpeakerTrack Closeup

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

This setting applies only when the Cameras SpeakerTrack Mode is set to Auto.

When a person in the room speaks the system will find the person and select the best camera framing. This is called a closeup and may not include all the persons in the room. If you want all the persons in the room to be in the picture at all times you can turn off the closeup functionality.

#### USAGE:

 ${\tt xConfiguration\ Cameras\ SpeakerTrack\ Closeup:\ } {\it Closeup\ }$  where

Closeup:

Auto/Off

Auto: The system will zoom in on the person speaking.

Off: The system will keep all the persons in the room in the camera framing at all times.

Default value:



### xConfiguration Cameras SpeakerTrack TrackingMode

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

The speaker tracking algorithm can react to changes in two modes, one faster than the other. The mode determines when the camera view will change to a new speaker.

SX80, Codec Pro: This setting applies only when using a Cisco TelePresence SpeakerTrack 60 camera, and when Cameras SpeakerTrack Mode is set to Auto.

MX700, MX800: This setting applies only to systems with a dual camera (speaker tracking), and when Cameras SpeakerTrack Mode is set to Auto.

#### **USAGE:**

 ${\tt xConfiguration~Cameras~SpeakerTrack~TrackingMode:~\underline{\it TrackingMode}} \\ {\tt where}$ 

#### TrackingMode:

Auto/Conservative [SX80 MX700/MX800/MX800D CodecPro]

#### Default value:

Auto [SX80 MX700/MX800/MX800D CodecPro]

### xConfiguration Cameras SpeakerTrack ConnectorDetection Mode

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Define whether to automatically detect or manually configure which video input each individual camera is connected to. You should choose manual configuration in situations where the codec does not receive EDID information from the cameras. Typically, this will be when you use HDMI repeaters that do not pass on EDID information.

SX80, Codec Pro: This setting applies only when a Cisco TelePresence SpeakerTrack 60 camera is connected to the codec (video system).

MX700, MX800: Not applicable in this version.

#### USAGE:

 ${\tt xConfiguration\ Cameras\ SpeakerTrack\ ConnectorDetection\ Mode:\ \underline{{\it Mode}}}$  where

#### Mode:

Auto/Manual [SX80 CodecPro]

Auto: Automatically detect which video inputs the cameras are connected to.

*Manual:* Manually define which video inputs the cameras are connected to. Use the Cameras SpeakerTrack ConnectorDetection CameraLeft and Cameras SpeakerTrack ConnectorDetection CameraRight settings.

#### Default value:

Auto [SX80 CodecPro]

### xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Define the number of the video input that SpeakerTrack 60's left camera is connected to. SX80, Codec Pro: This setting applies only when a Cisco TelePresence SpeakerTrack 60 camera is connected to the codec (video system). Furthermore, Cameras SpeakerTrack ConnectorDetection Mode must be set to Manual.

MX700, MX800: Not applicable in this version.

#### USAGE:

xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft:  $\underline{\textit{CameraLeft}}$  where

#### CameraLeft:

Integer (1..5) [SX80 CodecPro]

Set a valid video input number. For example, set to 1 if the left camera is connected to video input 1.

Default value:

1 [SX80 CodecPro]

### xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight

Applies to: SX80 MX700/MX800/MX800D CodecPro

Requires user role: ADMIN, INTEGRATOR

Define the number of the video input that SpeakerTrack 60's right camera is connected to SX80, Codec Pro: This setting applies only when a Cisco TelePresence SpeakerTrack 60 camera is connected to the codec (video system). Furthermore, Cameras SpeakerTrack ConnectorDetection Mode must be set to Manual.

MX700, MX800: Not applicable in this version.

#### USAGE:

 ${\tt xConfiguration~Cameras~SpeakerTrack~ConnectorDetection~CameraRight:} \ \underline{{\tt CameraRight}} \\ {\tt where}$ 

#### CameraRight:

Integer (1..5) [SX80 CodecPro]

Set a valid video input number. For example, set to 2 if the right camera is connected to video input 2.

Default value:

2 [SX80 CodecPro]

### xConfiguration Cameras SpeakerTrack Whiteboard Mode

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

The Snap to Whiteboard feature extends the speaker tracking functionality, thus you need a camera that supports speaker tracking. When a presenter is standing next to the whiteboard, the camera will capture both the presenter and the whiteboard if the Snap to Whiteboard feature is enabled. If the feature is disabled, only the presenter will be captured. The Snap to Whiteboard feature is set up from the Touch controller or web interface.

SX80, Codec Plus, Codec Pro: Applies only when the connected camera supports speaker tracking.

MX700, MX800: Applies only when the system has a dual camera (speaker tracking).

#### **USAGE:**

 ${\tt xConfiguration~Cameras~SpeakerTrack~Whiteboard~Mode:} \ \underline{{\it Mode}} \\ {\tt where}$ 

Mode:

Off/On

Off: The Snap to Whiteboard feature is disabled.

On: The Snap to Whiteboard feature is enabled.

Default value:

Off

## Conference configuration

### xConfiguration Conference AutoAnswer Mode

Applies to: All products

Requires user role: ADMIN

Define the auto answer mode. Use the Conference AutoAnswer Delay setting if you want the system to wait a number of seconds before answering the call, and use the Conference AutoAnswer Mute setting if you want your microphone to be muted when the call is answered.

#### USAGE:

xConfiguration Conference AutoAnswer Mode: Mode

where

Mode:

Off/On

Off: You can answer incoming calls manually from the systems user interface.

On: The system automatically answers incoming calls, except if you are already in a call. You can answer or decline incoming calls manually when you are already engaged in a call.

Default value:

Off

### xConfiguration Conference AutoAnswer Mute

Applies to: *All products*Requires user role: ADMIN

Define if the microphone shall be muted when an incoming call is automatically answered. Requires that AutoAnswer Mode is switched on.

#### **USAGE:**

```
xConfiguration Conference AutoAnswer Mute: <u>Mute</u>
where

<u>Mute</u>:

Off/On

Off: The incoming call will not be muted.

On: The incoming call will be muted when automatically answered.

Default value:

Off
```

### xConfiguration Conference AutoAnswer Delay

Applies to: *All products*Requires user role: ADMIN

Define how long (in seconds) an incoming call has to wait before it is answered automatically by the system. Requires that AutoAnswer Mode is switched on.

#### USAGE:

```
xConfiguration Conference AutoAnswer Delay: <u>Delay</u> where

<u>Delay</u>:

Integer (0..50)

The auto answer delay (seconds).

Default value:

0
```

### xConfiguration Conference DefaultCall Protocol

Applies to: *All products*Requires user role: ADMIN

Define the Default Call Protocol to be used when placing calls from the system.

#### **USAGE:**

xConfiguration Conference DefaultCall Protocol:  $\underline{\textit{Protocol}}$  where

### $\underline{\textit{Protocol}} :$

Auto/H320/H323/Sip/Spark

**Auto:** Enables auto-selection of the call protocol based on which protocols are available. If multiple protocols are available, the order of priority is: 1) SIP; 2) H323; 3) H320. If the system cannot register, the auto-selection chooses H323.

*H320*: All calls are set up as H.320 calls (only applicable if used with Cisco TelePresence ISDN Link).

H323: All calls are set up as H.323 calls.

Sip: All calls are set up as SIP calls.

Spark: Reserved for Webex registered systems. Do not use.

Default value:



### xConfiguration Conference DefaultCall Rate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the Default Call Rate to be used when placing calls from the system.

#### USAGE:

xConfiguration Conference DefaultCall Rate:  $\underline{\textit{Rate}}$  where

#### Rate:

Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Integer (64..3072) [ DX70/DX80 SX10 ]

The default call rate (kbps).

Default value:

6000 [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

3072 [DX70/DX80 SX10]

### xConfiguration Conference DoNotDisturb DefaultTimeout

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This setting determines the default duration of a Do Not Disturb session, i.e. the period when incoming calls are rejected and registered as missed calls. The session can be terminated earlier by using the user interface.

#### USAGE:

 ${\tt xConfiguration~Conference~DoNotDisturb~DefaultTimeout:} \ \underline{{\tt DefaultTimeout}} \\ {\tt where}$ 

#### DefaultTimeout:

Integer (1..1440)

The number of minutes (maximum 1440 minutes = 24 hours) before the Do Not Disturb session times out automatically.

Default value:

60

### xConfiguration Conference Encryption Mode

Applies to: *All products*Requires user role: ADMIN

Define the conference encryption mode. A padlock with the text "Encryption On" or "Encryption Off" displays on screen for a few seconds when the conference starts.

All except SX20: NOTE: If the Encryption Option Key is not installed on the video system, the encryption mode is always Off.

SX20: NOTE: If the CE-NC software (no crypto) is installed on the video system, the encryption mode is always Off.

#### **USAGE:**

xConfiguration Conference Encryption Mode: Mode

where

#### Mode:

Off/On/BestEffort

Off: The system will not use encryption.

On: The system will only allow calls that are encrypted.

BestEffort: The system will use encryption whenever possible.

- > In Point to point calls: If the far end system supports encryption (AES-128), the call will be encrypted. If not, the call will proceed without encryption.
- > In MultiSite calls: In order to have encrypted MultiSite conferences, all sites must support encryption. If not, the conference will be unencrypted.

Default value:

**BestEffort** 

### xConfiguration Conference FarEndControl Mode

Applies to: *All products*Requires user role: ADMIN

Lets you decide if the remote side (far end) should be allowed to select your video sources and control your local camera (pan, tilt, zoom).

#### **USAGE:**

where

<u>Mode</u>:

Off/On

*Off:* The far end is not allowed to select your video sources or to control your local camera (pan, tilt, zoom).

On: Allows the far end to be able to select your video sources and control your local camera (pan, tilt, zoom). You will still be able to control your camera and select your video sources as normal.

Default value:

On

### xConfiguration Conference FarEndMessage Mode

Applies to: *All products*Requires user role: ADMIN

Toggle whether it is allowed to send data between two codecs in a point-to-point call, for use with control systems or macros. Works with SIP calls only. This setting will enable/disable the use of the xCommand Call FarEndMessage Send command.

#### USAGE:

 ${\tt xConfiguration\ Conference\ FarEndMessage\ Mode:\ \underline{\it Mode}}$ 

where

Mode:

Off/On

Off: It is not possible to send messages between two codecs.

On: It is possible to send messages between two codecs in a point-to-point call.

Default value:

Off

### xConfiguration Conference MaxReceiveCallRate

Applies to: *All products*Requires user role: ADMIN

Define the maximum receive bit rate to be used when placing or receiving calls. Note that this is the maximum bit rate for each individual call; use the Conference MaxTotalReceiveCallRate setting to set the aggregated maximum for all simultaneous active calls.

#### USAGE:

 ${\tt xConfiguration~Conference~MaxReceiveCallRate:} \ \underline{{\tt MaxReceiveCallRate}} \\ {\tt where}$ 

#### MaxReceiveCallRate:

Integer (64...6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Integer (64..3072) [ DX70/DX80 SX10 ]

The maximum receive call rate (kbps).

#### Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

3072 [DX70/DX80 SX10]

### xConfiguration Conference MaxTransmitCallRate

Applies to: *All products*Requires user role: ADMIN

Define the maximum transmit bit rate to be used when placing or receiving calls. Note that this is the maximum bit rate for each individual call; use the Conference MaxTotalTransmitCallRate setting to set the aggregated maximum for all simultaneous active calls.

#### USAGE:

 ${\tt xConfiguration\ Conference\ MaxTransmitCallRate:\ \underline{\it MaxTransmitCallRate}} \\ {\tt where}$ 

#### MaxTransmitCallRate:

Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Integer (64..3072) [DX70/DX80 SX10]

The maximum transmitt call rate (kbps).

#### Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

3072 [DX70/DX80 SX10]

### xConfiguration Conference MaxTotalReceiveCallRate

Applies to: *All products*Requires user role: ADMIN

Define the maximum overall receive bit rate allowed.

This configuration applies when using a video system's built-in MultiSite feature (optional) to host a multipoint video conference. The bit rate will be divided fairly among all active calls at any time. This means that the individual calls will be up-speeded or down-speeded as appropriate when someone leaves or enters a multipoint conference, or when a call is put on hold (suspended) or resumed. The maximum receive bit rate for each individual call is defined in the Conference MaxReceiveCallRate setting.

DX70, DX80, SX10: This product does not support multiple simultaneous calls, so the total receive call rate will be the same as the receive bit rate for one call (ref. Conference MaxReceiveCallRate setting).

#### USAGE:

 ${\tt xConfiguration~Conference~MaxTotalReceiveCallRate:} \ \underline{{\tt \textit{MaxTotalReceiveCallRate}}} \\ {\tt where}$ 

#### MaxTotalReceiveCallRate:

Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus Room55 Room70/Room55D ]

Integer (64..15000) [CodecPro Room70G2]
Integer (64..3072) [DX70/DX80 SX10]

The maximum receive call rate (kbps).

#### Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus Room55 Room70/ Room55D]

15000 [CodecPro Room70G2] 3072 [DX70/DX80 SX10]

### xConfiguration Conference MaxTotalTransmitCallRate

Applies to: *All products*Requires user role: ADMIN

Define the maximum overall transmit bit rate allowed

This configuration applies when using a video system's built-in MultiSite feature (optional) to host a multipoint video conference. The bit rate will be divided fairly among all active calls at any time. This means that the individual calls will be up-speeded or down-speeded as appropriate when someone leaves or enters a multipoint conference, or when a call is put on hold (suspended) or resumed. The maximum transmit bit rate for each individual call is defined in the Conference MaxTransmitCallRate setting.

DX70, DX80, SX10: This product does not support multiple simultaneous calls, so the total transmit call rate will be the same as the transmit bit rate for one call (ref. Conference MaxTransmitCallRate setting).

#### USAGE:

 ${\tt xConfiguration\ Conference\ MaxTotalTransmitCallRate:\ \underline{{\tt MaxTotalTransmitCallRate}}}$  where

#### MaxTotalTransmitCallRate:

 $\label{localization} \textit{Integer (64..6000)} \ \ [SX20 \ SX80 \ MX200G2/MX300G2 \ MX700/MX800/MX800D \ RoomKit \ CodecPlus \ Room55 \ Room70/Room55D \ ]$ 

Integer (64..15000) [CodecPro Room70G2]
Integer (64..3072) [DX70/DX80 SX10]

The maximum transmit call rate (kbps).

Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus Room55 Room70/ Room55D I

15000 [CodecPro Room70G2] 3072 [DX70/DX80 SX10]

### xConfiguration Conference MultiStream Mode

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus

CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

The video system supports multistream video for conferences.

#### **USAGE:**

xConfiguration Conference MultiStream Mode:  $\underline{\textit{Mode}}$ 

where

Mode:

Auto/Off [SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Off [SX20 MX200G2/MX300G2]

**Auto:** Multistream will be used when the conference infrastructure supports the feature. Minimum versions required: CMS 2.2, CUCM 11.5, VCS X8.7.

Off: Multistream is disabled.

Default value:

Auto [ SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Off [SX20 MX200G2/MX300G2]



# GPIO configuration

### xConfiguration GPIO Pin [n] Mode

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

The four GPIO pins are configured individually. The state can be retrieved by xStatus GPIO Pin [1..4] State. The default pin state is High (+12 V). When activated as an output, a pin is set to 0 V (Low); when deactivated, it is set to +12 V (High). To activate a pin as an input, the voltage on the pin must be pulled down to 0 V; to deactivate it, raise the voltage to +12 V.

#### USAGE:

xConfiguration GPIO Pin [n] Mode: Mode

where

n: GPIO pin number.

Range: 1..4

#### Mode:

InputAcceptAllCalls/InputDisconnectAllCalls/InputMuteMicrophones/InputNoAction/OutputAllCallsEncrypted/OutputInCall/OutputManualState/OutputMicrophonesMuted/OutputPresentationOn/OutputStandbyActive

InputAcceptAllCalls: When the pin is activated, the xCommand Call Accept command, which accepts all incoming calls, will be issued.

InputDisconnectAllCalls: When the pin is activated, the xCommand Call Disconnect command, which disconnects all calls, will be issued.

*InputMuteMicrophones:* When the pin is activated, the microphones will be muted. When deactivated, the microphones will be unmuted.

*InputNoAction:* The pin state can be set, but no operation is performed.

OutputAllCallsEncrypted: The pin is activated when all calls are encrypted, and deactivated when one or more calls are not encrypted.

OutputInCall: The pin is activated when in call, and deactivated when not in call.

OutputManualState: The pin state can be set by xCommand GPIO ManualState Set PinX: High/Low. It is set to +12 V or 0 V, respectively.

OutputMicrophonesMuted: The pin is activated when microphones are muted, and deactivated when not muted.

*OutputPresentationOn:* The pin is activated when presentation is active, and deactivated when presentation is not active.

OutputStandbyActive: The pin is activated when the system is in standby mode, and

deactivated when no longer in standby.

Default value:

InputNoAction



# H323 configuration

### xConfiguration H323 Authentication Mode

Applies to: *All products*Requires user role: ADMIN

Define the authenticatin mode for the H.323 profile.

#### USAGE:

xConfiguration H323 Authentication Mode:  $\underline{\textit{Mode}}$ 

where

### Mode:

Off/On

*Off:* The system will not try to authenticate itself to a H.323 Gatekeeper, but will still try a normal registration.

*On:* If an H.323 Gatekeeper indicates that it requires authentication, the system will try to authenticate itself to the gatekeeper. Requires the H323 Authentication LoginName and H323 Authentication Password settings to be defined on both the codec and the Gatekeeper.

Default value:

Off

### xConfiguration H323 Authentication LoginName

Applies to: *All products*Requires user role: ADMIN

The system sends the H323 Authentication Login Name and the H323 Authentication Password to an H.323 Gatekeeper for authentication. The authentication is a one way authentication from the codec to the H.323 Gatekeeper, i.e. the system is authenticated to the gatekeeper. If the H.323 Gatekeeper indicates that no authentication is required, the system will still try to register. Requires the H.323 Authentication Mode to be enabled.

#### USAGE:

```
xConfiguration H323 Authentication LoginName: "LoginName" where

LoginName:
String (0, 50)
The authentication login name.
Default value:
""
```

### xConfiguration H323 Authentication Password

Applies to: *All products*Requires user role: ADMIN

The system sends the H323 Authentication Login Name and the H323 Authentication Password to an H.323 Gatekeeper for authentication. The authentication is a one way authentication from the codec to the H.323 Gatekeeper, i.e. the system is authenticated to the gatekeeper. If the H.323 Gatekeeper indicates that no authentication is required, the system will still try to register. Requires the H.323 Authentication Mode to be enabled.

```
xConfiguration H323 Authentication Password: "Password"
where
Password:
String (0, 50)
The authentication password.
Default value:
""
```

### xConfiguration H323 CallSetup Mode

Applies to: *All products*Requires user role: ADMIN

Defines whether to use a Gatekeeper or Direct calling when establishing H.323 calls. Direct H.323 calls can be made also when H323 CallSetup Mode is set to Gatekeeper.

#### USAGE:

xConfiguration H323 CallSetup Mode:  $\underline{\textit{Mode}}$  where

Mode:

Direct/Gatekeeper

Direct: You can only make an H.323 call by dialing an IP address directly.

**Gatekeeper:** The system uses a Gatekeeper to make an H.323 call. When choosing this option, the H323 Gatekeeper Address must also be configured.

Default value:

Gatekeeper

### xConfiguration H323 Encryption KeySize

Applies to: All products
Requires user role: ADMIN

Define the minimum or maximum key size for the Diffie-Hellman key exchange method, which is used when establishing the Advanced Encryption Standard (AES) encryption key.

#### **USAGE:**

xConfiguration H323 Encryption KeySize:  $\underline{\textit{KeySize}}$  where

<u>KeySize</u>:

Max1024bit/Min1024bit/Min2048bit

Max1024bit: The maximum size is 1024 bit.
Min1024bit: The minimum size is 1024 bit.
Min2048bit: The minimum size is 2048 bit.

Default value: Min1024bit

### xConfiguration H323 Gatekeeper Address

Applies to: *All products*Requires user role: ADMIN

Define the IP address of the Gatekeeper. Requires H323 CallSetup Mode to be set to Gatekeeper.

#### **USAGE:**

xConfiguration H323 Gatekeeper Address: "Address" where

Address:

String (0, 255)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

### xConfiguration H323 H323Alias E164

Applies to: *All products*Requires user role: ADMIN

The H.323 Alias E.164 defines the address of the system, according to the numbering plan implemented in the H.323 Gatekeeper. The E.164 alias is equivalent to a telephone number, sometimes combined with access codes.

```
xConfiguration H323 H323Alias E164: "E164"
where
E164:
String (0, 30)
The H.323 Alias E.164 address. Valid characters are 0-9, * and #.
Default value:
```

### xConfiguration H323 H323Alias ID

Applies to: *All products*Requires user role: ADMIN

Define the H.323 Alias ID, which is used to address the system on a H.323 Gatekeeper and will be displayed in the call lists.

#### **USAGE:**

```
xConfiguration H323 H323Alias ID: "ID"
where

ID:
String (0, 49)
The H.323 Alias ID. Example: "firstname.lastname@company.com", "My H.323 Alias ID"
Default value:
```

### xConfiguration H323 NAT Mode

Applies to: *All products*Requires user role: ADMIN

The firewall traversal technology creates a secure path through the firewall barrier, and enables proper exchange of audio/video data when connected to an external video conferencing system (when the IP traffic goes through a NAT router). NOTE: NAT does not work in conjunction with gatekeepers.

#### **USAGE:**

xConfiguration H323 NAT Mode:  $\underline{\textit{Mode}}$  where

Mode:

Auto/Off/On

**Auto:** The system will determine if the H323 NAT Address or the real IP address should be used in signaling. This makes it possible to place calls to endpoints on the LAN as well as endpoints on the WAN. If the H323 NAT Address is wrong or not set, the real IP address will be used.

Off: The system will signal the real IP address.

*On:* The system will signal the configured H323 NAT Address instead of its real IP address in Q.931 and H.245. The NAT server address will be shown in the startup-menu as: "My IP Address: 10.0.2.1". If the H323 NAT Address is wrong or not set, H.323 calls cannot be set up.

Default value:

Off

### xConfiguration H323 NAT Address

Applies to: *All products*Requires user role: ADMIN

Define the external/global IP address to the router with NAT support. Packets sent to the router will then be routed to the system. Note that NAT cannot be used when registered to a gatekeeper.

In the router, the following ports must be routed to the system's IP address:

- \* Port 1720
- \* Port 5555-6555
- \* Port 2326-2487

#### **USAGE:**

```
xConfiguration H323 NAT Address: "Address" where

Address:
String (0, 64)
A valid IPv4 address or IPv6 address.
Default value:
```

## Macros configuration

### xConfiguration Macros Mode

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Macros allow you to write snippets of JavaScript code that can automate parts of your video endpoint, thus creating custom behavior. Use of macros is disabled by default, but the first time you open the Macro Editor you will be asked whether to enable use of macros on the codec. Use this setting when you want to manually enable, or to permanently disable the use of macros on the codec. You can disable the use of macros within the Macro Editor. But this will not permanently disable macros from running, because every time the codec is reset the macros will be re-enabled automatically.

```
xConfiguration Macros Mode: Mode
where

Mode:
Off/On
Off: Permanently disable the use of macros on this video system.
On: Enable the use of macros on this video system.
Default value:
Off
```

### xConfiguration Macros AutoStart

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

All the macros run in a single process on the video endpoint, called the macro runtime. It should be running by default, but you can choose to stop and start it manually. If you restart the video system, the runtime will automatically start again if auto start is enabled.

#### **USAGE:**

 ${\tt xConfiguration~Macros~AutoStart:}~\underline{{\tt AutoStart}}$  where

#### AutoStart:

Off/On

Off: The macro runtime will not start automatically after a restart of the video system.

On: The macro runtime will start automatically after a restart of the video system.

Default value:

On

# Network configuration

### xConfiguration Network [n] DNS DNSSEC Mode

Applies to: All products

Requires user role: ADMIN

Domain Name System Security extensions (DNSSEC) is a set of extensions to DNS. It is used to authenticate DNS replies for zones that are signed. It will still allow unsigned zones.

#### **USAGE:**

xConfiguration Network [n] DNS DNSSEC Mode:  $\underline{\textit{Mode}}$  where

n: Index that identifies the network.

Range: 1..1

Mode:

Off/On

Off: Disable Domain Name System Security Extensions.

On: Enable Domain Name System Security Extensions.

Default value:

Off

### xConfiguration Network [n] DNS Domain Name

Applies to: All products

Requires user role: ADMIN, USER

The DNS Domain Name is the default domain name suffix which is added to unqualified names. Example: If the DNS Domain Name is "company.com" and the name to lookup is "MyVideoSystem", this will result in the DNS lookup "MyVideoSystem.company.com".

#### **USAGE:**

```
xConfiguration Network [n] DNS Domain Name: "Name" where

<u>n</u>: Index that identifies the network.

Range: 1..1

Name:

String (0, 64)

The DNS domain name.

Default value:
```

### xConfiguration Network [n] DNS Server [m] Address

Applies to: All products

Requires user role: ADMIN, USER

Define the network addresses for DNS servers. Up to three addresses may be specified. If the network addresses are unknown, contact your administrator or Internet Service Provider.

```
xConfiguration Network [n] DNS Server [m] Address: "Address"
where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>m</u>: Index that identifies the DNS server. Maximum three DNS servers are allowed.

Range: 1..3

<u>Address</u>:

String (0, 64)

A valid IPv4 address or IPv6 address.

Default value:

""
```

## xConfiguration Network [n] IEEE8021X Mode

Applies to: All products

Requires user role: ADMIN, USER

The system can be connected to an IEEE 802.1X LAN network, with a port-based network access control that is used to provide authenticated network access for Ethernet networks.

### **USAGE:**

```
xConfiguration Network [n] IEEE8021X Mode: Mode where

n: Index that identifies the network.

Range: 1..1

Mode:

Off/On

Off: The 802.1X authentication is disabled.

On: The 802.1X authentication is enabled.

Default value:

Off
```

## xConfiguration Network [n] IEEE8021X TIsVerify

Applies to: All products

Requires user role: ADMIN, USER

Verification of the server-side certificate of an IEEE802.1x connection against the certificates in the local CA-list when TLS is used. The CA-list must be uploaded to the video system. This can be done from the web interface.

This setting takes effect only when Network [1] IEEE8021X Eap TIs is enabled (On).

### USAGE:

```
xConfiguration Network [n] IEEE8021X TlsVerify: \underline{\mathit{TlsVerify}} where \underline{\mathit{n}}: Index that identifies the network. Range: 1..1 \underline{\mathit{TlsVerify}}:
```

Off/On

*Off:* When set to Off, TLS connections are allowed without verifying the server-side X.509 certificate against the local CA-list. This should typically be selected if no CA-list has been uploaded to the codec.

**On:** When set to On, the server-side X.509 certificate will be validated against the local CA-list for all TLS connections. Only servers with a valid certificate will be allowed.

Default value:



## xConfiguration Network [n] IEEE8021X UseClientCertificate

Cisco Collaboration Endpoint Software

Applies to: All products

Requires user role: ADMIN, USER

Authentication using a private key/certificate pair during an IEEE802.1x connection. The authentication X.509 certificate must be uploaded to the video system. This can be done from the web interface.

### USAGE:

n: Index that identifies the network.

Range: 1..1

### UseClientCertificate:

Off/On

Off: When set to Off client-side authentication is not used (only server-side).

On: When set to On the client (video system) will perform a mutual authentication TLS handshake with the server.

Default value:

Off

## xConfiguration Network [n] IEEE8021X Identity

Applies to: All products

Requires user role: ADMIN, USER

Define the user name for 802.1X authentication.

### USAGE:

```
xConfiguration Network [n] IEEE8021X Identity: "<u>Identity</u>" where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Identity</u>:

String (0, 64)

The user name for 802.1X authentication.
```

## xConfiguration Network [n] IEEE8021X Password

Applies to: All products

Default value:

Requires user role: ADMIN, USER

Define the password for 802.1X authentication.

```
xConfiguration Network [n] IEEE8021X Password: "Password"
where

<u>n</u>: Index that identifies the network.
Range: 1..1

Password:
String (0, 50)
The password for 802.1X authentication.
Default value:
```

## xConfiguration Network [n] IEEE8021X AnonymousIdentity

Applies to: All products

Default value:

Requires user role: ADMIN, USER

The 802.1X Anonymous ID string is to be used as unencrypted identity with EAP (Extensible Authentication Protocol) types that support different tunneled identity, like EAP-PEAP and EAP-TTLS. If set, the anonymous ID will be used for the initial (unencrypted) EAP Identity Request.

### **USAGE:**

```
xConfiguration Network [n] IEEE8021X AnonymousIdentity: "AnonymousIdentity" where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>AnonymousIdentity</u>:

String (0, 64)

The 802.1X Anonymous ID string.
```

## xConfiguration Network [n] IEEE8021X Eap Md5

Applies to: All products

Requires user role: ADMIN, USER

Define the Md5 (Message-Digest Algorithm 5) mode. This is a Challenge Handshake Authentication Protocol that relies on a shared secret. Md5 is a Weak security.

```
xConfiguration Network [n] IEEE8021X Eap Md5: Md5
where

<u>n</u>: Index that identifies the network.

Range: 1..1

Md5:

Off/On

Off: The EAP-MD5 protocol is disabled.

On: The EAP-MD5 protocol is enabled.

Default value:

On
```

## xConfiguration Network [n] IEEE8021X Eap Ttls

Applies to: All products

Requires user role: ADMIN, USER

Define the TTLS (Tunneled Transport Layer Security) mode. Authenticates LAN clients without the need for client certificates. Developed by Funk Software and Certicom. Usually supported by Agere Systems, Proxim and Avaya.

### USAGE:

```
xConfiguration Network [n] IEEE8021X Eap Ttls: <u>Ttls</u> where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Ttls</u>:

Off/On

Off: The EAP-TTLS protocol is disabled.

On: The EAP-TTLS protocol is enabled.

Default value:

On
```

## xConfiguration Network [n] IEEE8021X Eap TIs

Applies to: All products

Requires user role: ADMIN, USER

Enable or disable the use of EAP-TLS (Transport Layer Security) for IEEE802.1x connections. The EAP-TLS protocol, defined in RFC 5216, is considered one of the most secure EAP standards. LAN clients are authenticated using client certificates.

```
xConfiguration Network [n] IEEE8021X Eap Tls: Tls
where

n: Index that identifies the network.
Range: 1..1

Tls:
Off/On
Off: The EAP-TLS protocol is disabled.
On: The EAP-TLS protocol is enabled.
Default value:
On
```

## xConfiguration Network [n] IEEE8021X Eap Peap

Applies to: All products

Requires user role: ADMIN, USER

Define the Peap (Protected Extensible Authentication Protocol) mode. Authenticates LAN clients without the need for client certificates. Developed by Microsoft, Cisco and RSA Security.

### **USAGE:**

```
xConfiguration Network [n] IEEE8021X Eap Peap: Peap where

n: Index that identifies the network.
Range: 1..1
Peap:
Off/On
Off: The EAP-PEAP protocol is disabled.
On: The EAP-PEAP protocol is enabled.
Default value:
On
```

## xConfiguration Network [n] IPStack

Applies to: All products

Requires user role: ADMIN, USER

Select if the system should use IPv4, IPv6, or dual IP stack, on the network interface. NOTE: After changing this setting you may have to wait up to 30 seconds before it takes effect.

### **USAGE:**

xConfiguration Network [n] IPStack: <u>IPStack</u>

where

n: Index that identifies the network.

Range: 1..1

### IPStack:

Dual/IPv4/IPv6

**Dual:** When set to Dual, the network interface can operate on both IP versions at the same time, and can have both an IPv4 and an IPv6 address at the same time.

IPv4: When set to IPv4, the system will use IPv4 on the network interface.

IPv6: When set to IPv6, the system will use IPv6 on the network interface.

Default value:

Dual

## xConfiguration Network [n] IPv4 Assignment

Applies to: All products

Requires user role: ADMIN, USER

Define how the system will obtain its IPv4 address, subnet mask and gateway address. When using DHCP for address assignment, the MAC address is used as client identifier in DHCP requests for the SX10, SX20, SX80, MX200 G2, MX300 G2, and Touch 10. "01" appended by the MAC address is used for the other products.

### USAGE:

xConfiguration Network [n] IPv4 Assignment: Assignment where

<u>n</u>: Index that identifies the network.

Range: 1..1

Assignment:

Static/DHCP

**Static:** The addresses must be configured manually using the Network IPv4 Address, Network IPv4 Gateway and Network IPv4 SubnetMask settings (static addresses).

**DHCP:** The system addresses are automatically assigned by the DHCP server.

Default value:

DHCP

## xConfiguration Network [n] IPv4 Address

Applies to: All products

Requires user role: ADMIN, USER

Define the static IPv4 network address for the system. Applicable only when Network IPv4 Assignment is set to Static.

### **USAGE:**

```
xConfiguration Network [n] IPv4 Address: "Address" where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Address</u>:

String (0, 64)

A valid IPv4 address.

Default value:

""
```

## xConfiguration Network [n] IPv4 Gateway

Applies to: All products

Requires user role: ADMIN, USER

Define the IPv4 network gateway address. Applicable only when the Network IPv4 Assignment is set to Static.

```
xConfiguration Network [n] IPv4 Gateway: "Gateway" where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Gateway</u>:

String (0, 64)

A valid IPv4 address.

Default value:
```

## xConfiguration Network [n] IPv4 SubnetMask

Applies to: All products

Requires user role: ADMIN, USER

Define the IPv4 network subnet mask. Applicable only when the Network IPv4 Assignment is set to Static.

### **USAGE:**

```
xConfiguration Network [n] IPv4 SubnetMask: "SubnetMask" where

<u>n</u>: Index that identifies the network.

Range: 1..1

SubnetMask:

String (0, 64)

A valid IPv4 address.

Default value:
```

## xConfiguration Network [n] IPv6 Assignment

Applies to: All products

Requires user role: ADMIN, USER

Define how the system will obtain its IPv6 address and the default gateway address. When using DHCPv6 for address assignment, the MAC address is used as client identifier in DHCP requests for the SX10, SX20, SX80, MX200 G2, MX300 G2, and Touch 10. "01" appended by the MAC address is used for the other products.

### USAGE:

xConfiguration Network [n] IPv6 Assignment: <u>Assignment</u>

where

n: Index that identifies the network.

Range: 1..1

### Assignment:

Static/DHCPv6/Autoconf

**Static:** The codec and gateway IP addresses must be configured manually using the Network IPv6 Address and Network IPv6 Gateway settings. The options, for example NTP and DNS server addresses, must either be set manually or obtained from a DHCPv6 server. The Network IPv6 DHCPOptions setting determines which method to use.

**DHCPv6:** All IPv6 addresses, including options, will be obtained from a DHCPv6 server. See RFC 3315 for a detailed description. The Network IPv6 DHCPOptions setting will be ignored.

**Autoconf:** Enable IPv6 stateless autoconfiguration of the IPv6 network interface. See RFC 4862 for a detailed description. The options, for example NTP and DNS server addresses, must either be set manually or obtained from a DHCPv6 server. The Network IPv6 DHCPOptions setting determines which method to use.

Default value:

Autoconf

## xConfiguration Network [n] IPv6 Address

Applies to: All products

Requires user role: ADMIN, USER

Define the static IPv6 network address for the system. Applicable only when the Network IPv6 Assignment is set to Static.

### **USAGE:**

```
xConfiguration Network [n] IPv6 Address: "Address"
where

<u>n</u>: Index that identifies the network.
Range: 1..1

Address:
String (0, 64)
A valid IPv6 address including a network mask. Example: 2001:DB8::/48
Default value:
```

## xConfiguration Network [n] IPv6 Gateway

Applies to: All products

Requires user role: ADMIN, USER

Define the IPv6 network gateway address. This setting is only applicable when the Network IPv6 Assignment is set to Static.

### **USAGE:**

```
where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Gateway</u>:

String (0, 64)

A valid IPv6 address.

Default value:
```

## xConfiguration Network [n] IPv6 DHCPOptions

Applies to: All products

Requires user role: ADMIN, USER

Retrieve a set of DHCP options, for example NTP and DNS server addresses, from a DHCPv6 server.

### **USAGE:**

```
xConfiguration Network [n] IPv6 DHCPOptions: <a href="mailto:DHCPOptions"><u>DHCPOptions</u></a>
where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>DHCPOptions</u>:

Off/On

Off: Disable the retrieval of DHCP options from a DHCPv6 server.

On: Enable the retrieval of a selected set of DHCP options from a DHCPv6 server.

Default value:

On
```

## xConfiguration Network [n] MTU

Applies to: All products

Requires user role: ADMIN, USER

Define the Ethernet MTU (Maximum Transmission Unit) size. The MTU size must be supported by your network infrastructure. The minimum size is 576 for IPv4 and 1280 for IPv6.

```
xConfiguration Network [n] MTU: MTU where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>MTU</u>:

Integer (576..1500)

Set a value for the MTU (bytes).

Default value:

1500
```

## xConfiguration Network [n] QoS Mode

Applies to: All products

Requires user role: ADMIN, USER

The QoS (Quality of Service) is a method which handles the priority of audio, video and data in the network. The QoS settings must be supported by the infrastructure. Diffserv (Differentiated Services) is a computer networking architecture that specifies a simple, scalable and coarsegrained mechanism for classifying, managing network traffic and providing QoS priorities on modern IP networks.

### USAGE:

xConfiguration Network [n] QoS Mode: Mode where

<u>n</u>: Index that identifies the network.

Range: 1..1

Mode:

Off/Diffserv

Off: No QoS method is used.

*Diffserv:* When you set the QoS Mode to Diffserv, the Network QoS Diffserv Audio, Network QoS Diffserv Video, Network QoS Diffserv Data, Network QoS Diffserv Signalling, Network QoS Diffserv ICMPv6 and Network QoS Diffserv NTP settings are used to prioritize packets.

Default value:

Diffserv

## xConfiguration Network [n] QoS Diffserv Audio

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority Audio packets should have in the IP network.

The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended class for Audio is CS4, which equals the decimal value 32. If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

xConfiguration Network [n] QoS Diffserv Audio:  $\underline{\textit{Audio}}$  where

 $\underline{n}$ : Index that identifies the network.

Range: 1..1

### Audio:

Integer (0..63)

Set the priority of the audio packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:

## xConfiguration Network [n] QoS Diffserv Video

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority Video packets should have in the IP network. The packets on the presentation channel (shared content) are also in the Video packet category. The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended class for Video is CS4, which equals the decimal value 32. If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

xConfiguration Network [n] QoS Diffserv Video: <u>Video</u>
where
<u>n</u>: Index that identifies the network.
Range: 1..1
<u>Video</u>:
Integer (0..63)

Set the priority of the video packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:

0

## xConfiguration Network [n] QoS Diffserv Data

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority Data packets should have in the IP network.

The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended value for Data is 0, which means best effort. If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

xConfiguration Network [n] QoS Diffserv Data:  $\underline{\textit{Data}}$  where

 $\underline{n}$ : Index that identifies the network.

Range: 1..1

### Data:

Integer (0..63)

Set the priority of the data packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:

## xConfiguration Network [n] QoS Diffserv Signalling

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority Signalling packets that are deemed critical (time-sensitive) for the real-time operation should have in the IP network.

The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended class for Signalling is CS3, which equals the decimal value 24. If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

xConfiguration Network [n] QoS Diffserv Signalling:  $\underline{\it Signalling}$  where

n: Index that identifies the network.

Range: 1..1 Signalling:

Integer (0..63)

Set the priority of the signalling packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:

U

## xConfiguration Network [n] QoS Diffserv ICMPv6

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority ICMPv6 packets should have in the IP network.

The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended value for ICMPv6 is 0, which means best effort. If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

xConfiguration Network [n] QoS Diffserv ICMPv6: <u>ICMPv6</u>

n: Index that identifies the network.

Range: 1..1

ICMPv6:

Integer (0..63)

Set the priority of the ICMPv6 packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:

## xConfiguration Network [n] QoS Diffserv NTP

Applies to: All products

Requires user role: ADMIN, USER

This setting will only take effect if Network QoS Mode is set to Diffserv.

Define which priority NTP packets should have in the IP network.

The priority for the packets ranges from 0 to 63 - the higher the number, the higher the priority. The recommended value for NTP is 0, which means "best effort". If in doubt, contact your network administrator.

The priority set here might be overridden when packets are leaving the network controlled by the local network administrator.

### USAGE:

```
xConfiguration Network [n] QoS Diffserv NTP: NTP
where

<u>n</u>: Index that identifies the network.

Range: 1..1

NTP:

Integer (0..63)

Set the priority of the NTP packets in the IP network - the higher the number, the higher the priority. 0 means "best effort".

Default value:
```

## xConfiguration Network [n] RemoteAccess Allow

Applies to: All products

Requires user role: ADMIN, USER

Define which IP addresses (IPv4/IPv6) are allowed for remote access to the codec from HTTP, HTTPS, SSH or Telnet.

A network mask (IP range) is specified by <ip address>/N, where N is 1-32 for IPv4, and N is 1-128 for IPv6. The /N is a common indication of a network mask where the first N bits are set. Thus 192.168.0.0/24 would match any address starting with 192.168.0, since these are the first 24 bits in the address. Multiple IP addresses are separated by a white space.

Telnet is only supported by SX Series, MX Series and DX70/DX80.

```
xConfiguration Network [n] RemoteAccess Allow: "Allow" where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Allow</u>:

String (0..255)

A valid IPv4 address or IPv6 address.

Default value:

""
```

## xConfiguration Network [n] Speed

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the Ethernet link speed. We recommend not to change from the default value, which negotiates with the network to set the speed automatically. If you do not use auto-negotiation, make sure that the speed you choose is supported by the closest switch in your network infrastructure.

### USAGE:

xConfiguration Network [n] Speed: <u>Speed</u> where
<u>n</u>: Index that identifies the network.
Range: 1..1
Speed:

Auto/10half/10full/100half/100full [SX10]

Auto/10half/10full/100half/100full/1000full [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Auto: Auto-negotiate link speed.

10half: Force link to 10 Mbps half-duplex. 10full: Force link to 10 Mbps full-duplex. 100half: Force link to 100 Mbps half-duplex. 100full: Force link to 100 Mbps full-duplex. 1000full: Force link to 1 Gbps full-duplex.

Default value:

Auto

## xConfiguration Network [n] VLAN Voice Mode

Applies to: All products

Requires user role: ADMIN, USER

Define the VLAN voice mode. The VLAN Voice Mode will be set to Auto automatically if you have Cisco UCM (Cisco Unified Communications Manager) as provisioning infrastructure. Note that Auto mode will NOT work if the NetworkServices CDP Mode setting is Off.

### USAGE:

xConfiguration Network [n] VLAN Voice Mode:  $\underline{\textit{Mode}}$  where n: Index that identifies the network.

Range: 1..1

### Mode:

Auto/Manual/Off

**Auto:** The Cisco Discovery Protocol (CDP), if available, assigns an id to the voice VLAN. If CDP is not available, VLAN is not enabled.

*Manual:* The VLAN ID is set manually using the Network VLAN Voice VlanId setting. If CDP is available, the manually set value will be overruled by the value assigned by CDP.

Off: VLAN is not enabled.

Default value:

Auto



## xConfiguration Network [n] VLAN Voice VlanId

Applies to: All products

Requires user role: ADMIN, USER

Define the VLAN voice ID. This setting will only take effect if Network VLAN Voice Mode is set to Manual.

### USAGE:

```
xConfiguration Network [n] VLAN Voice VlanId: VlanId where

n: Index that identifies the network.

Range: 1..1

VlanId:

Integer (1..4094)

Set the VLAN voice ID.

Default value:
```

## NetworkPort configuration

## xConfiguration NetworkPort [n] Mode

Applies to: DX70/DX80
Requires user role: ADMIN

The video system has two network ports. The first network port is for connecting the video system to Ethernet LAN. The second network port (also called the computer network port) allows you to connect a computer to the Ethernet LAN via the video system. In this way, you only need one network wall socket to support both the video system and the computer.

If the video system is used in a public environment we recommend that you disable this network port, to prevent people from connecting a computer to your network through the video system.

You have to restart the video system for any change to this setting to take effect.

```
xConfiguration NetworkPort [n] Mode: Mode
where

<u>n</u>: Unique ID that identifies the network port.
Range: 2...2

Mode:
Off/On
Off: The computer network port is disabled.
On: The computer network port is available for use.
Default value:
On
```



## NetworkServices configuration

## xConfiguration NetworkServices CDP Mode

Applies to: *All products*Requires user role: ADMIN

Enable or disable the CDP (Cisco Discovery Protocol) daemon. Enabling CDP will make the endpoint report certain statistics and device identifiers to a CDP-enabled switch. If CDP is disabled, the Network VLAN Voice Mode: Auto setting will not work.

### USAGE:

```
xConfiguration NetworkServices CDP Mode: Mode where

Mode:
Off/On
Off: The CDP daemon is disabled.
On: The CDP daemon is enabled.
Default value:
On
```

## xConfiguration NetworkServices H323 Mode

Applies to: *All products*Requires user role: ADMIN

Define whether the system should be able to place and receive H.323 calls or not.

### USAGE:

```
xConfiguration NetworkServices H323 Mode: <u>Mode</u>
where

<u>Mode</u>:

Off/On

Off: Disable the possibility to place and receive H.323 calls.
On: Enable the possibility to place and receive H.323 calls.
Default value:

Off
```

## xConfiguration NetworkServices HTTP Mode

Applies to: *All products*Requires user role: ADMIN

Define whether or not to allow access to the video system using the HTTP or HTTPS (HTTP Secure) protocols. Note that the video system's web interface use HTTP or HTTPS. If this setting is switched Off, you cannot use the web interface.

For additional security (encryption and decryption of requests and pages that are returned by the web server), allow only HTTPS.

Note: The default value is HTTP+HTTPS for video systems that have been upgraded to CE9.4 (or later) from an earlier software version, provided that the video system has not been factory reset after the upgrade.

#### USAGF:

```
xConfiguration NetworkServices HTTP Mode: <u>Mode</u>
where
<u>Mode</u>:
Off/HTTP+HTTPS/HTTPS
```

Off: Access to the video system not allowed via HTTP or HTTPS.

HTTP+HTTPS: Access to the video system allowed via both HTTP and HTTPS.

HTTPS: Access to the video system allowed via HTTPS, but not via HTTP.

Default value:

HTTPS (changed from HTTP+HTTPS to HTTPS in CE9.4)

## xConfiguration NetworkServices HTTP Proxy LoginName

Applies to: All products

Requires user role: ADMIN, USER

This is the user name part of the credentials for authentication towards the HTTP proxy. Requires that the NetworkServices HTTP Proxy Mode is set to Manual.

### **USAGE:**

xConfiguration NetworkServices HTTP Proxy LoginName: " $\underline{LoginName}$ " where

### LoginName:

String (0, 80)

The authentication login name.

Default value:

11 11

## xConfiguration NetworkServices HTTP Proxy Password

Applies to: All products

Requires user role: ADMIN, USER

This is the password part of the credentials for authentication towards the HTTP proxy. Requires that the NetworkServices HTTP Proxy Mode is set to Manual.

### **USAGE:**

### Password:

String (0, 64)

The authentication password.

Default value:

.. ..

### xConfiguration NetworkServices HTTP Proxy Mode

Applies to: All products

Requires user role: ADMIN, USER

The HTTP proxy for Cisco Webex can be set up manually, it can be auto-configured (PACUrl), fully automated (WPAD), or it can be turned off.

### **USAGE:**

 $\verb"xConfiguration" NetworkServices HTTP Proxy Mode: $\underline{\textit{Mode}}$$ 

where

<u>Mode</u>:

Manual/Off/PACUrl/WPAD

*Manual:* Enter the address of the proxy server in the NetworkServices HTTP Proxy URL setting. Optionally, also add the HTTP proxy login name and password in the NetworkServices HTTP Proxy LoginName/Password settings.

Off: The HTTP proxy mode is turned off.

**PACUrl:** The HTTP proxy is auto-configured. You must enter the URL for the PAC (Proxy Auto Configuration) script in the NetworkServices HTTP Proxy PACUrl setting.

WPAD: With WPAD (Web Proxy Auto Discovery) the HTTP proxy is fully automated and auto-configured.

Default value:



## xConfiguration NetworkServices HTTP Proxy Url

Cisco Collaboration Endpoint Software

Applies to: All products

Requires user role: ADMIN, USER

Set the URL of the HTTP proxy server. Requires that the NetworkServices HTTP Proxy Mode is set to Manual.

### **USAGE:**

```
xConfiguration NetworkServices HTTP Proxy Url: "<u>Url</u>" where

<u>Url</u>:

String (0..255)

The URL of the HTTP proxy server.

Default value:
```

## xConfiguration NetworkServices HTTP Proxy PACUrl

Applies to: All products

Requires user role: ADMIN, USER

Set the URL of the PAC (Proxy Auto Configuration) script. Requires that the NetworkServices HTTP Proxy Mode is set to PACUrl.

### **USAGE:**

```
xConfiguration NetworkServices HTTP Proxy PACUrl: "PACUrl"
where

PACUrl:
String (0..255)
The URL of the PAC (Proxy Auto Configuration) script.
Default value:
```

## xConfiguration NetworkServices HTTPS Server MinimumTLSVersion

Applies to: *All products*Requires user role: ADMIN

Set the lowest version of the TLS (Transport Layer Security) protocol that is allowed.

### **USAGE:**

 $\verb|xConfiguration|| \verb|NetworkServices|| \verb|HTTPS|| Server|| \verb|MinimumTLSVersion|| \\ \underline{\textit{MinimumTLSVersion}}|| \\ \\ \text{where}||$ 

### MinimumTLSVersion:

TLSv1.1/TLSv1.2

*TLSv1.1:* Support of TLS version 1.1 or higher. *TLSv1.2:* Support of TLS version 1.2 or higher.

Default value:

TLSv1.1

## xConfiguration NetworkServices HTTPS StrictTransportSecurity

Applies to: All products
Requires user role: ADMIN

The HTTP Strict Transport Security header lets a web site inform the browser that it should never load the site using HTTP and should automatically convert all attempts to access the site using HTTP to HTTPS requests instead.

### USAGE:

xConfiguration NetworkServices HTTPS StrictTransportSecurity:  $\underline{StrictTransportSecurity}$ 

where

### StrictTransportSecurity:

Off/On

Off: The HTTP strict transport security feature is disabled.
On: The HTTP strict transport security feature is enabled.

Default value:



## xConfiguration NetworkServices HTTPS VerifyServerCertificate

Applies to: *All products*Requires user role: ADMIN

When the video system connects to an external HTTPS server (like a phone book server or an external manager), this server will present a certificate to the video system to identify itself.

### **USAGE:**

 $\verb|xConfiguration| NetworkServices| \verb| HTTPS| VerifyServerCertificate| \\ \textit{VerifyServerCertificate}|$ 

where

### VerifyServerCertificate:

Off/On

Off: Do not verify server certificates.

*On:* Requires the system to verify that the server certificate is signed by a trusted Certificate Authority (CA). This requires that a list of trusted CAs are uploaded to the system in advance.

Default value:

Off

## xConfiguration NetworkServices HTTPS VerifyClientCertificate

Applies to: *All products*Requires user role: ADMIN

When the video system connects to a HTTPS client (like a web browser), the client can be asked to present a certificate to the video system to identify itself.

### **USAGE:**

 $\verb|xConfiguration| NetworkServices| \verb| HTTPS| VerifyClientCertificate| \\ \textit{VerifyClientCertificate}|$ 

where

### VerifyClientCertificate:

Off/On

Off: Do not verify client certificates.

On: Requires the client to present a certificate that is signed by a trusted Certificate Authority (CA). This requires that a list of trusted CAs are uploaded to the system in advance.

Default value:



## xConfiguration NetworkServices NTP Mode

Applies to: *All products*Requires user role: ADMIN

The Network Time Protocol (NTP) is used to synchronize the system's time and date to a reference time server. The time server will be queried regularly for time updates.

### **USAGE:**

xConfiguration NetworkServices NTP Mode:  $\underline{\textit{Mode}}$ 

where

<u>Mode</u>:

Auto/Manual/Off

**Auto:** The system will use an NTP server for time reference. As default, the server address will be obtained from the network's DHCP server. If a DHCP server is not used, or if the DHCP server does not provide an NTP server address, the NTP server address that is specified in the NetworkServices NTP Server [n] Address setting will be used.

*Manual:* The system will use the NTP server that is specified in the NetworkServices NTP Server [n] Address setting for time reference.

Off: The system will not use an NTP server. The NetworkServices NTP Server [n] Address setting will be ignored.

Default value:

Auto

## xConfiguration NetworkServices NTP Server [n] Address

Applies to: *All products*Requires user role: ADMIN

The address of the NTP server that will be used when NetworkServices NTP Mode is set to Manual, and when NetworkServices NTP Mode is set to Auto and no address is supplied by a DHCP server.

### **USAGE:**

```
xConfiguration NetworkServices NTP Server [n] Address: "\underline{Address}" where
```

 $\underline{n}$ : Unique ID that identifies the NTP server.

Range: 1..3

Address:

String (0, 255)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

"0.tandberg.pool.ntp.org"

## xConfiguration NetworkServices SIP Mode

Applies to: *All products*Requires user role: ADMIN

Define whether the system should be able to place and receive SIP calls or not.

### **USAGE:**

xConfiguration NetworkServices SIP Mode:  $\underline{\textit{Mode}}$ 

where

Mode:

Off/On

Off: Disable the possibility to place and receive SIP calls.

On: Enable the possibility to place and receive SIP calls.

Default value:

On

## xConfiguration NetworkServices SNMP Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

SNMP (Simple Network Management Protocol) is used in network management systems to monitor network-attached devices (routers, servers, switches, projectors, etc) for conditions that warrant administrative attention. SNMP exposes management data in the form of variables on the managed systems, which describe the system configuration. These variables can then be queried (set to ReadOnly) and sometimes set (set to ReadWrite) by managing applications.

### **USAGE:**

xConfiguration NetworkServices SNMP Mode:  $\underline{\mathit{Mode}}$  where

### Mode:

Off/ReadOnly/ReadWrite

Off: Disable the SNMP network service.

ReadOnly: Enable the SNMP network service for queries only.

ReadWrite: Enable the SNMP network service for both queries and commands.

Default value:

ReadOnly

## xConfiguration NetworkServices SNMP Host [n] Address

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the address of up to three SNMP Managers

The system's SNMP Agent (in the codec) responds to requests from SNMP Managers (a PC program etc.), for example about system location and system contact. SNMP traps are not supported.

### USAGE:

 $\mbox{xConfiguration NetworkServices SNMP Host [n] Address: "$\underline{\mbox{Address}}$"} \mbox{where}$ 

n: Identifies the SNMP host. Maximum three SNMP hosts are allowed.

Range: 1..3

### Address:

String (0..255)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

## xConfiguration NetworkServices SNMP CommunityName

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the name of the Network Services SNMP Community. SNMP Community names are used to authenticate SNMP requests. SNMP requests must have a password (case sensitive) in order to receive a response from the SNMP Agent in the codec. The default password is "public". If you have the Cisco TelePresence Management Suite (TMS) you must make sure the same SNMP Community is configured there too. NOTE: The SNMP Community password is case sensitive.

### **USAGE:**

```
{\tt xConfiguration\ NetworkServices\ SNMP\ CommunityName:\ "} \underline{{\tt CommunityName}"} {\tt where}
```

### CommunityName:

String (0, 50)

The SNMP community name.

Default value:

11 1

## xConfiguration NetworkServices SNMP SystemContact

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the name of the Network Services SNMP System Contact.

### USAGE:

### SystemContact:

String (0, 50)

The name of the SNMP system contact.

Default value:

" "

## xConfiguration NetworkServices SNMP SystemLocation

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the name of the Network Services SNMP System Location.

### **USAGE:**

String (0, 50)

The name of the SNMP system location.

Default value:

11 11

## xConfiguration NetworkServices SSH Mode

Applies to: *All products*Requires user role: ADMIN

SSH (or Secure Shell) protocol can provide secure encrypted communication between the codec and your local computer.

```
xConfiguration NetworkServices SSH Mode: Mode where

Mode:
Off/On
Off: The SSH protocol is disabled.
On: The SSH protocol is enabled.
Default value:
```

## xConfiguration NetworkServices SSH HostKeyAlgorithm

Applies to: *All products*Requires user role: ADMIN

Choose the cryptographic algorithm that shall be used for the SSH host key. Choices are RSA (Rivest-Shamir-Adleman) with 2048 bits keysize, ECDSA (Elliptic Curve Digital Signature Algorithm) with NIST curve P-384, and EdDSA (Edwards-curve Digital Signature Algorithm) with ed25519 signature schema.

### **USAGE:**

 $\verb|xConfiguration| NetworkServices| SSH | HostKeyAlgorithm: | \underline{\textit{HostKeyAlgorithm}}| \\ where$ 

### HostKeyAlgorithm:

ECDSA/RSA/ed25519

ECDSA: Use the ECDSA algorithm (nist-384p). RSA: Use the RSA algorithm (2048 bits). ed25519: Use the ed25519 algorithm.

Default value:

RSA

Off

## xConfiguration NetworkServices Telnet Mode

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN

Telnet is a network protocol used on the Internet or Local Area Network (LAN) connections.

### **USAGE:**

### xConfiguration NetworkServices UPnP Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Fully disable UPnP (Universal Plug and Play), or enable UPnP for a short time period after the video system has been switched on or restarted.

The default operation is that UPnP is enabled when you switch on or restart the video system. Then UPnP is automatically disabled after the timeout period that is defined in the NetworkServices UPnP Timeout setting. Use the video system's web interface to set the timeout.

When UPnP is enabled, the video system advertises its presence on the network. The advertisement permits a Touch controller to discover video systems automatically, and you do not need to manually enter the video system's IP address in order to pair the Touch controller.

#### USAGE:

xConfiguration NetworkServices UPnP Mode: Mode

where

Mode:

Off/On

Off: UPnP is disabled. The video system does not advertise its presence, and you have to enter the video system's IP address manually in order to pair a Touch controller to the video system.

**On:** UPnP is enabled. The video system advertises its presence until the timeout period expires.

Default value:

On

## xConfiguration NetworkServices WelcomeText

Applies to: *All products*Requires user role: ADMIN

Choose which information the user should see when logging on to the codec through SSH or Telnet.

Telnet is only supported by SX Series, MX Series and DX70/DX80.

#### **USAGE:**

 $\verb|xConfiguration| NetworkServices WelcomeText: | \underline{\textit{WelcomeText}}|$  where

### WelcomeText:

Off/On

Off: The welcome text is: Login successful

**On:** The welcome text is: Welcome to <system name>; Software version; Software release date; Login successful.

Default value:

On

## Peripherals configuration

## xConfiguration Peripherals Profile Cameras

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the number of cameras that are expected to be connected to the video system. This information is used by the video system's diagnostics service. If the number of connected cameras does not match this setting, the diagnostics service will report it as an inconsistency.

### USAGE:

xConfiguration Peripherals Profile Cameras:  $\underline{\textit{Cameras}}$  where

### Cameras:

NotSet/Minimum1/0/1/2/3/4/5/6/7

NotSet: No camera check is performed.

Minimum1: At least one camera should be connected to the video system.

0-7: Select the number of cameras that are expected to be connected to the video system.

Default value:

Minimum1

## xConfiguration Peripherals Profile ControlSystems

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define if a third-party control system, for example Crestron or AMX, is expected to be connected to the video system. This information is used by the video system's diagnostics service. If the number of connected control systems does not match this setting, the diagnostics service will report it as an inconsistency. Note that only one third-party control system is supported.

If set to 1, the control system must send heart beats to the video system using xCommand Peripherals Pair and HeartBeat commands. Failing to do so will cause the in-room control extensions to show a warning that the video system has lost connectivity to the control system.

### USAGE:

xConfiguration Peripherals Profile ControlSystems:  $\underline{\textit{ControlSystems}}$  where

### ControlSystems:

1/NotSet

1: One third-party control system should be connected to the video system.

NotSet: No check for a third-party control system is performed.

Default value:

NotSet 1

### xConfiguration Peripherals Profile TouchPanels

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the number of Cisco Touch controllers that are expected to be connected to the video system. This information is used by the video system's diagnostics service. If the number of connected Touch controllers does not match this setting, the diagnostics service will report it as an inconsistency.

### USAGE:

xConfiguration Peripherals Profile TouchPanels:  $\underline{\textit{TouchPanels}}$  where

### TouchPanels:

NotSet/Minimum1/0/1/2/3/4/5

NotSet: No touch panel check is performed.

Minimum1: At least one Cisco Touch controller should be connected to the video system.

*0-5*: Select the number of Touch controllers that are expected to be connected to the video system. Note that only one Cisco Touch controller is officially supported.

Default value:

NotSet [SX10 SX20]

Minimum1 [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

## Phonebook configuration

## xConfiguration Phonebook Server [n] ID

Applies to: *All products*Requires user role: ADMIN

Define a name for the external phone book.

### USAGE:

```
xConfiguration Phonebook Server [n] ID: "ID" where

<u>n</u>: Unique ID that identifies the phonebook server.

Range: 1..1

<u>ID</u>:

String (0, 64)

The name for the external phone book.

Default value:
```

## xConfiguration Phonebook Server [n] Type

Applies to: *All products*Requires user role: ADMIN

Select the phonebook server type.

### USAGE:

```
xConfiguration Phonebook Server [n] Type: Type
where

<u>n</u>: Unique ID that identifies the phonebook server.

Range: 1..1

Type:

Off/CUCM/Spark/TMS/VCS

Off: Do not use a phonebook.

CUCM: The phonebook is located on the Cisco Unified Communications Manager.

Spark: The phonebook is located in the Cisco Webex cloud service.

TMS: The phonebook is located on the Cisco TelePresence Management Suite server.

VCS: The phonebook is located on the Cisco TelePresence Video Communication Server.

Default value:

Off
```

## xConfiguration Phonebook Server [n] URL

Applies to: *All products*Requires user role: ADMIN

Define the address (URL) to the external phone book server.

```
xConfiguration Phonebook Server [n] URL: "URL"
where

<u>n</u>: Unique ID that identifies the phonebook server.
Range: 1..1

<u>URL</u>:

String (0..255)

A valid address (URL) to the phone book server.
Default value:
```

## Provisioning configuration

## xConfiguration Provisioning Connectivity

Applies to: All products

Requires user role: ADMIN, USER

This setting controls how the device discovers whether it should request an internal or external configuration from the provisioning server.

### **USAGE:**

 ${\tt xConfiguration\ Provisioning\ Connectivity:}\ \underline{{\it Connectivity}}$  where

### Connectivity:

Internal/External/Auto

Internal: Request internal configuration.

External: Request external configuration.

**Auto:** Automatically discover using NAPTR queries whether internal or external configurations should be requested. If the NAPTR responses have the "e" flag, external configurations will be requested. Otherwise internal configurations will be requested.

Default value:

Auto

## xConfiguration Provisioning ExternalManager Address

Applies to: All products

Requires user role: ADMIN, USER

Define the IP Address or DNS name of the external manager / provisioning system.

If an External Manager Address (and Path) is configured, the system will send a message to this address when starting up. When receiving this message the external manager / provisioning system can return configurations/commands to the unit as a result.

When using CUCM or TMS provisioning, the DHCP server can be set up to provide the external manager address automatically (DHCP Option 242 for TMS, and DHCP Option 150 for CUCM). An address set in the Provisioning ExternalManager Address setting will override the address provided by DHCP.

### USAGE:

xConfiguration Provisioning ExternalManager Address: " $\underline{Address}$ " where

## Address:

String (0, 64)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

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## xConfiguration Provisioning ExternalManager AlternateAddress

Applies to: All products

Requires user role: ADMIN, USER

Only applicable when the endpoint is provisioned by Cisco Unified Communication Manager (CUCM) and an alternate CUCM is available for redundancy. Define the address of the alternate CUCM. If the main CUCM is not available, the endpoint will be provisioned by the alternate CUCM. When the main CUCM is available again, the endpoint will be provisioned by this CUCM.

### **USAGE:**

xConfiguration Provisioning ExternalManager AlternateAddress: " $\underline{AlternateAddress}$ " where

### AlternateAddress:

String (0, 64)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

## xConfiguration Provisioning ExternalManager Protocol

Applies to: All products

Requires user role: ADMIN, USER

Define whether to use the HTTP (unsecure communication) or HTTPS (secure communication) protocol when sending requests to the external manager / provisioning system.

The selected protocol must be enabled in the NetworkServices HTTP Mode setting.

#### USAGE:

```
xConfiguration Provisioning ExternalManager Protocol: <a href="Protocol">Protocol</a>:

HTTPS/HTTP

HTTPS: Send requests via HTTPS.

HTTP: Send requests via HTTP.
```

## xConfiguration Provisioning ExternalManager Path

Applies to: All products

Default value: HTTP

Requires user role: ADMIN, USER

Define the Path to the external manager / provisioning system. This setting is required when several management services reside on the same server, i.e. share the same External Manager address.

### **USAGE:**

```
xConfiguration Provisioning ExternalManager Path: "Path"
where

Path:
String (0..255)
A valid path to the external manager or provisioning system.
Default value:
```

## xConfiguration Provisioning ExternalManager Domain

Applies to: All products

Requires user role: ADMIN, USER

Define the SIP domain for the VCS provisioning server.

```
xConfiguration Provisioning ExternalManager Domain: "<u>Domain</u>" where

<u>Domain</u>:

String (0, 64)

A valid domain name.

Default value:
```

## xConfiguration Provisioning Mode

Applies to: All products

Requires user role: ADMIN, USER

It is possible to configure a video system using a provisioning system (external manager). This allows video conferencing network administrators to manage many video systems simultaneously. With this setting you choose which type of provisioning system to use. Provisioning can also be switched off. Contact your provisioning system provider/representative for more information.

### **USAGE:**

xConfiguration Provisioning Mode:  $\underline{\textit{Mode}}$  where

Mode:

Off/Auto/CUCM/Edge/Spark/TMS/VCS

Off: The video system is not configured by a provisioning system.

Auto: The provisioning server is automatically selected as set up in the DHCP server.

**CUCM:** Push configurations to the video system from CUCM (Cisco Unified Communications Manager).

*Edge:* Push configurations to the video system from CUCM (Cisco Unified Communications Manager). The system connects to CUCM via the Collaboration Edge infrastructure. In order to register over Edge the encryption option key must be installed on the video system.

Spark: Push configurations to the video system from the Cisco Webex cloud service.

*TMS:* Push configurations to the video system from TMS (Cisco TelePresence Management System).

 $\it VCS$ : Push configurations to the video system from VCS (Cisco TelePresence Video Communication Server).

Default value:

Auto

## xConfiguration Provisioning LoginName

Applies to: All products

Requires user role: ADMIN, USER

This is the username part of the credentials used to authenticate the video system with the provisioning server. This setting must be used when required by the provisioning server.

### **USAGE:**

 ${\tt xConfiguration \ Provisioning \ LoginName: \ "} \underline{{\tt LoginName}"} \\ {\tt where}$ 

VVIICIC

LoginName:

String (0, 80)

A valid username.

Default value:

11 11

## xConfiguration Provisioning Password

Applies to: All products

Requires user role: ADMIN, USER

This is the password part of the credentials used to authenticate the video system with the provisioning server. This setting must be used when required by the provisioning server.

### **USAGE:**

xConfiguration Provisioning Password: " $\underline{\textit{Password}}$ " where

### Password:

String (0, 64)

A valid password.

Default value:



## Proximity configuration

## xConfiguration Proximity Mode

Applies to: All products

Requires user role: ADMIN, USER

Determine whether the video system will emit ultrasound pairing messages or not.

When the video system emits ultrasound, Proximity clients can detect that they are close to the video system. In order to use a client, at least one of the Proximity services must be enabled (refer to the Proximity Services settings). In general, Cisco recommends enabling all the Proximity services.

### USAGE:

xConfiguration Proximity Mode: Mode

where

<u>Mode</u>:

Off/On

Off: The video system does not emit ultrasound, and Proximity services cannot be used.

**On:** The video system emits ultrasound, and Proximity clients can detect that they are close to the video system. Enabled Proximity services can be used.

Default value:

On [MX200G2/MX300G2 MX700/MX800/MX800D RoomKit Room55 Room70G2]

Off [DX70/DX80 SX10 SX20 SX80 CodecPlus CodecPro]

Room 55 Dual: Off Room 70: On [Room70/Room55D]

### xConfiguration Proximity Services CallControl

Applies to: All products

Requires user role: ADMIN, USER

Enable or disable basic call control features on Proximity clients. When this setting is enabled, you are able to control a call using a Proximity client (for example dial, mute, adjust volume and hang up). This service is supported by mobile devices (iOS and Android). Proximity Mode must be On for this setting to take any effect.

### **USAGE:**

xConfiguration Proximity Services CallControl: <u>CallControl</u>

where

### CallControl:

Enabled/Disabled

Enabled: Call control from a Proximity client is enabled. Disabled: Call control from a Proximity client is disabled.

Default value:

Disabled

## xConfiguration Proximity Services ContentShare FromClients

Applies to: All products

Requires user role: ADMIN, USER

Enable or disable content sharing from Proximity clients. When this setting is enabled, you can share content from a Proximity client wirelessly on the video system, e.g. share your laptop screen. This service is supported by laptops (OS X and Windows). Proximity Mode must be On for this setting to take any effect.

#### USAGE:

xConfiguration Proximity Services ContentShare FromClients:  $\underline{\textit{FromClients}}$  where

### FromClients:

Enabled/Disabled

**Enabled:** Content sharing from a Proximity client is enabled. **Disabled:** Content sharing from a Proximity client is disabled.

Default value:

**Enabled** 

## xConfiguration Proximity Services ContentShare ToClients

Applies to: All products

Requires user role: ADMIN, USER

Enable or disable content sharing to Proximity clients. When enabled, Proximity clients will receive the presentation from the video system. You can zoom in on details, view previous content and take snapshots. This service is supported by mobile devices (iOS and Android). Proximity Mode must be On for this setting to take any effect.

### **USAGE:**

 $\verb|xConfiguration|| Proximity Services ContentShare ToClients: $\underline{\textit{ToClients}}$ where$ 

### ToClients:

Enabled/Disabled

**Enabled:** Content sharing to a Proximity client is enabled. **Disabled:** Content sharing to a Proximity client is disabled.

Default value:

Disabled

# RoomAnalytics configuration

### xConfiguration RoomAnalytics PeopleCountOutOfCall

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

By using face detection, the video system has the capability to find how many persons are in the room. By default, the system only counts people when in a call, or when displaying the self-view picture.

Codec Plus, Codec Pro, SX80: Applies only when the codec has a Cisco Quad Camera connected. MX700/MX800: Not applicable.

### **USAGE:**

 $\verb|xConfiguration RoomAnalytics PeopleCountOutOfCall: | \underline{PeopleCountOutOfCall}| where$ 

### PeopleCountOutOfCall:

Off/On

Off: The video system counts people only when the system is in a call, or when self-view is on.

*On:* The video system counts people as long as the video system is not in standby mode. This includes outside of call, even if self-view is off.

Default value:



## xConfiguration RoomAnalytics PeoplePresenceDetector

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

The video system has the capability to find whether or not people are present in the room, and report the result in the RoomAnalytics PeoplePresence status. This feature is based on ultrasound. It takes a minimum of 2 minutes to detect whether people are present or not in the room, and it may take up to 2 minutes for the status to change after the room becomes vacant.

### **USAGE:**

 $\verb|xConfiguration|| RoomAnalytics|| PeoplePresenceDetector: | \underline{PeoplePresenceDetector}||$  where

### PeoplePresenceDetector:

Off/On

*Off:* The video system's status does not show whether or not there are people present in the room.

On: The video system's status shows whether or not there are people present in the room.

Default value:

Off

# SerialPort configuration

## xConfiguration SerialPort Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Enable/disable the serial port.

### USAGE:

xConfiguration SerialPort Mode:  $\underline{\textit{Mode}}$  where

Mode:

Off/On

Off: Disable the serial port.

On: Enable the serial port.

Default value:

On



## xConfiguration SerialPort BaudRate

Applies to: SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Set the baud rate (data transmission rate, bits per second) for the serial port.

Other connection parameters for the serial port are: Data bits: 8; Parity: None; Stop bits: 1; Flow control: None.

### USAGE:

```
xConfiguration SerialPort BaudRate: <u>BaudRate</u> where 
BaudRate:
```

115200 [RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

9600/19200/38400/57600/115200 [SX20 SX80 MX700/MX800/MX800D]

Choose a baud rate from the baud rates listed (bps).

Default value:

115200 [SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

38400 [SX20]

## xConfiguration SerialPort LoginRequired

Applies to: *All products*Requires user role: ADMIN

Define if login shall be required when connecting to the serial port.

### **USAGE:**

```
{\tt xConfiguration\ SerialPort\ LoginRequired:\ } \underline{{\tt LoginRequired}} where
```

### LoginRequired:

Off/On

Off: The user can access the codec via the serial port without any login.

On: Login is required when connecting to the codec via the serial port.

Default value:

On

## SIP configuration

### xConfiguration SIP Authentication UserName

Applies to: *All products*Requires user role: ADMIN

This is the user name part of the credentials used to authenticate towards the SIP proxy.

### USAGE:

```
xConfiguration SIP Authentication UserName: "UserName"
where
UserName:
String (0, 128)
A valid username.
Default value:
```

## xConfiguration SIP Authentication Password

Applies to: *All products*Requires user role: ADMIN

This is the password part of the credentials used to authenticate towards the SIP proxy.

```
xConfiguration SIP Authentication Password: "Password"
where
Password:
String (0, 128)
A valid password.
Default value:
```

## xConfiguration SIP DefaultTransport

Applies to: *All products*Requires user role: ADMIN

Select the transport protocol to be used over the LAN.

### USAGE:

 $\mbox{xConfiguration SIP DefaultTransport: } \underline{\textit{DefaultTransport}} \\ \mbox{where}$ 

### DefaultTransport:

Auto/TCP/TIs/UDP

TCP: The system will always use TCP as the default transport method.

UDP: The system will always use UDP as the default transport method.

*Tls:* The system will always use TLS as the default transport method. For TLS connections a SIP CA-list can be uploaded to the video system. If no such CA-list is available on the system then anonymous Diffie Hellman will be used.

**Auto:** The system will try to connect using transport protocols in the following order: TLS, TCP, UDP.

Default value:

Auto

## xConfiguration SIP DisplayName

Applies to: *All products*Requires user role: ADMIN

When configured the incoming call will report the display name instead of the SIP URI.

### **USAGE:**

```
xConfiguration SIP DisplayName: "DisplayName" where

<u>DisplayName</u>:

String (0, 550)
```

The name to be displayed instead of the SIP URI.

Default value:

11 11

### xConfiguration SIP Ice DefaultCandidate

Applies to: *All products*Requires user role: ADMIN

The ICE protocol needs some time to reach a conclusion about which media route to use (up to the first 5 seconds of a call). During this period media for the video system will be sent to the Default Candidate as defined in this setting.

### USAGE:

```
xConfiguration SIP Ice DefaultCandidate: \underline{\textit{DefaultCandidate}} where
```

### DefaultCandidate:

Host/Rflx/Relay

Host: Send media to the video system's private IP address.

Rflx: Send media to the video system's public IP address, as seen by the TURN server.

Relay: Send media to the IP address and port allocated on the TURN server.

Default value:

Host

## xConfiguration SIP Ice Mode

Applies to: *All products*Requires user role: ADMIN

ICE (Interactive Connectivity Establishment, RFC 5245) is a NAT traversal solution that the video systems can use to discover the optimized media path. Thus the shortest route for audio and video is always secured between the video systems.

### USAGE:

```
xConfiguration SIP Ice Mode: \underline{\textit{Mode}} where \underline{\textit{Mode}}: \underline{\textit{Auto/Off/On}}
```

Auto: ICE is enabled if a TURN server is provided, otherwise ICE is disabled.

Off: ICE is disabled.
On: ICE is enabled.
Default value:

Auto



### xConfiguration SIP ListenPort

Applies to: *All products*Requires user role: ADMIN

Turn on or off the listening for incoming connections on the SIP TCP/UDP ports. If turned off, the endpoint will only be reachable through the SIP registrar (CUCM or VCS).

### **USAGE:**

xConfiguration SIP ListenPort:  $\underline{\textit{ListenPort}}$  where

Cisco Collaboration Endpoint Software

### <u>ListenPort</u>:

Off/On

*Off:* Listening for incoming connections on the SIP TCP/UDP ports is turned off. *On:* Listening for incoming connections on the SIP TCP/UDP ports is turned on.

Default value:

On

## xConfiguration SIP Proxy [n] Address

Applies to: *All products*Requires user role: ADMIN

The Proxy Address is the manually configured address for the outbound proxy. It is possible to use a fully qualified domain name, or an IP address. The default port is 5060 for TCP and UDP but another one can be provided.

### **USAGE:**

```
xConfiguration SIP Proxy [n] Address: "Address"
where

<u>n</u>: Index that identifies the proxy (maximum 4 proxys can be defined).
Range: 1..4

Address:
String (0..255)
A valid IPv4 address, IPv6 address or DNS name.
Default value:
```

## xConfiguration SIP Turn Server

Applies to: *All products*Requires user role: ADMIN

Define the address of the TURN (Traversal Using Relay NAT) server. It is used as a media relay fallback and it is also used to discover the endpoint's own public IP address.

### **USAGE:**

```
xConfiguration SIP Turn Server: "Server"
where
Server:
String (0..255)
The preferred format is DNS SRV record (e.g. _turn._udp.<domain>), or it can be a valid IPv4 or IPv6 address.
```

## xConfiguration SIP Turn UserName

Applies to: *All products*Requires user role: ADMIN

Default value:

Define the user name needed for accessing the TURN server.

```
xConfiguration SIP Turn UserName: "UserName" where

UserName:
String (0, 128)
A valid user name.
Default value:
```

## xConfiguration SIP Turn Password

Applies to: *All products*Requires user role: ADMIN

Define the password needed for accessing the TURN server.

### USAGE:

```
xConfiguration SIP Turn Password: "Password"
where
Password:
String (0, 128)
A valid password.
Default value:
""
```

## xConfiguration SIP URI

Applies to: *All products*Requires user role: ADMIN

The SIP URI (Uniform Resource Identifier) is the address that is used to identify the video system. The URI is registered and used by the SIP services to route inbound calls to the system. The SIP URI syntax is defined in RFC 3261.

### **USAGE:**

```
xConfiguration SIP URI: "URI"
where

URI:
String (0..255)
An address (URI) that is compliant with the SIP URI syntax.
Default value:
""
```

## Standby configuration

## xConfiguration Standby BootAction

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position after a restart of the codec.

### **USAGE:**

 ${\tt xConfiguration \ Standby \ BootAction:} \ \underline{{\tt BootAction}}$  where

### BootAction:

None/DefaultCameraPosition/RestoreCameraPosition

None: No action.

**RestoreCameraPosition:** When the video system restarts, the camera returns to the position that it had before the restart.

**DefaultCameraPosition:** When the video system restarts, the camera moves to the factory default position.

### Default value:

DefaultCameraPosition [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

RestoreCameraPosition [SX10 SX20]



Cisco Collaboration Endpoint Software

### xConfiguration Standby Control

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define whether the system should go into standby mode or not.

### **USAGE:**

```
xConfiguration Standby Control: \underline{\textit{Control}} where \underline{\textit{Control}}:
```

Off: The system will not enter standby mode.

*On:* The system will enter standby mode when the Standby Delay has timed out. Requires the Standby Delay to be set to an appropriate value.

Default value:

On

Off/On

## xConfiguration Standby Delay

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define how long (in minutes) the system shall be in idle mode before it goes into standby mode. Requires the Standby Control to be enabled.

### USAGE:

```
xConfiguration Standby Delay: <u>Delay</u> where

<u>Delay</u>:

Integer (1..480)

Set the standby delay (minutes).

Default value:

10
```

## xConfiguration Standby StandbyAction

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the camera position when going into standby mode.

### **USAGE:**

 ${\tt xConfiguration~Standby~Action:~} \underline{{\it StandbyAction}} \\ {\tt where}$ 

### StandbyAction:

None/PrivacyPosition

None: No action.

*PrivacyPosition:* When the video system enters standby, the camera turns to a sideways position for privacy.

Default value:

**PrivacyPosition** 

## xConfiguration Standby WakeupAction

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit

CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position when leaving standby mode.

### **USAGE:**

xConfiguration Standby WakeupAction:  $\underline{\textit{WakeupAction}}$  where

### WakeupAction:

None/RestoreCameraPosition/DefaultCameraPosition

None: No action.

**RestoreCameraPosition:** When the video system leaves standby, the camera returns to the position that it had before entering standby.

**DefaultCameraPosition:** When the video system leaves standby, the camera moves to the factory default position.

Default value:

RestoreCameraPosition

## xConfiguration Standby WakeupOnMotionDetection

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Automatic wake up on motion detection is a feature that will sense when a person walks into the room. The feature is based on ultrasound detection, and the Proximity Mode setting must be On to make the feature work.

#### USAGE:

 $\verb|xConfiguration| Standby WakeupOnMotionDetection: | \underline{\textit{WakeupOnMotionDetection}}| \\ where$ 

## WakeupOnMotionDetection:

Off/On

Off: The wake up on motion detection is disabled.

**On:** When people walk into the room the system will automatically wake up from standby. Not applicable for DX70 and SX10.

#### Default value:

On [MX200G2/MX300G2 MX700/MX800/MX800D RoomKit Room55 Room70G2]

Off [DX70/DX80 SX10 SX20 SX80 CodecPlus CodecPro]

Room 55 Dual: Off Room 70: On [Room70/Room55D]

## xConfiguration Standby PowerSave

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

You can reduce the video system's power consumption during out-of-office hours with this setting. The Power Save mode is an extension to the regular standby mode.

When the video system enters power save mode, power is cut to some of the video system's modules, for example the integrated cameras. The codec and Touch controller behaves like in regular standby. The video system wakes up from power save mode when you tap the touch panel.

Waking up the video system from power save mode takes longer than waking it up from regular standby, because the cameras must boot. You can make calls right away, but there is no outgoing video until the cameras has completed their boot process.

#### **USAGE:**

xConfiguration Standby PowerSave: PowerSave

where

## PowerSave:

Never/OutsideOfficeHours

**Never:** The video system will never go into power save mode; only to regular standby.

OutsideOfficeHours: The video system will go into power save mode during out-of-office hours. You must provide the office hours with the following settings: Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End.

Default value:

Never

# SystemUnit configuration

## xConfiguration SystemUnit Name

Applies to: *All products*Requires user role: ADMIN

Define the system name. The system name will be sent as the hostname in a DHCP request and when the codec is acting as an SNMP Agent.

## **USAGE:**

```
xConfiguration SystemUnit Name: "Name" where

Name:
String (0, 50)
Define the system name.
Default value:
```

## xConfiguration SystemUnit CrashReporting Mode

Applies to: *All products*Requires user role: ADMIN

If the video system (codec) crashes, the system can automatically send logs to the Cisco Automatic Crash Report tool (ACR) for analyses. The ACR tool is for Cisco internal usage only and not available to customers.

## USAGE:

```
xConfiguration SystemUnit CrashReporting Mode: Mode
where

Mode:
Off/On
Off: No logs will be sent to ACR tool.
On: The logs will automatically be sent to ACR tool.
Default value:
Off [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D]
On [RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]
```

## xConfiguration SystemUnit CrashReporting Url

Applies to: *All products*Requires user role: ADMIN

If the video system (codec) crashes, the system can automatically send logs to the Cisco Automatic Crash Report tool (ACR) for analyses. The ACR tool is for Cisco internal usage only and not available to customers.

#### USAGE:

```
xConfiguration SystemUnit CrashReporting Url: "<u>Url</u>"

where

<u>Url</u>:

String (0..255)

The URL to the Cisco Automatic Crash Report tool (ACR).

Default value:

"" [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D]

"acr.cisco.com" [RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]
```



# Time configuration

## xConfiguration Time TimeFormat

Applies to: All products

Requires user role: ADMIN, USER

Define the time format.

#### USAGE:

xConfiguration Time TimeFormat: <u>TimeFormat</u>
where

<u>TimeFormat</u>:

24H/12H

24H: Set the time format to 24 hours.

12H: Set the time format to 12 hours (AM/PM).
Default value:

## xConfiguration Time DateFormat

Applies to: All products

24H

Requires user role: ADMIN, USER

Define the date format.

#### USAGF:

xConfiguration Time DateFormat: <u>DateFormat</u>
where
DateFormat:

#### Dater Officat.

 $DD\_MM\_YY/MM\_DD\_YY/YY\_MM\_DD$ 

DD\_MM\_YY: The date January 30th 2010 will be displayed: 30.01.10MM\_DD\_YY: The date January 30th 2010 will be displayed: 01.30.10YY\_MM\_DD: The date January 30th 2010 will be displayed: 10.01.30

Default value:

DD MM YY

## xConfiguration Time Zone

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define the time zone for the geographical location of the video system. The information in the value space is from the tz database, also called the IANA Time Zone Database.

## **USAGE:**

xConfiguration Time Zone:  $\underline{\textit{Zone}}$  where  $\underline{\textit{Zone}}$ :

Africa/Abidjan, Africa/Accra, Africa/Addis Ababa, Africa/Algiers, Africa/Asmara, Africa/ Asmera, Africa/Bamako, Africa/Bangui, Africa/Banjul, Africa/Bissau, Africa/Blantyre, Africa/ Brazzaville, Africa/Bujumbura, Africa/Cairo, Africa/Casablanca, Africa/Ceuta, Africa/Conakry, Africa/Dakar, Africa/Dar\_es\_Salaam, Africa/Djibouti, Africa/Douala, Africa/El\_Aaiun, Africa/ Freetown, Africa/Gaborone, Africa/Harare, Africa/Johannesburg, Africa/Juba, Africa/Kampala, Africa/Khartoum, Africa/Kigali, Africa/Kinshasa, Africa/Lagos, Africa/Libreville, Africa/Lome, Africa/Luanda, Africa/Lubumbashi, Africa/Lusaka, Africa/Malabo, Africa/Maputo, Africa/ Maseru, Africa/Mbabane, Africa/Mogadishu, Africa/Monrovia, Africa/Nairobi, Africa/Ndjamena, Africa/Niamey, Africa/Nouakchott, Africa/Ouagadougou, Africa/Porto-Novo, Africa/Sao\_Tome, Africa/Timbuktu, Africa/Tripoli, Africa/Tunis, Africa/Windhoek, America/Adak, America/ Anchorage, America/Anguilla, America/Antigua, America/Araguaina, America/Argentina/ Buenos\_Aires, America/Argentina/Catamarca, America/Argentina/ComodRivadavia, America/ Argentina/Cordoba, America/Argentina/Jujuy, America/Argentina/La\_Rioja, America/ Argentina/Mendoza, America/Argentina/Rio\_Gallegos, America/Argentina/Salta, America/ Argentina/San\_Juan, America/Argentina/San\_Luis, America/Argentina/Tucuman, America/ Argentina/Ushuaia, America/Aruba, America/Asuncion, America/Atikokan, America/Atka, America/Bahia, America/Bahia\_Banderas, America/Barbados, America/Belem, America/ Belize, America/Blanc-Sablon, America/Boa\_Vista, America/Bogota, America/Boise, America/Buenos\_Aires, America/Cambridge\_Bay, America/Campo\_Grande, America/ Cancun, America/Caracas, America/Catamarca, America/Cayenne, America/Cayman, America/Chicago, America/Chihuahua, America/Coral\_Harbour, America/Cordoba, America/ Costa Rica, America/Creston, America/Cuiaba, America/Curacao, America/Danmarkshavn, America/Dawson, America/Dawson\_Creek, America/Denver, America/Detroit, America/ Dominica, America/Edmonton, America/Eirunepe, America/El\_Salvador, America/Ensenada, America/Fort\_Nelson, America/Fort\_Wayne, America/Fortaleza, America/Glace\_Bay, America/Godthab, America/Goose\_Bay, America/Grand\_Turk, America/Grenada, America/ Guadeloupe, America/Guatemala, America/Guayaquil, America/Guyana, America/Halifax, America/Havana, America/Hermosillo, America/Indiana/Indianapolis, America/Indiana/Knox, America/Indiana/Marengo, America/Indiana/Petersburg, America/Indiana/Tell\_City, America/ Indiana/Vevay, America/Indiana/Vincennes, America/Indiana/Winamac, America/Indianapolis, America/Inuvik, America/Iqaluit, America/Jamaica, America/Jujuy, America/Juneau, America/ Kentucky/Louisville, America/Kentucky/Monticello, America/Knox\_IN, America/Kralendijk, America/La\_Paz, America/Lima, America/Los\_Angeles, America/Louisville, America/

Lower\_Princes, America/Maceio, America/Managua, America/M America/Martinique, America/Matamoros, America/Mazatlan, America/Mendoza, America/ Menominee, America/Merida, America/Metlakatla, America/Mexico\_City, America/Miguelon, America/Moncton, America/Monterrey, America/Montevideo, America/Montreal, America/ Montserrat, America/Nassau, America/New York, America/Nipigon, America/Nome, America/Noronha, America/North\_Dakota/Beulah, America/North\_Dakota/Center, America/ North\_Dakota/New\_Salem, America/Ojinaga, America/Panama, America/Pangnirtung, America/Paramaribo, America/Phoenix, America/Port-au-Prince, America/Port of Spain, America/Porto\_Acre, America/Porto\_Velho, America/Puerto\_Rico, America/Rainy\_River, America/Rankin\_Inlet, America/Recife, America/Regina, America/Resolute, America/ Rio Branco, America/Rosario, America/Santa Isabel, America/Santarem, America/Santiago, America/Santo Domingo, America/Sao Paulo, America/Scoresbysund, America/Shiprock, America/Sitka, America/St\_Barthelemy, America/St\_Johns, America/St\_Kitts, America/ St Lucia, America/St Thomas, America/St Vincent, America/Swift Current, America/ Tegucigalpa, America/Thule, America/Thunder\_Bay, America/Tijuana, America/Toronto, America/Tortola, America/Vancouver, America/Virgin, America/Whitehorse, America/ Winnipeg, America/Yakutat, America/Yellowknife, Antarctica/Casev, Antarctica/Davis, Antarctica/DumontDUrville, Antarctica/Macquarie, Antarctica/Mawson, Antarctica/McMurdo, Antarctica/Palmer, Antarctica/Rothera, Antarctica/South\_Pole, Antarctica/Syowa, Antarctica/ Troll, Antarctica/Vostok, Arctic/Longyearbyen, Asia/Aden, Asia/Almaty, Asia/Amman, Asia/ Anadyr, Asia/Agtau, Asia/Agtobe, Asia/Ashgabat, Asia/Ashkhabad, Asia/Baghdad, Asia/ Bahrain, Asia/Baku, Asia/Bangkok, Asia/Barnaul, Asia/Beirut, Asia/Bishkek, Asia/Brunei, Asia/ Calcutta, Asia/Chita, Asia/Choibalsan, Asia/Chongging, Asia/Chungking, Asia/Colombo, Asia/ Dacca, Asia/Damascus, Asia/Dhaka, Asia/Dili, Asia/Dubai, Asia/Dushanbe, Asia/Gaza, Asia/ Harbin, Asia/Hebron, Asia/Ho\_Chi\_Minh, Asia/Hong\_Kong, Asia/Hovd, Asia/Irkutsk, Asia/ Istanbul, Asia/Jakarta, Asia/Jayapura, Asia/Jerusalem, Asia/Kabul, Asia/Kamchatka, Asia/ Karachi, Asia/Kashgar, Asia/Kathmandu, Asia/Katmandu, Asia/Khandyga, Asia/Kolkata, Asia/ Krasnoyarsk, Asia/Kuala\_Lumpur, Asia/Kuching, Asia/Kuwait, Asia/Macao, Asia/Macau, Asia/ Magadan, Asia/Makassar, Asia/Manila, Asia/Muscat, Asia/Nicosia, Asia/Novokuznetsk, Asia/ Novosibirsk, Asia/Omsk, Asia/Oral, Asia/Phnom Penh, Asia/Pontianak, Asia/Pvongvang, Asia/Qatar, Asia/Qyzylorda, Asia/Rangoon, Asia/Riyadh, Asia/Saigon, Asia/Sakhalin, Asia/ Samarkand, Asia/Seoul, Asia/Shanghai, Asia/Singapore, Asia/Srednekolymsk, Asia/Taipei, Asia/Tashkent, Asia/Tbilisi, Asia/Tehran, Asia/Tel\_Aviv, Asia/Thimbu, Asia/Thimphu, Asia/ Tokyo, Asia/Tomsk, Asia/Ujung Pandang, Asia/Ulaanbaatar, Asia/Ulan Bator, Asia/Urumgi, Asia/Ust-Nera, Asia/Vientiane, Asia/Vladivostok, Asia/Yakutsk, Asia/Yekaterinburg, Asia/ Yerevan, Atlantic/Azores, Atlantic/Bermuda, Atlantic/Canary, Atlantic/Cape\_Verde, Atlantic/ Faeroe, Atlantic/Faroe, Atlantic/Jan Mayen, Atlantic/Madeira, Atlantic/Reykjavik, Atlantic/ South Georgia, Atlantic/St Helena, Atlantic/Stanley, Australia/ACT, Australia/Adelaide, Australia/Brisbane, Australia/Broken Hill, Australia/Canberra, Australia/Currie, Australia/ Darwin, Australia/Eucla, Australia/Hobart, Australia/LHI, Australia/Lindeman, Australia/ Lord Howe, Australia/Melbourne, Australia/NSW, Australia/North, Australia/Perth, Australia/ Queensland, Australia/South, Australia/Sydney, Australia/Tasmania, Australia/Victoria, Australia/West, Australia/Yancowinna, Brazil/Acre, Brazil/DeNoronha, Brazil/East, Brazil/West, CET, CST6CDT, Canada/Atlantic, Canada/Central, Canada/East-Saskatchewan, Canada/ Eastern, Canada/Mountain, Canada/Newfoundland, Canada/Pacific, Canada/Saskatchewan, Canada/Yukon, Chile/Continental, Chile/Easter/sland, Cuba, EET, EST, EST5EDT, Egypt, Eire,

Etc/GMT. Etc/GMT+0. Etc/GMT+1. Etc/GMT+10. Etc/GMT+11. Etc/GMT+12. Etc/GMT+2. Etc/GMT+2. GMT+3, Etc/GMT+4, Etc/GMT+5, Etc/GMT+6, Etc/GMT+7, Etc/GMT+8, Etc/GMT+9, Etc/GMT-0, Etc/GMT-1, Etc/GMT-10, Etc/GMT-11, Etc/GMT-12, Etc/GMT-13, Etc/GMT-14, Etc/GMT-2, Etc/ GMT-3, Etc/GMT-4, Etc/GMT-5, Etc/GMT-6, Etc/GMT-7, Etc/GMT-8, Etc/GMT-9, Etc/GMT0, Etc/Greenwich, Etc/UCT, Etc/UTC, Etc/Universal, Etc/Zulu, Europe/Amsterdam, Europe/ Andorra, Europe/Astrakhan, Europe/Athens, Europe/Belfast, Europe/Belgrade, Europe/Berlin, Europe/Bratislava, Europe/Brussels, Europe/Bucharest, Europe/Budapest, Europe/Busingen, Europe/Chisinau, Europe/Copenhagen, Europe/Dublin, Europe/Gibraltar, Europe/Guernsey, Europe/Helsinki, Europe/Isle\_of\_Man, Europe/Istanbul, Europe/Jersey, Europe/Kaliningrad, Europe/Kiev, Europe/Kirov, Europe/Lisbon, Europe/Ljubljana, Europe/London, Europe/ Luxembourg, Europe/Madrid, Europe/Malta, Europe/Mariehamn, Europe/Minsk, Europe/ Monaco, Europe/Moscow, Europe/Nicosia, Europe/Oslo, Europe/Paris, Europe/Podgorica, Europe/Prague, Europe/Riga, Europe/Rome, Europe/Samara, Europe/San\_Marino, Europe/ Sarajevo, Europe/Simferopol, Europe/Skopje, Europe/Sofia, Europe/Stockholm, Europe/ Tallinn, Europe/Tirane, Europe/Tiraspol, Europe/Ulvanovsk, Europe/Uzhgorod, Europe/Vaduz, Europe/Vatican, Europe/Vienna, Europe/Vilnius, Europe/Volgograd, Europe/Warsaw, Europe/ Zagreb, Europe/Zaporozhye, Europe/Zurich, GB, GB-Eire, GMT, GMT+0, GMT-0, GMT0, Greenwich, HST, Hongkong, Iceland, Indian/Antananariyo, Indian/Chagos, Indian/Christmas, Indian/Cocos, Indian/Comoro, Indian/Kerguelen, Indian/Mahe, Indian/Maldives, Indian/ Mauritius, Indian/Mayotte, Indian/Reunion, Iran, Israel, Jamaica, Japan, Kwajalein, Libya, MET, MST, MST7MDT, Mexico/BajaNorte, Mexico/BajaSur, Mexico/General, NZ, NZ-CHAT, Navajo, PRC, PST8PDT, Pacific/Apia, Pacific/Auckland, Pacific/Bougainville, Pacific/Chatham, Pacific/ Chuuk, Pacific/Easter, Pacific/Efate, Pacific/Enderbury, Pacific/Fakaofo, Pacific/Fiji, Pacific/ Funafuti, Pacific/Galapagos, Pacific/Gambier, Pacific/Guadalcanal, Pacific/Guam, Pacific/ Honolulu, Pacific/Johnston, Pacific/Kiritimati, Pacific/Kosrae, Pacific/Kwajalein, Pacific/Majuro, Pacific/Marquesas, Pacific/Midway, Pacific/Nauru, Pacific/Niue, Pacific/Norfolk, Pacific/ Noumea, Pacific/Pago\_Pago, Pacific/Palau, Pacific/Pitcairn, Pacific/Pohnpei, Pacific/Ponape, Pacific/Port\_Moresby, Pacific/Rarotonga, Pacific/Saipan, Pacific/Samoa, Pacific/Tahiti, Pacific/Tarawa, Pacific/Tongatapu, Pacific/Truk, Pacific/Wake, Pacific/Wallis, Pacific/Yap, Poland, Portugal, ROC, ROK, Singapore, Turkey, UCT, US/Alaska, US/Aleutian, US/Arizona, US/Central, US/East-Indiana, US/Eastern, US/Hawaii, US/Indiana-Starke, US/Michigan, US/ Mountain, US/Pacific, US/Pacific-New, US/Samoa, UTC, Universal, W-SU, WET, Zulu Select a time zone from the list.

Default value:

Etc/UTC

## xConfiguration Time WorkDay Start

Applies to: MX700/MX800/MX800D
Requires user role: ADMIN, USER

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

#### **USAGE:**

```
xConfiguration Time WorkDay Start: "Start"
where
Start:
String (5, 5)
The working day start time, using the 24-hour clock.
Default value:
"07:00"
```

## xConfiguration Time WorkDay End

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

#### USAGE:

```
xConfiguration Time WorkDay End: "End"
where
End:
String (5, 5)
The working day end time, using the 24-hour clock.
Default value:
"18:00"
```

## xConfiguration Time WorkWeek FirstDayOfWeek

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN. USER

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

#### **USAGE:**

xConfiguration Time WorkWeek FirstDayOfWeek:  $\underline{\textit{FirstDayOfWeek}}$  where

## FirstDayOfWeek:

Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday
The first day of the working week.
Default value:
Monday

## xConfiguration Time WorkWeek LastDayOfWeek

Applies to: MX700/MX800/MX800D
Requires user role: ADMIN, USER

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

#### USAGE:

xConfiguration Time WorkWeek LastDayOfWeek:  $\underline{\textit{LastDayOfWeek}}$  where

## LastDayOfWeek:

Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday
The last day of the working week.

Default value:

Friday



# UserInterface configuration

xConfiguration UserInterface Accessibility IncomingCallNotification

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

You can enable an incoming call notification with amplified visuals. The screen and Touch 10 will flash red/white approximately once every second (1.75 Hz) to make it easier for hearing impaired users to notice an incoming call. If the system is already in a call the screen will not flash as this will disturb the on-going call, instead you will get a normal notification on screen and touch panel.

## **USAGE:**

 ${\tt xConfiguration~UserInterface~Accessibility~IncomingCallNotification:} \underline{IncomingCallNotification}$ 

where

IncomingCallNotification:

AmplifiedVisuals/Default

AmplifiedVisuals: Enable the amplified visuals on screen and touch panel when the video system receives a call.

Default: Enable the default behavior with a notification on screen and touch panel.

Default value:

Default

xConfiguration UserInterface ContactInfo Type

Applies to: *All products*Requires user role: ADMIN

Choose which type of contact information to show in the user interface.

## USAGE:

xConfiguration UserInterface ContactInfo Type:  $\underline{\mathit{Type}}$ 

where

Type:

Auto/DisplayName/E164Alias/H320Number/H323Id/IPv4/IPv6/None/SipUri/SystemName

**Auto:** Show the address which another system should dial to reach this video system. The address depends on the default call protocol and system registration.

None: Do not show any contact information.

IPv4: Show the system's IPv4 address.

IPv6: Show the system's IPv6 address.

H323Id: Show the system's H.323 ID (refer to the H323 H323Alias ID setting).

H320Number: Show the system's H.320 number as contact information (only supported if

used with Cisco TelePresence ISDN Link).

E164Alias: Show the system's H.323 E164 Alias as contact information (refer to the H323

H323Alias E164 setting).

SipUri: Show the system's SIP URI (refer to the SIP URI setting).

SystemName: Show the system's name (refer to the SystemUnit Name setting).

DisplayName: Show the system's display name (refer to the SIP DisplayName setting).

Default value:

Auto



## xConfiguration UserInterface CustomMessage

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

A custom message can be displayed, in the lower left side of the screen, in awake mode.

## USAGE:

## ${\it CustomMessage}:$

String (0, 128)

Add a custom message. Add an empty string to remove a custom message.

Default value:

11 1

## xConfiguration UserInterface KeyTones Mode

Applies to: All products

Requires user role: ADMIN, USER

You can configure the system to make a keyboard click sound effect (key tone) when typing text or numbers in the user interface

## USAGE:

xConfiguration UserInterface KeyTones Mode:  $\underline{\textit{Mode}}$  where

## <u>Mode</u>:

Off/On

Off: There is no key tone sound effect.

On: The key tone sound effect is turned on.

Default value:

Off [DX70/DX80]

On [SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

## xConfiguration UserInterface Language

Applies to: All products

Requires user role: ADMIN, USER

Select the language to be used in the user interface. If the language is not supported, the default language (English) will be used.

## **USAGE:**

xConfiguration UserInterface Language: <u>Language</u>

where

## Language:

Arabic/Catalan/ChineseSimplified/ChineseTraditional/Czech/Danish/Dutch/English/EnglishUK/Finnish/French/FrenchCanadian/German/Hebrew/Hungarian/Italian/Japanese/Korean/Norwegian/Polish/Portuguese/PortugueseBrazilian/Russian/Spanish/SpanishLatin/Swedish/Turkish

Select a language from the list.

Default value:

English

## xConfiguration UserInterface OSD HalfwakeMessage

Applies to: All products

Requires user role: ADMIN

A custom message can be displayed in the middle of the main screen when the system is in the half wake state. The custom message will replace the default message, which gives instructions how to start using the video system. You can also delete the default message, without adding a custom message.

#### **USAGE:**

 $\begin{tabular}{ll} x Configuration UserInterface OSD HalfwakeMessage: "$\underline{\it HalfwakeMessage}$" where $$ \end{tabular}$ 

## HalfwakeMessage:

String (0, 128)

The custom message. An empty string: Restore the default message. A space only: There will be no message at all.

Default value:

11 11

## xConfiguration UserInterface OSD Output

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define on which monitor on-screen information and indicators (OSD) should be displayed. If the video system is controlled with a remote control also the on-screen menus appear on this monitor.

## **USAGE:**

 ${\tt xConfiguration~UserInterface~OSD~Output:}~\underline{{\it Output}}$  where

#### MICIC

Output:
 1 [SX10 Room55]

Auto/1/2 [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room70/Room55D]

Auto/1/2/3 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Auto [DX70/DX80]

**Auto:** For systems with integrated screen, the on-screen information and indicators are sent to the integrated screen. If the system has two integrated screens, the left monitor is used.

For systems without integrated screens, the system detects when a monitor is connected to a video output, and sends the on-screen information and indicators to the first monitor you connect. If you have a multi-monitor setup, and all monitors are connected before switching on the system, the on-screen information and indicators are sent to the video output with the lowest number, starting with Output Connector 1 (HDMI 1).

**1..n:** The system sends the on-screen information and indicators to the specified output. Choose n to send the on-screen information and indicators to the system's Output Connector n.

For systems with integrated screens, the lowest numbers refer to the integrated screens.

#### Default value:

1 [SX10 MX700/MX800/MX800D CodecPro Room55 Room70G2]

Auto [DX70/DX80 SX20 SX80 MX200G2/MX300G2 RoomKit CodecPlus Room70/Room55D]

## xConfiguration UserInterface Security Mode

Applies to: *All products*Requires user role: ADMIN

This setting allows you to prevent important system information from being exposed in the user interface (drop down menu and Settings panel), for example the contact information and IP addresses of the video system, touch controller, and UCM/VCS registrars. It is important to note that such information is not hidden when navigating further into the Settings panel.

If you want to fully prevent that people without administrator rights can see the contact information, IP addresses, MAC address, serial number, and software version, you must also set the UserInterface SettingsMenu Mode to Locked, and of course have a passphrase for all user accounts with administrator rights.

#### USAGE:

xConfiguration UserInterface Security Mode: Mode

where

Mode:

Normal/Strong

Normal: IP addresses and other system information are shown on the user interface.

**Strong:** Contact information and IP addresses are not displayed on the user interface (drop down menu and Settings panel).

Default value:

Normal

## xConfiguration UserInterface SettingsMenu Mode

Applies to: *All products*Requires user role: ADMIN

The Settings panel in the user interface (Touch 10 or on-screen) can be protected by the video system's admin password. If this password is blank, anyone can access the settings in the Settings menu, and for example factory reset the system. If authentication is enabled, all settings that require authentication have a padlock icon. You will be prompted to enter the administrator's user name and passphrase when you select the setting. Some settings do not require authentication, they do not have a padlock icon.

## USAGE:

 ${\tt xConfiguration}$  UserInterface SettingsMenu Mode:  $\underline{{\it Mode}}$  where

Mode:

Locked/Unlocked

Locked: Authentication with administrator's username and passphrase is required.

Unlocked: No authentication is required.

Default value:

Unlocked

# UserManagement configuration

xConfiguration UserManagement LDAP Admin Filter

Applies to: *All products*Requires user role: ADMIN

The LDAP filter is used to determine which users should be granted administrator privileges. You always have to set either an LDAP Admin Group or an LDAP Admin Filter. An LDAP Admin Filter takes precedence, so if the UserManagement LDAP Admin Filter is set, the UserManagement LDAP Admin Group setting is ignored.

#### USAGE:

 ${\tt xConfiguration}$  UserManagement LDAP Admin Filter: "Filter" where

## Filter:

String (0, 1024)

Refer to the LDAP specification for the syntax of this string. Example: "(//memberst=CN=admin group, CLI=company groups, DC=company

"(|(memberof=CN=admin group, OU=company groups, DC=company, DC=com) (sAMAccountName=username))"

Default value:

11 11



## xConfiguration UserManagement LDAP Admin Group

Applies to: *All products*Requires user role: ADMIN

Members of this AD (Active Directory) group will be given administrator access. This setting is a shorthand for saying (memberOf:1.2.840.113556.1.4.1941:=<group name>).

You always have to set either an LDAP Admin Group or an LDAP Admin Filter. An LDAP Admin Filter takes precedence, so if the UserManagement LDAP Admin Filter is set, the UserManagement LDAP Admin Group setting is ignored.

#### USAGE:

xConfiguration UserManagement LDAP Admin Group: " $\underline{\textit{Group}}$ " where

## Group:

String (0..255)

The distinguished name of the AD group. Example: "CN=admin group, OU=company groups, DC=company, DC=com"

Default value:

11 1

## xConfiguration UserManagement LDAP Attribute

Applies to: *All products*Requires user role: ADMIN

The attribute used to map to the provided username. If not set, sAMAccountName is used.

#### **USAGE:**

## Attribute:

String (0..255)

The attribute name.

Default value:

.. ..

## xConfiguration UserManagement LDAP BaseDN

Applies to: *All products*Requires user role: ADMIN

The distinguishing name of the entry at which to start a search (base).

#### USAGE:

```
xConfiguration UserManagement LDAP BaseDN: "BaseDN" where
BaseDN:
```

\_\_\_\_ String (0..255)

The distinguishing name of the base. Example: "DC=company, DC=com"

Default value:

11 11

## xConfiguration UserManagement LDAP Encryption

Applies to: *All products*Requires user role: ADMIN

Define how to secure the communication between the video system and the LDAP server. You can override the port number by using the UserManagement LDAP Server Port setting.

#### **USAGE:**

```
{\tt xConfiguration~UserManagement~LDAP~Encryption:}~\underline{{\it Encryption}} where
```

## Encryption:

LDAPS/None/STARTTLS

LDAPS: Connect to the LDAP server on port 636 over TLS (Transport Layer Security).

None: Connect to LDAP server on port 389 with no encryption.

**STARTTLS:** Connect to LDAP server on port 389, then send STARTTLS to enable TLS encryption.

Default value:

LDAPS

## xConfiguration UserManagement LDAP MinimumTLSVersion

Applies to: *All products*Requires user role: ADMIN

Set the lowest version of the TLS (Transport Layer Security) protocol that is allowed.

## USAGE:

 ${\tt xConfiguration~UserManagement~LDAP~MinimumTLSVersion:}~\underline{{\it MinimumTLSVersion}}$  where

## MinimumTLSVersion:

TLSv1.0/TLSv1.1/TLSv1.2

TLSv1.0: Support TLS version 1.0 or higher.

TLSv1.1: Support TLS version 1.1 or higher.

TLSv1.2: Support TLS version 1.2 or higher.

Default value:

TLSv1.2

## xConfiguration UserManagement LDAP Mode

Applies to: *All products*Requires user role: ADMIN

The video system supports the use of an LDAP (Lightweight Directory Access Protocol) server as a central place to store and validate user names and passwords. Use this setting to configure whether or not to use LDAP authentication. Our implementation is tested for the Microsoft Active Directory (AD) service.

If you switch on LDAP Mode, make sure to configure the other UserManagement LDAP settings to suit your setup. Here is a few examples.

#### Example 1:

- UserManagement LDAP Mode: On
- UserManagement LDAP Address: "192.0.2.20"
- UserManagement LDAP BaseDN: "DC=company, DC=com"
- UserManagement LDAP Admin Group: "CN=admin group, OU=company groups, DC=company, DC=com"

## Example 2:

- UserManagement LDAP Mode: On
- UserManagement LDAP Address: "192.0.2.20"
- UserManagement LDAP BaseDN: "DC=company, DC=com"
- UserManagement LDAP Admin Filter: "(|(memberof=CN=admin group, OU=company groups, DC=company, DC=com)(sAMAccountName=username))"

#### USAGE:

```
xConfiguration UserManagement LDAP Mode: Mode where

Mode:
Off/On
Off: LDAP authentication is not allowed.
On: LDAP authentication is allowed.
Default value:
Off
```

## xConfiguration UserManagement LDAP Server Address

Applies to: *All products*Requires user role: ADMIN

Set the IP address or hostname of the LDAP server.

## USAGE:

```
xConfiguration UserManagement LDAP Server Address: "Address" where

Address:
String (0..255)
A valid IPv4 address, IPv6 address or hostname.
Default value:
```

## xConfiguration UserManagement LDAP Server Port

Applies to: *All products*Requires user role: ADMIN

Set the port to connect to the LDAP server on. If set to 0, use the default for the selected protocol (see the UserManagement LDAP Encryption setting).

## **USAGE:**

```
xConfiguration UserManagement LDAP Server Port: <u>Port</u> where

<u>Port</u>:

Integer (0..65535)

The LDAP server port number.

Default value:
```

## xConfiguration UserManagement LDAP VerifyServerCertificate

Applies to: *All products*Requires user role: ADMIN

When the video system connects to an LDAP server, the server will identify itself to the video system by presenting its certificate. Use this setting to determine whether or not the video system will verify the server certificate.

#### USAGE:

 $\verb|xConfiguration| UserManagement| LDAP VerifyServerCertificate: \\ \textit{VerifyServerCertificate}$ 

where

VerifyServerCertificate:

Off/On

Off: The video system will not verify the LDAP server's certificate.

*On:* The video system must verify that the LDAP server's certificate is signed by a trusted Certificate Authority (CA). The CA must be on the list of trusted CAs that are uploaded to the system in advance. Use the video system's web interface to manage the list of trusted CAs (see more details in the administrator guide).

Default value:

On



# Video configuration

## xConfiguration Video DefaultMainSource

Applies to: All products

Requires user role: ADMIN, USER

Define which video input source to be used as the default main video source when you start a call.

#### USAGE:

```
xConfiguration Video DefaultMainSource: <u>DefaultMainSource</u>
where

<u>DefaultMainSource</u>:

1/2/3/4/5/6 [CodecPro]

1/2/3/4 [SX80 MX700/MX800/MX800D Room70G2]

1/2 [SX20]

1 [DX70/DX80 SX10]

1/2/3 [MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]
```

Set the source to be used as the default main video source.

Default value:

1

## xConfiguration Video Input Connector [n] CameraControl Camerald

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

The camera ID is a unique identifier of the cameras that are connected to the video input. For systems with more than one camera you can use the xStatus Camera API command to see the IDs of the different cameras.

#### USAGE:

```
xConfiguration Video Input Connector [n] CameraControl CameraId: \underline{\textit{CameraId}} where
```

n: Unique ID that identifies the video input connector.

```
Range: 1..6 [CodecPro Room70G2]
```

Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D]

Range: 1..2 [DX70/DX80 SX20 RoomKit]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 1..4 [MX200G2/MX300G2]

## CameraId:

```
Connector n: 1/2/3/4/5/6/7 [CodecPlus CodecPro Room70/Room55D Room70G2]
```

Connector n: 1 [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Connector 1,2,3,4: 1/2/3/4/5/6/7 Connector 5: 1 [SX80 MX700/MX800/MX800D]

For systems with more than one camera, select the ID of the camera. For systems with one camera the value is fixed and cannot be changed.

## Default value:

```
Connector n: n [CodecPlus CodecPro Room70/Room55D Room70G2]
```

Connector n: 1 [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Connector n: n Connector 5: 1 [SX80 MX700/MX800/MX800D]



## xConfiguration Video Input Connector [n] CameraControl Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define whether the camera on this video input connector can be controlled or not. Some connectors cannot be controlled (Off is the only available value).

## **USAGE:**

```
xConfiguration Video Input Connector [n] CameraControl Mode: Mode
where
 n: Unique ID that identifies the video input connector.
   Range: 1..6 [CodecPro Room70G2]
   Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D]
   Range: 1...2 [DX70/DX80 SX20 RoomKit]
   Range: 1..5 [SX80 MX700/MX800/MX800D]
   Range: 1..4 [MX200G2/MX300G2]
 Mode:
   Connector 1.2.3.4.5: Off/On Connector 6: On [CodecPro Room70G2]
   Connector n: Off/On [CodecPlus Room70/Room55D]
   Connector n: Off [DX70/DX80]
   Connector 1: Off/On Connector 2,3,4: Off [MX200G2/MX300G2]
   Connector 1: Off/On Connector 2,3: Off [SX10 Room55]
   Connector 1: Off/On Connector 2: Off [SX20 RoomKit]
   Connector 1, 2, 3, 4: Off/On Connector 5: Off [SX80 MX700/MX800/MX800D]
   Off: Disable camera control.
   On: Enable camera control.
   Default value:
      Connector n: On [CodecPlus CodecPro Room70/Room55D Room70G2]
      Connector n: Off [DX70/DX80]
      Connector 1: On Connector 2,3,4: Off [MX200G2/MX300G2]
      Connector 1: On Connector 2,3: Off [SX10 Room55]
      Connector 1: On Connector 2: Off [SX20 RoomKit]
      Connector 1, 2, 3: On Connector 4, 5: Off [SX80 MX700/MX800/MX800D]
```

## xConfiguration Video Input Connector [n] CEC Mode

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2
Requires user role: ADMIN. INTEGRATOR

The video input (HDMI) supports Consumer Electronics Control (CEC). When this setting is enabled, information about the connected device (for example device type and device name) is available in the video system status (Video Input Connector[n] ConnectedDevice CEC [n]), provided that the connected device also supports CEC.

If you have Cisco Quad Camera, do not switch off CEC on that connector because then there will be no sound on the speakers on the camera. CEC is required for HDMI ARC (Audio Return Channel), which is the channel used for sending audio from the codec to the camera.

## **USAGE:**

```
xConfiguration Video Input Connector [n] CEC Mode: Mode
where

<u>n</u>: Unique ID that identifies the video input connector.

Range: 1..5 [CodecPro Room70G2]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..3 [Room55]

Range: 2..2 [RoomKit]

Mode:

Connector n: Off/On [RoomKit CodecPlus CodecPro Room55 Room70G2]

Connector 1: On Other connectors: Off/On [Room70/Room55D]

Off: CEC is disabled.

On: CEC is enabled.

Default value:

On
```



## xConfiguration Video Input Connector [n] DviType

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN

The official DVI standard supports both digital and analog signals. In most cases the default AutoDetect setting can detect whether the signal is analog RGB or digital. However, in some rare cases when DVI-I cables are used (these cables can carry both the analog and digital signals) the auto detection fails. This setting makes it possible to override the AutoDetect and select the correct DVI video input.

#### USAGE:

xConfiguration Video Input Connector [n] DviType:  $\underline{\textit{DviType}}$  where

n: Unique ID that identifies the video input connector.

Range: 4..4 [SX80 MX700/MX800/MX800D]
Range: 2..2 [SX20 MX200G2/MX300G2]

## DviType:

AutoDetect/Digital/AnalogRGB/AnalogYPbPr

AutoDetect: Set to AutoDetect to automatically detect if the signal is analog RGB or digital.

*Digital:* Set to Digital to force the DVI video input to Digital when using DVI-I cables with both analog and digital pins and AutoDetect fails.

**AnalogRGB:** Set to AnalogRGB to force the DVI video input to AnalogRGB when using DVI-I cables with both analog and digital pins and AutoDetect fails.

**AnalogYPbPr:** Set to AnalogYPbPr to force the DVI video input to AnalogYPbPr, as the component (YPbPr) signal cannot be auto detected.

Default value:

AutoDetect

## xConfiguration Video Input Connector [n] HDCP Mode

Applies to: CodecPro Room55

Requires user role: ADMIN, INTEGRATOR

HDCP (High-bandwidth Digital Content Protection) support: The video system's second HDMI input (Connector 3) can be configured to support HDCP protected content. This allows customers to re-purpose the video system's screen by connecting devices such as a Google ChromeCast, an AppleTV, or an HDTV decoder. This type of content cannot be shared while in a call, or when an external screen is connected.

When the connector is configured to support HDCP, it is reserved for this type of content. This means that it will not be possible to share any content from this specific connector while in a call, regardless of what is connected.

Room 55: The Video Input Connector 3 (HDMI 2) have support for HDCP. The Video Input Connector 2 do not have support for HDCP.

Codec Pro: Not supported in this version.

## **USAGE:**

```
xConfiguration Video Input Connector [n] HDCP Mode: Mode
where

<u>n</u>: Unique ID that identifies the video input connector.

Range: 1..5 [CodecPro]
Range: 2..3 [Room55]

Mode:

Connector n: Off [CodecPro]
Connector 2: Off, Connector 3: Off/On [Room55]

Off: Disable support for HDCP protected content on the video input connector.
On: Enable support for HDCP protected content the video input connector.
Default value:

Off
```

## xConfiguration Video Input Connector [n] InputSourceType

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Select which type of input source is connected to the video input.

If the video system has an integrated camera, Connector 1 refers to the integrated camera; if the video system has two integrated cameras (dual camera), Connector 1 and Connector 2 refers to the integrated cameras.

#### USAGE:

 $\verb|xConfiguration| Video Input Connector [n] InputSourceType: $\underline{InputSourceType}$ where$ 

n: Unique ID that identifies the video input connector.

Range: 1..6 [CodecPro Room70G2]

Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D]

Range: 1..2 [DX70/DX80 SX20 RoomKit]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 1..4 [MX200G2/MX300G2]

## InputSourceType:

Connector n: PC/camera/document\_camera/mediaplayer/whiteboard/other [SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Connector 1: camera Connector 2: PC/camera/document\_camera/mediaplayer/whiteboard/other [DX70/DX80 RoomKit]

Connector 1: camera Other connectors: PC/camera/document\_camera/mediaplayer/white-board/other [SX10 MX200G2/MX300G2 Room55]

PC: Use this when a computer is connected to the video input.

camera: Use this when a camera is connected to the video input.

document\_camera: Use this when a document camera is connected to the video input.

mediaplayer: Use this when a media player is connected to the video input.

whiteboard: Use this when a whiteboard camera is connected to the video input.

other: Use this when the other options do not match.

#### Default value:

Connector 1,2,6: camera Connector 3,4,5: PC [CodecPro Room70G2]

Connector 1: camera Other connectors: PC [ SX10 MX200G2/MX300G2 CodecPlus Room55 Room70/Room55D ]

Connector 1: camera Connector 2: PC [DX70/DX80 SX20 RoomKit]

Connector 1,2: camera Connector 3,4: PC Connector 5: other [ SX80 MX700/MX800/ MX800D ]

## xConfiguration Video Input Connector [n] Name

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define a name for the video input connector.

## **USAGE:**

```
xConfiguration Video Input Connector [n] Name: "Name" where
```

 $\underline{\textit{n}}\textsc{:}$  Unique ID that identifies the video input connector.

Range: 1..6 [CodecPro Room70G2]

Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D]

Range: 1..2 [DX70/DX80 SX20 RoomKit]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 1..4 [MX200G2/MX300G2]

### Name:

String (0, 50)

Name for the video input connector.

#### Default value:

```
Connector 1: "Camera 1" Connector 2: "Camera 2" Connector 3: "PC 1 (HDMI)"

Connector 4: "PC 2 (HDMI)" Connector 5: "PC 3 (HDMI)" Connector 6: "Camera 3 (SDI)" [CodecPro Room70G2]
```

```
Connector 1: "Camera" Connector 2: "PC 1 (HDMI)" Connector 3: "PC 2 (HDMI)" [
CodecPlus Room70/Room55D]
```

Connector 1: "Camera" Connector 2,3: "" [Room55]

Connector 1: "Camera" Connector 2: "PC" [RoomKit]

Connector n: "" [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2]

Connector 1: "Camera 1" Connector 2: "" for single camera systems, "Camera 2" for dual camera systems Connector 3: "PC (HDMI)" Connector 4: "PC (VGA)" Connector 5: "" [MX700/MX800/MX800D]

## xConfiguration Video Input Connector [n] PreferredResolution

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN. INTEGRATOR

Define the screen resolution and refresh rate that the video system advertises as its preferred resolution to the source devices that connect to the system via HDMI (for example a laptop). The logic for selection of the resolution on the source side will choose this resolution and refresh rate automatically, unless it is overridden manually by the source device (for example the laptop's display configuration software).

Note that the formats 2560\_1440\_60 and 3840\_2160\_30 use about twice the amount of data compared to the 1920\_1080\_60 format, and requires a presentation cable (or adapter) that is qualified for at least HDMI 1.4b data rates.

#### USAGE:

xConfiguration Video Input Connector [n] PreferredResolution: PreferredResolution where

n: Unique ID that identifies the video input connector.

Range: 1..5 [CodecPro Room70G2]

Range: 2..3 [Room55]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..2 [RoomKit]

## PreferredResolution:

60 30 [CodecPro Room70G2]

Connector 1: 1920 1080 60 Connector 2,3: 1920 1080 60/2560 1440 60/3840 2160

30 [CodecPlus Room70/Room55D]

Connector n: 1920\_1080\_60/2560\_1440\_60/3840\_2160\_30 [RoomKit Room55]

1920\_1080\_60: The resolution is 1920 x 1080, and the refresh rate is 60 Hz.

2560\_1440\_60: The resolution is 2560 x 1440, and the refresh rate is 60 Hz.

3840 2160 30: The resolution is 3840 x 2160, and the refresh rate is 30 Hz.

Default value:

1920 1080 60 [CodecPro Room70G2]

Connector n: 1920\_1080\_60 [RoomKit CodecPlus Room55 Room70/Room55D]

## xConfiguration Video Input Connector [n] PresentationSelection

Applies to: All products

Requires user role: ADMIN. INTEGRATOR

Define how the video system will behave when you connect a presentation source to the video input. If the video system is in standby mode, it will wake up when you connect a presentation source. Sharing the presentation with the far end requires additional action (select Share on the user interface) except when this setting is set to AutoShare.

For systems with more than one camera: Any input source can be used as a presentation source; normally, the main camera will not be used as a presentation source.

For systems with an integrated camera: The integrated camera is not available as a presentation source.

#### USAGE:

xConfiguration Video Input Connector [n] PresentationSelection: PresentationSelection

#### where

n: Unique ID that identifies the video input connector.

Range: 1..6 [CodecPro Room70G2]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..2 [DX70/DX80 RoomKit]

Range: 2..3 [SX10 Room55]

Range: 1..2 [SX20]

Range: 1..4 [SX80 MX700/MX800/MX800D]

Range: 2..4 [MX200G2/MX300G2]

## PresentationSelection:

Connector n: AutoShare/Desktop/Manual/OnConnect [DX70/DX80 SX10 SX20 SX80 MX200G2/ MX300G2 RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Connector 1: Manual Connector 2: AutoShare/Desktop/Manual/OnConnect for single camera systems, and Manual for dual camera systems Connector 3,4: AutoShare/Desktop/ Manual/OnConnect [MX700/MX800/MX800D]

AutoShare: While in a call, the content on the video input will automatically be presented to the far end as well as on the local screen when you connect the cable, or when the source is activated otherwise (for example when a connected computer wakes up from sleep mode). You do not have to select Share on the user interface. If a presentation source is already connected when you make or answer a call, you have to manually select Share on the user interface.

Desktop: The content on the video input will be presented on the screen when you connect the cable, or when the source is activated otherwise (for example when a connected computer wakes up from sleep mode). This applies both when idle and in a call. Also, the



content on the video input will stay on the screen when you leave the call, provided that it was the active input at the time of leaving.

*Manual:* The content on the video input will not be presented on the screen until you select Share from the user interface.

OnConnect: The content on the video input will be presented on screen when you connect the cable, or when the source is activated otherwise (for example when a connected computer wakes up from sleep mode). Otherwise, the behavior is the same as in manual mode.

## Default value:

Connector 1,2,6: Manual Connector 3,4,5: OnConnect [CodecPro Room70G2]

Connector 1: Manual Other connectors: OnConnect [CodecPlus Room70/Room55D]

Connector n: Desktop [DX70/DX80]

Connector n: OnConnect [SX10 MX200G2/MX300G2 RoomKit Room55]

Connector 1,2: Manual Connector 3,4: OnConnect [SX80 MX700/MX800/MX800D]

Connector 1: Manual Connector 2: OnConnect [SX20]

## xConfiguration Video Input Connector [n] Quality

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

When encoding and transmitting video there is a trade-off between high resolution and high frame rate. For some video sources it is more important to transmit high frame rate than high resolution and vice versa. This setting specifies whether to give priority to high frame rate or to high resolution.

If a Quad Camera, SpeakerTrack 60 camera, or Precision 60 camera is detected by the video system this setting is automatically set to Motion. If a user changes this setting manually, it will be set back to Motion after a restart or a camera reconnect.

#### USAGF:

xConfiguration Video Input Connector [n] Quality:  $\underline{\textit{Quality}}$  where

<u>n</u>: Unique ID that identifies the video input connector.

Range: 1..6 [CodecPro Room70G2]

Range: 1..3 [CodecPlus Room70/Room55D]

Range: 2..2 [DX70/DX80 RoomKit]

Range: 2..3 [SX10 Room55]

Range: 1..2 [SX20]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 2..4 [MX200G2/MX300G2]

## Quality:

Connector n: Motion/Sharpness

**Motion:** Gives the highest possible frame rate. Used when there is a need for higher frame rates, typically when a large number of participants are present or when there is a lot of motion in the picture.

**Sharpness:** Gives the highest possible resolution. Used when you want the highest quality of detailed images and graphics.

#### Default value:

Connector 1,2,6: Motion Connector 3,4,5: Sharpness [CodecPro Room70G2]
Connector 1: Motion Connector 2,3: Sharpness [CodecPlus Room70/Room55D]
Connector n: Sharpness [DX70/DX80 SX10 MX200G2/MX300G2 RoomKit Room55]
Connector 1: Motion Connector 2: Sharpness [SX20]
Connector 1,2,5: Motion Connector 3,4: Sharpness [SX80 MX700/MX800/MX800D]



## xConfiguration Video Input Connector [n] Visibility

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the visibility of the video input connector in the menus on the user interface.

For systems with an integrated camera: Connector 1 is the system's integrated camera and is not available as a presentation source.

## **USAGE:**

xConfiguration Video Input Connector [n] Visibility:  $\underline{\textit{Visibility}}$  where

n: Unique ID that identifies the video input connector.

Range: 1..6 [CodecPro Room70G2]

Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D]

Range: 1..2 [DX70/DX80 SX20 RoomKit]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 1..4 [MX200G2/MX300G2]

## Visibility:

Connector n: Always/IfSignal/Never [ SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Connector 1: Never Connector 2: Always/IfSignal/Never [DX70/DX80 RoomKit]

Connector 1: Never Other connectors: Always/IfSignal/Never [SX10 MX200G2/MX300G2]

**Always:** The menu selection for the video input connector will always be visible on the user interface.

IfSignal: Yhe menu selection for the video input connector will only be visible when something is connected to the video input.

**Never:** The input source is not expected to be used as a presentation source, and will not show up on the user interface.

## Default value:

Connector 1: Never Other connectors: IfSignal [CodecPro Room70G2]

Connector 1: Never Other connectors: Always [CodecPlus Room55 Room70/Room55D]

Connector 1: Never Connector 2: Always [RoomKit]

Connector 1: Never Connector 2: IfSignal [ DX70/DX80 ]

Connector 1: Never Connector 2: Always Connector 3: IfSignal [SX10]
Connector 1: Never Connector 2: Always Connector 3,4: IfSignal [MX200G2/MX300G2]

Connector 1,2,3: IfSignal Connector 4: Always Connector 5: Never [SX80 MX700/

MX800/MX800D 1

Connector 1: IfSignal Connector 2: Always [SX20]

## xConfiguration Video Monitors

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

A monitor role is assigned to each screen/output. The monitor role for DX70, DX80, and SX10, which only support one screen, is First. The monitor role for the integrated screen of MX200 G2 and MX300 G2 is First; the monitor role for the optional external screen is Second. For the other products the monitor role is set using the Video Output Connector [n] MonitorRole setting.

The monitor role decides which layout (call participants and presentation) will appear on a screen. Screens with different monitor roles will have different layouts; screens with the same monitor role will get the same layout (except for SX20). SX20 does not support the same layout on two screens.

The monitor layout mode that is set in the Video Monitors setting should reflect the number of different layouts you want in your room setup. Note that some screens can be reserved for presentations.

## USAGE:

xConfiguration Video Monitors:  $\underline{\textit{Monitors}}$ 

where

#### Monitors:

Auto/Single/Dual/Dual/PresentationOnly [SX20 RoomKit CodecPlus Room55 Room70/Room55D]

Auto/Single/Dual/DualPresentationOnly/TriplePresentationOnly/Triple [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Auto/DualPresentationOnly [MX200G2/MX300G2]

Single [DX70/DX80 SX10]

**Auto:** The number of screens connected to the video system is automatically detected, and the layout is distributed on the screens according to the monitor role.

*Single:* The layout is shown on the video system's screen. If the video system has more than one screen, the same layout is shown on all screens (except for SX20). For SX20 with two screens, one of them will be disabled.

*Dual:* The layout is distributed on screens with monitor role First and Second. If a presentation is part of the layout, all participants in the call are shown on screens with monitor role First, and the presentation is shown on screens with monitor role Second.

**DualPresentationOnly:** All participants in the call are shown on screens with monitor role First. If a presentation is part of the layout, the presentation is shown on screens with monitor role Second.

*Triple:* The layout is distributed on screens with monitor role First, Second and Third. Screens with monitor role Second are used first, then First, and finally Third. If a presentation is part of the layout, all participants in the call are shown on screens with monitor role

First and Second, and the presentation is shown on the screen with monitor role Third.

*TriplePresentationOnly:* All participants in the call are distributed on screens with monitor role First and Second. Screens with monitor role Second are used first, then First. If a presentation is part of the layout, the presentation is shown on the screen with monitor role Third.

#### Default value:

Auto [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Single [DX70/DX80 SX10]



## xConfiguration Video Output Connector [n] CEC Mode

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70G2

Requires user role: ADMIN, INTEGRATOR

This video output (HDMI) supports Consumer Electronics Control (CEC).

When this setting is On, the system will use CEC to set the screen in standby when the system itself enters standby. Likewise the system will wake up the screen when the system itself wakes up from standby.

The active video input on a screen is sometimes changed by a user. When a call is started the video system detects if the active video input has been switched to another input on the screen. The video system then switches the input back so the video system is the active video input source (not suported by SX20, SX80, and MX series).

If the video system is not the active input source when the video system goes into standby the screen will not be set to standby (not suported by SX20, SX80, and MX series).

It's a prerequisite that the screen that is connected to the output is CEC compatible and that CEC is enabled on the screen.

Note that the different manufacturers uses different marketing names for CEC, for example Anynet+ (Samsung); Aquos Link (Sharp); BRAVIA Sync (Sony); HDMI-CEC (Hitachi); Kuro Link (Pioneer); CE-Link and Regza Link (Toshiba); RIHD (Onkyo); HDAVI Control, EZ-Sync, VIERA Link (Panasonic); EasyLink (Philips); and NetCommand for HDMI (Mitsubishi).

## **USAGE:**

```
xConfiguration Video Output Connector [n] CEC Mode: Mode where

<u>n</u>: Unique ID that identifies the video output connector.

Range: 1..3 [CodecPro Room70G2]

Range: 1..1 [SX10]

Range: 2..2 [MX200G2/MX300G2 Room55]

Range: 2..2 for MX800 Single [MX700/MX800/MX800D]

Range: 1..2 [SX20 SX80 RoomKit CodecPlus]

Mode:

Off/On

Off: CEC is disabled.

On: CEC is enabled.

Default value:

On [SX10 RoomKit CodecPlus CodecPro Room55]
```

Off [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D Room70G2]

## xConfiguration Video Output Connector [n] MonitorRole

Applies to: SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

The monitor role describes which video streams will be shown on the screen connected to this video output. Together the Video Monitors setting and the MonitorRole settings for all outputs define which layout (video streams) will be shown on each screen.

#### USAGE:

 $\verb|xConfiguration| Video Output Connector [n] MonitorRole: $\underline{\textit{MonitorRole}}$ where$ 

n: Unique ID that identifies the video output connector.

Range: 1..3 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 2..2 [Room55]

Range: 1...2 [SX20 RoomKit CodecPlus Room70/Room55D]

#### MonitorRole:

Auto/First/Second/PresentationOnly [SX20 RoomKit CodecPlus Room55 Room70/Room55D]
Auto/First/Second/Third/PresentationOnly/Recorder [SX80 MX700/MX800/MX800D CodecPro Room70G2]

**Auto:** The system will detect when a screen is connected, and a monitor role (First, Second, Third) that corresponds with the Video Monitors setting will be assigned automatically.

First/Second/Third: Define the role of the screen in a multi-screen setup. In a single-screen setup, there is no difference between First, Second and Third.

**PresentationOnly:** Show presentation video stream if active, and nothing else. Screens/outputs with this monitor role are ignored by the Video Monitors setting.

**Recorder:** Show all participants, including the local main video (self-view). If active, also show the presentation. Screens/outputs with this monitor role are ignored by the Video Monitors setting.

Default value:

Connector n: Auto [SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70G2]

Dual: Connector 1,2: Auto; Single: Connector 1: Auto Connector 2:

PresentationOnly [Room70/Room55D]

Connector 1: First Connector 2: Second [SX20]

## xConfiguration Video Output Connector [n] OverscanLevel

Applies to: SX10 SX20 MX200G2/MX300G2

Requires user role: ADMIN

Some monitors may not present the entire image that they receive. This means that the outer parts of the image that is sent from the video system may be cut off when displayed on the monitor.

Use this setting to instruct the video system not to use the outer part of the available frame. This part might be cut off by the monitor. Both the video and messages on screen will be scaled in this case.

#### USAGE:

xConfiguration Video Output Connector [n] OverscanLevel: <u>OverscanLevel</u> where

n: Unique ID that identifies the video output connector.

Range: 1..1 [SX10] Range: 1..2 [SX20]

Range: 2..2 [MX200G2/MX300G2]

## $\underline{\textit{OverscanLevel}}:$

None/Medium/High

None: The video system will use all of the output resolution.

 $\textit{Medium:}\ \text{The video system will not use the outer 3\% of the output resolution.}$ 

High: The video system will not use the outer 6% of the output resolution.

Default value:

None

## xConfiguration Video Output Connector [n] Resolution

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define the resolution and refresh rate for the connected screen.

The formats larger than 1920\_1200\_60 requires use of high quality display cables. For guaranteed operation, use display cables that are pre-qualified from Cisco for use at 3840\_2160\_60, or use a cable that has passed the "Premium HDMI certification" program.

Some UHD TVs/displays only enable 3840\_2160\_30 (30 Hz) and not 3840\_2160\_60 (60 Hz) as their default configuration. In such cases the corresponding setting on the TV/display must be reconfigured to allow 3840\_2160\_60 for the HDMI input where the video system is connected.

## **USAGE:**

xConfiguration Video Output Connector [n] Resolution:  $\underline{\textit{Resolution}}$  where

n: Unique ID that identifies the video output connector.

Range: 1..1 [DX70/DX80 SX10]

Range: 1..2 [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]

Range: 1..3 [SX80 CodecPro Room70G2]

Range: 2..3 for MX800 Single [MX700/MX800/MX800D]

## Resolution:

Connector 1,2: Auto/1920\_1080\_50/1920\_1080\_60/1920\_1200\_50/1920\_1200\_60/25 60\_1440\_60/3840\_2160\_30/3840\_2160\_60 Connector 3: Auto/1920\_1080\_50/192 0\_1080\_60/1920\_1200\_50/1920\_1200\_60/2560\_1440\_60/3840\_2160\_30 [CodecPro Room70G2]

Connector 1: 1920 1080 60 [DX70/DX80]

Auto/1920\_1080\_50/1920\_1080\_60/1920\_1200\_50/1920\_1200\_60/2560\_1440\_60/384 0 2160 30/3840 2160 60 [RoomKit CodecPlus Room70/Room55D]

Connector n: Auto [SX10]

Connector n: Auto/1280\_720\_50/1280\_720\_60/1920\_1080\_50/1920\_1080\_60 [SX20]
Connector n: Auto/1280\_720\_50/1280\_720\_60/1920\_1080\_50/1920\_1080\_60/1920\_12

00\_50/1920\_1200\_60 [SX80 MX700/MX800/MX800D]



**Auto:** The system will automatically try to set the optimal resolution based on negotiation with the connected monitor.

1280\_720\_50: The resolution is 1280 x 720, and the refresh rate is 50 Hz.

1280\_720\_60: The resolution is 1280 x 720, and the refresh rate is 60 Hz.

1920\_1080\_50: The resolution is 1920 x 1080, and the refresh rate is 50 Hz.

1920\_1080\_60: The resolution is 1920 x 1080, and the refresh rate is 60 Hz.

1920\_1200\_50: The resolution is 1920 x 1200, and the refresh rate is 50 Hz.

1920\_1200\_60: The resolution is 1920 x 1200, and the refresh rate is 60 Hz.

2560\_1440\_60: The resolution is 2560 x 1440, and the refresh rate is 60 Hz.

3840\_2160\_30: The resolution is 3840 x 2160, and the refresh rate is 30 Hz.

3840\_2160\_60: The resolution is 3840 x 2160, and the refresh rate is 60 Hz.

#### Default value:

Connector 1: 1920\_1080\_60 [DX70/DX80]

Connector n: Auto [SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70/

Room55D Room70G2]

## xConfiguration Video Presentation DefaultSource

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Define which video input source to use as a default presentation source. This setting may be used by the API and 3rd party user interfaces. It is not relevant when using the user interfaces provided by Cisco.

#### **USAGE:**

xConfiguration Video Presentation DefaultSource:  $\underline{\textit{DefaultSource}}$  where

#### DefaultSource:

1/2/3/4/5 [CodecPro Room70G2]

1/2/3/4 [SX80 MX700/MX800/MX800D]

1/2/3 [CodecPlus Room55 Room70/Room55D]

1/2 [ SX20 RoomKit ]

2 [ DX70/DX80 SX10 MX200G2/MX300G2 ]

The video input source to use as default presentation source.

#### Default value:

- 3 [SX80 MX700/MX800/MX800D CodecPro Room70G2]
- 2 [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]

## xConfiguration Video Selfview Default FullscreenMode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define if the main video source (self-view) shall be shown in full screen or as a small picture-in-picture (PiP) after a call. The setting only takes effect when self-view is switched on (see the Video Selfview Default Mode setting).

#### USAGE:

xConfiguration Video Selfview Default FullscreenMode:  $\underline{\textit{FullscreenMode}}$  where

## FullscreenMode:

Off/Current/On

Off: Self-view will be shown as a PiP.

**Current:** The size of the self-view picture will be kept unchanged when leaving a call, i.e. if it was a PiP during the call, it remains a PiP after the call; if it was fullscreen during the call, it remains fullscreen after the call.

On: The self-view picture will be shown in fullscreen.

Default value:

Current

## xConfiguration Video Selfview Default Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define if the main video source (self-view) shall be displayed on screen after a call. The position and size of the self-view window is determined by the Video Selfview Default PIPPosition and the Video Selfview Default FullscreenMode settings respectively.

#### USAGE:

xConfiguration Video Selfview Default Mode:  $\underline{\textit{Mode}}$ 

where

Mode:

Off/Current/On

Off: Self-view is switched off when leaving a call.

Current: Self-view is left as is, i.e. if it was on during the call, it remains on after the call; if it was off during the call, it remains off after the call.

On: Self-view is switched on when leaving a call.

Default value:

Current

## xConfiguration Video Selfview Default OnMonitorRole

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define which screen/output to display the main video source (self-view) after a call. The value reflects the monitor roles of the different outputs.

A monitor role is assigned to each screen. The monitor role for DX70 and DX80 is First (no support for an external screen). The monitor role for the integrated screen of MX200 G2 and MX300 G2 is First; the monitor role for the optional external screen is Second. For the other products the monitor role is set using the Video Output Connector [n] MonitorRole setting.

The OnMonitorRole setting applies both when self-view is displayed in full screen, and when it is displayed as picture-in-picture (PiP).

#### USAGE:

xConfiguration Video Selfview Default OnMonitorRole:  $\underline{\textit{OnMonitorRole}}$  where

#### OnMonitorRole:

Current/First/Second [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]

Current/First/Second/Third [SX80 MX700/MX800/MX800D CodecPro Room70G2]

First [DX70/DX80]

*Current:* When leaving a call, the self-view picture will be retained on the same output as it was during the call.

First: The self-view picture will be shown on outputs with monitor role First.

Second: The self-view picture will be shown on outputs with monitor role Second.

Third: The self-view picture will be shown on outputs with monitor role Third.

Default value:

Current [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

First [DX70/DX80]

## xConfiguration Video Selfview Default PIPPosition

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the position on screen of the small self-view picture-in-picture (PiP) after a call. The setting only takes effect when self-view is switched on (see the Video Selfview Default Mode setting) and fullscreen view is switched off (see the Video Selfview Default FullscreenMode setting).

#### USAGE:

xConfiguration Video Selfview Default PIPPosition:  $\underline{\textit{PIPPosition}}$  where

## PIPPosition:

Current/UpperLeft/UpperCenter/UpperRight/CenterLeft/CenterRight/LowerLeft/LowerRight

Current: The position of the self-view PiP will be kept unchanged when leaving a call.

*UpperLeft:* The self-view PiP will appear in the upper left corner of the screen.

*UpperCenter:* The self-view PiP will appear in the upper center position.

UpperRight: The self-view PiP will appear in the upper right corner of the screen.

*CenterLeft:* The self-view PiP will appear in the center left position. *CentreRight:* The self-view PiP will appear in the center right position.

LowerLeft: The self-view PiP will appear in the lower left corner of the screen.

LowerRight: The self-view PiP will appear in the lower right corner of the screen.

Default value:

Current

## xConfiguration Video Selfview Mirrored

Applies to: DX70/DX80

Requires user role: ADMIN, INTEGRATOR

You can configure the video system to show the self-view image the way other people see you, or as you would see yourself in a mirror.

This setting has no effect on the video that is sent to the far end.

#### USAGE:

 $\verb"xConfiguration Video Selfview Mirrored: $\underline{\textit{Mirrored}}$ where$ 

## Mirrored:

Off/On

Off: Display the self-view image as other people see you.

On: Display the self-view image as you see yourself in a mirror.

Default value:

On

## xConfiguration Video Selfview OnCall Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This setting is used to switch on self-view for a short while when setting up a call. The Video Selfview OnCall Duration setting determines for how long it remains on. This applies when self-view in general is switched off.

## USAGE:

xConfiguration Video Selfview OnCall Mode:  $\underline{\textit{Mode}}$  where

## Mode:

Off/On

Off: Self-view is not shown automatically during call setup.

On: Self-view is shown automatically during call setup.

Default value:

On

## xConfiguration Video Selfview OnCall Duration

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This setting only has an effect when the Video Selfview OnCall Mode setting is switched On. In this case, the number of seconds set here determines for how long self-view is shown before it is automatically switched off.

#### USAGE:

xConfiguration Video Selfview OnCall Duration:  $\underline{\textit{Duration}}$ 

where

Duration:

Integer (1..60)

**Range:** Choose for how long self-view remains on. The valid range is between 1 and 60 seconds.

Default value:

10

# Chapter 4

# xCommand commands



# Description of the xCommand commands

In this chapter, you can find a complete list of all xCommand type commands with parameters.

We recommend you visit our web site regularly for updated versions of the manual.

	,		0	,	
Go to: >	https://www.c	isco.com/go/	telepres/	ence/	docs

Δ	udio commands	177
	xCommand Audio Diagnostics MeasureDelay	. 177
	xCommand Audio Equalizer List	. 178
	xCommand Audio Equalizer Update	. 178
	xCommand Audio LocalInput Add	. 179
	xCommand Audio LocalInput AddConnector	.180
	xCommand Audio LocalInput Remove	.180
	xCommand Audio LocalInput RemoveConnector	. 181
	xCommand Audio LocalInput Update	. 181
	xCommand Audio LocalOutput Add	.182
	xCommand Audio LocalOutput AddConnector	.183
	xCommand Audio LocalOutput ConnectInput	.184
	xCommand Audio LocalOutput DisconnectInput	.185
	xCommand Audio LocalOutput Remove	.185
	xCommand Audio LocalOutput RemoveConnector	.186
	xCommand Audio LocalOutput Update	.186
	xCommand Audio LocalOutput UpdateInputGain	. 187
	xCommand Audio Microphones Mute	188
	xCommand Audio Microphones ToggleMute	188
	xCommand Audio Microphones Unmute	188
	xCommand Audio RemoteOutput ConnectInput	188
	xCommand Audio RemoteOutput DisconnectInput	.189
	xCommand Audio RemoteOutput UpdateInputGain	.189
	xCommand Audio Select	.190
	xCommand Audio Setup Clear	.190
	xCommand Audio Sound Play	.190
	xCommand Audio Sound Stop	.190

xCommand Audio SpeakerCheck	191
xCommand Audio SoundsAndAlerts Ringtone List	191
xCommand Audio SoundsAndAlerts Ringtone Play	191
xCommand Audio SoundsAndAlerts Ringtone Stop	191
xCommand Audio Volume Decrease	192
xCommand Audio Volume Increase	192
xCommand Audio Volume Mute	192
xCommand Audio Volume Set	193
xCommand Audio Volume SetToDefault	193
xCommand Audio Volume ToggleMute	193
xCommand Audio Volume Unmute	193
xCommand Audio VuMeter Start	194
xCommand Audio VuMeter Stop	195
xCommand Audio VuMeter StopAll	195
Acommand Addio Valvicter StopAir	
Additional Additional Staphilling	
3ookings commands	
	196
Bookings commands	
Bookings commandsxCommand Bookings Clear	
xCommand Bookings ClearxCommand Bookings Get	
xCommand Bookings Clear xCommand Bookings Get xCommand Bookings List xCommand Bookings NotificationSnooze	
xCommand Bookings Get xCommand Bookings Get xCommand Bookings List	
xCommand Bookings Clear xCommand Bookings Get xCommand Bookings List xCommand Bookings NotificationSnooze	
Sookings commands	
Sookings commands  xCommand Bookings Clear  xCommand Bookings Get  xCommand Bookings List  xCommand Bookings NotificationSnooze  Call commands  xCommand Call Accept.	
Sookings commands  xCommand Bookings Clear  xCommand Bookings Get  xCommand Bookings List  xCommand Bookings NotificationSnooze  Call commands  xCommand Call Accept.  xCommand Call Disconnect.	
Sookings commands  xCommand Bookings Clear.  xCommand Bookings Get  xCommand Bookings List  xCommand Bookings NotificationSnooze  Call commands  xCommand Call Accept  xCommand Call Disconnect.  xCommand Call DTMFSend	



xCommand Call FarEndControl Source Select	199
xCommand Call FarEndMessage Send	200
xCommand Call FarEndMessage SStringSend	200
xCommand Call FarEndMessage TStringSend	200
xCommand Call Forward	201
xCommand Call Hold	201
xCommand Call Ignore	201
xCommand Call Join	201
xCommand Call Reject	202
xCommand Call Resume	202
xCommand Call UnattendedTransfer	202
CallHistory commands	203
xCommand CallHistory AcknowledgeAllMissedCalls	203
xCommand CallHistory AcknowledgeMissedCall	203
xCommand CallHistory DeleteAll	203
xCommand CallHistory DeleteEntry	203
xCommand CallHistory Get	204
xCommand CallHistory Recents	
Camera commands	205
xCommand Camera PositionReset	205
xCommand Camera PositionSet	206
xCommand Camera Preset Activate	206
xCommand Camera Preset ActivateDefaultPosition	206
xCommand Camera Preset Edit	207
xCommand Camera Preset List	207
xCommand Camera Preset Remove	208
xCommand Camera Preset Show	208
xCommand Camera Preset Store	208
xCommand Camera Ramp	209
xCommand Camera TriggerAutofocus	210
Cameras commands	210
xCommand Cameras AutoFocus Diagnostics Start	210

xCommand Cameras AutoFocus Diagnostics Stop	210
xCommand Cameras PresenterTrack ClearPosition	211
xCommand Cameras PresenterTrack Set	211
xCommand Cameras PresenterTrack StorePosition	212
xCommand Cameras SpeakerTrack Activate	212
xCommand Cameras SpeakerTrack Deactivate	212
xCommand Cameras SpeakerTrack Diagnostics Start	212
xCommand Cameras SpeakerTrack Diagnostics Stop	213
xCommand Cameras SpeakerTrack Whiteboard ActivatePosition	213
xCommand Cameras SpeakerTrack Whiteboard AlignPosition	213
xCommand Cameras SpeakerTrack Whiteboard SetDistance	214
xCommand Cameras SpeakerTrack Whiteboard StorePosition	214
Conference commands	
xCommand Conference DoNotDisturb Activate	215
xCommand Conference DoNotDisturb Deactivate	215
xCommand Conference SpeakerLock Release	215
xCommand Conference SpeakerLock Set	215
Diagnostics commands	216
xCommand Diagnostics Run	216
Dial commands	216
xCommand Dial	216
GPIO commands	217
xCommand GPIO ManualState Set	217
HttpFeedback commands	218
xCommand HttpFeedback Deregister	
xCommand HttpFeedback Enable	
xCommand HttpFeedback Register	
,	
Macros commands	219
vCommand Magrag Lag Claar	210

xCommand Macros Log Get		219
xCommand Macros Macro Activate		219
xCommand Macros Macro Deactivate		219
xCommand Macros Macro Get		220
xCommand Macros Macro Remove		220
xCommand Macros Macro RemoveAll		220
xCommand Macros Macro Rename		220
xCommand Macros Macro Roles Set		22
xCommand Macros Macro Save		22
xCommand Macros Runtime Restart		22
xCommand Macros Runtime Start		22
xCommand Macros Runtime Status		22
xCommand Macros Runtime Stop		22
Message commands		22
xCommand Message Send		22
Peripherals commands		223
xCommand Peripherals HeartBeat		223
xCommand Peripherals List		22
	iscovery Start	
xCommand Peripherals Pairing Pair		22
xCommand Peripherals Pairing Unpair		22
xCommand Peripherals Purge		22
Phonebook commands		22
xCommand Phonebook Contact Add		22
xCommand Phonebook Contact Delete		226
xCommand Phonebook Contact Modify.		226
xCommand Phonebook ContactMethod	Add	22
xCommand Phonebook ContactMethod	Delete	22
xCommand Phonebook ContactMethod	Modify	228
xCommand Phonebook Folder Add	······································	228
xCommand Phonebook Folder Delete		22

xCommand Phonebook Folder Modify	229
xCommand Phonebook Search	229
Presentation commands	230
xCommand Presentation Start	230
xCommand Presentation Stop	231
Provisioning commands	231
xCommand Provisioning CompleteUpgrade	231
xCommand Provisioning PostponeUpgrade	231
xCommand Provisioning CUCM ExtensionMobility Login	232
xCommand Provisioning CUCM ExtensionMobility Logout	232
xCommand Provisioning RoomType Activate	232
xCommand Provisioning Service Fetch	233
Proximity commands	234
xCommand Proximity Services Activate	234
xCommand Proximity Services Deactivate	234
RoomPreset commands	234
xCommand RoomPreset Activate	234
xCommand RoomPreset Clear	234
xCommand RoomPreset Store	235
Security commands	235
xCommand Security Certificates CA Add	
xCommand Security Certificates CA Delete	
xCommand Security Certificates CA Show	236
xCommand Security Certificates Services Activate	236
xCommand Security Certificates Services Add	236
xCommand Security Certificates Services Deactivate	236
xCommand Security Certificates Services Delete	237
xCommand Security Certificates Services Show	237
xCommand Security FIPSMode Activate	237
xCommand Security Persistency	238



xCommand Security Session List	238
xCommand Security Session Terminate	238
Standby commands	
xCommand Standby Activate	
xCommand Standby Deactivate	
xCommand Standby Halfwake	
xCommand Standby ResetHalfwakeTimer	
xCommand Standby ResetTimer	239
SystemUnit commands	240
xCommand SystemUnit Boot	240
xCommand SystemUnit FactoryReset	240
xCommand SystemUnit FirstTimeWizard Stop	24
xCommand SystemUnit Notifications RemoveAll	24
xCommand SystemUnit OptionKey Add	24
xCommand SystemUnit OptionKey List	24
xCommand SystemUnit OptionKey Remove	242
xCommand SystemUnit OptionKey RemoveAll	242
xCommand SystemUnit ProductPlatform Set	242
xCommand SystemUnit SignInBanner Clear	242
xCommand SystemUnit SignInBanner Get	243
xCommand SystemUnit SignInBanner Set	243
xCommand SystemUnit SoftReset	243
xCommand SystemUnit SoftwareUpgrade	243
xCommand SystemUnit WelcomeBanner Clear	243
xCommand SystemUnit WelcomeBanner Get	243
xCommand SystemUnit WelcomeBanner Set	244
Fime commands	244
xCommand Time DateTime Get	244
xCommand Time DateTime Set	
UserInterface commands	245
xCommand UserInterface Branding Clear	245

xCommand UserInterface Branding Delete	24
xCommand UserInterface Branding Get	24!
xCommand UserInterface Branding Updated	24!
xCommand UserInterface Branding Upload	246
xCommand UserInterface Extensions Clear	246
xCommand UserInterface Extensions List	246
xCommand UserInterface Extensions Panel Clicked	246
xCommand UserInterface Extensions Panel Close	246
xCommand UserInterface Extensions Panel Remove	246
xCommand UserInterface Extensions Panel Save	24
xCommand UserInterface Extensions Set	24
xCommand UserInterface Extensions Widget Action	24
xCommand UserInterface Extensions Widget SetValue	248
xCommand UserInterface Extensions Widget UnsetValue	248
xCommand UserInterface Message Alert Clear	248
xCommand UserInterface Message Alert Display	249
xCommand UserInterface Message Prompt Clear	249
xCommand UserInterface Message Prompt Display	250
xCommand UserInterface Message Prompt Response	25
xCommand UserInterface Message TextInput Clear	25
xCommand UserInterface Message TextInput Display	25
xCommand UserInterface Message TextInput Response	25
xCommand UserInterface Message TextLine Clear	25
xCommand UserInterface Message TextLine Display	253
xCommand UserInterface OSD Key Click	253
xCommand UserInterface OSD Key Press	253
xCommand UserInterface OSD Key Release	25
xCommand UserInterface Presentation ExternalSource Add	25
xCommand UserInterface Presentation ExternalSource List	25
xCommand UserInterface Presentation ExternalSource Remove	25
xCommand UserInterface Presentation ExternalSource RemoveAll	25
xCommand UserInterface Presentation ExternalSource Select	25
vCommand UsarInterface Presentation ExternalSource State Set	256



UserManagement commands	256
xCommand UserManagement RemoteSupportUser Create	256
xCommand UserManagement RemoteSupportUser Delete	256
xCommand UserManagement RemoteSupportUser DisablePermanently	257
xCommand UserManagement RemoteSupportUser GetState	257
xCommand UserManagement User Add	257
xCommand UserManagement User Delete	258
xCommand UserManagement User Get	258
xCommand UserManagement User List	258
xCommand UserManagement User Modify	259
xCommand UserManagement User Passphrase Change	259
xCommand UserManagement User Passphrase Set	260
xCommand UserManagement User Unblock	260
Video commands	260
xCommand Video ActiveSpeakerPIP Set	260
xCommand Video CEC Input KeyClick	261
xCommand Video CEC Output KeyClick	261
xCommand Video CEC Output SendActiveSourceRequest	262
xCommand Video Input SetMainVideoSource	262

xCommand video input Source SetActiveConnector	263
xCommand Video Layout LayoutFamily Set	263
xCommand Video Matrix Assign	264
xCommand Video Matrix Reset	264
xCommand Video Matrix Swap	264
xCommand Video Matrix Unassign	265
xCommand Video Output Monitor Backlight Set	265
xCommand Video Output Monitor Brightness Set	265
xCommand Video Output Monitor Color Blue Set	266
xCommand Video Output Monitor Color Green Set	266
xCommand Video Output Monitor Color Red Set	266
xCommand Video Output Monitor Color Select	266
xCommand Video Output Monitor Contrast Set	267
xCommand Video Output Monitor CSC Select	267
xCommand Video Output Monitor Gamma Set	267
xCommand Video Output Monitor Reset	267
xCommand Video Output Monitor Sharpness Set	268
xCommand Video PresentationPIP Set	268
xCommand Video PresentationView Set	268
vCommand Video Salfview Sat	260

## Audio commands

The xCommand Audio LocalInput, xCommand Audio LocalOutput, xCommand Audio RemoteOutput commands are mainly intended for internal use by the Audio Console application, which currently is available only for SX80 and Codec Pro. Audio Console provides a graphical interface for the setup and configuration of audio chains.

An audio chain consists of a physical input connector that is assigned to a virtual local input, which in turn is connected to a virtual local output, to which a physical output connector is assigned. The commands listed above define the logical connection between the physical connectors and the virtual input and outputs, and also how the virtual inputs impose such things as gain, equalization and channel mixing to the signal.

When a call is made, the remote (from the far end) input signal is automatically added to all local outputs. Likewise, all local inputs are automatically added to the remote (to the far end) output gate.

Remember that xCommands are not persistent over a reboot. Therefore you have to include the commands in a startup script, or use the macro framework, in order to make the audio chain configuration persistent. A startup script is automatically generated and activated if you use Audio Console to set up the audio chains.

For more information about startup scripts and Audio Console see the video system's Administrator Guide and the Audio Console User Guide

## xCommand Audio Diagnostics MeasureDelay

Applies to: All products

Requires user role: ADMIN, USER

This command will measure the audio delay/latency in a device connected to the video system. A typical use case it to measure the delay in a TV connected to the video system via the HDMI connector. If the delay in a TV is too high, the real-time experience of a video call will be substantially degraded. If the delay is more than 50 ms we recommend the user to find a TV setting that has shorter delay. Typical TV settings that can reduce the delay are: Gaming Mode and PC Mode.

This command will measure the delay between output and input (microphone). This means that if you are using an external acoustic echo canceller or audio mixer, this command will also measure the delay of these devices.

#### USAGE:

#### where

## MeasurementLength:

Integer (1..100)

The length of the measurement in number of seconds. In a noisy environment a longer measurement time will give a more reliable and robust result.

Default value: 6

## Output:

HDMI/Line/Internal/All

HDMI: Measure the delay of the device connected to the HDMI output.

*Line:* Measure the delay of the device connected to the Line output (only available on video systems that have a Line output).

*Internal:* Measure the delay of the internal loudspeaker (only available on video systems that have an internal loudspeaker).

All: Will measure the maximum delay of all outputs.

Default value: HDMI

## Volume:

Integer (0..50)

The volume for the test signal. In a noisy environment a higher volume gives more reliable and robust results.

Default value: 20

## xCommand Audio Equalizer List

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

This command lists the current equalizer parameters. If no EqualizerId is specified, the command lists all 8 equalizers.

## **USAGE:**

xCommand Audio Equalizer List [EqualizerId:  $\underline{\textit{EqualizerId}}$ ] where

## EqualizerId:

Integer (1..8)

Each EqualizerId has 6 second-order filter sections with these parameters: FilterType, Frequency, Gain and Q-value.

## xCommand Audio Equalizer Update

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

This command sets the equalizer parameters for the selected Equalizerld and Section. Each of the 8 available equalizers consist of 6 cascaded second-order IIR filters.

## USAGE:

```
xCommand Audio Equalizer Update EqualizerId: \underline{EqualizerId} FilterType: \underline{FilterType} Frequency: "\underline{Frequency}" Gain: "\underline{Gain}" Q: "\underline{Q}" Section: \underline{Section} where
```

## EqualizerId:

Integer (1..8)

## FilterType:

highpass/highshelf/lowpass/lowshelf/none/peaking

## Frequency:

String (0, 32)

## Gain:

String (0, 32)

0:

String (0, 32)

## Section:

Integer (1..6)

## xCommand Audio LocalInput Add

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Create a virtual local input, and generate an identifier for it (InputId). A local input is associated with a set of input connectors, and you can specify the following: a name for the local input, how to mix the signals from the associated input connectors, the use of Automatic Gain Control (AGC) and mute, whether to make a mono or stereo signal, and whether to use direct mode to bypass input processing.

The maximum number of local input modules is 8. You get an error message if you exceed the limit

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Create a virtual local input, and generate an identifier for it (InputId). A local input is associated with a set of input connectors, and you can specify the following: a name for the local input, how to mix the signals from the associated input connectors, the use of Automatic Gain Control (AGC) and mute, whether to make a mono or stereo signal, and whether to use direct mode to bypass input processing.

The maximum number of local input modules is 8. You get an error message if you exceed the limit.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

#### InputId:

Integer (0..65534)

A unique identifier for the local input. If you don't specify an InputID, the system will automatically create one for you. We recommend that you specify the InputId yourself in case you need to refer to the local input at a later stage.

#### Name:

String (0, 255)

Choose a name that describes the local input. If you don't specify a name, the string will be empty.

## AGC:

On/Off

On: Adjusts the gain continuously to maintain a constant sound level (default).

Off: No automatic gain control.

#### Channels:

Integer (1..2)

1: Mixes the input signals into a mono signal (default).

2: Mixes the input signals into a stereo signal.

#### Direct:

On/Off

On: Bypass input processing such as acoustic echo cancellation and noise reduction, regardless of the configuration for each connected input connector. Bypassing the input processing reduces the audio input delay, which is useful when doing local sound reinforcement.

Off: All regular input processing is performed, according to the configuration of each connector (default).

## MixerMode:

Auto/Fixed/GainShared

*Auto:* If one input signal is dominating, the signal on the other connectors are attenuated with 20 dB each.

*Fixed:* The input signals all have the same weight, and consequently they are mixed together with equal gains (default).

*GainShared:* If one or some of the input signals dominate, the rest of the input signals are attenuated by a few dB so that the total gain of the mixed signal remains the same all the time

Auto and GainShared are intended for the microphone inputs; Fixed is recommended for Line and HDMI inputs.

## <u>Mute</u>:

On/Off

On: Mutes the mix of input signals (default).

Off: No muting.

## xCommand Audio LocalInput AddConnector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Attach an input connector to the local input given by the input ID. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local input.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Attach an input connector to the local input given by the input ID. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local input.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

## **USAGE:**

xCommand Audio LocalInput AddConnector InputId:  $\underline{InputId}$  ConnectorType:  $\underline{ConnectorType}$  ConnectorId:  $\underline{ConnectorId}$ 

#### where

#### InputId:

Integer (0..65534)

The unique identifier of the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

#### ConnectorType:

HDMI/Line/Microphone [SX80 MX700/MX800/MX800D]

HDMI/ARC/Microphone [CodecPro Room70G2]

Select the connector type.

#### ConnectorId:

Integer (1..3) for an HDMI connector; Integer (1..4) for a Line connector; Integer (1..8) for a microphone connector [SX80 MX700/MX800/MX800D]

Integer (1..5) for an HDMI connector; Integer (1..3) for an HDMI with ARC (Audio Return Channel) connector; Integer (1..8) for a microphone connector [CodecPro Room70G2]

Select a connector. The connectors' numbers are printed on the codec connector panel.

## xCommand Audio LocalInput Remove

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Remove the local input given by the input ID.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Remove the local input given by the input ID.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

xCommand Audio LocalInput Remove InputId:  $\underline{\mathit{InputId}}$  where

#### InputId:

Integer (0..65534)

The unique identifier of the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

# xCommand Audio LocalInput RemoveConnector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Detach an input connector from the local input given by the input ID. You need to enter both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Detach an input connector from the local input given by the input ID. You need to enter both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

 $\verb|xCommand Audio LocalInput RemoveConnector InputId: $\underline{InputId}$ ConnectorType: $ConnectorType ConnectorId: $ConnectorId$ | $ConnectorId$ |$ 

#### where

#### InputId:

Integer (0..65534)

The unique identifier for the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

#### ConnectorType:

HDMI/Line/Microphone [SX80 MX700/MX800/MX800D]

HDMI/ARC/Microphone [CodecPro Room70G2]

Select the connector type.

#### ConnectorId:

Integer (1..3) for an HDMI connector; Integer (1..4) for a Line connector; Integer (1..8) for a microphone connector [SX80 MX700/MX800/MX800D]

Integer (1..5) for an HDMI connector; Integer (1..3) for an HDMI with ARC (Audio Return Channel) connector; Integer (1..8) for a microphone connector [CodecPro Room70G2]

Select a connector. The connectors' numbers are printed on the codec connector panel.

# xCommand Audio LocalInput Update

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Update the settings of the local input given by the input ID.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

#### where

# InputId:

Integer (0..65534)

The unique identifier for the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

#### Name:

String (0, 255)

Choose a name that describes the local input.

#### AGC:

On/Off

On: Adjust the gain continuously to maintain a constant sound level).

Off: No automatic gain control.

#### Channels:

Integer (1..2)

1: Mix the input signals into a mono signal.

2: Mix the input signals into a stereo signal.

#### Direct:

On/Off

On: Bypass input processing such as acoustic echo cancellation and noise reduction, regardless of the configuration for each connected input connector. Bypassing the input processing reduces the audio input delay, which is useful when doing local sound reinforcement.

Off: All regular input processing is performed, according to the configuration of each

#### connector.

#### MixerMode:

Auto/Fixed/GainShared

**Auto:** If one input signal is dominating, the signal on the other connectors are attenuated with 20 dB each.

*Fixed:* The input signals all have the same weight, and consequently they are mixed together with equal gains.

**GainShared:** If one or some of the input signals dominate, the rest of the input signals are attenuated by a few dB so that the total gain of the mixed signal remains the same all the time.

Auto and GainShared are intended for the microphones; Fixed is recommended for Line and HDMI inputs.

#### Mute:

# On/Off

On: Mutes the mix of input signals.

Off: No muting.

# xCommand Audio LocalOutput Add

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Create a virtual local output, and generate an identifier for it (Outputld). A local output is a mix of local inputs and the remote input signals. Use the xCommand Audio LocalOutput ConnectInput command to specify which local inputs to include; the remote input signal (from far-end) is automatically added to all local outputs when in a call. A local output is associated with a set of output connectors, which all receive the same signal.

The maximum number of local output modules is 6. You get an error message if you exceed the limit.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Create a virtual local output, and generate an identifier for it (Outputld). A local output is a mix of local inputs and the remote input signals. Use the xCommand Audio Local Output ConnectInput command to specify which local inputs to include; the remote input signal (from far-end) is automatically added to all local outputs when in a call. A local output is associated with a set of output connectors, which all receive the same signal.

The maximum number of local output modules is 6. You get an error message if you exceed the limit.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGF:

#### OutputId:

Integer (0..65534)

A unique identifier for the local output. If you don't specify an OutputID, the system will automatically create one for you. We recommend that you specify the OutputId yourself in case you need to refer to the output module at a later stage.

Default value: 0

# Name:

String (0, 255)

Choose a name that describes the local output.

Default value: ""

#### Loudspeaker:

#### On/Off

**On:** Choose On if at least one of the associated connectors are connected to a loudspeaker. This is important because it tells the echo canceler to use this signal as a reference signal.

*Off:* Choose Off if no loudspeaker is connected to the associated connectors. Note that only one of the local outputs should have a loudspeaker connected.

Default value: Off

#### Channels:

Integer (1..2)

1: Mix the local and remote input signals into a mono signal.

2: Mix the local and remote input signals into a stereo signal.

Default value: 1

# VolumeControlled:

#### On/Off

On: The volume will change according to the level set with the volume controls on the user interface, or with the xCommand Audio Volume commands.

*Off:* The volume is neither influenced by the volume controls on the user interface, nor the xCommand Audio Volume commands.

# xCommand Audio LocalOutput AddConnector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Attach an output connector to the local output given by the output ID. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local output.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Attach an output connector to the local output given by the output ID. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local output.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

 $\verb|xCommand Audio LocalOutput AddConnector OutputId: | \underline{OutputId}| ConnectorType: \\ ConnectorType ConnectorId: | ConnectorId|$ 

#### where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

#### ConnectorType:

HDMI/Line [SX80 CodecPro]

HDMI/Line/ARC [MX700/MX800/MX800D Room70G2]

Select the connector type.

#### ConnectorId:

Integer (1..2) for an HDMI connector; Integer (1..6) for a Line connector [SX80 MX700/MX800/MX800D]

Integer (1..3) for an HDMI connector; Integer (1..6) for a line out connectors; Integer (1..1) for an HDMI with ARC (Audio Return Channel) connector [CodecPro Room70G2]

Select a connector. The connectors' numbers are printed on the codec connector panel.

# xCommand Audio LocalOutput ConnectInput

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Connect a local or remote input to a local output by giving their IDs as parameters. A local input can be connected to any number of local outputs. Likewise, any number of local inputs can be connected to each local output. Note that the remote input signal (from far-end) is automatically added to all local outputs when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Connect a local or remote input to a local output by giving their IDs as parameters. A local input can be connected to any number of local outputs. Likewise, any number of local inputs can be connected to each local output. Note that the remote input signal (from far-end) is automatically added to all local outputs when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

## **USAGE:**

xCommand Audio LocalOutput ConnectInput OutputId:  $\underline{OutputId}$  InputId:  $\underline{InputId}$  [InputGain: InputGain]

where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

# InputId:

Integer (0..65534)

The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the xCommand Audio LocalInput Add command. The remote input's ID was generated automatically when the call was made.

# InputGain:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.

Default value: 0

# xCommand Audio LocalOutput DisconnectInput

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Disconnect a local or remote input from a local output. Note that the remote input signal (from far-end) is automatically disconnected when a call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Disconnect a local or remote input from a local output. Note that the remote input signal (from far-end) is automatically disconnected when a call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot

#### USAGE:

 $\verb"xCommand Audio LocalOutput DisconnectInput OutputId: $\underline{\textit{OutputId}}$ InputId: $\underline{\textit{InputId}}$ where$ 

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

## InputId:

Integer (0..65534)

The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the xCommand Audio LocalInput Add command. The remote input's ID was generated automatically when the call was made.

# xCommand Audio LocalOutput Remove

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Remove the local output given by the output ID.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Remove the local output given by the output ID.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

xCommand Audio LocalOutput Remove OutputId:  $\underline{\textit{OutputId}}$  where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

# xCommand Audio LocalOutput RemoveConnector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Detach an output connector from the local output given by the output ID. You need to enter both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Detach an output connector from the local output given by the output ID. You need to enter both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### **USAGE:**

 $\verb|xCommand Audio LocalOutput RemoveConnector OutputId: | \underline{OutputId} | ConnectorType: \\ ConnectorType ConnectorId: | ConnectorId | Connector$ 

## where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

#### ConnectorType:

HDMI/Line [SX80 CodecPro]

HDMI/Line/InternalSpeaker [MX700/MX800/MX800D Room70G2]

Select the connector type.

## ConnectorId:

Integer (1..2) for an HDMI connector; Integer (1..6) for a Line connector [SX80 MX700/MX800/MX800D]

Integer (1..3) for an HDMI connector; Integer (1..6) for a line out connectors; Integer (1..1) for an HDMI with ARC (Audio Return Channel) connector [CodecPro Room70G2]

Select a connector. The connectors' numbers are printed on the codec connector panel.

# xCommand Audio LocalOutput Update

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Update the settings of the local output given by the output ID.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Update the settings of the local output given by the output ID.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

#### USAGE:

xCommand Audio LocalOutput Update OutputId: <u>OutputId</u> [Name: "<u>Name</u>"] [Loudspeaker: <u>Loudspeaker</u>] [Channels: <u>Channels</u>] [VolumeControlled: VolumeControlled]

#### where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

#### Name:

String (0, 255)

Choose a name that describes the local output.

# Loudspeaker:

#### On/Off

*On:* Choose On if at least one of the associated connectors are connected to a loudspeaker. This is important because it tells the echo canceler to use this signal as a reference signal.

*Off:* Choose Off if no loudspeaker is connected to the associated connectors. Note that only one of the local outputs should have a loudspeaker connected.

## Channels:

# Integer (1..2)

1: Mix the local and remote input signals into a mono signal.

2: Mix the local and remote input signals into a stereo signal.

### VolumeControlled:

## On/Off

**On:** The volume will change according to the level set by the volume controls on the user interface, or the xCommand Audio Volume commands.

*Off:* The volume is neither influenced by the volume controls on the user interface, nor the xCommand Audio Volume commands.

# xCommand Audio LocalOutput UpdateInputGain

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Update the gain of a local or remote input that is connected to a local output. Note that the remote input signal (from far-end) is automatically added to all local outputs when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot. Update the gain of a local or remote input that is connected to a local output. Note that the remote input signal (from far-end) is automatically added to all local outputs when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

# **USAGE:**

xCommand Audio LocalOutput UpdateInputGain OutputId:  $\underline{\textit{OutputId}}$  InputId:  $\underline{\textit{InputId}}$  [InputGain:  $\underline{\textit{InputGain}}$ ]

#### where

#### OutputId:

Integer (0..65534)

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

## InputId:

Integer (0..65534)

The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the xCommand Audio LocalInput Add command. The remote input's ID was generated automatically when the call was made.

#### InputGain:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54



dB equals Off.

Default value: 0

# xCommand Audio Microphones Mute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Mute all microphones.

#### USAGE:

xCommand Audio Microphones Mute

# xCommand Audio Microphones ToggleMute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Toggle the microphone between muted and unmuted.

## **USAGE:**

xCommand Audio Microphones ToggleMute

# xCommand Audio Microphones Unmute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Unmute all microphones.

## USAGE:

xCommand Audio Microphones Unmute

# xCommand Audio RemoteOutput ConnectInput

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Connect an input to a remote output by giving their IDs as parameters. An input can be connected to any number of remote output gates, and any number of inputs can be connected to one remote output gate. Note that all local inputs are automatically added to all remote output gates when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call. Connect an input to a remote output by giving their IDs as parameters. An input can be connected to any number of remote output gates, and any number of inputs can be connected to one remote output gate. Note that all local inputs are automatically added to all remote output gates when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call.

#### USAGE:

xCommand Audio RemoteOutput ConnectInput OutputId:  $\underline{\textit{OutputId}}$  InputId:  $\underline{\textit{InputId}}$  [InputGain:  $\underline{\textit{InputGain}}$ ]

#### where

#### OutputId:

Integer (0..65534)

The unique identifier of the remote output. It was automatically generated when the call was made.

#### InputId:

Integer (0..65534)

The unique identifier of the input. It was either generated when the input was created with the xCommand Audio Local Input Add command, or when the call was set up (remote input).

#### InputGain:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.

Default value: 0

# xCommand Audio RemoteOutput DisconnectInput

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Disconnect an input from a remote output by giving their IDs as parameters. Note that the remote output is automatically removed when the call has ended.

Run xStatus Audio Output RemoteOutput to get an overview of the remote outputs, and xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call. Disconnect an input from a remote output by giving their IDs as parameters. Note that the remote output is automatically removed when the call has ended.

Run xStatus Audio Output RemoteOutput to get an overview of the remote outputs, and xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call.

## **USAGE:**

xCommand Audio RemoteOutput DisconnectInput OutputId:  $\underline{\textit{OutputId}}$  InputId:  $\underline{\textit{InputId}}$  where

# OutputId:

Integer (0..65534)

The unique identifier of the remote output. It was automatically generated when the call was made.

## InputId:

Integer (0..65534)

The unique identifier of the input. It was either generated when the input was created with the xCommand Audio Local Input Add command, or when the call was set up (remote input).

# xCommand Audio RemoteOutput UpdateInputGain

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Update the gain of an input that is connected to a remote output. Note that the remote output is automatically removed when the call has ended.

Run xStatus Audio Output RemoteOutput to get an overview of the remote outputs, and xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call. Update the gain of an input that is connected to a remote output. Note that the remote output is automatically removed when the call has ended.

Run xStatus Audio Output RemoteOutput to get an overview of the remote outputs, and xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call.

## **USAGE:**

xCommand Audio RemoteOutput UpdateInputGain OutputId:  $\underline{OutputId}$  InputId:  $\underline{InputId}$  [InputGain: InputGain]

#### where

#### OutputId:

Integer (0..65534)

The unique identifier of the remote output. It was automatically generated when the call was made.

# InputId:

Integer (0..65534)

The unique identifier of the input. It was either generated when the input was created with the xCommand Audio Local Input Add command, or when the call was set up (remote input).

#### InputGain:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.

Default value: 0

## xCommand Audio Select

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Select which type of audio device to use (built-in loudspeakers and microphone, headsets, or handset).

USAGE:

xCommand Audio Select Device: Device

where

Device:

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to use the built-in loudspeakers and microphone (internal), a Bluetooth headset, an analog headset (DX70 only), a USB headset, or a USB handset.

# xCommand Audio Setup Clear

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Remove all local inputs and local outputs.

## **USAGE:**

xCommand Audio Setup Clear

# xCommand Audio Sound Play

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Play a specified audio sound.

#### USAGE:

xCommand Audio Sound Play [Loop: Loop] Sound: Sound

where

Loop:

Off/On

Determines whether or not to loop the playout of the audio sound. The sound is looped by default. Irrespective of how this parameter is set, some of the sounds (Busy, CallWaiting, Dial, Ringing, and SpecialInfo) will play until the Audio Sound Stop command is issued.

Default value: Off

Sound:

Alert/Binding/Bump/Busy/CallDisconnect/CallInitiate/CallWaiting/Dial/KeyInput/ KeyInputDelete/KeyTone/Nav/NavBack/Notification/OK/Pairing/PresentationConnect/ Ringing/SignIn/SpecialInfo/StartListening/TelephoneCall/VideoCall/VolumeAdjust/WakeUp

Choose which ringtone to play.

# xCommand Audio Sound Stop

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Stop playing audio sound.

#### USAGE:

xCommand Audio Sound Stop

# xCommand Audio SpeakerCheck

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Runs a test that you can use to check that all the internal speakers are connected correctly. A test tone will be emitted from each speaker in sequence, from left to right. If the speakers don't play in correct order, reconnect the loudspeaker cables to obtain the correct sequence. All speakers are part of the test sequence, and you must be in the same room as the video system to verify that the test sequence plays correctly.

The video system uses the connected microphones to listen for the test signal, and the result of the test is returned in the API.

#### USAGE:

 $\verb|xCommand Audio SpeakerCheck| [MeasurementLength: \underline{\textit{MeasurementLength}}] [Volume: \textit{Volume}]$ 

where

#### MeasurementLength:

Integer (1..5)

Test signal duration for each speaker in seconds.

Default value: 1

Volume:

Integer (1..30)

Test signal level.

Default value: 1

# xCommand Audio SoundsAndAlerts Ringtone List

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

List all available ringtones. Use the xConfiguration Audio SoundsAndAlerts RingTone setting to choose a ringtone.

#### USAGF:

xCommand Audio SoundsAndAlerts Ringtone List

# xCommand Audio SoundsAndAlerts Ringtone Play

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Play one of the available ringtones. Use the xCommand Audio SoundsAndAlerts Ringtone List command to get a list of the available ringtones.

## **USAGE:**

xCommand Audio SoundsAndAlerts Ringtone Play [Loop:  $\underline{Loop}$ ] RingTone: " $\underline{RingTone}$ " where

Loop:

On/Off

Repeats the chosen ringtone in a loop. To turn off the audio, use the Audio SoundsAndAlerts Ringtone Stop xCommand.

Default value: Off

RingTone:

String (1, 100)

The name of the ringtone.

# xCommand Audio SoundsAndAlerts Ringtone Stop

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Stops the chosen ringtone from playing. To start playing the ringtone again, use the Audio SoundsAndAlerts Ringtone Play xCommand.

#### USAGE:

xCommand Audio SoundsAndAlerts Ringtone Stop

# xCommand Audio Volume Decrease

Applies to: All products

Requires user role: ADMIN, USER

Decrease the volume on the endpoint. By default, the volume is decreased by 5 steps (each step is 0.5 dB). Use the Steps parameter if you want to override the default behavior.

Note that DX70 an DX80 has several audio devices: built-in loudspeakers, headsets, and handset. This command affects only one device at a time. You can use the optional Device parameter to specify which device to address. If you don't specify a device, the most recently selected device is chosen (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

#### USAGE:

xCommand Audio Volume Decrease [Device:  $\underline{\textit{Device}}$ ] [Steps:  $\underline{\textit{Steps}}$ ] where

Device: [DX70/DX80]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to decrease the volume on the built-in loudspeakers (internal), a Bluetooth headset, an analog headset (DX70 only), a USB headset, or a USB handset.

# Steps:

Integer (1..10)

Choose the number of steps to decrease the volume with. One step is 0.5 dB.

Default value: 5

## xCommand Audio Volume Increase

Applies to: All products

Requires user role: ADMIN, USER

Increase the volume on the endpoint. By default, the volume is increased by 5 steps (each step is 0.5 dB). Use the Steps parameter if you want to override the default behavior.

Note that DX70 an DX80 has several audio devices: built-in loudspeakers, headsets, and handset. This command affects only one device at a time. You can use the optional Device parameter to specify which device to address. If you don't specify a device, the most recently selected device is chosen (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

#### USAGF:

xCommand Audio Volume Increase [Device:  $\underline{\textit{Device}}$ ] [Steps:  $\underline{\textit{Steps}}$ ]

where

Device: [DX70/DX80]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to increase the volume on the built-in loudspeakers (internal), a Bluetooth headset, an analog headset (DX70 only), a USB headset, or a USB handset.

# Steps:

Integer (1..10)

Choose the number of steps to increase the volume with. One step is 0.5 dB.

Default value: 5

# xCommand Audio Volume Mute

Applies to: All products

Requires user role: ADMIN, USER

Mute the volume on the endpoint.

Note that DX70 an DX80 has several audio devices: built-in loudspeakers, headsets, and handset. This command affects only the selected device. Refer to the xStatus Audio SelectedDevice and xCommand Audio Select commands for more information about the selected device.

#### USAGE:

xCommand Audio Volume Mute

# xCommand Audio Volume Set

Applies to: All products

Requires user role: ADMIN, USER

Set the volume on the endpoint to a specified level.

Note that DX70 an DX80 has several audio devices: built-in loudspeakers, headsets, and handset. This command affects only one device at a time. You can use the optional Device parameter to specify which device to address. If you don't specify a device, the most recently selected device is chosen (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

#### USAGE:

xCommand Audio Volume Set [Device:  $\underline{\textit{Device}}$ ] Level:  $\underline{\textit{Level}}$  where

Device: [DX70/DX80]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to set the volume on the built-in loudspeakers (internal), a Bluetooth headset, an analog headset (DX70 only), a USB headset, or a USB handset.

## Level:

Integer (0..100)

Select the gain level. 70 equals 0 dB gain, and 100 equals 15 dB gain.

## xCommand Audio Volume SetToDefault

Applies to: All products

Requires user role: ADMIN, USER

Set the volume to the default level that is defined in the xConfiguration Audio DefaultVolume setting.

Note that DX70 an DX80 has several audio devices: built-in loudspeakers, headsets, and handset. This command affects only one device at a time. You can use the optional Device parameter to specify which device to address. If you don't specify a device, the most recently selected device is chosen (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

#### USAGF:

xCommand Audio Volume SetToDefault [Device: <u>Device</u>]

where

Device: [DX70/DX80]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to set the volume on the built-in loudspeakers (intern), a Bluetooth headset, an analog headset (DX70 only), a USB headset, or a USB handset.

# xCommand Audio Volume ToggleMute

Applies to: All products

Requires user role: ADMIN, USER

Toggle the loudspeaker between muted and unmuted.

#### USAGE:

xCommand Audio Volume ToggleMute

## xCommand Audio Volume Unmute

Applies to: All products

Requires user role: ADMIN, USER

Set the volume on the endpoint back on after muting.

#### **USAGE:**

xCommand Audio Volume Unmute

## xCommand Audio VuMeter Start

Applies to: All products

Requires user role: ADMIN, USER

Start a VU meter to show the audio signal level on the specified connector. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector. The VU meter measures the input level for frequencies below 20 kHz.

#### USAGE:

#### ConnectorID:

Integer (1..8) for Microphone; Integer (1..4) for Line; Integer (1..3) for HDMI [SX80 MX700/MX800/MX800D]

Integer (1..8) for Microphone; Integer (1..5) for HDMI [CodecPro Room70G2]

Integer (1..2) for Microphone; Integer (1..1) for Line [SX20]

Integer (1..2) for Microphone; Integer (1..1) for HDMI [SX10 RoomKit CodecPlus Room55 Room70/Room55D]

Integer (1..3) for Microphone; Integer (1..1) for Line; Integer (1..2) for HDMI [MX200G2/MX300G2]

Integer(1..1) [DX70/DX80]

Select a connector number.

Note the following if the ConnectorType is Microphone: If the video system has a built-in microphone, that microphone will be Microphone [1]. The external microphones connected to the input connectors starts from Microphone [2]. For DX70 and DX80, Microphone [1] refers to the selected audio device, which may be either the built-in microphone, or a connected headset or handset. Refer to the xStatus Audio SelectedDevice and xCommand Audio Select commands for more information about the selected device.

# ConnectorType:

HDMI/Line/Microphone [SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPro Room70G2]

Line/Microphone [SX20]

HDMI/Microphone [DX70/DX80 SX10 RoomKit CodecPlus Room55 Room70/Room55D]

Select the connector type.

# IncludePairingQuality:

Off/On

The system can measure the pairing quality (value 0 to 100). With no other ultrasound sources in the same room this value will be high, but if there are other ultrasound sources

in the same room the value will be low. To monitor the pairing quality, sign in to the video system's web interface, navigate to Setup > Peripherals > Microphones and tick the Show Pairing Rate check box. Or, use the xFeedback and xEvents commands to monitor the value. Read more about the xFeedback and xEvents commands in the API introduction section in this guide.

Default value: Off

API Reference Guide



# xCommand Audio VuMeter Stop

Applies to: All products

Requires user role: ADMIN, USER

Stop the VU meter on the specified connector. You have to specify both the connector's type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

## **USAGE:**

 $\verb|xCommand Audio VuMeter Stop ConnectorID: $\underline{ConnectorID}$ ConnectorType: $\underline{ConnectorType}$$ 

where

#### ConnectorID:

Integer (1..8) for Microphone; Integer (1..4) for Line; Integer (1..3) for HDMI [SX80 MX700/MX800/MX800D]

Integer (1..8) for Microphone; Integer (1..5) for HDMI [CodecPro Room70G2]

Integer (1..2) for Microphone; Integer (1..1) for Line [SX20]

Integer (1...2) for Microphone; Integer (1...1) for HDMI [SX10 RoomKit CodecPlus Room55 Room70/Room55D]

Integer (1..3) for Microphone; Integer (1..1) for Line; Integer (1..2) for HDMI [MX200G2/MX300G2]

Integer(1..1) [DX70/DX80]

Select a connector number.

Note the following if the ConnectorType is Microphone: If the video system has a built-in microphone, that microphone will be Microphone [1]. The external microphones connected to the input connectors starts from Microphone [2]. For DX70 and DX80, Microphone [1] refers to the selected audio device, which may be either the built-in microphone, or a connected headset or handset. Refer to the xStatus Audio SelectedDevice and xCommand Audio Select commands for more information about the selected device.

## ConnectorType:

 $\label{eq:hdml/line/microphone} \textit{[SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPro Room70G2]}$ 

Line/Microphone [SX20]

HDMI/Microphone [DX70/DX80 SX10 RoomKit CodecPlus Room55 Room70/Room55D]

Select the connector type.

# xCommand Audio VuMeter StopAll

Applies to: All products

Requires user role: ADMIN, USER

Stop all VU meters.

## USAGE:

xCommand Audio VuMeter StopAll

# Bookings commands

# xCommand Bookings Clear

Applies to: All products

Requires user role: ADMIN, USER

Clear the current stored list of bookings.

#### USAGE:

xCommand Bookings Clear

# xCommand Bookings Get

Applies to: All products

Requires user role: ADMIN, USER

Get the booking information for a specific ID.

## **USAGE:**

```
xCommand Bookings Get Id: "Id"
where

Id:
String (0, 128)
The booking ID of a call or conference.
```

# xCommand Bookings List

Applies to: All products

Requires user role: ADMIN, USER

List the stored bookings for the system. The list of booking details is received from the management system. All parameters are optional, and can be used to limit the search result. If no parameters are set, past, present and future bookings are all listed. To avoid listing bookings from yesterday and before, use DayOffset = 0.

#### USAGE:

```
xCommand Bookings List [Days: Days] [DayOffset: DayOffset] [Limit: Limit]
[Offset: Offset]
where
 Days:
   Integer (1..365)
   Number of days to retrieve bookings from.
 DayOffset:
   Integer (0..365)
   Which day to start the search from (today: 0, tomorrow: 1, ...).
   Default value: 0
 Limit:
   Integer (1..65534)
   Max number of bookings to list.
 Offset:
   Integer (0..65534)
   Offset number of bookings for this search.
   Default value: 0
```

# xCommand Bookings NotificationSnooze

Applies to: All products

Requires user role: ADMIN, USER

Sets notifications for the stored bookings in this room system to snooze.

## USAGE:

xCommand Bookings NotificationSnooze [Id: " $\underline{Id}$ "] [SecondsToSnooze: SecondsToSnooze]

where

<u>Id</u>:

String (0..128)

The ID of the notification snooze setting.

### SecondsToSnooze:

Integer (1..3600)

The duration of the snooze period, in seconds.

Default value: 300

# Call commands

# xCommand Call Accept

Applies to: All products

Requires user role: ADMIN, USER

Accept an incoming call. If no CallId is specified, all incoming calls are accepted.

#### USAGE:

xCommand Call Accept [CallId:  $\underline{CallId}$ ] where

CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.

Default value: 0

# xCommand Call Disconnect

Applies to: All products

Requires user role: ADMIN,INTEGRATOR, USER

Disconnect a call.

## **USAGE:**

xCommand Call Disconnect [CallId:  $\underline{CallId}$ ] where

# CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.

Default value: 0

# xCommand Call DTMFSend

Applies to: All products

Requires user role: ADMIN, USER

Send DTMF tones to the far end.

## USAGE:

xCommand Call DTMFSend [CallId:  $\underline{CallId}$ ] DTMFString: " $\underline{DTMFString}$ " where

## CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.

Default value: -1

# DTMFString:

String (0, 32)

Enter the DTMF string.

# xCommand Call FarEndControl Camera Move

Applies to: All products

Requires user role: ADMIN, USER

Move the far end camera (the remote camera).

NOTE: The far end camera moves in the specified direction until the stop command (ref: xCommand FarEndControl Camera Stop) is issued.

#### USAGE:

xCommand Call FarEndControl Camera Move [CallId:  $\underline{\it CallId}]$  Value:  $\underline{\it Value}$  where

# CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.

Default value: -1

# Value:

Left/Right/Up/Down/ZoomIn/ZoomOut

Select the action for how to move the camera.

# xCommand Call FarEndControl Camera Stop

Applies to: All products

Requires user role: ADMIN, USER

Stop the far end camera after the xCommand FarEndControl Camera Move has been issued.

#### **USAGE:**

xCommand Call FarEndControl Camera Stop [CallId:  $\underline{\it CallId}$ ] where

## CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

Default value: -1

# xCommand Call FarEndControl RoomPreset Activate

Applies to: All products

Requires user role: ADMIN, USER

While in a call, this command is used to activate a preset on the far end codec. The preset covers the far end codec's camera positions and input video switcher settings.

The preset must be stored on the far end codec beforehand, either by using the xCommand Preset Store command locally on the far end codec, or by using the xCommand FarEndControl Preset Store command from a remote codec.

Note: The far end codec's xConfiguration Conference FarEndControl Mode setting must be switched On for the FarEndControl commands to work.

## USAGE:

xCommand Call FarEndControl RoomPreset Activate [CallId:  $\underline{CallId}$ ] PresetId: PresetId

where

CallId:

Integer (0..65534)

The CallId is required to identify the far end codec only when in a Multipoint call. The CallId is returned when issuing the xCommand Dial command. During a call you can run the xStatus Call command to see the CallId.

Default value: -1

PresetId:

Integer (1..15)

The ID of the preset that is stored on the far end codec.

# xCommand Call FarEndControl Source Select

Applies to: All products

Requires user role: ADMIN, USER

Select which video input source to use as the main source on the far end system.

## USAGE:

xCommand Call FarEndControl Source Select [CallId:  $\underline{\it CallId}$ ] SourceId:  $\underline{\it SourceId}$  where

CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

Default value: -1

SourceId:

Integer (0..15)

Select a video input source on the far end.

# xCommand Call FarEndMessage Send

Applies to: All products

Requires user role: ADMIN, USER

Send data between two codecs in a point-to-point call, for use with control systems or macros. Works with SIP calls only. Requires that the Conference FarEndMessage Mode is set to On.

## **USAGE:**

xCommand Call FarEndMessage Send Text: " $\underline{\textit{Text}}$ " Type: " $\underline{\textit{Type}}$ " [CallId:  $\underline{\textit{CallId}}$ ] where

# Text:

String (1, 1450)

Enter the message to be sent to the far end.

# Type:

String (0, 255)

Enter the message type to be sent to the far end.

#### CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

# xCommand Call FarEndMessage SStringSend

Applies to: SX80

Requires user role: ADMIN, USER

Send data between two codecs in a point-to-point call, for use with control systems or macros. Works with H.323 and SIP calls. Uses the H.224 data channel (UDP). We recommend to use the new version of the command: xCommand Call FarEndMessage Send.

#### USAGE:

xCommand Call FarEndMessage SStringSend Message: " $\underline{\textit{Message}}$ " [CallId:  $\underline{\textit{CallId}}$ ] where

#### Message:

String (0, 255)

Enter the message to be sent to the far end.

# CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

# xCommand Call FarEndMessage TStringSend

Applies to: SX80

Requires user role: ADMIN, USER

Send data between two codecs in a point-to-point call, for use with control systems or macros. Works with H.323 calls only. Uses the H.245 control channel (TCP).

# **USAGE:**

xCommand Call FarEndMessage TStringSend Message: " $\underline{\textit{Message}}$ " CallId:  $\underline{\textit{CallId}}$  where

#### Message:

String (0, 255)

Enter the message to be sent to the far end.

#### CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.



## xCommand Call Forward

Applies to: All products

Requires user role: ADMIN, USER

Specifies what number or URI you want to forward your incoming calls to. The display name is a local reference for the forwarded destination. A message, together with the local reference, is shown on screen when you have configured the system to forward all calls.

#### USAGE:

```
xCommand Call Forward DisplayName: "\underline{\textit{DisplayName}}" Number: "\underline{\textit{Number}}" where
```

## DisplayName:

String (0, 255)

The local reference for the forwarded destination.

# Number:

String (0, 255)

The directory number or URI which you want to forward the incoming calls to.

# xCommand Call Hold

Applies to: All products

Requires user role: ADMIN, USER

Put a call on hold.

## USAGE:

```
xCommand Call Hold [CallId: \underline{CallId}] [Reason: \underline{Reason}] where
```

## CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

Default value: 0

#### Reason:

Conference/Transfer/Other

Internal usage only.

Default value: Other

# xCommand Call Ignore

Applies to: All products

Requires user role: ADMIN, USER

Turns off the ringtone for the incoming call. The call can still be answered.

## USAGE:

```
xCommand Call Ignore CallId: \underline{\it CallId} where \underline{\it CallId}:
```

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

# xCommand Call Join

Applies to: All products

Requires user role: ADMIN, USER

Internal usage only.

#### USAGE:

```
xCommand Call Join [CallId: \underline{CallId}] where \underline{CallId}:
```

Integer (0..65534)

You can have from 1 to 10 Callld parameters in the same command.

# xCommand Call Reject

Applies to: All products

Requires user role: ADMIN, USER

Reject incoming call. If no call id is specified, all incoming calls are rejected.

## USAGE:

```
xCommand Call Reject [CallId: \underline{CallId}] where \underline{CallId}:
```

carria.

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

Default value: 0

# xCommand Call Resume

Applies to: All products

Requires user role: ADMIN, USER

Resume a call that have been put on hold.

## **USAGE:**

```
xCommand Call Resume [CallId: \underline{CallId}] where \underline{CallId}:
```

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

Default value: 0

## xCommand Call UnattendedTransfer

Applies to: All products

Requires user role: ADMIN, USER

Transfers an ongoing call to another participant. Fully supported for SIP calls only.

## USAGE:

```
xCommand Call UnattendedTransfer CallId: \underline{\textit{CallId}} Number: "\underline{\textit{Number}}" where
```

## CallId:

Integer (0..65534)

The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

#### Number:

String (0, 255)

The number the call is transfered to.



# CallHistory commands

# xCommand CallHistory AcknowledgeAllMissedCalls

Applies to: All products

Requires user role: ADMIN, USER

Turns off the missed calls indicator on the touch controller for all missed calls.

#### USAGE:

xCommand CallHistory AcknowledgeAllMissedCalls

# xCommand CallHistory AcknowledgeMissedCall

Applies to: All products

Requires user role: ADMIN, USER

Turns off the missed calls indicator on the touch controller for the specified call.

# **USAGE:**

## CallHistoryId:

Integer (1..2147483647)

CallHistoryId for the call in question. Run xCommand CallHistory Get to get the id number.

# AcknowledgeConsecutiveDuplicates:

False/True

You can include or exclude all surrounding calls with duplicate information.

Default value: False

# xCommand CallHistory DeleteAll

Applies to: All products

Requires user role: ADMIN, USER

Deletes all information on previous calls.

## USAGE:

 $\verb|xCommand CallHistory DeleteAll [Filter: $\underline{Filter}$]|$ 

where

## Filter:

All/Missed/Placed/Received

You can filter which calls to delete.

Default value: All

# xCommand CallHistory DeleteEntry

Applies to: All products

Requires user role: ADMIN, USER

Deletes all information on the specified call.

## USAGE:

where

#### CallHistoryId:

Integer (1..2147483647)

CallHistoryId for the call in question. Run xCommand CallHistory Get to get the id number.

#### DeleteConsecutiveDuplicates:

False/True

You can delete the surrounding calls with duplicate information or not.

Default value: False



# xCommand CallHistory Get

Applies to: All products

Requires user role: ADMIN, USER

Retrieve all information on previous calls made on the video system.

## USAGE:

where

# Filter:

All/Missed/AnsweredElsewhere/Forwarded/Placed/NoAnswer/Received/Rejected/UnacknowledgedMissed

You can filter which calls to retrieve.

Default value: All

### Offset:

Integer (0..65534)

Sets the call from which to start.

Default value: 0

#### Limit:

Integer (0..65534)

Defines the amount of calls in the output.

Default value: 65534

## DetailLevel:

Basic/Full

Sets the level of detail for the information on these calls.

Default value: Basic

# SearchString:

String (0, 255)

Allows you to set the command to apply to a specified display name or call back number.

Default value: ""

#### CallHistoryId:

Integer (0..65534)

CallHistoryld for the call in question.

# xCommand CallHistory Recents

Applies to: All products

Requires user role: ADMIN, USER

Retrieve aggregated information on previous calls made on the video system.

## USAGE:

xCommand CallHistory Recents [Filter: <u>Filter</u>] [Offset: <u>Offset</u>] [Limit: <u>Limit</u>] [DetailLevel: <u>DetailLevel</u>] [SearchString: "<u>SearchString</u>"] [Order: <u>Order</u>] where

#### Filter:

All/Missed/AnsweredElsewhere/Forwarded/Placed/NoAnswer/Received/Rejected/UnacknowledgedMissed

You can filter which calls to retrieve.

Default value: All

## Offset:

Integer (0..65534)

Sets the call from which to start.

Default value: 0

#### Limit:

Integer (0..65534)

Defines the amount of calls in the output.

Default value: 65534

#### DetailLevel:

#### Basic/Full

Sets the level of detail for the information on these calls.

Default value: Basic

## SearchString:

String (0, 255)

Allows you to set the command to apply to a specified display name or call back number.

Default value: ""

#### Order:

OccurrenceTime/OccurrenceFrequency

Define the order in which the previous calls are presented.

Default value: OccurrenceTime

# Camera commands

# xCommand Camera PositionReset

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Reset the camera position to default position.

## USAGE:

xCommand Camera PositionReset [Axis:  $\underline{Axis}$ ] CameraId:  $\underline{CameraId}$  where

## Axis:

All/Focus/PanTilt/Zoom

Select which function to reset. If not specified all are reset.

Default value: All

## CameraId:

Integer (1..1) [ DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55 ]

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

The ID of the camera preset you want to reset.

# xCommand Camera PositionSet

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Set the camera position.

## **USAGE:**

```
xCommand Camera PositionSet CameraId: \underline{CameraId} [Focus: \underline{Focus}] [Lens: \underline{Lens}] [Pan: \underline{Pan}] [Tilt: \underline{Tilt}] [Zoom: \underline{Zoom}] where
```

#### CameraId:

Integer (1..1) [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

The ID of the camera preset you want to reset.

#### Focus:

Integer (0..65535)

Focus the camera near or far.

# Lens:

Wide/Center/Left/Right

Sets the camera's lens position.

# Pan:

Integer (-10000..10000)

Move the camera to the left or right.

### Tilt:

Integer (-2500..2500)

Move the camera up or down.

#### Zoom:

Integer (0..11800)

Zoom in or out.

## xCommand Camera Preset Activate

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Activate one of the stored camera presets.

Note that the xCommand Camera Preset commands applies to an individual camera. This is in contrast to the xCommand Preset commands where a single preset covers ALL connected cameras plus the Video Input switcher settings.

#### **USAGE:**

xCommand Camera Preset Activate PresetId: <u>PresetId</u>

where

#### PresetId:

Integer (1..35)

The ID of the camera preset you want to activate.

# xCommand Camera Preset ActivateDefaultPosition

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Sets the cameras to their default position, if one is defined. The default position is defined by xCommand Camera Preset Store or by xCommand Camera Preset Edit. Only one default position can be defined per camera.

#### **USAGE:**

 $\verb|xCommand Camera Preset ActivateDefaultPosition [CameraId: $\underline{\textit{CameraId}}$]| \\$  where

# CameraId:

Integer (1..1) [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

The ID of the camera preset you want to activate. If Camerald is not specified, all cameras will be set in their respective default position, if one is defined.



## xCommand Camera Preset Edit

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Edit a stored camera preset. You can change the name of the camera preset and its position in the list that is returned by the xCommand Camera Preset List command. You can also change whether or not this preset is the default position for the associated camera.

Note that the xCommand Camera Preset commands applies to an individual camera. This is in contrast to the xCommand Preset commands where a single preset covers ALL connected cameras and the Video Input switcher settings.

#### USAGE:

# where

# <u>PresetId</u>:

Integer (1..35)

The ID of the camera preset you want to edit.

#### ListPosition:

Integer (1..35)

The position in the list returned by the xCommand Camera Preset List command.

# Name:

String (0, 255)

The name of the camera preset. It will be used in the list returned by the xCommand Camera Preset List command.

# DefaultProsition:

### False/True

Defines whether or not this preset is the default position for the associated camera. Note that each camera can only have one default position, so if set, the old default preset will automatically be marked as not default.

# xCommand Camera Preset List

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

List information about available camera presets.

Note that the xCommand Camera Preset commands applies to an individual camera. This is in contrast to the xCommand Preset commands where a single preset covers ALL connected cameras plus the Video Input switcher settings.

#### USAGE:

xCommand Camera Preset List [CameraId:  $\underline{CameraId}$ ] [DefaultPosition:  $\underline{DefaultPosition}$ ]

# where

#### CameraId:

Integer (1..1) [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Only list presets for the specified camera.

## DefaultPosition:

False/True

List default positions only, or only those that are not default positions.



## xCommand Camera Preset Remove

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Remove a camera preset.

Note that the xCommand Camera Preset commands applies to an individual camera. This is in contrast to the xCommand Preset commands where a single preset covers ALL connected cameras plus the Video Input switcher settings.

#### USAGE:

xCommand Camera Preset Remove PresetId:  $\underline{\textit{PresetId}}$  where

### PresetId:

Integer (1..35)

The ID of the camera preset you want to remove.

#### xCommand Camera Preset Show

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the preset details for the requested Presetld.

#### **USAGE:**

xCommand Camera Preset Show PresetId:  $\underline{\textit{PresetId}}$ 

where

#### PresetId:

Integer (1..35)

The ID of the camera preset you wish to see.

# xCommand Camera Preset Store

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Store the current position (pan and tilt), zoom and focus of the chosen camera. The camera is identified by the Camerald parameter.

Note that the xCommand Camera Preset commands applies to an individual camera. This is in contrast to the xCommand Preset commands where a single preset covers ALL connected cameras plus the Video Input switcher settings. The xCommand Camera Preset commands are useful when you want to handle multiple camera positions individually per camera, rather than working with complete sets of camera positions. The individual camera presets are not available for far end control.

#### USAGE:

xCommand Camera Preset Store [PresetId: <u>PresetId</u>] CameraId: <u>CameraId</u> [ListPosition: <u>ListPosition</u>] [Name: "<u>Name</u>"] [TakeSnapshot: <u>TakeSnapshot</u>] [DefaultProsition: <u>DefaultProsition</u>]

#### where

#### PresetId:

Integer (1..35)

The ID of this camera preset. If not set explicitly, the codec will assign a preset ID automatically.

# CameraId:

Integer (1..1) [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Select the camera for which to store the preset position.

## ListPosition:

Integer (1..35)

The new camera preset's position in the list returned by the xCommand Camera Preset List command.

#### Name:

Strina (0, 255)

The name of the new camera preset. It will be used in the list returned by the xCommand Camera Preset List command.

#### TakeSnapshot:

False/True

Allow or disallow snapshot of the preview.

#### DefaultProsition:

#### False/True

Defines whether or not this preset shall be the default position of the associated camera. Note that each camera can hold only one default position, so if set, the old default preset will automatically be marked as not default.

# xCommand Camera Ramp

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Move the camera in a specified direction. The camera moves at specified speed until a stop command is issued. In a daisy chain, you need to know the Camerald for the camera you want to address. Be aware that pan and tilt can be operated simultaneously, but no other combinations. In the latter case only the first operation specified is executed. For example, if you try to run both zoom and pan at the same time, only zoom is executed.

NOTE: You must run a stop command to stop the camera, see the example below.

#### USAGE:

xCommand Camera Ramp CameraId:  $\underline{CameraId}$  [Pan:  $\underline{Pan}$ ] [PanSpeed:  $\underline{PanSpeed}$ ] [Tilt:  $\underline{Tilt}$ ] [TiltSpeed:  $\underline{TiltSpeed}$ ] [Zoom:  $\underline{Zoom}$ ] [ZoomSpeed:  $\underline{ZoomSpeed}$ ] [Focus: Focus] where

#### CameraId:

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Integer (1..1) [SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Select the camera.

#### Pan:

Left/Right/Stop

Move the camera to the Left or Right, followed by Stop.

#### PanSpeed:

Integer (1..15)

Set the pan speed.

#### Tilt:

Down/Up/Stop

Move the camera Up or Down, followed by Stop.

#### TiltSpeed:

Integer (1..15)

Set the tilt speed.

#### Zoom:

In/Out/Stop

Zoom the camera In or Out, followed by Stop.

# ZoomSpeed:

Integer (1..15)

Set the zoom speed.

#### Focus:

Far/Near/Stop

Focus the camera Far or Near, followed by Stop.

# xCommand Camera TriggerAutofocus

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Trigger the auto-focus functionality. The camera must support auto-focus functionality. If the camera is daisy chained, the Camerald is given by its place in the chain.

#### USAGE:

 ${\tt xCommand \ Camera \ TriggerAutofocus \ CameraId:} \ \underline{{\tt CameraId}} \\ {\tt where}$ 

#### CameraId:

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

Integer (1..1) [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit Room55]

Select the camera to auto-focus.

# Cameras commands

# xCommand Cameras AutoFocus Diagnostics Start

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Start diagnostics on auto focus.

## **USAGE:**

xCommand Cameras AutoFocus Diagnostics Start CameraId:  $\underline{\textit{CameraId}}$  where

## CameraId:

1..7 [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

1...1 [RoomKit Room55]

Select which camera to diagnose.

# xCommand Cameras AutoFocus Diagnostics Stop

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Stop diagnostics on auto focus.

# **USAGE:**

xCommand Cameras AutoFocus Diagnostics Stop CameraId:  $\underline{\textit{CameraId}}$  where

#### CameraId:

1..7 [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2]

1..1 [RoomKit Room55]

Select which camera to diagnose.



# xCommand Cameras PresenterTrack ClearPosition

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Clear the stored presenter tracking camera position for the overview image of the stage. The PresenterTrack feature will still work after the camera position has been cleared, but the camera will not view a predefined position upon activation.

For SX80 and Codec Pro: This setting applies only when using a Precision 60 camera or SpeakerTrack 60 camera.

#### **USAGE:**

xCommand Cameras PresenterTrack ClearPosition

## xCommand Cameras PresenterTrack Set

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Set the presenter tracking mode.

This command takes effect only if the PresenterTrack feature is enabled. Sign in to the video system's web interface and use the Cameras PresenterTrack Enabled setting to enable or disable the feature.

For SX80 and Codec Pro: This setting applies only when using a Precision 60 camera or SpeakerTrack 60 camera.

#### **USAGE:**

xCommand Cameras PresenterTrack Set Mode: Mode

where

#### Mode:

Off/Follow/Diagnostic/Background/Setup/Persistent

Off: Turn off presenter tracking.

*Follow:* Turn on presenter tracking. This is the default mode when the feature is activated from the Touch user interface. Presenter tracking is automatically turned off when camera moves to a different preset, when another camera is selected, or when standby is activated.

*Diagnostic:* Turn on diagnostic mode in order to troubleshoot presenter tracking, or to see exactly what happens on the video system screen. In diagnostics mode there are several activities on the screen. The screen will show the overview image, and the rectangles/squares listed below will be visible:

- \* RED: The trigger zone.
- \* YELLOW: The cropped image of the presenter. Visible only when a face is being tracked.
- \* GREEN: Indicates that a face is detected and that it is tracked.
- \* GREEN BLINKING FILLED: Indicates a positive face detection. If the tracked individual does not get a valid face-read the square becomes red.
- $^{\ast}$  RED BLINKING FILLED: Indicates a false face detection. After some seconds the tracking stops.
- \* BLUE: A face is detected but the face is not tracked.

**Background:** This setting is used by the codec's internal scripts. Turns on presenter tracking with no cropping of the image.

*Setup:* This setting is used by the codec's web interface to show the trigger zone on the video system screen when setting up the PresenterTrack feature.

**Persistent:** This setting is used by the codec's internal scripts. Turns on presenter tracking in persistent mode. Persitent mode is automatically turned off when camera moves to a different preset.

# xCommand Cameras PresenterTrack StorePosition

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Store the current position of the presenter tracking camera for the overview image of the stage. The presenter tracking camera will move to this position when activating the feature.

For SX80 and Codec Pro: This setting applies only when using a Precision 60 camera or SpeakerTrack 60 camera.

## **USAGE:**

xCommand Cameras PresenterTrack StorePosition

# xCommand Cameras SpeakerTrack Activate

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Activate SpeakerTrack mode. Requires that xConfiguration Cameras SpeakerTrack Mode is set to Auto (default).

This setting applies only when using a Cisco TelePresence SpeakerTrack 60 camera.

The SpeakerTrack 60 camera assembly consists of two cameras and uses an audio tracking technique that finds and captures a close-up of the active speaker. When a change of speaker is detected, the system can switch automatically between the two cameras to always show the best camera view.

#### USAGE:

xCommand Cameras SpeakerTrack Activate

# xCommand Cameras SpeakerTrack Deactivate

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Deactivate SpeakerTrack mode.

This setting applies only when using a Cisco TelePresence SpeakerTrack 60 camera.

The SpeakerTrack 60 camera assembly consists of two cameras and uses an audio tracking technique that finds and captures a close-up of the active speaker. When a change of speaker is detected, the system can switch automatically between the two cameras to always show the best camera view.

## USAGE:

xCommand Cameras SpeakerTrack Deactivate

# xCommand Cameras SpeakerTrack Diagnostics Start

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Starts diagnostics on the SpeakerTrack cameras' tracking.

#### **USAGE:**

xCommand Cameras SpeakerTrack Diagnostics Start Tracking:  $\underline{\textit{Tracking}}$  where

#### Tracking:

On/Off

*On:* Displays diagnostics from both cameras simultaneously. In this mode the tracking is determined by who is talking in the room identical to SpeakerTrack's standard behavior.

*Off:* Displays diagnostics from one camera at a time. Diagnostics is switched from one camera to the other in 15 seconds intervals, and camera related diagnostics are shown for the active camera. Both cameras stay in full wide position. Use Tracking: Off when you wish to see the tracking diagnostics from one camera at a time.

Default value: On

# xCommand Cameras SpeakerTrack Diagnostics Stop

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Stops diagnostics on the SpeakerTrack cameras.

# **USAGE:**

xCommand Cameras SpeakerTrack Diagnostics Stop

# xCommand Cameras SpeakerTrack Whiteboard ActivatePosition

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Moves the specified camera to the position stored with xCommand Cameras SpeakerTrack Whiteboard StorePosition.

# **USAGE:**

xCommand Cameras SpeakerTrack Whiteboard ActivatePosition CameraId:  $\underline{CameraId}$  [WhiteboardId:  $\underline{WhiteboardId}$ ]

# where

#### CameraId:

Integer(1..1) [RoomKit Room55 Room70/Room55D]

Integer(1..2) [CodecPlus]

Integer(1..7) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

The ID of the camera that is being positioned.

#### WhiteboardId:

Integer (1..8)

The id set for the camera position used for the snap-to-whiteboard feature. Currently only id 1 can be used.

Default value: 1

# xCommand Cameras SpeakerTrack Whiteboard AlignPosition

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Only applicable for MX700 and MX800 with a dual camera, and for SX80 and Codec Pro with a SpeakerTrack 60 camera. Not applicable for any other products.

Align the position of the second camera to the first camera's stored position. You must also set the distance to a whiteboard.

#### USAGE:

 $\verb|xCommand Cameras SpeakerTrack Whiteboard AlignPosition CameraId: \underline{\textit{CameraId}}|$ 

Distance: <u>Distance</u>

where

CameraId: [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Integer(1..7)

The ID of the camera that is being positioned.

Distance: [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Integer (300..1500)

Set distance to whiteboard in centimeters. Use an accurate measurement for the feature to work seamlessly.

# xCommand Cameras SpeakerTrack Whiteboard SetDistance

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Set the cameras distance to the whiteboard. This information is needed by the camera to frame the whiteboard automatically.

#### USAGE:

 $\verb|xCommand Cameras SpeakerTrack Whiteboard SetDistance Distance: \underline{Distance} \\ [WhiteboardId: WhiteboardId]$ 

where

#### Distance:

Integer (0..65534)

Set distance to whiteboard in centimeters. Use an accurate measurement for the feature to work seamlessly.

# WhiteboardId:

Integer (1..8)

The id set for the camera position used for the snap-to-whiteboard feature. Currently only id 1 can be used.

Default value: 1

# xCommand Cameras SpeakerTrack Whiteboard StorePosition

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Store the position of the specified camera as the Snap to Whiteboard position. Frame the image so that there is room around the whiteboard for the speaker. To use the Snap to Whiteboard feature it must be enabled with xConfiguration Cameras SpeakerTrack Whiteboard Mode and tracking must be enabled with xConfiguration Cameras SpeakerTrack Mode.

Note: For MX700 and MX800 with a dual camera, and for SX80 and Codec Pro with a SpeakerTrack 60 camera, you must store a snap-to-whiteboard position for both cameras.

#### USAGE:

xCommand Cameras SpeakerTrack Whiteboard StorePosition CameraId:  $\underline{\textit{CameraId}}$  [WhiteboardId:  $\underline{\textit{WhiteboardId}}$ ]

#### where

#### CameraId:

Integer(1..1) [RoomKit Room55 Room70/Room55D]

Integer(1..2) [CodecPlus]

Integer(1..7) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

The ID of the camera that is being positioned.

#### WhiteboardId:

Integer (1..8)

You can give the position an id number. Currently the only id that can be used is 1.

Default value: 1

API Reference Guide



# Conference commands

# xCommand Conference DoNotDisturb Activate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

This command switches on the Do Not Disturb mode, and the Timeout parameter allows you to control when it is switched off again. When Do Not Disturb is switched on, all incoming calls are rejected and registered as missed calls. The calling side receives a busy signal.

#### USAGE:

 $\verb|xCommand| Conference DoNotDisturb Activate [Timeout: \underline{\textit{Timeout}}]|$ 

where

# Timeout:

Integer (1..1440)

Set the number of minutes before Do Not Disturb is switched off. If not set, Do Not Disturb times out after 1440 minutes (24 hours).

# xCommand Conference DoNotDisturb Deactivate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Switch off the Do Not Disturb mode. When Do Not Disturb is switched off incoming calls come through as normal.

### **USAGE:**

xCommand Conference DoNotDisturb Deactivate

# xCommand Conference SpeakerLock Release

Applies to: All products

Requires user role: ADMIN, USER

Releases locked speaker set by xCommand Conference SpeakerLock Set. Default voice switching is switched back on.

#### **USAGE:**

xCommand Conference SpeakerLock Release

# xCommand Conference SpeakerLock Set

Applies to: All products

Requires user role: ADMIN, USER

For manually locking one of the speakers to the prominent speaker position. This overrides the default voice switching.

## **USAGE:**

 $\verb|xCommand Conference SpeakerLock Set Target: \underline{\textit{Target}} \ [CallId: \underline{\textit{CallId}}]|\\$ 

where

## Target:

Local/Remote

Identifies local or remote participant.

#### CallId:

Integer (0..65534)

Identify CallID for the remote participant. Only relevant if Target is set to "remote".

Default value: 0



# Diagnostics commands

# xCommand Diagnostics Run

Applies to: All products

Requires user role: ADMIN, TOUCHUSER

This command runs self-diagnostics commands on the system.

#### USAGE:

xCommand Diagnostics Run [ResultSet:  $\underline{\textit{ResultSet}}$ ] where

## ResultSet:

Alerts/All/None

You can filter the diagnostics results to alerts, all or none. If not set, the result will show all results.

Default value: Alerts

# Dial commands

# xCommand Dial

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Dial out from the system. Returns information about the CallId and ConferenceId, which are required for some of the other commands.

## **USAGE:**

## where

# Number:

String (0, 255)

Enter the number or address.

### Protocol:

H320/H323/Sip/Spark

Select the call protocol.

## CallRate:

Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

Integer (64..3072) [ DX70/DX80 SX10 ]

Set the call rate.

# CallType:

Audio/Video

Select the call type.

## BookingId:

String (0, 255)

Any identifier that an external booking system (e.g. TMS, CTS-MAN) can use for its own references to match placed calls with the booking systems internal identifier for a meeting. This can be any string, e.g. a GUID. The booking Id is supplied in call logs, call events etc for the call.

Default value: ""

## Appearance:

Integer (1..99999999)

Internal usage only.

### DisplayName:

String (0, 255)

The display name of the remote participant.

Default value: ""

### TrackingData:

String (0, 255)

Adds a tag to a call, so that it can be identified in the call history.

Default value:

# GPIO commands

### xCommand GPIO ManualState Set

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Set the state of a GPIO pin that is configured to OutputManualState mode (ref. xConfiguration GPIO Pin [1..4] Mode).

### USAGE:

```
xCommand GPIO ManualState Set [Pin1: \underline{Pin1}] [Pin2: \underline{Pin2}] [Pin3: \underline{Pin3}] [Pin4: \underline{Pin4}] where
```

Pin1:

High/Low

Pin2:

High/Low

Pin3:

High/Low

Pin4:

High/Low



# HttpFeedback commands

# xCommand HttpFeedback Deregister

Applies to: *All products*Requires user role: ADMIN

Deregister the HTTP feedback over HTTP(S).

#### USAGE:

xCommand HttpFeedback Deregister FeedbackSlot:  $\underline{\textit{FeedbackSlot}}$  where

### FeedbackSlot:

Integer (1..4)

Deregister the feedback slot that was registered using the xCommand HttpFeedback Register command.

# xCommand HttpFeedback Enable

Applies to: *All products*Requires user role: ADMIN

Re-enables a previously registered feedback slot after it has failed and become deactivated.

### **USAGE:**

 $\verb|xCommand| | \verb|HttpFeedback| | Enable| | FeedbackSlot| | \underline{FeedbackSlot}| \\ | where |$ 

### FeedbackSlot:

Integer (1..4)

Specifies the feedback slot that is enabled.

# xCommand HttpFeedback Register

Applies to: *All products*Requires user role: ADMIN

Register the system to a HTTP(S) server to return XML feedback over HTTP(S) to specific URLs.

### **USAGE:**

### where

## FeedbackSlot:

Integer (1..4)

The codec can register up to 4 slots of servers requesting HTTP feedback. Set the registering to one of them.

**Note:** Avoid using FeedbackSlot 3 in an environment where Cisco TelePresence Management Suite (TMS) is used as TMS uses this feedbackslot to register its expressions.

### Format:

XML/JSON

Set the format for the feedback from the HTTP server to XML or JSON.

Default value: XML

### ServerUrl:

String (1, 2048)

The URL to the HTTP server where you want the codec to post the HTTP feedback messages to.

### Expression:

String (1, 255)

The XPath expression specifies which parts of the Status, Configuration or Event XML documents are monitored. You can have from 0 to 15 XPath expressions in the same command.



# Macros commands

# xCommand Macros Log Clear

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Clears the Macros Logs.

### **USAGE:**

xCommand Macros Log Clear

# xCommand Macros Log Get

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Shows the logs for all running macros and for the runtime itself.

### USAGE:

xCommand Macros Log Get [Offset: Offset]
where
 Offset:

Integer (0..65534)

Shows lines with the same or higher Offset than the one provided.

Default value: 0

### xCommand Macros Macro Activate

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Activates a macro created on this video system.

### **USAGE:**

xCommand Macros Macro Activate Name: " $\underline{\mathit{Name}}$ " where

<u>Name</u>:

String (0..255)

Specifies the name of the macro to activate.

## xCommand Macros Macro Deactivate

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Deactivates a macro currently running on this video system.

### USAGE:

xCommand Macros Macro Deactivate Name: " $\underline{\mathit{Name}}$ " where

Name:

String (0..255)

The name of the macro to deactivate.

### xCommand Macros Macro Get

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Shows the details of a macro created on this video system.

### **USAGE:**

xCommand Macros Macro Get [Content:  $\underline{Content}$ ] [Name: " $\underline{Name}$ "] where

### Content:

False/True

Shows the content for the specified Macro or not.

Default value: False

### Name:

String (0..255)

The name of the macro.

### xCommand Macros Macro Remove

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Removes a macro created on this video system.

### USAGE:

xCommand Macros Macro Remove Name: " $\underline{\mathit{Name}}"$  where

Name:

String (0..255)

The name of the macro that is removed.

### xCommand Macros Macro RemoveAll

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Removes all of the macros created on this video system.

### **USAGE:**

xCommand Macros Macro RemoveAll

### xCommand Macros Macro Rename

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Renames a macro created on this video system.

### **USAGE:**

xCommand Macros Macro Rename Name: " $\underline{\textit{Name}}$ " NewName: " $\underline{\textit{NewName}}$ " [Overwrite: Overwrite]

where

Name:

String (0..255)

The name of the macro that is renamed.

### NewName:

String (0..255)

The new name of the macro.

### Overwrite:

False/True

Overwrites the existing content or not.

Default value: False

### xCommand Macros Macro Roles Set

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Sets the role for a macro.

### **USAGE:**

xCommand Macros Macro Roles Set Name: " $\underline{\textit{Name}}$ " [Role:  $\underline{\textit{Role}}$ ] where

Name:

String (0..255)

The name of the macro that is set.

Role:

Admin/Audit/User/Integrator/RoomControl

The role that is set for this macro.

Default value: Admin

### xCommand Macros Macro Save

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Saves the details of a macro. This is a multiline command.

### **USAGE:**

xCommand Macros Macro Save Name: " $\underline{\textit{Name}}$ " [Overwrite:  $\underline{\textit{Overwrite}}$ ] [Transpile:  $\underline{\textit{Transpile}}$ ]

where

Name:

String (0..255)

The name of the macro that is saved.

Overwrite:

False/True

Overwrites the existing content or not.

Default value: True

Transpile:

False/True

Translates current JavaScript language features into EcmaScript 5.0/5.1.

Default value: True

### xCommand Macros Runtime Restart

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Restarts all of the macros set up on this device.

#### **USAGE:**

xCommand Macros Runtime Restart

### xCommand Macros Runtime Start

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Starts all of the macros set up on this device.

### **USAGE:**

xCommand Macros Runtime Start

### xCommand Macros Runtime Status

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Shows the current status of the macros runtime on this device.

### **USAGE:**

xCommand Macros Runtime Status

# xCommand Macros Runtime Stop

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Stops all of the macros set up on this device.

### USAGE:

xCommand Macros Runtime Stop

# Message commands

# xCommand Message Send

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Triggers a Message Send event which sends text to any listening clients.

#### USAGE:

xCommand Message Send Text: " $\underline{\textit{Text}}$ "

where

<u>Text</u>:

String (0..255)

The text that the message contains.



# Peripherals commands

# xCommand Peripherals Connect

Applies to: All products

String (0, 100)

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Register peripherals that are connected to the codec, such as control systems and touch panels. The registered peripherals are displayed on the web interface under Configuration > Peripherals.

This command should be used when the peripheral connects to the codec for the first time or when the software version on the peripheral has changed. The list of connected devices is available with the command xStatus Peripherals ConnectedDevice [n] Status.

### USAGE:

```
xCommand Peripherals Connect [HardwareInfo: "HardwareInfo"] ID: "ID" [Name:
"Name"] [NetworkAddress: "NetworkAddress"] [SerialNumber: "SerialNumber"]
[SoftwareInfo: "SoftwareInfo"] Type: Type
where
 HardwareInfo:
   String (0, 100)
   The device's hardware number.
   Default value: " "
 ID:
   String (1, 100)
   A unique ID for the device you are connecting to, typically a MAC address.
 Name:
   String (0, 100)
   Define a name for the device.
   Default value: ""
 NetworkAddress:
   String (0, 100)
   Network address for the device you are connecting to.
   Default value: " "
 SerialNumber:
```

```
The device's serial number.

Default value: ""

SoftwareInfo:
String (0, 100)
Software version the device is running.
Default value: ""

Type:
Byod/ControlSystem/Other/TouchPanel
Define the type of device you are connecting to.
```

# xCommand Peripherals HeartBeat

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

When a peripheral is registered as a connected device, you can set it to send a heartbeat to the codec to let the codec know that it is still connected.

This will keep the device on the xStatus Peripherals ConnectedDevice list. If the peripheral is not set to send a heartbeat, the device will disappear from the list after a while.

Note: Does not apply to cameras.

### **USAGE:**

```
xCommand Peripherals HeartBeat ID: "ID" [Timeout: Timeout]
where

ID:
String (1, 100)
A unique ID for the device you are connecting to, typically a MAC address.

Timeout:
Integer (1..65535)
Set how long the device will send heartbeat.
Default value: 60
```

# xCommand Peripherals List

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Lists all currently and previously connected peripherals.

### USAGE:

xCommand Peripherals List [Connected:  $\underline{\textit{Connected}}$ ] [Type:  $\underline{\textit{Type}}$ ] where

### Connected:

False/True

Limit the search to currently connected devices.

### Туре:

All/ControlSystem/ISDNLink/Other/TouchPanel

Limit the search by device type.

Default value: All

# xCommand Peripherals Pairing DeviceDiscovery Start

Applies to: *All products*Requires user role: ADMIN

Start device discovery to detect ISDN Links in the same network.

### USAGE:

xCommand Peripherals Pairing DeviceDiscovery Start [AutoPairing: <u>AutoPairing</u>] [DeviceType: DeviceType] [Timeout: Timeout]

where

### AutoPairing:

On/Off

You can select to automatically pair the detected device to the endpoint.

Default value: Off

### DeviceType:

**ISDNLink** 

Only look for ISDN Link.

### Timeout:

Integer (3..60)

Set a maximum time for the search from 3 to 60 seconds.

Default value: 10

# xCommand Peripherals Pairing Pair

Applies to: *All products*Requires user role: ADMIN

Pair an ISDN Link to an endpoint.

#### USAGE:

xCommand Peripherals Pairing Pair MacAddress: " $\underline{\textit{MacAddress}}$ " where

#### MacAddress:

String (1, 1450)

Enter the MAC address for the ISDN Link you wish to pair to the endpoint.

# xCommand Peripherals Pairing Unpair

Applies to: All products

Requires user role: ADMIN, USER

Unpair endpoint from an ISDN Link, when the two have contact.

### USAGE:

```
xCommand Peripherals Pairing Unpair MacAddress: "\underline{\textit{MacAddress}}" where
```

### MacAddress:

String (1, 100)

Enter the MAC address for the ISDN Link you wish to unpair from the endpoint.

# xCommand Peripherals Purge

Applies to: All products

Requires user role: ADMIN, USER

Force unpair an endpoint from an ISDN Link when a connection has been lost. Note: You must also unpair the ISDN Link to be able to pair it to another endpoint.

### USAGE:

```
xCommand Peripherals Purge ID: "ID"
where

ID:
String (1, 100)
```

# Phonebook commands

### xCommand Phonebook Contact Add

Applies to: All products

Requires user role: ADMIN, USER

Add a new contact to the local phonebook. The command returns the ContactId, which is a unique string that identifies the contact; typically the format is "localContactId-n".

You can add several contact methods to a contact using the xCommand Phonebook ContactMethod Add command. Note that only the first contact method will appear in the Favorites list on the Cisco TelePresence Touch controller. All contact methods are available on the other Uls.

### **USAGE:**

```
xCommand Phonebook Contact Add Name: "\underline{Name}" [Number: "\underline{Number}"] [CallRate: \underline{CallRate}] [CallType: \underline{CallType}] [Device: \underline{Device}] [FolderId: "\underline{FolderId}"] [ImageURL: "\underline{ImageURL}"] [Protocol: Protocol] [Tag: Tag] [Title: "Title"]
```

#### where

#### Name:

String (0, 255)

The name of the contact.

#### Number:

String (0, 255)

The phone number or address of the contact.

#### CallRate:

Integer (0..6000)

Set a call rate.

Default value: 0

### CallType:

Audio/Video

Select a call type (audio or video).

### Device:

Mobile/Other/Telephone/Video

Select the device type.

FolderId:

Mac address of the ISDN Link in the format "xx:xx:xx:xx:xx:xx:xx.".



String (0, 255)

The unique identifier for the folder that you want to store the contact in. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the folder.

### ImageURL:

String (0, 255)

Currently not in use.

### Protocol:

Auto/H320/H323/SIP/Spark

Select the Auto, Spark, SIP, H323 or H320 protocol.

### Tag:

Untagged/Favorite

Tag the contact as a Favorite, or untag an already tagged contact.

## <u>Title</u>:

String (0, 255)

The title of the contact.

### xCommand Phonebook Contact Delete

Applies to: All products

Requires user role: ADMIN, USER

Delete an existing contact from the local phonebook.

### **USAGE:**

 ${\tt xCommand\ Phonebook\ Contact\ Delete\ ContactId:\ "$\underline{ContactId}$"}$ where$ 

### ContactId:

String (0, 255)

The unique identifier for the contact. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

# xCommand Phonebook Contact Modify

Applies to: All products

Requires user role: ADMIN, USER

Modify contact details of an existing contact in the local phonebook. The following parameters can be changed using this command: Name, Folderld, ImageURL and Title. You must use the xCommand Phonebook ContactMethod Modify command to change the other parameters: Number, Protocol, CallRate, CallType and Device.

#### USAGE:

```
xCommand Phonebook Contact Modify ContactId: "<u>ContactId</u>" [Name: "<u>Name</u>"] [FolderId: "<u>FolderId</u>"] [ImageURL: "<u>ImageURL</u>"] [Tag: <u>Tag</u>] [Title: "<u>Title</u>"] where
```

### ContactId:

String (0, 255)

The unique identifier for the contact you want to modify. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

### Name:

String (0, 255)

The name of the contact.

### FolderId:

String (0, 255)

A unique identifier for the folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued.

### ImageURL:

String (0, 255)

Currently not in use.

### Tag:

Untagged/Favorite

Tag the contact as a Favorite, or untag an already tagged contact.

#### Title:

String (0, 255)

The title of the contact.



### xCommand Phonebook ContactMethod Add

Applies to: All products

Requires user role: ADMIN, USER

Add contact details for an existing contact in the local phonebook. The command returns the ContactMethodld, which is a unique string that identifies the contact method; typically the format is "n".

You can add several contact methods to a contact. Note that only the first contact method will appear in the Favorites list on the video system's user interface. The first contact method may have been created when issuing the xCommand Phonebook Contact Add command to make the contact. All contact methods are available in the API and on the web interface.

#### USAGF:

### ContactId:

String (0, 255)

The unique identifier for the contact that you want to add a contact method to. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

### CallRate:

Integer (0..6000)

Set a call rate.

Default value: 0

### CallType:

Audio/Video

Select a call type (audio or video).

# <u>Device</u>:

Mobile/Other/Telephone/Video

Set which type of device to call to.

### Number:

String (0, 255)

The phone number or address of the contact.

### Protocol:

Auto/H320/H323/SIP/Spark

Select protocol.

### xCommand Phonebook ContactMethod Delete

Applies to: All products

Requires user role: ADMIN, USER

Delete a contact method from an existing contact in the local phonebook.

#### USAGE:

where

### ContactId:

String (0, 255)

The unique identifier for the contact you want to change. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

### ContactMethodId:

String (0, 255)

The unique identifier for the contact method you want to delete. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook ContactMethod Add command was issued to make the contact method.

# xCommand Phonebook ContactMethod Modify

Applies to: All products

Requires user role: ADMIN, USER

Modify details about the contact method for an existing contact in the local phonebook.

### USAGE:

```
xCommand Phonebook ContactMethod Modify ContactId: "ContactId" ContactMethodId: "ContactMethodId" [Device: Device] [Number: "Number"] [Protocol: Protocol] [CallRate: CallRate] [CallType: CallType] where
```

# ContactId:

String (0, 255)

The unique identifier for the contact. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

### ContactMethodId:

String (0, 255)

The unique identifier for the contact method you want to modify. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook ContactMethod Add or xCommand Phonebook Contact Add commands were issued to make the contact method.

#### Device:

Mobile/Other/Telephone/Video

Set which type of device to call to.

### ${\it Number}$ :

String (0, 255)

The phone number or address of the contact.

### Protocol:

Auto/H320/H323/SIP/Spark

Select protocol.

### CallRate:

Integer (0..6000)

Set a call rate.

Default value: 0

### CallType:

Audio/Video

Select a call type (audio or video).

### xCommand Phonebook Folder Add

Applies to: All products

Requires user role: ADMIN, USER

Phonebook entries can be stored in folders. Use this command to add a folder to the local phonebook. The command returns the Folderld, which is a unique string that identifies the folder; typically the format is "localGroupId-n".

#### **USAGE:**

```
xCommand Phonebook Folder Add Name: "Name" [ParentFolderId: "ParentFolderId"] where
```

#### Name:

String (0, 255)

The name of the folder.

#### ParentFolderId:

String (0, 255)

The unique identifier for the parent folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the parent folder.

### xCommand Phonebook Folder Delete

Applies to: All products

Requires user role: ADMIN, USER

Delete an existing folder from the local phonebook.

#### USAGE:

```
xCommand Phonebook Folder Delete FolderId: "\underline{FolderId}" where
```

### FolderId:

String (0, 255)

The unique identifier for the folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the folder.

# xCommand Phonebook Folder Modify

Applies to: All products

Requires user role: ADMIN, USER

Modify an existing phonebook folder.

### USAGE:

xCommand Phonebook Folder Modify FolderId: " $\underline{FolderId}$ " [Name: " $\underline{Name}$ "] [ParentFolderId: " $\underline{ParentFolderId}$ "]

where

### FolderId:

String (0, 255)

The unique identifier for the folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder. Add command was issued to make the folder.

### Name:

String (0, 255)

The name of the contact.

### ParentFolderId:

String (0, 255)

The unique identifier for the parent folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the parent folder.

### xCommand Phonebook Search

Applies to: All products

Requires user role: ADMIN, USER

The search command lets you search in both the local and corporate phone books. A search gives a ResultSet.

The total number of folders and contacts (TotalRows) is always included in the result set when searching the local phone book. When searching a corporate phonebook the total number of folders and contacts may not be included. Whether it is included or not depends on the backend corporate phonebook service (e.g. CUCM, VCS, TMS) and its version.

#### USAGE:

xCommand Phonebook Search [PhonebookId: "PhonebookId"] [PhonebookType: PhonebookType] [SearchString: "SearchString"] [SearchField: SearchField] [SearchFilter: SearchFilter] [ContactType: ContactType] [Offset: Offset] [FolderId: "FolderId"] [Limit: Limit] [ContactMethodLimit: ContactMethodLimit] [Recursive: Recursive] [Tag: Tag]

### where

### PhonebookId:

String (0, 255)

The identifier of the phonebook server that will be searched. See the xConfiguration Phonebook Server ID setting.

### PhonebookType:

Corporate/Local

Define whether to search the local phone book or the corporate phonebook.

Default value: Local

### SearchString:

String (0, 255)

Search for entries containing this string (note that the entry does not have to begin with the string). If no Folderld is specified, all folders / phonebook directories will be searched.

### SearchField:

Name/Number

Currently not in use.

SearchFilter: [SX80 RoomKit CodecPlus CodecPro]

All/Rooms/People

Only available for Cisco Webex registered devices.

### ContactType:

Any/Folder/Contact

Search all contact types, or limit the search to folders or individual contacts.

Default value: Any

### Offset:

Integer (0..65534)

Get records starting with this offset in a search. The default value is 0. Offset is used together with Limit to support paging.

Default value: 0

### FolderId:

String (0, 255)

Search only in the specified folder. The Folderld (string) is listed in the ResultSet of a search result containing folders.

### Limit:

Integer (0..65534)

Limit the number of records in the result set to this number. For example, if the limit is set to 10, the ResultSet will contain only 10 entries (Contacts and Folders) even if the total number of hits is larger. The maximum limit is 1000.

Default value: 50 ContactMethodLimit:

Integer (0..10)

Limit the number of records in the result set to this number. For example, if the limit is set to 2, the ResultSet will contain only 2 entries even if the total number of hits is larger.

Default value: 0

### Recursive:

False/True

This parameter will only have effect when searching the local phone book. The setting determines whether a local phone book search should be limited to the given Folderld, or also recursively search in its subfolders. If not specified, the search will be recursive.

When issuing the command without specifying any parameters, all folders, contacts and contact methods in the local phone book will be returned.

Default value: True

### Tag:

Untagged/Favorite

Limits the search to either contacts that have been tagged as favorite or the untagged contacts.

# Presentation commands

### xCommand Presentation Start

Applies to: All products

Requires user role: ADMIN, USER

Open a media stream from the selected presentation source.

You can combine up to four presentation sources in a single presentation video stream (the maximum number of different input sources depend on the type of video system) by adding multiple Connectorlds or PresentationSources in the same command. The order in which you write them in the command determines the order in which the sources show up on the screen. You can't use a mix of identifier types in the same command; use either Connectorld or PresentationSource.

#### USAGE:

xCommand Presentation Start [ConnectorId: <u>ConnectorId</u>] [Instance: <u>Instance</u>] [PresentationSource: <u>PresentationSource</u>] [SendingMode: <u>SendingMode</u>] where

#### ConnectorId:

```
Integer (1..6) [CodecPro Room70G2]
Integer (1..5) [SX80 MX700/MX800/MX800D]
Integer (1..4) [MX200G2/MX300G2]
Integer (1..2) [DX70/DX80 SX20 RoomKit]
Integer (1..3) [CodecPlus Room55 Room70/Room55D]
Integer (2..3) [SX10]
```

Select the video input source to be used for presentation, identified by connectorld.

### Instance:

New/1/2/3/4/5/6

Select which local presentation instance you wish to start.

### PresentationSource:

```
Integer (1..6) [CodecPro Room70G2]
Integer (1..4) [SX80 MX700/MX800/MX800D]
Integer (1..2) [DX70/DX80 SX20 MX200G2/MX300G2 RoomKit]
Integer (1..3) [CodecPlus Room55 Room70/Room55D]
Integer (2..2) [SX10]
```

Select the video input source to be used for presentation, identified by source number.

### <u>SendingMode</u>:

LocalRemote/LocalOnly

Select whether the presentation is shown locally or locally and remotely.

Default value: LocalRemote

# xCommand Presentation Stop

Applies to: All products

Requires user role: ADMIN, USER

Stop the media stream from the presentation source.

### USAGE:

xCommand Presentation Stop [Instance:  $\underline{Instance}$ ] [PresentationSource: PresentationSource]

where

### Instance:

1/2/3/4/5/6

Select which local presentation you wish to stop, identified by presentation instance.

### PresentationSource:

Integer (1..6) [CodecPro Room70G2]

Integer (1..4) [SX80 MX700/MX800/MX800D]

Integer (1..2) [ DX70/DX80 SX20 MX200G2/MX300G2 RoomKit ]

Integer (1..3) [CodecPlus Room55 Room70/Room55D]

Integer (2..2) [SX10]

Select which local presentation you wish to stop, identified by source number.

# Provisioning commands

# xCommand Provisioning CompleteUpgrade

Applies to: All products

Requires user role: ADMIN, USER

Starts installing the software upgrade if you wish to install it before it is set to do so.

#### USAGE:

xCommand Provisioning CompleteUpgrade

# xCommand Provisioning PostponeUpgrade

Applies to: All products

Requires user role: ADMIN, USER

Postpones the installing of the software upgrade.

### **USAGE:**

 ${\tt xCommand\ Provisioning\ Postpone Upgrade\ Seconds To Postpone:\ \underline{\textit{Seconds To Postpone}}}$  where

### SecondsToPostpone:

Integer (0..65534)

Set how long to postpone the upgrade. The value is in seconds.

# xCommand Provisioning CUCM ExtensionMobility Login

Applies to: All products

Requires user role: ADMIN, USER

Login command for the Extension Mobility service. You log in to the Extension Mobility service with a user name (Userld) and pin code (Pin). The user name and pin code are set up in CUCM. CUCM also supports multiple profiles for a user.

If you, for a user that has multiple profiles, submit a login command with only user name and pin code, CUCM will send a list of available profiles back to the video system. Then the video system will create corresponding ExtensionMobilityProfileSelection Profile events, so that a new login command, which contains the Profile parameter in addition to the user name and pin code, can be submitted.

### USAGE:

xCommand Provisioning CUCM ExtensionMobility Login UserId: "<u>UserId</u>" Pin: "<u>Pin</u>" [Profile: "*Profile*"]

where

UserId:

String (1, 255)

A valid user name, as set up in CUCM.

Pin:

String (1, 255)

A valid pin code for the user, as set up in CUCM.

Profile:

String (1, 255)

A valid profile for the user, as set up in CUCM. This parameter applies only if the user has multiple profiles.

# xCommand Provisioning CUCM ExtensionMobility Logout

Applies to: All products

Requires user role: ADMIN, USER

This command will log you out of your Extension Mobility profile.

### USAGE:

xCommand Provisioning CUCM ExtensionMobility Logout

# xCommand Provisioning RoomType Activate

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

Activate a room type template, that has been configured from the web interface.

#### USAGE:

xCommand Provisioning RoomType Activate Name:  $\underline{\textit{Name}}$  where

Name:

Briefing/Classroom/Standard

**Briefing:** Activate the briefing room template. **Classroom:** Activate the class room template.

Standard: Turn off room templates.



# xCommand Provisioning Service Fetch

Applies to: *All products*Requires user role: ADMIN

Updates the Bulk Customization file detailing the services used on this device.

### USAGE:

## where

### Checksum:

String (0..128)

This is used to check the downloaded Bulk Customization file. This check is mandatory for HTTP and HTTP(S) downloads. For HTTP this includes those with either an unsigned or a self-signed certificate.

However, with a self-signed certificate that the endpoint trusts, HTTP(S) does not require the checksum, and only requires it for unsigned certificates.

### ChecksumType:

SHA512

The algorithm that is used by the Checksum.

Default value: SHA512

### Mode:

Add/Replace

If the mode is set to Add, all items listed in the uploaded file are added to the existing Bulk Customization file.

If the mode is set to Replace, the newer Bulk Customization file that is uploaded, is compared against the previously uploaded file. Items that are not present in the newer file are removed. All other new items are added.

Default value: Add

### Origin:

Other/Provisioning

Specifies whether the service is used for provisioning or for another purpose.

Default value: Other

 $\underline{\mathit{URL}}$ :

String (0..128)

The URL of the Bulk Customization file.

# Proximity commands

# xCommand Proximity Services Activate

Applies to: All products

Requires user role: ADMIN, USER

Reactivate the Proximity services that were deactivated with xCommand Proximity Services Deactivate.

### **USAGE:**

xCommand Proximity Services Activate

# xCommand Proximity Services Deactivate

Applies to: All products

Requires user role: ADMIN, USER

This command deactivates all proximity services on the endpoint. To reactivate proximity services use the command xCommand Proximity Services Activate.

#### USAGE:

xCommand Proximity Services Deactivate

# RoomPreset commands

### xCommand RoomPreset Activate

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Activate one of the locally stored presets.

Note that information about all video input sources, and pan, tilt, zoom and focus values for all cameras are included in the same preset. In contrast, the xCommand Camera Preset commands applies to individual cameras only.

#### USAGE:

xCommand RoomPreset Activate PresetId: PresetId

where

### PresetId:

Integer (1..15)

The ID of the preset you want to activate.

### xCommand RoomPreset Clear

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN. USER

#### Delete a preset.

Note that information about all video input sources, and pan, tilt, zoom and focus values for all cameras are included in the same preset. In contrast, the xCommand Camera Preset commands applies to individual cameras only.

#### USAGE:

where

 $\verb|xCommand| RoomPreset Clear PresetId: \underline{\textit{PresetId}}|$ 

#### PresetId:

Integer (1..15)

The ID of the preset you want to delete.



### xCommand RoomPreset Store

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Store the connector selections for all video input sources and the current position (pan and tilt), zoom and focus values for all cameras.

Note that information about all video input sources, and pan, tilt, zoom and focus values for all cameras are included in the same preset. The system may hold 15 such predefined video input presets. These presets are available for far end control, i.e. they are referred in the Presetld parameter of the xCommand FarEndControl Preset Activate command. In contrast, the xCommand Camera Preset commands applies to individual cameras only. Those presets are not available for far end control.

#### USAGE:

 $\verb"xCommand RoomPreset Store [Description: "$\underline{\textit{Description}}$"] $$PresetId: $\underline{\textit{PresetId}}$ Type: $\underline{\textit{Type}}$$ 

where

### Description:

String (0, 255)

Enter a description of the camera preset.

### PresetId:

Integer (1..15)

The ID of this preset.

#### Туре:

All/Camera

Not applicable. If you want to ensure that a preset only affects camera positions we recommend that you select Camera.

# Security commands

# xCommand Security Certificates CA Add

Applies to: All products

Requires user role: ADMIN

Uploads CA security certificates to this device. This is a multiline command.

### USAGE:

xCommand Security Certificates CA Add

# xCommand Security Certificates CA Delete

Applies to: *All products*Requires user role: ADMIN

Deletes a CA security certificate from this device.

### **USAGE:**

xCommand Security Certificates CA Delete Fingerprint: " $\underline{Fingerprint}$ " where

### Fingerprint:

String (0..128)

The unique Identifier for the certificate that is deleted. You can get the fingerprint ID by running xCommand Security Certificates CA Show.

# xCommand Security Certificates CA Show

Applies to: All products

Requires user role: ADMIN, USER

Shows the details for the CA security certificates on this device.

### USAGE:

xCommand Security Certificates CA Show [Format:  $\underline{\textit{Format}}$ ] where

### Format:

PEM/Text

Specifies the format of the results.

Default value: Text

# xCommand Security Certificates Services Activate

Applies to: *All products*Requires user role: ADMIN

Activates a security certificate on this device.

### USAGE:

xCommand Security Certificates Services Activate Fingerprint: " $\underline{Fingerprint}$ " Purpose:  $\underline{Purpose}$ 

where

### Fingerprint:

String (0..128)

The unique Identifier for the certificate that is activated. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

#### Purpose:

802.1X/HTTPS/Audit/SIP)

The type of service which applies to this certificate.

# xCommand Security Certificates Services Add

Applies to: *All products*Requires user role: ADMIN

Uploads security certificates to this device. This is a multiline command.

### USAGE:

xCommand Security Certificates Services Add [PrivateKeyPassword: "PrivateKeyPassword"]

where

### PrivateKeyPassword:

String (0..128)

Stores the details of the private key for the password.

Default value: ""

# xCommand Security Certificates Services Deactivate

Applies to: *All products*Requires user role: ADMIN

Deactivates security certificates on this device.

#### USAGE:

xCommand Security Certificates Services Deactivate Fingerprint: " $\underline{Fingerprint}$ " Purpose:  $\underline{Purpose}$ 

where

### Fingerprint:

String (0..128)

The unique Identifier for the certificate that is deactivated. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

### Purpose:

802.1X/HTTPS/Audit/SIP)

The type of service which applies to this certificate.

# xCommand Security Certificates Services Delete

Applies to: *All products*Requires user role: ADMIN

Deletes security certificates from this device.

### USAGE:

xCommand Security Certificates Services Delete Fingerprint: " $\underline{\textit{Fingerprint}}$ " where

# Fingerprint:

String (0..128)

The unique Identifier for the certificate that is deleted. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

# xCommand Security Certificates Services Show

Applies to: All products

Requires user role: ADMIN, USER

Shows details for security certificates on this device.

### USAGE:

xCommand Security Certificates Services Show [Filter:  $\underline{\mathit{Filter}}$ ] [Format:  $\underline{\mathit{Format}}$ ] where

### Filter:

802.1X/HTTPS/Audit/SIP

Filters the results according to the chosen service.

### Format:

PFM/Text

Specifies the format of the results.

Default value: Text

# xCommand Security FIPSMode Activate

Applies to: *All products*Requires user role: ADMIN

Activate FIPS (140-2) mode. Activating FIPS mode implies a reset to factory defaults. While in FIPS mode, the following limitations apply: All calls are encrypted. Unencrypted communication protocols like Telnet and HTTP cannot be used. IEEE802.1x and SNMP are disabled. The remote support user is not available. Digest access authentication is not supported between the video system and an HTTP Proxy, because Digest access authentication is using MD5 cryptographic hashing, which is not allowed in FIPS. This last limitation only affects Webex registered video systems, since an HTTP Proxy is used only for the Webex solution.

To exit FIPS mode, perform a factory reset.

#### **USAGE:**

xCommand Security FIPSMode Activate Confirm: <u>Confirm</u> where

### Confirm:

Yes

Confirms setting the video system in FIPS mode.



# xCommand Security Persistency

Applies to: *All products*Requires user role: ADMIN

Set the following features to persistent or non-persistent mode. In non-persistent mode the information gathered by the specified feature does not persist a reboot of the system. Persistent mode is the default. This command reboots the system.

### USAGE:

xCommand Security Persistency Configurations:  $\underline{Configurations}$  CallHistory:  $\underline{CallHistory}$  InternalLogging:  $\underline{InternalLogging}$  LocalPhonebook:  $\underline{LocalPhonebook}$  DHCP:  $\underline{DHCP}$  ConfirmAndReboot:  $\underline{ConfirmAndReboot}$ 

### where

### Configurations:

NonPersistent/Persistent

In non-persistent mode, all configurations are set back to default when the system reboots.

# <u>CallHistory</u>:

NonPersistent/Persistent

In non-persistent mode call history is deleted when the system reboots.

### InternalLogging:

NonPersistent/Persistent

In non-persistent mode eventlog is deleted when the system reboots.

### LocalPhonebook:

NonPersistent/Persistent

In non-persistent mode local phone book is deleted when the system reboots.

#### DHCP:

NonPersistent/Persistent

In non-persistent mode all IP related information is deleted when the system reboots.

#### ConfirmAndReboot:

Yes

Reboots the system.

# xCommand Security Session List

Applies to: *All products*Requires user role: ADMIN

List active sessions.

### USAGE:

xCommand Security Session List

# xCommand Security Session Terminate

Applies to: *All products*Requires user role: ADMIN

Terminate a session.

### **USAGE:**

xCommand Security Session Terminate SessionId: " $\underline{SessionId}$ " where

### SessionId:

String (0, 32)

The session ID number.

# Standby commands

# xCommand Standby Activate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Set the system in standby mode, which turns off the video outputs and put the camera into sleep mode.

### **USAGE:**

xCommand Standby Activate

# xCommand Standby Deactivate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Bring the system out of standby mode.

#### USAGE:

xCommand Standby Deactivate

# xCommand Standby Halfwake

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Sets the system to "Halfwake" state. This state informs the user from the UI, to pick up a remote or to tap the touch device to get started.

#### USAGE:

xCommand Standby Halfwake

# xCommand Standby ResetHalfwakeTimer

Applies to: All products

Requires user role: ADMIN, USER

Sets a temporary Halfwake timer delay. If the system is in Halfwake mode when the reset timer is set, the system is brought out of Halfwake mode. When left idle for the given delay the system goes into halfwake mode.

#### USAGE:

```
xCommand Standby ResetHalfwakeTimer Delay: <u>Delay</u> where

<u>Delay</u>:

<u>Integer (1..480)</u>

Set the delay in minutes.
```

# xCommand Standby ResetTimer

Applies to: All products

Requires user role: ADMIN, USER

Set a temporary standby delay. If the system is in standby mode when the reset timer is set, the system is brought out of standby mode. When left idle for the given delay the system goes into standby mode. Setting the reset timer does not affect the Standby Delay in the Advanced configuration menu (or by xConfiguration Standby Delay). Next time this delay is the valid standby delay.

#### USAGE:

```
xCommand Standby ResetTimer Delay: <u>Delay</u> where

<u>Delay</u>:

Integer (1..480)

Set the delay in minutes.
```

# SystemUnit commands

## xCommand SystemUnit Boot

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Reboot the system.

#### USAGE:

xCommand SystemUnit Boot [Action:  $\underline{Action}$ ]

where

### Action:

Restart/Shutdown

As a default the system restarts after a reboot. By selecting Shutdown, the system will not restart

Default value: Restart

# xCommand SystemUnit FactoryReset

Applies to: All products

Requires user role: ADMIN, USER

Reset the codec to factory default settings. The call logs are deleted and all system parameters are reset to default values. All files that have been uploaded to the codec are deleted. Option key(s) are not affected. Use the parameter Keep in order to choose which configurations and files to keep when you factory reset the system.

As a default the system restarts after the factory reset, but other behaviors can be forced by selecting a different TrailingAction.

#### USAGE:

#### where

## <u>Confirm</u>:

Yes

Include to confirm your choice.

### Keep:

Certificates/HTTP/LocalSetup/Network/Provisioning/SerialPort/Spark

Select which configurations and files to keep when you factory reset the system. You can have up to 7 Callld parameters in the same command.

#### Certificates:

Client and CA certificates.

### HTTP:

xConfiguration NetworkServices HTTP Mode

xConfiguration NetworkServices HTTPS Server MinimumTLSVersion

xConfiguration NetworkServices HTTPS StrictTransportSecurity

xConfiguration NetworkServices HTTPS VerifyClientCertificate

xConfiguration NetworkServices HTTPS VerifyServerCertificate

### LocalSetup:

xConfiguration Audio DefaultVolume

xConfiguration Audio SoundsAndAlerts RingVolume

xConfiguration Time Zone

xConfiguration UserInterface Language

xConfiguration Video Output Connector OverscanLevel

xCommand Camera Preset Store

### Network:

xConfiguration Network 1

xConfiguration NetworkServices Wifi Allowed

xConfiguration NetworkServices Wifi Enabled

### Provisioning:

xConfiguration Provisioning Mode

#### SerialPort:

xConfiguration SerialPort Mode

xConfiguration SerialPort BaudRate

xConfiguration SerialPort LoginRequired

### Spark:

xConfiguration Spark ServiceOverrides GdsBaseUrl

xConfiguration Spark ServiceOverrides U2CBaseUrl

xConfiguration Spark ServiceOverrides WdmBaseUrl

### TrailingAction:

NoAction/Restart/Shutdown

Select Shutdown or NoAction to override the default behavior (Restart).

Default value: Restart

# xCommand SystemUnit FirstTimeWizard Stop

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Stops the wizard which appears the first time you start the system, so the system can be set up without it. The wizard only appears again if the system is reset to its factory default settings.

#### USAGE:

xCommand SystemUnit FirstTimeWizard Stop

# xCommand SystemUnit Notifications RemoveAll

Applies to: *All products*Requires user role: ADMIN

Clears the list of system notifications that are reported by xStatus SystemUnit Notifications Text/Type.

### **USAGE:**

xCommand SystemUnit Notifications RemoveAll

# xCommand SystemUnit OptionKey Add

Applies to: *All products*Requires user role: ADMIN

Add an option key to support additional features.

#### USAGE:

xCommand SystemUnit OptionKey Add Key: " $\underline{\mathit{Key}}$ " where

Key:

String (16, 24)

The key you have received for the option you wish to switch on.

# xCommand SystemUnit OptionKey List

Applies to: *All products*Requires user role: ADMIN

List all option keys.

### USAGE:

xCommand SystemUnit OptionKey List

# xCommand SystemUnit OptionKey Remove

Applies to: *All products*Requires user role: ADMIN

Remove a specified option key.

### USAGE:

xCommand SystemUnit OptionKey Remove Type:  $\underline{\mathit{Type}}$  where

Type:

RemoteMonitoring [DX70/DX80]

Encryption/RemoteMonitoring [SX10]

MultiSite/RemoteMonitoring [SX20]

Encryption/MultiSite/RemoteMonitoring [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

# xCommand SystemUnit OptionKey RemoveAll

Applies to: *All products*Requires user role: ADMIN

Remove all option keys.

### **USAGE:**

 $\verb"xCommand SystemUnit OptionKey RemoveAll Confirm: $\underline{\textit{Confirm}}$$ 

where

Confirm:

Yes

# xCommand SystemUnit ProductPlatform Set

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN

Select the product platform for your video system. This command is typically used after a room system has been in for repair and the product platform don't match the actual product. Use with caution.

#### USAGE:

 $\verb|xCommand SystemUnit ProductPlatform Set Platform: | \underline{\textit{Platform}}| \\$  where

### Platform:

ROOM70D/ROOM70S [CodecPro Room70G2]

ROOM55D/ROOM70S/ROOM70D [CodecPlus Room70/Room55D]

MX700/MX700ST/MX800/MX800ST/MX800D [SX80 MX700/MX800/MX800D]

ROOM55D: The platform is set to Room 55 Dual.

ROOM70S: For Codec Plus and Room 70, the platform is set to Room 70 Single. For

Codec Pro and Room 70 G2, the platform is set to Room 70 Single G2.

ROOM70D: For Codec Plus and Room 70, the platform is set to Room 70 Dual. For Codec

Pro and Room 70 G2, the platform is set to Room 70 Dual G2.

MX700: The platform is set to MX700 (dual screen, single camera).

**MX700ST:** The platform is set to MX700 (dual screen, dual camera)

MX800: The platform is set to MX800 (single screen, single camera).

MX800ST: The platform is set to MX800 (single screen, dual camera).

MX800D: The platform is set to MX800 Dual (dual screen, dual camera).

# xCommand SystemUnit SignInBanner Clear

Applies to: *All products*Requires user role: ADMIN

Clear the sign in banner set with xCommand SystemUnit SignInBanner Set.

### **USAGE:**

xCommand SystemUnit SignInBanner Clear

# xCommand SystemUnit SignInBanner Get

Applies to: All products

Requires user role: ADMIN, USER

Get the custom message set with xCommand SystemUnit SignInBanner Set.

### USAGE:

xCommand SystemUnit SignInBanner Get

# xCommand SystemUnit SignInBanner Set

Applies to: *All products*Requires user role: ADMIN

Set a sign in banner with a custom message on the system's user interface.

Use:

xCommand SystemUnit SignInBanner Set <enter>

Banner text <enter>

. <enter>

### USAGE:

xCommand SystemUnit SignInBanner Set

# xCommand SystemUnit SoftReset

Applies to: All products

Requires user role: ADMIN, USER

Reset most parameters to their default values. This does not include parameters associated with room setup, such as camera position, language, and volume.

#### USAGE:

xCommand SystemUnit SoftReset Confirm: Confirm
where
Confirm:

Yes

# xCommand SystemUnit SoftwareUpgrade

Applies to: *All products*Requires user role: ADMIN

Initiate a software upgrade by fetching the software from a given URL.

### USAGE:

xCommand SystemUnit SoftwareUpgrade URL: " $\underline{\textit{URL}}$ " [Forced:  $\underline{\textit{Forced}}$ ] where

URL:

String (0, 255)

The URL to the software package location.

### Forced:

False/True

You can force a system to accept a software upgrade immediately, without giving users a chance to acknowledge or postpone the update.

Default value: True

# xCommand SystemUnit WelcomeBanner Clear

Applies to: All products
Requires user role: ADMIN

Clear the welcome banner set with xCommand SystemUnit WelcomeBanner Set.

#### **USAGE:**

xCommand SystemUnit WelcomeBanner Clear

# xCommand SystemUnit WelcomeBanner Get

Applies to: All products

Requires user role: ADMIN, AUDIT, INTEGRATOR, ROOMCOMNTROL, TOUCHUSER, USER

Get the custom message set with xCommand SystemUnit WelcomeBanner Set.

### **USAGE:**

xCommand SystemUnit WelcomeBanner Get

# xCommand SystemUnit WelcomeBanner Set

Applies to: *All products*Requires user role: ADMIN

Set up a welcome banner that the user sees after they sign in to the device's web interface or the command line interface. The banner can for example contain information that the user needs to get started or things they need to be aware of when changing settings.

Use:

xCommand SystemUnit SignInBanner Set <enter>

Banner text <enter>

. <enter>

### **USAGE:**

xCommand SystemUnit WelcomeBanner Set

# Time commands

### xCommand Time DateTime Get

Applies to: All products

Requires user role: ADMIN, USER

Read the time and date from the system.

#### USAGE:

xCommand Time DateTime Get

### xCommand Time DateTime Set

Applies to: All products

Requires user role: ADMIN, USER

Set the date and time for the system, if not available from NTP (Network Time Protocol).

### **USAGE:**

```
xCommand Time DateTime Set [Year: Year] [Month: Month] [Day: Day] [Hour: Hour]
[Minute: Minute] [Second: Second]
where

Year:
Integer (2015..2037)

Month:
Integer (1..12)

Day:
Integer (1..31)

Hour:
Integer (0..23)

Minute:
Integer (0..59)

Second:
Integer (0..59)
```

# UserInterface commands

# xCommand UserInterface Branding Clear

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Clears all branding information from this device.

### **USAGE:**

xCommand UserInterface Branding Clear

# xCommand UserInterface Branding Delete

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Deletes the chosen image from this device.

#### USAGE:

xCommand UserInterface Branding Delete Type:  $\underline{\mathit{Type}}$  where

#### Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding

Specifies which image to delete from this device.

# xCommand UserInterface Branding Get

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows the chosen image in base64/encoded format in the requested size, if available.

### **USAGE:**

xCommand UserInterface Branding Get [Size:  $\underline{Size}$ ] Type:  $\underline{Type}$  where

### Size:

Large/Small/Thumbnail

Specifies the size in which to show the image.

Default value: Large

### Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding

Specifies which image to show.

# xCommand UserInterface Branding Updated

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Updates the chosen branding image.

#### USAGE:

xCommand UserInterface Branding Updated Type:  $\underline{\mathit{Type}}$  where

### Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding

Specifies which image to update.

# xCommand UserInterface Branding Upload

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Uploads a branding image to this device, which displays in the chosen area. This is a multiline command.

### USAGE:

xCommand UserInterface Branding Upload Type:  $\underline{\mathit{Type}}$  where

Туре:

Background/Branding/HalfwakeBackground/HalfwakeBranding

Specifies the area in which the uploaded image is to display.

### xCommand UserInterface Extensions Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Delete all user interface extensions (widgets) from the video system.

### USAGE:

xCommand UserInterface Extensions Clear

### xCommand UserInterface Extensions List

Applies to: All products

Requires user role: INTEGRATOR, ROOMCONTROL, USER

List all user interface extensions (widgets) that exist on the video system.

### USAGE:

xCommand UserInterface Extensions List

# xCommand UserInterface Extensions Panel Clicked

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Creates an event when the user clicks an in-room control panel.

#### USAGE:

xCommand UserInterface Extensions Panel Clicked PanelId: " $\underline{\textit{PanelId}}$ " where

### PanelId:

String (0..255)

The in-room control panel's unique identifier.

### xCommand UserInterface Extensions Panel Close

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Closes an opened in-room control panel.

#### USAGE:

xCommand UserInterface Extensions Panel Close

### xCommand UserInterface Extensions Panel Remove

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Removes the in-room control panel from the user interface of this room system.

### **USAGE:**

xCommand UserInterface Extensions Panel Remove PanelId: " $\underline{\textit{PanelId}}$  " where

### PanelId:

String (0..255)

The in-room control panel's unique identifier.

### xCommand UserInterface Extensions Panel Save

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Adds an in-room control panel to the current configuration. The panel will be added to the configuration, but if a panel with the same panel ID already exists, it will be overwritten. This is a multiline command.

### USAGE:

xCommand UserInterface Extensions Panel Save PanelId: "PanelId" where

### PanelId:

String (0..255)

The in-room control panel's unique identifier.

### xCommand UserInterface Extensions Set

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Set the configuration scheme you have chosen in the user interface extensions (widgets) for your room system. Updates the UserInterface Extensions status tree. This is a multiline command.

### USAGE:

 $\mbox{{\tt xCommand UserInterface Extensions Set ConfigId: "$\underline{ConfigId}$"} \mbox{{\tt where}}$ 

## ConfigId:

String (0, 40)

The unique identifier for the configuration.

# xCommand UserInterface Extensions Widget Action

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Sets the action of the given widget. Updates the UserInterface Extensions status tree.

### USAGE:

```
 \texttt{xCommand UserInterface Extensions Widget Action [Type: "$\underline{\textit{Type}}$"] [Value: "$\underline{\textit{Value}}$"] WidgetId: "$\underline{\textit{WidgetId}}$"}
```

#### where

Туре:

String (0..255)

The type of widget that is set.

### Value:

String (0..255)

The value of the widget. The range of values depends on the widget type.

### WidgetId:

String (0..255)

The unique identifier for the widget.

# xCommand UserInterface Extensions Widget SetValue

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Set the value of the given widget. Updates the UserInterface Extensions status tree. Returns an error if the value is out of range.

### **USAGE:**

xCommand UserInterface Extensions Widget SetValue Value: " $\underline{\text{Value}}$ " WidgetId: " $\underline{\text{WidgetId}}$ "

where

Value:

String (0, 255)

The value of the widget. The range of values depends on the widget type.

WidgetId:

String (0, 255)

The unique identifier for the widget.

# xCommand UserInterface Extensions Widget UnsetValue

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Empties the value of the given widget. Updates the UserInterface Extensions status tree and notifies the user interface that this widget is no longer selected.

### **USAGE:**

 $\verb|xCommand UserInterface Extensions Widget UnsetValue WidgetId: "|| \underline{\textit{WidgetId}}|| \\ | where$ 

<u>WidgetId</u>:

String (0, 255)

The unique identifier for the widget.

# xCommand UserInterface Message Alert Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Remove the message which was displayed using the xCommand Message Alert Display command. This is required when the Duration parameter is not set.

### **USAGE:**

xCommand UserInterface Message Alert Clear

# xCommand UserInterface Message Alert Display

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Display a message on screen, for a specified duration of time (in seconds).

NOTE: If Duration is not set, the command must be followed by xCommand Message Alert Clear.

Use the xFeedback commands to monitor the feedback from the user. Read more about the xFeedback commands in the API introduction section in this guide.

### USAGE:

xCommand UserInterface Message Alert Display [Title: " $\underline{Title}$ "] Text: " $\underline{Text}$ " [Duration: Duration]

where

### Title:

String (0, 255)

Enter a message title.

Default value: " "

### Text:

String (0, 255)

Enter the message to be displayed. The and <br/> hTML tags will result in line breaks as normal; any other tags will appear as plain text.

## Duration:

Integer (0..3600)

Set how long (in seconds) the message is to be displayed on the screen. If set to 0 (zero) the message does not disappear until an xCommand Message Alert Clear message has been sent.

Default value: 0

# xCommand UserInterface Message Prompt Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Remove the window displayed using the xCommand Message Alert Display command. Use the xFeedback commands to monitor the feedback from the user. Read more about the xFeedback commands in the API introduction section in this guide.

#### USAGE:

### FeedbackId:

String (0, 255)

The Feedbackld corresponds to the Feedbackld given by the xCommand Message Prompt Display command.

Default value: ""

# xCommand UserInterface Message Prompt Display

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Display a small window on screen with a title, text and up to five options for response from the user. The message is displayed on screen until the user gives a response, or until the system receives the following command xCommand Message Prompt Clear.

Use the xFeedback commands to monitor the feedback from the user. Read more about the xFeedback commands in the API introduction section in this guide.

Title:

Text:

Feedbackld:

Option.1 to Option.5:

### **USAGE:**

xCommand UserInterface Message Prompt Display [Title: " $\underline{Title}$ "] Text: " $\underline{Text}$ " [FeedbackId: " $\underline{FeedbackId}$ "] [Duration:  $\underline{Duration}$ ] [Option.1: " $\underline{Option.1}$ "] [Option.2: " $\underline{Option.2}$ "] [Option.3: " $\underline{Option.3}$ "] [Option.4: "Option.4"] [Option.5: "Option.5"] where

# Title:

String (0, 255)

Enter the message title.

#### Text:

String (0, 255)

Enter the text line to be displayed. The and <br/> hTML tags will result in line breaks as normal; any other tags will appear as plain text.

### FeedbackId:

String (0, 255)

To identify the feedback enter a FeedbackId

### Duration:

Integer (0, 3600)

Set how long (in seconds) the message window is to be displayed on the screen. If set to 0 (zero) the message window is displayed until a xCommand UserInterface Message Prompt Clear command has been sent.

Default value: 0

### Option.1:

String (0, 255)

Enter the text to appear on the feedback options.

### Option.2:

String (0, 255)

Enter the text to appear on the feedback options.

# Option.3:

String (0, 255)

Enter the text to appear on the feedback options.

### Option.4:

String (0, 255)

Enter the text to appear on the feedback options.

### Option.5:

String (0, 255)

Enter the text to appear on the feedback options.

# xCommand UserInterface Message Prompt Response

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Give a response to the xCommand Message Prompt Display.

Use the xFeedback commands to monitor the feedback from the user. Read more about the xFeedback commands in the API introduction section in this guide.

#### USAGE:

 $\texttt{xCommand UserInterface Message Prompt Response [FeedbackId: $$ $^{\underline{FeedbackId}}$"] OptionId: $OptionId$$ 

where

### FeedbackId:

String (0, 255)

The Feedbackld corresponds to the Feedbackld given by the xCommand Message Prompt Display command.

Default value: ""

### OptionId:

Integer (1..5)

The OptionId corresponds to the OptionIds given as possible responses in the xCommand Message Prompt Display command.

# xCommand UserInterface Message TextInput Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Removes the text input message.

### **USAGE:**

xCommand UserInterface Message TextInput Clear

# xCommand UserInterface Message TextInput Display

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Displays an input dialog box to which a user can respond, on the Cisco Telepresence Touch 10 and on the main screen of the Cisco DX80.

#### USAGE:

```
xCommand UserInterface Message TextInput Display [Duration: <u>Duration</u>]
FeedbackId: "<u>FeedbackId</u>" [InputType: <u>InputType</u>] [KeyboardState: <u>KeyboardState</u>]
[Placeholder: "<u>Placeholder</u>"] [SubmitText: "<u>SubmitText</u>"] Text: "<u>Text</u>" [Title:
"Title"]
```

#### where

### Duration:

Integer (0..3600)

Set how long (in seconds) the message is to be displayed on the screen. If set to 0 (zero) the message does not disappear until the xCommand UserInterface Message TextInput Clear message has been sent.

Default value: 0

### FeedbackId:

String (0..255)

To identify the feedback enter a FeedbackId.

### InputType:

SingleLine/Numeric/Password/PIN

Sets the type of text input dialog box that is displayed. This also determines the keyboard layout that it displayed.

Default value: SingleLine

### KeyboardState:

Open/Closed

Specifies if the device's keyboard should open when the text input message displays.

Default value: Open

### Placeholder:

String (0..255)

Contains the placeholder text displayed in the input dialog box before it is focused.

Default value: ""

### SubmitText:



String (0..32)

The text that is shown on the green Submit button on the keyboard.

Default value: "OK"

Text:

String (0..128)

The message that is to be displayed to the user.

Title:

String (0..40)

The title of the input dialog box.

Default value: ""

# xCommand UserInterface Message TextInput Response

Applies to: All products

String (0, 255)

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

The message that is to be displayed to the user.

Emulates a user typing in a text in the Text Input form that is shown on the control interface when xCommand UserInterface Message TextInput Display is triggered. This command is meant to be used in automated test scripts for integrations.

### USAGE:

```
xCommand UserInterface Message TextInput Response [FeedbackId: "\underline{FeedbackId}"] Text: "\underline{Text}" where \underline{FeedbackId}: String (0, 255)
To identify the feedback enter a FeedbackId. \underline{Text}:
```

# xCommand UserInterface Message TextLine Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Clears the text line which was defined by the xCommand Message TextLine Display command.

### USAGE:

xCommand UserInterface Message TextLine Clear

# xCommand UserInterface Message TextLine Display

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Display a text line on screen. Optionally you can place the text line at a specified location and for a specified duration of time (in seconds).

NOTE: If Duration is not set, the command must be followed by xCommand Message TextLine Clear.

#### USAGE:

xCommand UserInterface Message TextLine Display Text: " $\underline{Text}$ " [X:  $\underline{X}$ ] [Y:  $\underline{Y}$ ] [Duration:  $\underline{Duration}$ ] where

# Text:

String (0, 140)

Enter the text line to be displayed. The and <br/> hTML tags will result in line breaks as normal; any other tags will appear as plain text.

<u>X</u>:

Integer (1..10000)

Enter the X-coordinate (horizontal) on screen. X=0 is in the upper left corner.

Default value: 0

Υ:

Integer (1..10000)

Enter the Y-coordinate (vertical) on screen. Y=0 is in the upper left corner.

Default value: 0

#### Duration:

Integer (0..3600)

Set how long (in seconds) the text line is to be displayed on the screen. If set to 0 (zero) the text line is displayed until a xCommand Message TextLine Clear command has been sent.

Default value: 0

# xCommand UserInterface OSD Key Click

Applies to: DX70/DX80 SX10 SX20

Requires user role: ADMIN

Emulates a remote control key press, followed by a key release.

#### **USAGE:**

xCommand UserInterface OSD Key Click Key:  $\underline{\textit{Key}}$ 

where

Key:

0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/Zoomln/ZoomOut/+/-

Define the remote key to press.

# xCommand UserInterface OSD Key Press

Applies to: DX70/DX80 SX10 SX20

Requires user role: ADMIN

Emulates a remote control key press without releasing it. The Key Press command must be followed

by a Key Release command to emulate releasing the key.

#### USAGE:

xCommand UserInterface OSD Key Press Key:  $\underline{\text{Key}}$  where

Key:

0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/Zoomln/ZoomOut/+/-

Define the remote key to press.

# xCommand UserInterface OSD Key Release

Applies to: DX70/DX80 SX10 SX20

Requires user role: ADMIN

Emulates a remote control key release. The Key Release command is issued after a Key Press command.

## **USAGE:**

xCommand UserInterface OSD Key Release Key:  $\underline{\textit{Key}}$  where

## <u>Key</u>:

0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/ Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/ SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/Zoomln/ZoomOut/+/-

Define the remote control key to release.

## xCommand UserInterface Presentation ExternalSource Add

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Establish and set up an input source that is connected to the video system via an external switch.

#### USAGE:

```
xCommand UserInterface Presentation ExternalSource Add ConnectorId: \underline{ConnectorId} SourceIdentifier: "\underline{SourceIdentifier}" Name: "\underline{Name}" Type: \underline{Type} where
```

## ConnectorId:

Integer (2..3) [SX10]

Integer (1..3) [SX20]

Integer (1..5) [ SX80 MX700/MX800/MX800D ]

Integer (0..5) [RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Integer (2..4) [MX200G2/MX300G2]

Integer (2..2) [ DX70/DX80 ]

The ID of the video system connector that the external switch is connected to.

#### SourceIdentifier:

String (0, 40)

A unique string that identifies the input source. The identifier is used by other commands and events when addressing this specific input source.

### Name:

String (0, 40)

The name of the input source. This name will be displayed on the user interface.

#### Type

camera/desktop/document\_camera/mediaplayer/PC/whiteboard/other

The type of input source. The type determines which icon to display on the user interface.

## xCommand UserInterface Presentation ExternalSource List

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Returns the current list of external input sources.

## USAGE:

xCommand UserInterface Presentation ExternalSource List

## xCommand UserInterface Presentation ExternalSource Remove

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Remove the input source (specified by the Sourceldentifier) from the list of external input sources.

#### USAGE:

 $\verb|xCommand UserInterface Presentation ExternalSource Remove SourceIdentifier: "SourceIdentifier"|$ 

where

#### SourceIdentifier:

String (0, 40)

The unique string that identifies this input source. It was defined when the source was created with the UserInterface Presentation ExternalSource Add command.

## xCommand UserInterface Presentation ExternalSource RemoveAll

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Remove all input sources from the list of external input sources.

## USAGE:

xCommand UserInterface Presentation ExternalSource RemoveAll

#### xCommand UserInterface Presentation ExternalSource Select

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Starts to present the input source (specified by the Sourceldentifier) if it is in Ready state (see the UserInterface Presentation ExternalSource State Set command). The input source will be shown in the user interface sharetray as "Presenting".

#### USAGE:

 $\verb|xCommand UserInterface Presentation ExternalSource Select SourceIdentifier: | |sourceIdentifier||$ 

where

## SourceIdentifier:

String (0, 40)

The unique string that identifies this input source. It was defined when the source was created with the UserInterface Presentation ExternalSource Add command.



# xCommand UserInterface Presentation ExternalSource State Set

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Set or change the state of the input source (specified by the Sourceldentifier).

#### USAGE:

xCommand UserInterface Presentation ExternalSource State Set SourceIdentifier: "SourceIdentifier" State: State [ErrorReason: "ErrorReason"]

#### where

#### SourceIdentifier:

String (0, 40)

The unique string that identifies this input source. It was defined when the source was created with the UserInterface Presentation ExternalSource Add command.

#### State:

Hidden/Ready/NotReady/Error

**Ready:** The input source will be presented when someone selects it (taps it on the user interface, or when the UserInterface Presentation ExternalSource Select command is issued).

NotReady: The input source is not ready, and cannot be selected.

*Error:* The input source is in an erroneous state. The ErrorReason parameter may be used to inform the user about the reason for failure.

*Hidden:* The input source will not be displayed in the user interface sharetray.

#### ErrorReason:

String (0, 80)

This string is displayed in the user interface sharetray, given that the State parameter is set to Error.

Default value: " "

# UserManagement commands

# xCommand UserManagement RemoteSupportUser Create

Applies to: All products

Requires user role: ADMIN

Create a remote support user passphrase that Technical Assistance Center (TAC) can use to access the system for troubleshooting.

#### **USAGE:**

 $\verb|xCommand UserManagement RemoteSupportUser Create [ExpiryDays: $\underline{\textit{ExpiryDays}}$]| where$ 

## ExpiryDays:

Integer (1..31)

Define the duration for the passphrase validity. Default is 7 days.

# xCommand UserManagement RemoteSupportUser Delete

Applies to: *All products*Requires user role: ADMIN

Delete the remote support user created with the command xCommand UserManagement RemoteSupportUser Create.

#### USAGE:

xCommand UserManagement RemoteSupportUser Delete

# xCommand UserManagement RemoteSupportUser DisablePermanently

Applies to: *All products*Requires user role: ADMIN

Disable the creation of new remote support users. To enable the remote support user again you must factory reset your system.

#### **USAGE:**

 ${\tt xCommand\ UserManagement\ RemoteSupportUser\ DisablePermanently\ Confirm:\ \underline{\it Confirm}}$  where

#### Confirm:

Yes

# xCommand UserManagement RemoteSupportUser GetState

Applies to: *All products*Requires user role: ADMIN

Retrieves the state of the generated remote support user, if one exists.

#### USAGE:

xCommand UserManagement RemoteSupportUser GetState

## xCommand UserManagement User Add

Applies to: *All products*Requires user role: ADMIN

Adds a new user to this device.

#### USAGE:

xCommand UserManagement User Add [Active: <u>Active</u>] [ClientCertificateDN: "<u>ClientCertificateDN</u>"] [Passphrase: "<u>Passphrase</u>"] [PassphraseChangeRequired: <u>PassphraseChangeRequired</u>] [PinChangeRequired: <u>PinChangeRequired</u>] [Role: <u>Role</u>] [ShellLogin: <u>ShellLogin</u>] Username: "Username" [YourPassphrase: "YourPassphrase"] where

# Active:

False/True

Specifies whether this is an active user or not.

## ClientCertificateDN:

String (0..255)

Identifies a user who logs in with a client certificate instead of a username and password.

#### Passphrase:

String (0..255)

Specifies a Passphrase for the user.

#### PassphraseChangeRequired:

False/True

Specifies whether the user's passphrase requires changing or not.

#### PinChangeRequired:

False/True

Specifies whether a user's PIN requires changing or not.

#### Role:

Admin/Audit/Integrator/RoomControl/User

Sets the user's role.

## ShellLogin:

False/True

Specifies whether the user should have a shell login or not.

#### Username:

String (0..127)

Specifies the user's username.

## YourPassphrase:

String (0..255)

The user's passphrase.

# xCommand UserManagement User Delete

Applies to: *All products*Requires user role: ADMIN

Deletes a user from this device.

#### USAGE:

 $\verb|xCommand UserManagement User Delete Username: ||\underline{\textit{Username}}|| | [YourPassphrase: ||YourPassphrase||]|$ 

where

## Username:

String (0..127)

Specifies the username of the user that is deleted.

#### YourPassphrase:

String (0..255)

The passphrase of the user that is deleted.

# xCommand UserManagement User Get

Applies to: *All products*Requires user role: ADMIN

Shows the details of users on this device.

#### USAGE:

where

#### ClientCertificateDN:

String (0..255)

Identifies a user who logs in with a client certificate instead of a username and password.

## Username:

String (0..127)

Specify a username to show the details of a particular user.

# xCommand UserManagement User List

Applies to: All products

Requires user role: ADMIN

Shows the list of users on this device.

#### USAGE:

where

## Limit:

Integer (0..65536)

Limits the number of results that are shown.

Default value: 0

#### Offset:

Integer (0..65536)

Shows lines with the same or higher Offset than the one provided.

Default value: 0

# xCommand UserManagement User Modify

Applies to: *All products*Requires user role: ADMIN

Modifies the details of a particular user.

#### **USAGE:**

xCommand UserManagement User Modify [Active: Active] [AddRole: AddRole] [ClientCertificateDN: "ClientCertificateDN"] [PassphraseChangeRequired: PassphraseChangeRequired] [PinChangeRequired: PinChangeRequired] [RemoveRole: RemoveRole] [ShellLogin: ShellLogin] Username: "Username" [YourPassphrase: "YourPassphrase"]

#### where

#### Active:

False/True

Specifies whether this is an active user or not.

## AddRole:

Admin/Audit/Integrator/RoomControl/User

Adds a new role for the specified user.

#### ClientCertificateDN:

String (0..255)

Identifies a user who logs in with a client certificate instead of a username and password.

#### PassphraseChangeRequired:

False/True

Specifies whether the user's passphrase requires changing or not.

#### PinChangeRequired:

False/True

Specifies whether a user's PIN requires changing or not.

#### RemoveRole:

Admin/Audit/Integrator/RoomControl/User

Removes a role from the specified user.

#### ShellLogin:

False/True

Specifies whether the user should have a shell login or not.

#### Username:

String (0..127)

Specifies the user's username.

#### YourPassphrase:

String (0..255)

The user's passphrase.

# xCommand UserManagement User Passphrase Change

Applies to: All products

Requires user role: ADMIN, AUDIT, INTEGRATOR, ROOMCONTROL, USER

Change the passphrase for the user you logged in as. If you are logged in as the administrator, this will change the administrator passphrase.

#### USAGE:

xCommand UserManagement User Passphrase Change NewPassphrase: " $\underline{\textit{NewPassphrase}}$ " OldPassphrase: " $\underline{\textit{OldPassphrase}}$ "

where

#### NewPassphrase:

String (0, 255)

#### OldPassphrase:

String (0, 255)

# xCommand UserManagement User Passphrase Set

Applies to: *All products*Requires user role: ADMIN

Set a user passphrase for the specified user. You must be logged in as an administrator to set a user passphrase.

#### USAGE:

```
xCommand UserManagement User Passphrase Set NewPassphrase: "NewPassphrase"
Username: "Username" [YourPassphrase"]
where

NewPassphrase:
String (0, 255)
Username:
String (0, 127)
```

# xCommand UserManagement User Unblock

Applies to: *All products*Requires user role: ADMIN

YourPassphrase: String (0, 255)

Unblocks a user who is blocked out because of too many failed login attempts.

#### USAGE:

```
xCommand UserManagement User Unblock Username: "<u>Username</u>" [YourPassphrase: "<u>YourPassphrase</u>"] where

<u>Username</u>:

<u>String (0, 127)</u>

<u>YourPassphrase</u>:

String (0, 255)
```

# Video commands

# xCommand Video ActiveSpeakerPIP Set

Applies to: All products

Requires user role: ADMIN, USER

Sets position for the active speakers PiP (picture in picture).

#### USAGE:

xCommand Video ActiveSpeakerPIP Set Position:  $\underline{\textit{Position}}$  where

## $\underline{\textit{Position}}:$

CenterLeft/CenterRight/LowerLeft/LowerRight/UpperCenter/UpperLeft/UpperRight Select one of the predefined positions.

# xCommand Video CEC Input KeyClick

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2
Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from the input device.

#### **USAGE:**

xCommand Video CEC Input KeyClick ConnectorId:  $\underline{ConnectorId}$  [Key:  $\underline{Key}$ ] [LogicalAddress:  $\underline{LogicalAddress}$ ] [NamedKey:  $\underline{NamedKey}$ ] where

# ConnectorId:

Integer (1..5) [CodecPro Room70G2]

Integer (1..3) [RoomKit CodecPlus Room55 Room70/Room55D]

The unique identifier of the connector.

#### Key:

Integer (0..255)

The CEC specified key code for the key that is sent to the logical address of the device as if it was pushed on a remote control.

## Logical Address:

Integer (0..15)

The logical address of the connected device.

#### NamedKey:

Up/Down/Right/Left/Ok/Back/Stop/Play)

The name of the key that is sent to the logical address of the device as if it was pushed on a remote control.

# xCommand Video CEC Output KeyClick

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from this device.

#### USAGE:

# where

# ConnectorId:

Integer (1..1) [SX10]

Integer (1..3) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

The unique identifier of the connector.

## Key:

Integer (0..255)

The CEC specified key code for the key that is sent to the logical address of the device as if it was pushed on a remote control.

#### Logical Address:

Integer (0..15)

The logical address of the connected device.

## NamedKey:

Up/Down/Right/Left/Ok/Back/Stop/Play)

The name of the key that is sent to the logical address of the device as if it was pushed on a remote control.

## xCommand Video CEC Output SendActiveSourceRequest

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

A request from this device which discovers whether the connected device is active.

## **USAGE:**

 $\verb|xCommand Video CEC Output SendActiveSourceRequest [ConnectorId: $\underline{ConnectorId}$]| \\$  where

#### ConnectorId:

Integer (1..1) [SX10]

Integer (1..3) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]

The unique identifier of the connector.

## xCommand Video Input SetMainVideoSource

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Set which input source is the main video source. You can identify the input source by either the physical connector that it is connected to (ConnectorId) or the logical source identifier (SourceId).

You can combine up to four input sources in a single main video stream (the maximum number of different input sources depend on the type of video system) by adding multiple Connectorlds or Sourcelds in the same command. There cannot be a mix of identifier types in the same command; use either Connectorld or Sourceld. DX70 and DX80 don't support such combination of input sources.

#### USAGE:

xCommand Video Input SetMainVideoSource [ConnectorId: <u>ConnectorId</u>] [Layout: Layout] [SourceId: SourceId]

#### where

#### ConnectorId:

Integer (1..n)

The identifier (ID) of the connector. Connector [n] has ID n. Run the following API command to find the ID: xStatus Video Input Connector.

#### Layout:

Equal/PIP

Sets the layout of the main video source if the main video source is composed of multiple input sources.

## SourceId:

Integer (1..n)

The identifier (ID) of the input source. Input Source [n] has ID n. Run the following API command to find the ID: xStatus Video Input Source.

# xCommand Video Input Source SetActiveConnector

Applies to: SX10 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN, USER

Select which connector is active.

On SX80, MX700 and MX800, Input Connector 4 (DVI-I) and Connector 5 (S-Video/Composite) cannot be active simultaneously.

#### USAGE:

 $\verb|xCommand Video Input Source SetActiveConnector [ConnectorId: $\underline{ConnectorId}$]| where$ 

#### ConnectorId:

Integer (4..5) [ SX80 MX700/MX800/MX800D ]

Integer (2..4) [MX200G2/MX300G2]

Integer (2..3) [SX10]

The identifier (ID) of the connector. Connector [n] has ID n. Check the Video Input Connector status to find the connector IDs. On SX80 and MX700/MX800, the connector ID is also printed on the codec connector panel.

# xCommand Video Layout LayoutFamily Set

Applies to: All products

Requires user role: ADMIN, USER

Select the screen layout mode.

## USAGE:

```
xCommand Video Layout LayoutFamily Set [Target: <u>Target</u>] LayoutFamily: LayoutFamily [CustomLayoutName: "CustomLayoutName"]
```

#### where

## Target:

Local/Remote

Select if the target is the local layout or the remote layout.

## LayoutFamily:

auto/custom/equal/overlay/prominent/single

Select a layout family.

## CustomLayoutName:

String (1, 128)

Enter a name for the layout.

## xCommand Video Matrix Assign

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70G2

Requires user role: ADMIN, INTERGRATOR, USER

Video Matrix commands are a smart overlay to the xCommand Video Layout commands to make it easy to do simple video compositions.

#### USAGE:

xCommand Video Matrix Assign [Mode:  $\underline{Mode}$ ] Output:  $\underline{Output}$  [SourceId:  $\underline{SourceId}$ ] where

#### Mode:

## Add/Replace

Choose whether to replace the existing source on that output rendered full screen or to add it. Using Add, the layout engine will recompose the multiple sources automatically. Replace is the default value.

## Output:

```
Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]
Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2]
```

Choose the output you wish to use for this layout.

#### SourceId:

```
Integer (1..6) [CodecPro Room70G2]
Integer (1..3) [SX20]
Integer (1..4) [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus]
```

The identifier (ID) of the input source. Input Source [n] has ID n. Run the following API command to find the ID: xStatus Video Input Source. You can use up to four Sourcelds in one command.

## xCommand Video Matrix Reset

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70G2

Requires user role: ADMIN, INTERGRATOR, USER

Reset the content on the output to the default layout

xCommand Video Matrix commands are a smart overlay to the xCommand Video Layout commands to make it easy to do simple video compositions.

#### USAGE:

```
xCommand Video Matrix Reset [Output: Output]
where
Output:
Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]
Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2]
Choose the output you want to reset.
```

## xCommand Video Matrix Swap

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70G2

Requires user role: ADMIN, INTERGRATOR, USER

Swap the content defined with xCommand Video Matrix Assign between two outputs. xCommand Video Matrix commands are a smart overlay to the xCommand Video Layout commands to make it easy to do simple video compositions.

#### USAGE:

```
xCommand Video Matrix Swap OutputA: OutputA OutputB: OutputB where

OutputA:

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]

Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

The output you are swapping from.

OutputB:

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]

Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

The output you are swapping to.
```

## xCommand Video Matrix Unassign

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70G2

Requires user role: ADMIN, INTERGRATOR, USER

Remove a source from an output. Just as with xCommand Video Matrix Assign the layout engine will recompose the remaining sources automatically.

xCommand Video Matrix commands are a smart overlay to the xCommand Video Layout commands to make it easy to do simple video compositions.

#### USAGE:

xCommand Video Matrix Unassign Output:  $\underline{\textit{Output}}$  SourceId:  $\underline{\textit{SourceId}}$  where

## Output:

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus]

Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Choose the output you wish to remove the source from.

## SourceId:

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit]

Integer (1..3) [CodecPlus]

Integer (1..4) [SX80 MX700/MX800/MX800D CodecPlus]

Integer (1..6) [CodecPro Room70G2]

The identifier (ID) of the input source. Input Source [n] has ID n. Run the following API command to find the ID: xStatus Video Input Source.

# xCommand Video Output Monitor Backlight Set

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN

Adjust the monitor backlight.

#### USAGE:

xCommand Video Output Monitor Backlight Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

#### Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## Value:

Integer (0..100)

Select the level.

# xCommand Video Output Monitor Brightness Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the monitor brightness.

#### **USAGE:**

xCommand Video Output Monitor Brightness Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## <u>Value</u>:

Integer (0..100)

Select the level

# xCommand Video Output Monitor Color Blue Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the level of blue on the monitor.

#### USAGE:

xCommand Video Output Monitor Color Blue Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## Value:

Integer (0..100)

Select the level.

# xCommand Video Output Monitor Color Green Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the level of green on the monitor.

#### USAGE:

xCommand Video Output Monitor Color Green Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## <u>Value</u>:

Integer (0..100)

Select the level.

## xCommand Video Output Monitor Color Red Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the level of red on the monitor.

#### USAGE:

xCommand Video Output Monitor Color Red Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

#### Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

#### Value:

Integer (0..100)

Select the level

# xCommand Video Output Monitor Color Select

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN

Adjust the monitor's color temperature.

## **USAGE:**

xCommand Video Output Monitor Color Select Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

#### Value:

4900K/5500K/6500K/7200K/9300K/10500K/12000K/User [MX700/MX800/MX800] 4900K/5500K/6500K/7200K/9300K/10500K/12000K [Room70/Room55D Room70G2]

# xCommand Video Output Monitor Contrast Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the contrast level on the monitor.

#### USAGE:

xCommand Video Output Monitor Contrast Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

### Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## Value:

Integer (0..100)

Select the level.

# xCommand Video Output Monitor CSC Select

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Select the monitor's color space.

#### USAGE:

xCommand Video Output Monitor CSC Select Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## <u>Value</u>:

RGB/YUV

Select either RGB or YUV.

## xCommand Video Output Monitor Gamma Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the gamma level on the monitor.

#### USAGE:

xCommand Video Output Monitor Gamma Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

# Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

#### Value:

1.5/1.6/1.7/1.8/1.9/2.0/2.1/2.2/2.3/2.4/2.5/2.6/2.7

Select the level.

# xCommand Video Output Monitor Reset

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN

Reset monitor settings (not available for Room 55 Dual).

#### USAGE:

 $\verb"xCommand Video Output Monitor Reset Position: $\underline{\textit{Position}}$$ 

where

## Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

# xCommand Video Output Monitor Sharpness Set

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

Adjust the image sharpness on the monitor.

#### USAGE:

xCommand Video Output Monitor Sharpness Set Position:  $\underline{\textit{Position}}$  Value:  $\underline{\textit{Value}}$  where

#### Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for video systems with two integrated screens (dual screen systems).

## Value:

Softest/Soft/Normal/Sharp/Sharpest

Select the level.

# xCommand Video PresentationPIP Set

Applies to: All products

Requires user role: ADMIN, USER

Sets position for the presentation PiP (picture in picture).

#### **USAGE:**

xCommand Video PresentationPIP Set Position:  $\underline{\textit{Position}}$  where

## Position:

 ${\it CenterLeft/CenterRight/LowerLeft/LowerRight/UpperCenter/UpperLeft/UpperRight} \\ {\it Select one of the predefined positions}.$ 

#### xCommand Video PresentationView Set

Applies to: All products

Requires user role: ADMIN, USER

Set the presentation view mode

#### USAGE:

xCommand Video PresentationView Set View: View

where

#### View:

Default/Maximized/Minimized

Select Default when you want the presentation to be viewed with the default settings for the codec. Select Maximized when you want the presentation to be displayed in full screen. Select

Minimized when you want the presentation to be displayed in a small picture on screen.

## xCommand Video Selfview Set

Applies to: All products

Requires user role: ADMIN, USER

Sets self-view on/off and specifies its size and position. If the parameter is not specified, current value is used.

#### **USAGE:**

## where

# <u>Mode</u>:

On/Off

Selfview is set to on or off.

## FullscreenMode:

On/Off

Choose between displaying the self-view in full screen or as picture-in-picture.

## PIPPosition:

CenterLeft/CenterRight/LowerLeft/LowerRight/UpperCenter/UpperLeft/UpperRight Select the position for the self-view image.

## OnMonitorRole:

First/Second/Third

Displays self-view on monitors with this role.

# Chapter 5

# xStatus commands



# Description of the xStatus commands

In this chapter, you can find all of the xStatus commands and the responses. Status type commands return information about the system and system processes. You can query all information or just some of it.

We recommend you visit our web site regularly for updated versions of the manual.

Go to: ▶ https://www.cisco.com/go/telepresence/docs

udio status	277
xStatus Audio Devices HandsetUSB ConnectionStatus	277
xStatus Audio Devices HandsetUSB Cradle	277
xStatus Audio Devices HeadsetAnalog Connection Status	277
xStatus Audio Devices HeadsetAnalog HasMicrophone	277
xStatus Audio Devices HeadsetUSB ConnectionStatus	278
xStatus Audio Devices HeadsetUSB Description	278
xStatus Audio Devices HeadsetUSB Manufacturer	278
xStatus Audio Input Connectors ARC [n] EcReferenceDelay	278
xStatus Audio Input Connectors HDMI [n] EcReferenceDelay	279
xStatus Audio Input Connectors Microphone [n] ConnectionStatus	279
xStatus Audio Input Connectors Microphone [n] EcReferenceDelay	279
xStatus Audio Input KeyClick Attenuate	279
xStatus Audio Input KeyClick Detected	280
xStatus Audio Input KeyClick Enabled	280
xStatus Audio Input LocalInput [n] AGC	280
xStatus Audio Input LocalInput [n] Channels	280
xStatus Audio Input LocalInput [n] Connector	281
xStatus Audio Input LocalInput [n] Direct	281
xStatus Audio Input LocalInput [n] MixerMode	281
xStatus Audio Input LocalInput [n] Mute	281
xStatus Audio Input LocalInput [n] Name	282
xStatus Audio Input RemoteInput [n] CallId	282
xStatus Audio Microphones Mute	282
xStatus Audio Output Connectors ARC [n] DelayMs	282

xStatus Audio Output Connectors HDMI [n] DelayMs	283
xStatus Audio Output Connectors ARC [n] Mode	283
xStatus Audio Output Connectors HDMI [n] Mode	283
xStatus Audio Output Connectors InternalSpeaker [n] DelayMs	283
xStatus Audio Output Connectors InternalSpeaker [n] Mode	284
xStatus Audio Output Connectors Line [n] ConnectionStatus	284
xStatus Audio Output Connectors Line [n] DelayMs	284
xStatus Audio Output LocalOutput [n] Channels	284
xStatus Audio Output LocalOutput [n] Connector [n]	285
xStatus Audio Output LocalOutput [n] Input [n] Gain	285
xStatus Audio Output LocalOutput [n] Loudspeaker	285
xStatus Audio Output LocalOutput [n] Name	285
xStatus Audio Output LocalOutput [n] VolumeControlled	286
xStatus Audio Output MeasuredHdmiArcDelay	286
xStatus Audio Output MeasuredHdmiDelay	286
xStatus Audio Output MeasuredHdmiCecDelay	286
xStatus Audio Output RemoteOutput [n] CallId	28
xStatus Audio Output RemoteOutput [n] Input [n] Gain	28
xStatus Audio SelectedDevice	28
xStatus Audio Volume	28
xStatus Audio VolumeHandsetUsb	288
xStatus Audio VolumeHeadsetAnalog	288
xStatus Audio VolumeHeadsetUsb	288
xStatus Audio VolumeInternal	288
xStatus Audio VolumeMute	289

xStatus Bookings Current Id.         290           xStatus Call [n] AnswerState         290           xStatus Call [n] AttendedTransferFrom.         290           xStatus Call [n] CallbackNumber         290           xStatus Call [n] DeviceType         290           xStatus Call [n] DeviceType         291           xStatus Call [n] Direction         291           xStatus Call [n] Direction         291           xStatus Call [n] Direction         291           xStatus Call [n] Encryption Type         292           xStatus Call [n] FacilityServiceld         292           xStatus Call [n] HoldReason         292           xStatus Call [n] Protocol         293           xStatus Call [n] ReceiveCallRate         293           xStatus Call [n] RemoteNumber         293           xStatus Call [n] TransmitCallRate         293           xStatus Call [n] TransmitCallRate         294           xStatus Cameras Camera [n] Capabilities Options         294           xStatus Cameras Camera [n] Filip         295           xStatus Cameras Camera [n] Framerate         295           xStatus Cameras Camera [n] HardwarelD         295           xStatus Cameras Camera [n] LightingConditions         295           xStatus Cameras Camera [n] MacAddress	Bookings status	289
xStatus Call [n] AnswerState       290         xStatus Call [n] AttendedTransferFrom       290         xStatus Call [n] CallbackNumber       290         xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] TransmitCallRate       293         xStatus Call [n] TransmitCallRate       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Filip       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       296         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Bookings Current Id	289
xStatus Call [n] AnswerState       290         xStatus Call [n] AttendedTransferFrom       290         xStatus Call [n] CallbackNumber       290         xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] TransmitCallRate       293         xStatus Call [n] TransmitCallRate       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Filp       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       296         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	Call atatus	200
xStatus Call [n] AttendedTransferFrom       290         xStatus Call [n] CallbackNumber       290         xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] TransmitCallRate       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Detected Connector       295         xStatus Cameras Camera [n] Filip       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] Lighting Conditions       296         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] CallbackNumber       290         xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] HoldReason       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] HerotecedConnector       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296          xStatus Cameras Camera [n] M		
xStatus Call [n] CallType       290         xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] HoldReason       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] DeviceType       291         xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] Prip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] Direction       291         xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       292         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         Cameras camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Fip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] DisplayName       291         xStatus Call [n] Duration       292         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] HoldReason       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         **Cameras status       294         **Cameras tatus Camera Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] Duration       291         xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceld       292         xStatus Call [n] HoldReason       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] Encryption Type       292         xStatus Call [n] FacilityServiceId       292         xStatus Call [n] HoldReason       292         xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Frip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] FacilityServiceId       292         xStatus Call [n] HoldReason       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] HoldReason       292         xStatus Call [n] Protocol       293         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Detected Connector       295         xStatus Cameras Camera [n] Detected Connector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] PlacedOnHold       292         xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwarelD       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] FacilityServiceId	292
xStatus Call [n] Protocol       293         xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] HoldReason	292
xStatus Call [n] ReceiveCallRate       293         xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Call [n] RemoteNumber       293         xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] Protocol	293
xStatus Call [n] Status       293         xStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] ReceiveCallRate	293
XStatus Call [n] TransmitCallRate       294         Cameras status       294         xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] RemoteNumber	293
Cameras status	xStatus Call [n] Status	293
xStatus Cameras Camera [n] Capabilities Options       294         xStatus Cameras Camera [n] Connected       294         xStatus Cameras Camera [n] DetectedConnector       295         xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296	xStatus Call [n] TransmitCallRate	294
xStatus Cameras Camera [n] Connected	Cameras status	294
xStatus Cameras Camera [n] Connected	xStatus Cameras Camera [n] Capabilities Options	294
xStatus Cameras Camera [n] Flip       295         xStatus Cameras Camera [n] Framerate       295         xStatus Cameras Camera [n] HardwareID       295         xStatus Cameras Camera [n] LightingConditions       295         xStatus Cameras Camera [n] MacAddress       296         xStatus Cameras Camera [n] Manufacturer       296		
xStatus Cameras Camera [n] Framerate295xStatus Cameras Camera [n] HardwareID295xStatus Cameras Camera [n] LightingConditions295xStatus Cameras Camera [n] MacAddress296xStatus Cameras Camera [n] Manufacturer296	xStatus Cameras Camera [n] DetectedConnector	295
xStatus Cameras Camera [n] Framerate295xStatus Cameras Camera [n] HardwareID295xStatus Cameras Camera [n] LightingConditions295xStatus Cameras Camera [n] MacAddress296xStatus Cameras Camera [n] Manufacturer296	xStatus Cameras Camera [n] Flip	295
xStatus Cameras Camera [n] HardwareID		
xStatus Cameras Camera [n] LightingConditions		
xStatus Cameras Camera [n] MacAddress		
xStatus Cameras Camera [n] Manufacturer		
	* *	
xStatus Cameras Camera [n] Position Focus	* *	

xStatus Cameras Camera [n] Position Lens	297
xStatus Cameras Camera [n] Position Pan	297
xStatus Cameras Camera [n] Position Tilt	297
xStatus Cameras Camera [n] Position Zoom	297
xStatus Cameras Camera [n] SerialNumber	298
xStatus Cameras Camera [n] SoftwareID	298
xStatus Cameras PresenterTrack Availability	298
xStatus Cameras PresenterTrack PresenterDetected	298
xStatus Cameras PresenterTrack Status	299
xStatus Cameras SpeakerTrack ActiveConnector	299
xStatus Cameras SpeakerTrack Availability	299
xStatus Cameras SpeakerTrack Status	299
Capabilities status	300
xStatus Capabilities Conference MaxActiveCalls	300
xStatus Capabilities Conference MaxAudioCalls	300
xStatus Capabilities Conference MaxCalls	300
xStatus Capabilities Conference MaxVideoCalls	300
Conference status	
xStatus Conference ActiveSpeaker CallId	
xStatus Conference Call [n] BookingId	
xStatus Conference Call [n] Capabilities FarendMessage Mode	
xStatus Conference Call [n] Capabilities FECC Mode	
xStatus Conference Call [n] Capabilities FECC NumberOfPresets	
xStatus Conference Call [n] Capabilities FECC NumberOfSources	
xStatus Conference Call [n] Capabilities FECC Source [n] Name	
xStatus Conference Call [n] Capabilities FECC Source [n] Options	
xStatus Conference Call [n] Capabilities FECC Source [n] Sourceld	
xStatus Conference Call [n] Capabilities Hold	
xStatus Conference Call [n] Capabilities IxChannel Status	
xStatus Conference Call [n] Capabilities Presentation	
xStatus Conference Call [n] Manufacturer	304
xStatus Conference Call [n] MicrophonesMuted	304

xStatus Conference Call [n] SoftwareID	304
xStatus Conference DoNotDisturb	304
xStatus Conference Line [n] Mode	305
xStatus Conference Multipoint Mode	305
xStatus Conference Presentation CallId	305
xStatus Conference Presentation LocalInstance [n] SendingMode	305
xStatus Conference Presentation LocalInstance [n] Source	306
xStatus Conference Presentation Mode	306
xStatus Conference SpeakerLock CallId	306
xStatus Conference SpeakerLock Mode	306
Diagnostics status	307
xStatus Diagnostics Message [n] Description	307
xStatus Diagnostics Message [n] Level	307
xStatus Diagnostics Message [n] References	307
xStatus Diagnostics Message [n] Type	308
GPIO status	308
xStatus GPIO Pin [n] State	308
H323 status	309
xStatus H323 Gatekeeper Address	309
xStatus H323 Gatekeeper Port	309
xStatus H323 Gatekeeper Reason	309
xStatus H323 Gatekeeper Status	309
xStatus H323 Mode Reason	310
xStatus H323 Mode Status	310
HttpFeedback status	310
xStatus HttpFeedback [n] Expression [n]	310
xStatus HttpFeedback [n] Format	310
xStatus HttpFeedback [n] Status	31
xStatus HttpFeedback [n] URL	311

Ν	MediaChannels status	31
	xStatus MediaChannels Call [n] Channel [n] Audio Channels	31
	xStatus MediaChannels Call [n] Channel [n] Audio Mute	31
	xStatus MediaChannels Call [n] Channel [n] Audio Protocol	31
	xStatus MediaChannels Call [n] Channel [n] Direction	31
	xStatus MediaChannels Call [n] Channel [n] Encryption	31
	xStatus MediaChannels Call [n] Channel [n] NetStat Bytes	31
	xStatus MediaChannels Call [n] Channel [n] NetStat ChannelRate	31
	xStatus MediaChannels Call [n] Channel [n] NetStat Jitter	31
	xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalLost	31
	xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived	31
	xStatus MediaChannels Call [n] Channel [n] NetStat Loss	31
	xStatus MediaChannels Call [n] Channel [n] NetStat MaxJitter	31
	xStatus MediaChannels Call [n] Channel [n] NetStat Packets	31
	xStatus MediaChannels Call [n] Channel [n] ParticipantId	31
	xStatus MediaChannels Call [n] Channel [n] Type	31
	xStatus MediaChannels Call [n] Channel [n] Video ChannelRole	31
	xStatus MediaChannels Call [n] Channel [n] Video FrameRate	31
	xStatus MediaChannels Call [n] Channel [n] Video Protocol	31
	xStatus MediaChannels Call [n] Channel [n] Video ResolutionX	31
	xStatus MediaChannels Call [n] Channel [n] Video ResolutionY	31
Ν	letwork status	
	xStatus Network [n] CDP Address	
	xStatus Network [n] CDP Capabilities	
	xStatus Network [n] CDP DeviceId	
	xStatus Network [n] CDP Duplex	
	xStatus Network [n] CDP Platform	
	xStatus Network [n] CDP PortID	
	xStatus Network [n] CDP PrimaryMgmtAddress.	31
	xStatus Network [n] CDP SysName	
	xStatus Network [n] CDP SysObjectID	
	xStatus Network [n] CDP Version	
	xStatus Network [n] CDP VoIPApplianceVlanID	31
	vStatus Network [n] CDP VTPMamtDomain	31



xStatus Network [n] DNS Domain Name	320
xStatus Network [n] DNS Server [n] Address	320
xStatus Network [n] Ethernet MacAddress	320
xStatus Network [n] Ethernet Speed	320
xStatus Network [n] IPv4 Address	32
xStatus Network [n] IPv4 Gateway	32 <sup>-</sup>
xStatus Network [n] IPv4 SubnetMask	32
xStatus Network [n] IPv6 Address	32
xStatus Network [n] IPv6 Gateway	322
xStatus Network [n] IPv6 LinkLocalAddress	322
xStatus Network [n] VLAN Voice VlanId	322
NetworkServices status	323
xStatus NetworkServices NTP CurrentAddress	323
xStatus NetworkServices NTP Server [n] Address	323
xStatus NetworkServices NTP Status	323
Peripherals status	324
xStatus Peripherals ConnectedDevice [n] HardwareInfo	324
xStatus Peripherals ConnectedDevice [n] ID	324
xStatus Peripherals ConnectedDevice [n] Name	324
xStatus Peripherals ConnectedDevice [n] SoftwareInfo	324
xStatus Peripherals ConnectedDevice [n] Status	325
xStatus Peripherals ConnectedDevice [n] Type	325
xStatus Peripherals ConnectedDevice [n] UpgradeFailureReason	325
xStatus Peripherals ConnectedDevice [n] UpgradeStatus	325
xStatus Peripherals ConnectedDevice [n] UpgradeURL	326
Provisioning status	326
xStatus Provisioning CUCM ExtensionMobility Enabled	326
xStatus Provisioning CUCM ExtensionMobility LastLoggedInUserId	326
xStatus Provisioning CUCM ExtensionMobility LoggedIn	327
xStatus Provisioning RoomType	327
xStatus Provisioning Software Current CompletedAt	327
xStatus Provisioning Software Current URL	327

xStatus Provisioning Software Current VersionId	
xStatus Provisioning Software UpgradeStatus LastChange	328
xStatus Provisioning Software UpgradeStatus Message	328
xStatus Provisioning Software UpgradeStatus Phase	328
xStatus Provisioning Software UpgradeStatus SessionId	329
xStatus Provisioning Software UpgradeStatus Status	329
xStatus Provisioning Software UpgradeStatus Urgency	329
xStatus Provisioning Software UpgradeStatus URL	329
xStatus Provisioning Software UpgradeStatus VersionId	330
xStatus Provisioning Status	330
Proximity status	330
xStatus Proximity Services Availability	330
RoomAnalytics status	331
xStatus RoomAnalytics PeopleCount Current	331
xStatus RoomAnalytics PeoplePresence	331
RoomPreset status	331
xStatus RoomPreset	331
xStatus RoomPreset [n] Defined	331
xStatus RoomPreset [n] Description.	331
xStatus RoomPreset [n] Type	332
Security status	332
xStatus Security FIPS Mode	332
xStatus Security Persistency CallHistory	332
xStatus Security Persistency Configurations	333
xStatus Security Persistency DHCP	333
xStatus Security Persistency InternalLogging	333
xStatus Security Persistency LocalPhonebook	333
SIP status	334
xStatus SIP AlternateURI Alias [n] URI	334
xStatus SIP AlternateURI Primary [n] URI	334

xStatus SIP Authentication	334
xStatus SIP CallForward DisplayName	334
xStatus SIP CallForward Mode	335
xStatus SIP CallForward URI	335
xStatus SIP Mailbox MessagesWaiting	335
xStatus SIP Mailbox URI	335
xStatus SIP Proxy [n] Address	336
xStatus SIP Proxy [n] Status	336
xStatus SIP Registration [n] Authentication	336
xStatus SIP Registration [n] Reason	336
xStatus SIP Registration [n] Status	337
xStatus SIP Registration [n] URI	337
xStatus SIP Secure	337
xStatus SIP Verified	337
Standby status	
xStatus Standby PowerSave State	
xStatus Standby State	338
SystemUnit status	220
xStatus SystemUnit Hardware Module CompatibilityLevel	
xStatus SystemUnit Hardware Module ScrialNumber	
xStatus SystemUnit Hardware Monitoring Fan [n] Status	
xStatus SystemUnit Hardware Temperature	
xStatus SystemUnit Hardware TemperatureThreshold	
xStatus SystemUnit Notifications Notification [n] Text	
xStatus SystemUnit Notifications Notification [n] Type	
xStatus SystemUnit ProductId	
xStatus SystemUnit ProductPlatform	
xStatus SystemUnit ProductType	
xStatus SystemUnit Software DisplayName	
xStatus SystemUnit Software Name	
	341
xStatus SystemUnit Software Name	341
xStatus SystemUnit Software NamexStatus SystemUnit Software OptionKeys Encryption	

xStatus SystemUnit Software ReleaseDate	342
xStatus SystemUnit Software Version	342
xStatus SystemUnit State NumberOfActiveCalls	342
xStatus SystemUnit State NumberOfInProgressCalls	343
xStatus SystemUnit State NumberOfSuspendedCalls	343
xStatus SystemUnit Uptime	343
Time status	344
xStatus Time SystemTime	344
UserInterface status	344
xStatus UserInterface ContactInfo ContactMethod [n] Number	344
xStatus UserInterface ContactInfo Name	344
xStatus UserInterface Extensions Widget [n] Value	345
xStatus UserInterface Extensions Widget [n] WidgetId	345
Video status	346
xStatus Video ActiveSpeaker PIPPosition	346
xStatus Video Input Connector [n] Connected	346
xStatus Video Input Connector [n] ConnectedDevice CEC [n] DeviceType	346
xStatus Video Input Connector [n] ConnectedDevice CEC [n] LogicalAddress	346
xStatus Video Input Connector [n] ConnectedDevice CEC [n] Name	347
xStatus Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus	347
xStatus Video Input Connector [n] ConnectedDevice CEC [n] Vendorld	347
xStatus Video Input Connector [n] SignalState	
xStatus Video Input Connector [n] Sourceld	348
xStatus Video Input Connector [n] Type	348
xStatus Video Input MainVideoSource	348
xStatus Video Input Source [n] ConnectorId	348
xStatus Video Input Source [n] FormatStatus	349
xStatus Video Input Source [n] FormatType	349
xStatus Video Input Source [n] MediaChannelld	349
xStatus Video Input Source [n] Resolution Height	349
xStatus Video Input Source [n] Resolution RefreshRate	350
xStatus Video Input Source [n] Resolution Width	350



xStatus Video Layout LayoutFamily Local	350
xStatus Video Layout LayoutFamily Remote	350
xStatus Video Monitors	35
xStatus Video Mute	35
xStatus Video Output Connector [n] Connected	35
xStatus Video Output Connector [n] ConnectedDevice CEC [n] DeviceType	35
xStatus Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress	352
xStatus Video Output Connector [n] ConnectedDevice CEC [n] Name	352
xStatus Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus	352
xStatus Video Output Connector [n] ConnectedDevice CEC [n] Vendorld	352
xStatus Video Output Connector [n] ConnectedDevice Name	353
xStatus Video Output Connector [n] ConnectedDevice PreferredFormat	353
xStatus Video Output Connector [n] ConnectedDevice ScreenSize	353
xStatus Video Output Connector [n] MonitorRole	353
xStatus Video Output Connector [n] Resolution Height	354
xStatus Video Output Connector [n] Resolution RefreshRate	354
xStatus Video Output Connector [n] Resolution Width	354
xStatus Video Output Connector [n] Type	354
xStatus Video Output Monitor [n] Backlight	355

xStatus Video Output Monitor [n] Brightness	35
xStatus Video Output Monitor [n] ColorTemperature Blue	35
xStatus Video Output Monitor [n] ColorTemperature Green	35
xStatus Video Output Monitor [n] ColorTemperature Red	356
xStatus Video Output Monitor [n] ColorTemperature Selected	356
xStatus Video Output Monitor [n] Contrast	356
xStatus Video Output Monitor [n] CSCYUV	356
xStatus Video Output Monitor [n] FirmwareVersion	.35
xStatus Video Output Monitor [n] Gamma	.35
xStatus Video Output Monitor [n] ModelName	.35
xStatus Video Output Monitor [n] Position	.35
xStatus Video Output Monitor [n] SerialNumber	358
xStatus Video Output Monitor [n] Sharpness	358
xStatus Video Output Monitor [n] Temperature	358
xStatus Video Presentation PIPPosition	358
xStatus Video Selfview FullscreenMode	359
xStatus Video Selfview Mode	359
xStatus Video Selfview OnMonitorRole	359
x Status Video Selfview PIPPosition	350

# Audio status

## xStatus Audio Devices HandsetUSB ConnectionStatus

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows if a USB handset is connected.

Value space of the result returned:

Connected/NotConnected

#### Example:

xStatus Audio Devices HandsetUSB ConnectionStatus

\*s Connected

\*\* end

# xStatus Audio Devices HandsetUSB Cradle

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows if a USB handset is on hook or off hook.

Value space of the result returned:

OnHook/OffHook

## Example:

xStatus Audio Devices HandsetUSB Cradle

\*s OnHook

\*\* end

# xStatus Audio Devices HeadsetAnalog Connection Status

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows if an analog headset is connected. (DX70 only)

Value space of the result returned:

Connected/NotConnected

#### Example:

xStatus Audio Devices HeadsetAnalog Connection Status

\*s Connected

\*\* end

# xStatus Audio Devices HeadsetAnalog HasMicrophone

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows if an analog headset has a built-in microphone. (DX70 only)

Value space of the result returned:

False/True

#### Example:

xStatus Audio Devices HeadsetAnalog HasMicrophone

\*s True

## xStatus Audio Devices HeadsetUSB ConnectionStatus

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows if a USB headset is connected.

Value space of the result returned:

Connected/NotConnected

#### Example:

xStatus Audio Devices HeadsetUSB ConnectionStatus

\*s Connected

\*\* end

## xStatus Audio Devices HeadsetUSB Description

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows a description of the attached USB headset.

Value space of the result returned:

String

## Example:

xStatus Audio Devices HeadsetUSB Description

\*s HeadsetUSB Description: "Description of USB headset."

\*\* end

## xStatus Audio Devices HeadsetUSB Manufacturer

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Lists the USB headset manufacturer.

Value space of the result returned:

String

#### Example:

xStatus Audio Devices HeadsetUSB Manufacturer
\*s HeadsetUSB Manufacturer: "CompanyName"

\*\* end

# xStatus Audio Input Connectors ARC [n] EcReferenceDelay

Applies to: All products

Requires user role: ADMIN, USER

Returns the detected latency for each loudspeaker to microphone path for systems supporting ARC input used as microphone input. The result is in milliseconds.

Value space of the result returned:

Integer

#### Example:

xStatus Audio Input Connectors ARC 1 EcReferenceDelay

\*s Audio Connectors ARC 1 EcReferenceDelay: 0



# xStatus Audio Input Connectors HDMI [n] EcReferenceDelay

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Returns the detected latency for each loudspeaker to microphone path for systems supporting HDMI input used as microphone input. The result is in milliseconds.

Value space of the result returned:

Integer

#### Example:

xStatus Audio Input Connectors HDMI 1 EcReferenceDelay

\*s Audio Connectors HDMI 1 EcReferenceDelay: 0

\*\* end

# xStatus Audio Input Connectors Microphone [n] ConnectionStatus

Applies to: SX10 SX20 MX200G2/MX300G2 RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Indicates whether a microphone is detected on the microphone input connector.

Value space of the result returned:

Connected/NotConnected/Unknown

Connected: A microphone is connected.

NotConnected: Nothing is connected.

Unknow: The video system is not able to detect if a microphone is connected.

#### Example:

xStatus Audio Input Connectors Microphone ConnectionStatus

\*s Audio Input Connectors Microphone 1 ConnectionStatus: NotConnected

\*s Audio Input Connectors Microphone 2 ConnectionStatus: Connected

\*\* end

# xStatus Audio Input Connectors Microphone [n] EcReferenceDelay

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Returns the detected latency for each loudspeaker to microphone path. The result is in milliseconds

Value space of the result returned:

Integer

## Example:

xStatus Audio Input Connectors Microphone 1 EcReferenceDelay

\*s Audio Connectors Microphone 1 EcReferenceDelay: 120

\*\* end

# xStatus Audio Input KeyClick Attenuate

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows whether the video system is automatically attenuating clicking noises, such as those detected microphone signals caused by the typing of a keyboard.

Value space of the result returned:

Off/On

On: The attenuation of the microphone signal is turned On.

Off: The attenuation of the microphone signal is turned Off.

## Example:

xStatus Audio Input KeyClick Attenuate

\*s Audio Input KeyClick Attenuate On

# xStatus Audio Input KeyClick Detected

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows what type of audio signals the video system is detecting for attenuation. The system will attenuate the microphone signal if clicking noises from a keyboard are detected. If voice or silence is detected, the microphone signal will not be attenuated.

Value space of the result returned:

KeyClick/Voice/Silence

KeyClick: Only key clicks are being detected.

Voice: Voice is being detected.

Silence: No audio signals are being detected.

#### Example:

xStatus Audio Input KeyClick Detected
\*s Audio Input KeyClick Detected KeyClick
\*\* end

# xStatus Audio Input KeyClick Enabled

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, USER

Shows whether detection for attenuation on the microphone signal is enabled.

Value space of the result returned:

On/Off

*On:* Detection on the microphone signal is turned On. *Off:* Detection on the microphone signal is turned Off.

#### Example:

```
xStatus Audio Input KeyClick Enabled
*s Audio Input KeyClick Enabled On
** end
```

# xStatus Audio Input LocalInput [n] AGC

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the AGC (Automatic Gain Control) mode on the local input.

You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

On/Off

#### Example:

```
xStatus Audio Input LocalInput 1 AGC *s Audio Input LocalInput 1 AGC: "On" ** end
```

# xStatus Audio Input LocalInput [n] Channels

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

States if the local input channels are mixed into a mono signal (1) or stereo signal (2).

You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

1..2

```
xStatus Audio Input LocalInput 1 Channels
*s Audio Input LocalInput 1 Channels: 1
** end
```

# xStatus Audio Input LocalInput [n] Connector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Lists the connectors that are attached to the local input.

You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

Microphone.1/../Microphone.4/Line.1/Line.2/HDMI.2

#### Example:

```
xStatus Audio Input LocalInput 1 Connector
*s Audio Input LocalInput 1 Connector: "Microphone.1"
** end
```

# xStatus Audio Input LocalInput [n] Direct

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows whether or not input processing such as acoustic echo cancellation and noise reduction is bypassed on this local input. Bypassing the input processing reduces the audio input delay, which is useful when doing local sound reinforcement. You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

#### Off/On

Off: All regular input processing is performed, according to the configuration of each connector.

*On:* Bypass input processing such as acoustic echo cancellation and noise reduction, regardless of the configuration for each connected input connector.

#### Example:

```
xStatus Audio Input LocalInput 1 Direct
*s Audio Input LocalInput 1 Direct: "Off"
** end
```

# xStatus Audio Input LocalInput [n] MixerMode

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows how the local input connectors have been mixed together. You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

Auto/Fixed/GainShared

**Auto:** The microphone with the strongest speaker is active and the others are strongly attenuated.

Fixed: The input connector signals are mixed together with equal gains.

*GainShared:* The microphones are given a normalized gain factor relative to the strongest speaker before being mixed together.

#### Example:

```
xStatus Audio Input LocalInput 1 MixerMode
*s Audio Input LocalInput 1 MixerMode: "Auto"
** end
```

# xStatus Audio Input LocalInput [n] Mute

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the mute mode for the local inputs. A local input is a mix of input connectors.

You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

On/Off

```
xStatus Audio Input LocalInput 1 Mute
*s Audio Input LocalInput 1 Mute: "Off"

** end
```

# xStatus Audio Input LocalInput [n] Name

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the name of the local input. A local input is a mix of input connectors. You can run the command xStatus Audio Input LocalInput to find the identity [n] of the input.

Value space of the result returned:

String

#### Example:

xStatus Audio Input LocalInput 1 Name
\*s Audio Input LocalInput 1 Name: "Microphone"
\*\* end

# xStatus Audio Input RemoteInput [n] CallId

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the CallId for the remote audio input.

You can run the command xStatus Audio Input RemoteInput to find the identity [n] of the input.

Value space of the result returned:

0..65534

## Example:

```
xStatus Audio Input RemoteInput 8 CallId
*s Audio Input RemoteInput 8 CallId: 28
** end
```

## xStatus Audio Microphones Mute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the microphones are muted.

Value space of the result returned:

On/Off

## Example:

xStatus Audio Microphones Mute \*s Audio Microphones Mute: Off \*\* end

# xStatus Audio Output Connectors ARC [n] DelayMs

Applies to: CodecPlus CodecPro Room70G2
Requires user role: ADMIN, INTEGRATOR, USER

Shows the delay of the ARC output.

Value space of the result returned:

Integer

The delay in milliseconds.

#### Example:

xStatus Audio Output Connectors ARC 1 DelayMs \*s Audio Output Connectors ARC 1 DelayMs: 60 \*\* end

# xStatus Audio Output Connectors HDMI [n] DelayMs

Applies to: RoomKit CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows the delay of the HDMI output.

Value space of the result returned:

Integer

The delay in milliseconds.

#### Example:

```
xStatus Audio Output Connectors HDMI 1 DelayMs *s Audio Output Connectors HDMI 1 DelayMs: 60 ** end
```

# xStatus Audio Output Connectors ARC [n] Mode

Applies to: CodecPlus CodecPro Room70G2
Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the audio channel on the ARC output connector is enabled or disabled.

Value space of the result returned:

On/Off

## Example:

```
xStatus Audio Output Connectors ARC 1 Mode
*s Audio Output Connectors ARC 1 Mode: Off
** end
```

# xStatus Audio Output Connectors HDMI [n] Mode

Applies to: RoomKit CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the audio channel on the HDMI output connector is enabled or disabled.

Value space of the result returned:

On/Off

#### Example:

```
xStatus Audio Output Connectors HDMI 1 Mode
*s Audio Output Connectors HDMI 1 Mode: Off
** end
```

# xStatus Audio Output Connectors InternalSpeaker [n] DelayMs

Applies to: RoomKit CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows the delay of the internal loudspeaker.

Value space of the result returned:

Integer

The delay in milliseconds.

```
xStatus Audio Output Connectors InternalSpeaker 1 DelayMS *s Audio Output Connectors InternalSpeaker 1 DelayMs: 0 ** end
```

# xStatus Audio Output Connectors InternalSpeaker [n] Mode

Applies to: CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the video system's integrated speakers are enabled or disabled.

Value space of the result returned:

On/Off

#### Example:

xStatus Audio Output Connectors InternalSpeaker 1 Mode \*s Audio Output Connectors InternalSpeaker 1 Mode: On \*\* end

# xStatus Audio Output Connectors Line [n] ConnectionStatus

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the audio output line is connected.

Value space of the result returned:

Connected/NotConnected/Unknown

Connected: A device is connected.

NotConnected: Nothing is connected.

Unknow: The video system is not able to detect if anything is connected.

#### Example:

```
xStatus Audio Output Connectors Line 1 ConnectionStatus
*s Audio Output Connectors Line 1 ConnectionStatus: Connected
** end
```

# xStatus Audio Output Connectors Line [n] DelayMs

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the delay in milliseconds.

Value space of the result returned:

Integer (0..290)

## Example:

```
xStatus Audio Output Connectors Line 1 DelayMs *s Audio Output Connectors Line 1 DelayMs: 60
```

# xStatus Audio Output LocalOutput [n] Channels

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

States if the local output channels are mixed into a mono signal (1) or stereo signal (2). You can run the command xStatus Audio Output LocalOutput to find the identity [n] of the output.

Value space of the result returned:

1..2

```
xStatus Audio Output LocalOutput 4 Channels
*s Audio Output LocalOutput 4 Channels: "1"
** end
```

# xStatus Audio Output LocalOutput [n] Connector [n]

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Lists the connectors that are attached to the local output.

You can run the command xStatus Audio Output LocalOutput to find the identity [n] of the output.

Value space of the result returned:

Strina

## Example:

```
xStatus Audio Output LocalOutput 4 Connector
*s Audio Output LocalOutput 4 Connector: "Line.1"
** end
```

# xStatus Audio Output LocalOutput [n] Input [n] Gain

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the gain (dB) on the input, when it is connected to the local output.

You can run the command xStatus Audio Output LocalOutput to find the identity [n] of the output and input.

Value space of the result returned:

-54..15

Range from -54 dB to 15 dB, where -54 dB equals Off.

#### Example:

```
xStatus Audio Output LocalOutput 4 Input 2 Gain
*s Audio Output LocalOutput 4 Input 2 Gain: 0
** end
```

# xStatus Audio Output LocalOutput [n] Loudspeaker

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the Loudspeaker mode on the local output. If one or more of the output connectors that are attached to the local output are connected to a loudspeaker, then this signal should be a reference signal to the echo canceler and Loudspeaker should be set to On.

You can run the command xStatus Audio Output LocalOutput to find the identity [n] of the output.

Value space of the result returned:

On/Off

#### Example:

```
xStatus Audio Output LocalOutput 4 Loudspeaker
*s Audio Output LocalOutput 4 Loudspeaker: "Off"
** end
```

# xStatus Audio Output LocalOutput [n] Name

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the name of the local output.

You can run the command xStatus Audio Output LocalOutput to find the identity [n] of the output.

Value space of the result returned:

String

```
xStatus Audio Output LocalOutput 4 Name
*s Audio Output LocalOutput 4 Name: "MyLocalOutput1"
** end
```

# xStatus Audio Output LocalOutput [n] VolumeControlled

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows where this output's volume is controlled from.

Value space of the result returned:

String

Off: This output's volume is controlled by global audio control.

On: This output's volume is at the level defined with xCommand Audio Volume Set.

#### Example:

xStatus Audio Output LocalOutput 5 VolumeControlled
\*s Audio Output LocalOutput 5 VolumeControlled: "On"
\*\* end

# xStatus Audio Output MeasuredHdmiArcDelay

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the measured audio delay of the device connected to the HDMI connector. This delay is measured through the HDMI audio return channel, and will secure good lip-synchronization between audio and video.

Value space of the result returned:

Integer

The measured audio delay in milliseconds.

#### Example:

xStatus Audio Output MeasuredHdmiArcDelay
\*s Audio Output MeasuredHdmiArcDelay: 85
\*\* end

# xStatus Audio Output MeasuredHdmiDelay

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the measured audio delay of the device connected to the HDMI connector. This delay is measured from the HDMI output to one of the microphones.

Value space of the result returned:

Integer

The measured audio delay in milliseconds.

#### Example:

xStatus Audio Output MeasuredHdmiDelay \*s Audio Output MeasuredHdmiDelay: 134 \*\* end

# xStatus Audio Output MeasuredHdmiCecDelay

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the reported video delay of the device connected to the HDMI connector. This delay is reported through the consumer electronics control (CEC) protocol, and will secure good lip-synchronization between audio and video.

Value space of the result returned:

Integei

The measured audio delay in milliseconds.

## Example:

xStatus Audio Output ReportedHdmiCecDelay
\*s Audio Output ReportedHdmiCecDelay: 39
\*\* end

# xStatus Audio Output RemoteOutput [n] CallId

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the CallId for the remote audio output.

You can run the command xStatus Audio Output RemoteOutput to find the identity [n] of the output.

Value space of the result returned:

1 65534

#### Example:

xStatus Audio Output RemoteOutput 9 CallId \*s Audio Output RemoteOutput 9 CallId: 28 \*\* end

# xStatus Audio Output RemoteOutput [n] Input [n] Gain

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, USER

Shows the gain (dB) on the input, when input is connected to the remote output. Range from -54 dB to 15 dB, where -54 dB equals Off.

You can run the command xStatus Audio Output RemoteOutput to find the identity [n] of the output and input.

Value space of the result returned:

-54..15

## Example:

```
xStatus Audio Output RemoteOutput 9 Input 1 Gain
*s Audio Output RemoteOutput 9 Input 1 Gain: 0
** end
```

#### xStatus Audio SelectedDevice

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows the audio device that is selected. Only the DX70 supports analog headsets.

Value space of the result returned:

Internal/HeadsetUSB/HeadsetAnalog/HeadsetBluetooth/HandsetUSB []

#### Example:

xStatus Audio SelectedDevice
\*s Audio SelectedDevice: Internal
\*\* end

#### xStatus Audio Volume

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the volume level (dB) of the loudspeaker output.

Value space of the result returned:

0..100

#### Example:

xStatus Audio Volume \*s Audio Volume: 70

## xStatus Audio VolumeHandsetUsb

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows the volume level of the USB handset.

Value space of the result returned:

Integer

Example:

xStatus Audio VolumeHandsetUsb

\*s 6

\*\* end

# xStatus Audio VolumeHeadsetAnalog

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows the volume level of the analog headset (DX70 only).

Value space of the result returned:

Integer

Example:

xStatus Audio VolumeHeadsetAnalog

\*s 6

\*\* end

## xStatus Audio VolumeHeadsetUsb

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows the volume level of the USB headset.

Value space of the result returned:

Integer

Example:

xStatus Audio VolumeHeadsetUsb

\*s 6

\*\* end

## xStatus Audio VolumeInternal

Applies to: DX70/DX80

Requires user role: ADMIN, USER

Shows the internal volume level.

Value space of the result returned:

Integer

Example:

xStatus Audio VolumeInternal

\*s 6

### xStatus Audio VolumeMute

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the endpoint volume is set to mute.

Value space of the result returned:

Off/On

### Example:

xStatus Audio VolumeMute \*s Audio VolumeMute: Off

\*\* end

# Bookings status

## xStatus Bookings Current Id

Applies to: All products

Requires user role: ADMIN, USER

The ID of the on going booking event, if any.

Value space of the result returned:

String

### Example:

xStatus Bookings Current Id \*s Bookings Current Id: "123"

## Call status

## xStatus Call [n] AnswerState

Applies to: All products

Requires user role: ADMIN, USER

Indicates if a call is answered, ignored or has been automatically answered by a system.

Value space of the result returned:

Unanswered/Ignored/Autoanswered/Answered

#### Example:

xStatus Call AnswerState
\*s Call 5 AnswerState: Answered

\*\* end

## xStatus Call [n] AttendedTransferFrom

Applies to: All products

Requires user role: ADMIN, USER

Shows the CallId for the call the current call was transferred from.

Value space of the result returned:

Integer

### Example:

xStatus Call 1 AttendedTransferFrom \*s Call 1 AttendedTransferFrom: 1234

\*\* end

### xStatus Call [n] CallbackNumber

Applies to: All products

Requires user role: ADMIN, USER

Shows the remote (far end) number or URI of an incoming or outgoing call, including the call protocol, for call back. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

String

#### Example:

xStatus Call 27 CallbackNumber
\*s Call 27 CallbackNumber: "h323:firstname.lastname@company.com"
\*\* end

### xStatus Call [n] CallType

Applies to: All products

Requires user role: ADMIN, USER

Shows the call type of the incoming or outgoing call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Video/Audio/AudioCanEscalate/ForwardAllCall/Unknown

### Example:

xStatus Call 27 CallType
\*s Call 27 CallType: Video
\*\* end



## xStatus Call [n] DeviceType

Applies to: All products

Requires user role: ADMIN, USER

Shows where the call is connected to.

Value space of the result returned:

Endpoint/MCU

Endpoint: It is a point-to-point call to another endpoint.

**MCU:** The call is to a multipoint conferencing unit (MCU) in the network, or a MultiSite call hosted on an endpoint.

#### Example:

xStatus Call DeviceType
\*s Call 4 DeviceType: Endpoint

\*\* end

## xStatus Call [n] Direction

Applies to: All products

Requires user role: ADMIN, USER

States the direction of the call initiation. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Incoming/Outgoing

#### Example:

xStatus Call 27 Direction
\*s Call 27 Direction: Outgoing

\*\* end

## xStatus Call [n] DisplayName

Applies to: All products

Requires user role: ADMIN, USER

Shows the name of the remote (far end) participant in an incoming or outgoing call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

String

#### Example:

xStatus Call 27 DisplayName

\*s Call 27 DisplayName: "firstname.lastname@company.com"

\*\* end

## xStatus Call [n] Duration

Applies to: All products

Requires user role: ADMIN, USER

Shows the duration of a call (in seconds). You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Integer

#### Example:

xStatus Call 27 Duration \*s Call 27 Duration: 2354



## xStatus Call [n] Encryption Type

Cisco Collaboration Endpoint Software

Applies to: All products

Requires user role: ADMIN, USER

Shows the encryption type of the call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

None/Aes-128

### Example:

```
xStatus Call 27 Encryption Type
*s Call 27 Encryption Type: "None"
** end
```

# xStatus Call [n] FacilityServiceId

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

When calling a facility service, the facility service id is shown. Otherwise the value 0 is returned.

Value space of the result returned:

0..5

#### Example:

```
xStatus Call FacilityServiceId
*s Call 3 FacilityServiceId: 1
** end
```

## xStatus Call [n] HoldReason

Applies to: All products

Requires user role: ADMIN, USER

Shows the reason the current outgoing call was put on hold.

Value space of the result returned:

Conference/Transfer/None

Conference: On hold while the call is being merged into a conference.

Transfer: On hold while the call is being transferred.

None: All other instances.

### Example:

```
xStatus Call 2 HoldReason
*s Call 2 HoldReason: None
```

\*\* end

## xStatus Call [n] PlacedOnHold

Applies to: All products

Requires user role: ADMIN, USER

Shows the placed on hold status of the call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

True/False

### Example:

```
xStatus Call 27 PlacedOnHold *s Call 27 PlacedOnHold: False
```

## xStatus Call [n] Protocol

Applies to: All products

Requires user role: ADMIN, USER

Shows the call protocol of the incoming or outgoing call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

H320/H323/SIP/Spark/Unknown

### Example:

xStatus Call 27 Protocol
\*s Call 27 Protocol: "h323"
\*\* end

### xStatus Call [n] ReceiveCallRate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the receive bandwidth in the call in kilobits per second (kbps). You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Integer

#### Example:

xStatus Call 27 ReceiveCallRate
\*s Call 27 ReceiveCallRate: 4000
\*\* end

## xStatus Call [n] RemoteNumber

Applies to: All products

Requires user role: ADMIN, USER

Shows the remote (far end) number or URI of an incoming or outgoing call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

String

#### Example:

xStatus Call 27 RemoteNumber \*s Call 27 RemoteNumber: "5585232" \*\* end

# xStatus Call [n] Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of a call. You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Idle/Dialling/Ringing/Connecting/Connected/Disconnecting/OnHold/EarlyMedia/Preserved/RemotePreserved

#### Example:

xStatus Call 27 Status \*s Call 27 Status: Connected

## xStatus Call [n] TransmitCallRate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the transmit bandwidth in the call in kilobits per second (kbps). You can run the command xStatus Call to find the call identity.

Value space of the result returned:

Integer

### Example:

xStatus Call 27 TransmitCallRate
\*s Call 27 TransmitCallRate: 768

\*\* end

## Cameras status

## xStatus Cameras Camera [n] Capabilities Options

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the camera capabilities (ptzf = pan, tilt, zoom, focus).

Value space of the result returned:

String

#### Example:

```
xStatus Cameras Camera 1 Capabilities Options
*s Camera 1 Capabilities Options: "ptzf"
** end
```

## xStatus Cameras Camera [n] Connected

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows if the camera is connected or not.

Value space of the result returned:

True/False

```
xStatus Cameras Camera 1 Connected
*s Camera 1 Connected: True
** end
```



### xStatus Cameras Camera [n] DetectedConnector

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the connector number the camera has detected it is connected to, or shows 0 if no connection is detected.

Value space of the result returned:

Integer

#### Example:

xStatus Cameras Camera 1 DetectedConnector
\*s Cameras Camera 1 DetectedConnector: 1
\*\* end

## xStatus Cameras Camera [n] Flip

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

In Flip mode (vertical flip) the image can be flipped upside down.

Value space of the result returned:

Off/On

#### Example:

xStatus Cameras Camera 1 Flip
\*s Camera 1 Flip: "Off"
\*\* end

## xStatus Cameras Camera [n] Framerate

Applies to: RoomKit Room55

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Value space of the result returned:

Integer

## xStatus Cameras Camera [n] HardwarelD

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the hardware identity of the camera.

Value space of the result returned:

String

#### Example:

xStatus Cameras Camera 1 HardwareID \*s Camera 1 HardwareID: "50000000" \*\* end

## xStatus Camera Camera [n] LightingConditions

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Shows how the camera perceives the lighting conditions in the room.

Value space of the result returned:

Unknown/Good/Dark/Backlight

*Unknown:* The camera is turned off or does not support this functionality.

Good: The lighting is at a good level.

Dark: The lighting is too low.

Backlight: There is a high level of backlight in the image.

#### Example:

xStatus Cameras Camera 1 LightingConditions
\*s Camera 1 LightingConditions: Good
\*\* end

### xStatus Cameras Camera [n] MacAddress

Applies to: SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the MAC (Media Access Control) address for the camera.

Value space of the result returned:

String

### Example:

xStatus Cameras Camera 1 MacAddress
\*s Camera 1 MacAddress: ""
\*\* end

### xStatus Cameras Camera [n] Manufacturer

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the manufacturer of the camera

Value space of the result returned:

String

#### Example:

xStatus Cameras Camera 1 Manufacturer
\*s Camera 1 Manufacturer: "Cisco"
\*\* end

### xStatus Cameras Camera [n] Model

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the camera model.

Value space of the result returned:

String

### Example:

xStatus Cameras Camera 1 Model \*s Camera 1 Model: "Precision 40" \*\* end

## xStatus Cameras Camera [n] Position Focus

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN. INTEGRATOR, USER, ROOMCONTROL

Shows the current focus position of the camera. The value range depends on camera type.

Value space of the result returned:

0..65535

#### Example:

xStatus Cameras Camera 1 Position Focus \*s Camera 1 Position Focus: 4597 \*\* end

### xStatus Cameras Camera [n] Position Lens

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the camera's current lens position.

Value space of the result returned:

Default/Wide/Center/Left/Right

#### Example:

xStatus Cameras Camera 1 Position Lens \*s Cameras Camera 1 Position Lens: Center \*\* end

### xStatus Cameras Camera [n] Position Pan

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the current pan (move left and right) position of the camera. The value range depends on camera type.

Value space of the result returned:

-65535..65535

### Example:

xStatus Cameras Camera 1 Position Pan \*s Camera 1 Position Pan: 412

\*\* end

### xStatus Cameras Camera [n] Position Tilt

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the current tilt (move up and down) position of the camera. The value range depends on camera type.

Value space of the result returned:

-65535 65535

#### Example:

xStatus Cameras Camera 1 Position Tilt \*s Camera 1 Position Tilt: 106 \*\* end

## xStatus Cameras Camera [n] Position Zoom

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the current zoom (zoom in and out) position of the camera. The value range depends on camera type.

Value space of the result returned:

0 65535

#### Example:

xStatus Cameras Camera 1 Position Zoom

\*s Camera 1 Position Zoom: 828

### xStatus Cameras Camera [n] SerialNumber

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the camera serial number.

Value space of the result returned:

String

#### Example:

xStatus Cameras Camera 1 SerialNumber \*s Camera 1 SerialNumber: "B1AB26B00010" \*\* end

### xStatus Cameras Camera [n] SoftwareID

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the software identity of the camera.

Value space of the result returned:

String

#### Example:

xStatus Cameras Camera 1 SoftwareID
\*s Camera 1 SoftwareID: "S01718-4.0FINAL [ID:40063] 2014-10-20"
\*\* end

### xStatus Cameras PresenterTrack Availability

Applies to: SX80 MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Shows whether presenter tracking is available.

Value space of the result returned:

Off/Unavailable/Available

Off: Presenter tracking is disabled.

Unavailable: Presenter tracking is not configured correctly, camera is disconnected, or a

Multisite or Multistream call is in progress.

Available: Presenter tracking is available.

### Example:

xStatus Cameras PresenterTrack Availability
\*s Cameras PresenterTrack Availability: Available

\*\* end

### xStatus Cameras PresenterTrack PresenterDetected

Applies to: SX80 MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Shows whether presenter tracking is currently in use.

Value space of the result returned:

False/True

### Example:

xStatus Cameras PresenterTrack PresenterDetected
\*s Cameras PresenterTrack PresenterDetected: False

### xStatus Cameras PresenterTrack Status

Applies to: SX80\_MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Returns the current status for presenter tracking.

Value space of the result returned:

Off/Follow/Diagnostic/Background/Setup/Persistent

Off: Not running.

Follow: Tracking is in progress and working normally

Diagnostics: In diagnostics mode. This mode is used for troubleshooting.

**Background:** The algorithm is running when the PresenterTrack camera is not selected as the main camera. This is used in the Briefing room setup to enable automatic switching

between the different cameras.

**Setup:** Web wizard for setting up SpeakerTrack camera is active. **Persistent:** The camera is active and selected as main camera.

#### Example:

xStatus Cameras PresenterTrack Status \*s Cameras PresenterTrack Status: Off

\*\* end

### xStatus Cameras SpeakerTrack ActiveConnector

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the connector number currently chosen by SpeakerTrack.

Value space of the result returned:

Integer

#### Example:

xStatus Cameras SpeakerTrack

\*s Cameras SpeakerTrack Availability: Available

\*s Cameras SpeakerTrack Status: Active

\*\* end

### xStatus Cameras SpeakerTrack Availability

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows whether speaker tracking is available.

Value space of the result returned:

Off/Unavailable/Available

Off: Speaker tracking is turned off with the command xConfiguration Cameras SpeakerTrack Mode: Off

Unavailable: Speaker tracking hardware is not found.

**Available:** Speaker tracking hardware and the two cameras are found, and it is possible to turn speaker tracking on or off.

### Example:

xStatus Cameras SpeakerTrack Availability

\*s Cameras SpeakerTrack Availability: Unavailable

\*\* end

### xStatus Cameras SpeakerTrack Status

Applies to: SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows whether speaker tracking is set to active or inactive.

Value space of the result returned:

Active/Inactive

#### Example:

xStatus Cameras SpeakerTrack Status

\*s Cameras SpeakerTrack Status: Active

# Capabilities status

### xStatus Capabilities Conference MaxActiveCalls

Applies to: All products

Requires user role: ADMIN, USER

Shows the maximum number of simultaneous active calls. Calls that are set on hold/transfer are not counted as active.

Value space of the result returned:

0..5

### Example:

xStatus Capabilities Conference MaxNumberOfActiveCalls
\*s Capabilities Conference MaxNumberOfActiveCalls: 3
\*\* end

### xStatus Capabilities Conference MaxAudioCalls

Applies to: All products

Requires user role: ADMIN, USER

Shows the maximum number of simultaneous audio calls that is supported.

Value space of the result returned:

Integer

#### Example:

xStatus Capabilities Conference MaxAudioCalls
\*s Capabilities Conference MaxAudioCalls: 3

\*\* end

### xStatus Capabilities Conference MaxCalls

Applies to: All products

Requires user role: ADMIN, USER

Shows the maximum number of simultaneous calls.

Value space of the result returned:

0..5

#### Example:

xStatus Capabilities Conference MaxCalls
\*s Capabilities Conference MaxCalls: 3
\*\* end

### xStatus Capabilities Conference MaxVideoCalls

Applies to: All products

Requires user role: ADMIN, USER

Shows the maximum number of simultaneous video calls that is supported.

Value space of the result returned:

Integer

### Example:

xStatus Capabilities Conference MaxVideoCalls
\*s Capabilities Conference MaxVideoCalls: 3
\*\* end



## Conference status

### xStatus Conference ActiveSpeaker CallId

Applies to: All products

Requires user role: ADMIN, USER

Shows the CallId of the current active speaker.

Value space of the result returned:

Integer

#### Example:

xStatus Conference ActiveSpeaker CallId \*s Conference ActiveSpeaker CallId: 3 \*\* end

# xStatus Conference Call [n] BookingId

Applies to: All products

Requires user role: ADMIN, USER

Shows the booking ID of a conference (if assigned). The booking ID can be used for easy identification of a call or conference.

Value space of the result returned:

String

#### Example:

xStatus Conference Call 2 BookingId
\*s Conference Call 2 BookingId: "MyConference"
\*\* end

## xStatus Conference Call [n] Capabilities FarendMessage Mode

Applies to: All products

Requires user role: ADMIN, USER

Not applicable in this release.

Value space of the result returned:

On/Off

#### Example:

xStatus Conference Call Capabilities FarendMessage Mode \*s Conference Call 4 Capabilities FarendMessage Mode: Off \*\* end

### xStatus Conference Call [n] Capabilities FECC Mode

Applies to: All products

Requires user role: ADMIN, USER

Shows whether or not you have permission to control the input sources at a far end site.

Value space of the result returned:

On/Off

On: Far end input source control is permitted.

Off: Far end input source control is not permitted.

#### Example:

xStatus Conference Call 2 Capabilities FECC Mode \*s Conference Call 2 Capabilities FECC Mode: On \*\* end

### xStatus Conference Call [n] Capabilities FECC NumberOfPresets

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of presets available for the input sources at a far end site.

Value space of the result returned:

1..15

### Example:

```
xStatus Conference Call 2 Capabilities FECC NumberOfPresets
*s Conference Call 2 Capabilities FECC NumberOfPresets: 15
** end
```

### xStatus Conference Call [n] Capabilities FECC NumberOfSources

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of input sources that can be connected at a far end site.

Value space of the result returned:

1..5

#### Example:

```
xStatus Conference Call 2 Capabilities FECC NumberOfSources
*s Conference Call 2 Capabilities FECC NumberOfSources: 5
** end
```

### xStatus Conference Call [n] Capabilities FECC Source [n] Name

Applies to: All products

Requires user role: ADMIN, USER

Shows the name of an input source that can be connected at a far end site.

Value space of the result returned:

String

### Example:

```
xStatus Conference Call 2 Capabilities FECC Source 1 Name
*s Conference Call 2 Capabilities FECC Source 1 Name: "Main camera"
** end
```

### xStatus Conference Call [n] Capabilities FECC Source [n] Options

Applies to: All products

Requires user role: ADMIN, USER

Shows available options for an input source that can be connected at a far end site (for a camera: p=pan; t=tilt; z=zoom; f=focus).

Value space of the result returned:

String

```
xStatus Conference Call 2 Capabilities FECC Source 1 Options
*s Conference Call 2 Capabilities FECC Source 1 Options: "ptzf"
** end
```

## xStatus Conference Call [n] Capabilities FECC Source [n] Sourceld

Applies to: All products

Requires user role: ADMIN, USER

Shows the ID of an input source that can be connected at a far end site.

Value space of the result returned:

Integer

### Example:

xStatus Conference Call 2 Capabilities FECC Source 1 SourceId \*s Conference Call 2 Capabilities FECC Source 1 SourceId: 6

### xStatus Conference Call [n] Capabilities Hold

Applies to: All products

Requires user role: ADMIN, USER

Indicates whether the far-end site can be placed on hold or not.

Value space of the result returned:

True/False

### Example:

xStatus Conference Call Capabilities Hold \*s Conference Call 2 Capabilities Hold: True \*\* end

### xStatus Conference Call [n] Capabilities IxChannel Status

Applies to: All products

Requires user role: ADMIN, USER

Not applicable in this release.

Value space of the result returned:

Active/Failed/Off

#### Example:

xStatus Conference Call 4 Capabilities IxChannel Status
\*s Conference Call 4 Capabilities IxChannel Status: Active
\*\* end

### xStatus Conference Call [n] Capabilities Presentation

Applies to: All products

Requires user role: ADMIN, USER

Lists the presentation capabilities for other participants in the conference.

Value space of the result returned:

True/False

#### Example:

xStatus Conference Call 2 Capabilities Presentation
\*s Conference Call 2 Capabilities Presentation: True
\*\* end

### xStatus Conference Call [n] Manufacturer

Applies to: All products

Requires user role: ADMIN, USER

Shows the manufacturer of the video system at a far end site.

Value space of the result returned:

String

### Example:

xStatus Conference Call 2 Manufacturer
\*s Conference Call 2 Manufacturer: "Cisco"

### xStatus Conference Call [n] MicrophonesMuted

Applies to: All products

Requires user role: ADMIN, USER

Lists the audio mute status for other participants in the conference.

Value space of the result returned:

True/False

#### Example:

```
xStatus Conference Call 2 MicrophonesMuted
*s Conference Call 2 MicrophonesMuted: True
** end
```

### xStatus Conference Call [n] SoftwareID

Applies to: All products

Requires user role: ADMIN, USER

Shows the ID of the software running of the video system at a far end site.

Value space of the result returned:

String

### Example:

xStatus Conference Call 2 SoftwareID
\*s Conference Call 2 SoftwareID: "CE8"
\*\* end

### xStatus Conference DoNotDisturb

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether DoNotDisturb mode is switched on or not.

Value space of the result returned:

Active/Inactive

### Example:

xStatus Conference DoNotDisturb
\*s Conference DoNotDisturb: Inactive
\*\* end

## xStatus Conference Line [n] Mode

Applies to: All products

Requires user role: ADMIN, USER

Indicates whether the system is configured as private or shared line on CUCM.

Value space of the result returned:

Shared/Private

#### Example:

xStatus Conference Line Mode \*s Conference Line 1 Mode: Private

\*\* end

### xStatus Conference Multipoint Mode

Applies to: All products

Requires user role: ADMIN, USER

Shows how the Multipoint video conferences are handled.

Value space of the result returned:

Auto/CUCMMediaResourceGroupList/MultiSite/Off

Auto: The multipoint method available will be choosen automatically; if none are available the

Multipoint Mode will automatically be set to Off. If both MultiWay and MultiSite are available, the MultiWay service takes priority over the built-in MultiSite.

Off: Multiparty conferences are not allowed.

*MultiSite:* Multiparty conferences are set up using the built-in MultiSite feature. If MultiSite is chosen when the MultiSite feature is not available, the Multipoint Mode will automatically be set to Off.

**CUCMMediaResourceGroupList:** Multiparty conferences (ad hoc conferences) are hosted by the CUCM configured conference bridge. This setting is provisioned by CUCM in a CUCM environment and should never be set manually by the user.

### Example:

xStatus Conference Multipoint Mode
\*s Conference Multipoint Mode: "Auto"

\*\* end

### xStatus Conference Presentation CallId

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the identity of the system that sends the presentation.

Value space of the result returned:

Integer

### Example:

xStatus Conference Presentation CallId \*s Conference Presentation CallId: 0

\*\* end

### xStatus Conference Presentation LocalInstance [n] SendingMode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows whether a presentation source is shared locally or with a remote participant. There can be multiple local presentations which all have their own instance.

Value space of the result returned:

LocalOnly/LocalRemote/Off

#### Example:

xStatus Conference Presentation LocalInstance 1 SendingMode

\*s Conference Presentation LocalInstance 1 SendingMode: LocalOnly

### xStatus Conference Presentation LocalInstance [n] Source

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the Sourceld for a current presentation. There can be multiple local presentations which all have their own instance.

Value space of the result returned:

Integer

### Example:

xStatus Conference Presentation LocalInstance 1 Source \*s Conference Presentation LocalInstance 1 Source: 1 \*\* end

### xStatus Conference Presentation Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the status of the secondary video stream.

Value space of the result returned:

Off/Sending/Receiving

#### Example:

xStatus Conference Presentation Mode \*s Conference Presentation Mode: Off

\*\* end

### xStatus Conference SpeakerLock CallId

Applies to: All products

Requires user role: ADMIN, USER

Shows the CallId for the participant locked as the prominent speaker in the conference.

Value space of the result returned:

Integer

#### Example:

xStatus Conference SpeakerLock CallId \*s Conference SpeakerLock CallId: 0 \*\* end

### xStatus Conference SpeakerLock Mode

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the speaker lock is enabled or not.

Value space of the result returned:

On/Off

#### Example:

xStatus Conference SpeakerLock Mode \*s Conference SpeakerLock Mode: Off



# Diagnostics status

### xStatus Diagnostics Message [n] Description

Applies to: All products

Requires user role: ADMIN, USER

Shows a description of the current diagnostics alerts.

Value space of the result returned:

String

### Example:

xStatus Diagnostics Message Description
\*s DiagnosticsResult Message 1 Description: "IP configuration incomplete"

\*\* end

### xStatus Diagnostics Message [n] Level

Applies to: All products

Requires user role: ADMIN, USER

Shows the level of importance of the diagnostics message.

Value space of the result returned:

Error/Warning/Critical

*Error:* There is an error in the system. The system can still be used, but there can be some restrictions.

Warning: A problem is detected and a more specific report follows indicating the exact problem.

Critical: The warning level is critical. The system cannot be used.

### Example:

```
xStatus Diagnostics Message 4 Level
*s Diagnostics Message 4 Level: Warning
** end
```

### xStatus Diagnostics Message [n] References

Applies to: All products

Requires user role: ADMIN, USER

Additional information on the diagnostics alert, if available.

Value space of the result returned:

String

#### Example:

xStatus Diagnostics Message 10 References

\*s Diagnostics Message 10 References: "delay=190"

### xStatus Diagnostics Message [n] Type

Applies to: All products

Requires user role: ADMIN, USER

Shows information on the results of the latest diagnostics on the system.

Value space of the result returned:

ANATOnVCS/AbnormalCallTermination/AudioInternalSpeakerDisabled/ AudioPairingInterference/AudioPairingNoise/AudioPairingRate/ AudioPairingSNR/AudioPairingTokenDecode/CAPFOperationState/ CTLinstallation/CUCMVendorConfigurationFile/CallProtocolDualStackConfig/ CallProtocollPStackPlatformCompatibility/CallProtocolVcsProvisioningCompatibility/ CameraDetected/CameraId/CameraPairing/CameraSerial/CameraSoftwareVersion/ CameraStatus/CamerasDetected/CaptivePortalDetected/CertificateExpiry/ConfigurationFile/ ContactInfoMismatch/ControlSystemConnection/DefaultCallProtocolRegistered/ ECReferenceDelay/EthernetDuplexMatches/FanStatus/FirstTimeWizardNotCompleted/ H320GatewayStatus/H323GatekeeperStatus/HasActiveCallProtocol/HasValidReleaseKey/ HdmiCecModeNoSound/HTTPFeedbackFailed/HTTPSModeSecurity/IPv4Assignment/ IPv6Assignment/IPv6Mtu/ISDNLinkCompatibility/ISDNLinklpStack/ITLinstallation/ InvalidSIPTransportConfig/IpCameraStatus/LockDown/MacrosRuntimeStatus/ MediaBlockingDetected/MediaPortRangeNegative/MediaPortRangeOdd/ MediaPortRangeOverlap/MediaPortRangeTooSmall/MediaPortRangeValueSpace/ MicrophoneReinforcement/MicrophonesConnected/MonitorDelay/NTPStatus/NetLinkStatus/ NetSpeedAutoNegotiated/NetworkQuality/OSDVideoOutput/OutputConnectorLocations/ PeripheralSoftwareVersion/PlatformSanity/PresentationSourceSelection/PresenterTrack/ ProvisioningDeveloperOptions/ProvisioningModeAndStatus/ProvisioningStatus/ RoomControl/SIPEncryption/SIPListenPortAndOutboundMode/SIPListenPortAndRegistration/ SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/ SipIceAndAnatConflict/SipOrH323ButNotBothEnabled/SoftwareUpgrade/ SpeakerTrackEthernetConnection/SpeakerTrackFrontPanelMountedCorrectly/ SpeakerTrackMicrophoneConnection/SpeakerTrackVideoInputs/TCPMediaFallback/ TLSVerifyRequiredCerts/TemperatureCheck/TouchPanelConnection/TurnBandwidth/ UltrasoundConfigSettings/UltrasoundSpeakerAvailability/ValidPasswords/ VideoFromInternalCamera/VideoInputSignalQuality/VideoInputStability/ VideoPortRangeNegative/VideoPortRangeOdd/VideoPortRangeTooSmall/ VideoPortRangeValueSpace/MicrophoneOverloaded/WebexActivationRequired/ WebexConnectivity/WebexOffline/WifiCARequired

#### Example:

xStatus Diagnostics Message Type
\*s Diagnostics Message 1 Type: CamerasDetected
\*\* end

## **GPIO** status

## xStatus GPIO Pin [n] State

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows the current state of each of the four GPIO pins.

Value space of the result returned:

High/Low

*High:* +12V, the default state. *Low:* 0V, when activated.

#### Example:

xStatus GPIO Pin 1 State \*s GPIO Pin 1 State: High

## H323 status

### xStatus H323 Gatekeeper Address

Applies to: All products

Requires user role: ADMIN, USER

Displays the IP address of the gatekeeper where the system is registered.

Value space of the result returned:

String

### Example:

xStatus H323 Gatekeeper Address
\*s H323 Gatekeeper Address: "192.0.1.20"
\*\* end

### xStatus H323 Gatekeeper Port

Applies to: All products

Requires user role: ADMIN, USER

Shows the port which is used when connecting to on the gatekeeper.

Value space of the result returned:

Integer

### Example:

```
xStatus H323 Gatekeeper Port
*s H323 Gatekeeper Port: 1719
```

\*\* end

### xStatus H323 Gatekeeper Reason

Applies to: All products

Requires user role: ADMIN, USER

Shows the reason for rejected registration.

Value space of the result returned:

String

#### Example:

xStatus H323 Gatekeeper Reason \*s H323 Gatekeeper Reason: "" \*\* end

## xStatus H323 Gatekeeper Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the gatekeeper registration status.

Value space of the result returned:

Required/Discovering/Discovered/Authenticating/Authenticated/Registering/Registered/Inactive/Rejected

```
xStatus H323 Gatekeeper Status
*s H323 Gatekeeper Status: Registered
** end
```



### xStatus H323 Mode Reason

Applies to: All products

Requires user role: ADMIN, USER

Shows whether there is a conflict between H.323 settings and xStatus H323 Mode Status.

Value space of the result returned:

### String

"": When H.323 is set to On and there is no conflict between H.323 Mode configuration and the rest of the system settings.

"SIP is enabled": When H.323 Mode is set to On and SIP is enabled on a system that does not support the two simultaneously.

"Not available": When a system does not support H.323.

### Example:

xStatus H323 Mode Reason \*s H323 Mode Reason: "" \*\* end

### xStatus H323 Mode Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status for H.323 registration.

Value space of the result returned:

Enabled/Disabled

Enabled: Registration is enabled.

Disabled: Registration is disable, because SIP is enabled.

#### Example:

```
xStatus H323 Mode Status
*s H323 Mode Status: "Disabled"
** end
```

# HttpFeedback status

## xStatus HttpFeedback [n] Expression [n]

Applies to: All products

Requires user role: ADMIN, USER

Shows the feedback from the HTTP server. There can be up to 4 slots of servers requesting HTTP feedback and up to 15 expressions for each URL. See the xCommand HttpFeedback commands for more information.

Value space of the result returned:

String

## xStatus HttpFeedback [n] Format

Applies to: All products

Requires user role: ADMIN, USER

Shows the format of the HTTP Feedback feedback from the HTTP server.

Value space of the result returned:

XML/JSON

#### Example:

xStatus HttpFeedback 1 Format \*s HttpFeedback 1 Format: XML \*\* end



### xStatus HttpFeedback [n] Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of the feedback sent to the HTTP server.

Value space of the result returned:

OK/Failed

OK: Shows that the feedback has been successfully sent.

Cisco Collaboration Endpoint Software

Failed: Shows that the feedback has not been successfully sent.

### Example:

xStatus HttpFeedback 1 Status
\*s HttpFeedback 1 Status: OK
\*\* end

### xStatus HttpFeedback [n] URL

Applies to: All products

Requires user role: ADMIN, USER

Shows the URL (Uniform Resource Locator) of the HTTP server. There can be up to three HTTP servers, specified by the URL.

Value space of the result returned:

String

### Example:

xStatus HttpFeedback 1 URL

\*s HttpFeedback 1 URL: "http://tms.company.com/tms/public/feedback/code.aspx"

\*\* end

## MediaChannels status

## xStatus MediaChannels Call [n] Channel [n] Audio Channels

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of incoming or outgoing audio channels.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 Audio Channels \*s MediaChannels Call 27 Channel 327 Audio Channels: 1 \*\* end

## xStatus MediaChannels Call [n] Channel [n] Audio Mute

Applies to: All products

Requires user role: ADMIN, USER

Audio mute status of the incoming audio.

Value space of the result returned:

True/False

### Example:

xStatus MediaChannels Call 27 Channel 327 Audio Mute
\*s MediaChannels Call 27 Channel 327 Audio Mute: False
\*\* end

## xStatus MediaChannels Call [n] Channel [n] Audio Protocol

Applies to: All products

Requires user role: ADMIN, USER

Shows the audio algorithm of the incoming or outgoing audio.

Value space of the result returned:

AACLD/G711A/G711Mu/G722/G7221/G7221C/G723\_1/G728/G729/G729A/G729AB/Off/Opus

AACLD: The AAC-LD is an MPEG-4 Low Delay Audio Coder audio compression format.

G711A: The G.711 A-law algorithm is an ITU-T standard for audio compression.

G711Mu: The G.711 Mu-law algorithm is an ITU-T standard for audio compression.

G722: The G.722 algorithm is an ITU-T standard for audio compression.

G7221: The G.722.1 algorithm is an ITU-T standard for audio compression.

G7221C: The G.722.1 annex C algorithm is an ITU-T standard for audio compression.

G723\_1: The G.723.1 algorithm is an ITU-T standard for audio compression.

G728: The G.728 algorithm is an ITU-T standard for audio compression.

G729: The G.729 algorithm is an ITU-T standard for audio compression.

G729A: The G.729 annex A algorithm is an ITU-T standard for audio compression.

G729AB: The G.729 annex A and B algorithm is an ITU-T standard for audio compression.

Off: No audio.

Opus: Opus is a royalty-free IETF standard for audio compression.

#### Example:

xStatus MediaChannels Call 27 Channel 327 Audio Protocol

\*s MediaChannels Call 27 Channel 327 Audio Protocol: AACLD

\*\* end

### xStatus MediaChannels Call [n] Channel [n] Direction

Applies to: All products

Requires user role: ADMIN, USER

Shows the direction of the call.

Value space of the result returned:

Incoming/Outgoing

#### Example:

xStatus MediaChannels Call 27 Channel 327 Direction
\*s MediaChannels Call 27 Channel 327 Direction: Incoming

\*\* en

### xStatus MediaChannels Call [n] Channel [n] Encryption

Applies to: All products

Requires user role: ADMIN, USER

Shows the encryption status for audio or video on the incoming or outgoing call.

Value space of the result returned:

On/Off

#### Example:

xStatus MediaChannels Call 27 Channel 327 Encryption

\*s MediaChannels Call 27 Channel 327 Encryption: On

## xStatus MediaChannels Call [n] Channel [n] NetStat Bytes

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of bytes for audio, video or data on the incoming or outgoing channel.

Value space of the result returned:

Integer

### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat Bytes
\*s MediaChannels Call 27 Channel 327 NetStat Bytes: 496640

\*\* end

### xStatus MediaChannels Call [n] Channel [n] NetStat ChannelRate

Applies to: All products

Requires user role: ADMIN, USER

Shows the bandwidth for audio, video or data on the incoming or outgoing channel.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat ChannelRate \*s MediaChannels Call 27 Channel 327 NetStat ChannelRate: 128000

\*\* end

## xStatus MediaChannels Call [n] Channel [n] NetStat Jitter

Applies to: All products

Requires user role: ADMIN, USER

Shows the jitter for audio, video or data at the present moment on the incoming or outgoing channel, as specified by RFC 3550.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat Jitter \*s MediaChannels Call 27 Channel 327 NetStat Jitter: 2 \*\* end

## xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalLost

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of packets lost for audio, video or data during the last interval on the incoming or outgoing channels.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat LastIntervalLost \*s MediaChannels Call 27 Channel 327 NetStat LastIntervalLost: 0 \*\* end

### xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of packets received for audio, video or data during the last interval on the incoming or outgoing channels.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat LastIntervalReceived \*s MediaChannels Call 27 Channel 327 NetStat LastIntervalReceived: 289 \*\* end

## xStatus MediaChannels Call [n] Channel [n] NetStat Loss

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of packets lost for audio, video or data on the incoming or outgoing channels.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat Loss \*s MediaChannels Call 27 Channel 327 NetStat Loss: 0 \*\* end

### xStatus MediaChannels Call [n] Channel [n] NetStat MaxJitter

Applies to: All products

Requires user role: ADMIN, USER

Shows the maximum jitter for audio, video or data that has been measured during last interval (about 5 seconds).

Value space of the result returned:

Integer

### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat MaxJitter \*s MediaChannels Call 27 Channel 327 NetStat MaxJitter: 2 \*\* end

### xStatus MediaChannels Call [n] Channel [n] NetStat Packets

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of packets that was received or sent for audio, video or data on the incoming or outgoing channels.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 NetStat Packets
\*s MediaChannels Call 27 Channel 327 NetStat Packets: 1551
\*\* end

### xStatus MediaChannels Call [n] Channel [n] ParticipantId

Applies to: All products

Requires user role: ADMIN, USER

Shows the ID of the Active Control participant on the incoming audio or video channel.

Value space of the result returned:

String

### Example:

xStatus MediaChannels Call 27 Channel 327 ParticipantId \*s MediaChannels Call 27 Channel 327 ParticipantId: ""

## xStatus MediaChannels Call [n] Channel [n] Type

Applies to: All products

Requires user role: ADMIN, USER

Shows the media type on the incoming or outgoing channel.

Value space of the result returned:

Audio/Video/Data

Audio: The media type on the incoming or outgoing channel is audio.Video: The media type on the incoming or outgoing channel is video.Data: The media type on the incoming or outgoing channel is data.

#### Example:

xStatus MediaChannels Call 27 Channel 327 Type
\*s MediaChannels Call 27 Channel 327 Type: Audio
\*\* end

### xStatus MediaChannels Call [n] Channel [n] Video ChannelRole

Applies to: All products

Requires user role: ADMIN, USER

Shows the role of the incoming or outgoing video channel.

Value space of the result returned:

Main/Presentation

*Main:* The main video is on the incoming or outgoing video channel.

Presentation: The presentation is on the incoming or outgoing video channel.

#### Example:

xStatus MediaChannels Call 27 Channel 327 Video ChannelRole \*s MediaChannels Call 27 Channel 327 Video ChannelRole: Main \*\* end

## xStatus MediaChannels Call [n] Channel [n] Video FrameRate

Applies to: All products

Requires user role: ADMIN, USER

Shows the frame rate of the incoming or outgoing video channel.

Value space of the result returned:

Integer

### Example:

xStatus MediaChannels Call 27 Channel 327 Video FrameRate
\*s MediaChannels Call 27 Channel 327 Video FrameRate: 30
\*\* end

## xStatus MediaChannels Call [n] Channel [n] Video Protocol

Applies to: All products

Requires user role: ADMIN, USER

Shows the video algorithm of the incoming or outgoing video channel.

Value space of the result returned:

H261/H263/H263p/H263pp/H264/HEVC/JPEG/MP4V/Off

*H261:* The H.261 algorithm is an ITU-T standard for video compression.

H263: The H.263 algorithm is an ITU-T standard for video compression.

H263p: The H.263p (H.263+) algorithm is an ITU-T standard for video compression.

*H263pp:* The H.263pp (H.263++) algorithm is an ITU-T standard for video compression.

H264: The H.264 algorithm (MPEG-4 AVC) is an ITU-T and ISE/IEC standard for video

compression.

HEVC: The HEVC (H.265) algorithm (MPEG-H part 2) is an ITU-T and ISE/IEC standard for wides as marrosism.

video compression.

JPEG: The JPEG algorithm is an ISO/IEC standard for video compression.

MP4V: The MP4V format is an ISO/IEC file format for video compression.

Off: No video.

### Example:

xStatus MediaChannels Call 27 Channel 327 Video Protocol \*s MediaChannels Call 27 Channel 327 Video Protocol: H264

\*\* end

### xStatus MediaChannels Call [n] Channel [n] Video ResolutionX

Applies to: All products

Requires user role: ADMIN, USER

Shows the width (resolution in direction X) of the incoming or outgoing video.

Value space of the result returned:

Integer

### Example:

xStatus MediaChannels Call 27 Channel 327 Video ResolutionX

\*s MediaChannels Call 27 Channel 327 Video ResolutionX: 1920

\*\* end

## xStatus MediaChannels Call [n] Channel [n] Video ResolutionY

Applies to: All products

Requires user role: ADMIN, USER

Shows the width (resolution in direction Y) of the incoming or outgoing video.

Value space of the result returned:

Integer

#### Example:

xStatus MediaChannels Call 27 Channel 327 Video ResolutionY \*s MediaChannels Call 27 Channel 327 Video ResolutionY: 1080



# Network status

### xStatus Network [n] CDP Address

Applies to: All products

Requires user role: ADMIN, USER

Returns the first network address of both receiving and sending devices.

Value space of the result returned:

String

#### Example:

xStatus Network CDP Address

\*s Network 1 CDP Address: "192.0.1.20"

\*\* end

### xStatus Network [n] CDP Capabilities

Applies to: All products

Requires user role: ADMIN, USER

Describes the functional capability for the switch in form of a device type. See documentation for CDP protocol for more information.

Value space of the result returned:

String

#### Example:

xStatus Network CDP Capabilities
\*s Network 1 CDP Capabilities: "0x0029"

\*\* end

## xStatus Network [n] CDP DeviceId

Applies to: All products

Requires user role: ADMIN, USER

Identifies the name of the switch in form of a character string.

Value space of the result returned:

String

#### Example:

```
xStatus Network CDP DeviceId
```

\*s Network 1 CDP DeviceId: "123456.company.com"

\*\* end

### xStatus Network [n] CDP Duplex

Applies to: All products

Requires user role: ADMIN, USER

Indicates the status (duplex configuration) of the CDP broadcast interface. Used by network operators to diagnose connectivity problems between adjacent network elements.

Value space of the result returned:

String

#### Example:

```
xStatus Network CDP Duplex
*s Network 1 CDP Duplex: "Full"
```

## xStatus Network [n] CDP Platform

Applies to: All products

Requires user role: ADMIN, USER

Returns the hardware platform name of the switch connected to the endpoint.

Value space of the result returned:

String

### Example:

```
xStatus Network CDP Platform
*s Network 1 CDP Platform: "cisco WS-C3750X-48P"
** and
```

## xStatus Network [n] CDP PortID

Applies to: All products

Requires user role: ADMIN, USER

Returns the identification the switch uses of the port the endpoint is connected to.

Value space of the result returned:

String

#### Example:

```
xStatus Network CDP PortID
*s Network 1 CDP PortID: "GigabitEthernet1/0/23"
** end
```

### xStatus Network [n] CDP PrimaryMgmtAddress

Applies to: All products

Requires user role: ADMIN, USER

Returns the management address used to configure and monitor the switch the endpoint is connected to.

Value space of the result returned:

String

#### Example:

```
xStatus Network CDP PrimaryMgmtAddress
*s Network 1 CDP PrimaryMgmtAddress: "10.1.1.2"
** end
```

## xStatus Network [n] CDP SysName

Applies to: All products

Requires user role: ADMIN, USER

Returns the SysName as configured in the switch the endpoint is connected to.

Value space of the result returned:

String

```
xStatus Network CDP SysName
*s Network 1 CDP SysName: ""
** end
```

### xStatus Network [n] CDP SysObjectID

Applies to: All products

Requires user role: ADMIN, USER

Returns the SysObjectID as configured in the switch the endpoint is connected to.

Value space of the result returned:

String

### Example:

xStatus Network CDP SysObjectID
\*s Network 1 CDP SysObjectID: ""
\*\* end

### xStatus Network [n] CDP Version

Applies to: All products

Requires user role: ADMIN, USER

Returns information about the software release version the switch is running.

Value space of the result returned:

String

#### Example:

xStatus Network 1 CDP Version

\*s Network 1 CDP Version: "Cisco IOS Software, C3560CX Software (C3560CX-UNIVERSALK9-M), Version 15.2(3)E, RELEASE SOFTWARE (fc4)\*Technical Support: http://www.cisco.com/techsupport\*Copyright (c) 1986-2014 by Cisco Systems, Inc.\*Compiled Sun 07-Dec-14 13:15 by prod rel team"

\*\* end

## xStatus Network [n] CDP VoIPApplianceVlanID

Applies to: All products

Requires user role: ADMIN, USER

Identifies the VLAN used for VoIP traffic from the endpoint to the switch. For more information see documentation of the IEEE 802.1Q protocol.

Value space of the result returned:

String

#### Example:

```
xStatus Network CDP VoIPApplianceVlanID
*s Network 1 CDP VoIPApplianceVlanID: "300"
** end
```

## xStatus Network [n] CDP VTPMgmtDomain

Applies to: All products

Requires user role: ADMIN, USER

Returns the switch's configured VTP management domain name-string.

Value space of the result returned:

String

```
xStatus Network CDP VTPMgmtDomain
*s Network 1 CDP VTPMgmtDomain: "anyplace"
** end
```

## xStatus Network [n] DNS Domain Name

Applies to: All products

Requires user role: ADMIN, USER

Shows the domain name.

Value space of the result returned:

String

### Example:

```
xStatus Network 1 DNS Domain Name
*s Network 1 DNS Domain Name: "www.example.com www.example.int"
** end
```

## xStatus Network [n] DNS Server [n] Address

Applies to: All products

Requires user role: ADMIN, USER

Shows the IP address of the DNS server.

Value space of the result returned:

String

#### Example:

```
xStatus Network 1 DNS Server 1. Address
*s Network 1 DNS Server 1 Address: "192.0.2.60"
** end
```

### xStatus Network [n] Ethernet MacAddress

Applies to: All products

Requires user role: ADMIN, USER

Shows the MAC (Media Access Control) address for the Ethernet interface.

Value space of the result returned:

String

#### Example:

```
xStatus Network 1 Ethernet MacAddress
*s Network 1 Ethernet MacAddress: "00:50:60:02:FD:C7"
** end
```

### xStatus Network [n] Ethernet Speed

Applies to: All products

Requires user role: ADMIN, USER

Shows the Ethernet speed in Mbps. The speed can be in full-duplex or half-duplex.

Value space of the result returned:

10half/10full/100half/100full/1000full

```
xStatus Network 1 Ethernet Speed
*s Network 1 Ethernet Speed: "100full"
** end
```

## xStatus Network [n] IPv4 Address

Applies to: All products

Requires user role: ADMIN, USER

Shows the IPv4 address that uniquely identifies this system.

Value space of the result returned:

String

### Example:

```
xStatus Network 1 IPv4 Address
*s Network 1 IPv4 Address: "192.0.2.149"
** end
```

### xStatus Network [n] IPv4 Gateway

Applies to: All products

Requires user role: ADMIN, USER

Shows the address of the IPv4 gateway.

Value space of the result returned:

String

#### Example:

```
xStatus Network 1 IPv4 Gateway
*s Network 1 IPv4 Gateway: "192.0.2.10"
** end
```

### xStatus Network [n] IPv4 SubnetMask

Applies to: All products

Requires user role: ADMIN, USER

Shows the subnet mask which determines which subnet an IPv4 address belongs to.

Value space of the result returned:

String

#### Example:

```
xStatus Network 1 IPv4 SubnetMask
*s Network 1 IPv4 SubnetMask: "255.255.255.0"
** end
```

## xStatus Network [n] IPv6 Address

Applies to: All products

Requires user role: ADMIN, USER

Shows the IPv6 address that uniquely identifies this system.

Value space of the result returned:

String

```
xStatus Network 1 IPv6 Address
*s Network 1 IPv6 Address: ""
** end
```

# xStatus Network [n] IPv6 Gateway

Applies to: All products

Requires user role: ADMIN, USER

Shows the address of the IPv6 gateway.

Value space of the result returned:

String

### Example:

xStatus Network 1 IPv6 Gateway
\*s Network 1 IPv6 Gateway: ""
\*\* end

## xStatus Network [n] IPv6 LinkLocalAddress

Applies to: All products

Requires user role: ADMIN, USER

Shows the IPv6 link local address that is displayed on the primary user interface.

Value space of the result returned:

String

### Example:

```
xStatus Network 1 IPv6 LinkLocalAddress
*s Network 1 IPv6 LinkLocalAddress: "2001:DB8:0000:0000:0000:0000:00001"
** end
```

### xStatus Network [n] VLAN Voice VlanId

Applies to: All products

Requires user role: ADMIN, USER

The feedback shows the VLAN Voice ID.

Value space of the result returned:

Off/1..4094

Off: The VLAN Voice Mode is not enabled.

1..4094: VLAN Voice ID

### Example:

xStatus Network 1 VLAN Voice VlanId
\*s Network 1 VLAN Voice VlanId: "Off"
\*\* end

## NetworkServices status

### xStatus NetworkServices NTP CurrentAddress

Applies to: All products

Requires user role: ADMIN, USER

Returns the address of the NTP server that is currently in use.

Value space of the result returned:

String

#### Example:

xStatus NetworkServices NTP CurrentAddress

\*s NetworkServices NTP CurrentAddress: "123.254.15.121"

\*\* end

## xStatus NetworkServices NTP Server [n] Address

Applies to: All products

Requires user role: ADMIN, USER

Returns the address of the NTP server(s) the codec is using.

Value space of the result returned:

String

### Example:

xStatus NetworkServices NTP Address

\*s NetworkServices NTP Address: "12.104.193.12 64.104.222.16 144.254.15.121"

\*\* end

### xStatus NetworkServices NTP Status

Applies to: All products

Requires user role: ADMIN, USER

Returns the status of the endpoints synchronizing with the NTP server.

Value space of the result returned:

Discarded/Synced/NotSynced/Unknown/Off

**Discarded:** The NTP result has been discarded. **Synced:** The system is in sync with the NTP server.

NotSynced: The system is not in sync with the NTP server.

Unknown: The state of the synchronization is unknown.

Off: No synchronization with the NTP server.

### Example:

xStatus NetworkServices NTP Status
\*s NetworkServices NTP Status: Synced

# Peripherals status

## xStatus Peripherals ConnectedDevice [n] HardwareInfo

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows hardware information about connected device.

Value space of the result returned:

String

#### Example:

xStatus Peripherals ConnectedDevice 1007 HardwareInfo \*s Peripherals ConnectedDevice 1007 HardwareInfo: "1122330-0" \*\* end

### xStatus Peripherals ConnectedDevice [n] ID

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the MAC-address of the connected device.

Value space of the result returned:

String

### Example:

xStatus Peripherals ConnectedDevice 1007 ID
\*s Peripherals ConnectedDevice 1007 ID: "00:10:20:20:be:21"
\*\* end

### xStatus Peripherals ConnectedDevice [n] Name

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the product name of connected device.

Value space of the result returned:

String

#### Example:

xStatus Peripherals ConnectedDevice 1007 Name
\*s Peripherals ConnectedDevice 1007 Name: "Cisco TelePresence Touch"
\*\* ord

### xStatus Peripherals ConnectedDevice [n] SoftwareInfo

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows information of the software version running on the connected device.

Value space of the result returned:

String

### Example:

xStatus Peripherals ConnectedDevice 1007 SoftwareInfo
\*s Peripherals ConnectedDevice 1007 SoftwareInfo: "TI7.2.0"
\*\* end

### xStatus Peripherals ConnectedDevice [n] Status

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows peripheral devices that are currently connected to the endpoint.

Value space of the result returned:

Connected/ResponseTimedOut

#### Example:

xStatus Peripherals ConnectedDevice 1001 Status

\*s Peripherals ConnectedDevice 1001 Status: Connected

\*\* end

### xStatus Peripherals ConnectedDevice [n] Type

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the peripheral types that are connected to the endpoint.

Note: The value space Camera only shows Precision 60 cameras.

Value space of the result returned:

Byod/Camera/ControlSystem/InputDevice/ISDNLink/Other/SpeakerTrack/TouchPanel

#### Example:

xStatus Peripherals ConnectedDevice 1001 Type

\*s Peripherals ConnectedDevice 1001 Type: TouchPanel

\*\* end

### xStatus Peripherals ConnectedDevice [n] UpgradeFailureReason

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows that a connected device has failed during an upgrade and provides a reason.

Value space of the result returned:

String

Describes the reason for the upgrade failure.

#### Example:

```
xStatus Peripherals ConnectedDevice 1001 UpgradeFailureReason
*s Peripherals ConnectedDevice 1001 UpgradeFailureReason: ""
** end
```

### xStatus Peripherals ConnectedDevice [n] UpgradeStatus

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the status of the previous software upgrade on the currently connected peripherals.

Value space of the result returned:

Downloading/Failed/Installing/InstallationReady/None/Succeeded/Rebooting/Retrying/Aborted/Paused

```
xStatus Peripherals ConnectedDevice 1001 UpgradeStatus *s Peripherals ConnectedDevice 1001 UpgradeStatus: None ** end
```

# xStatus Peripherals ConnectedDevice [n] UpgradeURL

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the upgrade URL for the connected device.

Value space of the result returned:

String

Specifies the full URL.

#### Example:

```
xStatus Peripherals ConnectedDevice 1001 UpgradeURL *s Peripherals ConnectedDevice 1001 UpgradeURL: "" ** end
```

# Provisioning status

### xStatus Provisioning CUCM ExtensionMobility Enabled

Applies to: All products

Requires user role: ADMIN, USER

Shows if Extension Mobility is enabled for a CUCM registered device.

Value space of the result returned:

True/False

#### Example:

```
xStatus Provisioning CUCM ExtensionMobility Enabled
*s Provisioning CUCM ExtensionMobility Enabled: False
** end
```

### xStatus Provisioning CUCM ExtensionMobility LastLoggedInUserId

Applies to: All products

Requires user role: ADMIN, USER

Returns the user id that was last logged in to the system. Only in use if CUCM Extension Mobility is enabled, and CUCM is configured to remember the last logged in user on an endpoint.

Value space of the result returned:

String

```
xStatus Provisioning CUCM ExtensionMobility LastLoggedInUserId
*s Provisioning CUCM ExtensionMobility LastLoggedInUserId: "User 1"
** end
```

# xStatus Provisioning CUCM ExtensionMobility LoggedIn

Applies to: All products

Requires user role: ADMIN, USER

Shows if someone is logged in to Extension Mobility or not.

Value space of the result returned:

True/False

#### Example:

xStatus Provisioning CUCM ExtensionMobility LoggedIn
\*s Provisioning CUCM ExtensionMobility LoggedIn: False

# xStatus Provisioning RoomType

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70G2

Requires user role: ADMIN, USER

Specifies the room type setup configured for this device.

Value space of the result returned:

Briefing/Classroom/Standard

Briefing: This system is using the briefing room setup.

Classroom: This system is using is using the classroom setup.

Standard: This system is using the default room setup.

#### Example:

xStatus Provisioning RoomType
\*s Provisioning RoomType: Briefing

\*\* end

### xStatus Provisioning Software Current CompletedAt

Applies to: All products

Requires user role: ADMIN, USER

Shows date and time for when the current software upgrade was completed.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software Current CompletedAt

\*s Provisioning Software Current CompletedAt: "2011-06-07T07:20:03Z"

\*\* end

### xStatus Provisioning Software Current URL

Applies to: All products

Requires user role: ADMIN, USER

Shows the URL that the current software was uploaded from.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software Current URL

\*s Provisioning Software Current URL: "http://.../s52020ce8 0 0.pkg"

### xStatus Provisioning Software Current VersionId

Applies to: All products

Requires user role: ADMIN, USER

Shows the version ID of the current software.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software Current VersionId

\*s Provisioning Software Current VersionId: "s52020ce8 0 0.pkg"

\*\* end

### xStatus Provisioning Software UpgradeStatus LastChange

Applies to: All products

Requires user role: ADMIN, USER

Shows the date and time for the latest software upgrade.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software UpgradeStatus LastChange

\*s Provisioning Software UpgradeStatus LastChange: "2011-06-07T07:20:03Z"

\*\* end

# xStatus Provisioning Software UpgradeStatus Message

Applies to: All products

Requires user role: ADMIN, USER

Shows the system message for the software upgrade.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software UpgradeStatus Message
\*s Provisioning Software UpgradeStatus Message: ""

\*\* end

### xStatus Provisioning Software UpgradeStatus Phase

Applies to: All products

Requires user role: ADMIN, USER

Shows the phase of the software upgrade.

Value space of the result returned:

None/DownloadPending/FormingHierarchy/Downloading/DownloadPaused/DownloadDone/ Seeding/AboutToInstallUpgrade/Postponed/PeripheralsReady/UpgradingPeripherals/ Installing/InstallingPeripherals

#### Example:

xStatus Provisioning Software UpgradeStatus Phase

\*s Provisioning Software UpgradeStatus Phase: None

### xStatus Provisioning Software UpgradeStatus SessionId

Applies to: All products

Requires user role: ADMIN, USER

Shows the ID of the session for the software upgrade.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software UpgradeStatus SessionId \*s Provisioning Software UpgradeStatus SessionId: "" \*\* and

# xStatus Provisioning Software UpgradeStatus Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of the software upgrade.

Value space of the result returned:

None/InProgress/Failed/InstallationFailed/Succeeded

#### Example:

xStatus Provisioning Software UpgradeStatus Status \*s Provisioning Software UpgradeStatus Status: None \*\* end

# xStatus Provisioning Software UpgradeStatus Urgency

Applies to: All products

Requires user role: ADMIN, USER

Shows how urgently the software needs to be upgraded.

Value space of the result returned:

Low/Medium/Critical

Specifies the urgency of the software upgrade.

#### Example:

```
xStatus Provisioning Software UpgradeStatus Urgency
*s Provisioning Software UpgradeStatus Urgency: Low
** end
```

### xStatus Provisioning Software UpgradeStatus URL

Applies to: All products

Requires user role: ADMIN, USER

Shows the URL that the new software currently is being uploaded and installed from.

Value space of the result returned:

String

```
xStatus Provisioning Software UpgradeStatus URL
*s Provisioning Software UpgradeStatus URL: "http://.../s52020ce8_0_0.pkg"
** end
```

### xStatus Provisioning Software UpgradeStatus VersionId

Applies to: All products

Requires user role: ADMIN, USER

Shows the version ID of the software currently being uploaded and installed.

Value space of the result returned:

String

#### Example:

xStatus Provisioning Software UpgradeStatus VersionId

\*s Provisioning Software UpgradeStatus VersionId: "s52010ce8 \_ 0 \_ 0.pkg"

\*\* end

### xStatus Provisioning Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of the provisioning.

Value space of the result returned:

Failed/AuthenticationFailed/Provisioned/Idle/NeedConfig/ConfigError

Failed: The provisioning failed.

AuthenticationFailed: The authentication failed.

Provisioned: The endpoint is provisioned.

*Idle:* The provisioning is not active.

**NeedConfig:** The endpoint needs to be configured. **ConfigError:** An error occurred during configuration.

#### Example:

xStatus Provisioning Status

\*s Provisioning Status: Provisioned

\*\* end

# Proximity status

### xStatus Proximity Services Availability

Applies to: All products

Requires user role: ADMIN, USER

Shows whether proximity services are available on the endpoint.

Value space of the result returned:

Available, Deactivated, Disabled

**Available:** Proximity mode has been enabled with the command xConfiguration Proximity Mode and one or more of the proximity services have been enabled with xConfiguration Proximity Services commands.

**Deactivated:** Proximity services have been deactivated with the command xCommand Proximity Services Deactivate.

*Disabled:* Proximity mode has been disabled with xConfiguration Proximity Mode, or none of the services have been enabled with the xConfiguration Proximity Services commands.

#### Example:

xStatus Proximity Services Availability

\*s Proximity Services Availability: Disabled



# RoomAnalytics status

### xStatus RoomAnalytics PeopleCount Current

Applies to: SX80 RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN. INTERGRATOR. USER

Shows the amount of people who are in the room by use of face detection. The call must have a duration of minimum two minutes in order to get a reliable average. Persons that have not faced the camera will not be counted. If there are objects or pictures in the room that can be detected as faces, these might be counted. The video system will not keep record of who was in the room, only the average number of faces that were detected. When the system is in standby, or if the feature is turned off, the number returned is –1.

For SX80 and Codec Plus, this status only applies if you have a Cisco Quad Camera.

Value space of the result returned:

Integer

#### Example:

xStatus RoomAnalytics PeopleCount Current
\*s RoomAnalytics PeopleCount Current: 2
\*\* and

### xStatus RoomAnalytics PeoplePresence

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTERGRATOR, USER

Shows if there are people present in the room or not. It takes a minimum of two minutes to detect whether people are present or not in the room. After the room gets vacant, it may take up to two minutes for the status to change. This feature is based on ultrasound. The video system will not keep record of who was in the room, only whether or not there are people present in the room.

Value space of the result returned:

Yes/No/Unknown

#### Example:

xStatus RoomAnalytics PeoplePresence \*s RoomAnalytics PeoplePresence: No

\*\* end

# RoomPreset status

#### xStatus RoomPreset

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the top level overview of the camera presets status.

### xStatus RoomPreset [n] Defined

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows if a camera preset is stored at this position.

Value space of the result returned:

True/False

#### Example:

xStatus RoomPreset 1 Defined \*s RoomPreset 1 Defined: True \*\* end

# xStatus RoomPreset [n] Description

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Lists the configured name for the specific preset.

Value space of the result returned:

String

#### Example:

xStatus RoomPreset 1 Description
\*s RoomPreset 1 Description: "Zoom in"
\*\* end



# xStatus RoomPreset [n] Type

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the camera preset type.

Value space of the result returned:

All/Camera

#### Example:

xStatus RoomPreset 1 Type
\*s RoomPreset 1 Type: All

\*\* end

# Security status

### xStatus Security FIPS Mode

Applies to: All products

Requires user role: ADMIN, USER

Shows the FIPS mode status.

Value space of the result returned:

On/Off

#### Example:

xStatus Security FIPS Mode: \*s Security FIPS Mode: Off \*\* end

### xStatus Security Persistency CallHistory

Applies to: All products

Requires user role: ADMIN, USER

Shows whether call history logging is set to persistent or non-persistent mode. Persistent is the default mode.

Value space of the result returned:

NonPersistent/Persistent

#### Example:

xStatus Security Persistency CallHistory

\*s Security Persistency CallHistory: Persistent

### xStatus Security Persistency Configurations

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the systems all configurations are set to persistent or non-persistent mode. Persistent is the default mode.

Value space of the result returned:

NonPersistent/Persistent

#### Example:

xStatus Security Persistency Configurations

\*s Security Persistency Configurations: Persistent

\*\* end

### xStatus Security Persistency DHCP

Applies to: All products

Requires user role: ADMIN, USER

Shows whether DHCP logging is set to persistent or non-persistent mode. Persistent is the default mode.

Value space of the result returned:

NonPersistent/Persistent

#### Example:

xStatus Security Persistency DHCP

\*s Security Persistency DHCP: Persistent

^^ end

### xStatus Security Persistency InternalLogging

Applies to: All products

Requires user role: ADMIN, USER

Shows whether internal logging is set to persistent or non-persistent mode. Persistent is the default mode.

Value space of the result returned:

NonPersistent/Persistent

#### Example:

xStatus Security Persistency InternalLogging

\*s Security Persistency InternalLogging: Persistent

\*\* end

### xStatus Security Persistency LocalPhonebook

Applies to: All products

Requires user role: ADMIN, USER

Shows whether local phone book is set to persistent or non-persistent mode. Persistent is the default mode.

Value space of the result returned:

NonPersistent/Persistent

### Example:

xStatus Security Persistency LocalPhonebook

\*s Security Persistency LocalPhonebook: Persistent

# SIP status

### xStatus SIP AlternateURI Alias [n] URI

Applies to: All products

Requires user role: ADMIN, USER

Value space of the result returned:

String

#### Example:

```
xStatus SIP AlternateURI Alias
*s SIP AlternateURI Alias URI: ""
** end
```

### xStatus SIP AlternateURI Primary [n] URI

Applies to: All products

Requires user role: ADMIN, USER

Value space of the result returned:

String

#### Example:

```
xStatus SIP AlternateURI Primary
*s SIP AlternateURI Primary URI: ""
** end
```

#### xStatus SIP Authentication

Applies to: All products

Requires user role: ADMIN, USER

Shows which authentication mechanism is used when registering to the SIP Proxy Server.

Value space of the result returned:

Digest/Off

Digest: Uses the Digest access authentication method, as specified by RFC 2069.

Off: No authentication mechanism is used.

#### Example:

```
xStatus SIP Authentication
*s SIP Authentication: Off
** end
```

### xStatus SIP CallForward DisplayName

Applies to: All products

Requires user role: ADMIN, USER

Returns the URI that is displayed on the user interface for the forwarded call.

Value space of the result returned:

String

```
xStatus SIP CallForward DisplayName
*s SIP CallForward DisplayName: ""
** end
```

#### xStatus SIP CallForward Mode

Applies to: All products

Requires user role: ADMIN, USER

Indicates whether the call forward mode for SIP is set to on or off.

Value space of the result returned:

On/Off

#### Example:

xStatus SIP CallForward Mode \*s SIP CallForward Mode: Off \*\* end

#### xStatus SIP CallForward URI

Applies to: All products

Requires user role: ADMIN, USER

Indicates the address the incoming calls are directed to when call forward mode is set on.

Value space of the result returned:

String

#### Example:

xStatus SIP CallForward URI
\*s SIP CallForward URI: ""
\*\* end

### xStatus SIP Mailbox MessagesWaiting

Applies to: All products

Requires user role: ADMIN, USER

Indicates how many new messages are in the mailbox.

Value space of the result returned:

Integer

#### Example:

xStatus SIP Mailbox MessagesWaiting \*s SIP Mailbox MessagesWaiting: 0 \*\* end

#### xStatus SIP Mailbox URI

Applies to: All products

Requires user role: ADMIN, USER

Returns the URI for your SIP mailbox.

Value space of the result returned:

String

#### Example:

xStatus SIP Mailbox URI \*s SIP Mailbox URI: "12345678"

# xStatus SIP Proxy [n] Address

Applies to: All products

Requires user role: ADMIN, USER

Shows the address of the SIP Proxy that the system communicates with.

Value space of the result returned:

String

#### Example:

```
xStatus SIP Proxy 1 Address
*s SIP Proxy 1 Address: "192.0.2.50"
** end
```

# xStatus SIP Proxy [n] Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of the communication between the endpoint and the SIP Proxy server.

Value space of the result returned:

Active/DNSFailed/Off/Timeout/UnableTCP/UnableTLS/Unknown/AuthenticationFailed

Active: The communication between the endpoint and the SIP Proxy is active.

**DNSFailed:** The attempt to establish communication to the DNS server failed.

Off: There is no communication between the endpoint and the SIP Proxy.

*Timeout:* The attempt to establish communication to the SIP Proxy timed out.

UnableTCP: The system is unable to use TCP as the transport method.

UnableTLS: The system is unable to use TLS as the transport method.

*Unknown:* The status of the communication is not known. *AuthenticationFailed:* Wrong user name or password.

#### Example:

```
xStatus SIP Proxy 1 Status
*s SIP Proxy 1 Status: Active
** end
```

### xStatus SIP Registration [n] Authentication

Applies to: All products

Requires user role: ADMIN, USER

Shows which authentication mechanism is used when registering to the SIP Proxy Server.

Value space of the result returned:

Digest/Off

Digest: Uses the Digest access authentication method, as specified by RFC 2069.

Off: No authentication mechanism is used.

#### Example:

```
xStatus SIP Registration 1 Authentication
*s SIP Registration 1 Authentication: Off
** end
```

# xStatus SIP Registration [n] Reason

Applies to: All products

Requires user role: ADMIN, USER

Shows a message to explain the reason why the SIP registration failed.

Value space of the result returned:

String

```
xStatus SIP Registration 1 Reason
*s SIP Registration 1 Reason: "404 Not Found"
** end
```

# xStatus SIP Registration [n] Status

Applies to: All products

Requires user role: ADMIN, USER

Shows the status of the registration to the SIP Proxy Server.

Value space of the result returned:

Deregister/Failed/Inactive/Registered/Registering

Deregister: The system is in the process of de-registering to the SIP Proxy.

Failed: The system failed to register to the SIP Proxy.

Inactive: The system is not registered to any SIP Proxy.

Registered: The system is registered to the SIP Proxy.

Registering: The system is in the process of registering to the SIP Proxy.

#### Example:

```
xStatus SIP Registration 1 Status
*s SIP Registration 1 Status: Registered
** end
```

# xStatus SIP Registration [n] URI

Applies to: All products

Requires user role: ADMIN, USER

Shows the URI used for registration to the SIP Proxy server.

Value space of the result returned:

String

#### Example:

```
xStatus SIP Registration 1 URI
*s SIP Registration 1 URI: "firstname.lastname@company.com"
** end
```

### xStatus SIP Secure

Applies to: All products

Requires user role: ADMIN, USER

Shows the encryption status of the signaling with the SIP Proxy server.

Value space of the result returned:

True/False

#### Example:

xStatus SIP Secure
\*s SIP Secure: True
\*\* end

#### xStatus SIP Verified

Applies to: All products

Requires user role: ADMIN, USER

Shows whether or not the SSL certificate of the server that the video system / codec tries to register to is included in the codec's trusted CA-list. The server is typically a Cisco VCS or CUCM.

Value space of the result returned:

#### True/False

*True:* The server's SIP certificate is checked against the trusted CA-list on the codec and found valid. Additionally, the fully qualified domain name of the server matches the valid certificate.

*False:* A TLS connection is not set up because the SIP certificate verification failed or the domain name did not match. Note that the status also returns False when TLS is not used (xConfiguration SIP DefaultTransport not set to TLS) or certificate verification is switched off (SIP TIsVerify: Off. This setting is accessible through your products web interface).

```
xStatus SIP Verified
*s SIP Verified: False
** end
```



# Standby status

### xStatus Standby PowerSave State

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Shows whether the system is in power save mode or not.

Value space of the result returned:

Active/Deactivating/Unavailable/Inactive/Disabled

Active: It is out-of-office hours, so the video system is in power save mode.

Deactivating: The video system is in the process of waking up from power save mode.

Inactive: It is regular working hours, so the video system is not in power save mode.

*Disabled:* The video system is configured not to use power save mode.

#### Example:

xStatus Standby PowerSave State
\*s Standby PowerSave State: Inactive
\*\* end

# xStatus Standby State

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows whether the system is in standby mode or not.

Value space of the result returned:

Standby/EnteringStandby/Halfwake/Off

Standby: The system is in standby state.

EnteringStandby: The system is entering the standby state.

Halfwake: The system is in standby, but greets the user when presence is detected by

motion or the Proximity pairing app. Not applicable for DX70.

Off: The system is not in standby.

#### Example:

xStatus Standby State \*s Standby State: Off

\*\* end

# SystemUnit status

### xStatus SystemUnit Hardware Module CompatibilityLevel

Applies to: All products

Requires user role: ADMIN, USER

The Cisco TelePresence endpoints are using a NAND flash memory for general storage. The endpoints running TC software are manufactured with a new version of the flash memory. Endpoints having the new version of the flash memory must run software TC4.2.1 or later. Some previous TC software versions are updated to support the new flash memory. Please check the release note to find if the new version of the flash memory is supported. If your endpoint does not have the CompatibilityLevel command it does not have the new flash memory installed.

Value space of the result returned:

1/0

0 = The system does not have the new flash memory installed.

1 = The system has the new flash memory installed. If downgraded, it can only be downgraded to previous TC software versions having support for the new version of the flash memory.

#### Example:

xStatus SystemUnit Hardware Module CompatibilityLevel \*s SystemUnit Hardware Module CompatibilityLevel: 1

\*\* end

# xStatus SystemUnit Hardware Module SerialNumber

Applies to: All products

Requires user role: ADMIN, USER

Shows the serial number of the hardware module in the codec.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Hardware MainBoard SerialNumber

\*s SystemUnit Hardware MainBoard SerialNumber: "FOC99999999"

# xStatus SystemUnit Hardware Monitoring Fan [n] Status

Applies to: All products

Requires user role: ADMIN, USER

The feedback shows the speed (rpm) for the specified fan.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Hardware Monitoring Fan 1 Status
\*s SystemUnit Hardware Monitoring Fan 1 Status: "locked on 1096 rpm"
\*\* end

### xStatus SystemUnit Hardware Temperature

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN, USER

Shows the current maximum temperature (degree Celsius) measured in the codec/system.

Value space of the result returned:

String

#### Example:

```
xStatus SystemUnit Hardware Temperature
*s SystemUnit Hardware Temperature: "64.0"
** end
```

### xStatus SystemUnit Hardware TemperatureThreshold

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D

Requires user role: ADMIN, USER

Returns information on the maximum temperature for the codec. If this temperature is exceeded the system automatically shuts down.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Hardware TemperatureThreshold
\*s SystemUnit Hardware TemperatureThreshold: "85"
\*\* end

# xStatus SystemUnit Notifications Notification [n] Text

Applies to: All products

Requires user role: ADMIN, USER

Lists text related to important system notifications. Notifications are issued e.g. when a system was rebooted because of a software upgrade, or when a factory reset has been performed.

All the notifications can be removed from the list by issuing the xCommand SystemUnit Notifications RemoveAll command.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Notifications Notification 1 Text
\*s SystemUnit Notifications Notification 1 Text: "OK"
\*\* end

### xStatus SystemUnit Notifications Notification [n] Type

Applies to: All products

Requires user role: ADMIN, USER

Lists the system notification types. Notifications are issued e.g. when a system is rebooted because of a software upgrade, or when a factory reset is performed.

All the notifications can be removed from the list by issuing the xCommand SystemUnit Notifications RemoveAll command.

Value space of the result returned:

FactoryResetOK/FactoryResetFailed/SoftwareUpgradeOK/SoftwareUpgradeFailed/RebootRequired/Other

FactoryResetOK: This value is returned after a successful factory reset.

FactoryResetFailed: This value is returned after a failed factory reset attempt.

SoftwareUpgradeOK: This value is returned after a successful software upgrade.

Software Upgrade Failed: This value is returned after a failed software upgrade attempt.

RebootRequired: This value is returned when a reboot is required.

Other: This value is returned for any other notifications.

#### Example:

xStatus SystemUnit Notifications Notification 1 Type

\*s SystemUnit Notifications Notification 1 Type: SoftwareUpgradeOK

\*\* end

### xStatus SystemUnit ProductId

Applies to: All products

Requires user role: ADMIN, USER

Shows the product identity.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit ProductId

\*s SystemUnit ProductId: "Cisco TelePresence Codec SX80"

\*\* end

### xStatus SystemUnit ProductPlatform

Applies to: All products

Requires user role: ADMIN, USER

Shows the product platform.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit ProductPlatform
\*s SystemUnit ProductPlatform: "SX80"

\*\* end

### xStatus SystemUnit ProductType

Applies to: All products

Requires user role: ADMIN, USER

Shows the product type.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit ProductType

\*s SystemUnit ProductType: "Cisco Codec"

### xStatus SystemUnit Software DisplayName

Applies to: All products

Requires user role: ADMIN, USER

Shows the name of the software that is installed on the codec, as it is displayed in the UI.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Software DisplayName
\*s SystemUnit Software DisplayName: "Display Name"

### xStatus SystemUnit Software Name

Applies to: All products

Requires user role: ADMIN, USER

Shows the name of the software that is installed on the codec.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Software Name
\*s SystemUnit Software Name: "s53200"
\*\* end

xStatus SystemUnit Software OptionKeys Encryption

Applies to: All products

Requires user role: ADMIN, USER

Shows if the system has the option key or the software installed that supports the encryption functionality. The option key is available for SX10, SX80, and the MX series.

Value space of the result returned:

False/True

#### Example:

xStatus SystemUnit Software OptionKeys Encryption
\*s SystemUnit Software OptionKeys Encryption: "true"
\*\* end

### xStatus SystemUnit Software OptionKeys MultiSite

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows if the system has the option key installed that supports the MultiSite functionality.

Value space of the result returned:

False/True/NotApplicable

#### Example:

xStatus SystemUnit Software OptionKeys MultiSite
\*s SystemUnit Software OptionKeys MultiSite: "true"
\*\* end

### xStatus SystemUnit Software OptionKeys RemoteMonitoring

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the system has the remote monitoring option key installed. Remote monitoring option key enables snapshots from the web interface, and from a remote paired Touch 10.

Value space of the result returned:

False/True

#### Example:

xStatus SystemUnit Software OptionKeys RemoteMonitoring \*s SystemUnit Software OptionKeys RemoteMonitoring: "true" \*\* end

#### end

### xStatus SystemUnit Software ReleaseDate

Applies to: All products

Requires user role: ADMIN, USER

Shows the release date of the software installed on the codec

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Software ReleaseDate
\*s SystemUnit Software ReleaseDate: "2015-05-05"
\*\* end

### xStatus SystemUnit Software Version

Applies to: All products

Requires user role: ADMIN, USER

Shows the software version installed on the codec.

Value space of the result returned:

String

#### Example:

xStatus SystemUnit Software Version
\*s SystemUnit Software Version: "CE8.0.0"

# xStatus SystemUnit State NumberOfActiveCalls

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the number of active calls.

Value space of the result returned:

0..5

#### Example:

xStatus SystemUnit State NumberOfActiveCalls
\*s SystemUnit State NumberOfActiveCalls: 0
\*\* end

### xStatus SystemUnit State NumberOfInProgressCalls

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the number of calls in progress.

Value space of the result returned:

0..5

#### Example:

```
xStatus SystemUnit State NumberOfInProgressCalls
*s SystemUnit State NumberOfInProgressCalls: 0
** and
```

### xStatus SystemUnit State NumberOfSuspendedCalls

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of suspended calls.

Value space of the result returned:

0..5

#### Example:

```
xStatus SystemUnit State NumberOfSuspendedCalls
*s SystemUnit State NumberOfSuspendedCalls: 0
** end
```

### xStatus SystemUnit Uptime

Applies to: All products

Requires user role: ADMIN, USER

Shows the number of seconds since the last restart of the codec.

Value space of the result returned:

Integer

#### Example:

xStatus SystemUnit Uptime
\*s SystemUnit Uptime: 597095

### Time status

### xStatus Time SystemTime

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Returns the date and time set on the system.

Value space of the result returned:

String

#### Example:

xStatus Time SystemTime

\*s Time SystemTime: "2014-04-25T10:04:03Z"

\*\* end

# UserInterface status

### xStatus UserInterface ContactInfo ContactMethod [n] Number

Applies to: All products

Requires user role: ADMIN, USER

Returns the system's active contact information. This address is used to reach this endpoint.

Value space of the result returned:

String

#### Example:

xStatus UserInterface ContactInfo ContactMethod Number
\*s UserInterface ContactInfo ContactMethod 1 Number: "12345678"
\*\* end

#### xStatus UserInterface ContactInfo Name

Applies to: All products

Requires user role: ADMIN, USER

Returns the system's active contact name. The result depends on which protocol, if any, the system is registered on. The automatically set contact name may have been overridden with the command xConfiguration UserInterface ContactInfo Type. This results in a diagnostics warning about contact mismatch.

Value space of the result returned:

String

```
xStatus UserInterface ContactInfo Name
*s UserInterface ContactInfo Name: "MySystem"
** end
```

### xStatus UserInterface Extensions Widget [n] Value

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Returns the value for a widget. Widgets are used in custom panels, for example in-room controls, that are added to the user interface. The value space depends on the widget type. The value is an empty string until a value is set with the UserInterface Extensions Widget SetValue command.

Value space of the result returned:

String

#### Example:

```
UserInterface Extensions Value
*s UserInterface Extensions Widget 1 Value: "on"
*s UserInterface Extensions Widget 2 Value: "255"
*s UserInterface Extensions Widget 3 Value: "Blinds"
*s UserInterface Extensions Widget 4 Value: "inactive"
*s UserInterface Extensions Widget 5 Value: "2"
*s UserInterface Extensions Widget 6 Value: "Projector is ready"
** end //
```

### xStatus UserInterface Extensions Widget [n] WidgetId

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Returns the unique identifier for a widget. Widgets are used in custom panels, for example in-room controls, that are added to the user interface.

Value space of the result returned:

String

```
UserInterface Extensions WidgetId

*s UserInterface Extensions Widget 1 WidgetId: "togglebutton"

*s UserInterface Extensions Widget 2 WidgetId: "slider"

*s UserInterface Extensions Widget 3 WidgetId: "spinner"

*s UserInterface Extensions Widget 4 WidgetId: "button"

*s UserInterface Extensions Widget 5 WidgetId: "groupbutton"

*s UserInterface Extensions Widget 6 WidgetId: "textfield"

** end //
```

# Video status

### xStatus Video ActiveSpeaker PIPPosition

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the position of the active speaker's image on the screen.

Value space of the result returned:

UpperLeft/UpperCenter/UpperRight/CenterLeft/CenterRight/LowerLeft/LowerRight

#### Example:

xStatus Video ActiveSpeaker PIPPosition
\*s Video PIP ActiveSpeaker Position: UpperCenter
\*\* end

### xStatus Video Input Connector [n] Connected

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether is something is connected to the specified connector. Not all connections can be detected

Value space of the result returned:

False/True/Unknown

#### Example:

xStatus Video Input Connector 1 Connected \*s Video Input Connector 1 Connected: True \*\* end

### xStatus Video Input Connector [n] ConnectedDevice CEC [n] DeviceType

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Shows what type of input device is connected.

Value space of the result returned:

String

#### Example:

xStatus Video Input Connector 2 ConnectedDevice CEC 5 DeviceType
\*s Video Input Connector 2 ConnectedDevice CEC 5 DeviceType: "Playback"
\*\* end

### xStatus Video Input Connector [n] ConnectedDevice CEC [n] LogicalAddress

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

Shows the CEC logical address of the connected input device. The address is fixed at 0.

Value space of the result returned:

Integer

#### Example:

xStatus Video Input Connector 1 ConnectedDevice CEC 1 LogicalAddress \*s Video Input Connector 1 ConnectedDevice CEC 1 LogicalAddress: 0 \*\* end

### xStatus Video Input Connector [n] ConnectedDevice CEC [n] Name

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

Shows the name of the connected input device.

Value space of the result returned:

String

#### Example:

xStatus Video Input Connector 2 ConnectedDevice CEC 5 Name
\*s Video Input Connector 2 ConnectedDevice CEC 5 Name: "Device-2"
\*\* end

# xStatus Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

Shows the state of the CEC enabled devise connected to the HDMI input.

Value space of the result returned:

String

#### Example:

xStatus Video Input Connector 2 ConnectedDevice CEC 5 PowerStatus
\*s Video Input Connector 2 ConnectedDevice CEC 5 PowerStatus: "Standby"
\*\* end

# xStatus Video Input Connector [n] ConnectedDevice CEC [n] Vendorld

Applies to: RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR, USER

Shows the vendor ID for the connected input device.

Value space of the result returned:

String

#### Example:

xStatus Video Input Connector 2 ConnectedDevice CEC 5 VendorId
\*s Video Input Connector 2 ConnectedDevice CEC 5 VendorId: "20576"
\*\* end

### xStatus Video Input Connector [n] SignalState

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the signal state for the specified input.

Value space of the result returned:

OK/Unknown/Unsupported

Unknown: The signal format is unknown.

OK: A signal is detected and the signal format is supported.

Unsupported: A signal is detected, but the signal format is not supported.

#### Example:

xStatus Video Input Connector 1 SignalState \*s Video Input Connector 1 SignalState: OK \*\* end

### xStatus Video Input Connector [n] Sourceld

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the identifer of the input source that the connector is associated with.

Value space of the result returned:

Integer

#### Example:

```
xStatus Video Input Connector 1 SourceId
*s Video Input Connector 1 SourceId: 1
** end
```

### xStatus Video Input Connector [n] Type

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows which connector type it is.

Value space of the result returned:

Camera/Composite/DVI/3G-SDI/HD-SDI/HDMI/USB/Unknown/VGA/YC/YPbPr

#### Example:

```
xStatus Video Input Connector 1 Type
*s Video Input Connector 1 Type: HDMI
** end
```

### xStatus Video Input MainVideoSource

Applies to: All products

Requires user role: ADMIN, USER

Returns the local video input currently used as the main source. The value Composed is returned if the main source is composed of more than one local input. The default main video source is set with the xConfiguration Video DefaultMainSource command. It can be changed using xCommand Video Input SetMainVideoSource (this command is not applicable to SX10, DX70, and DX80).

Value space of the result returned:

1/2/3/4/5/6/Composed

#### Example:

```
xStatus Video Input MainVideoSource
*s Video Input MainVideoSource: 1
** end
```

### xStatus Video Input Source [n] ConnectorId

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the identifier of the connector that is associated with the input source.

Value space of the result returned:

Integer

```
xStatus Video Input Source 1 ConnectorId
*s Video Input Source 1 ConnectorId: 1
** end
```

### xStatus Video Input Source [n] FormatStatus

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the resolution format status for the video input source.

Value space of the result returned:

Ok/OutOfRange/NotFound/Interlaced/Error/Unknown

#### Example:

```
xStatus Video Input Source 1 FormatStatus
*s Video Input Source 1 Resolution FormatStatus: Ok
** end
```

### xStatus Video Input Source [n] FormatType

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the resolution format type for the video input source.

Value space of the result returned:

Unknown/AnalogCVTBlanking/AnalogCVTReducedBlanking/AnalogGTFDefault/ AnalogGTFSecondary/AnalogDiscreteTiming/AnalogDMTBlanking/AnalogCEABlanking/Digital

#### Example:

```
xStatus Video Input Source 1 FormatType
*s Video Input Source 1 Resolution FormatType: Digital
** end
```

# xStatus Video Input Source [n] MediaChannelld

Applies to: All products

Requires user role: ADMIN, USER

For internal use only.

Value space of the result returned:

Integer

#### Example:

```
xStatus Video Input Source MediaChannelId
*s Video Input Source 1 MediaChannelId: 2
*s Video Input Source 2 MediaChannelId: 3
** end
```

# xStatus Video Input Source [n] Resolution Height

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the resolution height (in pixels) for the video input source.

Value space of the result returned:

0..3000

```
xStatus Video Input Source 1 Resolution Height
*s Video Input Source 1 Resolution Height: 1080
** end
```

# xStatus Video Input Source [n] Resolution RefreshRate

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the resolution refresh rate (Hz) for the video input source.

Value space of the result returned:

0..300

#### Example:

```
xStatus Video Input Source 1 Resolution RefreshRate
*s Video Input Source 1 Resolution RefreshRate: 50
** and
```

# xStatus Video Input Source [n] Resolution Width

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the resolution width (in pixels) for the video input source.

Value space of the result returned:

0..4000

#### Example:

```
xStatus Video Input Source 1 Resolution Width *s Video Input Source 1 Resolution Width: 1920 ** end
```

### xStatus Video Layout LayoutFamily Local

Applies to: All products

Requires user role: ADMIN, USER

Shows the local screen layout family.

Value space of the result returned:

String

#### Example:

```
xStatus Video Layout LayoutFamily Local
*s Video Layout LayoutFamily Local: "equal"
** ord
```

# xStatus Video Layout LayoutFamily Remote

Applies to: All products

Requires user role: ADMIN, USER

Shows the remote screen layout family.

Value space of the result returned:

String

```
xStatus Video Layout LayoutFamily Remote
*s Video Layout LayoutFamily Remote: "equal"
** end
```



#### xStatus Video Monitors

Applies to: All products

Requires user role: ADMIN, USER

Returns the monitor layout mode.

Value space of the result returned:

Single/Dual/DualPresentationOnly/Triple/TriplePresentationOnly

**Single:** The same layout is shown on all monitors. **Dual:** The layout is distributed on two monitors.

*DualPresentationOnly:* All participants in the call will be shown on the first monitor, while the presentation (if any) will be shown on the second monitor.

Triple: The layout is distributed on three monitors.

*TriplePresentationOnly:* All participants in the call will be shown on the first and second monitors, while the presentation (if any) will be shown on the third monitor.

#### Example:

xStatus Video Monitors
\*s Video Monitors: Single
\*\* end

#### xStatus Video Mute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether video has been turned off on the device or not.

Value space of the result returned:

On/Off

#### Example:

xStatus Video Mute \*s Video Mute: Off

\*\* end

### xStatus Video Output Connector [n] Connected

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Describes whether a device (for example a display) is connected to the output connector or not. When a display enters standby mode, the endpoint may not be able to detect it. The connector status will then return False/Unknown even if the display is physically connected.

Value space of the result returned:

True/False

*True:* A device is connected to the video output connector. *False:* Nothing is connected to the video output connector.

#### Example:

xStatus Video Output Connector 1 Connected
\*s Video Output Connector 1 Connected: True
\*\* end

# xStatus Video Output Connector [n] ConnectedDevice CEC [n] DeviceType

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the type of CEC enabled device connected to the HDMI output the codec has detected.

This information is only available when the device connected to the HDMI output has the CEC feature configured on and the codec has the configuration xConfiguration Video Output Connector [n] CEC Mode set to on.

Value space of the result returned:

Unknown/TV/Reserved/Recorder/Tuner/Playback/Audio

#### Example:

xStatus Video Output Connector 1 ConnectedDevice CEC DeviceType
\*s Video Output Connector 1 ConnectedDevice CEC DeviceType: TV
\*\* end

# xStatus Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the CEC logical address of the device.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Connector 1 ConnectedDevice CEC 1 LogicalAddress \*s Video Output Connector 1 ConnectedDevice CEC 1 LogicalAddress: 4

# xStatus Video Output Connector [n] ConnectedDevice CEC [n] Name

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Returns the name of the connected device.

Value space of the result returned:

String

#### Example:

xStatus Video Output Connector 1 ConnectedDevice CEC Name
\*s Video Output Connector 1 ConnectedDevice CEC 1 Name: "LG SIGNAGE TV"
\*\* end

# xStatus Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the state of the CEC enabled devise connected to the HDMI output.

This information is only available when the device connected to the HDMI output has the CEC feature configured on and the codec has the configuration xConfiguration Video Output Connector CEC Mode set to on.

Value space of the result returned:

Unknown/Ok/In progress/Failed to power on/Failed to standby

#### Example:

xStatus Video Output Connector 1 ConnectedDevice CEC PowerStatus
\*s Video Output Connector 1 ConnectedDevice CEC PowerStatus: Ok
\*\* end

# xStatus Video Output Connector [n] ConnectedDevice CEC [n] Vendorld

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Returns the vendor ID for the connected device.

Value space of the result returned:

String

#### Example:

xStatus Video Output Connector 1 ConnectedDevice CEC VendorId
\*s Video Output Connector 1 ConnectedDevice CEC 1 VendorId: "57489"
\*\* end

### xStatus Video Output Connector [n] ConnectedDevice Name

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the name of the monitor connected to the HDMI port as defined in the monitors EDID.

Value space of the result returned:

String

#### Example:

xStatus Video Output Connector 1 ConnectedDevice Name
\*s Video Output Connector 1 ConnectedDevice Name: "G2420HDBL"

### xStatus Video Output Connector [n] ConnectedDevice PreferredFormat

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the preferred input format of the monitor connected to the HDMI port as defined in the monitors EDID. This is not necessarily the format the codec is sending out.

Value space of the result returned:

Strina

#### Example:

```
xStatus Video Output Connector 1 ConnectedDevice PreferredFormat
*s Video Output Connector 1 ConnectedDevice PreferredFormat: "1920x1080@60Hz"
** end
```

# xStatus Video Output Connector [n] ConnectedDevice ScreenSize

Applies to: All products

Requires user role: ADMIN, USER

Shows the screen size of the connected device in inches. If this information is not available, the default value is set to 0

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Connector 1 ConnectedDevice ScreenSize
\*s Video Output Connector 1 ConnectedDevice ScreenSize: 55
\*\* end

### xStatus Video Output Connector [n] MonitorRole

Applies to: All products

Requires user role: ADMIN, USER

Describes which video stream is shown on the device that is connected to the video output connector.

Value space of the result returned:

First/Second/Third/PresentationOnly/Recorder

First/Second/Third: The role of the monitor in a multimonitor setup. In a singlemonitor setup, there is no difference between First, Second and Third.

PresentationOnly: Shows presentation video stream if active.

**Recorder:** Shows all participants, including the local main video. If active, shows also the presentation.

```
xStatus Video Output Connector 1 MonitorRole
*s Video Output Connector 1 MonitorRole: First
** end
```

# xStatus Video Output Connector [n] Resolution Height

Applies to: All products

Requires user role: ADMIN, USER

Shows the resolution height (in pixels) for the video output connector.

Value space of the result returned:

120..3000

#### Example:

xStatus Video Output Connector 1 Resolution Height \*s Video Output Connector 1 Resolution Height: 1080

### xStatus Video Output Connector [n] Resolution RefreshRate

Applies to: All products

Requires user role: ADMIN, USER

Shows the resolution refresh rate (Hz) for the video output connector.

Value space of the result returned:

1..300

#### Example:

```
xStatus Video Output Connector 1 Resolution RefreshRate
*s Video Output Connector 1 Resolution RefreshRate: 60
** end
```

### xStatus Video Output Connector [n] Resolution Width

Applies to: All products

Requires user role: ADMIN, USER

Shows the resolution width (in pixels) for the video output connector.

Value space of the result returned:

176..4000

#### Example:

xStatus Video Output Connector 1 Resolution Width
\*s Video Output Connector 1 Resolution Width: 1920

### xStatus Video Output Connector [n] Type

Applies to: All products

Requires user role: ADMIN, USER

Shows the type of connector.

Value space of the result returned:

HDMI/DVI

#### Example:

xStatus Video Output Connector 1 Type
\*s Video Output Connector 1 Type: HDMI
\*\* end

### xStatus Video Output Monitor [n] Backlight

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Returns the monitors backlight level, that has been set with xCommand Video Output Monitor Backlight Set.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 Backlight \*s Video Output Monitor 1 Backlight: 80 \*\* end

# xStatus Video Output Monitor [n] Brightness

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors brightness level, that has been set with xCommand Video Output Monitor Brightness Set.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 Brightness \*s Video Output Monitor 1 Brightness: 50 \*\* end

### xStatus Video Output Monitor [n] ColorTemperature Blue

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors level for blue, that has been set with xCommand Video Output Monitor Color Blue Set.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 ColorTemperature Blue \*s Video Output Monitor 1 ColorTemperature Blue: 50 \*\* end

### xStatus Video Output Monitor [n] ColorTemperature Green

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors level for green, that has been set with xCommand Video Output Monitor Color Green Set.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 ColorTemperature Green \*s Video Output Monitor 1 ColorTemperature Green: 50 \*\* end

### xStatus Video Output Monitor [n] ColorTemperature Red

Applies to: MX700/MX800/MX800D
Requires user role: ADMIN, USER

Returns the monitors level for red, that has been set with xCommand Video Output Monitor Color Red Set.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 ColorTemperature Red \*s Video Output Monitor 1 ColorTemperature Red: 50 \*\* end

### xStatus Video Output Monitor [n] ColorTemperature Selected

Applies to: MX700/MX800/MX800D Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Returns the monitors color temperature, that has been set with xCommand Video Output Monitor Color Select.

Value space of the result returned:

4900/5500/6500/7200/9300/10500/12000/User

#### Example:

xStatus Video Output Monitor 1 ColorTemperature Selected
\*s Video Output Monitor 1 ColorTemperature Selected: 6500

### xStatus Video Output Monitor [n] Contrast

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors contrast level, that has been set with xCommand Video Output Monitor[n]

Contrast.

Value space of the result returned:

Integer

#### Example:

xStatus Video Output Monitor 1 Contrast \*s Video Output Monitor 1 Contrast: 50 \*\* end

# xStatus Video Output Monitor [n] CSCYUV

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors selected color space, that has been set with xCommand Video Output Monitor[n] CSC Select.

Value space of the result returned:

RGB/YUV

#### Example:

xStatus Video Output Monitor 1 CSCYUV: \*S Video Output Monitor 1 CSCYUV: RGB \*\* end



# xStatus Video Output Monitor [n] FirmwareVersion

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the firmware version of the monitor. This status field is only populated when connecting with a supported LG monitor.

Value space of the result returned:

String

The firmware version of the monitor.

#### Example:

```
xStatus Video Output Monitor 1 FirmwareVersion
*s Video Output Monitor 1 FirmwareVersion: ""
** end
```

### xStatus Video Output Monitor [n] Gamma

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors gamma level, that has been set with xCommand Video Output Monitor[n] Gamma.

Value space of the result returned:

String

#### Example:

```
xStatus Video Output Monitor 1 Gamma
*s Video Output Monitor 1 Gamma: "2.2"
** end
```

### xStatus Video Output Monitor [n] ModelName

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the model name of the monitor. This status field is only populated when connecting with a supported LG monitor.

Value space of the result returned:

String

The model name of the monitor.

#### Example:

```
xStatus Video Output Monitor 1 ModelName
*s Video Output Monitor 1 ModelName: ""
** end
```

# xStatus Video Output Monitor [n] Position

Applies to: SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows whether the monitor is positioned on the left or the right. Applicable for dual screen systems only.

Value space of the result returned:

Left/Right

```
xStatus Video Output Monitor 1 Position
*s Video Output Monitor 1 Position: Left
** end
```

### xStatus Video Output Monitor [n] SerialNumber

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the serial number of the monitor. This status field is only populated when connecting with a supported LG monitor.

Value space of the result returned:

String

The serial number of the monitor.

#### Example:

```
xStatus Video Output Monitor 1 SerialNumber
*s Video Output Monitor 1 SerialNumber: ""
** end
```

# xStatus Video Output Monitor [n] Sharpness

Applies to: MX700/MX800/MX800D Requires user role: ADMIN, USER

Returns the monitors selected sharpness, that has been set with xCommand Video Output Monitor[n] Sharpness.

Value space of the result returned:

Softest/Soft/Normal/Sharp/Sharpest

#### Example:

```
xStatus Video Output Monitor 1 Sharpness
*s Video Output Monitor 1 Sharpness: Normal
** end
```

# xStatus Video Output Monitor [n] Temperature

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, USER

Shows the temperature of the monitor. This status field is only populated when connecting with a supported LG monitor.

Value space of the result returned:

Normal/High

**Normal:** The temperature of the monitor is normal. **High:** The temperature of the monitor is too high.

#### Example:

```
xStatus Video Output Monitor 1 Temperature
*s Video Output Monitor 1 Temperature: Normal
** end
```

#### xStatus Video Presentation PIPPosition

Applies to: All products

Requires user role: ADMIN, USER

Shows the position of the presentation image on the screen.

Value space of the result returned:

UpperLeft/UpperCenter/UpperRight/CenterLeft/CenterRight/LowerLeft/LowerRight

#### Example:

xStatus Video Presentation PIPPosition

\*s Video PIP Presentation Position: CenterLeft

#### xStatus Video Selfview FullscreenMode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether selfview is set on full screen mode or not.

Value space of the result returned:

On/Off

#### Example:

xStatus Video Selfview FullscreenMode \*s Video Selfview FullscreenMode: Off \*\* end

#### xStatus Video Selfview Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows whether selfview mode is set on or not.

Value space of the result returned:

On/Off

#### Example:

xStatus Video Selfview Mode \*s Video Selfview Mode: Off

\*\* end

#### xStatus Video Selfview OnMonitorRole

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Identifies which monitor(s) contains the selfview, if present.

Value space of the result returned:

First/Second/Third

#### Example:

xStatus Video Selfview OnMonitorRole
\*s Video Selfview OnMonitorRole: First
\*\* end

#### xStatus Video Selfview PIPPosition

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Shows the position of the selfview image on the screen.

Value space of the result returned:

UpperLeft/UpperCenter/UpperRight/CenterLeft/CenterRight/LowerLeft/LowerRight

#### Example:

xStatus Video Selfview PIPPosition
\*s Video Selfview PIPPosition: LowerRight
\*\* end

Chapter 6

# Appendices

## Supported commands matrix

Here you can find tables that show the complete list of configurations, statuses, and commands that are supported for video systems running CE9.5.

#### Information about the tables

#### Which video systems support a configuration, status, or command

Some entries are supported by all types of video systems, while others only exist for a smaller subset.

The following video systems are covered:

- DX series: DX80, DX70
- MX series: MX800, MX700, MX300 G2, MX200 G2
- Room series: Codec Pro, Codec Plus, Room Kit, Room 70, Room 70 G2, Room 55 Dual, Room 55
- · SX series: SX80, SX20, SX10

#### Which call services support a configuration, status, or command

All entries are supported if the video system is registered on-premise, for example to Cisco UCM, VCS, or Cisco UCM via Expressway.

Some of the configurations, commands, and statuses that are available on the device's API, don't apply to Webex registered room or desk devices. They only apply to on-premises registered devices. Among the nonapplicable configurations, commands and statuses, are everything that is related to H.323, H.320, SIP, NTP, CUCM, LDAP, Proximity, and Far End Camera Control.

### 3. How to access each configuration, status, or command

You can access all configurations and statuses from the video system's web interface. A subset is also part of the video system's API. You can only issue commands from the video system's API.

# 4. Which user role is required to use a configuration, status, or command

A user account may hold one, or a combination, of the following user roles:

ADMIN

ROOMCONTROL

· AUDIT

- · USER
- INTEGRATOR



Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio DefaultVolume	Χ	X	Х	Х	Х	Χ	X	Х	Х	X	Х	Х	Web, API	AIU
Audio Input ARC [n] Mode	-	-	-	-	-	-	-	-	X	-	X	-	Web, API	AI
Audio Input HDMI [n] Level	Χ	-	_	X	-	-	-	-	X	-	-	-	Web, API	AI
Audio Input HDMI [n] Mode	Χ	-	-	X	-	-	-	X	X	-	-	X	Web, API	AI
Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo	Χ	-	_	X	-	-	-	X	X	-	-	X	Web, API	АІ
Audio Input Line [n] Equalizer ID	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Equalizer Mode	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	АІ
Audio Input Line [n] VideoAssociation MuteOnInactiveVideo	Χ	×	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] VideoAssociation VideoInputSource	Χ	X	-	Х	-	-	-	-	-	-	-	-	Web, API	АІ
Audio Input Line [n] Channel	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Level	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Mode	Χ	-	-	X	-	-	-	_	_	-	-	-	Web, API	AI
Audio Input Microphone [n] EchoControl Mode	Χ	X	X	X	-	-	X	X	X	X	Χ	X	Web, API	AI
Audio Input Microphone [n] EchoControl Dereverberation	X	×	X	X	-	-	X	×	×	X	X	X	Web, API	AI
Audio Input Microphone [n] EchoControl NoiseReduction	Χ	×	X	X	-	-	×	×	×	X	Х	X	Web, API	AI
Audio Input Microphone [n] Equalizer ID	Χ	-	-	X	-	-	-	-	X	-	X	-	Web, API	AI
Audio Input Microphone [n] Equalizer Mode	Χ	-	-	X	-	-	-	-	X	-	Χ	-	Web, API	AI
Audio Input Microphone [n] Level	Χ	X	X	X	X	-	X	X	X	X	X	X	Web, API	AI
Audio Input Microphone [n] Mode	Χ	×	X	X	X	-	X	X	X	X	Χ	X	Web, API	АІ
Audio Input Microphone [n] Type	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Microphone [n] PhantomPower	-	-	-	-	-	-	-	-	X	-	Χ	-	Web, API	АІ
Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo	X	-	-	X	-	-	-	-	X	-	-	-	Web, API	AI
Audio Input Microphone [n] VideoAssociation VideoInputSource	Χ	-	-	X	-	-	-	-	X	-	X	-	Web, API	АІ

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio Input MicrophoneMode	-	-	-	-	-	Х	-	-	-	-	-	-	Web, API	ΑΙ
Audio KeyClickDetector Attenuate	-	_	-	-	_	-	×	X	X	X	X	X	Web, API	AIU
Audio KeyClickDetector Enabled	-	-	-	-	-	-	×	×	×	×	X	X	Web, API	AIU
Audio Microphones Mute Enabled	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AI
Audio MicrophoneReinforcement Input Microphone [n] Mode	X	-	-	X	-	-	-	-	-	-	-	-	Web, API	AI
Audio MicrophoneReinforcement Output Line [n] Mode	X	-	_	×	_	-	-	-	-	-	-	-	Web, API	AI
Audio MicrophoneReinforcement Gain	X	-	-	×	-	-	-	_	_	-	-	-	Web, API	AI
Audio Output ARC [n] Delay DelayMs	-	-	-	-	_	-	-	-	X	-	X	-	Web, API	AI
Audio Output ARC [n] Delay Mode	-	-	-	-	-	-	_	-	×	-	X	-	Web, API	AI
Audio Output ARC [n] Mode	-	-	-	-	_	-	-	-	X	-	X	-	Web, API	AI
Audio Output HDMI [n] Delay DelayMs	-	-	-	-	_	_	-	_	×	-	_	-	Web, API	AI
Audio Output HDMI [n] Delay Mode	-	-	_	_	_	-	-	-	X	-	-	-	Web, API	AI
Audio Output HDMI [n] Level	X	-	-	-	-	-	-	_	_	-	X	-	Web, API	AI
Audio Output HDMI [n] Mode	X	-	-	-	_	-	-	-	X	-	X	-	Web, API	AI
Audio Output InternalSpeaker Mode	-	-	-	-	X	-	×	X	_	-	X	X	Web, API	A
Audio Output Line [n] Channel	X	-	_	X	_	-	-	-	X	-	X	-	Web, API	AI
Audio Output Line [n] Delay DelayMs	X	×	X	×	_	_	-	-	×	-	X	-	Web, API	AI
Audio Output Line [n] Delay Mode	X	X	X	X	-	-	-	-	X	-	X	-	Web, API	АІ
Audio Output Line [n] Equalizer ID	X	-	-	X	-	-	-	-	X	-	-	-	Web, API	AI
Audio Output Line [n] Equalizer Mode	X	-	-	X	_	-	-	-	X	-	-	-	Web, API	AI
Audio Output Line [n] Level	X	-	-	X	-	-	-	-	X	X	X	-	Web, API	AI
Audio Output Line [n] Mode	X	-	_	X	_	_	X	X	X	Х	X	X	Web, API	AI
Audio Output Line [n] OutputType	-	-	-	-	-	-	X	X	-	X	-	X	Web, API	AI
Audio SoundsAndAlerts RingTone	X	X	X	×	X	X	×	X	X	X	X	X	Web, API	AIU



Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio SoundsAndAlerts RingVolume	X	X	X	X	X	Χ	X	X	X	X	Х	X	Web, API	AIU
Audio Ultrasound Mode	X	X	X	X	X	Χ	X	X	X	X	×	Χ	Web	AI
Audio Ultrasound MaxVolume	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AI
Bluetooth Allowed	-	-	-	-	-	Χ	-	-	-	-	-	-	Web	А
Bluetooth Enabled	-	-	-	-	-	Χ	-	-	-	-	-	-	Web	A
CallHistory Mode	X	X	X	X	X	Χ	X	X	X	X	×	Χ	Web	AI
Cameras Camera [n] AssignedSerialNumber	X	-	-	X	-	-	-	X	X	X	-	-	Web, API	AI
Cameras Camera [n] Backlight DefaultMode	X	X	X	X	X	Χ	-	X	X	X	×	-	Web, API	AI
Cameras Camera [n] Brightness Mode	X	X	×	X	X	-	-	×	X	X	X	-	Web, API	AI
Cameras Camera [n] Brightness DefaultLevel	X	X	X	X	X	-	-	X	X	X	×	-	Web, API	AI
Cameras Camera [n] Flip	X	X	X	X	-	-	-	-	X	-	-	-	Web, API	AI
Cameras Camera [n] Focus Mode	X	X	X	X	X	-	-	X	X	X	X	-	Web, API	АΙ
Cameras Camera [n] Gamma Mode	X	×	-	×	X	-	-	X	×	X	×	-	Web, API	AI
Cameras Camera [n] Gamma Level	X	X	-	X	X	-	-	X	X	X	×	-	Web, API	AI
Cameras Camera [n] IrSensor	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
Cameras Camera [n] Mirror	X	X	X	X	X	-	-	X	X	X	X	-	Web, API	AI
Cameras Camera [n] MotorMoveDetection	X	×	-	×	-	-	-	-	×	-	-	-	Web	AI
Cameras Camera [n] Whitebalance Mode	X	X	X	X	X	-	-	X	X	X	×	-	Web, API	AI
Cameras Camera [n] Whitebalance Level	X	X	X	X	X	-	-	×	X	X	×	-	Web, API	AI
Cameras Camera Framerate	-	-	-	-	-	-	X	-	-	-	-	Х	Web, API	А
Cameras PowerLine Frequency	X	X	-	X	X	-	X	X	X	X	X	X	Web	AI
Cameras PresenterTrack CameraPosition Pan	X	-	-	X	-	-	-	X	X	X	Х	-	Web	AI
Cameras PresenterTrack CameraPosition Tilt	X	-	-	X	-	-	-	X	X	X	X	-	Web	AI
Cameras PresenterTrack CameraPosition Zoom	X	-	-	X	-	-	-	X	X	X	X	-	Web	АІ
Cameras PresenterTrack Connector	X	-	-	X	-	-	-	X	X	X	×	-	Web	AI

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Cameras PresenterTrack Enabled	Χ	-	-	Х	-	-	-	X	X	X	Х	-	Web	ΑΙ
Cameras PresenterTrack PresenterDetectedStatus	Χ	-	-	X	-	-	-	X	X	X	Х	-	Web	AI
Cameras PresenterTrack TriggerZone	Χ	-	-	X	-	-	-	X	×	X	Х	-	Web	ΑI
Cameras Preset TriggerAutofocus	Χ	×	-	×	X	-	-	-	-	-	-	-	Web, API	A
Cameras SpeakerTrack Mode	Χ	-	-	X	-	-	X	X	X	X	Х	X	Web, API	AI
Cameras SpeakerTrack Closeup	Χ	-	-	X	-	-	X	X	X	X	X	X	Web, API	AIU
Cameras SpeakerTrack TrackingMode	Χ	-	-	×	-	-	_	_	X	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection Mode	Χ	-	-	×	-	-	-	-	X	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection CameraLeft	Χ	-	-	×	-	-	-	-	X	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection CameraRight	Χ	-	-	×	-	-	-	-	X	-	-	-	Web, API	AI
Cameras SpeakerTrack Whiteboard Mode	Χ	-	-	×	-	-	X	X	X	X	×	X	Web, API	AIU
Conference ActiveControl Mode	Χ	X	X	×	X	X	X	X	X	X	X	X	Web	A
Conference AutoAnswer Mode	Χ	X	X	×	X	X	X	X	X	X	×	X	Web, API	А
Conference AutoAnswer Mute	X	X	X	X	×	X	×	×	×	×	X	X	Web, API	A
Conference AutoAnswer Delay	X	X	X	×	X	X	X	X	X	X	X	X	Web, API	А
Conference CallProtocollPStack	Χ	X	X	X	×	X	×	X	X	×	X	X	Web	A
Conference DefaultCall Protocol	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	А
Conference DefaultCall Rate	Χ	X	X	×	X	X	X	X	X	X	×	X	Web, API	AI
Conference DoNotDisturb DefaultTimeout	Χ	X	X	X	×	X	×	×	×	×	X	X	Web, API	AI
Conference Encryption Mode	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
Conference FarEndControl Mode	Χ	X	X	X	X	X	X	X	X	X	Х	X	Web, API	A
Conference FarEndControl SignalCapability	X	X	X	X	X	X	X	X	X	X	X	X	Web	A
Conference FarEndMessage Mode	Χ	X	X	X	X	X	X	X	X	X	Х	X	Web, API	А
Conference MaxReceiveCallRate	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
Conference MaxTransmitCallRate	Χ	X	X	X	×	X	×	×	×	×	Х	X	Web, API	Α

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Conference MaxTotalReceiveCallRate	X	Χ	X	Х	X	Χ	X	Х	Х	X	Χ	Х	Web, API	А
Conference MaxTotalTransmitCallRate	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	А
Conference MicUnmuteOnDisconnect Mode	X	X	×	X	X	Χ	X	X	X	X	X	X	Web	A
Conference Multipoint Mode	X	Х	-	X	X	-	X	X	X	X	Х	X	Web	Α
Conference MultiStream Mode	X	X	-	X	X	-	×	×	×	X	X	X	Web, API	A
Conference IncomingMultisiteCall Mode	X	Х	-	X	X	-	X	×	X	X	Χ	X	Web	А
Conference Presentation OnPlacedOnHold	X	X	X	X	X	Χ	X	×	×	X	Χ	X	Web	A
Conference Presentation RelayQuality	X	X	-	X	X	-	X	×	×	X	Χ	X	Web	А
Conference VideoBandwidth Mode	X	X	×	X	X	Χ	×	X	X	X	X	X	Web	A
FacilityService Service [n] Type	X	Χ	×	X	X	Χ	×	X	X	X	Χ	X	Web	AI
FacilityService Service [n] Name	X	X	X	X	X	Χ	×	×	×	X	X	X	Web	AI
FacilityService Service [n] Number	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	АІ
FacilityService Service [n] CallType	X	X	×	X	X	X	×	×	×	X	X	X	Web	AI
GPIO Pin [n] Mode	X	-	-	X	-	-	-	-	×	-	X	-	Web, API	AI
H323 Authentication Mode	X	X	×	X	X	X	X	X	X	X	X	X	Web, API	A
H323 Authentication LoginName	X	X	×	X	X	Χ	×	X	X	X	X	X	Web, API	А
H323 Authentication Password	X	X	×	X	X	X	×	×	×	X	X	X	Web, API	A
H323 CallSetup Mode	X	X	×	X	X	Χ	X	×	X	X	X	X	Web, API	А
H323 Encryption KeySize	X	X	×	X	X	Χ	×	×	×	X	X	X	Web, API	A
H323 Gatekeeper Address	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	A
H323 H323Alias E164	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
H323 H323Alias ID	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	А
H323 NAT Mode	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
H323 NAT Address	X	X	X	X	X	Χ	X	X	X	Х	X	X	Web, API	A
H323 PortAllocation	X	X	×	X	X	Χ	×	×	×	X	X	X	Web	A

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Logging External Mode	X	Х	X	Х	X	Χ	Х	Х	Х	X	Х	Х	Web	А
Logging External Protocol	X	×	×	×	X	X	×	×	×	X	X	×	Web	A
Logging External Server Address	X	X	×	X	X	Χ	X	X	X	X	X	X	Web	A
Logging External Server Port	X	X	×	X	X	X	X	X	X	X	X	X	Web	A
Logging Mode	X	X	×	X	X	Χ	X	X	X	X	X	X	Web	А
Macros Mode	X	X	-	X	X	X	X	X	X	X	X	X	Web, API	A
Macros AutoStart	X	×	-	×	X	Χ	×	X	X	X	X	X	Web, API	А
Network [n] DNS DNSSEC Mode	X	×	×	×	X	X	×	X	X	X	X	×	Web, API	A
Network [n] DNS Domain Name	X	×	×	×	X	Χ	×	×	X	X	X	×	Web, API	AU
Network [n] DNS Server [m] Address	X	×	×	×	X	X	×	×	×	X	X	×	Web, API	AU
Network [n] IEEE8021X Mode	X	×	×	×	X	Χ	×	X	X	X	X	X	Web, API	AU
Network [n] IEEE8021X TIsVerify	X	×	×	×	X	X	×	X	×	X	X	×	Web, API	AU
Network [n] IEEE8021X UseClientCertificate	X	X	×	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Network [n] IEEE8021X Identity	X	×	×	×	X	X	×	×	×	X	X	×	Web, API	AU
Network [n] IEEE8021X Password	X	X	×	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Network [n] IEEE8021X AnonymousIdentity	X	×	×	×	X	X	×	X	X	X	X	×	Web, API	AU
Network [n] IEEE8021X Eap Md5	X	×	×	×	X	Χ	×	X	X	X	X	X	Web, API	AU
Network [n] IEEE8021X Eap Ttls	X	X	×	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] IEEE8021X Eap TIs	X	×	×	×	X	Χ	×	×	X	X	X	×	Web, API	AU
Network [n] IEEE8021X Eap Peap	X	X	×	X	×	X	X	X	X	X	X	X	Web, API	AU
Network [n] IPStack	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Network [n] IPv4 Assignment	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] IPv4 Address	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Network [n] IPv4 Gateway	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] IPv4 SubnetMask	X	X	×	X	X	Χ	X	X	X	X	X	X	Web, API	AU

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Configuration	8X80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Network [n] IPv6 Assignment	X	Х	Х	X	X	Χ	Х	Х	Х	X	Χ	X	Web, API	ΑU
Network [n] IPv6 Address	X	Х	X	X	X	Χ	×	X	×	X	Χ	Х	Web, API	AU
Network [n] IPv6 Gateway	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] IPv6 DHCPOptions	X	Х	×	X	X	Χ	X	×	Х	X	Х	X	Web, API	AU
Network [n] MTU	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] QoS Mode	X	Х	X	X	X	Χ	×	X	×	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv Audio	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv Video	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv Data	X	X	X	X	X	Χ	×	X	X	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv Signalling	X	Х	X	X	X	Χ	×	X	X	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv ICMPv6	X	X	X	X	X	Χ	X	X	×	X	Χ	X	Web, API	AU
Network [n] QoS Diffserv NTP	X	X	X	X	X	Χ	X	X	X	X	Χ	Х	Web, API	AU
Network [n] RemoteAccess Allow	X	X	X	X	X	Χ	X	X	×	X	Χ	X	Web, API	AU
Network [n] Speed	X	X	X	X	×	Χ	X	×	X	X	Χ	X	Web, API	АІ
Network [n] TrafficControl Mode	X	X	X	X	X	Χ	×	X	×	X	X	X	Web	AU
Network [n] VLAN Voice Mode	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] VLAN Voice VlanId	X	X	X	X	X	X	×	X	×	X	X	X	Web, API	AU
NetworkPort [n] Mode	-	-	_	-	-	Χ	-	_	-	-	-	-	Web, API	А
NetworkServices CDP Mode	X	X	X	X	X	Χ	×	X	×	X	X	X	Web, API	A
NetworkServices H323 Mode	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	А
NetworkServices HTTP Mode	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	А
NetworkServices HTTP Proxy LoginName	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
NetworkServices HTTP Proxy Password	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
NetworkServices HTTP Proxy Mode	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
NetworkServices HTTP Proxy Url	X	X	X	X	X	X	×	X	×	X	X	X	Web, API	AU

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
NetworkServices HTTP Proxy PACUrl	X	X	X	Х	X	Χ	Х	X	Х	X	Χ	Х	Web, API	AU
NetworkServices HTTPS OCSP Mode	X	X	X	X	X	Χ	×	X	×	X	Χ	X	Web	A
NetworkServices HTTPS OCSP URL	X	X	X	X	X	Χ	×	X	×	X	Χ	X	Web	А
NetworkServices HTTPS Server MinimumTLSVersion	X	X	X	X	X	Χ	×	×	X	X	Χ	X	Web, API	A
NetworkServices HTTPS StrictTransportSecurity	X	X	×	X	X	Χ	X	X	X	X	Χ	X	Web, API	Α
NetworkServices HTTPS VerifyServerCertificate	X	X	X	X	X	Χ	×	×	×	X	Χ	X	Web, API	A
NetworkServices HTTPS VerifyClientCertificate	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	Α
NetworkServices NTP Mode	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	Α
NetworkServices NTP Server [n] Address	X	X	X	X	X	Χ	×	×	×	X	Χ	X	Web, API	A
NetworkServices SIP Mode	X	X	X	X	X	Χ	×	×	X	X	Χ	X	Web, API	A
NetworkServices SNMP Mode	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AI
NetworkServices SNMP Host [n] Address	X	X	X	X	X	Χ	×	X	×	X	Χ	X	Web, API	AI
NetworkServices SNMP CommunityName	X	X	X	X	X	Χ	×	X	×	X	Χ	X	Web, API	AI
NetworkServices SNMP SystemContact	X	X	X	X	X	Χ	×	×	×	X	Χ	X	Web, API	AI
NetworkServices SNMP SystemLocation	X	X	×	X	X	Χ	X	X	X	X	Χ	X	Web, API	AI
NetworkServices SSH Mode	X	X	X	X	X	Χ	×	×	×	X	Χ	X	Web, API	A
NetworkServices SSH HostKeyAlgorithm	X	X	X	X	X	Χ	X	X	×	X	Χ	X	Web, API	А
NetworkServices SSH AllowPublicKey	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	A
NetworkServices Telnet Mode	X	X	×	X	X	Χ	-	-	-	-	-	-	Web, API	Α
NetworkServices UPnP Mode	X	X	X	X	X	-	X	X	X	X	Χ	X	Web, API	A
NetworkServices UPnP Timeout	X	X	X	X	X	-	X	X	X	X	Χ	X	Web	Α
NetworkServices WelcomeText	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
NetworkServices Wifi Allowed	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
NetworkServices Wifi Enabled	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
NetworkServices XMLAPI Mode	X	X	X	X	X	Χ	×	×	X	X	Χ	Х	Web	А



Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Peripherals InputDevice Mode	-	-	-	-	-	-	X	X	X	X	Х	Х	Web	А
Peripherals Pairing CiscoTouchPanels EmcResilience	X	X	X	X	X	-	X	X	X	X	X	X	Web	А
Peripherals Pairing CiscoTouchPanels RemotePairing	X	X	X	X	X	-	-	-	-	-	-	-	Web	A
Peripherals Profile Cameras	X	X	×	X	X	-	X	X	X	X	Х	X	Web, API	AI
Peripherals Profile ControlSystems	X	×	X	×	X	Χ	×	×	×	X	X	X	Web, API	AI
Peripherals Profile TouchPanels	X	X	X	X	X	-	X	×	X	X	Х	X	Web, API	АІ
Phonebook Server [n] ID	X	×	X	×	X	Χ	X	×	×	X	X	X	Web, API	A
Phonebook Server [n] Type	X	×	X	×	X	Χ	X	×	×	X	X	X	Web, API	А
Phonebook Server [n] URL	X	×	X	×	X	Χ	×	X	X	X	X	X	Web, API	A
Provisioning Connectivity	X	×	X	×	X	Χ	×	X	X	X	Χ	X	Web, API	AU
Provisioning ExternalManager Address	X	×	X	×	X	Χ	×	×	×	X	X	X	Web, API	AU
Provisioning ExternalManager AlternateAddress	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Provisioning ExternalManager Protocol	X	×	X	×	X	X	×	×	×	X	X	X	Web, API	AU
Provisioning ExternalManager Path	X	×	X	×	X	Χ	×	×	×	X	X	X	Web, API	AU
Provisioning ExternalManager Domain	X	X	×	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Mode	X	×	X	×	X	Χ	×	X	X	X	X	X	Web, API	AU
Provisioning LoginName	X	×	X	×	X	X	×	×	×	X	X	X	Web, API	AU
Provisioning Password	X	×	X	×	X	Χ	X	×	X	X	X	X	Web, API	AU
Proximity Mode	X	×	X	×	X	Χ	×	×	×	X	X	X	Web, API	AU
Proximity Services CallControl	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Proximity Services ContentShare FromClients	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Proximity Services ContentShare ToClients	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
RoomAnalytics PeopleCountOutOfCall	X	-	-	X	-	-	X	X	X	X	X	X	Web, API	AIU
RoomAnalytics PeoplePresenceDetector	X	X	-	X	X	-	X	X	X	Х	X	X	Web, API	AIU
RoomReset Control	X	×	×	×	X	Χ	×	×	×	X	X	X	Web	A

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
RTP Ports Range Start	X	Х	X	Х	X	Х	Х	X	X	X	Х	X	Web	А
RTP Ports Range Stop	X	Χ	X	X	X	Χ	X	X	X	X	X	X	Web	А
RTP Video Ports Range Start	X	Χ	×	X	X	Χ	X	×	X	X	Χ	Х	Web	Α
RTP Video Ports Range Stop	X	Χ	X	×	X	Χ	X	X	X	X	X	X	Web	А
Security Audit Logging Mode	X	Х	X	×	X	Х	X	X	X	X	X	X	Web	Au
Security Audit OnError Action	X	Χ	X	×	X	Χ	X	X	X	X	X	X	Web	Au
Security Audit Server Address	X	Χ	X	×	X	Χ	X	X	X	X	X	X	Web	Au
Security Audit Server Port	X	Χ	×	X	X	Χ	X	X	X	X	Χ	X	Web	Au
Security Audit Server PortAssignment	X	Χ	×	X	×	Х	X	×	×	×	Х	X	Web	Au
Security Session FailedLoginsLockoutTime	X	Х	X	×	X	X	X	X	X	X	X	X	Web	Α
Security Session InactivityTimeout	X	Χ	×	×	X	Χ	X	X	X	X	X	Х	Web	Α
Security Session MaxFailedLogins	X	X	X	×	X	X	X	X	X	X	X	X	Web	А
Security Session MaxSessionsPerUser	X	Х	X	×	X	X	X	X	X	X	X	X	Web	А
Security Session MaxTotalSessions	X	X	×	×	X	X	X	X	X	×	X	X	Web	А
Security Session ShowLastLogon	X	X	X	×	X	X	X	X	X	X	X	X	Web	А
SerialPort Mode	X	Χ	×	X	×	X	X	×	X	×	Х	X	Web, API	AI
SerialPort BaudRate	X	Х	-	X	-	-	X	X	X	X	X	X	Web, API	АІ
SerialPort LoginRequired	X	X	X	×	X	X	X	X	X	X	X	X	Web, API	A
SIP ANAT	X	Х	×	X	×	X	X	×	×	×	X	X	Web	Α
SIP Authentication UserName	X	X	×	×	X	X	X	×	X	X	×	X	Web, API	A
SIP Authentication Password	X	Χ	X	X	X	Х	X	X	X	Х	Χ	X	Web, API	Α
SIP DefaultTransport	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	А
SIP DisplayName	X	Χ	X	X	X	Х	X	X	X	X	Χ	X	Web, API	Α
SIP Ice DefaultCandidate	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
SIP Ice Mode	X	Χ	×	×	X	X	X	X	X	×	X	Х	Web, API	А

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
SIP Line	X	X	X	Х	X	X	Х	X	X	X	Х	X	Web	А
SIP ListenPort	X	×	X	×	X	X	X	X	X	X	X	X	Web, API	А
SIP Mailbox	X	X	X	X	×	X	X	X	X	X	X	X	Web	A
SIP MinimumTLSVersion	X	X	X	X	X	X	X	×	X	X	X	X	Web	А
SIP PreferredIPMedia	X	×	X	×	X	X	X	×	×	X	×	X	Web	A
SIP PreferredIPSignaling	X	×	X	×	X	X	X	X	×	X	X	X	Web	А
SIP Proxy [n] Address	X	×	X	×	X	X	X	X	×	X	×	X	Web, API	A
SIP TIsVerify	X	X	X	X	X	X	X	X	X	X	X	X	Web	A
SIP Turn DiscoverMode	X	X	X	X	×	X	X	×	X	×	X	X	Web	A
SIP Turn DropRflx	X	×	X	X	X	X	X	X	X	X	X	X	Web	А
SIP Turn Server	X	×	X	×	X	X	X	X	×	X	×	X	Web, API	A
SIP Turn UserName	X	×	X	×	X	X	X	X	X	X	X	X	Web, API	А
SIP Turn Password	X	×	X	×	×	X	X	X	×	X	×	X	Web, API	A
SIP Type	X	×	X	×	X	X	X	X	×	X	×	X	Web	А
SIP URI	X	X	X	X	×	X	X	X	X	×	X	X	Web, API	A
Standby BootAction	X	×	X	×	X	-	X	X	X	X	X	X	Web, API	AIU
Standby Control	X	×	X	×	×	X	X	X	×	X	×	X	Web, API	AI
Standby Delay	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AI
Standby Standby Action	X	×	X	×	X	-	X	×	×	X	×	X	Web, API	AI
Standby WakeupAction	X	X	X	X	X	-	X	X	X	X	X	X	Web, API	AIU
Standby WakeupOnMotionDetection	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AI
Standby PowerSave	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	А
SystemUnit Name	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
SystemUnit CrashReporting Advanced	X	X	X	X	X	X	X	X	X	X	X	X	Web	А
SystemUnit CrashReporting Mode	X	×	X	×	X	X	X	×	×	X	X	X	Web, API	A

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
SystemUnit CrashReporting Url	X	Х	X	Х	X	Χ	Х	Х	Х	X	Х	Х	Web, API	А
SystemUnit IrSensor	-	×	-	-	-	-	-	-	_	-	-	-	Web	A
Time TimeFormat	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Time DateFormat	X	X	×	X	X	Χ	X	X	X	×	X	X	Web, API	AU
Time Zone	X	×	X	X	X	Χ	×	×	X	X	X	×	Web, API	AIU
Time WorkDay Start	-	-	-	X	-	-	-	_	_	_	-	_	Web, API	AU
Time WorkDay End	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Time WorkWeek FirstDayOfWeek	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Time WorkWeek LastDayOfWeek	-	-	-	X	-	-	-	_	-	-	-	-	Web, API	AU
UserInterface Accessibility IncomingCallNotification	X	×	X	X	X	Χ	×	X	×	X	Х	X	Web, API	AIU
UserInterface ContactInfo Type	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	Α
UserInterface CustomMessage	X	×	X	X	X	Χ	×	×	X	X	X	×	Web, API	AI
UserInterface KeyTones Mode	X	×	X	X	X	Χ	×	×	X	X	X	×	Web, API	AU
UserInterface Language	X	X	×	X	×	Χ	X	X	X	×	X	X	Web, API	AU
UserInterface OSD EncryptionIndicator	X	×	X	X	X	Χ	×	×	X	X	X	×	Web	А
UserInterface OSD HalfwakeMessage	X	×	X	X	X	Χ	×	×	×	X	X	×	Web, API	A
UserInterface OSD Output	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	АІ
UserInterface Security Mode	X	×	X	X	X	X	×	×	×	×	X	×	Web, API	A
UserInterface SettingsMenu Mode	X	X	×	X	X	Χ	X	X	X	×	X	X	Web, API	Α
UserInterface Wallpaper	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AIU
UserManagement LDAP Admin Filter	X	X	X	X	X	Χ	X	X	X	Х	Х	X	Web, API	Α
UserManagement LDAP Admin Group	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
UserManagement LDAP Attribute	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	А
UserManagement LDAP BaseDN	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	A
UserManagement LDAP Encryption	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	А

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Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
UserManagement LDAP MinimumTLSVersion	X	X	X	X	X	Χ	Х	X	X	X	X	X	Web, API	А
UserManagement LDAP Mode	X	X	X	×	X	Χ	×	X	×	X	X	Х	Web, API	А
UserManagement LDAP Server Address	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	А
UserManagement LDAP Server Port	X	X	×	X	X	Χ	X	X	Х	X	Х	X	Web, API	А
UserManagement LDAP VerifyServerCertificate	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	Α
Video ActiveSpeaker DefaultPIPPosition	X	X	X	X	X	Χ	×	X	×	X	X	X	Web	АІ
Video DefaultLayoutFamily Local	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	A
Video DefaultLayoutFamily Remote	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	А
Video DefaultMainSource	X	×	X	×	X	Χ	×	X	X	X	X	X	Web, API	AU
Video Input Connector [n] CameraControl Camerald	X	X	X	X	X	Χ	X	X	X	X	Х	Х	Web, API	АІ
Video Input Connector [n] CameraControl Mode	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AI
Video Input Connector [n] CEC Mode	-	-	-	-	-	-	X	X	×	X	X	X	Web, API	AI
Video Input Connector [n] DviType	X	X	-	X	X	-	-	-	-	-	-	-	Web, API	A
Video Input Connector [n] HDCP Mode	-	-	-	-	-	-	-	_	×	-	_	X	Web, API	AI
Video Input Connector [n] InputSourceType	X	X	×	X	X	Χ	X	×	X	×	X	X	Web, API	AI
Video Input Connector [n] Name	X	X	X	×	X	Χ	X	X	X	X	X	X	Web, API	АІ
Video Input Connector [n] OptimalDefinition Profile	X	×	X	×	X	Χ	×	X	×	X	X	X	Web	AI
Video Input Connector [n] OptimalDefinition Threshold60fps	X	X	-	X	X	-	-	-	X	-	X	-	Web	А
Video Input Connector [n] PreferredResolution	-	-	-	-	-	-	X	X	X	X	X	X	Web, API	AI
Video Input Connector [n] PresentationSelection	X	X	X	X	X	Χ	X	X	X	X	Х	Х	Web, API	АІ
Video Input Connector [n] Quality	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	АІ
Video Input Connector [n] RGBQuantizationRange	X	X	Х	X	X	X	X	X	X	Х	Х	Х	Web	АІ
Video Input Connector [5] SignalType	X	-	-	X	-	-	-	-	-	-	-	-	Web	А
Video Input Connector [n] Visibility	X	×	X	×	X	Χ	×	X	×	X	X	Х	Web, API	АІ



Configuration	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Monitors	X	Х	X	X	X	X	Х	X	X	X	Х	X	Web, API	АІ
Video Output Connector [n] Brightness	-	-	-	-	X	X	-	-	-	-	-	Х	Web	AU
Video Output Connector [n] CEC Mode	X	×	X	X	X	-	X	X	×	-	X	X	Web, API	AI
Video Output Connector [n] Location HorizontalOffset	X	X	-	X	X	-	×	X	×	×	X	X	Web	AI
Video Output Connector [n] Location VerticalOffset	X	X	-	X	X	-	X	X	X	X	X	X	Web	AI
Video Output Connector [n] MonitorRole	X	X	-	X	-	-	X	X	×	X	X	X	Web, API	AI
Video Output Connector [n] OverscanLevel	-	X	X	-	X	-	-	-	-	-	-	-	Web, API	A
Video Output Connector [n] Resolution	X	X	X	X	X	X	×	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] RGBQuantizationRange	X	X	X	X	X	-	X	X	×	×	×	X	Web	AI
Video Output Connector [n] Whitebalance Level	-	_	-	-	X	X	_	-	-	-	_	X	Web	AU
Video Presentation DefaultPIPPosition	X	X	X	X	X	X	X	X	X	×	Χ	X	Web	AI
Video Presentation DefaultSource	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Video Selfview Default FullscreenMode	X	×	X	X	X	X	X	X	×	X	X	X	Web, API	AI
Video Selfview Default Mode	X	X	X	X	X	X	×	X	×	×	X	X	Web, API	AI
Video Selfview Default OnMonitorRole	X	X	-	X	X	X	X	X	X	X	Χ	X	Web, API	AI
Video Selfview Default PIPPosition	X	X	X	X	×	X	X	X	X	X	Х	X	Web, API	АІ
Video Selfview Mirrored	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	АІ
Video Selfview OnCall Mode	X	X	X	X	X	X	X	X	X	Х	Х	X	Web, API	АІ
Video Selfview OnCall Duration	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AI



Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio Diagnostics MeasureDelay	X	Х	X	Х	X	Х	Х	X	X	X	Х	Х	API	AU
Audio Equalizer List	X	-	-	X	-	-	-	-	X	-	×	-	API	Α
Audio Equalizer Update	×	-	-	Х	-	-	-	-	×	-	Х	-	API	Α
Audio LocalInput Add	X	-	-	X	-	-	-	-	×	-	X	-	API	Α
Audio LocalInput AddConnector	X	-	-	Х	-	-	-	-	×	-	×	-	API	Α
Audio LocalInput Remove	X	-	-	X	-	-	-	-	X	-	×	-	API	Α
Audio LocalInput RemoveConnector	X	-	-	Х	-	-	-	-	X	-	Х	-	API	Α
Audio LocalInput Update	X	-	-	X	-	-	-	-	X	-	X	-	API	Α
Audio LocalOutput Add	X	-	-	X	-	-	-	-	×	-	×	-	API	Α
Audio LocalOutput AddConnector	X	-	-	X	-	-	-	-	X	-	×	-	API	Α
Audio LocalOutput ConnectInput	X	-	-	X	-	-	-	-	X	-	X	-	API	А
Audio LocalOutput DisconnectInput	X	-	-	X	-	-	-	-	X	-	×	-	API	A
Audio LocalOutput Remove	X	-	-	X	-	-	-	_	X	-	×	-	API	Α
Audio LocalOutput RemoveConnector	X	-	-	X	-	-	-	-	X	-	X	-	API	A
Audio LocalOutput Update	X	-	-	X	-	-	-	_	X	-	×	-	API	А
Audio LocalOutput UpdateInputGain	X	-	-	X	-	-	-	-	X	_	×	-	API	A
Audio Microphones Mute	X	X	X	X	X	X	X	X	X	X	X	X	API	AIU
Audio Microphones ToggleMute	X	×	X	X	X	X	×	X	X	×	×	X	API	AIU
Audio Microphones Unmute	X	X	X	X	X	X	×	X	X	X	×	X	API	AIU
Audio RemoteOutput ConnectInput	X	-	-	X	-	-	-	-	X	-	X	-	API	A
Audio RemoteOutput DisconnectInput	X	-	-	X	-	-	-	-	X	-	X	-	API	А
Audio RemoteOutput UpdateInputGain	X	-	-	X	-	-	-	-	X	-	X	-	API	A
Audio Select	-	-	-	-	-	X	-	-	-	-	-	-	API	AU
Audio Setup Clear	X	-	-	X	-	-	-	-	X	-	X	-	API	A
Audio Sound Play	X	X	X	X	X	X	X	X	X	X	X	X	API	AIU

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Command	8X80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio Sound Stop	X	Х	X	Х	X	Χ	X	X	X	X	Χ	Х	API	AIU
Audio SpeakerCheck	-	-	-	X	-	-	-	-	-	X	Χ	-	API	AIU
Audio SoundsAndAlerts Ringtone List	X	X	X	X	X	X	×	X	×	×	X	X	API	AIU
Audio SoundsAndAlerts Ringtone Play	×	X	X	X	X	Χ	X	X	X	×	X	X	API	AIU
Audio SoundsAndAlerts Ringtone Stop	X	X	X	X	X	X	×	×	×	×	X	X	API	AIU
Audio Volume Decrease	×	X	X	X	X	Χ	X	X	×	X	Χ	X	API	AU
Audio Volume Increase	X	X	X	X	X	X	×	X	×	×	X	X	API	AU
Audio Volume Mute	×	X	X	X	X	Χ	X	X	X	X	X	X	API	AU
Audio Volume Set	X	X	X	X	X	X	X	×	X	×	X	X	API	AU
Audio Volume SetToDefault	X	X	X	X	X	Χ	X	X	×	X	X	X	API	AU
Audio Volume ToggleMute	X	X	X	X	X	X	×	X	×	×	X	X	API	AU
Audio Volume Unmute	X	X	X	X	X	Χ	X	X	×	X	Χ	X	API	AU
Audio VuMeter Start	X	X	X	X	X	X	×	X	×	×	X	X	API	AU
Audio VuMeter Stop	×	X	X	X	X	Χ	×	X	×	X	Χ	X	API	AU
Audio VuMeter StopAll	X	X	X	X	X	X	X	×	X	×	X	X	API	AU
Bookings Clear	×	X	X	X	X	Χ	×	X	×	X	Χ	X	API	AU
Bookings Get	X	X	×	X	X	X	×	×	×	X	X	X	API	AU
Bookings List	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AU
Bookings NotificationSnooze	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
Call Accept	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	AU
Call Disconnect	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIU
Call DTMFSend	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AU
Call FarEndControl Camera Move	X	×	X	×	X	Χ	X	X	X	X	X	X	API	AU



Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Call FarEndControl Camera Stop	X	Х	X	Х	X	Х	X	X	X	X	X	Х	API	AU
Call FarEndControl RoomPreset Activate	X	X	X	X	X	Χ	X	X	X	X	×	X	API	AU
Call FarEndControl Source Select	×	X	X	X	X	Х	X	×	X	X	Х	Х	API	AU
Call FarEndMessage Send	×	X	X	X	X	Χ	X	X	X	X	X	X	API	AU
Call FarEndMessage SStringSend	X	-	-	_	-	-	-	-	-	-	-	-	API	AU
Call FarEndMessage TStringSend	X	-	-	-	-	-	-	-	-	-	-	-	API	AU
Call Forward	X	X	X	Х	X	Χ	X	X	X	X	Х	Х	API	AU
Call Hold	×	X	X	X	X	Χ	X	X	X	X	X	X	API	AU
Call Ignore	X	X	×	X	X	X	X	X	×	X	×	X	API	AU
Call Join	X	X	X	X	X	X	X	X	×	X	×	X	API	AU
Call Reject	X	X	X	X	X	X	×	X	X	X	X	X	API	AU
Call Resume	X	X	X	X	X	X	×	X	×	X	×	X	API	AU
Call UnattendedTransfer	X	X	X	X	X	X	×	X	X	X	×	X	API	AU
CallHistory AcknowledgeAllMissedCalls	X	X	X	X	×	X	X	×	X	×	X	X	API	AU
CallHistory AcknowledgeMissedCall	X	X	X	X	X	X	×	X	X	X	×	X	API	AU
CallHistory DeleteAll	X	X	X	X	X	X	×	X	×	X	×	X	API	AU
CallHistory DeleteEntry	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
CallHistory Get	X	X	X	X	×	X	X	X	×	×	×	X	API	AU
CallHistory Recents	X	X	X	X	X	X	×	X	X	X	×	X	API	AU
Camera PositionReset	X	X	X	X	-	_	-	X	X	X	X	-	API	AIU
Camera PositionSet	X	X	X	X	-	-	X	X	X	X	X	X	API	AIU
Camera Preset Activate	X	X	X	X	-	-	X	X	X	X	X	X	API	AU
Camera Preset ActivateDefaultPosition	X	X	X	X	-	-	X	X	X	X	X	X	API	AU
Camera Preset Edit	X	X	X	X	-	-	X	X	X	X	X	X	API	AU
Camera Preset List	X	X	X	X	-	-	×	X	X	X	X	X	API	AU

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Camera Preset Remove	X	Х	X	Х	-	-	X	X	X	X	Χ	X	API	AU
Camera Preset Show	X	X	X	X	_	-	X	X	X	X	Χ	X	API	AU
Camera Preset Store	X	X	X	X	-	-	×	×	×	X	Χ	X	API	AU
Camera Ramp	X	X	X	X	-	-	×	X	×	X	Χ	X	API	AIU
Camera TriggerAutofocus	X	X	X	X	-	-	-	X	X	x	Χ	-	API	AU
Cameras AutoFocus Diagnostics Start	X	-	-	X	-	-	X	X	X	X	Χ	X	API	АІ
Cameras AutoFocus Diagnostics Stop	X	-	-	X	-	-	×	×	×	X	Χ	X	API	AI
Cameras PresenterTrack ClearPosition	X	-	-	X	-	-	-	-	×	-	Χ	-	API	AIU
Cameras PresenterTrack Set	X	-	-	X	-	-	-	-	X	-	Χ	-	API	AIU
Cameras PresenterTrack StorePosition	X	-	_	X	_	-	-	-	X	-	Χ	-	API	AIU
Cameras SpeakerTrack Activate	X	-	-	X	-	-	×	×	×	X	Χ	X	API	AU
Cameras SpeakerTrack Deactivate	X	-	-	X	-	-	X	X	X	X	Χ	X	API	AU
Cameras SpeakerTrack Diagnostics Start	X	-	-	X	-	-	×	×	×	X	Χ	X	API	AIU
Cameras SpeakerTrack Diagnostics Stop	X	-	_	X	_	-	X	X	X	X	Χ	X	API	AIU
Cameras SpeakerTrack Whiteboard ActivatePosition	X	-	_	X	-	-	×	×	×	x	Χ	X	API	AU
Cameras SpeakerTrack Whiteboard AlignPosition	X	-	-	X	-	-	X	X	X	X	Χ	X	API	AU
Cameras SpeakerTrack Whiteboard SetDistance	X	-	-	X	-	-	X	X	X	X	X	X	API	AU
Cameras SpeakerTrack Whiteboard StorePosition	X	-	_	X	_	-	X	X	X	X	Χ	X	API	AU
Conference DoNotDisturb Activate	X	X	X	X	X	X	×	×	×	x	Χ	X	API	AIU
Conference DoNotDisturb Deactivate	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	AIU
Conference SpeakerLock Release	X	X	X	X	X	X	X	X	X	x	X	X	API	AU
Conference SpeakerLock Set	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	AU
Diagnostics Run	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AU
Dial	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	AIU
GPIO ManualState Set	X	_	-	X	-	-	-	-	×	-	Χ	-	API	AU

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
HttpFeedback Deregister	X	Х	X	Х	X	Χ	Х	X	Х	X	Χ	X	API	А
HttpFeedback Enable	X	X	X	X	X	Χ	X	X	X	X	Χ	Χ	API	A
HttpFeedback Register	×	X	X	X	X	Χ	X	X	X	X	Χ	Х	API	Α
Macros Log Clear	X	X	-	X	-	Χ	X	X	X	X	Χ	Χ	API	Α
Macros Log Get	X	X	-	X	-	Χ	×	X	×	X	Χ	Х	API	Α
Macros Macro Activate	X	X	-	X	-	Χ	X	X	X	X	X	Х	API	Α
Macros Macro Deactivate	X	X	-	X	-	Χ	X	X	X	X	Χ	X	API	А
Macros Macro Get	X	X	-	X	-	Χ	X	X	X	X	X	X	API	A
Macros Macro Remove	X	X	-	X	-	Χ	×	X	×	X	Χ	X	API	Α
Macros Macro RemoveAll	X	X	-	X	-	Χ	X	X	X	X	X	X	API	Α
Macros Macro Rename	X	X	-	X	-	Χ	X	X	X	X	Χ	X	API	А
Macros Macro Roles Set	X	X	-	X	-	X	×	X	×	X	X	X	API	A
Macros Macro Save	X	X	-	X	-	Χ	X	X	X	X	X	X	API	A
Macros Runtime Restart	X	X	-	X	-	Χ	×	X	×	X	X	X	API	A
Macros Runtime Start	X	X	-	X	-	Χ	X	X	X	X	X	X	API	A
Macros Runtime Status	X	X	-	X	-	X	×	X	×	X	X	X	API	A
Macros Runtime Stop	X	X	_	X	-	Χ	X	X	X	X	Χ	X	API	A
Message Send	l ×	X	×	X	×	X	X	X	X	X	X	X	API	AI
Peripherals Connect	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIRU
Peripherals HeartBeat	l ×	X	X	X	X	X	×	X	×	X	X	X	API	AIRU
Peripherals List	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIR
Peripherals Pairing DeviceDiscovery Start	X	X	X	X	X	X	X	X	X	X	X	X	API	A
Peripherals Pairing Pair	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	A
Peripherals Pairing Unpair	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
Peripherals Purge	X	X	X	X	X	X	X	X	X	X	X	X	API	AU

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Phonebook Contact Add	X	Χ	X	X	X	Х	X	X	X	X	X	Χ	API	AU
Phonebook Contact Delete	X	Χ	×	X	X	Х	X	X	X	X	Х	Х	API	AU
Phonebook Contact Modify	X	Χ	X	X	X	X	X	X	X	X	Χ	Χ	API	AU
Phonebook ContactMethod Add	X	Χ	×	×	X	X	X	×	×	X	X	Х	API	AU
Phonebook ContactMethod Delete	X	Χ	X	×	X	X	X	X	X	X	X	Χ	API	AU
Phonebook ContactMethod Modify	X	Χ	×	×	X	X	X	X	×	X	X	Х	API	AU
Phonebook Folder Add	X	Χ	X	X	X	X	X	X	×	X	X	Χ	API	AU
Phonebook Folder Delete	X	Χ	×	×	X	X	×	X	×	X	X	Х	API	AU
Phonebook Folder Modify	X	Χ	X	×	X	X	X	X	×	X	X	Χ	API	AU
Phonebook Search	X	Χ	×	X	X	Х	X	X	X	X	Х	Х	API	AU
Presentation Start	X	Х	X	×	X	Х	X	X	×	X	X	Х	API	AU
Presentation Stop	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
Provisioning CompleteUpgrade	X	X	X	×	X	X	X	X	×	X	X	X	API	AU
Provisioning PostponeUpgrade	X	X	×	X	×	X	X	X	X	X	X	X	API	AU
Provisioning CUCM ExtensionMobility Login	X	X	×	×	X	X	×	X	×	X	×	X	API	AU
Provisioning CUCM ExtensionMobility Logout	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
Provisioning RoomType Activate	X	-	-	X	-	-	-	-	X	-	X	-	API	AI
Provisioning Service Fetch	X	X	X	X	X	X	X	X	X	X	X	X	API	Α
Proximity Services Activate	X	X	×	X	×	X	X	X	X	X	X	X	API	AU
Proximity Services Deactivate	X	Х	X	X	X	X	X	X	X	X	Χ	X	API	AU
RoomPreset Activate	X	Χ	X	X	-	-	X	X	X	X	Χ	Х	API	AU
RoomPreset Clear	X	Х	X	X	-		X	X	X	X	Χ	X	API	AU
RoomPreset Store	X	Х	X	X	-	-	X	X	X	X	Χ	Х	API	AU
Security Certificates CA Add	X	Х	Х	X	Х	X	X	X	X	Х	Х	X	API	Α
Security Certificates CA Delete	X	X	X	×	X	×	X	X	×	X	X	X	API	Α

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Security Certificates CA Show	X	Х	X	Х	X	Х	Х	X	X	X	Х	X	API	AU
Security Certificates Services Activate	X	X	X	X	X	Χ	X	X	X	X	X	Χ	API	A
Security Certificates Services Add	X	X	X	X	X	Х	X	X	×	X	Х	Х	API	Α
Security Certificates Services Deactivate	X	X	X	X	X	Χ	X	X	×	X	Χ	Χ	API	Α
Security Certificates Services Delete	X	X	X	X	X	Х	X	X	X	X	X	Χ	API	Α
Security Certificates Services Show	X	X	X	X	X	Χ	X	X	X	X	X	Χ	API	AU
Security FIPSMode Activate	X	Х	X	Χ	X	Χ	X	X	X	X	X	Χ	API	Α
Security Persistency	×	X	X	X	X	Χ	X	X	X	X	Χ	Х	API	Α
Security Session List	X	X	×	X	X	Х	X	×	×	×	Х	Х	API	Α
Security Session Terminate	X	X	X	X	X	X	X	X	X	X	X	X	API	Α
Standby Activate	X	X	X	X	X	Χ	X	X	X	×	Χ	Х	API	AIU
Standby Deactivate	X	X	X	X	X	X	X	X	X	X	X	X	API	AIU
Standby Halfwake	X	X	X	X	X	X	X	X	X	X	X	X	API	AI
Standby ResetHalfwakeTimer	X	X	×	X	×	X	X	X	×	×	X	X	API	AU
Standby ResetTimer	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
SystemUnit Boot	X	X	X	X	X	X	X	X	X	X	X	X	API	AIU
SystemUnit FactoryReset	X	X	X	X	X	X	X	X	X	X	X	X	API	AU
SystemUnit FirstTimeWizard Stop	X	X	X	X	X	X	×	X	X	×	×	X	API	AIU
SystemUnit Notifications RemoveAll	X	X	X	X	X	X	×	X	X	X	×	X	API	A
SystemUnit OptionKey Add	X	X	X	X	X	X	X	X	X	X	X	X	API	Α
SystemUnit OptionKey List	X	X	X	X	X	Х	X	X	X	Х	Χ	Х	API	Α
SystemUnit OptionKey Remove	X	X	X	X	X	X	X	X	X	X	X	X	API	Α
SystemUnit OptionKey RemoveAll	X	X	X	X	X	Х	X	X	X	X	Χ	Χ	API	A
SystemUnit ProductPlatform Set	X	-	-	X	-	-	-	X	X	X	Χ	-	API	Α
SystemUnit SignInBanner Clear	X	X	X	X	X	Χ	X	X	×	×	X	Χ	API	Α

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
SystemUnit SignInBanner Get	X	X	X	Х	X	Х	X	X	Х	X	Χ	X	API	AU
SystemUnit SignInBanner Set	X	X	X	×	X	Х	X	X	×	X	X	X	API	Α
SystemUnit SoftReset	X	X	X	X	X	X	X	X	X	X	Χ	Х	API	AU
SystemUnit SoftwareUpgrade	X	×	X	×	X	Х	X	X	×	X	X	X	API	Α
SystemUnit WelcomeBanner Clear	X	X	X	X	X	X	X	X	X	X	X	X	API	А
SystemUnit WelcomeBanner Get	X	X	X	X	X	X	X	X	×	X	X	Х	API	A Au I U
SystemUnit WelcomeBanner Set	X	X	X	X	X	X	X	X	×	X	X	Х	API	Α
Time DateTime Get	X	X	X	X	X	X	×	X	×	X	X	Х	API	AU
Time DateTime Set	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AU
UserInterface Branding Clear	X	X	-	X	X	X	X	X	×	X	X	Х	API	AI
UserInterface Branding Delete	X	X	-	X	X	X	X	X	X	×	Χ	X	API	AIU
UserInterface Branding Get	X	X	-	X	X	X	X	X	X	X	X	X	API	AIU
UserInterface Branding Updated	X	X	-	X	X	X	×	X	×	X	X	X	API	AIU
UserInterface Branding Upload	X	X	-	X	X	X	X	×	X	×	X	X	API	AIU
UserInterface Extensions Clear	X	×	X	×	X	X	×	X	×	×	×	X	API	AIR
UserInterface Extensions List	X	X	X	X	X	X	×	X	X	X	X	X	API	IRU
UserInterface Extensions Panel Clicked	X	X	X	X	X	X	X	×	X	×	X	X	API	AIRU
UserInterface Extensions Panel Close	X	×	X	X	X	X	×	X	X	×	×	X	API	AIRU
UserInterface Extensions Panel Remove	X	×	X	×	X	X	×	×	×	×	×	X	API	AIR
UserInterface Extensions Panel Save	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AIR
UserInterface Extensions Set	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AIR
UserInterface Extensions Widget Action	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AIRU
UserInterface Extensions Widget SetValue	X	X	X	X	X	X	X	X	X	X	Χ	X	API	AIR
UserInterface Extensions Widget UnsetValue	X	X	X	X	X	X	X	X	X	X	Х	X	API	AIR
UserInterface Message Alert Clear	X	X	X	X	X	×	X	X	×	X	X	X	API	AIRU

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Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
UserInterface Message Alert Display	X	X	X	X	X	Х	X	X	X	X	X	X	API	AIR
UserInterface Message Prompt Clear	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIRU
UserInterface Message Prompt Display	X	X	X	X	X	Х	X	X	×	X	Х	X	API	AIR
UserInterface Message Prompt Response	X	×	×	X	X	Χ	X	×	X	X	Χ	X	API	AIRU
UserInterface Message TextInput Clear	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIRU
UserInterface Message TextInput Display	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIRU
UserInterface Message TextInput Response	X	X	X	×	X	Χ	X	X	X	X	X	Х	API	AIRU
UserInterface Message TextLine Clear	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	AIRU
UserInterface Message TextLine Display	X	X	X	×	X	Χ	X	×	X	X	X	X	API	AIR
UserInterface OSD Key Click	-	X	X	-	-	Χ	-	-	-	-	-	-	API	Α
UserInterface OSD Key Press	_	X	X	-	-	Χ	-	-	-	-	-	-	API	Α
UserInterface OSD Key Release	-	X	X	-	-	Χ	-	-	-	-	-	-	API	Α
UserInterface Presentation ExternalSource Add	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIR
UserInterface Presentation ExternalSource List	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIR
UserInterface Presentation ExternalSource Remove	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIR
UserInterface Presentation ExternalSource RemoveAll	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIR
UserInterface Presentation ExternalSource Select	X	X	X	×	X	Χ	X	X	X	X	X	X	API	AIRU
UserInterface Presentation ExternalSource State Set	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AIR
UserManagement RemoteSupportUser Create	X	X	X	X	X	Х	X	X	X	Х	Х	X	API	А
UserManagement RemoteSupportUser Delete	X	X	X	X	X	Χ	X	X	X	Х	Χ	Х	API	А
UserManagement RemoteSupportUser DisablePermanently	X	Х	X	X	X	Х	Х	Х	Х	Х	Х	×	API	А
UserManagement RemoteSupportUser GetState	X	X	X	X	X	X	X	X	X	×	X	X	API	A
UserManagement User Add	X	X	X	X	X	Χ	X	X	X	X	Χ	X	API	Α
UserManagement User Delete	X	X	X	X	X	X	×	X	X	X	X	X	API	А



Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
UserManagement User Get	X	Х	X	Х	X	Х	Х	X	Х	X	Х	Х	API	А
UserManagement User List	X	X	X	X	X	Χ	X	×	X	X	X	X	API	Α
UserManagement User Modify	X	X	X	X	X	X	X	X	X	X	X	X	API	A
UserManagement User Passphrase Change	X	X	X	X	X	X	X	X	X	X	X	X	API	A Au I R U
UserManagement User Passphrase Set	X	X	X	X	X	X	×	X	×	X	×	X	API	A
UserManagement User Unblock	X	X	X	X	X	X	X	×	X	×	X	X	API	A
Video ActiveSpeakerPIP Set	X	X	X	X	X	X	×	X	×	X	×	X	API	AU
Video CEC Input KeyClick	-	-	-	-	-	-	×	X	×	X	×	X	API	AI
Video CEC Output KeyClick	X	X	X	X	X	-	×	X	×	X	×	X	API	AI
Video CEC Output SendActiveSourceRequest	X	X	X	X	X	-	×	X	×	X	×	X	API	AI
Video Input SetMainVideoSource	X	X	_	X	X	X	X	X	X	X	X	X	API	AIU
Video Input Source SetActiveConnector	X	-	X	X	X	-	-	-	-	-	-	-	API	AU
Video Layout LayoutFamily Set	X	X	X	X	X	X	×	X	×	X	×	X	API	AU
Video Matrix Assign	X	X	-	X	X	-	×	×	×	-	×	-	API	AU
Video Matrix Reset	X	X	_	X	X	-	×	X	×	-	×	-	API	AU
Video Matrix Swap	X	X	-	X	X	-	×	×	×	-	×	-	API	AU
Video Matrix Unassign	X	X	-	X	X	-	X	×	X	-	X	-	API	AU
Video Output Monitor Backlight Set	-	-	-	X	-	-	-	-	-	X	×	-	API	A
Video Output Monitor Brightness Set	-	-	-	X	-	-	-	-	-	-	-	-	API	А
Video Output Monitor Color Blue Set	-	-	-	X	-	-	-	-	-	-	-	-	API	A
Video Output Monitor Color Green Set	-	-	-	X	-	-	-	-	-	-	-	-	API	Α
Video Output Monitor Color Red Set	-	-		X	-	-	-		-	-		-	API	Α
Video Output Monitor Color Select	-	-	-	X	-	-	-	-	-	X	X	-	API	Α
Video Output Monitor Contrast Set	-	-	-	X	-	-	-	-	-	-	-	-	API	А



Command	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Output Monitor CSC Select	-	-	-	Х	-	-	-	-	-	-	-	-	API	А
Video Output Monitor Gamma Set	-	-	-	X	-	-	-	-	-	-	-	-	API	A
Video Output Monitor Reset	-	-	-	X	-	-	-	-	-	×	×	-	API	A
Video Output Monitor Sharpness Set	-	-	-	X	-	-	-	-	_	-	_	-	API	A
Video PresentationPIP Set	X	X	X	X	X	Χ	X	X	X	×	X	X	API	AU
Video PresentationView Set	X	X	X	X	X	X	X	×	X	×	X	X	API	AU
Video Selfview Set	X	X	X	X	X	Χ	X	X	X	X	X	X	API	AU

X: Supported -: Not supported



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio Devices Bluetooth ActiveProfile	-	_	-	-	-	Χ	-	-	-	-	-	-	Web	AU
Audio Devices HandsetUSB ConnectionStatus	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio Devices HandsetUSB Cradle	-	_	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetAnalog Connection Status	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetAnalog HasMicrophone	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetUSB ConnectionStatus	-	-	-	-	-	X	-	-	-	-	_	-	Web, API	AU
Audio Devices HeadsetUSB Description	-	-	-	-	_	X	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetUSB Manufacturer	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio Input Connectors ARC [n] EcReferenceDelay	Χ	×	X	Χ	×	X	×	X	X	X	X	X	Web, API	AU
Audio Input Connectors HDMI [n] EcReferenceDelay	X	×	×	X	-	X	×	×	×	X	X	X	Web, API	AU
Audio Input Connectors Microphone [n] ConnectionStatus	-	×	X	-	×	-	×	X	X	X	X	X	Web, API	AIU
Audio Input Connectors Microphone [n] ConnectionType	X	×	×	X	X	X	×	×	×	X	X	X	Web	AU
Audio Input Connectors Microphone [n] EcReferenceDelay	Χ	×	X	Χ	-	X	×	X	X	X	Χ	-	Web, API	AU
Audio Input KeyClick Attenuate	-	-	-	-	-	-	×	×	×	X	X	X	Web, API	AU
Audio Input KeyClick Detected	-	_	-	-	-	-	×	X	X	X	X	X	Web, API	AU
Audio Input KeyClick Enabled	-	-	-	-	-	-	×	×	×	X	X	X	Web, API	AU
Audio Input LocalInput [n] AGC	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input LocalInput [n] Channels	X	-	-	X	-	-	-	-	×	-	X	-	Web, API	AU
Audio Input LocalInput [n] Connector	Χ	-	-	Χ	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input LocalInput [n] Direct	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input LocalInput [n] MixerMode	X	-	-	Χ	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input LocalInput [n] Mute	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input LocalInput [n] Name	X	-	-	Χ	-	-	-	-	X	-	X	-	Web, API	AU
Audio Input RemoteInput [n] CallId	X	X	X	X	-	X	X	X	X	X	X	X	Web, API	AU
Audio Microphones LedIndicator	X	×	X	Χ	×	X	×	X	X	X	X	X	Web	AU

A: ADMIN Au: AUDIT I: INTEGRATOR R: ROOMCONTROL



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio Microphones Mute	X	X	X	X	X	Χ	X	X	Х	X	X	X	Web, API	AIU
Audio Module [n] Connector	X	-	_	X	_	-	-	-	-	-	-	-	Web	AU
Audio Module [n] HardwareID	X	_	_	X	-	-	-	-	-	-	-	-	Web	AU
Audio Module [n] SoftwareID	X	-	-	X	_	-	-	-	-	-	-	-	Web	AU
Audio Module [n] Type	X	-	-	X	-	-	-	-	-	-	_	-	Web	AU
Audio Output Connectors ARC [n] DelayMs	-	-	-	-	-	-	-	X	X	-	X	-	Web, API	AIU
Audio Output Connectors HDMI [n] DelayMs	-	-	-	-	-	-	×	X	×	X	×	-	Web, API	AIU
Audio Output Connectors ARC [n] Mode	-	-	_	-	-	-	-	X	X	-	X	-	Web, API	AIU
Audio Output Connectors HDMI [n] Mode	-	-	-	-	-	-	×	X	×	X	×	-	Web, API	AIU
Audio Output Connectors InternalSpeaker [n] DelayMs	-	_	-	-	_	-	X	X	X	X	×	-	Web, API	AIU
Audio Output Connectors InternalSpeaker [n] Mode	-	-	-	-	-	-	-	×	X	×	X	-	Web, API	AIU
Audio Output Connectors Line [n] ConnectionStatus	-	-	-	-	-	-	X	X	X	X	X	X	Web, API	AIU
Audio Output Connectors Line [n] DelayMs	X	×	X	X	X	X	×	×	×	X	×	X	Web, API	AIU
Audio Output LocalOutput [n] Channels	X	_	_	X	_	-	-	-	X	_	X	-	Web, API	AU
Audio Output LocalOutput [n] Connector [n]	X	-	-	X	-	-	-	-	×	-	×	-	Web, API	AU
Audio Output LocalOutput [n] Input [n] Gain	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Output LocalOutput [n] Loudspeaker	X	-	-	X	-	-	-	-	×	-	×	-	Web, API	AU
Audio Output LocalOutput [n] Name	X	_	_	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Output LocalOutput [n] VolumeControlled	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Output MeasuredHdmiArcDelay	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AIU
Audio Output MeasuredHdmiDelay	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Audio Output MeasuredHdmiCecDelay	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Audio Output RemoteOutput [n] CallId	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AU
Audio Output RemoteOutput [n] Input [n] Gain	X	_	_	X	-	-	-	-	X	_	X	-	Web, API	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Audio SelectedDevice	-	-	-	-	-	Х	-	-	-	-	-	-	Web, API	AU
Audio Ultrasound Volume	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Audio Volume	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Audio VolumeHandsetUsb	-	-	-	_	-	X	-	-	-	-	-	-	Web, API	AU
Audio VolumeHeadsetAnalog	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio VolumeHeadsetBluetooth	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Audio VolumeHeadsetUsb	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio VolumeInternal	-	-	-	-	-	X	-	-	-	-	-	-	Web, API	AU
Audio VolumeKeyStepSize	X	X	X	X	X	X	X	X	×	X	X	X	Web	AU
Audio VolumeMute	×	X	X	X	X	X	X	X	×	X	X	X	Web, API	AU
Bluetooth Capabilities Advertising	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Bluetooth Capabilities Headset	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Bluetooth DeviceName	-	-	-	-	-	X	-	-	-	-	-	-	Web	AU
Bluetooth Devices [n] Address	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Bluetooth Devices [n] Connected	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Bluetooth Devices [n] Name	-	-	-	-	-	X	-	-	-	-	_	-	Web	AU
Bluetooth Devices [n] Paired	-	-	-	-	-	X	-	-	-	-	-	-	Web	AU
Bookings Current Id	×	X	X	×	X	Х	X	X	×	X	X	X	Web, API	AU
Call [n] AnswerState	×	X	X	X	X	X	X	X	×	X	X	X	Web, API	AU
Call [n] AttendedTransferFrom	×	X	X	X	X	X	X	X	X	X	Х	X	Web, API	AU
Call [n] CallbackNumber	×	X	X	X	Х	X	X	X	X	Х	Χ	X	Web, API	AU
Call [n] CallType	×	X	X	X	Х	X	X	X	X	X	Х	X	Web, API	AU
Call [n] DeviceType	×	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
Call [n] Direction	×	X	X	X	Х	X	X	X	X	X	Х	X	Web, API	AU
Call [n] DisplayName	X	×	×	X	X	Х	X	X	X	X	X	X	Web, API	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Call [n] Duration	X	X	X	X	X	Х	X	X	X	X	X	Х	Web, API	AU
Call [n] Encryption Type	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
Call [n] FacilityServiceId	X	X	X	X	X	Х	X	×	X	X	Х	Х	Web, API	AIU
Call [n] HoldReason	X	X	X	X	X	X	X	×	X	X	Χ	X	Web, API	AU
Call [n] PlacedOnHold	X	X	X	X	×	X	X	×	X	X	Х	X	Web, API	AU
Call [n] Protocol	X	X	X	×	X	X	×	X	X	X	X	X	Web, API	AU
Call [n] ReceiveCallRate	X	X	X	X	×	Х	X	X	X	X	Χ	X	Web, API	AIU
Call [n] RemoteNumber	X	×	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Call [n] Status	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Call [n] TransmitCallRate	X	×	X	×	X	X	×	X	×	X	×	X	Web, API	AIU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Bytes	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] ChannelRate	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Jitter	×	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] LastIntervalLost	×	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Loss	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] MaxJitter	X	X	Х	X	X	Х	X	X	X	X	Х	X	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Packets	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Bytes	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] ChannelRate	×	X	X	X	X	X	X	X	X	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Jitter	×	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] LastIntervalLost	X	X	X	X	X	Х	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	Х	X	X	Х	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Loss	X	Х	X	X	X	X	X	X	X	X	X	Х	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] MaxJitter	X	Х	X	X	X	Х	X	Х	X	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Packets	X	X	X	Х	X	X	X	X	X	Х	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Bytes	X	Х	X	Х	X	Х	Х	X	Х	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] ChannelRate	X	X	X	X	X	Х	X	X	X	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Jitter	X	X	X	Х	X	Х	Х	X	X	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] LastIntervalLost	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	Х	X	Х	X	X	Χ	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Loss	X	Х	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] MaxJitter	X	Х	X	X	X	X	X	Х	X	Х	X	Х	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Packets	X	X	X	Х	X	X	X	X	X	Х	Χ	Х	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Bytes	X	Х	X	X	X	Х	Х	X	X	X	X	Х	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] ChannelRate	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Jitter	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] LastIntervalLost	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Loss	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] MaxJitter	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Packets	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Bytes	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] ChannelRate	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Jitter	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] LastIntervalLost	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	X	X	Х	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Loss	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] MaxJitter	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Packets	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Bytes	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] ChannelRate	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Jitter	X	X	X	X	X	Х	X	X	Х	X	X	Х	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] LastIntervalLost	X	X	X	X	X	X	X	X	X	X	X	Х	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] LastIntervalReceived	X	X	X	X	X	X	X	X	X	X	Х	X	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Loss	X	X	X	Х	X	X	X	X	X	X	Χ	X	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] MaxJitter	X	X	X	X	X	X	X	X	X	X	X	Х	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Packets	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Cameras Camera [n] Capabilities Options	×	X	X	X	Х	Х	X	X	Х	X	Χ	Х	Web, API	AIRU
Cameras Camera [n] Connected	X	X	X	X	X	X	×	X	×	×	Χ	X	Web, API	AIRU
Cameras Camera [n] DetectedConnector	X	×	X	X	-	-	-	X	Х	×	Χ	-	Web, API	AIRU
Cameras Camera [n] DownloadProgress	X	X	X	X	X	Χ	X	X	Χ	X	Χ	Χ	Web	AIRU
Cameras Camera [n] Flip	×	X	X	X	-	-	-	X	Х	X	Χ	-	Web, API	AIRU
Cameras Camera [n] Framerate	-	-	-	-	-	-	X	-	-	-	-	X	Web, API	AIRU
Cameras Camera [n] HardwareID	X	X	X	X	Х	Χ	-	X	Х	X	Χ	-	Web, API	AIRU
Cameras Camera [n] lpAddress	X	X	Х	X	-	Χ	X	X	Χ	X	X	Χ	Web	AIRU
Cameras Camera [n] LightingConditions	-	-	-	-	-	-	X	X	Х	X	Χ	Х	Web, API	AIRU
Cameras Camera [n] MacAddress	X	X	X	Х	-	-	-	X	X	X	Χ	-	Web, API	AIRU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Cameras Camera [n] Manufacturer	Χ	X	X	Х	X	Χ	X	X	X	X	Χ	Х	Web, API	AIRU
Cameras Camera [n] Model	X	×	X	X	X	X	×	×	×	X	X	X	Web, API	AIRU
Cameras Camera [n] Position Focus	Χ	X	X	X	X	-	-	X	X	X	Χ	-	Web, API	AIRU
Cameras Camera [n] Position Lens	X	-	-	X	-	-	-	×	×	X	X	-	Web, API	AIRU
Cameras Camera [n] Position Pan	Χ	X	×	X	X	-	X	X	X	X	X	X	Web, API	AIRU
Cameras Camera [n] Position Tilt	Χ	×	X	X	X	-	×	×	×	X	Х	X	Web, API	AIRU
Cameras Camera [n] Position Zoom	Χ	X	X	X	X	-	X	X	X	X	Χ	X	Web, API	AIRU
Cameras Camera [n] Role	Χ	X	X	X	X	Χ	×	X	X	X	Χ	X	Web	AIRU
Cameras Camera [n] SerialNumber	Χ	×	X	X	-	Χ	-	X	X	X	Χ	-	Web, API	AIRU
Cameras Camera [n] SoftwareID	X	×	X	X	X	Χ	-	×	×	X	Χ	X	Web, API	AIRU
Cameras Camera [n] State	Χ	X	X	X	X	Χ	X	X	X	X	Х	X	Web	AIRU
Cameras Camera [n] UpgradeStatus	Χ	×	X	X	X	Χ	×	X	X	X	Χ	X	Web	AIRU
Cameras PresenterTrack Availability	Χ	_	-	Χ	-	-	-	-	-	-	-	-	Web, API	AIRU
Cameras PresenterTrack PresenterDetected	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AIRU
Cameras PresenterTrack Status	Χ	-	-	X	-	-	-	-	-	-	-	-	Web, API	AIRU
Cameras SpeakerTrack ActiveConnector	Χ	-	-	X	-	-	×	×	×	X	Х	X	Web, API	AIRU
Cameras SpeakerTrack Availability	Χ	-	-	X	-	-	×	×	×	X	Χ	X	Web, API	AIRU
Cameras SpeakerTrack Status	Χ	-	-	X	-	-	×	X	X	X	Χ	X	Web, API	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Defined	Χ	-	-	X	-	-	-	-	-	-	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Pan	X	-	-	X	-	-	-	-	-	-	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Tilt	Χ	-	-	X	-	-	-	-	-	-	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Zoom	Χ	-	-	X	-	-	-	-	-	-	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Distance	Χ	-	-	Х	-	-	-	-	-	-	-	-	Web	AIRU
Capabilities Conference MaxActiveCalls	Χ	X	Х	Х	Х	Χ	Х	X	Х	Х	Χ	X	Web, API	AU
Capabilities Conference MaxAudioCalls	Χ	×	X	Х	X	Χ	×	X	X	X	Х	X	Web, API	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Capabilities Conference MaxCalls	Х	X	X	X	X	Χ	X	X	X	X	X	Х	Web, API	AU
Capabilities Conference MaxVideoCalls	Χ	X	X	X	X	Χ	X	X	X	×	Х	Х	Web, API	AU
Conference ActiveSpeaker CallId	X	X	X	X	X	Χ	X	X	X	X	×	X	Web, API	AU
Conference Call [n] Appearance	X	X	X	X	X	Χ	X	X	X	X	×	X	Web	AU
Conference Call [n] AttendedTransfer	X	X	X	X	X	X	×	×	×	X	×	X	Web	AU
Conference Call [n] BookingId	Х	X	X	X	X	Χ	X	×	X	×	Х	Х	Web, API	AU
Conference Call [n] CALText	Χ	X	X	X	X	X	X	X	×	X	×	X	Web	AU
Conference Call [n] Capabilities DTMF	Х	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Conference Call [n] Capabilities FarendMessage Mode	X	X	X	X	X	Χ	X	X	×	X	×	X	Web, API	AU
Conference Call [n] Capabilities FECC Mode	X	X	X	X	X	Χ	×	×	×	×	×	X	Web, API	AU
Conference Call [n] Capabilities FECC NumberOfPresets	X	X	X	×	X	Χ	×	X	×	X	×	X	Web, API	AU
Conference Call [n] Capabilities FECC NumberOfSources	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Name	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Options	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Sourceld	X	×	X	×	X	X	×	X	×	X	×	X	Web, API	AU
Conference Call [n] Capabilities Hold	X	×	X	X	X	Χ	X	X	X	X	×	X	Web, API	AU
Conference Call [n] Capabilities IxChannel Encryption Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Conference Call [n] Capabilities IxChannel Status	X	X	X	X	X	Χ	X	X	X	X	×	X	Web, API	AU
Conference Call [n] Capabilities Mari Status	X	X	X	X	X	Χ	×	X	×	X	×	X	Web	AU
Conference Call [n] Capabilities Presentation	Х	X	X	X	X	Χ	X	X	X	Х	Х	X	Web, API	AU
Conference Call [n] GCI	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Conference Call [n] InfoScreen	X	X	X	X	X	Χ	X	X	X	Х	X	X	Web	AU
Conference Call [n] Manufacturer	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Conference Call [n] MicrophonesMuted	Χ	X	X	X	X	Χ	X	X	×	X	×	Х	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Conference Call [n] Multistream Mode	Х	X	X	Х	X	Χ	Х	X	Х	X	X	X	Web	AU
Conference Call [n] Preserved	Х	X	X	X	X	Χ	X	X	×	X	×	X	Web	AU
Conference Call [n] ProximityCall	X	X	X	X	X	Χ	X	X	X	X	Х	X	Web	AU
Conference Call [n] RemoteRenderSiteNames	X	X	X	X	X	Χ	X	X	×	X	×	X	Web	AU
Conference Call [n] SecurityStatus	X	X	×	X	X	Χ	X	X	X	X	X	X	Web	AU
Conference Call [n] SessionType	X	X	X	X	X	Χ	×	×	×	×	×	X	Web	AU
Conference Call [n] SoftwareID	X	X	X	X	X	Χ	×	X	×	X	×	X	Web, API	AU
Conference Call [n] Spark CorrelationId	X	X	X	Х	X	Χ	X	×	Х	X	Х	X	Web	AU
Conference Call [n] Spark TrackingId	X	X	X	X	X	Χ	X	X	×	X	×	X	Web	AU
Conference Call [n] UnattendedTransfer	X	X	×	X	X	Χ	X	×	X	×	X	X	Web	AU
Conference DoNotDisturb	X	X	X	X	X	Χ	×	X	×	X	×	X	Web, API	AIU
Conference Line [n] Appearance [n] DisplayName	X	X	X	X	X	Χ	X	X	×	X	×	X	Web	AU
Conference Line [n] Appearance [n] GCI	X	X	×	X	X	X	X	×	X	×	X	X	Web	AU
Conference Line [n] Appearance [n] Status	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Conference Line [n] Appearance [n] URI	X	X	X	X	X	X	X	X	×	×	×	X	Web	AIU
Conference Line [n] Mode	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Conference LoudestSite	X	×	×	X	X	X	X	×	X	×	X	X	Web	AU
Conference Multipoint Mode	X	X	X	X	X	Χ	X	X	×	X	×	X	Web, API	AU
Conference Presentation CallId	X	X	X	X	X	X	×	×	×	×	×	X	Web, API	AIRU
Conference Presentation LastLocalSource	X	X	X	X	X	Χ	X	X	×	X	×	X	Web	AIRU
Conference Presentation LocalInstance [n] SendingMode	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIRU
Conference Presentation LocalInstance [n] Source	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AIRU
Conference Presentation LocalSendingMode	X	X	X	X	X	X	X	X	X	X	X	X	Web	AIRU
Conference Presentation LocalSource	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AIRU
Conference Presentation Mode	X	X	X	X	X	X	X	X	×	X	×	X	Web, API	AIRU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Conference Presentation Protocol	X	X	X	X	X	Х	X	X	X	X	Х	Х	Web	AIRU
Conference Presentation Resolution Height	X	X	X	×	X	Χ	×	X	×	X	×	X	Web	AIRU
Conference Presentation Resolution Width	X	X	X	X	X	Χ	×	X	×	X	×	Χ	Web	AIRU
Conference Presentation Whiteboard BoardSessionId	X	X	X	X	X	Χ	×	X	×	X	X	X	Web	AU
Conference SelectedCallProtocol	X	×	X	X	×	Х	X	×	X	X	X	Х	Web	AU
Conference SpeakerLock CallId	X	X	X	X	X	Χ	X	X	X	X	×	X	Web, API	AU
Conference SpeakerLock Mode	X	X	X	X	X	Х	×	X	X	X	×	Х	Web, API	AU
Diagnostics LastRun	X	X	X	X	X	Χ	X	X	X	X	Х	Х	Web	AU
Diagnostics Message [n] Description	X	X	×	X	X	Χ	×	X	×	X	×	Х	Web, API	AU
Diagnostics Message [n] Level	X	X	X	X	X	Χ	×	X	X	X	×	X	Web, API	AU
Diagnostics Message [n] References	X	×	X	X	X	Χ	X	X	X	X	Х	Х	Web, API	AU
Diagnostics Message [n] Type	X	X	X	×	X	Χ	×	X	×	X	×	X	Web, API	AU
Facerec IdentifiedPeople [n] Confidence	-	-	-	-	-	-	X	X	X	X	X	X	Web	AU
Facerec IdentifiedPeople [n] Name	-	-	-	-	-	-	X	X	×	X	×	X	Web	AU
Facerec IdentifiedPeople [n] UID	-	-	-	-	-	-	×	×	×	X	×	Х	Web	AU
Facerec IdentifiedPeople [n] UserFeedback	-	-	-	-	-	-	X	X	X	X	X	X	Web	AU
GPIO Pin [n] State	X	-	-	X	-	-	-	-	X	-	X	-	Web, API	AIU
H320 Gateway Address	X	X	X	X	X	X	X	X	×	X	×	X	Web	AU
H320 Gateway Id	X	X	X	X	X	X	X	X	X	X	×	X	Web	AU
H320 Gateway Mode	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
H320 Gateway Number	X	X	X	X	Х	Х	X	X	X	Х	Х	Х	Web	AU
H320 Gateway Reason	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
H320 Gateway Status	X	X	X	X	X	Х	X	X	X	X	X	X	Web	AU
H323 Gatekeeper Address	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
H323 Gatekeeper Port	X	X	X	X	X	X	×	X	×	X	×	X	Web, API	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
H323 Gatekeeper Reason	X	Х	X	Х	X	Х	Х	X	Х	X	Χ	X	Web, API	AU
H323 Gatekeeper Status	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
H323 Mode Reason	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
H323 Mode Status	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
HttpFeedback [n] Expression [n]	X	X	×	X	×	X	X	X	X	×	X	X	Web, API	AU
HttpFeedback [n] Format	X	X	X	×	X	X	X	X	×	X	Χ	X	Web, API	AU
HttpFeedback [n] Status	X	X	X	X	X	X	X	X	×	X	X	X	Web, API	AU
HttpFeedback [n] URL	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
ICE Call [n] MediaLine [n] Local Candidate	X	X	X	X	X	X	X	X	×	X	Χ	X	Web	AU
ICE Call [n] MediaLine [n] Local IP	X	X	X	×	×	X	X	X	×	X	Χ	X	Web	AU
ICE Call [n] MediaLine [n] Local Transport	X	X	X	×	X	X	X	X	×	X	X	X	Web	AU
ICE Call [n] MediaLine [n] Remote Candidate	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
ICE Call [n] MediaLine [n] Remote IP	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
ICE Call [n] MediaLine [n] Remote XtlsFqdnHost	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
ICE Call [n] NegotiationTime	X	X	X	×	×	X	X	X	×	X	X	X	Web	AU
ICE Call [n] Result	X	X	×	X	×	X	X	X	X	X	Χ	X	Web	AU
ICE Configured	X	X	X	X	X	X	X	X	×	X	X	X	Web	AU
ICE Defaultcandidate	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
ICE Turn Bandwidth	X	X	X	X	X	X	X	X	×	X	Χ	X	Web	AU
ICE Turn Discovermode	X	X	X	X	Х	X	X	X	X	X	Х	X	Web	AU
ICE Turn Hostname	X	X	X	X	Х	Х	X	X	X	Х	Χ	X	Web	AU
ICE Turn IP	X	X	X	X	Х	X	X	X	X	X	Χ	X	Web	AU
ICE Turn Transport	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
ICE Turn Username	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Logging ExtendedLogging Mode	X	X	X	X	X	X	X	X	×	X	Χ	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Logging ExtendedLogging PacketDump	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Audio Channels	X	X	X	×	X	X	×	X	×	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] Audio Mute	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] Audio Protocol	Χ	×	X	X	X	X	X	X	X	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] Direction	Χ	X	X	×	X	X	X	X	×	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] Encryption	Χ	X	×	×	X	X	×	X	×	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] LastCsi	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Msctrlld	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] NetStat Bytes	Χ	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat ChannelRate	Χ	X	×	×	X	X	×	X	×	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Jitter	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat LastIntervalLost	X	X	X	×	X	X	×	X	×	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Loss	Χ	X	X	X	X	X	×	X	×	X	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat MaxJitter	Χ	X	X	X	X	X	X	X	X	X	X	Х	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Packets	Χ	×	×	×	X	X	×	X	×	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] ParticipantId	Χ	X	X	X	X	X	×	X	X	X	×	X	Web, API	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local lpAddress	X	X	X	X	X	X	X	X	X	×	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local Port	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local Protocol	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Remote IpAddress	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
MediaChannels Call [n] Channel [n] Transport RTCP Remote Port	Χ	X	X	X	×	X	X	X	X	X	Χ	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Remote Protocol	Χ	X	X	X	×	X	X	X	X	×	Χ	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local IpAddress	X	X	X	Х	X	X	X	Х	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local Port	X	X	X	Х	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local Protocol	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Remote lpAddress	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Remote Port	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Remote Protocol	Χ	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
MediaChannels Call [n] Channel [n] Type	X	X	X	X	X	X	X	X	X	×	X	X	Web, API	AU
MediaChannels Call [n] Channel [n] Video ChannelRole	Χ	X	X	X	X	X	×	X	X	X	Χ	X	Web, API	AU
MediaChannels Call [n] Channel [n] Video FrameRate	Χ	X	X	×	X	×	X	×	X	X	Χ	×	Web, API	AU
MediaChannels Call [n] Channel [n] Video Protocol	Χ	X	×	X	X	X	×	X	X	X	Χ	X	Web, API	AU
MediaChannels Call [n] Channel [n] Video ResolutionX	Χ	X	×	X	X	X	×	X	×	X	Χ	X	Web, API	AU
MediaChannels Call [n] Channel [n] Video ResolutionY	Χ	X	X	X	X	X	X	X	X	×	Χ	X	Web, API	AU
Network [n] ActiveInterface	-	-	-	-	-	X	X	X	X	×	Χ	X	Web	AU
Network [n] CDP Address	Χ	X	X	X	X	Χ	Х	Х	X	X	Χ	X	Web, API	AU
Network [n] CDP Capabilities	Χ	X	X	X	X	Χ	X	X	X	×	Χ	X	Web, API	AU
Network [n] CDP DeviceId	Χ	X	X	X	X	Χ	Х	X	X	X	Χ	X	Web, API	AU
Network [n] CDP Duplex	Χ	X	X	X	X	Χ	Χ	Χ	X	X	Χ	X	Web, API	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Network [n] CDP Platform	X	X	X	X	X	Х	X	X	X	X	X	Х	Web, API	AU
Network [n] CDP PortID	X	X	X	X	X	Х	X	X	X	×	X	X	Web, API	AU
Network [n] CDP PrimaryMgmtAddress	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] CDP SysName	X	X	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Network [n] CDP SysObjectID	X	×	X	X	×	X	X	X	X	×	X	X	Web, API	AU
Network [n] CDP Version	X	X	×	X	X	X	X	X	×	X	×	X	Web, API	AU
Network [n] CDP VoIPApplianceVlanID	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] CDP VTPMgmtDomain	X	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Network [n] DNS Domain Name	X	X	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Network [n] DNS Server [n] Address	X	X	×	X	X	X	X	X	×	×	×	X	Web, API	AU
Network [n] Ethernet MacAddress	X	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Network [n] Ethernet Speed	X	×	X	X	X	X	X	X	X	×	X	X	Web, API	AU
Network [n] IPv4 Address	X	X	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Network [n] IPv4 DHCP ProvisioningDomain	X	X	X	×	X	X	×	X	×	X	×	X	Web	AU
Network [n] IPv4 DHCP ProvisioningServer	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Network [n] IPv4 DHCP TftpServer	X	X	×	×	X	X	×	X	×	X	×	X	Web	AU
Network [n] IPv4 DHCP TftpServerAddress	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Network [n] IPv4 DHCP TmsServer	X	X	X	X	X	X	X	X	X	X	×	X	Web	AU
Network [n] IPv4 Gateway	X	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Network [n] IPv4 SubnetMask	X	X	×	×	X	X	×	X	×	X	×	X	Web, API	AU
Network [n] IPv6 Address	X	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Network [n] IPv6 DHCP TftpServerAddress	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Network [n] IPv6 Gateway	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] IPv6 LinkLocalAddress	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Network [n] MTU	X	X	X	×	X	X	×	X	×	X	×	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Network [n] VLAN Voice VlanId	X	Х	X	Х	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Network [n] Wifi BSSID	-	_	-	_	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi Channel	-	-	-	-	-	Χ	×	X	X	X	Χ	X	Web	AU
Network [n] Wifi Frequency	-	-	-	_	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi MacAddress	-	-	-	-	-	Χ	×	×	×	X	Χ	X	Web	AU
Network [n] Wifi Phase2Method	-	_	-	_	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi RawSSID	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi Reason	-	_	-	_	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi Region	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi RSSI	-	-	-	_	-	Χ	×	×	×	X	Χ	X	Web	AU
Network [n] Wifi ScanResult [n] Flags	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi ScanResult [n] RawSSID	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi ScanResult [n] SignalLevel	-	-	-	-	-	Χ	×	X	X	X	Χ	X	Web	AU
Network [n] Wifi ScanResult [n] SSID	-	-	-	_	-	Χ	X	X	X	X	Χ	X	Web	AU
Network [n] Wifi Speed	_	-	-	_	-	Χ	×	×	×	X	Χ	X	Web	AU
Network [n] Wifi SSID	-	-	-	-	-	Χ	×	X	X	X	Χ	X	Web	AU
Network [n] Wifi Status	-	-	-	_	-	Χ	×	×	×	×	Χ	X	Web	AU
Network [n] Wifi Type	-	-	_	-	-	Χ	X	X	X	X	Χ	X	Web	AU
NetworkServices NTP CurrentAddress	X	×	X	X	X	Χ	×	X	X	X	Χ	X	Web, API	AU
NetworkServices NTP Server [n] Address	X	Х	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
NetworkServices NTP Status	X	X	X	X	X	Χ	X	X	X	×	Χ	X	Web, API	AU
Peripherals ConnectedDevice [n] HardwareInfo	X	X	X	X	X	Χ	X	X	X	Х	Χ	X	Web, API	AIRU
Peripherals ConnectedDevice [n] ID	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIRU
Peripherals ConnectedDevice [n] Name	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AIRU
Peripherals ConnectedDevice [n] SoftwareInfo	X	X	×	X	X	Χ	X	X	X	X	Χ	X	Web, API	AIRU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Peripherals ConnectedDevice [n] Status	Χ	X	X	X	X	Х	X	X	X	X	X	X	Web, API	AIRU
Peripherals ConnectedDevice [n] Type	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeFailureReason	Χ	X	×	×	X	Х	X	X	×	X	X	X	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeStatus	Χ	X	×	X	X	X	X	X	X	X	X	X	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeURL	Χ	X	×	×	X	X	×	×	×	×	×	X	Web, API	AIRU
Peripherals ConnectedProgress [n] Ident	Χ	X	×	×	X	X	×	×	×	X	×	X	Web	AIRU
Peripherals ConnectedProgress [n] Progress	Χ	X	Χ	X	X	Х	X	×	Х	×	X	X	Web	AIRU
Provisioning CUCM CAPF LSC	Χ	X	×	×	X	X	X	X	X	X	X	X	Web	AU
Provisioning CUCM CAPF Mode	Χ	X	×	X	X	X	X	X	×	X	X	X	Web	AU
Provisioning CUCM CAPF OperationResult	X	X	X	X	×	X	X	×	X	×	X	X	Web	AU
Provisioning CUCM CAPF OperationState	Χ	X	Χ	X	X	Х	X	×	Х	×	Х	X	Web	AU
Provisioning CUCM CAPF ServerName	X	X	X	X	X	X	X	×	X	×	X	X	Web	AU
Provisioning CUCM CAPF ServerPort	Χ	X	×	×	X	X	X	X	×	X	X	X	Web	AU
Provisioning CUCM CTL State	X	X	×	×	X	X	X	X	×	X	×	X	Web	AU
Provisioning CUCM Customization Checksum	Χ	X	×	×	X	X	X	X	×	X	X	X	Web	AU
Provisioning CUCM ExtensionMobility Enabled	X	X	×	×	X	X	X	×	×	×	×	X	Web, API	AU
Provisioning CUCM ExtensionMobility LastLoggedInUserId	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning CUCM ExtensionMobility LoggedIn	X	X	×	×	×	X	×	×	×	×	×	X	Web, API	AU
Provisioning CUCM ITL State	X	X	×	×	X	X	X	X	×	X	X	X	Web	AU
Provisioning CUCM Phonebook URL	X	X	X	X	×	X	X	×	X	×	X	X	Web	AU
Provisioning CUCM ProvisionSecurity	Χ	X	X	×	X	X	X	X	×	X	X	X	Web	AU
Provisioning CUCM TVS Proxy [n] IPv6Address	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning CUCM TVS Proxy [n] Port	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning CUCM TVS Proxy [n] Priority	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning CUCM TVS Proxy [n] Server	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Provisioning CUCM UserId	X	X	X	X	X	Χ	X	X	X	X	X	Х	Web	AU
Provisioning Discovered	X	×	X	X	X	X	X	X	X	X	×	X	Web	AU
Provisioning NextRetry	X	×	X	X	X	X	X	X	×	X	×	X	Web	AU
Provisioning Reason	X	×	X	X	X	X	X	X	X	X	×	X	Web	AU
Provisioning RoomType	X	-	-	X	-	_	-	X	×	-	×	-	Web, API	AU
Provisioning Server	X	×	X	X	X	X	X	X	X	X	×	X	Web	AU
Provisioning Software Current CompletedAt	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Software Current URL	X	X	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Provisioning Software Current VersionId	X	×	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Provisioning Software PreviousUpgrade Changed	X	×	X	X	X	X	X	X	×	X	×	X	Web	AU
Provisioning Software PreviousUpgrade Message	X	×	X	X	X	X	X	X	×	X	×	X	Web	AU
Provisioning Software PreviousUpgrade Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning Software PreviousUpgrade URL	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning Software PreviousUpgrade VersionId	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning Software UpgradeStatus LastChange	X	×	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Provisioning Software UpgradeStatus Message	X	×	X	X	X	X	X	X	X	X	×	X	Web, API	AU
Provisioning Software UpgradeStatus Phase	X	×	X	X	X	X	X	X	×	X	×	X	Web, API	AU
Provisioning Software UpgradeStatus PostponedUntil	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning Software UpgradeStatus SecondsUntilUpgrade	×	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Provisioning Software UpgradeStatus SessionId	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Software UpgradeStatus Status	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Software UpgradeStatus Urgency	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Software UpgradeStatus URL	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Provisioning Software UpgradeStatus VersionId	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Provisioning Status	X	X	X	Χ	X	Х	X	X	X	X	X	X	Web, API	AU
Proximity Services Availability	X	X	X	X	X	Χ	X	X	×	X	×	X	Web, API	AU
RoomAnalytics PeopleCount Current	X	-	-	-	-	-	X	X	×	X	×	X	Web, API	AU
RoomAnalytics PeoplePresence	X	X	-	X	X	-	X	X	×	X	×	X	Web, API	AU
RoomPreset	X	X	×	X	×	-	X	X	X	X	X	X	Web, API	AU
RoomPreset [n] Defined	X	X	X	X	X	-	X	X	X	X	Х	X	Web, API	AU
RoomPreset [n] Description	X	X	X	X	X	-	X	X	×	X	×	X	Web, API	AU
RoomPreset [n] Type	X	X	X	Χ	X	-	X	X	×	X	×	X	Web, API	AU
Security Audit Server Port	X	X	X	X	X	X	X	X	×	X	×	X	Web	A Au U
Security FIPS Mode	X	×	×	X	×	Х	×	×	X	×	Х	X	Web, API	AU
Security Persistency CallHistory	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
Security Persistency Configurations	X	X	X	X	X	Χ	X	X	×	×	×	X	Web, API	AU
Security Persistency DHCP	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Security Persistency InternalLogging	X	X	X	X	X	Χ	X	X	×	X	×	X	Web, API	AU
Security Persistency LocalPhonebook	X	X	×	X	×	Χ	X	X	X	X	X	X	Web, API	AU
Spark Access Token	X	X	×	X	X	Χ	X	X	×	×	×	X	Web	AU
Spark Account DisplayName	X	X	X	X	X	Х	X	X	×	X	×	X	Web	AU
Spark Account Email	X	X	X	X	X	Х	X	X	X	X	X	X	Web	AU
Spark Account ExternalPhoneNumber	X	X	X	X	X	X	X	X	×	X	×	X	Web	AU
Spark Account Id	X	X	X	X	X	X	X	X	×	×	×	X	Web	AU
Spark Account InternalPhoneNumber	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Spark Account OrganizationDisplayName	X	X	X	X	X	Х	X	X	Х	Х	Х	X	Web	AU
Spark Account OrganizationId	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Account SipAddress	X	X	Х	X	X	Х	X	X	X	Х	Х	X	Web	AU
Spark Account Type	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark ActiveToken	X	X	X	X	X	Х	X	X	X	X	X	Х	Web	AU
Spark Binding DisplayName	X	×	×	X	X	X	X	X	×	X	X	X	Web	AU
Spark Binding Mode	X	X	X	X	X	Χ	X	X	X	X	Χ	Χ	Web	AU
Spark Binding Type	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Spark Binding URL	X	X	×	X	X	X	X	X	×	X	X	X	Web	AU
Spark BoardSession [n] BoardUrl	X	X	X	X	X	X	X	X	X	×	X	X	Web	AU
Spark BoardSession [n] BoardType	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark BoardSession [n] BridgeState	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark BoardSession [n] CallId	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark BoardSession [n] ClientState	X	×	×	X	X	X	×	X	×	X	X	X	Web	AU
Spark BoardSession [n] Id	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark BoardSession [n] SocketPath	X	×	X	X	X	X	×	X	×	×	X	X	Web	AU
Spark DeviceRoles CallControl	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark CallTrackingId	X	×	X	X	X	X	X	X	×	×	X	X	Web	AU
Spark DeviceRoles MainAudio	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark DeviceRoles MainVideo	X	×	×	X	X	X	X	X	×	×	X	X	Web	AU
Spark DeviceRoles Presentation	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark PairedDevice [n] Id	X	×	X	X	X	X	×	X	×	×	X	X	Web	AU
Spark PairedDevice [n] Name	X	X	X	X	X	X	×	X	X	X	X	X	Web	AU
Spark PairedDevice [n] UserId	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark PrivateBoard [n] Id	X	X	X	X	X	Х	X	X	X	Х	Х	X	Web	AU
Spark PrivateBoard [n] LastUpdated	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark PrivateBoard [n] SnapshotAvailable	X	X	X	X	X	Х	X	X	X	Х	Х	X	Web	AU
Spark PrivateBoard [n] Type	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Assistant Description	X	X	X	×	X	X	X	X	X	X	X	×	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark Services Assistant LastUrl	X	X	X	X	X	Χ	X	X	X	X	X	Х	Web	AU
Spark Services Assistant Status	X	X	X	X	X	Χ	×	X	X	X	×	X	Web	AU
Spark Services Assistant TimeStamp	X	X	X	X	X	X	×	X	×	X	×	X	Web	AU
Spark Services Calendar BaseUrl	X	×	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Spark Services Calendar Description	X	×	X	X	X	X	X	×	X	×	X	X	Web	AU
Spark Services Calendar Status	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Spark Services Calendar TimeStamp	X	X	X	X	X	X	X	X	X	×	X	X	Web	AU
Spark Services Configuration Description	X	X	X	X	X	Χ	×	X	X	X	×	X	Web	AU
Spark Services Configuration Proximity Description	X	X	X	X	X	X	×	X	×	×	×	X	Web	AU
Spark Services Configuration Proximity PinChallenge Pin	X	X	X	X	X	Χ	×	X	×	X	×	X	Web	AU
Spark Services Configuration Proximity TimeStamp	X	X	X	X	X	Χ	×	X	×	X	×	X	Web	AU
Spark Services Configuration Proximity Token Description	X	X	X	X	X	Χ	×	X	X	X	×	X	Web	AU
Spark Services Configuration Proximity Token NextRequest	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Configuration Proximity Token Status	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Spark Services Configuration Proximity Token TimeStamp	X	X	X	X	X	X	X	X	X	×	X	X	Web	AU
Spark Services Configuration Settings Description	X	×	×	X	X	Χ	X	×	X	X	X	X	Web	AU
Spark Services Configuration Settings Status	X	×	X	X	X	Χ	X	X	X	×	X	X	Web	AU
Spark Services Configuration Settings TimeStamp	X	X	X	X	X	Χ	X	X	X	X	×	X	Web	AU
Spark Services Configuration Space Description	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
Spark Services Configuration Space Status	X	X	X	X	X	Χ	X	X	X	Х	Х	X	Web	AU
Spark Services Configuration Space TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Configuration Space TimeStamp	X	X	X	X	X	Χ	X	X	X	Х	X	Х	Web	AU
Spark Services Configuration Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Configuration TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark Services Credentials AccessToken BaseUrl	X	X	X	X	X	Х	Х	X	Х	X	X	X	Web	AU
Spark Services Credentials AccessToken Expiry	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Credentials AccessToken LastRefresh Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Credentials AccessToken LastRefresh NextRequest	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Credentials AccessToken LastRefresh TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Credentials AccessToken Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Credentials RefreshToken Expiry	X	×	X	X	X	X	X	X	×	X	X	X	Web	AU
Spark Services Credentials RefreshToken Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Encryption Alias	X	X	X	X	X	X	X	X	X	×	X	X	Web	AU
Spark Services Encryption Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Encryption Status	X	X	X	X	X	X	×	X	×	X	×	X	Web	AU
Spark Services Encryption TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Encryption Url	X	X	×	X	×	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation ClientAddress	X	X	X	X	X	X	X	X	X	X	×	X	Web	AU
Spark Services GeoLocation CountryCode	X	×	X	X	X	X	X	X	×	X	×	X	Web	AU
Spark Services GeoLocation Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation NextRequest	X	×	X	X	X	X	×	X	×	X	×	X	Web	AU
Spark Services GeoLocation RegionCode	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation TimeZone	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services GeoLocation Url	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services IdBrokerBaseUrl	X	X	X	X	X	×	X	X	X	X	X	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark Services IdStoreBaseUrl	Х	X	X	Х	X	Х	X	X	Х	X	X	X	Web	AU
Spark Services LogUpload Details	Х	X	×	X	X	Х	X	×	X	X	Χ	X	Web	AU
Spark Services LogUpload Error	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services LogUpload LogId	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services LogUpload RequestOrigin	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services LogUpload Result	X	×	X	X	X	X	×	X	X	X	×	X	Web	AU
Spark Services LogUpload TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Metrics Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Metrics Status	X	×	X	X	X	X	X	X	X	X	×	X	Web	AU
Spark Services Metrics TimeStamp	X	×	X	X	X	X	×	X	X	X	×	X	Web	AU
Spark Services Metrics Url	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications Alias	X	×	X	X	X	X	×	X	X	X	×	X	Web	AU
Spark Services Notifications ApplicationPing Description	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications ApplicationPing NextRequest	X	X	×	X	X	X	X	×	X	X	X	X	Web	AU
Spark Services Notifications ApplicationPing Status	X	×	X	X	X	X	X	X	X	X	×	X	Web	AU
Spark Services Notifications ApplicationPing TimeStamp	X	×	X	X	X	X	X	×	X	X	×	X	Web	AU
Spark Services Notifications Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications KeepAlive Description	X	X	×	X	X	X	X	×	X	X	X	X	Web	AU
Spark Services Notifications KeepAlive NextRequest	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications KeepAlive Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications KeepAlive TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications MessageReceived Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications MessageReceived Status	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications MessageReceived TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark Services Notifications MessageSent TimeStamp	X	X	X	X	X	Х	X	X	X	X	X	Х	Web	AU
Spark Services Notifications RemoteAddress	X	X	×	X	X	X	X	X	×	X	×	X	Web	AU
Spark Services Notifications Servers ActiveUrl	X	×	X	X	X	Х	X	×	X	X	Х	X	Web	AU
Spark Services Notifications Servers HAEntry [n] Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications Servers HAEntry [n] Priority	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications Servers HAEntry [n] State	X	×	X	X	X	X	X	X	×	X	×	X	Web	AU
Spark Services Notifications Servers HAEntry [n] TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Notifications Servers HAEntry [n] Url	X	×	X	X	X	X	X	×	X	×	X	X	Web	AU
Spark Services Notifications Status	X	×	X	X	X	X	X	×	X	×	Х	X	Web	AU
Spark Services Notifications TimeStamp	X	X	×	×	X	X	X	X	×	X	×	X	Web	AU
Spark Services Phonebook BaseUrl	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Phonebook Description	X	X	X	×	X	X	×	X	×	×	×	X	Web	AU
Spark Services Phonebook Status	X	×	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Phonebook TimeStamp	X	×	X	×	X	X	×	×	×	×	×	X	Web	AU
Spark Services Registration Alias	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Registration BaseUrl	X	X	X	X	X	X	×	×	×	X	×	X	Web	AU
Spark Services Registration Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services Registration NextRequest	X	X	×	×	X	X	×	×	×	×	×	X	Web	AU
Spark Services Registration Status	X	X	X	X	X	X	X	X	X	X	×	X	Web	AU
Spark Services Registration TimeStamp	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services SoftwareUpgrade Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services SoftwareUpgrade ManifestUrl	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services SoftwareUpgrade ServiceUrl	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services SoftwareUpgrade Status	X	X	X	X	X	X	X	X	×	X	×	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Spark Services SoftwareUpgrade TimeStamp	X	X	X	X	X	Х	X	X	X	X	X	Х	Web	AU
Spark Services SpeechServicesManager BaseUrl	X	X	X	X	X	Х	X	×	X	×	X	X	Web	AU
Spark Services SpeechServicesManager Description	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services SpeechServicesManager LastUrl	X	X	×	×	X	X	X	X	×	X	×	X	Web	AU
Spark Services SpeechServicesManager NextRequest	×	X	X	X	×	X	X	×	X	×	X	X	Web	AU
Spark Services SpeechServicesManager Status	X	X	×	×	X	X	×	×	×	X	×	X	Web	AU
Spark Services SpeechServicesManager TimeStamp	X	X	×	X	X	X	X	X	X	X	X	X	Web	AU
Spark Services TrustAnchorService LastRefresh	X	X	×	×	X	X	X	X	X	X	×	X	Web	AU
Spark Services TrustAnchorService Url	X	X	×	X	X	X	X	X	×	X	×	X	Web	AU
Spark Services U2CBaseUrl	×	X	X	X	×	X	X	×	X	×	X	X	Web	AU
Spark Services WdmBaseUrl	X	X	×	X	X	X	X	X	X	X	×	X	Web	AU
Spark Space Access	×	X	X	X	X	X	X	×	X	×	X	X	Web	AU
Spark Status	X	X	×	×	X	X	X	X	×	X	×	X	Web	AU
SIP AlternateURI Alias [n] URI	X	×	×	×	X	X	X	X	×	X	×	X	Web, API	AU
SIP AlternateURI Primary [n] URI	×	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
SIP Authentication	X	×	×	×	X	X	X	×	×	×	×	X	Web, API	AU
SIP CallForward DisplayName	X	X	×	×	X	X	X	X	×	X	×	X	Web, API	AU
SIP CallForward Mode	X	X	×	×	X	X	X	X	×	×	×	X	Web, API	AU
SIP CallForward URI	X	X	×	×	X	X	X	X	×	X	×	X	Web, API	AU
SIP Mailbox MessagesWaiting	X	×	×	×	X	X	×	X	×	X	×	X	Web, API	AU
SIP Mailbox URI	X	X	X	X	X	X	X	X	X	X	Х	X	Web, API	AU
SIP Proxy [n] Address	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
SIP Proxy [n] Status	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
SIP Registration [n] Authentication	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
SIP Registration [n] Reason	×	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
SIP Registration [n] Status	X	X	X	Х	X	Χ	X	X	X	X	Χ	Х	Web, API	AU
SIP Registration [n] URI	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
SIP Secure	X	X	X	X	X	X	×	X	X	X	Χ	X	Web, API	AU
SIP Verified	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
Standby PowerSave State	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Standby State	X	X	×	X	X	Χ	X	X	X	X	Χ	X	Web, API	AIRU
SystemUnit Hardware BootSoftware	X	×	X	X	X	X	×	×	×	X	Χ	X	Web	AU
SystemUnit Hardware HasWiFi	-	-	-	-	-	Χ	X	X	X	X	Χ	X	Web	AU
SystemUnit Hardware MainBoard Revision	-	-	-	-	-	-	×	X	X	X	Χ	X	Web	AU
SystemUnit Hardware MainBoard SerialNumber	X	X	X	X	X	-	×	X	×	X	Χ	X	Web	AU
SystemUnit Hardware Module CompatibilityLevel	X	×	X	X	X	X	×	×	×	X	Χ	X	Web, API	AU
SystemUnit Hardware Module Identifier	X	X	X	X	X	X	×	X	X	X	Χ	X	Web	AU
SystemUnit Hardware Module SerialNumber	X	X	×	X	X	X	X	X	X	X	X	X	Web, API	AU
SystemUnit Hardware Monitoring Fan [n] Status	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
SystemUnit Hardware MonitoringSoftware	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
SystemUnit Hardware Monitoring Temperature Status	-	-	_	-	_	-	X	X	X	X	Χ	X	Web	AU
SystemUnit Hardware Temperature	X	×	X	X	X	X	-	-	_	-	-	-	Web, API	AU
SystemUnit Hardware TemperatureThreshold	X	X	X	X	X	Χ	-	-	-	-	-	-	Web, API	AU
SystemUnit Hardware UDI	X	X	X	X	X	X	×	X	X	X	Χ	X	Web	AU
SystemUnit Notifications Notification [n] Text	X	X	X	X	X	Χ	X	X	X	Х	Χ	X	Web, API	AU
SystemUnit Notifications Notification [n] Type	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
SystemUnit ProductId	X	X	Х	X	X	X	X	X	X	Х	Χ	X	Web, API	AU
SystemUnit ProductPlatform	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
SystemUnit ProductType	X	X	X	X	X	X	X	X	X	X	Χ	X	Web, API	AU
SystemUnit Software DisplayName	X	×	X	X	X	X	×	×	×	X	Χ	X	Web, API	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
SystemUnit Software Name	X	X	X	Х	X	Χ	X	X	X	X	X	X	Web, API	AU
SystemUnit Software OptionKeys Encryption	X	X	X	X	X	Χ	×	X	×	X	×	X	Web, API	AU
SystemUnit Software OptionKeys MultiSite	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AU
SystemUnit Software OptionKeys RemoteMonitoring	X	X	X	X	X	Χ	X	X	×	X	×	X	Web, API	AU
SystemUnit Software ReleaseDate	X	×	X	X	X	Χ	×	×	×	X	×	X	Web, API	AU
SystemUnit Software ReleaseKey	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
SystemUnit Software Version	X	×	X	X	X	Χ	X	×	X	X	X	Х	Web, API	AU
SystemUnit State CameraLid	-	-	-	-	X	X	_	_	_	-	-	-	Web	AU
SystemUnit State CameraTilt	-	-	-	-	X	-	-	-	-	-	-	-	Web	AU
SystemUnit State NumberOfActiveCalls	X	×	X	X	×	Χ	X	×	X	×	X	X	Web, API	AIRU
SystemUnit State NumberOfInProgressCalls	X	X	X	X	X	Χ	X	X	X	X	×	X	Web, API	AIRU
SystemUnit State NumberOfSuspendedCalls	X	X	X	X	X	X	X	×	X	X	X	X	Web, API	AU
SystemUnit State Subsystem Application	X	X	X	X	X	Χ	X	X	X	X	X	X	Web	AU
SystemUnit State System	X	×	X	X	X	X	X	×	X	X	X	X	Web	AU
SystemUnit Uptime	X	X	X	X	X	Χ	×	X	×	X	×	X	Web, API	AU
Time SystemTime	X	X	X	X	X	X	×	X	×	X	×	X	Web, API	AIU
UserInterface ContactInfo ContactMethod [n] Number	X	X	X	X	X	Χ	×	X	X	X	×	X	Web, API	AU
UserInterface ContactInfo Name	X	X	X	X	X	X	X	×	X	X	X	X	Web, API	AU
UserInterface Extensions Widget [n] Value	X	X	X	X	X	Χ	X	Х	X	X	Х	X	Web, API	AIRU
UserInterface Extensions Widget [n] WidgetId	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AIRU
UserInterface OSD Output	X	X	X	X	X	Χ	X	X	X	X	Х	X	Web	AIU
Video ActiveSpeaker PIPPosition	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] Connected	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] DeviceType	-	-	-	-	-	-	X	X	X	X	X	X	Web, API	AIU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Input Connector [n] ConnectedDevice CEC [n] LogicalAddress	-	-	-	-	-	-	X	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] Name	-	-	-	-	-	-	×	X	×	X	×	X	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus	-	_	_	-	_	-	X	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] Vendorld	-	_	_	_	-	-	X	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] SignalState	Χ	X	×	×	X	Χ	×	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] Sourceld	Χ	X	X	X	X	Χ	×	X	X	X	X	X	Web, API	AIU
Video Input Connector [n] Type	Χ	X	X	X	X	Χ	X	X	Х	X	Х	X	Web, API	AIU
Video Input LastConnectedSource	Χ	X	X	X	-	Χ	X	-	-	-	-	X	Web	AU
Video Input MainVideoSource	Χ	X	×	×	X	Χ	×	X	×	X	X	X	Web, API	AU
Video Input Source [n] ConnectorId	Χ	×	×	X	×	X	X	×	X	X	X	X	Web, API	AIU
Video Input Source [n] FormatStatus	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Input Source [n] FormatType	X	X	X	X	X	X	×	X	×	X	×	X	Web, API	AIU
Video Input Source [n] MediaChannelld	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Video Input Source [n] Msctrlld	X	X	×	X	×	X	X	X	X	X	X	X	Web	AU
Video Input Source [n] Resolution Height	Χ	X	X	X	X	X	×	X	×	X	X	X	Web, API	AIU
Video Input Source [n] Resolution RefreshRate	X	X	×	×	X	X	×	X	×	X	×	X	Web, API	AIU
Video Input Source [n] Resolution Width	Χ	X	×	×	X	X	×	X	×	X	X	X	Web, API	AIU
Video Input Source [n] TmdsClockPresent	-	-	-	-	-	-	X	X	X	X	X	X	Web	AU
Video Layout Engine Version	Χ	Х	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout LayoutFamily Local	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AU
Video Layout LayoutFamily Remote	Χ	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Video Layout Local Height	-	-	-	-	X	-	-	-	-	-	-	-	Web	AU
Video Layout Local PositionX	-	-	-	-	X	_	-	-	_	-	_	-	Web	AU

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X: Supported -: Not supported



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Layout Local PositionY	-	-	-	-	Х	-	-	-	-	-	-	-	Web	AU
Video Layout Local Type	_	-	-	_	X	-	-	-	-	_	-	-	Web	AU
Video Layout Local Width	-	-	-	-	X	-	-	-	-	-	-	-	Web	AU
Video Layout Mode	X	-	-	X	-	-	-	-	-	-	-	-	Web	AU
Video Layout Prediction Site [n] Family [n] DiffFromActive	X	X	×	X	×	X	X	×	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] FamilyName	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Height	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] InputNumber	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Layer	X	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] MediaChannelld	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Msctrlld	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] ParticipantId	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] ParticipantType	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] PositionX	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] PositionY	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceContent	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceld	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU

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Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceInstance	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceType	X	X	X	X	×	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Width	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] GraphicName	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] RoleName	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] Height	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] PositionX	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] PositionY	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] Width	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Output [12] Frame [16] MediaChannelld	-	X	X	_	X	X	X	-	-	-	-	X	Web	AU
Video Layout Prediction Site [n] Family[n] OutputRole [n] Frame[n] ParticipantId	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame[n] VideoSourceInstance	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] StatusIndex Family [n] Hidden	X	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	Web	AU
Video Layout Prediction Site [n] StatusIndex Family [n] Name	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Prediction Site [n] StatusIndex OutputRole [n] Name	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Layout PresentationView	Χ	X	X	X	X	Χ	X	X	X	X	Χ	Х	Web	AU
Video Layout Site [n] Frame [n] BoardSessionId	Χ	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] Cropping Height	Χ	X	X	×	X	X	×	X	X	X	X	X	Web	AU
Video Layout Site [n] Frame [n] Cropping PositionX	Χ	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] Cropping PositionY	Χ	X	×	X	×	X	X	×	X	X	X	X	Web	AU
Video Layout Site [n] Frame [n] Cropping Width	Χ	×	X	×	X	Χ	×	×	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] FrameContainerId	Χ	X	×	X	X	Χ	X	X	X	X	X	X	Web	AU
Video Layout Site [n] Frame [n] Height	Χ	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] InputNumber	Χ	X	X	×	X	X	×	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] Layer	Χ	×	X	×	X	X	×	×	X	X	Х	X	Web	AU
Video Layout Site [n] Frame [n] MediaChannelld	X	×	X	×	X	X	×	X	X	X	Х	X	Web	AU
Video Layout Site [n] Frame [n] Media Height	Χ	X	X	X	X	X	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] Media Width	Χ	X	X	×	X	X	×	X	X	X	X	X	Web	AU
Video Layout Site [n] Frame [n] Msctrlld	Χ	X	X	X	X	X	×	X	X	X	Х	X	Web	AU
Video Layout Site [n] Frame [n] Output	X	×	X	×	X	X	×	×	X	X	X	X	Web	AU
Video Layout Site [n] Frame [n] ParticipantId	Χ	X	×	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] ParticipantType	Χ	×	X	×	X	X	×	X	×	X	X	X	Web	AU
Video Layout Site [n] Frame [n] PositionX	Χ	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] PositionY	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] VideoSourceContent	X	X	X	X	X	Х	X	X	X	Х	Х	X	Web	AU
Video Layout Site [n] Frame [n] VideoSourceld	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] VideoSourceInstance	Χ	X	X	X	Х	Χ	X	X	X	X	Χ	X	Web	AU
Video Layout Site [n] Frame [n] VideoSourceType	X	X	X	X	X	Χ	X	X	X	X	Х	X	Web	AU
Video Layout Site [n] Frame [n] Width	Χ	X	X	X	Х	Х	X	X	X	X	Χ	Х	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] Content	Χ	Х	×	Х	X	Χ	X	×	X	X	Χ	X	Web	AU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Layout Site [n] Output [n] FrameContainer [n] Height	Χ	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	X	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] PositionX	X	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] PositionY	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] Width	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Layout Site [n] Output [n] FullFamilyName	Χ	X	X	X	X	X	X	X	X	X	X	X	Web	AU
Video Monitors	Χ	X	×	X	×	X	X	X	X	X	X	X	Web, API	AU
Video Mute	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] Connected	Χ	×	X	X	X	X	×	X	×	X	X	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] DeviceType	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] Name	Χ	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus	X	X	X	X	X	X	X	X	X	X	X	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] Vendorld	Χ	X	X	X	X	Х	X	X	X	X	Х	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice Name	Χ	X	X	Х	X	Χ	Х	Х	Х	X	Χ	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice PreferredFormat	X	X	X	Х	X	Х	X	X	X	X	Х	X	Web, API	AIU
Video Output Connector [n] ConnectedDevice ScreenSize	Χ	X	Х	Х	Х	Χ	Х	Х	Х	Х	Χ	X	Web, API	AU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1080_50	X	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1080_60	X	X	X	X	X	X	X	X	X	X	X	X	Web	AIU



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1200_50	X	X	X	X	X	X	X	X	Х	X	X	X	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1200_60	X	X	X	X	X	X	X	X	X	X	X	X	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_2560_1440_60	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_3840_2160_30	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_3840_2160_60	X	X	X	X	X	Χ	X	X	X	X	Х	X	Web	AIU
Video Output Connector [n] MonitorRole	X	X	X	Х	X	Χ	Х	X	Χ	X	Χ	X	Web, API	AU
Video Output Connector [n] Resolution Height	X	X	X	X	X	Χ	X	X	X	X	Χ	Х	Web, API	AU
Video Output Connector [n] Resolution RefreshRate	X	X	×	X	X	X	Х	×	Χ	X	X	X	Web, API	AU
Video Output Connector [n] Resolution Width	X	X	X	X	X	Χ	X	X	X	X	Χ	X	Web, API	AU
Video Output Connector [n] Type	X	X	×	Х	X	Χ	X	×	Х	×	Χ	X	Web, API	AU
Video Output Monitor [n] Backlight	-	-	-	X	-	-	-	-	-	X	Χ	-	Web, API	AU
Video Output Monitor [n] Brightness	-	-	-	×	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Blue	-	-	-	×	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Green	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Red	-	-	-	×	-	-	-	-	_	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Selected	-	-	-	×	-	-	-	-	-	×	X	-	Web, API	AU
Video Output Monitor [n] Contrast	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] CSCYUV	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] FirmwareVersion	X	X	X	X	X	-	X	X	X	X	Χ	X	Web, API	AU
Video Output Monitor [n] Gamma	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ModelName	X	X	X	X	X	-	X	X	X	X	Χ	X	Web, API	AU
Video Output Monitor [n] Position	X	X	-	×	X	-	X	X	X	×	Χ	X	Web, API	AU

A: ADMIN Au: AUDIT I: INTEGRATOR R: ROOMCONTROL

X: Supported -: Not supported



Status	SX80	SX20	SX10	MX800/MX700	MX300G2/ MX200G2	DX80/DX70	Room Kit	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Web interface or API	User role
Video Output Monitor [n] SerialNumber	X	X	X	X	X	-	X	X	X	X	X	X	Web, API	AU
Video Output Monitor [n] Sharpness	-	-	-	X	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] Temperature	X	×	×	X	X	-	×	X	X	X	×	X	Web, API	AU
Video Presentation PIPPosition	×	×	×	X	X	X	×	X	×	×	×	X	Web, API	AU
Video Selfview FullscreenMode	X	X	X	X	X	Χ	×	×	×	X	×	X	Web, API	AIU
Video Selfview Mode	×	×	×	X	X	X	×	×	×	×	×	X	Web, API	AIU
Video Selfview OnMonitorRole	X	X	X	X	X	Χ	X	×	X	X	X	X	Web, API	AIU
Video Selfview PIPPosition	X	X	X	X	X	Χ	X	X	X	X	X	X	Web, API	AIU

A: ADMIN Au: AUDIT I: INTEGRATOR R: ROOMCONTROL

X: Supported -: Not supported



# Startup scripts

You can add one or more startup scripts to the codec. A startup script contains commands (xCommand) and configurations (xConfiguration) that will be executed as part of the start up procedure every time the codec boots. A few commands and configurations cannot be placed in a startup script, e.g. xCommand SystemUnit Boot.

Use the codec's web interface to create and manage startup scripts.

Read more about the web interface and startup scripts in the *Administrator guide* for your product.

# The SystemTools commands

NOTE: The systemtools commands are used for administrative control of the codec and are only available from a command line interface. Systemtools should not be used to program the codec.

Required parameters in angle brackets: <text>

Optional parameters in square brackets: [text]

To get an overview of the supported commands type "systemtools?".

#### Example:

```
systemtools ?
rootsettings
selectsw
whoami
license
network
ntp
passwd
pki
ps
securitysettings
securitystatus
sudo
idefixversion
pairing
```

To see the usage of the commands add a question mark after the command.

#### Example:

```
systemtools network ?
usage: network ping <hostname> | traceroute
<hostname> | netstat | addrs | ifconfig
```

## systemtools idefixversion (Not for DX70 and DX80)

Returns the software version the connected Touch controller should have. Used when downgrading to TC7.3 or earlier.

## systemtools license list

Lists all the licenses for the codec.

#### systemtools license show <name>

Shows the content of a license file, defined by the name.

<name>: The name of the license file.

#### systemtools network ping <hostname>

Network debug command.

<hostname>: The IP address or URL of the host.

#### systemtools network traceroute <hostname>

Network debug command.

<hostname>: The IP address or URL of the host.

#### systemtools network netstat

Network debug command.

#### systemtools network addrs

Shows the systems IP addresses.

#### systemtools network ifconfig

Network debug command:

#### systemtools ntp

Shows the NTP status.

#### systemtools pairing unpair

Remove association with Cisco TelePresence Touch controller

#### systemtools passwd

Change the password for the logged in user.

#### systemtools pki list

Lists the codec certificate and CA list if they exist.

#### systemtools pki delete <cert-name>

Delete the codec certificate and CA list if they exist.

<cert-name>: The name of the certificate.

#### systemtools securitysettings jitc

Set up security requirements so they meet JITC.

Set password and PIN polices enforced on the codec.

#### systemtools securitysettings isjitc

Check if the current settings are JTIC compiant.

#### systemtools securitysettings default

Revert to default security settings.

#### systemtools securitysettings ask

Query for the separate configurations. When issuing this command you can see each policy separately.

- · Press enter to keep the current value.
- Enter a number and press enter to change the given policy.
- The default value "0" indicates no restrictions.

Max failed login attempts [0]?

· Number of failed logins until a user is set inactive.

Suspend-time after max failed login attempts (minutes) [0]?

 Number of minutes the user is set inactive after maximum failed login attempts have been exceeded.

Max simultaneous sessions total [0]?

Maximum number of users that can be logged in simultaneous to web and maximum number of users that can be logged in simultaneous to ssh/Telnet.

Max simultaneous sessions per user [0]?

· Maximum number of simultaneous sessions per user.

Number of passwords to remember [0]?

 Number of previous passwords that the new password must differ from.

Number of PINs to remember [0]?

 Number of previous PINs that the new PIN must differ from.

Maximum time between password renewals (days) [0]?

 If the user has not changed the password within the renewal time the user will be set inactive.

Minimum time between password renewals (hours) [0]?

The user can only change password once within this limit.

Maximum time between PIN renewals (days) [0]?

 If the user has not changed the PIN within the renewal time the user will be set inactive.

Minimum time between PIN renewals (hours) [0]?

The user can only change PIN once within this limit.

Maximum time between logins (days) [0]?

 If the user has not logged in within this limit the user will be set inactive.

Max consecutive equal digits in PINs [0]?

Maximum consecutive equal digits in PINs.

Minimum number of digits in PINs [0]?

· Minimum number of digits in PINs.

Maximum number of digits in PINs [0]?

Maximum number of digits in PINs.

Max consecutive identical characters in passwords [0]?

Maximum consecutive identical characters in passwords.
 Minimum number of characters in passwords [0]?

· Minimum number of characters in passwords.

Maxmum number of characters in passwords [0]?

· Maxmum number of characters in passwords.

Minimum number of lower-case letters in passwords [0]?

· Minimum number of lower-case letters in passwords.

Minimum number of upper-case letters in passwords [0]?

• Minimum number of upper-case letters in passwords.

Minimum number of numerical characters in passwords [0]?

Minimum number of numerical characters in passwords.

Minimum number of special characters in passwords [0]?

Minimum number of special characters in passwords.

Minimum number of character groups in passwords [0]?

• Minimum number of character groups in passwords.

Minimum number of character changed from previous password [0]?

Minimum number of character changed from previous password.

#### systemtools securitystatus

Shows the security status for the codec.

#### systemtools selectsw

Select which of the available software images to use. Changing the software image will restart the codec.

No argument given: Lists the version of the available software images, and shows which one is active.

image name: Swap to the software with this name.

#### systemtools sudo on

Changes the user role of the current session to the role of the specified user

<username>: The name of the sudo user.

<password>: The password for the sudo user.

#### systemtools sudo off

Reverts back to the user role of the signed in user.

#### systemtools whoami

Lists the name and id of the signed in user, and the user roles held by this user.

# Disconnect cause types

The following parameters are logged when a call is disconnected. The disconnect cause types are used in disconnect events (xEvent).

CauseValue Proprietary. We recomend the use of CauseType and CauseCode.

CauseType Describes why the call was disconnected. The value space is { OtherLocal, LocalDisconnect,

UnknownRemoteSite, LocalBusy, LocalReject, InsufficientSecurity, OtherRemote, RemoteDisconnect,

RemoteBusy, RemoteRejected, RemoteNoAnswer, CallForwarded, NetworkRejected }

CauseString Describes the Cause Code.

CauseCode The disconnect Cause Codes are defined in SIP and Q.850.

CauseOrigin SIP, Q.850, internal.

#### Example:

xEvent DisconnectEvent

\*e CallDisconnect CauseValue: 1 CauseType: "LocalDisconnect"

CauseString: ""

OrigCallDirection: "outgoing"

RemoteURI: "firstname.lastname@company.com"

CallId: 89
CauseCode: 0
CauseOrigin: SIP

\*\* end



# User documentation on the Cisco web site

User documentation for the Cisco TelePresence products is available at

▶ https://www.cisco.com/go/telepresence/docs

Select the *Collaboration Endpoints* product category from the list. Then select the product series:

- TelePresence MX Series
- · TelePresence SX Series
- · Webex DX Series
- · Webex Room Series

Alternatively, use the following short-links:

- ▶ https://www.cisco.com/go/dx-docs
- ▶ https://www.cisco.com/go/mx-docs
- ▶ https://www.cisco.com/go/roomkit-docs
- ▶ https://www.cisco.com/go/sx-docs

# Install and Upgrade

## Installation and Upgrade Guides

- · Installation guides: How to install the product
- Getting started guide: Initial configurations required to get the system up and running
- RCSI guide: Regulatory compliance and safety information

# Maintain and Operate

#### Maintain and Operate Guides

- Getting started guide: Initial configurations required to get the system up and running
- Administrator guide: Information required to administer your product
- Administering CE Endpoints on CUCM: Tasks to perform to start using the product with the Cisco Unified Communications Manager (CUCM)

#### End-User Guides

- · User guides: How to use the product
- · Quick reference guides: How to use the product
- Physical interface guide: Details about the product's physical interface, including the connector panel and LEDs (SX80 only)

# Configure

#### Configuration Guides

- In-Room Control Guide: How to design an in-room control panel, and how to use the video system's API to program the in-room controls
- In-Room Control Editor: Download the in-room control editor
- CE and TC Console: Information on how to use the CE and TC consoles to configure the codec's audio and video.

#### Reference Guides

#### Command references

 API reference guides: Reference guide for the Application Programming Interface (API)

#### Technical References

· CAD drawings: 2D CAD drawings with measurements

# Design

#### Design Guides

- Video conferencing room guidelines: General guidelines for room design and best practice
- Video conferencing room guidelines: Things to do to improve the perceived audio quality

# Software Downloads, Release and General Information

#### Release notes

· Release notes and deferral notices

#### Licensing Information

 Open sourse licences: Licenses and notices for open source software used in this product

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