Application Programming Interface (API) Reference Guide

Cisco Collaboration Endpoint Software 9.12
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
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 486.

This guide applies to the following products:

- **MX Series:**
  - MX200 G2
  - MX300 G2
  - MX700
  - MX800
- **SX Series:**
  - SX10 Quick Set
  - SX20 Quick Set
  - SX80 Codec
- **Room Series:**
  - Room Kit
  - Room Kit Mini
  - Codec Plus ¹
  - Codec Pro ²
  - Room 55
  - Room 55 Dual
  - Room 70
  - Room 70 G2
- **Desk Series / DX Series:**
  - Desk Pro
  - DX70
  - DX80
- **Webex Boards:**
  - Webex Board 55 and 55S
  - Webex Board 70 and 70S
  - Webex Board 85S

¹ Included in Room Kit Plus and Room Kit Plus Precision 60
² Included in Room Kit Pro and Room Kit Pro Precision 60

Downloading the user documentation

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

- [https://www.cisco.com/go/telepresence/docs](https://www.cisco.com/go/telepresence/docs)

For Cisco Webex registered devices, go to:

- [https://help.webex.com](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.
What’s new in CE9.12

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 9.12 (CE9.12) compared to CE9.10.

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
- CE9.12 - Desk Pro, Room USB

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

New features and improvements in CE9.12

New products
- Cisco Webex Room USB
- Cisco Webex Desk Pro

DX Series renamed to Desk Series

The new Desk Series contains the DX70, DX80, and Desk Pro products.

Support for using Room Kit Mini with Samsung Flip

The Room Kit Mini can be connected with a Samsung Flip device to get a touch interface. Then, you can also use the whiteboard feature. You can easily switch between the Samsung Flip and the Room Kit Mini user interfaces by pressing the Flip button.

One-way whiteboard sharing in-call (Boards)

You can now share the whiteboard while in-call. To initiate this, click the Home button followed by the Whiteboard button. Enter Editing mode and the sharing will begin. To stop the whiteboard sharing, press the Done button, followed by Stop sharing.

Note that the whiteboard share is one-way. Only the device sharing the whiteboard can draw on the whiteboard. Remote participants can only observe.

Webex Join support for Personal Meeting Room IDs

The Webex Join button now supports dialing Personal Meeting Room (PMR) IDs. You can address them by entering the full URL or a short path (i.e., username.sitename); as well as, by entering the meeting number.

PMRs from your recent calls list will be suggested as you type.

HTTP proxy support for Webex Edge for Devices

HTTP Proxy support has been enhanced to include devices linked to Webex Edge for Devices.

Webex Edge for Devices can select the HTTP Proxy services for the HttpClient, HttpFeedback, and/or the WebEngine.

If so enabled, all HTTP requests to the Webex Cloud will use the configured HTTP Proxy. However, regardless of the Proxy Mode, the device will never communicate with the Cisco Unified Communication Manager (CUCM), MRA (CUCM via Expressway), or TMS (phonebook) via proxy.

In addition, the following new configurations allow you to enable/disable use of the HTTP Proxy:
- xConfiguration HttpClient UseHttpProxy
- xConfiguration HttpFeedback UseHttpProxy
- xConfiguration WebEngine UseHttpProxy
In-call touch forwarding (Boards)
Touch forwarding has been enabled for use while in-call and can be activated and deactivated using a floating toolbar.

Hide Proximity notifications (All products)
You can now hide the Proximity notifications. This includes the Proximity icon that is visible on-screen when someone is paired with Proximity and the notification that appears when someone has just paired.

This can be configured via the API or the web interface of the device, or it can be provisioned (e.g., via TMS).

Hide scheduled meeting titles (All products)
A setting has been added to hide/show the scheduled meeting titles. When hidden, the words “Scheduled meeting” will be displayed instead of the meeting information.

Increased manual zoom range (Room Kit Mini, Room Kit and Room 55)
The manual zoom range is increased from 2x (Room Kit Mini) / 3x (Room Kit, Room 55) to 5x. The automatic best overview or speaker track zoom range is not changed.

Improvements for the Call Control page in the web interface of the device (All products)
- On a SpeakerTrack-enabled device, a button can be used to alter the current SpeakerTrack status. Click the button to disable or enable SpeakerTrack.
- The Mute button will correctly reflect the mute status of the microphones.
- When a preset is selected and accepted by the video device, it will be highlighted in blue. This includes selection from other devices, such as the Touch 10 controller. Note that preset highlighting and detection occurs only if the Camera Positions window is open.
- On devices where PresenterTrack is configured, it can be enabled from the Camera Positions window.
- For cases where the main video consists of a composited image of more than one input source, the DefaultMainVideo source will be displayed. By default, this is the main camera. This requires the remote monitoring option key.
- Regarding the display of directory entries, recent calls, and favorite entries, the maximum number that can be displayed at one time is increased from 50 to 100. The search field can be used to narrow down the list.
xConfiguration changes in CE9.12

**New configurations**
- Audio Input WebView [1] Mode (Codec Pro, Room 70 G2)
- BYOD TouchForwarding Enabled (Board 55S, Board 70S, Board 85S)
- Cameras Camera [1..3] Flip (Codec Plus, Room 55D, Room 70)
- Cameras Camera [1..7] Flip (Room 70 G2)
- Cameras SpeakerTrack ConnectorDetection * (Codec Plus)
- Cameras SpeakerTrack TrackingMode (Codec Plus)
- HttpClient UseHttpProxy (All products)
- HttpFeedback UseHttpProxy (All products)
- NetworkServices SMTP * (Room Kit Mini)
- SIP TlsVerify (All products)
- Standby Signage InteractionMode (Room Kit Mini)
- SystemUnit State CameraLid (DX80, DX70)
- UserInterface Bookings Visibility Title (All products)
- UserInterface Diagnostics Notifications (All products)
- UserInterface Features Call Keypad (All products)
- UserInterface Proximity Notifications (All products)
- UserInterface Whiteboard ActivityIndicators (All products)
- Video Output Connector [n] Location HorizontalOffset (Codec Pro, Codec Plus, Room Kit, Room 55, Room 55D, Room 70, Room 70 G2, SX80, SX20, MX700, MX800, MX200 G2, MX300 G2)
- Video Output Connector [n] Location VerticalOffset (CCCodec Pro, Codec Plus, Room Kit, Room 55, Room 55D, Room 70, Room 70 G2, SX80, SX20, MX700, MX800, MX200 G2, MX300 G2)
- VoiceControl Wakeword Mode (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)
- WebEngine UseHttpProxy (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

**Configurations that are removed**
- NetworkServices SNMP Host [1..3] Address (All products)

**Configurations that are modified**
- Network [1] QoS Diffserv Audio (All products)
  - OLD: Default: 0
  - NEW: Default: 46
- Network [1] QoS Diffserv Data (All products)
  - OLD: Default: 0
  - NEW: Default: 34
- Network [1] QoS Diffserv Signalling (All products)
  - OLD: Default: 0
  - NEW: Default: 24
- Network [1] QoS Diffserv Video (All products)
  - OLD: Default: 0
  - NEW: Default: 34
- NetworkServices SMTP Username (Boards, DX80, DX70)
  - OLD: String (0, 50)
  - NEW: String (0, 80)
- SerialPort BaudRate (Codec Pro, Room 70 G2)
  - OLD: 9600
  - NEW: Valuespace: 9600/19200/38400/57600/115200

*<path>* means that the change applies to all configurations starting with <path>.
xCommand changes in CE9.12

**New commands**

- **Network SMTP VerifyConfig** (Room Kit Mini, Boards, DX80, DX70)
- **Network Wifi** *(Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards, DX80, DX70)*
- **Webex Join** *(All products)*
- **Webex Registration ConvertToCloud** *(All products)*

**Commands that are removed**

None.

**Commands that are modified**

- **Audio Diagnostics Advanced Run** *(All products)*
  - **NEW**: Channel: Integer (0..13), Default: 0
  - **NEW**: Output: HDMI/Line/Internal/Headset/All, Default: All
- **Audio Diagnostics MeasureDelay** *(All products)*
  - **OLD**: HDMI: All/HDMI/Internal/Line
  - **NEW**: HDMI: All/HDMI/Headset/Internal/Line
- **Audio LocalInput AddConnector** *(Codec Pro, Room 70 G2)*
  - **OLD**: ConnectorType: ARC/HDMI/Microphone
  - **NEW**: ConnectorType: ARC/HDMI/Microphone/WebView
- **Audio LocalInput RemoveConnector** *(Codec Pro, Room 70 G2)*
  - **OLD**: ConnectorType: ARC/HDMI/Microphone
  - **NEW**: ConnectorType: ARC/HDMI/Microphone/WebView
- **CallHistory Get** *(All products)*
  - **OLD**: Filter: All/AnsweredElsewhere/Forwarded/Missed/NoAnswer/Placed/Received/Rejected/UnacknowledgedMissed
  - **NEW**: Filter: All/AnsweredElsewhere/Forwarded/Missed/NoAnswer/Placed/Pmr/Received/Rejected/UnacknowledgedMissed
- **Presentation Start** *(Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2)*
  - **OLD**: PresentationSource: Integer (1..n)
  - **NEW**: PresentationSource: None/1/2/../n
- **SystemUnit Boot** *(All products)*
  - **NEW**: Force: False/True, Default: True
- **UserInterface Extensions Panel Update** *(All products)*
  - **NEW**: Color: String (0, 255), Default: none
  - **NEW**: Icon: Briefing/Camera/Concierge/Disc/Handset/Help/Helpdesk/Home/Hvac/Info/Input/Language/Laptop/Lightbulb/Media/Microphone/Power/Proximity/Record/Spark/Tv/Webex/General, Default: none
  - **NEW**: Visibility: Auto/Hidden, Default: none
  - **OLD**: Name: required parameter
  - **NEW**: Name: optional parameter

<path>* means that the change applies to all configurations starting with <path>.
xStatus changes in CE9.12

New statuses

Audio Input Connectors USBC [n] Mute (All products)

Conference Presentation LocalInstance [n] DirectShare (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Conference SelectedCallProtocol (All products)

MediaChannels DirectShare [n] * (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Network [n] Wifi * (All products)

RoomAnalytics Engagement CloseProximity (Room Kit, Room Kit Mini, Room 55, Boards)

UserInterface Features Call Keypad (All products)

UserInterface OSD Output (All products)

Video Input DirectShare [n] Peer Address (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Video Input DirectShare [n] Peer PeripheralID (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Video Input DirectShare [n] Type (Codec Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55D, Room 70, Room 70 G2, Boards)

Webex Services Proximity GuestToken (All products)

Statuses that are removed

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

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

Audio Output Connectors Line [n] ConnectionStatus (Codec Pro, Room Kit Mini, Room 70 G2)

xStatus Security FIPS Mode (All products)

---

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


New features and improvements in CE9.10

Webex Edge for Devices (All products)
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 (All products)
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 (All products)
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 (All products)
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.
xConfiguration 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:


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

(Codex Pro, Codec Plus, Room Kit, Room Kit Mini, Room 55, Room 55 Dual, 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 (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 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).
xConfiguration 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)
- HttpFeedback TlsVerify (All products)
- Logging External TlsVerify (All products)
- Phonebook Server [1] TlsVerify (All products)
- Provisioning TlsVerify (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)
- BYOD TouchForwarding Enabled (Boards)

**Configurations that are removed**
- NetworkServices HTTPS VerifyServerCertificate (All products)

  Replaced by:
  - HttpFeedback TlsVerify
  - Provisioning TlsVerify

**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**: Integer (0..90) (Codec Pro, Codec Plus, SX80, SX20)
- **NEW**: 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, MX7000, MX8000, 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

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

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)

HttpRequest Delete (All products)
  OLD: ResponseSizeLimit: Integer (0..100000)
  NEW: ResponseSizeLimit: Integer (1..100000)

HttpRequest Get (All products)
  OLD: ResponseSizeLimit: Integer (0..100000)
  NEW: ResponseSizeLimit: Integer (1..100000)

HttpRequest Patch (All products)
  OLD: ResponseSizeLimit: Integer (0..100000)
  NEW: ResponseSizeLimit: Integer (1..100000)

HttpRequest Post (All products)
  OLD: CallRate: Integer (0..6000), Default: 0
  NEW: CallRate: Integer (0..6000), Default: none

HttpRequest Put (All products)
  OLD: CallRate: Integer (0..6000), Default: 0
  NEW: CallRate: Integer (0..6000), Default: none

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: CompanionModelIncompatibilityLocal/CompanionModelIncompatibilityRemote/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:


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 programatically 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-premises 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 Communications Manager and the IM and Presence Service, Release 12.5(1) SU1 for more information.
xConfiguration 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 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)*
  - **NEW**: IntervalMs: Integer (10..1000), Default: 100

- **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:


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.


**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](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
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 Reset (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: none
  NEW: VolumeControlled, Default: Off

Audio LocalOutput Update (Codec Pro, MX700, M800, Room 70 G2, SX80)
  NEW: AutoconnectRemote: On/Off

CallHistory Get (All products)
  OLD: CallHistoryId: Integer (0..65534)
  NEW: CallHistoryId: 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 Mixi, 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:


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 Customization 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 Customization 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] KeyId (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
  - NEW: Default: On
  - OLD: Default, HDMI [2..3]: Auto
  - NEW: Default, HDMI [2..3]: Off
  - OLD: Default, HDMI [3]: Auto
  - NEW: Default, HDMI [3]: Off
  - OLD: Off/On/Auto
  - NEW: Off/On
- Audio Output InternalSpeaker Mode (Room 55, Room 70 G2, Room Kit)
  - OLD: Default: Auto
  - NEW: Default: On
  - OLD: Off/On/Auto
  - NEW: Off/On/UltrasoundOnly
- 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 WakeupOnMotionDetection *(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 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: 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: 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: HDMI/Microphone/Line

NEW: ConnectorType: 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 (0, 255)

**UserInterface Message TextInput Display** (All products)

OLD: User role: Admin, Integrator, RoomControl, User

NEW: User role: Admin, Integrator, RoomControl

OLD: FeedbackId: required parameter

NEW: FeedbackId: optional parameter

**UserInterface Message TextInput Response** (All products)

OLD: FeedbackId: required parameter

NEW: FeedbackId: optional parameter
User Management User Add (All products)
  OLD: Passphrase: optional parameter
  NEW: Passphrase: required parameter

Video Input SetMainVideoSource (All products)
  OLD: Layout: Equal/PIP
  NEW: Layout: Equal/PIP/Prominent
  NEW: PIP Position: LowerLeft/LowerRight/UpperLeft/UpperRight
  NEW: PIP Size: Auto/Large

Video Matrix Assign (All products)
  NEW: Layout: Equal/Prominent
  NEW: Remote Main: Integer (1..4)

Video Matrix Unassign (All products)
  OLD: SourceId: required parameter
  NEW: SourceId: optional parameter
  NEW: Remote Main: Integer (1..4)
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 Reason (All products)
H320 Gateway Status (All products)
MediaChannels Call [n] Channel [n] Audio ChannelRole (All products)
UserInterface Features Call End (All products)
UserInterface Features Call MidCallControls (All products)
UserInterface Features Call Start (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:

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 compositing 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 Customization guide for CE9.5 at [https://www.cisco.com/go/in-room-control-docs](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)
Network Services 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 (1..14)
  NEW: Integer (1..8)
Audio Ultrasound MaxVolume (Codec Pro, MX700 with dual camera, Room 70 G2, SX80)
  OLD: Default: 70 (Codec Pro, Room 70 G2, SX80)
  NEW: Default: 60 (Codec Pro, Room 70 G2, SX80)
  OLD: Default: 70 (MX700 with dual camera)
  NEW: Default: 66 (MX700 with dual camera)
  OLD: Integer: 0 – 90 (Room 70 G2)
  NEW: Integer: 0 – 80 (Room 70 G2)
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: HDMI/Microphone/Line
  NEW: ConnectorType: HDMI/Microphone/ARC
Audio LocalInput RemoveConnector (Codec Pro, Room 70 G2)
  OLD: ConnectorType: HDMI/Microphone/Line
  NEW: ConnectorType: HDMI/Microphone/ARC
Audio LocalOutput AddConnector (Codec Pro, Room 70 G2)
  OLD: ConnectorType: HDMI/Microphone
  NEW: ConnectorType: HDMI/Microphone/ARC
Audio LocalOutput RemoveConnector (Codec Pro, Room 70 G2)
  OLD: ConnectorType: HDMI/Microphone
  NEW: ConnectorType: HDMI/Microphone/ARC

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/StartListening/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/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

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: SourceId: required parameter
  NEW: SourceId: optional parameter

Video Matrix Unassign (SX20, Codec Plus, Room Kit, MX200 G2, MX300 G2)
  OLD: SourceId: Integer (1..4) (Codec Plus)
  NEW: SourceId: Integer (1..3) (Codec Plus)
  OLD: SourceId: Integer (1..4) (Room Kit, MX200 G2, MX300 G2)
  NEW: SourceId: Integer (1..2) (Room Kit, MX200 G2, MX300 G2)
  OLD: SourceId: Integer (1..3) (SX20)
  NEW: SourceId: Integer (1..2) (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/ToucPanel
NEW: Byod/Camera/ControlSystem/ISDNLink/Other/SpeakerTracker/ToucPanel/ 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:


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.
xConfiguration 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)
- NEW: Default value: 50 (MX200 G2, MX300 G2)
- OLD: Value space: Integer (0..80) (MX200 G2, MX300 G2)
- NEW: Value space: Integer (0..70) (MX200 G2, MX300 G2)
- OLD: Value space: Integer (0..90) (Room 70)
- NEW: Value space: Integer (0..80) (Room 70)
- OLD: Value space: Integer (0..84) (Room 55)
- NEW: Value space: 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

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
xCommands 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 modified

Audio LocalInput Add (SX80)
NEW: Direct: On/Off

Audio LocalInput Update (SX80)
NEW: Direct: On/Off
OLD: AGC, Channels, MixerMode, Mute, Name: Required parameters
NEW: AGC, Channels, MixerMode, Mute, Name: Optional parameters

Audio LocalOutput Update (SX80)
OLD: Channels, Loundspeaker, Name: Required parameters
NEW: Channels, Loundspeaker, Name: Optional parameters

Camera PositionSet (All products except DX70, DX80)
OLD: Zoom: Integer (0..8500)
NEW: Zoom: Integer (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
xStatus 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 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

**Statuses that are removed**

None.
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:


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-of-call only and in-call only panels, respectively.
- You can make standalone trigger-buttons, which are buttons that trigger an event directly, without opening a panel on the user interface.

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

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

For a full description of in-room controls, see the Customization guide for CE9.3 at [https://www.cisco.com/go/in-room-control-docs](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 Default Call 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
- User Interface Settings Menu Mode must be set to Locked
- User Interface 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 Incoming Call Notification 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 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

Configurations that are removed
Provisioning HttpMethod (All products)
xCommands changes in CE9.3

New commands
Audio SoundsAndAlerts Ringtone Stop (All products)
Bookings Notification Snooze (All products)
HttpFeedback Enable (All products)
Macros Macro RemoveAll (All products)
Provisioning Service Fetch (All products)
Standby Reset HalfwakeTimer (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: Integer (64..3072)
NEW: CallRate: Integer (64..6000)

Dial (All products)
NEW: TrackingData: String (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: WidgetId: String (0, 40)
NEW: WidgetId: String (0, 255)
UserInterface Extensions Widget SetValue  (All products)
  OLD: WidgetId: String (0, 40)
  NEW: WidgetId: String (0, 255)

UserInterface Extensions Widget UnsetValue  (All products)
  OLD: WidgetId: String (0, 40)
  NEW: WidgetId: String (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 Kit)
Video Output Monitor [n] SerialNumber (Codec Plus, Room 55, Room 70, Room Kit, SX10)
Video Output Monitor [n] Temperature (Codec Plus, Room 55, Room 70, Room Kit, SX10)

Statuses that are removed

MediaChannels Call [n] Channel [n] Netstat Drop (All products)
USB Device [n] State (SX20)
USB Device [n] Type (SX20)

Statuses that are modified

Cameras Camera [n] Flip (Codec Plus, MX700, MX800, Room 70, SX10, SX20, SX80)
OLD: String
NEW: Off/On

Diagnostics Message [n] Type (All products)
OLD: ANATOnVC/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/H323GatewayStatus/
HasActiveCallProtocol/HasValidReleaseKey/IPv4Assignment/IPv6Assignment/IPv6Mtu/
ISDNLinkCompatibility/ISDNLinkIpStack/ITLInstallation/InvalidSIPTransportConfig/
IpCameraStatus/LockDown/MediaBlockingDetected/MediaPortRangeNegative/
MediaPortRangeOdd/MediaPortRangeOverlay/MediaPortRangeTooSmall/
MediaPortRangeValueSpace/MicrophoneReinforcement/MicrophonesConnected/
MonitorDelay/NTPStatus/NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/
OSDVideoOutput/OutputConnectorLocations/PlatformSanity/PresentationSourceSelection/
PresenterTrack/ProvisioningDeveloperOptions/ProvisioningStatus/RoomControl/
SIPEncryption/SIPListenPortAndOutboundMode/SIPListenPortAndRegistration/
SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/
SipIceAndAnatConflict/SipOrH323ButNotBothEnabled/SoftwereUpgrade/
SparkActivationRequired/SparkConnectivity/SpeakerTrackEthernetConnection/
SpeakerTrackFrontPanelMountedCorrectly/SpeakerTrackMicrophoneConnection/
SpeakerTrackVideoInputs/TCMPmediafallback/TLSServerRequired/TLSServerTLSRequired/
TouchPanelControl/TouchPanelMaterial/TouchPanelTechnology/TouchPanelVersion/
TouchPanelConfiguration/TouchPanelInstallation/TouchPanelLicense/TouchPanelName/
TouchPanelNumber/TouchPanelOption/TouchPanelStatus/TouchPanelTemplateName/
TouchPanelType/TurnBandwidth/TurnBandwidth/UploadInformation/UploadSpeed/
VideoFromInternalCamera/VideoOutputSignalQuality/VideoPortOutputStatus/
VideoPortRangeNegative/VideoPortRangeOdd/VideoPortRangeTooSmall/
VideoPortRangeValueSpace/WifiCARRequired/ActiveMacros/AudioECRefDelay/
SparkActivationRequired/SparkConnectivity/SpeakerTrackEthernetConnection/
SpeakerTrackFrontPanelMountedCorrectly/SpeakerTrackMicrophoneConnection/
SpeakerTrackVideoInputs/TCPMediaFallback/TLSThresholdCerts/TemperatureCheck/
TouchPanelConnection/TurnBandwidth/VideoConference/Validity/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:


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 suits 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 Certificates CA Add, or xCommand Security Certificates 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: Integer (0..36)
  NEW: Value space: Integer (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)

Commands that are removed
UserInterface OSD Key Click (Room Kit, Codec Plus, Room 55)
UserInterface OSD Key Press (Room Kit, Codec Plus, Room 55)
UserInterface OSD Key Release (Room Kit, Codec Plus, Room 55)
Commands that are modified

**Audio Microphones Mute** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio Microphones ToggleMute** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio Microphones Unmute** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio Sound Play** *(All products)*
- **OLD:** Sound: Alert/Bump/Busy/CallDisconnect/CallInitiate/CallWaiting/Dial/KeyInput/KeyInputDelete/KeyTone/Nav/NavBack/Notification/OK/PresentationConnect/Ringing/SignIn/SpecialInfo/TelephoneCall/VideoCall/VolumeAdjust/WakeUp
- **NEW:** Sound: Alert/Bump/Busy/CallDisconnect/CallInitiate/CallWaiting/Dial/KeyInput/KeyInputDelete/KeyTone/Nav/NavBack/Notification/OK/Pairing/PresentationConnect/Ringing/SignIn/SpecialInfo/TelephoneCall/VideoCall/VolumeAdjust/WakeUp
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio Sound Stop** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio SoundsAndAlerts Ringtone List** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio SoundsAndAlerts Ringtone Play** *(All products)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Audio SpeakerCheck** *(MX700/MX800)*
- **OLD:** Volume: Integer (1..10)
- **NEW:** Volume: Integer (1..30)

**Call Disconnect** *(All products)*
- **OLD:** User role: ADMIN, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Camera PositionReset** *(SX80, SX20, SX10, MX200G2/MX300G2, MX700/MX800, Codec Plus)*
- **OLD:** User role: ADMIN, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Camera PositionSet** *(All products except DX70/DX80)*
- **OLD:** User role: ADMIN, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER
- **Added:** Lens: Wide/Center/Left/Right

**Camera Ramp** *(All products except DX70/DX80)*
- **OLD:** User role: ADMIN, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Cameras PresenterTrack ClearPosition** *(SX80, MX700/MX800)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Cameras PresenterTrack Set** *(SX80, MX700/MX800)*
- **OLD:** User role: INTEGRATOR, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER

**Cameras PresenterTrack Whiteboard ActivatePosition** *(SX80, MX700/MX800)*
- **OLD:** User role: ADMIN, USER
- **NEW:** User role: ADMIN, INTEGRATOR, USER
- **Removed:** Camera
- **Added:** CameraId: Integer (1..7)
Cameras SpeakerTrack Whiteboard AlignPosition (SX80, MX700/MX800)
   Removed: Camera
   Added: CameraId: Integer (1..7)
Cameras SpeakerTrack Whiteboard StorePosition (SX80, MX700/MX800)
   Removed: Camera
   Added: CameraId: Integer (1..7)
Dial
   OLD: User role: ADMIN, USER
   NEW: User role: ADMIN, INTEGRATOR, USER
Peripherals HeartBeat
   OLD: User role: ADMIN, ROOMCONTROL, USER
   NEW: User role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
SystemUnit Boot
   OLD: User role: INTEGRATOR, USER
   NEW: User role: ADMIN, INTEGRATOR, USER
SystemUnit FirstTimeWizard Stop
   OLD: User role: INTEGRATOR, USER
   NEW: User role: ADMIN, INTEGRATOR, USER
UserInterface Extensions List
   OLD: User role: INTEGRATOR, ROOMCONTROL, USER
   NEW: User role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
UserInterface Message Prompt Display
   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: CamerasDetectedNoIr/UdpPortRangeViolation
  Added to valuespace: CameraDetected/CertificateExpiry/MacrosRuntimeStatus / MediaPortRangeNegative/MediaPortRangeOdd/MediaPortRangeOverlap/ MediaPortRangeTooSmall/MediaPortRangeValueSpace/MicrophonesConnected/ SparkActivationRequired/VideoPortRangeNegative/VideoPortRangeOdd/ VideoPortRangeTooSmall/VideoPortRangeValueSpace/UltrasoundConfigSettings
Video Input MainVideoSource (All products)
  OLD: Value space: Integer
  NEW: Value space: 1/2/3/4/Composed
What's new in CE9.1

This section provides an overview of the new and changed 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:


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 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 Volume/HeadsetBluetooth (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] VendorId (Room Kit)

Statuses that are removed

- Cameras Camera [n] Flip (Room Kit)
- Cameras Camera [n] HardwareID (Room Kit)
- Cameras Camera [n] MacAddress (DX70, DX80, Room Kit)
- Cameras Camera [n] Position Focus (Room Kit)
- Cameras Camera [n] SerialNumber (Room Kit)
- Cameras Camera [n] SoftwareID (Room Kit)
- Video Input Source [n] TmdsClockPresent (Room Kit)

Statuses that are modified

Diagnostics Message Type (All products)

OLD: Value space: CAPFOperationState/CTLinstallation/CUCMVendorConfigurationFile/CallProtocolDoubleStackConfig/CallProtocolIPStackPlatformCompatibility/CallProtocolVcsProvisioningCompatibility/CameraId/CameraPairing/CameraSerial/CameraSoftwareVersion/CameraStatus/CamerasDetected/CamerasDetectedNoIR/ConfigurationFile/DefaultCallProtocolRegistered/EthernetDuplexMatches/FanStatus/PresenterTrack/H320GatewayStatus/H323GatekeeperStatus/HasValidReleaseKey/IpCameraStatus/Ip4Assignment/Ip6Assignment/IPv6Mtul/ISDNLinkCompatibility/ISDNLinkIpStack/ITLinstallation/InvalidSIPTransportConfig/LockDown/RoomControl/MediaBlockingDetected/NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/NTPSstatus/OSD/videoOutput/OutputConnectorLocations/ProvisioningDeveloperOptions/ProvisioningStatus/SIPEncryption/SIPListenPortAndOutboundMode/SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/SipIceAndAnatConflict/SIPListenPortAndRegistration/TCPMediaFallback/TemperatureCheck/TLSServerRequiredCerts/TouchPanelConnection/ControlSystemConnection/TurnBandwidth/UdpPortRangeViolation/UltrasoundSpeakerAvailability/ValidPasswords/VideoFromInternalCamera/VideoInputStability/VideoInputSignalQuality/SparkConnectivity/VideoTrackFrontPanelMountedCorrectly/VideoTrackMicrophoneConnection/VideoTrackUnuseful/VideoTrackEthernetConnection/ANATOnVCS/ECReferenceDelay/AudioECRefDelay/AudioPairingRate/AudioPairingSNR/AudioPairingInterference/AudioPairingTokenDecode/AudioInternalSpeakerDisabled/AbnormalCallTermination/HasActiveCallProtocol/SipOrH323ButNotBothEnabled/PresentationSourceSelection/SoftwareUpgrade/PlatformSanity/ContactInfoMismatch/MicrophoneReinforcement/FirstTimeWizardNotCompleted/CaptivePortalDetected/MonitorDelay

NEW: Value space: CAPFOperationState/CTLinstallation/CUCMVendorConfigurationFile/CallProtocolDoubleStackConfig/CallProtocolIPStackPlatformCompatibility/CallProtocolVcsProvisioningCompatibility/CameraId/CameraPairing/CameraSerial/CameraSoftwareVersion/CameraStatus/CamerasDetected/CamerasDetectedNoIR/ConfigurationFile/DefaultCallProtocolRegistered/EthernetDuplexMatches/FanStatus/PresenterTrack/H320GatewayStatus/H323GatekeeperStatus/HasValidReleaseKey/IpCameraStatus/Ip4Assignment/Ip6Assignment/IPv6Mtul/ISDNLinkCompatibility/ISDNLinkIpStack/ITLinstallation/InvalidSIPTransportConfig/LockDown/RoomControl/MediaBlockingDetected/NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/NTPSstatus/OSD/videoOutput/OutputConnectorLocations/ProvisioningDeveloperOptions/ProvisioningStatus/SIPEncryption/SIPListenPortAndOutboundMode/SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/SipIceAndAnatConflict/SIPListenPortAndRegistration/TCPMediaFallback/TemperatureCheck/TLSServerRequiredCerts/TouchPanelConnection/ControlSystemConnection/TurnBandwidth/UdpPortRangeViolation/UltrasoundSpeakerAvailability/ValidPasswords/VideoFromInternalCamera/VideoInputStability/VideoInputSignalQuality/SparkConnectivity/VideoTrackFrontPanelMountedCorrectly/VideoTrackMicrophoneConnection/VideoTrackUnuseful/VideoTrackEthernetConnection/ANATOnVCS/ECReferenceDelay/AudioECRefDelay/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:


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] * (MX200 G2, MX300 G2, MX700, MX800, SX10, SX20, SX80)
OLD: User role: ADMIN, USER
NEW: User role: ADMIN, INTEGRATOR

Cameras SpeakerTrack * (MX700, MX800, SX80)
OLD: User role: ADMIN, USER
NEW: User role: ADMIN, INTEGRATOR

Conference MultiStream Mode (MX200 G2, MX300 G2, MX700, MX800, SX20, SX80)
OLD: Value space: Auto/Off
NEW: Value space: Off

UserInterface Language (All products)
NEW: Portuguese added to value space

xConfigurations with INTERATOR user role
A new user role - INTERATOR - 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] * (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)

Conference DefaultCall Rate (All products)
Conference DoNotDisturb DefaultTimeout (All products)

GPIO Pin [n] Mode (MX700, MX800, 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 CameraId (All products)
Video Input Connector [n] CameraControl Mode (All products)
Video Input Connector [n] InputSourceType (All products)
Video Input Connector [n] Name (All products)
Video Input Connector [n] PresentationSelection (All products)
Video Input Connector [n] Quality (All products)
Video Input Connector [n] Visibility (All products)
Video Monitors (All products)
Video Output Connector [n] CEC Mode (All products)
Video Output Connector [n] MonitorRole (MX700, MX800, SX20, SX80)
Video Output Connector [n] Resolution (All products)
Video Presentation DefaultPIPPosition (All products)
Video Selfview Default * (All products)
Video Selfview OnCall * (All products)

* 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 Clear (All products)
- UserInterface Message Prompt Display (All products)
- UserInterface Message Prompt Response (All products)
- UserInterface Message TextLine Clear (All products)
UserInterface Message TextLine Display (All products)
UserInterface Presentation ExternalSource Add (All products)
UserInterface Presentation ExternalSource List (All products)
UserInterface Presentation ExternalSource Remove (All products)
UserInterface Presentation ExternalSource RemoveAll (All products)
UserInterface Presentation ExternalSource Select (All products)
UserInterface Presentation ExternalSource State Set (All products)
UserManagement User Passphrase Change (All products)
Video Input SetMainVideoSource (DX70, DX80, MX200 G2, MX300 G2, MX700, MX800, SX20, SX80)
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] VendorId (All products)

Statuses that are modified

Diagnostics Message [n] Type (All Products)
OLD: CAPFOperationState/CTLInstallation/CUCMVendorConfigurationFile/
CallProtocolDualStackConfig/CallProtocolPStackPlatformCompatibility/
CameraSoftwareVersion/CameraStatus/CamerasDetected/ConfigurationFile/
DefaultCallProtocolRegistered/EthernetDuplexMatches/FanStatus/PresenterTrack/
H320GatewayStatus/H323GatekeeperStatus/HasValidReleaseKey/
IpCameraStatus/IPv4Assignment/IPv6Assignment/IPv6Mtu/ISDNLinkCompatibility/
ISDNLinkStack/ITInstallation/InvalidSIPTransportConfig/LockDown/RoomControl/
MediaBlockingDetected/NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/
NTPStatus/OSDVideoOutput/OutputConnectorLocations/ProvisioningDeveloperOptions/
ProvisioningStatus/SIPEncryptions/SIPListenPortAndOutboundMode/
SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/
SpeakerAnatConflict/SIPListenPortAndRegistration/TPCMediaFallback/
TemperatureCheck/TLSVerifyRequiredCerts/TouchPanelConnection/
ControlSystemConnection/TurnBandwidth/UdpPortRangeViolation/
UltrasonicSpeakerAvailability/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: CAPFOperationState/CTLInstallation/CUCMVendorConfigurationFile/
CallProtocolDualStackConfig/CallProtocolPStackPlatformCompatibility/
CameraSoftwareVersion/CameraStatus/CamerasDetected/ConfigurationFile/
DefaultCallProtocolRegistered/EthernetDuplexMatches/FanStatus/PresenterTrack/
H320GatewayStatus/H323GatekeeperStatus/HasValidReleaseKey/
IpCameraStatus/IPv4Assignment/IPv6Assignment/IPv6Mtu/ISDNLinkCompatibility/
ISDNLinkStack/ITInstallation/InvalidSIPTransportConfig/LockDown/RoomControl/
MediaBlockingDetected/NetLinkStatus/NetSpeedAutoNegotiated/NetworkQuality/
NTPStatus/OSDVideoOutput/OutputConnectorLocations/ProvisioningDeveloperOptions/
ProvisioningStatus/SIPEncryptions/SIPListenPortAndOutboundMode/
SIPProfileRegistration/SIPProfileType/SelectedVideoInputSourceConnected/
SpeakerAnatConflict/SIPListenPortAndRegistration/TPCMediaFallback/
TemperatureCheck/TLSVerifyRequiredCerts/TouchPanelConnection/
ControlSystemConnection/TurnBandwidth/UdpPortRangeViolation/
UltrasonicSpeakerAvailability/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] Value (All products)
UserInterface Extensions Widget [n] WidgetId (All products)
Video ActiveSpeaker PiPPosition (All products)
Video Input Connector [n] Connected (All products)
Video Input Connector [n] SourceId (All products)
Video Input Connector [n] Type (All products)
Video Input Source [n] Connected (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] VendorId (All products)
Video Output Connector [n] ConnectedDevice Name (All products)
Video Output Connector [n] ConnectedDevice PreferredFormat (All products)
Video Selfview FullscreenMode (All products)
Video Selfview Mode (All products)
Video Selfview OnMonitorRole (All products)
Video Selfview PiPPosition (All products)
Chapter 2

About the API
API fundamentals

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

Connecting to the API

There are several ways to access the device API:
- SSH
- Telnet
- HTTP/HTTPS
- WebSocket
- Serial connection

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.

Telnet

Telnet can be viewed as the equivalent of the serial protocol in the TCP/IP world. Telnet is disabled by default. Before connecting to the 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.

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.

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.

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 85 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 WebSockets.

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.

Read the API over WebSocket guide for details how to convey API commands in JSON-RPC objects over WebSockets.
RS-232 / serial connection

You may want to set up serial connection to a device for the following purposes:

- **Access to the device’s API**
  Depending on the device type, the serial connection for API access is set up via an USB-A or a COM-port (D-SUB 9 or 3-pin Euroblock).³

- **Maintenance and service**
  You may need a serial connection to the device to recover from a faulty state. Refer to the administrator guide of the product for details.

Serial communication can be used without an IP-address, DNS, or a network.

Serial communication is enabled by default, but can be disabled by setting the serial port mode to Off.⁴

  xConfiguration SerialPort Mode: <Off/On>

**Baud rate and other serial port parameters**

Refer to the table to find the connector types and serial port parameters for each device type.

Some device types allow a range of baud rates.⁵ The device can give very much feedback, so we recommend keeping the connection at the highest rate possible. In some situations, such as when using long cables, a lower rate may be used to avoid bit errors.

  xConfiguration SerialPort BaudRate: <9600/19200/38400/57600/115200>

A new baud rate takes effect after a device reboot.

**Login and password**

For security reasons the password prompting is turned on by default, but it can be turned off if preferred.

  xConfiguration SerialPort LoginRequired: <Off/On>

---

<table>
<thead>
<tr>
<th>Device type</th>
<th>Connector type</th>
<th>Baud rate (bps)</th>
<th>Other parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Kit Mini</td>
<td>USB-A + RS-232 adapter</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>Room Kit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room 55</td>
<td>USB-A + RS-232 adapter</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>Codec Plus</td>
<td>USB-A + RS-232 adapter</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>SX10</td>
<td>USB-A + RS-232 adapter</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>Codec Pro</td>
<td>COM (Euroblock, 3-pin)</td>
<td>9600, 19200, 38400, 57600, or 115200 (default)</td>
<td>Data bits: 8, Parity: None, Stop bits: 1, Hardware flow control: Off</td>
</tr>
<tr>
<td>Room 70 G2</td>
<td>USB-A + RS-232 adapter</td>
<td>9600, 19200, 38400, 57600, or 115200 (default)</td>
<td></td>
</tr>
<tr>
<td>SX80</td>
<td>COM (D-SUB 9)</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>MX700, MX800</td>
<td>USB-A + RS-232 adapter</td>
<td>9600, 19200, 38400, 57600, or 115200 (default)</td>
<td></td>
</tr>
<tr>
<td>SX20</td>
<td>USB-A + RS-232 adapter</td>
<td>9600, 19200, 38400, 57600, or 115200 (default)</td>
<td></td>
</tr>
<tr>
<td>MX200 G2, MX300 G2</td>
<td>USB-A + RS-232 adapter</td>
<td>115200</td>
<td></td>
</tr>
<tr>
<td>Board 55, 70</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board 55S, 70S, 85S</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX70, DX80</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room 55 Dual, Room 70</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

² API access over a serial connection is not available for DX70, DX80, Room 55 Dual, and Room 70.
³ Serial communication is always enabled for Webex Board 55 and 70 (first generation of boards); it cannot be disabled.
⁴ Applies only to the ports that are used to access the device’s API. A dedicated maintenance port (micro USB) always uses the default baud rate.
⁵ During the initial boot sequence, the device uses a baud rate of 38400 bps regardless of the baud rate you have set.
Ethernet ports

The main network port - Network port 1 - is always reserved for the connection to LAN. 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.

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
```

---

**Example: Command in terminal mode**

```
xCommand Audio Volume Set Level: 50
```

---

**Example: Command in XML mode**

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

Example 1:
```
?  
- User Commands -
  help xcommand xconfiguration xevent xfeedback
  xgetxml xpreferences xstatus bye echo
  log systemtools
OK
```

API commands

**xConfiguration**
Configurations are device settings, such as device name and network settings. These are persistent across boots. Refer to “Configurations” on page 79.

**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 79.

**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 79.

**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 83.

**xPreferences**
The xPreferences command is used to set preferences for the RS-232, Telnet and SSH sessions. Refer to “API output” on page 76.

**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 82.

**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 83.

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 535.

**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 OUT and HDMI:

```
xconfiguration //out//hdmi
```

```
*c xConfiguration Audio Output HDMI 1 Level: 0
*c xConfiguration Audio Output HDMI 1 Mode: On
*c xConfiguration Audio Output HDMI 2 Level: 0
*c xConfiguration Audio Output HDMI 2 Mode: Off
** end
```

Example 2:
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 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
```
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 response-tagging mechanism.

This mechanism works with all command types: xcommand, xconfiguration, and xstatus. A typical use of this would be to create a command queue in your application and assign unique IDs to every command sent to the 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:

```bash
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:

```bash
xgetxml /Configuration/Video/Layout/Scaling | resultId="mytag_2"
<XmlDoc resultId="mytag_2">
  <Configuration item="1">
    <Video item="1">
      <Layout item="1">
        <Scaling item="1" valueSpaceRef="...">Off</Scaling>
      </Layout>
    </Video>
  </Configuration>
</XmlDoc>
```
Events

Event returns information about the events that are available for feedback. This overview presents examples of some of 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 dialed. Returns the CallId the call has been assigned.

```plaintext
*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.

```plaintext
*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.

```plaintext
*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.

```plaintext
*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.

```plaintext
*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.

```plaintext
*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 87 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.

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.

<table>
<thead>
<tr>
<th>Method</th>
<th>URL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>http://&lt;ip-address&gt;/status.xml</td>
<td>Complete status document</td>
</tr>
<tr>
<td>GET</td>
<td>http://&lt;ip-address&gt;/configuration.xml</td>
<td>Complete configuration document</td>
</tr>
<tr>
<td>GET</td>
<td>http://&lt;ip-address&gt;/command.xml</td>
<td>Complete command document</td>
</tr>
<tr>
<td>GET</td>
<td>http://&lt;ip-address&gt;/valuespace.xml</td>
<td>Complete valuespace document</td>
</tr>
<tr>
<td>GET</td>
<td>http://&lt;ip-address&gt;/getxml?location=&lt;path&gt;</td>
<td>Retrieve document based on a path</td>
</tr>
<tr>
<td>POST</td>
<td>http://&lt;ip-address&gt;/putxml</td>
<td>Configurations and commands in HTTP body</td>
</tr>
</tbody>
</table>

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=f08102c8ce5aaf8fba23a7238cc2ef64b990e18ffbb7fb048820c0e28955c54; 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=f08102c8ce5aaf8fba23a7238cc2ef64b990e18ffbb7fb048820c0e28955c54
```

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=f08102c8ce5aaf8fba23a7238cc2ef64b990e18ffbb7fb048820c0e28955c54
```

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>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
Expression: <S: 1, 255>
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 83 for more information about the expression formats.

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

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

<Command>
  <HttpFeedback>
    <Register command="True">
      <FeedbackSlot>1</FeedbackSlot>
      <ServerUrl>http://127.0.0.1/myhttppostscripturl</ServerUrl>
      <Format>XML</Format>
      <Expression item="1">/Status/iCallStatus</Expression>
      <Expression item="2">/Event/iCallDisconnect</Expression>
    </Register>
  </HttpFeedback>
</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.

```xml
<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>PH00000000</SerialNumber>
  </Identification>
  <Audio item="1">
    <Volume item="1">60</Volume>
  </Audio>
</Configuration>
```
Translating from terminal mode to XML

Translating commands

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

Example 1: Setting up a call

Terminal

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 xconfvid. 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.

<table>
<thead>
<tr>
<th>Command Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>xConfiguration Audio DefaultVolume</td>
<td>98</td>
</tr>
<tr>
<td>xConfiguration Audio Input ARC [n] Mode</td>
<td>98</td>
</tr>
<tr>
<td>xConfiguration Audio Input HDMI [n] Level</td>
<td>99</td>
</tr>
<tr>
<td>xConfiguration Audio Input HDMI [n] Mode</td>
<td>99</td>
</tr>
<tr>
<td>xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo</td>
<td>100</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] Equalizer ID</td>
<td>100</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] Equalizer Mode</td>
<td>100</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] VideoAssociation MuteOnInactiveVideo</td>
<td>101</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] VideoAssociation VideoInputSource</td>
<td>101</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] Channel</td>
<td>102</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] Level</td>
<td>102</td>
</tr>
<tr>
<td>xConfiguration Audio Input Line [n] Mode</td>
<td>103</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Channel</td>
<td>103</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] EchoControl Mode</td>
<td>104</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] EchoControl Dereverberation</td>
<td>104</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] EchoControl NoiseReduction</td>
<td>105</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Equalizer ID</td>
<td>105</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Equalizer Mode</td>
<td>105</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Level</td>
<td>106</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Mode</td>
<td>106</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Type</td>
<td>107</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] PhantomPower</td>
<td>107</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo</td>
<td>108</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] VideoAssociation VideoInputSource</td>
<td>108</td>
</tr>
<tr>
<td>xConfiguration Audio Input Microphone [n] Mode</td>
<td>109</td>
</tr>
<tr>
<td>xConfiguration Audio Input USBC[n] Level</td>
<td>109</td>
</tr>
<tr>
<td>xConfiguration Audio Input USBC[n] Mode</td>
<td>109</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Mode</td>
<td>114</td>
</tr>
<tr>
<td>xConfiguration Audio Output HDMI [n] Mode</td>
<td>117</td>
</tr>
<tr>
<td>xConfiguration Audio Output HDMI [n] Level</td>
<td>117</td>
</tr>
<tr>
<td>xConfiguration Audio Output HDMI [n] Delay DelayMs</td>
<td>117</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Delay DelayMs</td>
<td>119</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Delay Mode</td>
<td>119</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Equalizer ID</td>
<td>120</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Equalizer Mode</td>
<td>120</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Level</td>
<td>120</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] Mode</td>
<td>121</td>
</tr>
<tr>
<td>xConfiguration Audio Output Line [n] OutputType</td>
<td>121</td>
</tr>
<tr>
<td>xConfiguration Audio SoundsAndAlerts RingTone</td>
<td>122</td>
</tr>
<tr>
<td>xConfiguration Audio SoundsAndAlerts RingVolume</td>
<td>122</td>
</tr>
<tr>
<td>xConfiguration Audio Ultrasound MaxVolume</td>
<td>122</td>
</tr>
<tr>
<td>xConfiguration Audio Ultrasound MaxVolume</td>
<td>122</td>
</tr>
</tbody>
</table>
**BYOD configuration**............................................................................................................... 123
  xConfiguration BYOD TouchForwarding Enabled......................................................................... 123

**CallHistory configuration**...................................................................................................... 123
  xConfiguration CallHistory Mode ................................................................................................. 123

**Cameras configuration**............................................................................................................ 124
  xConfiguration Cameras Camera [n] AssignedSerialNumber .......................................................... 124
  xConfiguration Cameras Background Enabled .............................................................................. 124
  xConfiguration Cameras Camera [n] Backlight DefaultMode .......................................................... 125
  xConfiguration Cameras Camera [n] Brightness DefaultMode ....................................................... 125
  xConfiguration Cameras Camera [n] Brightness DefaultLevel ....................................................... 126
  xConfiguration Cameras Camera [n] Flip ..................................................................................... 126
  xConfiguration Cameras Camera [n] Focus Mode ......................................................................... 127
  xConfiguration Cameras Camera [n] Gamma Mode ....................................................................... 127
  xConfiguration Cameras Camera [n] Gamma Level ....................................................................... 128
  xConfiguration Cameras Camera [n] Mirror .................................................................................. 128
  xConfiguration Cameras Camera [n] Whitebalance Mode .............................................................. 129
  xConfiguration Cameras Camera [n] Whitebalance Level .............................................................. 129
  xConfiguration Cameras Camera Framerate .................................................................................. 130
  xConfiguration Cameras Preset TriggerAutofocus ...................................................................... 130
  xConfiguration Cameras SpeakerTrack Mode .............................................................................. 131
  xConfiguration Cameras SpeakerTrack Closeup .......................................................................... 131
  xConfiguration Cameras SpeakerTrack TrackingMode .................................................................. 132
  xConfiguration Cameras SpeakerTrack ConnectorDetection Mode .............................................. 132
  xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft ....................................... 133
  xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight ...................................... 133
  xConfiguration Cameras SpeakerTrack Whiteboard Mode ........................................................... 134

**Conference configuration**...................................................................................................... 134
  xConfiguration Conference AutoAnswer Mode ............................................................................ 134
  xConfiguration Conference AutoAnswer Mute ............................................................................ 135
  xConfiguration Conference AutoAnswer Delay .......................................................................... 135
  xConfiguration Conference DefaultCall Protocol ......................................................................... 135
  xConfiguration Conference DefaultCall Rate ............................................................................. 136
  xConfiguration Conference DoNotDisturb DefaultTimeout .......................................................... 136
  xConfiguration Conference Encryption Mode .............................................................................. 137
  xConfiguration Conference FarEndControl Mode ....................................................................... 137
  xConfiguration Conference FarEndControl SignalCapability ....................................................... 137
  xConfiguration Conference FarEndMessage Mode .................................................................... 138
  xConfiguration Conference MaxReceiveCallRate ........................................................................ 138
  xConfiguration Conference MaxTransmitCallRate ..................................................................... 139
  xConfiguration Conference MaxTotalReceiveCallRate ................................................................. 139
  xConfiguration Conference MaxTotalTransmitCallRate ............................................................... 140
  xConfiguration Conference MicUnmuteOnDisconnect Mode ....................................................... 140
  xConfiguration Conference Multipoint Mode ............................................................................. 141
  xConfiguration Conference MultiStream Mode ............................................................................ 141

**FacilityService configuration** ................................................................................................ 142
  xConfiguration FacilityService Service [n] Type .......................................................................... 142
  xConfiguration FacilityService Service [n] Name ......................................................................... 142
  xConfiguration FacilityService Service [n] Number ....................................................................... 143
  xConfiguration FacilityService Service [n] CallType .................................................................... 143

**GPIO configuration**................................................................................................................ 144
  xConfiguration GPIO Pin [n] Mode ................................................................................................. 144

**H323 configuration**................................................................................................................ 145
  xConfiguration H323 Authentication Mode ................................................................................ 145
  xConfiguration H323 Authentication LoginName ......................................................................... 145
  xConfiguration H323 Authentication Password .......................................................................... 146
  xConfiguration H323 CallSetup Mode .......................................................................................... 146
  xConfiguration H323 Encryption KeySize ................................................................................... 147
  xConfiguration H323 Gatekeeper Address ................................................................................... 147
  xConfiguration H323 H323Alias E164 .......................................................................................... 147
  xConfiguration H323 H323Alias ID .............................................................................................. 147
  xConfiguration H323 NAT Mode .................................................................................................. 148
  xConfiguration H323 NAT Address .............................................................................................. 148
xConfiguration HttpClient Mode ................................................................. 149
xConfiguration HttpClient AllowHTTP ...................................................... 149
xConfiguration HttpClient AllowInsecureHTTPS ........................................ 150
xConfiguration HttpClient UseHttpProxy .................................................. 150

xConfiguration Logging External Mode ..................................................... 152
xConfiguration Logging External Protocol ............................................... 152
xConfiguration Logging External Server Address ..................................... 152
xConfiguration Logging External Server Port ......................................... 153
xConfiguration Logging External TlsVerify ............................................. 153
xConfiguration Logging Internal Mode ...................................................... 154

xConfiguration Macros Mode ................................................................. 154
xConfiguration Macros AutoStart ........................................................... 155
xConfiguration Macros UnresponsiveTimeout ......................................... 155

xConfiguration Network [n] DNS DNSSEC Mode ..................................... 156
xConfiguration Network [n] DNS Domain Name ....................................... 156
xConfiguration Network [n] DNS Server [m] Address ................................. 157
xConfiguration Network [n] IEEE8021X Mode .......................................... 157
xConfiguration Network [n] IEEE8021X TlsVerify .................................... 158
xConfiguration Network [n] IEEE8021X UseClientCertificate .................... 158
xConfiguration Network [n] IEEE8021X Identity ....................................... 159
xConfiguration Network [n] IEEE8021X Password ................................... 159
xConfiguration Network [n] IEEE8021X AnonymouslyIdentify ................. 159
xConfiguration Network [n] IEEE8021X Eap Mds ..................................... 160
xConfiguration Network [n] IEEE8021X Eap Tls ....................................... 160
xConfiguration Network [n] IPv4 Assignment ......................................... 162
xConfiguration Network [n] IPv4 Address ................................................. 163
xConfiguration Network [n] IPv4 Gateway .............................................. 163
xConfiguration Network [n] IPv6 Assignment ......................................... 164
xConfiguration Network [n] IPv6 Address ............................................... 164
xConfiguration Network [n] IPv6 Gateway .............................................. 164
xConfiguration Network [n] IPv6 DHCPOptions ..................................... 165
xConfiguration Network [n] IPv6 SubnetMask ......................................... 163
xConfiguration Network [n] QoS Mode ..................................................... 165
xConfiguration Network [n] QoS DiffServ Audio ...................................... 166
xConfiguration Network [n] QoS DiffServ Video ...................................... 166
xConfiguration Network [n] QoS DiffServ Data ........................................ 167
xConfiguration Network [n] QoS DiffServ Signalling ................................ 167
xConfiguration Network [n] QoS DiffServ ICMPv6 ................................... 168
xConfiguration Network [n] QoS DiffServ NTP ......................................... 168
xConfiguration Network [n] RemoteAccess Allow ................................... 169
xConfiguration Network [n] Speed ......................................................... 169
xConfiguration Network [n] VLAN Voice Mode ...................................... 170
xConfiguration Network [n] VLAN Voice VlanId ..................................... 170

xConfiguration NetworkPort [n] Mode ...................................................... 171

xConfiguration NetworkServices CDP Mode ........................................... 171
xConfiguration NetworkServices H323 Mode ......................................... 171
xConfiguration NetworkServices HTTP Mode ........................................ 172
xConfiguration NetworkServices HTTP Proxy LoginName ....................... 172
xConfiguration NetworkServices HTTP Proxy Password ......................... 172
xConfiguration NetworkServices HTTP Proxy Mode ................................ 173
xConfiguration NetworkServices HTTP Proxy Url ................................... 173
### Configuration

- NetworkServices
  - HTTP Proxy PACUrl
  - HTTPS Server MinimumTLSVersion
  - HTTPS StrictTransportSecurity
  - NetworkServices HTTPS VerifyClientCertificate
  - NTP Mode
  - NTP Server [n] Address
  - NTP Server [n] Key
  - NTP Server [n] KeyId
  - KeyAlgorithm

- SIP Mode

- SMTP From
  - Password
  - Port

- SNMP SystemContact
  - SystemLocation

- SSH HostKeyAlgorithm

- Telnet Mode

- WelcomeText

- SSH Mode

- SMTP Server
  - SMTP Port

- SNMP CommunityName

- SMTP Username

- SNMP Mode

- SMTP Password

- SNMP SystemContact
  - SystemLocation

- SMTP Security

- SNMP SystemContact

### Peripherals

- InputDevice Mode

- Pairing CiscoTouchPanels RemotePairing

- Profile Cameras

- Profile ControlSystems

- Profile TouchPanels

### Phonebook

- Server [n] Type

### Provisioning

- Connectivity

- ExternalManager Domain

- ExternalManager AlternateAddress

- ExternalManager Address

- ExternalManager Path

- ExternalManager LoginName

- ExternalManager Password

### Security

- Audit Logging Mode

- CallControl

- ContentShare FromClients

- ContentShare ToClients

- PresenceDetector

- OnError Action

- Server Address
<table>
<thead>
<tr>
<th>Configuration Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SystemUnit configuration</td>
<td>210</td>
</tr>
<tr>
<td>Standby configuration</td>
<td>206</td>
</tr>
<tr>
<td>xConfiguration</td>
<td></td>
</tr>
<tr>
<td>Standby Control</td>
<td>206</td>
</tr>
<tr>
<td>Standby StandbyAction</td>
<td>208</td>
</tr>
<tr>
<td>Standby StandbyWakeupAction</td>
<td>208</td>
</tr>
<tr>
<td>Standby StandbySignageAudio</td>
<td>207</td>
</tr>
<tr>
<td>Standby StandbySignageInteractionMode</td>
<td>207</td>
</tr>
<tr>
<td>Standby StandbySignageMode</td>
<td>207</td>
</tr>
<tr>
<td>Standby StandbySignageRefreshInterval</td>
<td>208</td>
</tr>
<tr>
<td>Standby StandbySignageUrl</td>
<td>208</td>
</tr>
<tr>
<td>Standby StandbyPowerSave</td>
<td>209</td>
</tr>
<tr>
<td>Standby StandbyWakeupOnMotionDetection</td>
<td>209</td>
</tr>
<tr>
<td>SystemUnit CrashReportingMode</td>
<td>210</td>
</tr>
<tr>
<td>SystemUnit CrashReportingMode</td>
<td>210</td>
</tr>
<tr>
<td>Time configuration</td>
<td>211</td>
</tr>
<tr>
<td>Time TimeFormat</td>
<td>211</td>
</tr>
<tr>
<td>Time TimeDateFormat</td>
<td>211</td>
</tr>
<tr>
<td>Time TimeZone</td>
<td>211</td>
</tr>
<tr>
<td>Time WorkDayStart</td>
<td>213</td>
</tr>
<tr>
<td>Time WorkDayEnd</td>
<td>213</td>
</tr>
<tr>
<td>Time WorkWeek FirstDayOfWeek</td>
<td>213</td>
</tr>
<tr>
<td>Time WorkWeek LastDayOfWeek</td>
<td>213</td>
</tr>
<tr>
<td>UserInterface configuration</td>
<td>214</td>
</tr>
<tr>
<td>UserInterface Accessibility IncomingCallNotification</td>
<td>214</td>
</tr>
<tr>
<td>UserInterface Bookings Visibility Title</td>
<td>214</td>
</tr>
<tr>
<td>UserInterface Branding AwakeBrandingColors</td>
<td>214</td>
</tr>
<tr>
<td>UserInterface ContactInfo Type</td>
<td>215</td>
</tr>
<tr>
<td>UserInterface CustomMessage</td>
<td>215</td>
</tr>
<tr>
<td>UserInterface Diagnostics Notifications</td>
<td>215</td>
</tr>
<tr>
<td>UserInterface KeyTones Mode</td>
<td>216</td>
</tr>
<tr>
<td>UserInterface Activities</td>
<td>216</td>
</tr>
<tr>
<td>UserInterface Features Call End</td>
<td>216</td>
</tr>
<tr>
<td>UserInterface Features Call Keypad</td>
<td>216</td>
</tr>
<tr>
<td>UserInterface Features Call Keypad</td>
<td>216</td>
</tr>
</tbody>
</table>
### UserManagement configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>xConfiguration UserManagement LDAP AdminFilter</td>
<td>224</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP AdminGroup</td>
<td>224</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP Attribute</td>
<td>224</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP BaseDN</td>
<td>225</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP Encryption</td>
<td>225</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP MinimumTLSVersion</td>
<td>225</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP Mode</td>
<td>226</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP ServerAddress</td>
<td>226</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP ServerPort</td>
<td>226</td>
</tr>
<tr>
<td>xConfiguration UserManagement LDAP VerifyServerCertificate</td>
<td>227</td>
</tr>
<tr>
<td>xConfiguration UserManagement PasswordPolicy Complexity MinimumDigits</td>
<td>227</td>
</tr>
<tr>
<td>xConfiguration UserManagement PasswordPolicy Complexity MinimumLength</td>
<td>228</td>
</tr>
<tr>
<td>xConfiguration UserManagement PasswordPolicy Complexity MinimumLowercase</td>
<td>228</td>
</tr>
</tbody>
</table>

### xConfiguration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>xConfiguration UserInterface Features Call MidCallControls</td>
<td>216</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features Call JoinWebex</td>
<td>217</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features Call Start</td>
<td>217</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features Call VideoMute</td>
<td>217</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features HideAll</td>
<td>218</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features ShareStart</td>
<td>218</td>
</tr>
<tr>
<td>xConfiguration UserInterface Features WhiteboardStart</td>
<td>218</td>
</tr>
<tr>
<td>xConfiguration UserInterface Language</td>
<td>218</td>
</tr>
<tr>
<td>xConfiguration UserInterface OSD EncryptionIndicator</td>
<td>219</td>
</tr>
<tr>
<td>xConfiguration UserInterface OSD HalfwakeMessage</td>
<td>219</td>
</tr>
<tr>
<td>xConfiguration UserInterface OSD Output</td>
<td>220</td>
</tr>
<tr>
<td>xConfiguration UserInterface PhonebookMode</td>
<td>220</td>
</tr>
<tr>
<td>xConfiguration UserInterface ProximityNotifications</td>
<td>220</td>
</tr>
<tr>
<td>xConfiguration UserInterface SecurityMode</td>
<td>221</td>
</tr>
<tr>
<td>xConfiguration UserInterface SettingsMenu Mode</td>
<td>221</td>
</tr>
<tr>
<td>xConfiguration UserInterface SettingsMenuVisibility</td>
<td>221</td>
</tr>
<tr>
<td>xConfiguration UserInterface SoundEffectsMode</td>
<td>222</td>
</tr>
<tr>
<td>xConfiguration UserInterface UsbPromotion</td>
<td>222</td>
</tr>
<tr>
<td>xConfiguration UserInterface WebcamOnlyMode</td>
<td>223</td>
</tr>
<tr>
<td>xConfiguration UserInterface WhiteboardActivityIndicators</td>
<td>223</td>
</tr>
</tbody>
</table>

### Video configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>xConfiguration Video DefaultMainSource</td>
<td>231</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] CameraControlCameraId</td>
<td>231</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] CameraControlMode</td>
<td>232</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] CECMode</td>
<td>232</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] DviType</td>
<td>233</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] HDCPMode</td>
<td>233</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] InputSourceType</td>
<td>234</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] Name</td>
<td>234</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] PreferredResolution</td>
<td>235</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] PresentationSelection</td>
<td>235</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] Quality</td>
<td>236</td>
</tr>
<tr>
<td>xConfiguration Video Input Connector [n] Visibility</td>
<td>237</td>
</tr>
<tr>
<td>xConfiguration Video Monitors</td>
<td>238</td>
</tr>
<tr>
<td>xConfiguration Video Output Connector [n] CECMode</td>
<td>239</td>
</tr>
<tr>
<td>xConfiguration Video Output Connector [n] LocationHorizontalOffset</td>
<td>240</td>
</tr>
<tr>
<td>xConfiguration Video Output Connector [n] MonitorRole</td>
<td>241</td>
</tr>
<tr>
<td>xConfiguration Video Output Connector [n] OverscanLevel</td>
<td>241</td>
</tr>
<tr>
<td>xConfiguration Video Output Connector [n] Resolution</td>
<td>242</td>
</tr>
<tr>
<td>xConfiguration Video Presentation DefaultSource</td>
<td>243</td>
</tr>
<tr>
<td>xConfiguration Video Presentation Priority</td>
<td>243</td>
</tr>
<tr>
<td>xConfiguration Video SelfView Default FullscreenMode</td>
<td>244</td>
</tr>
<tr>
<td>xConfiguration Video SelfView Default Mode</td>
<td>244</td>
</tr>
<tr>
<td>xConfiguration Video SelfView Default OnMonitorRole</td>
<td>245</td>
</tr>
<tr>
<td>xConfiguration Video SelfView Default PIPPosition</td>
<td>245</td>
</tr>
<tr>
<td>xConfiguration Video SelfView Mirrored</td>
<td>246</td>
</tr>
<tr>
<td>xConfiguration Video SelfView OnCallMode</td>
<td>246</td>
</tr>
<tr>
<td>xConfiguration Video SelfView OnCallDuration</td>
<td>246</td>
</tr>
<tr>
<td>Configuration WebEngine Mode</td>
<td>247</td>
</tr>
<tr>
<td>xConfiguration WebEngine RemoteDebugging</td>
<td>247</td>
</tr>
<tr>
<td>xConfiguration WebEngine UseHttpProxy</td>
<td>248</td>
</tr>
</tbody>
</table>
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 [ D1X0/D2X80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro ]
 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 output, 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

 Mode
 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, DeskPro

**Requires user role:** ADMIN, INTEGRATOR

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

**USAGE:**

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

where

- **n**: Unique ID that identifies the HDMI input.
  - Range: 1..3 for SX80
  - Range: 2..3 for single camera devices; 3..3 for dual camera devices: MX700/MX800/MX800D
  - Range: 2..3 for CodecPlus, Room70/Room55D
  - Range: 1..5 for CodecPro
  - Range: 1..2 for RoomKit, RoomKitMini, DeskPro
  - Range: 2..5 for Room55
  - Range: 2..3 for MX700/MX800/MX800D

**Level**
- **Range:** Integer (-24..0)
- **Default value:** 0

**xConfiguration Audio Input HDMI [n] Mode**

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

**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 for SX80
  - Range: 2..3 for single camera devices; 3..3 for dual camera devices: MX700/MX800/MX800D
  - Range: 2..3 for CodecPlus, Room70/Room55D
  - Range: 1..5 for CodecPro
  - Range: 1..2 for RoomKit, RoomKitMini, DeskPro
  - Range: 2..5 for Room55
  - Range: 2..3 for MX700/MX800/MX800D

**Mode**
- **Off/On**
  - **Off:** Disable audio on the HDMI input.
  - **On:** Enable audio on the HDMI input.

**Default value:**

```
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:**

```plaintext
xConfiguration Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo:

MuteOnInactiveVideo
```

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/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 CodecPro 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:**

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

where

- n: Unique ID that identifies the audio line input.
  
ID:
  
- 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:**

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

where

- n: Unique ID that identifies the audio line input.
  
Mode:
  
- Off/On
  
- Off: No equalizer.
  - On: Enable the equalizer for the audio source that is connected to the line input.

Default value:

`Off`
xConfiguration Audio Input Line \[n\] VideoAssociation MuteOnInactiveVideo

Applies to: SX20  SX80  MX700/MX800/MX800D
Requires user role: ADMIN, INTEGRATOR

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

**USAGE:**

xConfiguration Audio Input Line \[n\] VideoAssociation MuteOnInactiveVideo:

MuteOnInactiveVideo

where

\[n\] Unique ID that identifies the audio line input.

Range: 1..4  \[ SX80  MX700/MX800/MX800D \]
Range: 1..1  \[ SX20 \]

MuteOnInactiveVideo:

Off/On

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

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

Default value:

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

xConfiguration Audio Input Line \[n\] VideoAssociation VideoInputSource

Applies to: SX20  SX80  MX700/MX800/MX800D
Requires user role: ADMIN, INTEGRATOR

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

**USAGE:**

xConfiguration Audio Input Line \[n\] VideoAssociation VideoInputSource:

VideoInputSource

where

\[n\] Unique ID that identifies the audio line input.

Range: 1..4  \[ SX80  MX700/MX800/MX800D \]
Range: 1..1  \[ SX20 \]

VideoInputSource:

1/2/3/4  \[ SX80  MX700/MX800/MX800D \]
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: \text{Channel}
```

where

\(n\): Unique ID that identifies the audio line input.

Range: 1..4

**Channel:**

- **Left/Mono/Right**
  - **Left:** The Audio Line input signal is the left channel of a stereo signal.
  - **Mono:** The Audio Line input signal is a mono signal.
  - **Right:** The Audio Line input signal is the right channel of a stereo signal.

Default value:
- **Left**

xConfiguration Audio Input Line \([n]\) Level

Applies to: SX80, MX700/MX800/MX800D

Requires user role: ADMIN, INTEGRATOR

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

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

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

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

**USAGE:**

```
xConfiguration Audio Input Line \([n]\) Level: \text{Level}
```

where

\(n\): Unique ID that identifies the audio line input.

Range: 1..4

**Level:**

- Integer (0..24)

Default value:
- 10
xConfiguration Audio Input Line [n] Mode

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

Define the mode for the audio input line.

USAGE:
xConfiguration Audio Input Line [n] Mode: Mode
where
n: Unique ID that identifies the audio line input.
Range: 1..4
Mode:
Off/On
Off: Disable the Audio Line input.
On: Enable the Audio Line input.
Default value:
On

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

where

- **n**: Unique ID that identifies the microphone input.
  - Range: 1..8  [ SX80 MX700/MX800/MX800D CodecPlus Room70G2 ]
  - Range: 1..2  [ SX20 ]
  - Range: 2..2  [ SX10 ]
  - Range: 1..3  [ CodecPlus Room70/Room55D ]
  - Range: 2..3  [ RoomKit Room55 ]

- **Mode**: Off/On
  - **Off**: Turn off the echo control. Recommended if external echo cancellation or playback equipment is used.
  - **On**: Turn on the echo control. Recommended, in general, to prevent the far end from hearing their own audio. Once selected, echo cancellation is active at all times.

Default value: On

xConfiguration Audio Input Microphone [n] EchoControl Dereverberation

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

Requires user role: ADMIN, INTEGRATOR

The 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: Dereverberation

where

- **n**: Unique ID that identifies the microphone input.
  - Range: 1..8  [ SX80 MX700/MX800/MX800D CodecPlus 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

\(n\): 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)

**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

\(n\): Unique ID that identifies the microphone input.

- **Range:** 1..8

**ID:**

- **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

\(n\): Unique ID that identifies the microphone input.

- **Range:** 1..8

**Mode:**

- **Off/On**
  - **Off:** No equalizer.
  - **On:** Enable the equalizer for the source that is connected to the microphone input.

Default value:

- **Off**
xConfiguration Audio Input Microphone [n] Level

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

**Requires user role:** ADMIN, INTEGRATOR

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

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

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

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

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

**USAGE:**

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

where

- **n**: Unique ID that identifies the microphone input.
  - Range: 1..8 [SX80, MX700/MX800/MX800D, CodecPro, Room70G2]
  - Range: 1..2 [SX10, SX20]
  - Range: 2..2 [SX80, MX700/MX800]
  - Range: 2..3 [CodecPlus, Room55, Room70/Room55D]
  - Range: 2..3 [MX200G2/MX300G2, RoomKit, Room55]

- **Level**: Integer (0..26) [RoomKit, Room55]
  - Integer (0..24) [Room70/Room55D]
  - Integer (0..70) [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: Mode
```

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..1 [CodecPlus, Room55, Room70/Room55D]
  - Range: 1..1 [MX200G2, MX300G2]

- **Mode**: Off/On

- **Off**: Disable the audio input microphone connector.
- **On**: Enable the audio input microphone connector.

- **Default value:**
  - Off
  - 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: Type
```
where
- `n`: 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: 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 present or not. By default, audio is not muted.

**Usage:**
xConfiguration Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo: MuteOnInactiveVideo:

where

\( n \): Unique ID that identifies the microphone input.

Range: 1..8

MuteOnInactiveVideo:

\( \text{Off/On} \)

\( \text{Off} \): No video source is associated.

\( \text{On} \): A video source is associated, and the audio will be muted if the associated video source is not displayed.

Default value:

\( \text{On} \)

---

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:

where

\( n \): 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 DeskPro
Requires user role: ADMIN, INTEGRATOR

This setting does not apply to DX70.

If the microphone mode is 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 the microphone mode is 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 [ DX70/DX80 ]
Focused [ DeskPro ]

xConfiguration Audio Input USBC[n] Level

Applies to: DeskPro
Requires user role: ADMIN, INTEGRATOR

Set the USB-C audio level.

USAGE:

xConfiguration Audio Input USBC[n] Level: Level
where

n: Unique ID that identifies the USBC input.
Range: 1..1
Level:
Integer (-24..0)
The audio level, between -24 and 0 decibels.
Default value:
0

xConfiguration Audio Input USBC[n] Mode

Applies to: DeskPro
Requires user role: ADMIN, INTEGRATOR

Set the USB-C audio mode.

USAGE:

xConfiguration Audio Input USBC[n] Mode: Mode
where

n: Unique ID that identifies the USBC input.
Range: 1..1
Mode:
Off/On
On: Allow audio from the USB-C.
Off: Do not allow any audio from the USB-C.
Default value:
On
xConfiguration Audio Input WebView[n] Mode

**Applies to:** CodecPro  Room70G2

**Requires user role:** ADMIN, INTEGRATOR

Set the WebView mode.

**USAGE:**
xConfiguration Audio Input WebView[n] Mode: Mode

where

n: Unique ID that identifies the WebView input.
  Range: 1..1

Mode:
  Off/On
  On: Allow audio from the web browser.
  Off: Do not allow any audio to be played from the web browser.

Default value:
  On

xConfiguration Audio KeyClickDetector Attenuate

**Applies to:** RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro 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: Attenuate

where

Attenuate:
  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  DeskPro
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: 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  DeskPro

Requires user role: ADMIN, INTEGRATOR

Define the microphone mute behavior on the device.

USAGE:
xConfiguration Audio Microphones Mute Enabled: Enabled

where

Enabled:
True/InCallOnly
True: Muting of audio is always available. In general, the microphone mute LED will not be lit outside of call, but you can still mute using the API commands.
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: **PhantomPower**

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: **Mode**

where

- **n**: Unique ID that identifies the microphone input.
- Range: 1..8
- **Mode**: 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:**

```plaintext
xConfiguration Audio MicrophoneReinforcement Output Line [n] Mode: Mode  
where  
n: Unique ID that identifies the microphone output.  
Range: 1..4  
Mode:  
Off/On  
On: This output will deliver far end audio, local presentation audio and the microphone reinforcement mix.  
Off: This output will deliver far end audio and local presentation audio.  
Default value:  
Off
```

**xConfiguration Audio MicrophoneReinforcement Gain**

**Applies to:** SX80, MX700/MX800/MX800D  
**Requires user role:** ADMIN, INTEGRATOR  
The gain (in dB) that will be applied to the mixed microphone signal that is fed to the selected MicrophoneReinforcement outputs.

**USAGE:**

```plaintext
xConfiguration Audio MicrophoneReinforcement Gain: Gain  
where  
Gain:  
Integer (-54..15)  
Use this gain to adjust the level of microphone signal that should be fed to the local output. The value -54 means "Off," and no signal will be fed from the microphone to the output.  
Default value:  
-54
```

**xConfiguration Audio Output ARC [n] Delay DelayMs**

**Applies to:** CodecPro, Room70G2  
**Requires user role:** ADMIN, INTEGRATOR  
To obtain lip-synchronization, you can configure each ARC output with an extra delay that compensates for delay in other connected devices, for example TVs and external loudspeakers. The delay that you set here is either fixed or relative to the delay measured on or reported by an external monitor, as defined in the Audio Output ARC [n] Delay Mode setting.

**USAGE:**

```plaintext
xConfiguration Audio Output ARC [n] Delay DelayMs: DelayMs  
where  
n: Unique ID that identifies the audio ARC output.  
Range: 1..1  
DelayMs:  
Integer (0..290)  
The delay in milliseconds.  
Default value:  
0
```
xConfiguration Audio Output ARC \([\text{n}]\) 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 \([\text{n}]\) 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 \([\text{n}]\) Delay Mode: \text{Mode}
```

where

\(\text{n}\): Unique ID that identifies the audio ARC output.

**Range:** 1..1

**Mode:**

- **Fixed/RelativeToHDMI**

- **Fixed:** Any extra delay (DelayMs) added to the output, will be a fixed number of milliseconds.

- **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 \([\text{n}]\) DelayMs status reports the actual delay.

**Default value:**

- **RelativeToHDMI** [CodecPro]

- **Fixed** [Room70G2]

---

xConfiguration Audio Output ARC \([\text{n}]\) Mode

**Applies to:** CodecPro Room70G2

**Requires user role:** ADMIN, INTEGRATOR

Choose whether or not to enable the audio return channel (ARC) on the HDMI \([\text{n}]\) 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 \([\text{n}]\) Mode: \text{Mode}
```

where

\(\text{n}\): Unique ID that identifies the audio ARC output.

**Range:** 1..1

**Mode:**

- **Off/On**

- **Off:** Disable the ARC output on the HDMI input.

- **On:** Enable the ARC output on the HDMI input.

**Default value:**

- **On**
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: 
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: [DelayMs]
```

where

- `n`: 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

- `n`: Unique ID that identifies the audio line output.
  - Range: 1..3
- `Mode`: 
  - `Fixed/RelativeToHDMI`
  - `Fixed`: Any extra delay (DelayMs) added to the output, will be a fixed number of milliseconds.
  - `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: 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)

**Level:**

- **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: Mode
```

where

- **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/MX800D)

**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: Mode

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: Channel

where

n: Unique ID that identifies the audio line output.

Range: 1..6

Channel:

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
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:**

```plaintext
xConfiguration Audio Output Line [n] Delay DelayMs:
```

where

- **n**: Unique ID that identifies the audio line output.
  - Range: 1..6 [ SX80 MX700/MX800D CodecPro Room70G2 ]
  - Range: 1..1 [ SX10 SX20 ]

**DelayMs**:

- **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:**

```plaintext
xConfiguration Audio Output Line [n] Delay Mode: Mode
```

where

- **n**: Unique ID that identifies the audio line output.
  - Range: 1..6 [ SX80 MX700/MX800D CodecPro Room70G2 ]
  - Range: 1..1 [ SX10 SX20 ]

**Mode**:

- **Fixed/RelativeToHDMI**
- **Fixed**: Any extra delay (DelayMs) added to the output, will be a fixed number of milliseconds.
- **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/MX800D Room70G2 ]**
- Default value: **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: ID
```

where

- **n**: Unique ID that identifies the audio line output.
  - Range: 1..6
- **ID**: 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: Mode
```

where

- **n**: Unique ID that identifies the audio line output.
  - Range: 1..6
- **Mode**: 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

- **n**: Unique ID that identifies the audio line output.
  - Range: 1..6
  - [SX80, MX700/MX800/MX800D, CodecPro, Room70G2]
- **Level**: Integer (-24..0)
  - Range: 1..1
  - [Room70/Room55D]
  - Default value:
    - [SX80, MX700/MX800/MX800D]: 0
    - [CodecPro, Room70/Room55D, Room70G2]: -10
xConfiguration Audio Output Line [n] Mode

**Appplies 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 [Mode]
```

where

- **n:** Unique ID that identifies the audio line output.
  - Range: 1..6 [SX80, MX700/MX800/MX800D, CodecPro, Room70G2]
  - Range: 1..1 [RoomKit, CodecPlus, Room55, Room70/Room55D]

**Mode:**

- **Off/On**
  - **Off:** Disable the audio line output.
  - **On:** Enable the audio line output.

**Default value:**

- **On**

xConfiguration Audio Output Line [n] OutputType

**Appplies 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 [OutputType]
```

where

- **n:** Unique ID that identifies the audio line output.
  - Range: 1..1 [RoomKit, CodecPlus, Room55, Room70/Room55D]

**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: **RingTone**

where

**RingTone:**
Sunrise/Mischief/Ripples/Reflections/Vibes/Playful/Ascent/Calculation/Mellow/Ringer
Select a ringtone from the list.

Default value:
Sunrise

Default value:
Sunrise

[x70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 RX700/RX800 MX700/MX800/MX800D RoomKit RoomKitMini CodecPro CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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: **RingVolume**

where

**RingVolume:**
Integer (0..100)

**Range:** The value goes in steps of 5 from 0 to 100 (from -34.5 dB to 15 dB). Volume 0 = Off.

Default value:
50

[x70/DX80 SX10 SX20 SX80 RoomKit RoomKitMini CodecPro CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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 StandbyWakeUpOnMotionDetection settings for information about the use of ultrasound in presence and motion detection.

**USAGE:**
xConfiguration Audio Ultrasound MaxVolume: **MaxVolume**

where

**MaxVolume:**
Integer (0..90) [SX20 SX80 CodecPro CodecPro]

 Integer (0..70) [DX70/DX80 SX10 MX200G2/MX300G2 MX700/MX800 MX800D RoomKit RoomKitMini Room55 Room70/Room55D Room70G2 DeskPro 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:** DeskPro Boards  
**Requires user role:** ADMIN, INTEGRATOR

Use this setting to enable or disable the Touch redirect feature. Touch redirect enables you to control your laptop from the touch screen of the board or video device. You must connect the laptop to the device 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 device to the laptop.

This feature is not available on the first generation of boards (Webex Board 55 and 70, not S-series).

**USAGE:**

```plaintext
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:**

```plaintext
xConfiguration CallHistory Mode: 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: "AssignedSerialNumber"

where

n: Unique ID that identifies the camera.
 Range: 1..7 [ SX80 MX700/MX800/MX800D CodecPro ]
 Range: 1..3 [ CodecPlus Room70/Room55D ]

AssignedSerialNumber: String (0, 20)
The camera's serial number.
Default value: ""
xConfiguration Cameras Camera [n] Backlight DefaultMode

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

Requires user role: ADMIN, INTEGRATOR

This configuration turns backlight compensation on or off. Backlight compensation is useful when there is much light behind the persons in the room. Without compensation the persons will easily appear very dark to the far end.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

USAGE:

```plaintext
xConfiguration Cameras Camera [n] Backlight DefaultMode: DefaultMode
```

where:

- **n**: Unique ID that identifies the camera.
  - Range: 1..7 [ SX80 MX700/MX800/MX800D CodecPro Room70G2 ]
  - Range: 1..1 [ DX70/DX80 SX10 SX20 MX200G2/MX300G2 ]
  - Range: 1..3 [ CodecPlus Room70/Room55D ]

**DefaultMode**:

- **Off/On**: Turn off/on the camera backlight compensation.
- **On**: Turn on the camera backlight compensation.

Default value: Off

xConfiguration Cameras Camera [n] Brightness Mode

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

Requires user role: ADMIN, INTEGRATOR

Define the camera brightness mode.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

USAGE:

```plaintext
xConfiguration Cameras Camera [n] Brightness Mode: Mode
```

where:

- **n**: Unique ID that identifies the camera.
  - Range: 1..7 [ SX80 MX700/MX800/MX800D CodecPro Room70G2 ]
  - Range: 1..1 [ SX10 SX20 MX200G2/MX300G2 ]
  - Range: 1..3 [ CodecPlus Room70/Room55D ]

**Mode**:

- **Auto/Manual**: 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

Requires user role: ADMIN, INTEGRATOR

Define the brightness level. Requires the Cameras Camera [n] Brightness Mode to be set to Manual.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

USAGE:
```
xConfiguration Cameras Camera [n] Brightness DefaultLevel: DefaultLevel
```
where
- **n**: Unique ID that identifies the camera.
  
  - Range: 1..7 for SX80, MX700/MX800/MX800D, CodecPro, Room70G2
  - Range: 1..3 for CodecPlus, Room70/Room55D
  - Range: 1..1 for MX700/MX800/MX800D
  - Range: 1..3 for SX10, SX20

- **DefaultLevel**: Integer (1..31)
  
  The brightness level.

  Default value: 20

xConfiguration Cameras Camera [n] Flip

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

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: Flip
```
where
- **Flip**: Unique ID that identifies the camera.
  
  - Range: 1..7 for SX80, CodecPro, Room70G2
  - Range: 1..3 for CodecPlus, Room70/Room55D
  - Range: 2..7 for single camera devices; 3..7 for dual camera devices for MX700/MX800/MX800D
  - Range: 1..1 for SX10, SX20

- **Flip**: Auto/Off/On
  
  **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

**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.
- `Mode`: 
  - **Auto/AutoLimited/Manual**: (SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus)
  - **Auto**: The auto focus works differently for different products. For Room 55 Dual, Room 70, Room 70 G2, and when using the Cisco Quad Camera with a codec (SX80 or Codec Plus), the camera will do single shot auto focusing once a call is connected, and when the view has changed. For SX10, SX20, MX200 G2, MX300 G2 and SX80 with a Cisco TelePresence Precision 40 or Cisco TelePresence Precision HD 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:** SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2

**Requires user role:** ADMIN, INTEGRATOR

This setting enables gamma corrections. Gamma describes the nonlinear relationship between image pixels and monitor brightness.

Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

**USAGE:**

```
xConfiguration Cameras Camera [n] Gamma Mode: Mode
```

where

- `n`: Unique ID that identifies the camera.
- `Mode`: 
  - **Auto/AutoLimited/Manual**: (SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D CodecPlus)
    - **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.
  - **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

 Requires user role: ADMIN, INTEGRATOR

 By setting the Gamma Level you can select which gamma correction table to use. This setting may be useful in difficult lighting conditions, where changes to the brightness setting does not provide satisfactory results. Requires the Cameras Camera [n] Gamma Mode to be set to Manual.

 Not applicable for the Cisco Quad Camera and the integrated camera of Room 55 Dual, Room 70, and Room 70 G2. These cameras automatically adjust themselves based on the room lighting conditions.

 USAGE:

 xConfiguration Cameras Camera [n] Gamma Level: Level

 where

 n: Unique ID that identifies the camera.
 Range: 1..7 [ SX80, MX700/MX800/MX800D, CodecPro, Room70G2 ]
 Range: 1..1 [ SX20, MX200G2/MX300G2 ]
 Range: 1..3 [ CodecPlus, Room70/Room55D ]

 Level:
 Integer (0..7)
 Define the gamma level.

 Default value:
 0

---

xConfiguration Cameras Camera [n] Mirror

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

 Requires user role: ADMIN, INTEGRATOR

 With Mirror mode (horizontal flip) you can mirror the image on screen. Mirroring applies both to the self-view and the video that is transmitted to the far end. Mirroring is automatically disabled when speaker tracking is on.

 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: Mirror

 where

 n: Unique ID that identifies the camera.

 Mirror:
 Auto/Off/On

 Off/On:
 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, MX200G2/MX300G2, 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:**

```configuration
xConfiguration Cameras Camera [n] Whitebalance Mode: Mode
```

where

- **n**: Unique ID that identifies the camera.
  - Range: 1..7  [ SX80 MX700/MX800/MX800D CodecPro Room70G2 ]
  - Range: 1..1  [ SX10 SX20 MX200G2/MX300G2 ]
  - Range: 1..3  [ CodecPlus Room70/Room55D ]

**Mode:**

- **Auto/Manual**
- **Auto**: The camera will continuously adjust the white balance depending on the camera view.

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:**

```configuration
xConfiguration Cameras Camera [n] Whitebalance Level: 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:**

```plaintext
xConfiguration Cameras Camera Framerate: Framerate
```

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:**

```plaintext
xConfiguration Cameras Preset TriggerAutofocus: TriggerAutofocus
```

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 DeskPro 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

Mode:

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

Closeup:

Auto/Off/On

Auto: The behavior 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 CodecPlus 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. This setting applies only to MX700/MX800 with dual camera (speaker tracking), and to codecs with a Cisco TelePresence SpeakerTrack 60 camera. Also, the Cameras SpeakerTrack Mode must be set to Auto.

**Usage:**
xConfiguration Cameras SpeakerTrack TrackingMode: TrackingMode
 where
TrackerMode: 
  Auto/Conservative
    Auto: This is the normal tracking mode.
    Conservative: The camera view will change to a new speaker later than in normal tracking mode.
Default value: Auto

xConfiguration Cameras SpeakerTrack ConnectorDetection Mode

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

This setting applies only when a Cisco TelePresence SpeakerTrack 60 camera is connected to the video conferencing device. 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.

**Usage:**
xConfiguration Cameras SpeakerTrack ConnectorDetection Mode: Mode
 where
Mode: 
  Auto/Manual (SX80 CodecPlus 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 CodecPlus CodecPro)
xConfiguration Cameras SpeakerTrack ConnectorDetection CameraLeft

**Applies to:** SX80, MX700/MX800/MX800D, CodecPlus, CodecPro

**Requires user role:** ADMIN, INTEGRATOR

Define the number of the video input that SpeakerTrack 60's left camera is connected to. 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: CameraLeft
```

where

```
CameraLeft:
  Integer (1..5) { SX80 CodecPro }
  Integer (1..3) { CodecPlus }

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 CodecPlus CodecPro }
```

---

xConfiguration Cameras SpeakerTrack ConnectorDetection CameraRight

**Applies to:** SX80, MX700/MX800/MX800D, CodecPlus, CodecPro

**Requires user role:** ADMIN, INTEGRATOR

Define the number of the video input that SpeakerTrack 60's right camera is connected to. 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: CameraRight
```

where

```
CameraRight:
  Integer (1..5) { SX80 CodecPro }
  Integer (1..3) { CodecPlus }

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 CodecPlus 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: Mode
```

**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**

**Mode:**

- 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: **Mute**

where

Mute:

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: **Delay**

where

Delay:

Integer (0..50)

The auto answer delay (seconds).

Default value:

0

xConfiguration Conference DefaultCall Protocol

Applies to: All products
Requires user role: ADMIN

Define the Default Call Protocol to be used when placing calls from the device.

**USAGE:**

xConfiguration Conference DefaultCall Protocol: **Protocol**

where

Protocol:

Auto/H320/H323/Sip/Spark

Auto: Enables auto-selection of the call protocol based on which protocols are available. If multiple protocols are available, the order of priority is: 1) SIP; 2) H323; 3) H320. If the device cannot register, the auto-selection chooses H323.

H320: All calls are set up as H.320 calls (only applicable if used with Cisco TelePresence ISDN Link).

H323: All calls are set up as H.323 calls.

Sip: All calls are set up as SIP calls.

Spark: Reserved for Webex registered 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: Rate
where
Rate:
  Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro ]
  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 DeskPro ]
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: DefaultTimeout
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

Mode:
- 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: Mode

where

Mode:
- 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: 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: Mode
where
  Mode:
    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: MaxReceiveCallRate
where
  MaxReceiveCallRate:
    Integer (64..6000)  [ SX20 SX80 MX200G2/MX300G2 MX700/MX800D MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro ]
    Integer (64..10000)  [ Boards ]
    Integer (64..3072)  [ DX70/DX80 SX10 ]

The maximum receive call rate (kbps).
Default value:
  6000  [ SX20 SX80 MX200G2/MX300G2 MX700/MX800D MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro ]
  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: MaxTransmitCallRate
```

where

```
MaxTransmitCallRate:
```

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

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 DeskPro ]
- **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 DeskPro ]
- **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: MaxTotalTransmitCallRate
```

where
```
MaxTotalTransmitCallRate:

Integer (64..6000) [ SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D Boards ]
Integer (64..15000) [ CodecPro Room70G2 DeskPro ]
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 DeskPro ]
```
```
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: Mode
```

where
```
Mode:

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

**Mode:**

- **Auto/CUCMMediaResourceGroupList/MultiSite/Off**
  - (SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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: **Mode**

where

**Mode:**

- **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:  
where

n: 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: "Name"
where

n: Unique ID that identifies the service.
  Range: 1..5
Name:
  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:**

```plaintext
xConfiguration FacilityService Service [n] Number: "Number"
```

where

- **n**: Unique ID that identifies the service.
  - Range: 1..5
- **Number**: 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:**

```plaintext
xConfiguration FacilityService Service [n] CallType: CallType
```

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

n: GPIO pin number.
   Range: 1..4

Mode:

- InputAcceptAllCalls/InputDisconnectAllCalls/InputMuteMicrophones/InputNoAction/
  OutputAllCallsEncrypted/OutputInCall/OutputManualState/OutputMicrophonesMuted/
  OutputPresentationOn/OutputStandbyActive

- InputAcceptAllCalls: When the pin is activated, the xCommand Call Accept command, which accepts all incoming calls, will be issued.
- InputDisconnectAllCalls: When the pin is activated, the xCommand Call Disconnect command, which disconnects all calls, will be issued.
- InputMuteMicrophones: When the pin is activated, the microphones will be muted. When deactivated, the microphones will be unmuted.
- InputNoAction: The pin state can be set, but no operation is performed.
- OutputAllCallsEncrypted: The pin is activated when all calls are encrypted, and deactivated when one or more calls are not encrypted.
- OutputInCall: The pin is activated when in call, and deactivated when not in call.
- OutputManualState: The pin state can be set by xCommand GPIO ManualState Set PinX: High/Low. It is set to +12 V or 0 V, respectively.
- OutputMicrophonesMuted: The pin is activated when microphones are muted, and deactivated when not muted.
- OutputPresentationOn: The pin is activated when presentation is active, and deactivated when presentation is not active.
- OutputStandbyActive: The pin is activated when the device is in standby mode, and deactivated when no longer in standby.
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 DeskPro Boards

Requires user role: ADMIN

Define the authentication mode for the H.323 profile.

USAGE:

xConfiguration H323 Authentication Mode: Mode

where

 Mode:

 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 DeskPro 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: LoginName

where

 LoginName:

 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 DeskPro 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: "Password"

 where

 Password: 

 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 DeskPro 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: Mode

 where

 Mode: 

 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 H.323 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 DeskPro 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: KeySize
where

KeySize:

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 DeskPro 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 DeskPro 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

E164:

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

Default value:

""

xConfiguration H323 H323Alias ID

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

ID:

String (0, 49)
The H.323 Alias ID. Example: "firstname.lastname@company.com", "My H.323 Alias ID"

Default value:

""
xConfiguration H323 NAT Mode

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

*Mode*:

- 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 DeskPro 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: "Address"

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: Mode
where
Mode:
  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: AllowHTTP
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:**

```plaintext
xConfiguration HttpClient AllowInsecureHTTPS: AllowInsecureHTTPS
```

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

xConfiguration HttpClient UseHttpProxy

Applies to: All products
Requires user role: ADMIN

There are several UseHttpProxy settings that specify if a service shall communicate via an HTTP proxy or not. The HttpClient UseHttpProxy setting applies to macros and arbitrary HTTP(S) requests using the HttpClient commands.

For this setting to have any effect, a proxy server for HTTP, HTTPS, and WebSocket traffic must be set up using the NetworkServices HTTP Proxy settings.

**USAGE:**

```plaintext
xConfiguration HttpClient UseHttpProxy: UseHttpProxy
```

where

- **UseHttpProxy:**
  - Off/On
  - **Off:** Set up communication directly with the server (not using a proxy).
  - **On:** Set up communication via proxy.
  - Default value: On
HttpFeedback configuration

xConfiguration HttpFeedback TlsVerify

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 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: TlsVerify

where

TlsVerify:

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 HttpFeedback UseHttpProxy

Applies to: All products
Requires user role: ADMIN

There are several UseHttpProxy settings that specify if a service shall communicate via an HTTP proxy or not. The HttpFeedback UseHttpProxy setting applies to feedback sent from the video device.

For this setting to have any effect, a proxy server for HTTP, HTTPS, and WebSocket traffic must be set up using the NetworkServices HTTP Proxy settings.

USAGE:

xConfiguration HttpFeedback UseHttpProxy: UseHttpProxy

where

UseHttpProxy:

Off/On

Off: Set up communication directly with the server (not using a proxy).

On: Set up communication via proxy.

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.

Usage:
```
xConfiguration Logging External Mode: Mode
```

where
```
Mode:
   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: Protocol
```

where
```
Protocol:
   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: "Address"
```

where
```
Address:
   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

**Port**: 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 TlsVerify

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: **TlsVerify**

where

**TlsVerify**: 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: *Mode*

where

**Mode:**
- 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 DeskPro 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 DeskPro 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: AutoStart

 where

 AutoStart:

 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 DeskPro 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: 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 DeskPro 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: Mode
where
- n: Index that identifies the network.
  Range: 1..1
- Mode: String (0, 64)
  Off/On
  Off: Disable Domain Name System Security Extensions.
  On: Enable Domain Name System Security Extensions.
  Default value:
  Off

xConfiguration Network [n] DNS Domain Name

Applies to: All products
Requires user role: ADMIN, USER

The DNS Domain Name is the default domain name suffix which is added to unqualified names. Example: If the DNS Domain Name is "company.com" and the name to lookup is "MyVideoSystem", this will result in the DNS lookup "MyVideoSystem.company.com".

USAGE:
xConfiguration Network [n] DNS Domain Name: "Name"
where
- n: Index that identifies the network.
  Range: 1..1
- Name: String (0, 64)
  The DNS domain name.
  Default value:
  **
xConfiguration Network [n] DNS Server [m] Address

Applies to: All products
Requires user role: ADMIN, USER

Define the network addresses for DNS servers. Up to three addresses may be specified. If the network addresses are unknown, contact your administrator or Internet Service Provider.

USAGE:
```
xConfiguration Network [n] DNS Server [m] Address: "Address"
```
where
- n: Index that identifies the network.
  Range: 1..1
- m: Index that identifies the DNS server. Maximum three DNS servers are allowed.
  Range: 1..3
- Address:
  String (0, 64)
  A valid IPv4 address or IPv6 address.
  Default value: ""

xConfiguration Network [n] IEEE8021X Mode

Applies to: All products
Requires user role: ADMIN, USER

The 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: Mode
```
where
- n: Index that identifies the network.
  Range: 1..1
- Mode:
  Off/On
  Off: The 802.1X authentication is disabled.
  On: The 802.1X authentication is enabled.
  Default value: Off
xConfiguration Network [n] IEEE8021X TlsVerify

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 Tls is enabled (On).

**USAGE:**

xConfiguration Network [n] IEEE8021X TlsVerify: `TlsVerify`

where

\[ n \] Index that identifies the network.

Range: 1..1

`TlsVerify`:

- **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:**


where

\[ n \] Index that identifies the network.

Range: 1..1

`UseClientCertificate`:

- **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: "Identity"
where
  n: Index that identifies the network.
  Range: 1..1
  Identity:
      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: "Password"
where
  n: Index that identifies the network.
  Range: 1..1
  Password:
      String (0, 50)
      The password for 802.1X authentication.
  Default value:
      ""

xConfiguration Network [n] IEEE8021X AnonymousIdentity
Applies to: All products
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:**
where
  n: Index that identifies the network.
  Range: 1..1
  AnonymousIdentity:
      String (0, 64)
      The 802.1X Anonymous ID string.
  Default value:
      ""
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: Md5

where

n: Index that identifies the network.
Range: 1..1

Md5:
Off/On

Off: The EAP-MD5 protocol is disabled.
On: The EAP-MD5 protocol is enabled.

Default value:
On

xConfiguration Network [n] IEEE8021X Eap Ttls

Applies to: All products
Requires user role: ADMIN, USER

Define the TTLS (Tunneled Transport Layer Security) mode. Authenticates LAN clients without the need for client certificates. Developed by Funk Software and Certicom. Usually supported by Agere Systems, Proxim and Avaya.

USAGE:

xConfiguration Network [n] IEEE8021X Eap Ttls: Ttls

where

n: Index that identifies the network.
Range: 1..1

Ttls:
Off/On

Off: The EAP-TTLS protocol is disabled.
On: The EAP-TTLS protocol is enabled.

Default value:
On
xConfiguration Network [n] IEEE8021X Eap Tls
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 Tls: Tls
where
  n: Index that identifies the network.
    Range: 1..1
  Tls: Off/On
    Off: The EAP-TLS protocol is disabled.
    On: The EAP-TLS protocol is enabled.
Default value: On
```

xConfiguration Network [n] IEEE8021X Eap Peap
Applies to: All products
Requires user role: ADMIN, USER
Define the Peap (Protected Extensible Authentication Protocol) mode. Authenticates LAN clients without the need for client certificates. Developed by Microsoft, Cisco and RSA Security.

USAGE:
```
xConfiguration Network [n] IEEE8021X Eap Peap: Peap
where
  n: Index that identifies the network.
    Range: 1..1
  Peap: Off/On
    Off: The EAP-PEAP protocol is disabled.
    On: The EAP-PEAP protocol is enabled.
Default value: On
```
xConfiguration Network [n] IPStack

Applies to: All products
Requires user role: ADMIN, USER

Select if the 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:

```
Command: xConfiguration Network [n] IPStack
```

where

- `n`: Index that identifies the network.
  - Range: 1..1
- `IPStack`
  - `Dual/IPv4/IPv6`
    - `Dual` When set to Dual, the network interface can operate on both IP versions at the same time, and can have both an IPv4 and an IPv6 address at the same time.
    - `IPv4` When set to IPv4, the 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:

```
Command: xConfiguration Network [n] IPv4 Assignment
```

where

- `n`: 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: "Address"
```

where

n: Index that identifies the network.
  Range: 1..1

Address:
```
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: "Gateway"
```

where

n: Index that identifies the network.
  Range: 1..1

Gateway:
```
String (0, 64)
A valid IPv4 address.
Default value: ""
```

---

xConfiguration Network [n] IPv4 SubnetMask

Applies to: All products
Requires user role: ADMIN, USER

Define the IPv4 network subnet mask. Applicable only when the Network IPv4 Assignment is set to Static.

USAGE:
```
xConfiguration Network [n] IPv4 SubnetMask: "SubnetMask"
```

where

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 identi-
fer 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
Assignment:
  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: "Address"
where
n: 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: "Gateway"
where
n: Index that identifies the network.
  Range: 1..1
Gateway:
    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: DHCPOptions
where
- **n**: Index that identifies the network.
  - Range: 1..1
- **DHCPOptions**: [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: MTU
where
- **n**: Index that identifies the network.
  - Range: 1..1
- **MTU**: 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
- **n**: Index that identifies the network.
  - Range: 1..1
- **Mode**: [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
- `Audio`
  - Integer (0..63)
    Set the priority of the audio packets in the IP network. 0 means "best-effort".
Default value:
- 46

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: Video
```
where
- \( n \): Index that identifies the network.
  - Range: 1..1
- `Video`
  - Integer (0..63)
    Set the priority of the video packets in the IP network. 0 means "best-effort".
Default value:
- 34
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

Data:

Integer (0..63)
Set the priority of the data packets in the IP network. 0 means "best-effort".
Default value:

34

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 real-time 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: Signalling

where

n: Index that identifies the network.
Range: 1..1

Signalling:

Integer (0..63)
Set the priority of the signalling packets in the IP network. 0 means "best-effort".
Default value:

24
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

- \( n \): Index that identifies the network.
  - Range: 1..1
- ICMPv6:
  - \( \text{Integer} \ (0..63) \)
  - Set the priority of the ICMPv6 packets in the IP network. 0 means "best effort".
  - Default value: 0

---

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
- NTP:
  - \( \text{Integer} \ (0..63) \)
  - 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: "Allow"
where
n: Index that identifies the network.
Range: 1..1
Allow:
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: Speed
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 SX90 MX200G2/MX300G2 MX700/ MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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
Mode:
Auto/Manual/Off
Auto: The Cisco Discovery Protocol (CDP), if available, assigns an id to the voice VLAN. If CDP is not available, VLAN is not enabled.
Manual: The VLAN ID is set manually using the Network VLAN Voice VlanId setting. If CDP is available, the manually set value will be overruled by the value assigned by CDP.
Off: VLAN is not enabled.
Default value:
Auto

xConfiguration Network [n] VLAN Voice VlanId

Applies to: All products
Requires user role: ADMIN, USER

Define the VLAN voice ID. This setting will only take effect if Network VLAN Voice Mode is set to Manual.

USAGE:
xConfiguration Network [n] VLAN Voice VlanId: VlanId

where
n: Index that identifies the network.
Range: 1..1
VlanId:
Integer (1..4094)
Set the VLAN voice ID.
Default value:
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: Mode

where

n: Unique ID that identifies the network port.
  Range: 2..2

Mode:
  Off/On
  Off: The computer network port is disabled.
  On: The computer network port is available for use.
  Default value:
  On

NetworkServices configuration

xConfiguration NetworkServices CDP Mode

Applies to: All products
Requires user role: ADMIN

Enable or disable the CDP (Cisco Discovery Protocol) daemon. Enabling CDP will make the 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: Mode

where

Mode:
  Off/On
  Off: The CDP daemon is disabled.
  On: The CDP daemon is enabled.
  Default value:
  On

xConfiguration NetworkServices H323 Mode

Applies to: All products
Requires user role: ADMIN

Define whether the device should be able to place and receive H.323 calls or not.

USAGE:

xConfiguration NetworkServices H323 Mode: Mode

where

Mode:
  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 Network Services 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 Network Services HTTP Mode: Mode

where

Mode:

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 Network Services HTTP Proxy Login Name

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 Network Services HTTP Proxy Mode is set to Manual.

USAGE:

xConfiguration Network Services HTTP Proxy Login Name: "LoginName"

where

LoginName:

String (0, 80)
The authentication login name.

Default value:

**

xConfiguration Network Services 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 Network Services HTTP Proxy Mode is set to Manual.

USAGE:

xConfiguration Network Services HTTP Proxy Password: "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 to use a proxy server for HTTP, HTTPS, and WebSocket traffic. The HTTP proxy can be set up manually, it can be auto-configured (PACUrl), fully automated (WPAD), or it can be turned off.

If NetworkServices HTTP Proxy Mode is not turned Off, you can further specify which services shall use the proxy in the HttpClient UseHttpProxy, HttpFeedback UseHttpProxy, and WebEngine UseHttpProxy settings.

Communication with the Cisco Webex cloud will always go via the proxy if NetworkServices HTTP Proxy Mode is not turned Off.

Regardless of the Proxy Mode, the device will never communicate with CUCM, MRA (CUCM via Expressway), or TMS via proxy.

USAGE:
xConfiguration NetworkServices HTTP Proxy Mode: *Mode*

where

Mode:

- **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: *"Url"*

where

- **Url**: String (0..255)
The URL of the HTTP proxy server.

Default value:

- **""**

xConfiguration NetworkServices HTTP Proxy PACUrl

Applies to: All products
Requires user role: ADMIN, USER

Set the URL of the PAC (Proxy Auto Configuration) script. Requires that the NetworkServices HTTP Proxy Mode is set to PACUrl.

USAGE:

xConfiguration NetworkServices HTTP Proxy PACUrl: *"PACUrl"*

where

- **PACUrl**: String (0..255)
The URL of the PAC (Proxy Auto Configuration) script.

Default value:

- **""**
xConfiguration NetworkServices HTTPS Server MinimumTLSVersion

Applies to: All products
Requires user role: ADMIN

Set the lowest version of the TLS (Transport Layer Security) protocol that is allowed.

**USAGE:**
xConfiguration NetworkServices HTTPS Server MinimumTLSVersion: \(\text{MinimumTLSVersion}\)

where

\(\text{MinimumTLSVersion}:\)

- 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: \(\text{StrictTransportSecurity}\)

where

\(\text{StrictTransportSecurity}:\)

- 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: \(\text{VerifyClientCertificate}\)

where

\(\text{VerifyClientCertificate}:\)

- 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

- **Mode:** 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: "Address"
```

where

- **n:** Unique ID for the NTP server.  
  - Range: 1..3  
- **Address:** String (0, 255)  
  - A valid IPv4 address, IPv6 address or DNS name.  
  - Default value:  
    
    "0.tandberg.pool.ntp.org"
xConfiguration NetworkServices 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] KeyId settings for the key and ID respectively.

**USAGE:**

```bash
xConfiguration NetworkServices NTP Server [n] Key: "Key"
```

where

- `n`: Unique ID for the NTP server.
  - Range: 1..3
- `Key`: 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] KeyId

**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] KeyId settings for the key and ID respectively.

**USAGE:**

```bash
xConfiguration NetworkServices NTP Server [n] KeyId: "KeyId"
```

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] KeyAlgorithm

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] KeyAlgorithm: KeyAlgorithm
```

Where

- `n`: Unique ID for the NTP server.
  - Range: 1..3
- `KeyAlgorithm`:
  - `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: Mode
```

Where

- `Mode`:
  - `Off/On`
    - `Off`: Disable the possibility to place and receive SIP calls.
    - `On`: Enable the possibility to place and receive SIP calls.
  - Default value: `On`

xConfiguration NetworkServices SMTP Mode

Applies to: DX70/DX80 RoomKitMini DeskPro 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.

This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

**USAGE:**

```
xConfiguration NetworkServices SMTP Mode: Mode
```

Where

- `Mode`:
  - `Off/On`
    - `Off`: Disable SMTP (and email) support.
    - `On`: Enable SMTP support for sending email.
  - Default value: `Off`
xConfiguration NetworkServices SMTP Server

Applies to: DX70/DX80 RoomKitMini DeskPro Boards
Requires user role: ADMIN

This is the address of the SMTP server.
This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

USAGE:
```
xConfiguration NetworkServices SMTP Server: "Server"
```
where
```
Server:
  String (0, 255)
  A valid IPv4 address, IPv6 address or DNS name.
  Default value:"
```

xConfiguration NetworkServices SMTP Port

Applies to: DX70/DX80 RoomKitMini DeskPro 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.
This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

USAGE:
```
xConfiguration NetworkServices SMTP Port: Port
```
where
```
Port:
  Integer (0..65535)
  The port used for outgoing emails from the device.
  Default value: 0
```

xConfiguration NetworkServices SMTP Username

Applies to: DX70/DX80 RoomKitMini DeskPro 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.
This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

USAGE:
```
xConfiguration NetworkServices SMTP Username: "Username"
```
where
```
Username:
  String (0, 80)
  A valid username.
  Default value:"
```

xConfiguration NetworkServices SMTP Password

Applies to: DX70/DX80 RoomKitMini DeskPro 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.
This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

USAGE:
```
xConfiguration NetworkServices SMTP Password: "Password"
```
where
```
Password:
  String (0, 64)
  A valid password.
  Default value:"
```
**xConfiguration NetworkServices SMTP From**

**Applies to:** DX70/DX80 RoomKitMini DeskPro 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.

This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

**USAGE:**

```
xConfiguration NetworkServices SMTP From: "From"
```

where

```
From: String (0, 255)
An email address that meets the requirements of the SMTP server.
```

Default value:

```
"
```

---

**xConfiguration NetworkServices SMTP Security**

**Applies to:** DX70/DX80 RoomKitMini DeskPro Boards

Requires user role: ADMIN

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

This setting is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

**USAGE:**

```
xConfiguration NetworkServices SMTP Security: Security
```

where

```
Security: 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).
- **Tls:** 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: **Mode**  

where  
**Mode:**  
    - Off/ReadOnly/ReadWrite  
      - Off: Disable the SNMP network service.  
      - ReadOnly: Enable the SNMP network service for queries only.  
      - ReadWrite: Enable the SNMP network service for both queries and commands.  

Default value:  
- Off

**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: "**CommunityName**"  

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: "**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: "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: Mode
 where
   Mode:
     Off/On
     Off: The SSH protocol is disabled. This is the factory setting.
     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: 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: Mode
 where
   Mode:
     Off/On
     Off: The Telnet protocol is disabled. This is the factory setting.
     On: The Telnet protocol is enabled.
     Default value:
       Off
xConfiguration NetworkServices UPnP Mode

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

Mode:

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: Websocket

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:**

```plaintext
xConfiguration NetworkServices WelcomeText: WelcomeText
```

where

- **WelcomeText:**
  - **Off/On**
  - **Off:** The welcome text is: Login successful
  - **On:** The welcome text is: Welcome to <system name>; Software version; Software release date; Login successful.

Default value:

- **On**

xConfiguration NetworkServices Wifi Allowed

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

```plaintext
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 DeskPro

*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

**Mode:**

*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 DeskPro 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: **RemotePairing**

where

**RemotePairing:**

*Off/On*

*Off:* Remote pairing of Touch 10 is not allowed.

*On:* Remote pairing of Touch 10 is allowed.

**Default value:**

*Off*
xConfiguration Peripherals Profile Cameras

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

**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: 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 [SX10, SX20, SX80, MX200G2/MX300G2, MX700/MX800/MX800D, RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2]

0 [DeskPro]

---

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 heartbeats to the video conferencing device using xCommand Peripherals Pair and HeartBeat commands. Failing to do so will cause the video conferencing device to show a warning that it has lost connectivity to the control system.

**USAGE:**

```
xConfiguration Peripherals Profile ControlSystems: ControlSystems
```

where

```
ControlSystems:
1/NotSet
```

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, DeskPro

**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:**

```plaintext
xConfiguration Peripherals Profile TouchPanels: TouchPanels

where

TouchPanels:

- NotSet/Minimum1/0/1/2/3/4/5
- 0 [ DeskPro ]

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 ]
- 0  [ DeskPro ]
```

Phonebook configuration

xConfiguration Phonebook Server [n] ID

**Applies to:** All products

**Requires user role:** ADMIN

Define a name for the external phone book.

**USAGE:**

```plaintext
xConfiguration Phonebook Server [n] ID: "ID"

where

- n: Unique ID that identifies the phonebook server.
  Range: 1..1
- ID: String (0, 64)
  The name for the external phone book.
  Default value:
  ""
```
xConfiguration Phonebook Server [n] Pagination

Applies to: All products
Requirements: 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: **Pagination**
where

- **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] TlsVerify

Applies to: All products
Requirements: 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: **TlsVerify**
where

- **TlsVerify**: 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: \texttt{Type}

\texttt{Type}:

- \texttt{CUCM}: The phonebook is located on the Cisco Unified Communications Manager.
- \texttt{Spark}: The phonebook is located in the Cisco Webex cloud service.
- \texttt{TMS}: The phonebook is located on the Cisco TelePresence Management Suite server.
- \texttt{VCS}: The phonebook is located on the Cisco TelePresence Video Communication Server.

Default value: \texttt{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: \texttt{URL}

\texttt{URL}:

- A valid address (URL) to the phone book server.

Default value: **
Provisioning configuration

xConfiguration Provisioning Connectivity

Appplies 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: 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

Appplies 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: "Address"

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: "AlternateAddress"
where

AlternateAddress:
String (0, 64)
A valid IPv4 address, IPv6 address or DNS name.
Default value:"

xConfiguration Provisioning ExternalManager Protocol

Applies to: All products
Requires user role: ADMIN, USER

Define whether to use the HTTP (unsecure communication) or HTTPS (secure communication) protocol when sending requests to the external manager / provisioning system. The selected protocol must be enabled in the NetworkServices HTTP Mode setting.

**USAGE:**

xConfiguration Provisioning ExternalManager Protocol: Protocol
where

Protocol:
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: "Path"
where

Path:
String (0..255)
A valid path to the external manager or provisioning system.
Default value:
"

xConfiguration Provisioning ExternalManager Domain

Applies to: All products
Requires user role: ADMIN, USER

Define the SIP domain for the VCS provisioning server.

**USAGE:**

xConfiguration Provisioning ExternalManager Domain: "Domain"
where

Domain:
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:**

```plaintext
xConfiguration Provisioning Mode: Mode
where
  Mode:
    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. In order to register to the Webex cloud service, the encryption option key must be installed on the device.
    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:**

```plaintext
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:**

```plaintext
xConfiguration Provisioning Password: "Password"
where
  Password:
    String (0, 64)
    A valid password.
    Default value: ""
```
xConfiguration Provisioning TlsVerify

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: TlsVerify
where
   TlsVerify:
       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
```
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

Mode:

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:

Off [ MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini Room55 Room70/Room55D Room70G2 Boards ]

On [ D70/DX80 SX10 SX20 SX80 CodecPlus CodecPro DeskPro ]

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: CallControl

where

CallControl:

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: FromClients

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: 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, DeskPro 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: 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 DeskPro 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: PeopleCountOutOfCall

where

PeopleCountOutOfCall:

Off/On [ SX80 RoomKit RoomKitMini CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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 CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards ]


xConfiguration RoomAnalytics PeoplePresenceDetector

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

where
Mode:
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
Action:
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: "Address"

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

Port:

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: PortAssignment

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

```
Mode:
- 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: FailedLoginsLockoutTime
```

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: 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:**

\[xConfiguration Security Session MaxFailedLogins: \text{MaxFailedLogins}\]

where

\[\text{MaxFailedLogins}:\]

- Integer (0..10)
  - Set the maximum number of failed login attempts per user.
  - Default value: 0

xConfiguration Security Session MaxSessionsPerUser

Applies to: All products
Requires user role: ADMIN

The maximum number of simultaneous sessions per user is 20 sessions.

**USAGE:**

\[xConfiguration Security Session MaxSessionsPerUser: \text{MaxSessionsPerUser}\]

where

\[\text{MaxSessionsPerUser}:\]

- 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:**

\[\text{xConfiguration Security Session MaxTotalSessions: \text{MaxTotalSessions}}\]

where

\[\text{MaxTotalSessions}:\]

- 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:**

\[\text{xConfiguration Security Session ShowLastLogon: \text{ShowLastLogon}}\]

where

\[\text{ShowLastLogon}:\]

- 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. If the device has more than one serial port, this setting applies to all of them.
This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

**USAGE:**

```
xConfiguration SerialPort Mode: Mode
where
    Mode:
        Off/On
        Off: Serial communication is disabled.
        On: Serial communication is enabled.
    Default value: On
```

xConfiguration SerialPort BaudRate

Applies to: SX20 SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, INTEGRATOR

Set the baud rate (data transmission rate) for the serial port. A new baud rate takes effect after a device reboot.
Other connection parameters for the serial port are: Data bits: 8; Parity: None; Stop bits: 1; Flow control: None.
This setting does not have any effect on a dedicated maintenance port (micro USB). The maintenance port always uses the default baud rate.
This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

**USAGE:**

```
xConfiguration SerialPort BaudRate: BaudRate
where
    BaudRate:
        115200 [ RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D DeskPro Boards ]
        9600/19200/38400/57600/115200 [ SX20 SX80 MX700/MX800/MX800D CodecPro Room70G2 ]
    Choose a baud rate from the list (bits per second).
    Default value: 115200 [ SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/ Room55D Room70G2 DeskPro Boards ]
        38400 [ SX20 ]
```
xConfiguration SerialPort LoginRequired
Applies to: All products
Requires user role: ADMIN
Define if login shall be required when connecting to a serial port. If the device has more than one serial port, this setting applies to all of them.
This setting is not available for the first generation of boards (Webex Board 55 and Webex Board 70).

USAGE:
xConfiguration SerialPort LoginRequired: LoginRequired
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: ANAT
where
ANAT:
  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: "UserName"
where
UserName:
  String (0, 128)
  A valid username.
Default value:
  *
xConfiguration SIP Authentication Password

Applies to: All products
Requires user role: ADMIN

This is the password part of the credentials used to authenticate towards the SIP proxy.

**USAGE:**

```text
xConfiguration SIP Authentication Password: "Password"
```

where

- **Password:**
  - String (0, 128)
  - A valid password.
  - Default value: ""

xConfiguration SIP DefaultTransport

Applies to: All products
Requires user role: ADMIN

Select the transport protocol to be used over the LAN.

**USAGE:**

```text
xConfiguration SIP DefaultTransport: DefaultTransport
```

where

- **DefaultTransport:**
  - 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:**

```text
xConfiguration SIP DisplayName: "DisplayName"
```

where

- **DisplayName:**
  - 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:**

```text
xConfiguration SIP Ice DefaultCandidate: DefaultCandidate
```

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

```
Mode:
  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

```
ListenPort:
  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
```

```
Auto
```

Auto
```
```
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: 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: "Address"
```
where
```
  n: Index that identifies the proxy (maximum 4 proxys can be defined).
  Range: 1..4
  Address:
    String (0..255)
    A valid IPv4 address, IPv6 address or DNS name.
Default value:
  ""
```

xConfiguration SIP TlsVerify

Applies to: All products
Requires user role: ADMIN

Before establishing a connection over SIP TLS, the device checks if the certificate of the peer is signed by a trusted Certificate Authority (CA). The CA must be included in the CA list that is manually uploaded to the device using the web interface or API. The list of pre-installed certificates is not used to validate certificates for SIP TLS connections.

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 setting was not explicitly set to On.

Use the SIP MinimumTLSVersion setting to specify which TLS versions are allowed.

USAGE:
```
xConfiguration SIP TlsVerify: TlsVerify
```
where
```
TlsVerify:
  Off/On
  Off: The device doesn't check the certificate of the peer. The SIP TLS connection is established anyway.
  On: The device checks if the certificate of the peer can be trusted. If not, the SIP TLS connection is not established.
Default value:
  On
```
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**:
  - String (0..255)
  - The preferred format is DNS SRV record (e.g. _turn._udp.<domain>), or it can be a valid IPv4 or IPv6 address.
  - 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: "UserName"

where

- **UserName**:
  - 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: "Password"

where

- **Password**:
  - String (0..128)
  - A valid password.
  - Default value:"

xConfiguration SIP URI

Applies to: All products
Requires user role: ADMIN

The SIP URI (Uniform Resource Identifier) is the address that is used to identify the 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: "URI"

where

- **URI**:
  - String (0..255)
  - An address (URI) that is compliant with the SIP URI syntax.
  - Default value:"
Standby configuration

xConfiguration Standby BootAction

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

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position after a restart of the video conferencing device.

 USAGE:

 xConfiguration Standby BootAction: BootAction

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 DeskPro ]

 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: 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: Delay

where

 Delay:

 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 DeskPro ]

 4 [ Boards ]
xConfiguration Standby Signage Audio

**Applies to:** RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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

Audio:

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:** RoomKit Mini DeskPro 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.

The Interactive mode is not available for Room Kit Mini in general, only when Room Kit Mini is used with Samsung Flip (Webex on Flip).

**USAGE:**

xConfiguration Standby Signage InteractionMode: InteractionMode

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 DeskPro 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: Mode

where

Mode:

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 DeskPro 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: RefreshInterval
```

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 DeskPro 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: "Url"
```

where

```
Url: 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 DeskPro Boards

Requires user role: ADMIN, INTEGRATOR

Define the camera position when going into standby mode.

USAGE:
```
xConfiguration Standby StandbyAction: 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 DeskPro Boards

Requires user role: ADMIN, INTEGRATOR, USER

Define the camera position when leaving standby mode.

USAGE:
```
xConfiguration Standby WakeupAction: WakeupAction
```

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: WakeupOnMotionDetection
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 RoomS5 Room70/Room55D Room70G2 DeskPro 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:
```plaintext
xConfiguration SystemUnit Name: "Name"
```

where

Name:
- 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:
```plaintext
xConfiguration SystemUnit CrashReporting Mode: Mode
```

where

Mode:
- Off/On
- Off: No logs will be sent to ACR tool.
- On: The logs will automatically be sent to ACR tool.
- Default value:
  - Off [ DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D ]
  - On [ RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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:
```plaintext
xConfiguration SystemUnit CrashReporting Url: "Url"
```

where

Url:
- String (0..255)
- The URL to the Cisco Automatic Crash Report tool (ACR).
- Default value:
  - "acr.cisco.com" [ RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards ]
Time configuration

xConfiguration Time TimeFormat

Applies to: All products
Requires user role: ADMIN, USER

Define the time format.

USAGE:
xConfiguration Time TimeFormat: TimeFormat

where

TimeFormat:
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: DateFormat

where

DateFormat:
DD_MM_YY/MM/DD/YY/MM_MMM/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: Zone

where

Zone:
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:**

```plaintext
xConfiguration Time WorkDay Start: "Start"
```

**where**

```plaintext
Start:  
String (5, 5)  
The working day start time, using the 24-hour clock.
Default value:  
"07:00"
```

xConfiguration Time WorkDay End

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

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

**USAGE:**

```plaintext
xConfiguration Time WorkDay End: "End"
```

**where**

```plaintext
End:  
String (5, 5)  
The working day end time, using the 24-hour clock.
Default value:  
"18:00"
```

xConfiguration Time WorkWeek FirstDayOfWeek

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

The Time WorkWeek FirstDayOfWeek, Time WorkWeek LastDayOfWeek, Time WorkDay Start, and Time WorkDay End settings are available so that you can specify when the regular working hours are, and thereby also find the out-of-office hours.

Knowing the out-of-office hours is required if you want to use the power save mode, which is set up using the Standby PowerSave setting.

**USAGE:**

```plaintext
xConfiguration Time WorkWeek FirstDayOfWeek: FirstDayOfWeek
```

**where**

```plaintext
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:**

```plaintext
xConfiguration Time WorkWeek LastDayOfWeek: LastDayOfWeek
```

**where**

```plaintext
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 Bookings Visibility Title

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

Sets the meeting details to private. “Schedule meeting” will be displayed as the title of the meeting.

USAGE:

xConfiguration UserInterface Bookings Visibility Title: Title

where

Title: Auto/Hidden

Auto: The title of the meeting is public and will be displayed on the user interface.
Hidden: The title of the meeting will be hidden and “Schedule meeting” will be displayed on the user interface.
Default value: Auto

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: 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:**

\[
xConfiguration \ UserInterface \ ContactInfo \ Type: \ Type
\]

where

- **Type**:
  - 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 DeskPro
Requires user role: ADMIN, INTEGRATOR

A custom message can be displayed, in the lower left side of the screen, in awake mode.

**USAGE:**

\[
xConfiguration \ UserInterface \ CustomMessage: \ "CustomMessage"
\]

where

- **CustomMessage**: String (0, 128)
  - Add a custom message. Add an empty string to remove a custom message.
  - Default value: **"**

xConfiguration UserInterface Diagnostics Notifications

Applies to: All products
Requires user role: ADMIN

Hide or show diagnostics notifications on the user interface.

**USAGE:**

\[
xConfiguration \ UserInterface \ Diagnostics \ Notifications: \ Notifications
\]

where

- **Notifications**: Auto/Hidden
  - **Auto**: The diagnostics notifications will be displayed on the user interface.
  - **Hidden**: The diagnostics notifications will not be displayed on the user interface.

Default value:

- **Auto**
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: Mode
where
Mode:
  Off/On
  Off: There is no key tone sound effect.
  On: The key tone sound effect is turned on.
Default value:
  Off  [ DX70/DX80 DeskPro 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: End
where
End:
  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 Keypad
Applies to: All products
Requires user role: ADMIN, INTEGRATOR
Choose whether or not to remove the default in-call Keypad button from the user interface. This button opens a keypad, which for example can be used for DTMF input.

USAGE:
xConfiguration UserInterface Features Call Keypad: Keypad
where
Keypad:
  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 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: 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.

The Join Webex button is not available if you are controlling the device with a remote control.

**USAGE:**

```bash
xConfiguration UserInterface Features Call JoinWebex: 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:**

```bash
xConfiguration UserInterface Features Call Start: Start
```

where

- **Start:**
  - **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, SX60, 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:**

```bash
xConfiguration UserInterface Features Call VideoMute: VideoMute
```

where

- **VideoMute:**
  - **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

- **HideAll:**
  - **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

- **Start:**
  - **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 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: 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 DeskPro
Requires user role: ADMIN, INTEGRATOR

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: "HalfwakeMessage"
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: Output
```

where

```
Output:
  1 [ SX10 Room55 DeskPro 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 Room70G2 DeskPro 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

```
Mode:
  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
```

xConfiguration UserInterface Proximity Notifications

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

Configure the display of proximity notifications on the user interface.

USAGE:

```
xConfiguration UserInterface Proximity Notifications: Notifications
```

where

```
Notifications:
  Auto/Off/On

Auto: Allow the system to automatically determine when to display proximity notifications.

Off: Proximity notifications will not be shown on the user interface.

On: All proximity notifications will be shown on the user interface.
```

Default value:

```
Auto
```
xConfiguration UserInterface Security Mode

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

```
Mode:
```

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: Mode
```

where

```
Mode:
```

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:**

```plaintext
xConfiguration UserInterface SettingsMenu Visibility: 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:**

```plaintext
xConfiguration UserInterface SoundEffects Mode: Mode
```

where

- **Mode:**
  - **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:**

```plaintext
xConfiguration UserInterface UsbPromotion: UsbPromotion
```

where

- **UsbPromotion:**
  - **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: WebcamOnlyMode
```

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

---

xConfiguration UserInterface Whiteboard ActivityIndicators

Applies to: All products

Requires user role: ADMIN

Activity indicators let you see who is drawing and annotating in a call.

The avatars of the participants or the initials of the device are displayed when someone is interacting with the whiteboard, so you can follow who is drawing or annotating.

Applies only to cloud-registered devices.

**USAGE:**

```
xConfiguration UserInterface Whiteboard ActivityIndicators: ActivityIndicators
```

where

```
ActivityIndicators: Off/On
```

- **On**: Enables activity indicators.
- **Off**: Disables activity indicators.

Default value: On
### 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

**Filter:**

String (0..1024)

Refer to the LDAP specification for the syntax of this string. Example:

```
((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: "Group"
```

where

**Group:**

String (0..255)

The distinguished name of the AD group. Example: "CN=admin group, OU=company groups, DC=company, DC=com"

Default value:

```
*
```

**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

**Attribute:**

String (0..255)

The attribute name.

Default value:

```
*
```

---

*Copyright © 2020 Cisco Systems, Inc. All rights reserved.*
xConfiguration UserManagement LDAP BaseDN
Applies to: All products
Requires user role: ADMIN
The distinguishing name of the entry at which to start a search (base).

**USAGE:**
xConfiguration UserManagement LDAP BaseDN: "BaseDN"
where
- BaseDN: String (0..255)
  - The distinguishing name of the base. Example: "DC=company, DC=com"
  - Default value:"

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: Encryption
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: 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: Mode

where
Mode:
Off/On

Off: LDAP authentication is not allowed.
On: LDAP authentication is allowed.

Default value: Off

xConfiguration UserManagement LDAP Server Address

Applies to: All products
Requires user role: ADMIN

Set the IP address or hostname of the LDAP server.

 USAGE:

xConfiguration UserManagement LDAP Server Address: "Address"

where
Address:
String (0..255)
A valid IPv4 address, IPv6 address or hostname.

Default value:
"

xConfiguration UserManagement LDAP Server Port

Applies to: All products
Requires user role: ADMIN

Set the port to connect to the LDAP server on. If set to 0, use the default for the selected protocol (see the UserManagement LDAP Encryption setting).

 USAGE:

xConfiguration UserManagement LDAP Server Port: Port

where
Port:
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:
    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:
  MinimumDigits:
    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: MinimumLength
```

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: MinimumLowercase
```

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
```

---

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: MinimumUppercase

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:**

```plaintext
xConfiguration UserManagement PasswordPolicy MaxLifetime: MaxLifetime
```

```plaintext
where
```

```plaintext
MaxLifetime:
```

```plaintext
Integer (0..7300)
The minimum number of days. 0 means no restrictions.
```

Default value:

```plaintext
0
```

---

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:**

```plaintext
xConfiguration UserManagement PasswordPolicy ReuseLimit: ReuseLimit
```

```plaintext
where
```

```plaintext
ReuseLimit:
```

```plaintext
Integer (0..24)
The minimum number of passwords. 0 means no restrictions.
```

Default value:

```plaintext
12
```
Video configuration

**xConfiguration Video DefaultMainSource**

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

Define the default input source for main video in calls. The main video is played on this source when you switch on or restart the video conferencing device. Use the Video Input SetMainVideoSource command to change to another source while the device is running.

**USAGE:**

```
xConfiguration Video DefaultMainSource: DefaultMainSource
```

where

```
DefaultMainSource:
```

```
1/2/3/4/5/6 [ CodecPro ]
1/2/3/4 [ SX80 MX700/MX800/MX800D Room70G2 ]
1/2 [ SX90 ]
1 [ DX70/DX80 SX10 RoomKit/RoomKitMini Boards ]
1/2/3 [ MX200G2/MX300G2 RoomKit CodecPlus Room55 Room70/Room55D DeskPro ]
```

The default source for main video.

**Default value:**

```
1
```

**xConfiguration Video Input Connector [n] CameraControl CameraId**

*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: CameraId
```

where

```
CameraId:
```

```
1/2/3/4/5/6 [ CodecPlus CodecPro Room70/Room70D Room70G2 ]
1/2/3/4/5/6/7 [ CodecPlus CodecPro Room70/Room70D Room70G2 ]
```

```
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: 1
```

```
1 [ DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Room55D Room70/Room70D DeskPro Boards ]
```
xConfiguration Video Input Connector [n] CameraControl Mode

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

Define whether the camera on this video input connector can be controlled or not. Some connectors cannot be controlled (Off is the only available value).

USAGE:
xConfiguration Video Input Connector [n] CameraControl Mode: Mode
where
- n: Unique ID that identifies the video input connector.
  Range: 1..6 [CodecPro Room70G2]
  Range: 1..3 [SX10 CodecPlus Room55 Room70/Room55D DeskPro]
  Range: 1..2 [DX70/DX80 SX20 RoomKit RoomKitMini Boards]
  Range: 1..5 [MX80 MX700/MX800/MX800D]
  Range: 1..4 [MX200G2/MX300G2]

Mode:
- Off/On [CodecPro Room70G2]
- Off [DX70/DX80]
Connector 1: Off/On Connector 2,3,4: Off [MX200G2/MX300G2]
Connector 1: Off/On Connector 2,3: Off [SX10 Room55 DeskPro]
Connector 1: Off/On Connector 2: Off [DX20 RoomKit RoomKitMini Boards]
Connector 1,2,3,4: Off/On Connector 5: Off [MX80 MX700/MX800/MX800D]
Connector 1,2,3: On Connector 4,5: Off [MX80 MX700/MX800/MX800D]

xConfiguration Video Input Connector [n] CEC Mode

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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
- n: Unique ID that identifies the video input connector.
  Range: 1..5 [CodecPro Room70G2]
  Range: 1..3 [CodecPlus Room70/Room55D]
  Range: 2..3 [Room55 DeskPro]
  Range: 2..2 [RoomKit RoomKitMini Boards]

Mode:
- Off/On [CodecPro Room70G2]
  Connector 1,2,3,4,5: On Connector 6: Off [CodecPro Room70G2]
  Connector 1,2,3,4: Off [DX70/DX80]
  Connector 1: On Connector 2,3,4: Off [MX200G2/MX300G2]
  Connector 1: On Connector 2,3: Off [SX10 Room55 DeskPro]
  Connector 1: On Connector 2: Off [SX20 RoomKit RoomKitMini Boards]
  Connector 1,2,3: On Connector 4,5: Off [MX80 MX700/MX800/MX800D]
  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: \texttt{DviType}

where

- \texttt{n}: Unique ID that identifies the video input connector.
  - Range: 4..4  \{ SX80 MX700/MX800/MX800D \}
  - Range: 2..2  \{ SX20 MX200G2/MX300G2 \}

- \texttt{DviType}
  - \texttt{AutoDetect}/\texttt{Digital}/\texttt{AnalogRGB}/\texttt{AnalogYPbPr}

  - \texttt{AutoDetect}: Set to AutoDetect to automatically detect if the signal is analog RGB or digital.
  - \texttt{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.
  - \texttt{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.
  - \texttt{AnalogYPbPr}: Set to AnalogYPbPr to force the DVI video input to AnalogYPbPr, as the component (YPbPr) signal cannot be auto detected.

**Default value:**

- \texttt{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: \texttt{Mode}

where

- \texttt{n}: Unique ID that identifies the video input connector.
  - Range: 1..3  \{ CodecPlus Room70/Room55D \}
  - Range: 1..5  \{ CodecPro Room70G2 \}
  - Range: 2..3  \{ Room55 \}

- \texttt{Mode}
  - \texttt{Connector 1,3}: Off, Connector 2: Off/On
  - \texttt{Connector 1,2,3,4}: Off, Connector 5: Off/On
  - \texttt{Connector 2, Off, Connector 3}: Off/On
  - \texttt{Connector 2}: Off, Connector 3: Off/On

  - \texttt{Off}: Disable support for HDCP protected content on this video input connector.
  - \texttt{On}: Enable support for HDCP protected content this video input connector.

**Default value:**

- \texttt{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: InputSourceType

where

n: Unique ID that identifies the video input connector.

Range: 1..6 (CodecPro Room70G2)

Range: 1..3 (SX10 CodecPlus Room55 Room70/Room55D DeskPro)

Range: 1..2 (DX70/DX80 SX20 RoomKit RoomKitMini Boards)

Range: 1..5 (MX800D MX700/MX800/MX800D)

Range: 1..4 (MX200G2/MX300G2)

InputSourceType:

- PC/camera/document_camera/mediaplayer/whiteboard/other
- PC
- camera
- document_camera
- mediaplayer
- whiteboard
- other

Default value:

Connector 1: camera   Connector 2: PC/camera/document_camera/mediaplayer/whiteboard/other

Connector 1: camera   Connector 2: PC

Default value:

Connector 1,2,6: camera   Connector 3,4,5: PC

Connector 1: camera   Other connectors: PC/Camera/document_camera/mediaplayer/whiteboard/other

Connector 1: camera   Connector 2: PC

Connector 1: camera   Connector 2: PC

Connector 1,2: camera   Connector 3,4: PC   Connector 5: other

xConfiguration Video Input Connector [n] Name

Applies to: All products

Requires user role: ADMIN, INTEGRATOR

Define a name for the video input connector.

USAGE:

xConfiguration Video Input Connector [n] Name: "Name"

where

n: Unique ID that identifies the video input connector.

Range: 1..6 (CodecPro Room70G2)

Range: 1..3 (SX10 CodecPlus Room55 Room70/Room55D DeskPro)

Range: 1..2 (DX70/DX80 SX20 RoomKit RoomKitMini Boards)

Range: 1..5 (MX800D 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)"

Connector 1: "Camera"   Connector 2: "PC 1 (HDMI)"   Connector 3: "PC 2 (HDMI)"

Connector 4: "PC (HDMI)"

Connector 1: "Camera"   Connector 2: "Camera"   Connector 3: "PC (HDMI)"

Connector 4: "PC (HDMI)"

Connector 1: "Camera"   Connector 2: "Camera"   Connector 3: "PC (HDMI)"

Connector 4: "PC (HDMI)"

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)"

Connector 1: "Camera"   Connector 2: "PC 1 (HDMI)"   Connector 3: "PC 2 (HDMI)"

Connector 4: "PC (HDMI)"

Connector 1: "Camera"   Connector 2: "Camera"   Connector 3: "PC (HDMI)"

Connector 4: "PC (HDMI)"

Connector 1: "Camera 1"   Connector 2: "Camera 2"   Connector 3: "PC (HDMI)"

Connector 4: "PC (HDMI)"

Connector 5: "Camera 3 (SDI)"
xConfiguration Video Input Connector [n] PreferredResolution

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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 larger formats than 1920_1080_60 use much more data, and requires a presentation cable (or adapter) that is qualified for at least HDMI 1.4b data rates.

USAGE:

xConfiguration Video Input Connector [n] PreferredResolution:
 PreferredResolution

where

n: Unique ID that identifies the video input connector.

Range: 1..5 [ CodecPro Room70G2 ]
Range: 2..3 [ Room55 DeskPro ]
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_2160_30 [ CodecPro Room70G2 ]
Connector 1: 1920_1080_60 Connector 2,3: 1920_1080_60/2560_1440_60/3840_2160_30 [ CodecPlus Room70/Room55D ]
1920_1080_60/2560_1440_60/3840_2160_30 [ RoomKit RoomKitMini Room55 Boards ]
1920_1080_60/2560_1440_60/3840_2160_30/3840_2160_60 [ DeskPro ]
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.
3840_2160_60: The resolution is 3840 x 2160, and the refresh rate is 60 Hz.

Default value:

1920_1080_60 [ CodecPro Room70G2 ]
3840_2160_60 [ DeskPro ]
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:
 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 [ RoomKit RoomKitMini Room55 Boards ]
Range: 1..2 [ SX10 Room55 DeskPro ]
Range: 1..4 [ SX20 SX80 MX700/MX800/MX800D ]
Range: 2..4 [ MX200G2/MX300G2 ]

PresentationSelection:

AutoShare/Desktop/Manual/OnConnect [ DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards ]

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
- **Connector 1:** Manual
- **Other connectors:** OnConnect
- **Desktop:** [CodecPro Room70G2]
- **OnConnect:** [SX10 MX200G2/MX300G2 RoomKit RoomKitMini Room55]
- **AutoShare:** [Boards]
- **Connector 1, 2:** Manual
- **Connector 3, 4:** OnConnect
- **Connector 1:** Manual
- **Connector 2:** OnConnect
- **Quality:** [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:**

```
Quality
```

where

- **n:** Unique ID that identifies the video input connector.
- **Range:**
  - **1..6** (CodecPro Room70G2)
  - **1..3** (CodecPlus Room70/Room55D)
  - **Range:** [DX70/DX80 DeskPro]
  - **Range:** [SX10 MX200G2/MX300G2 RoomKit RoomKitMini Room55]
  - **Range:** [SX20]
  - **Range:** [SX80 MX700/MX800/MX800D]
  - **Range:** [MX200G2/MX300G2]

**Quality:**

- **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
- **Connector 1:** Motion
- **Connector 2, 3:** Sharpness
- **Sharpness:** [DX70/DX80 SX10 MX200G2/MX300G2 RoomKit RoomKitMini Room55 DeskPro Boards]
- **Connector 1:** Motion
- **Connector 2:** Sharpness
- **Quality:** [SX20]
- **Connector 1, 2, 5:** Motion
- **Connector 3, 4:** Sharpness
- **Connector 1:** Motion
- **Connector 2:** Sharpness
- **Connector 1, 2, 5:** Motion
- **Connector 3, 4:** Sharpness
- **Quality:** [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: Visibility

where

n: Unique ID that identifies the video input connector.

- Range: 1..6  
  - [ CodecPro Room70G2 ]
  - [ SX10 CodecPlus Room55 Room70Rooms555 DeskPro ]
  - [ DX70/DX80 SX20 RoomKit RoomKitMini Boards ]
  - [ SX80 MX700/MX800/MX800D ]
  - [ MX200G2/MX300G2 ]

Visibility:

Always/IfSignal/Never  
[ SX20 SX80 MX700/MX800/MX800D CodecPro CodecPlus Room55 Room70/Room555 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 DeskPro ]

Always: The menu selection for the video input connector will always be visible on the user interface.

IfSignal: The 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 DeskPro ]

Connector 1: Never   Other connectors: Always  
[ CodecPlus Room55 Room70Rooms555 Room70G2 ]

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: IfSignal  
[ MX200G2/MX300G2 ]
xConfiguration Video Monitors

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

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

Monitors:

Auto/Single/Dual/DualPresentationOnly [ SX20 RoomKit CodecPlus Room55 Room70/Room70G2 DeskPro ]

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/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 DeskPro

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 supported 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 supported 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 use 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 DeskPro ]
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 ]

Mode:

Off/On

Off: CEC is disabled.

On: CEC is enabled.

Default value:
xConfiguration Video Output Connector \([n]\) Location HorizontalOffset

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

**Requires user role:** ADMIN, INTEGRATOR

HorizontalOffset and VerticalOffset settings are associated with each video output. These settings are used to signal the relative position of the displays that are connected to these outputs.

HorizontalOffset = "0" and VerticalOffset = "0" indicates that the display is positioned in center, both horizontally and vertically. A negative horizontal offset indicates that the monitor is left of center, and a positive horizontal offset indicates that the monitor is right of center. A negative vertical offset indicates that the monitor is below center, and a positive vertical offset indicates that the monitor is above center. The magnitude of the offset indicates how far the display is from center (relative to other displays).

Example: You have two screens side by side. The left screen is on Connector 1 and the right screen on Connector 2. Then the following settings will apply:

- Video Output Connector 1 Location: HorizontalOffset = "0", VerticalOffset = "0"
- Video Output Connector 2 Location: HorizontalOffset = "1", VerticalOffset = "0"

Example: You have two screens, one below the other. The upper screen is on Connector 1 and the lower screen on Connector 2. Then the following settings will apply:

- Video Output Connector 1 Location: HorizontalOffset = "0", VerticalOffset = "0"
- Video Output Connector 2 Location: HorizontalOffset = "0", VerticalOffset = "-1"

MX200 G2, MX300 G2, and Room 55: The integrated screen (Connector 1) has HorizontalOffset = "0" and VerticalOffset = "0" (implicit, not configurable).

**USAGE:**

xConfiguration Video Output Connector \([n]\) Location HorizontalOffset:

"HorizontalOffset"

where

\(n\): Unique ID that identifies the video output connector.

- **Range:** 1..3 \[ SX80 MX700/MX800/MX800D CodecPro Room70G2 \]
- **Range:** 1..2 \[ SX20 RoomKit CodecPlus Room70/Room55D \]
- **Range:** 2..2 \[ MX200G2/MX300G2 Room55 DeskPro \]

**HorizontalOffset:**

String \((1, 12)\)

The string represents a decimal number between -100.0 and 100.0 (these numbers included). Input strings that complies with the std::stof function in the C++ <string> library are accepted. This means that you can use either decimal notation or E-notation, for example "12", "12.0", "1.2e1", "1.2E1", "-0.12", "-12e-2". Leading whitespace characters are discarded, and the decimal point is "."
**xConfiguration Video Output Connector [n] MonitorRole**

**Applies to:** SX20 SX80 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G DeskPro

**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:**

```plaintext
xConfiguration Video Output Connector [n] MonitorRole: MonitorRole
```

where

- `n`: Unique ID that identifies the video output connector.
  - Range: 1..3 [ SX80 MX700/MX800/MX800D CodecPro Room70G2 ]
  - Range: 2..2 [ Room55 DeskPro ]
  - Range: 1..2 [ SX20 RoomKit CodecPlus Room70/Room55D ]
  - Range: 1..1 [ RoomKitMini ]

**MonitorRole:**

- **Auto/First/Second/Third/PresentationOnly** [ SX20 RoomKit CodecPlus Room55 Room70/Room55D DeskPro ]
- **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 single-screen setup, there is no difference between First, Second and Third.
- **PresentationOnly:** Show presentation video stream if active, and nothing else. Screens/outputs with this monitor role are ignored by the Video Monitors setting.
- **Recorder:** Show all participants, including the local main video (self-view). If active, also show the presentation. Screens/outputs with this monitor role are ignored by the Video Monitors setting.

Default value:

- **Auto** [ SX80 MX700/MX800/MX800D RoomKit CodecPlus CodecPro Room55 Room70G2 DeskPro ]
- **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:**

```plaintext
xConfiguration Video Output Connector [n] OverscanLevel: OverscanLevel
```

where

- `n`: 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**
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: **Resolution**

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 DeskPro]
  - Range: 1..3 [SX80 CodecPro Room70G2]
  - Range: 2..3 for MX800 Single; not available for MX700 and MX800 Dual [MX700/MX800/MX800D]

**Resolution:**

<table>
<thead>
<tr>
<th>Connector 1: Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60</th>
<th>Connector 2: Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector 3: Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60</td>
<td>[CodecPro Room70G2]</td>
</tr>
<tr>
<td>1920_1080_60</td>
<td>DX70/DX80</td>
</tr>
<tr>
<td>1920_1200_60</td>
<td>[Boards]</td>
</tr>
<tr>
<td>Connector 1: 3840_2160_60 Connector 2: Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60</td>
<td>[RoomKit Mini CodecPlus Room70/Room55D]</td>
</tr>
<tr>
<td>Connector 1: 3840_2160_60 Connector 2: Auto/1920_1080_50/1920_1080_60/1920_1200_50/1920_1200_60/2560_1440_60/3840_2160_30/3840_2160_60</td>
<td>[RoomKit Mini CodecPlus Room55 Room70G2]</td>
</tr>
<tr>
<td>Connector 1: 3840_2160_60 Connector 2: Auto/1024_768_60/1280_1024_60/1280_720_50/1280_720_60</td>
<td>[SX80 MX700/MX800/MX800D]</td>
</tr>
<tr>
<td>Connector 1: 3840_2160_60 Connector 2: Auto/1280_720_50/1280_720_60</td>
<td>[MX200G2/MX300G2]</td>
</tr>
</tbody>
</table>

**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.
- **2560_1440_60**: The resolution is 2560 x 1440, and the refresh rate is 60 Hz.
- **3840_2160_30**: The resolution is 3840 x 2160, and the refresh rate is 30 Hz.
- **3840_2160_60**: The resolution is 3840 x 2160, and the refresh rate is 60 Hz.

**Default value**: 1920_1080_60 [DX70/DX80]
3840_2160_60 [DeskPro Boards]

**Connector 1**: 3840_2160_60 **Connector 2**: Auto [Room55]
**Connector 1**: 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 DeskPro 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: DefaultSource
```

where

**DefaultSource:**

1/2/3/4/5 [CodecPro Room70G2]
1/2/3/4 [SX80 MX200G2/MX300G2]
1/2/3 [CodecPlus Room55 Room70/Room55D DeskPro]
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 MX200G2/MX300G2 CodecPro Room70G2]
2 [DX70/DX80 SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D DeskPro Boards]

---

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: Priority
```

where

**Priority:**

```
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

**USAGE:**
xConfiguration Video Selfview Default FullscreenMode: **FullscreenMode**
where

- **FullscreenMode:**
  - **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: **Mode**
where

- **Mode:**
  - **Off/Current/On:**
    - **Off:** Self-view is switched off when leaving a call.
    - **Current:** Self-view is left as is, i.e., if it was on during the call, it remains on after the call; if it was off during the call, it remains off after the call.
    - **On:** Self-view is switched on when leaving a call.

Default value: **Current**
xConfiguration Video Selfview Default OnMonitorRole

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

where

- **OnMonitorRole:**
  - **Current/First/Second** [ SX20 MX200G2/MX300G2 RoomKit RoomKitMini CodecPlus Room55 Room70/Room55D DeskPro 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 DeskPro 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: PIPPosition`

where

- **PIPPosition:**
  - **Current/UpperLeft/UpperCenter/UpperRight/CentreLeft/CentreRight/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.

- **CentreLeft:** 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 DeskPro ]

- **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: `Mirrored`
where
- `Mirrored`
  - `Off/On`
  - `Off`: Display the self-view image as other people see you.
  - `On`: Display the self-view image as you see yourself in a mirror.

Default value: `On`

---

xConfiguration Video Selfview OnCall Mode

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

This setting is used to switch on self-view for a short while when setting up a call. The Video Selfview OnCall Duration setting determines for how long it remains on. This applies when self-view in general is switched off.

**USAGE:**
xConfiguration Video Selfview OnCall Mode: `Mode`
where
- `Mode`
  - `Off/On`
  - `Off`: Self-view is not shown automatically during call setup.
  - `On`: Self-view is shown automatically during call setup.

Default value:
- `On` [DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro]
- `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 DeskPro 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: Mode

where

Mode:
  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 DeskPro 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: RemoteDebugging

where

RemoteDebugging:
  Off/On
  Off: Remote debugging is switched off.
  On: Remote debugging is switched on.

Default value: Off
```
xConfiguration WebEngine UseHttpProxy

**Applies to:** RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro

**Boards**

Requires user role: ADMIN

There are several UseHttpProxy settings that specify if a service shall communicate via an HTTP proxy or not. The WebEngine UseHttpProxy setting applies all web view based features, such as digital signage, API-driven web views, and web apps.

For this setting to have any effect, a proxy server for HTTP, HTTPS, and WebSocket traffic must be set up using the NetworkServices HTTP Proxy settings.

**USAGE:**

```
xConfiguration WebEngine UseHttpProxy: UseHttpProxy
```

where

- **UseHttpProxy:**
  - **Off/On**
    - **Off:** Set up communication directly with the server (not using a proxy).
    - **On:** Set up communication via proxy.

Default value: **On**
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.
<table>
<thead>
<tr>
<th>Cameras commands</th>
<th>290</th>
</tr>
</thead>
<tbody>
<tr>
<td>xCommand Cameras AutoFocus Diagnostics Start</td>
<td>290</td>
</tr>
<tr>
<td>xCommand Cameras AutoFocus Diagnostics Stop</td>
<td>290</td>
</tr>
<tr>
<td>xCommand Cameras Background Set</td>
<td>290</td>
</tr>
<tr>
<td>xCommand Cameras PresenterTrack ClearPosition</td>
<td>291</td>
</tr>
<tr>
<td>xCommand Cameras PresenterTrack Set</td>
<td>291</td>
</tr>
<tr>
<td>xCommand Cameras PresenterTrack StorePosition</td>
<td>292</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Activate</td>
<td>292</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Deactivate</td>
<td>292</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Diagnostics Start</td>
<td>292</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Diagnostics Stop</td>
<td>293</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Whiteboard ActivatePosition</td>
<td>293</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Whiteboard AlignPosition</td>
<td>293</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Whiteboard SetDistance</td>
<td>294</td>
</tr>
<tr>
<td>xCommand Cameras SpeakerTrack Whiteboard StorePosition</td>
<td>294</td>
</tr>
<tr>
<td>Conference commands</td>
<td>295</td>
</tr>
<tr>
<td>xCommand Conference Call AuthenticationResponse</td>
<td>295</td>
</tr>
<tr>
<td>xCommand Conference DoNotDisturb Activate</td>
<td>295</td>
</tr>
<tr>
<td>xCommand Conference DoNotDisturb Deactivate</td>
<td>295</td>
</tr>
<tr>
<td>xCommand Conference Participant Admit</td>
<td>296</td>
</tr>
<tr>
<td>xCommand Conference Participant Disconnect</td>
<td>296</td>
</tr>
<tr>
<td>xCommand Conference Participant Mute</td>
<td>297</td>
</tr>
<tr>
<td>xCommand Conference Participant Search</td>
<td>297</td>
</tr>
<tr>
<td>xCommand Conference Recording Pause</td>
<td>298</td>
</tr>
<tr>
<td>xCommand Conference Recording Resume</td>
<td>298</td>
</tr>
<tr>
<td>xCommand Conference Recording Start</td>
<td>298</td>
</tr>
<tr>
<td>xCommand Conference Recording Stop</td>
<td>298</td>
</tr>
<tr>
<td>xCommand Conference SpeakerLock Release</td>
<td>299</td>
</tr>
<tr>
<td>xCommand Conference SpeakerLock Set</td>
<td>299</td>
</tr>
<tr>
<td>Diagnostics commands</td>
<td>299</td>
</tr>
<tr>
<td>xCommand Diagnostics Run</td>
<td>299</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CallHistory commands</th>
<th>283</th>
</tr>
</thead>
<tbody>
<tr>
<td>xCommand CallHistory AcknowledgeAllMissedCalls</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory AcknowledgeMissedCall</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory DeleteAll</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory DeleteEntry</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory Get</td>
<td>284</td>
</tr>
<tr>
<td>xCommand CallHistory Recents</td>
<td>284</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Camera commands</th>
<th>285</th>
</tr>
</thead>
<tbody>
<tr>
<td>xCommand Camera PositionReset</td>
<td>285</td>
</tr>
<tr>
<td>xCommand Camera PositionSet</td>
<td>285</td>
</tr>
<tr>
<td>xCommand Camera Preset Activate</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset ActivateDefaultPosition</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset Edit</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset List</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Remove</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Show</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Store</td>
<td>288</td>
</tr>
<tr>
<td>xCommand Camera Ramp</td>
<td>289</td>
</tr>
<tr>
<td>xCommand Camera TriggerAutofocus</td>
<td>289</td>
</tr>
</tbody>
</table>

| xCommand CallFarEndControl RoomPreset Activate | 279 |
| xCommand CallFarEndControl Source Select | 279 |
| xCommand CallFarEndMessage Send | 280 |
| xCommand CallFarEndMessage SStringSend | 280 |
| xCommand CallFarEndMessage TStringSend | 280 |
| xCommand CallForward | 281 |
| xCommand CallHold | 281 |
| xCommand CallIgnore | 281 |
| xCommand CallJoin | 281 |
| xCommand CallReject | 282 |
| xCommand CallResume | 282 |
| xCommand CallUnattendedTransfer | 282 |

<table>
<thead>
<tr>
<th>CallHistory commands</th>
<th>283</th>
</tr>
</thead>
<tbody>
<tr>
<td>xCommand CallHistory AcknowledgeAllMissedCalls</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory AcknowledgeMissedCall</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory DeleteAll</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory DeleteEntry</td>
<td>283</td>
</tr>
<tr>
<td>xCommand CallHistory Get</td>
<td>284</td>
</tr>
<tr>
<td>xCommand CallHistory Recents</td>
<td>284</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Camera commands</th>
<th>285</th>
</tr>
</thead>
<tbody>
<tr>
<td>xCommand Camera PositionReset</td>
<td>285</td>
</tr>
<tr>
<td>xCommand Camera PositionSet</td>
<td>285</td>
</tr>
<tr>
<td>xCommand Camera Preset Activate</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset ActivateDefaultPosition</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset Edit</td>
<td>286</td>
</tr>
<tr>
<td>xCommand Camera Preset List</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Remove</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Show</td>
<td>287</td>
</tr>
<tr>
<td>xCommand Camera Preset Store</td>
<td>288</td>
</tr>
<tr>
<td>xCommand Camera Ramp</td>
<td>289</td>
</tr>
<tr>
<td>xCommand Camera TriggerAutofocus</td>
<td>289</td>
</tr>
</tbody>
</table>
Dial commands ................................................................. 300
  xCommand Dial ................................................................. 300

GPIO commands ................................................................. 301
  xCommand GPIO ManualState Set ........................................ 301

HttpClient commands ......................................................... 301
  xCommand HttpClient Allow Hostname Add ....................... 301
  xCommand HttpClient Allow Hostname Clear .................... 301
  xCommand HttpClient Allow Hostname List ....................... 302
  xCommand HttpClient Allow Hostname Remove .................. 302
  xCommand HttpClient Delete ........................................... 302
  xCommand HttpClient Get ................................................ 303
  xCommand HttpClient Patch ............................................. 304
  xCommand HttpClient Post ............................................... 305
  xCommand HttpClient Put ................................................ 306

HttpFeedback commands .................................................. 307
  xCommand HttpFeedback Deregister ................................... 307
  xCommand HttpFeedback Enable ....................................... 307
  xCommand HttpFeedback Register ..................................... 308

Logging commands .......................................................... 308
  xCommand Logging SendLogs ........................................... 308

Macros commands .......................................................... 309
  xCommand Macros Log Clear ........................................... 309
  xCommand Macros Log Get ............................................. 309
  xCommand Macros Macro Activate ..................................... 309
  xCommand Macros Macro Deactivate .................................. 309
  xCommand Macros Macro Get .......................................... 310
  xCommand Macros Macro Remove ..................................... 310
  xCommand Macros Macro RemoveAll .................................. 310
  xCommand Macros Macro Rename ..................................... 310
  xCommand Macros Macro Roles Set ................................... 311

xCommand Macros Macro Save ........................................... 311
  xCommand Macros Runtime Restart .................................... 311
  xCommand Macros Runtime Start ....................................... 312
  xCommand Macros Runtime Status ..................................... 312
  xCommand Macros Runtime Stop ....................................... 312

Message commands ........................................................ 312
  xCommand Message Send ............................................... 312

Network commands ........................................................ 313
  xCommand Network SMTP VerifyConfig ............................. 313
  xCommand Network Wifi Configure ................................... 313
  xCommand Network Wifi Delete ....................................... 314
  xCommand Network Wifi List .......................................... 314
  xCommand Network Wifi Scan Start .................................. 314
  xCommand Network Wifi Scan Stop ................................... 314

Peripherals commands ...................................................... 315
  xCommand Peripherals Pairing .......................................... 315
  xCommand Peripherals HeartBeat ....................................... 315
  xCommand Peripherals List ............................................. 316
  xCommand Peripherals Pairing DeviceDiscovery Start .......... 316
  xCommand Peripherals Pairing Pair ................................... 316
  xCommand Peripherals Pairing Unpair ................................ 317
  xCommand Peripherals Purge ........................................... 317

Phonebook commands ...................................................... 317
  xCommand Phonebook Contact Add .................................... 317
  xCommand Phonebook Contact Delete ................................ 318
  xCommand Phonebook Contact Modify .............................. 318
  xCommand Phonebook ContactMethod Add ......................... 318
  xCommand Phonebook ContactMethod Delete ....................... 319
  xCommand Phonebook ContactMethod Modify ...................... 320
  xCommand Phonebook Folder Add ....................................... 320
  xCommand Phonebook Folder Delete ................................... 321
<table>
<thead>
<tr>
<th>Command Type</th>
<th>Commands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security commands</td>
<td>xCommand Security Certificates ThirdParty List</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates ThirdParty Show</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates Webex Show</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Persistency</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Session Get</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Session List</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Session Terminate</td>
</tr>
<tr>
<td>Presentation commands</td>
<td>xCommand Presentation Start</td>
</tr>
<tr>
<td></td>
<td>xCommand Presentation Stop</td>
</tr>
<tr>
<td>Provisioning commands</td>
<td>xCommand Provisioning CompleteUpgrade</td>
</tr>
<tr>
<td></td>
<td>xCommand Provisioning PostponeUpgrade</td>
</tr>
<tr>
<td></td>
<td>xCommand Provisioning CUCM ExtensionMobility Login</td>
</tr>
<tr>
<td></td>
<td>xCommand Provisioning CUCM ExtensionMobility Logout</td>
</tr>
<tr>
<td></td>
<td>xCommand Provisioning RoomType Activate</td>
</tr>
<tr>
<td></td>
<td>xCommand Provisioning Service Fetch</td>
</tr>
<tr>
<td>Proximity commands</td>
<td>xCommand Proximity Services Activate</td>
</tr>
<tr>
<td></td>
<td>xCommand Proximity Services Deactivate</td>
</tr>
<tr>
<td>RoomPreset commands</td>
<td>xCommand RoomPreset Activate</td>
</tr>
<tr>
<td></td>
<td>xCommand RoomPreset Clear</td>
</tr>
<tr>
<td></td>
<td>xCommand RoomPreset Store</td>
</tr>
<tr>
<td>Security commands</td>
<td>xCommand Security Certificates CA Add</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates CA Delete</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates CA Show</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates Services Activate</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates Services Add</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates Services Deactivate</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates ThirdParty Disable</td>
</tr>
<tr>
<td></td>
<td>xCommand Security Certificates ThirdParty Enable</td>
</tr>
<tr>
<td>Standby commands</td>
<td>xCommand Standby Activate</td>
</tr>
<tr>
<td></td>
<td>xCommand Standby Deactivate</td>
</tr>
<tr>
<td></td>
<td>xCommand Standby Halfwake</td>
</tr>
<tr>
<td></td>
<td>xCommand Standby ResetHalfwakeTimer</td>
</tr>
<tr>
<td></td>
<td>xCommand Standby ResetTimer</td>
</tr>
<tr>
<td>SystemUnit commands</td>
<td>xCommand SystemUnit Boot</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit FactoryReset</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit FirstTimeWizard Stop</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit Notifications RemoveAll</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit OptionKey Add</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit OptionKey List</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit OptionKey Remove</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit OptionKey RemoveAll</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit ProductPlatform Set</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit SignInBanner Clear</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit SignInBanner Get</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit SignInBanner Set</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit SoftReset</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit SoftwareUpgrade</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit WelcomeBanner Clear</td>
</tr>
<tr>
<td></td>
<td>xCommand SystemUnit WelcomeBanner Get</td>
</tr>
</tbody>
</table>
Time commands ...................................................................................................................................... 338
  xCommand Time DateTime Get ........................................................................................................ 338
  xCommand Time DateTime Set ........................................................................................................ 338
UserInterface commands ...................................................................................................................... 339
  xCommand UserInterface Branding Clear .......................................................................................... 339
  xCommand UserInterface Branding Delete ........................................................................................ 339
  xCommand UserInterface Branding Fetch .......................................................................................... 339
  xCommand UserInterface Branding Get ............................................................................................ 340
  xCommand UserInterface Branding Updated ....................................................................................... 340
  xCommand UserInterface Branding Upload ........................................................................................ 341
  xCommand UserInterface Extensions Clear ....................................................................................... 341
  xCommand UserInterface Extensions List .......................................................................................... 341
  xCommand UserInterface Extensions Panel Clicked ......................................................................... 342
  xCommand UserInterface Extensions Panel Close ............................................................................ 342
  xCommand UserInterface Extensions Panel Open .............................................................................. 342
  xCommand UserInterface Extensions Panel Remove .......................................................................... 342
  xCommand UserInterface Extensions Panel Save .............................................................................. 343
  xCommand UserInterface Extensions Panel Update ............................................................................ 343
  xCommand UserInterface Extensions Set ........................................................................................... 344
  xCommand UserInterface Extensions Widget Action ........................................................................... 344
  xCommand UserInterface Extensions Widget SetValue ....................................................................... 344
  xCommand UserInterface Extensions Widget UnsetValue ................................................................... 344
  xCommand UserInterface Message Alert Clear .................................................................................. 345
  xCommand UserInterface Message Alert Display ............................................................................... 345
  xCommand UserInterface Message Prompt Clear ............................................................................. 346
  xCommand UserInterface Message Prompt Response ......................................................................... 346
  xCommand UserInterface Message TextInput Clear .......................................................................... 347
  xCommand UserInterface Message TextInput Display ........................................................................ 347
  xCommand UserInterface Message TextInput Response ...................................................................... 348
  xCommand UserInterface Message TextLine Clear ............................................................................ 348
  xCommand UserInterface Message TextLine Display .......................................................................... 349
  xCommand UserInterface OSD Key Click ........................................................................................... 349
  xCommand UserInterface OSD Key Press ............................................................................................ 349
xCommand UserInterface OSD Key Release .......................................................................................... 350
xCommand UserInterface Presentation ExternalSource Add .................................................................... 350
xCommand UserInterface Presentation ExternalSource Remove ......................................................... 351
xCommand UserInterface Presentation ExternalSource List .................................................................. 351
xCommand UserInterface Presentation ExternalSource RemoveAll .................................................... 351
xCommand UserInterface Presentation ExternalSource Select ................................................................ 351
xCommand UserInterface Presentation ExternalSource State Set ....................................................... 352
xCommand UserInterface WebView Clear ............................................................................................. 352
xCommand UserInterface WebView Display ........................................................................................ 352
UserManagement commands ............................................................................................................. 353
  xCommand UserManagement RemoteSupportUser Create ................................................................. 353
  xCommand UserManagement RemoteSupportUser Delete ............................................................... 353
  xCommand UserManagement RemoteSupportUser DisablePermanently ........................................... 353
  xCommand UserManagement RemoteSupportUser GetState ............................................................. 353
  xCommand UserManagement User Add ............................................................................................. 354
  xCommand UserManagement User Delete .......................................................................................... 354
  xCommand UserManagement User Get .............................................................................................. 354
  xCommand UserManagement User List .............................................................................................. 355
  xCommand UserManagement User Modify ........................................................................................ 355
  xCommand UserManagement User Passphrase Change ....................................................................... 356
  xCommand UserManagement User Passphrase Set .......................................................................... 356
  xCommand UserManagement User Unblock ....................................................................................... 356
Video commands .................................................................................................................................. 357
  xCommand Video ActiveSpeakerPIP Set ............................................................................................. 357
  xCommand Video CEC Input KeyClick ............................................................................................... 357
  xCommand Video CEC Output KeyClick ............................................................................................ 358
  xCommand Video CEC Output SendActiveSourceRequest .................................................................... 358
  xCommand Video CEC Output SendInactiveSourceRequest ............................................................... 358
  xCommand Video Graphics Clear ....................................................................................................... 359
  xCommand Video Graphics Text Display ............................................................................................ 359
  xCommand Video Input MainVideo Mute ............................................................................................ 359
  xCommand Video Input MainVideo Unmute ........................................................................................ 360
  xCommand Video Input SetMainVideoSource ..................................................................................... 360
xCommand Video Input Source SetActiveConnector ................................................................. 361
xCommand Video Layout LayoutFamily Set ................................................................. 361
xCommand Video Matrix Assign .......................................................................................... 362
xCommand Video Matrix Reset ........................................................................................... 362
xCommand Video Matrix Swap ............................................................................................ 363
xCommand Video Matrix Unassign ........................................................................................ 363
xCommand Video Output Monitor Backlight Set ................................................................. 364
xCommand Video Output Monitor Brightness Set ............................................................... 364
xCommand Video Output Monitor Color Blue Set ............................................................... 364
xCommand Video Output Monitor Color Green Set ............................................................ 364
xCommand Video Output Monitor Color Red Set ............................................................... 365
xCommand Video Output Monitor Color Select .................................................................. 365
xCommand Video Output Monitor Contrast Set ................................................................... 365
xCommand Video Output Monitor CSC Select ..................................................................... 365
xCommand Video Output Monitor Gamma Set .................................................................... 366
xCommand Video Output Monitor Reset ............................................................................. 366
xCommand Video Output Monitor Sharpness Set ............................................................... 366
xCommand Video PresentationPIP Set ................................................................................ 366
xCommand Video PresentationView Set .............................................................................. 367
xCommand Video Selfview Set ........................................................................................... 367

WebEngine commands ........................................................................................................ 368
xCommand UserInterface WebEngine DeleteStorage .......................................................... 368

Webex commands .............................................................................................................. 368
xCommand Webex Join ....................................................................................................... 368
xCommand Webex Registration Cancel .............................................................................. 368
xCommand Webex Registration ConvertToCloud ................................................................. 369
xCommand Webex Registration Start .................................................................................. 369
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 [Channel: Channel] [MeasurementLength: MeasurementLength] [Output: Output] [Volume: Volume]

where

Channel:
  Integer (0..13)
The channel number, from left to right, of the selected output.
  Default value: 0

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

Output:
  HDMI/Line/Internal/Headset/All
  The output where the test signal should be directed.
  HDMI: Measure the room impulse response (RIR) of the device connected to the HDMI output.
**Line**: Measure the RIR of the device connected to the Line output (only available on video conferencing devices that have a Line output).

**Internal**: Measure the RIR of the internal loudspeaker (only available on video conferencing devices that have an internal loudspeaker).

**Headset**: Measure the RIR of the headset (only available on video conferencing devices that have a headset).

**All**: Measure the RIR on all outputs.

**Default value**: All

**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 is 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:**

```command
xCommand Audio Diagnostics MeasureDelay [MeasurementLength: MeasurementLength] [Output: Output] [Volume: Volume]
```

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/Headset/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).
  - **Headset**: Measure the delay of the headset (only available on video conferencing devices that have a headset).
  - **All**: 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: \[EqualizerId\] FilterType: \[FilterType\] 
Frequency: "\[Frequency\]" Gain: "\[Gain\]" Q: "\[Q\]" Section: \[Section\]
where
  EqualizerId:  
    Integer (1..8)
  FilterType: 
    highpass/highshelf/lowpass/lowshelf/none/peaking
  Frequency:  
    String (0, 32)
  Gain:  
    String (0, 32)
  Q:  
    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: InputId] [Name: "Name"] [AGC: AGC] [Channels: Channels] [Direct: Direct] [MixerMode: MixerMode] [Mute: Mute]
```

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.

- **Name**
  - `String (0, 255)`
  - Choose a name that describes the local input. If you don't specify a name, the string will be empty.

- **AGC**
  - `On/Off`
  - **On:** Adjusts the gain continuously to maintain a constant sound level (default).
  - **Off:** No automatic gain control.

- **Channels**
  - `Integer (1..2)`
  - 1: Mixes the input signals into a mono signal (default).
  - 2: Mixes the input signals into a stereo signal.

- **Direct**
  - `On/Off`

- **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.

- **Mute**
  - `On/Off`
  - **On:** Mutes the mix of input signals (default).
  - **Off:** No muting.
xCommand Audio LocalInput AddConnector

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

Attach an input connector to the local input given by the input ID. You have to specify both the connector’s type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local input.

Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

**USAGE:**

```
xCommand Audio LocalInput AddConnector InputId: InputId ConnectorType: ConnectorType
where
 InputId: Integer (0..65534)
The unique identifier of the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

ConnectorType:
 HDMI/Line/Microphone [ SX80 MX700/MX800/MX800D ]
 HDMI/ARC/Microphone/WebView [ CodecPro Room70G2 ]

Select the connector type.
 HDMI: HDMI cable input connector.
 ARC: HDMI with ARC (Audio Return Channel) is input connector.
 Line: Line input connector.
 Microphone: Microphone input connector.
 WebView: WebView input connector.
```

```
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; Integer (1..8) for WebView 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: InputId
where
 InputId: Integer (0..65534)
The unique identifier of the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.
```
xCommand Audio LocalInput RemoveConnector

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Detach an input connector from the local input given by the input ID. You need to enter both the connector’s type and number (ConnectorType, ConnectorId) to uniquely identify the connector. Run xStatus Audio Input LocalInput to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

USAGE:
xCommand Audio LocalInput RemoveConnector InputId: InputId ConnectorType: ConnectorType

where

InputId:
Integer (0..65534)
The unique identifier for the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

ConnectorType:
HDMI/Line/Microphone [ SX80 MX700/MX800/MX800D ]
HDMI/ARC/Microphone/WebView [ CodecPro Room70G2 ]

Select the connector type.

HDMI: HDMI cable input connector.
ARC: HDMI with ARC (Audio Return Channel) is input connector.
Line: Line input connector.
Microphone: Microphone input connector.
WebView: WebView input connector.

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; Integer (1..8) for a WebView 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: InputId [Name: "Name"] [AGC: AGC] [Channels: Channels] [Direct: Direct] [MixerMode: MixerMode] [Mute: Mute]

where

InputId:
Integer (0.65534)
The unique identifier for the local input. It was generated when the local input was created with the xCommand Audio LocalInput Add command.

Name:
String (0, 255)
Choose a name that describes the local input.

AGC:
On/Off
On: Adjust the gain continuously to maintain a constant sound level.
Off: No automatic gain control.

Channels:
Integer (1..2)
1: Mix the input signals into a mono signal.
2: Mix the input signals into a stereo signal.

Direct:
On/Off
On: Bypass input processing such as acoustic echo cancellation and noise reduction, regardless of the configuration for each connected input connector. Bypassing the input processing reduces the audio input delay, which is useful when doing local sound reinforcement.
Off: All regular input processing is performed, according to the configuration of each connector.
MixerMode:

Auto/Fixed/GainShared

Auto: If one input signal is dominating, the signal on the other connectors are attenuated with 20 dB each.

Fixed: The input signals all have the same weight, and consequently they are mixed together with equal gains.

GainShared: If one or some of the input signals dominate, the rest of the input signals are attenuated by a few dB so that the total gain of the mixed signal remains the same all the time.

Auto and GainShared are intended for the microphones; Fixed is recommended for Line and HDMI inputs.

Mute:

On/Off

On: Mutes the mix of input signals.
Off: No muting.

xCommand Audio LocalOutput Add

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Create a virtual local output and generate an identifier for it (OutputId). 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: OutputId] [Name: "Name"] [AutoconnectRemote: AutoconnectRemote] [Loudspeaker: Loudspeaker] [Channels: Channels] [VolumeControlled: VolumeControlled]

where

OutputId:

Integer (0..65534)

A unique identifier for the local output. If you don't specify an OutputId, the device will automatically create one for you. We recommend that you specify the OutputId yourself in case you need to refer to the output module at a later stage.

Default value: 0

Name:

String (0, 255)

Choose a name that describes the local output.

Default value: *

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

**Channels:**

- **Integer (1..2)**
  - **1:** Mix the local and remote input signals into a mono signal.
  - **2:** Mix the local and remote input signals into a stereo signal.

Default value: 1

**VolumeControlled:**

- **On/Off**
  - **On:** The volume will change according to the level set with the volume controls on the user interface, or with the xCommand Audio Volume commands. 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

**Requires user role:** ADMIN

Attach an output connector to the local output given by the output ID. You have to specify both the connector’s type and number (ConnectorType, ConnectorId) to uniquely identify the connector. A connector can only be attached to one local output.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

**USAGE:**

```plaintext
xCommand Audio LocalOutput AddConnector OutputId: OutputId ConnectorType: ConnectorType ConnectorId: ConnectorId
```

where

- **OutputId:**
  - Integer (0..65534)
  - The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

- **ConnectorType:**
  - **HDMI/Line** (SX80, CodecPro)
  - **HDMI/Line/ARC** (MX700/MX800/MX800D, Room70G2)
  - Select the connector type.

- **ConnectorId:**
  - Integer (1..2) for an HDMI connector; Integer (1..6) for a Line connector (SX80, MX700/MX800/MX800D)
  - Integer (1..3) for an HDMI connector; Integer (1..6) for a Line out connectors; Integer (1..1) for an HDMI with ARC (Audio Return Channel) connector (CodecPro, Room70G2)
  - Select a connector. The connectors’ numbers are printed on the codec connector panel.
xCommand Audio LocalOutput ConnectInput

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

Connect a local or remote input to a local output by giving their IDs as parameters. A local input can be connected to any number of local outputs. Likewise, any number of local inputs can be connected to each local output. Note that the remote input signal (from far-end) is automatically added to all local outputs when a call is made, and automatically disconnected when the call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

USAGE:

xCommand Audio LocalOutput ConnectInput OutputId: OutputId InputId: InputId [InputGain: InputGain]

where

OutputId: Integer (0..65534)
The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

InputId: Integer (0..65534)
The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the xCommand Audio LocalInput Add command. The remote input's ID was generated automatically when the call was made.

InputGain: Integer (-54..15)
Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.
Default value: 0

xCommand Audio LocalOutput DisconnectInput

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

Disconnect a local or remote input from a local output. Note that the remote input signal (from far-end) is automatically disconnected when a call is ended.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs, xStatus Audio Input LocalInput to get an overview of all local inputs, and xStatus Audio Input RemoteInput to see the remote input details.

This command is mainly intended for internal use by the Audio Console. If you don't use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

USAGE:

xCommand Audio LocalOutput DisconnectInput OutputId: OutputId InputId: InputId

where

OutputId: Integer (0..65534)
The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

InputId: Integer (0..65534)
The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the xCommand Audio LocalInput Add command. The remote input's ID was generated automatically when the call was made.
**xCommand Audio LocalOutput Remove**

**Applies to:** SX80  MX700/MX800/MX800D  CodecPro  Room70G2

**Requires user role:** ADMIN

Remove the local output given by the output ID.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

**USAGE:**

```
xCommand Audio LocalOutput Remove OutputId: OutputId
```

where

```
OutputId: Integer (0..65534)
```

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

**xCommand Audio LocalOutput RemoveConnector**

**Applies to:** SX80  MX700/MX800/MX800D  CodecPro  Room70G2

**Requires user role:** ADMIN

Detach an output connector from the local output given by the output ID. You need to enter both the connector’s type and number (ConnectorType, ConnectorId) to uniquely identify the connector.

Run xStatus Audio Output LocalOutput to get an overview of all local outputs.

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

**USAGE:**

```
xCommand Audio LocalOutput RemoveConnector OutputId: OutputId ConnectorType: ConnectorType ConnectorId: ConnectorId
```

where

```
OutputId: Integer (0..65534)
```

The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

```
ConnectorType:
    HDMI/Line { SX80 CodecPro }  
    HDMI/Line/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 line out connectors; Integer (1..1) for an HDMI with ARC (Audio Return Channel) connector { CodecPro Room70G2 }
```

Select a connector. The connectors’ numbers are printed on the codec connector panel.
xCommand Audio LocalOutput Update

**Applies to:** SX80 MX700/MX800/MX800D CodecPro Room70G2

**Requires user role:** ADMIN

Update the settings of the local output given by the output ID.

**Run xStatus Audio Output LocalOutput to get an overview of all local outputs.**

This command is mainly intended for internal use by the Audio Console. If you don’t use Audio Console, you need to manually add the command in a startup script, or use the macro framework, in order to make the definition persistent over a reboot.

**USAGE:**

```
xCommand Audio LocalOutput Update OutputId: [OutputId] [Name: "Name"] [AutoconnectRemote: AutoconnectRemote] [Loudspeaker: Loudspeaker] [Channels: Channels] [VolumeControlled: VolumeControlled]
```

**where**

- **OutputId:**
  - Integer (0..65534)
  - The unique identifier of the local output. It was generated when the local output was created with the xCommand Audio LocalOutput Add command.

- **Name:**
  - String (0, 255)
  - Choose a name that describes the local output.

- **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: <OutputId> InputId: <InputId> [InputGain: <InputGain>]
```

where

- **OutputId**
  - Integer (0..65534)
  - The unique identifier of the local output. It was generated when the local output was created with the `xCommand Audio LocalOutput Add` command.

- **InputId**
  - Integer (0..65534)
  - The unique identifier of the local or remote input. The local input's ID was generated when the local input was created with the `xCommand Audio LocalInput Add` command. The remote input's ID was generated automatically when the call was made.

- **InputGain**
  - Integer (-54..15)
  - Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.
  - Default value: 0

---

**xCommand Audio 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.

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: OutputId InputId: InputId [InputGain: InputGain]
```

where

- **OutputId**
  - Integer (0..65534)
  - The unique identifier of the remote output. It was automatically generated when the call was made.

- **InputId**
  - Integer (0..65534)
  - The unique identifier of the input. It was either generated when the input was created with the xCommand Audio Local Input Add command, or when the call was set up (remote input).

- **InputGain**
  - Integer (-54..15)
  - Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.
  - Default value: 0

xCommand Audio 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.

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: OutputId InputId: InputId
```

where

- **OutputId**
  - Integer (0..65534)
  - The unique identifier of the remote output. It was automatically generated when the call was made.

- **InputId**
  - Integer (0..65534)
  - The unique identifier of the input. It was either generated when the input was created with the xCommand Audio Local Input Add command, or when the call was set up (remote input).
xCommand Audio RemoteOutput UpdateInputGain

**Applies to:** SX80 MX700/MX800/MX800D CodecPro Room70G2

Requires user role: ADMIN

Update the gain of an input that is connected to a remote output. Note that the remote output is automatically removed when the call has ended.

Run `xStatus Audio Output RemoteOutput` to get an overview of the remote outputs, and `xStatus Audio Input LocalInput` to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call. Update the gain of an input that is connected to a remote output. Note that the remote output is automatically removed when the call has ended.

Run `xStatus Audio Output RemoteOutput` to get an overview of the remote outputs, and `xStatus Audio Input LocalInput` to get an overview of all local inputs.

This command is mainly intended for internal use by the Audio Console. It is only applicable during a call.

**USAGE:**

```
xCommand Audio RemoteOutput UpdateInputGain OutputId: [OutputId] InputId: [InputId] [InputGain: [InputGain]]
```

where

- **OutputId**: Integer (0..65534)
  - The unique identifier of the remote output. It was automatically generated when the call was made.

- **InputId**: Integer (0..65534)
  - The unique identifier of the input. It was either generated when the input was created with the `xCommand Audio Local Input Add` command, or when the call was set up (remote input).

- **InputGain**: Integer (-54..15)
  - Set the gain on the input signal. The gain can also be negative (attenuation). The value -54 dB equals Off.
  - Default value: 0

xCommand Audio Select

**Applies to:** DX70/DX80 RoomKit RoomKitMini Room55 DeskPro

Requires user role: ADMIN, USER

Select which type of audio device to use (built-in loudspeakers and microphone, headsets, or handset).

**USAGE:**

```
xCommand Audio Select Device: [Device]
```

where

- **Device**: Internal/Headset/Bluetooth/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/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: MeasurementLength] [Volume: Volume]
where
MeasurementLength: Integer (1..5)
Test signal duration for each speaker in seconds.
Default value: 1
Volume: Integer (1..30)
Test signal level.
Default value: 1

xCommand Audio SoundsAndAlerts Ringtone List
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, USER
List all available ringtones. Use the xConfiguration Audio SoundsAndAlerts RingTone setting to choose a ringtone.

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: Loop] RingTone: "RingTone"
```

where

- **Loop:**
  - On/Off
  - Repeats the chosen ringtone in a loop. To turn off the audio, use the Audio SoundsAndAlerts Ringtone Stop xCommand.

- **Default value:** Off

- **RingTone:**
  - String (1, 100)
  - The name of the ringtone.

xCommand Audio SoundsAndAlerts Ringtone Stop

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

Stops the chosen ringtone from playing. To start playing the ringtone again, use the Audio SoundsAndAlerts Ringtone Play xCommand.

**USAGE:**

```
xCommand Audio SoundsAndAlerts Ringtone Stop
```

xCommand Audio Volume Decrease

Applies to: All products
Requires user role: ADMIN, USER

Decrease the volume on the 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, Desk Pro, 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: Device] [Steps: Steps]
```

where

- **Device:** [ DX70/DX80 RoomKit RoomKitMini Room55 DeskPro ]
  - Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB
  - DX70/DX80 DeskPro
  - RoomKit RoomKitMini Room55

Choose whether to decrease the volume on the built-in loudspeakers, a Bluetooth headset (only Desk Pro, DX70, and DX80), an analog headset (only Desk Pro and DX70), a USB headset, or a USB handset.

- **Steps:**
  - Integer (1..10)
  - Choose the number of steps to decrease the volume with. One step is 0.5 dB.

- **Default value:** 5
xCommand Audio Volume Increase

Applies to: All products
Requires user role: ADMIN, USER

Increase the volume on the 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, Desk Pro, 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 DeskPro]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB [DX70/DX80 DeskPro]

Internal/HeadsetUSB/HandsetUSB [RoomKit RoomKitMini Room55]

Choose whether to increase the volume on the built-in loudspeakers, a Bluetooth headset (only Desk Pro, DX70, and DX80), an analog headset (only Desk Pro and DX70), a USB headset, or a USB handset.

Steps:

Integer (1..10)

Choose the number of steps to increase the volume with. One step is 0.5 dB.

Default value: 5

xCommand Audio Volume Mute

Applies to: All products
Requires user role: ADMIN, USER

Mute the volume on the 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, Desk Pro, 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: Device] Level: Level
where

Device: [DX70/DX80 RoomKit RoomKitMini Room55 DeskPro]

Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB [DX70/DX80 DeskPro]

Internal/HeadsetUSB/HandsetUSB [RoomKit RoomKitMini Room55]

Choose whether to set the volume on the built-in loudspeakers, a Bluetooth headset (only Desk Pro, DX70, and DX80), an analog headset (only Desk Pro and DX70), a USB headset, or a USB handset.

Level:

Integer (0..100)

Select the gain level. 70 equals 0 dB gain, and 100 equals 15 dB gain.
xCommand Audio Volume SetToDefault

Applies to: All products
Requires user role: ADMIN, USER

Set the volume to the default level that is defined in the xConfiguration Audio DefaultVolume setting.
Note that DX70, DX80, Desk Pro, Room Kit, Room Kit Mini, and Room 55 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: Device]
```
where
```
Device: { DX70/DX80  RoomKit  RoomKitMini  Room55  DeskPro }  
Internal/HeadsetUSB/HandsetUSB { RoomKit  RoomKitMini  Room55 }  
Internal/HeadsetBluetooth/HeadsetAnalog/HeadsetUSB/HandsetUSB { DX70/DX80  DeskPro }
```
Choose whether to set the volume on the built-in loudspeakers, a Bluetooth headset (only Desk Pro, DX70, and DX80), an analog headset (only Desk Pro and DX70), 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:**

```xml
<xCommand Audio VuMeter Start
    ConnectorID: <ConnectorID>
    ConnectorType: <ConnectorType>
    IncludePairingQuality: <IncludePairingQuality>
    IntervalMs: <IntervalMs>
```

**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, DeskPro, 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 start 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 (DeskPro, 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:  ConnectorID ConnectorType:  ConnectorType
```

where

- **ConnectorID:**
  - Integer (1..8) for Microphone; Integer (1..4) for Line; Integer (1..3) for HDMI [ SX80 MX700/MX800/MX800D ]
  - Integer (1..8) for Microphone; Integer (1..5) for HDMI [ CodecPro Room70G2 ]
  - Integer (1..2) for Microphone; Integer (1..1) for Line [ SX20 ]
  - Integer (1..2) for Microphone; Integer (1..1) for HDMI [ SX10 RoomKit CodecPlus Room55 Room70/Room55D ]
  - Integer (1..1) for Microphone; Integer (1..1) for HDMI [ RoomKitMini DeskPro 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 [ DeskPro 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: "Id"
   where
      Id:
         String (0, 128)
         The booking ID of a call or conference.

xCommand Bookings List
Applies to: All products
Requires user role: ADMIN, USER
List the stored bookings for the 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: Days] [DayOffset: DayOffset] [Limit: Limit] [Offset: Offset]
   where
      Days:
         Integer (1..365)
         Number of days to retrieve bookings from.
      DayOffset:
         Integer (0..365)
         Which day to start the search from (today: 0, tomorrow: 1, ...).
         Default value: 0
      Limit:
         Integer (1..65534)
         Max number of bookings to list.
      Offset:
         Integer (0..65534)
         Offset number of bookings for this search.
         Default value: 0
xCommand Bookings NotificationSnooze

Applies to: All products
Requires user role: ADMIN, USER

Sets notifications for the stored bookings in this device to snooze.

**USAGE:**

```
xCommand Bookings NotificationSnooze [Id: "Id"] [SecondsToSnooze: SecondsToSnooze]
```

where

- **Id**: String (0, 128)
  - The ID of the notification snooze setting.
- **SecondsToSnooze**: Integer (1..3600)
  - The duration of the snooze period, in seconds.
  - Default value: 300

Call commands

xCommand Call Accept

Applies to: All products
Requires user role: ADMIN, USER

Accept an incoming call. If no CallId is specified, all incoming calls are accepted.

**USAGE:**

```
xCommand Call Accept [CallId: CallId]
```

where

- **CallId**: Integer (0..65534)
  - The CallId is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.
  - Default value: 0

xCommand Call Disconnect

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

Disconnect a call.

**USAGE:**

```
xCommand Call Disconnect [CallId: CallId]
```

where

- **CallId**: Integer (0..65534)
  - The CallId is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.
  - Default value: 0
xCommand Call DTMFSend
Applies to: All products
Requires user role: ADMIN, USER
Send DTMF tones to the far end.

**USAGE:**
xCommand Call DTMFSend [CallId: CallId] DTMFString: "DTMFString"

where:

**CallId:**
Integer (0..65534)
The CallId is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.
Default value: -1

**DTMFString:**
String (0..32)
Enter the DTMF string.

xCommand Call FarEndControl Camera Move
Applies to: All products
Requires user role: ADMIN, USER
Move the far end camera (the remote camera).
NOTE: The far end camera moves in the specified direction until the stop command (ref: xCommand FarEndControl Camera Stop) is issued.

**USAGE:**
xCommand Call FarEndControl Camera Move [CallId: CallId] Value: Value

where:

**CallId:**
Integer (0..65534)
The CallId is returned when the xCommand Dial command is run. During the call you can run the xStatus Call command to see the CallId.
Default value: -1

**Value:**
Left/Right/Up/Down/ZoomIn/ZoomOut
Select the action for how to move the camera.

xCommand Call FarEndControl Camera Stop
Applies to: All products
Requires user role: ADMIN, USER
Stop the far end camera after the xCommand FarEndControl Camera Move has been issued.

**USAGE:**
xCommand Call FarEndControl Camera Stop [CallId: CallId]

where:

**CallId:**
Integer (0..65534)
The CallId is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
Default value: -1
**xCommand Call FarEndControl RoomPreset Activate**

**Applies to:** All products

**Requires user role:** ADMIN, USER

While in a call, this command is used to activate a preset on the far end codec. The preset covers the far end codec's camera positions and input video switcher settings. The preset must be stored on the far end codec beforehand, either by using the xCommand Preset Store command locally on the far end codec, or by using the xCommand FarEndControl Preset Store command from a remote codec.

Note: The far end codec's xConfiguration Conference FarEndControl Mode setting must be switched On for the FarEndControl commands to work.

**USAGE:**

xCommand Call FarEndControl RoomPreset Activate [CallId: CallId] PresetId: PresetId

where

- **CallId**
  - Integer (0..65534)
  - The CallId is required to identify the far end codec only when in a Multipoint call. The CallId is returned when issuing the xCommand Dial command. During a call you can run the xStatus Call command to see the CallId.
  - Default value: -1

- **PresetId**
  - Integer (1..15)
  - The ID of the preset that is stored on the far end codec.

**xCommand Call FarEndControl Source Select**

**Applies to:** All products

**Requires user role:** ADMIN, USER

Select which video input source to use as the main source on the far end device.

**USAGE:**

xCommand Call FarEndControl Source Select [CallId: CallId] SourceId: 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: "Text" Type: "Type" [CallId: CallId]
```

where
- **Text**: String (1, 1450)
  - Enter the message to be sent to the far end.
- **Type**: String (0, 255)
  - Enter the message type to be sent to the far end.
- **CallId**: Integer (0..65534)
  - The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

xCommand Call FarEndMessage SStringSend

Applies to: SX80
Requires user role: ADMIN, USER

Send data between two codecs in a point-to-point call, for use with control systems or macros. Works with H.323 and SIP calls. Uses the H.224 data channel (UDP). We recommend to use the new version of the command: xCommand Call FarEndMessage Send.

USAGE:
```
xCommand Call FarEndMessage SStringSend Message: "Message" [CallId: CallId]
```

where
- **Message**: String (0, 255)
  - Enter the message to be sent to the far end.
- **CallId**: Integer (0..65534)
  - The CallId is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

xCommand Call FarEndMessage TStringSend

Applies to: SX80
Requires user role: ADMIN, USER

Send data between two codecs in a point-to-point call, for use with control systems or macros. Works with H.323 calls only. Uses the H.245 control channel (TCP).

USAGE:
```
xCommand Call FarEndMessage TStringSend Message: "Message" CallId: CallId
```

where
- **Message**: String (0, 255)
  - Enter the message to be sent to the far end.
- **CallId**: Integer (0..65534)
  - The CallId is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
xCommand Call Forward
Applies to: All products
Requires user role: ADMIN, USER

Specifies what number or URI you want to forward your incoming calls to. The display name is a local reference for the forwarded destination. A message, together with the local reference, is shown on screen when you have configured the device to forward all calls.

USAGE:
```
xCommand Call Forward DisplayName: "DisplayName" Number: "Number"
```
where
- **DisplayName**:
  - String (0, 255)
  - The local reference for the forwarded destination.
- **Number**:
  - String (0, 255)
  - The directory number or URI which you want to forward the incoming calls to.

xCommand Call 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: CallId
```
where
- **CallId**:
  - Integer (0..65534)
  - The CallId is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.

xCommand Call Join
Applies to: All products
Requires user role: ADMIN, USER

Internal usage only.

USAGE:
```
xCommand Call Join [CallId: CallId]
```
where
- **CallId**:
  - Integer (0..65534)
  - You can have from 1 to 10 CallId parameters in the same command.

xCommand Call Hold
Applies to: All products
Requires user role: ADMIN, USER

Put a call on hold.

USAGE:
```
xCommand Call Hold [CallId: CallId] [Reason: Reason]
```
where
- **CallId**:
  - Integer (0..65534)
  - The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
- **Default value**: 0
- **Reason**:
  - Conference/Transfer/Other
  - Internal usage only.
  - Default value: Other
xCommand Call 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: CallId]
where
   CallId:
       Integer (0..65534)
       The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
       Default value: 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: CallId]
where
   CallId:
       Integer (0..65534)
       The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
       Default value: 0

xCommand Call UnattendedTransfer
Applies to: All products
Requires user role: ADMIN, USER
Transfers an ongoing call to another participant. Fully supported for SIP calls only.

USAGE:
xCommand Call UnattendedTransfer CallId: CallId Number: "Number"
where
   CallId:
       Integer (0..65534)
       The CallID is returned when the xCommand Dial command is run. During a call you can run the xStatus Call command to see the CallId.
   Number:
       String (0, 255)
       The number the call is 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: CallHistoryId
[AcknowledgeConsecutiveDuplicates: AcknowledgeConsecutiveDuplicates]
```

**where**  
```
CallHistoryId: Integer (1..2147483647)
CallHistoryId for the call in question. Run xCommand CallHistory Get to get the id number.

AcknowledgeConsecutiveDuplicates: False/True
You can include or exclude all surrounding calls with duplicate information.
Default value: False
```

### xCommand CallHistory DeleteAll

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

Deletes all information on previous calls.  

**USAGE:**  
```
xCommand CallHistory DeleteAll [Filter: Filter]
```

**where**  
```
Filter: All/Missed/Placed/Received
You can filter which calls to delete.
Default value: All
```

### xCommand CallHistory DeleteEntry

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

Deletes all information on the specified call.  

**USAGE:**  
```
xCommand CallHistory DeleteEntry CallHistoryId: CallHistoryId
[DeleteConsecutiveDuplicates: DeleteConsecutiveDuplicates]
```

**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:

\[ xCommand \text{ CallHistory Get } [\text{Filter: Filter}] \ [\text{Offset: Offset}] \ [\text{Limit: Limit}] \ [\text{DetailLevel: DetailLevel}] \ [\text{SearchString: "SearchString"}] \ [\text{CallHistoryId: CallHistoryId}] \]

where

Filter:
- All/Missed/AnsweredElsewhere/Forwarded/Placed/Pmr/NoAnswer/Received/Rejected/UnacknowledgedMissed
- You can filter which calls to retrieve. Pmr refers to a personal meeting room.
- Default value: All

Offset:
- Integer (0..65534)
- Sets the call from which to start.
- Default value: 0

Limit:
- Integer (0..65534)
- Defines the amount of calls in the output.
- Default value: 65534

DetailLevel:
- Basic/Full
- Sets the level of detail for the information on these calls.
- Default value: Basic

SearchString:
- String (0..255)
- Allows you to set the command to apply to a specified display name or call back number.
- Default value: ""

CallHistoryId:
- Integer (1..2147483647)
- CallHistoryId 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:

\[ xCommand \text{ CallHistory Recents } [\text{Filter: Filter}] \ [\text{Offset: Offset}] \ [\text{Limit: Limit}] \ [\text{DetailLevel: DetailLevel}] \ [\text{SearchString: "SearchString"}] \ [\text{Order: Order}] \]

where

Filter:
- All/Missed/AnsweredElsewhere/Forwarded/Placed/Pmr/NoAnswer/Received/Rejected/UnacknowledgedMissed
- You can filter which calls to retrieve. Pmr refers to a personal meeting room.
- 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/Room55S Room70G2 DeskPro
Requires user role: ADMIN, INTEGRATOR, USER
Reset the camera position to default position.

USAGE:
xCommand Camera PositionReset [Axis: Axis] CameraId: CameraId
where
Axis:
All/Focus/Pan/Tilt/Zoom
Select which function to reset. If not specified all are reset.
Default value: All
CameraId:
Integer (1..1) [ SX10 SX20 MX200G2/MX300G2 DeskPro ]
Integer (1..7) [ SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55S 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 DeskPro 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: CameraId [Focus: Focus] [Lens: Lens] [Pan: Pan] [Roll: Roll] [Tilt: Tilt] [Zoom: Zoom]
where
CameraId:
Integer (1..1) [ SX10 SX20 MX200G2/MX300G2 RoomKit RoomKitMini Room55 DeskPro Bardo ]
Integer (1..7) [ SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2 ]
The ID of the camera preset you want to reset.
Focus:
Integer (0..65535)
Focus the camera near or far.
Lens:
Wide/Center/Left/Right
Set the camera’s lens position.
Pan:
Integer (-10000..10000)
Move the camera to the left or right.
Roll:
Snapshot 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, DeskPro, Boards

**Requires user role:** ADMIN, USER

Activate one of the stored camera presets.

Note that the xCommand Camera Preset commands apply 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:**

```plaintext
xCommand Camera Preset Activate PresetId: [PresetId]
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, DeskPro, 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:**

```plaintext
xCommand Camera Preset ActivateDefaultPosition [CameraId: [CameraId]]
where
CameraId:
  Integer (1..1) [SX10, SX20, SX80, MX200G2/MX300G2, MX700/MX800/MX800D, RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro, Boards]
  Integer (1..7) [SX80, MX700/MX800/MX800D, CodecPlus, CodecPro, Room70/Room55D, Room70G2]
  The ID of the camera preset you want to activate. If CameraId 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, DeskPro, 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 apply 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:**

```plaintext
xCommand Camera Preset Edit PresetId: [PresetId] [ListPosition: [ListPosition]]
where
PresetId:
  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: ["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.
DefaultPosition: [DefaultPosition]
  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.
```

Note: The provided content is a natural representation of the document text, excluding any graphical elements or formatting not directly translatable into plain text.
xCommand Camera Preset List

**Applies to:** SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room70G2 Room70G2 DeskPro 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: CameraId] [DefaultPosition: DefaultPosition]
```

where

- **CameraId:**
  - Integer (1..1) [ SX10 SX20 SX80 MX200G2/MX300G2 RoomKit RoomKitMini Room55 Room70/Room70G2 Room70G2 DeskPro Boards ]
  - Integer (1..7) [ SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room70G2 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/Room70G2 Room70G2 DeskPro 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: PresetId
```

where

- **PresetId:**
  - Integer (1..35)
  - The ID of the camera preset you want to remove.

xCommand Camera Preset Show

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

**Requires user role:** ADMIN, USER

Shows the preset details for the requested PresetId.

**USAGE:**

```
xCommand Camera Preset Show PresetId: PresetId
```

where

- **PresetId:**
  - Integer (1..35)
  - The ID of the camera preset you wish to see.
xCommand Camera Preset Store

Applies to: SX10  SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  RoomKitMini  CodecPlus
CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro  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 CameraId 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: PresetId] CameraId: CameraId
[ListPosition: ListPosition] [Name: "Name"] [TakeSnapshot: TakeSnapshot]
[DefaultProsition: DefaultProsition]
```

Where

- **PresetId**: Integer (1..35)
  The ID of this camera preset. If not set explicitly, the codec will assign a preset ID automatically.

- **CameraId**: Integer (1..1) [ SX10  SX20  SX80  MX200G2/MX300G2  RoomKit  RoomKitMini  Room55  Room70/Room55D  Room70G2  DeskPro  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.

- **Name**: 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  DeskPro  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 CameraId 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: CameraId [Pan: Pan] [PanSpeed: PanSpeed] [Tilt: Tilt] [TiltSpeed: TiltSpeed] [Zoom: Zoom] [ZoomSpeed: ZoomSpeed] [Focus: Focus]
```

where

- **CameraId**: Integer (1..7)  
  - SX80  MX700/MX800/MX800D  CodecPlus  CodecPro  Room70/Room55D  Room70G2  
  - SX10  SX20  MX200G2/MX300G2  RoomKit  RoomKitMini  Room55  DeskPro  Boards

Select the camera.

- **Pan**: Left/Right/Stop
  - Move the camera to the Left or Right, followed by Stop.

- **PanSpeed**: Integer (1..15)
  - Set the pan speed.

- **Tilt**: Down/Up/Stop
  - Move the camera Up or Down, followed by Stop.

- **TiltSpeed**: Integer (1..15)
  - Set the tilt speed.

- **Zoom**: In/Out/Stop
  - Zoom the camera In or Out, followed by Stop.

- **ZoomSpeed**: Integer (1..15)
  - Set the zoom speed.

- **Focus**: Far/Near/Stop
  - Focus the camera Far or Near, followed by Stop.

xCommand Camera TriggerAutofocus

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

Requires user role: ADMIN, USER

Trigger the auto-focus functionality. The camera must support auto-focus functionality. If the camera is daisy chained, the CameraId is given by its place in the chain.

USAGE:

```
xCommand Camera TriggerAutofocus CameraId: CameraId
```

where

- **CameraId**: Integer (1..7)  
  - SX80  MX700/MX800/MX800D  CodecPlus  CodecPro  Room70/Room55D  Room70G2  
  - SX10  SX20  MX200G2/MX300G2  DeskPro

Select the camera to auto-focus.
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: \( \text{CameraId} \)
where
\( \text{CameraId} \):
1..7
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: \( \text{CameraId} \)
where
\( \text{CameraId} \):
1..7
Select which camera to diagnose.

xCommand Cameras Background Set
Applies to: DeskPro
Requires user role: ADMIN, INTEGRATOR, USER
Specify the camera background settings. The Cameras Background Enabled configuration must be True for this command to take effect.

USAGE:
xCommand Cameras Background Set [Image: \( \text{Image} \)] [Mode: \( \text{Mode} \)]
where
\( \text{Image} \):
Image1/Image2/Image3
The image to use as the background. For the image to be shown, the "xCommand Cameras Background Set Mode" must be set to "Image".
Image 1-3 is a set of pre-installed images.
Image1 = Office space
Image2 = Home office
Image3 = Beach
\( \text{Mode} \):
Disabled/Blur/BlurMonochrome/DepthOfField/Monochrome/Image
The mode for the background image. Options include:
\( \text{Disabled} \): There are no images or effects masking the background of the camera view.
\( \text{Blur} \): The background is blurred.
\( \text{BlurMonochrome} \): combination of blur and monochrome (blurred without colors)
\( \text{DepthOfField} \): variant of blur with less blurring
\( \text{Monochrome} \): Shows the image in grayscale
\( \text{Image} \): The background is replaced by the selected background image.
**xCommand Cameras PresenterTrack ClearPosition**

**Applies to:** SX80, MX700/MX800/MX800D, Codec Pro, 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, Codec Pro, 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: **Mode**

where

**Mode:**

- **Off/Follow/Diagnostic/Background/Setup/Persistent**
  - **Off:** Turn off presenter tracking.
  - **Follow:** Turn on presenter tracking. This is the default mode when the feature is activated from the Touch user interface. Presenter tracking is automatically turned off when camera moves to a different preset, when another camera is selected, or when standby is activated.
  - **Diagnostic:** Turn on diagnostic mode in order to troubleshoot presenter tracking, or to see exactly what happens on the 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
Persistent mode is automatically turned off when camera moves to a different preset.

**xCommand Cameras PresenterTrack StorePosition**

This is a command that stores 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.

**Example Usage:**
```
xCommand Cameras PresenterTrack StorePosition
```

**xCommand Cameras SpeakerTrack Activate**

This command activates SpeakerTrack or Best Overview mode. It requires that xConfiguration Cameras SpeakerTrack Mode is set to Auto (default).

**Example Usage:**
```
xCommand Cameras SpeakerTrack Activate
```

**xCommand Cameras SpeakerTrack Deactivate**

This command deactivates SpeakerTrack or Best Overview mode.

**Example Usage:**
```
xCommand Cameras SpeakerTrack Deactivate
```

**xCommand Cameras SpeakerTrack Diagnostics Start**

This command starts diagnostics on the camera's tracking. The Tracking parameter only applies to the SpeakerTrack 60 camera and MX700/MX800 with dual camera.

**Example Usage:**
```
xCommand Cameras SpeakerTrack Diagnostics Start [Tracking: On/Off]
```

Where:
- **Tracking:**
  - **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 tracking diagnostics from one camera at a time.

  Default value: **On**

**Example Usage:**
```
xCommand Cameras SpeakerTrack Diagnostics Start [Tracking: On]
```

**Example Usage:**
```
xCommand Cameras SpeakerTrack Diagnostics Start [Tracking: Off]
```
xCommand Cameras SpeakerTrack Whiteboard ActivatePosition

**Applies to:** SX80, MX700/MX800/MX800D, RoomKit, CodecPlus, CodecPro, Room55, Room70/Room577D, 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: CameraId [WhiteboardId: WhiteboardId]
```

where

- **CameraId**: `Integer(1..1)`
  - SX80
  - MX700/MX800/MX800D
  - RoomKit
  - CodecPlus
  - CodecPro
  - Room55
  - Room70/Room577D
  - Room70G2

- **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/Room577D, 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: CameraId Distance: Distance
```

where

- **CameraId**: `Integer(1..2)`
  - SX80
  - MX700/MX800/MX800D
  - CodecPlus
  - CodecPro
  - Room70G2

- **Distance**: `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:**

```bash
gxCommand Cameras SpeakerTrack Whiteboard SetDistance Distance: Distance
[WhiteboardId: WhiteboardId]
```

where

**Distance:**

Integer (0..65534)

Set distance to whiteboard in centimeters. Use an accurate measurement for the feature to work seamlessly.

**WhiteboardId**

Integer (1..8)

The id set for the camera position used for the snap-to-whiteboard feature. Currently only id 1 can be used.

Default value: 1

xCommand Cameras SpeakerTrack Whiteboard StorePosition

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

Requires user role: ADMIN, USER

Store the position of the specified camera as the Snap to Whiteboard position. Frame the image so that there is room around the whiteboard for the speaker. To use the Snap to Whiteboard feature it must be enabled with xConfiguration Cameras SpeakerTrack Whiteboard Mode and tracking must be enabled with xConfiguration Cameras SpeakerTrack Mode.

Note: For MX700 and MX800 with a dual camera, and for SX80 and Codec Pro with a SpeakerTrack 60 camera, you must store a snap-to-whiteboard position for both cameras.

**USAGE:**

```bash
gxCommand Cameras SpeakerTrack Whiteboard StorePosition CameraId: CameraId
[WhiteboardId: WhiteboardId]
```

where

**CameraId:**

Integer (1..1) [ RoomKit  Room55  Room70/Room55D ]

Integer (1..2) [ CodecPlus ]

Integer (1..7) [ SX80  MX700/MX800/MX800D  CodecPro  Room70G2 ]

The ID of the camera that is being positioned.

**WhiteboardId**

Integer (1..8)

You can give the position an id number. Currently the only id that can be used is 1.

Default value: 1
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: CallId]
ParticipantRole: ParticipantRole [Pin: Pin]
```

where
- **CallId**: 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.
- **Pin**: 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
- **Timeout**: Integer (1..1440)
  - Set the number of minutes before Do Not Disturb is switched off. If not set, Do Not Disturb times out after 1440 minutes (24 hours).

xCommand Conference DoNotDisturb Deactivate

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

Switch off the Do Not Disturb mode. When Do Not Disturb is switched off incoming calls come through as normal.

USAGE:
```
xCommand Conference DoNotDisturb Deactivate
```
xCommand Conference 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 Participant List Search command (*r ParticipantListSearchResult Participant [n] Status = "waiting").

USAGE:

```
xCommand Conference Participant Admit CallId: CallId ParticipantId: "ParticipantId"
```

where

- **CallId**: 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: CallId ParticipantId: "ParticipantId"
```

where

- **CallId**: 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 Capabilities ParticipantMute status shows Available.

**USAGE:**

```
xCommand Conference Participant Mute AudioMute CallId ParticipantId: "ParticipantId"
```

where

- **AudioMute:**
  - On/Off
  - Indicate the desired mute state of the participant.

- **CallId:**
  - 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 Capabilities ParticipantList status shows Available.

**USAGE:**

```
xCommand Conference Participant Search [CallId: CallId] [Limit: Limit] [Offset: Offset] [SearchString: "SearchString"]
```

where

- **CallId:**
  - 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

- **Limit:**
  - 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

- **Offset:**
  - 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.
  - Default value: ""
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: CallId]

where

CallId:

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: CallId]

where

CallId:

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: CallId]

where

CallId:

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 stopped. When you are recording a meeting, you can use this setting to stop recording.

**USAGE:**

xCommand Conference Recording Stop [CallId: CallId]

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: [CallId: CallId]
```

Where

- **Target:**
  - Local/Remote
    - Identifies local or remote participant.
- **CallId:**
  - Integer (0..65534)
    - Identify CallID for the remote participant. Only relevant if Target is set to "remote".
  - Default value: 0

Diagnostics commands

xCommand Diagnostics Run

Applies to: All products
Requires user role: ADMIN

This command runs self-diagnostics commands on the device.

**Usage:**

```
xCommand Diagnostics Run [ResultSet: ResultSet]
```

Where

- **ResultSet:**
  - Alerts/All/None
    - You can filter the diagnostics results to alerts, all or none. If not set, the result will show all results.
      - Default value: Alerts
Dial commands

xCommand Dial

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

Dial out from the device. Returns information about the CallId and ConferenceId, which are required for some of the other commands.

USAGE:

xCommand Dial Number: "Number" [Protocol: Protocol] [CallRate: CallRate] [CallType: CallType] [BookingId: "BookingId"] [Appearance: Appearance] [DisplayName: "DisplayName"] [TrackingData: "TrackingData"]

where

Number:
String (0, 255)
Enter the number or address.

Protocol:
H320/H323/Sip/Spark
Select the call protocol.

CallRate:
Integer (64..6000) [DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro]

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.

Appearance:
Integer (1..999999999)
Not applicable. For internal usage only.

DisplayName:
String (0, 255)
The display name of the remote participant. Default value: 

TrackingData:
String (0, 255)
Adds a tag to a call, so that it can be identified in the call history. Default value: 

GPIO commands

**xCommand GPIO ManualState Set**

*Applies to:* SX80, MX700/MX800/MX800D CodecPro, Room70G2

Requires user role: ADMIN, USER

Set the state of a GPIO pin that is configured to OutputManualState mode (ref. xConfiguration GPIO Pin [1..4] Mode).

**USAGE:**

```
```

where

- **Pin1:** High/Low
- **Pin2:** High/Low
- **Pin3:** High/Low
- **Pin4:** 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 identifier 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: AllowInsecureHTTPS] [Header: "Header"] [ResponseSizeLimit: ResponseSizeLimit] [ResultBody: ResultBody] [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  

```
Header: 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  

```
ResultBody: 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: AllowInsecureHTTPS] [Header: "Header"] [ResponseSizeLimit: ResponseSizeLimit] [ResultBody: ResultBody] [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

- `Header`:

  *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

- `ResultBody`:

  *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:**

```plaintext
xCommand HttpClient Patch [AllowInsecureHTTPS: AllowInsecureHTTPS] [Header: "Header"] [ResponseSizeLimit: ResponseSizeLimit] [ResultBody: ResultBody] [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

**Header**: String (0, 1024)
An HTTP header field. You can add up to 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

**ResultBody**: 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 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: AllowInsecureHTTPS] [Header: "Header"] [ResponseSizeLimit: ResponseSizeLimit] [ResultBody: ResultBody] [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

**Header:**

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

**ResultBody:**

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**

Appplies 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: AllowInsecureHTTPS] [Header: "Header"] [ResponseSizeLimit: ResponseSizeLimit] [ResultBody: ResultBody] [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

- **Header**:

  *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

- **ResultBody**:

  *None/PlainText/Base64*

  - **None**: The body of the HTTP response (if any) is not included in the command result.

  - **None**: 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: FeedbackSlot
```

where

- **FeedbackSlot:**
  - *Integer (1..4)*
  - Deregister the feedback slot that was registered using the xCommand HttpFeedback Register command.

#### xCommand HttpFeedback Enable

**Applies to:** All products

**Requires user role:** ADMIN

Re-enables a previously registered feedback slot after it has failed and become deactivated.

**USAGE:**

```
xCommand HttpFeedback Enable FeedbackSlot: FeedbackSlot
```

where

- **FeedbackSlot:**
  - *Integer (1..4)*
  - Specifies the feedback slot that is enabled.
xCommand HttpFeedback Register

Applies to: All products
Requires user role: ADMIN

Register the device to an HTTP(S) server to return XML feedback over HTTP(S) to specific URLs.

**USAGE:**

```plaintext
xCommand HttpFeedback Register FeedbackSlot: FeedbackSlot [Format: Format]
ServerUrl: ServerUrl [Expression: Expression]
```

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:**

```plaintext
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 DeskPro 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 DeskPro Boards

Requires user role: ADMIN

Shows the logs for all running macros and for the runtime itself.

**USAGE:**

```
xCommand Macros Log Get [Offset: Offset]
```

where

```
Offset: Integer (0..65534)
```

Shows lines with the same or higher Offset than the one provided.

Default value: 0

**xCommand Macros Macro Activate**

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

Requires user role: ADMIN

Activates a macro created on this device.

**USAGE:**

```
xCommand Macros Macro Activate Name: "Name"
```

where

```
Name: 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 DeskPro Boards

Requires user role: ADMIN

Deactivates a macro currently running on this device.

**USAGE:**

```
xCommand Macros Macro Deactivate Name: "Name"
```

where

```
Name: String (0, 255)
```

The name of the macro to deactivate.
xCommand Macros Macro Get

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

Requires user role: ADMIN

Shows the details of a macro created on this device.

USAGE:
xCommand Macros Macro Get [Content: Content] [Name: "Name"]

where

Content:
False/True
Shows the content for the specified Macro or not.
Default value: False

Name:
String (0, 255)
The name of the macro.

xCommand Macros Macro Remove

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

Requires user role: ADMIN

Removes a macro created on this device.

USAGE:
xCommand Macros Macro Remove Name: "Name"

where

Name:
String (0, 255)
The name of the macro that is removed.

xCommand Macros Macro RemoveAll

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

Requires user role: ADMIN

Renames a macro created on this device.

USAGE:
xCommand Macros Macro Rename Name: "Name" NewName: "NewName" [Overwrite: Overwrite]

where

Name:
String (0, 255)
The name of the macro that is renamed.

NewName:
String (0, 255)
The new name of the macro.

Overwrite:
False/True
Overwrites the existing content or not.
Default value: False
xCommand Macros Macro Roles Set

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

Requires user role: ADMIN

Sets the role for a macro.

**USAGE:**

xCommand Macros Macro Roles Set Name: "Name" [Role: Role]

where

**Name:**

String (0, 255)
The name of the macro that is set.

**Role:**

Admin/Audit/User/Integrator/RoomControl
The role that is set for this macro.
Default value: Admin

xCommand Macros Macro Save

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

Requires user role: ADMIN

Saves the details of a macro. This is a multiline command.

**USAGE:**

xCommand Macros Macro Save Name: "Name" [Overwrite: Overwrite] [Transpile: Transpile]

where

**Name:**

String (0, 255)
The name of the macro that is saved.

**Overwrite:**

False/True
Overwrites the existing content or not.
Default value: True

**Transpile:**

False/True
Translates current JavaScript language features into EcmaScript 5.0/5.1.
Default value: True

xCommand Macros Runtime Restart

**Applies to:** DX70/DX80  SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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  DeskPro  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  DeskPro  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  DeskPro  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: "Text"
```

where

- **Text:**
  - String (0, 255)
  - The text that the message contains.
Network commands

xCommand Network SMTP VerifyConfig

Applies to: DX70/DX80 SX80 RoomKitMini DeskPro Boards
 Requires user role: ADMIN, USER

 Verifies if the SMTP server is configured in the instance emails are not being sent.

 USAGE:
 xCommand Network SMTP VerifyConfig

xCommand Network Wifi Configure

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

 Configures the device to connect to a specific Wi-Fi network.
 This is only available if the Wi-Fi is enabled on the device.
 To do this, you must unplug the ethernet cable.
 Then, you must connect to the terminal over Wi-Fi.

 USAGE:

 where
 AllowMissingCA:
 False/True
 The policy for allowing a web connection with missing Certificate Authentication (CA).
 False: Not Allowed, True: Allowed

 AnonymousIdentity:
 String (0, 255)
 The anonymous identity, if applicable.

 Identity:
 String (0, 255)
 The username for the Wi-Fi connection, if applicable.

 Password:
 String (0, 255)
 The password for the Wi-Fi connection, if applicable.

 SSID:
 String (0, 255)
 The SSID for the Wi-Fi connection.

 Type:
 The encryption type for the Wi-Fi connection.
 We support: open networks (not secured), WPA-PSK (AES), WPA2-PSK (AES), EAP-TLS,
EAP-TTLS, EAP-FAST, PEAP, EAP-MSCHAPv2, EAP-GTC

xCommand Network Wifi Delete

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

Requires user role: ADMIN, USER

Deletes the specified Wi-Fi network connection from the device. This command is only available if Wi-Fi services are turned on and ethernet is disconnected.

**USAGE:**

```
xCommand Network Wifi Delete SSID: "SSID"
```

where

- **SSID**: String (0, 255)
  
  The SSID for the Wi-Fi connection.

xCommand Network Wifi List

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

Requires user role: ADMIN, USER

Lists the details of the current Wi-Fi connection. This command is only available if Wi-Fi services are turned on and ethernet is disconnected.

**USAGE:**

```
xCommand Network Wifi List
```

xCommand Network Wifi Scan Start

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

Requires user role: ADMIN, USER

Scans for available Wi-Fi networks.

**USAGE:**

```
xCommand Network Wifi Scan Start [Duration: Duration]
```

where

- **Duration**: Integer (1..30)
  
  The duration of the Wi-Fi scan, in seconds.
  
  Default value: 10

xCommand Network Wifi Scan Stop

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

Requires user role: ADMIN, USER

Stops an ongoing Wi-Fi scan.

**USAGE:**

```
xCommand Network Wifi Scan Stop
```
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)

SoftwareInfo:
The device’s serial number.
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: Connected] [Type: Type]
where
- **Connected:** False/True
  - Limit the search to currently connected devices.
- **Type:** 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: AutoPairing] [DeviceType: DeviceType] [Timeout: Timeout]
where
- **AutoPairing:** On/Off
  - You can select to automatically pair the detected device to the video conferencing device.
  - Default value: Off
- **DeviceType:** ISDNLink
  - Only look for ISDN Link.
- **Timeout:** Integer (3..60)
  - Set a maximum time for the search from 3 to 60 seconds.
  - Default value: 10

xCommand Peripherals Pairing Pair

Applies to: All products
Requires user role: ADMIN

Pair an ISDN Link to a video conferencing device.

**USAGE:**
xCommand Peripherals Pairing Pair MacAddress: "MacAddress"
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:**

```plaintext
xCommand Peripherals Pairing Unpair MacAddress: "MacAddress"
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:**

```plaintext
xCommand Peripherals Purge ID: "ID"
where
   ID: String (1, 100)
   Mac address of the ISDN Link in the format "xxxxxxxxxxxxx".
```

---

**Phonebook commands**

**xCommand Phonebook Contact Add**

**Applies to:** All products

**Requires user role:** ADMIN, USER

Add a new contact to the local phonebook. The command returns the ContactId, which is a unique string that identifies the contact; typically, the format is "localContactId-n".

You can add several contact methods to a contact using the xCommand Phonebook ContactMethod Add command. Note that only the first contact method will appear in the Favorites list on the Cisco Touch controller. All contact methods are available on the other UIs.

**USAGE:**

```plaintext
xCommand Phonebook Contact Add Name: "Name" [Number: "Number"] [CallRate: CallRate] [CallType: CallType] [Device: Device] [FolderId: "FolderId"] [ImageURL: "ImageURL"] [Protocol: Protocol] [Tag: Tag] [Title: "Title"]
where
   Name: String (0, 255)
   The name of the contact.
   Number: String (0, 255)
   The phone number or address of the contact.
   CallRate: Integer (0..6000)
   Set a call rate.
   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)
```

---

**Phonebook commands**

**xCommand Phonebook Contact Add**

**Applies to:** All products

**Requires user role:** ADMIN, USER

Add a new contact to the local phonebook. The command returns the ContactId, which is a unique string that identifies the contact; typically, the format is "localContactId-n".

You can add several contact methods to a contact using the xCommand Phonebook ContactMethod Add command. Note that only the first contact method will appear in the Favorites list on the Cisco Touch controller. All contact methods are available on the other UIs.

**USAGE:**

```plaintext
xCommand Phonebook Contact Add Name: "Name" [Number: "Number"] [CallRate: CallRate] [CallType: CallType] [Device: Device] [FolderId: "FolderId"] [ImageURL: "ImageURL"] [Protocol: Protocol] [Tag: Tag] [Title: "Title"]
where
   Name: String (0, 255)
   The name of the contact.
   Number: String (0, 255)
   The phone number or address of the contact.
   CallRate: Integer (0..6000)
   Set a call rate.
   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.

**Protocol:**
- Auto/H320/H323/SIP/Spark
  - Select the Auto, Spark, SIP, H323 or H320 protocol.

**Tag:**
- Untagged/Favorite
  - Tag the contact as a Favorite, or untag an already tagged contact.

**Title:**
- String (0, 255)
  - The title of 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, FolderId, 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: "ContactId" [Name: "Name"]
  [FolderId: "FolderId"] [ImageURL: "ImageURL"] [Tag: Tag] [Title: "Title"]
```

**where**

**ContactId:**
- String (0, 255)
  - The unique identifier for the contact you want to modify. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

**Name:**
- String (0, 255)
  - The name of the contact.

**FolderId:**
- String (0, 255)
  - A unique identifier for the folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued.

**ImageURL:**
- String (0, 255)
  - Currently not in use.

**Tag:**
- Untagged/Favorite
  - Tag the contact as a Favorite, or untag an already tagged contact.

**Title:**
- String (0, 255)
  - The title of the contact.

---

**xCommand Phonebook 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: "ContactId"
```

**where**

**ContactId:**
- String (0, 255)
  - The unique identifier for the contact. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.
xCommand Phonebook 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 ContactMethodId, 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: "ContactId" [CallRate: CallRate] [CallType: CallType] [Device: Device] Number: "Number" [Protocol: Protocol]
```

where

- **ContactId**: String (0, 255)
  The unique identifier for the contact that you want to add a contact method to. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

- **CallRate**: Integer (0..6000)
  Set a call rate.

- **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

- **Device**: Mobile/Other/Telephone/Video
  Set which type of device to call to.

- **Number**: String (0, 255)
  The phone number or address of the contact.

- **Protocol**: Auto/H320/H323/SIP/Spark
  Select protocol.

xCommand Phonebook ContactMethod Delete

Applies to: All products
Requires user role: ADMIN, USER

Delete a contact method from an existing contact in the local phonebook.

**USAGE:**

```
xCommand Phonebook ContactMethod Delete ContactId: "ContactId" 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.
xCommand Phonebook ContactMethod Modify

Applies to: All products
Requires user role: ADMIN, USER

Modify details about the contact method for an existing contact in the local phonebook.

USAGE:
```
xCommand Phonebook ContactMethod Modify ContactId: "ContactId" ContactMethodId: "ContactMethodId" [Device: Device] [Number: "Number"] [Protocol: Protocol] [CallRate: CallRate] [CallType: CallType]
```

where

- **ContactId**: String (0, 255)
  The unique identifier for the contact. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Contact Add command was issued to make the contact.

- **ContactMethodId**: String (0, 255)
  The unique identifier for the contact method you want to modify. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook ContactMethod Add or xCommand Phonebook Contact Add commands were issued to make the contact method.

- **Device**: Mobile/Other/Telephone/Video
  Set which type of device to call to.

- **Number**: String (0, 255)
  The phone number or address of the contact.

- **Protocol**: Auto/H320/H323/SIP/Spark
  Select protocol.

- **CallRate**: Integer (0..6000)
  Set a call rate.

- **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 FolderId, which is a unique string that identifies the folder; typically, the format is “localGroupId-n”.

USAGE:
```
xCommand Phonebook Folder Add Name: "Name" [ParentFolderId: "ParentFolderId"]
```

where

- **Name**: String (0, 255)
  The name of the folder.

- **ParentFolderId**: String (0, 255)
  The unique identifier for the parent folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the parent folder.
xCommand Phonebook Folder Delete

Applies to: All products
Requires user role: ADMIN, USER
Delete an existing folder from the local phonebook.

USAGE:

xCommand Phonebook Folder Delete FolderId: "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: "FolderId" [Name: "Name"] [ParentFolderId: "ParentFolderId"]

where

FolderId:
   String (0, 255)
   The unique identifier for the folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the folder.

Name:
   String (0, 255)
   The name of the contact.

ParentFolderId:
   String (0, 255)
   The unique identifier for the parent folder. The identifier will be returned by an xCommand Phonebook Search command. It was also returned when the xCommand Phonebook Folder Add command was issued to make the parent folder.
xCommand Phonebook Search

Applies to: All products
Requires user role: ADMIN, USER

The search command lets you search in both the local and corporate phone books. A search gives a ResultSet.

The total number of folders and contacts (TotalRows) is always included in the result set when searching the local phone book. When searching a corporate phone book 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:

```plaintext
xCommand Phonebook Search [PhonebookId: "PhonebookId"] [PhonebookType: Corporate/Local] [SearchString: "SearchString"] [SearchField: Name/Number] [SearchFilter: All/Rooms/People] [ContactType: Any/Folder/Contact] [Offset: Offset] [FolderId: "FolderId"] [Limit: Limit] [ContactMethodLimit: ContactMethodLimit] [Recursive: Recursive] [Tag: Tag]
```

Where

- **PhonebookId**:
  - **String (0, 255)**
  - The identifier of the phonebook server that will be searched. See the xConfiguration Phonebook Server ID setting.

- **PhonebookType**:
  - **Corporate/Local**
  - Define whether to search the local phone book or the corporate phonebook.
  - Default value: Local

- **SearchString**:
  - **String (0, 255)**
  - Search for entries containing this string (note that the entry does not have to begin with the string). If no FolderId 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.

- **ContactType**:
  - **Any/Folder/Contact**
  - Search all contact types, or limit the search to folders or individual contacts.
  - Default value: Any

- **Offset**:
  - **Integer (0..65534)**
  - Get records starting with this offset in a search. The default value is 0. Offset is used together with Limit to support paging.
  - Default value: 0

- **FolderId**:
  - **String (0, 255)**
  - Search only in the specified folder. The FolderId (string) is listed in the ResultSet of a search result containing folders.

- **Limit**:
  - **Integer (0..65534)**
  - Limit the number of records in the result set to this number. For example, if the limit is set to 10, the ResultSet will contain only 10 entries (Contacts and Folders) even if the total number of hits is larger. The maximum limit is 1000.
  - Default value: 50

- **ContactMethodLimit**:
  - **Integer (0..10)**
  - Limit the number of records in the result set to this number. For example, if the limit is set to 2, the ResultSet will contain only 2 entries even if the total number of hits is larger.
  - Default value: 0

- **Recursive**:
  - **False/True**
  - This parameter will only have effect when searching the local phone book. The setting determines whether a local phone book search should be limited to the given FolderId, 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.

- **Tag**:
  - **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 ConnectorId or PresentationSource parameters 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 ConnectorId or PresentationSource.

**USAGE:**

```
xCommand Presentation Start [ConnectorId: ConnectorId] [Instance: Instance] [PresentationSource: PresentationSource] [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 DeskPro]  
- Integer (1..2) [MX70/DX80 SX20 RoomKit RoomKitMini Boards]  
- Integer (1..2) [S X10]

Select the video input source to be used for presentation, identified by connectorId.

**Instance**:  
- 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.

**Default value:** Equal

**PresentationSource**:  
- None/1/2/3/4/5/6 [CodecPro Room70G2]  
- Integer (1..4) [SX80 MX700/MX800/MX800D]  
- Integer (1..2) [DX70/DX80 SX20 MX200G2/MX300G2 Boards]  
- None/1/2 [RoomKit RoomKitMini]  
- None/1/2/3 [CodecPlus Room55 Room70/Room55D DeskPro]  
- Integer (1..2) [S X10]

Select the video input source to be used for presentation, identified by source number. The value None means that a black frame is inserted. None can only be used when you have multiple PresentationSource parameters in the same command.

**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: Instance] [PresentationSource: PresentationSource]
```

where

- **Instance**
  - 1/2/3/4/5/6
  - Select which local presentation you wish to stop, identified by presentation instance.

- **PresentationSource**
  - Integer (1..6) [CodecPro Room70G2]
  - Integer (1..4) [SX80 MX700/MX800/MX800D]
  - Integer (1..3) [CodecPlus Room55 Room70/Room55D DeskPro]
  - 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: SecondsToPostpone
```

where

- **SecondsToPostpone**
  - Integer (0..65534)
  - Set how long to postpone the upgrade. The value is in seconds.
xCommand Provisioning CUCM ExtensionMobility Login

Applies to: All products
Requires user role: ADMIN, USER

Login command for the Extension Mobility service. You log in to the Extension Mobility service with a 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: "UserId" Pin: "Pin"
[Profile: "Profile"]
```

where

- **UserId**
  `String (1, 255)`
  A valid username, as set up in CUCM.

- **Pin**
  `String (1, 255)`
  A valid pin code for the user, as set up in CUCM.

- **Profile**
  `String (1, 255)`
  A valid profile for the user, as set up in CUCM. This parameter applies only if the user has multiple profiles.

xCommand Provisioning CUCM ExtensionMobility Logout

Applies to: All products
Requires user role: ADMIN, USER

This command will log you out of your Extension Mobility profile.

**USAGE:**

```
xCommand Provisioning CUCM ExtensionMobility Logout
```

xCommand Provisioning RoomType Activate

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

Activate a room type template, that has been configured from the web interface.

**USAGE:**

```
xCommand Provisioning RoomType Activate
Name: 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: "Checksum"] [ChecksumType: ChecksumType] [Mode: Mode] [Origin: Origin] URL: "URL"
```

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

Mode:
- **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

Origin:
- **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

URL:
- **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 DeskPro 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: PresetId  
where

**PresetId:**

- **Integer (1..15)**  
The ID of the preset you want to activate.

**xCommand RoomPreset Clear**

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

**PresetId:**

- **Integer (1..15)**  
The ID of the preset you want to delete.
xCommand RoomPreset Store

**Applies to:** SX10  SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro  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: "Description"] PresetId: PresetId Type: Type
```

where

- **Description:**
  - String (0, 255)
  - Enter a description of the camera preset.

- **PresetId:**
  - Integer (1..15)
  - The ID of this preset.

- **Type:**
  - 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: "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: \[Format\]]
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: "\[Fingerprint\]"
Purpose: \[Purpose\]
where
  \[Fingerprint\]:
    String (0, 128)
    The unique Identifier for the certificate that is activated. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

  \[Purpose\]:
    802.1X/HTTPS/Audit/SIP
    The type of service which applies to this certificate.

xCommand Security Certificates Services Add
Applies to: All products
Requires user role: ADMIN
Uploads security certificates to this device. This is a multiline command.

**USAGE:**
xCommand Security Certificates Services Add [PrivateKeyPassword: \"\[PrivateKeyPassword\]\]
where
  \[PrivateKeyPassword\]:
    String (0, 128)
    Stores the details of the private key for the password.
    Default value: ""

xCommand Security Certificates Services Deactivate
Applies to: All products
Requires user role: ADMIN
Deactivates security certificates on this device.

**USAGE:**
xCommand Security Certificates Services Deactivate Fingerprint: "\[Fingerprint\]"
Purpose: \[Purpose\]
where
  \[Fingerprint\]:
    String (0, 128)
    The unique Identifier for the certificate that is deactivated. You can get the fingerprint ID by running xCommand Security Certificates Services Show.

  \[Purpose\]:
    802.1X/HTTPS/Audit/SIP
    The type of service which applies to this certificate.
xCommand Security Certificates Services Delete

Applies to: All products
Requires user role: ADMIN

Deletes security certificates from this device.

**USAGE:**

```command
xCommand Security Certificates Services Delete Fingerprint: "Fingerprint"
```

where

- **Fingerprint**: String (0, 128)
  - The unique identifier for the certificate that is deleted. You can get the fingerprint ID by running `xCommand Security Certificates Services Show`.

---

xCommand Security Certificates Services Show

Applies to: All products
Requires user role: ADMIN, USER

Shows details for security certificates on this device.

**USAGE:**

```command
xCommand Security Certificates Services Show [Filter: Filter] [Format: Format]
```

where

- **Filter**: 802.1X/HTTPS/Audit/SIP
  - Filters the results according to the chosen service.
- **Format**: 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:**

```command
xCommand Security Certificates ThirdParty Disable Fingerprint: "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:**

```command
xCommand Security Certificates ThirdParty Enable Fingerprint: "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: "Fingerprint"

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: Filter] [Format: Format]

where

Filter:
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 of 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:**

```plaintext
xCommand Security Persistency Configurations: Configurations CallHistory: CallHistory InternalLogging: InternalLogging LocalPhonebook: LocalPhonebook DHCP: DHCP ConfirmAndReboot: ConfirmAndReboot
```

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:**

```plaintext
xCommand Security Session Get
```

xCommand Security Session List

Applies to: All products
Requires user role: ADMIN

List active sessions.

**USAGE:**

```plaintext
xCommand Security Session List
```

xCommand Security Session Terminate

Applies to: All products
Requires user role: ADMIN

Terminate a session.

**USAGE:**

```plaintext
xCommand Security Session Terminate SessionId: "SessionId"
```

where

- **SessionId:**
  - String (0, 32)
    - The session ID number.
Standby commands

**xCommand Standby Activate**

**Applies to:** All products  
**Requires user role:** ADMIN, INTEGRATOR, USER  
Set the 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: Delay  
where  
  Delay:  
    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  
  Delay:  
    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: Action] [Force: Force]
```

where
- **Action:**
  - Restart/Shutdown
    - As a default the device restarts after a reboot. By selecting Shutdown, the device will not restart.
    - Default value: Restart
- **Force:**
  - False/True
    - As a default the device reboots right away, regardless of whether the device is in use or not. By selecting False, the device reboots only if it is not in use (i.e. if it is in idle, standby, or halfwake mode).
    - Default value: True

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: Confirm [Keep: Keep] [TrailingAction: TrailingAction]
```

where
- **Confirm:**
  - Yes
    - Include to confirm your choice.
- **Keep:**
  - 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 CallId 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
- **Network:**
  - xCommand Camera Preset Store
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: "Key"

  where
  
  **Key**:
  
  String (16, 24)

  The key you have received for the option you wish to switch on.

---

**xCommand SystemUnit OptionKey List**

**Applies to:** All products

**Requires user role:** ADMIN

List all option keys.

**USAGE:**

- xCommand SystemUnit OptionKey List
xCommand SystemUnit OptionKey Remove

Applies to: All products
Requires user role: ADMIN

Remove a specified option key.

USAGE:
nCommand SystemUnit OptionKey Remove Type: Type
where
  Type:
    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 DeskPro Boards ]

xCommand SystemUnit OptionKey RemoveAll

Applies to: All products
Requires user role: ADMIN

Remove all option keys.

USAGE:
xCommand SystemUnit OptionKey RemoveAll Confirm: Confirm
where
  Confirm:
    Yes

xCommand SystemUnit ProductPlatform Set

Applies to: SX80 MX700/MX800/MX800D CodecPlus CodecPro Room70/Room55D Room70G2
Requires user role: ADMIN

Select the product platform for your 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: Platform
where
  Platform:
    ROOM70D/ROOM70S  [ CodecPro Room70G2 ]
    ROOM55D/ROOM55D/ROOM70D [ CodecPlus Room70/Room55D ]
    MX700/MX700ST/MX800/MX800ST/MX800D  [ SX80 MX700/MX800/MX800D ]
    ROOM55D: The platform is set to Room 55 Dual.
    ROOM70S: For Codec Plus and Room 70, the platform is set to Room 70 Single. For Codec Pro and Room 70 G2, the platform is set to Room 70 Single G2.
    ROOM70D: For Codec Plus and Room 70, the platform is set to Room 70 Dual. For Codec Pro and Room 70 G2, the platform is set to Room 70 Dual G2.
    MX700: The platform is set to MX700 (dual screen, single camera).
    MX700ST: The platform is set to MX700 (dual screen, dual camera)
    MX800: The platform is set to MX800 (single screen, single camera).
    MX800ST: The platform is set to MX800 (single screen, dual camera).
    MX800D: The platform is set to MX800 Dual (dual screen, dual camera).

xCommand SystemUnit SignInBanner Clear

Applies to: All products
Requires user role: ADMIN

Clear the sign in banner set with xCommand SystemUnit SignInBanner Set.

USAGE:
xCommand SystemUnit SignInBanner Clear
xCommand SystemUnit SignInBanner Get
Applies to: All products
Requires user role: ADMIN, USER
Get the custom message set with xCommand SystemUnit SignInBanner Set.

USAGE:

xCommand SystemUnit SignInBanner Get

xCommand SystemUnit SignInBanner Set
Applies to: All products
Requires user role: ADMIN
Set a sign in banner with a custom message on the 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: Confirm
where
Confirm: Yes

xCommand SystemUnit SoftwareUpgrade
Applies to: All products
Requires user role: ADMIN
Initiate a software upgrade by fetching the software from a given URL.

USAGE:

xCommand SystemUnit SoftwareUpgrade URL: "URL" [Forced: Forced]
where
URL: 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: Year] [Month: Month] [Day: Day] [Hour: Hour]
[Minute: Minute] [Second: Second]

where

Year:

   Integer (2015..2037)

Month:

   Integer (1..12)

Day:

   Integer (1..31)

Hour:

   Integer (0..23)

Minute:

   Integer (0..59)

Second:

   Integer (0..59)
UserInterface commands

**xCommand UserInterface Branding Clear**

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

**Appplies to:** DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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: Type

where

**Type:**

- **Background/Branding/HalfwakeBackground/HalfwakeBranding** [ DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro ]
- **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**

**Appplies to:** DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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: "Checksum"] [ChecksumType: ChecksumType] Type: Type URL: "URL"

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 DeskPro ]
- **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 background 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.

URL:
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  DeskPro  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: Size] Type: Type

where

**Size:**

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

| Background/Branding/HalfwakeBackground/HalfwakeBranding |
| DX70/DX80  SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro |

Branding/HalfwakeBackground/HalfwakeBranding

- **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 Upload

**Applies to:** DX70/DX80 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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 DeskPro ]
- Branding/HalfwakeBackground/HalfwakeBranding   [ Boards ]

Background/Branding/HalfwakeBackground/HalfwakeBranding: 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:   ActivityType]

where

ActivityType:
- Custom   [ DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]
- Custom/WebApp   [ DeskPro 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:   ActivityType]

where

ActivityType:
- Custom   [ DX70/DX80 SX10 SX20 SX80 MX200G2/MX300G2 MX700/MX800/MX800D RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 ]
- Custom/WebApp   [ DeskPro 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:**

```plaintext
xCommand UserInterface Extensions Panel Clicked PanelId: "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:**

```plaintext
xCommand UserInterface Extensions Panel Close PanelId: "PanelId"
```

where

- **PanelId:**
  - String (0, 255)
  - The unique identifier of the custom panel.

---

xCommand UserInterface Extensions Panel Open

**Applies to:** All products

**Requires user role:** ADMIN, INTEGRATOR, ROOMCONTROL, USER

Opens the custom panel that has the given PanelId. If the panel has multiple pages you can specify which page to open by including the Pageld parameter.

**USAGE:**

```plaintext
xCommand UserInterface Extensions Panel Open PanelId: "PanelId" [PageId: "PageId"]
```

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:**

```plaintext
xCommand UserInterface Extensions Panel Remove PanelId: "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:**

```plaintext
xCommand UserInterface Extensions Panel Save PanelId: "PanelId"
```

where

- **PanelId:**  
  - 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

Updates the custom panel that has the given PanelId. Successful changes are immediately visible on the endpoint.

**USAGE:**

```plaintext
xCommand UserInterface Extensions Panel Update PanelId: "PanelId" [Name: "Name"] [Color: "Color"] [Icon: Icon] [Visibility: Visibility]
```

where

- **PanelId:**  
  - String (0, 255)  
  - The unique identifier of the custom panel.

- **Name:**  
  - String (0, 255)  
  - The new name of the custom panel.

- **Color:**  
  - String (0, 255)  
  - The color of the specified panel button, specified in hexadecimal (e.g., #4287f5).

- **Icon:**  
  - Briefing/Camera/Concierge/Disc/Handset/Help/Helpdesk/Home/Hvac/Info/Input/Language/Laptop/Lightbulb/Media/Microphone/Power/Proximity/Record/Spark/Tv/Webex/General  
  - The icon to display on the button as selected from the list available options.

- **Visibility:**  
  - Auto/Hidden  
  - The visibility of the button.  
  - **Auto:** the button will be visible according to the configuration (Always, Only out of call, or Only in call).  
  - **Hidden:** the button will always be hidden.
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: "ConfigId"
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: "Type"] [Value: "Value"] WidgetId: "WidgetId"
where
   Type:
      String (0, 255)
      The type of widget that is set.
   Value:
      String (0, 255)
      The value of the widget. The range of values depends on the widget type.
   WidgetId:
      String (0, 255)
      The unique identifier for the widget.

xCommand UserInterface Extensions Widget SetValue
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL
Set the value of the given widget. Updates the UserInterface Extensions status tree. Returns an error if the value is out of range.

USAGE:
xCommand UserInterface Extensions Widget SetValue Value: "Value" WidgetId: "WidgetId"
where
   Value:
      String (0, 255)
      The value of the widget. The range of values depends on the widget type.
   WidgetId:
      String (0, 255)
      The unique identifier for the widget.

xCommand UserInterface Extensions Widget UnsetValue
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL
Empties the value of the given widget. Updates the UserInterface Extensions status tree and notifies the user interface that this widget is no longer selected.

USAGE:
xCommand UserInterface Extensions Widget UnsetValue WidgetId: "WidgetId"
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: "Title"] Text: "Text" [Duration: Duration]

where

**Title:**
String (0, 255)
The title of the message.
Default value: ""

**Text:**
String (0, 255)
The message to be displayed. The <p> and <br> 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: "FeedbackId"]

where

**FeedbackId:**
String (0, 255)
The FeedbackId corresponds to the FeedbackId 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:**

```plaintext
xCommand UserInterface Message Prompt Display [Title: "Title"] Text: "Text" [FeedbackId: "FeedbackId"] [Duration: Duration] [Option.1: "Option.1"] [Option.2: "Option.2"] [Option.3: "Option.3"] [Option.4: "Option.4"] [Option.5: "Option.5"]
```

where:
- **Title:**
  - String (0, 255)
  - The title of the message.
- **Text:**
  - String (0, 255)
  - Enter the text line to be displayed. The `<p>` and `<br>` HTML tags will result in line breaks as normal; any other tags will appear as plain text.
- **FeedbackId:**
  - String (0, 255)
  - To identify the feedback enter a FeedbackId.
  - Default value:"
- **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
- **Option.1:**
  - String (0, 255)
  - The text to appear on feedback option 1.
- **Option.2:**
  - String (0, 255)
  - The text to appear on feedback option 2.

**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:**

```plaintext
xCommand UserInterface Message Prompt Response [FeedbackId: "FeedbackId"] OptionId: OptionId
```

where:
- **FeedbackId:**
  - String (0, 255)
  - The FeedbackId corresponds to the FeedbackId 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:**

```plaintext
xCommand UserInterface Message TextInput Clear [FeedbackId: "FeedbackId"]
```

where

**FeedbackId:**

*String (0, 255)*

The FeedbackId corresponds to the FeedbackId 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:**

```plaintext
xCommand UserInterface Message TextInput Display [Duration: Duration] [FeedbackId: "FeedbackId"] [InputText: "InputText"] [InputType: InputType] [KeyboardState: KeyboardState] [Placeholder: "Placeholder"] [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

Placeholder:
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"

Text:
String (0, 128)
The message that is to be displayed to the user. The <p> and <br> HTML tags will result in
line breaks as normal; any other tags will appear as plain text.

Title:
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: "FeedbackId"]
Text: "Text"
```
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: "Text"  [X: X] [Y: Y]
[Duration: Duration]
```

- **Text:**
  - String (0, 140)
  - The text line to be displayed. The <p> and <br> HTML tags will result in line breaks as normal; any other tags will appear as plain text.

- **X:**
  - Integer (1..10000)
  - Enter the X-coordinate (horizontal) on screen. X=0 is in the upper left corner.
  - Default value: 0

- **Y:**
  - 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: Key
```

- **Key:**
  - 0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/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
```

- **Key:**
  - 0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/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
Key: 0/1/2/3/4/5/6/7/8/9/C/Call/Disconnect/Down/F1/F2/F3/F4/F5/Grab/Home/Layout/Left/
Mute/MuteMic/Ok/PhoneBook/Presentation/Right/Selfview/Square/SrcAux/SrcCamera/
SrcDocCam/SrcPc/SrcVcr/Star/Up/VolumeDown/VolumeUp/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  DeskPro
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: ConnectorId
SourceIdentifier: "SourceIdentifier"  Name: "Name"  Type: Type
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  DeskPro ]
  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.
Name:
  String (0, 40)
The name of the input source. This name will be displayed on the user interface.
Type:
camera/desktop/document_camera/mediaplayer/PC/whiteboard/other
The type of input source. The type determines which icon to display on the user interface.
xCommand UserInterface Presentation ExternalSource List

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

**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 DeskPro

**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:

```
"SourceIdentifier"
```

where

**SourceIdentifier**: String (0, 40)

The unique string that identifies this input source. It was defined when the source was created with the UserInterface Presentation ExternalSource Add command.

---

xCommand UserInterface Presentation ExternalSource RemoveAll

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

**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 DeskPro

**Requires user role:** ADMIN, INTEGRATOR, ROOMCONTROL, USER

Starts to present the input source (specified by the SourceIdentifier) 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**

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

Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL

Set or change the state of the input source (specified by the SourceIdentifier).

**USAGE:**

```
xCommand UserInterface Presentation ExternalSource State Set SourceIdentifier: "SourceIdentifier" State: State [ErrorReason: "ErrorReason"]
```

where

- **SourceIdentifier:**
  - String (0, 40)
  - The unique string that identifies this input source. It was defined when the source was created with the UserInterface Presentation ExternalSource Add command.

- **State:**
  - Hidden/Ready/NotReady/Error
  - **Ready:** The input source will be presented when someone selects it (taps it on the user interface, or when the UserInterface Presentation ExternalSource Select command is issued).
  - **NotReady:** The input source is not ready, and cannot be selected.
  - **Error:** The input source is in an erroneous state. The ErrorReason parameter may be used to inform the user about the reason for failure.
  - **Hidden:** The input source will not be displayed in the user interface sharetray.

- **ErrorReason:**
  - String (0, 80)
  - This string is displayed in the user interface sharetray, given that the State parameter is set to Error.
  - Default value: ""

---

**xCommand UserInterface WebView Clear**

Appplies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards

Requires user role: ADMIN, INTEGRATOR, USER

Closes the current web view.

**USAGE:**

```
xCommand UserInterface WebView Clear
```

---

**xCommand UserInterface WebView Display**

Appplies to: RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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: "Header"] [Options: "Options"] [Title: "Title"] Url: "Url"
```

where

- **Header:**
  - String (0, 8192)
  - An HTTP header field. You can add up 15 Header parameters in one command, each holding one HTTP header field.

- **Options:**
  - String (0, 255)
  - This value is intended for internal use by the UI Extensions Editor.

- **Title:**
  - String (0, 255)
  - The title of the web page.

- **Url:**
  - String (0, 2000)
  - The URL of the web page.
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:**

```
```

where

- **ExpiryDays:**
  - Integer (1..31)
  - Define the duration for the passphrase validity. Default is 7 days.

xCommand UserManagement RemoteSupportUser Delete

**Applies to:** All products

**Requires user role:** ADMIN

Delete the remote support user created with the command xCommand UserManagement RemoteSupportUser Create.

**USAGE:**

```
xCommand UserManagement RemoteSupportUser Delete
```

xCommand UserManagement RemoteSupportUser DisablePermanently

**Applies to:** All products

**Requires user role:** ADMIN

Disable the creation of new remote support users. To enable the remote support user again you must factory reset your device.

**USAGE:**

```
xCommand UserManagement RemoteSupportUser DisablePermanently Confirm: 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:
where
- Active: False/True
  Specifies whether this is an active user or not.
- ClientCertificateDN: String (0, 255)
  Identifies a user who logs in with a client certificate instead of a username and password.
- Passphrase: String (0, 255)
  Specifies a Passphrase for the user.
- PassphraseChangeRequired: False/True
  Specifies whether the user's passphrase requires changing or not.
- Role: Admin/Audit/Integrator/RoomControl/User
  Sets the user's role.
- ShellLogin: False/True
  Specifies whether the user should have a shell login or not.
- Username: String (0, 127)
  Specifies the user's username.
- YourPassphrase: String (0, 255)
  The user's passphrase.

xCommand UserManagement User Delete
Applies to: All products
Requires user role: ADMIN
Deletes a user from this device.

USAGE:
xCommand UserManagement User Delete Username: "Username" [YourPassphrase: "YourPassphrase"]
where
- Username: String (0, 127)
  Specifies the username of the user that is deleted.
- YourPassphrase: String (0, 255)
  The passphrase of the user that is deleted.

xCommand UserManagement User Get
Applies to: All products
Requires user role: ADMIN
Shows the details of users on this device.

USAGE:
where
- ClientCertificateDN: String (0, 255)
  Identifies a user who logs in with a client certificate instead of a username and password.
- Username: String (0, 127)
  Specify a username to show the details of a particular user.
xCommand UserManagement User List
Applies to: All products
Requires user role: ADMIN
Shows the list of users on this device.

USAGE:
xCommand UserManagement User List [Limit: \texttt{Limit}] [Offset: \texttt{Offset}]
where
\begin{itemize}
  \item \texttt{Limit}:
    \begin{itemize}
      \item Integer (0..65536)
      \item Limits the number of results that are shown.
      \item Default value: 0
    \end{itemize}
  \item \texttt{Offset}:
    \begin{itemize}
      \item Integer (0..65536)
      \item Shows lines with the same or higher Offset than the one provided.
      \item Default value: 0
    \end{itemize}
\end{itemize}

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: \texttt{Active}] [AddRole: \texttt{AddRole}]
[ClientCertificateDN: \texttt{"ClientCertificateDN"}] [PassphraseChangeRequired: \texttt{PassphraseChangeRequired}]
[RemoveRole: \texttt{RemoveRole}] [ShellLogin: \texttt{ShellLogin}]
Username: \texttt{"Username"} [YourPassphrase: \texttt{"YourPassphrase"}]
where
\begin{itemize}
  \item \texttt{Active}:
    \begin{itemize}
      \item False/True
      \item Specifies whether this is an active user or not.
    \end{itemize}
  \item \texttt{AddRole}:
    \begin{itemize}
      \item Admin/Audit/Integrator/RoomControl/User
      \item Adds a new role for the specified user.
    \end{itemize}
  \item \texttt{ClientCertificateDN}:
    \begin{itemize}
      \item String (0, 255)
      \item Identifies a user who logs in with a client certificate instead of a username and password.
    \end{itemize}
  \item \texttt{PassphraseChangeRequired}:
    \begin{itemize}
      \item False/True
      \item Specifies whether the user's passphrase requires changing or not.
    \end{itemize}
  \item \texttt{RemoveRole}:
    \begin{itemize}
      \item Admin/Audit/Integrator/RoomControl/User
      \item Removes a role from the specified user.
    \end{itemize}
  \item \texttt{ShellLogin}:
    \begin{itemize}
      \item False/True
      \item Specifies whether the user should have a shell login or not.
    \end{itemize}
  \item \texttt{Username}:
    \begin{itemize}
      \item String (0, 127)
      \item Specifies the user's username.
    \end{itemize}
  \item \texttt{YourPassphrase}:
    \begin{itemize}
      \item String (0, 255)
      \item The user's passphrase.
    \end{itemize}
\end{itemize}
**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: "NewPassphrase" 
 OldPassphrase: "OldPassphrase"
 where 
   NewPassphrase: 
     String (0, 255)
   OldPassphrase: 
     String (0, 255)
 ```

**xCommand UserManagement User Passphrase Set**

 Applies to: All products
 Requires user role: ADMIN

 Set a user passphrase for the specified user. You must be logged in as an administrator to set a user passphrase.

 **USAGE:**

 ```
 xCommand UserManagement User Passphrase Set 
 NewPassphrase: "NewPassphrase" 
 Username: "Username" [YourPassphrase: "YourPassphrase"]
 where 
   NewPassphrase: 
     String (0, 255)
   Username: 
     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: "Username" [YourPassphrase: "YourPassphrase"]
 where 
   Username: 
     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
```

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, DeskPro, Boards

Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from the input device.

USAGE:

```
xCommand Video CEC Input KeyClick ConnectorId: [ConnectorId] [Key: Key] [LogicalAddress: LogicalAddress] [NamedKey: NamedKey]
```

where

- `ConnectorId`:
  - `CodecPro` Room70G2
  - `RoomKit` RoomKitMini CodecPlus Room55 Room70 Room55D Room70G2 DeskPro Boards
  - Integer (2..2)

  The unique identifier of the connector.

- `Key`:
  - Integer (0..255)

  The CEC specified key code for the key that is sent to the logical address of the device as if it was pushed on a remote control.

- `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  DeskPro

Requires user role: ADMIN, INTEGRATOR

Mimics a remote control key click event from this device.

**USAGE:**

```
xCommand Video CEC Output KeyClick ConnectorId: ConnectorId [Key: Key] LogicalAddress: LogicalAddress [NamedKey: NamedKey]
```

where

- **ConnectorId**:
  - `Integer (1..1) [SX10]`
  - `Integer (1..3) [SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro]`

  The unique identifier of the connector.

- **Key**:
  - `Integer (0..255)`

  The CEC specified key code for the key that is sent to the logical address of the device as if it was pushed on a remote control.

- **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  DeskPro

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: 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  DeskPro]`

  The unique identifier of the connector.

xCommand Video CEC Output SendInactiveSourceRequest

Applies to: RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro

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: ConnectorId]
```

where

- **ConnectorId**:
  - `Integer (1..1) [RoomKitMini]`
  - `Integer (1..3) [RoomKit  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro]`

  The unique identifier of the connector.
xCommand Video Graphics Clear

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room70/Room55D Room70G2
Requires user role: ADMIN, INTEGRATOR, USER
Not applicable in this version.

USAGE:
xCommand Video Graphics Clear [Layer: Layer] [Target: Target]

where
Layer:
Integer (1..3)

Target:
LocalOutput/MainSource/PresentationSource

xCommand Video Graphics Text Display

Applies to: RoomKit RoomKitMini CodecPlus CodecPro Room70/Room55D Room70G2
Requires user role: ADMIN, INTEGRATOR, USER
Not applicable in this version.

USAGE:
xCommand Video Graphics Text Display [Date: Date] [Duration: Duration] [Layer: Layer] [Target: Target] [Text: Text] [Time: Time]

where
Date:
On/Off

Duration:
Integer (0..3600)

Layer:
Integer (1..3)

Target:
LocalOutput/MainSource/PresentationSource

Text:
String (0, 1024)

Time:
On/Off

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  DeskPro

**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 ConnectorIds or SourceIds in the same command. There cannot be a mix of identifier types in the same command; use either ConnectorId or SourceId. DX70 and DX80 don’t support such combination of input sources.

**USAGE:**

```
xCommand Video Input SetMainVideoSource [ConnectorId: ConnectorId] [Layout: Layout] [PIPPosition: PIPPosition] [PIPSize: PIPSize] [SourceId: SourceId]
```

where

**ConnectorId:**

`Integer (1..n)`

The identifier (ID) of the connector. Connector [n] has ID n. Run the following API command to find the ID: `xStatus Video Input Connector`.

**Layout:**

`Equal/PIP/Prominent`

Sets the layout of the main video source if the main video source is composed of multiple input sources.

- **Equal:** The input sources are shown in same-sized images. There can be a maximum of four images on screen.
- **PIP:** Shows one of the input source as a Picture in Picture (only available when composing two input sources).
- **Prominent:** The first input source is shown as a large image, and the next input sources are shown as smaller images placed below.

**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.

**PIPSize:**

`Auto/Large`
Select the PIP size of the main video source if the main video source is composed of multiple input sources.

**SourceId:**

- **SourceId:** Integer (1..n)
  - The identifier (ID) of the input source. Input Source [n] has ID n. Run the following API command to find the ID: `xStatus Video Input Source`.

**xCommand Video Input Source SetActiveConnector**

- **Applies to:** SX10 SX80 MX200G2/MX300G2 MX700/MX800/MX800D
- **Requires user role:** ADMIN, USER

Select which connector is active.

- On SX80 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: ConnectorId]
```

where

- **ConnectorId:**
  - **ConnectorId:** Integer (4..5) [SX80 MX700/MX800/MX800D]
  - **ConnectorId:** Integer (2..4) [MX200G2/MX300G2]
  - **ConnectorId:** 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: Target] LayoutFamily: LayoutFamily [CustomLayoutName: "CustomLayoutName"]
```

where

- **Target:**
  - **Local/Remote**
    - Select if the target is the local layout or the remote layout.
- **LayoutFamily:**
  - auto/custom/equal/overlay/prominent/single
    - Select a layout family.
- **CustomLayoutName:**
  - **String (1, 128)**
    - Enter a name for the layout.
xCommand Video Matrix Assign

Applies to: SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  CodecPlus  CodecPro  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: Layout] [Mode: Mode] Output: Output [RemoteMain: RemoteMain] [SourceId: SourceId]
```

where

- **Layout:**
  - Equal/Prominent
    - 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.

- **Mode:**
  - Add/Replace
    - Add: 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.
    - RemoteMain: Integer (1..4)
      - Add a remote site to the layout.

- **Output:**
  - Integer (1..2) [ SX20  MX200G2/MX300G2  RoomKit  CodecPlus ]
  - Integer (1..3) [ SX80  MX700/MX800/MX800D  CodecPro  Room70G2 ]
  - Choose the output you wish to use for this layout.

- **SourceId:**
  - Integer (1..6) [ CodecPro  Room70G2 ]
  - Integer (1..3) [ SX20 ]
  - Integer (1..4) [ SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  CodecPlus ]
  - The identifier (ID) of the input source. Input Source [n] has ID n. Run the following API command to find the ID: xStatus Video Input Source. You can use up to four SourceIds 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

- **Output:**
  - Integer (1..2) [ SX20  MX200G2/MX300G2  RoomKit  CodecPlus ]
  - Integer (1..3) [ SX80  MX700/MX800/MX800D  CodecPro  Room70G2 ]
  - Choose the output you want to reset.
xCommand Video Matrix Swap

 Applies to: SX20  SX80  MX200G2/MX300G2  MX700/MX800/MX800D  RoomKit  CodecPlus  CodecPro  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: OutputA OutputB: OutputB

 where

 OutputA:

 Integer (1..2) [ SX20  MX200G2/MX300G2  RoomKit  CodecPlus ]
 Integer (1..3) [ SX80  MX700/MX800/MX800D  CodecPro  Room70G2 ]

 The output you are swapping from.

 OutputB:

 Integer (1..2) [ SX20  MX200G2/MX300G2  RoomKit  CodecPlus ]
 Integer (1..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: Output [RemoteMain: RemoteMain] [SourceId: SourceId]

 where

 Output:

 Integer (1..2) [ SX20  MX200G2/MX300G2  RoomKit  CodecPlus ]
 Integer (1..3) [ SX80  MX700/MX800/MX800D  CodecPro  Room70G2 ]

 Choose the output you wish to remove the source from.

 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  DeskPro  Boards
Requires user role: ADMIN
Adjust the monitor backlight.

USAGE:
xCommand Video Output Monitor Backlight Set Position: Position Value: 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: Position Value: 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 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: Position Value: 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 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: Position Value: 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: Position Value: 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: Position Value: 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: 4900K/5500K/6500K/7200K/9300K/10500K/12000K/User
Select either RGB or YUV.

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: Position Value: 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: Position Value: 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: 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: Position Value: 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: Position
```
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).

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: Position Value: 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:**
  - 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: 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: 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: Mode] [FullscreenMode: FullscreenMode] [PIPPosition: PIPPosition] [OnMonitorRole: OnMonitorRole]
```
where
```
Mode:
   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, DeskPro, Boards

Requires user role: ADMIN

Deletes session data for web view types, such as digital signage and web apps.

**USAGE:**

```bash
xCommand UserInterface WebEngine DeleteStorage [Type: Type]
```

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 Join**

**Applies to:** All products

Requires user role: ADMIN, INTEGRATOR, USER

Join the Webex Meeting specified by the meeting number. Add optional information, such as the display name or a tag, to identify the call in the call history.

**USAGE:**

```bash
xCommand Webex Join [DisplayName: "DisplayName"] Number: "Number" [TrackingData: "TrackingData"]
```

where

- **DisplayName**: String (0, 255)
  - The display name of the remote participant.
- **Number**: String (0, 255)
  - The meeting number, meeting link, video address, or Personal Room ID.
- **TrackingData**: String (0, 255)
  - A tag or label preserved with the call number in the call history.

**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:**

```bash
xCommand Webex Registration Cancel
```
xCommand Webex Registration ConvertToCloud

Applies to: All products
Requires user role: ADMIN

Convert a device to be managed by the Cisco Webex cloud service.
This is only available on systems linked with Webex Edge for Devices. All current connections to on-premises services for calling and directory will be replaced with cloud data sources.
To convert back to on-premises again, the device must factory reset.

USAGE:
xCommand Webex Registration ConvertToCloud Confirm:  Confirm
where
  Confirm:
    Yes
    Enter Yes, case-insensitive, to confirm that you will proceed with the command. Any other text will cancel the request.

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:  ActivationCode SecurityAction:  SecurityAction
where
  ActivationCode:
    String: 16, 19
    The activation code that has been created in Control Hub for this device.
  SecurityAction:
    Harden/NoAction
    Harden: Deactivates all local users that have been created for this device and deactivates Macros.
    NoAction: Does not 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 infor-
mation or just some of it.

**Audio status**

<table>
<thead>
<tr>
<th>Command</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>xStatus Audio Devices Bluetooth ActiveProfile</td>
<td>378</td>
</tr>
<tr>
<td>xStatus Audio Devices HandsetUSB ConnectionStatus</td>
<td>378</td>
</tr>
<tr>
<td>xStatus Audio Devices HandsetUSB Cradle</td>
<td>378</td>
</tr>
<tr>
<td>xStatus Audio Devices HeadsetAnalog Connection Status</td>
<td>378</td>
</tr>
<tr>
<td>xStatus Audio Devices HeadsetAnalog HasMicrophone</td>
<td>379</td>
</tr>
<tr>
<td>xStatus Audio Devices HeadsetUSB ConnectionStatus</td>
<td>379</td>
</tr>
<tr>
<td>xStatus Audio Devices HeadsetUSB Description</td>
<td>379</td>
</tr>
<tr>
<td>xStatus Audio Devices HeadsetUSB Manufacturer</td>
<td>379</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors HDMI [n] Mute</td>
<td>380</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors Line [n] Mute</td>
<td>380</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors Microphone [n] ConnectionStatus</td>
<td>380</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors Microphone [n] EcReferenceDelay</td>
<td>380</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors Microphone [n] Mute</td>
<td>381</td>
</tr>
<tr>
<td>xStatus Audio Input Connectors USBC [n] Mute</td>
<td>381</td>
</tr>
<tr>
<td>xStatus Audio Input KeyClick Attenuate</td>
<td>381</td>
</tr>
<tr>
<td>xStatus Audio Input KeyClick Detected</td>
<td>381</td>
</tr>
<tr>
<td>xStatus Audio Input KeyClick Enabled</td>
<td>382</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] AGC</td>
<td>382</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] Channels</td>
<td>382</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] Connector</td>
<td>382</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] Direct</td>
<td>383</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] MixerMode</td>
<td>383</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] Mute</td>
<td>383</td>
</tr>
<tr>
<td>xStatus Audio Input LocalInput [n] Name</td>
<td>383</td>
</tr>
<tr>
<td>xStatus Audio Input RemoteInput [n] Calld</td>
<td>384</td>
</tr>
<tr>
<td>xStatus Audio Microphones Mute</td>
<td>384</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors ARC [n] DelayMs</td>
<td>384</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors HDMI [n] DelayMs</td>
<td>385</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors HDMI [n] Mode</td>
<td>385</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors InternalSpeaker [n] DelayMs</td>
<td>385</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors InternalSpeaker [n] Mode</td>
<td>385</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors Line [n] ConnectionStatus</td>
<td>386</td>
</tr>
<tr>
<td>xStatus Audio Output Connectors Line [n] DelayMs</td>
<td>386</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] AutoconnectRemote</td>
<td>386</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] Channels</td>
<td>386</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] Connector [n]</td>
<td>387</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] Input [n] Gain</td>
<td>387</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] Loudspeaker</td>
<td>387</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] Name</td>
<td>387</td>
</tr>
<tr>
<td>xStatus Audio Output LocalOutput [n] VolumeControlled</td>
<td>388</td>
</tr>
<tr>
<td>xStatus Audio Output MeasuredHdmiArcDelay</td>
<td>388</td>
</tr>
<tr>
<td>xStatus Audio Output MeasuredHdmiDelay</td>
<td>388</td>
</tr>
<tr>
<td>xStatus Audio Output MeasuredHdmiCcDelay</td>
<td>388</td>
</tr>
<tr>
<td>xStatus Audio Output RemoteOutput [n] Calld</td>
<td>389</td>
</tr>
<tr>
<td>xStatus Audio Output RemoteOutput [n] Input [n] Gain</td>
<td>389</td>
</tr>
<tr>
<td>xStatus Audio SelectedDevice</td>
<td>389</td>
</tr>
<tr>
<td>xStatus Audio Volume</td>
<td>389</td>
</tr>
<tr>
<td>xStatus Audio VolumeHandsetUsb</td>
<td>390</td>
</tr>
<tr>
<td>xStatus Audio VolumeHeadsetAnalog</td>
<td>390</td>
</tr>
<tr>
<td>xStatus Audio VolumeHeadsetUsb</td>
<td>390</td>
</tr>
<tr>
<td>xStatus Audio VolumeInternal</td>
<td>390</td>
</tr>
<tr>
<td>xStatus Audio VolumeMute</td>
<td>391</td>
</tr>
</tbody>
</table>
## Bookings status

- xStatus Bookings Current Id

## 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] FacilityServiced
- 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 Background Image
- xStatus Cameras Background Mode
- 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

## Capabilities status

- xStatus Capabilities Conference MaxActiveCalls
- xStatus Capabilities Conference MaxAudioCalls
- xStatus Capabilities Conference MaxCalls
- xStatus Capabilities Conference MaxVideoCalls

## Conference status

- xStatus Conference ActiveSpeaker CallId
- xStatus Conference Call [n] AuthenticationRequest
- xStatus Conference Call [n] BookingId
- xStatus Conference Call [n] Capabilities FarendMessage Mode
- xStatus Conference Call [n] Capabilities FECC Mode
- xStatus Conference Call [n] Capabilities FECC NumberOfPresets
- xStatus Conference Call [n] Capabilities FECC NumberOfSources
- xStatus Conference Call [n] Capabilities FECC Source [n] Name
- xStatus Conference Call [n] Capabilities FECC Source [n] Options
- xStatus Conference Call [n] Capabilities FECC Source [n] SourceId
- xStatus Conference Call [n] Capabilities Hold
- xStatus Conference Call [n] Capabilities ixChannel Status
xStatus Conference Call [n] Capabilities ParticipantDisconnect
xStatus Conference Call [n] Capabilities ParticipantList
xStatus Conference Call [n] Capabilities ParticipantMute
xStatus Conference Call [n] Capabilities Presentation
xStatus Conference Call [n] EventCenter Mode
xStatus Conference Call [n] Manufacturer
xStatus Conference Call [n] MicrophonesMuted
xStatus Conference Call [n] SoftwareID
xStatus Conference Call [n] Streamed
xStatus Conference DoNotDisturb
xStatus Conference Line [n] Mode
xStatus Conference Multipoint Mode
xStatus Conference Presentation CallId
xStatus Conference Presentation CallIdLocal
xStatus Conference Presentation LocalInstance [n] DirectShare
xStatus Conference Presentation LocalInstance [n] SendingMode
xStatus Conference Presentation LocalInstance [n] Source
xStatus Conference Presentation Mode
xStatus Conference SpeakerLock CallId
xStatus Conference SpeakerLock Local
Diagnostics status
xStatus Diagnostics Message [n] Description
xStatus Diagnostics Message [n] Level
xStatus Diagnostics Message [n] References
xStatus Diagnostics Message [n] Type
GPIO status
xStatus GPIO Pin [n] State
H320 status
xStatus H320 Gateway Address
xStatus H320 Gateway Id
xStatus H320 Gateway Mode
xStatus H320 Gateway Number
xStatus H320 Gateway Reason
xStatus H320 Gateway Status
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
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 ................................................................. 423
xStatus MediaChannels Call [n] Channel [n] Video ChannelRole ........................................ 423
xStatus MediaChannels Call [n] Channel [n] Video FrameRate ........................................... 423
xStatus MediaChannels Call [n] Channel [n] Video Protocol ................................................ 424
xStatus MediaChannels Call [n] Channel [n] Video ResolutionX ........................................ 424
xStatus MediaChannels Call [n] Channel [n] Video ResolutionY ........................................... 424
xStatus MediaChannels DirectShare [n] Channel [n] Audio Channels .................................. 424
xStatus MediaChannels DirectShare [n] Channel [n] Encryption ......................................... 425
xStatus MediaChannels DirectShare [n] Channel [n] Netstat Bytes ....................................... 425
xStatus MediaChannels DirectShare [n] Channel [n] Netstat ChannelRate ............................. 426
xStatus MediaChannels DirectShare [n] Channel [n] Netstat Jitter ........................................ 426
xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalLost ...................... 426
xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived .............. 426
xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived .............. 427
xStatus MediaChannels DirectShare [n] Channel [n] Netstat Loss ........................................ 427
xStatus MediaChannels DirectShare [n] Channel [n] Netstat MaxJitter ................................. 427
xStatus MediaChannels DirectShare [n] Channel [n] Netstat Packets ................................. 427
xStatus MediaChannels DirectShare [n] Channel [n] Video FrameRate ................................. 428
xStatus MediaChannels DirectShare [n] Channel [n] Video Protocol ................................. 428
xStatus MediaChannels DirectShare [n] Channel [n] Video ResolutionX ............................. 429
xStatus MediaChannels DirectShare [n] Channel [n] Video ResolutionY ............................. 429

Network status .................................................................................................................... 429
xStatus Network [n] CDP Address .................................................................................. 429
xStatus Network [n] CDP Capabilities .............................................................................. 429
xStatus Network [n] CDP Deviceld .................................................................................. 430
xStatus Network [n] CDP Duplex .................................................................................... 430
xStatus Network [n] CDP Platform .................................................................................. 430
xStatus Network [n] CDP PortID ..................................................................................... 430
xStatus Network [n] CDP PrimaryMgmtAddress .............................................................. 431
xStatus Network [n] CDP SysName ................................................................................. 431
xStatus Network [n] CDP SysObjectID .......................................................................... 431
xStatus Network [n] CDP Version ................................................................................... 431
xStatus Network [n] CDP VoIPApplianceVlanId ............................................................... 432

NetworkServices status ..................................................................................................... 439
xStatus NetworkServices NTP CurrentAddress ............................................................... 439
xStatus NetworkServices NTP Server [n] Address ......................................................... 439
xStatus NetworkServices NTP Server [n] Address ......................................................... 440
xStatus NetworkServices UPnP Status ......................................................................... 440
Peripherals status
---------------------
- 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
------------------------
- xStatus Provisioning CUCM Customization Checksum
- xStatus Provisioning CUCM ExtensionMobility Enabled
- xStatus Provisioning CUCM ExtensionMobility LastLoggedInUserld
- 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
- xStatus Provisioning Software UpgradeStatus SessionId
- xStatus Provisioning Software UpgradeStatus Status
- xStatus Provisioning Software UpgradeStatus Urgency
- xStatus Provisioning Software UpgradeStatus URL
- xStatus Provisioning Software UpgradeStatus VersionId
- xStatus Provisioning Status

Proximity status
------------------
- xStatus Proximity Services Availability
<table>
<thead>
<tr>
<th>Status</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SystemUnit</td>
<td>457</td>
</tr>
<tr>
<td>Time</td>
<td>464</td>
</tr>
<tr>
<td>SIP Registration</td>
<td>455</td>
</tr>
<tr>
<td>SIP Secure</td>
<td>456</td>
</tr>
<tr>
<td>SIP Verified</td>
<td>456</td>
</tr>
<tr>
<td>Standby PowerSave State</td>
<td>456</td>
</tr>
<tr>
<td>Standby State</td>
<td>457</td>
</tr>
<tr>
<td>SystemUnit Hardware Module CompatibilityLevel</td>
<td>457</td>
</tr>
<tr>
<td>SystemUnit Hardware Module SerialNumber</td>
<td>457</td>
</tr>
<tr>
<td>SystemUnit Hardware Monitoring Fan Status</td>
<td>458</td>
</tr>
<tr>
<td>SystemUnit Hardware Monitoring Temperature Status</td>
<td>458</td>
</tr>
<tr>
<td>SystemUnit Software DisplayName</td>
<td>461</td>
</tr>
<tr>
<td>SystemUnit Software Name</td>
<td>461</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys Encryption</td>
<td>461</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys MultiSite</td>
<td>462</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys RemoteMonitoring</td>
<td>462</td>
</tr>
<tr>
<td>SystemUnit Software ReleaseDate</td>
<td>462</td>
</tr>
<tr>
<td>SystemUnit Software Version</td>
<td>462</td>
</tr>
<tr>
<td>SystemUnit State CameraLid</td>
<td>463</td>
</tr>
<tr>
<td>SystemUnit State NumberOfActiveCalls</td>
<td>463</td>
</tr>
<tr>
<td>SystemUnit State NumberOfInProgressCalls</td>
<td>463</td>
</tr>
<tr>
<td>SystemUnit State NumberOfSuspendedCalls</td>
<td>463</td>
</tr>
<tr>
<td>SystemUnit Uptime</td>
<td>464</td>
</tr>
<tr>
<td>Video Input Source</td>
<td>468</td>
</tr>
<tr>
<td>Video Input Connector</td>
<td>468</td>
</tr>
<tr>
<td>Video Input DirectShare</td>
<td>469</td>
</tr>
<tr>
<td>Video Input Connector</td>
<td>469</td>
</tr>
<tr>
<td>Video Input DirectShare</td>
<td>469</td>
</tr>
<tr>
<td>Video Input Source</td>
<td>469</td>
</tr>
<tr>
<td>Video ActiveSpeaker PIPPosition</td>
<td>468</td>
</tr>
<tr>
<td>Video ActiveSpeaker DirectShare</td>
<td>468</td>
</tr>
<tr>
<td>Video Input Connector</td>
<td>469</td>
</tr>
<tr>
<td>Video Input DirectShare</td>
<td>469</td>
</tr>
<tr>
<td>Video Input Source</td>
<td>469</td>
</tr>
<tr>
<td>UserInterface Features</td>
<td>465</td>
</tr>
<tr>
<td>UserInterface ContactInfo</td>
<td>465</td>
</tr>
<tr>
<td>UserInterface OSD Output</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface SettingsMenuVisibility</td>
<td>465</td>
</tr>
<tr>
<td>UserInterface Start</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface Share Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Whiteboard Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Features</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface MidCallControls</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface Features</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface Call End</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface Call Keypad</td>
<td>466</td>
</tr>
<tr>
<td>UserInterface Call Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Call Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Call Start</td>
<td>467</td>
</tr>
<tr>
<td>UserInterface Call Start</td>
<td>467</td>
</tr>
</tbody>
</table>
xStatus Video Source [n] Resolution RefreshRate .............................................. 473
xStatus Video Source [n] Resolution Width ..................................................... 473
xStatus Video Layout LayoutFamily Local .......................................................... 474
xStatus Video Layout LayoutFamily Remote ..................................................... 474
xStatus Video Monitors ..................................................................................... 474
xStatus Video Output Connector [n] Connected .............................................. 474
xStatus Video Output Connector [n] ConnectedDevice CEC [n] DeviceType ....... 475
xStatus Video Output Connector [n] ConnectedDevice CEC [n] LogicalAddress ... 475
xStatus Video Output Connector [n] ConnectedDevice CEC [n] Name ............... 475
xStatus Video Output Connector [n] ConnectedDevice CEC [n] PowerStatus ...... 475
xStatus Video Output Connector [n] ConnectedDevice CEC [n] VendorId .......... 476
xStatus Video Output Connector [n] ConnectedDevice Name ......................... 476
xStatus Video Output Connector [n] ConnectedDevice PreferredFormat ......... 476
xStatus Video Output Connector [n] ConnectedDevice ScreenSize .................. 476
xStatus Video Output Connector [n] MonitorRole ............................................. 477
xStatus Video Output Connector [n] Resolution Height ................................... 477
xStatus Video Output Connector [n] Resolution RefreshRate ........................... 477
xStatus Video Output Connector [n] Resolution Width .................................... 477
xStatus Video Output Monitor [n] Backlight ...................................................... 478
xStatus Video Output Monitor [n] Brightness ................................................... 478
xStatus Video Output Monitor [n] ColorTemperature Blue ............................ 478
xStatus Video Output Monitor [n] ColorTemperature Green ......................... 479
xStatus Video Output Monitor [n] ColorTemperature Red ............................. 479
xStatus Video Output Monitor [n] ColorTemperature Selected ....................... 479
xStatus Video Output Monitor [n] Contrast ..................................................... 479
xStatus Video Output Monitor [n] CSCYUV ...................................................... 480
xStatus Video Output Monitor [n] FirmwareVersion ...................................... 480
xStatus Video Output Monitor [n] Gamma ....................................................... 480
xStatus Video Output Monitor [n] ModelName ............................................... 480
xStatus Video Output Monitor [n] Position ..................................................... 481
xStatus Video Output Monitor [n] SerialNumber ............................................ 481
xStatus Video Output Monitor [n] Sharpness .................................................. 481
xStatus Video Output Monitor [n] Temperature .............................................. 481

xStatus Video Presentation PIPPosition ......................................................... 482
xStatus Video Selfview FullscreenMode ......................................................... 482
xStatus Video Selfview Mode ......................................................................... 482
xStatus Video Selfview OnMonitorRole ......................................................... 482
xStatus Video Selfview PIPPosition ................................................................. 483

WebEngine status ......................................................................................... 483
xStatus WebEngine Features Signage ............................................................. 483
xStatus WebEngine Features WebEngine .......................................................... 483

Webex status .................................................................................................. 484
xStatus Webex Services Proximity GuestToken .............................................. 484
xStatus Webex Status ..................................................................................... 484
Audio status

xStatus Audio Devices Bluetooth Active Profile
Applies to: DX70/DX80, DeskPro
Requires user role: ADMIN, USER
Shows the Bluetooth headset profile currently in use.
Value space of the result returned:
   None/HFP/A2DP
      HFP Hands-Free Profile), A2DP (Advanced Audio Distribution Profile), or None, no profile in use.
Example:
xStatus Audio Devices Bluetooth Active Profile
  *s Audio Devices Bluetooth Active Profile: None
  ** end

xStatus Audio Devices HandsetUSB Connection Status
Applies to: DX70/DX80, RoomKit, RoomKitMini, Room55, DeskPro
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 Connection Status
  *s Connected
  ** end

xStatus Audio Devices HandsetUSB Cradle
Applies to: DX70/DX80, RoomKit, RoomKitMini, Room55, DeskPro
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 Headset Analog Connection Status
Applies to: DX70/DX80, DeskPro
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 Headset Analog 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 DeskPro
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 DeskPro
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 DeskPro
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 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 Line [n] Mute
Applies to: All products
Requires user role: ADMIN, USER
Shows whether the audio on a Line input connector is muted or not.
Value space of the result returned:
- On/Off
Example:
xStatus Audio Input Connectors Line 1 Mute
  *s Audio Input Connectors Line 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 DeskPro 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.
  - Unknown: 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 DeskPro 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 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 Connectors USBC [n] Mute
Applies to: All products
Requires user role: ADMIN, USER
Shows whether the audio channel on a USB-C input connector is muted or not.
Value space of the result returned:
  On/Off
Example:
xStatus Audio Input Connectors USBC 1 Mute
  *s Audio Input Connectors USBC 1 Mute: Off
  ** end

xStatus Audio Input KeyClick Attenuate
Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro 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, DeskPro 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  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 DeskPro 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 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 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 \([n]\) 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 CodecPlus Room55 Room70/Room55D 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.
- **Unknown:** 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 [n] 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
  ** 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: "On"
  ** 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:

- **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:

```plaintext
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:

```plaintext
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:

```plaintext
xStatus Audio Output ReportedHdmiCecDelay
's Audio Output ReportedHdmiCecDelay: 39
** end
```
xStatus Audio Output RemoteOutput [n] CallId

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2
Requires user role: ADMIN, USER
Shows the CallId for the remote audio output.
You can run the command xStatus Audio Output RemoteOutput to find the identity [n] of the output.
Value space of the result returned:

1..65534

Example:
```
xStatus Audio Output RemoteOutput 9 CallId
's Audio Output RemoteOutput 9 CallId: 28
** end
```

xStatus Audio Output RemoteOutput [n] Input [n] Gain

Applies to: SX80 MX700/MX800/MX800D CodecPro Room70G2
Requires user role: ADMIN, USER
Shows the gain (dB) on the input, when input is connected to the remote output. Range from -54 dB to 15 dB, where -54 dB equals Off.
You can run the command xStatus Audio Output RemoteOutput to find the identity [n] of the output and input.
Value space of the result returned:

-54..15

Example:
```
xStatus Audio Output RemoteOutput 9 Input 1 Gain
's Audio Output RemoteOutput 9 Input 1 Gain: 0
** end
```

xStatus Audio SelectedDevice

Applies to: DX70/DX80 RoomKit RoomKitMini Room55 DeskPro
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  DeskPro

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 VolumeHeadsetUsb

**Applies to:** DX70/DX80  DeskPro

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 VolumeHeadsetAnalog

**Applies to:** DX70/DX80  RoomKit  RoomKitMini  Room55  DeskPro

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 VolumeInternal

**Applies to:** DX70/DX80  RoomKit  RoomKitMini  Room55  DeskPro

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 5 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.
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] 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] 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 Background Image
Applies to: DeskPro
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
Shows which of a set of three pre-installed images is selected as the background image.
Value space of the result returned:
   Image1/Image2/Image3
   *Image1*: Office space
   *Image2*: Home office
   *Image3*: Beach
Example:
   xstatus Cameras Background Mode
   *s Cameras Background Mode: Image
   ** end
xStatus Cameras Background Mode
Applies to: DeskPro
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
Shows whether any images or effects have been selected to mask the background of the camera view.
Value space of the result returned:
- **Disabled/Blur/BlurMonochrome/DepthOfField/Monochrome/Image**
  - **Disabled**: There are no images or effects masking the background of the camera view.
  - **Blur**: The background is blurred.
  - **BlurMonochrome**: Combination of blur and monochrome (blurred without colors)
  - **DepthOfField**: Variant of blur with less blurring
  - **Monochrome**: Shows the image in grayscale
  - **Image**: The background is replaced by the selected background image.

Example:
```plaintext
xstatus Cameras Background Image
*s Cameras Background Image: Image3
** end
```

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:
```plaintext
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, ROOMCONTROL, USER
Shows if the camera is connected or not.
Value space of the result returned:
- **True/False**

Example:
```plaintext
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
DeskPro
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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:
```plaintext
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  DeskPro
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
Shows if the image is 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  DeskPro
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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  DeskPro
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  DeskPro
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  DeskPro  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 DeskPro

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 DeskPro

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 DeskPro

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 DeskPro 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 DeskPro 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.
  - Diagnostic: 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 DeskPro 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 DeskPro 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 DeskPro 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 CallId

Applies to: All products
Requires user role: ADMIN, USER
Shows the CallId of the current active speaker.
Value space of the result returned: Integer

Example:

xStatus Conference ActiveSpeaker CallId
's Conference ActiveSpeaker CallId: 3
** end

xStatus Conference Call [n] 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] BookingId

Applies to: All products
Requires user role: ADMIN, USER
Shows the booking ID of a conference (if assigned). The booking ID can be used for easy identification of a call or conference.
Value space of the result returned: String

Example:

xStatus Conference Call 2 BookingId
's Conference Call 2 BookingId: "MyConference"
** end

xStatus Conference Call [n] Capabilities FarendMessage Mode

Applies to: All products
Requires user role: ADMIN, USER
Not applicable in this release.
Value space of the result returned:

On/Off

Example:

xStatus Conference Call 4 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 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] SourceId

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 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 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 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] DirectShare

Applies to:
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

Indicates whether or not the presentation originates as a direct share session.

Value space of the result returned:

Integer

Example:
xStatus Conference Presentation LocalInstance 1 DirectShare
  *s Conference Presentation LocalInstance 1 DirectShare: 1
  ** end
**xStatus Conference Presentation LocalInstance [n] SendingMode**

*Applies to: All products*

*Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER*

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:*
  ```bash
  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, ROOMCONTROL, USER*

Shows the SourceId for a current presentation. There can be multiple local presentations which all have their own instance.

*Value space of the result returned:*
  - Integer

*Example:*
  ```bash
  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, ROOMCONTROL, USER*

Shows the status of the secondary video stream.

*Value space of the result returned:*
  - Off/Sending/Receiving

*Example:*
  ```bash
  xStatus Conference Presentation Mode
  *s Conference Presentation Mode: Off
  ** end
  ```

**xStatus Conference SelectedCallProtocol**

*Applies to: All products*

*Requires user role: ADMIN, USER*

Indicates which call protocol is used as default.

*Value space of the result returned:*
  - H320/H323/SIP/Spark

*Example:*
  ```bash
  xStatus Conference SelectedCallProtocol
  *s Conference SelectedCallProtocol: SIP
  ** 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:
```plaintext
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:
```plaintext
xStatus Conference SpeakerLock Mode
*s Conference SpeakerLock Mode: Off
** end
```

Diagnostics status

xStatus Diagnostics Message [n] Description

Applies to: All products
Requires user role: ADMIN, USER

Shows a description of the current diagnostics alerts.

Value space of the result returned:

String

Example:
```plaintext
xStatus Diagnostics Message Description
*s DiagnosticsResult Message 1 Description: "IP configuration incomplete"
** end
```

xStatus Diagnostics Message [n] Level

Applies to: All products
Requires user role: ADMIN, USER

Shows the level of importance of the diagnostics message.

Value space of the result returned:

Error/Warning/Critical

- **Error**: There is an error in the 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:
```plaintext
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:

- **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/AmplifierDetection/AmplifierFanStatus/
- AudioInternalSpeakerDisabled/AudioPairingInterference/AudioPairingNoise/AudioPairingRate/
- AudioPairingSNR/AudioPairingTokenDecode/CAPFOperationState/
- CTLOperation/CallProtocolVendorConfigurationFile/CallProtocolDualStackConfig/
- CallProtocolIPStackPlatformCompatibility/
- CallProtocolVvsProvisioningCompatibility/CameraDetected/CameraId/CameraPairing/
- CameraSerial/CameraSoftwareVersion/CameraStatus/CamerasDetected/
- CaptivePortalDetected/CertificateExpirey/
- CompanionModelIncompatibilityLocal/CompanionModelIncompatibilityRemote/
- ConfigurationFile/ContactInfoMismatch/ControlSystemConnection/CurrentNetowrkQuality/
- DefaultCallProtocolRegistered/
- ECReferenceDelay/EmbeddedWebViewFailedToLoad/
- EmbeddedWebViewTerminatedUnexpectedly/EthernetDuplexMatches/FanStatus/
- FirstTimeWizardNotCompleted/H320GatewayStatus/H323GatekeeperStatus/
- HTTPFeedbackFailed/HTTPSModeSecurity/HasActiveCallProtocol/HasValidReleaseKey/
- HdmiCecModeNoSound/IPv4Assignment/IPv6Assignment/IPv6Mtu/ISDNLinkCompatibility/
- ISDNLinkIpStack/ITLInstallation/
- InvalidSIPTransportConfig/lpCameraStatus/KioskModeFailedToLoad/LockDown/
- LowBattery/MacrosRuntimeStatus/MediaBlockingDetected/MediaPortRangeNegative/
- MediaPortRangeOgg/MediaPortRangeOverlap/
- MediaPortRangeTooSmall/MediaPortRangeValueSpace/MicrophoneOverloaded/
- MicrophoneReinforcement/MicrophonesConnected/MissingDisplay/MissingThirdDisplay/
- MonitorDelay/NTFSStatus/NetLinkStatus/
- NetSpeedAutoNegotiated/NetworkQuality/OSDVideoOutput/OutputConnectorLocations/
- PllLoggingMode/PanoramaCameraHdmi/PanoramaView/PeripheralSoftwareUpgrade/
- PeripheralSoftwareVersion/Linux/PlatformSanity/
- PresentationSourceSelection/PresenterTrack/ProvModeWebexAndWebexEdgeEnabled/
- ProvisioningDeveloperOptions/ProvisioningModeAndStatus/ProvisioningStatus/RoomControl/
- SIPEncryption/SIPListenPortAndOutboundMode/
- SIPListenPortAndRegistration/SIPProfileRegistration/SIPProfileType/
- SelectedVideoSourceConnected/SignageFailedToLoad/
- SignageTerminatedUnexpectedly/SipIceAndAnatConflict/SipOrH323ButNotBothEnabled/
- SoftwareUpgrade/SoftwareUpgradeKeepsFailing/SpeakerTrackEthernetConnection/
**GPIO status**

**xStatus GPIO Pin [n] State**

- **Applies to:** SX80, MX700/800/800D, 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**: +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

xStatus H323 Gatekeeper Address

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

Example:
```
xStatus H323 Mode Reason
's H323 Mode Reason: ""
** end
```

xStatus H323 Mode Status

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

Requires user role: ADMIN, USER

Shows the status for H.323 registration.

Value space of the result returned:

```
Enabled/Disabled
```

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
  ** 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 annex C algorithm is an ITU-T standard for audio compression.
G723_1: The G.723.1 algorithm is an ITU-T standard for audio compression.
G728: The G.728 algorithm is an ITU-T standard for audio compression.
G729: The G.729 algorithm is an ITU-T standard for audio compression.
G729AB: The G.729 annex A and B algorithm is an ITU-T standard for audio compression.
Off: No audio.
Opus: Opus is a royalty-free IETF standard for audio compression.

Example:
```
xStatus MediaChannels Call 27 Channel 327 Audio Protocol
  *s MediaChannels Call 27 Channel 327 Audio Protocol: AACLD
** end
```

xStatus MediaChannels Call \([n]\) Channel \([n]\) Direction

Applies to: All products
Requires user role: ADMIN, USER

Shows the direction of the call.

Value space of the result returned:

Incoming/Outgoing

Example:
```
xStatus MediaChannels Call 27 Channel 327 Direction
  *s MediaChannels Call 27 Channel 327 Direction: Incoming
** 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 incom-
ing 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
  - 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.
  - 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 height (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

xStatus MediaChannels DirectShare [n] Channel [n] Audio Channels
Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro, Boards
Requires user role: ADMIN, USER
Shows the number of audio channels (none, mono, stereo) received over the channel in question.
Value space of the result returned:
- Integer
  - 0: None
  - 1: Mono
  - 2: Stereo
Example:
xStatus MediaChannels DirectShare 27 Channel 327 Audio Channels
  *s MediaChannels DirectShare 27 Channel 327 Audio Channels: 1
  ** end
xStatus MediaChannels DirectShare [n] Channel [n] Audio Protocol

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

Requires user role: ADMIN, USER

Shows the audio codec used for the active incoming share session.

Value space of the result returned:

AAC/LC/AACLD/AMR/CiscoPCM16/L16-768/ComfortNoise/G711A/G711Mu/G722/G7221/G7221C/G723_1/G728/G729/G729A/G729AB/Off/Opus/Raw

The audio standards supported are essentially the same as supported in call, but the client will typically only ever use Opus (or AAC).

AAC/LC: The AAC-LD is an MPEG-4 Low Delay Audio Coder audio compression format.
G711A: The G.711 A-law algorithm is an ITU-T standard for audio compression.
G711Mu: The G.711 Mu-law algorithm is an ITU-T standard for audio compression.
G722: The G.722 algorithm is an ITU-T standard for audio compression.
G7221: The G.722.1 algorithm is an ITU-T standard for audio compression.
G7221C: The G.722.1 annex C algorithm is an ITU-T standard for audio compression.
G723_1: The G.723.1 algorithm is an ITU-T standard for audio compression.
G728: The G.728 algorithm is an ITU-T standard for audio compression.
G729: The G.729 algorithm is an ITU-T standard for audio compression.
G729AB: The G.729 annex A and B algorithm is an ITU-T standard for audio compression.
Off: No audio.
Opus: Opus is a royalty-free IETF standard for audio compression.

Example:

xStatus MediaChannels DirectShare 27 Channel 327 Audio Protocol
*s MediaChannels DirectShare 27 Channel 327 Audio Protocol: AACLC
** end

xStatus MediaChannels DirectShare [n] Channel [n] Encryption

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

Requires user role: ADMIN, USER

Shows the encryption status for the incoming audio/video channel in question.

Value space of the result returned:

On/Off

Example:

xStatus MediaChannels DirectShare 27 Channel 327 Encryption
*s MediaChannels DirectShare 27 Channel 327 Encryption: On
** end

xStatus MediaChannels DirectShare [n] Channel [n] Netstat Bytes

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

Requires user role: ADMIN, USER

Shows the cumulative number of bytes received for the channel in question.

Value space of the result returned:

Integer

Example:

xStatus MediaChannels DirectShare 27 Channel 327 NetStat Bytes
*s MediaChannels DirectShare 27 Channel 327 NetStat Bytes: 496640
** end
xStatus MediaChannels DirectShare [n] Channel [n] Netstat ChannelRate

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

 Requires user role: ADMIN, USER

 Shows the current incoming audio/video bandwidth for the channel in question.

 Value space of the result returned:

 Integer

 Example:

 xStatus MediaChannels DirectShare 27 Channel 327 NetStat ChannelRate
 *s MediaChannels DirectShare 27 Channel 327 NetStat ChannelRate: 128000
 ** end

xStatus MediaChannels DirectShare [n] Channel [n] Netstat Jitter

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

 Requires user role: ADMIN, USER

 Shows the jitter currently measured for received audio/video on the incoming channel, as specified by RFC 3550.

 Value space of the result returned:

 Integer

 Example:

 xStatus MediaChannels DirectShare 27 Channel 327 NetStat Jitter
 *s MediaChannels DirectShare 27 Channel 327 NetStat Jitter: 2
 ** end

xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalLost

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

 Requires user role: ADMIN, USER

 Shows the number of lost audio/video packets during the last interval on the incoming channel in question.

 Value space of the result returned:

 Integer

 Example:

 xStatus MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalLost
 *s MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalLost: 0
 ** end

xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived

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

 Requires user role: ADMIN, USER

 Shows the number of received audio/video packets during the last interval over the channel in question.

 Value space of the result returned:

 Integer

 Example:

 xStatus MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalReceived
 *s MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalReceived: 289
 ** end
xStatus MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived

Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro

Requires user role: ADMIN, USER

Shows the number of received audio/video packets during the last interval over the channel in question.

Value space of the result returned:

Integer

Example:
```
xStatus MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalReceived
's MediaChannels DirectShare 27 Channel 327 NetStat LastIntervalReceived: 289
** end
```

xStatus MediaChannels DirectShare [n] Channel [n] Netstat Loss

Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro

Requires user role: ADMIN, USER

Shows the number of audio/video packets lost for the channel in question.

Value space of the result returned:

Integer

Example:
```
xStatus MediaChannels DirectShare 27 Channel 327 NetStat Loss
's MediaChannels DirectShare 27 Channel 327 NetStat Loss: 0
** end
```

xStatus MediaChannels DirectShare [n] Channel [n] Netstat MaxJitter

Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro

Requires user role: ADMIN, USER

Shows the maximum jitter measured on the channel in question during the last interval (about 5 seconds).

Value space of the result returned:

Integer

Example:
```
xStatus MediaChannels DirectShare 27 Channel 327 NetStat MaxJitter
's MediaChannels DirectShare 27 Channel 327 NetStat MaxJitter: 2
** end
```

xStatus MediaChannels DirectShare [n] Channel [n] Netstat Packets

Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro

Requires user role: ADMIN, USER

Shows the total number of packets received for the channel in question.

Value space of the result returned:

Integer

Example:
```
xStatus MediaChannels DirectShare 27 Channel 327 NetStat Packets
's MediaChannels DirectShare 27 Channel 327 NetStat Packets: 1551
** end
```
xStatus MediaChannels DirectShare [n] Channel [n] Video FrameRate

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

Requires user role: ADMIN, USER

Shows the received frame rate for the channel in question. Note: Only applicable to video channels.

Value space of the result returned:
   Integer

Example:
   xStatus MediaChannels DirectShare 27 Channel 327 Video FrameRate: 30

** end

xStatus MediaChannels DirectShare [n] Channel [n] Video Protocol

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

Requires user role: ADMIN, USER

Shows the video codec used for the channel in question.

Value space of the result returned:
   H261/H263/H263p/H263pp/H264/HEVC/AV1/JPEG/MP4V/Off/Raw/RDP

The video standards supported are essentially the same as supported in call, but the client will typically only ever use H264.

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.
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 DirectShare 27 Channel 327 Video Protocol: H264

** end
xStatus MediaChannels DirectShare [n] Channel [n] Video ResolutionX

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

Requires user role: ADMIN, USER

Shows the width (resolution in the x-direction) of the video stream received.

Value space of the result returned:

  Integer

Example:
xStatus MediaChannels DirectShare 27 Channel 327 Video ResolutionX
's MediaChannels DirectShare 27 Channel 327 Video ResolutionX: 1920
  ** end

xStatus MediaChannels DirectShare [n] Channel [n] Video ResolutionY

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

Requires user role: ADMIN, USER

Shows the height (resolution in y-direction) of the video stream received.

Value space of the result returned:

  Integer

Example:
xStatus MediaChannels DirectShare 27 Channel 327 Video ResolutionY
's MediaChannels DirectShare 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 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
  ** end
xStatus Network [n] CDP VoIPApplianceVlanID

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

xStatus Network [n] IPv6 Address
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: ""
   ** 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:DB8:0000:0000:0000:0000:0000:0001"
   ** 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**: 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
```

xStatus Network [n] Wifi BSSID

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Shows the Basic Service Set Identifiers (BSSID) used for the Wi-Fi connection.
Value space of the result returned:

- **String**

Example:

```
xStatus Network 1 Wifi BSSID
** end
```

xStatus Network [n] Wifi Channel

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Shows the channel used for the Wi-Fi connection.
Value space of the result returned:

- **Integer**

Example:

```
xStatus Network 1 Wifi Channel
*s Network 1 Wifi Channel: 13
** end
```

xStatus Network [n] Wifi Frequency

Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Shows the frequency corresponding to the Wi-Fi channel.
Value space of the result returned:

- **Integer**

Example:

```
xStatus Network 1 Wifi frequency
*s Network 1 Wifi Frequency: nnnn
** end
```
**xStatus Network [n] Wifi MacAddress**

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

DeskPro  Boards

Requires user role: ADMIN, USER

Shows the MacAddress used for the Wi-Fi connection.

Value space of the result returned:

* `String`

Example:

```
xStatus Network 1 Wifi MacAddress
*s Network 1 Wifi MacAddress: "xx:xx:xx:xx:xx:xx"
** end
```

**xStatus Network [n] Wifi Phase2Method**

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

DeskPro  Boards

Requires user role: ADMIN, USER

Shows the Phase2Method used for the Wi-Fi connection, if applicable.

Value space of the result returned:

* `String`

Example:

```
xStatus Network 1 Wifi Phase2Method
*s Network 1 Wifi Phase2Method: ""
** end
```

**xStatus Network [n] Wifi RawSSID**

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

DeskPro  Boards

Requires user role: ADMIN, USER

Shows the Raw SSID of the Wi-Fi connection.

Value space of the result returned:

* `String`

Example:

```
xStatus Network 1 Wifi RawSSID
*s Network 1 Wifi RawSSID: "Aurora"
** end
```

**xStatus Network [n] Wifi Reason**

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

DeskPro  Boards

Requires user role: ADMIN, USER

Shows the reason defined for the Wi-Fi connection, if applicable.

Value space of the result returned:

* `String`

Example:

```
xStatus Network 1 Wifi Reason
*s Network 1 Wifi Reason: ""
** end
```
xStatus Network [n] Wifi Region
Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Shows the region of the Wi-Fi connection.
Value space of the result returned:
  String
Example:
  xStatus Network 1 Wifi Region
  *s Network 1 Wifi Region: "00"
  ** end

xStatus Network [n] Wifi RSSI
Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Shows the Received Signal Strength Indicator (RSSI) used by the Wi-Fi connection.
Value space of the result returned:
  Integer
Example:
  xStatus Network 1 Wifi RSSI
  *s Network 1 Wifi RSSI: -62
  ** end

xStatus Network [n] Wifi ScanResult [n] Flags
Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Returns all the flags found in a scan result.
Note that you must run a scan (e.g., "Network Wifi Scan Start") before this will yield results.
Value space of the result returned:
  String
Example:
  xStatus Network 1 Wifi ScanResult 1 Flags
  *s Network 1 Wifi ScanResult 1 Flags: "[ESS]"
  ** end

xStatus Network [n] Wifi ScanResult [n] RawSSID
Applies to: DX70/DX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro Boards
Requires user role: ADMIN, USER
Returns all the RawSSID values found in a scan result.
Note that you must run a scan (e.g., "Network Wifi Scan Start") before this will yield results.
Value space of the result returned:
  String
Example:
  xStatus Network 1 Wifi ScanResult 1 RawSSID
  *s Network 1 Wifi ScanResult 1 RawSSID: "Aurora"
  ** end
xStatus Network [n] Wifi ScanResult [n] SignalLevel

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

Requires user role: ADMIN, USER

Returns all the SignalLevel values found in a scan result.
Note that you must run a scan (e.g., "Network Wifi Scan Start") before this will yield results.

Value space of the result returned:
Integer

Example:
```plaintext
xStatus Network 1 Wifi ScanResult 1 SignalLevel
's Network 1 Wifi ScanResult 1 SignalLevel: -61
** end
```

xStatus Network [n] Wifi ScanResult [n] SSID

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

Requires user role: ADMIN, USER

Returns all the SSID values found in a scan result.
Note that you must run a scan (e.g., "Network Wifi Scan Start") before this will yield results.

Value space of the result returned:
String

Example:
```plaintext
xStatus Network 1 Wifi ScanResult 1 SSID
's Network 1 Wifi ScanResult 1 SSID: "Aurora"
** end
```

xStatus Network [n] Wifi Speed

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

Requires user role: ADMIN, USER

Shows the speed of the Wi-Fi connection.

Value space of the result returned:
Integer

Example:
```plaintext
xStatus Network 1 Wifi Speed
's Network 1 Wifi Speed: 39
** end
```

xStatus Network [n] Wifi SSID

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

Requires user role: ADMIN, USER

Shows the Server Set Identifier (SSID) of the Wi-Fi connection.

Value space of the result returned:
String

Example:
```plaintext
xStatus Network 1 Wifi SSID
's Network 1 Wifi SSID: "Aurora"
** end
```
xStatus Network [n] Wifi Status

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

Requires user role: ADMIN, USER

Shows the status of the Wi-Fi network connection.

Value space of the result returned:

- Associating/Connected/Disconnected/AuthFailed/Failed/Other
  - Associating-Trying to connect to a Wi-Fi network.
  - Connected-The device is not connected to a Wi-Fi network.
  - Disconnected-The device is not connected to a Wi-Fi network.
  - AuthFailed-Authentication failed when trying to connect to a Wi-Fi network.
  - Failed-The device could not connect to the Wi-Fi network for reasons other than authentication failure.
  - Other-Any other scenario.

Example:

```plaintext
xStatus Network 1 Wifi Status
*s Network 1 Wifi Status: Connected
** end
```

xStatus Network [n] Wifi Type

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

Requires user role: ADMIN, USER

Shows the encryption type of the Wi-Fi network connection.

Value space of the result returned:

```plaintext
xStatus Network 1 Wifi Type
*s Network 1 Wifi Type: "Wpa2-psk"
** 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:

```plaintext
String
```

Example:

```plaintext
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:

```plaintext
String
```

Example:

```plaintext
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, ROOMCONTROL, USER
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, ROOMCONTROL, USER
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, ROOMCONTROL, USER
Shows the product name of connected device.
Value space of the result returned:
  String
Example:
  xStatus Peripherals ConnectedDevice 1007 Name
  *s Peripherals ConnectedDevice 1007 Name: "Cisco TelePresence Touch"
  ** end

xStatus Peripherals ConnectedDevice [n] SerialNumber
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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, ROOMCONTROL, USER
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, ROOMCONTROL, USER
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, ROOMCONTROL, USER
Shows the type of a peripheral that is connected to the video conferencing device.
Note: The Precision 60 and Quad cameras returns the value Camera. A SpeakerTrack 60 camera returns the value SpeakerTracker. Only recognized Cisco headsets returns the value Headset.
Value space of the result returned:
- Byod/Camera/ControlSystem/Headset/InputDevice/ISDNLink/Other/SpeakerTrack/TouchPanel
Example:
```
xStatus Peripherals ConnectedDevice 1001 Type
*s Peripherals ConnectedDevice 1001 Type: TouchPanel
** end
```

xStatus Peripherals ConnectedDevice [/n] UpgradeStatus
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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, ROOMCONTROL, USER
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
```

xStatus Peripherals ConnectedDevice [/n] UpgradeFailureReason
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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
```
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:
```plaintext
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:
```plaintext
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:
```plaintext
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:
```plaintext
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**: This device is using the briefing room setup.
- **Classroom**: This device 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/DownloadCompleted/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**: 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:

```bash
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**

Example:

```bash
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, Room70G2, DeskPro, 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 AmbientTemperature

Applies to: DeskPro

Requires user role: ADMIN, USER

Shows the ambient temperature for the device.

Value space of the result returned: String

The ambient temperature in degrees Celsius.

Example:
xStatus RoomAnalytics AmbientTemperature
'\s RoomAnalytics AmbientTemperature: "20.7"
** end

xStatus RoomAnalytics Engagement CloseProximity

Applies to: RoomKit, RoomKitMini, Room55, DeskPro, Boards

Requires user role: ADMIN, INTEGRATOR, USER

The device can detect the presence of people at close proximity.

This status depends on the camera running. To use, we recommend turning on the configuration "RoomAnalytics PeopleCountOutOfCall".

If not, the status will only be updated in conversation or when self-view is on.

Value space of the result returned:

False/True

False: The status will be False when the camera is not running or when the conditions for True are not met.

True: The status becomes True if at least one person meets these criteria:
- Less than 1 meter from the camera
- Has face facing camera
- Standing relatively still

The status goes from True to False again if the person goes further than 1.5 meters from the camera or leaves the camera view.

Example:
xStatus RoomAnalytics Engagement
'\s RoomAnalytics Engagement CloseProximity: False
** end
xStatus RoomAnalytics PeopleCount Current

** Applies to:** SX80 RoomKit RoomKitMini CodecPlus CodecPro Room55 Room70/Room55D Room70G2 DeskPro 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 DeskPro 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 DeskPro 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
```

** Example:**

```
xStatus RoomAnalytics Sound Level A
*s RoomAnalytics Sound Level A: 33
** end
```

xStatus RoomAnalytics RelativeHumidity

** Applies to:** DeskPro

** Requires user role:** ADMIN, USER

Shows the relative humidity for the device.

**Value space of the result returned:**

```
Integer
```

** Example:**

```
xStatus RoomAnalytics RelativeHumidity
*s RoomAnalytics RelativeHumidity: 26
** 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 DeskPro 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
  "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 DeskPro 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
  "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 DeskPro Boards
Requires user role: ADMIN, USER
Shows the camera preset type.
Value space of the result returned:
All/Camera
Example:
  xStatus RoomPreset 1 Type
  "RoomPreset 1 Type: All"
  ** end
Security status

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
  \n  *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 DeskPro Boards

**Requires user role:** ADMIN, USER

**Value space of the result returned:**

- String

**Example:**

```
xStatus SIP AlternateURI Alias
  \n  *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 DeskPro Boards

**Requires user role:** ADMIN, USER

**Value space of the result returned:**

- String

**Example:**

```
xStatus SIP AlternateURI Primary
  \n  *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  DeskPro  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  DeskPro  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  DeskPro  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  DeskPro  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 DeskPro Boards

**Requires user role:** ADMIN, USER

Indicates how many new messages are in the mailbox.

Value space of the result returned:

- **Integer**

Example:

```plaintext
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 DeskPro Boards

**Requires user role:** ADMIN, USER

Returns the URI for your SIP mailbox.

Value space of the result returned:

- **String**

Example:

```plaintext
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 DeskPro 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:

```plaintext
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 DeskPro 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:

```plaintext
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  DeskPro  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  DeskPro  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  DeskPro  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  DeskPro  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  DeskPro  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  DeskPro  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 TlsVerify: 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, ROOMCONTROL, USER
Shows whether the device is in standby mode or not.
Value space of the result returned:
- **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
```
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, DeskPro 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/MX800D
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
Pro)
"Cisco Webex Room 70 USB": Cisco Webex Room USB
"Cisco TelePresence SX10": Cisco TelePresence SX10
"Cisco TelePresence SX20": Cisco TelePresence SX20
"Cisco TelePresence SX80": Cisco TelePresence SX80

Example:

```plaintext
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
- "Desk Pro": Cisco Webex Desk 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)
- "Room USB": Cisco Webex Room USB
- "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 DeskPro 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"
  ** 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"
  ** end
xStatus SystemUnit State CameraLid
Applies to: DX70/DX80, MX200G2/MX300G2, DeskPro
Requires user role: ADMIN, USER
Shows the position of the camera lid (i.e., Closed or Open).
Value space of the result returned:

Closed/Open
- **Closed**: The camera lid is closed.
- **Open**: The camera lid is open.

Example:
```
xStatus SystemUnit State CameraLid
*s SystemUnit State CameraLid: Closed
** end
```

xStatus SystemUnit State NumberOfActiveCalls
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER
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, ROOMCONTROL, USER
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 State NumberOfSuspendedCalls
Applies to: All products
Shows the number of suspended calls.
Value space of the result returned:

0..5

Example:
```
xStatus SystemUnit State NumberOfSuspendedCalls
*s SystemUnit State NumberOfSuspendedCalls: 0
** end
```
xStatus SystemUnit Uptime

Applies to: All products
Requires user role: ADMIN, USER

Shows the number of seconds since the last restart of the device.

Value space of the result returned:

- Integer

Example:

xStatus SystemUnit Uptime
's SystemUnit Uptime: 597095
** end

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
** 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"
  ** end

xStatus UserInterface Extensions Widget [n] Value

Applies to: All products
Requires user role: ADMIN, INTEGRATOR, ROOMCONTROL, USER

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, ROOMCONTROL, USER

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:**

```plaintext
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:**

```plaintext
xStatus UserInterface Features Call End
's UserInterface Features Call End: Visible
** end
```

**xStatus UserInterface Features Call Keypad**

**Applies to:** All products

**Requires user role:** ADMIN, INTEGRATOR

This status reports whether or not the default Keypad 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:**

```plaintext
xStatus UserInterface Features Call Keypad
's UserInterface Features Call Keypad: Visible
** end
```

**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:**

```plaintext
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 DeskPro 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 OSD Output
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, USER

Indicates which monitor on-screen information and indicators (OSD) are displayed on. If the device is controlled with a remote control also the on-screen menus appear on this monitor.

Value space of the result returned:

Integer

Example:
```
xStatus UserInterface OSD Output
's UserInterface OSD Output: 1
   ** end
```
xStatus UserInterface SettingsMenu Visibility

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

This status reports whether or not 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**: 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 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  DeskPro

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  DeskPro

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  DeskPro

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  DeskPro

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] VendorId
Applies to: RoomKit  RoomKitMini  CodecPlus  CodecPro  Room55  Room70/Room55D  Room70G2  DeskPro
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] SourceId
Applies to: All products
Requirements user role: ADMIN, INTEGRATOR, USER
Shows the identifier 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
  *s Video Input Connector 1 Type: HDMI
  ** end
xStatus Video Input DirectShare [n] Peer Address
Applies to:
Requires user role: ADMIN, INTEGRATOR, USER
Shows the IP address of the connected direct share peer.
Value space of the result returned:
String
Example:
  xStatus Video Input DirectShare 27 Peer Address
  *s Video Input DirectShare 27 Peer Address: xxx.xxx.xx.xx
  ** end

xStatus Video Input DirectShare [n] Peer PeripheralID
Applies to:
Requires user role: ADMIN, INTEGRATOR, USER
Shows a unique identifier of the direct share peer in question.
Value space of the result returned:
String
Example:
  xStatus Video Input DirectShare 27 Peer PeripheralID
  *s Video Input DirectShare 27 Peer PeripheralID: byod-5
  ** end

xStatus Video Input DirectShare [n] Type
Applies to:
Requires user role: ADMIN, INTEGRATOR, USER
Shows the type of direct share peer (currently limited to "Proximity" only).
Value space of the result returned:
Proximity
  Proximity: Sharing through a proximity connection.
Example:
  xStatus Video Input DirectShare 27 Type
  *s Video Input DirectShare 27 Type: Proximity
  ** 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

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/AnalogGTFLVDefault/
AnalogGTFSsecondary/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] MediaChannelId
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
Applies to: All products
Requires user role: ADMIN, INTEGRATOR, USER
Shows the resolution refresh rate (Hz) for the video input source.
Value space of the result returned:
  0..300
Example:
xStatus Video Input Source 1 Resolution RefreshRate
  *s Video Input Source 1 Resolution RefreshRate: 50
  ** end

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 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 device 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] VendorId
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 1 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 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] 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
** 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, DeskPro, 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 Room65 Room70/Room55D Room70G2 DeskPro 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 Room65 Room70/Room55D Room70G2 DeskPro 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  DeskPro  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  DeskPro  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  DeskPro  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

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
** end

xStatus Video Selfview OnMonitorRole

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

Identifies which monitor(s) contains the selfview, if present.

Value space of the result returned:

First/Second/Third

Example:
xStatus Video Selfview OnMonitorRole
*s Video Selfview OnMonitorRole: First
** end
xStatus Video Selfview PIPPosition

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

Shows the position of the selfview image on the screen.

Value space of the result returned:
- UpperLeft
- UpperCenter
- UpperRight
- CenterLeft
- CenterRight
- LowerLeft
- LowerRight

Example:
```plaintext
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, DeskPro 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:
```plaintext
xStatus WebEngine Features Signage
*s WebEngine Features Signage: On
** end
```

xStatus WebEngine Features WebEngine

Applies to: RoomKit, RoomKitMini, CodecPlus, CodecPro, Room55, Room70/Room55D, Room70G2, DeskPro 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:
```plaintext
xStatus WebEngine Features WebEngine
*s WebEngine Features WebEngine: On
** end
```
Webex status

xStatus Webex Services Proximity GuestToken

Applies to: All products
Requires user role: ADMIN, USER

Provides the device-specific code that can be used with devices.webex.com. Note that the code will change periodically.
The status is only available for cloud-registered devices.
Value space of the result returned:
  String

Example:
  xStatus Webex Services Proximity GuestToken
  *s Webex Services Proximity GuestToken: "6K2-WEC-7U2"
  ** end

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 cloud 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
Supported commands matrix

Here you can find tables that show the complete list of configurations, commands, and statuses that are supported for devices running CE9.12.

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:
   - Desk series: Desk Pro, 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
   Configurations: You can access all configurations from the device’s web interface. A subset is also part of the device’s API.

   Commands: You can only issue commands from the device’s API.

   Statuses: You can request the listed statuses from the device’s API. You can access more statuses from the device’s web interface.

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)
   - INTEGRATOR (I)
   - ROOMCONTROL (R)
   - USER (U)
### Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 G2</th>
<th>Room 55 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio DefaultVolume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Audio Input ARC [n] Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input HDMI [n] Level</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input HDMI [n] Mode</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input HDMI [n] VideoAssociation MuteOnInactiveVideo</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] Equalizer ID</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] Equalizer Mode</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] VideoAssociation MuteOnInactiveVideo</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] VideoAssociation VideoInputSource</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] Channel</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] Level</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Line [n] Mode</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Channel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] EchoControl Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] EchoControl Dereverberation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] EchoControl NoiseReduction</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Equalizer ID</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Equalizer Mode</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Level</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] Type</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] PhantomPower</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] VideoAssociation</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] VideoAssociation MuteOnInactiveVideo</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input Microphone [n] VideoAssociation VideoInputSource</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported                                      
### Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX/80</th>
<th>SX/20</th>
<th>SX/10</th>
<th>MX80/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 S</th>
<th>Room 75</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Input MicrophoneMode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input USB[n] Level</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input USB[n] Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Input WebView[n] Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio KeyClickDetector Attenuate</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio KeyClickDetector Enabled</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Microphones Mute Enabled</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Microphones PhantomPower</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio MicrophoneReinforcement Input Microphone [n] Mode</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio MicrophoneReinforcement Output Line [n] Mode</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output ARC [n] Delay DelayMs</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output ARC [n] Delay Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output ARC [n] Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output ConnectorSetup</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output HDMI [n] Delay DelayMs</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output HDMI [n] Delay Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output HDMI [n] Level</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output InternalSpeaker Mode</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output Line [n] Channel</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output Line [n] Delay DelayMs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output Line [n] Delay Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output Line [n] Equalizer ID</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio Output Line [n] Equalizer Mode</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Web, API</td>
<td></td>
<td>A I</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported

## Configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX80/800 MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70</th>
<th>Room 55</th>
<th>Room 70 Dual</th>
<th>Room 55</th>
<th>Room 70 G2</th>
<th>Room 70 G2</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web, API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Output Line [n] Level</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Audio Output Line [n] Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Audio Output Line [n] OutputType</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>Audio SoundsAndAlerts RingTone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio SoundsAndAlerts RingVolume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Ultrasound Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Ultrasound MaxVolume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluetooth Allowed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Bluetooth Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>BYOD TouchForwarding Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
</tr>
<tr>
<td>CallHistory Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] AssignedSerialNumber</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Background Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Backlight DefaultMode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Brightness Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Brightness DefaultLevel</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Flip</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Focus Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Gamma Mode</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Gamma Level</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] IrSensor</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Mirror</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] MotorMoveDetection</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Whitebalance Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras Camera [n] Whitebalance Level</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported  
<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameras Camera Frame Rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, AUDIT, INTEGRATOR, ROOMCONTROL, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PowerLine Frequency</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack CameraPosition Pan</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack CameraPosition Tilt</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack CameraPosition Zoom</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack Connector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack Enabled</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack PresenterDetectedStatus</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PresenterTrack TriggerZone</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras PowerLine Frequency</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, AUDIT, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack Closeup</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack TrackingMode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack ConnectorDetection Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack ConnectorDetection CameraLeft</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack ConnectorDetection CameraRight</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Cameras SpeakerTrack Whiteboard Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, INTEGRATOR, USER</td>
<td></td>
</tr>
<tr>
<td>Conference ActiveControl Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference AutoAnswer Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference AutoAnswer Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference AutoAnswer Delay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference CallProtocolIPStack</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference DefaultCall Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference DefaultCall Rate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
<tr>
<td>Conference DoNotDisturb DefaultTimeout</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>ADMIN, USER</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
## Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2/MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 70 G2</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Encryption Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference FarEndControl Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference FarEndControl SignalCapability</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference FarEndMessage Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference MaxReceiveCallRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference MaxTransmitCallRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference MaxTotalReceiveCallRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference MicUnmuteOnDisconnect Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference MultiStream Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference IncomingMultisiteCallMode</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Presentation OnPlacedOnHold</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>Conference Presentation RelayQuality</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>Facility Service Service [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Facility Service Service [n] Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Facility Service Service [n] Number</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Facility Service Service [n] CallType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>GPIO Pin [n] Mode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>H323 Authentication Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>H323 Authentication LoginName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>H323 Authentication Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>H323 CallSetup Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>H323 Encryption KeySize</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
<tr>
<td>H323 Gatekeeper Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>Web, A</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported
## Configuration

<table>
<thead>
<tr>
<th>Setting</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 55</th>
<th>Room 70 G2</th>
<th>Room 705</th>
<th>Room 70 S5</th>
<th>Board 55/65S</th>
<th>70/70 S5</th>
<th>85S</th>
<th>On-prem only</th>
<th>Web interface</th>
<th>API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>H323 H323Alias E164</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 H323Alias ID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 NAT Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 NAT Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 PortAllocation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpClient Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpClient AllowHTTP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpClient AllowInsecureHTTPS</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpClient UseHttpProxy</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpFeedback TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HttpFeedback UseHttpProxy</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging Debug Wifi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging External Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging External Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging External Server Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging External Server Port</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging External TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logging Internal Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macros Mode</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macros AutoStart</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macros UnresponsiveTimeout</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macros XAPI Transport</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] DNS DNSSEC Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] DNS Domain Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
### Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX80/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55 Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network [n] DNS Server [m] Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X UseClientCertificate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Identity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X AnonymousIdentity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Eap Md5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Eap Tls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Eap Tls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IEEE8021X Eap Peap</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPStack</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv4 Assignment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv4 Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv4 Gateway</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv4 SubnetMask</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv6 Assignment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv6 Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv6 Gateway</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] IPv6 DHCPOptions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] MTU</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS DiffServ Audio</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS DiffServ Video</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS DiffServ Data</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**X**: Supported   **-**: Not supported    
**A**: ADMIN    **Au**: AUDIT   **I**: INTEGRATOR   **R**: ROOMCONTROL   **U**: USER
### Configuration

<table>
<thead>
<tr>
<th>Network [n] QoS Diffserv Signalling</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS Diffserv ICMPv6</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] QoS Diffserv NTP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] RemoteAccess Allow</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] Speed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] TrafficControl Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] VLAN Voice Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network [n] VLAN Voice VlanId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkPort [n] Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices CDP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices H323 Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Proxy LoginName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Proxy Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Proxy Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Proxy Url</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTP Proxy PACUrl</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTPS OCSP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTPS OCSP URL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTPS Server MinimumTLSVersion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTPS StrictTransportSecurity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices HTTPS VerifyClientCertificate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices NTP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices NTP Server [n] Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NetworkServices NTP Server [n] Key</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **X:** Supported
- **-:** Not supported
- **A:** ADMIN
- **Au:** AUDIT
- **I:** INTEGRATOR
- **R:** ROOMCONTROL
- **U:** USER
<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetworkServices NTP Server [n] KeyId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices NTP Server [n] KeyAlgorithm</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SIP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP Server</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP Port</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP Username</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP Password</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SMTP From</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SNMP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SNMP CommunityName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SNMP SystemContact</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SNMP SystemLocation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SSH Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SSH HostKeyAlgorithm</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices SSH AllowPublicKey</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices Telnet Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices UPnP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices UPnP Timeout</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices Websocket</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices WelcomeText</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>NetworkServices Wifi Allowed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices Wifi Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices XMLAPI Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
### Configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70-55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripherals InputDevice Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Pairing CiscoTouchPanels EmcResilience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Pairing CiscoTouchPanels RemotePairing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Profile Cameras</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Profile Cameras</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Profile ControlSystems</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripherals Profile TouchPanels</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonebook Server [n] ID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonebook Server [n] Pagination</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonebook Server [n] TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonebook Server [n] URL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Connectivity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning CUCM CallManagementRecords</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning ExternalManager Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning ExternalManager AlternateAddress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning ExternalManager Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning ExternalManager Path</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning ExternalManager Domain</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning LoginName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning WebexEdge</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity AlternatePort Enabled</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Notes:**
- X: Supported  - : Not supported
<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity Services CallControl</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity Services ContentShare FromClients</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity Services ContentShare ToClients</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics AmbientNoiseEstimation Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics PeopleCountOutOfCall</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics PeoplePresenceDetector</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomReset Control</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTP Ports Range Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTP Ports Range Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTP Video Ports Range Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTP Video Ports Range Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Audit Logging Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Audit OnError Action</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Audit Server Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Audit Server Port</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Audit Server PortAssignment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Fips Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session FailedLoginsLockoutTime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session InactivityTimeout</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session MaxFailedLogins</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session MaxSessionsPerUser</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session MaxTotalSessions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Session ShowLastLogon</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SerialPort Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Configuration

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 5</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SerialPort BaudRate</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>SerialPort LoginRequired</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP ANAT</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Authentication UserName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Authentication Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP DefaultTransport</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP DisplayName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Line</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP ListenPort</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Mailbox</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP MinimumTLSVersion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP PreferredIPSignaling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Proxy [n] Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP TlsVerify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Turn DiscoverMode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Turn DropRfix</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Turn Server</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Turn UserName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Turn Password</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SIP URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Standby BootAction</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I U</td>
</tr>
<tr>
<td>Standby Control</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
### Configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby Delay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby Signage Audio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby Signage InteractionMode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby Signage Mode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby Signage RefreshInterval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby Signage Url</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby StandbyAction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby WakeupAction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>Standby WakeupOnMotionDetection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
</tr>
<tr>
<td>Standby PowerSave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
</tr>
<tr>
<td>SystemUnit Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit CrashReporting Advanced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit CrashReporting Mode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit CrashReporting Url</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit IrSensor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Time TimeFormat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time DateFormat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time Zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time WorkDay Start</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time WorkDay End</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time WorkWeek FirstDayOfWeek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Time WorkWeek LastDayOfWeek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>User Interface Accessibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
</tr>
<tr>
<td>User Interface Assistant Mode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>User Interface Assistant ProactiveMeetingJoin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported
## Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 75</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserInterface Bookings Visibility Title</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserInterface Branding AwakeBranding Colors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface ContactInfo Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface CustomMessage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Diagnostics Notifications</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface KeyTones Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>UserInterface Features Call End</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Call Keypad</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Call MidCallControls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Call JoinWebex</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Call Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Call VideoMute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features HideAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Share Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Features Whiteboard Start</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Language</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>UserInterface OSD EncryptionIndicator</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface OSD HalfwakeMessage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface OSD Output</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Proximity Notifications</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface RoomKitTouch Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>UserInterface Security Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface SettingsMenu Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface SettingsMenu Visibility</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
## Configuration

<table>
<thead>
<tr>
<th>User Interface</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX8700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Effects Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Wallpaper</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A, U</td>
</tr>
<tr>
<td>Usb Promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Webcam Only Mode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Whiteboard Activity Indicators</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Admin Filter</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Admin Group</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Attribute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP BaseDN</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Encryption</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP MinimumTLSVersion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Server Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP Server Port</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>LDAP VerifyServerCertificate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Complexity Minimum Digits</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Complexity Minimum Length</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Complexity Minimum Lowercase</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Complexity Minimum Special</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Complexity Minimum Uppercase</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Max Lifetime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Password Policy Reuse Limit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Active Speaker Default PIP Position</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
<tr>
<td>Default Layout Family Local</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A</td>
<td>A</td>
<td>Web, API</td>
<td>-</td>
<td>Web, API</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
### Configuration

<table>
<thead>
<tr>
<th>Video DefaultLayoutFamily</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 G2</th>
<th>Room 70 G5</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video DefaultMainSource</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] CameraControl Cameradl</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] CameraControl Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] CEC Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] DvType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] HDCP Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] InputSourceType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] OptimalDefinition Profile</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] OptimalDefinition Threshold60fps</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] PreferredResolution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] PresentationSelection</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] Quality</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] RGBQuantizationRange</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] SignalType</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Input Connector[n] Visibility</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Monitors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] Brightness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] BrightnessMode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] CEC Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] Location HorizontalOffset</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] Location VerticalOffset</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] MonitorRole</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Video Output Connector[n] OverscanLevel</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
## Configuration

<table>
<thead>
<tr>
<th>Feature</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800 MX700</th>
<th>MX300 G2 MX200 G2</th>
<th>DX80 DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web Interface</th>
<th>API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output Connector [n] Resolution</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>A I U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] RGBQuantizationRange</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Whitebalance Level</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Presentation Default PIPPosition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Presentation DefaultSource</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Presentation Priority</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview Default FullscreenMode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview Default Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview Default OnMonitorRole</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview Default PIPPosition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview Mirrored</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview OnCall Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Selfview OnCall Duration</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoiceControl Wakeword Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebEngine Features WebGL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebEngine Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebEngine RemoteDebugging</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebEngine UseHttpProxy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>Web A I</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mix</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70</th>
<th>Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Diagnostics Advanced Run</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Audio Diagnostics MeasureDelay</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Audio Equalizer List</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio Equalizer Update</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalInput Add</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalInput AddConnector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalInput Remove</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalInput RemoveConnector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalInput Update</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput Add</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput AddConnector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput ConnectInput</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput DisconnectInput</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput Remove</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput RemoveConnector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput Update</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio LocalOutput UpdateInputGain</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio Microphones Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A I U</td>
<td>API</td>
<td>A I U</td>
</tr>
<tr>
<td>Audio Microphones ToggleMute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A I U</td>
<td>API</td>
<td>A I U</td>
</tr>
<tr>
<td>Audio Microphones Unmute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A I U</td>
<td>API</td>
<td>A I U</td>
</tr>
<tr>
<td>Audio RemoteOutput ConnectInput</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio RemoteOutput DisconnectInput</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio RemoteOutput UpdateInputGain</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>I U</td>
</tr>
<tr>
<td>Audio Select</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A I U</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Audio Setup Clear</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/MRL</th>
<th>Codec Pro</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Setup Reset</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>API</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Audio Sound Play</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Sound Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio SpeakerCheck</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio SoundsAndAlerts Ringtone List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio SoundsAndAlerts Ringtone Play</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio SoundsAndAlerts Ringtone Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume Decrease</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume Increase</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume SetToDefault</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume ToggleMute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio Volume Unmute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio VuMeter Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio VuMeter Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Audio VuMeter StopAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bookings Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bookings Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bookings List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bookings NotificationSnooze</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Call Accept</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Call Disconnect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Call DTMFSend</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/0X70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mix</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call FarEndControl Camera Move</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndControl Camera Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndControl RoomPreset Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndControl Source Select</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndMessage Send</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndMessage SSStringSend</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call FarEndMessage TStringSend</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Forward</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Hold</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Ignore</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Join</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Reject</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call Resume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Call UnattendedTransfer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory AcknowledgeAllMissedCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory AcknowledgeMissedCall</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory DeleteAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory DeleteEntry</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>CallHistory Recents</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Camera PositionReset</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A I U</td>
</tr>
<tr>
<td>Camera PositionSet</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A I U</td>
</tr>
<tr>
<td>Camera Preset Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Camera Preset ActivateDefaultPosition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Camera Preset Edit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A U</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/0X70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/MKI</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 70 G2</th>
<th>Room 70 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Preset List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Camera Preset Remove</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Camera Preset Show</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Camera Preset Store</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Camera Ramp</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Camera TriggerAutofocus</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Cameras AutoFocus Diagnostics Start</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>I</td>
</tr>
<tr>
<td>Cameras AutoFocus Diagnostics Stop</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>I</td>
</tr>
<tr>
<td>Cameras Background Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras PresenterTrack ClearPosition</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras PresenterTrack Set</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras PresenterTrack StorePosition</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Activate</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Deactivate</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Diagnostics Start</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Diagnostics Stop</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Whiteboard ActivatePosition</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Whiteboard AlignPosition</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Whiteboard SetDistance</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Whiteboard StorePosition</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Call AuthenticationResponse</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>Conference DoNotDisturb Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference DoNotDisturb Deactivate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Participant Admit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Participant Disconnect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Midi</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70</th>
<th>Room 70 55</th>
<th>Room 70 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 S5</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Participant Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Participant Search</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Recording Pause</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Recording Resume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Recording Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference Recording Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference SpeakerLock Release</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Conference SpeakerLock Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Diagnostics Run</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Dial</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>I</td>
</tr>
<tr>
<td>GPIO ManualState Set</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Allow Hostname Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Allow Hostname Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Allow Hostname List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Allow Hostname Remove</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Patch</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Post</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpClient Put</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpFeedback Deregister</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpFeedback Enable</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>HttpFeedback Register</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Logging SendLogs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Macros Log Clear</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mkt</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 70 G2</th>
<th>Room 70</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macros Log Get</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Activate</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Deactivate</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Get</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Remove</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro RemoveAll</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Rename</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Roles Set</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Macro Save</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Runtime Restart</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Runtime Start</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Runtime Status</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Macros Runtime Stop</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Message Send</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A I</td>
<td>A I</td>
</tr>
<tr>
<td>Network SMTP VerifyConfig</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Network Wifi Configure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Network Wifi Delete</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Network Wifi List</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Network Wifi Scan Start</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Network Wifi Scan Stop</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td>A U</td>
</tr>
<tr>
<td>Peripherals Connect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A I R U</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals HeartBeat</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A I R U</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A I R U</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals Pairing DeviceDiscovery Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Peripherals Pairing Pair</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/UX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 S</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripherals Pairing Unpair</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Peripherals Purge</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Contact Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Contact Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Contact Modify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook ContactMethod Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook ContactMethod Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook ContactMethod Modify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Folder Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Folder Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Folder Modify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Phonebook Search</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Presentation Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Presentation Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Provisioning CompleteUpgrade</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Provisioning PostponeUpgrade</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Provisioning CUCM ExtensionMobility Login</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Provisioning CUCM ExtensionMobility Logout</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
</tr>
<tr>
<td>Provisioning RoomType Activate</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A I</td>
</tr>
<tr>
<td>Provisioning Service Fetch</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Proximity Services Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>Proximity Services Deactivate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>RoomPreset Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>RoomPreset Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
</tr>
<tr>
<td>RoomPreset Store</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700 MX200 G2 / MX200 G2 DX80/UX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mk1 Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Certificates CA Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates CA Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates CA Show</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Services Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Services Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Services Deactivate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Services Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Services Show</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates ThirdParty Disable</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates ThirdParty Enable</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates ThirdParty List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates ThirdParty Show</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Certificates Webex Show</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Persistency</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Session Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Session List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Security Session Terminate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Standby Activate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Standby Deactivate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Standby Halfwake</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Standby ResetHalfwakeTimer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Standby ResetTimer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit Boot</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit FactoryReset</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit FirstTimeWizard Stop</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mkt</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 S</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SystemUnit Notifications RemoveAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit OptionKey Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit OptionKey List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit OptionKey Remove</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit OptionKey RemoveAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit ProductPlatform Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit SignInBanner Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit SignInBanner Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit SignInBanner Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit SoftReset</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit SoftwareUpgrade</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit WelcomeBanner Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit WelcomeBanner Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>SystemUnit WelcomeBanner Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Time DateTime Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>Time DateTime Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Fetch</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Updated</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Branding Upload</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Extensions Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Extensions List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
<tr>
<td>UserInterface Extensions Panel Clicked</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>MX80/UX0</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserInterface Extensions Panel Close</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>R</td>
<td>U</td>
</tr>
<tr>
<td>UserInterface Extensions Panel Open</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>R</td>
<td>U</td>
</tr>
<tr>
<td>UserInterface Extensions Panel Remove</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Extensions Panel Save</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Extensions Panel Update</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Extensions Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Extensions Action</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Extensions SetValue</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message Alert Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message Alert Display</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message Prompt Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message Prompt Display</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message Prompt Response</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message TextInput Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message TextInput Display</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message TextInput Response</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message TextLine Clear</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Message TextLine Display</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface OSD Key Click</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UserInterface OSD Key Press</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UserInterface OSD Key Release</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UserInterface Presentation ExternalSource Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Presentation ExternalSource List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>UserInterface Presentation ExternalSource Remove</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A</td>
<td>I</td>
<td>U</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported  
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mali</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70</th>
<th>Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 G</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserInterface Presentation ExternalSource RemoveAll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I R</td>
<td>A I R</td>
</tr>
<tr>
<td>UserInterface Presentation ExternalSource Select</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I R</td>
<td>A I R</td>
</tr>
<tr>
<td>UserInterface Presentation ExternalSource State Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I R</td>
<td>A I R</td>
</tr>
<tr>
<td>UserInterface WebView Clear</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserInterface WebView Display</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement RemoteSupportUser Create</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement RemoteSupportUser Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement RemoteSupportUser DisablePermanently</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement RemoteSupportUser GetState</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User Add</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User Delete</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User Get</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User List</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User Modify</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>UserManagement User Passphrase Change</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I I R</td>
<td>A I I R</td>
</tr>
<tr>
<td>UserManagement User Passphrase Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I R</td>
<td>A I R</td>
</tr>
<tr>
<td>UserManagement User Unblock</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video ActiveSpeakerPIP Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video CEC Input KeyClick</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video CEC Output KeyClick</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video CEC Output SendActiveSourceRequest</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video CEC Output SendInActiveSourceRequest</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video Graphics Clear</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video Graphics Text Display</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
<tr>
<td>Video Input MainVideo Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td>A I U</td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX80/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit/Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 G5</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Input MainVideo Unmute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input SetMainVideoSource</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input SourceSetActiveConnector</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Layout LayoutFamily Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Matrix Assign</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Matrix Reset</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Matrix Swap</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Matrix Unassign</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Backlight Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Brightness Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Color Blue Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Color Green Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Color Red Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Color Select</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Contrast Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor CSC Select</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Gamma Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Reset</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video Output Monitor Sharpness Set</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>API</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video PresentationPIP Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video PresentationView Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Video Selfview Set</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>UserInterface WebEngine DeleteStorage</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Webex Join</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Webex Registration Cancel</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td>A U</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webex Registration ConvertToCloud</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>API</td>
<td>A</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Webex Registration Start</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>API</td>
<td></td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70</th>
<th>Room 55</th>
<th>Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 70 G2</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Devices Bluetooth ActiveProfile</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Handset/USB ConnectionStatus</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Handset/USB Cradle</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Headset/Analog Connection</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Headset/Analog HasMicrophone</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Headset/USB ConnectionStatus</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Headset/USB Description</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Devices Headset/USB Manufacturer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors HDMI [n] Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors Line [n] Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors Microphone [n] ConnectionStatus</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors Microphone [n] EcReferenceDelay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors Microphone [n] Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input Connectors USBC [n] Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input KeyClick Attenuate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input KeyClick Detected</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input KeyClick Enabled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] AGC</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] Channels</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] Connector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] Direct</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] MixerMode</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] Mute</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input LocalInput [n] Name</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Input RemoteInput [n] CallId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
## Status

<table>
<thead>
<tr>
<th></th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface</th>
<th>API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Microphones Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors ARC [n] DelayMs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors ARC [n] Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors HDMI [n] DelayMs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors HDMI [n] Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors InternalSpeaker [n] DelayMs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors InternalSpeaker [n] Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors Line [n] ConnectionStatus</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output Connectors Line [n] DelayMs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] AutoconnectRemote</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] Channels</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] Connector [n]</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] Input [n] Gain</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] Loudspeaker</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] Name</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output LocalOutput [n] VolumeControlled</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output MeasuredHdmiArcDelay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output MeasuredHdmiDelay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output MeasuredHdmiCecDelay</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output RemoteOutput [n] CallId</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Output RemoteOutput [n] Input [n] Gain</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio SelectedDevice</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Volume</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio VolumeHandsetUsb</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX880/MX700</th>
<th>MX380 G2 / MX280 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>CodecPro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio VolumeHeadsetAnalog</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Audio VolumeHeadsetUsb</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Audio VolumeInternal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Audio VolumeMute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Bookings Current Id</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] AnswerState</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] AttendedTransferFrom</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] CallbackNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] CalType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] DeviceType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Direction</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] DisplayName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Duration</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Encryption Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] FacilityServiceId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] HoldReason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Ice</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] PlacedOnHold</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] ReceiveCallRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] RemotelnNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Call [n] TransmitCallRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Cameras Background Image</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I R U</td>
<td></td>
</tr>
<tr>
<td>Cameras Background Mode</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A I R U</td>
<td></td>
</tr>
</tbody>
</table>

**X:** Supported  - : Not supported  
**A:** ADMIN  **Au:** AUDIT  **I:** INTEGRATOR  **R:** ROOMCONTROL  **U:** USER
## Status

<table>
<thead>
<tr>
<th>Cameras Camera [n] Capabilities Options</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 55 G2</th>
<th>Room 57</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Room 55</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>X: Supported</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Connected</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] DetectedConnector</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Flip</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Framerate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] HardwareID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] LightingConditions</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] MacAddress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Manufacturer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Model</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Focus</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Lens</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Pan</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Roll</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Tilt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] Position Zoom</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] SerialNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras Camera [n] SoftwareID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras PresenterTrack Availability</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras PresenterTrack PresenterDetected</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras PresenterTrack Status</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack ActiveConnector</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Availability</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Cameras SpeakerTrack Status</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A IR U</td>
</tr>
<tr>
<td>Capabilities Conference MaxActiveCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/65S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capabilities Conference MaxAudioCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Capabilities Conference MaxCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Capabilities Conference MaxVideoCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference ActiveSpeaker CallId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] AuthenticationRequest</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] BookingsId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FarendMessage Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC NumberOfPresets</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC NumberOfSources</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC Source [n] Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC Source [n] Options</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities FECC Source [n] SourceId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities Hold</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities IxChannel Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities ParticipantDisconnect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities ParticipantList</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities ParticipantMute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Capabilities Presentation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] EventCenter Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Manufacturer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] MicrophonesMuted</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] SoftwareID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference Call [n] Streamed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Conference DoNotDisturb</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td></td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Line [n] Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Multipoint Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Presentation CallId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Presentation LocalInstance [n] DirectShare</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Presentation LocalInstance [n] SendingMode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Presentation LocalInstance [n] Source</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Presentation Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference SelectedCallProtocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference SpeakerLock CallId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference SpeakerLock Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostics Message [n] Description</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostics Message [n] Level</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostics Message [n] References</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostics Message [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPIO Pin [n] State</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Id</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Number</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Reason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H320 Gateway Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 Gatekeeper Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 Gatekeeper Port</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 Gatekeeper Reason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H323 Gatekeeper Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>A U</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
## Status

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX800 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55 55</th>
<th>Board 55/65, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>H323 Mode Reason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>H323 Mode Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>HttpFeedback [n] Expression [n]</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>HttpFeedback [n] Format</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>HttpFeedback [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>HttpFeedback [n] URL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Audio Channels</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Audio ChannelRole</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Audio Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Audio Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Direction</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Encryption</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat Bytes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat ChannelRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat Jitter</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat LastIntervalLost</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat LastIntervalReceived</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat Loss</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat MaxJitter</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] NetStat Packets</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] ParticipantId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Video ChannelRole</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Video FrameRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Video Protocol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaChannels Call [n] Channel [n] Video ResolutionX</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels Call [n] Channel [n] Video ResolutionY</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Audio Channels</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Audio Protocol</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Encryption</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat Bytes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat ChannelRate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat Jitter</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalLost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat LastIntervalReceived</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat Loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat MaxJitter</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Netstat Packets</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Video FrameRate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Video Protocol</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Video ResolutionX</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>MediaChannels DirectShare [n] Channel [n] Video ResolutionY</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
</tbody>
</table>

### Status

|                      | SX80 | SX20 | SX10 | MX800/MX700 | MX300 G2 / MX200 G2 | DX80/DX70 | Desk Pro | Room Kit | Room Kit Mini | Codec Plus | Codec Pro | Room 70 | Room 55 | Room 70 G2 | Room 55 Dual | Room 55 | 70/55 G2 | 70/55 GS | 70/55 S | 85 G2 | Board 55/65S, 70/70S, 85S | On-prem only | Web interface or API | User role |
|----------------------|------|------|------|-------------|---------------------|----------|---------|---------|-------------|------------|------------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|--------------------|--------------|----------------------|----------|
| Network [n] CDP PortID | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP PrimaryMgmtAddress | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP SysName | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP SysObjectID | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP Version | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP VoIPApplianceVlanID | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] CDP VTPMgmtDomain | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] DNS Domain Name | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] DNS Server [n] Address | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Ethernet MacAddress | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Ethernet Speed | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv4 Address | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv4 Gateway | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv4 SubnetMask | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv6 Address | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv6 Gateway | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] IPv6 LinkLocalAddress | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] VLAN Voice VlanId | X    | X    | X    | X           | X                   | X        | X       | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi BSSID | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi Channel | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi Frequency | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi MacAddress | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi Phase2Method | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi RawSSID | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |
| Network [n] Wifi Reason | -    | -    | -    | -           | -                   | -        | X        | X       | X           | X          | X          | X       | X       | X       | X       | X       | X        | X       | X       | X       | X       | X                   | -            | Web, API             | A U       |

### Status

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX200 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network [n] Wifi Region</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi RSSI</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi ScanResult [n] Flags</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi ScanResult [n] RawSSID</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi ScanResult [n] SignalLevel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi Speed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi SSID</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Network [n] Wifi Type</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices NTP CurrentAddress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices NTP Server [n] Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices NTP Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>NetworkServices UPnP Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] HardwareInfo</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] ID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] SerialNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] SoftwareInfo</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] UpgradeFailureReason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] UpgradeStatus</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Peripherals ConnectedDevice [n] UpgradeURL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
</tr>
<tr>
<td>Provisioning CUCM Customization Checksum</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/65S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface of API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisioning CUCM Extension Mobility Enabled</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning CUCM Extension Mobility LastLoggedInUserId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning CUCM Extension Mobility LoggedIn</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning RoomType</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software Current CompletedAt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software Current URL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software Current VersionId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus LastChange</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus Message</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus Phase</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus SessionId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus Urgency</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus URL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Software UpgradeStatus VersionId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisioning Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity Services Availability</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics AmbientNoise Level A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics AmbientTemperature</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics Engagement CloseProximity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics PeopleCount Current</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics PeoplePresence</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics Sound Level A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomAnalytics RelativeHumidity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoomPreset [n] Defined</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported
<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoomPreset [n] Description</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>RoomPreset [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Security Persistency CallHistory</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Security Persistency Configurations</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Security Persistency DHCP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Security Persistency InternalLogging</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Security Persistency LocalPhonebook</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP AlternateURI Alias [n] URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP AlternateURI Primary [n] URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Authentication</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP CallForward DisplayName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP CallForward Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP CallForward URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Mailbox MessagesWaiting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Mailbox URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Proxy [n] Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Proxy [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Registration [n] Authentication</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Registration [n] Reason</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Registration [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Registration [n] URI</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Secure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>SIP Verified</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Standby PowerSave State</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Standby State</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I R U</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported   - : Not supported  
## Status

<table>
<thead>
<tr>
<th>SystemUnit Hardware Module CompatibilityLevel</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/65S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>X: Supported</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Hardware Module SerialNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Hardware Monitoring Fan [n] Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Hardware Monitoring Temperature Status</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A I U</td>
</tr>
<tr>
<td>SystemUnit Hardware Temperature</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Hardware TemperatureThreshold</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Notifications Notification [n] Text</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Notifications Notification [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit ProductId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit ProductType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software DisplayName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys Encryption</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys MultiSite</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software OptionKeys RemoteMonitoring</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software ReleaseDate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Software Version</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit State CameraLid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit State NumberOfActiveCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit State NumberOfInProgressCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit State NumberOfSuspendedCalls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>SystemUnit Uptime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>Time SystemTime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
<tr>
<td>UserInterface ContactInfo ContactMethod [n] Number</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported - : Not supported
### Status

<table>
<thead>
<tr>
<th>User Interface</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web Interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Interface ContactInfo Name</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Extensions Widget [n] Value</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Extensions Widget [n] WidgetId</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features Call End</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features Call Keypad</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features MidCallControls</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features Call Start</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features Share Start</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface Features Whiteboard Start</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface OSD Output</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>User Interface SettingsMenu Visibility</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video ActiveSpeaker PIPPosition</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] Connected</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] ConnectedDevice CEC [n] DeviceType</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] ConnectedDevice CEC [n] LogicalAddress</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] ConnectedDevice CEC [n] Name</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] ConnectedDevice CEC [n] PowerStatus</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] ConnectedDevice CEC [n] VendorId</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] SignalState</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] SourceId</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input Connector [n] Type</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input DirectShare [n] Peer Address</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input DirectShare [n] Peer PeripheralID</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
<tr>
<td>Video Input DirectShare [n] Type</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Web, API</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX80/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Input Main Video Mute</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Main Video Source</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] ConnectorId</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] Format Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] Format Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] Media Channel Id</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] Resolution Height</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Input Source [n] Resolution Refresh Rate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Layout Layout Family Local</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Layout Layout Family Remote</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Monitors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device CEC [n] Device Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device CEC [n] Logical Address</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device CEC [n] Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device CEC [n] Power Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device CEC [n] Vendor Id</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device Name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device Preferred Format</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Connected Device Screen Size</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Monitor Role</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
<tr>
<td>Video Output Connector [n] Resolution Height</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Web, API</td>
<td>A I U</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
# Status

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX880/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output Connector [n] Resolution RefreshRate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Connector [n] Resolution Width</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Connector [n] Type</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Backlight</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Brightness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] ColorTemperature Blue</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] ColorTemperature Green</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] ColorTemperature Selected</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Contrast</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] CSCYUV</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] FirmwareVersion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Gamma</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] ModelName</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Position</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] SerialNumber</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Sharpness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Output Monitor [n] Temperature</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Presentation PiPPosition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Selfview FullscreenMode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Selfview Mode</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Selfview OnMonitorRole</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>Video Selfview PiPPosition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>WebEngine Features Signage</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
<tr>
<td>WebEngine Features WebEngine</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
</tr>
</tbody>
</table>

X: Supported - : Not supported

## Status

<table>
<thead>
<tr>
<th>Status</th>
<th>SX80</th>
<th>SX20</th>
<th>SX10</th>
<th>MX800/MX700</th>
<th>MX300 G2 / MX200 G2</th>
<th>DX80/DX70</th>
<th>Desk Pro</th>
<th>Room Kit</th>
<th>Room Kit Mini</th>
<th>Codec Plus</th>
<th>Codec Pro</th>
<th>Room 70 / Room 55 Dual</th>
<th>Room 70 G2</th>
<th>Room 55</th>
<th>Room 55 G2</th>
<th>Board 55/55S, 70/70S, 85S</th>
<th>On-prem only</th>
<th>Web interface or API</th>
<th>User role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webex Services Proximity GuestToken</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
<tr>
<td>Webex Status</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>Web, API</td>
<td>A U</td>
<td></td>
</tr>
</tbody>
</table>

X: Supported  - : Not supported  
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 | addr | ifconfig | ifstats <ifname>
```

- `systemtools idefixversion (not for Desk Pro, 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.

- `systemtools network ping <hostname>`
  Network debug command.

- `systemtools network traceroute <hostname>`
  Network debug command.

- `systemtools network netstat`
  Network debug command.

- `systemtools network ifconfig`
  Network debug command.

- `systemtools network ifstats <ifname>`
  Network debug command. Prints out network interface statistics.

- `systemtools idefixversion`
  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.

- `systemtools network ping <hostname>`
  Network debug command.

- `systemtools network traceroute <hostname>`
  Network debug command.

- `systemtools network netstat`
  Network debug command.

- `systemtools network ifconfig`
  Network debug command.

- `systemtools network ifstats <ifname>`
  Network debug command. Prints out network interface statistics.

- `systemtools idefixversion`
  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.

- `systemtools network ping <hostname>`
  Network debug command.

- `systemtools network traceroute <hostname>`
  Network debug command.

- `systemtools network netstat`
  Network debug command.

- `systemtools network ifconfig`
  Network debug command.

- `systemtools network ifstats <ifname>`
  Network debug command. Prints out network interface statistics.

- `systemtools idefixversion`
  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.

- `systemtools network ping <hostname>`
  Network debug command.

- `systemtools network traceroute <hostname>`
  Network debug command.

- `systemtools network netstat`
  Network debug command.

- `systemtools network ifconfig`
  Network debug command.

- `systemtools network ifstats <ifname>`
  Network debug command. Prints out network interface statistics.
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 Desk Pro, DX70, DX80, and Boards)
Debug command for testing the touch panel.

systemtools touch stop (only for Desk Pro, DX70, DX80, and Boards)
Debug command for testing the touch panel.

systemtools touch forever (only for Desk Pro, 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).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CauseValue</td>
<td>Proprietary. We recommend the use of CauseType and CauseCode.</td>
</tr>
<tr>
<td>CauseType</td>
<td>Describes why the call was disconnected. The value space is { OtherLocal, LocalDisconnect,</td>
</tr>
<tr>
<td></td>
<td>UnknownRemoteSite, LocalBusy, LocalReject, InsufficientSecurity, OtherRemote, RemoteDisconnect,</td>
</tr>
<tr>
<td></td>
<td>RemoteBusy, RemoteRejected, RemoteNoAnswer, CallForwarded, NetworkRejected }</td>
</tr>
<tr>
<td>CauseString</td>
<td>Describes the Cause Code.</td>
</tr>
<tr>
<td>CauseCode</td>
<td>The disconnect Cause Codes are defined in SIP and Q.850.</td>
</tr>
<tr>
<td>CauseOrigin</td>
<td>SIP, Q.850, internal.</td>
</tr>
</tbody>
</table>

Example:

```plaintext
xEvent DisconnectEvent

  *e CallDisconnect CauseValue: 1
  CauseType: "LocalDisconnect"
  CauseString: ""
  OrigCallDirection: "outgoing"
  RemoteURI: "firstname.lastname@company.com"
  CallId: 89
  CauseCode: 0
  CauseOrigin: SIP

** end
```
User documentation on the Cisco web site

User documentation for the Cisco Collaboration products is available at
https://www.cisco.com/go/telepresence/docs

Select the product series:
- Webex Board
- Webex DX Series (Webex Desk Series)
- TelePresence MX Series
- Webex Room Series
- TelePresence SX Series

Alternatively, use the following short-links:
- https://www.cisco.com/go/board-docs
- https://www.cisco.com/go/desk-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
- Customization 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 acoustics 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 source licences: Licenses and notices for open source software used in this product