Collaboration Endpoint Software 9.10 DECEMBER 2019



Application Programming Interface (API) Reference Guide

Cisco Collaboration Endpoint Software 9.10

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 CE9.10	5
What's new in CE9.9	9
What's new in CE9.8	14
What's new in CE9.7	19
What's new in CE9.6	23
What's new in CE9.5	29
What's new in CE9.4	33
What's new in CE9.3	39
What's new in CE9.2	46
What's new in CE9.1	54
What's new in CE9.0	60

About the API67	67
API fundamentals68Connecting to the API68SSH68Telnet68HTTP/HTTPS68WebSocket68RS-232 / serial connection69Ethernet ports69User roles69Passphrase70	68 68 68 68 69 69 69 69
API output	71
Using the command line72API commands72Other commands72Command line shortcuts73Searching73Value types and formats73	72 72 73 73

Multiline commands	75
Synchronous API calls	76
Events	77
Feedback mechanism Feedback expressions Terminal connections HTTP XMLAPI Authentication HTTP XMLAPI Session Authentication Getting status and configurations Sending commands and configurations	78 79 80 80 81
Feedback from the device over HTTP Registering for feedback Translating from terminal mode to XML	82
Dos and don'ts	84
xConfiguration commands Description of the xConfiguration commands	
xCommand commands	237
Description of the xCommand commands	238
xStatus commands	
Appendices	455
Supported commands matrix	456
Startup scripts	520
The SystemTools commands	521
Disconnect cause types	523
User documentation on the Cisco web site	524

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 conferencing devices (CUCM, VCS) as well as devices registered to Cisco's cloud service (Cisco Webex).

Which commands are available depends on the product, the back-end (on-premise, cloud), and the user role of the local user (admin, audit, integrator, roomcontrol, user). To get an overview of the commands, see the "Supported commands matrix" on page 456.

This guide applies to the following products:

- DX Series:
 - DX70
 - DX80
- MX Series:
- MX200 G2
- MX300 G2
- MX700
- MX800
- SX Series:

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- SX10 Quick Set
- SX20 Quick Set
- SX80 Codec
- Room Series:
 - Room Kit
 - Room Kit Mini
 - Codec Plus¹
 - Codec Pro²
 - Room 55
 - Room 55 Dual
 - Room 70
 - Room 70 G2
- Webex Boards:
 - Webex Board 55 and 55S
 - Webex Board 70 and 70S
 - Webex Board 85S

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://help.webex.com

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

¹ Included in Room Kit Plus and Room Kit Plus Precision 60

² Included in Room Kit Pro and Room Kit Pro Precision 60

What's new in CE9.10

This section provides an overview of the new and changed device settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.10 (CE9.10) compared to CE9.9.

The following Webex products are new in CE9:

- CE9.0 Room Kit
- CE9.1 Codec Plus, and Room 55
- CE9.2 Room 70
- CE9.4 Codec Pro, Room 70 G2, and Room 55 Dual
- CE9.6 Room Kit Mini
- CE9.8 Board 55/55S, Board 70/70S, and Board 85S

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 in CE9.10

Webex Edge for Devices

Devices running CE9.10 are ready for *Webex Edge for Devices*. You can use Webex Edge for Devices to link your on-premises devices to the Cisco Webex cloud service.

This gives you access to select cloud features, while your registration, device management, calling, and media services remain on-premises. You can manage cloud services and get device diagnostics from them in Webex Control Hub.

You need the Device Connector tool to get started. Read the Release Notes on Webex Help Center to find out when the tool is available.

Easier to join Webex meetings

We have added a Join Webex button in the user interface. The button is shown by default.

The Join Webex button allows users to join meetings by entering the meeting number without a domain. This information is available in the Webex email invite. The infrastructure must allow calls to be routed to **@webex.com*.

New procedure for defining a password policy

In earlier CE software versions, the password policy was defined using the systemtools securitysettings command. This command has now been replaced by configurations (xConfiguration UserManagement PasswordPolicy *). Some of the previous restrictions are discontinued.

When upgrading a device from an earlier CE software version, the values previously stored through the systemtools securitysettings command are preserved. The ones that are no longer reflected by configurations are deleted. The previous defaults were all 0, so on upgrade, if no changes had been made, the new defaults are also all 0.

SNMP is switched off by default

SNMP (Simple Network Management Protocol) is switched off by default. Also, we no longer provide a default community name.

When upgrading a device from an earlier CE software version, the values that were previously stored are preserved.

Configuration changes in CE9.10

New configurations

Cameras SpeakerTrack Closeup (Boards)

Macros UnresponsiveTimeout (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards, SX80, SX20, MX700, MX800, MX200 G2, MX300 G2, DX80, DX70)

Peripherals Pairing CiscoTouchPanels RemotePairing (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards, SX80, SX20, SX10, MX700, MX800, MX200 G2, MX300 G2)

Provisioning WebexEdge (All products)

Security Fips Mode (All products)

UserInterface Features Call JoinWebex (All products)

UserManagement PasswordPolicy Complexity MinimumDigits (All products)

UserManagement PasswordPolicy Complexity MinimumLength (All products)

UserManagement PasswordPolicy Complexity MinimumLowercase (All products)

UserManagement PasswordPolicy Complexity MinimumSpecial (All products)

UserManagement PasswordPolicy Complexity MinimumUppercase (All products)

UserManagement PasswordPolicy MaxLifetime (All products)

UserManagement PasswordPolicy ReuseLimit (All products)

Configurations that are removed

None.

Configurations that are modified

Cameras SpeakerTrack Closeup (Codec Pro, Codec Plus, Room Kit, Room 55, Room 55D, Room 70, Room 70 G2, SX80, MX700, MX800)

OLD: Auto/Off

NEW: Auto/Off/On

NetworkServices SMTP Security (Boards)

OLD: Default: None

NEW: Default: StartTls

NetworkServices SNMP Mode (All products)

OLD: Default: ReadOnly

NEW: Default: Off

Standby Signage Mode (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

OLD: User role: ADMIN NEW: User role: ADMIN, INTEGRATOR

xCommand changes in CE9.10

New commands

Video CEC Output SendInactiveSourceRequest (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)

Commands that are removed

Security FIPSMode Activate (All products) Replaced by the Security Fips Mode configuration.

Commands that are modified

UserInterface WebView Display (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

NEW: Header: String (0, 8192) [multiple 15]

UserManagement User Add (All products)

Removed: PinChangeRequired

UserManagement User Modify (All products)

REMOVED: PinChangeRequired

xStatus changes in CE9.10

New statuses

None.

Statuses that are removed

None.

Statuses that are modified

Diagnostics Message [n] Type (All products)

Added to valuespace: ProvModeWebexAndWebexEdgeEnabled/ WebexAccountPlusWebexEdgeEnabled/WebexEdgeAccountPlusProvModeWebex/ WebexMustUpgradeCeSoftware/ WebexShouldUpgradeCeSoftware

What's new in CE9.9

This section provides an overview of the new and changed device settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.9 (CE9.9) compared to CE9.8.

The following Webex products are new in CE9:

- CE9.0 Room Kit
- CE9.1 Codec Plus, and Room 55
- CE9.2 Room 70
- · CE9.4 Codec Pro, Room 70 G2, and Room 55 Dual
- CE9.6 Room Kit Mini
- CE9.8 Board 55/55S, Board 70/70S, and Board 85S

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 in CE9.9

Updates to the UI Extensions editor (All products)

The *In-room control editor* has been renamed to *UI Extensions editor* to reflect the additional features that are available. You can launch the editor by going to *Integration > UI Extension Editor* on the web interface. In addition, the editor's UI has been updated.

For more information, see the *Customization guide* for CE9.9 at https://www.cisco.com/go/in-room-control-docs

Web apps (Boards)

You can use the UI Extensions editor to create web apps. This way you can access apps such as Jira, Miro, Office 365, and Google docs directly from a board.

Digital signage

(Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Digital signage allows you to display custom content, such as company news, building maps, or emergency information, when the device is in half-wake mode.

Users can interact with the signage content only on Webex Boards.

Fetch branding images and custom wallpaper from an external URL $(\ensuremath{\textit{All products}})$

You can use the xCommand UserInterface Branding Fetch API command to download branding images or a custom wallpaper from an external URL.

Custom wallpaper is not available for Webex Boards.

Changes to the Network Settings menu (All products)

The Network connection page on the device's user interface has changed. First you see an overview of the current network set-up, then you can open the Ethernet or Wi-Fi settings if you want to change them. A few settings, which were not available from the GUI before, are now added.

Changes to the ultrasound settings (All products)

All products now has the same default value for the *Audio Ultrasound MaxVolume* setting. Also the volume range is aligned between the different products. Product specific differences are handled internally and no longer reflected in the range of values and the default value. We have not made any changes to the sound level that is played out from a device.

TLS configuration changes (All products)

For security reasons we have made some changes to the TLS configuration on HTTPS client, syslog, and SIP connections:

- You must explicitly turn off certificate verification if you don't want to perform a certificate check. By default, certificates are checked on all TLS connections.
- The minimum TLS version is increased from version 1.0 to 1.1 (exceptions for CUCM and SIP, which still allow version 1.0). Also note that the Webex cloud is using TLS version 1.2.
- You can configure certificate verification for provisioning, phone book, and other HTTP servers separately. The former NetworkServices HTTPS VerifyServerCertificate setting, which covered all these server types, are replaced by three settings: Provisioning TLSVerify, Phonebook Server [1] TlsVerify, and HTTPFeedback TlsVerify.
- You can configure certificate verification for external logging (both audit logging and regular logging).
- For SIP, the certificates are verified against the *Custom CA list*, which is uploaded to the device manually using the web interface or API. For other connections, the certificates are verified against either the *Pre-installed CA list* on the device, or the *Custom CA list*.

Updates to whiteboarding and annotations (Boards)

- Create, edit, and move stickies on your whiteboard and annotations.
- Choose between three different pen sizes when whiteboarding and annotating.
- Create copies of whiteboards and annotations. The whiteboard or annotated snapshot of a presentation is stored in the Whiteboard menu. You can go back to it and continue work on the copy as you would on any other whiteboard or snapshot.

Wired touch redirect (Boards)

Touch redirect enables you to control your laptop from a Webex Board screen. You must connect the laptop to the Webex Board with an HDMI cable (wired sharing) and a USB-C cable.

Touch redirect only works outside of call.

This feature is only available on the second generation of boards (Webex Board 55S, 70S, and 85S).

Configuration changes in CE9.9

New configurations

Audio Input ARC [1] Mode (Codec Plus)

Audio Input HDMI [2..3] Level (Room 55D, Room 70)

Audio Input HDMI [2..3] Mode (Room 55D, Room 70)

Audio Input HDMI [2..3] VideoAssociation MuteOnInactiveVideo (Room 55D, Room 70)

BYOD TouchForwarding Enabled (Boards)

Not available in CE9.9.0.

HttpFeedback TIsVerify (All products)

Logging External TIsVerify (All products)

Phonebook Server [1] TIsVerify (All products)

Provisioning TIsVerify (All products)

SIP MinimumTLSVersion (All products)

Standby Signage Audio (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Standby Signage InteractionMode (Boards)

Standby Signage Mode (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Standby Signage RefreshInterval (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Standby Signage Url (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

WebEngine Mode (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

WebEngine RemoteDebugging (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Configurations that are removed

NetworkServices HTTPS VerifyServerCertificate (All products)

Replaced by:

- HttpFeedback TIsVerify
- Phonebook Server [1] TIsVerify
- Provisioning TIsVerify

Configurations that are modified

Audio Ultrasound MaxVolume

The valuespace and default value has changed for many products. Product specific differences are now handled internally and not reflected in the default value and range of possible values.

NEW valuespace: Integer (0..90) (Codec Pro, Codec Plus, SX80, SX20)

NEW valuespace: Integer (0..70) (Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards, SX10, MX700, MX800, MX200 G2, MX300 G2, DX70, DX80)

NEW default value: 70 (All products)

SIP ListenPort (All products)

OLD: Off/On

NEW: Auto/Off/On

SIP ListenPort (Boards)

OLD: Default: On

NEW: Default: Auto

xCommand changes in CE9.9

New commands

Logging SendLogs (All products)

Security Certificates Webex Show (All products)

UserInterface Branding Fetch (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards, SX80, SX20, MX700, MX800, MX200 G2, MX300 G2, DX70, DX80)

UserInterface WebView Clear (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

UserInterface WebView Display (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

WebEngine DeleteStorage (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Commands that are removed

Removed xCommand Cameras AutoFocus Diagnostics Start (Room Kit, Room Kit Mini, Room 55, Boards)

Removed xCommand Cameras AutoFocus Diagnostics Stop (Room Kit, Room Kit Mini, Room 55, Boards)

Commands that are modified

Audio Volume SetToDefault (Room Kit, Room Kit Mini, Room 55)

NEW: Device: Internal/HeadsetUSB/HandsetUSB

Camera PositionSet (Codec Pro, Room 70 G2)

NEW: Roll: Integer (-300..300)

HttpClient Delete (All products)

OLD: ResponseSizeLimit: Integer (0..100000)

NEW: ResponseSizeLimit: Integer (1..100000)

HttpClient Get (All products)

OLD: ResponseSizeLimit: Integer (0..100000) NEW: ResponseSizeLimit: Integer (1..100000)

HttpClient Patch (All products)

OLD: ResponseSizeLimit: Integer (0..100000) NEW: ResponseSizeLimit: Integer (1..100000) HttpClient Post (All products)

OLD: ResponseSizeLimit: Integer (0..100000) NEW: ResponseSizeLimit: Integer (1..100000)

HttpClient Put (All products)

OLD: ResponseSizeLimit: Integer (0..100000) NEW: ResponseSizeLimit: Integer (1..100000)

Phonebook Contact Add (All products) OLD: CallRate: Integer (0..6000), Default: 0 NEW: CallRate: Integer (0..6000), Default: none Phonebook ContactMethod Add (All products)

OLD: CallRate: Integer (0..6000), Default: 0

NEW: CallRate: Integer (0..6000), Default: none

Phonebook ContactMethod Modify (All products)

OLD: CallRate: Integer (0..6000), Default: 0 NEW: CallRate: Integer (0..6000), Default: *none*

Standby ResetTimer (All products)

OLD: Delay: required parameter NEW: Delay: optional parameter

UserInterface Extensions Clear (All products) NEW: ActivityType: Custom/WebApp UserInterface Extensions List (All products)

NEW: ActivityType: Custom/WebApp

xStatus changes in CE9.9

New statuses

Cameras Camera[n] Position Roll (Codec Pro, Room 70 G2)

RoomAnalytics AmbientNoise Level A (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Renamed from RoomAnalytics AmbientNoise Level dBA

RoomAnalytics Sound Level A (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

SystemUnit Hardware Monitoring Temperature Status (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

WebEngine Features Signage (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

WebEngine Features WebEngine (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Webex Status (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Statuses that are removed

RoomAnalytics AmbientNoise Level dBA (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Renamed to RoomAnalytics AmbientNoise Level A

Statuses that are modified

Diagnostics Message[n] Type (All products)

Added to valuespace: CompanionModeIncompatibilityLocal/ CompanionModeIncompatibilityRemote/EmbeddedWebViewFailedToLoad/ EmbeddedWebViewTerminatedUnexpectedly/SoftwareUpgradeKeepsFailing

What's new in CE9.8

This section provides an overview of the new and changed device settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.8 (CE9.8) compared to CE9.7.

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

https://www.cisco.com/c/en/us/support/ collaboration-endpoints/telepresence-quick-setseries/products-release-notes-list.html New features and improvements in CE9.8

New products

The Cisco Webex Boards, which previously have been available only for cloud registration, are now also available for on-premises registration:

- Cisco Webex Board 55/55S
- Cisco Webex Board 70/70S
- Cisco Webex Board 85S

Support for USB headsets (Room Kit, Room Kit Mini, Room 55)

You can connect a USB Headset, Handset or USB Bluetooth dongle to the USB-A port on the devices. This is similar to the DX series.

Extended support for HTTP requests (All products)

Since CE9.6 a device has been able to send arbitrary HTTP(S) Post and Put requests to an HTTP(S) server. This feature is extended to support more request types (Get, Patch, and Delete), and also to handle data that is returned from the server (response headers and body).

Improved USB-C experience (Room Kit Mini)

The Room Kit Mini is in USB camera mode only when it is streaming media to a computer over the USB-C port. In previous releases it was sufficient that at computer was connected to the USB-C port.

Add participant to CMS conference from the device UI

(All products)

Any user can add another participant to an ongoing CMS conference using the user interface of the device. This also includes PSTN calls. When the participant accepts the call, the participant will be added to the same CMS conference.

In this case the device will tell the CMS to dial the participant using the Active Control mechanism. Then the CMS will dial directly to the participant you want to add. For this feature to work, Active Control must be enabled on the device, the call protocol must be SIP, and the CMS must be on version 2.4 or higher. The feature doesn't work if multipoint mode is set to CUCMMediaResourceGroupList.

Register a device to Cisco Webex using API or local web Interface (All products)

You can register a device to Cisco Webex remotely, so you don't have to be in the same room as the device. You can do this programmatically from the API or use the local web interface. In earlier releases you had to use the on-screen setup assistant.

From the web interface, you can only start Webex registering if the device is not currently registered anywhere. If you are using the API, you can start Webex registering even if the device is currently registered to an on-premise system (CUCM or VCS).

Pre-installed list of Certificate Authorities - CAs (All products)

A list of commonly used CA certificates are pre-installed on the video conferencing device. The device uses this list when validating certificates from external servers that it communicates with:

- HTTP servers that host content used by the HttpClient API or macros
- SMTP mail servers (only relevant for Webex Boards)

A factory reset does not delete the list.

xAPI over WebSocket: Authentication using auth protocol header (All products)

Authentication using an auth protocol header is supported. This comes in addition to Basic authentication using an HTTP header field.

This means that browser-based clients, which don't have direct control over HTTP headers, can authenticate to a device directly from the browser using Javascript. More device settings can be provisioned from UCM than before (All products)

If the device is registered to Cisco UCM 12.5(1)SU1 more settings and parameters can be provisioned from UCM than before (*Device > Product Specific Configuration Layout*). Also, if these settings are changed locally on the device, the new value can be written back to the UCM.

Most of the device's public settings (xConfiguration), are included. Exceptions are made for Network, Provisioning and SIP settings.

See the Video Endpoints Management Overview section in the
Release Notes for Cisco Unified ommunications Manager and the IM and Presence Service, Release 12.5(1) SU1 for more information.

Configuration changes in CE9.8

New configurations

Conference FarEndControl SignalCapability (All products) Conference MicUnmuteOnDisconnect Mode (All products) Conference Multipoint Mode (SX10, DX70, DX80) FacilityService Service [1..5] CallType (All products) FacilityService Service [1..5] Name (All products) FacilityService Service [1..5] Number (All products) FacilityService Service [1..5] Type (All products) NetworkServices SMTP From (Boards) NetworkServices SMTP Mode (Boards) NetworkServices SMTP Password (Boards) NetworkServices SMTP Port (Boards) NetworkServices SMTP Security (Boards) NetworkServices SMTP Server (Boards) NetworkServices SMTP Username (Boards) Security Audit Logging Mode (All products) Security Audit OnError Action (All products) Security Audit Server Address (All products) Security Audit Server Port (All products) Security Audit Server PortAssignment (All products) Security Session FailedLoginsLockoutTime (All products) Security Session InactivityTimeout (All products) Security Session MaxFailedLogins (All products) Security Session MaxSessionsPerUser (All products) Security Session MaxTotalSessions (All products) Security Session ShowLastLogon (All products) SerialPort LoginRequired (Codec Pro, Room 70 G2)

UserInterface OSD EncryptionIndicator (*All products*) UserInterface Phonebook DefaultSearchFilter (*All products*) UserInterface SoundEffects Mode (*All products*)

Configurations that are removed

Video DefaultLayoutFamily Remote (SX10, DX70, DX80)

Configurations that are modified

Audio KeyClickDetector Attenuate (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)

- OLD: Default: On
- NEW: Default: True

OLD: Off/On

NEW: False/True

Audio KeyClickDetector Enabled (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)

OLD: Default: Off

NEW: Default: True

OLD: Off/On

NEW: False/True

Audio Output Line[1..6] Delay Mode (Room 70 G2)

OLD: Default: RelativeToHDMI

NEW: Default: Fixed

NetworkServices Wifi Allowed (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, DX70, DX80)

OLD: Public: False NEW: Public: True

xCommand changes in CE9.8

New commands

Audio Select (Room Kit, Room Kit Mini, Room 55) HttpClient Delete (All Products) HttpClient Get (All Products) HttpClient Patch (All Products) Security Certificates ThirdParty Disable (All Products) Security Certificates ThirdParty Enable (All Products) Security Certificates ThirdParty List (All Products) Security Certificates ThirdParty Show (All Products) Webex Registration Cancel (All Products) Webex Registration Start (All Products)

Commands that are removed None.

Commands that are modified

- Audio Volume Decrease (Room Kit, Room Kit Mini, Room 55) NEW: Device: Internal, HeadsetUSB, HandsetUSB NEW: Steps: Integer (1..10), Default: 5
- Audio Volume Increase (Room Kit, Room Kit Mini, Room 55) NEW: Device: Internal, HeadsetUSB, HandsetUSB NEW: Steps: Integer (1..100)
- Audio Volume Set (Room Kit, Room Kit Mini, Room 55)
 - NEW: Device: Internal, HeadsetUSB, HandsetUSB NEW: Steps: Integer (1..1000), Default: 100
- Audio VuMeter Start (All Products)

HttpClient Post (All Products)

NEW: ResponseSizeLimit: Integer (0..100000), Default: 100000 NEW: ResultBody: None, PlainText, Base64, Default: None

HttpClient Put (All Products)

NEW: ResponseSizeLimit: Integer (0..100000), Default: 100000 NEW: ResultBody: None, PlainText, Base64, Default: None

Presentation Start (Room Kit Mini)

- OLD: ConnectorId: Integer (0..65534)
- NEW: ConnectorId: Integer (1..2)
- OLD: PresentationSource: Integer (0..65534)
- NEW: PresentationSource: Integer (1..2)

Presentation Stop (Room Kit Mini)

- OLD: PresentationSource: Integer (0..65534)
- NEW: PresentationSource: Integer (1..2)

xStatus changes in CE9.8

New statuses

Audio Devices HandsetUSB ConnectionStatus (Room Kit, Room Kit Mini, Room 55) Audio Devices HandsetUSB Cradle (Room Kit, Room Kit Mini, Room 55) Audio Devices HeadsetUSB ConnectionStatus (Room Kit, Room Kit Mini, Room 55) Audio Devices HeadsetUSB Description (Room Kit, Room Kit Mini, Room 55) Audio Devices HeadsetUSB Manufacturer (Room Kit, Room Kit Mini, Room 55) Audio SelectedDevice (Room Kit, Room Kit Mini, Room 55) Audio VolumeHandsetUsb (Room Kit, Room Kit Mini, Room 55) Audio VolumeHeadsetUsb (Room Kit, Room Kit Mini, Room 55) Audio VolumeInternal (Room Kit, Room Kit Mini, Room 55) Cameras Camera[n] LightingConditions (MX700, MX800, SX80) Conference Call[n] Capabilities ParticipantDisconnect (All Products) Conference Call[n] Capabilities ParticipantList (All Products) Conference Call[n] Capabilities ParticipantMute (All Products) Conference Call[n] EventCenter Mode (All Products) Conference Call[n] Streamed (All Products) UserInterface Features Whiteboard Start (Codec Plus, Codec Pro, Room Kit, Room Kit Mini) Statuses that are removed

None.

Statuses that are modified

Audio Input KeyClick Attenuate (Codec Plus, Codec Pro, Room Kit, Room Kit Mini, Room 55, Room 55 Dual, Room 70, Room 70 G2)

OLD: On/Off

NEW: False/True

Audio Input KeyClick Enabled (Codec Plus, Codec Pro, Room Kit, Room Kit Mini, Room 55, Room 55 Dual, Room 70, Room 70 G2)

OLD: On/Off

NEW: False/True

Diagnostics Message[n] Type (All Products)

Added to valuespace: SignageFailedToLoad, SignageTerminatedUnexpectedly

SystemUnit Notifications Notification[n] Type (All Products)

OLD: FactoryResetFailed/FactoryResetOK/Other/RebootRequired/SoftwareUpgradeFailed/ SoftwareUpgradeOK

NEW: Other/RebootRequired/SoftwareUpgradeFailed/SoftwareUpgradeOK

What's new in CE9.7

This section provides an overview of the new and changed device settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.7 (CE9.7) compared to CE9.6.

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 in CE9.7

Connect to xAPI over a WebSocket (All products)

You can now connect to the xAPI over WebSocket. The communication channel over WebSocket is open both ways until it is explicitly closed. This means that the server can send data to the client as soon as the new data is available, and there is no need for re-authentication for every request. This improves speed significantly compared to HTTP.

Each message contains a complete JSON document and nothing else. Many programming languages have good library support for WebSocket and JSON-RPC.

WebSocket is not enabled by default. Note that WebSocket is tied to HTTP and HTTP or HTTPS must be enabled before you can use WebSocket.

For more information, see > xAPI over WebSocket guide.

Graphical sound mixer available on Audio Console

(Codec Pro, MX700, MX800, Room 70 G2, Room 70D G2, SX80)

The Audio Console now has a graphical sound mixer. It has 8 user-definable parametric equalizer settings. A setting consists of up to 6 sections, each of which has its own filter type, gain, center/crossover frequency and Q value. Each section is shown with its own color and the effect of altering any of the parameters immediately becomes visible in the graph.

For more information, see the *Customization guide* for CE9.7 at https://www.cisco.com/go/in-room-control-docs

Ambient noise reporting

(Codec Plus, Codec Pro, Room 55, Room 55 Dual, Room 70, Room 70 G2, Room Kit, Room Kit Mini)

The Room series devices can be configured to report the stationary ambient noise level in the room. The reported value is an A-weighted decibel value (dBA), which reflects the response of the human ear. Based on reported noise, facility management or a building manager can intervene to troubleshoot the issue.

All signal processing related to this feature is local and the only data transmitted is the calculated noise level.

Support for multiple SRG-120DH/PTZ-12 cameras

(Codec Plus)

You can now connect up to three SRG-120DH/PTZ-12 cameras to a Codec Plus using an HDMI and an Ethernet switch.

Other updates

- 1080p support for Room Kit Mini when it is used as a USB camera. (Room Kit Mini)
- You can turn video off and on during calls. (All products)
- A device administrator can prevent the use of HTTP and only allow HTTPS Post and HTTPS Put requests. (All products)

xConfiguration changes in CE9.7

New configurations

CallHistory Mode (All products)

Conference Multipoint Mode (Codec Pro, Codec Plus, MX200 G2, MX300 G2, MX700, MX800, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, SX20, SX80)

HttpClient AllowHTTP (All products)

Logging External Mode (All products)

Logging External Protocol (All products)

Logging External Server Address (All products)

Logging External Server Port (All products)

Logging Internal Mode (All products)

NetworkServices Websocket (All products)

Phonebook Server [1] Pagination (All products)

RoomAnalytics AmbientNoiseEstimation Mode (Codec Plus, Codec Pro, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)

SIP ANAT (All products)

UserInterface Features Call VideoMute (Codec Plus, Codec Pro, MX200 G2, MX300 G2, MX700, MX800, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, SX10, SX20, SX80)

UserInterface Features Whiteboard Start (DX70, DX80)

UserInterface Phonebook Mode (All products)

UserInterface SettingsMenu Visibility (All products)

UserInterface UsbPromotion (Room Kit Mini)

Video Presentation Priority (All products)

Configurations that are removed

RoomAnalytics PeopleCountOutOfCall (MX700, MX800)

Configurations that are modified
Audio Input Line [1..4] VideoAssociation VideoInputSource (MX700, MX800, SX80)
OLD: 1 / 2 / 3 / 4 / 5
NEW: 1 / 2 / 3 / 4
Audio Input Microphone [1..8] VideoAssociation VideoInputSource (Codec Pro, Room 70 G2)
OLD: 1 / 2 / 3 / 4 / 5
NEW: 1 / 2 / 3 / 4 / 5 / 6
Audio Input Microphone [1..8] VideoAssociation VideoInputSource (MX700, MX800, SX80)
OLD: 1 / 2 / 3 / 4 / 5 / 6
Audio Input Microphone [1..8] VideoAssociation VideoInputSource (MX700, MX800, SX80)
OLD: 1 / 2 / 3 / 4 / 5
NEW: 1 / 2 / 3 / 4 / 5
NEW: 1 / 2 / 3 / 4 / 5
NEW: 1 / 2 / 3 / 4
Video Input Connector [6] CameraControl Mode (Codec Pro, Room 70 G2)
OLD: Default: On
NEW: Default: Off
OLD: On
NEW: On / Off

xCommand changes in CE9.7

New commands

Audio Diagnostics Advanced Run (*All products*) Audio Setup Reset (*Codec Pro, MX700, M800, Room 70 G2, SX80*) Conference Call AuthenticationResponse (*All products*) Conference Participant Admit (*All products*) Conference Participant Disconnect (*All products*) Conference Participant Mute (*All products*) Conference ParticipantList Search (*All products*) UserInterface Extensions Panel Open (*All products*) UserInterface Extensions Panel Update (*All products*) Video Input MainVideo Mute (*All products*) Video Input MainVideo Unmute (*All products*) Video Matrix Assign (*Room 55D, Room 70*) Video Matrix Swap (*Room 55D, Room 70*) Video Matrix Unassign (*Room 55D, Room 70*)

Commands that are removed

None.

Commands that are modified

Audio LocalOutput Add (Codec Pro, MX700, M800, Room 70 G2, SX80)
NEW: AutoconnectRemote: On/Off, Default: On
OLD: VolumeControlled, Default: undefined
NEW: VolumeControlled, Default: Off
Audio LocalOutput Update (Codec Pro, MX700, M800, Room 70 G2, SX80)
NEW: AutoconnectRemote: On/Off
CallHistory Get (All products)
OLD: CallHistoryld: Integer (0..65534)

NEW: CallHistoryld: Integer (1..2147483647)

HttpClient Post (All products)

NEW: Timeout: Integer (1..30), Default: 30

HttpClient Put (All products) NEW: Timeout: Integer (1..30), Default: 30

UserInterface Message TextInput Display (All products) NEW: InputText: String (0, 255), Default: ""

xStatus changes in CE9.7

New statuses

Audio Output LocalOutput [n] AutoconnectRemote (Codec Pro, MX700, MX800, Room 70 G2, SX80)

Call [n] Ice (All products)

Conference Call [n] AuthenticationRequest (All products)

NetworkServices UPnP Status (All products)

Peripherals ConnectedDevice [n] SerialNumber (All products)

Provisioning CUCM Customization Checksum (All products)

RoomAnalytics AmbientNoise Level dBA (Codec Plus, Codec Pro, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)

UserInterface Features Whiteboard Start (DX70, DX80)

UserInterface SettingsMenu Visibility (All products)

Video Input MainVideoMute (All products)

Statuses that are removed

None.

Statuses that are modified

Diagnostics Message [n] Type (All products)

Added to valuespace: PIILoggingMode / WebexAudioProximityConnectivity / WebexLyraConnectivity / WebexNotificationConnectivity

Video Input Connector[n] Type (All products)

OLD: 3G-SDI / Camera / Composite / DVI / HD-SDI / HDMI / USB / Unknown / VGA / YC / YPbPr

NEW: 3G-SDI / Camera / Composite / DVI / HD-SDI / HDMI / USB / Unknown / VGA / YC / YPbPr / USBC-DP

What's new in CE9.6

This section provides an overview of the new and changed device settings, and the new features and improvements in the Cisco Collaboration Endpoint software version 9.6 (CE9.6) compared to CE9.5.

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

HDCP support

(Codec Plus, Codec Pro, Room 55 Dual, Room 70, Room 70 G2)

One of the device's HDMI inputs can be configured to support HDCP (High-bandwidth Digital Content Protection) protected content. This allows customers to re-purpose the screen by connecting other devices such as a Google Chromecast, an Apple TV, 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.

Remove default buttons from the user interface (All products)

If you don't need all of the default buttons on the user interface, you can remove the ones that you don't need. This makes it possible to fully customize the user interface. The configuration only removes the buttons, not the functionality as such, and the custom In-Room Control panels can still be exposed.

For more information, see the *Cusomization guide* for CE9.6 at https://www.cisco.com/go/in-room-control-docs

Support for third-party USB controllers

(Codec Plus, Codec Pro, DX70, DX80, Room 55, Room 55 Dual, Room 70, Room 70 G2, Room Kit)

You can use a third-party USB input device to control certain functions on a room device. A Bluetooth remote control with a USB dongle and a USB keyboard are examples of such input devices. You can setup the desired features through macros.

This feature is meant to complement the functionality of the Touch 10 or the DX user interfaces. It is not meant to replace the Touch 10 and DX user interfaces.

For more information, see the *Cusomization guide* for CE9.6 at https://www.cisco.com/go/in-room-control-docs

HTTP Post and Put requests (All products)

This feature makes it possible to send arbitrary HTTP(S) Post and Put requests from a device to an HTTP(S) server.

By using macros, you can send data to an HTTP(S) server whenever you want. You can choose what data to send, and structure them as you like. This way you can adapt the data to an already established service.

Security measures:

- The HTTP(S) Post/Put feature is disabled by default.
- The device administrator can specify a list of HTTP(S) servers that the device is allowed to send data to.
- The number of concurrent Post and Put requests is limited.

Content priority (All products)

You can now configure your device to prioritize bandwidth usage for either Main Video Channel or Presentation Channel.

xConfiguration Video Presentation Priority: <Equal, High>

Equal is the default configuration and means 50 / 50 bandwidth division. Selecting "High" divides the bandwidth 25 / 75 in favor of the presentation channel.

Other updates (All products)

- You can start and control recording meetings from the device's user interface, provided that recording is supported by your infrastructure.
- Edit favorite contact's information on Touch 10 controller.
- SIP calls now display the SIP Session ID field in the logs to help identify calls.
- Ability to use ICE over MRA to locate the best path for media.

xConfiguration changes in CE9.6

New configurations

Audio Input Microphone [1..8] Channel (Codec Pro, Room 70 G2) Audio Input HDMI [n] Level (Codec Plus, Room 55, Room 70 G2, Room Kit) Audio Input HDMI [n] Mode (Room 70 G2, Room Kit) Audio Input HDMI [2..5] VideoAssociation MuteOnInactiveVideo (Room 70 G2) Audio Microphones PhantomPower (Codec Plus, MX200 G2, MX300 G2, Room 55, Room Kit, SX20) Audio Output ConnectorSetup (Codec Pro, Room 70 G2) Audio Output HDMI [n] Level (MX700, MX800) Audio Output HDMI [n] Mode (Codec Plus, MX700, MX800) Audio Output InternalSpeaker Mode (MX700, MX800, Room 55 Dual, Room 70) Audio Output Line [1..6] Equalizer ID (Room 70 G2) Audio Output Line [1..6] Equalizer Mode (Room 70 G2) HttpClient AllowInsecureHTTPS (All products) HttpClient Mode (All products) NetworkServices NTP Server [1..3] Key (All products) NetworkServices NTP Server [1..3] Keyld (All products) NetworkServices NTP Server [1..3] KeyAlgorithm (All products) Peripherals InputDevice Mode (Codec Plus, Codec Pro, DX70, DX80, Room 55, Room 55 Dual, Room 70, Room 70 G2, Room Kit) UserInterface Branding AwakeBranding Colors (All products) UserInterface Features Call End (All products) UserInterface Features Call MidCallControls (All products) UserInterface Features Call Start (All products) UserInterface Features HideAll (All products) UserInterface Features Share Start (All products) Video Input Connector [n] HDCP Mode (Codec Plus, Codec Pro, Room 55 Dual, Room 70, Room 70 G2) Video Output Connector [2] CEC Mode (Room 70 Single)

Configurations that are removed Conference MultiStream Mode (MX200 G2, MX300 G2, SX20)

Configurations that are modified

Audio Output ARC [1] Mode (Codec Pro, Room 70 G2) OLD: Default: Auto NEW: Default: On OLD: Off / On / Auto NEW: Off / On Audio Output HDMI [1..3] Mode (Codec Pro, Room 70 G2) OLD: Default: Auto (Codec Pro) NEW: Default: On (Codec Pro) OLD: Default, HDMI [2..3]: Auto (Room 70 G2 Single) NEW: Default, HDMI [2..3]: Off (Room 70 G2 Single) OLDI: Default, HDMI [3]: Auto (Room 70 G2 Dual) NEW: Default, HDMI [3]: Off (Room 70 G2 Dual) OLD: Off / On / Auto NEW: Off / On Audio Output InternalSpeaker Mode (Room 55, Room 70 G2, Room Kit) OLD: Default: Auto (Room 70 G2) NEW: Default: On (Room 70 G2) OLD: Off / On / Auto (Room 70 G2) NEW: Off / On / UltrasoundOnly (Room 70 G2) OLD: Off / On (Room 55, Room Kit) NEW: Off / On / UltrasoundOnly (Room 55, Room Kit) Audio Ultrasound MaxVolume (SX20) OLD: Default: 70 NEW: Default: 60 Provisioning Mode (All products) OLD: Auto / CUCM / Edge / Off / TMS / VCS / Spark NEW: Auto / CUCM / Edge / Off / TMS / VCS / Webex

Provisioning Mode (Room 55 Dual)

OLD: Default: Off

NEW: Default: On

 $Standby \ Wakeup On Motion Detection \ \textit{(Room 55 Dual)}$

OLD: Default: Off

NEW: Default: On

xCommand changes in CE9.6

New commands

Conference Recording Pause (All products) Conference Recording Resume (All products) Conference Recording Start (All products) Conference Recording Stop (All products) HttpClient Allow Hostname Add (All products) HttpClient Allow Hostname Clear (All products) HttpClient Allow Hostname List (All products) HttpClient Allow Hostname Remove (All products) HttpClient Allow Hostname Remove (All products) HttpClient Post (All products) HttpClient Put (All products) Security Session Get (All products)

Commands that are removed

None.

Commands that are modified

Audio Sound Play (All products)

OLD: Sound (r): 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

NEW: Sound (r): 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 / Announcement

Audio VuMeter Start (DX70, DX80, Codec Plus, Codec Pro, Room 50, Room 70, Room 70 G2, Room Kit, SX10)

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

NEW: ConnectorType (r): HDMI / Microphone

Audio VuMeter Stop (DX70, DX80, Codec Plus, Codec Pro, Room 50, Room 70, Room 70 G2, Room Kit, SX10)

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

Dial (All products)

OLD: CallType: Audio / Video NEW: CallType: Audio / Video / Auto Phonebook Contact Add (*All products*) OLD: CallType: Audio / Video NEW: CallType: Audio / Video / Auto Phonebook ContactMethod Add (*All products*) OLD: CallType: Audio / Video

NEW: CallType: Audio / Video / Auto

Phonebook ContactMethod Modify (All products)

- OLD: CallType: Audio / Video
- NEW: CallType: Audio / Video / Auto

Phonebook Search (All products)

NEW: SearchFilter: All / Rooms / People

Presentation Start (All products)

NEW: Layout: Equal / Prominent

SystemUnit FactoryReset (All products)

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

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

UserInterface Message TextInput Clear (All products)

NEW: FeedbackId: String , MaxLength: 255 , MinLength: 0

UserInterface Message TextInput Display (All products)

OLD: Role: Admin, Integrator, RoomControl, User

NEW: Role: Admin, Integrator, RoomControl

OLD: FeedbackId (r): String , MaxLength: 255 , MinLength: 0

NEW: FeedbackId: String , MaxLength: 255 , MinLength: 0

UserInterface Message TextInput Response (All products)

OLD: FeedbackId (r): String , MaxLength: 255 , MinLength: 0

NEW: FeedbackId: String , MaxLength: 255 , MinLength: 0

UserManagement User Add (*All products*)
OLD: Passphrase: String , MaxLength: 255 , MinLength: 0
NEW: Passphrase (r): String , MaxLength: 255 , MinLength: 0
Video Input SetMainVideoSource (*All products*)
OLD: Layout: Equal / PIP
NEW: Layout: Equal / PIP / Prominent
NEW: PIPPosition: LowerLeft / LowerRight / UpperLeft / UpperRight
NEW: PIPSize: Auto / Large
Video Matrix Assign (*All products*)
NEW: Layout: Equal / Prominent
NEW: RemoteMain: ntegerArray, Max: 4, Min: 1, Step: 1, Multiple: 4
Video Matrix Unassign (*All products*)
OLD: Sourceld (r): Integer , Max: 2, Min: 1 , Step: 1
NEW: Sourceld: Integer , Max: 2, Min: 1 , Step: 1
NEW: RemoteMain: ntegerArray, Max: 4, Min: 1, Step: 1

xStatus changes in CE9.6

New statuses

Audio Input Connectors HDMI [n] Mute (*All products*) Audio Input Connectors Line [n] Mute (*All products*) Audio Input Connectors Microphone [n] Mute (*All products*) H320 Gateway Address (*All products*) H320 Gateway Id (*All products*) H320 Gateway Mode (*All products*) H320 Gateway Number (*All products*) H320 Gateway Number (*All products*) H320 Gateway Reason (*All products*) H320 Gateway Status (*All products*) H320 Gateway Status (*All products*) UserInterface Features Call End (*All products*) UserInterface Features Call MidCallControls (*All products*) UserInterface Features Share Start (*All products*) Video Layout Site [n] Frame [n] Mirrored (*All products*)

Statuses that are removed

Audio Output Connectors InternalSpeaker [n] DelayMs (Room 55 Dual, Room 70, Room 70 G2) Audio Output Connectors InternalSpeaker [n] Mode (Room 55 Dual, Room 70, Room 70 G2) Video Mute (All products)

Statuses that are modified

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

OLD: Off / On NEW: Off / On / DelayMeasurement

What's new in CE9.5

This section provides an overview of the new and changed device 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 device 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 *Cusomization guide* for CE9.5 at https://www.cisco.com/go/in-room-control-docs

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

CEC is disabled on the device 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^{[2} 4 El Dreferred Decelution (Output Du Dum 70 O2)

Video Input Connector[3,4,5] PreferredResolution (Codec Pro, Room 70 G2) OLD: Default: 3840_2160_30 NEW: Default: 1920_1080_60

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 removed

None.

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 / CallInitiate / 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: Connectorld: Integer, Multiple: undefined NEW: Connectorld 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: Sourceld (r): Integer, Max: 4, Min: 1, Step: 1 (Codec Plus)

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

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

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

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

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

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 device 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 devices 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 device 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 device's web interface, or you can generalize the backup bundle so that it can be provisioned across multiple devices, for example using Cisco UCM or TMS.

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

Provisioning of custom elements (All products)

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

By provisioning a non-device specific backup bundle, you can for example, copy a device's setup with macros, branding elements, and in-room control panels across multiple devices. 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-ofcall 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 *Cusomization guide* for CE9.3 at ► 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 conferencing devices that supports CE9.3.0.

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

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 devices in the Room series.

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

CEC is disabled on the device 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 device information from being exposed in the user interface (All products)

You can prevent important device 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 device 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 device 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.

xConfiguration 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

xCommands 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: WidgetId: 0..40

NEW: WidgetId: 0..255

UserInterface Extensions Widget UnsetValue (All products)

OLD: WidgetId: 0..40

NEW: WidgetId: 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

xStatus 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 70, Room Kit, SX10) 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 / Camerald / CameraPairing / CameraSerial / CameraSoftwareVersion / CameraStatus / CamerasDetected / CaptivePortalDetected / CertificateExpiry / ConfigurationFile / ContactInfoMismatch / ControlSystemConnection / DefaultCallProtocolRegistered / ECReferenceDelay / EthernetDuplexMatches / FanStatus / FirstTimeWizardNotCompleted / H320GatewayStatus / H323GatekeeperStatus / HasActiveCallProtocol / HasValidReleaseKey / IPv4Assignment / IPv6Assignment / IPv6Mtu / ISDNLinkCompatibility / ISDNLinkIpStack / 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 / SiplceAndAnatConflict / 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 / Camerald / 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
/ SiplceAndAnatConflict / 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 device 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 device 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 device 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 device's web interface.

HDCP support (Room 55)

The device'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 device's screen by connecting other 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 device) 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 device 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 device's admin password. If the password is blank, anyone can access the Settings and factory reset the device.
- 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 device.

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 device'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 device 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 devices. 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 device's 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 device 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 device that is running software version CE9.2 will not be unmuted directly. When you try to unmute such a device 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 Ceritifcates CA Add, or xCommand Security Ceritifcates Services Add). You can also upload certificates to a device 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 device'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 device, 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 device 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 device 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 device to a new service.

Changing the provisioning from the API will not automatically factory reset the device.

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

You can configure the device 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.

xConfiguration 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

xCommand 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 / Signln / SpecialInfo / TelephoneCall / VideoCall / VolumeAdjust / WakeUp

NEW: Sound: Alert / Bump / Busy / CallDisconnect / CallDitiate / 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 55)

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

xStatus 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*) Video Output Connector[n] ConnectedDevice CEC[n] LogicalAddress (*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: CamerasDetectedNolr / 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 device 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 devices can utilize both screens for video in a CMS based meeting. The device 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 device, and gives users better guidance on how to get started.

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

Bluetooth headset support (DX70, DX80)

A Bluetooth headset can be used with the device. The headset must support HFP (Hands Free Protocol). The user can enable Bluetooth and set the device 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 device 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 device 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 device counts the number of people in the room when in a call, and when displaying the self-view picture. You can configure the device to also count the number of people outside of call, but the device 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 conferencing device's second network port. Then you only need one network wall socket to support both the device and the computer.

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

xConfiguration 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

xCommand 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)

xStatus 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] SoftwarelD (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 / ISDNLinklpStack / ITLinstallation / InvalidSIPTransportConfig / LockDown / RoomControl / MediaBlockingDetected / NetLinkStatus / NetSpeedAutoNegotiated / NetworkQuality / NTPStatus / OSDVideoOutput / OutputConnectorLocations / ProvisioningDeveloperOptions / ProvisioningStatus / SIPEncryption / SIPListenPortAndOutboundMode / SIPProfileRegistration / SIPProfileType / SelectedVideoInputSourceConnected / SiplceAndAnatConflict / 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 / ISDNLinkIpStack / 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 device 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 (All products)

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 (All products)

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

xConfiguration Standby WakeupOnMotionDetection

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

Updated In-Room Control Editor (All products)

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 (All products)

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

Other changes (All products)

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

xConfiguration 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] * (*M*200 *G*2, *M*X300 *G*2, *M*X700, *M*X800, *S*X10, *S*X20, *S*X80) OLD: User role: ADMIN, USER NEW: User role: ADMIN, INTEGRATOR Cameras SpeakerTrack * (*M*X700, *M*X800, *S*X80) OLD: User role: ADMIN, USER NEW: User role: ADMIN, INTEGRATOR Conference MultiStream Mode (*M*X200 *G*2, *M*X300 *G*2, *M*X700, *M*X800, *S*X20, *S*X80) 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 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>.

xCommand 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 Select (*All products*) UserInterface Presentation ExternalSource State Set (*All products*) UserInterface Presentation ExternalSource State Set (*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*)

xStatus 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, ISDNLinkIpStack, 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, ISDNLinkIpStack, 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 CallId (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] 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)

UserInterface Extensions Widget[n] Value (All products)

Chapter 2

About the API

API fundamentals

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

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 device interacts with third-party systems. These may change from release to release and are not documented.

¹ Telnet is only available for DX, MX, and SX series.

Connecting to the API

There are several ways to access the device API:

- SSH
- Telnet¹
- HTTP/HTTPS
- WebSocket
- Serial connection²

Regardless of which method you choose, the structure of the API is the same. Choose the connection method that suits your application best. Note that all methods are not available for all products.

Before you start, please read this section about the different methods, as some of them may require additional configuration changes before being enabled. The configurations, apart from password, can be set from the Configuration menu on the web interface or from the command line interface. The examples are for the command line interface.

SSH

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

xConfiguration NetworkServices SSH Mode: <Off,On>

Telnet

Telnet¹ can be viewed as the equivalent of the serial protocol in the TCP/IP world. Telnet is disabled by default. Before connecting to the device with Telnet you have to enable it.

To enable the Telnet service, configure the following setting on the device. 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 device.

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

Connecting

You can inspect the API by entering the IP-address or host name of the device in your web browser. This opens the web interface, and 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 device. This is described in "Using HTTP" on page 80 in this document.

WebSocket

WebSocket is a protocol that provides a full-duplex communication channel between a client and the API of the device. The API commands are embedded in JSON-RPC objects before they are sent over WebSocket.

In order to enable or disable the use of WebSocket, configure the following settings. Because WebSocket is tied to HTTP, also HTTP or HTTPS must be enabled before you can use WebSocket.

- xConfiguration NetworkServices WebSocket: <Off, FollowHTTPService>
- xConfiguration NetworkServices HTTP Mode: <Off, HTTP+HTTPS, HTTPS>

Read the **API** over WebSocket guide for details how to convey API commands in JSON-RPC objects over WebSocket.

RS-232 / serial connection

Depending on the product the device has either an USB or a standard COM-port for serial communication.² It can be used without an IP-address, DNS, or a network. Serial connection is allowed by default.³

xConfiguration SerialPort Mode: <Off/On>

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 device 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 device 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>

Ethernet ports

The main network port – Network port 1 – is always reserved for the connection to LAN.⁴ This applies to all devices.

Some of our devices 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 video conferencing device, 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 device 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 Kit Mini, 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")

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 customized UI panels (for example in-room controls). The user has access to the UI Extensions 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 devices with third-party equipment. Such a user can also create customized UI panels.

 $^{^{\,2}\,}$ Serial connection is not available for DX70, DX80, Room 55 Dual, and Room 70.

³ Only the default serial connection settings are available for Webex Board 55 and 70.

⁴ Depending on the device, Network port 1 is marked with the number 1, the network symbol $\langle \widehat{\boldsymbol{\varsigma}} \boldsymbol{\delta} \rangle$, or both.

Passphrase

The device is delivered with a default user account with full credentials. The user name is *admin*, and initially, no passphrase is set for the default user.

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

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

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

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 device using RS-232, Telnet or SSH (Example 1).

Bye

Typing the bye command closes the command line interface.

API commands

xConfiguration

Configurations are device settings, such as device name and network settings. These are persistent across boots. Refer to "Configurations" on page 74.

xCommand

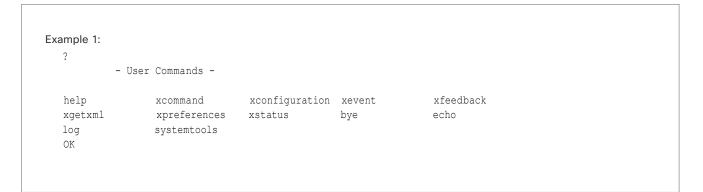
Commands instruct the device to execute actions, such as to dial a number or to search the phone book. Refer to "Commands" on page 74.

xStatus

A status contains the current state of the device, such as connected calls, the status of the gatekeeper registration, connected inputs and output sources. Refer to "Status" on page 74.

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 device with multiple sessions, you have to define feedback individually for each session. Refer to "Feedback mechanism" on page 78.



xPreferences

The xPreferences command is used to set preferences for the RS-232, Telnet and SSH sessions. Refer to "API output" on page 71.

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 77.

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 78.

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 521.

Log

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

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>: Erase 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 $\ensuremath{\mathsf{OUT}}$ and $\ensuremath{\mathsf{HDMI}}$:

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:

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 ** end

Value types and formats

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

Writing $\ensuremath{\mathsf{xConfiguration}}$? 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"

**end

Status

A status contains the current state of the device, 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>

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 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 WelcomeBanner Set Hello! This is the second line of text. This is the third. Thank you!

OK

•

*r WelcomeBannerSetResult (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 device may also respond with feedback between your request and the response, in form of status changes or events, due to changes on the device.

For some applications it might be crucial to match requests with responses. The API therefore supports a responsetagging 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 device. A listener then listens to all feedback from the device 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"
OK
*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:

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 device

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

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 device synchronized, you can set up a notification system to report the changes in the state of the device.

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 device 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 "Feedback from the device over HTTP" on page 82 for more information.

WARNING: A device 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 http://<ip-address>/getxml?location=path or to execute xgetxml <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 query

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 device 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 device 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 device 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 XMLAPI 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 authentication 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 device's 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 device

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

Example 2: Get just the audio statuses of the device

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

Example 3: Get all configurations of the device

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

Example 4: Get all video configurations of the device

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

Sending commands and configurations

Using HTTP POST

When sending configurations and commands to the device, 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 device name

Request

POST /putxml HTTP/1.1 Content-Type: text/xml

<Configuration> <SystemUnit> <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 the device 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 device 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 device 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 "Feedback mechanism" on page 78 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>I</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> </Register> </Command>

Feedback output

When the device 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 device from which the notification originated. This means that you can handle multiple devices with a single HTTP server URI.

Example: Audio volume changed.

<Configuration xmlns="http://www.company.com/XML/ CUIL/2.0">

<Identification>

<SystemName>My Device 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]</HWBoard> <SerialNumber>PH0000000</SerialNumber> </Identification> <Audio item="1"> <Volume item="1"> </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

xCommand Dial Number: "12345" Protocol: H323

XML

<Command> <Dial command="True">

- <Number>12345</Number>
 <Protocol>H323</Protocol>
- </Dial>

</Command>

Example 2: Assigning volume level

Terminal

xCommand Audio Volume Set Level: 50

XML

<Command> <Audio> <Volume> <Set command="True"> <Level>50</Level> </Set> </Volume> </Audio> </Command>

Translating configurations

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

xConfiguration Video Input Connector 2 InputSourceType: camera

XML

<Configuration> <Video> <Input> <Connector item="2"> <InputSourceType>camera</ InputSourceType> </Connector> </Input> </Video> </Configuration>

Dos and don'ts

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

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	
xConfiguration Audio DefaultVolume	92
xConfiguration Audio Input ARC [n] Mode	92
xConfiguration Audio Input HDMI [n] Level	93
xConfiguration Audio Input HDMI [n] Mode	93
xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo	
xConfiguration Audio Input Line [n] Equalizer ID	
xConfiguration Audio Input Line [n] Equalizer Mode	94
xConfiguration Audio Input Line [n] VideoAssociation MuteOnInactiveVideo	95
xConfiguration Audio Input Line [n] VideoAssociation VideoInputSource	95
xConfiguration Audio Input Line [n] Channel	
xConfiguration Audio Input Line [n] Level	
xConfiguration Audio Input Line [n] Mode	97
xConfiguration Audio Input Microphone [n] Channel	97
xConfiguration Audio Input Microphone [n] EchoControl Mode	
xConfiguration Audio Input Microphone [n] EchoControl Dereverberation	
xConfiguration Audio Input Microphone [n] EchoControl NoiseReduction	
xConfiguration Audio Input Microphone [n] Equalizer ID	
xConfiguration Audio Input Microphone [n] Equalizer Mode	
xConfiguration Audio Input Microphone [n] Level	100
xConfiguration Audio Input Microphone [n] Mode	100
xConfiguration Audio Input Microphone [n] Type	
xConfiguration Audio Input Microphone [n] PhantomPower	
xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo	102
xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource	102
xConfiguration Audio Input MicrophoneMode	103
xConfiguration Audio KeyClickDetector Attenuate	

xConfiguration Audio KeyClickDetector Enabled	.104
xConfiguration Audio Microphones Mute Enabled	.104
xConfiguration Audio Microphones PhantomPower	.105
xConfiguration Audio MicrophoneReinforcement Input Microphone [n] Mode	.105
xConfiguration Audio MicrophoneReinforcement Output Line [n] Mode	.106
xConfiguration Audio MicrophoneReinforcement Gain	.106
xConfiguration Audio Output ARC [n] Delay DelayMs	.106
xConfiguration Audio Output ARC [n] Delay Mode	. 107
xConfiguration Audio Output ARC [n] Mode	. 107
xConfiguration Audio Output ConnectorSetup	108
xConfiguration Audio Output HDMI [n] Delay DelayMs	.109
xConfiguration Audio Output HDMI [n] Delay Mode	
xConfiguration Audio Output HDMI [n] Level	. 110
xConfiguration Audio Output HDMI [n] Mode	
xConfiguration Audio Output InternalSpeaker Mode	. 111
xConfiguration Audio Output Line [n] Channel	. 111
xConfiguration Audio Output Line [n] Delay DelayMs	. 112
xConfiguration Audio Output Line [n] Delay Mode	. 112
xConfiguration Audio Output Line [n] Equalizer ID	. 113
xConfiguration Audio Output Line [n] Equalizer Mode	
xConfiguration Audio Output Line [n] Level	. 113
xConfiguration Audio Output Line [n] Mode	
xConfiguration Audio Output Line [n] OutputType	
xConfiguration Audio SoundsAndAlerts RingTone	. 115
xConfiguration Audio SoundsAndAlerts RingVolume	
xConfiguration Audio Ultrasound MaxVolume	. 115

BYOD configuration	116
xConfiguration BYOD TouchForwarding Enabled	
CallHistory configuration	116
xConfiguration CallHistory Mode	
Cameras configuration	
xConfiguration Cameras Camera [n] AssignedSerialNumber	117
xConfiguration Cameras Camera [n] Backlight DefaultMode	117
xConfiguration Cameras Camera [n] Brightness Mode	
xConfiguration Cameras Camera [n] Brightness DefaultLevel	
xConfiguration Cameras Camera [n] Flip	
xConfiguration Cameras Camera [n] Focus Mode	
xConfiguration Cameras Camera [n] Gamma Mode	120
xConfiguration Cameras Camera [n] Gamma Level	120
xConfiguration Cameras Camera [n] Mirror	121
xConfiguration Cameras Camera [n] Whitebalance Mode	121
xConfiguration Cameras Camera [n] Whitebalance Level	
xConfiguration Cameras Camera Framerate	
xConfiguration Cameras Preset TriggerAutofocus	
xConfiguration Cameras SpeakerTrack Mode	
xConfiguration Cameras SpeakerTrack Closeup	
xConfiguration Cameras SpeakerTrack TrackingMode	
xConfiguration Cameras SpeakerTrack ConnectorDetection Mode	
xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft	
xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight	
xConfiguration Cameras SpeakerTrack Whiteboard Mode	
Conference configuration	
xConfiguration Conference AutoAnswer Mode	
xConfiguration Conference AutoAnswer Mute	
xConfiguration Conference AutoAnswer Delay	
xConfiguration Conference DefaultCall Protocol	
xConfiguration Conference DefaultCall Rate	

xConfiguration Conference DoNotDisturb DefaultTimeout	129
xConfiguration Conference Encryption Mode	129
xConfiguration Conference FarEndControl Mode	130
xConfiguration Conference FarEndControl SignalCapability	130
xConfiguration Conference FarEndMessage Mode	130
xConfiguration Conference MaxReceiveCallRate	
xConfiguration Conference MaxTransmitCallRate	
xConfiguration Conference MaxTotalReceiveCallRate	132
xConfiguration Conference MaxTotalTransmitCallRate	132
xConfiguration Conference MicUnmuteOnDisconnect Mode	133
xConfiguration Conference Multipoint Mode	133
xConfiguration Conference MultiStream Mode	134
FacilityService configuration	
xConfiguration FacilityService Service [n] Type	134
xConfiguration FacilityService Service [n] Name	135
xConfiguration FacilityService Service [n] Number	135
xConfiguration FacilityService Service [n] CallType	136
GPIO configuration	
xConfiguration GPIO Pin [n] Mode	136
H323 configuration	
xConfiguration H323 Authentication Mode	
xConfiguration H323 Authentication LoginName	
xConfiguration H323 Authentication Password	
xConfiguration H323 CallSetup Mode	
xConfiguration H323 Encryption KeySize	
xConfiguration H323 Gatekeeper Address	
xConfiguration H323 H323Alias E164	
xConfiguration H323 H323Alias ID	140
xConfiguration H323 NAT Mode	
xConfiguration H323 NAT Address	
-	

HttpClient configuration	141
xConfiguration HttpClient Mode	141
xConfiguration HttpClient AllowHTTP	142
xConfiguration HttpClient AllowInsecureHTTPS	142

HttpFeedback configuration	143
xConfiguration HttpFeedback TIsVerify	.143

Logging configuration	143
xConfiguration Logging External Mode	143
xConfiguration Logging External Protocol	144
xConfiguration Logging External Server Address	144
xConfiguration Logging External Server Port	144
xConfiguration Logging External TIsVerify	145
xConfiguration Logging Internal Mode	145

Macros configuration146	3
xConfiguration Macros Mode146	3
xConfiguration Macros AutoStart	3
xConfiguration Macros UnresponsiveTimeout	7

Network configuration	7
xConfiguration Network [n] DNS DNSSEC Mode	7
xConfiguration Network [n] DNS Domain Name148	3
xConfiguration Network [n] DNS Server [m] Address148	3
xConfiguration Network [n] IEEE8021X Mode149)
xConfiguration Network [n] IEEE8021X TIsVerify149)
xConfiguration Network [n] IEEE8021X UseClientCertificate)
xConfiguration Network [n] IEEE8021X Identity150)
xConfiguration Network [n] IEEE8021X Password150)
xConfiguration Network [n] IEEE8021X AnonymousIdentity151	1
xConfiguration Network [n] IEEE8021X Eap Md5	1
xConfiguration Network [n] IEEE8021X Eap Ttls152	2
xConfiguration Network [n] IEEE8021X Eap TIs152	2
xConfiguration Network [n] IEEE8021X Eap Peap153	3

xConfiguration Network [n] IPStack	
xConfiguration Network [n] IPv4 Assignment	
xConfiguration Network [n] IPv4 Address	
xConfiguration Network [n] IPv4 Gateway	
xConfiguration Network [n] IPv4 SubnetMask	
xConfiguration Network [n] IPv6 Assignment	
xConfiguration Network [n] IPv6 Address	
xConfiguration Network [n] IPv6 Gateway	
xConfiguration Network [n] IPv6 DHCPOptions	
xConfiguration Network [n] MTU	
xConfiguration Network [n] QoS Mode	
xConfiguration Network [n] QoS Diffserv Audio	
xConfiguration Network [n] QoS Diffserv Video	
xConfiguration Network [n] QoS Diffserv Data	
xConfiguration Network [n] QoS Diffserv Signalling	
xConfiguration Network [n] QoS Diffserv ICMPv6	
xConfiguration Network [n] QoS Diffserv NTP	
xConfiguration Network [n] RemoteAccess Allow	
xConfiguration Network [n] Speed	
xConfiguration Network [n] VLAN Voice Mode	
xConfiguration Network [n] VLAN Voice Vlanld	
NetworkPort configuration	
xConfiguration NetworkPort [n] Mode	
NetworkServices configuration	163
xConfiguration NetworkServices CDP Mode	
xConfiguration NetworkServices H323 Mode	
xConfiguration NetworkServices HTTP Mode	
xConfiguration NetworkServices HTTP Proxy LoginName	
xConfiguration NetworkServices HTTP Proxy Password	
xConfiguration NetworkServices HTTP Proxy Mode	
xConfiguration NetworkServices HTTP Proxy Url	
xConfiguration NetworkServices HTTP Proxy PACUrl	
xConfiguration NetworkServices HTTPS Server MinimumTLSVersion	

xConfiguration NetworkServices HTTPS StrictTransportSecurity	
xConfiguration NetworkServices HTTPS VerifyClientCertificate	
xConfiguration NetworkServices NTP Mode	
xConfiguration NetworkServices NTP Server [n] Address	
xConfiguration NetworkServices NTP Server [n] Key	
xConfiguration NetworkServices NTP Server [n] Keyld	
xConfiguration NetworkServices NTP Server [n] KeyAlgorithn	
xConfiguration NetworkServices SIP Mode	
xConfiguration NetworkServices SMTP Mode	
xConfiguration NetworkServices SMTP Server	
xConfiguration NetworkServices SMTP Port	
xConfiguration NetworkServices SMTP Username	
xConfiguration NetworkServices SMTP Password	
xConfiguration NetworkServices SMTP From	
xConfiguration NetworkServices SMTP Security	
xConfiguration NetworkServices SNMP Mode	
xConfiguration NetworkServices SNMP Host [n] Address	
xConfiguration NetworkServices SNMP CommunityName	
xConfiguration NetworkServices SNMP SystemContact	
xConfiguration NetworkServices SNMP SystemLocation	
xConfiguration NetworkServices SSH Mode	
xConfiguration NetworkServices SSH HostKeyAlgorithm	
xConfiguration NetworkServices Telnet Mode	
xConfiguration NetworkServices UPnP Mode	
xConfiguration NetworkServices Websocket	
xConfiguration NetworkServices WelcomeText	
xConfiguration NetworkServices Wifi Allowed	

Peripherals configuration	175
xConfiguration Peripherals InputDevice Mode	175
xConfiguration Peripherals Pairing CiscoTouchPanels RemotePairing	175
xConfiguration Peripherals Profile Cameras	176
xConfiguration Peripherals Profile ControlSystems	176
xConfiguration Peripherals Profile TouchPanels	177

Phonebook configuration	
xConfiguration Phonebook Server [n] ID	
xConfiguration Phonebook Server [n] Pagination	
xConfiguration Phonebook Server [n] TIsVerify	
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 Provisioning ExternalManager Path	
xConfiguration Provisioning ExternalManager Domain	
xConfiguration Provisioning Mode	
xConfiguration Provisioning LoginName	
xConfiguration Provisioning Password	
xConfiguration Provisioning TIsVerify	
xConfiguration Provisioning WebexEdge	
Proximity configuration	
xConfiguration Proximity Mode	
xConfiguration Proximity Services CallControl	
xConfiguration Proximity Services ContentShare FromClients	
xConfiguration Proximity Services ContentShare ToClients	
RoomAnalytics configuration	
xConfiguration RoomAnalytics AmbientNoiseEstimation Mode	
xConfiguration RoomAnalytics PeopleCountOutOfCall	
xConfiguration RoomAnalytics PeoplePresenceDetector	
Security configuration	
xConfiguration Security Audit Logging Mode	
xConfiguration Security Audit OnError Action	

xConfiguration Security Audit Server Address	187
xConfiguration Security Audit Server Port	188
xConfiguration Security Audit Server PortAssignment	188
xConfiguration Security Fips Mode	189
xConfiguration Security Session FailedLoginsLockoutTime	189
xConfiguration Security Session InactivityTimeout	189
xConfiguration Security Session MaxFailedLogins	190
xConfiguration Security Session MaxSessionsPerUser	190
xConfiguration Security Session MaxTotalSessions	190
xConfiguration Security Session ShowLastLogon	190

SerialPort configuration	191
xConfiguration SerialPort Mode	
xConfiguration SerialPort BaudRate	
xConfiguration SerialPort LoginRequired	

xConfiguration SIP ANAT	
xConfiguration SIP Authentication UserName	
xConfiguration SIP Authentication Password	
xConfiguration SIP DefaultTransport	193
xConfiguration SIP DisplayName	193
xConfiguration SIP Ice DefaultCandidate	
xConfiguration SIP Ice Mode	
xConfiguration SIP ListenPort	
xConfiguration SIP MinimumTLSVersion	195
xConfiguration SIP Proxy [n] Address	
xConfiguration SIP Turn Server	
xConfiguration SIP Turn UserName	
xConfiguration SIP Turn Password	196
xConfiguration SIP URI	196
Standby configuration	196

Standby configuration	196
xConfiguration Standby BootAction	196
xConfiguration Standby Control	197

xConfiguration Standby Delay	
xConfiguration Standby Signage Audio	
xConfiguration Standby Signage InteractionMode	
xConfiguration Standby Signage Mode	
xConfiguration Standby Signage RefreshInterval	
xConfiguration Standby Signage Url	198
xConfiguration Standby StandbyAction	
xConfiguration Standby WakeupAction	199
xConfiguration Standby WakeupOnMotionDetection	199
xConfiguration Standby PowerSave	
SystemUnit configuration	
xConfiguration SystemUnit Name	
xConfiguration SystemUnit CrashReporting Mode	
xConfiguration SystemUnit CrashReporting Url	
Time configuration	201
xConfiguration Time TimeFormat	201
xConfiguration Time DateFormat	201
xConfiguration Time Zone	202
xConfiguration Time WorkDay Start	
xConfiguration Time WorkDay End	
xConfiguration Time WorkWeek FirstDayOfWeek	
xConfiguration Time WorkWeek LastDayOfWeek	
UserInterface configuration	
xConfiguration UserInterface Accessibility IncomingCallNotification	
xConfiguration UserInterface Branding AwakeBranding Colors	
xConfiguration UserInterface ContactInfo Type	205
xConfiguration UserInterface CustomMessage	
xConfiguration UserInterface KeyTones Mode	
xConfiguration UserInterface Features Call End	
xConfiguration UserInterface Features Call MidCallControls	
xConfiguration UserInterface Features Call JoinWebex	207
xConfiguration UserInterface Features Call Start	

xConfiguration UserInterface Features Call VideoMute	207
xConfiguration UserInterface Features HideAll	207
xConfiguration UserInterface Features Share Start	208
xConfiguration UserInterface Features Whiteboard Start	208
xConfiguration UserInterface Language	208
xConfiguration UserInterface OSD EncryptionIndicator	209
xConfiguration UserInterface OSD HalfwakeMessage	209
xConfiguration UserInterface OSD Output	210
xConfiguration UserInterface Phonebook Mode	210
xConfiguration UserInterface Security Mode	211
xConfiguration UserInterface SettingsMenu Mode	211
xConfiguration UserInterface SettingsMenu Visibility	212
xConfiguration UserInterface SoundEffects Mode	212
xConfiguration UserInterface UsbPromotion	212
xConfiguration UserInterface WebcamOnlyMode	213

xConfiguration UserManagement LDAP MinimumTLSVersion215

Video configuration	
xConfiguration Video DefaultMainSource	220
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	
xConfiguration Video Input Connector [n] HDCP Mode	223
xConfiguration Video Input Connector [n] InputSourceType	
xConfiguration Video Input Connector [n] Name	
xConfiguration Video Input Connector [n] PreferredResolution	
xConfiguration Video Input Connector [n] PresentationSelection	
xConfiguration Video Input Connector [n] Quality	
xConfiguration Video Input Connector [n] Visibility	
xConfiguration Video Monitors	
xConfiguration Video Output Connector [n] CEC Mode	228
xConfiguration Video Output Connector [n] MonitorRole	229
xConfiguration Video Output Connector [n] OverscanLevel	230
xConfiguration Video Output Connector [n] Resolution	
xConfiguration Video Presentation DefaultSource	231
xConfiguration Video Presentation Priority	232
xConfiguration Video Selfview Default FullscreenMode	232
xConfiguration Video Selfview Default Mode	
xConfiguration Video Selfview Default OnMonitorRole	
xConfiguration Video Selfview Default PIPPosition	234
xConfiguration Video Selfview Mirrored	
xConfiguration Video Selfview OnCall Mode	235
xConfiguration Video Selfview OnCall Duration	235
WebEnging configuration	225

ebEngine configuration	l	
Configuration WebEngi	ne Mode	
Configuration WebEngi	ne RemoteDebugging	

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 conferencing device. 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 device is running, and to reset to default value.

USAGE:

xConfiguration Audio DefaultVolume: 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 [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

70 [Boards]

xConfiguration Audio Input ARC [n] Mode

Applies to: CodecPlus CodecPro Room70G2 Requires user role: ADMIN, INTEGRATOR

Each HDMI output has an associated audio return channel (ARC). You can use the ARC to send audio from a screen or TV, which is connected to the HDMI ouput, to the video conferencing device. You can decide for each HDMI output connector (n) separately, whether or not to allow audio transmission.

USAGE:

xConfiguration Audio Input ARC [n] Mode: Mode

where

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

Range: 1..1 [CodecPlus]

Range: 1..3 [CodecPro]

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

<u>Mode</u>:

Off/On

Off: Disable the ARC channel of HDMI output n (audio is not sent to the video conferencing device).

On: Enable the ARC channel of HDMI output n (audio is sent to the video conferencing device).

Default value:

On

xConfiguration Audio Input HDMI [n] Level

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

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: $\underline{\mathit{Level}}$ where

n: Unique ID that identifies the HDMI input.

Range: 1..3 [SX80]

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

Range: 2..3 [CodecPlus Room70/Room55D]

Range: 1..5 [CodecPro]

Range: 1..1 [RoomKit RoomKitMini]

Range: 1..2 [Room55]

Range: 2..5 [Room70G2]

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 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

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

USAGE:

xConfiguration Audio Input HDMI [n] Mode: Mode where n: Unique ID that identifies the HDMI input. Range: 1..3 [SX80] Range: 2..3 for single camera devices; 3..3 for dual camera devices [MX700/MX800/MX800/] Range: 2..3 [CodecPlus Room70/Room55D] Range: 1.,5 [CodecPro] Range: 1..1 [RoomKit RoomKitMini] Range: 1..2 [Room55] Range: 2..5 [Room70G2] Mode: Off/On Off: Disable audio on the HDMI input. On: Enable audio on the HDMI input. Default value: On [MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

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

xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo

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

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:

xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo: <u>MuteOnInactiveVideo</u>

where

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

Range: 1..3 [SX80]

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

Range: 2..3 [CodecPlus Room70/Room55D]

Range: 1..5 [CodecPro]

Range: 1..2 [Room55]

Range: 2..5 [Room70G2]

Range: 1..1 [RoomKit RoomKitMini]

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 RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D]

HDMI [1,2]: Off HDMI [3,4,5]: On [CodecPro] HDMI [2]: Off HDMI [3,4,5]: On [Room70G2]

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: 1

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.

USAGE:

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

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:

xConfiguration Audio Input Line [n] VideoAssociation MuteOnInactiveVideo: <u>MuteOnInactiveVideo</u>

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:

xConfiguration Audio Input Line [n] VideoAssociation VideoInputSource: <u>VideoInputSource</u>

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 [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: $\underline{Channel}$ where

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

Range: 1..4

<u>Channel</u>:

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.

USAGE:

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

 \underline{n} : Unique ID that identifies the audio line input.

Range: 1..4

<u>Mode</u>:

Off/On

Off: Disable the Audio Line input. *On:* Enable the Audio Line input.

Default value:

On

xConfiguration Audio Input Microphone [n] Channel

Applies to: CodecPro Room70G2 Requires user role: ADMIN, INTEGRATOR

Define whether the signal on the microphone input is a mono signal or part of a multichannel signal.

USAGE:

xConfiguration Audio Input Microphone [n] Channel: <u>Channel</u>

where

 \underline{n} : Unique ID that identifies the microphone input.

Range: 1..8

<u>Channel</u>:

Left/Mono/Right

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

Mono: The microphone input signal is a mono signal.

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

Default value:

Mono

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: $\underline{\mathit{Mode}}$ 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]

<u>Mode</u>:

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

USAGE:

xConfiguration Audio Input Microphone [n] EchoControl Dereverberation: $\underline{\textit{Dereverberation}}$

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 video conferencing device 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:

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: ID 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: 1

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 <u>Mode</u>: 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.

USAGE:

xConfiguration Audio Input Microphone [n] Level: \underline{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]

<u>Level</u>:

Integer (0..26) [RoomKit Room55]

Integer (0..24) [SX10 SX20 MX200G2/MX300G2 CodecPlus Room70/Room55D]

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, MX200 G2, MX300 G2, Room Kit, Room Kit Mini, Room 55: Microphone [1] is the device's internal microphone.

USAGE:

xConfiguration Audio Input Microphone [n] Mode: <u>Mode</u>

where

n: 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]

<u>Mode</u>:

Off/On

Off: Disable the audio input microphone connector.

On: Enable the audio input microphone connector.

Default value:

On

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 type. The pre-amplification gain is fully determined by the Audio Input Microphone Level setting. There is no limitation of the adjustment range caused by the chosen type.

USAGE:

xConfiguration Audio Input Microphone [n] Type: <u>Type</u>

where

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

Range: 1..8

Type:

Line/Microphone

Microphone: Select Microphone if your input source requires 48 V phantom power to operate.

Line: Select Line if 48 V phantom power is not required or desired for correct operation.

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:

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:

xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo: <u>MuteOnInactiveVideo</u>

where

<u>n</u>: 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:

xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource: <u>VideoInputSource</u>

where

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

Range: 1..8

VideoInputSource:

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

1/2/3/4/5/6 [CodecPro Room70G2]

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 device. The voice of people not sitting right in front of the device will be suppressed.

If you set the microphone mode to Wide, the device behaves like any other device. 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 device.

USAGE:

xConfiguration Audio Input MicrophoneMode: MicrophoneMode

where

MicrophoneMode:

Focused/Wide

Focused: Focused sound sensitivity, suppressing sound from sources that are not right in front of the device.

Wide: Default microphone operation with normal sound sensitivity.

Default value:

Wide

xConfiguration Audio KeyClickDetector Attenuate

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

The device 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:

xConfiguration Audio KeyClickDetector Attenuate: <u>Attenuate</u>

where

<u>Attenuate</u>:

False/True

False: The attenuation of the microphone signal is disabled.

True: The device attenuates the microphone signal if clicking noise from keyboards is detected. If voice or voice + keyboard clicks are detected the microphone signal is not attenuated.

Default value:

True

xConfiguration Audio KeyClickDetector Enabled

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

The device 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:

xConfiguration Audio KeyClickDetector Enabled: $\underline{\textit{Enabled}}$ where

Enabled:

False/True

False: The key click detection is disabled.

True: The device will detect clicking noise from keyboards.

Default value:

True

xConfiguration Audio Microphones Mute Enabled

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Define the microphone mute behavior on the device.

USAGE:

xConfiguration Audio Microphones Mute Enabled: Enabled

where

 $\underline{Enabled}$:

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 device and is to be available when the device 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 Microphones PhantomPower

Applies to: SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Requires user role: ADMIN

Define whether or not to have phantom power (11 V +/- 1 V) on the microphone input.

USAGE:

xConfiguration Audio Microphones PhantomPower: <u>PhantomPower</u> where

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 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

<u>n</u>: 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{Mode} where

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

Range: 1..4

<u>Mode</u>:

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.

USAGE:

xConfiguration Audio MicrophoneReinforcement Gain: Gain

where

<u>Gain</u>:

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: DelayMs
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: Mode

where

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

Range: 1..1

<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 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

Choose whether or not to enable the audio return channel (ARC) on the HDMI [n] input connector. The ARC output must be enabled if you want audio playback through the Quad Camera.

On Room 70 G2, the Quad Camera is a part of the integrated loudspeaker system. We recommend to leave the ARC output enabled. If you want to disable the complete integrated loudspeaker system, use the Audio Output InternalSpeaker Mode setting.

USAGE:

xConfiguration Audio Output ARC [n] Mode: $\underline{\textit{Mode}}$ where

n: Unique ID that identifies the audio ARC output.

Range: 1..1

<u>Mode</u>:

Off/On

Off: Disable the ARC output on the HDMI input. *On:* Enable the ARC output on the HDMI input. Default value:

On

xConfiguration Audio Output ConnectorSetup

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

You can choose whether to set up the audio inputs and outputs manually, or to let the video conferencing device do it automatically based on the type of camera you have and which screens are connected.

In Auto mode, you cannot add, update, delete or connect audio inputs and outputs manually. Therefore the following API commands do not have any effect: xCommand Audio Setup *, xCommand Audio LocalInput *, and xCommand Audio LocalOutput *.

When going from Manual to Auto mode: The existing Audio setup is cleared (xCommand Audio Setup Clear), and the input and output groups are set up according to product defaults. The Audio Output HDMI [n] Mode and Audio Output ARC [1] Mode settings are set to their default value. For Codec Pro automatic delay measurement is enabled.

When going from Auto to Manual mode: The HDMI and ARC output connectors are connected to the default groups. The Audio Output HDMI [n] Mode and Audio Output ARC [1] Mode settings are not changed. For Codec Pro delay measurement is stopped.

USAGE:

xConfiguration Audio Output ConnectorSetup: ConnectorSetup

where

ConnectorSetup:

Auto/Manual

Auto: For Code Pro, the video conferencing device will play audio either through the camera, or through a screen that is connected to one of the HDMI outputs. The video conferencing device chooses to play the audio on the first available device in the following list:

1. A Quad Camera that has camera control connected to one of the camera control connectors of the video conferencing device (Ethernet 2 or 3), and HDMI connected to the camera input of the video conferencing device (HDMI 1 input). Additionally, the Audio Output ARC [1] Mode and Video Input Connector [1] CEC Mode settings must be On. The audio return channel (ARC) on the HDMI 1 input is used to play audio through the camera.

2. A screen that is connected to the HDMI 1 output, provided that the Audio Output HDMI [1] Mode setting is On.

3. A screen that is connected to the HDMI 2 output, provided that the Audio Output HDMI [2] Mode setting is On.

4. A screen that is connected to the HDMI 3 output, provided that the Audio Output HDMI [3] Mode setting is On.

When audio is played out through the Quad Camera, the video conferencing device will measure the delay between a screen and the camera, so that it can synchronize the audio

on the camera with the video on screen (lip-synchronization). In order to measure the delay, the video conferencing device sends a signal to the screen, and the screen sends the signal back to the video conferencing device using the audio return channel. The first screen in the list above that supports CEC (Consumer Electronics Control), and has the Video Output Connector [n] CEC Mode set to On, is used for the delay measurements.

When audio is played out through a screen, additional lip-synchronization delay is the responsibility of the screen. The video conferencing device will not add any delay.

For Room 70 G2, the video conferencing device will play audio through its integrated loudspeaker system, provided that Audio Output ARC [1] Mode and Audio Output InternalSpeaker Mode is On, and Audio Output HDMI [n] Mode is On for the integrated screen(s). Automatic delay measurement is not necessary, because the relationship between the integrated loudspeaker system and screen(s) is known.

Manual: You must set up the audio inputs and outputs manually using the Audio Console application or the API (xCommand Audio LocalInput *, and xCommand Audio LocalOutput *).

For Room 70 G2, external screen(s) may be used for audio output if the connectors are explicitly added using the Audio Console application or the API (xCommand Audio LocalOutput *). In that case, the external screens will play a stereo down mix of the audio that is played on the built-in loudspeaker system. Ultrasound signals will not play through external screens or line outputs; only through the integrated loudspeaker system.

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.

USAGE:

xConfiguration Audio Output HDMI [n] Delay DelayMs: <u>DelayMs</u>

where

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

Range: 1..3

DelayMs:

Integer (0..290)

The delay in milliseconds.

Default value:

0

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: Mode

where

<u>n</u>: 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 MX700/MX800/MX800D Room70G2* 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 Output HDMI [n] Level: \underline{Level} where

n: Unique ID that identifies the HDMI output.

Range: 1..3 [Room70G2]

Range: 1..2 [SX80]

Range: 1..1 for single screen devices; 1..2 for dual screen devices [MX700/MX800/MX800D]

<u>Level</u>:

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

0

xConfiguration Audio Output HDMI [n] Mode

Applies to: *SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70G2* Requires user role: ADMIN, INTEGRATOR

Define if the audio channel on this HDMI output connector shall be enabled.

USAGE:

xConfiguration Audio Output HDMI [n] Mode: <u>Mode</u>

where

 \underline{n} : Unique ID that identifies the HDMI output.

Range: 1..1 [CodecPlus]

Range: 1..3 [CodecPro Room70G2]

Range: 1..2 [SX80]

Range: 1..1 for single screen devices; 1..2 for dual screen devices [MX700/MX800/MX800] Mode:

Off/On

Off: The connector will not be used for audio out.

On: The connector can be used for audio out. For Codec Pro and Room 70 G2 it depends on the Audio Output ConnectorSetup setting.

Default value:

Room 70 Dual G2: HDMI 1,2: On HDMI 3: Off Room 70 Single G2: HDMI 1: On HDMI 2,3: Off [Room70G2] On [MX700/MX800/MX800D CodecPlus CodecPro]

HDMI 1: On HDMI 2: Off [SX80]

xConfiguration Audio Output InternalSpeaker Mode

Applies to: MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

Define whether or not to use the camera's integrated speakers. Codec Plus must be connected to a Quad Camera for this setting to apply.

For Room 70 G2, MX700, and MX800, the Audio Output HDMI [n] Mode settings for the integrated monitor(s) must be set to On in order to play any audio on the integrated speakers. For Room 70 G2, also the Audio Output ARC 1 Mode setting must be On.

For all products except Codec Plus, MX300 G2, and MX200 G2, you can limit the use of the integrated speakers to play only ultrasound.

USAGE:

xConfiguration Audio Output InternalSpeaker Mode: <u>Mode</u> where

Mode:

Off/On/UltrasoundOnly [MX700/MX800/MX800D RoomKit Room55 Room70/Room55D Room70G2]

Off/On [MX200G2/MX300G2 CodecPlus]

Off: Disable the device's integrated speakers.

On: Enable the device's integrated speakers.

UltrasoundOnly: Enable the device's integrated speakers only for ultrasound.

Default value:

On

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: <u>Channel</u>

where

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

Range: 1..6

<u>Channel</u>:

Left/Mono/Right

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.

USAGE:

xConfiguration Audio Output Line [n] Delay DelayMs: <u>DelayMs</u>

where

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

Range: 1..6 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20]

<u>DelayMs</u>:

Integer (0..290)

The delay in milliseconds.

Default value:

0

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: 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]

<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 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 Room70G2] RelativeToHDMI [SX10 SX20 CodecPro]

xConfiguration Audio Output Line [n] Equalizer ID

Applies to: *SX80 MX700/MX800/MX800D CodecPro Room70G2* 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: $\underline{\textit{ID}}$ 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:

1

xConfiguration Audio Output Line [n] Equalizer Mode

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR

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

USAGE:

xConfiguration Audio Output Line [n] Equalizer Mode: <u>Mode</u>

where

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

Range: 1..6

<u>Mode</u>:

Off/On

Off: No equalizer.

On: Enable the equalizer for the audio line output.

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.

USAGE:

xConfiguration Audio Output Line [n] Mode: $\underline{\mathit{Mode}}$ 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]

<u>Mode</u>:

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: <u>OutputType</u>
where

<u>n</u>: 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:

xConfiguration Audio SoundsAndAlerts RingTone: <u>RingTone</u> where

<u>RingTone</u>:

Sunrise/Mischief/Ripples/Reflections/Vibes/Delight/Evolve/Playful/Ascent/Calculation/ Mellow/Ringer Select a ringtone from the list.

Default value:

Sunrise [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Waves [Boards]

xConfiguration Audio SoundsAndAlerts RingVolume

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Define the ring volume for incoming calls.

USAGE:

xConfiguration Audio SoundsAndAlerts RingVolume: <u>*RingVolume*</u> 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]
- 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 messages.

The Audio Ultrasound MaxVolume and Proximity Mode settings only affect ultrasound pairing messages. See the RoomAnalytics PeoplePresenceDetector and Standby WakeupOnMotionDetection settings for information about the use of ultrasound in presence and motion detection.

USAGE:

xConfiguration Audio Ultrasound MaxVolume: MaxVolume

where

<u>MaxVolume</u>:

Integer (0..90) [SX20 SX80 CodecPlus CodecPro]

Integer (0..70) [DX70/DX80 SX10 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini Room55 Room70/Room55D Room70G2 Boards]

Select a value in the specified range. If set to 0, ultrasound pairing messages are not emitted.

Default value:

70

BYOD configuration

xConfiguration BYOD TouchForwarding Enabled

Applies to: *Boards* Requires user role: ADMIN

Use this setting to enable or disable the Touch redirect feature. Touch redirect enables you to control your laptop from a Webex Board screen. You must connect the laptop to the board with an HDMI cable (wired sharing) and a USB-C cable. You can use either a USB-C to USB-C cable or a USB-C to USB-A cable from the board to the laptop.

Touch redirect only works outside of call.

In software version CE9.9.0 Touch redirect is always enabled, and this setting is not available. Also note that this feature is not available on the first generation of boards (Webex Board 55 and 70, not S-series).

USAGE:

xConfiguration	BYOD	TouchForwarding	Enabled:	Enabled

where

Enabled:

False/True

False: Touch redirect is disabled.

True: Touch redirect is enabled.

Default value:

True

CallHistory configuration

xConfiguration CallHistory Mode

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Determine whether or not information about calls that are placed or received are stored, including missed calls and calls that are not answered (call history). This determines whether or not the calls appear in the Recents list in the user interfaces.

USAGE:

xConfiguration CallHistory Mode: \underline{Mode} where

Mode:

Off/On

Off: New entries are not added to the call history. *On:* New entries are stored in the call history list. Default value:

On

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 video conferencing device, the camera ID is not persistent after a reboot. This means that a camera may get a new camera ID when the video conferencing device is restarted.

You should use the Cameras Camera AssignedSerialNumber setting to cater for configurations where the video conferencing device 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 video conferencing device is factory reset.

Typical situations where the video conferencing device 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:

xConfiguration Cameras Camera [n] AssignedSerialNumber: "<u>AssignedSerialNumber</u>" where

<u>n</u>: 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:

" "

xConfiguration Cameras Camera [n] Backlight DefaultMode

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2 Boards

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 Boards]

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 Boards

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{Mode}

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 Boards]

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

<u>Mode</u>:

Auto/Manual

Auto: The camera brightness is automatically set by the device.

Manual: Enable manual control of the camera brightness. The brightness level is set using the Cameras Camera [n] Brightness DefaultLevel setting.

Default value:

Auto

xConfiguration Cameras Camera [n] Brightness DefaultLevel

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

Requires user role: ADMIN, INTEGRATOR

Define the brightness level. Requires the Cameras Camera $\left[n\right]$ 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:

xConfiguration Cameras Camera [n] Brightness DefaultLevel: <u>DefaultLevel</u> where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2 Boards]

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

DefaultLevel:

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:

xConfiguration Cameras Camera [n] Flip: <u>Flip</u>

where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 CodecPro]

Range: 2..7 for single camera devices; 3..7 for dual camera devices [MX700/MX800/MX800D]

Range: 1..1 [SX10 SX20]

Flip:

Auto/Off/On [SX20 SX80 MX700/MX800/MX800D CodecPro]

Auto [SX10]

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:

Auto

xConfiguration Cameras Camera [n] Focus Mode

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

Requires user role: ADMIN, INTEGRATOR

Define the camera focus mode.

USAGE:

xConfiguration Cameras Camera [n] Focus Mode: Mode

where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 CodecPro Room70G2]

Range: 2..7 for single camera devices; 3..7 for dual camera devices [MX700/MX800/MX800]

Range: 1..1 [SX10 SX20 MX200G2/MX300G2 Boards]

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

Mode:

Auto/AutoLimited/Manual [SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus]

Auto/Manual [CodecPro Room70/Room55D Room70G2 Boards]

Auto: The auto focus works differently for different products. For Webex Boards, 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 Boards

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{Mode} where

n: Unique ID that identifies the camera.

Range: 1..7 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Range: 1..1 [SX20 MX200G2/MX300G2 Boards]

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

<u>Mode</u>:

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:

Auto

xConfiguration Cameras Camera [n] Gamma Level

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

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 Boards]

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 when speaker tracking is on.

This setting is not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2.

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 devices; 3..7 for dual camera devices [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: Mode

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>Mode</u>:

Auto/Manual

 $\ensuremath{\textit{Auto:}}$ The camera will continuously adjust the white balance depending on the camera view.

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.

USAGE:

xConfiguration Cameras Camera [n] Whitebalance Level: $\underline{\mathit{Level}}$ 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]

Level:

Integer (1..16)

The white balance level.

Default value:

1

xConfiguration Cameras Camera Framerate

Applies to: RoomKit RoomKitMini 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: <u>Framerate</u> where 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:

xConfiguration Cameras Preset TriggerAutofocus: <u>TriggerAutofocus</u> 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:

Auto

xConfiguration Cameras SpeakerTrack Mode

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR

This setting applies only when using a camera with support for speaker tracking or best overview.

Cisco Quad Camera: Speaker tracking uses automatic camera framing to select the best camera view based on where people are in the room. The Quad Camera 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 video conferencing device 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.

Video conferencing devices with a built-in speakertrack camera (Room Kit, Room 55, Room 55 Dual, Room 70, Room 70 G2, Boards): Speaker tracking uses automatic camera framing to select the best camera view based on where people are in the room. The camera uses an audio tracking technique that finds and captures a close-up of the active speaker.

Video conferencing devices with a camera that supports Best overview, but not speaker tracking (Room Kit Mini): Best overview uses automatic camera framing to select the best camera view based on where people are in the room.

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 video conferencing device 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.

USAGE:

xConfiguration Cameras SpeakerTrack Mode: Mode

where

<u>Mode</u>:

Auto/Off

Auto: Speaker tracking (not supported on Room Kit Mini) and best overview (not supported on SX80 and MX700/MX800) is switched on. The device will detect people in the room and automatically select the best camera framing. Users can switch the feature on or off instantly in the camera control panel on the Touch controller, but the feature is switched back on after each call so that the device is ready for the next user.

Off: Speaker tracking (not supported on Room Kit Mini) and best overview (not supported on SX80 and MX700/MX800) 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 Boards

Requires user role: ADMIN, INTEGRATOR, USER

This setting applies only when the Cameras SpeakerTrack Mode is set to Auto.

When the closeup functionality is turned on, the device will detect that a person is speaking and select the best framing to cover that person. 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:

xConfiguration Cameras SpeakerTrack Closeup: Closeup

where

<u>Closeup</u>:

Auto/Off/On

Auto: The bahvior depends on the device type. Boards will keep all the persons in the room in the camera framing at all times, while other devices will zoom in on the person speaking.

Off: The device will keep all the persons in the room in the camera framing at all times.

On: The device will zoom in on the person speaking

Default value:

Auto

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 devices with a dual camera (speaker tracking), and when Cameras SpeakerTrack Mode is set to Auto.

USAGE:

xConfiguration Cameras SpeakerTrack TrackingMode: <u>TrackingMode</u>

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 video conferencing device 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 video conferencing device.

MX700, MX800: Not applicable in this version.

USAGE:

xConfiguration Cameras SpeakerTrack ConnectorDetection Mode: <u>Mode</u>

where

<u>Mode</u>:

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 video conferencing device. Furthermore, Cameras SpeakerTrack ConnectorDetection Mode must be set to Manual.

MX700, MX800: Not applicable in this version.

USAGE:

xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft: $\underline{CameraLeft}$ 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 video conferencing device. Furthermore, Cameras SpeakerTrack ConnectorDetection Mode must be set to Manual.

MX700, MX800: Not applicable in this version.

USAGE:

xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight: $\underline{CameraRight}$ 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 device has a dual camera (speaker tracking).

USAGE:

xConfiguration Cameras SpeakerTrack Whiteboard Mode: <u>Mode</u> 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 device 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

<u>Mode</u>:

Off/On

Off: You can answer incoming calls manually from the devices user interface.

On: The device 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 device. Requires that AutoAnswer Mode is switched on.

USAGE:

xConfiguration Conference AutoAnswer Delay: <u>Delay</u> where <u>Delay</u>: <u>Integer (0..50)</u> The auto answer delay (seconds). Default value: <u>0</u>

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 device.

USAGE:

xConfiguration Conference DefaultCall Protocol: $\underline{\textit{Protocol}}$

where

<u>Protocol</u>:

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 device cannot register, the auto-selection chooses H323.

 $\ensuremath{\textit{H320:}}$ 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 devices. Do not use.

Default value:

Auto

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 device.

USAGE:

xConfiguration Conference DefaultCall Rate: <u>Rate</u>

where

<u>Rate</u>:

Integer (64..6000) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Integer (64..10000) [Boards]

Integer (64..3072) [DX70/DX80 SX10]

The default call rate (kbps).

Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

10000 [Boards]

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:

xConfiguration Conference DoNotDisturb DefaultTimeout: <u>DefaultTimeout</u> 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 device, the encryption mode is always Off.

SX20: NOTE: If the CE-NC software (no crypto) is installed on the device, the encryption mode is always Off.

USAGE:

xConfiguration Conference Encryption Mode: Mode

where

<u>Mode</u>:

Off/On/BestEffort

Off: The device will not use encryption.

On: The device will only allow calls that are encrypted.

BestEffort: The device will use encryption whenever possible.

> In Point to point calls: If the far end device 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:

xConfiguration Conference FarEndControl Mode: <u>Mode</u>

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 FarEndControl SignalCapability

Applies to: All products

Requires user role: ADMIN

Define the far end control (H.224) signal capability mode.

USAGE:

xConfiguration Conference FarEndControl SignalCapability: $\underline{SignalCapability}$ where

SignalCapability:

Off/On

Off: Disable the far end control signal capability.

On: Enable the far end control signal capability.

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 devices 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:

xConfiguration Conference FarEndMessage Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: It is not possible to send messages between two devices.

On: It is possible to send messages between two devices 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:

xConfiguration Conference MaxReceiveCallRate: <u>MaxReceiveCallRate</u>

where

MaxReceiveCallRate:

Integer (64..6000) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Integer (64..10000) [Boards]

Integer (64..3072) [DX70/DX80 SX10]

The maximum receive call rate (kbps).

Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

10000 [Boards]

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:

xConfiguration Conference MaxTransmitCallRate: <u>MaxTransmitCallRate</u>

where

MaxTransmitCallRate:

Integer (64..6000) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

Integer (64..3072) [DX70/DX80 SX10]

The maximum transmitt call rate (kbps).

Default value:

6000 [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

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 device'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, and SX10 do 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:

xConfiguration Conference MaxTotalReceiveCallRate: <u>MaxTotalReceiveCallRate</u> where

MaxTotalReceiveCallRate:

Integer (64..6000) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D]

Integer (64..10000) [Boards]

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 RoomKitMini CodecPlus Room55 Room70/Room55D]

10000 [Boards]

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 device'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:

xConfiguration Conference MaxTotalTransmitCallRate: <u>MaxTotalTransmitCallRate</u> where

MaxTotalTransmitCallRate:

Integer (64..6000) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D Boards]

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 RoomKitMini CodecPlus Room55 Room70/Room55D Boards]

15000 [CodecPro Room70G2]

3072 [DX70/DX80 SX10]

xConfiguration Conference MicUnmuteOnDisconnect Mode

Applies to: All products

Requires user role: ADMIN

Define if the microphones shall be unmuted automatically when all calls are disconnected. In a meeting room or other shared resources this may be done to prepare the device for the next user.

USAGE:

xConfiguration Conference MicUnmuteOnDisconnect Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: If muted during a call, let the microphones remain muted after the call is disconnected.

On: Unmute the microphones after the call is disconnected.

Default value:

On

xConfiguration Conference Multipoint Mode

Applies to: *All products* Requires user role: ADMIN

Define how to expand a point-to-point video call (a call involving only two parties) into a multipoint conference with more participants (ad hoc conferences). Both the built-in MultiSite feature, which relies only on local resources, and different solutions based on centralized infrastructure (multipoint control units – MCUs) are available.

The MultiSite feature is an upgrade option and may not be available on all devices. The MultiSite option key must be installed on the device. The MultiSite feature is not available at all for SX10, DX70, and DX80.

If registered to a Cisco TelePresence Video Communication Server (VCS), the device can use MultiSite when calling other video devices. If registered to a Cisco Unified Communications Manager (CUCM) version 8.6.2 or newer, the device can use either a CUCM conference bridge, or the device's own built-in MultiSite feature. Which option to use, is set-up by CUCM.

In either case, multiparty conferences may be set up via an MCU if you call an MCU that allows devices to add participants to a conference (Direct Remote Add).

USAGE:

xConfiguration Conference Multipoint Mode: Mode

where

<u>Mode</u>:

Auto/CUCMMediaResourceGroupList/MultiSite/Off [SX20 SX80 MX200G2/MX300G2 MX700/ MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

Auto/CUCMMediaResourceGroupList [DX70/DX80 SX10]

Auto: The multipoint method is selected automatically.

Multiparty conferences are set up using the built-in MultiSite feature, provided that the MultiSite option key is installed on the device, and that you are calling another video device (not an MCU). Only the MultiSite host can add participants. This prevents cascaded conferences. If the device doesn't have the MultiSite option key, you cannot call more than one video device on video. All products except SX10, DX70, and DX80 may add one extra participant on audio-only.

Regardless of the MultiSite option key, multiparty conferences may be set up via an MCU if you call an MCU that allows devices to add participants to a conference (Direct Remote Add).

CUCMMediaResourceGroupList: Multiparty 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.

MultiSite: Multiparty conferences are set up using the built-in MultiSite feature, provided that the MultiSite option key is installed on the device. If the device doesn't have the

MultiSite option key, you cannot call more than one device on video. You may add one extra device on audio-only.

Off: You cannot call more than one device on video, but you may add one extra device on audio-only. Multiparty conferences may be set up via an MCU if you call an MCU that allows devices to add participants to a conference (Direct Remote Add).

Default value:

Auto

xConfiguration Conference MultiStream Mode

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

Requires user role: ADMIN

The device supports multistream video for conferences.

USAGE:

xConfiguration Conference MultiStream Mode: <u>Mode</u>

where

<u>Mode</u>:

Auto/Off

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

FacilityService configuration

xConfiguration FacilityService Service [n] Type

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Up to five different facility services can be supported simultaneously. With this setting you can select what kind of services they are. A facility service is not available unless both the FacilityService Service [n] Name and the FacilityService Service [n] Number settings are properly set. Facility services are available from the user interface. They are not available for devices that use a remote control.

USAGE:

xConfiguration FacilityService Service [n] Type: <u>Type</u>

where

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

Range: 1..5

Type:

Catering/Concierge/Emergency/Helpdesk/Security/Transportation/Other

Catering: Select this option for catering services.

Concierge: Select this option for concierge services.

Emergency: Select this option for emergency services.

Helpdesk: Select this option for helpdesk services.

Security: Select this option for security services.

Transportation: Select this option for transportation services.

Other: Select this option for services not covered by the other options.

Default value:

Helpdesk

xConfiguration FacilityService Service [n] Name

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Define the name of the facility service. Up to five different facility services are supported. A facility service is not available unless both the FacilityService Service [n] Name and the FacilityService Service [n] Number settings are properly set. The name will show on the facility service call button, which appears when you tap the question mark icon in the top bar. Facility services are available from the user interface. They are not available for devices that use a remote control.

USAGE:

xConfiguration FacilityService Service [n] Name: "<u>Name</u>" where

n: Unique ID that identifies the service.

Range: 1..5

<u>Name</u>:

String (0, 1024)

The name of the facility service.

Default value:

Service 1: "Live Support" Other services: ""

xConfiguration FacilityService Service [n] Number

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the number (URI or phone number) of the facility service. Up to five different facility services are supported. A facility service is not available unless both the FacilityService Service [n] Name and the FacilityService Service [n] Number settings are properly set. Facility services are available from the user interface. They are not available for devices that use a remote control.

USAGE:

xConfiguration FacilityService Service [n] Number: "<u>Number</u>"
where
 <u>n</u>: Unique ID that identifies the service.
 Range: 1..5
 <u>Number</u>:
 String (0, 1024)
 The number (URI or phone number) of the facility service.
 Default value:
 ""

xConfiguration FacilityService Service [n] CallType

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the call type for each facility service. Up to five different facility services are supported. A facility service is not available unless both the FacilityService Service [n] Name and the FacilityService Service [n] Number settings are properly set. Facility services are available from the user interface. They are not available for devices that use a remote control.

USAGE:

xConfiguration FacilityService Service [n] CallType: <u>CallType</u>

where

n: Unique ID that identifies the service.

Range: 1..5

CallType:

Audio/Video

Audio: Select this option for audio calls.

Video: Select this option for video calls.

Default value:

Video

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

<u>n</u>: GPIO pin number.

Range: 1..4

<u>Mode</u>:

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 device is in standby mode, and deactivated when no longer in standby.

Default value: InputNoAction

H323 configuration

xConfiguration H323 Authentication Mode

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Define the authenticatin mode for the H.323 profile.

USAGE:

xConfiguration H323 Authentication Mode: Mode

where

<u>Mode</u>:

Off/On

Off: The device 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 device will try to authenticate itself to the gatekeeper. Requires the H323 Authentication LoginName and H323 Authentication Password settings to be defined on both the device and the Gatekeeper.

Default value:

Off

xConfiguration H323 Authentication LoginName

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

The device 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 device to the H.323 Gatekeeper, i.e. the device is authenticated to the gatekeeper. If the H.323 Gatekeeper indicates that no authentication is required, the device will still try to register. Requires the H.323 Authentication Mode to be enabled.

USAGE:

xConfiguration H323 Authentication LoginName: "<u>LoginName</u>" where <u>LoginName</u>: String (0, 50)

The authentication login name.

Default value:

" "

xConfiguration H323 Authentication Password

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

The device 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 device to the H.323 Gatekeeper, i.e. the device is authenticated to the gatekeeper. If the H.323 Gatekeeper indicates that no authentication is required, the device will still try to register. Requires the H.323 Authentication Mode to be enabled.

USAGE:

xConfiguration H323 Authentication Password: "<u>Password</u>" where <u>Password</u>: String (0, 50) The authentication password. Default value: ""

xConfiguration H323 CallSetup Mode

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>Mode</u>

where

<u>Mode</u>:

Direct/Gatekeeper

Direct: You can only make an H.323 call by dialing an IP address directly.

Gatekeeper: The device 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>KeySize</u>

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

The H.323 Alias E.164 defines the address of the device, 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.

USAGE:

xConfiguration H323 H323Alias E164: "E164"

where

<u>E164</u>:

String (0, 30) The H.323 Alias E.164 address. Valid characters are 0-9, * and #. Default value:

" "

xConfiguration H323 H323Alias ID

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Define the H.323 Alias ID, which is used to address the device on a H.323 Gatekeeper and will be displayed in the call lists.

USAGE:

xConfiguration H323 H323Alias ID: "<u>ID</u>"

where

<u>ID</u>:

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 device (when the IP traffic goes through a NAT router). NOTE: NAT does not work in conjunction with gatekeepers.

USAGE:

xConfiguration H323 NAT Mode: Mode

where

<u>Mode</u>:

Auto/Off/On

Auto: The device 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 devices on the LAN as well as devices on the WAN. If the H323 NAT Address is wrong or not set, the real IP address will be used.

Off: The device will signal the real IP address.

On: The device 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 video conferencing device. Note that NAT cannot be used when registered to a gatekeeper.

In the router, the following ports must be routed to the video conferencing device's IP address: * Port 1720

* Port 5555-6555

* Port 2326-2487

USAGE:

xConfiguration H323 NAT Address: "<u>Address</u>"

where

Address:

String (0, 64) A valid IPv4 address or IPv6 address.

Default value:

" "

HttpClient configuration

xConfiguration HttpClient Mode

Applies to: *All products* Requires user role: ADMIN

Allow or prohibit communication with an external HTTP(S) server using HTTP(S) requests and responses.

USAGE:

xConfiguration HttpClient Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: The video conferencing device cannot communicate with an external HTTP(S) server. *On:* The video conferencing device is allowed to communicate with an external HTTP(S) server.

Default value:

Off

xConfiguration HttpClient AllowHTTP

Applies to: All products

Requires user role: ADMIN

The HttpClient Mode setting is used to allow or prohibit communication with an external HTTP(S) server. The Mode setting does not distinguish between HTTP and HTTPS. You must use the HttpClient AllowHTTP setting to further allow or prohibit the use of HTTP.

USAGE:

xConfiguration HttpClient AllowHTTP: <u>AllowHTTP</u>

where

AllowHTTP:

False/True

False: The video conferencing device can communicate only over HTTPS.

True: The video conferencing device can communicate over both HTTPS and HTTP. Default value:

True

xConfiguration HttpClient AllowInsecureHTTPS

Applies to: *All products* Requires user role: ADMIN

You can choose whether or not to allow the video conferencing device to communicate with a server over HTTPS without checking the server's certificate first.

Even if the device is allowed to skip the certificate validation process, it doesn't automatically do it. You must specifically set the AllowInsecureHTTPS parameter in each xCommand HttpClient command for data to be exchanged with the server without certificate validation.

USAGE:

xConfiguration HttpClient AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u> where

AllowInsecureHTTPS:

False/True

False: The device always checks that the HTTPS server has a valid certificate. No communication with the server takes place if the certificate validation fails.

True: The device is allowed to skip the certificate validation process before communicating with the server.

Default value:

False

HttpFeedback configuration

xConfiguration HttpFeedback TIsVerify

Applies to: *All products* Requires user role: ADMIN

This setting applies when a video conferencing device connects to an HTTPS server for arbitrary HTTPS communication (refer to the HttpClient Post/Put/Patch/Get/Delete commands). For phone book, provisioning, and external logging servers, see the Phonebook Server 1 TlsVerify, Provisioning TlsVerify, and Logging External TlsVerify settings.

Before establishing a connection between the device and the HTTPS server, the device checks if the certificate of the server is signed by a trusted Certificate Authority (CA). The CA certificate must be included in the CA list on the device, either pre-installed or manually uploaded using the web interface or API.

In general, the minimum TLS (Transport Layer Security) version for the HTTPS connection is 1.1. There are two exceptions to this rule: 1) For compatibility reasons, the minimum TLS version is 1.0 for devices that are registered to CUCM. 2) Devices registered to the Webex cloud service always use version 1.2.

Note: The value is set to Off for a device that has been upgraded to CE9.9 (or later) from CE9.8 or earlier software versions, provided that the device has not been factory reset after the upgrade, and that the old NetworkServices HTTPS VerifyServerCertificate setting was not explicitly set to On.

USAGE:

xConfiguration HttpFeedback TlsVerify: <u>TlsVerify</u>

where

<u>TlsVerify</u>:

Off/On

Off: The device doesn't check the certificate of the HTTPS server.

On: The device checks if the certificate of the HTTPS server can be trusted. If not, the connection between the device and the server is not established.

Default value:

On

Logging configuration

xConfiguration Logging External Mode

Applies to: All products

Requires user role: ADMIN

Determine whether or not to store the device logs on a remote syslog server. This setting has no effect if the Logging Mode setting is set to Off.

You must enter the address of the remote server in the Logging External Server Address setting. Unless otherwise specified in the Logging External Server Port setting, the standard syslog port is used.

USAGE:

xConfiguration Logging External Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: Device logs will not be stored on the remote syslog server.

On: Device logs will be stored on the remote syslog server.

Default value:

Off

xConfiguration Logging External Protocol

Applies to: All products

Requires user role: ADMIN

Determine which protocol to use toward the remote logging server. You can use either the syslog protocol over TLS (Transport Layer Security), or the syslog protocol in plaintext. For details about the syslog protocol, see RFC 5424.

USAGE:

xConfiguration Logging External Protocol: $\underline{\textit{Protocol}}$ where

<u>Protocol</u>:

Syslog/SyslogTLS Syslog: Syslog protocol in plain text. SyslogTLS: Syslog protocol over TLS. Default value: SyslogTLS

xConfiguration Logging External Server Address

Applies to: All products

Requires user role: ADMIN

The address of the remote syslog server.

USAGE:

xConfiguration Logging External Server Address: " $\underline{Address}$ " where

<u>Address</u>:

String (0, 255) A valid IPv4 address, IPv6 address or DNS name.

Default value:

" "

xConfiguration Logging External Server Port

Applies to: All products

Requires user role: ADMIN

The port that the remote syslog server listens for messages on. If set to 0, the device will use the standard syslog port. The standard syslog port is 514 for syslog, and 6514 for syslog over TLS.

USAGE:

xConfiguration Logging External Server Port: Port

where

<u>Port</u>:

Integer (0..65535)

The number of the port that the remote syslog server is using. 0 means that the device uses the standard syslog port.

Default value:

514

xConfiguration Logging External TIsVerify

Applies to: All products

Requires user role: ADMIN

This setting applies when a video conferencing device connects to a remote syslog server. It applies to both regular logging (refer to the Logging External Mode setting) and audit logging (refer to the Security Audit Logging Mode setting).

Before establishing a connection between the device and the syslog server, the device checks if the certificate of the server is signed by a trusted Certificate Authority (CA). The CA certificate must be included in the CA list on the device, either pre-installed or manually uploaded using the web interface or API.

The minimum TLS (Transport Layer Security) version for the syslog connection is 1.1.

USAGE:

xConfiguration Logging External TlsVerify: <u>TlsVerify</u>

where

<u>TlsVerify</u>:

Off/On

Off: The device doesn't check the certificate of the syslog server.

On: The device checks if the certificate of the syslog server can be trusted. If not, the connection between the device and the server is not established.

Default value:

On

xConfiguration Logging Internal Mode

Applies to: All products

Requires user role: ADMIN

Determine whether or not to store the system logs on the device (local files). These are the files that you get when you download the log bundles from the device. This setting has no effect if the Logging Mode setting is set to Off.

USAGE:

xConfiguration Logging Internal Mode: <u>Mode</u> where <u>Mode</u>: Off/On Off: System logs will not be stored on the device. On: System logs will be stored on the device. Default value: On

Macros configuration

xConfiguration Macros Mode

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Macros allow you to write snippets of JavaScript code that can automate parts of your video conferencing device, 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 device. Use this setting when you want to manually enable, or to permanently disable the use of macros on the device. You can disable the use of macros within the Macro Editor. But this will not permanently disable macros from running, because every time the device is reset the macros will be re-enabled automatically.

USAGE:

xConfiguration Macros Mode: Mode

where

Mode:

Off/On

Off: Permanently disable the use of macros on this device. *On:* Enable the use of macros on this device.

Default value:

Off

xConfiguration Macros AutoStart

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

All the macros run in a single process on the video conferencing device, called the macro runtime. It should be running by default, but you can choose to stop and start it manually. If you restart the device, the runtime will automatically start again if auto start is enabled.

USAGE:

xConfiguration Macros AutoStart: <u>AutoStart</u>

where

<u>AutoStart</u>:

Off/On

Off: The macro runtime will not start automatically after a restart of the device. *On:* The macro runtime will start automatically after a restart of the device.

Default value:

On

xConfiguration Macros UnresponsiveTimeout

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Macros are continuously monitored to detect unresponsive code. Unresponsive macros are typically a sign of a programming error, but occasionally it might be due to limited system resources. Increasing the value allows macros to run for longer without being terminated, while decreasing the value ensures that faulty macros do not consume system resources.

USAGE:

xConfiguration Macros UnresponsiveTimeout: $\underline{\textit{UnresponsiveTimeout}}$

where

UnresponsiveTimeout:

Integer (0..65535)

Set the number of seconds before terminating an unresponsive macro. The value 0 disables the check altogether.

Default value:

5 [SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

10 [DX70/DX80 SX20 MX200G2/MX300G2]

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: <u>Mode</u> where <u>n</u>: Index that identifies the network. Range: 1..1 <u>Mode</u>: 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: "<u>Name</u>"

where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Name</u>:

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.

USAGE:

xConfiguration Network [n] DNS Server [m] Address: "<u>Address</u>" 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>: <u>String (0, 64)</u> A valid IPv4 address or IPv6 address. Default value:

xConfiguration Network [n] IEEE8021X Mode

Applies to: All products

Requires user role: ADMIN, USER

The device 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: <u>Mode</u>

where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Mode</u>:

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 conferencing device. 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: <u>TlsVerify</u>

where

n: Index that identifies the network.

Range: 1..1

<u>TlsVerify</u>:

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 device.

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:

Off

xConfiguration Network [n] IEEE8021X UseClientCertificate

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 conferencing device. This can be done from the web interface.

USAGE:

xConfiguration Network [n] IEEE8021X UseClientCertificate: $\underline{\textit{UseClientCertificate}}$ where

<u>n</u>: 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 conferencing device) 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 username 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 username for 802.1X authentication.
 Default value:
 ""

xConfiguration Network [n] IEEE8021X Password

Applies to: All products

Requires user role: ADMIN, USER

Define the password for 802.1X authentication.

USAGE:

xConfiguration Network [n] IEEE8021X Password: "<u>Password</u>"
where
<u>n</u>: Index that identifies the network.
Range: 1..1
<u>Password</u>:
String (0, 50)
The password for 802.1X authentication.
Default value:
""

xConfiguration Network [n] IEEE8021X AnonymousIdentity

Applies to: All products

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: "<u>AnonymousIdentity</u>" where

<u>n</u>: Index that identifies the network.

Range: 1..1

AnonymousIdentity:

String (0, 64) The 802.1X Anonymous ID string. Default value:

Jeia ""

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.

USAGE:

xConfiguration Network [n] IEEE8021X Eap Md5: <u>Md5</u> where <u>n</u>: Index that identifies the network. Range: 1..1 <u>Md5</u>: <u>Off/On</u> **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.

USAGE:

xConfiguration Network [n] IEEE8021X Eap TIs: <u>TIs</u> where <u>n</u>: Index that identifies the network. Range: 1..1 <u>TIs</u>: 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: $\underline{\textit{Peap}}$ where

n: Index that identifies the network.

Range: 1..1

<u>Peap</u>:

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 device 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: IPStack

where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>IPStack</u>:

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 device will use IPv4 on the network interface.

IPv6: When set to IPv6, the device 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 device 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: <u>Assignment</u>

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 device 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 device. Applicable only when Network IPv4 Assignment is set to Static.

USAGE:

xConfiguration Network [n] IPv4 Address: "<u>Address</u>"

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.

USAGE:

xConfiguration Network [n] IPv4 Gateway: "<u>Gateway</u>" 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: " $\underline{SubnetMask}$ " where

n: 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 device 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: Assignment

where

n: Index that identifies the network.

Range: 1..1

<u>Assignment</u>:

Static/DHCPv6/Autoconf

Static: The device 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 device. Applicable only when the Network IPv6 Assignment is set to Static.

USAGE:

xConfiguration Network [n] IPv6 Address: "<u>Address</u>" 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:

xConfiguration Network [n] IPv6 Gateway: "<u>Gateway</u>" 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: <u>DHCPOptions</u> 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.

USAGE:

xConfiguration Network [n] MTU: <u>MTU</u> 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 other data in the network. The QoS settings must be supported by the infrastructure. Diffserv (Differentiated Services) is a networking architecture that specifies a simple, scalable and coarse-grained mechanism for classifying and managing network traffic. It provides QoS priorities on IP networks.

USAGE:

xConfiguration Network [n] QoS Mode: Mode

where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>Mode</u>:

Off/Diffserv

Off: No QoS method is used.

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 takes effect only if Network QoS Mode is set to Diffserv.

Define which priority Audio packets should have in the IP network. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use EF for Audio. EF equals the decimal value 46.

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: Audio

where

n: Index that identifies the network.

Range: 1..1

<u>Audio</u>:

Integer (0..63)

Set the priority of the audio packets in the IP network. 0 means "best-effort".

Default value:

xConfiguration Network [n] QoS Diffserv Video

Applies to: All products

Requires user role: ADMIN, USER

This setting takes effect only if Network QoS Mode is set to Diffserv.

Define which priority Video packets should have in the IP network. The packets of the presentation channel (shared content) are also in the Video packet category. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use AF41 for Video. AF41 equals the decimal value 34.

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. 0 means "best-effort".

Default value:

0

xConfiguration Network [n] QoS Diffserv Data

Applies to: All products

Requires user role: ADMIN, USER

This setting takes effect only if Network QoS Mode is set to Diffserv.

Define which priority Data packets should have in the IP network. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use AF41 for Data. AF41 equals the decimal value 34.

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: Data

where

n: Index that identifies the network.

Range: 1..1

<u>Data</u>:

Integer (0..63)

Set the priority of the data packets in the IP network. 0 means "best-effort".

Default value:

xConfiguration Network [n] QoS Diffserv Signalling

Applies to: All products

Requires user role: ADMIN, USER

This setting takes effect only if Network QoS Mode is set to Diffserv.

Define which priority Signalling packets that are deemed critical (time-sensitive) for the realtime operation should have in the IP network. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use CS3 for Signalling. CS3 equals the decimal value 24.

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: <u>Signalling</u>

where

<u>n</u>: Index that identifies the network.

Range: 1..1

Signalling:

Integer (0..63)

Set the priority of the signalling packets in the IP network. 0 means "best-effort".

Default value:

0

xConfiguration Network [n] QoS Diffserv ICMPv6

Applies to: All products

Requires user role: ADMIN, USER

This setting takes effect only if Network QoS Mode is set to Diffserv.

Define which priority ICMPv6 packets should have in the IP network. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use 0 for ICMPv6.

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: ICMPv6

where

<u>n</u>: Index that identifies the network.

Range: 1..1

ICMPv6:

Integer (0..63)

Set the priority of the ICMPv6 packets in the IP network. 0 means "best effort".

Default value:

xConfiguration Network [n] QoS Diffserv NTP

Applies to: All products

Requires user role: ADMIN, USER

This setting takes effect only if Network QoS Mode is set to Diffserv.

Define which priority NTP packets should have in the IP network. The traffic classes recommended in the DiffServ RFCs map to a decimal value between 0 and 63. We recommend you use 0 for NTP.

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

n: Index that identifies the network.

Range: 1..1

<u>NTP</u>:

Integer (0..63)

Set the priority of the NTP packets in the IP network. 0 means "best-effort".

Default value:

0

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 device 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.

USAGE:

xConfiguration Network [n] RemoteAccess Allow: "<u>Allow</u>" 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

n: 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

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: Mode

where

n: Index that identifies the network.

Range: 1..1

<u>Mode</u>:

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 Vlanld 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: $\underline{\textit{VlanId}}$ where

<u>n</u>: Index that identifies the network.

Range: 1..1

<u>VlanId</u>:

Integer (1..4094)

Set the VLAN voice ID.

Default value:

1

NetworkPort configuration

xConfiguration NetworkPort [n] Mode

Applies to: *DX70/DX80* Requires user role: ADMIN

The video conferencing device has two network ports. The first network port is for connecting the device 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 device. In this way, you only need one network wall socket to support both the video conferencing device and the computer.

If the video conferencing device 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 device.

You have to restart the device for any change to this setting to take effect.

USAGE:

xConfiguration NetworkPort [n] Mode: <u>Mode</u> where <u>n</u>: Unique ID that identifies the network port. Range: 2..2 <u>Mode</u>: 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 device 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: <u>Mode</u> where <u>Mode</u>: 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 device 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 device using the HTTP or HTTPS (HTTP Secure) protocols. Note that the device'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 devices that have been upgraded to CE9.4 (or later) from an earlier software version, provided that the device has not been factory reset after the upgrade.

USAGE:

xConfiguration NetworkServices HTTP Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/HTTP+HTTPS/HTTPS

Off: Access to the device not allowed via HTTP or HTTPS.

HTTP+HTTPS: Access to the device allowed via both HTTP and HTTPS.

HTTPS: Access to the device 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 username 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: "LoginName" where

LoginName:

String (0, 80) The authentication login name. Default value:

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:

xConfiguration NetworkServices HTTP Proxy Password: " $\underline{Password}"$ where

Password:

String (0, 64)

The authentication password.

Default value:

" "

xConfiguration NetworkServices HTTP Proxy Mode

Applies to: *All products* Requires user role: ADMIN. USER

You can configure a device that is registered to the Cisco Webex cloud service to use a proxy server for HTTPS and WebSocket traffic. 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. If the device is registered to an on-premise service such as CUCM or VCS, keep this setting Off.

USAGE:

xConfiguration NetworkServices HTTP Proxy Mode: 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:

Off

xConfiguration NetworkServices HTTP Proxy Url

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: " $\underline{\textit{Url}}"$ where

Url:

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: "<u>PACUrl</u>" 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:

xConfiguration NetworkServices HTTPS Server MinimumTLSVersion: <u>MinimumTLSVersion</u> 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: StrictTransportSecurity

where

<u>StrictTransportSecurity</u>: Off/On

Off: The HTTP strict transport security feature is disabled.

On: The HTTP strict transport security feature is enabled.

Default value:

Off

xConfiguration NetworkServices HTTPS VerifyClientCertificate

Applies to: All products

Requires user role: ADMIN

When the video conferencing device connects to an HTTPS client (like a web browser), the client can be asked to present a certificate to the video conferencing device to identify itself.

USAGE:

xConfiguration NetworkServices HTTPS 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 device in advance.

Default value:

Off

xConfiguration NetworkServices NTP Mode

Applies to: *All products* Requires user role: ADMIN

The Network Time Protocol (NTP) is used to synchronize the device's time and date to a reference time server. The time server will be queried regularly for time updates.

USAGE:

xConfiguration NetworkServices NTP Mode: Mode

where

<u>Mode</u>:

Auto/Manual/Off

Auto: The device 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 device will use the NTP server that is specified in the NetworkServices NTP Server [n] Address setting for time reference.

Off: The device 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: "<u>Address</u>"

where

 $\underline{\textit{n}}$: Unique ID for the NTP server.

Range: 1..3

<u>Address</u>:

String (0, 255)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

"0.tandberg.pool.ntp.org"

xConfiguration NetworkServices NTP Server [n] Key

Applies to: All products

Requires user role: ADMIN

To make sure that the NTP information comes from a trusted source, the video conferencing device must know the ID/key pair that the NTP source uses. Use the NetworkServices NTP Server [n] Key and NetworkServices NTP Server [n] Keyld settings for the key and ID respectively.

USAGE:

xConfiguration NetworkServices NTP Server [n] Key: "Key"
where
 <u>n</u>: Unique ID for the NTP server.
 Range: 1..3
 <u>Key</u>:
 String (0, 2045)
 The key, which is part of the ID/key pair that the NTP source uses.
 Default value:
 ""

xConfiguration NetworkServices NTP Server [n] Keyld

Applies to: All products

Requires user role: ADMIN

To make sure that the NTP information comes from a trusted source, the video conferencing device must know the ID/key pair that the NTP source uses. Use the NetworkServices NTP Server [n] Key and NetworkServices NTP Server [n] Keyld settings for the key and ID respectively.

USAGE:

xConfiguration NetworkServices NTP Server [n] KeyId: "<u>KeyId</u>" where

n: Unique ID for the NTP server.

Range: 1..3

KeyId:

String (0, 10)

The ID, which is part of the ID/key pair that the NTP source uses.

Default value:

" "

xConfiguration NetworkServices NTP Server [n] KeyAlgorithn

Applies to: All products

Requires user role: ADMIN

Choose the authentication hash function that the NTP server uses, and that the video conferencing device must use to authenticate the time messages.

USAGE:

xConfiguration NetworkServices NTP Server [n] KeyAlgorithn: $\underline{\textit{KeyAlgorithn}}$ where

<u>n</u>: Unique ID for the NTP server.

Range: 1..3

KeyAlgorithn:

None/SHA1/SHA256

None: The NTP server doesn't use a hash function.

SHA1: The NTP server uses the SHA-1 hash function.

SHA256: The NTP server uses the SHA-256 hash function (from the SHA-2 family of hash functions).

Default value:

" "

xConfiguration NetworkServices SIP Mode

Applies to: All products

Requires user role: ADMIN

Define whether the device should be able to place and receive SIP calls or not.

USAGE:

xConfiguration NetworkServices SIP Mode: <u>Mode</u>

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:

xConfiguration NetworkServices SMTP Mode

Applies to: Boards

Requires user role: ADMIN

You can set up the device to use SMTP (Simple Mail Transfer Protocol) for sending email from the device to a mail server for relaying. This is required if you want to allow users to send their whiteboards and presentations via email to people inside or outside their organization.

If the device is set up for encrypted communication (see the NetworkServices SMTP Security setting), the device only allows connections where the SMTP server's certificate is validated. There is no option for ignoring the certificate check.

USAGE:

xConfiguration NetworkServices SMTP Mode: Mode

where

<u>Mode</u>:

Off/On

Off: Disable SMTP (and email) support.

On: Enable SMTP support for sending email.

Default value:

Off

xConfiguration NetworkServices SMTP Server

Applies to: Boards

Requires user role: ADMIN

This is the address of the SMTP server.

USAGE:

xConfiguration NetworkServices SMTP Server: "<u>Server</u>"

where

<u>Server</u>:

String (0, 255)

A valid IPv4 address, IPv6 address or DNS name.

Default value:

" "

xConfiguration NetworkServices SMTP Port

Applies to: Boards

Requires user role: ADMIN

This port is used for outgoing emails from the device to the SMTP server.

Set a port number based on the encryption setting (NetworkServices SMTP Security) and the requirements of the SMTP server. Do not use the default value.

USAGE:

xConfiguration NetworkServices SMTP Port: <u>Port</u> where <u>Port</u>: <u>Integer (0..65535)</u> The port used for outgoing emails from the device. Default value: 0

xConfiguration NetworkServices SMTP Username

Applies to: Boards

Requires user role: ADMIN

This is the username part of the credentials that are used to authenticate the device with the SMTP server. This setting may be required by the SMTP server.

USAGE:

xConfiguration NetworkServices SMTP Username: "<u>Username</u>" where <u>Username</u>: String (0, 50) A valid username. Default value:

xConfiguration NetworkServices SMTP Password

Applies to: Boards

Requires user role: ADMIN

This is the password part of the credentials that are used to authenticate the device with the SMTP server. This setting may be required by the SMTP server.

USAGE:

xConfiguration NetworkServices SMTP Password: "<u>Password</u>" where

Password:

String (0, 64) A valid password. Default value:

xConfiguration NetworkServices SMTP From

Applies to: Boards

Requires user role: ADMIN

When sending an email message from this device, this is the name of the mailbox that the message is sent from.

USAGE:

xConfiguration NetworkServices SMTP From: "<u>From</u>"

where

<u>From</u>:

String (0, 255)

An email address that meets the requirements of the SMTP server.

Default value:

" "

xConfiguration NetworkServices SMTP Security

Applies to: *Boards* Requires user role: ADMIN

Choose if and how to secure the communication between the device and the SMTP server.

USAGE:

xConfiguration NetworkServices SMTP Security: <u>Security</u>

where

<u>Security</u>:

None/StartTls/Tls

None: Connect to the SMTP server without encryption.

StartTls: Initially connect to the SMTP server without encryption, and then send a STARTTLS command to upgrade to an encrypted connection (TLS).

TIs: Connect to the SMTP server over TLS (Transport Layer Security).

Default value:

StartTls

xConfiguration NetworkServices SNMP Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

SNMP (Simple Network Management Protocol) is used by network management systems to monitor and manage devices such as routers, servers, and switches, that are connected to the IP network. SNMP exposes management data in the form of variables on the managed devices, which describe the device status and configuration. These variables can then be remotely queried, and sometimes set, by managing applications.

USAGE:

xConfiguration NetworkServices SNMP Mode: <u>Mode</u>

where

<u>Mode</u>:

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:

Off

xConfiguration NetworkServices SNMP Host [n] Address

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Not applicable in this version.

USAGE:

xConfiguration NetworkServices SNMP Host [n] Address: <u>Address</u> where

<u>n</u>: Identifies the SNMP host.

Range: 1..3

xConfiguration NetworkServices SNMP CommunityName

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define the name of the SNMP community. The SNMP community name is used to authenticate SNMP requests. If an SNMP request from a management system does not include a matching community name (case sensitive), the message is dropped and the SNMP agent in the video device will not send a response.

If you have the Cisco TelePresence Management Suite (TMS) you must make sure the same SNMP community is configured there.

USAGE:

xConfiguration NetworkServices SNMP CommunityName: "<u>CommunityName</u>" where

CommunityName:

String (0, 50) The SNMP community name.

Default value:

xConfiguration NetworkServices SNMP SystemContact

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Define contact information that SNMP servers can use.

USAGE:

xConfiguration NetworkServices SNMP SystemContact: " $\underline{SystemContact}$ " where

SystemContact:

String (0, 50) String that describes the contact information for the video device. Default value:

xConfiguration NetworkServices SNMP SystemLocation

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define location information that SNMP servers can use.

USAGE:

xConfiguration NetworkServices SNMP SystemLocation: " $\underline{SystemLocation}$ " where

SystemLocation:

String (0, 50) String that describes the location of the video device. Default value:

" "

xConfiguration NetworkServices SSH Mode

Applies to: All products

Requires user role: ADMIN

The SSH (or Secure Shell) protocol can provide secure encrypted communication between the video conferencing device and your local computer.

USAGE:

xConfiguration NetworkServices SSH Mode: $\underline{\mathit{Mode}}$

where

<u>Mode</u>:

Off/On

Off: The SSH protocol is disabled. *On:* The SSH protocol is enabled.

Default value:

On

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:

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

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 Telnet Mode: <u>Mode</u> where <u>Mode</u>: <u>Off/On</u> **Off:** The Telnet protocol is disabled. This is the factory setting. **On:** The Telnet protocol is enabled. Default value: <u>Off</u>

xConfiguration NetworkServices UPnP Mode

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

Requires user role: ADMIN

Fully disable UPnP (Universal Plug and Play), or enable UPnP for a short time period after the video conferencing device has been switched on or restarted.

The default operation is that UPnP is enabled when you switch on or restart the video conferencing device. Then UPnP is automatically disabled after the timeout period that is defined in the NetworkServices UPnP Timeout setting.

When UPnP is enabled, the device advertises its presence on the network. The advertisement permits a Touch controller to discover video conferencing devices automatically, and you do not need to manually enter the device's IP address in order to pair the Touch controller.

USAGE:

xConfiguration NetworkServices UPnP Mode: Mode

where

<u>Mode</u>:

Off/On

Off: UPnP is disabled. The video conferencing device does not advertise its presence, and you have to enter the device's IP address manually in order to pair a Touch controller to the device.

On: UPnP is enabled. The video conferencing device advertises its presence until the timeout period expires.

Default value:

On

xConfiguration NetworkServices Websocket

Applies to: *All products* Requires user role: ADMIN

It is possible to interact with the API of the device over the WebSocket protocol, both the insecure and secure versions (ws and wss). A WebSocket is tied to HTTP, so that also HTTP or HTTPS must be enabled before you can use WebSockets (see the NetworkServices HTTP Mode setting).

USAGE:

xConfiguration NetworkServices Websocket: <u>Websocket</u>

where

Websocket:

FollowHTTPService/Off

FollowHTTPService: Communication over the WebSocket protocol is allowed when HTTP or HTTPS is enabled.

Off: Communication over the WebSocket protocol is not allowed.

Default value:

Off

xConfiguration NetworkServices WelcomeText

Applies to: All products

Requires user role: ADMIN

Choose which information the user should see when logging on to the device through SSH or Telnet.

Telnet is only supported by SX Series, MX Series and DX70/DX80.

USAGE:

xConfiguration NetworkServices WelcomeText: <u>WelcomeText</u>

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

xConfiguration NetworkServices Wifi Allowed

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Devices that have a built-in Wi-Fi adapter, can connect to the network either via Ethernet or Wi-Fi. Both Ethernet and Wi-Fi are allowed by default, and the user can choose which one to use from the user interface. With this setting, the administrator can disable Wi-Fi configuration, so that it cannot be set up from the user interface.

The devices support the following standards: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, and IEEE 802.11ac (IEEE 802.11ac is not supported on DX70 and DX80). The device supports the following security protocols: WPA-PSK (AES), WPA2-PSK (AES), EAP-TLS, EAP-TTLS, EAP-FAST, PEAP, EAP-MSCHAPv2, EAP-GTC, and open networks (not secured).

If the PID (Product ID), found on the rating label at the rear of the device, contains the letters NR (No Radio) the device does not support Wi-Fi.

USAGE:

xConfiguration NetworkServices Wifi Allowed: Allowed

where

Allowed:

False/True

False: Wi-Fi cannot be used. You must connect to the network via Ethernet. *True:* Both Ethernet and Wi-Fi are allowed.

Default value:

True

Peripherals configuration

xConfiguration Peripherals InputDevice Mode

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN

Define whether or not to allow the use of a third-party input device, such as a USB keyboard or a wireless remote control with a USB dongle. The input device must advertise itself as a USB keyboard. You must define and implement the actions to be taken as response to key clicks yourself.

USAGE:

xConfiguration Peripherals InputDevice Mode: Mode

where

<u>Mode</u>:

Off/On

Off: A third-party USB input device is not allowed.

On: A third-party USB input device can be used to control certain functions on the video conferencing device.

Default value:

Off

xConfiguration Peripherals Pairing CiscoTouchPanels RemotePairing

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

Requires user role: ADMIN

In order to use Cisco Touch 10 (touch controller) as user interface for the video conferencing device, Touch 10 must be paired to the device. When Touch 10 is paired via the network (LAN), this is referred to as remote pairing. Remote pairing is allowed by default; you must switch this setting Off if you want to prevent remote pairing.

USAGE:

xConfiguration Peripherals Pairing CiscoTouchPanels RemotePairing: <u>RemotePairing</u> where

RemotePairing:

Off/On

Off: Remote pairing of Touch 10 is not allowed.

On: Remote pairing of Touch 10 is allowed.

Default value:

On

xConfiguration Peripherals Profile Cameras

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini 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 conferencing device. This information is used by the device'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: $\underline{Cameras}$ 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 device.

0-7: Select the number of cameras that are expected to be connected to the device.

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 conferencing device. This information is used by the video conferencing device'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 conferencing device using xCommand Peripherals Pair and HeartBeat commands. Failing to do so will cause the video conferenceing device to show a warning that it has lost connectivity to the control system.

USAGE:

xConfiguration Peripherals Profile ControlSystems: <u>ControlSystems</u>

where

ControlSystems:

1/NotSet [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

NotSet [Boards]

1: One third-party control system should be connected to the device.

NotSet: No check for a third-party control system is performed.

Default value:

NotSet

xConfiguration Peripherals Profile TouchPanels

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini 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 device. This information is used by the device'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: <u>TouchPanels</u> 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 device.

0-5: Select the number of Touch controllers that are expected to be connected to the device. Note that only one Cisco Touch controller is officially supported.

Default value:

NotSet [SX10 SX20]

Minimum1 [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini 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: " \underline{ID} " where \underline{n} : 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] Pagination

Applies to: All products

Requires user role: ADMIN

Configure if the phonebook server supports pagination (paging) or not. Pagination means that the server supports consecutive searches, and these searches can be relative to an offset. This allows the user interface to perform as many consecutive searches as required to get the complete search result.

If Pagination is Disabled the device does a single search and returns a maximum of 100 entries in the search result. It is not possible to scroll to any further search results beyond that.

USAGE:

xConfiguration Phonebook Server [n] Pagination: <u>Pagination</u>

where

 \underline{n} : Unique ID that identifies the phonebook server.

Range: 1..1

Pagination:

Disabled/Enabled

Disabled: The phonebook server does not support pagination. The device does a single search, and the maximum number of entries in the search result is 100.

Enabled: The phonebook server supports pagination.

Default value:

Enabled

xConfiguration Phonebook Server [n] TIsVerify

Applies to: All products

Requires user role: ADMIN

This setting applies when a video conferencing device connects to an external phone book server via HTTPS.

Before establishing a connection between the device and the HTTPS server, the device checks if the certificate of the server is signed by a trusted Certificate Authority (CA). The CA certificate must be included in the CA list on the device, either pre-installed or manually uploaded using the web interface or API.

In general, the minimum TLS (Transport Layer Security) version for the HTTPS connection is 1.1. There are two exceptions to this rule: 1) For compatibility reasons, the minimum TLS version is 1.0 for devices that are registered to CUCM. 2) Devices registered to the Webex cloud service always use version 1.2.

Note: The value is set to Off for a device that has been upgraded to CE9.9 (or later) from CE9.8 or earlier software versions, provided that the device has not been factory reset after the upgrade, and that the old NetworkServices HTTPS VerifyServerCertificate setting was not explicitly set to On.

USAGE:

xConfiguration Phonebook Server [n] TlsVerify: <u>TlsVerify</u>

where

<u>TlsVerify</u>:

Off/On

Off: The device doesn't check the certificate of the HTTPS server.

On: The device checks if the certificate of the HTTPS server can be trusted. If not, the connection between the device and the server is not established.

Default value:

On

xConfiguration Phonebook Server [n] Type

Applies to: All products

Requires user role: ADMIN

Select the phonebook server type.

USAGE:

xConfiguration Phonebook Server [n] Type: $\underline{\mathit{Type}}$ where

 \underline{n} : 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.

 $\ensuremath{\textit{VCS:}}$ 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.

USAGE:

xConfiguration Phonebook Server [n] URL: "<u>URL</u>" 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:

xConfiguration Provisioning Connectivity: $\underline{\textit{Connectivity}}$ 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 device 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: "<u>Address</u>" where

Address:

String (0, 64) A valid IPv4 address, IPv6 address or DNS name.

Default value:

xConfiguration Provisioning ExternalManager AlternateAddress

Applies to: All products

Requires user role: ADMIN, USER

Only applicable when the device 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 device will be provisioned by the alternate CUCM. When the main CUCM is available again, the device will be provisioned by this CUCM.

USAGE:

xConfiguration Provisioning ExternalManager AlternateAddress: "<u>AlternateAddress</u>" where

<u>AlternateAddress</u>: <u>String (0, 64)</u> 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: <u>Protocol</u> where

<u>Protocol</u>:

HTTPS/HTTP HTTPS: Send requests via HTTPS. HTTP: Send requests via HTTP. Default value: HTTP

xConfiguration Provisioning ExternalManager Path

Applies to: All products

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: "<u>Path</u>" where <u>Path</u>: 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.

USAGE:

xConfiguration Provisioning ExternalManager Domain: " $\underline{\textit{Domain}}$ " 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 device using a provisioning system (external manager). This allows video conferencing network administrators to manage many devices 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: Mode

where

<u>Mode</u>:

Off/Auto/CUCM/Edge/Webex/TMS/VCS

Off: The device 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 device from CUCM (Cisco Unified Communications Manager).

Edge: Push configurations to the device from CUCM (Cisco Unified Communications Manager). The device connects to CUCM via the Expressway infrastructure. In order to register over Expressway the encryption option key must be installed on the device.

Webex: Push configurations to the device from the Cisco Webex cloud service.

TMS: Push configurations to the device from TMS (Cisco TelePresence Management System).

VCS: Push configurations to the device 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 device with the provisioning server. This setting must be used when required by the provisioning server.

USAGE:

xConfiguration Provisioning LoginName: "LoginName"

where

LoginName:

String (0, 80) A valid username.

Default value:

xConfiguration Provisioning Password

Applies to: *All products* Requires user role: ADMIN, USER

This is the password part of the credentials used to authenticate the device with the provisioning server. This setting must be used when required by the provisioning server.

USAGE:

xConfiguration Provisioning Password: "Password"

where Password:

String (0, 64)

A valid password

Default value:

" "

xConfiguration Provisioning TIsVerify

Applies to: All products

Requires user role: ADMIN, USER

This setting applies when a video conferencing device connects to a provisioning server via HTTPS.

Before establishing a connection between the device and the HTTPS server, the device checks if the certificate of the server is signed by a trusted Certificate Authority (CA). The CA certificate must be included in the CA list on the device, either pre-installed or manually uploaded using the web interface or API.

In general, the minimum TLS (Transport Layer Security) version for the HTTPS connection is 1.1. There are two exceptions to this rule: 1) For compatibility reasons, the minimum TLS version is 1.0 for devices that are registered to CUCM. 2) Devices registered to the Webex cloud service always use version 1.2.

Note: The value is set to Off for a device that has been upgraded to CE9.9 (or later) from CE9.8 or earlier software versions, provided that the device has not been factory reset after the upgrade, and that the old NetworkServices HTTPS VerifyServerCertificate setting was not explicitly set to On.

The certificate check is always performed, regardless of this setting, if the device is provisioned from the Cisco Webex cloud service or from CUCM via Expressway (also known as MRA or Edge).

USAGE:

xConfiguration Provisioning TlsVerify: <u>TlsVerify</u>

where

<u>TlsVerify</u>:

Off/On

Off: The device doesn't check the certificate of the HTTPS server.

On: The device checks if the certificate of the HTTPS server can be trusted. If not, the connection between the device and the server is not established.

Default value:

On

xConfiguration Provisioning WebexEdge

Applies to: All products

Requires user role: ADMIN, USER

Define if the device is linked to Webex Edge for Devices, which gives access to select Webex cloud services.

The setting applies only to devices that are registered to an on-premises service.

USAGE:

xConfiguration Provisioning WebexEdge: <u>WebexEdge</u>

where

<u>WebexEdge</u>:

Off/On

Off: The device is not linked to Webex Edge for Devices. *On:* The device is linked to Webex Edge for Devices. Default value:

Off

Proximity configuration

xConfiguration Proximity Mode

Applies to: *All products* Requires user role: ADMIN, USER

The Proximity Mode setting has no effect for devices that are registered to the Webex cloud service. To prevent a cloud registered device from sending ultrasound pairing messages, you must set Audio Ultrasound MaxVolume to 0.

For devices registered on-premises, the Proximity Mode setting determines whether the device will emit ultrasound pairing messages or not. When the device emits ultrasound pairing messages, Cisco collaboration clients can detect that they are close to the device.

In order to use a client, at least one of the Proximity services must be enabled (refer to the Proximity Services settings) as well. In general, Cisco recommends enabling all the Proximity services.

The Proximity Mode and Audio Ultrasound MaxVolume settings only affect ultrasound pairing messages. To stop all ultrasound emissions, the RoomAnalytics PeoplePresenceDetector and Standby WakeupOnMotionDetection settings must also be switched Off.

USAGE:

xConfiguration Proximity Mode: Mode

where

<u>Mode</u>:

Off/On

Off: Cisco collaboration clients cannot detect that they are close to the device, thus Proximity services cannot be used.

On: Cisco collaboration clients can detect that they are close to the device, and enabled Proximity services can be used.

Default value:

On [MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini Room55 Room70/Room55D Room70G2 Boards]

Off [DX70/DX80 SX10 SX20 SX80 CodecPlus CodecPro]

xConfiguration Proximity Services CallControl

Applies to: All products

Requires user role: ADMIN, USER

Enable or disable basic call control features on Cisco collaboration clients. When this setting is enabled, you are able to control a call using a Cisco collaboration 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: $\underline{CallControl}$ where

<u>CallControl</u>:

Enabled/Disabled

Enabled: Call control from a Cisco collaboration client is enabled.

Disabled: Call control from a Cisco collaboration 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 Cisco collaboration clients. When this setting is enabled, you can share content from a Cisco collaboration client wirelessly on the device, 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: <u>FromClients</u> where

FromClients:

Enabled/Disabled

Enabled: Content sharing from a Cisco collaboration client is enabled.

Disabled: Content sharing from a Cisco collaboration 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 Cisco collaboration clients. When enabled, Cisco collaboration clients will receive the presentation from the device. 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:

xConfiguration Proximity Services ContentShare ToClients: $\underline{\mathit{ToClients}}$ where

ToClients:

Enabled/Disabled

Enabled: Content sharing to a Cisco collaboration client is enabled.

Disabled: Content sharing to a Cisco collaboration client is disabled.

Default value:

Disabled

RoomAnalytics configuration

xConfiguration RoomAnalytics AmbientNoiseEstimation Mode

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

The device can estimate the stationary ambient noise level (background noise level) in the room. The result is reported in the RoomAnalytics AmbientNoise Level dBA status. The status is updated when a new ambient noise level is detected.

USAGE:

xConfiguration RoomAnalytics AmbientNoiseEstimation Mode: $\underline{\mathit{Mode}}$ where

Mode:

Off/On

On: The device regularly estimates the stationary ambient noise level. *Off:* The device doesn't estimate the stationary ambient noise level.

Default value:

Off

xConfiguration RoomAnalytics PeopleCountOutOfCall

Applies to: SX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

By using face detection, the device has the capability to find how many persons are in the room. By default, the device only counts people when in a call, or when displaying the self-view picture.

Codec Plus, Codec Pro, SX80: Applies only when the device has a Cisco Quad Camera connected. MX700/MX800: Not applicable.

USAGE:

xConfiguration RoomAnalytics PeopleCountOutOfCall: <u>PeopleCountOutOfCall</u> where

PeopleCountOutOfCall:

Off/On [SX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

Off: The device counts people only when the device is in a call, or when self-view is on. *On:* The device counts people as long as the device is not in standby mode. This includes outside of call, even if self-view is off.

Default value:

Off [SX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

xConfiguration RoomAnalytics PeoplePresenceDetector

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

Requires user role: ADMIN, INTEGRATOR, USER

The device has the capability to find whether or not people are present in the room, and report the result in the RoomAnalytics PeoplePresence status. The feature is based on ultrasound. Read the status description for more details.

Ultrasound signals for presence detection are not emitted when both this setting AND the Standby WakeupOnMotionDetection setting are switched Off. The Audio Ultrasound MaxVolume and Proximity Mode settings has no effect on presence detection.

USAGE:

xConfiguration RoomAnalytics PeoplePresenceDetector: $\underline{\textit{PeoplePresenceDetector}}$ where

PeoplePresenceDetector:

Off/On

Off: Information about the presence of people is not reported in the device's status. *On:* Information about the presence of people is reported in the device's status. Default value:

Off

Security configuration

xConfiguration Security Audit Logging Mode

Applies to: *All products* Requires user role: AUDIT

Define where to record or transmit the audit logs. The audit logs are sent to a syslog server. This setting has no effect if the Logging Mode setting is set to Off.

When using the External or ExternalSecure mode you must enter the address of the audit server in the Security Audit Server Address setting.

USAGE:

xConfiguration Security Audit Logging Mode: <u>Mode</u>

where

<u>Mode</u>:

External/ExternalSecure/Internal/Off

External: The device sends the audit logs to an external syslog server. The syslog server must support UDP.

ExternalSecure: The device sends encrypted audit logs to an external syslog server that is verified by a certificate in the Audit CA list. The Audit CA list file must be uploaded to the device using the web interface. The common_name parameter of a certificate in the CA list must match the IP address or DNS name of the syslog server, and the secure TCP server must be set up to listen for secure (TLS) TCP Syslog messages.

Internal: The device records the audit logs to internal logs, and rotates logs when they are full.

Off: No audit logging is performed.

Default value:

Internal

xConfiguration Security Audit OnError Action

Applies to: *All products* Requires user role: AUDIT

Define what happens when the connection to the syslog server is lost. This setting is only relevant when Security Audit Logging Mode is set to ExternalSecure.

USAGE:

xConfiguration Security Audit OnError Action: Action

where

<u>Action</u>:

Halt/Ignore

Halt: If a halt condition is detected the device is rebooted and only the auditor is allowed to operate the unit until the halt condition has passed. When the halt condition has passed the audit logs are re-spooled to the syslog server. Halt conditions are: A network breach (no physical link), no syslog server running (or incorrect address or port to the syslog server), TLS authentication failed (if in use), local backup (re-spooling) log full.

Ignore: The device will continue its normal operation, and rotate internal logs when full. When the connection is restored it will again send its audit logs to the syslog server.

Default value:

Ignore

xConfiguration Security Audit Server Address

Applies to: All products

Requires user role: AUDIT

Set the IP address or DNS name of the syslog server that the audit logs are sent to. This setting is only relevant when Security Audit Logging Mode is set to External or ExternalSecure.

USAGE:

xConfiguration Security Audit Server Address: "<u>Address</u>"

where

Address:

String (0..255) A valid IPv4 address, IPv6 address, or DNS name.

Default value:

" "

xConfiguration Security Audit Server Port

Applies to: All products

Requires user role: AUDIT

The audit logs are sent to a syslog server. Define the port of the syslog server that the device shall send its audit logs to. This setting is only relevant when Security Audit Server PortAssignment is set to Manual.

USAGE:

xConfiguration Security Audit Server Port: Port

where

<u>Port</u>:

Integer (0..65535)

Set the audit server port.

Default value:

514

xConfiguration Security Audit Server PortAssignment

Applies to: All products

Requires user role: AUDIT

The audit logs are sent to a syslog server. You can define how the port number of the external syslog server will be assigned. This setting is only relevant when Security Audit Logging Mode is set to External or ExternalSecure. To see which port number is used you can check the Security Audit Server Port status. Navigate to Setup > Status on the web interface or; if on a command line interface, run the command xStatus Security Audit Server Port.

USAGE:

xConfiguration Security Audit Server PortAssignment: <u>PortAssignment</u> where

- - /

PortAssignment:

Auto/Manual

Auto: Will use UDP port number 514 when the Security Audit Logging Mode is set to External. Will use TCP port number 6514 when the Security Audit Logging Mode is set to ExternalSecure.

Manual: Will use the port value defined in the Security Audit Server Port setting.

Default value:

Auto

xConfiguration Security Fips Mode

Applies to: All products

Requires user role: ADMIN

If required, you can set the device in FIPS mode (Federal Information Processing Standard (FIPS) Publication 140-3, Security Requirements for Cryptographic Modules). While in FIPS mode the remote support user is not available, and Digest access authentication is not supported between the device 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 devices, since an HTTP Proxy is used only for the Webex solution.

You should allow only HTTPS, and do not switch on Telnet, SNMP, or IEEE8021X in FIPS mode (keep the default values).

For changes to this setting to take full effect, you must restart the device.

USAGE:

xConfiguration Security Fips Mode: Mode

where

<u>Mode</u>:

Off/On

Off: The device is not in FIPS mode.

On: The device is in FIPS mode.

Default value:

Off

xConfiguration Security Session FailedLoginsLockoutTime

Applies to: *All products* Requires user role: ADMIN

Define how long the device will lock out a user after failed login to a web or SSH session. Restart the device for any change to this setting to take effect.

USAGE:

xConfiguration Security Session FailedLoginsLockoutTime: <u>FailedLoginsLockoutTime</u> where

FailedLoginsLockoutTime:

Integer (0..10000) Set the lockout time (minutes). Default value: 60

xConfiguration Security Session InactivityTimeout

Applies to: *All products* Requires user role: ADMIN

Define how long the device will accept inactivity from the user before he is automatically logged out from a web, SSH or Telnet session. Restart the device for any change to this setting to take effect.

Telnet is only supported by SX Series, MX Series and DX70/DX80.

USAGE:

xConfiguration Security Session InactivityTimeout: $\underline{\textit{InactivityTimeout}}$ where

InactivityTimeout:

Integer (0..10000)

Set the inactivity timeout (minutes); or select 0 when inactivity should not enforce automatic logout.

Default value:

0

xConfiguration Security Session MaxFailedLogins

Applies to: All products

Requires user role: ADMIN

Define the maximum number of failed login attempts per user for a web or SSH session. If the user exceeded the maximum number of attempts the user will be locked out. 0 means that there is no limit for failed logins.

Restart the device for any change to this setting to take effect.

USAGE:

xConfiguration Security Session MaxFailedLogins: <u>MaxFailedLogins</u> where

MaxFailedLogins:

Integer (0..10) Set the maximum number of failed login attempts per user. Default value:

xConfiguration Security Session MaxSessionsPerUser

Applies to: All products

Requires user role: ADMIN

The maximum number of simultaneous sessions per user is 20 sessions.

USAGE:

xConfiguration Security Session MaxSessionsPerUser: $\underline{\it MaxSessionsPerUser}$ where

MaxSessionsPerUser:

Integer (1..20) Set the maximum number of simultaneous sessions per user.

Default value:

20

xConfiguration Security Session MaxTotalSessions

Applies to: *All products* Requires user role: ADMIN

The maximum number of simultaneous sessions in total is 20 sessions.

USAGE:

xConfiguration Security Session MaxTotalSessions: <u>MaxTotalSessions</u> where

MaxTotalSessions:

Integer (1..20) Set the maximum number of simultaneous sessions in total. Default value:

20

xConfiguration Security Session ShowLastLogon

Applies to: All products

Requires user role: ADMIN

When logging in to the device using SSH or Telnet you will see the UserId, time and date of the last session that did a successful login.

Telnet is only supported by SX Series, MX Series and DX70/DX80.

USAGE:

xConfiguration Security Session ShowLastLogon: <u>ShowLastLogon</u> where <u>ShowLastLogon</u>:

Off/On

On: Show information about the last session. *Off:* Do not show information about the last session.

Default value:

Off

SerialPort configuration

xConfiguration SerialPort Mode

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Enable/disable the serial port.

This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

USAGE:

xConfiguration SerialPort Mode: <u>Mode</u> where <u>Mode</u>: <u>Off/On</u> **Off:** Disable the serial port. **On:** Enable the serial port. Default value:

On

xConfiguration SerialPort BaudRate

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

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.

This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

USAGE:

xConfiguration SerialPort BaudRate: <u>BaudRate</u>

where

<u>BaudRate</u>:

115200 [RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards]

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.

This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

USAGE:

xConfiguration SerialPort LoginRequired: <u>LoginRequired</u> where

LoginRequired:

Off/On

Off: The user can access the device via the serial port without any login. *On:* Login is required when connecting to the device via the serial port. Default value:

On

SIP configuration

xConfiguration SIP ANAT

Applies to: *All products* Requires user role: ADMIN

ANAT (Alternative Network Address Types) enables media negotiation for multiple addresses and address types, as specified in RFC 4091.

USAGE:

xConfiguration SIP ANAT: <u>ANAT</u> where <u>ANAT</u>: Off/On Off: Disable ANAT. On: Enable ANAT. Default value: Off

xConfiguration SIP Authentication UserName

Applies to: All products

Requires user role: ADMIN

This is the username part of the credentials used to authenticate towards the SIP proxy.

USAGE:

xConfiguration SIP Authentication UserName: "<u>UserName</u>" where <u>UserName</u>: 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.

USAGE:

xConfiguration SIP Authentication Password: " $\underline{\textit{Password}}"$ 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:

xConfiguration SIP DefaultTransport: <u>DefaultTransport</u>

where

<u>DefaultTransport</u>:

Auto/TCP/Tls/UDP

TCP: The device will always use TCP as the default transport method.

UDP: The device will always use UDP as the default transport method.

Tls: The device will always use TLS as the default transport method. For TLS connections a SIP CA-list can be uploaded to the device. If no such CA-list is available on the device then anonymous Diffie Hellman will be used.

Auto: The device 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: "<u>DisplayName</u>" where <u>DisplayName</u>: String (0, 550) The name to be displayed instead of the SIP URI. Default value:

" "

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 device will be sent to the Default Candidate as defined in this setting.

USAGE:

xConfiguration SIP Ice DefaultCandidate: <u>DefaultCandidate</u>

where

DefaultCandidate:

Host/Rflx/Relay

Host: Send media to the device's private IP address.

Rflx: Send media to the device'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 devices can use to discover the optimized media path. Thus the shortest route for audio and video is always secured between the devices. Initially STUN (Session Traversal Utilities for NAT) messages are exchanged when setting up the media path.

USAGE:

xConfiguration SIP Ice Mode: Mode

where

<u>Mode</u>:

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 device will only be reachable through a SIP Proxy (CUCM or VCS). As a security measure, SIP ListenPort should be Off when the device is registered to a SIP Proxy.

USAGE:

xConfiguration SIP ListenPort: ListenPort

where

<u>ListenPort</u>:

Auto/Off/On

Auto: Listening for incoming connections on the SIP TCP/UDP ports is automatically turned off if the device is registered to a SIP Proxy; otherwise it is turned 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 [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Auto [Boards]

xConfiguration SIP MinimumTLSVersion

Applies to: All products

Requires user role: ADMIN

Set the lowest version of the TLS (Transport Layer Security) protocol that is allowed.

USAGE:

xConfiguration SIP MinimumTLSVersion: $\underline{\textit{MinimumTLSVersion}}$ 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:

TLSv1.0

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: "<u>Address</u>"

where

<u>n</u>: Index that identifies the proxy (maximum 4 proxys can be defined).

Range: 1..4

<u>Address</u>:

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 device's own public IP address.

USAGE:

xConfiguration SIP Turn Server: "Server"

where Server:

The preferred format is DNS SRV record (e.g. _turn._udp.<domain>), or it can be a valid IPv4 or IPv6 address.

Default value:

" "

xConfiguration SIP Turn UserName

Applies to: *All products* Requires user role: ADMIN

Define the username needed for accessing the TURN server.

USAGE:

xConfiguration SIP Turn UserName: "<u>UserName</u>" where

<u>UserName</u>:

String (0, 128) A valid username. 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: "<u>Password</u>" 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 device. The URI is registered and used by the SIP services to route inbound calls to the device. The SIP URI syntax is defined in RFC 3261.

USAGE:

xConfiguration SIP URI: " \underline{URI} "

where

<u>URI</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position after a restart of the video conferencing device.

USAGE:

xConfiguration Standby BootAction: <u>BootAction</u>

where

BootAction:

None/DefaultCameraPosition/RestoreCameraPosition

None: No action.

RestoreCameraPosition: When the video conferencing device restarts, the camera returns to the position that it had before the restart.

DefaultCameraPosition: When the video conferencing device restarts, the camera moves to the factory default position.

Default value:

DefaultCameraPosition [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

RestoreCameraPosition [SX10 SX20]

xConfiguration Standby Control

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Define whether the device should go into standby mode or not.

USAGE:

xConfiguration Standby Control: $\underline{\textit{Control}}$ where

Control:

Off/On

Off: The device will not enter standby mode. *On:* The device will enter standby mode when the Standby Delay has timed out.

Default value:

On

xConfiguration Standby Delay

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define how long (in minutes) the device shall be in idle mode before it goes into standby mode. Requires the Standby Control to be enabled.

USAGE:

xConfiguration Standby Delay: $\underline{\textit{Delay}}$

where

<u>Delay</u>:

Integer (1..480)

Set the standby delay (minutes).

Default value:

10 [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

4 [Boards]

xConfiguration Standby Signage Audio

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

By default, a device does not play out audio in digital signage mode even if the web page has audio. You can use this setting to override the default behavior.

USAGE:

xConfiguration Standby Signage Audio: Audio

where

<u>Audio</u>:

Off/On

Off: The device does not play out audio with the web page.

On: If the web page has audio, the device plays it out. The volume follows the volume setting of the device.

Default value:

Off

xConfiguration Standby Signage InteractionMode

Applies to: Boards

Requires user role: ADMIN, INTEGRATOR

By default, a user cannot interact with a digital signage web page. You can use this setting to enable the ability to interact with the web page.

USAGE:

xConfiguration Standby Signage InteractionMode: <u>InteractionMode</u>

where

InteractionMode:

Interactive/NonInteractive

Interactive: It's possible to interact with the web page.

NonInteractive: It's not possible to interact with the web page.

Default value:

NonInteractive

xConfiguration Standby Signage Mode

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

Content from a URL (a web page) can replace the traditional half-wake background image and information. This feature is called digital signage. Users can interact with the web page on devices with interactive screens (Webex Boards), for example click on a link or enter text in a form.

The use of digital signage does not prevent the device from entering standby the normal way. Therefore, the Standby Delay setting determines for how long the digital signage is shown before the device goes into standby.

USAGE:

xConfiguration Standby Signage Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: Digital signage is not enabled on the device.

On: Digital signage is enabled and replaces the device's half-wake mode, provided that also the WebEngine Mode setting is On.

Default value:

Off

xConfiguration Standby Signage RefreshInterval

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

You can use this setting to force a web page to refresh at regular intervals. This is useful for web pages that are not able to refresh themselves. It is not recommended to set a refresh interval with the interactive mode.

USAGE:

xConfiguration Standby Signage RefreshInterval: <u>RefreshInterval</u>

where

RefreshInterval:

Integer (0..1440)

The number of seconds between each web page refresh. The value of 0 means that the web page is never forced to refresh.

Default value:

0

xConfiguration Standby Signage Url

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

Set the URL of the web page you want to display on the screen (digital signage). If the length of the URL is 0, the device retains normal half-wake mode. If the URL fails, the device retains normal half-wake mode and a diagnostics message is issued.

USAGE:

```
xConfiguration Standby Signage Url: "<u>Url</u>"
where
<u>Url:</u>
String (0, 2000)
The URL of the web page.
Default value:
""
```

xConfiguration Standby StandbyAction

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

Requires user role: ADMIN, INTEGRATOR

Define the camera position when going into standby mode.

USAGE:

xConfiguration Standby StandbyAction: $\underline{StandbyAction}$ where

StandbyAction:

None/PrivacyPosition

None: No action.

PrivacyPosition: When the video conferencing device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position when leaving standby mode.

USAGE:

xConfiguration Standby WakeupAction: <u>WakeupAction</u>

where

WakeupAction:

None/RestoreCameraPosition/DefaultCameraPosition

None: No action.

RestoreCameraPosition: When the video conferencing device leaves standby, the camera returns to the position that it had before entering standby.

DefaultCameraPosition: When the video conferencing device 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 allows the device to detect when people enter the room. The feature is based on ultrasound detection.

Ultrasound signals for motion detection are not emitted when both this setting AND the RoomAnalytics PeoplePresenceDetector setting are switched Off. The Audio Ultrasound MaxVolume and Proximity Mode settings has no effect on motion detection.

USAGE:

xConfiguration Standby WakeupOnMotionDetection: <u>WakeupOnMotionDetection</u> where

WakeupOnMotionDetection:

Off/On

Off: Wake up on motion detection is disabled.

On: When people walk into the room the device will automatically wake up from standby. Not applicable for DX70 and SX10.

Default value:

- On [MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini Room55 Room70/Room55D Room70G2 Boards]
- Off [DX70/DX80 SX10 SX20 SX80 CodecPlus CodecPro]

xConfiguration Standby PowerSave

Applies to: MX700/MX800/MX800D

Requires user role: ADMIN

You can reduce the video conferencing device'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 device enters power save mode, power is cut to some of the device's modules, for example the integrated cameras. The video conferencing device and Touch controller behaves like in regular standby. The device wakes up from power save mode when you tap the touch panel.

Waking up the device 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 device will never go into power save mode; only to regular standby.

OutsideOfficeHours: The device 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 device name. The device name will be sent as the hostname in a DHCP request and when the device is acting as an SNMP Agent.

USAGE:

xConfiguration SystemUnit Name: "<u>Name</u>" where <u>Name</u>: String (0, 50) Define the device name. Default value: ""

xConfiguration SystemUnit CrashReporting Mode

Applies to: All products

Requires user role: ADMIN

If the device crashes, the device 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: <u>Mode</u>

where

<u>Mode</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

xConfiguration SystemUnit CrashReporting Url

Applies to: All products

Requires user role: ADMIN

If the device crashes, the device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

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: 24H

xConfiguration Time DateFormat

Applies to: *All products* Requires user role: ADMIN, USER

Define the date format.

USAGE:

xConfiguration Time DateFormat: $\underline{DateFormat}$ where

DateFormat:

DD_MM_YY/MM_DD_YY/YY_MM_DD

DD_MM_YY: The date January 30th 2010 will be displayed: 30.01.10 *MM_DD_YY*: The date January 30th 2010 will be displayed: 01.30.10 *YY_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 device. The information in the value space is from the tz database, also called the IANA Time Zone Database.

USAGE:

xConfiguration Time Zone: <u>Zone</u>

where

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/Igaluit, 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/Manaus, America/Marigot, America/Martinique, America/Matamoros, America/Mazatlan, America/ Mendoza, America/Menominee, America/Merida, America/Metlakatla, America/Mexico City, America/Miquelon, 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/Tequcigalpa, America/Thule, America/ Thunder Bay, America/Tijuana, America/Toronto, America/Tortola, America/Vancouver, America/Virgin, America/Whitehorse, America/Winnipeg, America/Yakutat, America/ Yellowknife, Antarctica/Casey, 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/Aqtau, 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/Chongqing, 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/Pyongyang, 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/

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: "<u>Start</u>" where <u>Start</u>: 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

<u>End</u>: String (5, 5) The working day end time, using the 24-hour clock. Default value:

Delault valu

" 18:00"

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/Ulyanovsk, 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/Antananarivo, 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:

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/Easterlsland, 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+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/

Etc/UTC

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: <u>FirstDayOfWeek</u> 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: <u>LastDayOfWeek</u>

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 device 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:

xConfiguration UserInterface Accessibility IncomingCallNotification: IncomingCallNotification

where

IncomingCallNotification:

AmplifiedVisuals/Default

AmplifiedVisuals: Enable the amplified visuals on screen and touch panel when the device receives a call.

Default: Enable the default behavior with a notification on screen and touch panel.

Default value:

Default

xConfiguration UserInterface Branding AwakeBranding Colors

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

If the device is set up with branding customizations, this setting affects the colors of the logo that is shown when the device is awake. You can choose whether you want to show the logo in full color, or reduce the opacity of the logo so that it blends in more naturally with the background and other elements on the screen.

USAGE:

xConfiguration UserInterface Branding AwakeBranding Colors: $\underline{\mathit{Colors}}$ where

Colors:

Auto/Native

Auto: The opacity of the logo is reduced.

Native: The logo has full colors.

Default value:

Auto

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: <u>Type</u>

where

<u>Type</u>:

Auto/DisplayName/E164Alias/H320Number/H323Id/IPv4/IPv6/None/SipUri/SystemName

Auto: Show the address which another device should dial to reach this video conferencing device. The address depends on the default call protocol and device registration.

None: Do not show any contact information.

IPv4: Show the device's IPv4 address.

IPv6: Show the device's IPv6 address.

H323Id: Show the device's H.323 ID (refer to the H323 H323Alias ID setting).

H320Number: Show the device's H.320 number as contact information (only supported if used with Cisco TelePresence ISDN Link).

E164Alias: Show the device's H.323 E164 Alias as contact information (refer to the H323 H323Alias E164 setting).

SipUri: Show the device's SIP URI (refer to the SIP URI setting).

SystemName: Show the device's name (refer to the SystemUnit Name setting).

DisplayName: Show the device's display name (refer to the SIP DisplayName setting).

Default value:

Auto

xConfiguration UserInterface CustomMessage

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

A custom message can be displayed, in the lower left side of the screen, in awake mode.

USAGE:

xConfiguration UserInterface CustomMessage: " $\underline{CustomMessage}$ " where

CustomMessage:

String (0, 128) Add a custom message. Add an empty string to remove a custom message. Default value:

xConfiguration UserInterface KeyTones Mode

Applies to: All products

Requires user role: ADMIN, USER

You can configure the device to make a keyboard click sound effect (key tone) when typing text or numbers in the user interface.

USAGE:

xConfiguration UserInterface KeyTones Mode: <u>Mode</u>

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 Boards]

On [SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

xConfiguration UserInterface Features Call End

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default End Call button from the user interface. The setting removes only the button, not its functionality as such.

USAGE:

xConfiguration UserInterface Features Call End: <u>End</u> where <u>End</u>: <u>Auto/Hidden</u> **Auto:** Shows the default button in the user interface. **Hidden:** Removes the default button from the user interface. Default value: <u>Auto</u>

xConfiguration UserInterface Features Call MidCallControls

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default Hold, Transfer, and Resume in-call buttons from the user interface. The setting removes only the buttons, not their functionality as such.

USAGE:

xConfiguration UserInterface Features Call MidCallControls: $\underline{\it MidCallControls}$ where

MidCallControls:

Auto/Hidden Auto: Shows the default buttons in the user interface. Hidden: Removes the default buttons from the user interface. Default value: Auto

xConfiguration UserInterface Features Call JoinWebex

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default Join Webex button from the user interface.

The button allows users to dial into a Webex meeting using just the Webex meeting number, no domain is required. However, for this to work, you must set up the infrastructure to allow calls to be routed to *@webex.com.

USAGE:

xConfiguration UserInterface Features Call JoinWebex: $\underline{\textit{JoinWebex}}$ where

JoinWebex:

Auto/Hidden

Auto: Shows the default button in the user interface.

Hidden: Removes the default button from the user interface.

Default value:

Auto

xConfiguration UserInterface Features Call Start

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default Call button (including the directory, favorites, and recent calls lists) and the default in-call Add participant button from the user interface. The setting removes only the buttons, not their functionality as such.

USAGE:

xConfiguration UserInterface Features Call Start: Start

where

<u>Start</u>:

Auto/Hidden

Auto: Shows the default buttons in the user interface.

Hidden: Removes the default buttons from the user interface.

Default value:

Auto

xConfiguration UserInterface Features Call VideoMute

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

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to show the default "Turn video off" button in the user interface.

USAGE:

xConfiguration UserInterface Features Call VideoMute: VideoMute

where

<u>VideoMute</u>:

Auto/Hidden

Auto: Shows the "Turn video off" button in the user interface if this feature is supported in the ongoing call.

Hidden: The "Turn video off" button is never shown in the user interface.

Default value:

Auto

xConfiguration UserInterface Features HideAll

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove all default buttons from the user interface. The setting removes only the buttons, not their functionality as such.

USAGE:

xConfiguration UserInterface Features HideAll: HideAll

where

<u>HideAll</u>:

False/True

False: Shows all default buttons in the user interface.

True: Removes all default buttons from the user interface.

Default value:

False

xConfiguration UserInterface Features Share Start

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default buttons and other UI elements for sharing and previewing content, both in call and out of call, from the user interface. The setting removes only the buttons and UI elements, not their functionality as such. You can share content using Proximity or the Cisco Webex Teams app still.

USAGE:

xConfiguration UserInterface Features Share Start: Start

where

<u>Start</u>:

Auto/Hidden

Auto: Shows the default buttons and UI elements in the user interface.

Hidden: Removes the default buttons and UI elements from the user interface.

Default value:

Auto

xConfiguration UserInterface Features Whiteboard Start

Applies to: DX70/DX80 Boards

Requires user role: ADMIN, INTEGRATOR

Choose whether or not to remove the default Whiteboard button from the user interface. The setting removes only the button, not its functionality as such. This setting only applies to Cisco Webex registered devices.

USAGE:

xConfiguration UserInterface Features Whiteboard Start: <u>Start</u>

where

<u>Start</u>:

Auto/Hidden

Auto: Shows the default button in the user interface.

Hidden: Removes the default button from the user interface.

Default value:

Auto

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: Language

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 EncryptionIndicator

Applies to: All products

Requires user role: ADMIN

Define for how long the encryption indicator is shown on screen. The icon for encrypted calls is a locked padlock.

USAGE:

xConfiguration UserInterface OSD EncryptionIndicator: $\underline{\textit{EncryptionIndicator}}$ where

EncryptionIndicator:

Auto/AlwaysOn/AlwaysOff

Auto: If the call is encrypted, a "Call is encrypted" notification is shown for 5 seconds. Then, an encryption indicator icon is shown for the rest of the call.

If the call is not encrypted, a "Call is not encrypted" notification is shown for 5 seconds. No encryption indicator icon is shown.

AlwaysOn: The "Call is encrypted" notification is shown for 5 seconds. Then, an encryption indicator icon is shown for the rest of the call.

AlwaysOff: The encryption indicator is never displayed on screen.

Default value:

Auto

xConfiguration UserInterface OSD HalfwakeMessage

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN

A custom message can be displayed in the middle of the main screen when the device is in the half wake state. The custom message will replace the default message, which gives instructions how to start using the device. You can also delete the default message, without adding a custom message.

USAGE:

xConfiguration UserInterface OSD HalfwakeMessage: "<u>HalfwakeMessage</u>"

where

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:

" "

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 device is controlled with a remote control also the on-screen menus appear on this monitor.

USAGE:

xConfiguration UserInterface OSD Output: $\underline{\textit{Output}}$

where

<u>Output</u>:

1 [SX10 Room55 Boards]

Auto/1/2 [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room70/Room55D]

Auto/1/2/3 [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Auto [DX70/DX80 RoomKitMini]

Auto: For devices with integrated screen, the on-screen information and indicators are sent to the integrated screen. If the device has two integrated screens, the left monitor is used.

For devices without integrated screens, the device 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 device, 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 device sends the on-screen information and indicators to the specified output. Choose n to send the on-screen information and indicators to the device's Output Connector n.

For devices with integrated screens, the lowest numbers refer to the integrated screens.

Default value:

1 [SX10 MX700/MX800/MX800D CodecPro Room55 Room70G2 Boards]

Auto [DX70/DX80 SX20 SX80 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus Room70/Room55D]

xConfiguration UserInterface Phonebook Mode

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This setting determines if a user is allowed to add or change a contact in the Directory and Favorites list from the user interface of the device.

USAGE:

xConfiguration UserInterface Phonebook Mode: Mode

where

<u>Mode</u>:

ReadOnly/ReadWrite

ReadOnly: You neither can add a contact to the Favorites list, edit a contact in the Favorites list, nor edit any contact from the Directory or Favorites list before calling. **ReadWrite:** You are able to add a contact to the Favorites list, edit a contact in the Favorites list, and edit a contact from the Directory or Favorites list before calling.

Default value:

ReadWrite

Applies to: All products

Requires user role: ADMIN

This setting allows you to prevent important device 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 conferencing device, 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

<u>Mode</u>:

Normal/Strong

Normal: IP addresses and other device 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 device's admin password. If this password is blank, anyone can access the settings in the Settings panel, and for example factory reset the device. If authentication is enabled, all settings that require authentication have a padlock icon. You will be prompted to enter the administrator's username and passphrase when you select the setting. Some settings do not require authentication, they do not have a padlock icon.

USAGE:

xConfiguration UserInterface SettingsMenu Mode: <u>Mode</u>

where

<u>Mode</u>:

Locked/Unlocked

Locked: Authentication with administrator's username and passphrase is required. *Unlocked:* No authentication is required.

Default value:

Unlocked

xConfiguration UserInterface SettingsMenu Visibility

Applies to: All products

Requires user role: ADMIN

Choose whether or not to show the device name (or contact information) and the associated drop down menu and Settings panel on the user interface.

USAGE:

xConfiguration UserInterface SettingsMenu Visibility: $\underline{\textit{Visibility}}$.

where

Visibility:

Auto/Hidden

Auto: Shows the device name with drop down menu and Settings panel on the user interface.

Hidden: Doesn't show the device name with drop down menu and Settings panel on the user interface.

Default value:

Auto

xConfiguration UserInterface SoundEffects Mode

Applies to: All products

Requires user role: ADMIN, USER

You can configure the device to make a sound effect, e.g. when someone connects a laptop or mobile through Proximity.

The keyboard click sound effect when typing text is not affected by this setting (refer to the UserInterface Keytones Mode setting).

USAGE:

xConfiguration UserInterface SoundEffects Mode: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: There are no sound effects. *On:* The sound effects are switched on.

Default value:

On

xConfiguration UserInterface UsbPromotion

Applies to: *RoomKitMini* Requires user role: ADMIN

Choose whether or not to show on the halfwake screen, a text that informs you that you can use the device as a USB camera.

USAGE:

xConfiguration UserInterface UsbPromotion: <u>UsbPromotion</u> where <u>UsbPromotion</u>: Off/On Off: The USB camera information text is not shown. On: The USB camera information text is shown. Default value:

Off

xConfiguration UserInterface WebcamOnlyMode

Applies to: RoomKitMini

Requires user role: ADMIN

This device can be used as a web camera, and as a normal video conferencing device. It can be used as a web camera even if it is not registered to any on-premise or cloud call service (such as CUCM, VCS, and Webex).

This setting determines if the user interface shall be adapted to a web camera only scenario when the video conferencing device is not registered.

USAGE:

xConfiguration UserInterface WebcamOnlyMode: <u>WebcamOnlyMode</u> where

WebcamOnlyMode:

Auto/Off

Auto: If the device is registered to a call service, the full user interface will be shown. If the device is not registered, and therefore cannot be used for calling, irrelevant user interface elements are removed.

Off: The device will always show the full user interface.

Default value:

Auto

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:

xConfiguration UserManagement LDAP Admin Filter: "Filter"

where

<u>Filter</u>:

String (0, 1024)

Refer to the LDAP specification for the syntax of this string. Example: "(I(memberof=CN=admin group, OU=company groups, DC=company, DC=com) (sAMAccountName=username))"

Default value:

" "

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: "<u>Group</u>" where

<u>Group</u>:

String (0..255)

The distinguished name of the AD group. Example: "CN=admin group, OU=company groups, DC=company, DC=com" $\,$

Default value:

" "

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:

xConfiguration UserManagement LDAP Attribute: "Attribute"

where

<u>Attribute</u>:

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: "<u>BaseDN</u>"

where

BaseDN:

String (0..255)

The distinguishing name of the base. Example: "DC=company, DC=com"

Default value:

" "

xConfiguration UserManagement LDAP Encryption

Applies to: *All products* Requires user role: ADMIN

Define how to secure the communication between the device and the LDAP server. You can override the port number by using the UserManagement LDAP Server Port setting.

USAGE:

xConfiguration UserManagement LDAP Encryption: <u>Encryption</u>

where

Encryption:

LDAPS/None/STARTTLS

LDAPS: Connect to the LDAP server on port 636 over TLS (Transport Layer Security).

None: Connect to the LDAP server on port 389 with no encryption.

STARTTLS: Connect to the LDAP server on port 389, then send a STARTTLS command to upgrade to an encrypted connection (TLS).

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:

xConfiguration UserManagement LDAP MinimumTLSVersion: $\underline{\textit{MinimumTLSVersion}}$ 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 device supports the use of an LDAP (Lightweight Directory Access Protocol) server as a central place to store and validate usernames 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: <u>Mode</u>

where

<u>Mode</u>:

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: " $\underline{Address}$ " 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: Port

where

<u>Port</u>:

Integer (0..65535)

The LDAP server port number.

Default value:

0

xConfiguration UserManagement LDAP VerifyServerCertificate

Applies to: All products

Requires user role: ADMIN

When the device connects to an LDAP server, the server will identify itself to the device by presenting its certificate. Use this setting to determine whether or not the device will verify the server certificate.

USAGE:

xConfiguration UserManagement LDAP VerifyServerCertificate: VerifyServerCertificate

where

VerifyServerCertificate:

Off/On

Off: The device will not verify the LDAP server's certificate.

On: The device 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 device in advance. Use the device's web interface to manage the list of trusted CAs (see more details in the administrator guide).

Default value:

On

xConfiguration UserManagement PasswordPolicy Complexity MinimumDigits

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the minimum number of numerical characters (0..9) in the password.

USAGE:

xConfiguration UserManagement PasswordPolicy Complexity MinimumDigits: <u>MinimumDigits</u>

where

<u>MinimumDigits</u>:

Integer (0..4)

The minimum number of numerical characters. 0 means no restrictions.

Default value:

0

xConfiguration UserManagement PasswordPolicy Complexity MinimumLength

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the minimum number of characters in the password.

USAGE:

xConfiguration UserManagement PasswordPolicy Complexity MinimumLength: <u>MinimumLength</u>

where

MinimumLength:

Integer (0..256) The minimum number of characters. 0 means no restrictions.

Default value:

8

xConfiguration UserManagement PasswordPolicy Complexity MinimumLowercase

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the minimum number of lower-case letters in the password.

USAGE:

xConfiguration UserManagement PasswordPolicy Complexity MinimumLowercase: <u>MinimumLowercase</u>

where

MinimumLowercase:

Integer (0..4)

The minimum number of lower-case characters. 0 means no restrictions.

Default value:

0

xConfiguration UserManagement PasswordPolicy Complexity MinimumSpecial

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the minimum number of special characters in the password.

USAGE:

xConfiguration UserManagement PasswordPolicy Complexity MinimumSpecial: MinimumSpecial

where

MinimumSpecial:

Integer (0..4)

The minimum number of special characters. 0 means no restrictions.

Default value:

0

xConfiguration UserManagement PasswordPolicy Complexity MinimumUppercase

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the minimum number of upper-case letters in the password.

USAGE:

xConfiguration UserManagement PasswordPolicy Complexity MinimumUppercase: <u>MinimumUppercase</u>

where

MinimumUppercase:

Integer (0..4)

The minimum number of upper-case characters. 0 means no restrictions.

Default value:

0

xConfiguration UserManagement PasswordPolicy MaxLifetime

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the maximum number of days before a password becomes invalid.

USAGE:

xConfiguration UserManagement PasswordPolicy MaxLifetime: $\underline{\textit{MaxLifetime}}$ where

MaxLifetime:

Integer (0..7300) The minimum number of days. 0 means no restrictions. Default value:

xConfiguration UserManagement PasswordPolicy ReuseLimit

Applies to: All products

Requires user role: ADMIN

When signing in to the device as a local user, the password must follow the rules set by the UserManagement PasswordPolicy settings. These settings replace the "systemtools security-setting" command that was available in software versions older than CE9.10.

A new password rule will not apply to existing passwords but will take effect on the next password change.

This setting specifies the reuse limit (n), which means that a user cannot change to either of their previous n passwords.

USAGE:

xConfiguration UserManagement PasswordPolicy ReuseLimit: $\underline{\textit{ReuseLimit}}$ where

ReuseLimit:

Integer (0..24)

The minimum number of passwords. 0 means no restrictions.

Default value:

12

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

DefaultMainSource:

1/2/3/4/5/6 [CodecPro] 1/2/3/4 [SX80 MX700/MX800/MX800D Room70G2]

1/2 [SX20]

1 [DX70/DX80 SX10 RoomKitMini Boards]

1/2/3 [MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]

The source that is 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 camera that is connected to this video input. For devices 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

<u>n</u>: 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 RoomKitMini Boards]

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 RoomKitMini Room55 Boards]

Connector 1,2,3,4: 1/2/3/4/5/6/7 Connector 5: 1 [SX80 MX700/MX800/MX800D]

For devices with more than one camera, select the ID of the camera. For devices 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 RoomKitMini Room55 Boards]

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: $\underline{\mathit{Mode}}$ 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 RoomKitMini Boards]

Range: 1..5 [SX80 MX700/MX800/MX800D]

Range: 1..4 [MX200G2/MX300G2]

<u>Mode</u>:

Connector n: Off/On [CodecPlus CodecPro Room70/Room55D Room70G2] 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 RoomKitMini Boards]

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 Room70/Room55D]

Connector 1,2,3,4,5: On Connector 6: Off [CodecPro 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 RoomKitMini Boards]

Connector 1,2,3: On Connector 4,5: Off [SX80 MX700/MX800/MX800D]

xConfiguration Video Input Connector [n] CEC Mode

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 conferencing device 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 video conferencing device 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 RoomKitMini Boards]

<u>Mode</u>:

Connector n: Off/On [RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70G2 Boards]

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: <u>DviType</u>

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: CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

One of the video conferencing device's HDMI inputs can be configured to support HDCP protected content (High-bandwidth Digital Content Protection, version 1.4). This allows customers to re-purpose a video conferencing device'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 input connector is configured to support HDCP, it is reserved for this type of content. This means that you can't share any content from this specific connector while in a call, regardless of what is connected, nor can you take web snapshots of this source.

The screens, on which the protected content is displayed, must support HDCP. For Codec Plus, Room 70 (Single and Dual), and Room 55 Dual, the protected content is always displayed on the screen that is connected to output connector 1; for Codec Pro and Room 70 G2 (Single and Dual), it's displayed on screens connected to output connector 1 and 2; and for Room 55, it's displayed on the integrated screen. The integrated screens of devices in the Room Series support HDCP.

Note: If you have connected an external screen to Room 55 (not Room 55 Dual), you cannot display HDCP content, not even on the integrated screen.

USAGE:

xConfiguration Video Input Connector [n] HDCP Mode: Mode

where

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

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

Range: 1..5 [CodecPro Room70G2]

Range: 2..3 [Room55]

<u>Mode</u>:

Connector 1,3: Off, Connector 2: Off/On [CodecPlus Room70/Room55D]

Connector 1,2,3,4: Off, Connector 5: Off/On [CodecPro Room70G2]

Connector 2: Off, Connector 3: Off/On [Room55]

Off: Disable support for HDCP protected content on this video input connector.

On: Enable support for HDCP protected content this 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 device has an integrated camera, Connector 1 refers to the integrated camera; if the device has two integrated cameras (dual camera), Connector 1 and Connector 2 refers to the integrated cameras.

USAGE:

xConfiguration Video Input Connector [n] InputSourceType: $\underline{\mathit{InputSourceType}}$ where

<u>n</u>: 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 RoomKitMini Boards]
- 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 RoomKitMini Boards]

Connector 1: camera Other connectors: PC/camera/document_camera/mediaplayer/ whiteboard/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 RoomKitMini Boards] 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: " $\underline{\it Name}"$ where

<u>n</u>: 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 RoomKitMini Boards]

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 RoomKitMini Boards]
- Connector n: "" [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2]
- Connector 1: "Camera 1" Connector 2: "" for single camera devices, "Camera 2" for dual camera devices Connector 3: "PC (HDMI)" Connector 4: "PC (VGA)" Connector 5: "" [MX700/MX800/MX800D]

xConfiguration Video Input Connector [n] PreferredResolution

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

Define the preferred screen resolution and refresh rate that the video conferencing device advertises to the input sources that are connected 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: <u>PreferredResolution</u>

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 RoomKitMini Boards]

PreferredResolution:

Connector 1,2: 1920_1080_60 Connector 3,4,5: 1920_1080_60/2560_1440_60/3840_2 160_30 [CodecPro Room70G2]

Connector 1: 1920_1080_60 Connector 2,3 : 1920_1080_60/2560_1440_60/3840_216 0_30 [CodecPlus Room70/Room55D]

Connector n: 1920_1080_60/2560_1440_60/3840_2160_30 [RoomKit RoomKitMini Room55 Boards]

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 RoomKitMini CodecPlus Room55 Room70/Room55D Boards]

xConfiguration Video Input Connector [n] PresentationSelection

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define how the video conferencing device will behave when you connect a presentation source to the video input. If the device 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 devices 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 devices with an integrated camera: The integrated camera is not available as a presentation source.

USAGE:

xConfiguration Video Input Connector [n] PresentationSelection: $\underline{\textit{PresentationSelection}}$

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 RoomKitMini Boards]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

Connector 1: Manual Connector 2: AutoShare/Desktop/Manual/OnConnect for single camera devices, and Manual for dual camera devices 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 RoomKitMini Room55] Connector n: AutoShare [Boards]

Connector 1,2: Manual Connector 3,4: OnConnect [SX80 MX700/MX800/MX800]

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 device 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.

USAGE:

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 RoomKitMini Boards]

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 RoomKitMini Room55 Boards]

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 devices with an integrated camera: Connector 1 is the device's integrated camera and is not available as a presentation source.

USAGE:

xConfiguration Video Input Connector [n] Visibility: $\underline{\it Visibility}$

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 RoomKitMini Boards]

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 RoomKitMini Boards]

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 RoomKitMini]

Connector 1: Never Connector 2: IfSignal [DX70/DX80 Boards]

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]

Connector 1: IfSignal Connector 2: Always [SX20]

xConfiguration Video Monitors

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2

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: Monitors

where

<u>Monitors</u>:

Auto/Single/Dual/DualPresentationOnly [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 device is automatically detected, and the layout is distributed on the screens according to the monitor role.

Single: The layout is shown on the device's screen. If the device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

This video output (HDMI) supports Consumer Electronics Control (CEC).

When this setting is On, the video conferencing device will use CEC to set the screen in standby when the device itself enters standby. Likewise the device will wake up the screen when the device itself wakes up from standby.

The active video input on a screen is sometimes changed by a user. When a call is started the device detects if the active video input has been switched to another input on the screen. The device then switches the input back so the device is the active video input source (not suported by SX20, SX80, and MX series).

If the device is not the active input source when the device 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

n: Unique ID that identifies the video output connector.

Range: 1..3 [CodecPro Room70G2]

Range: 1..1 [SX10 RoomKitMini]

Range: 2..2 [MX200G2/MX300G2 Room55]

Range: 2..2 for MX800 Single; not available for MX700 and MX800 Dual [MX700/MX800/ MX800D]

Range: 2..2 for Room 70 Single; not available for Room 70 Dual [Room70/Room55D]

Range: 1..2 [SX20 SX80 RoomKit CodecPlus]

<u>Mode</u>:

Off/On

Off: CEC is disabled.

On: CEC is enabled.

Default value:

On [SX10 RoomKit RoomKitMini CodecPlus CodecPro Room55]

Off [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D Room70/Room55D Room70G2]

xConfiguration Video Output Connector [n] MonitorRole

Applies to: SX20 SX80 MX700/MX800/MX800D RoomKit RoomKitMini 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.

This setting is not applicable for Room Kit Mini, since it supports only one screen.

USAGE:

xConfiguration Video Output Connector [n] MonitorRole: $\underline{MonitorRole}$ 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]

Range: 1..1 [RoomKitMini]

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 device 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 singlescreen 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 device may be cut off when displayed on the monitor. Use this setting to instruct the device 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: $\underline{\textit{OverscanLevel}}$ where

<u>n</u>: Unique ID that identifies the video output connector.

Range: 1..1 [SX10]

Range: 1..2 [SX20]

Range: 2..2 [MX200G2/MX300G2]

OverscanLevel:

None/Medium/High

None: The device will use all of the output resolution.

Medium: The device will not use the outer 3% of the output resolution.

High: The device 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 device is connected.

USAGE:

xConfiguration Video Output Connector [n] Resolution: <u>Resolution</u>

where

n: Unique ID that identifies the video output connector.

Range: 1..1 [DX70/DX80 SX10 RoomKitMini Boards]

Range: 1..2 [SX20 MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D]

Range: 1..3 [SX80 CodecPro Room70G2]

Range: 2..3 for MX800 Single; not available for MX700 and MX800 Dual [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]

1920_1080_60 [DX70/DX80]

3840_2160_60 [Boards]

Connector 1: 3840_2160_60 Connector 2: Auto/1920_1080_50/1920_1080_60/1920_1 200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60 [Room55]

Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/384 0_2160_30/3840_2160_60 [RoomKit RoomKitMini CodecPlus Room70/Room55D]

Connector n: Auto [SX10]

Connector n: Auto/1280_720_50/1280_720_60/1920_1080_50/1920_1080_60 [\$x20] Connector n: Auto/1280_720_50/1280_720_60/1920_1080_50/1920_1080_60/1920_12 00_50/1920_1200_60 [\$x80 MX700/MX800/MX800]

Connector 1: 1920_1080_60 Connector 2: Auto/1024_768_60/1280_1024_60/1280_72 0_50/1280_720_60/1920_1080_50/1920_1080_60/1280_768_60/1360_768_60/1366_

768_60 [MX200G2/MX300G2]

 $\ensuremath{\textit{Auto:}}$ The device 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.

Default value:

1920_1080_60 [DX70/DX80]

3840_2160_60 [Boards]

Connector 1: 3840_2160_60 Connector 2: Auto [Room55]

Connector n: Auto [SX10 SX20 SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room70/Room55D Room70G2]

Connector 1: 1920_1080_60 Connector 2: Auto [MX200G2/MX300G2]

xConfiguration Video Presentation DefaultSource

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 third-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 RoomKitMini Boards]
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 RoomKitMini CodecPlus Room55 Room70/ Room55D Boards]

D15407.12 Cisco Collaboration Endpoint Software API Reference Guide CE9.10, DECEMBER 2019

xConfiguration Video Presentation Priority

Applies to: All products

Requires user role: ADMIN

Determine how to distribute the bandwidth between the presentation channel and the main video channel.

USAGE:

xConfiguration Video Presentation Priority: $\underline{\textit{Priority}}$

where

<u>Priority</u>:

Equal/High/Low

Equal: The available bandwidth is shared equally between the presentation channel and the main video channel.

High: The presentation channel is assigned a larger portion of the available bandwidth at the expense of the main video channel.

Low: The main video channel is assigned a larger portion of the available bandwidth at the expense of the presentation channel.

Default value:

Equal

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 picturein-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: <u>FullscreenMode</u>

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: <u>Mode</u>

where

<u>Mode</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>OnMonitorRole</u>

where

OnMonitorRole:

Current/First/Second [SX20 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus Room55 Room70/ Room55D Boards]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

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: <u>PIPPosition</u> 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 [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

LowerRight [Boards]

xConfiguration Video Selfview Mirrored

Applies to: DX70/DX80

Requires user role: ADMIN, INTEGRATOR

You can configure the device 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:

xConfiguration Video Selfview Mirrored: <u>Mirrored</u>

where

<u>Mirrored</u>:

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: <u>Mode</u>

where

<u>Mode</u>:

Off/On

Off: Self-view is not shown automatically during call setup. *On:* Self-view is shown automatically during call setup.

Default value:

On [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Off [Boards]

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: 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

WebEngine configuration

xConfiguration WebEngine Mode

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN

The web engine is a prerequisite for features that use the device's web view, for example digital signage and web apps.

USAGE:

xConfiguration WebEngine Mode: <u>Mode</u> where <u>Mode</u>: Off/On Off: The web engine is disabled. On: The web engine is enabled. Default value: Off

xConfiguration WebEngine RemoteDebugging

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN

If you encounter a problem with a web page, it can be a good idea to turn on remote debugging. Remote debugging lets you access the Chrome developer console and identify potential issues with a web page. When enabled, a banner is displayed at the bottom of the screen, warning the users that they may be monitored. The banner also shows the URL that you can enter in your local Chrome browser to open the developer console.

Make sure to turn off remote debugging after use.

USAGE:

xConfiguration WebEngine RemoteDebugging: <u>RemoteDebugging</u> where <u>RemoteDebugging</u>: <u>Off/On</u>

Off: Remote debugging is switched off.

On: Remote debugging is switched on.

Default value:

Off

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

Audio commands	
xCommand Audio Diagnostics Advanced Run	244
xCommand Audio Diagnostics MeasureDelay	245
xCommand Audio Equalizer List	245
xCommand Audio Equalizer Update	
xCommand Audio LocalInput Add	
xCommand Audio LocalInput AddConnector	247
xCommand Audio LocalInput Remove	
xCommand Audio LocalInput RemoveConnector	
xCommand Audio LocalInput Update	249
xCommand Audio LocalOutput Add	250
xCommand Audio LocalOutput AddConnector	251
xCommand Audio LocalOutput ConnectInput	251
xCommand Audio LocalOutput DisconnectInput	252
xCommand Audio LocalOutput Remove	252
xCommand Audio LocalOutput RemoveConnector	253
xCommand Audio LocalOutput Update	253
xCommand Audio LocalOutput UpdateInputGain	254
xCommand Audio Microphones Mute	255
xCommand Audio Microphones ToggleMute	255
xCommand Audio Microphones Unmute	255
xCommand Audio RemoteOutput ConnectInput	255
xCommand Audio RemoteOutput DisconnectInput	256
xCommand Audio RemoteOutput UpdateInputGain	256
xCommand Audio Select	257
xCommand Audio Setup Clear	257
xCommand Audio Setup Reset	257

xCommand Audio Sound Play	
xCommand Audio Sound Stop	
xCommand Audio SpeakerCheck	
xCommand Audio SoundsAndAlerts Ringtone List	
xCommand Audio SoundsAndAlerts Ringtone Play	
xCommand Audio SoundsAndAlerts Ringtone Stop	
xCommand Audio Volume Decrease	
xCommand Audio Volume Increase	
xCommand Audio Volume Mute	
xCommand Audio Volume Set	
xCommand Audio Volume SetToDefault	
xCommand Audio Volume ToggleMute	
xCommand Audio Volume Unmute	
xCommand Audio VuMeter Start	
xCommand Audio VuMeter Stop	
xCommand Audio VuMeter StopAll	
Bookings 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 Camera Move	

xCommand Call FarEndControl Camera Stop	. 266
xCommand Call FarEndControl RoomPreset Activate	. 266
xCommand Call FarEndControl Source Select	267
xCommand Call FarEndMessage Send	267
xCommand Call FarEndMessage SStringSend	. 268
xCommand Call FarEndMessage TStringSend	. 268
xCommand Call Forward	. 268
xCommand Call Hold	. 268
xCommand Call Ignore	. 269
xCommand Call Join	. 269
xCommand Call Reject	. 269
xCommand Call Resume	. 269
xCommand Call UnattendedTransfer	270

CallHistory commands	270
xCommand CallHistory AcknowledgeAllMissedCalls	270
xCommand CallHistory AcknowledgeMissedCall	270
xCommand CallHistory DeleteAll	271
xCommand CallHistory DeleteEntry	271
xCommand CallHistory Get	271
xCommand CallHistory Recents	272

Camera commands	272
xCommand Camera PositionReset	272
xCommand Camera PositionSet	273
xCommand Camera Preset Activate	273
xCommand Camera Preset ActivateDefaultPosition	273
xCommand Camera Preset Edit	274
xCommand Camera Preset List	274
xCommand Camera Preset Remove	275
xCommand Camera Preset Show	275
xCommand Camera Preset Store	275
xCommand Camera Ramp	276
xCommand Camera TriggerAutofocus	277

Cameras commands	277
xCommand Cameras AutoFocus Diagnostics Start	277
xCommand Cameras AutoFocus Diagnostics Stop	277
xCommand Cameras PresenterTrack ClearPosition	278
xCommand Cameras PresenterTrack Set	278
xCommand Cameras PresenterTrack StorePosition	279
xCommand Cameras SpeakerTrack Activate	279
xCommand Cameras SpeakerTrack Deactivate	279
xCommand Cameras SpeakerTrack Diagnostics Start	279
xCommand Cameras SpeakerTrack Diagnostics Stop	280
xCommand Cameras SpeakerTrack Whiteboard ActivatePosition	280
xCommand Cameras SpeakerTrack Whiteboard AlignPosition	280
xCommand Cameras SpeakerTrack Whiteboard SetDistance	281
xCommand Cameras SpeakerTrack Whiteboard StorePosition	281

Conference commands	2
xCommand Conference Call AuthenticationResponse	2
xCommand Conference DoNotDisturb Activate	2
xCommand Conference DoNotDisturb Deactivate	2
xCommand Conference Participant Admit	3
xCommand Conference Participant Disconnect	3
xCommand Conference Participant Mute	4
xCommand Conference Participant Search	4
xCommand Conference Recording Pause	5
xCommand Conference Recording Resume	5
xCommand Conference Recording Start	5
xCommand Conference Recording Stop	5
xCommand Conference SpeakerLock Release	5
xCommand Conference SpeakerLock Set	3
Diagnostics commands	ŝ
xCommand Diagnostics Run	5
Dial commands	
xCommand Dial	7

PIO commands	288
xCommand GPIO ManualState Set	288

Ht	tpClient commands	. 288
Х	Command HttpClient Allow Hostname Add	288
Х	Command HttpClient Allow Hostname Clear	288
Х	Command HttpClient Allow Hostname List	289
Х	Command HttpClient Allow Hostname Remove	289
Х	Command HttpClient Delete	289
Х	Command HttpClient Get	290
Х	Command HttpClient Patch	.291
Х	Command HttpClient Post	.292
Х	Command HttpClient Put	293

HttpFeedback commands	294
xCommand HttpFeedback Deregister	
xCommand HttpFeedback Enable	294
xCommand HttpFeedback Register	295

ogging commands29	5
xCommand Logging SendLogs	5

Macros commands 2	296
xCommand Macros Log Clear	96
xCommand Macros Log Get	96
xCommand Macros Macro Activate	96
xCommand Macros Macro Deactivate	96
xCommand Macros Macro Get	297
xCommand Macros Macro Remove	297
xCommand Macros Macro RemoveAll	297
xCommand Macros Macro Rename2	297
xCommand Macros Macro Roles Set	98
xCommand Macros Macro Save	98

xCommand Macros Runtime Restart	
xCommand Macros Runtime Start	
xCommand Macros Runtime Status	
xCommand Macros Runtime Stop	
Message commands	
xCommand Message Send	
Peripherals commands	
xCommand Peripherals Connect	
xCommand Peripherals HeartBeat	
xCommand Peripherals List	
xCommand Peripherals Pairing DeviceDiscovery Start	
xCommand Peripherals Pairing Pair	
xCommand Peripherals Pairing Unpair	
xCommand Peripherals Purge	
Phonebook commands	
xCommand Phonebook Contact Add	
xCommand Phonebook Contact Delete	
xCommand Phonebook Contact Modify	
xCommand Phonebook ContactMethod Add	
xCommand Phonebook ContactMethod Delete	
xCommand Phonebook ContactMethod Modify	
xCommand Phonebook Folder Add	
xCommand Phonebook Folder Delete	
xCommand Phonebook Folder Modify	
xCommand Phonebook Search	
Presentation commands	
xCommand Presentation Start	
xCommand Presentation Stop	

Provisioning commands 309 xCommand Provisioning CompleteUpgrade 309 xCommand Provisioning PostponeUpgrade 309 xCommand Provisioning CUCM ExtensionMobility Login 309 xCommand Provisioning CUCM ExtensionMobility Logout 309 xCommand Provisioning CUCM ExtensionMobility Logout 309 xCommand Provisioning RoomType Activate 310 xCommand Provisioning Service Fetch 310

Proximity commands	
xCommand Proximity Services Activate	
xCommand Proximity Services Deactivate	

RoomPreset commands	312
xCommand RoomPreset Activate	
xCommand RoomPreset Clear	
xCommand RoomPreset Store	

Security commands	313
xCommand Security Certificates CA Add	
xCommand Security Certificates CA Delete	
xCommand Security Certificates CA Show	
xCommand Security Certificates Services Activate	
xCommand Security Certificates Services Add	
xCommand Security Certificates Services Deactivate	
xCommand Security Certificates Services Delete	
xCommand Security Certificates Services Show	
xCommand Security Certificates ThirdParty Disable	
xCommand Security Certificates ThirdParty Enable	
xCommand Security Certificates ThirdParty List	
xCommand Security Certificates ThirdParty Show	
xCommand Security Certificates Webex Show	
xCommand Security Persistency	
xCommand Security Session Get	
xCommand Security Session List	
xCommand Security Session Terminate	

Standby commands	
xCommand Standby Activate	
xCommand Standby Deactivate	
xCommand Standby Halfwake	
xCommand Standby ResetHalfwakeTimer	
xCommand Standby ResetTimer	
SystemUnit commands	318
xCommand SystemUnit Boot	
xCommand SystemUnit FactoryReset	
xCommand SystemUnit FirstTimeWizard Stop	
xCommand SystemUnit Notifications RemoveAll	
xCommand SystemUnit OptionKey Add	
xCommand SystemUnit OptionKey List	
xCommand SystemUnit OptionKey Remove	
xCommand SystemUnit OptionKey RemoveAll	
xCommand SystemUnit ProductPlatform Set	
xCommand SystemUnit SignInBanner Clear	
xCommand SystemUnit SignInBanner Get	
xCommand SystemUnit SignInBanner Set	
xCommand SystemUnit SoftReset	
xCommand SystemUnit SoftwareUpgrade	
xCommand SystemUnit WelcomeBanner Clear	
xCommand SystemUnit WelcomeBanner Get	
xCommand SystemUnit WelcomeBanner Set	
Time commands	
xCommand Time DateTime Get	
xCommand Time DateTime Set	
UserInterface commands	
xCommand UserInterface Branding Clear	
xCommand UserInterface Branding Delete	
xCommand UserInterface Branding Fetch	
xCommand UserInterface Branding Get	

xCommand UserInterface Branding Updated	.325
xCommand UserInterface Branding Upload	.325
xCommand UserInterface Extensions Clear	326
xCommand UserInterface Extensions List	326
xCommand UserInterface Extensions Panel Clicked	326
xCommand UserInterface Extensions Panel Close	326
xCommand UserInterface Extensions Panel Open	.327
xCommand UserInterface Extensions Panel Remove	.327
xCommand UserInterface Extensions Panel Save	.327
xCommand UserInterface Extensions Panel Update	.327
xCommand UserInterface Extensions Set	328
xCommand UserInterface Extensions Widget Action	328
xCommand UserInterface Extensions Widget SetValue	328
xCommand UserInterface Extensions Widget UnsetValue	328
xCommand UserInterface Message Alert Clear	329
xCommand UserInterface Message Alert Display	329
xCommand UserInterface Message Prompt Clear	329
xCommand UserInterface Message Prompt Display	330
xCommand UserInterface Message Prompt Response	330
xCommand UserInterface Message TextInput Clear	.331
xCommand UserInterface Message TextInput Display	.331
xCommand UserInterface Message TextInput Response	.332
xCommand UserInterface Message TextLine Clear	.332
xCommand UserInterface Message TextLine Display	333
xCommand UserInterface OSD Key Click	333
xCommand UserInterface OSD Key Press	333
xCommand UserInterface OSD Key Release	334
xCommand UserInterface Presentation ExternalSource Add	334
xCommand UserInterface Presentation ExternalSource List	335
xCommand UserInterface Presentation ExternalSource Remove	335
xCommand UserInterface Presentation ExternalSource RemoveAll	335
xCommand UserInterface Presentation ExternalSource Select	335
xCommand UserInterface Presentation ExternalSource State Set	336

xCommand UserInterface WebView Clear	
xCommand UserInterface WebView Display	
UserManagement commands	337
xCommand UserManagement RemoteSupportUser Create	
xCommand UserManagement RemoteSupportUser Delete	
xCommand UserManagement RemoteSupportUser DisablePermanently	
xCommand UserManagement RemoteSupportUser GetState	
xCommand UserManagement User Add	
xCommand UserManagement User Delete	
xCommand UserManagement User Get	
xCommand UserManagement User List	
xCommand UserManagement User Modify	
xCommand UserManagement User Passphrase Change	
xCommand UserManagement User Passphrase Set	
xCommand UserManagement User Unblock	
Video commands	
Video commands xCommand Video ActiveSpeakerPIP Set	
xCommand Video ActiveSpeakerPIP Set	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource xCommand Video Input SetMainVideoSource	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource xCommand Video Input SetMainVideoSource xCommand Video Input Source SetActiveConnector xCommand Video Layout LayoutFamily Set	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource xCommand Video Input SetMainVideoSource xCommand Video Input SetActiveConnector xCommand Video Layout LayoutFamily Set xCommand Video Matrix Assign	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource xCommand Video Input SetMainVideoSource xCommand Video Input Source SetActiveConnector xCommand Video Input LayoutFamily Set xCommand Video Matrix Assign xCommand Video Matrix Reset xCommand Video Matrix Swap xCommand Video Matrix Swap xCommand Video Matrix Unassign	
xCommand Video ActiveSpeakerPIP Set xCommand Video CEC Input KeyClick xCommand Video CEC Output KeyClick xCommand Video CEC Output SendActiveSourceRequest xCommand Video CEC Output SendInactiveSourceRequest xCommand Video Input MainVideo Mute xCommand Video Input MainVideo Unmute xCommand Video Input SetMainVideoSource xCommand Video Input SetMainVideoSource xCommand Video Input Source SetActiveConnector xCommand Video Layout LayoutFamily Set xCommand Video Matrix Assign xCommand Video Matrix Reset xCommand Video Matrix Swap	

cisco Collaboration Endpoint Software

xCommand Video Output Monitor Brightness Set	347
xCommand Video Output Monitor Color Blue Set	347
xCommand Video Output Monitor Color Green Set	347
xCommand Video Output Monitor Color Red Set	348
xCommand Video Output Monitor Color Select	348
xCommand Video Output Monitor Contrast Set	348
xCommand Video Output Monitor CSC Select	348
xCommand Video Output Monitor Gamma Set	349
xCommand Video Output Monitor Reset	349
xCommand Video Output Monitor Sharpness Set	349
xCommand Video PresentationPIP Set	349
xCommand Video PresentationView Set	350
xCommand Video Selfview Set	350

Webex commands	351
xCommand Webex Registration Cancel	
xCommand Webex Registration Start	

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 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, macros and Audio Console see the Administrator Guide and Customization Guide for the device.

xCommand Audio Diagnostics Advanced Run

Applies to: All products

Requires user role: ADMIN, USER

This command sends out a noise signal sequentially on all audio output connectors and measures the room impulse response (RIR) between the output and the microphones. If a RIR is detected, the detected number of microphones (input), the detected number of output connectors, and the detected delay between the output and input is reported back.

Example:

xCommand Audio Diagnostics Advanced Run Volume: 50 MeasurementLength: 1 Result returned ->

OK

*r AdvancedRunResult (status=OK):

*r AdvancedRunResult HdmiSpeakersDelay: "100 ms"

- *r AdvancedRunResult NumHdmiSpeakersDetected: 2
- *r AdvancedRunResult NumMicsDetected: 1
- ** end

USAGE:

xCommand Audio Diagnostics Advanced Run [MeasurementLength: <u>MeasurementLength</u>] [Volume: <u>Volume</u>]

where

MeasurementLength:

Integer (1..100)

The length of the measurement in number of seconds. In a noisy environment a longer measurement duration will give a more reliable and robust result.

Default value: 3

Volume:

Integer (0..50)

The volume of the test signal. In a noisy environment a higher volume gives more reliable and robust results.

Default value: 20

xCommand Audio Diagnostics MeasureDelay

Applies to: All products

Requires user role: ADMIN, USER

This command measures the audio delay/latency in a device that is connected to the video conferencing device. A typical use case it to measure the delay in a TV connected to the video conferencing device 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:

xCommand Audio Diagnostics MeasureDelay [MeasurementLength: <u>MeasurementLength</u>] [Output: <u>Output</u>] [Volume: <u>Volume</u>]

where

MeasurementLength:

Integer (1..100)

The length of the measurement in number of seconds. In a noisy environment a longer measurement duration 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 conferencing devices that have a Line output).

Internal: Measure the delay of the internal loudspeaker (only available on video conferencing devices that have an internal loudspeaker).

All: Will measure the maximum delay of all outputs.

Default value: HDMI

Volume:

Integer (0..50)

The volume of 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: 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 EqualizerId and Section. Each of the 8 available equalizers consist of 6 cascaded second-order IIR filters.

USAGE:

xCommand Audio Equalizer Update EqualizerId: <u>EqualizerId</u> FilterType: <u>FilterType</u> Frequency: "<u>Frequency</u>" Gain: "<u>Gain</u>" Q: "<u>Q</u>" Section: <u>Section</u>

where

EqualizerId:

Integer (1..8)

FilterType:

highpass/highshelf/lowpass/lowshelf/none/peaking

Frequency:

String (0, 32)

<u>Gain</u>:

String (0, 32)

<u>Q</u>:

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.

USAGE:

xCommand Audio LocalInput Add [InputId: <u>InputId</u>] [Name: "<u>Name</u>"] [AGC: <u>AGC</u>] [Channels: <u>Channels</u>] [Direct: <u>Direct</u>] [MixerMode: <u>MixerMode</u>] [Mute: <u>Mute</u>] where

InputId:

Integer (0..65534)

A unique identifier for the local input. If you don't specify an InputID, the device 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.

<u>Name</u>:

String (0, 255)

Choose a name that describes the local input. If you don't specify a name, the string will be empty.

<u>AGC</u>:

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 frame-work, in order to make the definition persistent over a reboot.

USAGE:

xCommand Audio LocalInput AddConnector InputId: <u>InputId</u> ConnectorType: <u>ConnectorType</u> ConnectorId: <u>ConnectorId</u>

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/MX800]

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.

USAGE:

xCommand Audio LocalInput Remove InputId: <u>InputId</u>

where

<u>InputId</u>:

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 frame-work, in order to make the definition persistent over a reboot.

USAGE:

xCommand Audio LocalInput RemoveConnector InputId: <u>InputId</u> ConnectorType: <u>ConnectorType</u> ConnectorId: <u>ConnectorId</u>

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/MX800]

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:

xCommand Audio LocalInput Update InputId: <u>InputId</u> [Name: "<u>Name</u>"] [AGC: <u>AGC</u>] [Channels: <u>Channels</u>] [Direct: <u>Direct</u>] [MixerMode: <u>MixerMode</u>] [Mute: <u>Mute</u>] 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.

<u>Name</u>:

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.

<u>MixerMode</u>:

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.

<u>Mute</u>:

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 by default automatically added to this local output when in a call.Use the AutoconnectRemote parameter if you want to override the default behavior. 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.

USAGE:

xCommand Audio LocalOutput Add [OutputId: <u>OutputId</u>] [Name: "<u>Name</u>"] [AutoconnectRemote: <u>AutoconnectRemote</u>] [Loudspeaker: <u>Loudspeaker</u>] [Channels: <u>Channels</u>] [VolumeControlled: <u>VolumeControlled</u>]

where

<u>OutputId</u>:

Integer (0..65534)

A unique identifier for the local output. If you don't specify an Outputld, the device will automatically create one for you. We recommend that you specify the Outputld yourself in case you need to refer to the output module at a later stage.

Default value: 0

<u>Name</u>:

String (0, 255)

Choose a name that describes the local output.

Default value: " "

AutoconnectRemote:

On/Off

On: The remote input signal is automatically added to the local output when in a call. *Off:* The remote input signal is not added to the local output.

Default value: On

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

<u>Channels</u>:

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. If Loudspeaker is On, VolumeControlled is forced to On no matter what you specify here.

Off: The volume is neither influenced by the volume controls on the user interface, nor the xCommand Audio Volume commands.

Default value: Off

xCommand Audio LocalOutput AddConnector

Applies to: *SX80 MX700/MX800/MX800D CodecPro Room70G2* Reauires 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.

USAGE:

xCommand Audio LocalOutput AddConnector OutputId: <u>OutputId</u> ConnectorType: <u>ConnectorType</u> ConnectorId: <u>ConnectorId</u>

where

<u>OutputId</u>:

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.

<u>ConnectorType</u>:

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.

USAGE:

xCommand Audio LocalOutput ConnectInput OutputId: <u>OutputId</u> InputId: <u>InputId</u> [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* Reauires 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.

USAGE:

xCommand Audio LocalOutput DisconnectInput OutputId: $\underline{\textit{OutputId}}$ InputId: $\underline{\textit{InputId}}$ where

<u>OutputId</u>:

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.

<u>InputId</u>:

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 frame-work, in order to make the definition persistent over a reboot.

USAGE:

xCommand Audio LocalOutput Remove OutputId: OutputId

where

<u>OutputId</u>:

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.

USAGE:

xCommand Audio LocalOutput RemoveConnector OutputId: <u>OutputId</u> ConnectorType: <u>ConnectorType</u> ConnectorId: <u>ConnectorId</u>

where

<u>OutputId</u>:

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 Room7062]

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.

USAGE:

xCommand Audio LocalOutput Update OutputId: <u>OutputId</u> [Name: "<u>Name</u>"] [AutoconnectRemote: <u>AutoconnectRemote</u>] [Loudspeaker: <u>Loudspeaker</u>] [Channels: Channels] [VolumeControlled: VolumeControlled]

where

<u>OutputId</u>:

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.

<u>Name</u>:

String (0, 255)

Choose a name that describes the local output.

AutoconnectRemote:

On/Off

On: The remote input signal is automatically added to the local output when in a call. *Off:* The remote input signal is not added to 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. If Loudspeaker is On, VolumeControlled is forced to On no matter what you specify here.

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.

USAGE:

xCommand Audio LocalOutput UpdateInputGain OutputId: <u>OutputId</u> InputId: <u>InputId</u> [InputGain: <u>InputGain</u>]

where

<u>OutputId</u>:

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.

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: <u>OutputId</u> InputId: <u>InputId</u> [InputGain: <u>InputGain</u>]

where

<u>OutputId</u>:

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).

<u>InputGain</u>:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.

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: <u>OutputId</u> InputId: <u>InputId</u> where

<u>OutputId</u>:

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: <u>OutputId</u> InputId: <u>InputId</u> [InputGain: <u>InputGain</u>]

where

<u>OutputId</u>:

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).

<u>InputGain</u>:

Integer (-54..15)

Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.

xCommand Audio Select

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 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: <u>Device</u>

where

<u>Device</u>:

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to use the built-in loudspeakers and microphone (internal), a Bluetooth headset (DX70 and DX only), 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 Setup Reset

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

This command resets the audio setup of the video conferencing device (as set up using the Audio Console application or API commands). In effect it removes all local inputs and local outputs, sets connectors and groups back to their default values, and rebuilds the audio setup the same way as after a restart.

USAGE:

xCommand Audio Setup Reset

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/Announcement/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 device to verify that the test sequence plays correctly.

The device uses the connected microphones to listen for the test signal, and the result of the test is returned in the API.

USAGE:

xCommand Audio SpeakerCheck [MeasurementLength: <u>MeasurementLength</u>] [Volume: <u>Volume</u>]

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.

USAGE:

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: <u>Loop</u>] RingTone: "<u>RingTone</u>" 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

<u>RingTone</u>:

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 video conferencing device. 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, DX80, Room Kit, Room Kit Mini, and Room 55 have several audio units: built-in loudspeakers, headsets, and handset. This command affects only one unit at a time. You can use the optional Device parameter to specify which audio unit to address. The most recently selected unit is chosen if you don't specify a unit (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

USAGE:

xCommand Audio Volume Decrease [Device: <u>Device</u>] [Steps: <u>Steps</u>]

where

Device: [DX70/DX80 RoomKit RoomKitMini Room55]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to decrease the volume on the built-in loudspeakers (internal), a Bluetooth headset ((DX70 and DX80 only), an analog headset (DX70 only), a USB headset, or a USB handset.

<u>Steps</u>:

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 video conferencing device. 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, DX80, Room Kit, Room Kit Mini, and Room 55 have several audio units: built-in loudspeakers, headsets, and handset. This command affects only one unit at a time. You can use the optional Device parameter to specify which audio unit to address. The most recently selected unit is chosen if you don't specify a unit (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

USAGE:

xCommand Audio Volume Increase [Device: Device] [Steps: Steps]

where

Device: [DX70/DX80 RoomKit RoomKitMini Room55]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to increase the volume on the built-in loudspeakers (internal), a Bluetooth headset (DX70 and DX80 only), an analog headset (DX70 only), a USB headset, or a USB handset.

<u>Steps</u>:

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 video conferencing device.

Note that DX70, DX80, Room Kit, Room Kit Mini, and Room 55 have several audio units: built-in loudspeakers, headsets, and handset. This command affects only the selected audio unit. Refer to the xStatus Audio SelectedDevice and xCommand Audio Select commands for more information about the selected unit.

USAGE:

xCommand Audio Volume Mute

xCommand Audio Volume Set

Applies to: All products

Requires user role: ADMIN, USER

Set the volume on the video conferencing device to a specified level.

Note that DX70, DX80, Room Kit, Room Kit Mini, and Room 55 have several audio units: built-in loudspeakers, headsets, and handset. This command affects only one unit at a time. You can use the optional Device parameter to specify which unit to address. The most recently selected unit is chosen if you don't specify a unit (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

USAGE:

xCommand Audio Volume Set [Device: <u>Device</u>] Level: <u>Level</u>

where

Device: [DX70/DX80 RoomKit RoomKitMini Room55]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB

Choose whether to set the volume on the built-in loudspeakers (internal), a Bluetooth headset (DX70 and DX80 only), 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 Room Kit, Room Kit Mini, Room 55, DX70, and DX80 have several audio unit: built-in loudspeakers, headsets, and handset. This command affects only one unit at a time. You can use the optional Device parameter to specify which audio unit to address. The most recently selected unit is chosen if you don't specify a unit (see xStatus Audio SelectedDevice). Also refer to xCommand Audio Select.

USAGE:

xCommand Audio Volume SetToDefault [Device: <u>Device</u>]

where

Device: [DX70/DX80 RoomKit RoomKitMini Room55]

Internal/HeadsetUSB/HandsetUSB [RoomKit RoomKitMini Room55]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB [DX70/DX80]

Choose whether to set the volume on the built-in loudspeakers (intern), a Bluetooth headset (DX70 and DX80 only), 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 device 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:

xCommand Audio VuMeter Start ConnectorID: <u>ConnectorID</u> ConnectorType: <u>ConnectorType</u> [IncludePairingQuality: <u>IncludePairingQuality</u>] [IntervalMs: <u>IntervalMs</u>]

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..1) for Microphone; Integer (1..1) for HDMI [RoomKitMini Boards]

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 device 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/MX800]

Line/Microphone [SX20]

HDMI/Microphone [DX70/DX80 SX10 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

HDMI/Microphone/MicArray [Boards]

Select the connector type.

IncludePairingQuality:

Off/On

The device 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 device'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

IntervalMs:

10..1000

Specifies the update interval in milliseconds of the VuMeter values. The values can be specified in 10 ms steps.

Default value: 100

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:

xCommand Audio VuMeter Stop ConnectorID: <u>ConnectorID</u> ConnectorType: <u>ConnectorType</u>

where

<u>ConnectorID</u>:

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..1) for Microphone; Integer (1..1) for HDMI [RoomKitMini Boards]

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 device 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]

Line/Microphone [SX20]

HDMI/Microphone [DX70/DX80 SX10 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

HDMI/Microphone/MicArray [Boards]

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: "<u>Id</u>" where <u>Id</u>: *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 device. 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: <u>Days</u>] [DayOffset: <u>DayOffset</u>] [Limit: <u>Limit</u>] [Offset: <u>Offset</u>]

where

<u>Days</u>:

Integer (1..365)

Number of days to retrieve bookings from.

<u>DayOffset</u>:

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 device to snooze.

USAGE:

xCommand Bookings NotificationSnooze [Id: "<u>Id</u>"] [SecondsToSnooze: <u>SecondsToSnooze</u>] where <u>Id</u>: String (0..128) The ID of the notification snooze setting. <u>SecondsToSnooze</u>: Integer (1..3600) The duration of the snooze period, in seconds.

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: <u>CallId</u>]

where

<u>CallId</u>:

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: <u>CallId</u>]

where

<u>CallId</u>:

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: <u>CallId</u>] DTMFString: "<u>DTMFString</u>" 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: <u>CallId</u>] Value: <u>Value</u> 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: <u>CallId</u>]

where

<u>CallId</u>:

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: <u>CallId</u>] PresetId: <u>PresetId</u>

where

<u>CallId</u>:

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

<u>PresetId</u>:

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 device.

USAGE:

xCommand Call FarEndControl Source Select [CallId: $\underline{CallId}]$ SourceId: $\underline{SourceId}$ 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: "<u>Text</u>" Type: "<u>Type</u>" [CallId: <u>CallId</u>] 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.

<u>CallId</u>:

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: "<u>Message</u>" [CallId: <u>CallId</u>] 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{CallId} where

<u>Message</u>:

String (0, 255)

Enter the message to be sent to the far end.

<u>CallId</u>:

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 device to forward all calls.

USAGE:

xCommand Call Forward DisplayName: "<u>DisplayName</u>" Number: "<u>Number</u>" where

<u>DisplayName</u>:

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: <u>CallId</u>] [Reason: <u>Reason</u>]

where

<u>CallId</u>:

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

<u>Reason</u>:

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: <u>CallId</u>

where

<u>CallId</u>:

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: <u>CallId</u>]

where

<u>CallId</u>:

Integer (0..65534)

You can have from 1 to 10 CallId 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: <u>CallId</u>]

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

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: <u>CallId</u>]

where

<u>CallId</u>:

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 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: <u>CallId</u> Number: "<u>Number</u>" 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 transferred 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:

xCommand CallHistory AcknowledgeMissedCall CallHistoryId: <u>CallHistoryId</u> [AcknowledgeConsecutiveDuplicates: <u>AcknowledgeConsecutiveDuplicates</u>] where

CallHistoryId:

Integer (1..2147483647)

CallHistoryld 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:

xCommand CallHistory DeleteAll [Filter: $\underline{\it Filter}]$ where

<u>Filter</u>:

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:

xCommand CallHistory DeleteEntry CallHistoryId: <u>CallHistoryId</u> [DeleteConsecutiveDuplicates: <u>DeleteConsecutiveDuplicates</u>]

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 device.

USAGE:

xCommand CallHistory Get [Filter: <u>Filter</u>] [Offset: <u>Offset</u>] [Limit: <u>Limit</u>] [DetailLevel: <u>DetailLevel</u>] [SearchString: "<u>SearchString</u>"] [CallHistoryId: <u>CallHistoryId</u>]

where

<u>Filter</u>:

All/Missed/AnsweredElsewhere/Forwarded/Placed/NoAnswer/Received/Rejected/ UnacknowledgedMissed

You can filter which calls to retrieve.

Default value: All

<u>Offset</u>:

Integer (0..65534)

Sets the call from which to start.

Default value: 0

<u>Limit</u>:

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 (1..2147483647) 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 device.

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: <u>Axis</u>] CameraId: <u>CameraId</u>
where
<u>Axis:</u>
 All/Focus/PanTilt/Zoom
 Select which function to reset. If not specified all are reset.
 Default value: All
 <u>CameraId</u>:
 Integer (1..1) [SX10 SX20 MX200G2/MX300G2]
 Integer (1..7) [SX80 MX700/MX800/ 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

Set the camera position. If the combination of the pan, tilt, zoom, and roll values is not possible, the camera automatically adjusts the values to a valid combination.

USAGE:

xCommand Camera PositionSet CameraId: <u>CameraId</u> [Focus: <u>Focus</u>] [Lens: <u>Lens</u>] [Pan: <u>Pan</u>] [Roll: <u>Roll</u>] [Tilt: <u>Tilt</u>] [Zoom: <u>Zoom</u>]

where

CameraId:

Integer (1..1) [SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Boards]

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.

<u>Lens</u>:

Wide/Center/Left/Right Set the camera's lens position.

Pan:

Integer (-10000..10000) Move the camera to the left or right.

Roll: [CodecPro Room70G2]

Integer (-300..300)

Rotate the camera view. The observed image rotates counterclockwise when the value is positive, and clockwise when the value is negative. The unit is 1/100 degree, that is 300 corresponds to 3 degrees.

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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:

xCommand Camera Preset ActivateDefaultPosition [CameraId: <u>CameraId</u>] where

CameraId:

Integer (1..1) [SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Boards]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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:

xCommand Camera Preset Edit PresetId: <u>PresetId</u> [ListPosition: <u>ListPosition</u>] [Name: "Name"] [DefaultProsition: DefaultProsition]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>CameraId</u>] [DefaultPosition: <u>DefaultPosition</u>]

where

<u>CameraId</u>:

Integer (1..1) [SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Boards]

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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

<u>PresetId</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows the preset details for the requested PresetId.

USAGE:

xCommand Camera Preset Show PresetId: $\underline{\textit{PresetId}}$ where

<u>PresetId</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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

<u>PresetId</u>:

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) [SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Boards]

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.

<u>Name</u>:

String (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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>CameraId</u> [Pan: <u>Pan</u>] [PanSpeed: <u>PanSpeed</u>] [Tilt: <u>Tilt</u>] [TiltSpeed: <u>TiltSpeed</u>] [Zoom: <u>Zoom</u>] [ZoomSpeed: <u>ZoomSpeed</u>] [Focus: Focus] where

CameraId:

Integer (17)	[SX80	MX70	00/MX800/MX800D	CodecPlus	CodecPro	Room70/Ro	om55D	Room70G2]
Integer (11)	[SX10	SX20	MX200G2/MX300G	G2 RoomKit	RoomKitMi	ni Room55	Boards]

Select the camera.

<u>Pan</u>:

Left/Right/Stop

Move the camera to the Left or Right, followed by Stop.

PanSpeed:

Integer (1..15)

Set the pan speed.

<u>Tilt</u>:

Down/Up/Stop

Move the camera Up or Down, followed by Stop.

<u>TiltSpeed</u>:

Integer (1..15)

Set the tilt speed.

Zoom:

In/Out/Stop Zoom the camera In or Out, followed by Stop. ZoomSpeed:

Cameras commands

xCommand Cameras AutoFocus Diagnostics Start

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR

Start diagnostics on auto focus.

USAGE:

xCommand Cameras AutoFocus Diagnostics Start CameraId: <u>CameraId</u> where <u>CameraId</u>: <u>1.7</u>

Select which camera to diagnose.

xCommand Cameras AutoFocus Diagnostics Stop

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro 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

Select which camera to diagnose.

Integer (1..15) Set the zoom speed. <u>Focus</u>:

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:

xCommand Camera TriggerAutofocus CameraId: <u>CameraId</u>

where

CameraId:

Integer (1..7) [SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2] Integer (1..1) [SX10 SX20 MX200G2/MX300G2]

Select the camera to auto-focus.

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 device'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: <u>Mode</u>

where

<u>Mode</u>:

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 device 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.

 $\,$ 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 device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Activate SpeakerTrack or Best Overview mode. Requires that xConfiguration Cameras SpeakerTrack Mode is set to Auto (default).

This command applies only to devices with cameras that support speaker tracking or best overview.

USAGE:

xCommand Cameras SpeakerTrack Activate

xCommand Cameras SpeakerTrack Deactivate

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Deactivate SpeakerTrack or Best Overview mode.

This command applies only to devices with cameras that support speaker tracking or best overview.

USAGE:

xCommand Cameras SpeakerTrack Deactivate

xCommand Cameras SpeakerTrack Diagnostics Start

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

Starts diagnostics on the camera's tracking.

This command applies only to devices with cameras that support speaker tracking or best overview.

The Tracking parameter only applies to the SpeakerTrack 60 camera and MX700/MX800 with dual camera.

USAGE:

xCommand Cameras SpeakerTrack Diagnostics Start [Tracking: <u>Tracking</u>] 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.

xCommand Cameras SpeakerTrack Diagnostics Stop

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

Stops diagnostics on the camera's tracking.

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: <u>CameraId</u> [WhiteboardId: <u>WhiteboardId</u>]

where

<u>CameraId</u>:

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:

xCommand Cameras SpeakerTrack Whiteboard AlignPosition CameraId: <u>CameraId</u> Distance: <u>Distance</u>

where

CameraId: [SX80 MX700/MX800/MX800D CodecPro Room70G2]

Integer(1..7)

The ID of the camera that is being positioned.

<u>Distance</u>: [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:

xCommand Cameras SpeakerTrack Whiteboard SetDistance Distance: $\underline{Distance}$ [WhiteboardId: $\underline{WhiteboardId}$]

where

<u>Distance</u>:

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: <u>CameraId</u> [WhiteboardId: <u>WhiteboardId</u>]

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.

Conference commands

xCommand Conference Call AuthenticationResponse

Applies to: *All products* Requires user role: ADMIN, USER

This command is only available for Cisco Webex registered devices. The command gives a response to an authentication request based on the Conference Call[n] AuthenticationRequest status.

USAGE:

xCommand Conference Call AuthenticationResponse [CallId: <u>CallId</u>] ParticipantRole: <u>ParticipantRole</u> [Pin: <u>Pin</u>]

where

<u>CallId</u>:

Integer (1..65534)

Unique identifier of the call. During a call you can run the xStatus Call command to see the CallId.

Default value: 0

ParticipantRole:

Host/Panelist/Guest

Host: Join as host.

Panelist: Join as panelist.

Guest: Join as guest.

<u>Pin</u>:

String(0, 32)

PIN code. Must be provided if joining as host, panelist or as guest when the Conference Call[n] AuthenticationRequest status indicates that a PIN code must provided.

Default value: " "

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:

xCommand Conference DoNotDisturb Activate [Timeout: Timeout]

where

<u>Timeout</u>:

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 Participant Admit

Applies to: All products

Requires user role: ADMIN, USER

Admits or lets in a participant that is waiting to be admitted into the call or meeting. This command is only available Cisco Webex registered devices.

A participant is waiting to be admitted if he has status "waiting" in the result from the Conference ParticipantList Search command (*r ParticipantListSearchResult Participant [n] Status = "waiting").

USAGE:

xCommand Conference Participant Admit CallId: <u>CallId</u> ParticipantId: "<u>ParticipantId</u>"

where

<u>CallId</u>:

Integer (0..65534)

Unique identifier of the call. During a call you can run the xStatus Call command to see the CallId.

ParticipantId:

String (0, 255)

Unique identifier of a participant in the call.

xCommand Conference Participant Disconnect

Applies to: All products

Requires user role: ADMIN, USER

Disconnects the participant from a call or meeting. It is only possible to disconnect a participant if the Conference Call[n] Capabilities ParticipantDisconnect status for the meeting shows Available.

USAGE:

xCommand Conference Participant Disconnect CallId: <u>CallId</u> ParticipantId: "ParticipantId"

where

<u>CallId</u>:

Integer (0..65534)

Unique identifier of the call. During a call you can run the xStatus Call command to see the CallId.

ParticipantId:

String (0, 255)

Unique identifier of a participant in the call.

xCommand Conference Participant Mute

Applies to: All products

Requires user role: ADMIN, USER

Mutes the participant in the call or meeting. It is only possible to mute a participant if the Conference Call[n] Capabilities ParticipantMute status shows Available.

USAGE:

xCommand Conference Participant Mute AudioMute: <u>AudioMute</u> CallId: <u>CallId</u> ParticipantId: "<u>ParticipantId</u>"

where

AudioMute:

On/Off

Indicate the desired mute state of the participant.

<u>CallId</u>:

Integer (0..65534)

Unique identifier of the call. During a call you can run the xStatus Call command to see the CallId.

ParticipantId:

String (0, 255)

Unique identifier of a participant in the call.

xCommand Conference Participant Search

Applies to: All products

Requires user role: ADMIN, USER

Searches the list of participants in the call or meeting. There is a participant list that can be searched only if the Conference Call[n] Capabilities ParticipantList status shows Available.

USAGE:

xCommand Conference Participant Search [CallId: <u>CallId</u>] [Limit: <u>Limit</u>] [Offset: <u>Offset</u>] [SearchString"]

where

<u>CallId</u>:

Integer (0..65534)

Unique identifier of the call. During a call you can run the xStatus Call command to see the CallId.

Default value: 0

<u>Limit</u>:

Integer (0..65534)

Limit the number of records (participants) in the result set to this number. For example, if the limit is set to 10, the result set will contain only 10 entries even if the total number of hits is larger.

Default value: 200

<u>Offset</u>:

Integer (0..65534)

Get records starting with this offset in a search.

Default value: 0

SearchString:

String (0,255)

URI or DisplayName. Leave this parameter empty if you want the search to return all participants in the call.

xCommand Conference Recording Pause

Applies to: All products

Requires user role: ADMIN, USER

Define if the recording of a meeting shall be paused. When you are recording a meeting, you can use this setting if you want to pause the recording. You can resume the recording by using the command Conference Recording Resume.

USAGE:

xCommand Conference Recording Pause [CallId: <u>CallId</u>]

where

<u>CallId</u>:

Integer (1..65534) Identify CallID for the remote participant.

xCommand Conference Recording Resume

Applies to: All products

Requires user role: ADMIN, USER

Define if the recording of a meeting shall be resumed. When you are recording a meeting, you can use this setting if you want to resume a recording that has previously been paused.

USAGE:

xCommand Conference Recording Resume [CallId: <u>CallId</u>]

where

<u>CallId</u>:

Integer (1..65534) Identify CallID for the remote participant.

xCommand Conference Recording Start

Applies to: *All products* Requires user role: ADMIN, USER

Define if the meeting shall be recorded. Once you are in a meeting, you can use this setting if you want to start recording. Note that the recording commands are only available if your infrastructure (Cisco Meeting Server) supports recording.

USAGE:

xCommand Conference Recording Start [CallId: <u>CallId</u>] where <u>CallId</u>: Integer (1..65534)

Identify CallID for the remote participant.

xCommand Conference Recording Stop

Applies to: *All products* Requires user role: ADMIN, USER

Define if the recording of a meeting shall be stoppped. When you are recording a meeting, you can use this setting to stop recording.

USAGE:

xCommand Conference Recording Stop [CallId: <u>CallId</u>] where

CallId:

Integer (1..65534) Identify CallID for the remote participant.

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:

xCommand Conference SpeakerLock Set Target: <u>Target</u> [CallId: <u>CallId</u>] where

<u>Target</u>:

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

This command runs self-diagnostics commands on the device.

USAGE:

xCommand Diagnostics Run [ResultSet: $\underline{\textit{ResultSet}}]$ where

<u>ResultSet</u>:

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 device. Returns information about the CallId and ConferenceId, which are required for some of the other commands.

USAGE:

xCommand Dial Number: "<u>Number</u>" [Protocol: <u>Protocol</u>] [CallRate: <u>CallRate</u>] [CallType: <u>CallType</u>] [BookingId: "<u>BookingId</u>"] [Appearance: <u>Appearance</u>] [DisplayName: "<u>DisplayName</u>"] [TrackingData: "TrackingData"]

where

Number:

- String (0, 255)
- Enter the number or address.

<u>Protocol</u>:

H320/H323/Sip/Spark

Select the call protocol.

<u>CallRate</u>:

Integer (64..6000) [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Integer (64..10000) [Boards]

Integer (64..3072) [SX10]

Set the call rate.

CallType:

Audio/Video/Auto

Select a call type (audio or video). By selecting Auto, the device will detect the call type automatically.

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: ""

<u>Appearance:</u>
Integer (1..999999999)
Not appliable. For internal usage only.
<u>DisplayName:</u>
String (0, 255)
The display name of the remote participant.
Default value: ""
<u>TrackingData:</u>
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: <u>Pin1</u>] [Pin2: <u>Pin2</u>] [Pin3: <u>Pin3</u>] [Pin4: <u>Pin4</u>] where Pin1:

High/Low

Pin2:

High/Low

<u>Pin3</u>:

High/Low

<u>Pin4</u>:

High/Low

HttpClient commands

xCommand HttpClient Allow Hostname Add

Applies to: *All products* Requires user role: ADMIN

Adds an HTTP(S) server to the list of allowed servers (hosts).

The HttpClient Allow Hostname commands let you set up and maintain a list of up to ten allowed hosts. As long as the list is not empty, you can send HTTP(S) requests only to the servers in the list. The check against the list is performed both when using insecure (HTTP) and secure (HTTPS) transfer of data.

USAGE:

xCommand HttpClient Allow Hostname Add Expression: "Expression"

where

Expression:

String (2, 200)

Regular expression that matches a host name or IP address of an HTTP(S) server.

xCommand HttpClient Allow Hostname Clear

Applies to: All products

Requires user role: ADMIN

Removes all HTTP(S) servers from the list of allowed servers (hosts), leaving you with an empty list.

USAGE:

xCommand HttpClient Allow Hostname Clear

xCommand HttpClient Allow Hostname List

Applies to: All products

Requires user role: ADMIN

Returns the list of allowed HTTP(S) servers (hosts).

The HttpClient Allow Hostname commands let you set up and maintain a list of up to ten allowed hosts. As long as the list is not empty, you can send HTTP(S) requests only to the servers in the list. The check against the list is performed both when using insecure (HTTP) and secure (HTTPS) transfer of data.

USAGE:

xCommand HttpClient Allow Hostname List

xCommand HttpClient Allow Hostname Remove

Applies to: All products

Requires user role: ADMIN

Removes an HTTP(S) server from the list of allowed servers (hosts). Use the HttpClient Allow Hostname List command to find the indentifier of each entry in the list.

USAGE:

xCommand HttpClient Allow Hostname Remove Id: Id

where

Id:

Integer (0..9)

The identifier of the HTTP(S) server you want to remove from the list.

xCommand HttpClient Delete

Applies to: *All products* Requires user role: ADMIN

Sends an HTTP(S) Delete request to the server that is specified in the Url parameter. You can use the AllowInsecureHTTPS parameter to specify whether or not to validate the server's certificate before sending data over HTTPS. This parameter has no effect unless the xConfiguration HttpClient AllowInsecureHTTPS is set to On. The command returns the HTTP status code along with the data returned from the server (HTTP headers and body).

USAGE:

xCommand HttpClient Delete [AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u>] [Header: "<u>Header</u>"] [ResponseSizeLimit: <u>ResponseSizeLimit</u>] [ResultBody: <u>ResultBody</u>] [Timeout: <u>Timeout</u>] Url: "<u>Url</u>"

where

AllowInsecureHTTPS:

False/True

If set to True the device skips the certificate validation process, and sends data to the server anyway. If set to False, the server certificate is checked, and data is not sent to the server if the certificate validation fails.

Default value: False

<u>Header</u>:

String (0, 1024)

An HTTP header field. You can add up 20 Header parameters in one command, each holding one HTTP header field.

ResponseSizeLimit:

Integer (1..100000)

The maximum payload size (bytes) of the response to this request. If the response payload is larger than this maximum size, the command returns a status error with a message saying that the maximum file size is exceeded. However, this has no effect on the server side; the request was received and processed properly by the server.

Default value: 100000

<u>ResultBody</u>:

None/PlainText/Base64

None: The body of the HTTP response (if any) is not included in the command result. *PlainText:* The body of the HTTP response is included in the command result as plain text. If the response contain non-printable letters, the command returns a status error with a message saying that non-printable data was encountered.

Base64: The body of the HTTP response is Base64 encoded before it is included in the command result.

Default value: None

Timeout:

Integer (1..30)

Timeout period in seconds. If the request is not completed during this period, the API will return an error.

Default value: 30

Url:

String (8, 2048)

The URL that the request will be sent to: $<\!$ Protocol> + $<\!$ Host name or IP address of an HTTP(S) server> + $<\!$ Path>.

xCommand HttpClient Get

Applies to: *All products* Requires user role: ADMIN

Sends an HTTP(S) Get request to the server that is specified in the Url parameter. You can use the AllowInsecureHTTPS parameter to specify whether or not to validate the server's certificate before sending data over HTTPS. This parameter has no effect unless the xConfiguration HttpClient AllowInsecureHTTPS is set to On. The command returns the HTTP status code along with the data returned from the server (HTTP headers and body).

USAGE:

xCommand HttpClient Get [AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u>] [Header: "<u>Header</u>"] [ResponseSizeLimit: <u>ResponseSizeLimit</u>] [ResultBody: <u>ResultBody</u>] [Timeout: <u>Timeout</u>] Url: "<u>Url</u>"

where

AllowInsecureHTTPS:

False/True

If set to True the device skips the certificate validation process, and sends data to the server anyway. If set to False, the server certificate is checked, and data is not sent to the server if the certificate validation fails.

Default value: False

<u>Header</u>:

String (0, 1024)

An HTTP header field. You can add up 20 Header parameters in one command, each holding one HTTP header field.

ResponseSizeLimit:

Integer (1..100000)

The maximum payload size (bytes) of the response to this request. If the response payload is larger than this maximum size, the command returns a status error with a message saying that the maximum file size is exceeded. However, this has no effect on the server side; the request was received and processed properly by the server.

Default value: 100000

<u>ResultBody</u>:

None/PlainText/Base64

None: The body of the HTTP response (if any) is not included in the command result. *PlainText:* The body of the HTTP response is included in the command result as plain text. If the response contain non-printable letters, the command returns a status error with a message saying that non-printable data was encountered.

Base64: The body of the HTTP response is Base64 encoded before it is included in the command result.

Default value: None

Timeout:

Integer (1..30)

Timeout period in seconds. If the request is not completed during this period, the API will return an error.

Default value: 30

Url:

String (8, 2048)

The URL that the request will be sent to: $<\!$ Protocol> + $<\!$ Host name or IP address of an HTTP(S) server> + $<\!$ Path>.

xCommand HttpClient Patch

Applies to: *All products* Requires user role: ADMIN

Sends an HTTP(S) Patch request to the server that is specified in the Url parameter. This is a multiline command, so the payload (data) follows after the parameters. You can use the AllowInsecureHTTPS parameter to specify whether or not to validate the server's certificate before sending data over HTTPS. This parameter has no effect unless the xConfiguration HttpClient AllowInsecureHTTPS is set to On. The command returns the HTTP status code along with the data returned from the server (HTTP headers and body).

USAGE:

xCommand HttpClient Patch [AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u>] [Header: "<u>Header</u>"] [ResponseSizeLimit: <u>ResponseSizeLimit</u>] [ResultBody: <u>ResultBody</u>] [Timeout: Timeout] Url: "Url"

where

AllowInsecureHTTPS:

False/True

If set to True the device skips the certificate validation process, and sends data to the server anyway. If set to False, the server certificate is checked, and data is not sent to the server if the certificate validation fails.

Default value: False

<u>Header</u>:

String (0, 1024)

An HTTP header field. You can add up 20 Header parameters in one command, each holding one HTTP header field.

ResponseSizeLimit:

Integer (1..100000)

The maximum payload size (bytes) of the response to this request. If the response payload is larger than this maximum size, the command returns a status error with a message saying that the maximum file size is exceeded. However, this has no effect on the server side; the request was received and processed properly by the server.

Default value: 100000

<u>ResultBody</u>:

None/PlainText/Base64

None: The body of the HTTP response (if any) is not included in the command result. *PlainText:* The body of the HTTP response is included in the command result as plain text. If the response contain non-printable letters, the command returns a status error with a

message saying that non-printable data was encountered.

Base64: The body of the HTTP response is Base64 encoded before it is included in the command result.

Default value: None

Timeout:

Integer (1..30)

Timeout period in seconds. If the request is not completed during this period, the API will return an error.

Default value: 30

<u>Url</u>:

String (8, 2048)

xCommand HttpClient Post

Applies to: *All products* Requires user role: ADMIN

Sends an HTTP(S) Post request to the server that is specified in the Url parameter.

You can use the AllowInsecureHTTPS parameter to specify whether or not to validate the server's certificate before sending data over HTTPS. This parameter has no effect unless the xConfiguration HttpClient AllowInsecureHTTPS is set to On.

This is a multiline command, so the payload (data) follows after the parameters.

USAGE:

xCommand HttpClient Post [AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u>] [Header: "<u>Header</u>"] [ResponseSizeLimit: <u>ResponseSizeLimit</u>] [ResultBody: <u>ResultBody</u>] [Timeout: Timeout] Url: "Url"

where

AllowInsecureHTTPS:

False/True

If set to True the device skips the certificate validation process, and sends data to the server anyway. If set to False, the server certificate is checked, and data is not sent to the server if the certificate validation fails.

Default value: False

<u>Header</u>:

String (0, 1024)

An HTTP header field. You can add up 20 Header parameters in one command, each holding one HTTP header field.

ResponseSizeLimit:

Integer (1..100000)

The maximum payload size (bytes) of the response to this request. If the response payload is larger than this maximum size, the command returns a status error with a message saying that the maximum file size is exceeded. However, this has no effect on the server side; the request was received and processed properly by the server.

Default value: 100000

<u>ResultBody</u>:

None/PlainText/Base64

None: The body of the HTTP response (if any) is not included in the command result. *PlainText:* The body of the HTTP response is included in the command result as plain text. If the response contain non-printable letters, the command returns a status error with a message saying that non-printable data was encountered.

Base64: The body of the HTTP response is Base64 encoded before it is included in the command result.

Default value: None

Timeout:

Integer (1..30)

Timeout period in seconds. If the request is not completed during this period, the API will return an error.

Default value: 30

Url:

String (8, 2048)

The URL that the request will be sent to: <Protocol> + <Host name or IP address of an HTTP(S) server> + <Path>.

xCommand HttpClient Put

Applies to: *All products* Requires user role: ADMIN

Sends an HTTP(S) Put request to the server that is specified in the Url parameter.

You can use the AllowInsecureHTTPS parameter to specify whether or not to validate the server's certificate before sending data over HTTPS. This parameter has no effect unless the xConfiguration HttpClient AllowInsecureHTTPS is set to On.

This is a multiline command, so the payload (data) follows after the parameters.

USAGE:

xCommand HttpClient Put [AllowInsecureHTTPS: <u>AllowInsecureHTTPS</u>] [Header: "<u>Header</u>"] [ResponseSizeLimit: <u>ResponseSizeLimit</u>] [ResultBody: <u>ResultBody</u>] [Timeout: Timeout] Url: "Url"

where

AllowInsecureHTTPS:

False/True

If set to True the device skips the certificate validation process, and sends data to the server anyway. If set to False, the server certificate is checked, and data is not sent to the server if the certificate validation fails.

Default value: False

<u>Header</u>:

String (0, 1024)

An HTTP header field. You can add up 20 Header parameters in one command, each holding one HTTP header field.

ResponseSizeLimit:

Integer (1..100000)

The maximum payload size (bytes) of the response to this request. If the response payload is larger than this maximum size, the command returns a status error with a message saying that the maximum file size is exceeded. However, this has no effect on the server side; the request was received and processed properly by the server.

Default value: 100000

<u>ResultBody</u>:

None/PlainText/Base64

None: The body of the HTTP response (if any) is not included in the command result. **PlainText:** The body of the HTTP response is included in the command result as plain text. If the response contain non-printable letters, the command returns a status error with a message saying that non-printable data was encountered. *Base64:* The body of the HTTP response is Base64 encoded before it is included in the command result.

Default value: None

Timeout:

Integer (1..30)

Timeout period in seconds. If the request is not completed during this period, the API will return an error.

Default value: 30

Url:

String (8, 2048)

The URL that the request will be sent to: <Protocol> + <Host name or IP address of an HTTP(S) server> + <Path>.

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: <u>FeedbackSlot</u> 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:

xCommand HttpFeedback Enable FeedbackSlot: <u>FeedbackSlot</u>

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 device to an HTTP(S) server to return XML feedback over HTTP(S) to specific URLs.

USAGE:

xCommand HttpFeedback Register FeedbackSlot: <u>FeedbackSlot</u> [Format: <u>Format</u>] ServerUrl: "<u>ServerUrl</u>" [Expression: "<u>Expression</u>"]

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.

Logging commands

xCommand Logging SendLogs

Applies to: *All products* Requires user role: ADMIN, USER

This command applies only to devices that are registered to the Cisco Webex cloud service. Send logs to the Cisco Webex cloud. These logs can help diagnose and fix issues with the device. The command returns a log ID, which an administrator or TAC engineer can use to identify and download the logs.

USAGE:

xCommand Logging SendLogs

Macros commands

xCommand Macros Log Clear

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN

Shows the logs for all running macros and for the runtime itself.

USAGE:

xCommand Macros Log Get [Offset: <u>Offset</u>]

where

<u>Offset</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Activates a macro created on this device.

USAGE:

xCommand Macros Macro Activate Name: "<u>Name</u>" 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Deactivates a macro currently running on this device.

USAGE:

xCommand Macros Macro Deactivate Name: "<u>Name</u>"

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Shows the details of a macro created on this device.

USAGE:

xCommand Macros Macro Get [Content: <u>Content</u>] [Name: "<u>Name</u>"] where

Content:

False/True

Shows the content for the specified Macro or not.

Default value: False

<u>Name</u>:

String (0..255) The name of the macro

xCommand Macros Macro Remove

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Removes a macro created on this device.

USAGE:

xCommand Macros Macro Remove Name: " $\underline{\it Name}$ " where

<u>Name</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Removes all of the macros created on this device.

USAGE:

xCommand Macros Macro RemoveAll

xCommand Macros Macro Rename

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN

Renames a macro created on this device.

Default value: False

USAGE:

xCommand Macros Macro Rename Name: "<u>Name</u>" NewName: "<u>NewName</u>" [Overwrite: <u>Overwrite]</u> where <u>Name</u>: String (0..255) The name of the macro that is renamed. <u>NewName</u>: String (0..255) The new name of the macro. <u>Overwrite</u>: False/True Overwrites the existing content or not.

xCommand Macros Macro Roles Set

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Sets the role for a macro.

USAGE:

xCommand Macros Macro Roles Set Name: "<u>Name</u>" [Role: <u>Role</u>] 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN

Saves the details of a macro. This is a multiline command.

USAGE:

xCommand Macros Macro Save Name: "<u>Name</u>" [Overwrite: <u>Overwrite</u>] [Transpile: <u>Transpile</u>] where Name:

String (0..255)

The name of the macro that is saved.

<u>Overwrite</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: "<u>Text</u>" where <u>Text</u>: String (0..255) The text that the message contains.

Peripherals commands

xCommand Peripherals Connect

Applies to: All products 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:

String (0, 100)

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: $\underline{Connected}$ [Type: \underline{Type}] where

Connected:

False/True

Limit the search to currently connected devices.

<u>Type</u>:

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: <u>DeviceType</u>] [Timeout: <u>Timeout</u>]
where
AutoPairing:

On/Off

You can select to automatically pair the detected device to the video conferencing device.

Default value: Off

<u>DeviceType</u>: 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 a video conferencing device.

USAGE:

xCommand Peripherals Pairing Pair MacAddress: "<u>MacAddress</u>"

where

MacAddress:

String (1, 1450)

Enter the MAC address for the ISDN Link you wish to pair to the video conferencing device.

xCommand Peripherals Pairing Unpair

Applies to: All products

Requires user role: ADMIN, USER

Unpair the video conferencing device from an ISDN Link, when the two have contact.

USAGE:

xCommand Peripherals Pairing Unpair MacAddress: "<u>MacAddress</u>" where

MacAddress:

String (1, 100)

Enter the MAC address for the ISDN Link you wish to unpair from the video conferencing device.

xCommand Peripherals Purge

Applies to: All products

Requires user role: ADMIN, USER

Force unpair a video conferencing device 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 video conferencing device.

USAGE:

xCommand Peripherals Purge ID: " \underline{ID} "

where

<u>ID</u>:

String (1, 100)

Mac address of the ISDN Link in the format "xx:xx:xx:xx:xx:xx.

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 Contactld, which is a unique string that identifies the contact; typically, the format is "localContactld-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 Touch controller. All contact methods are available on the other Uls.

USAGE:

xCommand Phonebook Contact Add Name: "<u>Name</u>" [Number: "<u>Number</u>"] [CallRate: <u>CallRate</u>] [CallType: <u>CallType</u>] [Device: <u>Device</u>] [FolderId: "<u>FolderId</u>"] [ImageURL: "ImageURL"] [Protocol: Protocol] [Tag: Tag] [Title: "Title"]

where

<u>Name</u>:

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.

CallType:

Audio/Video/Auto

Select a call type (audio or video). By selecting Auto, the device will detect the call type automatically.

Device:

Mobile/Other/Telephone/Video

Select the device type.

FolderId:

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.

<u>Protocol</u>:

Auto/H320/H323/SIP/Spark Select the Auto, Spark, SIP, H323 or H320 protocol.

<u>Tag</u>:

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:

xCommand Phonebook Contact Delete ContactId: "<u>ContactId</u>" where

where

<u>ContactId</u>:

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.

<u>Name</u>:

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.

<u>Tag</u>:

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 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 device'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.

USAGE:

xCommand Phonebook ContactMethod Add ContactId: "<u>ContactId</u>" [CallRate: <u>CallRate</u>] [CallType: <u>CallType</u>] [Device: <u>Device</u>] Number: "<u>Number</u>" [Protocol: <u>Protocol</u>]

where

<u>ContactId</u>:

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.

<u>CallRate</u>:

Integer (0..6000)

Set a call rate.

CallType:

Audio/Video/Auto

Select a call type (audio or video). By selecting Auto, the device will detect the call type automatically.

Default value: Auto

<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.

<u>Protocol</u>:

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:

xCommand Phonebook ContactMethod Delete ContactId: "<u>ContactId</u>" ContactMethodId: "ContactMethodId"

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: "<u>ContactId</u>" ContactMethodId: "<u>ContactMethodId</u>" [Device: <u>Device</u>] [Number: "<u>Number</u>"] [Protocol: <u>Protocol</u>] [CallRate: <u>CallRate</u>] [CallType: <u>CallType</u>]

where

<u>ContactId</u>:

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.

<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.

<u>Protocol</u>:

Auto/H320/H323/SIP/Spark

Select protocol.

<u>CallRate</u>:

Integer (0..6000)

Set a call rate.

CallType:

Audio/Video/Auto

Select a call type (audio or video). By selecting Auto, the device will detect the call type

automatically.

Default value: Auto

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: "<u>Name</u>" [ParentFolderId: "<u>ParentFolderId</u>"] 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: "<u>FolderId</u>" [Name: "<u>Name</u>"] [ParentFolderId: "<u>ParentFolderId</u>"]

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.

<u>Name</u>:

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: "<u>PhonebookId</u>"] [PhonebookType: <u>PhonebookType</u>] [SearchString: "<u>SearchString</u>"] [SearchField: <u>SearchField</u>] [SearchFilter: <u>SearchFilter</u>] [ContactType: <u>ContactType</u>] [Offset: <u>Offset</u>] [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:

All/Rooms/People

Only available for Cisco Webex registered devices. Filter search results by choosing the type of results you want to see. You can select rooms, people, or search in all directories.

<u>ContactType</u>:

Any/Folder/Contact

Search all contact types, or limit the search to folders or individual contacts.

Default value: Any

<u>Offset</u>:

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.

<u>Limit</u>:

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

<u>Recursive</u>:

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

<u>Tag</u>:

Untagged/Favorite

Limits the search to 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 multiple presentation sources in a single presentation video stream (the maximum number of different input sources depend on the type of video conferencing device) 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>] [Layout: <u>Layout</u>] [PresentationSource: <u>PresentationSource</u>] [SendingMode: SendingMode]

where

ConnectorId:

Integer (1..6) [CodecPro Room70G2]

Integer (1..5) [SX80 MX700/MX800/MX800D]

Integer (1..4) [MX200G2/MX300G2]

Integer (1..3) [CodecPlus Room55 Room70/Room55D]

Integer (1..2) [DX70/DX80 SX20 RoomKit RoomKitMini Boards]

Integer (2..3) [SX10]

Select the video input source to be used for presentation, identified by connectorId.

<u>Instance</u>:

New/1/2/3/4/5/6

Select which local presentation instance you wish to start.

Layout:

Equal/Prominent

Select the layout of the presentation if the stream is composed of multiple input sources. *Equal:* The presentations are shown in same-sized images. There can be a maximum of four images on screen.

Prominent: The first presentation source is shown as a large image, and the next

presentation sources are shown as smaller images placed below.

PresentationSource:

- Integer (1..6) [CodecPro Room70G2]
- Integer (1..4) [SX80 MX700/MX800/MX800D]
- Integer (1..2) [DX70/DX80 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Boards]
- 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.

SendingMode:

LocalRemote/LocalOnly

Select whether the presentation is shown local and/or remote.

LocalRemote: The presentation is shown both local and remote.

LocalOnly: The presentation is shown locally.

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: <u>Instance</u>] [PresentationSource: <u>PresentationSource</u>]

where

<u>Instance</u>:

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..3) [CodecPlus Room55 Room70/Room55D]
- Integer (1..2) [DX70/DX80 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Boards]

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:

xCommand Provisioning PostponeUpgrade SecondsToPostpone: $\underline{\mathit{SecondsToPostpone}}$ where

<u>SecondsToPostpone</u>:

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 username (UserId) and pin code (Pin). The username 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 username and pin code, CUCM will send a list of available profiles back to the device. Then the device will create corresponding ExtensionMobilityProfileSelection Profile events, so that a new login command, which contains the Profile parameter in addition to the username and pin code, can be submitted.

USAGE:

xCommand Provisioning CUCM ExtensionMobility Login UserId: "<u>UserId</u>" Pin: "<u>Pin</u>" [Profile: "<u>Profile</u>"]

where

<u>UserId</u>:

String (1, 255) A valid username, as set up in CUCM.

<u>Pin</u>:

String (1, 255)

A valid pin code for the user, as set up in CUCM.

<u>Profile</u>:

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

Add or update the customization template that details the custom elements of the device. Examples of custom elements are: branding images, macros, favorites, sign-in banner, and in-room control panels.

USAGE:

xCommand Provisioning Service Fetch [Checksum: "<u>Checksum</u>"] [ChecksumType: <u>ChecksumType</u>] [Mode: <u>Mode</u>] [Origin: <u>Origin</u>] URL: "<u>URL</u>"

where

Checksum:

String (0..128)

The checksum is used to ensure the integrity of the downloaded customization template. When using HTTP, it is mandatory to add a checksum. When using HTTPS, it is mandatory to add a checksum only if you are downloading the template from a server that presents an unsigned certificate, or a self-signed certificate that is not in the CA list of the device (not trusted).

ChecksumType:

SHA512

The algorithm that is used to calculate the checksum.

Default value: SHA512

<u>Mode</u>:

Add/Replace

If the mode is set to Add, all items listed in the uploaded file are added to the existing customization template. If the mode is set to Replace, the newer customization template that is uploaded, is compared against the previously uploaded template. Items that are not present in the newer file are removed. In both cases, items with the same name are overwritten.

Default value: Add

<u>Origin</u>:

Other/Provisioning

Specifies whether the customization template is used for provisioning or for another purpose. When the value is Provisioning, the configurations (xConfiguration) in the template are ignored, and the provisioning system (CUCM or TMS) can set configurations like they normally do. CUCM always acts as if this parameter is set to Provisioning. Note that some configurations may be specific to one device, and you may end up with

devices that you cannot reach if you provision those configurations to more than one device.

Default value: Other

<u>URL</u>:

String (0..128) The URL of the customization template.

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 device. 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: <u>PresetId</u> 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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:

xCommand RoomPreset Clear PresetId: <u>PresetId</u>

where

<u>PresetId</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 device may hold 15 such predefined video input presets. These presets are available for far end control, i.e. they are referred in the PresetId 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:

xCommand RoomPreset Store [Description: "<u>Description</u>"] PresetId: <u>PresetId</u> Type: <u>Type</u>

where

Description:

String (0, 255)

Enter a description of the camera preset.

<u>PresetId</u>:

Integer (1..15)

The ID of this preset.

<u>Type</u>:

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: " $\underline{\it Fingerprint}$ " 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: <u>Format</u>] where

Format:

PEM/Text

Specifies the format of the listed certificates, PEM (Privacy Enhanced Mail) or plain text. 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: "<u>Fingerprint</u>" Purpose: <u>Purpose</u>

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.

<u>Purpose</u>:

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: "<u>PrivateKeyPassword</u>"]

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: "<u>Fingerprint</u>" Purpose: <u>Purpose</u>

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: "<u>Fingerprint</u>" 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: $\underline{\textit{Filter}}$ [Format: $\underline{\textit{Format}}$] where

<u>Filter</u>:

802.1X/HTTPS/Audit/SIP

Filters the results according to the chosen service.

<u>Format</u>:

PEM/Text

Specifies the format of the listed certificates, PEM (Privacy Enhanced Mail) or plain text. Default value: Text

xCommand Security Certificates ThirdParty Disable

Applies to: All products

Requires user role: ADMIN

Disables a bundled certificate used for SMTP and HttpClient.

Disabling a certificate results in a server providing a certificate signed with this root certificate will be declined.

USAGE:

xCommand Security Certificates ThirdParty Disable Fingerprint: " $\underline{\it Fingerprint}$ " where

Fingerprint:

String (0..128)

The unique Identifier for the certificate that is disabled. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

xCommand Security Certificates ThirdParty Enable

Applies to: All products

Requires user role: ADMIN

Enables a bundled certificate used for SMTP and HttpClient.

USAGE:

xCommand Security Certificates ThirdParty Enable Fingerprint: " $\underline{Fingerprint}$ " where

Fingerprint:

String (0..128)

The unique Identifier for the certificate that is enabled. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

xCommand Security Certificates ThirdParty List

Applies to: *All products* Requires user role: ADMIN

Lists all bundled certificates and their state.

USAGE:

xCommand Security Certificates ThirdParty List

xCommand Security Certificates ThirdParty Show

Applies to: *All products* Requires user role: ADMIN

Shows a single third-party certificate.

USAGE:

xCommand Security Certificates ThirdParty Show Fingerprint: "<u>Fingerprint</u>" [Format: <u>Format</u>]

where

Fingerprint:

String (0..128)

The unique Identifier for the certificate you want to see. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

Format:

PEM/Text

Specifies the format of the listed certificates, PEM (Privacy Enhanced Mail) or plain text. Default value: Text

xCommand Security Certificates Webex Show

Applies to: All products

Requires user role: ADMIN, USER

This command applies only to devices that are registered to the Cisco Webex cloud service. Shows the list of trusted CA certificates that verifies the certificates of servers and services used by the Cisco Webex cloud.

USAGE:

xCommand Security Certificates Webex Show [Filter: <u>Filter</u>] [Format: <u>Format</u>] where

<u>Filter</u>:

Cisco/Non-Cisco/TLS-proxy

Cisco: Shows the list of CA certificates used when communicating with servers and services that are provided by Cisco.

Non-Cisco: Shows the list CA certificates used when communicating with servers and services that are provided by others than Cisco.

TLS-proxy: Shows the list of additional CA certificates required when using a TLS inspecting proxy for outbound traffic.

Format:

PEM/Text

Specifies the format of the listed certificates, PEM (Privacy Enhanced Mail) or plain text. Default value: Text

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 device. Persistent mode is the default. This command reboots the device.

USAGE:

xCommand Security Persistency Configurations: <u>Configurations</u> CallHistory: <u>CallHistory</u> InternalLogging: <u>InternalLogging</u> LocalPhonebook: <u>LocalPhonebook</u> DHCP: <u>DHCP</u> ConfirmAndReboot: <u>ConfirmAndReboot</u>

where

Configurations:

NonPersistent/Persistent

In non-persistent mode, all configurations are set back to default when the device reboots.

CallHistory:

NonPersistent/Persistent

In non-persistent mode call history is deleted when the device reboots.

InternalLogging:

NonPersistent/Persistent

In non-persistent mode eventlog is deleted when the device reboots.

LocalPhonebook:

NonPersistent/Persistent

In non-persistent mode local phone book is deleted when the device reboots.

DHCP:

NonPersistent/Persistent

In non-persistent mode all IP related information is deleted when the device reboots.

ConfirmAndReboot:

Yes

Reboots the device.

xCommand Security Session Get

Applies to: *All products* Requires user role: ADMIN, AUDIT, INTEGRATOR, ROOMCONTROL, USER Shows details of your current session.

USAGE: xCommand Security Session Get

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: "<u>SessionId</u>" 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 device 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 device out of standby mode.

USAGE: xCommand Standby Deactivate

xCommand Standby Halfwake

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR

Sets the device 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 device is in Halfwake mode when the reset timer is set, the device is brought out of Halfwake mode. When left idle for the given delay the device goes into halfwake mode.

USAGE:

xCommand Standby ResetHalfwakeTimer Delay: <u>Delay</u>

where

<u>Delay</u>:

Integer (1..480) Set the delay in minutes.

xCommand Standby ResetTimer

Applies to: All products

Requires user role: ADMIN, USER

Reset the standby delay timer or set a temporary standby delay. If the device is in standby mode when the timer is set, the device is brought out of standby mode before starting the countdown.

If you don't specify a Delay, the standby delay timer is reset, and the device goes into standby after the period that is given by the Standby Delay setting (xConfiguration Standby Delay). If you do specify a Delay, the device goes into standby when it has been idle for the specified period. Next time, the standby delay is as configured in the Standby Delay setting again.

USAGE:

xCommand Standby ResetTimer [Delay: Delay]

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 device.

USAGE:

xCommand SystemUnit Boot [Action: <u>Action</u>]

where

<u>Action</u>:

Restart/Shutdown

As a default the device restarts after a reboot. By selecting Shutdown, the device 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 device 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 device.

As a default the device restarts after the factory reset, but other behaviors can be forced by selecting a different TrailingAction.

USAGE:

xCommand SystemUnit FactoryReset Confirm: <u>Confirm</u> [Keep: <u>Keep</u>] [TrailingAction: <u>TrailingAction</u>]

where

Confirm

Yes

Include to confirm your choice.

<u>Keep</u>:

Certificates/HTTP/LocalSetup/Network/Provisioning/SerialPort/Webex

Select which configurations and files to keep when you factory reset the device. 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 device, so the device can be set up without it. The wizard only appears again if the device 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: " $\underline{\textit{Key}}"$ where

<u>Key</u>:

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: <u>Type</u> where <u>Type</u>: RemoteMonitoring [DX70/DX80] Encryption/RemoteMonitoring [SX10] MultiSite/RemoteMonitoring [SX20] Encryption/MultiSite/RemoteMonitoring [SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]

xCommand SystemUnit OptionKey RemoveAll

Applies to: *All products* Requires user role: ADMIN

Remove all option keys.

USAGE:

xCommand SystemUnit OptionKey RemoveAll Confirm: <u>Confirm</u> where <u>Confirm</u>: 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 device. This command is typically used after a device has been in for repair and the product platform don't match the actual product. Use with caution.

USAGE:

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/MX800]

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).

MX70057: The platform is set to MX700 (dual screen, dual camera).
 MX8007: The platform is set to MX800 (single screen, single camera).
 MX80057: The platform is set to MX800 (single screen, dual camera).
 MX80057: 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 device's user interface. This is a multiline command.

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: <u>Confirm</u> where <u>Confirm</u>:

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

<u>URL</u>:

String (0, 255)

The URL to the software package location.

Forced:

False/True

You can force a device 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, ROOMCONTROL, 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. This is a multi-line command.

Use:

xCommand SystemUnit WelcomeBanner 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 device.

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 device, if not available from NTP (Network Time Protocol).

USAGE:

xCommand Time DateTime Set [Year: <u>Year</u>] [Month: <u>Month</u>] [Day: <u>Day</u>] [Hour: <u>Hour</u>] [Minute: <u>Minute</u>] [Second: <u>Second</u>] where

<u>Year</u>:

Integer (2015..2037)

<u>Month</u>:

Integer (1..12)

<u>Day</u>:

Integer (1..31)

<u>Hour</u>:

Integer (0..23)

<u>Minute</u>:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

Deletes the custom wallpaper, the brand background image, and the logo files from the device.

USAGE:

xCommand UserInterface Branding Clear

xCommand UserInterface Branding Delete

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

Deletes the image file, which is specified in the Type parameter, from the device.

USAGE:

xCommand UserInterface Branding Delete Type: <u>Type</u>

where

Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

Branding/HalfwakeBackground/HalfwakeBranding [Boards]

Background: Delete the custom wallpaper.

Branding: Delete the logo that is displayed when the device is active.

HalfwakeBackground: Delete the brand image that is displayed as a background when the device is in the halfwake state.

HalfwakeBranding: Delete the logo that is displayed when the device is in the halfwake state.

xCommand UserInterface Branding Fetch

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

Fetches an image file from a URL and stores the file on the device. The following image formats are supported: BMP, GIF, JPEG, and PNG. The maximum image size is 16 megapixels, and the maximum file size is 4 MByte.

The Type parameter determines what kind of image it is. If it is a background image, the associated feature (Custom wallpaper or Branding with background and logo) is automatically applied.

This command issues an HTTP request, so it is included in the HTTP requests count. The maximum number of concurrent requests is limited.

USAGE:

xCommand UserInterface Branding Fetch [Checksum: "<u>Checksum</u>"] [ChecksumType: <u>ChecksumType</u>] Type: <u>Type</u> URL: "<u>URL</u>"

where

Checksum:

String (0, 128)

The checksum is used to ensure the integrity of the downloaded image file. When using HTTP, it is mandatory to add a checksum. When using HTTPS, it is mandatory to add a checksum only if you are downloading the template from a server that presents an unsigned certificate, or a self-signed certificate that is not in the CA list of the device (not trusted).

ChecksumType:

SHA512

The algorithm that is used to calculate the checksum.

Default value: SHA512

Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

Branding/HalfwakeBackground/HalfwakeBranding [Boards]

Background: Fetches a background image that can be used as custom wallpaper.

Branding: Fetches a logo that can be displayed when the device is active.

HalfwakeBackground: Fetches a brand image that can be displayed as a background when the device is in the halfwake state.

HalfwakeBranding: Fetches a logo that can be displayed when the device is in the

halfwake state. <u>URL</u>: String (5, 250) The URL of the image file.

xCommand UserInterface Branding Get

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

The command returns the image file that is specified in the Type parameter, given that such a file is stored on the device. The file is Base64 encoded. The format is JPG for background images and PNG for logos, regardless of the format of the originally uploaded file.

Background images are stored in three sizes, one for the main screen, one for the Touch controller, and one for the web interface illustrations. Use the Size parameter to choose which one to get. Logos have only one size.

USAGE:

xCommand UserInterface Branding Get [Size: <u>Size</u>] Type: <u>Type</u>

where

<u>Size</u>:

Large/Small/Thumbnail

Large: The size of the image that is displayed on the main screen.

Small: The size of the image that is displayed on the Touch controller.

Thumbnail: The size of the image that is used in the web interface illustrations.

Default value: Large

Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

Branding/HalfwakeBackground/HalfwakeBranding [Boards]

Background: Return the custom wallpaper.

Branding: Return the logo that is displayed when the device is active.

HalfwakeBackground: Return the brand image that is displayed as a background when the device is in the halfwake state.

HalfwakeBranding: Return the logo that is displayed when the device is in the halfwake state.

xCommand UserInterface Branding Updated

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

This command creates an event that tells that a new image file is uploaded to the device and ready for use. The Type parameter identifies what kind of image it is.

USAGE:

xCommand UserInterface Branding Updated Type: <u>Type</u>

where

Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

Branding/HalfwakeBackground/HalfwakeBranding [Boards]

Background: A new background image that can be used as a custom wallpaper is ready for use.

Branding: A new logo that can be displayed when the device is active is ready for use.

HalfwakeBackground: A new brand image that can be displayed as a background when the device is in the halfwake state is ready for use.

HalfwakeBranding: A new logo that can be displayed when the device is in the halfwake state is ready for use.

xCommand UserInterface Branding Upload

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER

Uploads an image file to the device. The following image formats are supported: BMP, GIF, JPEG, and PNG, and the maximum image size is 16 megapixels. The file must be Base64 encoded, and the maximum file size is 4 MByte.

The Type parameter determines what kind of image it is. If it is a background image, the associated feature (Custom wallpaper or Branding with background and logo) is automatically applied. This is a multiline command.

USAGE:

xCommand UserInterface Branding Upload Type: Type

where

Type:

Background/Branding/HalfwakeBackground/HalfwakeBranding [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2]

Branding/HalfwakeBackground/HalfwakeBranding [Boards]

Background: Uploads a background image that can be used as custom wallpaper.

Branding: Uploads a logo that can be displayed when the device is active.

HalfwakeBackground: Uploads a brand image that can be displayed as a background when the device is in the halfwake state.

HalfwakeBranding: Uploads a logo that can be displayed when the device is in the halfwake state.

xCommand UserInterface Extensions Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Delete user interface extensions (web apps, custom buttons, panels, and widgets) from the device. If you don't specify an ActivityType, all extensions are deleted.

USAGE:

xCommand UserInterface Extensions Clear [ActivityType: <u>ActivityType</u>] where

ActivityType:

Custom [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Custom/WebApp [Boards]

Custom: Custom buttons, panels, and widgets are removed. Web apps are not affected. *WebApp:* Web apps are removed. Custom buttons, panels, and widgets are not affected.

xCommand UserInterface Extensions List

Applies to: *All products* Requires user role: INTEGRATOR, ROOMCONTROL, USER

List user interface extensions (web apps, custom buttons, panels, and widgets) that exist on the device. If you don't specify an ActivityType, all extensions are listed.

USAGE:

xCommand UserInterface Extensions List [ActivityType: <u>ActivityType</u>]

where

ActivityType:

Custom [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

Custom/WebApp [Boards]

Custom: Custom buttons, panels, and widgets are listed. Web apps are not included. *WebApp:* Web apps are listed. Custom buttons, panels, and widgets are not included.

xCommand UserInterface Extensions Panel Clicked

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Creates an event when the user clicks a custom panel.

USAGE:

xCommand UserInterface Extensions Panel Clicked PanelId: " $\underline{PanelId}$ " where

PanelId:

String (0..255) The unique identifier of the custom panel.

xCommand UserInterface Extensions Panel Close

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Closes an opened custom panel.

USAGE:

xCommand UserInterface Extensions Panel Close

xCommand UserInterface Extensions Panel Open

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Opens the custom panel that has the given Panelld. If the panel has multiple pages you can specify which page to open by including the Pageld parameter.

USAGE:

xCommand UserInterface Extensions Panel Open PanelId: "<u>PanelId</u>" [PageId: "<u>PageId</u>"]

where

PanelId:

String (0..255) The unique identifier of the custom panel.

PageId:

String (0..255)

The unique identifier of a page on a custom panel.

xCommand UserInterface Extensions Panel Remove

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Removes the custom panel from the user interface of this device.

USAGE:

xCommand UserInterface Extensions Panel Remove PanelId: " $\underline{PanelId}$ " where

PanelId:

String (0..255) The unique identifier of the custom panel.

xCommand UserInterface Extensions Panel Save

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Adds a custom 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: "<u>PanelId</u>" where <u>PanelId</u>: String (0..255)

The unique identifier of the custom panel.

xCommand UserInterface Extensions Panel Update

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Update the name of the custom panel that has the given Panelld. This is the name that you see just below the button on the user interface.

USAGE:

xCommand UserInterface Extensions Panel Update PanelId: "<u>PanelId</u>" Name: "<u>Name</u>" where

PanelId:

String (0..255) The unique identifier of the custom panel.

<u>Name</u>:

String (0..255) The new name of the custom panel.

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 device. Updates the UserInterface Extensions status tree. This is a multiline command.

USAGE:

xCommand UserInterface Extensions Set ConfigId: "<u>ConfigId</u>" 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:

xCommand UserInterface Extensions Widget Action [Type: "<u>Type</u>"] [Value: "<u>Value</u>"] WidgetId: "<u>WidgetId</u>"

where

Type:

String (0..255)

The type of widget that is set.

<u>Value</u>:

String (0..255)

The value of the widget. The range of values depends on the widget type.

<u>WidgetId</u>:

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: "<u>Value</u>" WidgetId: "<u>WidgetId</u>" where

Value:

String (0, 255)

The value of the widget. The range of values depends on the widget type.

<u>WidgetId</u>:

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:

xCommand UserInterface Extensions Widget UnsetValue WidgetId: "<u>WidgetId</u>" where

WidgetId:

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 UserInterface 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. Optionally you can keep the message for a specified duration of time. If Duration is not set, the command must be followed by a UserInterface Message Alert Clear command.

USAGE:

xCommand UserInterface Message Alert Display [Title: "<u>Title</u>"] Text: "<u>Text</u>" [Duration: <u>Duration</u>]

where

<u>Title</u>:

String (0, 255)

The title of the message.

Default value: ""

<u>Text</u>:

String (0, 255)

The message to be displayed. The and
 HTML tags will result in line breaks as normal; any other tags will appear as plain text.

Duration:

Integer (0..3600)

How long (in seconds) the message is to be displayed on the screen. If set to 0 (zero) the message is displayed until a UserInterface Message Alert Clear command is sent.

Default value: 0

xCommand UserInterface Message Prompt Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Remove the window which was displayed using the UserInterface Message Prompt Display command. This is required when the Duration parameter is not set.

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 Prompt Clear [FeedbackId: "<u>FeedbackId</u>"] where

FeedbackId:

String (0, 255)

The Feedbackld corresponds to the Feedbackld given by the UserInterface 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 device receives a UserInterface Message Prompt Clear 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:

xCommand UserInterface Message Prompt Display [Title: "<u>Title</u>"] Text: "<u>Text</u>" [FeedbackId: "<u>FeedbackId</u>"] [Duration: <u>Duration</u>] [Option.1: "<u>Option.1</u>"] [Option.2: "<u>Option.2</u>"] [Option.3: "<u>Option.3</u>"] [Option.4: "Option.4"] [Option.5: "Option.5"]

where *Title*:

String (0, 255)

The title of the message

<u>Text</u>:

String (0, 255)

Enter the text line to be displayed. The and
 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)

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 UserInterface Message Prompt Clear command is sent.

Default value: 0

<u>Option.1</u>:

String (0, 255)

The text to appear on feedback option 1.

Option.2:

String (0, 255) The text to appear on feedback option 2.

Option.3:

String (0, 255) The text to appear on feedback option 3. Option.4:

String (0, 255) The text to appear on feedback option 4. <u>Option.5</u>:

00000000000

String (0, 255) The text to appear on feedback option 5.

xCommand UserInterface Message Prompt Response

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Give a response to the UserInterface Message Prompt Display command. This command is executed when the user selects an option in the user interface.

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 Prompt Response [FeedbackId: "<u>FeedbackId</u>"] OptionId: <u>OptionId</u>

where

FeedbackId:

String (0, 255)

The Feedbackld corresponds to the Feedbackld given by the UserInterface Message Prompt Display command.

Default value: ""

OptionId:

Integer (1..5)

The OptionId corresponds to the OptionIds given as possible responses in the UserInterface Message Prompt Display command.

xCommand UserInterface Message TextInput Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Remove the text input message which was displayed using the UserInterface Message TextInput Display command. This is required when the Duration parameter is not set.

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 TextInput Clear [FeedbackId: "<u>FeedbackId</u>"] where

FeedbackId:

String (0, 255)

The Feedbackld corresponds to the Feedbackld given by the UserInterface Message TextInput Display command.

Default value: " "

xCommand UserInterface Message TextInput Display

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Displays an input dialog box to which a user can respond. This is only supported for devices with a touch-based user interface. The message is displayed on screen until the user gives a response, or until the device receives a UserInterface Message TextInput Clear 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:

xCommand UserInterface Message TextInput Display [Duration: <u>Duration</u>] [FeedbackId: "FeedbackId"] [InputText: "<u>InputText</u>"] [InputType: <u>InputType</u>] [KeyboardState: <u>KeyboardState</u>] [Placeholder: "<u>Placeholder</u>"] [SubmitText: "SubmitText"] Text: "Text" [Title: "Title"]

where

Duration:

Integer (0..3600)

How long (in seconds) the message is to be displayed on the screen. If set to 0 (zero) the message is displayed until a UserInterface Message TextInput Clear command is sent.

Default value: 0

FeedbackId:

String (0..255)

To identify the feedback enter a FeedbackId.

InputText:

String (0..255)

Text that is pre-populated in the text input field when the dialog box opens. Before submitting the response, you can edit this text, or delete it and enter your own text. If this parameter is not included, the content of the Placeholder parameter is shown in the text input field when the dialog box opens.

Default value: ""

InputType:

SingleLine/Numeric/Password/PIN

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

<u>Placeholder</u>:

String (0..255)

Placeholder text that is displayed in the text input field until you start typing. If the InputText parameter is included, the Placeholder parameter has no effect.

Default value: ""

SubmitText:

String (0..32)

The text that is shown on the Submit button.

Default value: "OK"

<u>Text</u>:

String (0..128)

The message that is to be displayed to the user. The and
 HTML tags will result in line breaks as normal; any other tags will appear as plain text.

<u>Title</u>:

String (0..40)

The title of the input dialog box.

Default value: " "

xCommand UserInterface Message TextInput Response

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Give a response to the UserInterface Message TextInput Display command. This command is executed when the user submits the reply that he has entered in the text input field in the user interface.

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 TextInput Response [FeedbackId: "<u>FeedbackId</u>"] Text: "<u>Text</u>"

where

FeedbackId:

String (0, 255)

To identify the feedback enter a FeedbackId.

<u>Text</u>:

String (0, 255)

The message that is to be displayed to the user.

xCommand UserInterface Message TextLine Clear

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Remove the text line which was displayed by the UserInterface Message TextLine Display command. This is required when the Duration parameter is not set.

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. If Duration is not set, the command must be followed by the UserInterface Message TextLine Clear command.

USAGE:

xCommand UserInterface Message TextLine Display Text: "<u>Text</u>" [X: <u>X</u>] [Y: <u>Y</u>] [Duration: <u>Duration</u>]

where

<u>Text</u>:

String (0, 140)

The text line to be displayed. The and
 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

<u>Y</u>:

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)

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 UserInterface Message TextLine Clear command is 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: <u>Key</u>

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/ZoomIn/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: Key

where Key:

1/0/0/4/

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/ZoomIn/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: 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/ZoomIn/ZoomOut/+/-

Define the remote control key to release.

xCommand UserInterface Presentation ExternalSource Add

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Establish and set up an input source that is connected to the device via an external switch.

USAGE:

xCommand UserInterface Presentation ExternalSource Add ConnectorId: <u>ConnectorId</u> SourceIdentifier: "<u>SourceIdentifier</u>" Name: "<u>Name</u>" Type: <u>Type</u>

where

ConnectorId:

Integer (2..3) [SX10]

- Integer (1..3) [SX20]
- Integer (1..5) [SX80 MX700/MX800/MX800D]
- Integer (0..5) [RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards]
- Integer (2..4) [MX200G2/MX300G2]
- Integer (2..2) [DX70/DX80]

The ID of the device 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.

<u>Name</u>:

String (0, 40)

The name of the input source. This name will be displayed on the user interface.

<u>Type</u>:

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Remove the input source (specified by the SourceIdentifier) from the list of external input sources.

USAGE:

xCommand UserInterface Presentation ExternalSource Remove SourceIdentifier: "<u>SourceIdentifier</u>"

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

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:

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

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: <u>State</u> [ErrorReason: "<u>ErrorReason</u>"]

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.

<u>State</u>:

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: ""

xCommand UserInterface WebView Clear

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

Closes the current web view.

USAGE:

xCommand UserInterface WebView Clear

xCommand UserInterface WebView Display

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

Opens the web view and displays the web page given by the URL.

USAGE:

xCommand UserInterface WebView Display [Header: "<u>Header</u>"] [Options: "<u>Options</u>"] [Title: "<u>Title</u>"] Url: "<u>Url</u>"

where

<u>Header</u>:

String (0, 8192)

An HTTP header field. You can add up 15 Header parameters in one command, each holding one HTTP header field.

<u>Options</u>:

String (0, 255)

This value is intended for internal use by the UI Extensions Editor.

<u>Title</u>:

String (0, 255)

The title of the web page.

<u>Url</u>:

String (0, 2000) The URL of the web page.

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 device for troubleshooting.

USAGE:

xCommand UserManagement RemoteSupportUser Create [ExpiryDays: <u>ExpiryDays</u>] where

<u>ExpiryDays</u>:

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 device.

USAGE:

xCommand UserManagement RemoteSupportUser DisablePermanently Confirm: $\underline{Confirm}$ 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>] [Role: <u>Role</u>] [ShellLogin: <u>ShellLogin</u>] Username: "<u>Username</u>" [YourPassphrase: "YourPassphrase"]

where

<u>Active</u>:

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.

<u>Role</u>:

Admin/Audit/Integrator/RoomControl/User Sets the user's role.

ShellLogin:

False/True

Specifies whether the user should have a shell login or not.

<u>Username</u>:

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:

xCommand UserManagement User Delete Username: "<u>Username</u>" [YourPassphrase: "<u>YourPassphrase</u>"] where <u>Username</u>: String (0..127) Specifies the username of the user that is deleted. <u>YourPassphrase</u>: 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:

xCommand UserManagement User Get [ClientCertificateDN: "<u>ClientCertificateDN</u>"]
[Username: "<u>Username</u>"]
where
 <u>ClientCertificateDN:</u>
 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:

xCommand UserManagement User List [Limit: \underline{Limit}] [Offset: \underline{Offset}] where

<u>Limit</u>:

Integer (0..65536)

Limits the number of results that are shown.

Default value: 0

<u>Offset</u>:

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: <u>Active</u>] [AddRole: <u>AddRole</u>] [ClientCertificateDN: "<u>ClientCertificateDN</u>"] [PassphraseChangeRequired: <u>PassphraseChangeRequired</u>] [RemoveRole: <u>RemoveRole</u>] [ShellLogin: <u>ShellLogin</u>] Username: "<u>Username</u>" [YourPassphrase: "YourPassphrase"]

where

<u>Active</u>:

False/True

Specifies whether this is an active user or not.

<u>AddRole</u>:

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.

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.

<u>Username</u>:

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: "<u>NewPassphrase</u>" OldPassphrase: "<u>OldPassphrase</u>"

where

NewPassphrase:

String (0, 255)

<u>OldPassphrase</u>:

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: "<u>NewPassphrase</u>" Username: "<u>Username</u>" [YourPassphrase: "<u>YourPassphrase</u>"] where

NewPassphrase:

String (0, 255)

<u>Username</u>:

String (0, 127)

YourPassphrase:

String (0, 255)

xCommand UserManagement User Unblock

Applies to: *All products* Requires user role: ADMIN

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>:

String (0, 127) YourPassphrase:

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

Position:

CenterLeft/CenterRight/LowerLeft/LowerRight/UpperCenter/UpperLeft/UpperRight Select one of the predefined positions.

xCommand Video CEC Input KeyClick

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from the input device.

USAGE:

xCommand Video CEC Input KeyClick ConnectorId: <u>ConnectorId</u> [Key: <u>Key</u>] [LogicalAddress: <u>LogicalAddress</u>] [NamedKey: <u>NamedKey</u>]

where

<u>ConnectorId</u>:

Integer (1..5) [CodecPro Room70G2]

Integer (1..3) [RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D]

Integer (2..2) [Boards]

The unique identifier of the connector.

<u>Key</u>:

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.

LogicalAddress:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from this device.

USAGE:

xCommand Video CEC Output KeyClick ConnectorId: <u>ConnectorId</u> [Key: <u>Key</u>] LogicalAddress: <u>LogicalAddress</u> [NamedKey: <u>NamedKey</u>]

where

ConnectorId:

Integer (1..1) [SX10]

Integer (1..3) [SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

The unique identifier of the connector.

<u>Key</u>:

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.

LogicalAddress:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR

A request from the video conferencing device to become the active source of the screen (device) that is connected to the specified output connector.

USAGE:

xCommand Video CEC Output SendActiveSourceRequest [ConnectorId: $\underline{\textit{ConnectorId}}$ where

ConnectorId:

Integer (1..1) [SX10 RoomKitMini]

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 CEC Output SendInactiveSourceRequest

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Requires user role: ADMIN, INTEGRATOR

A request from the video conferencing device to stop being the active source of the screen (device) that is connected to the specified output connector. It is up to the screen to decide how to respond to the request. It can become the active source itself, make another source the active one, or do nothing.

USAGE:

xCommand Video CEC Output SendInactiveSourceRequest [ConnectorId: <u>ConnectorId</u>] where

ConnectorId:

Integer (1..1) [RoomKitMini]

Integer (1..3) [RoomKit CodecPlus CodecPro Room55 Room70/Room55D Room70G2]

The unique identifier of the connector.

xCommand Video Input MainVideo Mute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Stop sending video from the device. Selfview is also turned off. This command does not affect the presentation channel.

USAGE:

xCommand Video Input MainVideo Mute

xCommand Video Input MainVideo Unmute

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER

Start sending video from the device if previously turned off using the Video Input MainVideo Mute command (or, if available, the "Turn off video" button on the user interface). Selfview is also available.

USAGE:

xCommand Video Input MainVideo Unmute

xCommand Video Input SetMainVideoSource

Applies to: DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini 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 conferencing device) 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: <u>Layout</u>] [PIPPosition: <u>PIPPosition</u>] [PIPSize: <u>PIPSize</u>] [SourceId: <u>SourceId</u>] 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.

<u>Layout</u>:

Equal/PIP/Prominent

Sets the layout of the main video source if the main video source is composed of multiple input sources.

PIPPosition:

LowerLeft/LowerRight/UpperLeft/UpperRight

Select the PIP position of the main video source if the main video source is composed of multiple input sources.

<u>PIPSize</u>:

Auto/Large

Select the PIP size of the main video source if the main video source is composed of multiple input sources.

<u>SourceId</u>:

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 and MX700/MX800 Input Connector 4 (DVI-I) and Connector 5 (S-Video/Composite) cannot be active simultaneously.

On SX10 Input Connector 2 (HDMI) and Connector 3 (VGA) cannot be active simultaneously. On MX200G2/MX300G2: Only one of Input Connector 2 (DVI), Connector 3 (HDMI), and Connector 4 (HDMI) can be active at any time.

USAGE:

xCommand Video Input Source SetActiveConnector [ConnectorId: <u>ConnectorId</u>] 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: <u>LayoutFamily</u> [CustomLayoutName: "<u>CustomLayoutName</u>"] 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 Room70/ Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, 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 [Layout: <u>Layout</u>] [Mode: <u>Mode</u>] Output: <u>Output</u> [RemoteMain: <u>RemoteMain</u>] [SourceId: <u>SourceId</u>]

where

<u>Layout</u>:

Equal/Prominent

Select the layout you wish to use for the video composition.

Equal: All sources are shown in same-sized images on the output.

Prominent: The first source is shown as a large image, and the next sources are shown as smaller images placed below.

<u>Mode</u>:

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.

<u>Output</u>:

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.

RemoteMain:

Integer (1..4)

Add a remote site to the layout.

<u>SourceId</u>:

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 Room70/ Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, 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

<u>Output</u>:

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 Room70/ Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, 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: <u>OutputA</u> OutputB: <u>OutputB</u> where

<u>OutputA</u>

Integer (1..2) [SX20 MX200G2/MX300G2 RoomKit CodecPlus] Integer (1..3) [SX80 MX700/MX800/MX800D CodecPro Room70G2] The output you are swapping from.

<u>OutputB</u>:

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 Room70/ Room55D Room70G2

Requires user role: ADMIN, INTEGRATOR, 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: <u>Output</u> [RemoteMain: <u>RemoteMain</u>] [SourceId: <u>SourceId</u>]

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.

RemoteMain:

Integer (1..4)

Remove a remote site from the layout.

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 Boards 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: [MX700/MX800/MX800D Room70/Room55D Room70G2]

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for devices with two integrated screens (dual screen devices).

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 devices with two integrated screens (dual screen devices).

<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: <u>Position</u> Value: <u>Value</u> where

Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for devices with two integrated screens (dual screen devices).

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 devices with two integrated screens (dual screen devices).

Value:

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 devices with two integrated screens (dual screen devices).

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 devices with two integrated screens (dual screen devices).

<u>Value</u>:

4900K/5500K/6500K/7200K/9300K/10500K/12000K/User [MX700/MX800/MX800D] 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 devices with two integrated screens (dual screen devices).

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 devices with two integrated screens (dual screen devices).

<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 devices with two integrated screens (dual screen devices).

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 Boards Requires user role: ADMIN

Reset monitor settings (not available for Room 55 Dual).

USAGE:

xCommand Video Output Monitor Reset Position: $\underline{\textit{Position}}$ where

Position: [MX700/MX800/MX800D Room70/Room55D Room70G2]

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for devices with two integrated screens (dual screen devices).

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: <u>Position</u> Value: <u>Value</u> where

Position:

Left/Right

Choose whether to apply the command to the left or right integrated screen. This parameter is only present for devices with two integrated screens (dual screen devices).

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:

CenterLeft/CenterRight/LowerLeft/LowerRight/UpperCenter/UpperLeft/UpperRight 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: $\underline{\textit{View}}$ 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:

xCommand Video Selfview Set [Mode: <u>Mode</u>] [FullscreenMode: <u>FullscreenMode</u>] [PIPPosition: <u>PIPPosition</u>] [OnMonitorRole: <u>OnMonitorRole</u>]

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.

WebEngine commands

xCommand UserInterface WebEngine DeleteStorage

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN

Deletes session data for web view types, such as digital signage and web apps.

USAGE:

xCommand UserInterface WebEngine DeleteStorage [Type: <u>Type</u>] where

Type:

All/Signage/WebApps

All: Deletes the session data for all web view types.

Signage: Deletes the session data related to digital signage.

WebApps: Deletes the session data related to all web views except digital signage.

Default value: All

Webex commands

xCommand Webex Registration Cancel

Applies to: *All products* Requires user role: ADMIN, USER

Cancel device registration to Cisco Webex. This command only works in the short period after the registration is started with xCommand Webex Registration Start.

USAGE:

xCommand Webex Registration Cancel

xCommand Webex Registration Start

Applies to: All products

Requires user role: ADMIN, USER

Start registering a device to Cisco Webex by entering the activation code that has been created in Control Hub and choosing whether to keep local users and integrations. You get a confirmation that the registration has been successful or failed.

USAGE:

xCommand Webex Registration Start ActivationCode: <u>ActivationCode</u> SecurityAction: <u>SecurityAction</u>

where

ActivationCode:

String: 16, 19

The activation code that has been created in Control Hub for this device.

SecurityAction:

Harden/NoAction

 $\ensuremath{\textit{Harden:}}$ Deactivates all local users that have been created for this device and deactivates Macros.

NoAction: Doesn't remove any configurations. Use NoAction if you wish to keep existing integrations.

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

Audio status	
xStatus Audio Devices HandsetUSB ConnectionStatus	
xStatus Audio Devices HandsetUSB Cradle	
xStatus Audio Devices HeadsetAnalog Connection Status	
xStatus Audio Devices HeadsetAnalog HasMicrophone	
xStatus Audio Devices HeadsetUSB ConnectionStatus	
xStatus Audio Devices HeadsetUSB Description	
xStatus Audio Devices HeadsetUSB Manufacturer	
xStatus Audio Input Connectors ARC [n] EcReferenceDelay	
xStatus Audio Input Connectors HDMI [n] EcReferenceDelay	
xStatus Audio Input Connectors HDMI [n] Mute	
xStatus Audio Input Connectors Line [n] Mute	
xStatus Audio Input Connectors Microphone [n] ConnectionStatus	
xStatus Audio Input Connectors Microphone [n] EcReferenceDelay	
xStatus Audio Input Connectors Microphone [n] Mute	
xStatus Audio Input KeyClick Attenuate	
xStatus Audio Input KeyClick Detected	
xStatus Audio Input KeyClick Enabled	
xStatus Audio Input LocalInput [n] AGC	
xStatus Audio Input LocalInput [n] Channels	
xStatus Audio Input LocalInput [n] Connector	
xStatus Audio Input LocalInput [n] Direct	
xStatus Audio Input LocalInput [n] MixerMode	
xStatus Audio Input LocalInput [n] Mute	
xStatus Audio Input LocalInput [n] Name	
xStatus Audio Input RemoteInput [n] CallId	
xStatus Audio Microphones Mute	

xStatus Audio Output Connectors ARC [n] DelayMs	366
xStatus Audio Output Connectors ARC [n] Mode	366
xStatus Audio Output Connectors HDMI [n] DelayMs	.367
xStatus Audio Output Connectors HDMI [n] Mode	.367
xStatus Audio Output Connectors InternalSpeaker [n] DelayMs	.367
xStatus Audio Output Connectors InternalSpeaker [n] Mode	.367
xStatus Audio Output Connectors Line [n] ConnectionStatus	368
xStatus Audio Output Connectors Line [n] DelayMs	368
xStatus Audio Output LocalOutput [n] AutoconnectRemote	368
xStatus Audio Output LocalOutput [n] Channels	368
xStatus Audio Output LocalOutput [n] Connector [n]	369
xStatus Audio Output LocalOutput [n] Input [n] Gain	369
xStatus Audio Output LocalOutput [n] Loudspeaker	369
xStatus Audio Output LocalOutput [n] Name	369
xStatus Audio Output LocalOutput [n] VolumeControlled	.370
xStatus Audio Output MeasuredHdmiArcDelay	.370
xStatus Audio Output MeasuredHdmiDelay	.370
xStatus Audio Output MeasuredHdmiCecDelay	.370
xStatus Audio Output RemoteOutput [n] CallId	. 371
xStatus Audio Output RemoteOutput [n] Input [n] Gain	. 371
xStatus Audio SelectedDevice	. 371
xStatus Audio Volume	. 371
xStatus Audio VolumeHandsetUsb	
xStatus Audio VolumeHeadsetAnalog	.372
xStatus Audio VolumeHeadsetUsb	.372
xStatus Audio VolumeInternal	.372
xStatus Audio VolumeMute	.373

Bookings status	373
xStatus Bookings Current Id	373

Call status	
xStatus Call [n] AnswerState	
xStatus Call [n] AttendedTransferFrom	
xStatus Call [n] CallbackNumber	
xStatus Call [n] CallType	
xStatus Call [n] DeviceType	
xStatus Call [n] Direction	
xStatus Call [n] DisplayName	
xStatus Call [n] Duration	
xStatus Call [n] Encryption Type	
xStatus Call [n] FacilityServiceId	
xStatus Call [n] HoldReason	
xStatus Call [n] Ice	
xStatus Call [n] PlacedOnHold	
xStatus Call [n] Protocol	
xStatus Call [n] ReceiveCallRate	
xStatus Call [n] RemoteNumber	
xStatus Call [n] Status	
xStatus Call [n] TransmitCallRate	

Cameras status
xStatus Cameras Camera [n] Capabilities Options
xStatus Cameras Camera [n] Connected
xStatus Cameras Camera [n] DetectedConnector
xStatus Cameras Camera [n] Flip
xStatus Cameras Camera [n] Framerate
xStatus Cameras Camera [n] HardwareID
xStatus Cameras Camera [n] LightingConditions
xStatus Cameras Camera [n] MacAddress
xStatus Cameras Camera [n] Manufacturer
xStatus Cameras Camera [n] Model
xStatus Cameras Camera [n] Position Focus

xStatus Car	neras Camera [n] Position Lens	
xStatus Car	neras Camera [n] Position Pan	
xStatus Car	neras Camera [n] Position Roll	
xStatus Car	neras Camera [n] Position Tilt	
xStatus Car	neras Camera [n] Position Zoom	
xStatus Car	neras Camera [n] SerialNumber	
xStatus Car	neras Camera [n] SoftwarelD	
xStatus Car	neras PresenterTrack Availability	
xStatus Car	neras PresenterTrack PresenterDetected	
xStatus Car	neras PresenterTrack Status	
xStatus Car	neras SpeakerTrack ActiveConnector	
xStatus Car	neras SpeakerTrack Availability	
xStatus Car	neras SpeakerTrack Status	
Capabilities s	status	
xStatus Cap	babilities Conference MaxActiveCalls	
	babilities Conference MaxAudioCalls	
xStatus Cap	babilities Conference MaxCalls	
xStatus Cap	babilities Conference MaxVideoCalls	
. .		
	status	
	ference ActiveSpeaker CallId	
	iference Call [n] AuthenticationRequest	
	iference Call [n] BookingId	
	nference Call [n] Capabilities FarendMessage Mode	
	nference Call [n] Capabilities FECC Mode	
	nference Call [n] Capabilities FECC NumberOfPresets	
	nference Call [n] Capabilities FECC NumberOfSources	
	ference Call [n] Capabilities FECC Source [n] Name	
	ference Call [n] Capabilities FECC Source [n] Options	
	nference Call [n] Capabilities FECC Source [n] Sourceld	
	nference Call [n] Capabilities Hold	
	ference Call [n] Capabilities IxChannel Status	
	ference Call [n] Capabilities ParticipantDisconnect	
xStatus Cor	ference Call [n] Capabilities ParticipantList	

xStatus Conference Call [n] Capabilities ParticipantMute	389
xStatus Conference Call [n] Capabilities Presentation	389
xStatus Conference Call [n] EventCenter Mode	389
xStatus Conference Call [n] Manufacturer	389
xStatus Conference Call [n] MicrophonesMuted	390
xStatus Conference Call [n] SoftwareID	390
xStatus Conference Call [n] Streamed	390
xStatus Conference DoNotDisturb	390
xStatus Conference Line [n] Mode	391
xStatus Conference Multipoint Mode	391
xStatus Conference Presentation CallId	392
xStatus Conference Presentation LocalInstance [n] SendingMode	392
xStatus Conference Presentation LocalInstance [n] Source	392
xStatus Conference Presentation Mode	392
xStatus Conference SpeakerLock CallId	393
xStatus Conference SpeakerLock Mode	393

Diagnostics status	93
xStatus Diagnostics Message [n] Description	93
xStatus Diagnostics Message [n] Level	93
xStatus Diagnostics Message [n] References	94
xStatus Diagnostics Message [n] Type	94

GPIO status	
xStatus GPIO Pin [n] State	

H320 status	396
xStatus H320 Gateway Address	396
xStatus H320 Gateway Id	396
xStatus H320 Gateway Mode	396
xStatus H320 Gateway Number	396
xStatus H320 Gateway Reason	397
xStatus H320 Gateway Status	397

H323 status	
xStatus H323 Gatekeeper Address	
xStatus H323 Gatekeeper Port	
xStatus H323 Gatekeeper Reason	
xStatus H323 Gatekeeper Status	
xStatus H323 Mode Reason	
xStatus H323 Mode Status	
HttpFeedback status	
xStatus HttpFeedback [n] Expression [n]	
xStatus HttpFeedback [n] Format	
xStatus HttpFeedback [n] Status	
xStatus HttpFeedback [n] URL	
MediaChannels status	400
xStatus MediaChannels Call [n] Channel [n] Audio Channels	
xStatus MediaChannels Call [n] Channel [n] Audio ChannelRole	
xStatus MediaChannels Call [n] Channel [n] Audio Mute	
xStatus MediaChannels Call [n] Channel [n] Audio Protocol	
xStatus MediaChannels Call [n] Channel [n] Direction	
xStatus MediaChannels Call [n] Channel [n] Encryption	
xStatus MediaChannels Call [n] Channel [n] NetStat Bytes	
xStatus MediaChannels Call [n] Channel [n] NetStat ChannelRate	
xStatus MediaChannels Call [n] Channel [n] NetStat Jitter	
xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalLost	
xStatus MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived	
xStatus MediaChannels Call [n] Channel [n] NetStat Loss	
xStatus MediaChannels Call [n] Channel [n] NetStat MaxJitter	
xStatus MediaChannels Call [n] Channel [n] NetStat Packets	
xStatus MediaChannels Call [n] Channel [n] ParticipantId	
xStatus MediaChannels Call [n] Channel [n] Type	
xStatus MediaChannels Call [n] Channel [n] Video ChannelRole	
xStatus MediaChannels Call [n] Channel [n] Video FrameRate	

xStatus MediaChannels Call [n] Channel [n] Video Protocol	405
xStatus MediaChannels Call [n] Channel [n] Video ResolutionX	405
xStatus MediaChannels Call [n] Channel [n] Video ResolutionY	405

Network 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	
xStatus Network [n] CDP SysName	
xStatus Network [n] CDP SysObjectID	
xStatus Network [n] CDP Version	
xStatus Network [n] CDP VoIPApplianceVlanID	
xStatus Network [n] CDP VTPMgmtDomain	
xStatus Network [n] DNS Domain Name	
xStatus Network [n] DNS Server [n] Address	
xStatus Network [n] Ethernet MacAddress	
xStatus Network [n] Ethernet Speed	
xStatus Network [n] IPv4 Address	
xStatus Network [n] IPv4 Gateway	
xStatus Network [n] IPv4 SubnetMask	
xStatus Network [n] IPv6 Address	
xStatus Network [n] IPv6 Gateway	411
xStatus Network [n] IPv6 LinkLocalAddress	411
xStatus Network [n] VLAN Voice VlanId	411

NetworkServices status	412
xStatus NetworkServices NTP CurrentAddress	412
xStatus NetworkServices NTP Server [n] Address	412
xStatus NetworkServices NTP Status	412
xStatus NetworkServices UPnP Status	412

Peripherals status	413
xStatus Peripherals ConnectedDevice [n] HardwareInfo	
xStatus Peripherals ConnectedDevice [n] ID	
xStatus Peripherals ConnectedDevice [n] Name	
xStatus Peripherals ConnectedDevice [n] SerialNumber	
xStatus Peripherals ConnectedDevice [n] SoftwareInfo	
xStatus Peripherals ConnectedDevice [n] Status	
xStatus Peripherals ConnectedDevice [n] Type	
xStatus Peripherals ConnectedDevice [n] UpgradeFailureReason	
xStatus Peripherals ConnectedDevice [n] UpgradeStatus	
xStatus Peripherals ConnectedDevice [n] UpgradeURL	
Provisioning status	415
xStatus Provisioning CUCM Customization Checksum	
xStatus Provisioning CUCM ExtensionMobility Enabled	
xStatus Provisioning CUCM ExtensionMobility LastLoggedInUserId	
xStatus Provisioning CUCM ExtensionMobility LoggedIn	
xStatus Provisioning RoomType	
xStatus Provisioning Software Current CompletedAt	
xStatus Provisioning Software Current URL	
xStatus Provisioning Software Current VersionId	
xStatus Provisioning Software UpgradeStatus LastChange	
xStatus Provisioning Software UpgradeStatus Message	
xStatus Provisioning Software UpgradeStatus Phase	418
xStatus Provisioning Software UpgradeStatus SessionId	418
xStatus Provisioning Software UpgradeStatus Status	418
xStatus Provisioning Software UpgradeStatus Urgency	
xStatus Provisioning Software UpgradeStatus URL	
xStatus Provisioning Software UpgradeStatus VersionId	419
xStatus Provisioning Status	
Proximity status	
xStatus Proximity Services Availability	

RoomAnalytics status	. 420
xStatus RoomAnalytics AmbientNoise Level A	. 420
xStatus RoomAnalytics PeopleCount Current	421
xStatus RoomAnalytics PeoplePresence	421
xStatus RoomAnalytics Sound Level A	421

RoomPreset status	
xStatus RoomPreset [n] Defined	
xStatus RoomPreset [n] Description	
xStatus RoomPreset [n] Type	

Security status	
xStatus Security FIPS Mode	
xStatus Security Persistency CallHistory	
xStatus Security Persistency Configurations	
xStatus Security Persistency DHCP	
xStatus Security Persistency InternalLogging	
xStatus Security Persistency LocalPhonebook	

SIP status	
xStatus SIP AlternateURI Alias [n] URI	424
xStatus SIP AlternateURI Primary [n] URI	424
xStatus SIP Authentication	425
xStatus SIP CallForward DisplayName	425
xStatus SIP CallForward Mode	425
xStatus SIP CallForward URI	425
xStatus SIP Mailbox MessagesWaiting	426
xStatus SIP Mailbox URI	426
xStatus SIP Proxy [n] Address	
xStatus SIP Proxy [n] Status	426
xStatus SIP Registration [n] Authentication	427
xStatus SIP Registration [n] Reason	427
xStatus SIP Registration [n] Status	427
xStatus SIP Registration [n] URI	

xStatus SIP Secure	
xStatus SIP Verified	
Standby status	120
xStatus Standby PowerSave State	
xStatus Standby Fower Save State	
SystemUnit status	
xStatus SystemUnit Hardware Module CompatibilityLevel	
xStatus SystemUnit Hardware Module SerialNumber	
xStatus SystemUnit Hardware Monitoring Fan [n] Status	
xStatus SystemUnit Hardware Monitoring Temperature Status	
xStatus SystemUnit Hardware Temperature	
xStatus SystemUnit Hardware TemperatureThreshold	
xStatus SystemUnit Notifications Notification [n] Text	431
xStatus SystemUnit Notifications Notification [n] Type	431
xStatus SystemUnit ProductId	431
xStatus SystemUnit ProductPlatform	
xStatus SystemUnit ProductType	
xStatus SystemUnit Software DisplayName	
xStatus SystemUnit Software Name	
xStatus SystemUnit Software OptionKeys Encryption	
xStatus SystemUnit Software OptionKeys MultiSite	
xStatus SystemUnit Software OptionKeys RemoteMonitoring	
xStatus SystemUnit Software ReleaseDate	
xStatus SystemUnit Software Version	
xStatus SystemUnit State NumberOfActiveCalls	
xStatus SystemUnit State NumberOfInProgressCalls	
xStatus SystemUnit State NumberOfSuspendedCalls	
xStatus SystemUnit Uptime	435
Time status	
xStatus Time SystemTime	

ι	JserInterface status	.436
	xStatus UserInterface ContactInfo ContactMethod [n] Number	. 436
	xStatus UserInterface ContactInfo Name	. 436
	xStatus UserInterface Extensions Widget [n] Value	437
	xStatus UserInterface Extensions Widget [n] WidgetId	437
	xStatus UserInterface Features Call End	437
	xStatus UserInterface Features MidCallControls	
	xStatus UserInterface Features Call Start	. 438
	xStatus UserInterface Features Share Start	. 438
	xStatus UserInterface Features Whiteboard Start	. 438
	xStatus UserInterface SettingsMenu Visibility	. 439

xStatus Video Output Connector [n] Connected	445
xStatus Video Output Connector [n] ConnectedDevice CEC [n] DeviceType	445
xStatus Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress	445
xStatus Video Output Connector [n] ConnectedDevice CEC [n] Name	445
xStatus Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus	
xStatus Video Output Connector [n] ConnectedDevice CEC [n] Vendorld	
xStatus Video Output Connector [n] ConnectedDevice Name	
xStatus Video Output Connector [n] ConnectedDevice PreferredFormat	
xStatus Video Output Connector [n] ConnectedDevice ScreenSize	
xStatus Video Output Connector [n] MonitorRole	
xStatus Video Output Connector [n] Resolution Height	
xStatus Video Output Connector [n] Resolution RefreshRate	
xStatus Video Output Connector [n] Resolution Width	
xStatus Video Output Connector [n] Type	
xStatus Video Output Monitor [n] Backlight	
xStatus Video Output Monitor [n] Brightness	
xStatus Video Output Monitor [n] ColorTemperature Blue	
xStatus Video Output Monitor [n] ColorTemperature Green	
xStatus Video Output Monitor [n] ColorTemperature Red	
xStatus Video Output Monitor [n] ColorTemperature Selected	
xStatus Video Output Monitor [n] Contrast	450
xStatus Video Output Monitor [n] CSCYUV	450
xStatus Video Output Monitor [n] FirmwareVersion	
xStatus Video Output Monitor [n] Gamma	450
xStatus Video Output Monitor [n] ModelName	451
xStatus Video Output Monitor [n] Position	451
xStatus Video Output Monitor [n] SerialNumber	451
xStatus Video Output Monitor [n] Sharpness	
xStatus Video Output Monitor [n] Temperature	452
xStatus Video Presentation PIPPosition	
xStatus Video Selfview FullscreenMode	452
xStatus Video Selfview Mode	450
	452
xStatus Video Selfview OnMonitorRole	453

Cisco Collaboration Endpoint Software

WebEngine status	453
xStatus WebEngine Features Signage	
xStatus WebEngine Features WebEngine	453
Webex status	454

Audio status

xStatus Audio Devices HandsetUSB ConnectionStatus

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 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 $^{\star}\text{s}$ Connected

** end

xStatus Audio Devices HandsetUSB Cradle

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 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

** end

xStatus Audio Devices HeadsetUSB ConnectionStatus

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 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 RoomKit RoomKitMini Room55 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 RoomKit RoomKitMini Room55 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 devices 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 Input Connectors ARC 1 EcReferenceDelay: 0 ** end

xStatus Audio Input Connectors HDMI [n] EcReferenceDelay

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Returns the detected latency for each loudspeaker to microphone path for devices 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 Input Connectors HDMI 1 EcReferenceDelay: 0

** end

xStatus Audio Input Connectors HDMI [n] Mute

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the audio channel on a HDMI input connector is muted or not.

Value space of the result returned:

On/Off

Example:

xStatus Audio Input Connectors HDMI 1 Mute *s Audio Input Connectors HDMI 1 Mute: Off ** end

xStatus Audio Input Connectors Microphone [n] ConnectionStatus

Applies to: SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

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 conferencing device 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 RoomKitMini CodecPlus CodecPro Room70/Room55D Room70G2 Boards

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 Input Connectors Microphone 1 EcReferenceDelay: 120

** end

xStatus Audio Input Connectors Microphone [n] Mute

Applies to: All products

Requires user role: ADMIN, USER

Shows whether the audio on a Microphone input connector is muted or not.

Value space of the result returned:

On/Off

Example:

xStatus Audio Input Connectors Microphone 1 Mute *s Audio Input Connectors Microphone 1 Mute: Off ** end

xStatus Audio Input KeyClick Attenuate

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Shows whether the device is automatically attenuating clicking noises, such as those detected microphone signals caused by the typing of a keyboard.

Value space of the result returned:

False/True

True: The attenuation of the microphone signal is turned on. *False:* The attenuation of the microphone signal is turned off.

Example:

xStatus Audio Input KeyClick Attenuate *s Audio Input KeyClick Attenuate: True ** end

xStatus Audio Input KeyClick Detected

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Shows what type of audio signals the device is detecting for attenuation. The device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Shows whether detection for attenuation on the microphone signal is enabled.

Value space of the result returned:

True/False

True: Detection on the microphone signal is turned on. *False:* 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

Example:

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

Example:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 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] DelayMs

Applies to: RoomKit RoomKitMini 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 HDMI [n] Mode

Applies to: RoomKit RoomKitMini 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, or if the connector is being used to measure the audio delay through the connected video display.

Value space of the result returned:

On/Off/DelayMeasurement

On: The audio channel on the HDMI output connector is enabled.

Off: The audio channel on the HDMI output connector is disabled

DelayMeasurement: The connector is being used to measure the audio delay through the connected video display.

Example:

xStatus Audio Output Connectors HDMI 1 Mode

- *s Audio Output Connectors HDMI 1 Mode: On
- ** end

xStatus Audio Output Connectors InternalSpeaker [n] DelayMs

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Requires user role: ADMIN, INTEGRATOR, USER Shows the delay of the internal loudspeaker. Value space of the result returned: Integer The delay in milliseconds. Example: 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: RoomKitMini CodecPlus CodecPro Requires user role: ADMIN, INTEGRATOR, USER

Shows whether the device'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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 device 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 ** end

xStatus Audio Output LocalOutput [n] AutoconnectRemote

Applies to: *SX80 MX700/MX800/MX800D CodecPro Room70G2* Requires user role: ADMIN, USER

Shows whether or not the remote input signal (from far-end) is automatically added to this local output. It can always be added manually using the Audio LocalOutput ConnectInput command.

Value space of the result returned:

On/Off

On: The remote input signal is automatically added to all local outputs when in a call. *Off:* The remote input signal is not automatically added to the local output.

Example:

xStatus Audio Output LocalOutput 4 AutoconnectRemote *s Audio Output LocalOutput 4 AutoconnectRemote: "On" ** end

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

Example:

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 $\left[n\right]$ of the output.

Value space of the result returned:

String

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

Audio Output Localout

** 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

Example:

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:

Integer

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 $\left[n\right]$ 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 RoomKit RoomKitMini Room55 Requires user role: ADMIN, USER

Shows the audio device that is selected. Only DX80 and DX70 support Bluetooth. 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 ** end

xStatus Audio VolumeHandsetUsb

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 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 RoomKit RoomKitMini Room55 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 RoomKit RoomKitMini Room55 Requires user role: ADMIN, USER Shows the internal volume level. Value space of the result returned: Integer Example: xStatus Audio VolumeInternal *s 6 ** end xStatus Audio VolumeMute

Applies to: *All products* Requires user role: ADMIN, USER

Shows whether the device 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" ** end

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 device.

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 device. *MCU:* The call is to a multipoint conferencing unit (MCU) in the network, or a MultiSite call hosted on a device.

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 ** end

xStatus Call [n] Encryption Type

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.

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] Ice

Applies to: *All products* Requires user role: ADMIN, USER

ICE is a feature that enables two sides of a call to send media (video and audio) directly between each other, if a direct network path has been found through ICE negotiation. This status reflects the result of that negotiation.

Value space of the result returned:

Disabled/Passed/Failed

Disabled: ICE is disabled.

Passed: A direct network path was found and is being used.

Failed: A direct network path was not found, and media will most likely flow through an intermediary component.

Example:

xStatus Call 2 Ice *s Call 2 Ice: Passed ** 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 ** end

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 ** end

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

Example: 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 RoomKitMini Room55 Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Value space of the result returned:

Integer

xStatus Cameras Camera [n] HardwareID

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 Cameras Camera [n] LightingConditions

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

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 Boards

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 RoomKitMini 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:

-10000..10000

Example:

xStatus Cameras Camera 1 Position Pan

*s Camera 1 Position Pan: 412

** end

xStatus Cameras Camera [n] Position Roll

Applies to: CodecPro Room70G2

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the current rotation (roll) of the camera view. The observed image is rotated counterclockwise if the value is positive, and clockwise if the value is negative. The unit is 1/100 degree, that is 300 corresponds to 3 degrees.

Value space of the result returned:

-300..300

Example:

xStatus Cameras Camera 1 Position Roll *s Camera 1 Position Roll: 20 ** end

xStatus Cameras Camera [n] Position Tilt

Applies to: SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini 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:

-2500..2500

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 RoomKitMini 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..11800

Example:

xStatus Cameras Camera 1 Position Zoom *s Camera 1 Position Zoom: 828

** end

xStatus Cameras Camera [n] SerialNumber

Applies to: DX70/DX80 SX10 SX20 SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2 Boards

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 Boards 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 CodecPlus CodecPro Room70/Room55D Room70G2* 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 CodecPlus CodecPro Room70/Room55D Room70G2* 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

** end

xStatus Cameras PresenterTrack Status

Applies to: *SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2* 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 RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the number of the connector that a camera with speaker tracking support is connected to. If it is a SpeakerTrack 60 camera or the dual camera of an MX700/MX800, it is the connector number for the camera that is currently chosen by the SpeakerTrack algorithm.

This status is not applicable for Room Kit Mini.

Value space of the result returned:

Integer

Example: xStatus Cameras SpeakerTrack ActiveConnector *s Cameras SpeakerTrack ActiveConnector: 1 ** end

xStatus Cameras SpeakerTrack Availability

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

The product may support speaker tracking (which also includes best overview), or only the best overview feature. This status shows whether or not that feature is available.

Value space of the result returned:

Off/Unavailable/Available

Off: Speaker tracking / best overview is turned off with the command xConfiguration Cameras SpeakerTrack Mode: Off

Unavailable: Hardware for speaker tracking / best overview is not found.

Available: Hardware for speaker tracking / best overview is found, and it is possible to turn the feature on or off from the user interface.

Example:

xStatus Cameras SpeakerTrack Availability

*s Cameras SpeakerTrack Availability: Available

** end

xStatus Cameras SpeakerTrack Status

Applies to: SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 Boards

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

The product may support speaker tracking (which also includes best overview), or only the best overview feature. This status shows whether or not that feature is active.

Value space of the result returned:

Active/Inactive

Active: Speaker tracking / best overview is active. Inactive: Speaker tracking / best overview is inactive.

Example:

xStatus Cameras SpeakerTrack Status

*s Cameras SpeakerTrack Status: Active

** end

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 Calld 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] AuthenticationRequest

Applies to: *All products* Requires user role: ADMIN, INTEGRATOR, USER

This status is only relevant for Cisco Webex registered devices. When this status has another value than "None" the device is waiting for an authentication response. Use the Conference Call AuthenticationResponse command to give the response.

Value space of the result returned:

None/HostPinOrGuest/HostPinOrGuestPin/PanelistPin

None: The device is not waiting for an authentication response (no authentication request).

HostPinOrGuest: You must either provide a host PIN, or join as a Guest without PIN. *HostPinOrGuestPin:* You must either provide a host PIN or a guest PIN.

PanelistPin: You must provide a Panelist PIN for joining an Event Center event as panelist.

Example:

xStatus Conference Call 2 AuthenticationRequest *s Conference Call 2 AuthenticationRequest: None ** end

xStatus Conference Call [n] Bookingld

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

Example:

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 ** end

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 ParticipantDisconnect

Applies to: *All products* Requires user role: ADMIN, USER

Value space of the result returned:

Available/Unavailable

Shows if you can disconnect participants on this call.

Example:

xStatus Conference Call 2 Capabilities ParticipantDisconnect *s Conference Call 2 Capabilities ParticipantDisconnect: Available ** end

xStatus Conference Call [n] Capabilities ParticipantList

Applies to: *All products* Requires user role: ADMIN, USER

Value space of the result returned:

Available/Unavailable

Shows if you can see the participant list on this call.

Example:

xStatus Conference Call 2 Capabilities ParticipantList *s Conference Call 2 Capabilities ParticipantList: Available ** end

xStatus Conference Call [n] Capabilities ParticipantMute

Applies to: *All products* Requires user role: ADMIN, USER

Value space of the result returned:

Available/Unavailable

Shows if you can mute and unmute participants on this call.

Example:

xStatus Conference Call 2 Capabilities ParticipantMute *s Conference Call 2 Capabilities ParticipantMute: Available ** 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] EventCenter Mode

Applies to: *All products* Requires user role: ADMIN, USER

Shows if the Practice Session mode is currently in use on this call. This status is only available for cloud registered devices.

Value space of the result returned:

Normal/PracticeSession

Example:

xStatus Conference Call 2 EventCenter Mode *s Conference Call 2 EventCenter Mode: Normal ** end

xStatus Conference Call [n] Manufacturer

Applies to: *All products* Requires user role: ADMIN, USER Shows the manufacturer of the device at a far end site. Value space of the result returned: *String* Example:

xStatus Conference Call 2 Manufacturer *s Conference Call 2 Manufacturer: "Cisco" ** end

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 on the device 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 Call [n] Streamed Applies to: *All products* Requires user role: ADMIN, USER Shows if the conference is being live streamed. Value space of the result returned: *False/True*

Example: xStatus Conference Call 2 Streamed *s Conference Call 2 Streamed: False ** 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 device 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

The multipoint status depends on the Conference Multipoint Mode setting and the MultiSite option key. A device that doesn't have the MultiSite option key cannot host a MultiSite conference regardless of the Conference Multipoint Mode setting.

Value space of the result returned:

CUCMMediaResourceGroupList/MultiSite/Off/Spark

Off: Multiparty conferences may be set up via an MCU if you call an MCU that allows devices to add participants to a conference (Direct Remote Add). All products except SX10, DX70, and DX80 can call one extra device on audio-only. Also if Conference Multipoint Mode is set to MultiSite on a device that doesn't have the MultiSite option key, the add one extra device on audio-only behavior applies.

MultiSite: If Conference Multipoint Mode is set to MultiSite, multiparty conferences are always set up using the built-in MultiSite feature. If Conference Multipoint Mode is set to Auto, the built-in MultiSite feature is used for multiparty conferences only when calling other video devices. Multiparty conferences are set up via an MCU if you call an MCU that allows devices to add participants to a conference (Direct Remote Add).

CUCMMediaResourceGroupList: Multiparty conferences are hosted by a CUCM configured conference bridge (ad hoc conferencing).

Spark: Multiparty conferences are set up through the Cisco Webex cloud service.

Example:

xStatus Conference Multipoint Mode

*s Conference Multipoint Mode: "CUCMMediaResourceGroupList"

** end

xStatus Conference Presentation CallId

Applies to: All products

Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL

Shows the identity of the device 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

** end

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

 ** end

Diagnostics status

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 device. The device 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 device 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" ** end

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 device.

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/ CompanionModeIncompatibilityLocal/CompanionModeIncompatibilityRemote/ ConfigurationFile/ContactInfoMismatch/ControlSystemConnection/ DefaultCallProtocolRegistered/ECReferenceDelay/EmbeddedWebViewFailedToLoad/ EmbeddedWebViewTerminatedUnexpectedly/EthernetDuplexMatches/FanStatus/ FirstTimeWizardNotCompleted/H320GatewayStatus/H323GatekeeperStatus/ HTTPFeedbackFailed/HTTPSModeSecurity/HasActiveCallProtocol/HasValidReleaseKey/ HdmiCecModeNoSound/IPv4Assignment/IPv6Assignment/IPv6Mtu/ ISDNLinkCompatibility/ISDNLinklpStack/ITLinstallation/InvalidSIPTransportConfig/ IpCameraStatus/LockDown/MacrosRuntimeStatus/MediaBlockingDetected/ MediaPortRangeNegative/MediaPortRangeOdd/MediaPortRangeOverlap/ MediaPortRangeTooSmall/MediaPortRangeValueSpace/MicrophoneOverloaded/ MicrophoneReinforcement/MicrophonesConnected/MonitorDelay/NTPStatus/ NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/OSDVideoOutput/ OutputConnectorLocations/PIILoggingMode/PeripheralSoftwareVersion/PlatformSanity/ PresentationSourceSelection/PresenterTrack/ProvModeWebexAndWebexEdgeEnabled/ ProvisioningDeveloperOptions/ProvisioningModeAndStatus/ProvisioningStatus/ RoomControl/SIPEncryption/SIPListenPortAndOutboundMode/SIPListenPortAndRegistration/ SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/ SignageFailedToLoad/SignageTerminatedUnexpectedly/SiplceAndAnatConflict/ SipOrH323ButNotBothEnabled/SoftwareUpgrade/SoftwareUpgradeKeepsFailing/ SpeakerTrackEthernetConnection/SpeakerTrackFrontPanelMountedCorrectly/ SpeakerTrackMicrophoneConnection/SpeakerTrackVideoInputs/TCPMediaFallback/ TLSVerifyRequiredCerts/TemperatureCheck/TouchPanelConnection/TurnBandwidth/ UltrasoundConfigSettings/UltrasoundSpeakerAvailability/ValidPasswords/ VideoFromInternalCamera/VideoInputSignalQuality/VideoInputStability/ VideoPortRangeNegative/VideoPortRangeOdd/VideoPortRangeTooSmall/ VideoPortRangeValueSpace/WebexAccountPlusWebexEdgeEnabled/ WebexActivationRequired/WebexAudioProximityConnectivity/WebexConnectivity/ WebexEdgeAccountPlusProvModeWebex/WebexLyraConnectivity/

WebexMustUpgradeCeSoftware/WebexNotificationConnectivity/WebexOffline/ WebexShouldUpgradeCeSoftware/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

** end

H320 status

xStatus H320 Gateway Address

Applies to: All products

Requires user role: ADMIN, USER

Returns the IPv4 address of the ISDN Gateway, if the video conferencing device is paired to one.

Value space of the result returned:

String

Example:

xStatus H320 Gateway Address *s H320 Gateway Address: "" ** end

xStatus H320 Gateway Id

Applies to: All products

Requires user role: ADMIN, USER

Returns the unique identification of the H320 Gateway, if the video conferencing device is paired with an ISDN Link.

Value space of the result returned:

String

Example: xStatus H320 Gateway Id *s H320 Gateway Id: "00:50:60:0B:EF:11" ** end

xStatus H320 Gateway Mode

Applies to: *All products* Requires user role: ADMIN, USER

Returns information on the type of calls the ISDN Gateway is configured for, if the video conferencing device is paired with an ISDN Link.

Value space of the result returned:

BRI/External/G703/PRI/Unknown

Example: xStatus H320 Gateway Mode *s H320 Gateway Mode: Unknown ** end

xStatus H320 Gateway Number

Applies to: *All products* Requires user role: ADMIN, USER

Returns the IPv6 address of the ISDN Gateway if the video conferencing device is paired to one.

Value space of the result returned:

String

Example: xStatus H320 Gateway Number *s H320 Gateway Number: "" ** end

xStatus H320 Gateway Reason

Applies to: *All products* Requires user role: ADMIN. USER

Shows the reason for rejected Gateway registration. Only available if the video conferencing device is connected to an ISDN Link.

Value space of the result returned:

String

Example:

xStatus H320 Gateway Reason

- *s H320 Gateway Reason: ""
- ** end

xStatus H320 Gateway Status

Applies to: *All products* Requires user role: ADMIN, USER

Returns the state of the H320 Gateway, if the video conferencing device is paired with an ISDN Link.

Value space of the result returned:

Error/Inactive/OK/OKWithWarning/Warning/NoConnection

Example:

xStatus H320 Gateway status

*s H320 Gateway Status: Error

** end

H323 status

xStatus H323 Gatekeeper Address

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Displays the IP address of the gatekeeper where the device 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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

Example:

xStatus H323 Gatekeeper Status

*s H323 Gatekeeper Status: Registered

** end

xStatus H323 Mode Reason

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 device settings.

"SIP is enabled": When H.323 Mode is set to On and SIP is enabled on a device that does not support the two simultaneously.

"Not available": When a device does not support H.323.

Example:

xStatus H323 Mode Reason *s H323 Mode Reason: "" ** end

ena

xStatus H323 Mode Status

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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. *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 ChannelRole

Applies to: *All products* Requires user role: ADMIN, USER

Shows the role of the incoming or outgoing audio channel.

Value space of the result returned:

Main/Presentation

Main: The audio from the main video is on the incoming or outgoing audio channel. *Presentation:* The audio from the presentation is on the incoming or outgoing audio channel.

Example:

xStatus MediaChannels Call 27 Channel 327 Audio ChannelRole *s MediaChannels Call 27 Channel 327 Audio ChannelRole: Main ** 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 algorithm is an ITU-T standard for audio compression.
G723_1: The G.723.1 algorithm is an ITU-T standard for audio compression.
G723_1: The G.728 algorithm is an ITU-T standard for audio compression.
G728: 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.
G729A: The G.729 annex A and B 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.

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 ** end

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 ** end

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: ""
- ** end

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 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 ** end

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" ** end

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 device.

Value space of the result returned:

String

Example:

xStatus Network CDP Platform

*s Network 1 CDP Platform: "cisco WS-C3750X-48P"

** end

xStatus Network [n] CDP PortID

Applies to: *All products* Requires user role: ADMIN, USER

Returns the identification the switch uses of the port the device 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 device 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 device is connected to.

Value space of the result returned:

String

Example: 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 device 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 VolPApplianceVlanID

Applies to: *All products* Requires user role: ADMIN, USER

Identifies the VLAN used for VoIP traffic from the device 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

Example:

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

Example:

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 device.

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

Applies to: *All products* Requires user role: ADMIN, USER Shows the IPv6 address that uniquely identifies this device. Value space of the result returned: *String* Example: xStatus Network 1 IPv6 Address *s Network 1 IPv6 Address: ""

xStatus Network [n] 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:DB8:0000:0000:0000:0000:0001"
** 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 device 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 devices 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 device is in sync with the NTP server. *NotSynced:* The device 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 ** end

xStatus NetworkServices UPnP Status

Applies to: *All products* Requires user role: ADMIN, USER

Reports whether or not the UPnP service advertises the device's presence on the network. The advertisement permits a Touch controller to discover the device automatically, and you do not need to manually enter the device's IP address in order to pair the Touch controller.

Value space of the result returned:

Running/Stopped

Running: The device's presence is advertised on the network. *Stopped:* The device's presence is not advertised on the network.

Example:

xStatus NetworkServices UPnP Status *s NetworkServices UPnP Status: Running

** end

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 *s Peripherals ConnectedDevice 1007 Name: "Cisco TelePresence Touch" ** end

xStatus Peripherals ConnectedDevice [n] SerialNumber

Applies to: All products
Requires user role: ADMIN, INTEGRATOR, USER, ROOMCONTROL
Shows the serial number of a connected peripheral device, for example the Touch 10.
Value space of the result returned:
 String
Example:
 xStatus Peripherals ConnectedDevice 1001 SerialNumber
 *s Peripherals ConnectedDevice 1001 SerialNumber: "ABC123..."

** end

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 video conferencing device.

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 video conferencing device. 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

Example:

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 Customization Checksum

Applies to: *All products* Requires user role: ADMIN, USER

You can provision custom elements to multiple devices by using a customization template (a backup file). This status reports the checksum of the last customization template that has been uploaded to the device. Also see the xCommand Provisioning Service Fetch command.

Value space of the result returned:

String

The checksum of the customization template.

Example:

xStatus Provisioning CUCM Customization Checksum *s Provisioning CUCM Customization Checksum: "633e163e2694b89ce37103b2448c36a..." ** end

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 device. Only in use if CUCM Extension Mobility is enabled, and CUCM is configured to remember the last logged in user on a device.

Value space of the result returned:

String

Example:

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

** end

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 device is using the briefing room setup. *Classroom:* This device is using is using the classroom setup. *Standard:* This device 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"
** end

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

** end

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: ""

** end

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

Example:

- 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 device is provisioned. *Idle:* The provisioning is not active. *NeedConfig:* The device 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 device.

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
- ** end

RoomAnalytics status

xStatus RoomAnalytics AmbientNoise Level A

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

The device can be set up to estimate the stationary ambient noise level in the room (refer to the RoomAnalytics AmbientNoiseEstimation Mode setting). The result is reported in this status.

The value is an A-weighted decibel value (dBA). The value is only a relative value and should not be treated as an absolute SPL (Sound Pressure Level) value. Especially not for third-party microphones that the device doesn't know the sensitivity of.

Value space of the result returned:

Integer

The stationary ambient noise level in dBA.

Example:

xStatus RoomAnalytics AmbientNoise Level A

*s RoomAnalytics AmbientNoise Level A: 30

** end

xStatus RoomAnalytics PeopleCount Current

Applies to: SX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

Shows the number 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 device will not keep record of who was in the room, only the average number of faces that were detected. When the device 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

** end

xStatus RoomAnalytics PeoplePresence

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

Requires user role: ADMIN, INTEGRATOR, USER

Shows if there are people present in the room or not. The feature is based on ultrasound. The device will not keep record of who was in the room, only whether or not there are people present in the room.

When someone enters the room, the status is updated immediately. After the room gets vacant, it may take up to two minutes for the status to change.

Value space of the result returned:

Yes/No/Unknown

Example:

xStatus RoomAnalytics PeoplePresence

*s RoomAnalytics PeoplePresence: No

** end

xStatus RoomAnalytics Sound Level A

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

If the RoomAnalytics AmbientNoiseEstimation Mode setting is On, the device will in addition to the ambient noise also measure the sound level in the room. The result is reported in this status every 10th second.

The value is an A-weighted averaged sound level in decibel (dBA). The value is only a relative value and should not be treated as an absolute SPL (Sound Pressure Level) value. Especially not for third-party microphones that the device doesn't know the sensitivity of.

Value space of the result returned:

Integer

The average sound level in dBA.

Example:

xStatus RoomAnalytics Sound Level A *s RoomAnalytics Sound Level A: 33 ** end

RoomPreset status

xStatus RoomPreset [n] Defined

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

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 ** end

xStatus Security Persistency Configurations

Applies to: All products

Requires user role: ADMIN, USER

Shows whether all the device's 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

** end

SIP status

xStatus SIP AlternateURI Alias [n] URI

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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

Example:

xStatus SIP CallForward DisplayName *s SIP CallForward DisplayName: ""

** end

xStatus SIP CallForward Mode

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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" ** end

xStatus SIP Proxy [n] Address

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows the address of the SIP Proxy that the device 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows the status of the communication between the device and the SIP Proxy server.

Value space of the result returned:

Active/AuthenticationFailed/DNSFailed/Off/Timeout/UnableTCP/UnableTLS/Unknown Active: The communication between the device and the SIP Proxy is active. DNSFailed: The attempt to establish communication to the DNS server failed. Off: There is no communication between the device and the SIP Proxy. Timeout: The attempt to establish communication to the SIP Proxy timed out. UnableTCP: The device is unable to use TCP as the transport method. UnableTLS: The device is unable to use TLS as the transport method. Unknown: The status of the communication is not known. AuthenticationFailed: Wrong username or password.

Example:

xStatus SIP Proxy 1 Status *s SIP Proxy 1 Status: Active ** end

xStatus SIP Registration [n] Authentication

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows a message to explain the reason why the SIP registration failed.

Value space of the result returned:

String

Example:

xStatus SIP Registration 1 Reason

*s SIP Registration 1 Reason: "404 Not Found"

** end

xStatus SIP Registration [n] Status

Applies to: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 device is in the process of de-registering to the SIP Proxy.
Failed: The device failed to register to the SIP Proxy.
Inactive: The device is not registered to any SIP Proxy.
Registered: The device is registered to the SIP Proxy.
Registering: The device 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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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: DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows whether or not the SSL certificate of the server that the device tries to register to is included in the device'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 device 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).

Example:

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 device 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 device is in power save mode. Deactivating: The device is in the process of waking up from power save mode. Inactive: It is regular working hours, so the device is not in power save mode. Disabled: The device 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 device is in standby mode or not.

Value space of the result returned:

Standby/EnteringStandby/Halfwake/Off

Standby: The device is in standby state.

EnteringStandby: The device is entering the standby state.

Halfwake: The device is in standby, but greets the user when presence is detected by motion or the Proximity pairing app. Not applicable for DX70.

Off: The device 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 devices have different sets of compatibility levels. Please check the release note to find the compatibility levels and minimum software version required for your product.

Value space of the result returned:

String

Shows the compatibility level for the device.

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 device.

Value space of the result returned:

String

Example:

xStatus SystemUnit Hardware MainBoard SerialNumber

- *s SystemUnit Hardware MainBoard SerialNumber: "FOC99999999"
- ** end

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 Monitoring Temperature Status

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, INTEGRATOR, USER

Shows the current temperature alarm level. "High" is meant to raise attention to the temperature trend since the operating temperature is higher than normal. At "Critical" level the device will shut down processes and processors to prevent any damage to the device. To avoid high operating temperatures, make sure the device is operating in a ventilated environment.

Value space of the result returned:

Unknown, Normal, High, Critical

Example:

xStatus SystemUnit Hardware Monitoring Temperature Status

*s SystemUnit Hardware Monitoring Temperature Status: Normal

** 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 device.

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/MX800/ Requires user role: ADMIN, USER

Returns information on the maximum temperature for the device. If this temperature is exceeded the device 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 device 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 device 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:

SoftwareUpgradeOK/SoftwareUpgradeFailed/RebootRequired/Other

SoftwareUpgradeOK: This value is returned after a successful software upgrade. SoftwareUpgradeFailed: 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

"Cisco Webex Board 55": Cisco Webex Board 55 "Cisco Webex Board 55S": Cisco Webex Board 55S (second generation / S series) "Cisco Webex Board 70": Cisco Webex Board 70 "Cisco Webex Board 70S": Cisco Webex Board 70S (second generation / S series) "Cisco Webex Board 85S": Cisco Webex Board 85S "Cisco Webex Codec Plus": Cisco Webex Codec Plus "Cisco Webex Codec Pro": Cisco Webex Codec Pro "Cisco TelePresence DX70": Cisco Webex DX70 (also sold as Cisco DX70) "Cisco Webex DX80": Cisco Webex DX80 (also sold as Cisco DX80) "Cisco TelePresence MX200 G2": Cisco TelePresence MX200 G2 "Cisco TelePresence MX300 G2": Cisco TelePresence MX300 G2 "Cisco TelePresence MX700": Cisco TelePresence MX700 with dual screen and single camera "Cisco TelePresence MX700 SpeakerTrack": Cisco TelePresence MX700 with dual screen and dual camera "Cisco TelePresence MX800": Cisco TelePresence MX800 with single screen and single camera "Cisco TelePresence MX800 SpeakerTrack": Cisco TelePresence MX800 with single screen and dual camera "Cisco TelePresence MX800 Dual": Cisco TelePresence MX800 Dual with dual screen and dual camera "Cisco Webex Room Kit": Cisco Webex Room Kit "Cisco Webex Room Kit Mini": Cisco Webex Room Kit Mini "Cisco Webex Room 55": Cisco Webex Room 55 "Cisco Webex Room 55 Dual": Cisco Webex Room 55 Dual (based on Codec Plus) "Cisco Webex Room 70 Dual": Cisco Webex Room 70 Dual (based on Codec Plus) "Cisco Webex Room 70 Dual G2": Cisco Webex Room 70 Dual G2 (based on Codec Pro) "Cisco Webex Room 70 Single": Cisco Webex Room 70 Single (based on Codec Plus)

"Cisco TelePresence SX10": Cisco TelePresence SX10 "Cisco TelePresence SX20": Cisco TelePresence SX20 "Cisco TelePresence SX80": Cisco TelePresence SX80

Example:

xStatus SystemUnit ProductId

*s SystemUnit ProductId: "Cisco TelePresence 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 "Board 55": Cisco Webex Board 55 "Board 55S": Cisco Webex Board 55S (second generation / S series) "Board 70": Cisco Webex Board 70 "Board 70S": Cisco Webex Board 70S (second generation / S series) "Board 85S": Cisco Webex Board 85S "Codec Plus": Cisco Webex Codec Plus "Codec Pro": Cisco Webex Codec Pro "DX70": Cisco Webex DX70 (also sold as Cisco DX70) "DX80": Cisco Webex DX80 (also sold as Cisco DX80) "MX200 G2": Cisco TelePresence MX200 G2 "MX300 G2": Cisco TelePresence MX300 G2 "MX700": Cisco TelePresence MX700 with dual screen and single camera "MX700ST": Cisco TelePresence MX700 with dual screen and dual camera "MX800": Cisco TelePresence MX800 with single screen and single camera "MX800ST": Cisco TelePresence MX800 with single screen and dual camera "MX800D": Cisco TelePresence MX800 Dual with dual screen and dual camera "Room Kit": Cisco Webex Room Kit "Room Kit Mini": Cisco Webex Room Kit Mini "Room 55": Cisco Webex Room 55 "Room 55D": Cisco Webex Room 55 Dual (based on Codec Plus) "Room 70D": Cisco Webex Room 70 Dual (based on Codec Plus) "Room 70D G2": Cisco Webex Room 70 Dual G2 (based on Codec Pro) "Room 70S": Cisco Webex Room 70 Single (based on Codec Plus) "Room 70S G2": Cisco Webex Room 70 Single G2 (based on Codec Pro) "SX10": Cisco TelePresence SX10 "SX20": Cisco TelePresence SX20 "SX80": Cisco TelePresence SX80

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" ** end

xStatus SystemUnit Software DisplayName

Applies to: All products

Requires user role: ADMIN, USER

Shows the name of the software that is installed on the device, 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"

** end

xStatus SystemUnit Software Name Applies to: All products Requires user role: ADMIN, USER Shows the name of the software that is installed on the device. 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 device 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows if the device 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 device 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

xStatus SystemUnit Software ReleaseDate Applies to: All products Requires user role: ADMIN, USER Shows the release date of the software installed on the device. Value space of the result returned: String Example: xStatus SystemUnit Software ReleaseDate *s SystemUnit Software ReleaseDate: "2015-05-05"

*s SystemUnit Software ReleaseDate:
** end

xStatus SystemUnit Software Version

Applies to: *All products* Requires user role: ADMIN, USER Shows the software version installed on the device. 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

** end

xStatus SystemUnit Uptime

Applies to: *All products* Requires user role: ADMIN, USER Shows the number of seconds since the last restart of the device. 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 device. 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 device's active contact information. This address is used to reach this device. 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 device's active contact name. The result depends on which protocol, if any, the device 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

Example: xStatus UserInterface ContactInfo Name *s UserInterface ContactInfo Name: "MySystem"

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

Example:

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 []

xStatus UserInterface Features Call End

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the default End call button is removed from the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The default button is in the user interface.

Hidden: The default button is removed from the user interface.

Example:

xStatus UserInterface Features Call End

*s UserInterface Features Call End: Visible

xStatus UserInterface Features MidCallControls

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the default Hold, Transfer, and Resume in-call buttons are removed from the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The default button is in the user interface.

Hidden: The default button is removed from the user interface.

Example:

xStatus UserInterface Features MidCallControls

*s UserInterface Features MidCallControls: Visible

** end

xStatus UserInterface Features Call Start

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the default Call button and the Add participant button are removed from the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The default button is in the user interface.

Hidden: The default button is removed from the user interface.

Example:

xStatus UserInterface Features Call Start

*s UserInterface Features Call Start: Visible

** end

xStatus UserInterface Features Share Start

Applies to: All products Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the default buttons and other UI elements for sharing and previewing content, both in call and out of call, are removed from the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The default button is in the user interface. *Hidden:* The default button is removed from the user interface.

Example:

xStatus UserInterface Features Share Start *s UserInterface Features Share Start: Visible ** end

xStatus UserInterface Features Whiteboard Start

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Boards Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the default Whiteboard button is removed from the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The default button is in the user interface.

Hidden: The default button is removed from the user interface.

Example:

xStatus UserInterface Features Whiteboard Start *s UserInterface Features Whiteboard Start: Visible ** end

xStatus UserInterface SettingsMenu Visibility

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

This status reports whether or not the the device name (or contact information) in the upper left corner of the user interface, and the associated drop down menu and Settings panel, are shown in the user interface.

Value space of the result returned:

Visible/Hidden

Visible: The device name with drop down menu and Settings panel is shown in the upper left corner of the user interface.

Hidden: The device name with drop down menu and Settings panel is not shown.

Example:

xStatus UserInterface SettingsMenu Visibility

*s UserInterface SettingsMenu Visibility: Visible

** 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards 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/USBC-DP* Example: xStatus Video Input Connector 1 Type

xStatus Video Input Connector I Type *s Video Input Connector 1 Type: HDMI ** end

xStatus Video Input MainVideoMute

Applies to: *All products* Requires user role: ADMIN. INTEGRATOR. USER

Indicates whether sending of main video has been stopped by using the Video Input MainVideo Mute command (or, if available, the "Turn video off" button on the user interface).

Value space of the result returned:

On/Off

On: Video has been stopped. *Off:* Video has not been stopped.

Example:

xStatus Video Input MainVideoMute *s Video Input MainVideoMute: Off ** 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

Example:

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

D15407.12 Cisco Collaboration Endpoint Software API Reference Guide CE9.10, DECEMBER 2019

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* Example:

xStatus Video Input Source 1 Resolution Height *s Video Input Source 1 Resolution Height: 1080 ** end

xStatus Video Input Source [n] Resolution RefreshRate

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"

** end

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* Example: 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 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 video conferencing device 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 that the video conferencing device has detected.

This information is only available when the device connected to the HDMI output has the CEC feature configured on and the video conferencing device 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 ** end

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 video conferencing device 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" ** end

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 video conferencing device is sending out.

Value space of the result returned:

String

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.

Example:

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 ** en

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 ** end

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 Boards 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 ** end

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

Requires user role: ADMIN, USER

Shows whether the monitor is positioned on the left or the right. Applicable for dual screen devices only.

Value space of the result returned:

Left/Right

Example:

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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 RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards

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

** end

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

D15407.12 Cisco Collaboration Endpoint Software API Reference Guide CE9.10, DECEMBER 2019

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

WebEngine status

xStatus WebEngine Features Signage

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Reports whether or not the digital signage feature is enabled. It is enabled (On) only when both the WebEngine Mode and Standby Signage Mode settings are On.

Value space of the result returned:

On/Off

Example: xStatus WebEngine Features Signage *s WebEngine Features Signage: On ** end

xStatus WebEngine Features WebEngine

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 Boards Requires user role: ADMIN, USER

Reports whether or not the web engine is enabled. It is enabled (On) when the WebEngine Mode setting is On.

Value space of the result returned:

On/Off

Example: xStatus WebEngine Features WebEngine *s WebEngine Features WebEngine: On ** end

Webex status

xStatus Webex Status

Applies to: *All products* Requires user role: ADMIN, USER

Reports the status of the connection between the device and the Cisco Webex cloud service. If the could service is up and running, the status reports Registered. If the device is registered to an on-premise service such as CUCM or VCS, the status reports Disabled.

Value space of the result returned:

Disabled/Error/Registered/Registering/Stopped

Example:

- xStatus Webex Status
- *s Webex Status: Disabled
- ** end

Chapter 6

Appendices

D15407.12 Cisco Collaboration Endpoint Software API Reference Guide CE9.10, DECEMBER 2019

Supported commands matrix

Here you can find tables that show the complete list of configurations, commands, and statuses that are supported for devices running CE9.10.

Configuration	7
Command	3
Status	5

Information about the tables

1. Which devices support a configuration, status, or command

Some entries are supported by all types of devices, while others only exist for a smaller subset.

The following devices are covered:

- DX series: DX80, DX70
- MX series: MX800, MX700, MX300 G2, MX200 G2
- Room series: Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55 Dual, Room 70, Room 70 G2
- SX series: SX80, SX20, SX10
- Webex Boards: 55, 55S, 70, 70S, and 85S

2. Which call services support a configuration, status, or command

Some of the configurations, commands, and statuses that are available in the API only apply to on-premises registered devices. They don't apply to Webex registered devices. These items are marked with "On-prem only".

Among the non-applicable 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 device's web interface. A subset is also part of the device's API. You can only issue commands from the device'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 (A)
 AUDIT (Au)
- USER (U)

ROOMCONTROL (R)

• INTEGRATOR (I)

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio DefaultVolume	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio Input ARC [n] Mode	-	-	-	-	-	-	-	-	X	Х	-	Х	-	-	-	Web, API	AI
Audio Input HDMI [n] Level	Х	-	-	Х	-	-	Х	Х	Х	Х	Х	Х	Х	-	-	Web, API	AI
Audio Input HDMI [n] Mode	X	-	-	X	-	-	X	X	X	Х	X	Х	Х	-	-	Web, API	AI
Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo	Х	-	-	Х	-	-	Х	Х	Х	Х	Х	Х	Х	-	-	Web, API	AI
Audio Input Line [n] Equalizer ID	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Equalizer Mode	Х	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] VideoAssociation MuteOnInactiveVideo	X	X	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] VideoAssociation VideoInputSource	Х	X	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Channel	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Level	Х	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Line [n] Mode	Х	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Microphone [n] Channel	-	-	-	-	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Input Microphone [n] EchoControl Mode	X	X	X	X	-	-	X	-	X	X	X	Х	X	-	-	Web, API	AI
Audio Input Microphone [n] EchoControl Dereverberation	X	X	X	X	-	-	X	-	X	X	X	Х	X	-	-	Web, API	AI
Audio Input Microphone [n] EchoControl NoiseReduction	X	X	X	X	-	-	X	-	X	X	X	Х	Х	-	-	Web, API	AI
Audio Input Microphone [n] Equalizer ID	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Input Microphone [n] Equalizer Mode	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Input Microphone [n] Level	X	X	X	X	X	-	X	-	X	X	X	Х	X	-	-	Web, API	AI
Audio Input Microphone [n] Mode	X	X	X	X	X	-	X	-	X	X	X	Х	X	-	-	Web, API	AI
Audio Input Microphone [n] Type	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Input Microphone [n] PhantomPower	-	-	-	-	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo	X	-	-	X	-	-	-	-	-	X	-	-	-	-	-	Web, API	AI
Audio Input Microphone [n] VideoAssociation VideoInputSource	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Input MicrophoneMode	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio KeyClickDetector Attenuate	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio KeyClickDetector Enabled	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio Microphones Mute Enabled	X	X	X	X	X	Х	X	X	X	X	X	Х	X	-	-	Web, API	AI
Audio Microphones PhantomPower	-	Х	-	-	Х	-	Х	-	Х	-	-	-	Х	-	-	Web, API	А
Audio MicrophoneReinforcement Input Microphone [n] Mode	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio MicrophoneReinforcement Output Line [n] Mode	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio MicrophoneReinforcement Gain	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AI
Audio Output ARC [n] Delay DelayMs	-	-	-	-	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Output ARC [n] Delay Mode	-	-	-	-	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Output ARC [n] Mode	-	-	-	-	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Output ConnectorSetup	-	-	-	-	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Output HDMI [n] Delay DelayMs	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	Web, API	AI
Audio Output HDMI [n] Delay Mode	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	Web, API	AI
Audio Output HDMI [n] Level	X	-	-	X	-	-	-	-	-	-	-	Х	-	-	-	Web, API	AI
Audio Output HDMI [n] Mode	X	-	-	Х	-	-	-	-	X	Х	-	Х	-	-	-	Web, API	AI
Audio Output InternalSpeaker Mode	-	-	-	X	X	-	X	-	X	-	Х	Х	Х	-	-	Web, API	А
Audio Output Line [n] Channel	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Output Line [n] Delay DelayMs	X	X	X	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Output Line [n] Delay Mode	X	X	X	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Output Line [n] Equalizer ID	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AI
Audio Output Line [n] Equalizer Mode	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
Audio Output Line [n] Level	Х	-	-	Х	-	-	-	-	-	Х	Х	Х	-	-	-	Web, API	AI
Audio Output Line [n] Mode	X	-	-	X	-	-	X	-	X	Х	X	Х	Х	-	-	Web, API	AI
Audio Output Line [n] OutputType	-	-	-	-	-	-	Х	-	Х	-	Х	-	Х	-	-	Web, API	AI
Audio SoundsAndAlerts RingTone	X	X	X	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AIU

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio SoundsAndAlerts RingVolume	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio Ultrasound Mode	X	X	Х	X	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AI
Audio Ultrasound MaxVolume	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Bluetooth Allowed	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	A
Bluetooth Enabled	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	А
BYOD TouchForwarding Enabled	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	Web, API	А
CallHistory Mode	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Cameras Camera [n] AssignedSerialNumber	X	-	-	X	-	-	-	-	X	Х	X	-	-	-	-	Web, API	AI
Cameras Camera [n] Backlight DefaultMode	Х	Х	Х	Х	Х	Х	-	-	Х	Х	Х	Х	-	Х	-	Web, API	AI
Cameras Camera [n] Brightness Mode	X	X	Х	X	X	-	-	-	X	Х	X	Х	-	X	-	Web, API	AI
Cameras Camera [n] Brightness DefaultLevel	X	X	Х	Х	Х	-	-	-	X	Х	Х	Х	-	Х	-	Web, API	AI
Cameras Camera [n] Flip	X	X	Х	X	-	-	-	-	-	X	-	-	-	-	-	Web, API	AI
Cameras Camera [n] Focus Mode	X	X	Х	X	X	-	-	-	X	X	X	Х	-	X	-	Web, API	AI
Cameras Camera [n] Gamma Mode	X	Х	-	Х	Х	-	-	-	X	Х	Х	Х	-	X	-	Web, API	AI
Cameras Camera [n] Gamma Level	X	X	-	Х	Х	-	-	-	X	Х	Х	Х	-	Х	-	Web, API	AI
Cameras Camera [n] IrSensor	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	Web	AU
Cameras Camera [n] Mirror	X	Х	Х	Х	Х	-	-	-	Х	Х	Х	Х	-	-	-	Web, API	AI
Cameras Camera [n] MotorMoveDetection	X	X	-	X	-	-	-	-	-	X	-	-	-	-	-	Web	AI
Cameras Camera [n] Whitebalance Mode	X	X	Х	X	X	-	-	-	X	X	Х	Х	-	-	-	Web, API	AI
Cameras Camera [n] Whitebalance Level	X	X	Х	Х	Х	-	-	-	X	Х	Х	Х	-	-	-	Web, API	AI
Cameras Camera Framerate	-	-	-	-	-	-	Х	Х	-	-	-	-	Х	-	-	Web, API	А
Cameras PowerLine Frequency	X	X	-	X	X	-	Х	X	X	X	X	Х	X	-	-	Web	AI
Cameras PresenterTrack CameraPosition Pan	Х	-	-	Х	-	-	-	-	Х	Х	Х	Х	-	-	-	Web	AI
Cameras PresenterTrack CameraPosition Tilt	X	-	-	X	-	-	-	-	X	X	X	Х	-	-	-	Web	AI
Cameras PresenterTrack CameraPosition Zoom	X	-	-	X	-	-	-	-	Х	X	X	Х	-	-	-	Web	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Cameras PresenterTrack Connector	Х	-	-	Х	-	-	-	-	Х	Х	Х	Х	-	-	-	Web	AI
Cameras PresenterTrack Enabled	Х	-	-	Х	-	-	-	-	Х	Х	Х	Х	-	-	-	Web	AI
Cameras PresenterTrack PresenterDetectedStatus	X	-	-	Х	-	-	-	-	X	Х	X	Х	-	-	-	Web	AI
Cameras PresenterTrack TriggerZone	Х	-	-	Х	-	-	-	-	Х	Х	Х	Х	-	-	-	Web	AI
Cameras Preset TriggerAutofocus	X	Х	-	Х	X	-	-	-	-	-	-	-	-	-	-	Web, API	А
Cameras SpeakerTrack Mode	Х	-	-	Х	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Cameras SpeakerTrack Closeup	X	-	-	Х	-	-	Х	-	X	Х	X	Х	Х	X	-	Web, API	AIU
Cameras SpeakerTrack TrackingMode	Х	-	-	Х	-	-	-	-	-	Х	-	-	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection Mode	X	-	-	Х	-	-	-	-	-	Х	-	-	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection CameraLeft	Х	-	-	Х	-	-	-	-	-	Х	-	-	-	-	-	Web, API	AI
Cameras SpeakerTrack ConnectorDetection CameraRight	X	-	-	Х	-	-	-	-	-	X	-	-	-	-	-	Web, API	AI
Cameras SpeakerTrack Whiteboard Mode	Х	-	-	Х	-	-	Х	-	Х	Х	Х	Х	Х	-	-	Web, API	AIU
Conference ActiveControl Mode	X	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web	А
Conference AutoAnswer Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Conference AutoAnswer Mute	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	А
Conference AutoAnswer Delay	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	А
Conference CallProtocollPStack	X	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web	А
Conference DefaultCall Protocol	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	А
Conference DefaultCall Rate	X	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AI
Conference DoNotDisturb DefaultTimeout	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Conference Encryption Mode	X	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web, API	А
Conference FarEndControl Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
Conference FarEndControl SignalCapability	X	Х	Х	Х	X	Х	Х	Х	Х	X	X	Х	Х	X	Х	Web, API	А
Conference FarEndMessage Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
Conference MaxReceiveCallRate	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	А

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference MaxTransmitCallRate	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Conference MaxTotalReceiveCallRate	X	X	Х	Х	X	Х	X	Х	X	Х	Х	Х	Х	X	-	Web, API	A
Conference MaxTotalTransmitCallRate	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Conference MicUnmuteOnDisconnect Mode	X	X	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	A
Conference Multipoint Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Conference MultiStream Mode	X	-	-	X	-	-	X	X	X	Х	X	Х	Х	-	-	Web, API	A
Conference IncomingMultisiteCall Mode	Х	Х	-	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	А
Conference Presentation OnPlacedOnHold	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	A
Conference Presentation RelayQuality	Х	Х	-	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	А
Conference VideoBandwidth Mode	X	X	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	А
FacilityService Service [n] Type	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
FacilityService Service [n] Name	X	X	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AI
FacilityService Service [n] Number	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
FacilityService Service [n] CallType	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AI
GPIO Pin [n] Mode	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AI
H323 Authentication Mode	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	A
H323 Authentication LoginName	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
H323 Authentication Password	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	Х	Web, API	A
H323 CallSetup Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	A
H323 Encryption KeySize	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	Х	Web, API	A
H323 Gatekeeper Address	X	X	Х	X	X	Х	X	Х	X	Х	X	Х	Х	Х	Х	Web, API	A
H323 H323Alias E164	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	А
H323 H323Alias ID	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
H323 NAT Mode	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	А
H323 NAT Address	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А

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H323 PortAllocation	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web	А
HttpClient Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	-	Web, API	А
HttpClient AllowHTTP	Х	Х	Х	Х	Х	Х	Х	X	X	Х	Х	X	Х	X	-	Web, API	А
HttpClient AllowInsecureHTTPS	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
HttpFeedback TlsVerify	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А
Logging Debug Wifi	-	-	-	-	-	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web	А
Logging External Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	-	Web, API	А
Logging External Protocol	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	А
Logging External Server Address	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А
Logging External Server Port	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	-	Web, API	А
Logging External TIsVerify	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	-	Web, API	А
Logging Internal Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	А
Logging Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web	А
Macros Mode	Х	Х	-	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А
Macros AutoStart	Х	Х	-	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	-	Web, API	А
Macros UnresponsiveTimeout	Х	Х	-	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А
Macros XAPI Transport	Х	Х	-	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	-	Web	А
Network [n] DNS DNSSEC Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	А
Network [n] DNS Domain Name	Х	Х	Х	Х	Х	Х	Х	X	X	Х	X	X	Х	X	-	Web, API	AU
Network [n] DNS Server [m] Address	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	AU
Network [n] IEEE8021X Mode	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	-	Web, API	AU
Network [n] IEEE8021X TIsVerify	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	AU
Network [n] IEEE8021X UseClientCertificate	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IEEE8021X Identity	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IEEE8021X Password	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Network [n] IEEE8021X AnonymousIdentity	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IEEE8021X Eap Md5	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IEEE8021X Eap Ttls	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IEEE8021X Eap TIs	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IEEE8021X Eap Peap	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IPStack	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv4 Assignment	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IPv4 Address	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv4 Gateway	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IPv4 SubnetMask	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv6 Assignment	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv6 Address	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv6 Gateway	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] IPv6 DHCPOptions	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] MTU	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] QoS Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv Audio	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv Video	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv Data	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv Signalling	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv ICMPv6	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AU
Network [n] QoS Diffserv NTP	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	x	Х	Х	X	-	Web, API	AU
Network [n] RemoteAccess Allow	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] Speed	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AI
Network [n] TrafficControl Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Network [n] VLAN Voice Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] VLAN Voice Vlanld	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
NetworkPort [n] Mode	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	A
NetworkServices CDP Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices H323 Mode	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Web, API	А
NetworkServices HTTP Mode	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices HTTP Proxy LoginName	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	-	Web, API	AU
NetworkServices HTTP Proxy Password	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
NetworkServices HTTP Proxy Mode	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	AU
NetworkServices HTTP Proxy Url	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
NetworkServices HTTP Proxy PACUrl	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	-	Web, API	AU
NetworkServices HTTPS OCSP Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	А
NetworkServices HTTPS OCSP URL	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	-	Web	А
NetworkServices HTTPS Server MinimumTLSVersion	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices HTTPS StrictTransportSecurity	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	А
NetworkServices HTTPS VerifyClientCertificate	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices NTP Mode	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Web, API	А
NetworkServices NTP Server [n] Address	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Web, API	А
NetworkServices NTP Server [n] Key	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Web, API	А
NetworkServices NTP Server [n] Keyld	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Web, API	А
NetworkServices NTP Server [n] KeyAlgorithn	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Web, API	А
NetworkServices SIP Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices SMTP Mode	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	Web, API	A
NetworkServices SMTP Server	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web, API	А
NetworkServices SMTP Port	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	Web, API	A

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
NetworkServices SMTP Username	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web, API	А
NetworkServices SMTP Password	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web, API	А
NetworkServices SMTP From	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web, API	А
NetworkServices SMTP Security	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web, API	А
NetworkServices SNMP Mode	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AI
NetworkServices SNMP Host [n] Address	X	Х	X	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AI
NetworkServices SNMP CommunityName	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AI
NetworkServices SNMP SystemContact	X	Х	X	Х	X	Х	X	X	X	X	X	Х	Х	Х	-	Web, API	AI
NetworkServices SNMP SystemLocation	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AI
NetworkServices SSH Mode	X	Х	X	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	А
NetworkServices SSH HostKeyAlgorithm	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices SSH AllowPublicKey	X	Х	X	Х	X	Х	X	X	X	X	X	Х	X	X	-	Web	А
NetworkServices Telnet Mode	X	Х	Х	Х	Х	Х	-	-	-	-	-	-	-	-	-	Web, API	А
NetworkServices UPnP Mode	X	Х	X	Х	X	-	X	X	X	X	X	Х	Х	X	-	Web, API	А
NetworkServices UPnP Timeout	X	Х	X	Х	Х	-	X	X	X	Х	Х	Х	Х	Х	-	Web	А
NetworkServices Websocket	X	Х	X	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	А
NetworkServices WelcomeText	X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
NetworkServices Wifi Allowed	-	-	-	-	-	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
NetworkServices Wifi Enabled	-	-	-	-	-	Х	X	X	X	X	X	Х	Х	X	-	Web	AU
NetworkServices XMLAPI Mode	X	Х	X	Х	Х	Х	X	X	X	X	Х	Х	Х	X	-	Web	А
Peripherals InputDevice Mode	-	-	-	-	-	Х	X	X	X	Х	Х	Х	X	-	-	Web, API	А
Peripherals Pairing CiscoTouchPanels EmcResilience	X	Х	X	Х	X	-	X	X	X	X	X	Х	Х	-	-	Web	A
Peripherals Pairing CiscoTouchPanels RemotePairing	Х	Х	Х	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Peripherals Profile Cameras	X	Х	X	Х	X	-	X	X	X	X	X	Х	Х	-	-	Web, API	AI
Peripherals Profile Cameras	-	-	-	-	-	-	-	-	-	-	-	-	-	Х	-	Web	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Peripherals Profile ControlSystems	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Peripherals Profile TouchPanels	Х	Х	Х	Х	X	-	Х	Х	X	Х	X	Х	Х	-	-	Web, API	AI
Phonebook Server [n] ID	Х	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web, API	А
Phonebook Server [n] Pagination	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
Phonebook Server [n] TIsVerify	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	Х	Web, API	А
Phonebook Server [n] Type	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
Phonebook Server [n] URL	Х	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web, API	А
Provisioning Connectivity	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Provisioning ExternalManager Address	Х	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	Х	Web, API	AU
Provisioning ExternalManager AlternateAddress	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Provisioning ExternalManager Protocol	Х	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Provisioning ExternalManager Path	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Provisioning ExternalManager Domain	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	Х	Web, API	AU
Provisioning Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Provisioning LoginName	Х	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Provisioning Password	Х	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	Х	Х	Web, API	AU
Provisioning TIsVerify	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Provisioning WebexEdge	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
Proximity AlternatePort Enabled	Х	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	A
Proximity Mode	Х	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
Proximity Services CallControl	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
Proximity Services ContentShare FromClients	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Proximity Services ContentShare ToClients	Х	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AU
RoomAnalytics AmbientNoiseEstimation Mode	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
RoomAnalytics PeopleCountOutOfCall	Х	-	-	-	-	-	X	X	X	X	X	Х	X	X	-	Web, API	AIU

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
RoomAnalytics PeoplePresenceDetector	Х	Х	-	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
RoomReset Control	X	Х	Х	X	X	Х	Х	Х	X	X	Х	Х	X	X	-	Web	А
RTP Ports Range Start	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	А
RTP Ports Range Stop	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web	А
RTP Video Ports Range Start	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	А
RTP Video Ports Range Stop	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	А
Security Audit Logging Mode	X	X	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	Au
Security Audit OnError Action	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	Au
Security Audit Server Address	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	Au
Security Audit Server Port	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	Au
Security Audit Server PortAssignment	X	X	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	Au
Security Fips Mode	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	А
Security Session FailedLoginsLockoutTime	X	X	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	Web, API	А
Security Session InactivityTimeout	X	X	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	А
Security Session MaxFailedLogins	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	А
Security Session MaxSessionsPerUser	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	А
Security Session MaxTotalSessions	X	X	Х	X	X	Х	Х	X	X	X	Х	Х	X	X	-	Web, API	А
Security Session ShowLastLogon	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	А
SerialPort Mode	X	X	Х	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AI
SerialPort BaudRate	X	X	-	X	-	-	Х	X	X	X	X	Х	X	X	-	Web, API	AI
SerialPort LoginRequired	X	X	Х	X	X	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А
SIP ANAT	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	Х	Web, API	А
SIP Authentication UserName	X	X	Х	X	X	Х	Х	X	Х	X	X	Х	X	X	Х	Web, API	А
SIP Authentication Password	X	X	Х	X	X	Х	Х	Х	X	X	X	Х	X	X	Х	Web, API	А
SIP DefaultTransport	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	Х	Web, API	А

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
SIP DisplayName	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
SIP Ice DefaultCandidate	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Web, API	А
SIP Ice Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Web, API	А
SIP Line	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web	А
SIP ListenPort	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	Х	Х	Х	Web, API	А
SIP Mailbox	Х	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Web	А
SIP MinimumTLSVersion	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A
SIP PreferredIPSignaling	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web	А
SIP Proxy [n] Address	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A
SIP TIsVerify	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Web	А
SIP Turn DiscoverMode	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web	А
SIP Turn DropRflx	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web	А
SIP Turn Server	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A
SIP Turn UserName	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	Х	X	Х	Web, API	А
SIP Turn Password	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	А
SIP Type	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web	А
SIP URI	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A
Standby BootAction	Х	Х	Х	Х	X	-	Х	X	X	Х	X	Х	Х	-	-	Web, API	AIU
Standby Control	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
Standby Delay	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	Web, API	AI
Standby Signage Audio	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
Standby Signage InteractionMode	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	Web, API	AI
Standby Signage Mode	-	-	-	-	-	-	Х	X	Х	Х	X	Х	Х	X	-	Web, API	AI
Standby Signage RefreshInterval	-	-	-	-	-	-	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AI
Standby Signage Url	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Standby StandbyAction	Х	Х	Х	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	-	-	Web, API	AI
Standby WakeupAction	X	X	X	X	X	-	X	X	X	X	X	Х	X	-	-	Web, API	AIU
Standby WakeupOnMotionDetection	X	X	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AI
Standby PowerSave	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	А
SystemUnit Name	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
SystemUnit CrashReporting Advanced	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	А
SystemUnit CrashReporting Mode	X	X	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	А
SystemUnit CrashReporting Url	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	А
SystemUnit IrSensor	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	Web	А
Time TimeFormat	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
Time DateFormat	X	X	X	X	Х	Х	X	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
Time Zone	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AIU
Time WorkDay Start	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Time WorkDay End	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Time WorkWeek FirstDayOfWeek	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Time WorkWeek LastDayOfWeek	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
UserInterface Accessibility IncomingCallNotification	X	X	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AIU
UserInterface Assistant Mode	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	А
UserInterface Assistant Mode	X	X	X	X	X	Х	X	Х	X	Х	Х	Х	X	Х	-	Web	А
UserInterface Branding AwakeBranding Colors	X	X	X	X	Х	Х	X	X	X	X	Х	Х	X	Х	-	Web, API	AI
UserInterface ContactInfo Type	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
UserInterface CustomMessage	X	X	X	X	X	Х	X	X	X	X	X	Х	X	-	-	Web, API	AI
UserInterface KeyTones Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
UserInterface Features Call End	X	X	X	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AI
UserInterface Features Call MidCallControls	X	X	X	X	X	Х	X	X	X	X	X	Х	Х	Х	-	Web, API	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
UserInterface Features Call JoinWebex	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
UserInterface Features Call Start	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
UserInterface Features Call VideoMute	Х	Х	Х	Х	X	-	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features HideAll	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
UserInterface Features Share Start	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features Whiteboard Start	-	-	-	-	-	Х	-	-	-	-	-	-	-	Х	-	Web, API	AI
UserInterface Language	X	X	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AU
UserInterface OSD EncryptionIndicator	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
UserInterface OSD HalfwakeMessage	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	-	-	Web, API	A
UserInterface OSD Output	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
UserInterface Phonebook Mode	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Security Mode	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
UserInterface SettingsMenu Mode	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	А
UserInterface SettingsMenu Visibility	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
UserInterface SoundEffects Mode	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
UserInterface Wallpaper	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIU
UserInterface UsbPromotion	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	Web, API	А
UserInterface WebcamOnlyMode	-	-	-	-	-	-	-	Х	-	-	-	-	-	-	-	Web, API	А
UserManagement LDAP Admin Filter	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A
UserManagement LDAP Admin Group	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
UserManagement LDAP Attribute	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	Х	Web, API	А
UserManagement LDAP BaseDN	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
UserManagement LDAP Encryption	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	Х	Web, API	А
UserManagement LDAP MinimumTLSVersion	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
UserManagement LDAP Mode	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	A

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
UserManagement LDAP Server Address	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
UserManagement LDAP Server Port	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Web, API	А
UserManagement LDAP VerifyServerCertificate	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	А
UserManagement PasswordPolicy Complexity MinimumDigits	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	A
UserManagement PasswordPolicy Complexity MinimumLength	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	А
UserManagement PasswordPolicy Complexity MinimumLowercase	X	X	Х	X	X	Х	Х	Х	X	X	X	Х	X	X	-	Web, API	A
UserManagement PasswordPolicy Complexity MinimumSpecial	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	А
UserManagement PasswordPolicy Complexity MinimumUppercase	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	A
UserManagement PasswordPolicy MaxLifetime	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	А
UserManagement PasswordPolicy ReuseLimit	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	А
Video ActiveSpeaker DefaultPIPPosition	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AI
Video DefaultLayoutFamily Local	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	-	-	Web	А
Video DefaultLayoutFamily Remote	X	Х	-	Х	X	-	Х	Х	Х	Х	Х	Х	Х	X	-	Web	А
Video DefaultMainSource	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU
Video Input Connector [n] CameraControl Camerald	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AI
Video Input Connector [n] CameraControl Mode	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AI
Video Input Connector [n] CEC Mode	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AI
Video Input Connector [n] DviType	X	X	-	X	X	-	-	-	-	-	-	-	-	-	-	Web, API	А
Video Input Connector [n] HDCP Mode	-	-	-	-	-	-	-	-	Х	Х	Х	Х	Х	-	-	Web, API	AI
Video Input Connector [n] InputSourceType	X	X	Х	Х	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	AI
Video Input Connector [n] Name	X	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AI
Video Input Connector [n] OptimalDefinition Profile	X	X	Х	X	X	Х	Х	Х	X	X	X	Х	X	X	-	Web	AI
Video Input Connector [n] OptimalDefinition Threshold60fps	X	Х	-	Х	X	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	А
Video Input Connector [n] PreferredResolution	-	-	-	-	-	-	Х	X	X	X	X	Х	X	X	-	Web, API	AI
Video Input Connector [n] PresentationSelection	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AI

Configuration	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Input Connector [n] Quality	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Video Input Connector [n] RGBQuantizationRange	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AI
Video Input Connector [n] SignalType	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	Web	A
Video Input Connector [n] Visibility	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AI
Video Monitors	X	X	Х	X	X	Х	Х	-	X	Х	X	Х	Х	-	-	Web, API	AI
Video Output Connector [n] Brightness	-	-	-	-	X	Х	-	-	-	-	-	-	Х	-	-	Web	AU
Video Output Connector [n] CEC Mode	X	X	Х	X	X	-	Х	X	X	Х	X	Х	Х	-	-	Web, API	AI
Video Output Connector [n] Location HorizontalOffset	Х	Х	-	Х	X	-	Х	-	Х	Х	Х	Х	Х	-	-	Web	AI
Video Output Connector [n] Location VerticalOffset	X	X	-	X	X	-	Х	-	X	Х	X	Х	Х	-	-	Web	AI
Video Output Connector [n] MonitorRole	Х	X	-	X	-	-	Х	Х	X	Х	Х	Х	Х	-	-	Web, API	AI
Video Output Connector [n] OverscanLevel	-	X	Х	-	X	-	-	-	-	-	-	-	-	-	-	Web, API	А
Video Output Connector [n] Resolution	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] RGBQuantizationRange	X	X	Х	X	X	-	Х	X	X	Х	X	Х	Х	-	-	Web	AI
Video Output Connector [n] Whitebalance Level	-	-	-	-	X	Х	-	-	-	-	-	-	Х	-	-	Web	AU
Video Presentation DefaultPIPPosition	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AI
Video Presentation DefaultSource	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Presentation Priority	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	A
Video Selfview Default FullscreenMode	X	X	Х	X	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web, API	AI
Video Selfview Default Mode	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
Video Selfview Default OnMonitorRole	X	X	-	X	X	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	AI
Video Selfview Default PIPPosition	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
Video Selfview Mirrored	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	AI
Video Selfview OnCall Mode	X	X	Х	X	x	Х	Х	X	X	Х	x	Х	Х	X	-	Web, API	AI
Video Selfview OnCall Duration	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AI
WebEngine Mode	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	А
WebEngine RemoteDebugging	-	-	-	-	-	-	Х	X	Х	Х	X	Х	Х	X	-	Web, API	А

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio Diagnostics Advanced Run	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Audio Diagnostics MeasureDelay	X	Х	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AU
Audio Equalizer List	Х	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio Equalizer Update	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalInput Add	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalInput AddConnector	Х	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalInput Remove	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalInput RemoveConnector	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalInput Update	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalOutput Add	Х	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	API	A
Audio LocalOutput AddConnector	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalOutput ConnectInput	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalOutput DisconnectInput	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalOutput Remove	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalOutput RemoveConnector	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio LocalOutput Update	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio LocalOutput UpdateInputGain	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio Microphones Mute	X	Х	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AIU
Audio Microphones ToggleMute	X	Х	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AIU
Audio Microphones Unmute	X	Х	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AIU
Audio RemoteOutput ConnectInput	Х	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio RemoteOutput DisconnectInput	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	A
Audio RemoteOutput UpdateInputGain	Х	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А
Audio Select	-	-	-	-	-	Х	Х	X	-	-	-	-	Х	-	-	API	AU
Audio Setup Clear	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	А

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio Setup Reset	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	API	A
Audio Sound Play	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	API	AIU
Audio Sound Stop	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIU
Audio SpeakerCheck	-	-	-	X	-	-	-	-	-	-	X	Х	-	-	-	API	AIU
Audio SoundsAndAlerts Ringtone List	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIU
Audio SoundsAndAlerts Ringtone Play	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	API	AIU
Audio SoundsAndAlerts Ringtone Stop	X	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	Х	X	-	API	AIU
Audio Volume Decrease	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume Increase	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume Mute	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume Set	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume SetToDefault	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume ToggleMute	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio Volume Unmute	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Audio VuMeter Start	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	x	-	API	AU
Audio VuMeter Stop	X	X	Х	X	X	Х	X	X	Х	Х	X	Х	Х	X	-	API	AU
Audio VuMeter StopAll	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Bookings Clear	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Bookings Get	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Bookings List	X	Х	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	API	AU
Bookings NotificationSnooze	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	x	-	API	AU
Call Accept	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
Call Disconnect	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	x	-	API	AIU
Call DTMFSend	X	Х	Х	X	x	Х	X	X	X	Х	X	Х	Х	X	-	API	AU

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Call FarEndControl Camera Move	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	API	AU
Call FarEndControl Camera Stop	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	API	AU
Call FarEndControl RoomPreset Activate	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Call FarEndControl Source Select	Х	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	Х	API	AU
Call FarEndMessage Send	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Call FarEndMessage SStringSend	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	API	AU
Call FarEndMessage TStringSend	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	API	AU
Call Forward	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Call Hold	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Call Ignore	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Call Join	X	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	-	API	AU
Call Reject	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Call Resume	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Call UnattendedTransfer	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
CallHistory AcknowledgeAllMissedCalls	X	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	-	API	AU
CallHistory AcknowledgeMissedCall	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
CallHistory DeleteAll	X	Х	Х	Х	x	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
CallHistory DeleteEntry	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
CallHistory Get	X	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
CallHistory Recents	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Camera PositionReset	X	Х	Х	Х	-	-	-	-	X	X	X	Х	-	-	-	API	AIU
Camera PositionSet	X	Х	Х	Х	-	-	Х	X	X	X	X	Х	Х	X	-	API	AIU
Camera Preset Activate	X	Х	Х	Х	-	-	Х	X	X	X	x	Х	Х	x	-	API	AU
Camera Preset ActivateDefaultPosition	Х	Х	Х	Х	-	-	Х	X	X	X	X	Х	Х	X	-	API	AU
Camera Preset Edit	X	Х	Х	Х	-	-	Х	X	X	X	X	Х	Х	X	-	API	AU

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Camera Preset List	Х	Х	Х	Х	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Camera Preset Remove	X	Х	Х	X	-	-	X	X	X	X	X	Х	X	X	-	API	AU
Camera Preset Show	X	Х	Х	X	-	-	X	X	X	X	X	Х	X	Х	-	API	AU
Camera Preset Store	X	Х	Х	X	-	-	X	X	X	X	X	Х	X	X	-	API	AU
Camera Ramp	X	Х	Х	X	-	-	X	X	X	X	X	Х	X	X	-	API	AIU
Camera TriggerAutofocus	X	Х	Х	X	-	-	-	-	X	X	X	Х	-	-	-	API	AU
Cameras AutoFocus Diagnostics Start	X	-	-	X	-	-	-	-	X	Х	X	Х	-	-	-	API	AI
Cameras AutoFocus Diagnostics Stop	X	-	-	X	-	-	-	-	X	X	X	Х	-	-	-	API	AI
Cameras PresenterTrack ClearPosition	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	AIU
Cameras PresenterTrack Set	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	API	AIU
Cameras PresenterTrack StorePosition	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	API	AIU
Cameras SpeakerTrack Activate	X	-	-	X	-	-	X	X	X	X	X	Х	X	X	-	API	AU
Cameras SpeakerTrack Deactivate	X	-	-	X	-	-	X	X	X	X	X	Х	X	X	-	API	AU
Cameras SpeakerTrack Diagnostics Start	X	-	-	X	-	-	X	X	X	X	X	Х	X	x	-	API	AIU
Cameras SpeakerTrack Diagnostics Stop	X	-	-	X	-	-	X	X	X	X	X	Х	X	X	-	API	AIU
Cameras SpeakerTrack Whiteboard ActivatePosition	X	-	-	X	-	-	X	-	X	X	X	Х	X	-	-	API	AU
Cameras SpeakerTrack Whiteboard AlignPosition	X	-	-	X	-	-	X	-	X	X	X	Х	X	-	-	API	AU
Cameras SpeakerTrack Whiteboard SetDistance	X	-	-	X	-	-	X	-	X	X	X	Х	X	-	-	API	AU
Cameras SpeakerTrack Whiteboard StorePosition	X	-	-	X	-	-	X	-	X	X	X	Х	Х	-	-	API	AU
Conference Call AuthenticationResponse	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	x	-	API	AU
Conference DoNotDisturb Activate	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	API	AIU
Conference DoNotDisturb Deactivate	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	API	AIU
Conference Participant Admit	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	API	AU
Conference Participant Disconnect	X	X	Х	X	x	Х	X	X	X	X	x	Х	X	X	-	API	AU
Conference Participant Mute	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	API	AU

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference Participant Search	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Conference Recording Pause	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Conference Recording Resume	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AU
Conference Recording Start	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Conference Recording Stop	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AU
Conference SpeakerLock Release	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	API	AU
Conference SpeakerLock Set	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	Х	API	AU
Diagnostics Run	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	А
Dial	Х	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIU
GPIO ManualState Set	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	API	AU
HttpClient Allow Hostname Add	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
HttpClient Allow Hostname Clear	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	А
HttpClient Allow Hostname List	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	А
HttpClient Allow Hostname Remove	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	А
HttpClient Delete	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
HttpClient Get	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	А
HttpClient Patch	Х	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	Х	X	-	API	А
HttpClient Post	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	А
HttpClient Put	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
HttpFeedback Deregister	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	API	А
HttpFeedback Enable	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
HttpFeedback Register	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	API	A
Logging SendLogs	Х	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AU
Macros Log Clear	Х	Х	-	Х	-	Х	Х	Х	Х	Х	X	Х	Х	X	-	API	А
Macros Log Get	Х	Х	-	X	-	Х	X	X	X	X	X	Х	Х	X	-	API	A

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Macros Macro Activate	Х	Х	-	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	А
Macros Macro Deactivate	X	Х	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Macros Macro Get	X	Х	-	Х	-	Х	Х	X	X	X	Х	Х	Х	X	-	API	А
Macros Macro Remove	X	Х	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Macros Macro RemoveAll	X	Х	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Macro Rename	Х	Х	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Macro Roles Set	X	Х	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Macro Save	X	X	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Runtime Restart	X	X	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Runtime Start	X	X	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Runtime Status	X	X	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Macros Runtime Stop	X	X	-	Х	-	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Message Send	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AI
Peripherals Connect	X	X	Х	Х	x	Х	Х	X	X	X	x	Х	Х	x	-	API	AIRU
Peripherals HeartBeat	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AIRU
Peripherals List	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AIR
Peripherals Pairing DeviceDiscovery Start	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Peripherals Pairing Pair	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Peripherals Pairing Unpair	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Peripherals Purge	X	X	Х	Х	x	Х	Х	X	X	X	X	Х	Х	x	-	API	AU
Phonebook Contact Add	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Phonebook Contact Delete	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Phonebook Contact Modify	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Phonebook ContactMethod Add	X	X	Х	Х	x	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
Phonebook ContactMethod Delete	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Phonebook ContactMethod Modify	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Phonebook Folder Add	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	API	AU
Phonebook Folder Delete	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Phonebook Folder Modify	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	API	AU
Phonebook Search	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
Presentation Start	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Presentation Stop	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	-	API	AU
Provisioning CompleteUpgrade	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Provisioning PostponeUpgrade	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
Provisioning CUCM ExtensionMobility Login	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	API	AU
Provisioning CUCM ExtensionMobility Logout	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	Х	API	AU
Provisioning RoomType Activate	Х	-	-	Х	-	-	-	-	-	X	-	Х	-	-	-	API	AI
Provisioning Service Fetch	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Proximity Services Activate	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	AU
Proximity Services Deactivate	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
RoomPreset Activate	Х	Х	Х	Х	-	-	Х	X	X	X	X	Х	Х	X	-	API	AU
RoomPreset Clear	Х	Х	Х	Х	-	-	Х	X	X	X	x	Х	Х	x	-	API	AU
RoomPreset Store	Х	Х	Х	Х	-	-	Х	X	X	X	X	Х	Х	X	-	API	AU
Security Certificates CA Add	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	A
Security Certificates CA Delete	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Security Certificates CA Show	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	x	-	API	AU
Security Certificates Services Activate	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Security Certificates Services Add	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	A
Security Certificates Services Deactivate	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	А
Security Certificates Services Delete	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	API	A

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Security Certificates Services Show	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AU
Security Certificates ThirdParty Disable	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	A
Security Certificates ThirdParty Enable	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	А
Security Certificates ThirdParty List	X	Х	Х	X	X	Х	X	X	X	Х	x	Х	X	X	-	API	A
Security Certificates ThirdParty Show	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	А
Security Certificates Webex Show	X	X	Х	X	X	Х	X	X	X	Х	x	Х	X	X	-	API	AU
Security Persistency	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	Х	API	А
Security Session Get	x	x	х	x	x	Х	x	x	x	x	x	Х	x	x	-	API	A Au I R U
Security Session List	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	А
Security Session Terminate	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	A
Standby Activate	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
Standby Deactivate	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
Standby Halfwake	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AI
Standby ResetHalfwakeTimer	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AU
Standby ResetTimer	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AU
SystemUnit Boot	X	X	Х	X	X	Х	X	X	X	Х	x	Х	X	x	-	API	AIU
SystemUnit FactoryReset	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AU
SystemUnit FirstTimeWizard Stop	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
SystemUnit Notifications RemoveAll	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	А
SystemUnit OptionKey Add	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	A
SystemUnit OptionKey List	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	А
SystemUnit OptionKey Remove	X	X	Х	X	x	Х	X	X	X	Х	x	Х	X	x	-	API	A
SystemUnit OptionKey RemoveAll	X	Х	Х	X	X	Х	X	Х	Х	Х	X	Х	Х	X	-	API	А
SystemUnit ProductPlatform Set	X	-	-	X	-	-	-	-	X	Х	X	Х	-	-	-	API	A
SystemUnit SignInBanner Clear	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	А

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
SystemUnit SignInBanner Get	X	Х	Х	Х	Х	Х	Х	X	X	Х	X	Х	Х	Х	-	API	AU
SystemUnit SignInBanner Set	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	А
SystemUnit SoftReset	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AU
SystemUnit SoftwareUpgrade	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	А
SystemUnit WelcomeBanner Clear	X	Х	Х	X	X	Х	X	X	X	Х	x	Х	X	X	-	API	A
SystemUnit WelcomeBanner Get	x	х	Х	x	X	Х	x	x	x	х	X	Х	x	X	-	API	A Au I R U
SystemUnit WelcomeBanner Set	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	A
Time DateTime Get	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	API	AU
Time DateTime Set	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AU
UserInterface Branding Clear	X	Х	-	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AI
UserInterface Branding Delete	X	Х	-	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
UserInterface Branding Fetch	X	Х	-	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
UserInterface Branding Get	X	Х	-	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIU
UserInterface Branding Updated	X	Х	-	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
UserInterface Branding Upload	X	X	-	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIU
UserInterface Extensions Clear	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIR
UserInterface Extensions List	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	IRU
UserInterface Extensions Panel Clicked	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIRU
UserInterface Extensions Panel Close	X	Х	Х	Х	Х	Х	X	X	X	Х	X	Х	Х	X	-	API	AIRU
UserInterface Extensions Panel Open	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIRU
UserInterface Extensions Panel Remove	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIR
UserInterface Extensions Panel Save	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	API	AIR
UserInterface Extensions Panel Update	X	Х	Х	X	X	Х	X	X	X	Х	x	Х	X	X	-	API	AIRU
UserInterface Extensions Set	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	API	AIR
UserInterface Extensions Widget Action	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	API	AIRU

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
UserInterface Extensions Widget SetValue	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	AIR
UserInterface Extensions Widget UnsetValue	X	X	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AIR
UserInterface Message Alert Clear	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	API	AIRU
UserInterface Message Alert Display	X	X	Х	X	X	Х	X	X	X	X	Х	Х	X	X	-	API	AIR
UserInterface Message Prompt Clear	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	API	AIRU
UserInterface Message Prompt Display	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	API	AIR
UserInterface Message Prompt Response	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	API	AIRU
UserInterface Message TextInput Clear	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	API	AIRU
UserInterface Message TextInput Display	X	X	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AIR
UserInterface Message TextInput Response	X	X	Х	X	X	Х	Х	X	X	X	Х	Х	X	X	-	API	AIRU
UserInterface Message TextLine Clear	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	API	AIRU
UserInterface Message TextLine Display	X	Х	Х	Х	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	AIR
UserInterface OSD Key Click	-	Х	Х	-	-	Х	-	-	-	-	-	-	-	-	-	API	А
UserInterface OSD Key Press	-	X	Х	-	-	Х	-	-	-	-	-	-	-	-	-	API	A
UserInterface OSD Key Release	-	X	Х	-	-	Х	-	-	-	-	-	-	-	-	-	API	А
UserInterface Presentation ExternalSource Add	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	-	-	API	AIR
UserInterface Presentation ExternalSource List	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	-	-	API	AIR
UserInterface Presentation ExternalSource Remove	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	-	-	API	AIR
UserInterface Presentation ExternalSource RemoveAll	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	-	-	API	AIR
UserInterface Presentation ExternalSource Select	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	-	-	API	AIRU
UserInterface Presentation ExternalSource State Set	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	-	-	API	AIR
UserInterface WebView Clear	-	-	-	-	-	-	Х	X	X	X	X	Х	X	X	-	API	AIU
UserInterface WebView Display	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	X	-	API	AIU
UserManagement RemoteSupportUser Create	X	Х	Х	X	X	Х	Х	X	X	X	Х	Х	Х	X	-	API	A
UserManagement RemoteSupportUser Delete	X	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	API	A

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
UserManagement RemoteSupportUser DisablePermanently	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	API	А
UserManagement RemoteSupportUser GetState	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	Х	-	API	А
UserManagement User Add	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	Х	-	API	А
UserManagement User Delete	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	Х	-	API	А
UserManagement User Get	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
UserManagement User List	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	API	А
UserManagement User Modify	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
UserManagement User Passphrase Change	x	х	Х	х	X	Х	x	x	x	x	X	Х	х	X	-	API	A Au I R U
UserManagement User Passphrase Set	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	A
UserManagement User Unblock	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	API	А
Video ActiveSpeakerPIP Set	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AU
Video CEC Input KeyClick	-	-	-	-	-	-	Х	Х	X	Х	X	Х	Х	Х	-	API	AI
Video CEC Output KeyClick	X	Х	Х	X	X	-	X	X	X	X	X	Х	Х	-	-	API	AI
Video CEC Output SendActiveSourceRequest	Х	Х	Х	Х	Х	-	Х	Х	X	Х	Х	Х	Х	-	-	API	AI
Video CEC Output SendInactiveSourceRequest	-	-	-	-	-	-	X	X	X	X	X	Х	Х	-	-	API	AI
Video Input MainVideo Mute	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	API	AIU
Video Input MainVideo Unmute	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	API	AIU
Video Input SetMainVideoSource	X	Х	-	X	X	Х	X	X	X	X	X	Х	Х	-	-	API	AIU
Video Input Source SetActiveConnector	X	-	Х	Х	Х	-	-	-	-	-	-	-	-	-	-	API	AU
Video Layout LayoutFamily Set	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	API	AU
Video Matrix Assign	X	Х	-	X	X	-	X	-	X	X	X	Х	-	-	-	API	AIU
Video Matrix Reset	Х	Х	-	X	X	-	Х	-	Х	Х	X	Х	-	-	-	API	AIU
Video Matrix Swap	X	Х	-	X	X	-	X	-	X	X	X	Х	-	-	-	API	AIU
Video Matrix Unassign	Х	Х	-	X	X	-	Х	-	Х	Х	X	Х	-	-	-	API	AIU
Video Output Monitor Backlight Set	-	-	-	X	-	-	-	-	-	-	X	Х	-	X	-	API	A

Command	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Output Monitor Brightness Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	А
Video Output Monitor Color Blue Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	A
Video Output Monitor Color Green Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	А
Video Output Monitor Color Red Set	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	API	A
Video Output Monitor Color Select	-	-	-	Х	-	-	-	-	-	-	X	Х	-	-	-	API	А
Video Output Monitor Contrast Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	A
Video Output Monitor CSC Select	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	А
Video Output Monitor Gamma Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	A
Video Output Monitor Reset	-	-	-	Х	-	-	-	-	-	-	X	Х	-	X	-	API	А
Video Output Monitor Sharpness Set	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	API	A
Video PresentationPIP Set	X	X	Х	Х	X	Х	X	X	X	X	X	Х	Х	Х	-	API	AU
Video PresentationView Set	X	X	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	API	AU
Video Selfview Set	X	X	Х	Х	X	Х	X	X	X	X	X	Х	Х	Х	-	API	AU
UserInterface WebEngine DeleteStorage	-	-	-	-	-	-	X	X	X	X	X	Х	Х	X	-	API	A
Webex Registration Cancel	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	API	AU
Webex Registration Start	X	X	Х	Х	Х	Х	X	X	X	X	X	Х	Х	X	-	API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio Devices Bluetooth ActiveProfile	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Audio Devices HandsetUSB ConnectionStatus	j -	-	-	-	-	Х	X	X	-	-	-	-	Х	-	-	Web, API	AU
Audio Devices HandsetUSB Cradle	-	-	-	-	-	Х	Х	Х	-	-	-	-	Х	-	-	Web, API	AU
Audio Devices HeadsetAnalog Connection Status	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetAnalog HasMicrophone	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	AU
Audio Devices HeadsetUSB ConnectionStatus	-	-	-	-	-	Х	X	X	-	-	-	-	Х	-	-	Web, API	AU
Audio Devices HeadsetUSB Description	-	-	-	-	-	Х	X	X	-	-	-	-	Х	-	-	Web, API	AU
Audio Devices HeadsetUSB Manufacturer	-	-	-	-	-	Х	Х	Х	-	-	-	-	Х	-	-	Web, API	AU
Audio Input Connectors ARC [n] EcReferenceDelay	X	X	Х	X	X	Х	X	X	Х	Х	X	Х	Х	X	-	Web, API	AU
Audio Input Connectors HDMI [n] EcReferenceDelay	X	X	Х	X	-	Х	X	X	Х	Х	X	Х	Х	X	-	Web, API	AU
Audio Input Connectors HDMI [n] Mute	X	X	Х	X	X	Х	X	X	Х	Х	Х	Х	Х	X	-	Web, API	AU
Audio Input Connectors Line [n] Mute	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
Audio Input Connectors Microphone [n] ConnectionStatus	-	X	Х	-	X	-	X	X	Х	Х	X	Х	Х	X	-	Web, API	AIU
Audio Input Connectors Microphone [n] ConnectionType	X	X	Х	X	X	Х	X	X	X	Х	x	Х	Х	X	-	Web	AU
Audio Input Connectors Microphone [n] EcReferenceDelay	X	X	Х	X	-	Х	X	X	Х	Х	X	Х	-	X	-	Web, API	AU
Audio Input Connectors Microphone [n] Mute	X	X	Х	X	X	Х	X	X	X	Х	x	Х	Х	X	-	Web, API	AU
Audio Input KeyClick Attenuate	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Audio Input KeyClick Detected	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AU
Audio Input KeyClick Enabled	-	-	-	-	-	-	X	X	Х	Х	X	Х	Х	Х	-	Web, API	AU
Audio Input LocalInput [n] AGC	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input LocalInput [n] Channels	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input LocalInput [n] Connector	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input LocalInput [n] Direct	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input LocalInput [n] MixerMode	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input LocalInput [n] Mute	X	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio Input LocalInput [n] Name	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Input RemoteInput [n] CallId	Х	Х	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Audio Microphones LedIndicator	X	X	X	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web	AU
Audio Microphones Mute	X	X	X	X	X	Х	Х	Х	X	X	X	Х	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	-	Х	-	-	-	Web, API	AIU
Audio Output Connectors ARC [n] Mode	-	-	-	-	-	-	-	-	X	X	-	Х	-	-	-	Web, API	AIU
Audio Output Connectors ARC [n] Mute	-	-	-	-	-	-	-	-	X	X	X	Х	-	-	-	Web	AU
Audio Output Connectors HDMI [n] DelayMs	-	-	-	-	-	-	Х	Х	X	X	X	Х	-	-	-	Web, API	AIU
Audio Output Connectors HDMI [n] Mode	-	-	-	-	-	-	Х	Х	X	X	X	Х	-	-	-	Web, API	AIU
Audio Output Connectors HDMI [n] Mute	-	-	-	-	-	-	Х	Х	X	X	X	Х	-	-	-	Web	AU
Audio Output Connectors InternalSpeaker [n] DelayMs	-	-	-	-	-	-	Х	Х	X	X	-	-	-	-	-	Web, API	AIU
Audio Output Connectors InternalSpeaker [n] Mode	-	-	-	-	-	-	-	Х	X	X	-	-	-	-	-	Web, API	AIU
Audio Output Connectors InternalSpeaker [n] Mute	-	-	-	-	-	-	Х	Х	X	X	-	-	-	-	-	Web	AU
Audio Output Connectors Line [n] ConnectionStatus	-	-	-	-	-	-	Х	Х	X	X	Х	Х	Х	X	-	Web, API	AIU
Audio Output Connectors Line [n] DelayMs	X	X	X	X	X	Х	Х	Х	X	X	X	Х	X	X	-	Web, API	AIU
Audio Output Connectors Line [n] Mute	-	-	-	-	-	-	-	-	X	X	X	Х	-	-	-	Web	AU
Audio Output LocalOutput [n] AutoconnectRemote	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AU
Audio Output LocalOutput [n] Channels	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Output LocalOutput [n] Connector [n]	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AU
Audio Output LocalOutput [n] Input [n] Gain	X	-	-	X	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Audio Output LocalOutput [n] Loudspeaker	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Output LocalOutput [n] Name	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Output LocalOutput [n] VolumeControlled	Х	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Output MeasuredHdmiArcDelay	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio Output MeasuredHdmiDelay	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Audio Output MeasuredHdmiCecDelay	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Audio Output RemoteOutput [n] CallId	X	-	-	X	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio Output RemoteOutput [n] Input [n] Gain	Х	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AU
Audio SelectedDevice	-	-	-	-	-	Х	Х	Х	-	-	-	-	Х	-	-	Web, API	AU
Audio Ultrasound Volume	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Audio Volume	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Audio VolumeHandsetUsb	-	-	-	-	-	Х	Х	X	-	-	-	-	Х	-	-	Web, API	AU
Audio VolumeHeadsetAnalog	-	-	-	-	-	Х	Х	X	-	-	-	-	Х	-	-	Web, API	AU
Audio VolumeHeadsetBluetooth	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Audio VolumeHeadsetUsb	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web, API	AU
Audio VolumeInternal	-	-	-	-	-	Х	Х	X	-	-	-	-	Х	-	-	Web, API	AU
Audio VolumeKeyStepSize	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Audio VolumeMute	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Bluetooth Devices [n] Address	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Bluetooth Devices [n] Connected	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Bluetooth Devices [n] Name	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Bluetooth Devices [n] Paired	-	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	Web	AU
Bookings Current Id	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Call [n] AnswerState	X	X	Х	X	X	Х	Х	X	Х	Х	Х	Х	Х	X	-	Web, API	AU
Call [n] AttendedTransferFrom	X	Х	Х	X	X	Х	Х	X	X	Х	Х	Х	Х	X	Х	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Call [n] CallbackNumber	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Call [n] CallType	X	Х	Х	X	X	Х	Х	X	Х	Х	X	Х	X	X	-	Web, API	AU
Call [n] DeviceType	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Call [n] Direction	X	Х	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	Web, API	AU
Call [n] DisplayName	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Call [n] Duration	X	Х	Х	X	X	Х	Х	Х	Х	Х	X	Х	X	Х	-	Web, API	AU
Call [n] Encryption Type	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Call [n] FacilityServiceId	X	Х	Х	X	X	Х	Х	X	Х	Х	X	Х	X	X	Х	Web, API	AIU
Call [n] HoldReason	X	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Call [n] Ice	X	X	Х	X	X	Х	Х	X	Х	Х	X	Х	X	X	-	Web, API	AU
Call [n] PlacedOnHold	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Call [n] Protocol	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	X	X	-	Web, API	AU
Call [n] ReceiveCallRate	X	Х	Х	X	X	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	AIU
Call [n] RemoteNumber	X	X	Х	X	X	Х	Х	X	Х	Х	X	Х	X	X	-	Web, API	AU
Call [n] Status	X	X	Х	X	X	Х	Х	X	Х	Х	X	Х	Х	X	-	Web, API	AU
Call [n] TransmitCallRate	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	X	X	-	Web, API	AIU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Bytes	X	X	Х	X	X	Х	Х	X	Х	Х	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] ChannelRate	x	x	х	x	X	Х	х	x	X	х	X	Х	x	X	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Jitter	X	Х	Х	X	X	Х	Х	X	Х	Х	X	Х	X	Х	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] LastIntervalLost	×	×	x	x	x	Х	х	×	×	Х	x	Х	×	x	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] LastIntervalReceived	×	×	Х	х	×	Х	Х	х	×	Х	X	Х	x	X	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Loss	X	Х	Х	X	X	Х	Х	X	Х	Х	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] MaxJitter	Х	X	х	х	х	Х	х	X	x	x	х	Х	x	Х	-	Web	AU
CallDiagnostics[n] Channels IncomingAudioChannel[n] Netstat[n] Packets	X	X	X	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Bytes	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] ChannelRate	х	×	x	х	x	х	х	×	×	x	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Jitter	Х	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] LastIntervalLost	х	x	х	х	x	х	х	x	x	×	x	Х	x	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] LastIntervalReceived	х	×	х	х	х	х	х	×	×	×	x	Х	x	Х	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Loss	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] MaxJitter	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels IncomingDataChannel[n] Netstat[n] Packets	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Bytes	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] ChannelRate	X	×	X	X	x	х	х	×	×	×	X	X	x	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Jitter	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] LastIntervalLost	×	×	X	X	x	х	х	×	×	×	X	Х	x	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] LastIntervalReceived	х	×	х	х	x	х	х	×	×	×	x	Х	×	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Loss	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] MaxJitter	Х	×	х	Х	x	х	х	×	×	x	x	Х	х	X	-	Web	AU
CallDiagnostics[n] Channels IncomingVideoChannel[n] Netstat[n] Packets	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Bytes	Х	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] ChannelRate	Х	х	Х	Х	X	Х	х	х	х	Х	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Jitter	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] LastIntervalLost	х	х	х	X	X	Х	Х	×	×	×	x	Х	×	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] LastIntervalReceived	х	х	х	х	x	Х	х	x	x	x	х	Х	x	х	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Loss	Х	Х	Х	Х	Х	Х	Х	X	X	X	Х	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] MaxJitter	Х	Х	х	х	х	Х	Х	x	×	x	x	Х	x	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingAudioChannel[n] Netstat[n] Packets	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Bytes	Х	Х	Х	Х	X	Х	Х	X	X	X	Х	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] ChannelRate	х	х	х	х	x	х	х	x	x	x	х	Х	x	x	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Jitter	Х	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] LastIntervalLost	x	х	х	х	x	х	х	×	×	×	x	х	x	x	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] LastIntervalReceived	Х	х	х	х	x	Х	Х	×	×	×	х	х	x	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Loss	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] MaxJitter	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingDataChannel[n] Netstat[n] Packets	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Bytes	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] ChannelRate	x	х	x	x	x	Х	х	×	×	×	x	х	×	x	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Jitter	Х	Х	Х	Х	Х	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] LastIntervalLost	Х	Х	Х	Х	х	Х	Х	Х	Х	x	X	Х	x	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] LastIntervalReceived	Х	×	Х	х	x	Х	х	Х	×	х	x	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Loss	Х	X	Х	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] MaxJitter	Х	×	Х	×	x	Х	х	Х	×	×	х	Х	Х	X	-	Web	AU
CallDiagnostics[n] Channels OutgoingVideoChannel[n] Netstat[n] Packets	Х	Х	Х	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web	AU
Cameras Camera [n] Capabilities Options	Х	X	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Cameras Camera [n] Connected	Х	Х	Х	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AIRU
Cameras Camera [n] DetectedConnector	Х	X	Х	X	-	-	-	-	X	X	X	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] DownloadProgress	Х	Х	Х	X	X	Х	Х	Х	X	X	x	Х	Х	X	-	Web	AIRU
Cameras Camera [n] Flip	Х	X	Х	X	-	-	-	-	X	Х	X	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] Framerate	-	-	-	-	-	-	Х	Х	-	-	-	-	Х	-	-	Web, API	AIRU
Cameras Camera [n] HardwarelD	Х	X	Х	X	X	Х	-	-	X	X	X	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] IpAddress	Х	Х	Х	X	-	-	-	-	X	X	X	Х	-	X	-	Web	AIRU
Cameras Camera [n] LightingConditions	Х	-	-	X	-	-	Х	Х	X	X	X	Х	Х	X	-	Web, API	AIRU
Cameras Camera [n] MacAddress	Х	X	Х	X	-	-	-	-	X	X	X	Х	-	X	-	Web, API	AIRU
Cameras Camera [n] Manufacturer	Х	X	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Cameras Camera [n] Model	Х	Х	Х	X	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AIRU
Cameras Camera [n] Position Focus	Х	X	Х	X	X	-	-	-	X	Х	X	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] Position Lens	Х	-	-	X	-	-	-	-	X	X	X	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] Position Pan	Х	X	Х	X	X	-	Х	Х	X	X	X	Х	Х	-	-	Web, API	AIRU
Cameras Camera [n] Position Roll	-	-	-	-	-	-	-	-	-	X	-	Х	-	-	-	Web, API	AIRU
Cameras Camera [n] Position Tilt	Х	Х	Х	Х	X	-	Х	Х	Х	Х	X	Х	Х	-	-	Web, API	AIRU
Cameras Camera [n] Position Zoom	Х	Х	Х	X	X	-	Х	Х	X	X	X	Х	Х	-	-	Web, API	AIRU
Cameras Camera [n] Role	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AIRU
Cameras Camera [n] SerialNumber	Х	Х	Х	X	-	Х	-	-	X	X	x	Х	-	X	-	Web, API	AIRU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Cameras Camera [n] SoftwareID	Х	Х	Х	Х	Х	Х	-	-	Х	Х	Х	Х	Х	Х	-	Web, API	AIRU
Cameras Camera [n] State	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AIRU
Cameras Camera [n] UpgradeStatus	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIRU
Cameras PresenterTrack Availability	X	-	-	Х	-	-	-	-	X	Х	X	Х	-	-	-	Web, API	AIRU
Cameras PresenterTrack PresenterDetected	Х	-	-	Х	-	-	-	-	Х	Х	Х	Х	-	-	-	Web, API	AIRU
Cameras PresenterTrack Status	X	-	-	Х	-	-	-	-	X	X	X	Х	-	-	-	Web, API	AIRU
Cameras SpeakerTrack ActiveConnector	Х	-	-	Х	-	-	Х	Х	Х	Х	X	Х	Х	Х	-	Web, API	AIRU
Cameras SpeakerTrack Availability	X	-	-	Х	-	-	Х	X	X	X	X	Х	Х	X	-	Web, API	AIRU
Cameras SpeakerTrack Status	Х	-	-	Х	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Defined	X	-	-	Х	-	-	Х	-	X	X	X	Х	Х	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Lens	Х	-	-	Х	-	-	Х	-	Х	Х	Х	Х	Х	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Pan	X	-	-	Х	-	-	Х	-	X	X	X	Х	X	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Tilt	X	-	-	Х	-	-	Х	-	X	X	X	Х	Х	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Camera [n] Zoom	X	-	-	Х	-	-	Х	-	X	X	X	Х	X	-	-	Web	AIRU
Cameras SpeakerTrack Whiteboard [n] Distance	X	-	-	Х	-	-	Х	-	X	X	X	Х	X	-	-	Web	AIRU
Capabilities Conference MaxActiveCalls	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU
Capabilities Conference MaxAudioCalls	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Capabilities Conference MaxCalls	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Capabilities Conference MaxVideoCalls	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU
Conference ActiveSpeaker CallId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	Х	Web, API	AU
Conference Call [n] ActivePresenter [m] ParticipantId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] ActiveSpeaker [m] ParticipantId	Х	Х	Х	Х	x	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Call [n] ActiveVideo [m] ParticipantId	X	Х	Х	Х	X	Х	Х	X	Х	X	X	Х	Х	X	-	Web	AU
Conference Call [n] Appearance	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Call [n] AttendedTransfer	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference Call [n] AuthenticationRequest	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Conference Call [n] AvailableLayout [m] LayoutName	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] AvailableLayout [m] MaxPanes	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] BookingId	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Conference Call [n] CALText	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] Capabilities DTMF	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] Capabilities FarendMessage Mode	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Conference Call [n] Capabilities FECC Mode	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Conference Call [n] Capabilities FECC NumberOfPresets	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Conference Call [n] Capabilities FECC NumberOfSources	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Name	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	Х	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Options	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	Х	Х	Web, API	AU
Conference Call [n] Capabilities FECC Source [n] Sourceld	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	Х	Web, API	AU
Conference Call [n] Capabilities Hold	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AU
Conference Call [n] Capabilities IsModerator	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Capabilities IxChannel Encryption Status	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	Х	Х	Web	AU
Conference Call [n] Capabilities IxChannel Status	X	X	Х	X	X	Х	X	X	X	X	X	Х	Х	X	Х	Web, API	AU
Conference Call [n] Capabilities LocalLayoutChange	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] Capabilities Mari Status	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Capabilities ParticipantDisconnect	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	Х	-	Web, API	AU
Conference Call [n] Capabilities ParticipantList	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
Conference Call [n] Capabilities ParticipantMute	X	X	Х	X	X	Х	X	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Conference Call [n] Capabilities Presentation	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
Conference Call [n] Capabilities Recording Pause	X	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] Capabilities Recording Resume	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference Call [n] Capabilities Recording Start	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] Capabilities Recording Stop	X	Х	Х	X	X	Х	X	Х	X	Х	Х	Х	X	X	-	Web	AU
Conference Call [n] Capabilities SelfMute	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] Capabilities SelfMuteLock	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] DefaultLayout LayoutName	X	Х	Х	X	X	Х	X	Х	X	Х	Х	Х	Х	X	-	Web	AU
Conference Call [n] DefaultLayout MaxPanes	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Description	X	X	Х	X	X	Х	X	X	X	X	Х	Х	X	X	-	Web	AU
Conference Call [n] EventCenter Mode	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web, API	AU
Conference Call [n] GCI	X	X	Х	X	X	Х	X	X	X	Х	Х	Х	X	X	-	Web	AU
Conference Call [n] InfoScreen	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Invitation Inviter DisplayName	X	X	Х	X	X	Х	X	X	X	Х	Х	Х	Х	X	-	Web	AU
Conference Call [n] Layout LayoutName	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Layout MaxPanes	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Locked	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Manufacturer	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	ΑU
Conference Call [n] MicrophonesMuted	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web, API	AU
Conference Call [n] Multistream Mode	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] NumberOfParticipants	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] NumberOfParticipantsVisible	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] ParticipantSelf	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Preserved	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] ProximityCall	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] Recorded	X	Х	Х	X	X	Х	X	X	Х	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] RemoteRenderSiteNames	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Conference Call [n] SecurityStatus	X	Х	Х	X	X	Х	X	X	X	X	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference Call [n] SessionType	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] SoftwareID	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Conference Call [n] Spark CorrelationId	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Conference Call [n] Spark TrackingId	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Conference Call [n] Streamed	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Conference Call [n] UnattendedTransfer	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Call [n] VideoMutePoster	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference DoNotDisturb	X	Х	Х	X	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web, API	AIU
Conference Line [n] Appearance [n] DisplayName	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Line [n] Appearance [n] GCI	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Line [n] Appearance [n] Status	X	X	Х	X	x	Х	Х	X	X	X	X	Х	Х	x	-	Web	AU
Conference Line [n] Appearance [n] URI	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AIU
Conference Line [n] Mode	X	X	Х	X	x	Х	Х	X	X	X	x	Х	Х	X	Х	Web, API	AU
Conference LoudestSite	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Multipoint Mode	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Conference Muter	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Presentation CallId	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AIRU
Conference Presentation LastLocalSource	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AIRU
Conference Presentation LocalInstance [n] SendingMode	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web, API	AIRU
Conference Presentation LocalInstance [n] Source	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web, API	AIRU
Conference Presentation LocalSendingMode	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AIRU
Conference Presentation LocalSource	Х	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIRU
Conference Presentation Mode	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Conference Presentation Protocol	X	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIRU
Conference Presentation Resolution Height	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AIRU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Conference Presentation Resolution Width	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIRU
Conference Presentation Whiteboard BoardSessionId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference Presentation Wireless LocallyControlled	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference Presentation Wireless ParticipantId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Conference SelectedCallProtocol	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	Х	Х	-	Web	AU
Conference SpeakerLock CallId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Conference SpeakerLock Mode	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Diagnostics LastRun	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	Web	AU
Diagnostics Message [n] Description	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
Diagnostics Message [n] Level	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Diagnostics Message [n] References	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Diagnostics Message [n] Type	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
GPIO Pin [n] State	X	-	-	Х	-	-	-	-	-	Х	-	Х	-	-	-	Web, API	AIU
H320 Gateway Address	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H320 Gateway Id	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H320 Gateway Mode	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H320 Gateway Number	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H320 Gateway Reason	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H320 Gateway Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H323 Gatekeeper Address	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H323 Gatekeeper Port	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H323 Gatekeeper Reason	X	Х	Х	X	x	Х	Х	X	X	X	x	Х	Х	x	Х	Web, API	AU
H323 Gatekeeper Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H323 Mode Reason	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU
H323 Mode Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	Х	Web, API	AU

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496

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
HttpFeedback [n] Expression [n]	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
HttpFeedback [n] Format	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AU
HttpFeedback [n] Status	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web, API	AU
HttpFeedback [n] URL	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
ICE Call [n] MediaLine [n] Local Candidate	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
ICE Call [n] MediaLine [n] Local IP	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
ICE Call [n] MediaLine [n] Local Transport	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
ICE Call [n] MediaLine [n] Remote Candidate	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
ICE Call [n] MediaLine [n] Remote IP	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
ICE Call [n] MediaLine [n] Remote XtlsFqdnHost	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
ICE Call [n] MediaPath	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	Web	AU
ICE Call [n] NegotiationTime	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
ICE Call [n] Result	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
ICE Configured	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
ICE Defaultcandidate	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
ICE Turn Bandwidth	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
ICE Turn Discovermode	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
ICE Turn Hostname	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
ICE Turn IP	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
ICE Turn Transport	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
ICE Turn Username	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Logging ExtendedLogging Mode	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Logging ExtendedLogging PacketDump	X	Х	Х	Х	X	Х	Х	X	Х	X	X	Х	Х	X	-	Web	AU
Logging ExtendedLogging RenderingDump	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Audio Channels	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
MediaChannels Call [n] Channel [n] Audio ChannelRole	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] Audio Mute	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] Audio Protocol	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] Direction	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] Encryption	X	X	Х	X	X	Х	X	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] LastCsi	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Msctrlld	X	X	Х	X	X	Х	X	X	X	Х	Х	Х	X	Х	-	Web	AU
MediaChannels Call [n] Channel [n] NetStat Bytes	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat ChannelRate	X	X	Х	X	X	Х	X	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Jitter	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat LastIntervalLost	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Loss	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat MaxJitter	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] NetStat Packets	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] ParticipantId	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local IpAddress	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local Port	X	X	Х	X	x	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Local Protocol	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Remote IpAddress	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Remote Port	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTCP Remote Protocol	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local IpAddress	Х	X	Х	X	X	Х	X	X	Х	Х	X	Х	Х	Х	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local Port	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Local Protocol	X	X	Х	X	X	Х	X	X	Х	Х	X	Х	X	X	-	Web	AU

A: ADMIN Au: AUDIT I: INTEGRATOR R: ROOMCONTROL U: USER

498

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
MediaChannels Call [n] Channel [n] Transport RTP Remote IpAddress	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Remote Port	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
MediaChannels Call [n] Channel [n] Transport RTP Remote Protocol	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	Web	AU
MediaChannels Call [n] Channel [n] Type	X	Х	Х	Х	X	Х	X	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] Video ChannelRole	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] Video FrameRate	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] Video Protocol	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
MediaChannels Call [n] Channel [n] Video ResolutionX	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
MediaChannels Call [n] Channel [n] Video ResolutionY	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
Network [n] ActiveInterface	-	-	-	-	-	Х	X	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Network [n] CDP Address	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP Capabilities	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP DeviceId	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP Duplex	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP Platform	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP PortID	X	X	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP PrimaryMgmtAddress	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP SysName	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
Network [n] CDP SysObjectID	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] CDP Version	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	Х	-	Web, API	AU
Network [n] CDP VolPApplianceVlanID	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
Network [n] CDP VTPMgmtDomain	X	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Network [n] DNS Domain Name	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
Network [n] DNS Server [n] Address	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] Ethernet MacAddress	X	Х	Х	Х	X	Х	X	X	X	X	X	Х	Х	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Network [n] Ethernet Speed	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IPv4 Address	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	X	X	-	Web, API	AU
Network [n] IPv4 DHCP ProvisioningDomain	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Network [n] IPv4 DHCP ProvisioningServer	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web	AU
Network [n] IPv4 DHCP TftpServer	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Network [n] IPv4 DHCP TftpServerAddress	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	X	X	-	Web	AU
Network [n] IPv4 DHCP TmsServer	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Network [n] IPv4 Gateway	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	X	X	-	Web, API	AU
Network [n] IPv4 SubnetMask	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
Network [n] IPv6 Address	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU
Network [n] IPv6 DHCP TftpServerAddress	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Network [n] IPv6 Gateway	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web, API	AU
Network [n] IPv6 LinkLocalAddress	X	Х	Х	X	X	Х	Х	Х	X	X	Х	Х	X	X	-	Web, API	AU
Network [n] MTU	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Network [n] VLAN Voice VlanId	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web, API	AU
Network [n] Wifi BSSID	-	-	-	-	-	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Network [n] Wifi Channel	-	-	-	-	-	Х	Х	X	X	X	Х	Х	X	X	-	Web	AU
Network [n] Wifi Frequency	-	-	-	-	-	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Network [n] Wifi MacAddress	-	-	-	-	-	Х	Х	Х	X	X	Х	Х	Х	X	-	Web	AU
Network [n] Wifi Phase2Method	-	-	-	-	-	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Network [n] Wifi RawSSID	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AU
Network [n] Wifi Reason	-	-	-	-	-	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Network [n] Wifi Region	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Network [n] Wifi RSSI	-	-	-	-	-	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Network [n] Wifi ScanResult [n] Flags	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Network [n] Wifi ScanResult [n] RawSSID	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Network [n] Wifi ScanResult [n] SignalLevel	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Network [n] Wifi ScanResult [n] SSID	-	-	-	-	-	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Network [n] Wifi Speed	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Network [n] Wifi SSID	-	-	-	-	-	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Network [n] Wifi Status	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Network [n] Wifi Type	-	-	-	-	-	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
NetworkServices NTP CurrentAddress	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
NetworkServices NTP Server [n] Address	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	Х	Web, API	AU
NetworkServices NTP Status	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
NetworkServices UPnP Status	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AU
Peripherals ConnectedDevice [n] HardwareInfo	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	Web, API	AIRU
Peripherals ConnectedDevice [n] ID	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] Name	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] SerialNumber	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] SoftwareInfo	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] Status	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] Type	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeFailureReason	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeStatus	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedDevice [n] UpgradeURL	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIRU
Peripherals ConnectedProgress [n] Ident	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AIRU
Peripherals ConnectedProgress [n] Progress	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AIRU
Provisioning CUCM CAPF LSC	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Provisioning CUCM CAPF Mode	X	Х	Х	Х	x	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU

API Reference Guide

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Provisioning CUCM CAPF OperationResult	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Provisioning CUCM CAPF OperationState	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM CAPF ServerName	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Provisioning CUCM CAPF ServerPort	X	X	Х	X	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM CTL State	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Provisioning CUCM Customization Checksum	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web, API	AU
Provisioning CUCM ExtensionMobility Enabled	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Provisioning CUCM ExtensionMobility LastLoggedInUserId	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	Х	Web, API	AU
Provisioning CUCM ExtensionMobility LoggedIn	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Provisioning CUCM ITL State	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM Phonebook URL	X	X	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AU
Provisioning CUCM ProvisionSecurity	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM TVS Proxy [n] IPv6Address	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Provisioning CUCM TVS Proxy [n] Port	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM TVS Proxy [n] Priority	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM TVS Proxy [n] Server	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Provisioning CUCM UserId	X	X	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Provisioning Discovered	X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Provisioning NextRetry	X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Provisioning Reason	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	Х	-	Web	AU
Provisioning RoomType	X	-	-	Х	-	-	-	-	Х	Х	-	Х	-	-	-	Web, API	AU
Provisioning Server	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	Х	-	Web	AU
Provisioning Software Current CompletedAt	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Provisioning Software Current URL	X	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	Х	Х	-	Web, API	AU
Provisioning Software Current VersionId	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU

X: Supported -: Not supported

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Provisioning Software PreviousUpgrade Changed	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Provisioning Software PreviousUpgrade Message	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	-	Web	AU
Provisioning Software PreviousUpgrade Status	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Provisioning Software PreviousUpgrade URL	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Provisioning Software PreviousUpgrade VersionId	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web	AU
Provisioning Software UpgradeStatus LastChange	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	Х	-	Web, API	AU
Provisioning Software UpgradeStatus Message	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AU
Provisioning Software UpgradeStatus Phase	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	-	Web, API	AU
Provisioning Software UpgradeStatus PostponedUntil	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	X	Х	-	Web	AU
Provisioning Software UpgradeStatus SecondsUntilUpgrade	Х	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	Х	-	Web	AU
Provisioning Software UpgradeStatus SessionId	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web, API	AU
Provisioning Software UpgradeStatus Status	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	Х	X	-	Web, API	AU
Provisioning Software UpgradeStatus Urgency	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	X	-	Web, API	AU
Provisioning Software UpgradeStatus URL	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	X	-	Web, API	AU
Provisioning Software UpgradeStatus VersionId	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web, API	AU
Provisioning Status	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	Х	-	Web, API	AU
Proximity Services Availability	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	Х	Web, API	AU
RoomAnalytics AmbientNoise Level A	-	-	-	-	-	-	Х	Х	X	X	Х	Х	Х	Х	-	Web, API	AIU
RoomAnalytics PeopleCount Current	Х	-	-	-	-	-	Х	Х	X	X	X	Х	Х	X	-	Web, API	AIU
RoomAnalytics PeoplePresence	Х	Х	-	Х	X	-	Х	Х	X	X	X	Х	X	X	-	Web, API	AIU
RoomAnalytics Sound Level A	-	-	-	-	-	-	Х	Х	X	X	X	Х	X	X	-	Web, API	AIU
RoomPreset [n] Defined	Х	Х	Х	Х	X	-	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
RoomPreset [n] Description	Х	Х	Х	Х	X	-	Х	Х	X	X	X	Х	X	X	-	Web, API	AU
RoomPreset [n] Type	Х	Х	Х	Х	X	-	Х	Х	Х	X	X	Х	Х	X	-	Web, API	AU
Security Audit Server Port	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х	X	X	-	Web	A Au U

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503

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Security FIPS Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
Security Persistency CallHistory	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	X	X	Х	Web, API	AU
Security Persistency Configurations	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Web, API	AU
Security Persistency DHCP	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	Х	Web, API	AU
Security Persistency InternalLogging	X	Х	Х	X	X	Х	X	Х	X	Х	Х	Х	Х	X	Х	Web, API	AU
Security Persistency LocalPhonebook	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	Х	Web, API	AU
Security PII LoggingMode	X	X	Х	X	X	Х	X	X	X	X	Х	Х	X	X	-	Web	AU
Spark Access Token	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Spark Account CloudMode	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	X	Х	-	Web	AU
Spark Account ClusterId	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account DisplayName	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account Email	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account ExternalPhoneNumber	X	X	Х	X	X	Х	X	X	X	Х	X	Х	X	X	-	Web	AU
Spark Account Id	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account InternalPhoneNumber	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account OrganizationDisplayName	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account OrganizationId	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account SipAddress	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Account Type	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Binding DisplayName	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Binding Mode	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark Binding Type	X	Х	Х	X	x	Х	X	X	X	X	x	Х	X	x	-	Web	AU
Spark Binding URL	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark DeviceRoles CallControl	X	Х	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU
Spark CallTrackingId	X	X	Х	X	X	Х	X	X	X	X	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark DeviceRoles MainAudio	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark DeviceRoles MainVideo	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark DeviceRoles Presentation	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark PrivateBoard [n] Id	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark PrivateBoard [n] LastUpdated	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark PrivateBoard [n] SnapshotUrl	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark PrivateBoard [n] Type	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Assistant Description	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Assistant LastUrl	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	Х	-	Web	AU
Spark Services Assistant Status	X	X	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Assistant TimeStamp	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Calendar BaseUrl	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Calendar Description	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Calendar Status	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Calendar TimeStamp	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Description	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity Description	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity PinChallenge Pin	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	ΑU
Spark Services Configuration Proximity TimeStamp	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity Token Description	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity Token Status	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity TokenRequest Description	X	X	Х	Х	x	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity TokenRequest NextRequest	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity TokenRequest Status	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Configuration Proximity TokenRequest TimeStamp	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark Services Configuration Settings Description	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Configuration Settings Status	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Spark Services Configuration Settings TimeStamp	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AU
Spark Services Configuration Space Description	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	X	X	-	Web	AU
Spark Services Configuration Space Status	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Configuration Space TimeStamp	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web	AU
Spark Services Configuration Space TimeStamp	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AU
Spark Services Configuration Status	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Spark Services Configuration TimeStamp	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Credentials AccessToken BaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials AccessToken Expiry	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials AccessToken LastRefresh Description	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials AccessToken LastRefresh NextRequest	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Spark Services Credentials AccessToken LastRefresh TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials AccessToken Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials RefreshToken Expiry	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Credentials RefreshToken Status	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Spark Services Encryption Alias	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Encryption Description	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	X	X	-	Web	AU
Spark Services Encryption Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Encryption TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AU
Spark Services Encryption Url	X	Х	Х	X	x	Х	Х	X	X	X	X	Х	X	x	-	Web	AU
Spark Services FeatureToggles Description	X	Х	Х	Х	X	Х	Х	X	Х	Х	X	Х	X	X	-	Web	AU
Spark Services FeatureToggles LastSuccess	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services FeatureToggles NextRequest	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark Services FeatureToggles Status	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services FeatureToggles TimeStamp	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services PeopleService BaseUrl	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services PeopleService Description	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services PeopleService Status	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services PeopleService TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	Х	-	Web	AU
Spark Services GeoLocation ClientAddress	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation CountryCode	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Spark Services GeoLocation Description	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation NextRequest	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation RegionCode	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation Status	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation TimeStamp	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation TimeZone	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services GeoLocation Url	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services HydraService BaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services HydraService Description	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services HydraService Status	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Spark Services HydraService TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services IdBrokerBaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services IdStoreBaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services LogUpload Details	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Spark Services LogUpload Error	Х	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	-	Web	AU
Spark Services LogUpload LogId	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services LogUpload RequestOrigin	Х	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark Services LogUpload Result	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services LogUpload TimeStamp	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	X	X	-	Web	AU
Spark Services Metrics Description	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Metrics Status	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Metrics TimeStamp	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Metrics Url	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications Alias	X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	-	Web	AU
Spark Services Notifications ApplicationPing Description	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications ApplicationPing NextRequest	X	Х	Х	X	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AU
Spark Services Notifications ApplicationPing Status	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications ApplicationPing TimeStamp	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications Description	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications KeepAlive Description	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications KeepAlive NextRequest	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications KeepAlive Status	X	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Notifications KeepAlive TimeStamp	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications MessageReceived Description	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications MessageReceived Status	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications MessageReceived TimeStamp	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications MessageSent TimeStamp	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications RemoteAddress	X	X	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications Servers ActiveUrl	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications Servers HAEntry [n] Description	Х	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Spark Services Notifications Servers HAEntry [n] Priority	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Spark Services Notifications Servers HAEntry [n] State	X	Х	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark Services Notifications Servers HAEntry [n] TimeStamp	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Notifications Servers HAEntry [n] Url	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Notifications Status	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
Spark Services Notifications TimeStamp	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Phonebook BaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Phonebook Description	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	Х	-	Web	AU
Spark Services Phonebook Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Phonebook TimeStamp	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Registration Alias	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web	AU
Spark Services Registration BaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Registration Description	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Registration NextRequest	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Registration Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services Registration TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SoftwareUpgrade Description	X	Х	Х	Х	X	Х	Х	X	X	X	x	Х	Х	X	-	Web	AU
Spark Services SoftwareUpgrade ManifestUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SoftwareUpgrade ServiceUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SoftwareUpgrade Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SoftwareUpgrade TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager BaseUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager Description	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager LastUrl	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager NextRequest	X	Х	Х	Х	X	Х	Х	X	Х	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager Status	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Spark Services SpeechServicesManager TimeStamp	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

A: ADMIN Au: AUDIT I: INTEGRATOR R: ROOMCONTROL U: USER

509

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Spark Services TrustAnchorService LastRefresh	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Spark Services TrustAnchorService Url	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Spark Services U2CBaseUrl	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Spark Services WdmBaseUrl	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Spark Space Access	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Spark Status	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
SIP AlternateURI Alias [n] URI	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	Х	Web, API	AU
SIP AlternateURI Primary [n] URI	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP Authentication	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP CallForward DisplayName	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP CallForward Mode	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP CallForward URI	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP Mailbox MessagesWaiting	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP Mailbox URI	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP Proxy [n] Address	X	Х	Х	X	X	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP Proxy [n] Status	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP Registration [n] Authentication	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP Registration [n] Reason	X	Х	Х	X	X	Х	Х	X	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP Registration [n] Status	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	X	Х	Web, API	AU
SIP Registration [n] URI	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
SIP Secure	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Web, API	AU
SIP Verified	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	Х	Web, API	AU
Standby PowerSave State	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Standby State	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AIRU
SystemUnit Hardware BootSoftware	X	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
SystemUnit Hardware HasWiFi	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
SystemUnit Hardware MainBoard Revision	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
SystemUnit Hardware MainBoard SerialNumber	X	Х	Х	X	X	-	Х	Х	Х	Х	X	Х	Х	Х	-	Web	AU
SystemUnit Hardware Module CompatibilityLevel	X	Х	Х	X	X	Х	X	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
SystemUnit Hardware Module Identifier	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web	AU
SystemUnit Hardware Module SerialNumber	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
SystemUnit Hardware Monitoring Fan [n] Status	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
SystemUnit Hardware MonitoringSoftware	X	Х	Х	X	X	Х	X	Х	Х	Х	Х	Х	Х	-	-	Web	AU
SystemUnit Hardware Monitoring Temperature Status	-	-	-	-	-	-	X	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
SystemUnit Hardware Temperature	X	Х	Х	X	X	Х	-	-	-	-	-	-	-	-	-	Web, API	AU
SystemUnit Hardware TemperatureThreshold	X	Х	Х	X	X	Х	-	-	-	-	-	-	-	-	-	Web, API	AU
SystemUnit Hardware UDI	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	Х	-	Web	AU
SystemUnit Notifications Notification [n] Text	X	Х	Х	X	x	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit Notifications Notification [n] Type	X	Х	Х	X	X	Х	X	X	X	Х	Х	Х	Х	Х	-	Web, API	AU
SystemUnit ProductId	X	Х	Х	X	x	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit ProductPlatform	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
SystemUnit ProductType	X	Х	Х	X	x	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit Software DisplayName	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
SystemUnit Software Name	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit Software OptionKeys Encryption	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AU
SystemUnit Software OptionKeys MultiSite	X	Х	Х	X	x	Х	X	X	X	Х	x	Х	Х	X	-	Web, API	AU
SystemUnit Software OptionKeys RemoteMonitoring	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit Software ReleaseDate	X	Х	Х	X	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU
SystemUnit Software ReleaseKey	-	Х	-	-	-	-	-	-	-	-	-	-	-	-	-	Web	AU
SystemUnit Software Version	X	Х	Х	X	x	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
SystemUnit State CameraLid	-	-	-	-	Х	Х	-	-	-	-	-	-	-	-	-	Web	AU
SystemUnit State CameraTilt	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
SystemUnit State NumberOfActiveCalls	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIRU
SystemUnit State NumberOfInProgressCalls	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIRU
SystemUnit State NumberOfSuspendedCalls	X	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web, API	AU
SystemUnit State Subsystem Application	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
SystemUnit State System	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	X	-	Web	AU
SystemUnit Uptime	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Time SystemTime	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
UserInterface ContactInfo ContactMethod [n] Number	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
UserInterface ContactInfo Name	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
UserInterface Extensions Widget [n] Value	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIRU
UserInterface Extensions Widget [n] WidgetId	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIRU
UserInterface Features Call End	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features Call JoinWebex	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AI
UserInterface Features MidCallControls	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features Call Start	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features Share Start	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AI
UserInterface Features Whiteboard Start	-	-	-	-	-	Х	Х	X	X	Х	-	-	-	X	-	Web, API	AI
UserInterface FlipScreenConnected	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	Web	AU
UserInterface OSD Output	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AIU
UserInterface SettingsMenu Visibility	X	Х	Х	Х	x	Х	Х	X	X	Х	x	Х	Х	x	-	Web, API	AI
UserInterface Spark BoardWorkflowsSupport	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web	AU
UserInterface WebView [n] Status	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web	AIU
UserInterface WebView [n] Type	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web	AIU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
UserInterface WebView [n] URL	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AIU
Video ActiveSpeaker PIPPosition	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] Connected	Х	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] DeviceType	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] LogicalAddress	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] Name	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] ConnectedDevice CEC [n] Vendorld	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] SignalState	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] Sourceld	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input Connector [n] Type	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input LastConnectedSource	X	Х	Х	Х	-	Х	X	X	-	-	-	-	Х	Х	-	Web	AU
Video Input MainVideoMute	X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Input MainVideoSource	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Video Input Source [n] ConnectorId	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Input Source [n] FormatStatus	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Source [n] FormatType	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Input Source [n] MediaChannelld	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	-	Web, API	AU
Video Input Source [n] Msctrlld	X	X	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web	AU
Video Input Source [n] Resolution Height	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Source [n] Resolution RefreshRate	X	Х	Х	Х	x	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Input Source [n] Resolution Width	X	X	Х	Х	X	Х	X	X	Х	Х	X	Х	Х	Х	-	Web, API	AIU
Video Input Source [n] TmdsClockPresent	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	Х	-	Web	AU
Video Layout Engine Version	X	Х	Х	Х	X	Х	X	X	X	Х	X	Х	Х	Х	-	Web	AU
Video Layout LayoutFamily Local	X	X	Х	Х	X	Х	X	X	X	Х	X	Х	Х	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Layout LayoutFamily Remote	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Video Layout Local Height	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Local PositionX	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Local PositionY	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Local Type	-	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Local Width	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Mode	Х	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web	AU
Video Layout Prediction Site [n] Family [n] DiffFromActive	X	X	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] FamilyName	X	X	Х	X	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Height	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] InputNumber	×	×	х	x	X	Х	х	х	×	х	x	Х	×	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Layer	X	X	Х	X	X	Х	Х	Х	X	Х	Х	Х	X	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] MediaChannelld	×	×	х	x	X	Х	х	х	×	х	x	Х	×	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Msctrlld	×	×	x	x	X	Х	х	х	×	x	x	Х	×	x	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] ParticipantId	x	x	х	x	X	Х	х	х	x	х	х	Х	x	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] ParticipantType	×	×	х	x	x	Х	х	х	×	х	х	Х	x	x	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] PositionX	×	×	Х	x	X	Х	х	Х	×	Х	x	Х	х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] PositionY	x	x	Х	x	x	Х	х	Х	×	Х	x	Х	x	x	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceContent	Х	Х	Х	x	X	Х	Х	Х	X	Х	x	Х	х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceld	х	х	Х	Х	X	Х	×	Х	×	Х	x	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceInstance	×	Х	Х	x	X	Х	x	Х	×	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] VideoSourceType	×	х	x	×	X	Х	×	X	×	х	x	X	Х	x	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame [n] Width	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] GraphicName	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] RoleName	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] Height	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] PositionX	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] PositionY	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] FrameContainer OutputRole [n] Width	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] Output [12] Frame [16] MediaChannelld	-	Х	Х	-	X	Х	X	Х	-	-	-	-	Х	X	-	Web	AU
Video Layout Prediction Site [n] Family[n] OutputRole [n] Frame[n] ParticipantId	x	х	х	x	x	Х	x	х	x	х	х	Х	Х	х	-	Web	AU
Video Layout Prediction Site [n] Family [n] OutputRole [n] Frame[n] VideoSourceInstance	x	Х	х	x	x	Х	x	х	x	х	x	х	х	X	-	Web	AU
Video Layout Prediction Site [n] StatusIndex Family [n] Hidden	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Prediction Site [n] StatusIndex Family [n] Name	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Prediction Site [n] StatusIndex OutputRole [n] Name	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Video Layout PresentationView	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] BoardSessionId	X	Х	Х	X	X	Х	Х	Х	X	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] Cropping Height	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] Cropping PositionX	Х	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] Cropping PositionY	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] Cropping Width	X	Х	Х	X	X	Х	X	Х	X	Х	X	Х	Х	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Layout Site [n] Frame [n] FrameContainerId	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] Height	X	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] InputNumber	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] Layer	X	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] MediaChannelld	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] Media Height	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] Media Width	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] Mirrored	X	Х	Х	Х	X	Х	Х	X	X	X	Х	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] Msctrlld	X	Х	Х	Х	X	Х	Х	X	X	X	Х	Х	Х	Х	-	Web	AU
Video Layout Site [n] Frame [n] Output	X	Х	Х	Х	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] ParticipantId	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] ParticipantType	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] PositionX	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] PositionY	X	X	Х	Х	X	Х	Х	X	X	X	Х	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] VideoSourceContent	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] VideoSourceld	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] VideoSourceInstance	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Frame [n] VideoSourceType	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Video Layout Site [n] Frame [n] Width	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] Content	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] Height	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] PositionX	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] PositionY	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU
Video Layout Site [n] Output [n] FrameContainer [n] Width	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	ΑU
Video Layout Site [n] Output [n] FullFamilyName	X	Х	Х	Х	X	Х	Х	X	X	X	X	Х	X	X	-	Web	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Monitors	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Video Output Connector [n] Connected	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] DeviceType	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress	X	Х	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] Name	X	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice CEC [n] Vendorld	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice Name	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice PreferredFormat	X	X	Х	X	X	Х	Х	Х	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Output Connector [n] ConnectedDevice ScreenSize	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	AU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1080_50	x	×	х	×	X	Х	х	х	×	х	x	Х	×	X	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1080_60	x	×	x	x	x	Х	x	x	×	х	x	Х	×	x	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1200_50	x	X	х	x	X	Х	Х	х	x	х	х	Х	x	X	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_1920_1200_60	x	x	х	x	x	Х	х	х	x	x	x	Х	x	X	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_2560_1440_60	x	х	х	х	X	Х	Х	х	x	х	х	Х	x	X	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_3840_2160_30	x	х	х	x	X	Х	х	х	х	х	х	Х	x	X	-	Web	AIU
Video Output Connector [n] ConnectedDevice SupportedFormat Res_3840_2160_60	x	x	Х	х	X	Х	х	Х	x	Х	X	Х	х	X	-	Web	AIU
Video Output Connector [n] MonitorRole	X	Х	Х	X	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Video Output Connector [n] Resolution Height	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х	X	-	Web, API	AU
Video Output Connector [n] Resolution RefreshRate	X	Х	Х	X	X	Х	Х	Х	X	Х	X	Х	X	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Video Output Connector [n] Resolution Width	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	Web, API	AU
Video Output Connector [n] Type	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Output Monitor [n] Backlight	-	-	-	Х	-	-	-	-	-	-	Х	Х	-	Х	-	Web, API	AU
Video Output Monitor [n] Brightness	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Blue	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Green	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Red	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ColorTemperature Selected	-	-	-	Х	-	-	-	-	-	-	X	Х	-	-	-	Web, API	AU
Video Output Monitor [n] Contrast	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] CSCYUV	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] FirmwareVersion	X	X	Х	Х	X	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Output Monitor [n] Gamma	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] ModelName	X	Х	Х	Х	X	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Output Monitor [n] Position	X	Х	-	Х	X	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Output Monitor [n] SerialNumber	X	X	Х	Х	X	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Output Monitor [n] Sharpness	-	-	-	Х	-	-	-	-	-	-	-	-	-	-	-	Web, API	AU
Video Output Monitor [n] Temperature	X	X	Х	Х	X	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Presentation PIPPosition	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
Video Selfview FullscreenMode	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Selfview Mode	X	Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Selfview OnMonitorRole	X	X	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	X	-	Web, API	AIU
Video Selfview PIPPosition	X	Х	Х	Х	x	Х	Х	X	X	Х	X	Х	Х	x	-	Web, API	AIU
WebEngine Features AnnotationOnEmbeddedWebView	-	-	-	-	-	-	Х	X	Х	Х	X	Х	Х	Х	-	Web	AU
WebEngine Features Signage	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU
WebEngine Features WebEngine	-	-	-	-	-	-	Х	X	X	Х	X	Х	Х	X	-	Web, API	AU

Status	SX80	SX20	SX10	MX800/MX700	MX300 G2 / MX200 G2	DX80/DX70	Room Kit	Room Kit Mini	Codec Plus	Codec Pro	Room 70 / Room 55 Dual	Room 70 G2	Room 55	Board 55/55S, 70/70S, 85S	On-prem only	Web interface or API	User role
Webex Status	Х	Х	Х	X	Х	Х	Х	Х	Х	X	X	Х	Х	Х	-	Web, API	AU
Whiteboard Session [n] BackgroundPath	Х	X	Х	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Whiteboard Session [n] BoardOrigin	X	X	X	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU
Whiteboard Session [n] BoardType	Х	X	Х	X	Х	Х	Х	X	X	X	X	Х	Х	Х	-	Web	AU
Whiteboard Session [n] BoardUrl	X	X	X	X	Х	Х	Х	X	X	X	X	Х	Х	Х	-	Web	AU
Whiteboard Session [n] BridgeState	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	-	Web	AU
Whiteboard Session [n] ClientState	Х	X	Х	X	X	Х	Х	X	Х	X	X	Х	Х	X	-	Web	AU
Whiteboard Session [n] Id	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	-	Web	AU
Whiteboard Session [n] SocketPath	Х	X	X	X	X	Х	Х	X	X	X	X	Х	Х	X	-	Web	AU

Startup scripts

You can add one or more startup scripts to the device. A startup script contains commands (xCommand) and configurations (xConfiguration) that will be executed as part of the start up procedure every time the device boots. A few commands and configurations cannot be placed in a startup script, e.g. xCommand SystemUnit Boot.

Use the device'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 device and are only available from a command line interface. Systemtools should not be used to program the device.

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
pki
ps
securitystatus
sudo
idefixversion
pairing
touch

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 | ifstats
<ifname>

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 device.

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 device's IP-addresses.

systemtools network ifconfig Network debug command.

systemtools network ifstats <ifname>

Network debug command. Prints out network interface statistics.

<ifname>: The name of the interface.

systemtools ntp

Shows the NTP status.

systemtools pairing unpair Removes association with remotely paired Touch controller.

systemtools pki list

Lists the device certificate and CA list if they exist.

systemtools pki delete <cert-name>

Delete the device certificate and CA list if they exist. <cert-name>: The name of the certificate.

systemtools ps

Lists all running processes.

systemtools rootsettings

Root access is no longer available in release software. Please use the remotesupport account instead.

systemtools securitystatus

Shows the security status for the device.

systemtools selectsw

Select which of the available software images to use. Changing the software image will restart the device.

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 touch start (only for DX70, DX80, and Boards)

Debug command for testing the touch panel.

systemtools touch stop (only for DX70, DX80, and Boards)

Debug command for testing the touch panel.

systemtools touch forever (only for DX70, DX80, and Boards)

Debug command for testing the touch panel.

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).

Proprietary. We recomend the use of CauseType and CauseCode.
Describes why the call was disconnected. The value space is { OtherLocal, LocalDisconnect, UnknownRemoteSite, LocalBusy, LocalReject, InsufficientSecurity, OtherRemote, RemoteDisconnect, RemoteBusy, RemoteRejected, RemoteNoAnswer, CallForwarded, NetworkRejected }
Describes the Cause Code.
The disconnect Cause Codes are defined in SIP and Q.850.
SIP, Q.850, internal.
connectEvent
onnect CauseValue: 1 pe: "LocalDisconnect" ring: "" LDirection: "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 Collaboration 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:

- Webex Boards
- Webex DX Series
- Webex Room Series
- TelePresence MX Series
- TelePresence SX Series

Alternatively, use the following short-links:

- https://www.cisco.com/go/board-docs
- https://www.cisco.com/go/dx-docs
- https://www.cisco.com/go/mx-docs
- https://www.cisco.com/go/room-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 device up and running
- Physical interface guide: Details about the product's physical interface, including the connector panel and LEDs (SX80 only)
- *RCSI guide:* Regulatory compliance and safety information

Maintain and Operate

Maintain and Operate Guides

- Administrator guide: Information required to administer your product
- Deployment guide for TelePresence 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

Reference Guides

Command references

• API reference guides: Reference guide for the Application Programming Interface (API)

Technical References

CAD drawings: 2D CAD drawings with dimensions

Configure

Configuration Guides

- Cistomization Guide: How to customize the user interface, how to use the device's API to program in-room controls, making macros, configure advanced audio set-ups using the Audio Console, and other customizations.
- UI Extensions Editor (formerly: In-Room Control Editor): Download the UI extensions editor

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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