User's and Administrator's Manual

AudioCodes Room Experience (RX) Suite

RXV200 MTR on Android™ Compute with RX-PAD Meeting Room Controller

Version 2.8

Microsoft Solutions Partner
Modern Work

audiocodes

Table of Contents

Notice

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Each abbreviation, unless widely used, is spelled out in full when first used.

Related Documentation

Document Name
RXV81 RXV200 RX-PAD RX-PANEL Release Notes
RXV200 Microsoft Teams Rooms on Android Compute Unit Quick Installation Guide
RX-PAD Meeting Room Controller Quick Guide
RXVCAM70 PTZ Camera Quick Guide
RXVCam360 Video Conferencing Camera Quick Guide
One Voice Operation Center (OVOC) User's Manual
Device Manager Administrator's Guide

Document Revision Record

LTRT	Description
09985	Initial document release for Version 2.8.574 (M1); AlphaSSL certificate; no firewall required for screen sharing; Composite AI individual camera settings and user modifications during meeting; selecting presenter to track; whiteboard sharing; preferred HDMI IN source; return to previous version

Documentation Feedback

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1 Introduction

The enterprise workspace and meeting space have changed dramatically over the past decade. Virtually all our communication today is hybrid, involving both on-site participants gathered in one or more meeting rooms and online participants located in their home offices or on the go. Modern meeting devices must be adaptable enough to accommodate any room size or shape, while minimizing the number of table-mounted accessories and devices apart from a microphone and a meeting room controller like the AudioCodes RX-PAD.

To meet this specific need, AudioCodes has created a range of RXV200 bundles which function as Microsoft Teams Rooms on Android devices.

The AudioCodes RXV200 MTR on Android Compute is a robust, dependable and adaptable solution that enables an easy upgrade of any component within the meeting room, thereby facilitating the adoption of new and advanced devices to keep up with latest technology trends without excessive expenditure. Together with the RX-PAD Meeting Room Controller, it provides an easy meeting room experience that significantly boosts productivity.

This Android compute MTR unit serves as the meeting room's nerve center and sits at the heart of the RXV200-B20 and RXV200-B40 bundles. It can be connected to a variety of cameras, audio sources and advanced AI applications.

Controlled by AudioCodes' RX-PAD Meeting Room Controller, the RXV200 offers innovative features such as one-click-to-join with an integrated calendar for easy collaboration initiation, smooth content sharing and simple camera adjustments for a complete hybrid experience.

See also AudioCodes website here for additional information.

With this release, Microsoft Teams Android devices now utilize Intune Android Open Source Project (AOSP) device management. AOSP device management is a mobile device management (MDM) platform specifically designed for Teams devices. This update delivers more reliable user experience, an enhanced deployment process for administrators, and serves as the foundation for future innovations and advanced management capabilities for Microsoft Teams Android devices, including Teams Rooms, Teams panels, Teams phones, and Teams displays.

AOSP Device Management replaces the legacy Android Device Administrator solution previously used to manage Teams devices.

For detailed information on the AOSP migration process, please refer to the article Moving Teams Android Devices to AOSP Device Management | Microsoft Community Hub.

1.1 Highlights

RXV200 feature highlights are:

- Multiple device support for mix-and-match adaptability
- Reliable Android compute unit for every room configuration
- Simple deployment and management
- Cost-effective and value for money
- Allows future addition and upgrade of peripherals (mix-and-match of video and audio devices)
- Comprehensive support for Microsoft Teams features is provided for a complete hybrid collaboration
- Intuitive meeting experience with calendar integration and click-to-join or proximity-join experience

- Users can hear audio notifications triggered by RX-PAD through the RXV200 speaker, including Talkback accessibility, ensuring a streamlined and accessible communication experience during meetings and collaboration sessions.
- HDMI Out CEC (Consumer Electronics Control) One-Touch-Play command, triggered by RX-PAD's human sensor, turns on/off the TV screen. See also here for more information.
  - When RX-PAD (pre-set to 'Screen timeout') enters sleep mode, it automatically triggers RXV200 to enter sleep mode as well, activating the CEC One-Touch-Play command to turn the TV off.
  - When RX-PAD's human sensor wakes up RX-PAD, RXV200 wakes up as well and turns the TV on.

1.2 Benefits

- Superb video quality provided by AudioCodes's RXVCam50 AI camera (4K, auto framing, EPTZ)
- Hear and be heard with crystal-clear sound
- Human sensor for activating the system and welcoming the user upon proximity
- An optimal solution for small to large meeting spaces
- Optional centralized management with AudioCodes' OVOC
- Fully controllable by the RX-PAD Meeting Room Controller center-of-room intelligent touch controller

1.3 Bundles

The RXV200 supports multiple devices for mix-and-match adaptability and simplified deployment and management.

RXV200 bundles provide a reliable solution for every room layout and allow easy meeting room component upgrades.

The RXV200 is available in five main bundles.

Table 1: RXV200 Bundles

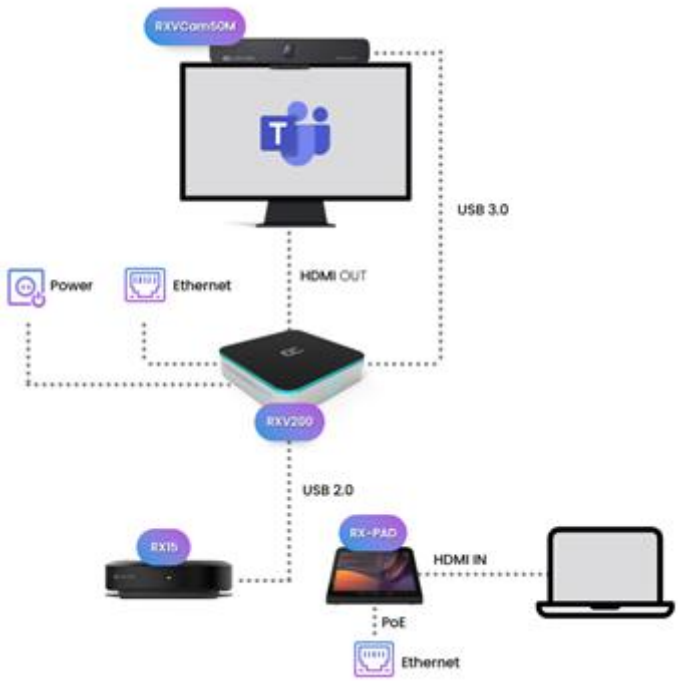
Name of Bundle	Description
RXV200-B05	■ Leverages RX-PAD to enable integration of an existing conference room AV system with Microsoft Teams. Connects to an existing audio-video conference system. ■ Any room size ■ Any number of participants
RXV200-B20	■ RX-PAD ■ RXVCam50 ■ RX15 (audio) ■ Small rooms of up to 10 participants ■ See schematic diagram below
RXV200-B360	■ RX-PAD ■ RXVCam360 (video | audio) ■ Small-medium size rooms of 2-8 participants ■ Productivity: Meeting Insights ■ See schematic diagram below

Name of Bundle	Description
RXV200-B40	■ RX-PAD ■ RXVCam50 ■ RX40 (audio) ■ Medium size rooms of 6-12 participants ■ Productivity: Meeting Insights ■ See schematic diagram below
RXV200-B70	■ RX-PAD ■ RXVCam70 ■ RX40 (audio) ■ Large rooms of 10-18 participants ■ Productivity: Meeting Insights ■ See schematic diagram below

1.3.1 RXV200-B20 Bundle

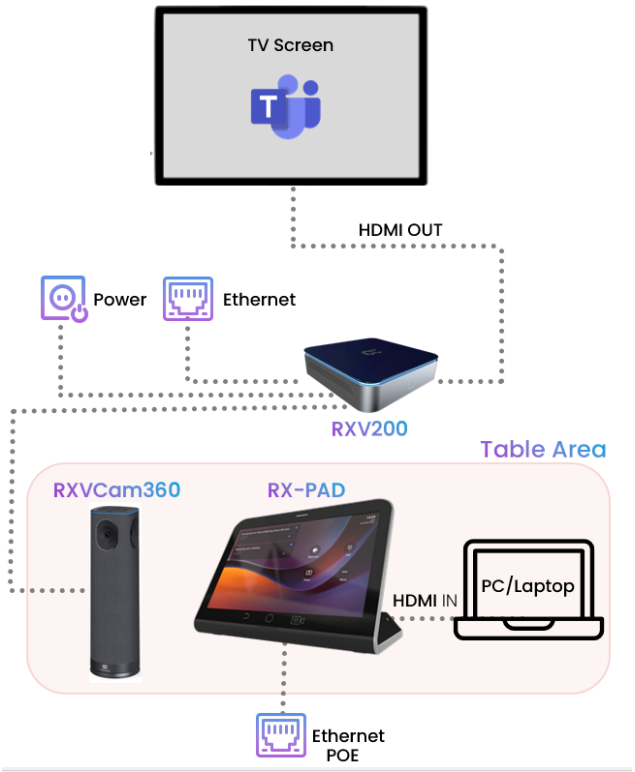
The figure below illustrates the RXV200-B20 bundle.

Figure 1: RXV200-B20



1.3.2 RXV200-B360 Bundle

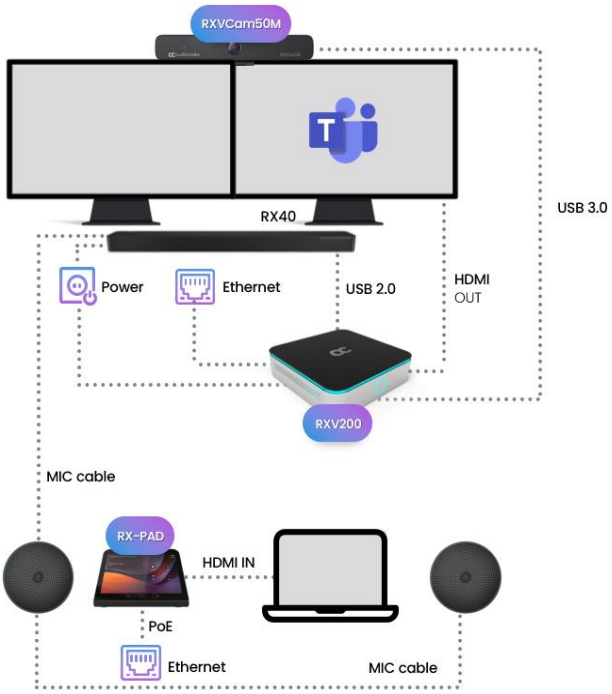
Figure 2: RXV200-B360



1.3.3 RXV200-B40 Bundle

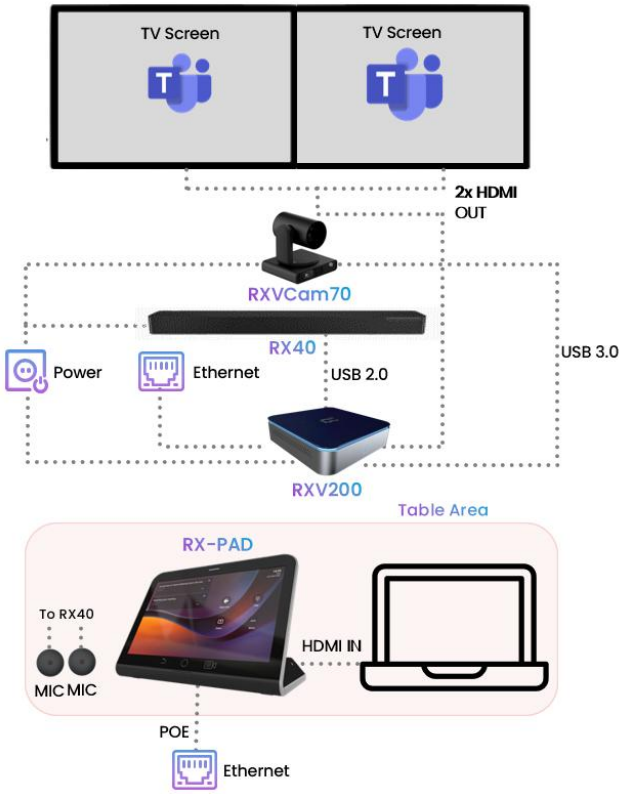
The figure below illustrates the RXV200-B40 bundle.

Figure 3: RXV200-B40



1.3.4 RXV200-B70 Bundle

Figure 4: RXV200-B70



1.4 Hardware

The RXV200's plug-and-play simplicity makes it easy to connect a screen, sound system, AI camera with auto-framing to simplify Microsoft Teams physical whiteboard sharing, all controlled by a meeting room controller.

- HDMI In enables participants to share their desktop during a meeting via a simple cable connection
- 4K HDMI Out enables users to seamlessly connect and display ultra-high-definition visuals in compatible external displays during Teams meetings, ensuring a visually immersive and crystal-clear collaboration experience. Whether you're presenting a slideshow, streaming content, or simply extending your display, 4K HDMI Out enhances the overall viewing experience.
- 1x USB C and 2x USB A to connect camera and audio peripherals

RXV200 supports a single display *irrespective of whether it's connected to HDMI1 or HDMI2*:

- When RXV200 boots up, if a single TV screen is connected to RXV200, it can be connected to either HDMI1 or to HDMI2. This TV screen will function as the primary screen irrespective of whether it is connected to HDMI1 or HDMI2.
- If after that another TV screen is connected to the available HDMI port on RXV200, this TV screen will become the secondary screen.
- If two TV screens are connected to RXV200 prior to boot up, the TV screen connected to HDMI1 will be used as the primary screen while the other TV screen will be used as the secondary screen.

1.5 Management

RXV200 bundles are managed using AudioCodes' One Voice Operations Center (OVOC) Device Manager or Microsoft's Teams admin center (TAC), enabling IT admins to monitor and upgrade the devices from anywhere. Using OVOC, IT admins can easily monitor and manage all bundled devices from a centralized location. Management includes:

- Firmware management / upgrade
- Alarm management
- Upgrade the MTR APK

Admins can monitor the status of the device's software modules from the System State page as shown here.

> Firmware *downgrade* is blocked as of version 2.6.280 to prevent a possible race condition (conflict) between Microsoft Teams admin center (TAC) and AudioCodes' OVOC | Device Manager.

1.6 Specifications

The powerful RXV200 Android compute unit is suited to every room configuration. The device supports:

- Multiple cameras
  - Modular design allows connecting any current and future peripherals
  - AudioCodes's RXVCam50M camera (4K, auto framing, EPTZ)
- Dual screen support
- Audio: RX40 sound bar or RX15 speakerphone
- Advanced AI capabilities
- Fully controllable by RX-PAD center-of-room intelligent touch controller
- RX-PAD includes proximity sensor for activating the system and welcoming users
- HDMI In enables participants to share their desktop content during a meeting via a simple cable connection
- 4K HDMI Out support

1.6.1 RXV200

The table shows RXV200 specifications.

Table 2: RXV200 Specifications

Feature	Description
HDMI Outputs	■ 2 x 4K HDMI Outputs to external screens
HDMI Input type	■ HDMI 2.0 Input (including audio)
Network provisioning	■ TCP/IP (IPv4), DHCP/ static IP; Time and date synchronization via SNTP; VLAN support; QoS support: IEEE 802.1p/Q tagging (VLAN) ■ Layer 3 TOS and DSCP RTCP support: (RFC 1889) ■ IP address configuration: TCP/IP (IPv4), DHCP/static IP; Time and date synchronization: SNTP ■ QoS support: IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS and DSCP RTCP support: (RFC 1889)

Feature	Description
Performance	■ PROCESSOR ■ Snapdragon™ QCS8250 ■ MEMORY ■ LPDDR5, 8G ■ STORAGE ■ UFS3.1, 128G ■ GRAPHICS ■ Adreno™ 650
Device interfaces	■ Ethernet: 10/100/1000 Mbps (RJ-45) network interface ■ Wi-Fi (dual band support) ■ Support 802.11 a/b/g/n/ac/ax ■ Bluetooth 5.1 ■ Proximity join and casting via Bluetooth ■ Interfaces: USB 3.0 for audio and video peripherals. Two are Type A, one is Type C ■ 12V/3A DC power input
Wi-Fi type	■ Dual band Wi-Fi
Chipset type	■ Latest chipset from QUALCOMM for video/conf applications
OS	■ Android 10
UC platform support highlights	Microsoft Teams Room for Android application with: ■ Intuitive meeting experience with calendar integration and click-to-join or proximity-join experience
Security	■ Encryption: TLS (Transport Layer Security), SRTP encryption for media, AES256 Network Access Control: IEEE 802.1x ■ Built-in certificate (i.e., DigiCert, AlphaSSL, etc.) ■ Kensington Lock for security measures
Design	■ DIMENSIONS (W X D X H) 170 x 170 x 41.4 mm ■ WEIGHT 0.987 kg
Manageability	■ AudioCodes One Voice Operation Center (OVOC) | Device Manager

1.6.2 RX-PAD

Following are the RX-PAD specifications.

Table 3: RX-PAD Specifications

Feature	Description
Display	Landscape Touch 8” LCD (1280 x 800 resolution)
Device interfaces	■ Ethernet: 10/100/1000 Mbps (RJ-45) network interface (PoE) ■ Wi-Fi (dual band support) ■ Bluetooth 5.0 ■ 12V/3A DC power input ■ Proximity Sensor
Network provisioning	■ TCP/IP (IPv4), DHCP/ static IP; Time and date synchronization via SNTP; VLAN support; QoS support: IEEE 802.1p/Q tagging (VLAN) ■ Layer 3 TOS and DSCP RTCP support: (RFC 1889) ■ IP address configuration: TCP/IP (Ipv4), DHCP/static IP; Time and date synchronization: SNTP
OS	Android 12

1.6.3 RX15

See AudioCodes website here for the RX15 specifications.

1.6.4 RXVCAM50M

See AudioCodes website here for the RXVCAM50M specifications.

1.7 Security Guidelines

For detailed security guidelines regarding AudioCodes Native Teams Android-based devices, refer to the document Security Guidelines for AudioCodes Native Teams Android based Devices.

2 Getting Started

See the *RXV200 Microsoft Teams Rooms on Android Compute Unit Quick Installation Guide* shipped with the product or available from AudioCodes for how to get started, including:

- Package contents checklist
- Positioning
- Mounting
- Cabling
- Powering up

3 Connecting to RXV200

> See the *RXV200 Microsoft Teams Rooms on Android Compute Unit Quick Installation Guide* shipped with the product or available from AudioCodes for information about connecting the RXV200.

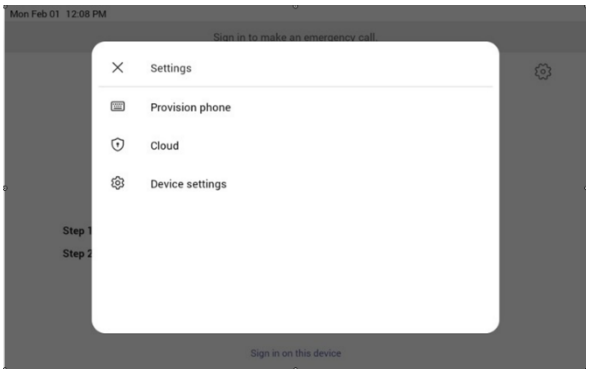
After mounting and cabling RXV200, pair it with RX-PAD (see the guide *Pairing RX-PAD with Teams Rooms on Android AudioCodes Devices*).

3.1 Signing in

Users are provided by default with the option to sign in from any browser or smartphone with a prominent device code. If you choose to sign in from the device, you can enter your username and password on-screen via the device keyboard.

3.1.1 Multi-Cloud Sign-in

For authentication into specialized clouds, the network administrator can choose the Settings gear on the sign-in page to see the options that are applicable to their tenant.



3.1.2 Remote Provisioning and Sign in from Teams Admin Center

See Remote provisioning and sign in for Teams Android devices - Microsoft Teams | Microsoft Docs for more information.

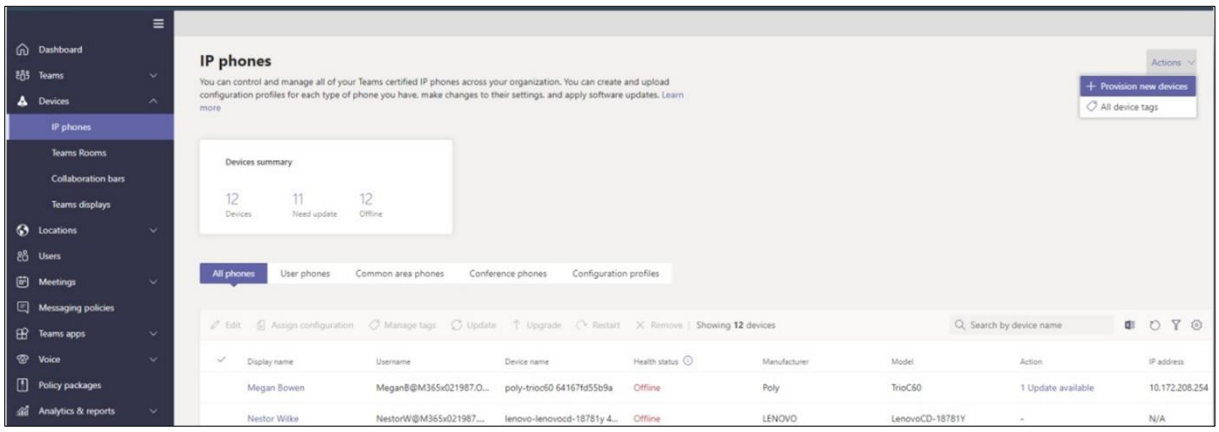
IT admins can remotely provision and sign in to a Teams device.

To provision a device remotely, the network administrator needs to upload the MAC IDs of the devices being provisioned and create a verification code. The entire process can be completed remotely from the Teams admin center.

Step 1: Add a device MAC address

Provision the device by imprinting a MAC address on it.

1. Sign in to the Teams admin center.
2. Expand **Devices**.
3. Select **Provision new device** from the **Actions** tab.



In the 'Provision new devices' window, you can either add the MAC address manually or upload a file.

Manually add a device MAC address

1. From the Awaiting Activation tab, select **Add MAC ID**.
2. Enter the MAC ID.
3. Enter a location, which helps technicians identify where to install the devices.
4. Select **Apply** when finished.

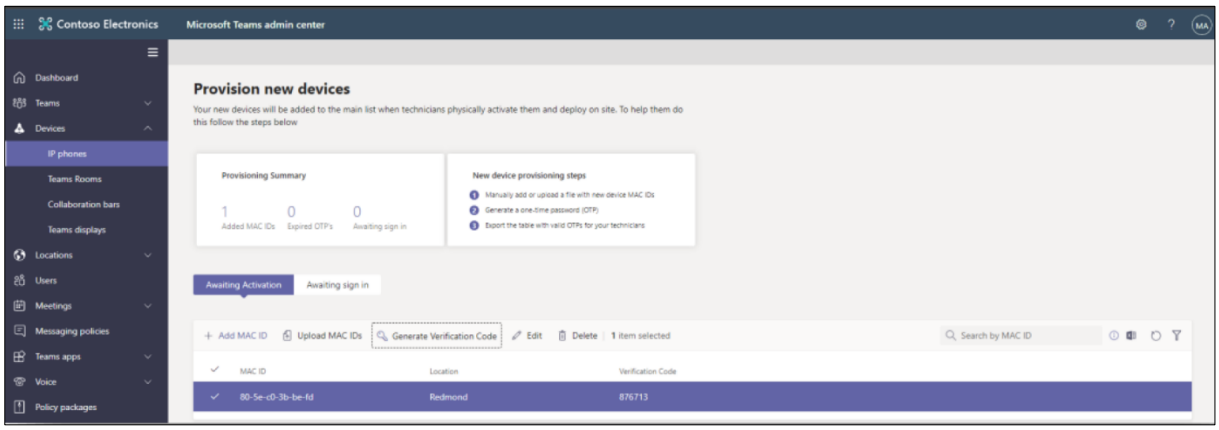
Upload a file to add a device MAC address

1. From the Awaiting Activation tab, select Upload MAC IDs.
2. Download the file template.
3. Enter the MAC ID and location, and then save the file.
4. Select the file, and then select **Upload**.

Step 2: Generate a verification code

You need to generate a verification code for the devices. The verification code is generated in bulk or at the device level and is valid for 24 hours.

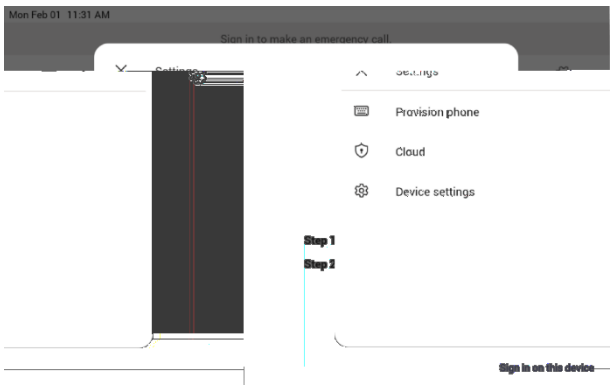
- From the **Awaiting Activation** tab, select an existing MAC ID. A password is created for the MAC address and is shown in the **Verification Code** column.



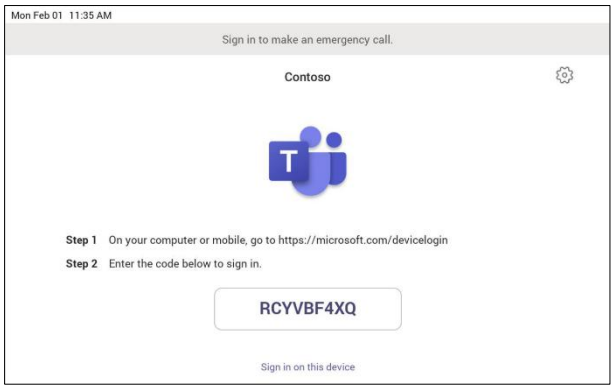
You'll need to provide the list of MAC IDs and verification codes to the field technicians. You can export the detail directly in a file and share the file with the technician who is doing the actual installation work.

Step 3: Provisioning on the device

Once the device is powered up and connected to the network, the technician provisions the device by choosing the 'Settings' gear on the top right of the new 'Sign in' page and selecting **Provision phone**.



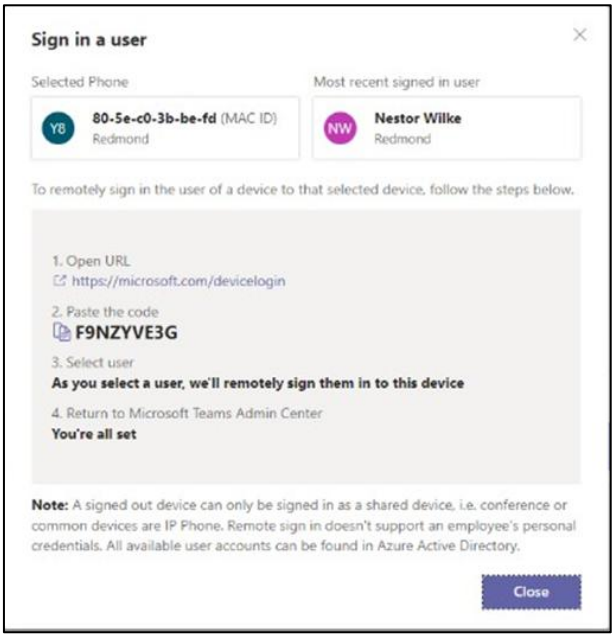
The technician is then expected to enter the device-specific Verification code that was provided in the Teams admin center on the phone's user interface. Once the device is provisioned successfully, the tenant name will be available on the sign in page.



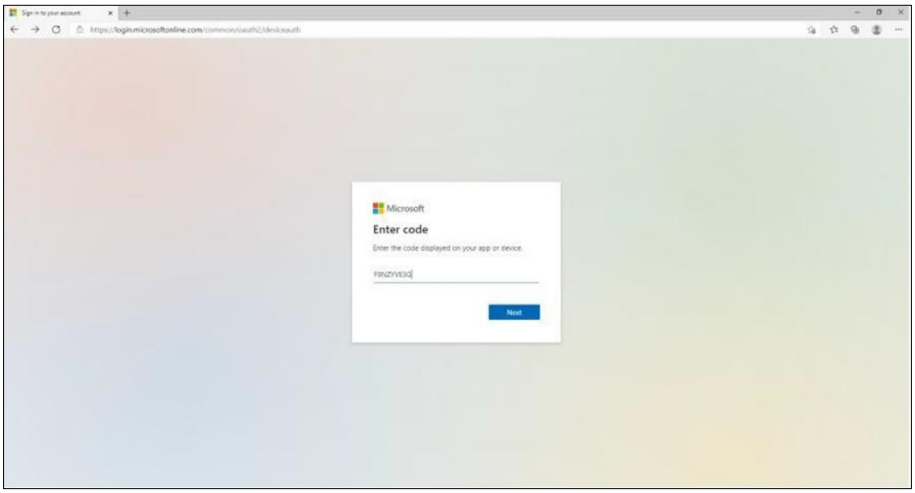
Step 4: Sign in remotely

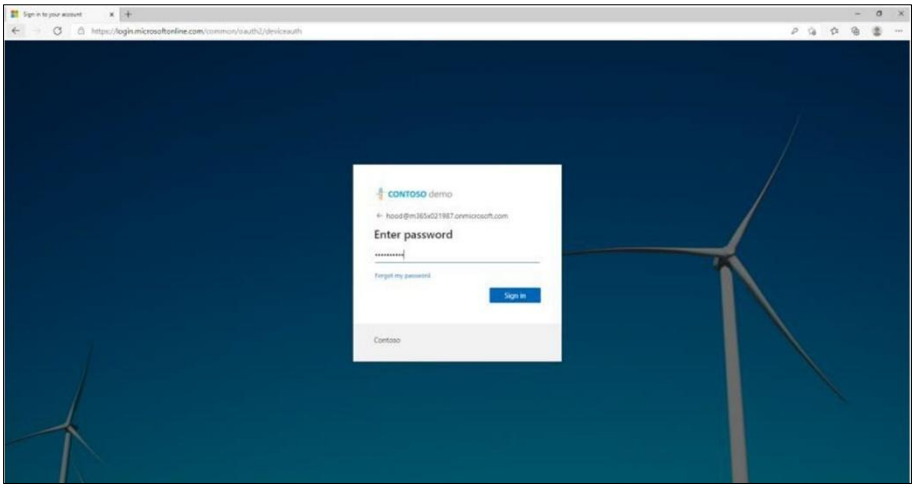
The provisioned device appears in the Awaiting sign in tab. Initiate the remote sign-in process by selecting the individual device.

1. Select a device from the **Awaiting sign in** tab.
2. Follow the instructions in **Sign in a user**, and then select **Close**.

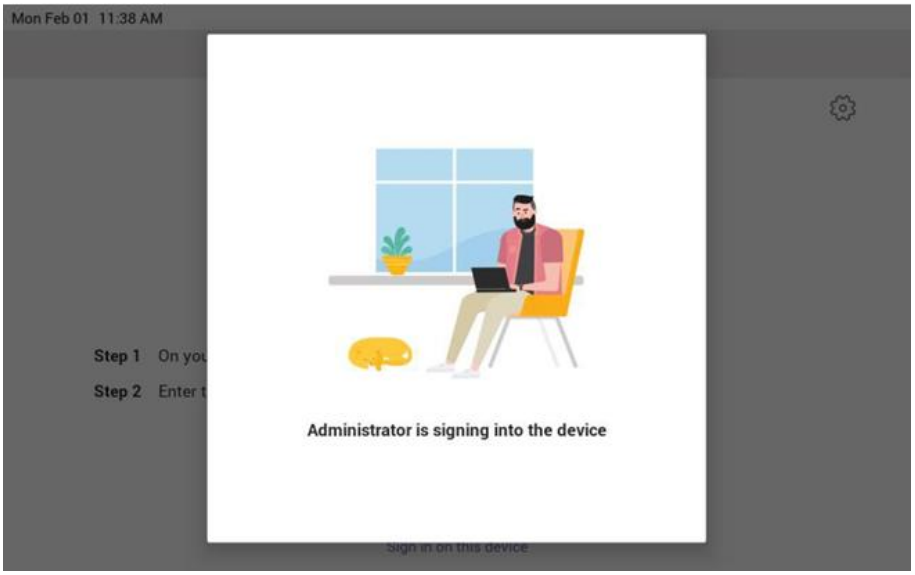


The tenant admin is expected to complete authentication on the device from any browser or smartphone.





When the tenant admin is signing in from Teams Admin Center, the user interface on the device is blocked to prevent other actions on the phone.



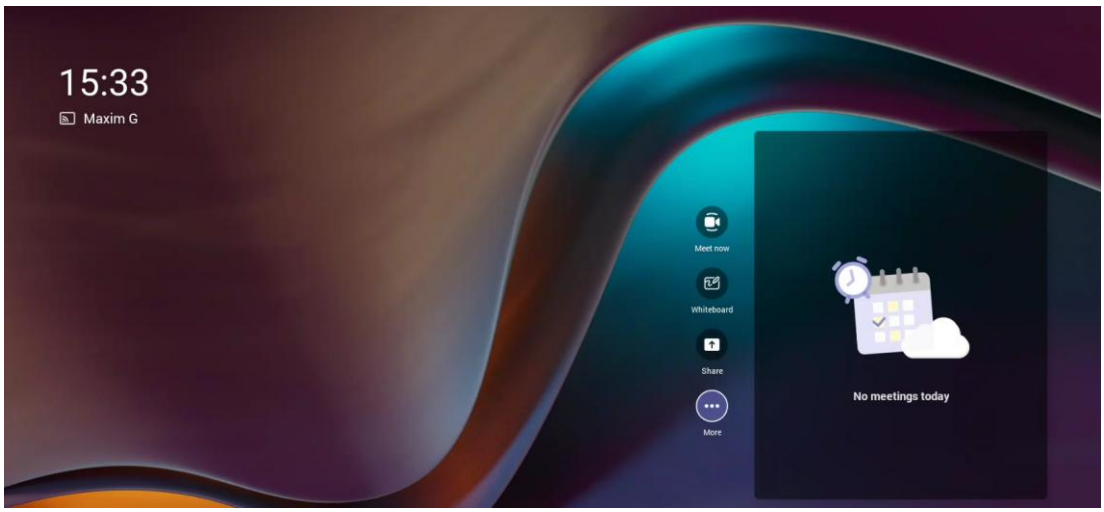
4 Using General RXV200 Functions

This section shows how to use general RXV200 functions.

To get started:

1. After signing in, view the RXV200 home page.

Figure 5: Home Page



4.1 Customizing a Background

This feature is only available with the Teams Rooms Pro license Pro

Admin can upload custom background images on the Teams admin center to reinforce their company brand on their Teams Rooms on Android devices.

The main room display, extended room display, and touch console can each have their own specific background image.

PNG, JPG, and JPEG formats are supported.

See also here for more information.

4.2 Configuring a Bundle

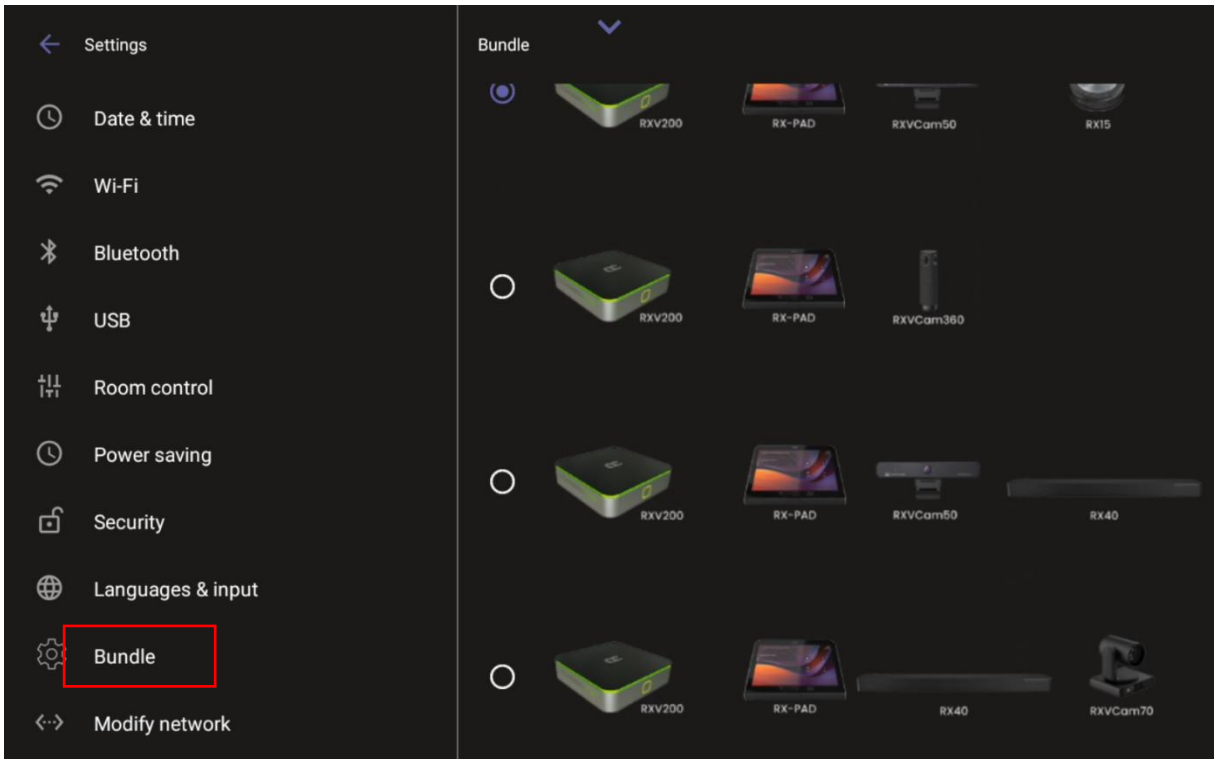
Admin can configure one of five bundles depending on the solution the enterprise acquired.

See here for more information about available bundles.

Admin can configure the bundle via RX-PAD and/or the RXV200 UI.

To configure a bundle:

1. Open the Bundle page (**Settings** > **Bundle**).



2. Select the bundle the enterprise acquired. The preceding figure shows RXV200 + RX-PAD + RXVCam50 + RX40 as the selected bundle.

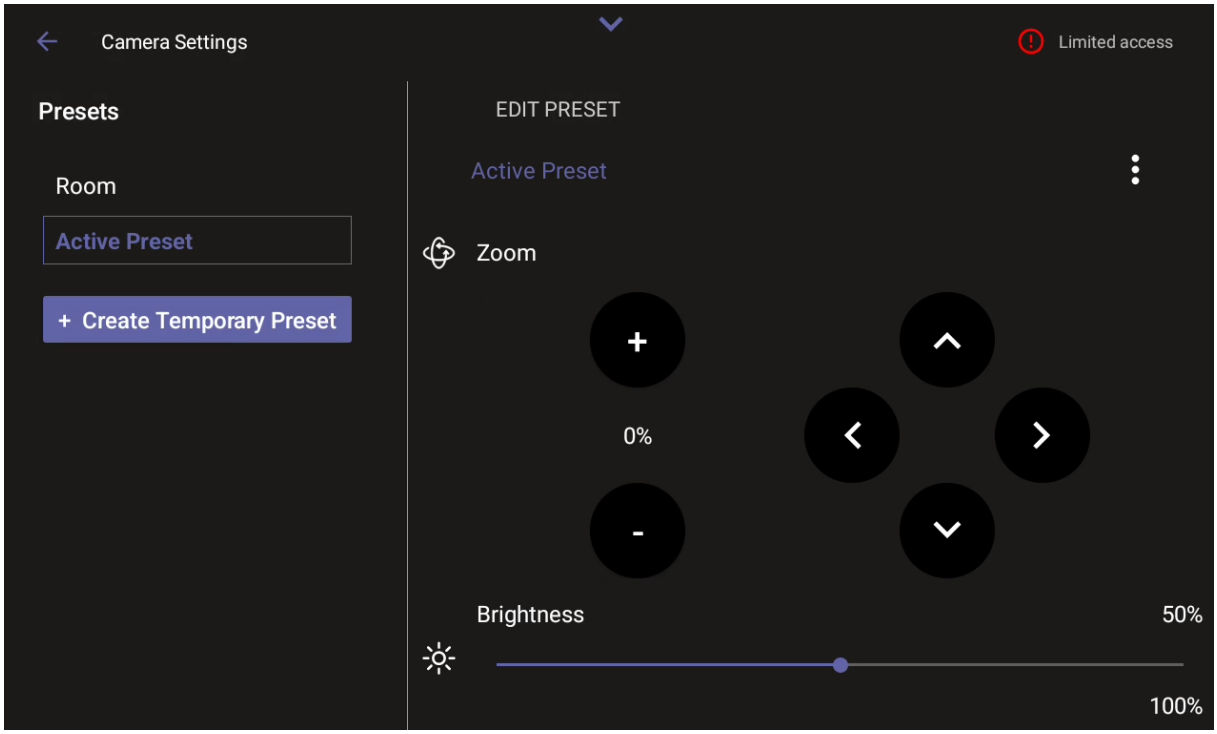
4.3 Managing Camera Presets

You can adjust RXV200 camera presets to suit your preferences.

To access RXV200 camera presets:

1. On RX-PAD, touch the camera button.

Figure 6: Camera Settings



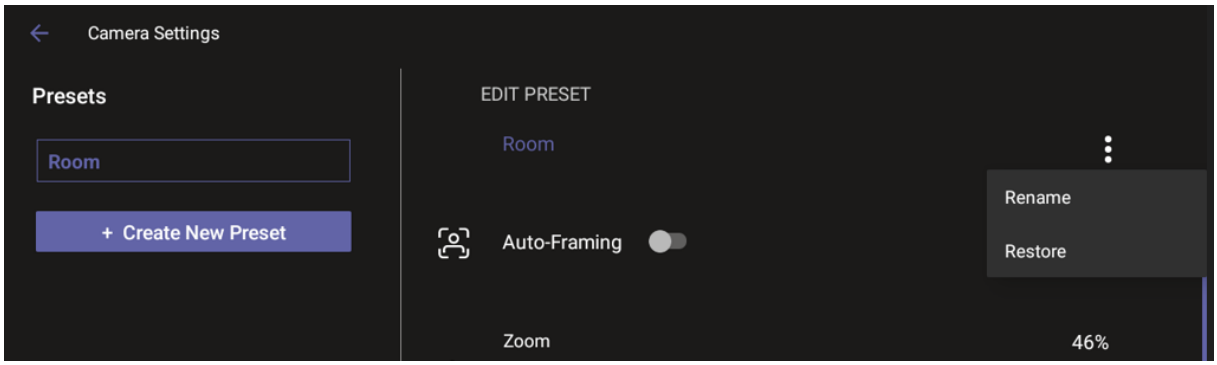
The default **Room** preset enables you to capture all participants and actions in a meeting room.

2. Touch the **Create Temporary Preset** option (while in an ongoing meeting) | Touch the **Create New Preset** option if the device is in idle state.
3. Configure the PTZ settings you want.

- If you configure a preset (for example) to zoom in and focus on a whiteboard in the meeting room, users in a video call-meeting can switch to it and later switch back to the default **Room** preset or any other defined preset.
- Users can easily toggle between presets according to their requirements per call.

4. [Optionally] Edit a preset.
5. [Optionally] Click the vertical ellipsis and then from the pop-up menu select the **Restore** option to return camera settings to their defaults.

Figure 7: Restore



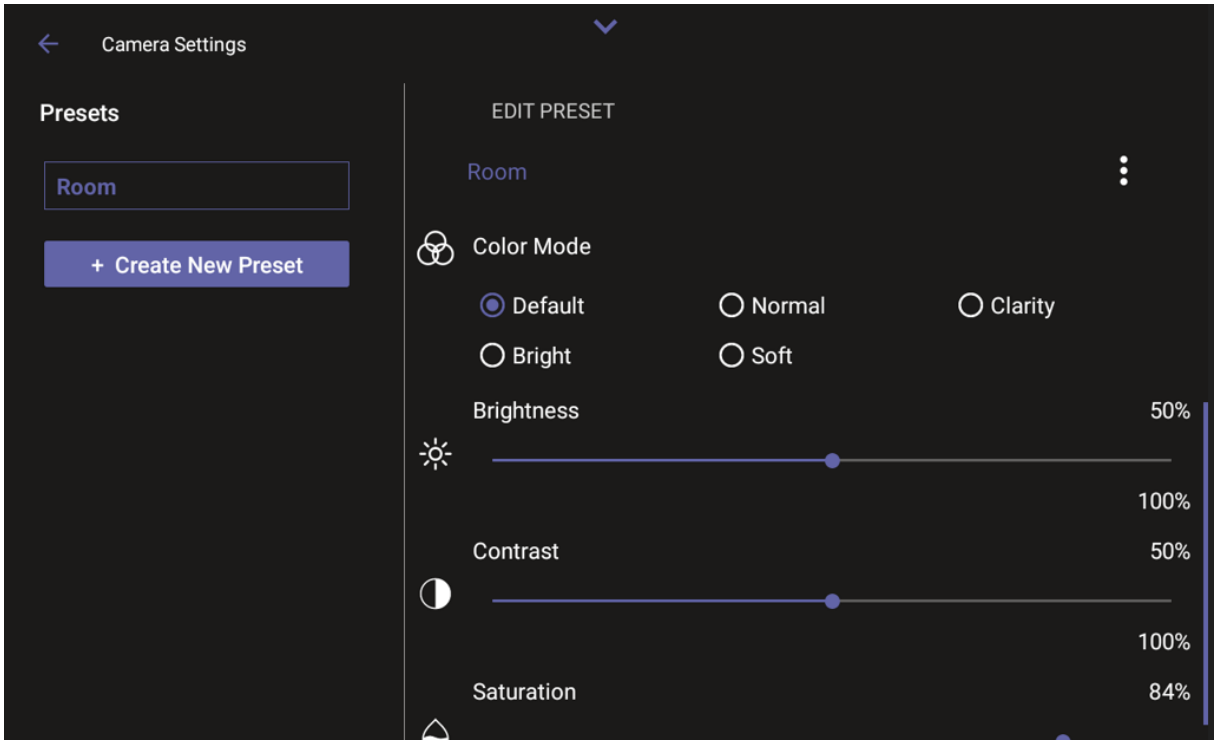
- During a meeting, any user can create a temporary preset; when the meeting ends, that preset is automatically deleted.
- Admins can create presets when the device is in idle mode (and the presets will be saved). Users cannot.
- **Camera Settings** can be changed during a meeting without turning off the video to remote parties.
- **Camera Settings** can optionally be accessed from RXV200's **Device Settings** though admin permissions are necessary.

4.3.1 Configuring a Color Mode Preset on the RXVCAM50M Camera

When RXV200 is connected to the AudioCodes RXVCAM50M camera, users can configure a Color Mode preset from RX-PAD.

Users can configure either:

- Default
- Normal
- Clarity
- Bright
- Soft



Each Color Mode preset incorporates the following attributes:

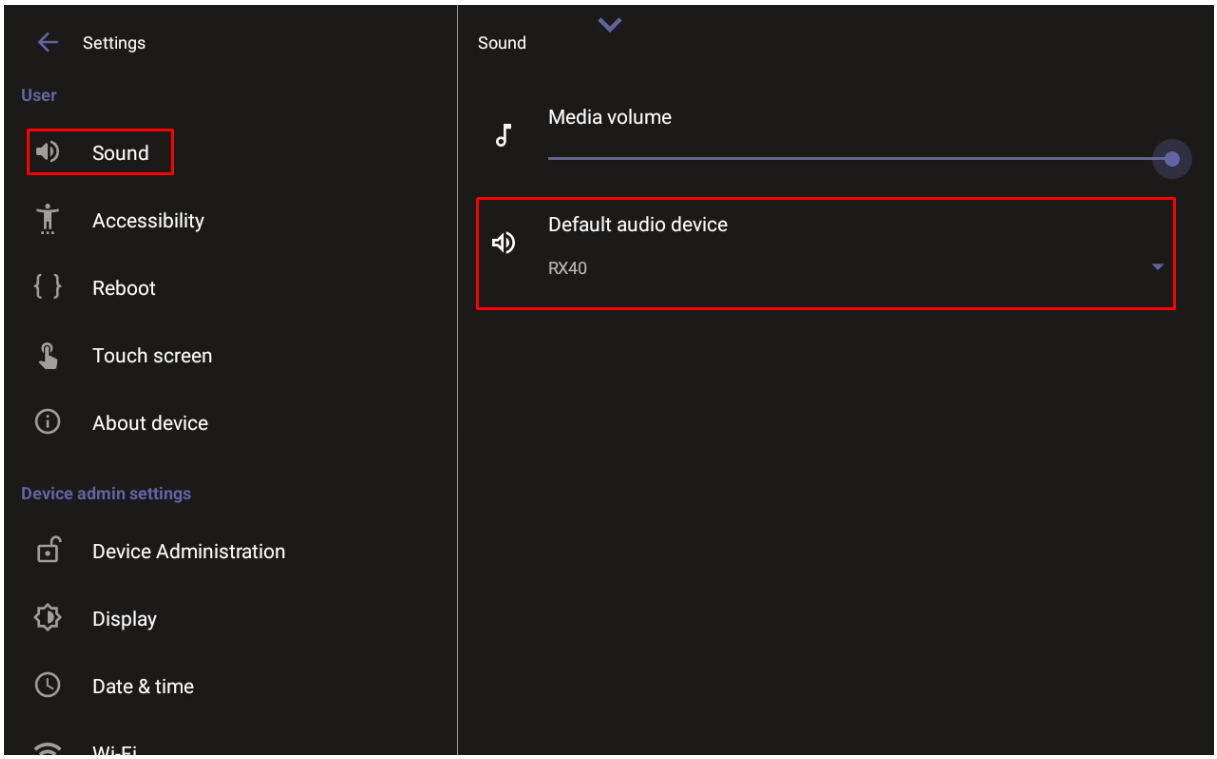
- **Default**: Brightness - 50, Contrast - 50, Saturation - 70
- **Normal**: Brightness - 50, Contrast - 50, Saturation - 70
- **Clarity**: Brightness - 60, Contrast - 50, Saturation - 60
- **Bright**: Brightness - 50, Contrast - 50, Saturation - 70
- **Soft**: Brightness - 50, Contrast - 50, Saturation - 60

4.4 Selecting the Default Audio Device

Admin can select the default audio device if there's more than one audio device option available.

To select the default audio device:

1. Open the Sound page (**Device settings** > **Sounds**).



2. From the 'Default audio device' drop-down, select the default device.

4.5 Starting a New Meeting

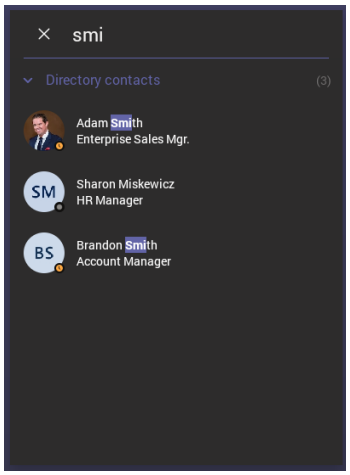
To start a new meeting:

1. In the home screen, navigate to and select the **Meet Now** option.

Figure 8: New meeting – Invite someone

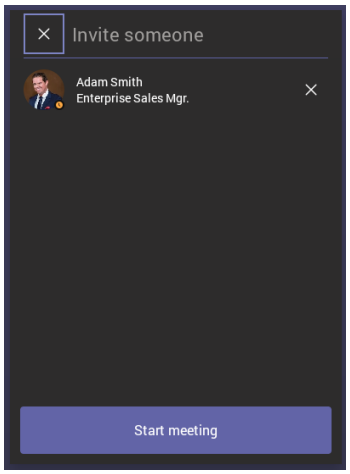
2. In the 'Invite someone' field, enter the name of a person to invite; after entering the first letters in the name, matching contacts from directory are displayed.

Figure 9: New meeting – Enter the name of a person



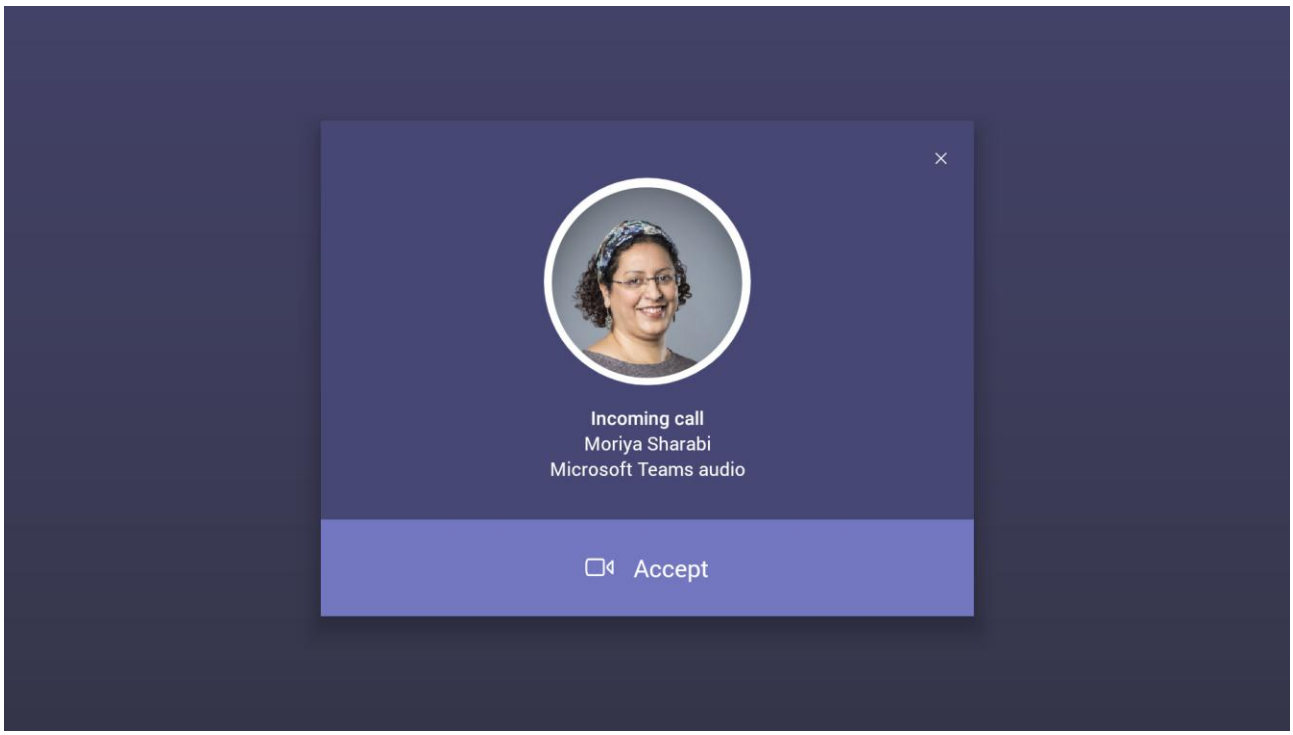
3. Select the name of the person to invite.

Figure 10: New meeting – Select the name of a person

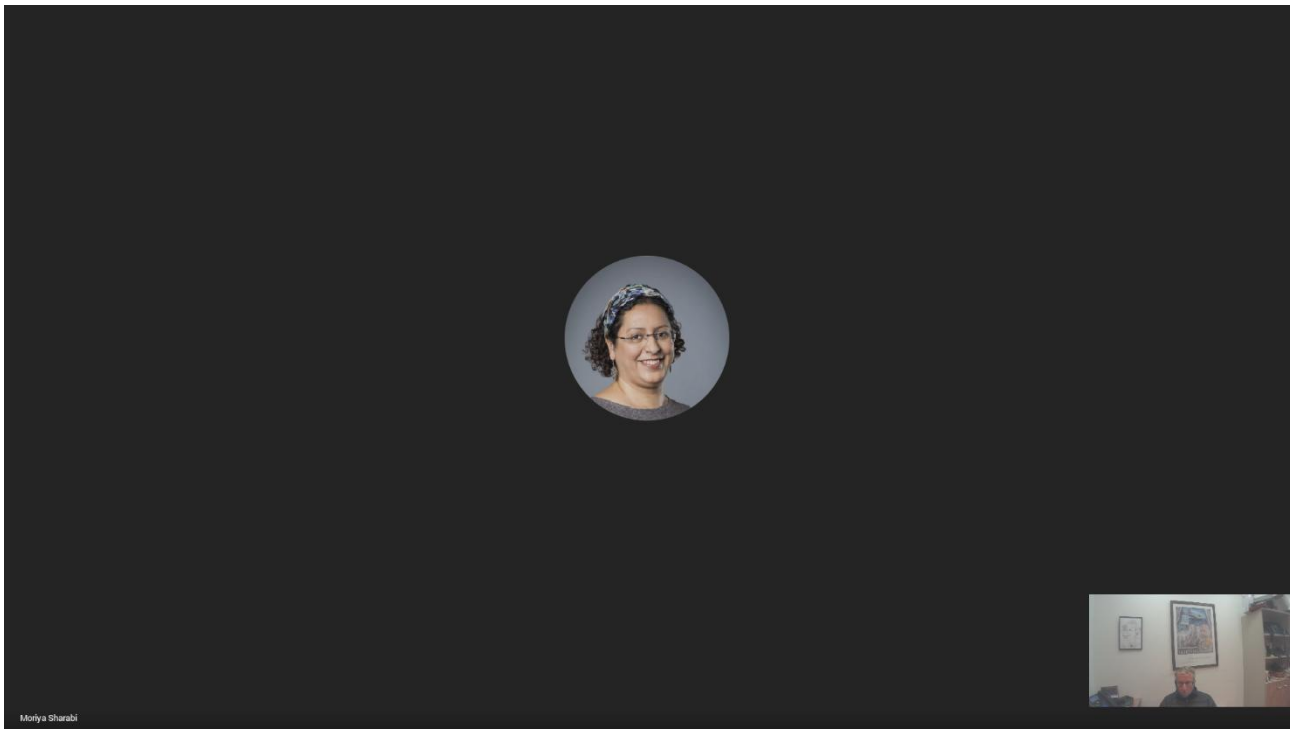


4. Invite someone else – or others – and then select **Start meeting**.

The server allocates a meeting ID number and sends an invite message to all participant devices. All devices simultaneously indicate an incoming call (the 'Calling' screen is displayed). The server manages every aspect of the call.



5. Select **Accept**. Note that according to the icon in the 'Incoming call' screen shown in the preceding figure, the caller has video capability.



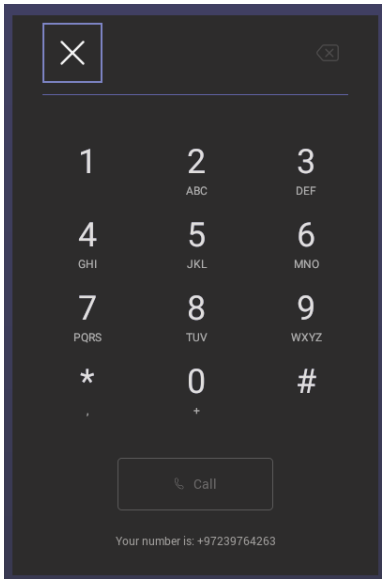
4.6 Dialing a Number

You can manually dial someone's phone number.

To dial a phone number:

1. In the home screen, navigate to and select the **Dial pad** option.

Figure 11: Dial pad

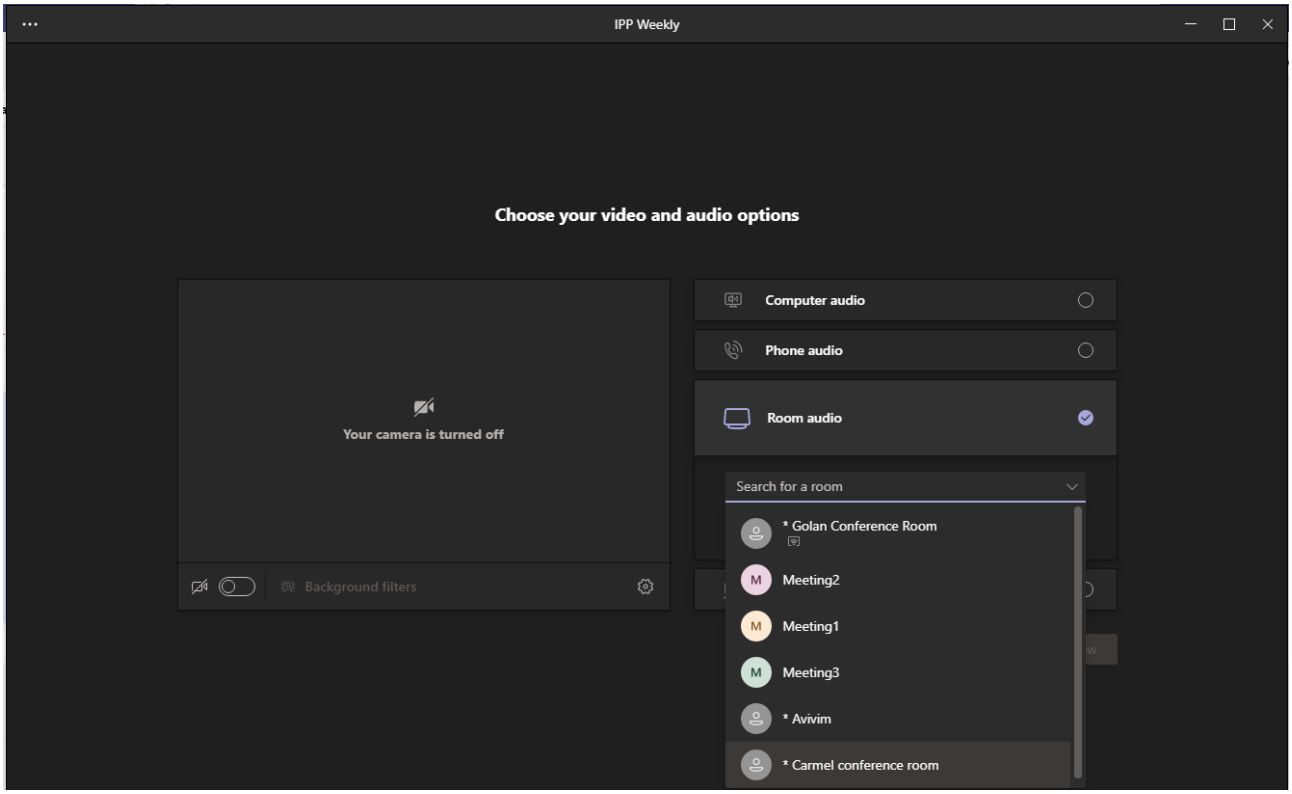


2. Enter the digits of the destination to call and select **Call**.

4.7 Enabling Proximity Join

'Proximity Join' allows you to discover and add a nearby, available Microsoft Teams Room, i.e., the RXV200, in this case, to any meeting. It's also possible to accept the incoming meeting on the console of the room.

The feature functions in combination with Bluetooth and 'Bluetooth Beaconing', an integral feature in Microsoft Teams Rooms (MTRs). The MTR device is RXV200. If you bring a laptop or a Teams Mobile Client near the RXV200, it'll offer the RXV200 as the room audio device. The figure below shows how to select the room audio device.



After you select the room audio device, the meeting is opened without any audio device on your PC client, and then the room meeting device (RXV200) gets a request to join the meeting.

To enable 'Proximity join':

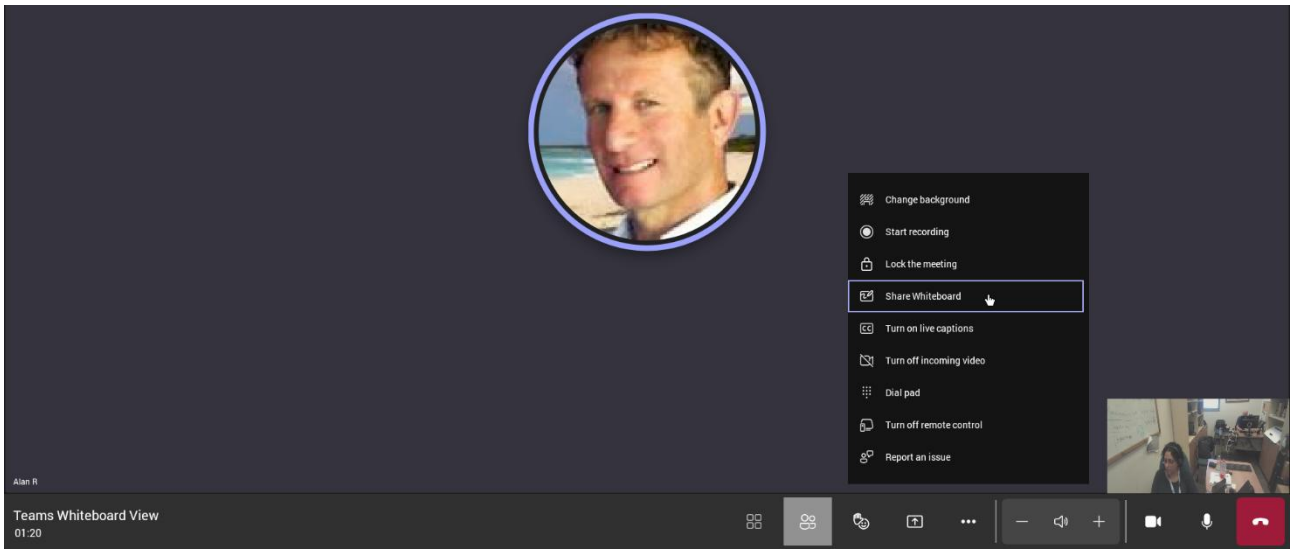
- In the Settings screen, navigate to and select **Proximity join**. If it's disabled, it'll become enabled and vice versa.

4.8 Sharing a Whiteboard

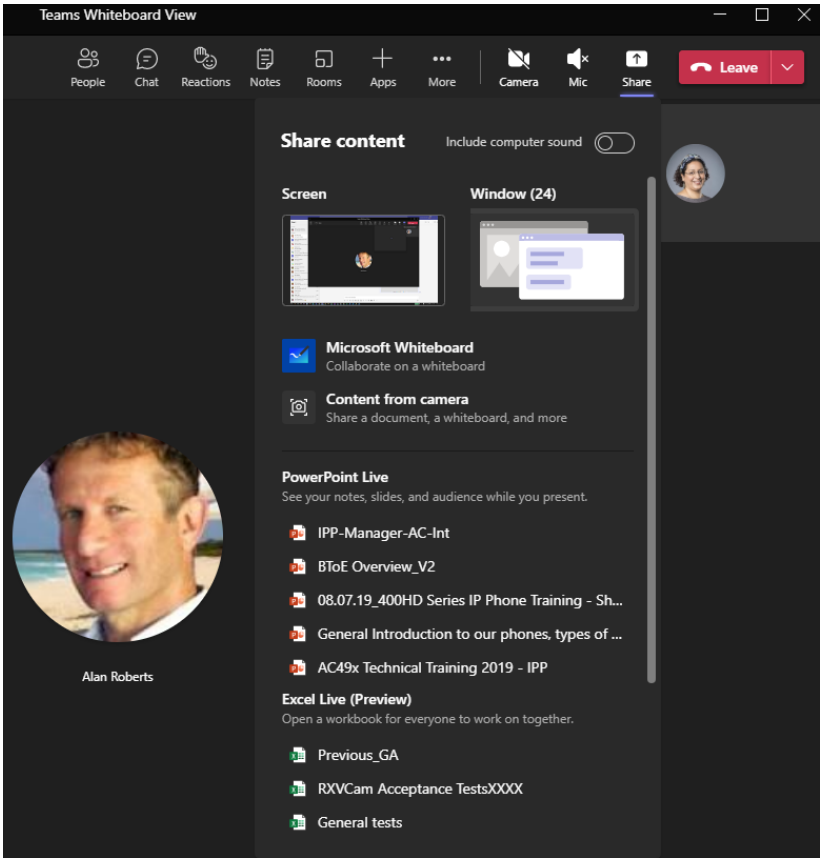
Teams meetings on the RXV200 allow participants to open a virtual whiteboard – a digital canvas - on which they can sketch, illustrate, collaborate, brainstorm, plan, and share perspectives with one another in real time. The focus switches away from the presenting participant to the whiteboard. For more information about this Microsoft feature, see here.

To share the Whiteboard:

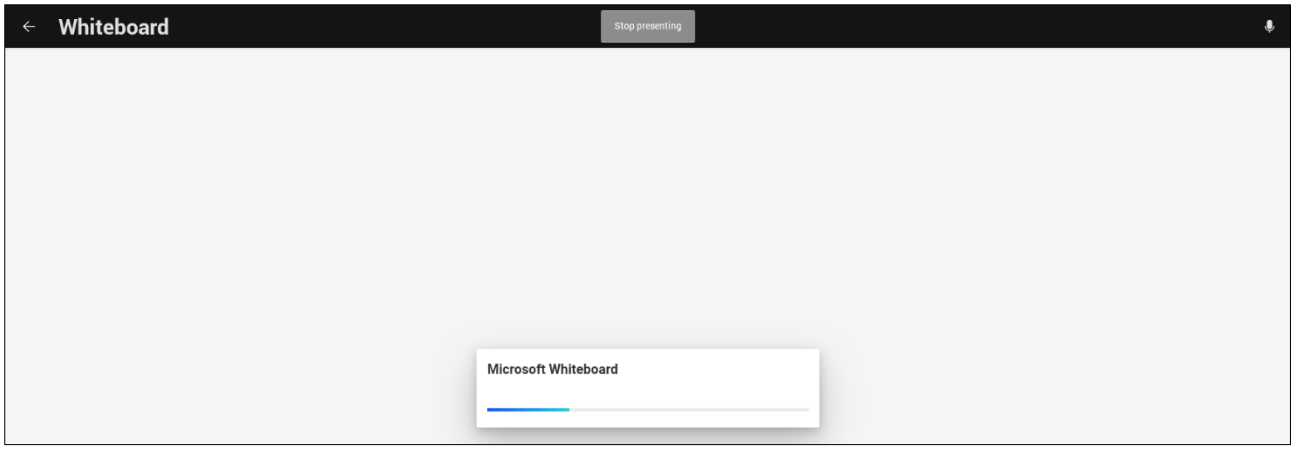
1. From the ··· menu (in the MTRA GUI), select **Share Whiteboard**.



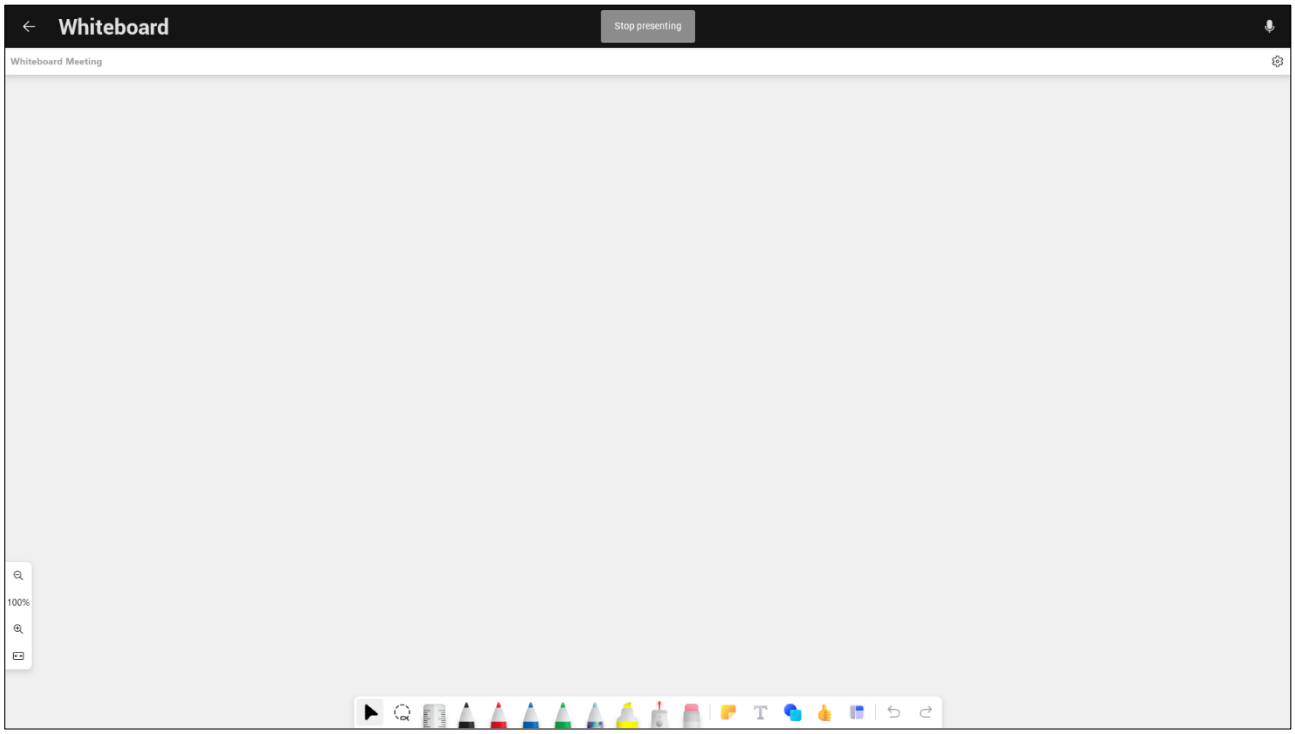
2. Alternatively, access the Whiteboard from **Share content**:



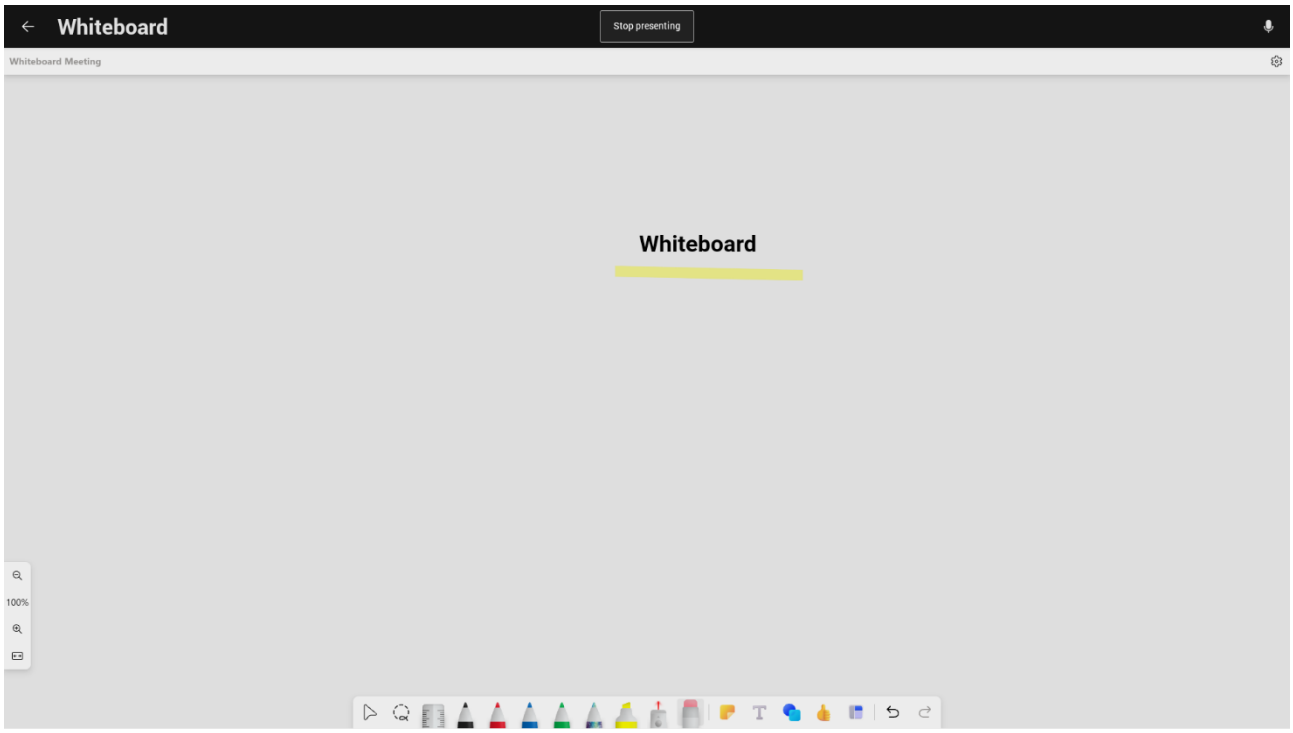
3. View the following Microsoft Whiteboard initializing indication:



4. View the Whiteboard in the Teams desktop application or in Teams client:



5. Edit the Whiteboard; every participant with privileges can edit it.



4.9 Screen Sharing

RXV200 enables users to share their PC/laptop screen via the RX-PAD HDMI In port, to be shared on the screen in idle mode and peripheral mode.

- A short HDMI cable connects the PC/laptop to the RX-PAD HDMI In port.
- The connection between RX-PAD and RXV200 is thus ‘cableless’.

The feature offers added flexibility by enabling the use of a shorter HDMI cable connected to the center of the meeting room desk, in contrast to a longer (more expensive) cable connected to the RXV200 positioned in the front of the room.

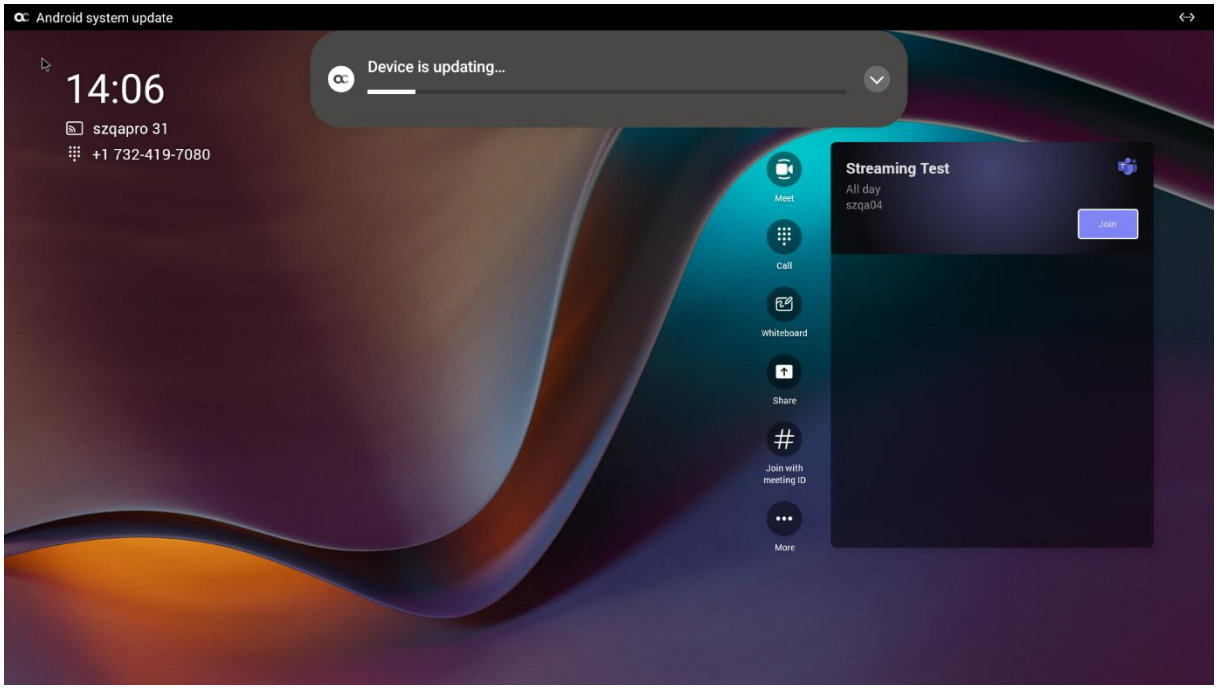
- **In-Meeting Mode:** When the MTR is in a meeting, the presenter can use the Teams app ‘Share’ key to share their PC screen (when their PC is connected to RX-PAD’s HDMI In port) with in-person attendees who are physically present in the same meeting room, as well as with remote attendees. [Audio sharing is currently unsupported].
- **Idle Mode:** When the MTR is not in a meeting, the presenter can use the Teams app ‘Share’ key to share their PC screen (when their PC is connected to RX-PAD’s HDMI In port) only with in-person attendees who are physically present in the same meeting room.

4.10 Updating RXV200 Audio and Camera Peripherals Firmware

- RXV200 firmware update includes **RXVCam360** camera and speaker firmware upgrade.
- RXV200 firmware update includes **RXVCam70** camera firmware upgrade.
- RXV200 firmware update includes **RXVCam50** camera firmware upgrade.
- RXV200 firmware update includes **RX15** speaker firmware upgrade.

Updating RXV200 audio and camera peripherals firmware is a safe and streamlined process. Peripherals' update packages are included in the RXV200 firmware update and executed according to the currently connected peripheral. Here's the user experience:

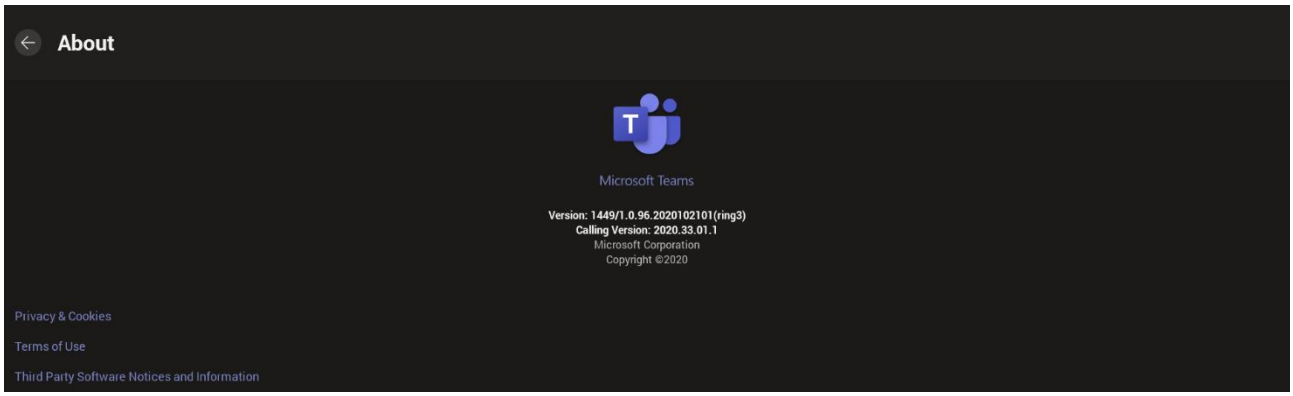
1. View 'Device is updating...'



2. View the notification 'AudioCodes RXV200 RXVCam70 / RXVCam360 / RXVCam50 firmware is being updated, do not reboot the device'.
3. Click **OK**.
4. If RX15 is connected, you'll view the notification: 'AudioCodes RX15 firmware is being updated, do not reboot the device'
5. Click **OK**.
6. After a peripheral firmware upgrade is completed, the connected device will perform a reboot and an associated notification will appear at the bottom of the screen.

4.11 About Microsoft Teams

Information about the Microsoft Teams application can be viewed by navigating to and selecting the Settings screen's **About** option shown in the preceding figure.



4.12 Signing out

You can sign out of the application as one user and optionally sign in again as another.

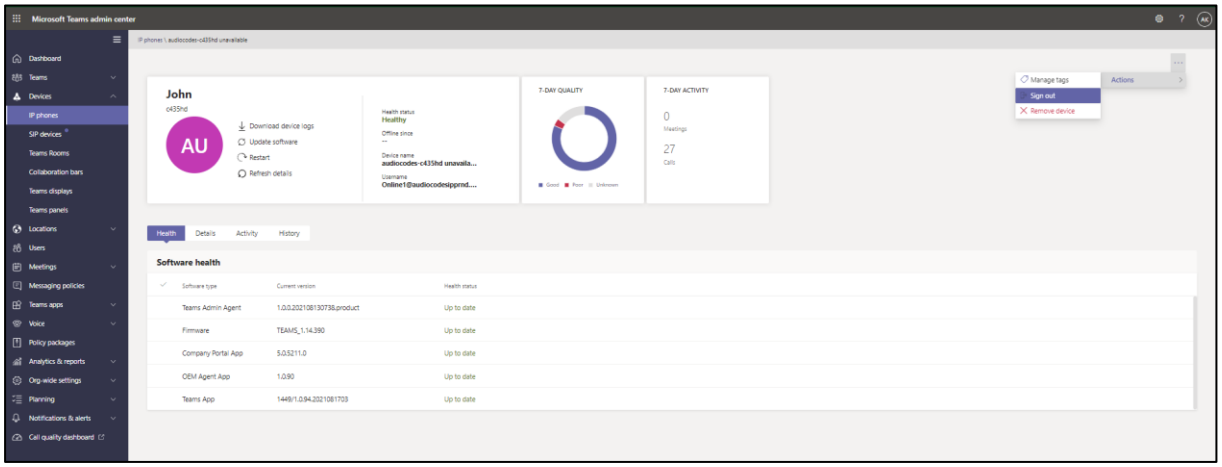
To sign out:

- Navigate to and select **Sign out** in the Settings screen shown in the preceding figure.

Optionally, remote sign-out can be performed from Microsoft Teams admin center (TAC). Network administrators can provision the RXV200 from the TAC, remotely sign in, and also sign out.

To sign out of the RXV200 using Microsoft TAC:

- Navigate to the TAC screen shown in the figure below and from the ⋯ menu located in the uppermost right corner of the screen, select **Actions** and then **Sign out**.



4.13 Enrolling a Device with Intune Policies

Two ways are available to enroll an AudioCodes Teams Android-based device in Intune:

- Create a dynamic group - see here
- Create an exclusion group - see here

4.13.1 Creating a Dynamic Group

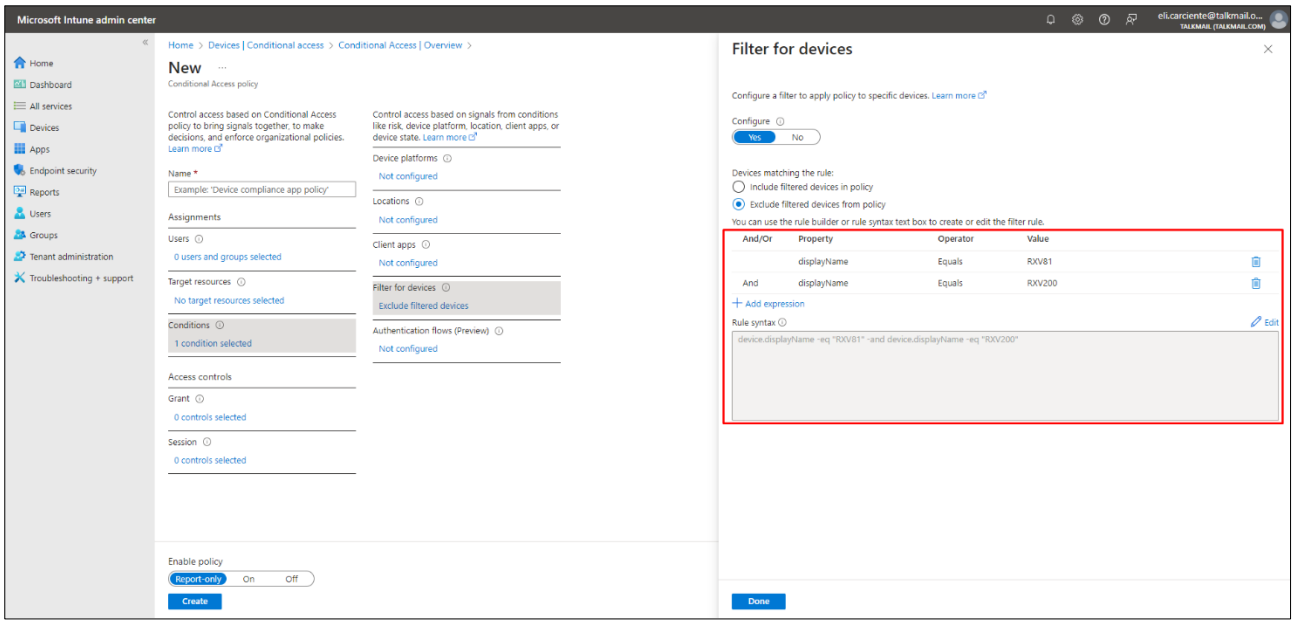
See here how to create dynamic groups in Intune for enrolling AudioCodes Android-based Teams devices.

4.13.2 Creating an Exclusion Group

The information presented here shows how to *exclude* AudioCodes Android-based Teams devices from the organization's Intune policies.

To exclude devices from the organization's Intune policies:

- Remove all conditions that were previous configured:
  - Access Microsoft Azure Government Portal Home > Conditional Access Policies > Require Hybrid Joined or Intune to Access Cloud Resources Conditional Access policy as shown in the figure below.
  - Exclude the device from Intune policies and replace **displayName -contains RXVxx**
  - where RXVxx is the name of the device model (device.model).

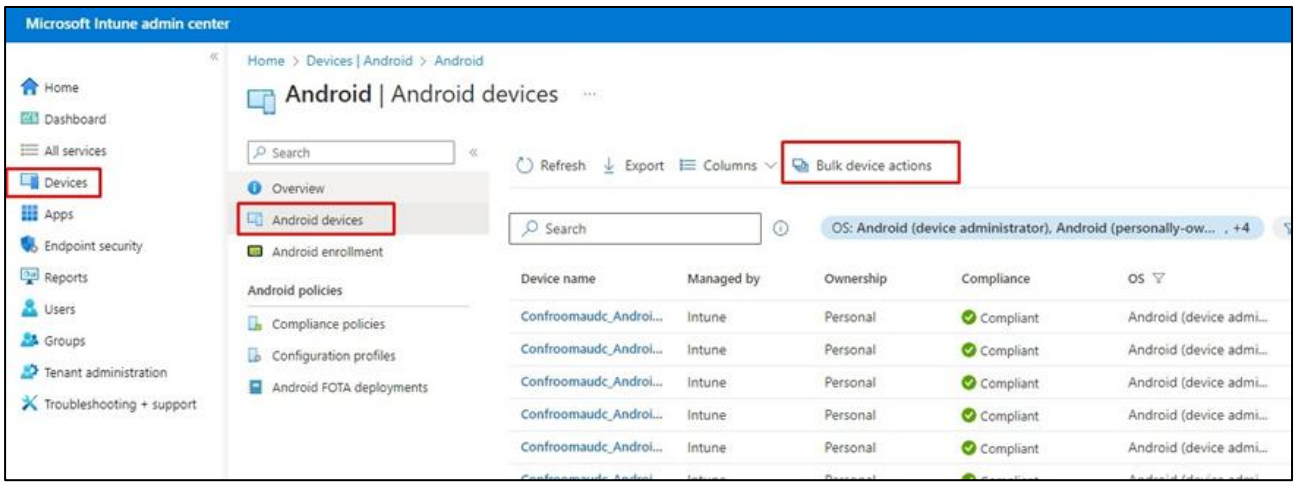


4.14 Removing Devices from Intune admin center

You can remove devices from Intune admin center when the maximum capacity of signed-in devices is reached.

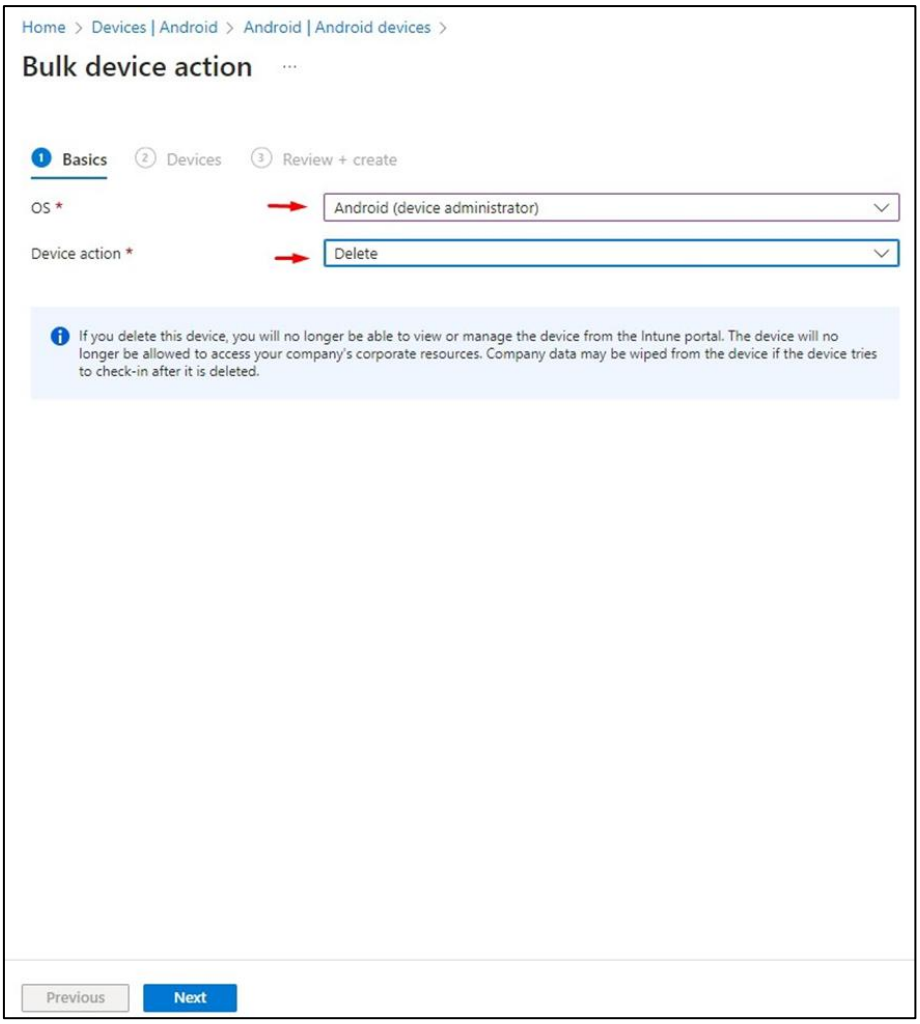
To remove devices from Intune admin center:

1. Go to Microsoft 365 admin center [portal.office.com] and log in with an Administration account.
2. Navigate to **Devices** > **Android devices**.

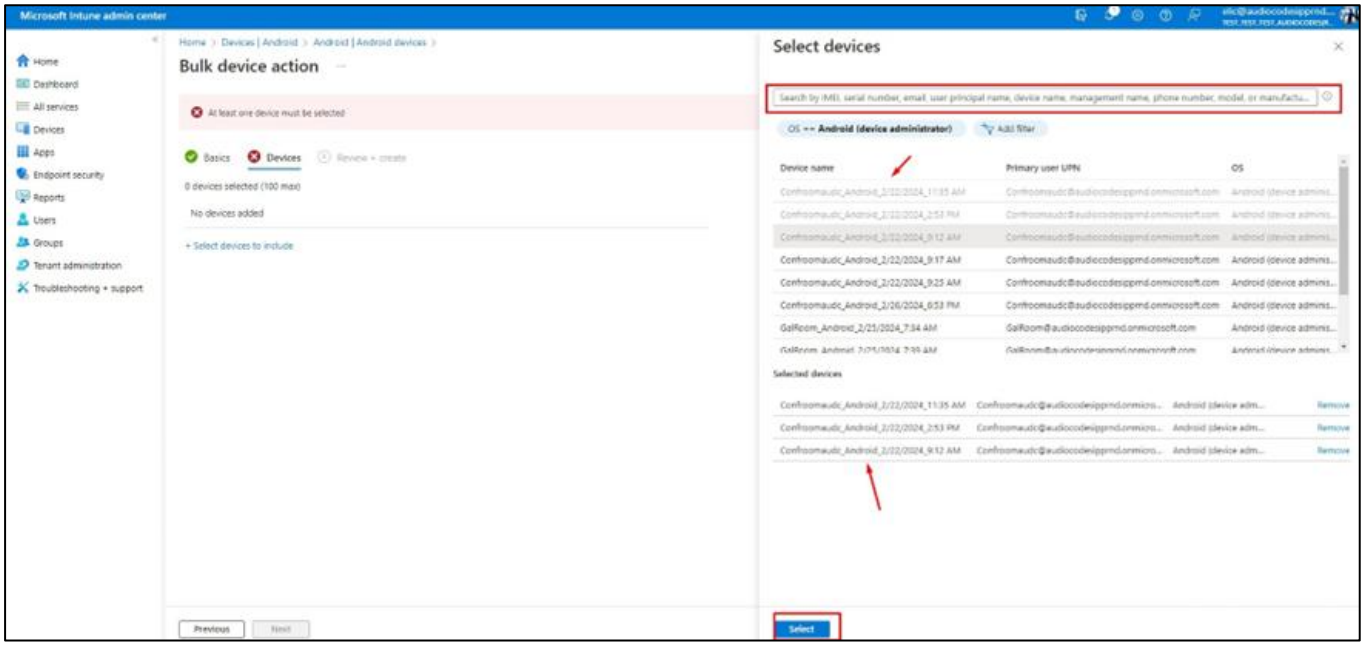


> The Intune admin center service is licensed according to the terms of individual licenses so not all network admins will be able to navigate to it. Check if the license you're using includes the service or not.

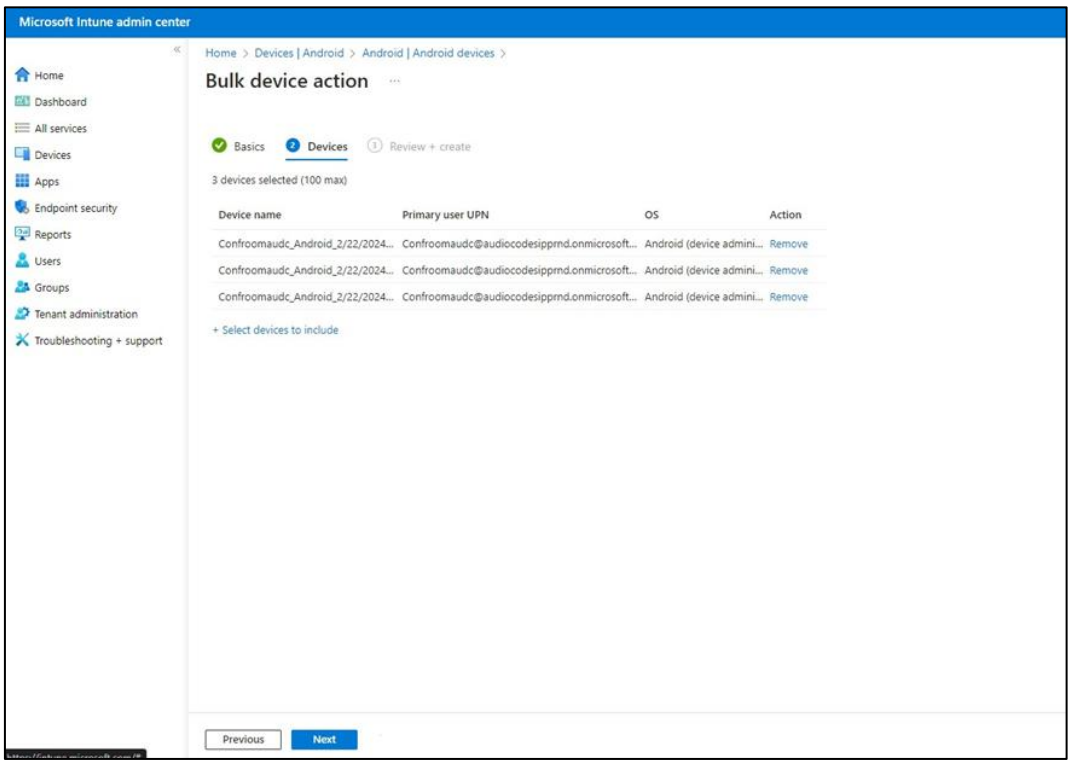
3. Click **Bulk device actions**.



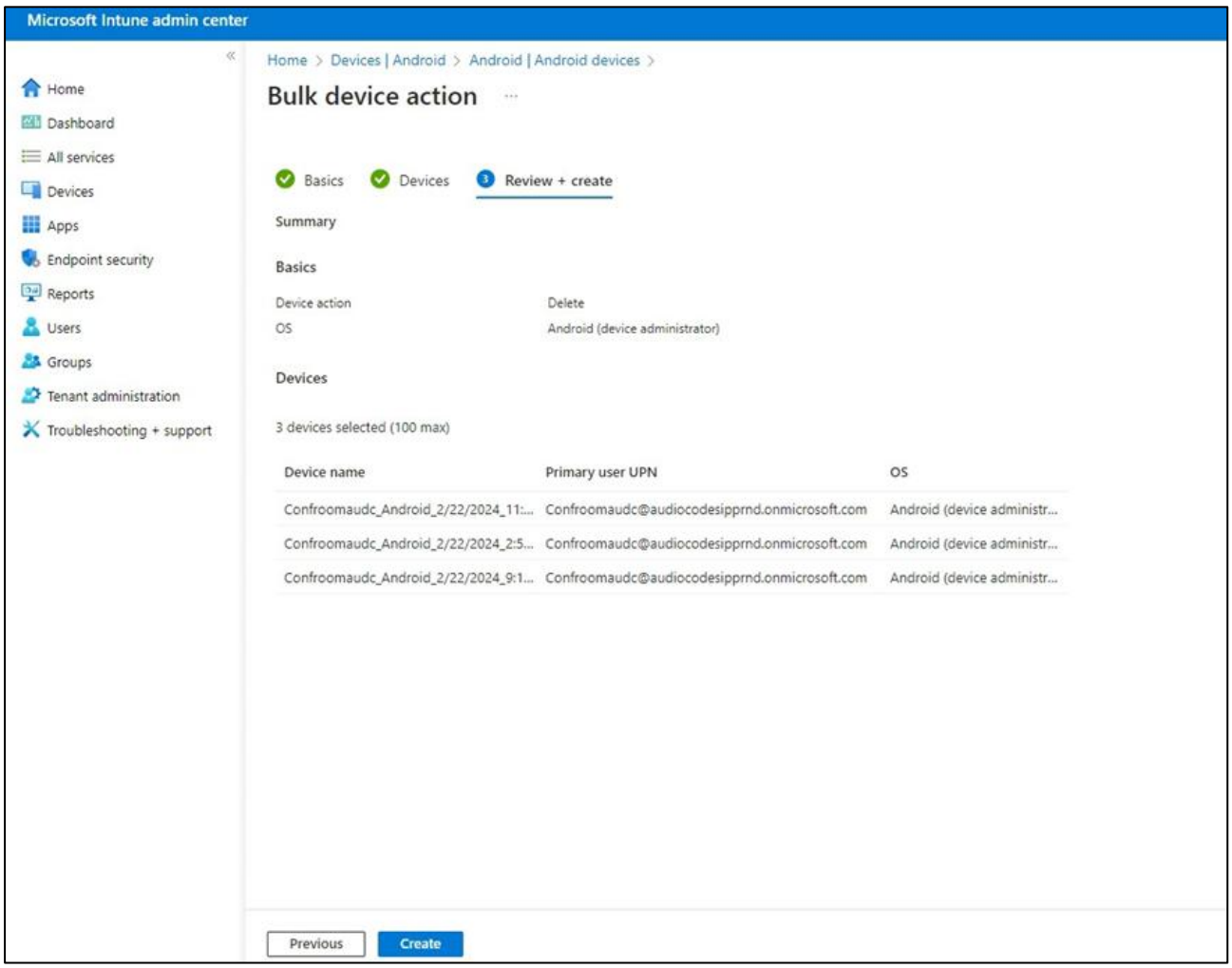
4. From the 'OS' drop-down under the **Basics** tab, select **Android (device administrator)**. From the 'Device action' drop-down, select **Delete**. Click **Next**.



5. Select the devices to delete (i.e., to remove from Intune admin center), and then click **Select**.



6. Under the **Devices** tab, click **Next**.



7. Under the **Review + Create** tab, make sure your definitions are correct and then click Create; admin receives a notification that a delete action from Intune was successfully initiated on all devices and that *n* devices were removed.

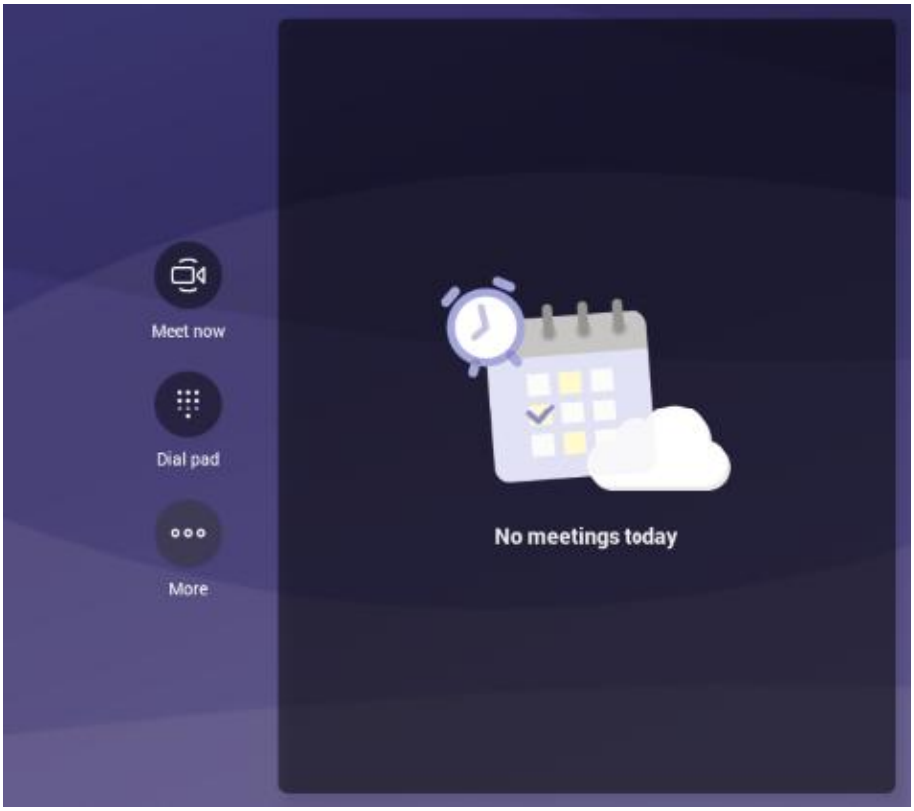
> It may take some time to completely sync the devices with the account so after deleting the devices, wait for 30 minutes before signing in.

5 Getting Familiar with RXV200 Settings

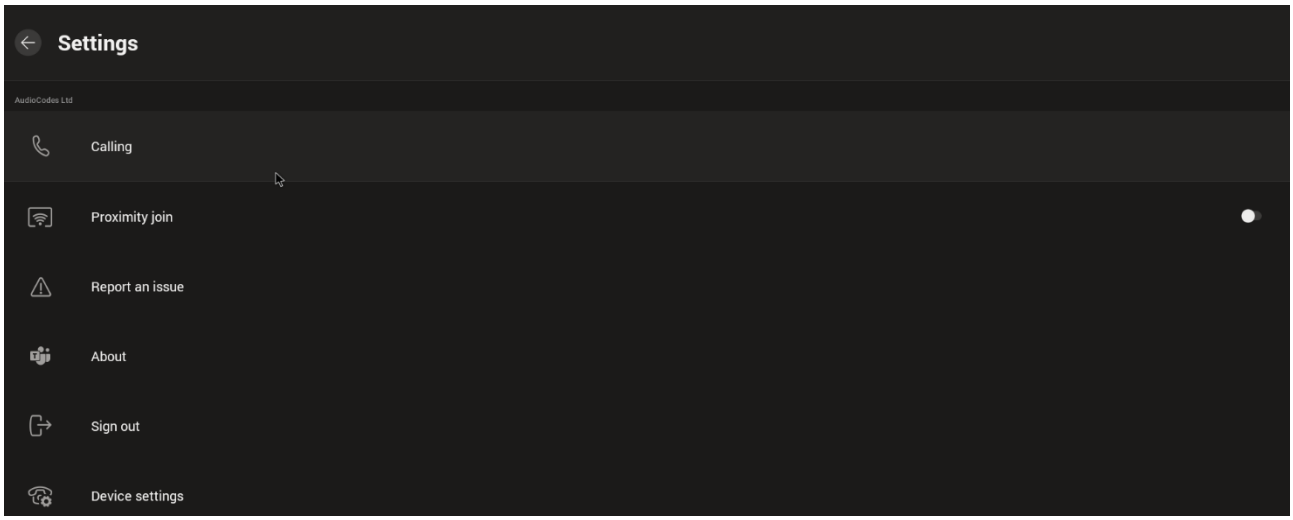
The section familiarizes you with the RXV200's settings. RXV200s are delivered configured with their default settings. Customers can customize them to suit enterprise requirements.

To access device settings:

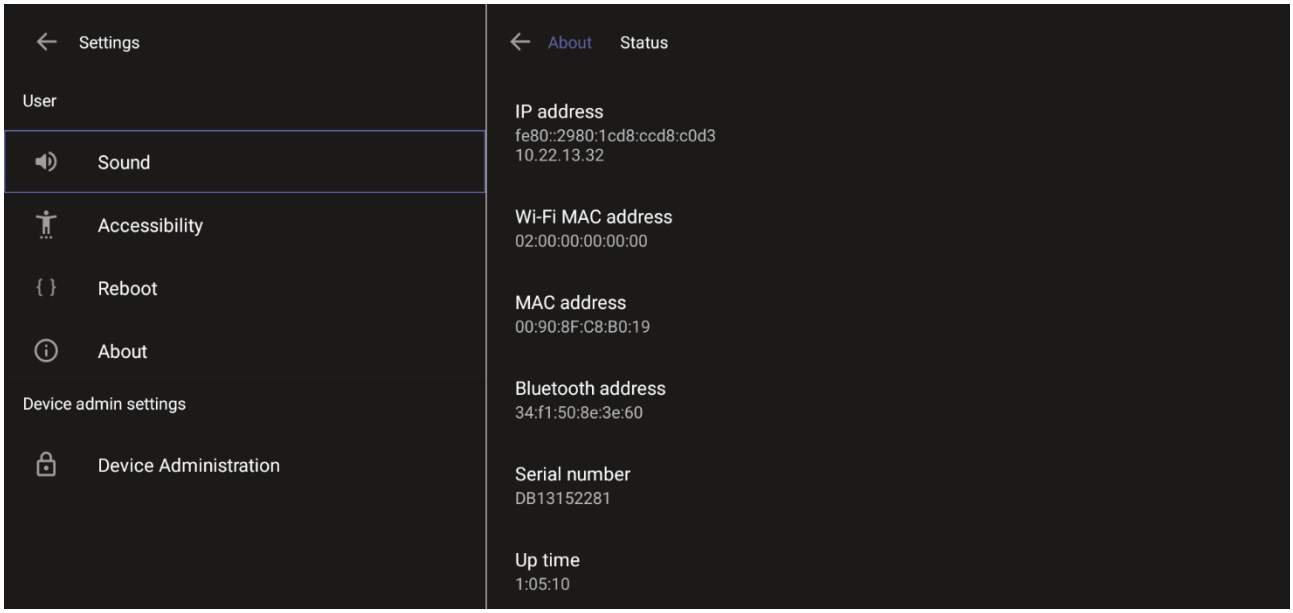
1. In the home screen, navigate to and select the **More** option.



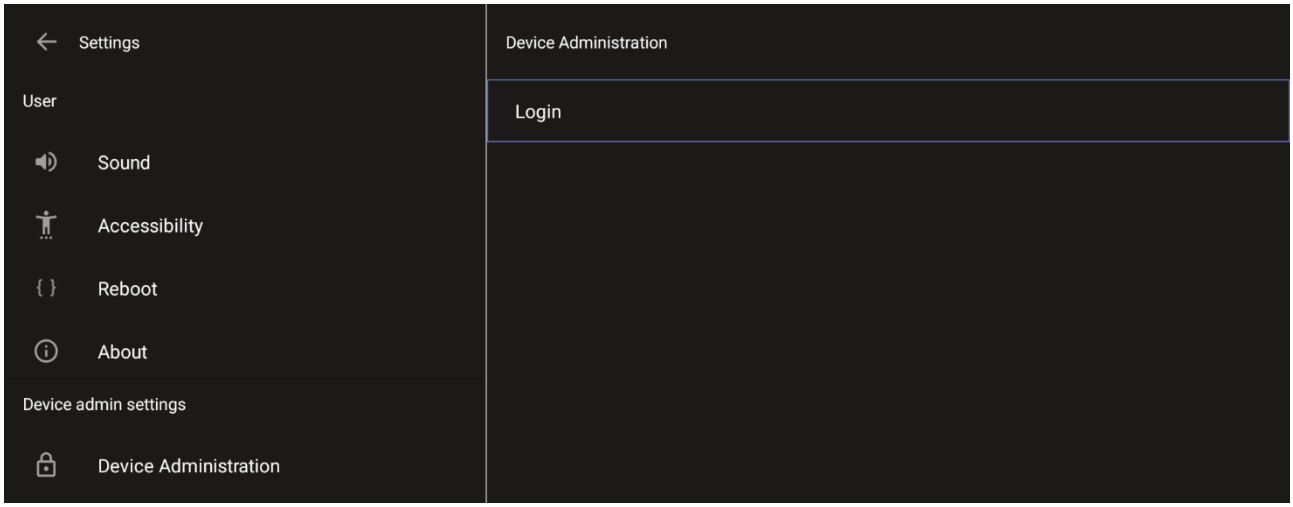
2. Navigate to and select **Settings**.



3. Navigate to and select **Device settings**.



4. Navigate to and select **Device Administration**.



5. Log in as administrator.

> Logging in as Administrator is required for debugging options. It's password protected. Default: **1234**. After logging in as Admin, you can log out | change password.

6. Select **Login**.

7. Enter the password (**1234**) in the 'Enter password' field; use the virtual keyboard to enter the password.

The virtual keyboard pops up for all 'Settings' fields to allow inputting characters and / or numbers. Two virtual keyboard types can be displayed: Numeric or QWERTY.

8. Select **OK**; you're prompted to change password.

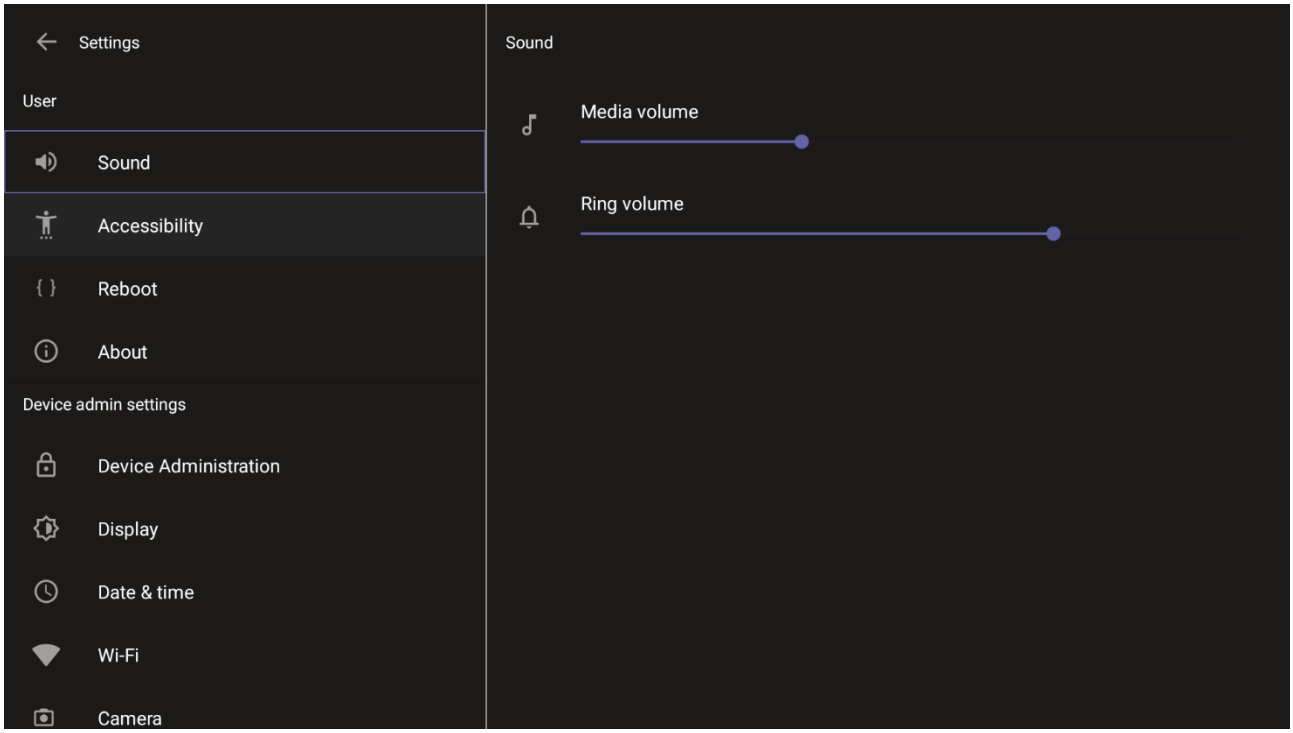
- The default password must be changed before access to the device via SSH is allowed.
- The default password can be changed per device from the GUI, or via bulk configuration of multiple devices using Microsoft's TAC or AudioCodes' Device Manager.

9. Enter a password; you're prompted to verify the password you entered. Criteria required for a strong password are provided (for strengthened security) in order to Log in as Administrator:
   - The password length must be greater than or equal to 8.
   - The password must contain one or more uppercase characters.
   - The password must contain one or more lowercase characters.
   - The password must contain one or more numeric values.
   - The password must contain one or more special characters.

These virtual keyboards are also displayed when the admin needs to enter an IP address to debug, or when they need to enter their PIN lock for the security setting.

After logging in, the Settings screen now also displays the settings under the section 'Device admin settings'.

10. Click **OK**; the Settings screen now also displays 'Device admin settings', in addition to the 'User' settings.



5.1 Device Admin Settings

After logging in as Device Administration as shown in the previous section, you can configure Device Administration settings: Display, Date & Time, Wi-Fi, Camera.

5.1.1 Configuring Admin Login Timeout

Admin login timeout can be configured using the following cfg configuration file parameter:

settings/admin_logout_timeout,values=3

- Default: 3 (minutes)
- Valid values: 1-10 (minutes)

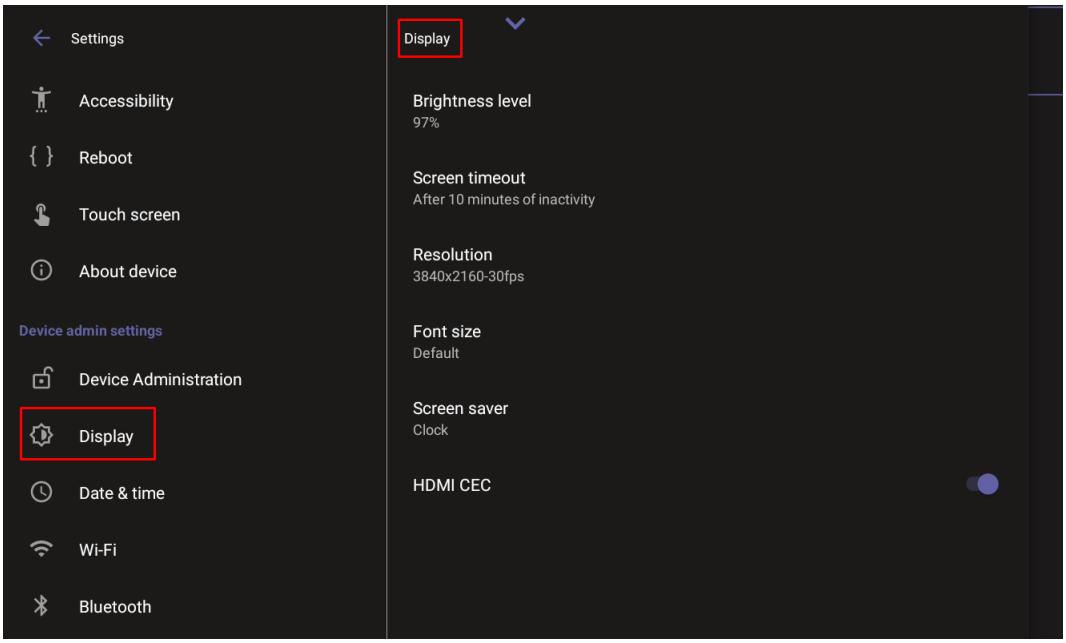
- Timing begins when exiting the 'Device Settings' menu.
- When the timeout expires, the device logs out automatically.
- The functionality works for both registered and unregistered devices.

5.1.2 Configuring Display

Modify these settings to suit your preferences related to the look and feel of the user interface.

To configure Display settings:

1. Under ‘Device admin settings’, navigate to and select **Display**.

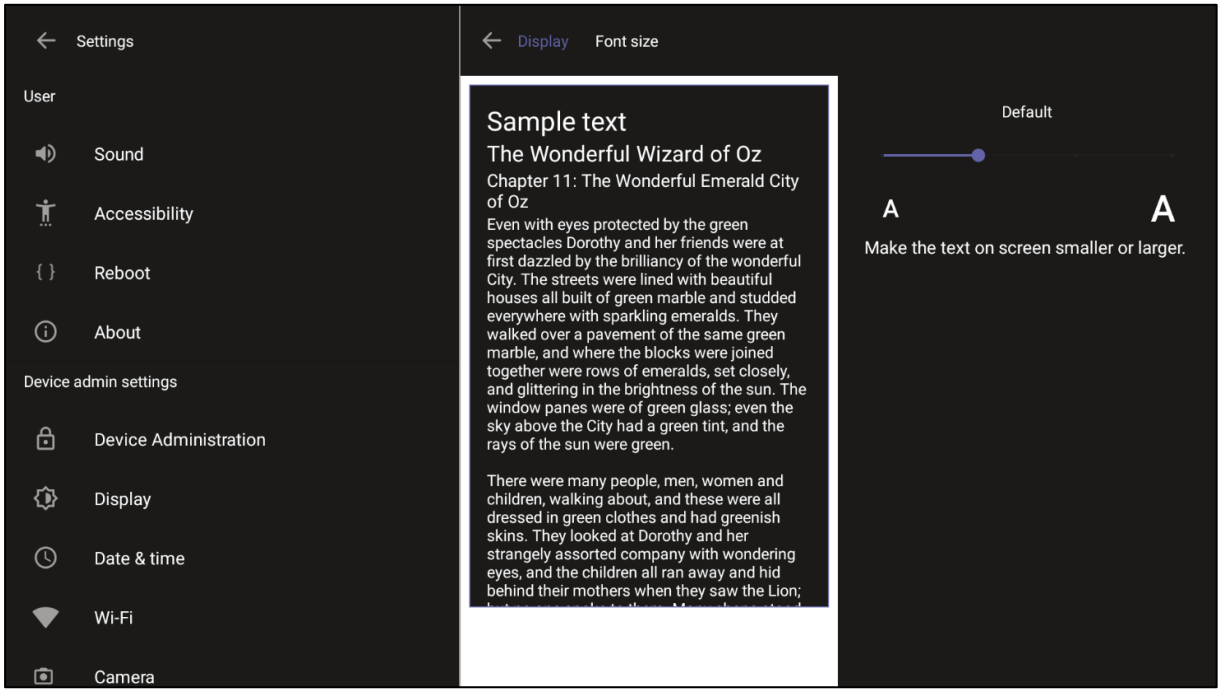


2. Under ‘Display’, navigate to and select **Sleep**.

3. Navigate to and select the time to lapse before the interface 'goes to sleep'. Default: 10 minutes.

> It's recommended not to enable the 'No IR Power off' option which exists in known TV brands such as LG and Samsung, and to allow RX-PAD to put the system to sleep while it is not in use.

4. Navigate to and select **Font size**.



5. Navigate to and select **Screen saver**.

6. Navigate to and select **Off** to switch it on and then choose the screen saver.

5.1.3 Configuring Time Zones on Teams Devices

- AudioCodes recommends using Geolocation as the time zone configuration method.
- Geolocation is the default setting, if no other changes to the time zone settings are made, the device retrieves the time from its geographical location.

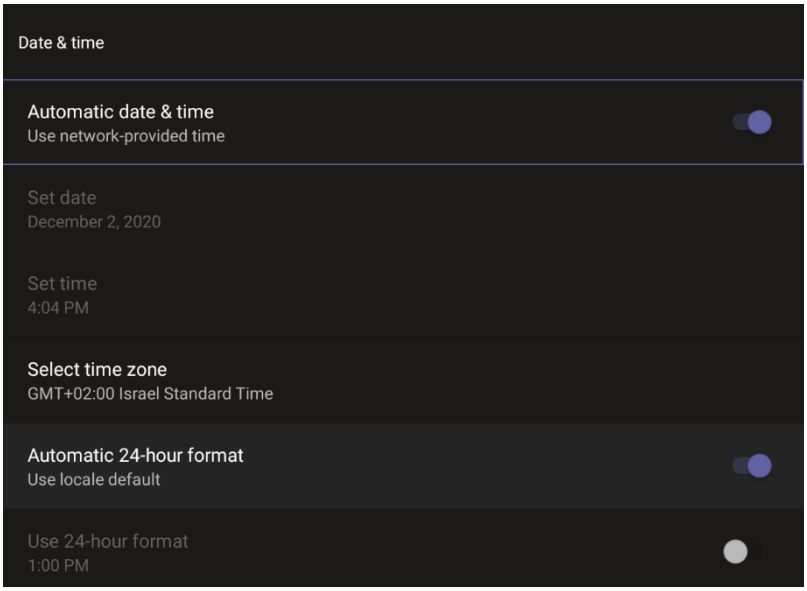
Manual time zone setting is **NOT** recommended. Choosing a time zone manually may cause retrieval of the incorrect time zone, and cause functionality issues.

You can configure the time zone using one of the following methods, which are listed in order of preference for best performance:

- **Geolocation (Default):**
  - The default geolocation method uses a device's public IP address to obtain its location. If the devices are behind NAT, they are using STUN server to discover their public IP addresses.
  - A common STUN server example is Google's publicly accessible server: stun.l.google.com:19302 (default URL).
- **DHCP Option 100/101 (posix/tzdbx):**
  - Configuration is obtained from DHCP server (once defined as available).
- **Admin Provisioning:**

  Use one of the following:
  - Teams Admin Center, created under configuration profile.
  - Device Manager, created in configuration parameters setup.

The supported parameters for Device Manager configuration can be found in product specific Admin and User guides. For Teams Admin Center see Microsoft documentation on creating a configuration profile.



5.1.4 Configuring Wi-Fi

The RXV200 can connect to an Access Point via Wi-Fi.

Network administrators can configure Wi-Fi parameters for the RXV200. The parameters are concealed from the user's view. Users can enable | disable Wi-Fi in the device's user interface.

> Wi-Fi cannot be enabled | disabled using SSH command.

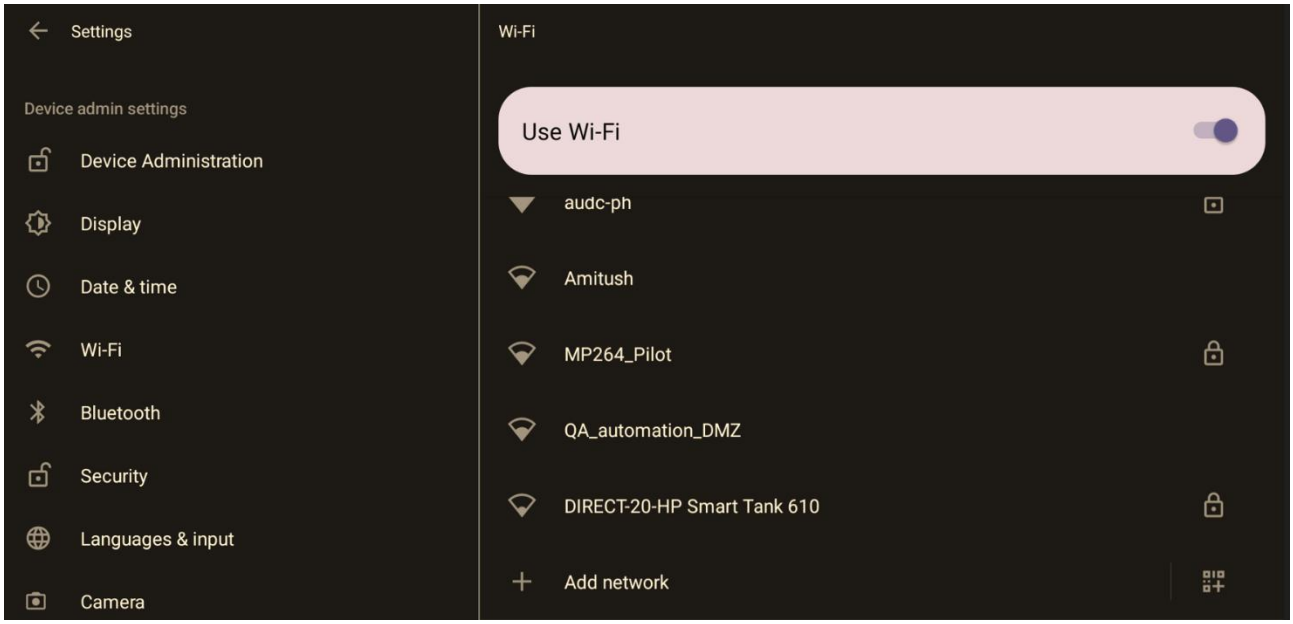
The Wi-Fi connection is transparent to users; which frequency is used, 2.4 GHz or 5 GHz, is made for users by the device; users cannot disable one or the other.

5.1.4.1 Connecting to an Available Wi-Fi Network

To connect to an available Wi-Fi network:

> Make sure to first disconnect your Ethernet cable. If it's connected, the device will not be able to connect to a Wi-Fi network.

1. Under 'Settings', navigate to **Wi-Fi** and enable **Use Wi-Fi**.



2. View a list of available connections.
3. Select the Wi-Fi network you want and enter the password.
4. View the network you selected 'Connected'.

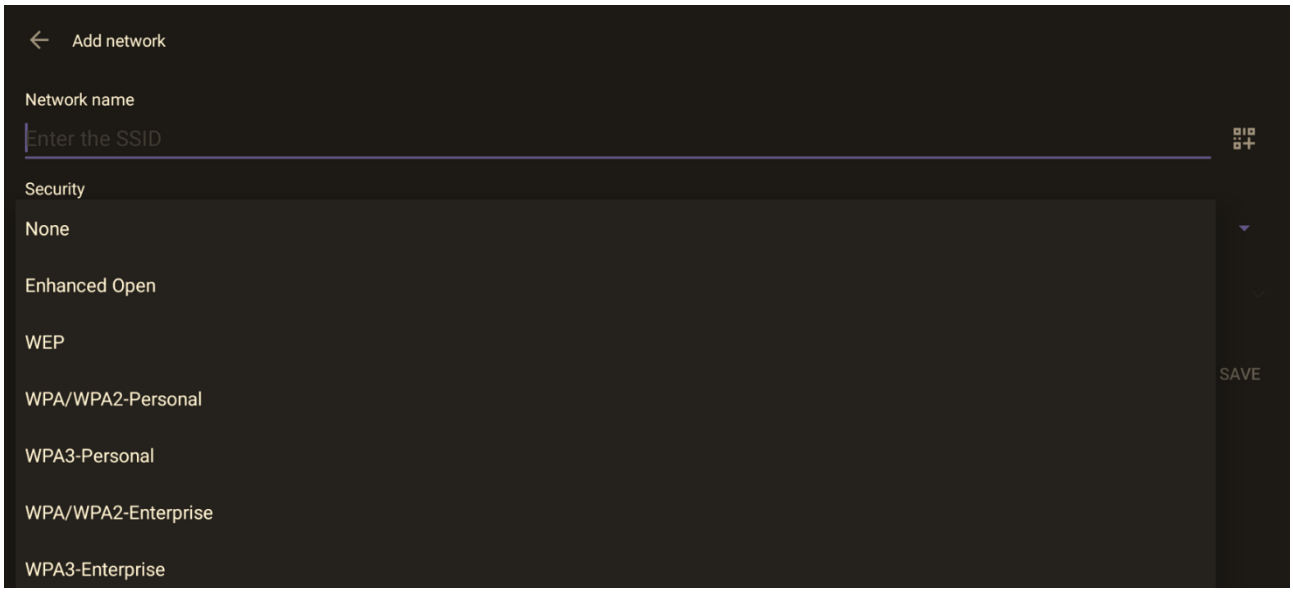
5.1.4.2 Manually Connecting to a Wi-Fi Network

To manually connect to a Wi-Fi network:

> Make sure to first disconnect your Ethernet cable. If it's connected, the device will not be able to connect to a Wi-Fi network.

1. Under **Wi-Fi**, select **Add network** and then enter the SSID of the network to add manually.

2. From the 'Security' drop-down, select a security key strength (encryption method).



3. Optionally meter the selected network. Leave the setting at its default value of **Detect automatically** if you don't want to meter the network. Select a **Metered** option to meter it.

- 'Proxy' and 'DHCP' will automatically be configured by the network.
- Enabling the setting **Turn on Wi-Fi automatically** allows the device to automatically connect in the future to the highest signal-quality network remembered by the device.
- As an alternative to manually configuring Wi-Fi settings via the device's user interface, you can configure the Wi-Fi settings described in Table 4, using the Configuration File.

Table 4: Configuration File Wi-Fi Parameters

Parameter	Description
network/wireless/adavanced_ options/dns1	Defines the IP of the wireless DNS1.
network/wireless/adavanced_ options/dns2	Defines the IP of the wireless DNS2.
network/wireless/adavanced_ options/gateway	Defines the IP address of the wireless gateway
network/wireless/adavanced_ options/hidden_network	Defines the name of the wireless hidden network.
network/wireless/adavanced_ options/ip_addr	Defines the IP address of the static Wi-Fi network if you're operating with a static Wi-Fi network.
network/wireless/adavanced_ options/ip_settings	Used to define DHCP.
network/wireless/adavanced_ options/network_prefix_length	Defines the network prefix length to be used.
network/wireless/adavanced_ options/proxy	Defines the proxy wireless server source.
network/wireless/adavanced_ options/proxy/auto_config/pac_url	Defines the URL of the PAC file.
network/wireless/adavanced_ options/proxy/manual/exclusion_list	Defines the list of IP addresses that will be blocked.
network/wireless/adavanced_ options/proxy/manual/proxy_ hostname	Defines the name of the proxy host.

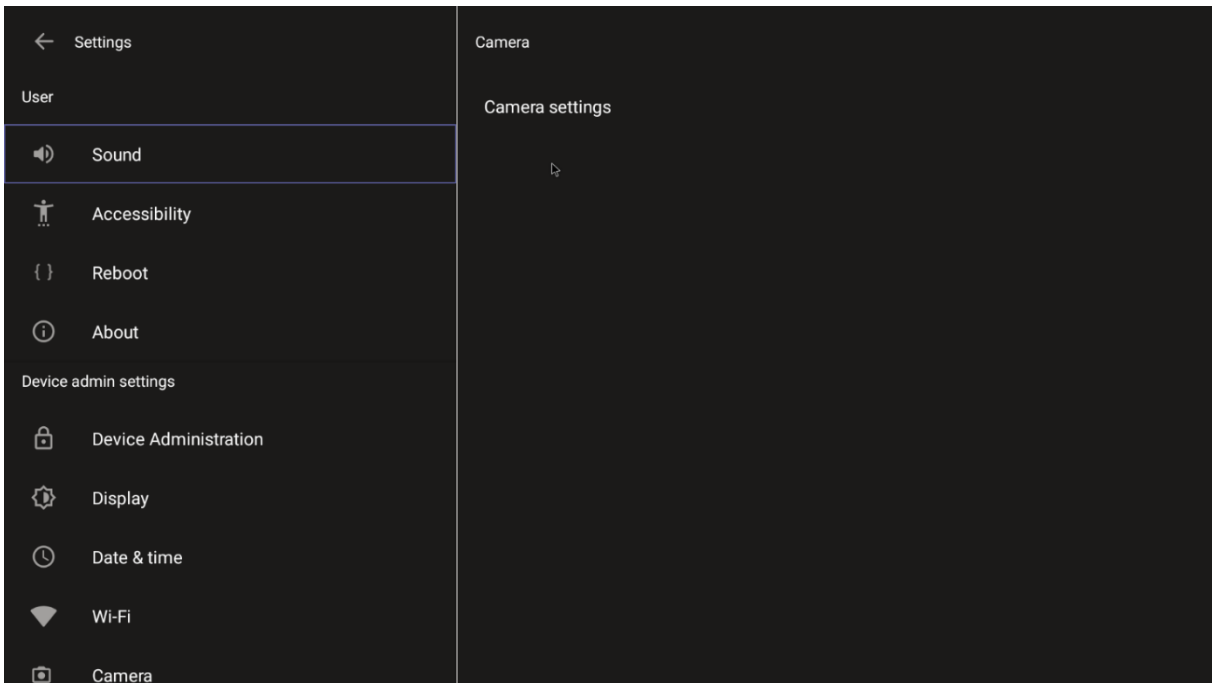
Parameter	Description
network/wireless/adavanced_ options/proxy/manual/proxy_port	Defines the proxy port.
network/wireless/anon_identity	Defines the anonymous wireless users who won't be seen.
network/wireless/ca_cert	Defines which CA certificate to use.
network/wireless/client_cert	Defines which client certificate to use.
network/wireless/domain	Defines the domain name.
network/wireless/eap_method	Defines the EAP method.
network/wireless/identity	Defines the identity of the user.
network/wireless/password	Defines the password of the network.
network/wireless/phase2_method NONE,MSCHAPV2,GTC,PAP,MSCHAP	Defines the encryption method. Phase 2 applies only to the 802.1x EAP method.
network/wireless/security	Defines the security method (encryption protocol).

5.1.5 Configuring Camera Settings

Settings controlling the look and feel of the video UI can be set to suit individual preferences.

To configure Camera settings:

1. In RX-PAD under 'Device admin settings', navigate to and select **Camera**.



2. Navigate to and select **Camera settings**; the video stream is played and the following is displayed on the right side of the screen:

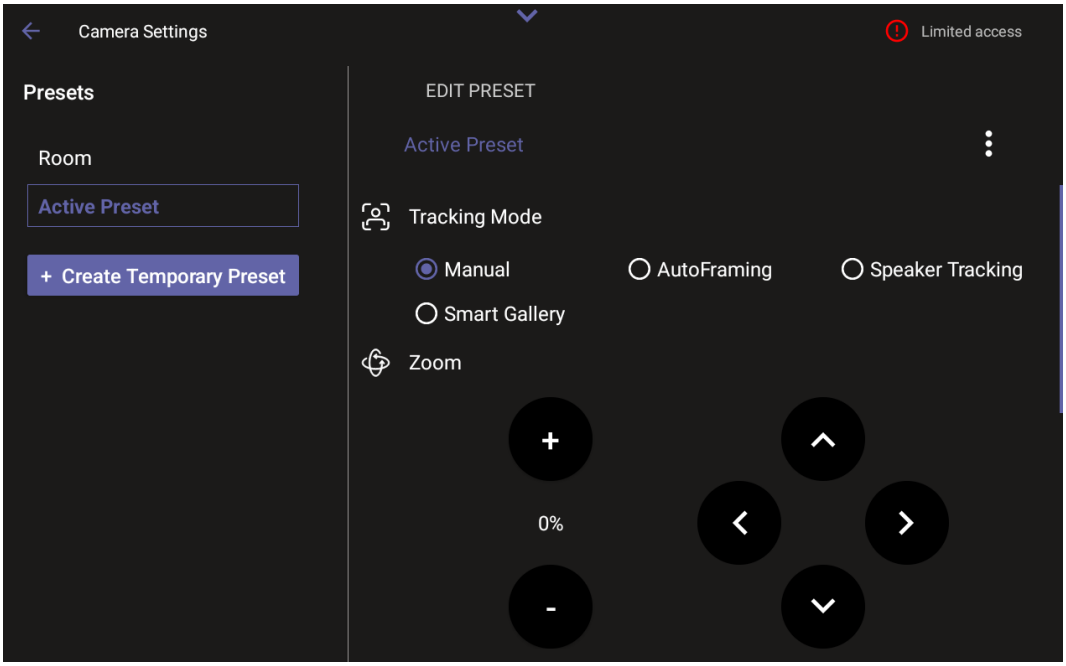
3. Create and edit presets using PTZ control. For more information, see here.

5.1.6 Selecting RXVCam70 PTZ Camera Tracking Mode

Applies exclusively to RX-PAD bundled with RXV200.

To select a Tracking Mode:

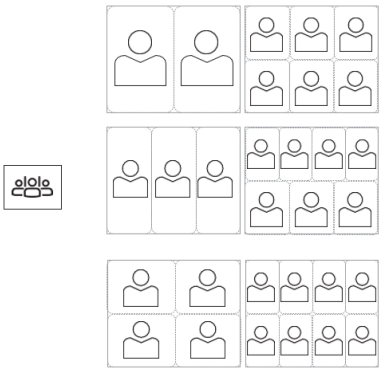
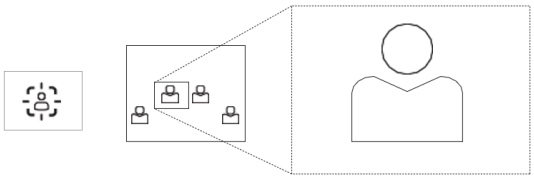
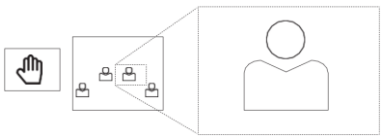
1. Open the Edit Preset page (**Camera Settings** > **Room** > **Edit Preset**).

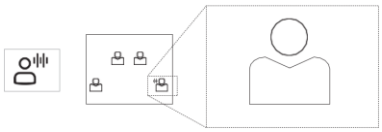


2. Select one of the following RXVCam70 camera tracking mode options:
   - Manual
   - Auto Framing (default)
   - Speaker Tracking
   - Smart Gallery

   See the next step for a description of each tracking mode.

3. Use the following descriptions as a reference when configuring a tracking mode:

Smart Gallery	■ Automatically identifies 1-8 people ■ Automatically lays out the display ■ When a person moves, the camera automatically tracks them and keeps them centered ■ Switching from one person to another is accompanied by dynamic effects of entry and exit
	
Presenter Tracking	■ [Currently supported by the RC only] ■ Automatically identifies and tracks the position of the presenter to ensure that that person remains centered. ■ Press the left and right keys to select the target to track. ■ Press **OK** to choose the target.
	
Manual	■ Select this option to manually adjust the Zoom, Tilt or Pan. ■ In RX-PAD's 'Camera Settings' page, use the sliders to set Zoom, Tilt or Pan. ■ Using the RC, after selecting an area to display, zoom in | out, move up | down, and move left | right. ■ This mode does not have AI functions.
	

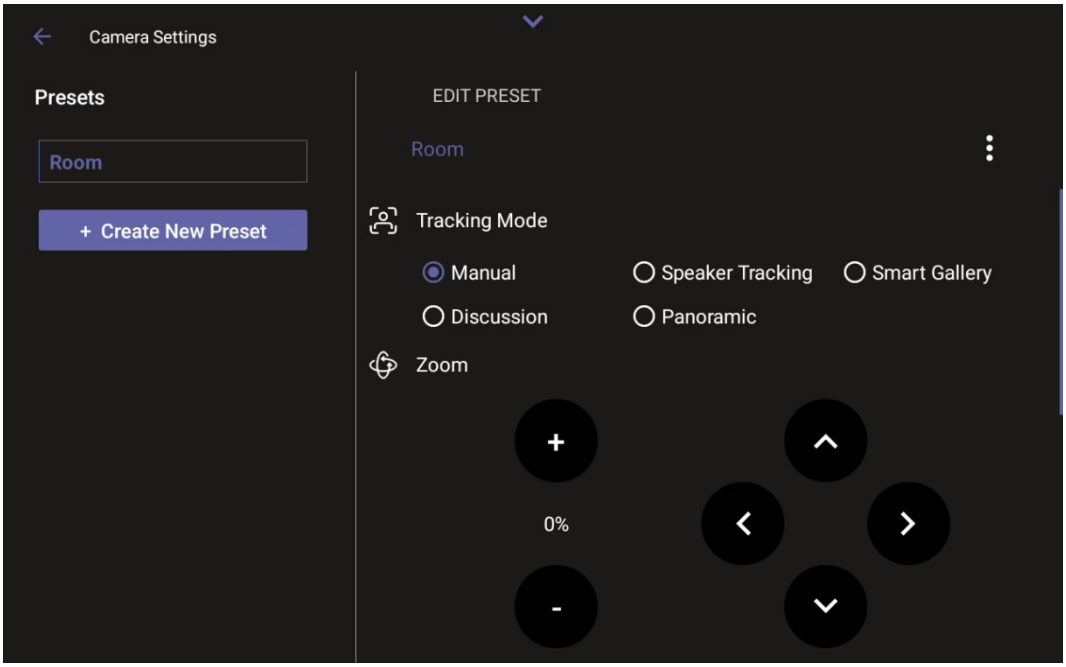
Speaker Tracking	■ Automatically tracks speakers who speak continuously for 3-5 seconds ■ Focuses on the speaker (displays them close-up allowing participants to focus more) ■ Effective distance: 6m
	
Group Framing	■ [Supported by RX-PAD Camera Settings] [Same as 'Auto Framing'] ■ Automatically detects and frames all the participants in the room. ■ Effective distance: 8m
	

5.1.7 Selecting RXVCam360 Camera Tracking Mode

> Applies exclusively to RX-PAD bundled with RXV200.

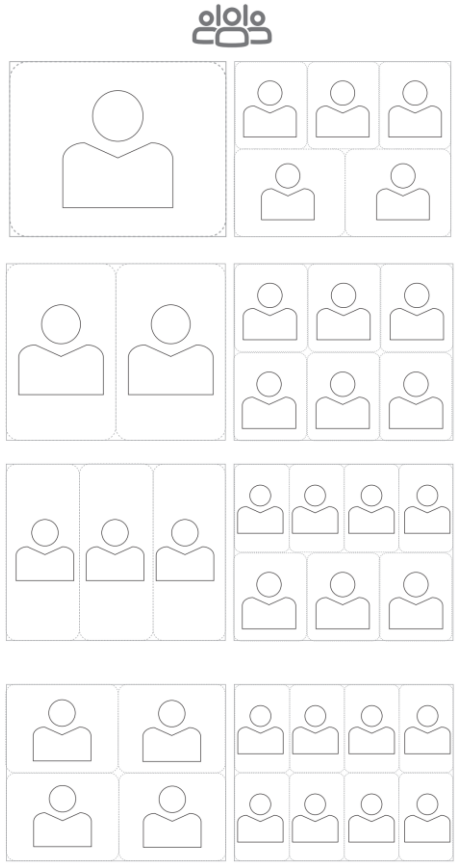
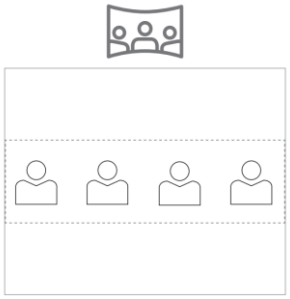
To select a Tracking Mode:

1. Open the Edit Preset page (**Camera Settings** > **Presets** > **Room** > **Edit Preset**).

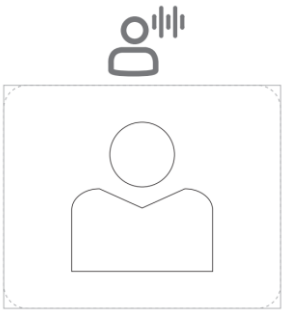


2. Select one of the following RXVCam360 camera tracking mode options:
   - Manual
   - Speaker tracking
   - Smart Gallery (default)
   - Discussion
   - Panoramic

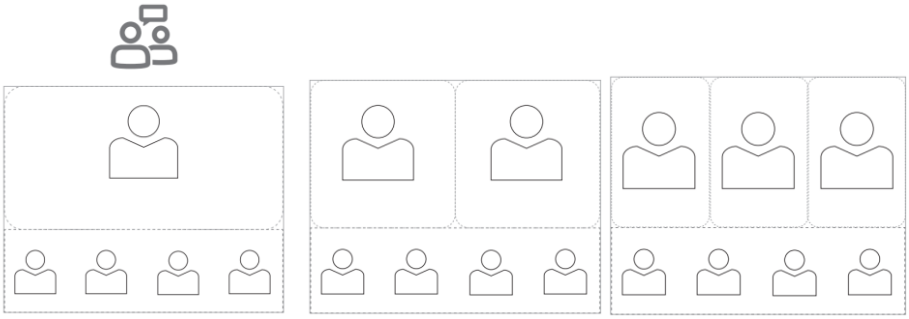
3. Use the following as reference:

Smart Gallery Mode	■ Recommended ■ Automatically identifies 1-8 people ■ Puts each in a dedicated frame ■ Maximum: 8 frames ■ When a person moves, the camera automatically tracks and keeps their head centered
	
Panoramic Mode	■ 360° panoramic high-definition view ■ This mode does not have AI functions
	

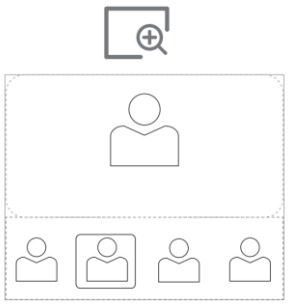
Speaker Tracking Mode	RXVCam360 follows the active speaker and automatically switches from the previous speaker to the next speaker within three seconds.



Discussion Mode	■ The lowermost panel displays a 360° panoramic view. ■ The second level displays an automatic layout of 1-3 speakers. • Only the person speaking is displayed. • Those not speaking are not displayed.



Manual Mode*	■ Select an area to focus on ■ Use the RC to zoom in and out (five levels) and move up, down, left and right to select a focused area. ■ The selected area has a fixed 16:9 aspect ratio. ■ This mode does not have AI functions.



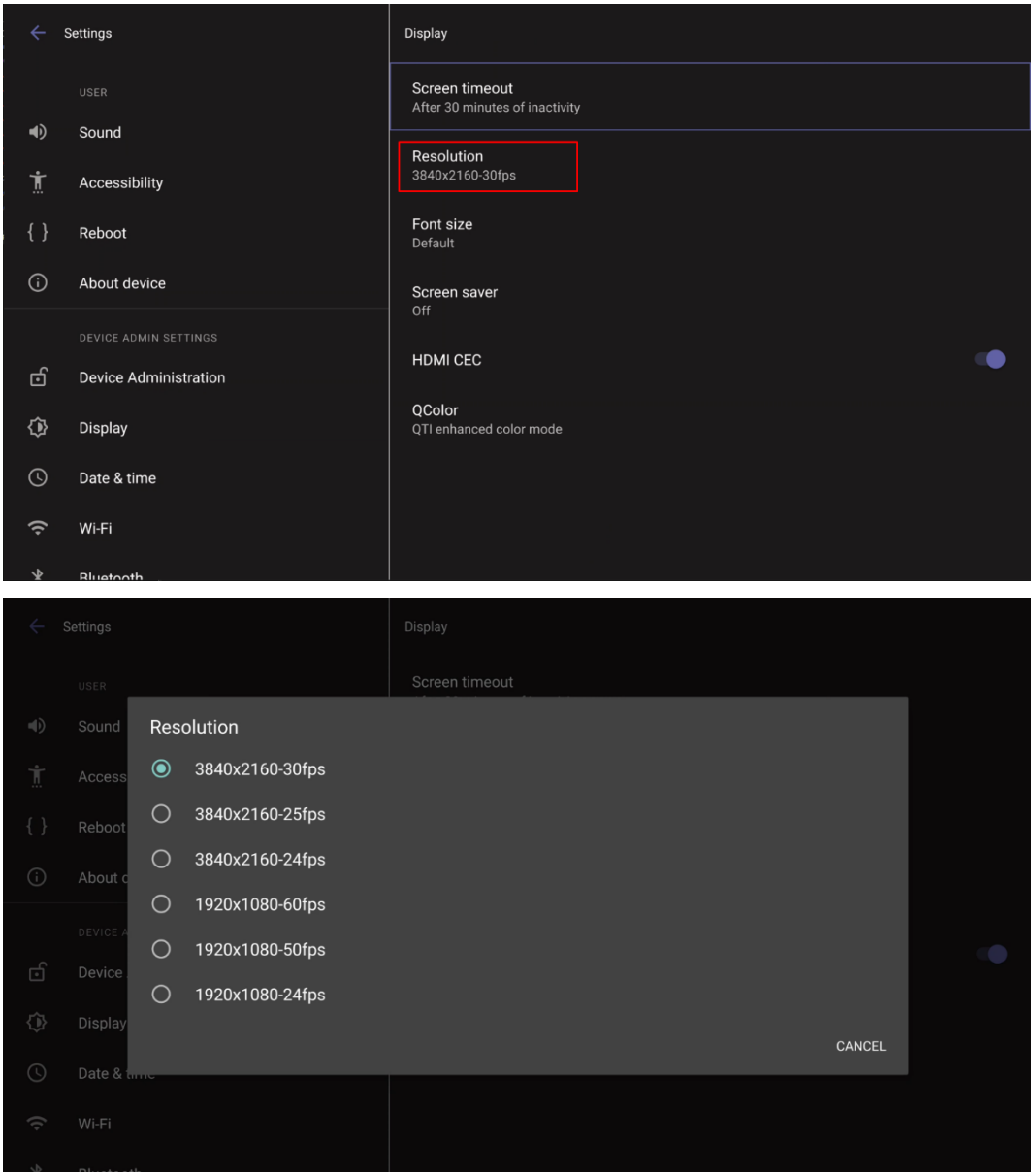
* Currently available only when using the RC

5.1.8 Limiting Resolution

Admin can limit HDMI resolution and Frames per Second (FPS) for debugging purposes.

To limit HDMI resolution and FPS:

- Open the Display page as shown in the figure below and perform the configuration:

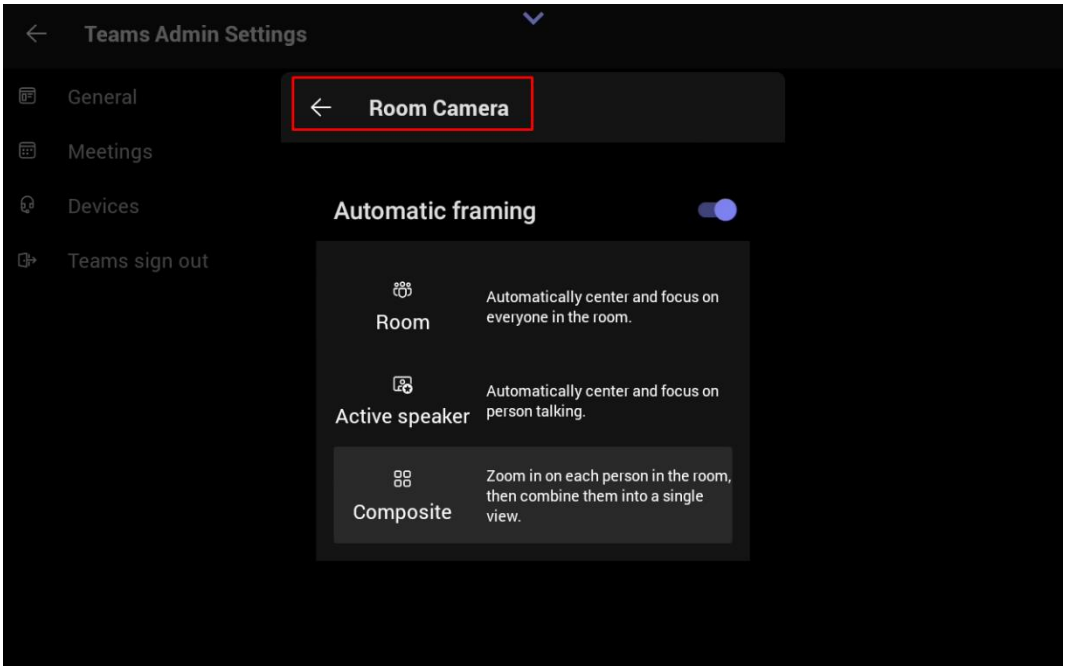


5.1.9 Configuring Teams Admin Settings

Camera Settings adjustment is now supported via **Device Settings** > **Teams Admin Settings**.

AudioCodes Camera Settings are synced with Teams Room Camera Settings.

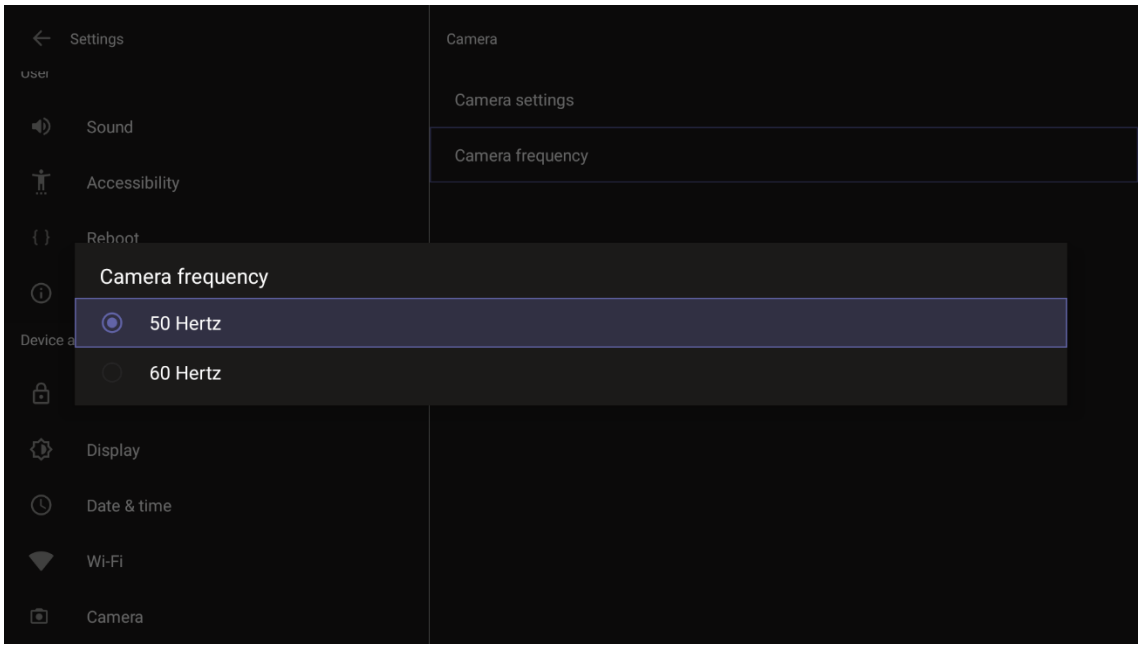
The figure below shows how to control camera settings via the Teams Admin Settings.



5.1.10 Configuring Camera Frequency

The **Camera frequency** (under **Device settings**) must be set per the power supply as follows:

- 110V – 60Hz
- 220V – 50Hz

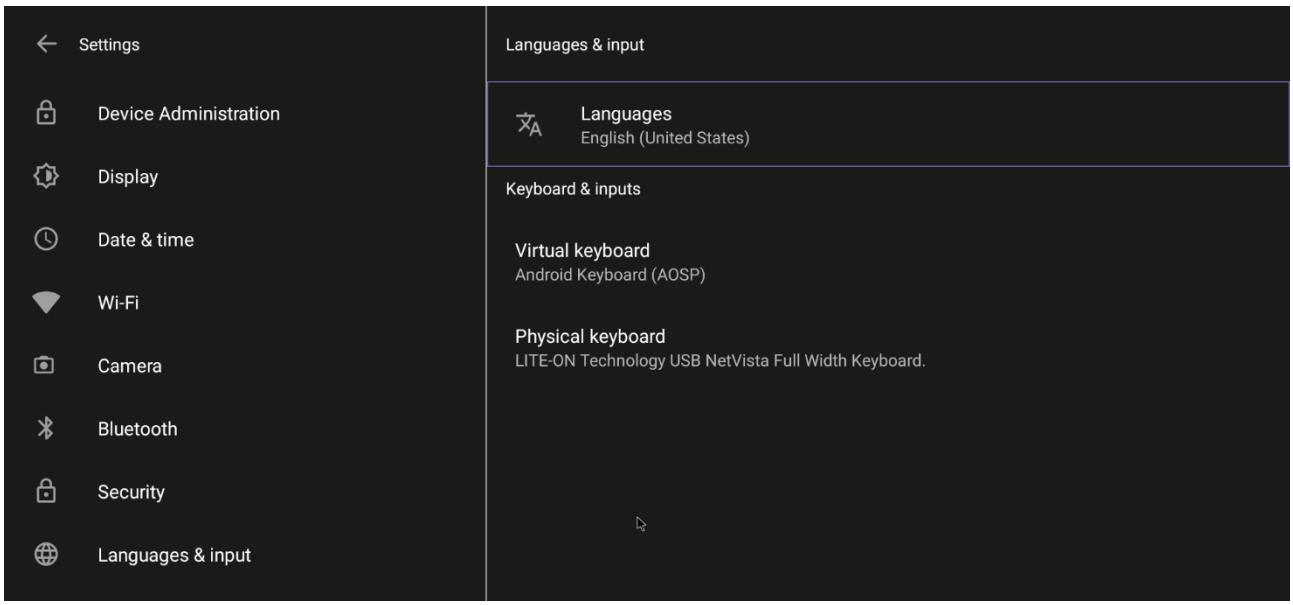


5.1.11 Configuring UI Language & Input

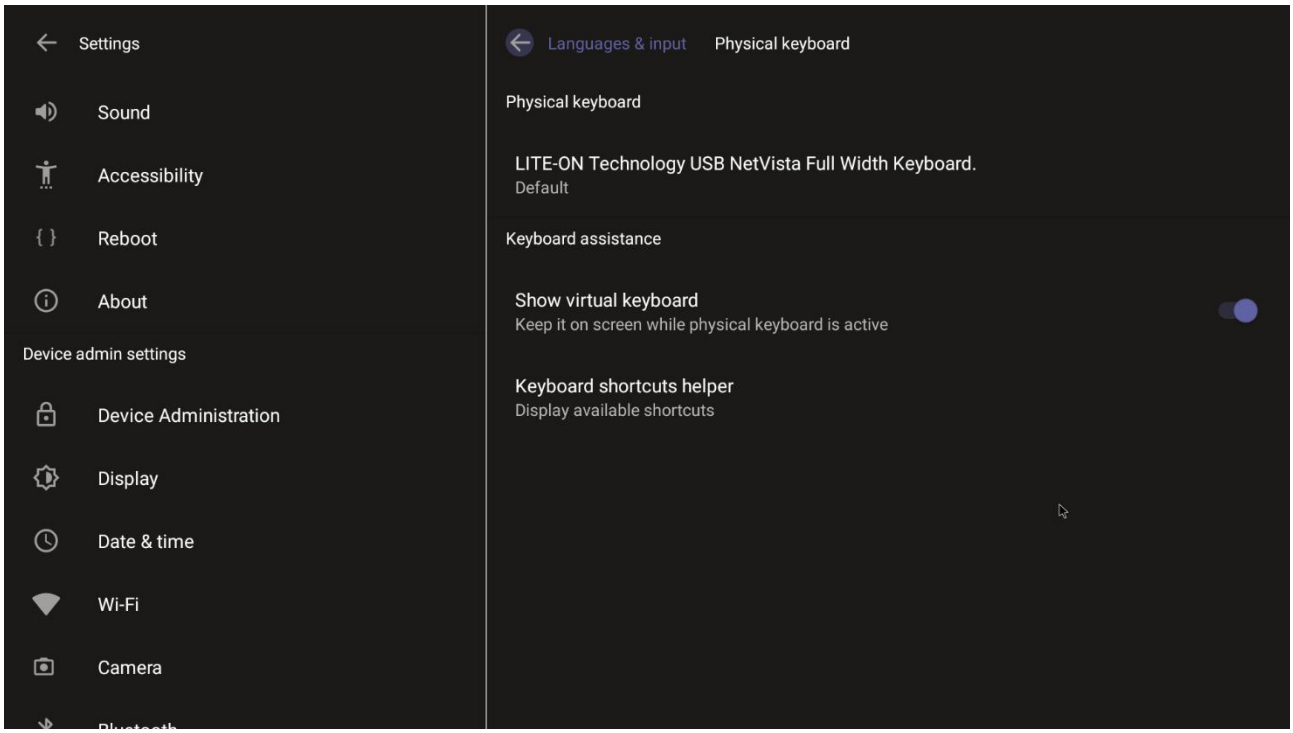
This setting allows users to customize inputting to suit personal requirements.

To set language and input:

1. Under 'Device admin settings', navigate to and select **Languages & input**.



2. Navigate to and select **Physical keyboard**.



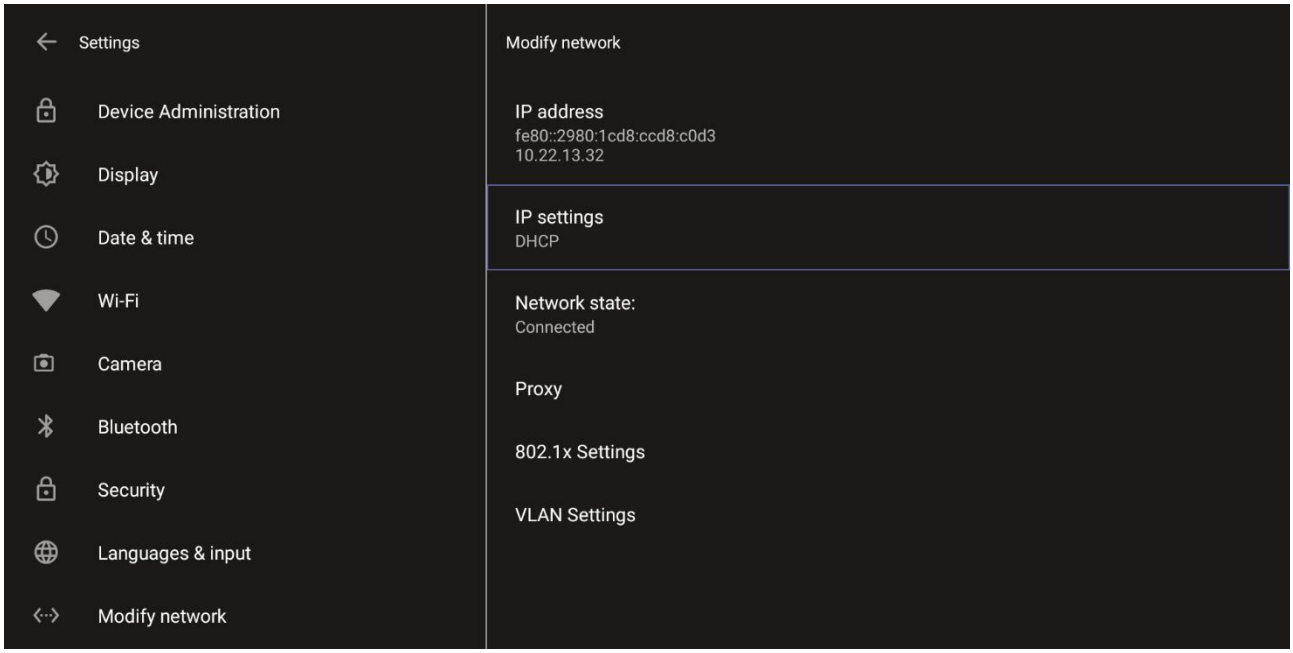
3. Navigate to and select **Show virtual keyboard**.

5.1.12 Modifying IP Network Settings

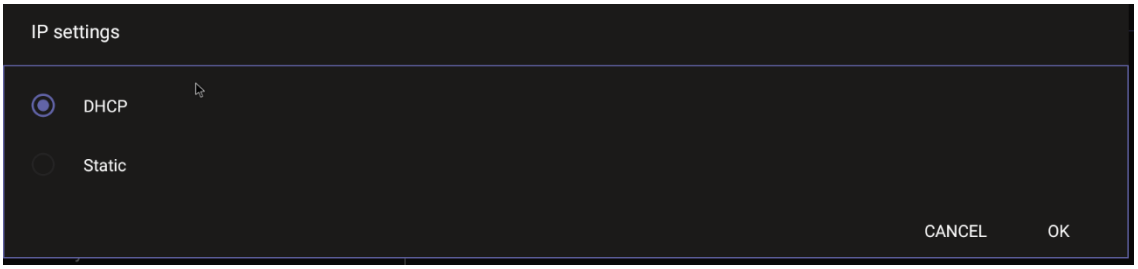
This setting enables the Admin user to determine IP network information and to modify IP network settings.

To modify network settings:

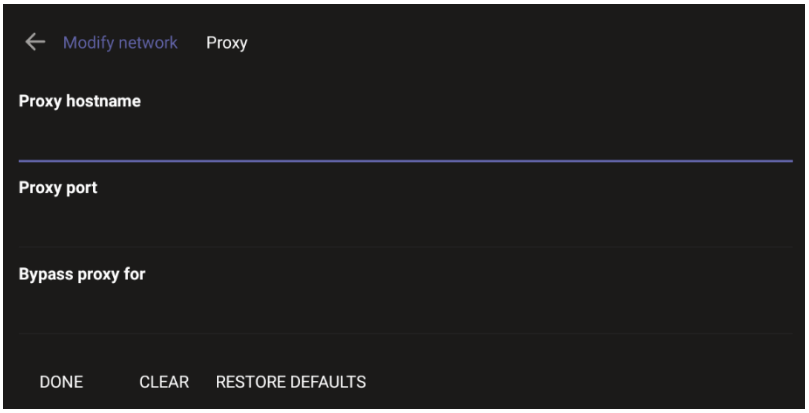
1. Under 'Device admin settings', navigate to and select **Modify network**.



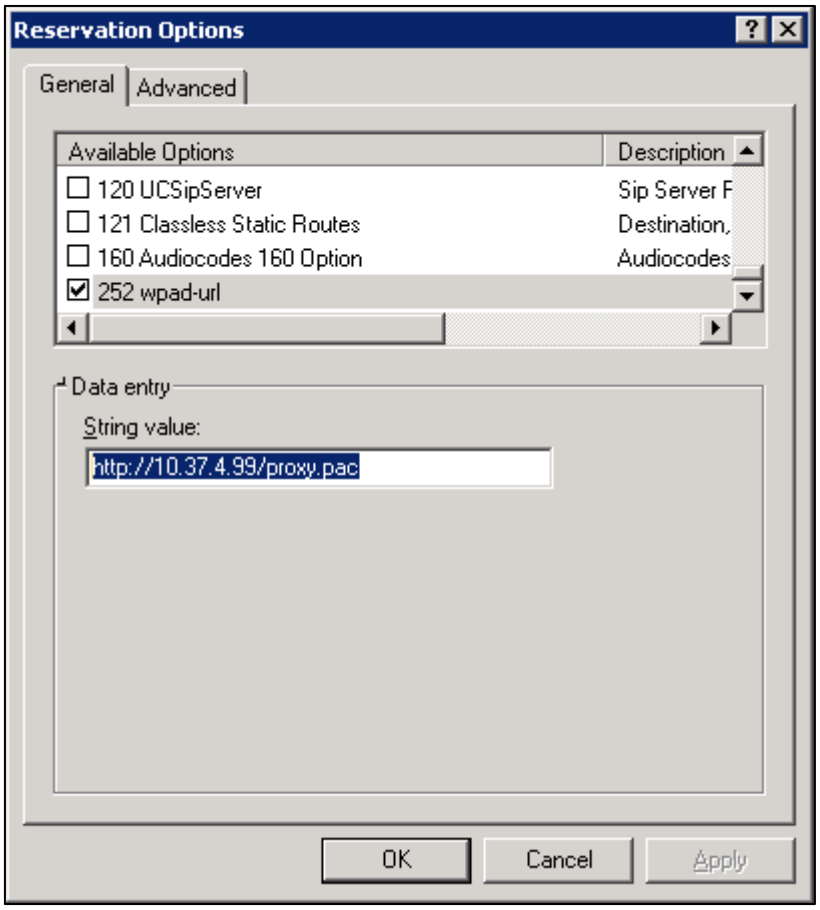
2. Navigate to and select:
   - IP Address [Read Only]
   - IP Settings [DHCP or Static IP]



   - Network state [Read Only]
   - Proxy



- Manually (from the screen shown in the preceding figure). Allows you to configure the RXV200 with an HTTP proxy server. Configure the proxy hostname and proxy port and then navigate to and select **Done**.
- **DHCP Option 252** (recommended). Option 252 provides a DHCP client with a URL to use to configure its proxy settings:



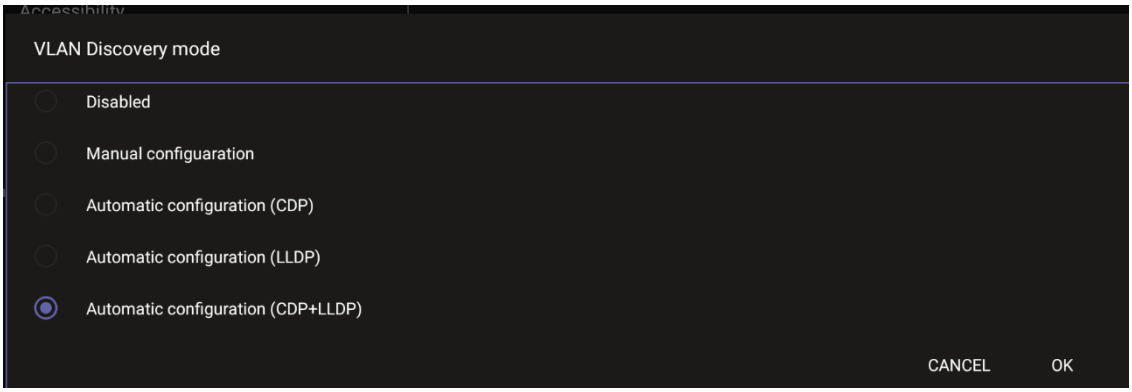
The proxy setting is provided in a Proxy Auto-Configuration (PAC) file that contains a set of rules coded in JavaScript which allows a web browser to determine whether to send web traffic directly to the Internet or to be sent via a proxy server. PAC files control how the phone handles HTTP, HTTPS, and FTP traffic. Example of a basic PAC file:

```
function FindProxyForURL(url, host)
{
return "PROXY 10.13.2.40:3128";
}
```

- 802.1x Settings [Allows enabling 802.1x]

802.1X Authentication is the IEEE Standard for Port-based Network Access Control (PNAC). See https://1.ieee802.org/security/802-1x/ for more information.

- VLAN Settings
  - Allows you to configure 'VLAN Discovery mode' to Manual configuration, Automatic configuration (CDP), Automatic configuration (LLDP) or Automatic configuration (CDP+LLDP)]



Cisco Discovery Protocol (CDP) is a Cisco proprietary Data Link Layer protocol

Link Layer Discovery Protocol (LLDP) is a standard, layer two discovery protocol

The VLAN configuration is by default **data VLAN** rather than voice VLAN, in compliance with the requirement specified here for the device not to advertise itself as a voice device. The default CDP/LLDP configuration is **data VLAN**.

- Allows you to configure 'VLAN Interval'.

'VLAN interval' refers to CDP/LLDP advertisements' periodic interval. Default: 30 seconds. You can increase or decrease the intervals between the CDP/LLDP packets that are sent, based on network traffic and topology.

- In versions before 1.19, if network VLAN mode '/network/lan/vlan/mode' was set to LLDP, the device retrieved the VLAN and LLDP switch information (for location purposes) from LLDP.
- From version 1.19, LLDP switch information (for location purposes) is retrieved when parameter network/lan/lldp/enabled=1 (even when VLAN is retrieved from **CDP** or VLAN is disabled or VLAN is **Manual**).

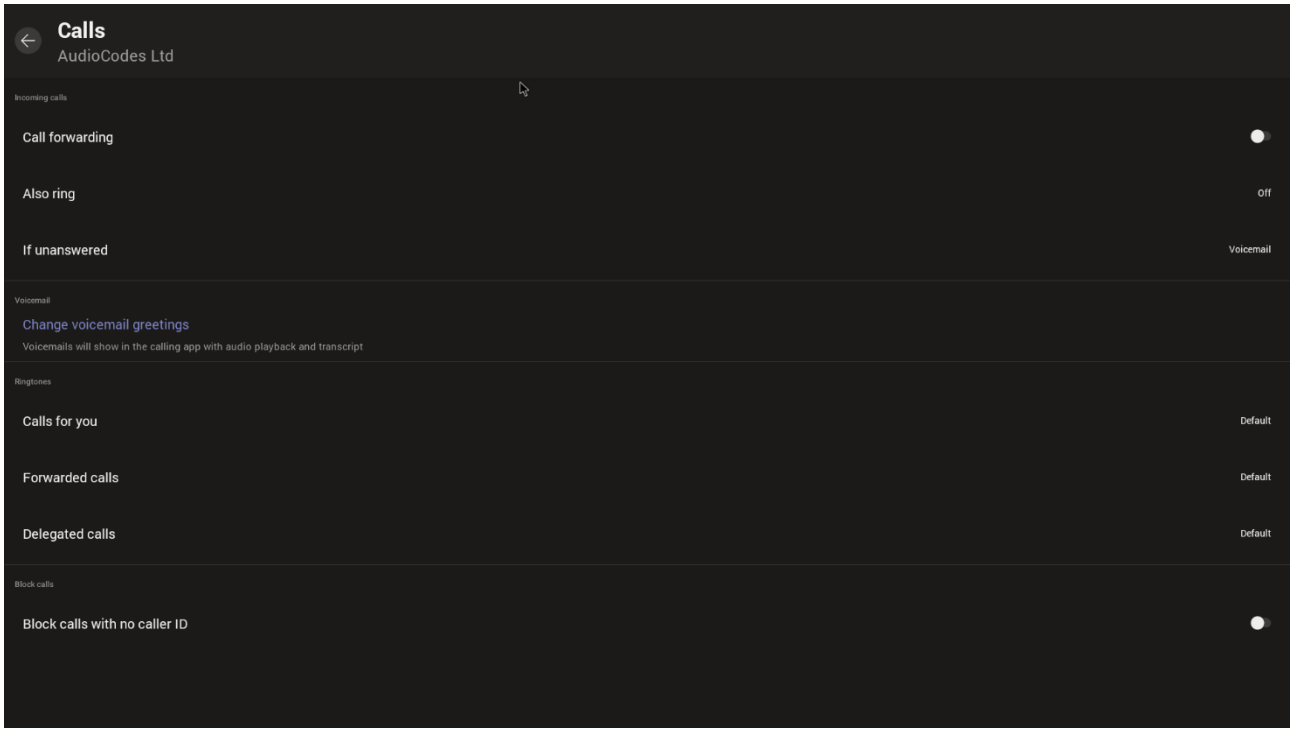
5.1.13 Configuring Call Settings

This setting enables the user to configure call-associated functionalities to suit personal preferences.

To configure call settings:

1. From the home page, navigate to and select **More** and then navigate to and select **Settings**.

2. Navigate to and select **Calling**.



- In the Calls screen, navigate to and select:
  - **Call forwarding** to enable automatically redirecting incoming calls to another destination.
  - **Also ring** to configure other phones to ring on incoming calls; only displayed if **Call forwarding** is disabled.
  - **If unanswered** to configure the destination to which unanswered calls will be sent; only displayed if **Call forwarding** is disabled. Select either Off, Voicemail, Contact or number.
  - **Calls for you** to configure the ringtone played on your phone when calls come in.
  - **Forwarded calls**
  - **Delegated calls** to configure the ringtone played to delegates.
  - **Block calls with no caller ID** to block calls that do not have a Caller ID.

5.2 User Settings

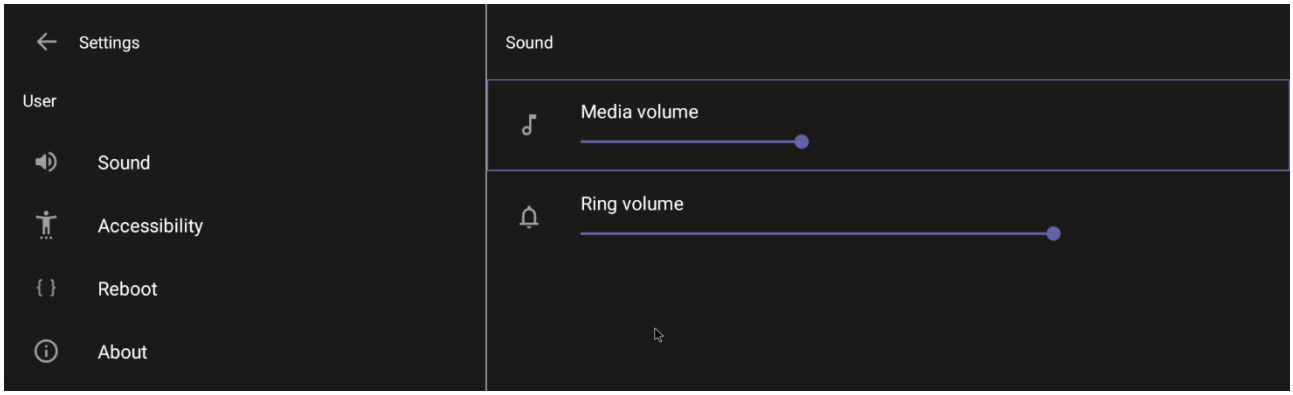
In the 'Settings' screen you can optionally configure the following User settings: Sound, Accessibility, Reboot and About (read-only).

5.2.1 Setting the Volume

You can customize phone volume for a friendlier user experience.

To configure sound settings:

- Under 'User', navigate to and select **Sound**.

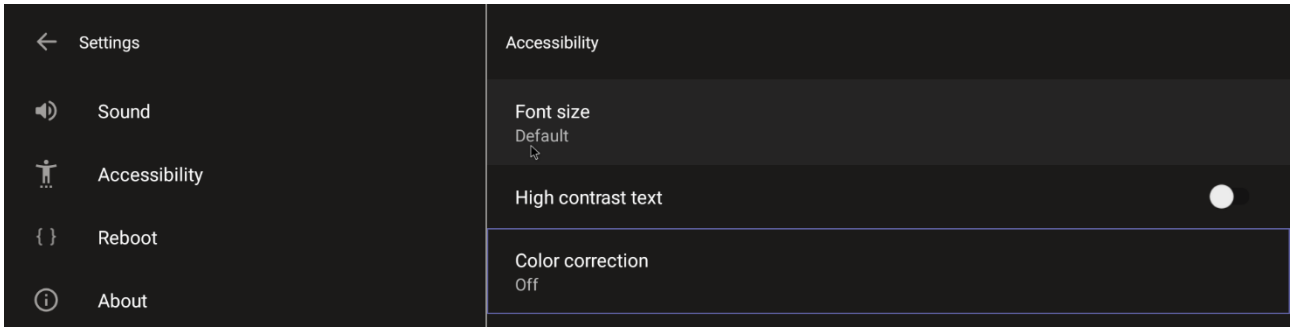


5.2.2 Configuring Accessibility Settings

This option allows users to customize the screen to be reader-friendlier.

To configure the Accessibility setting:

1. Under 'User', navigate to and select **Accessibility**.



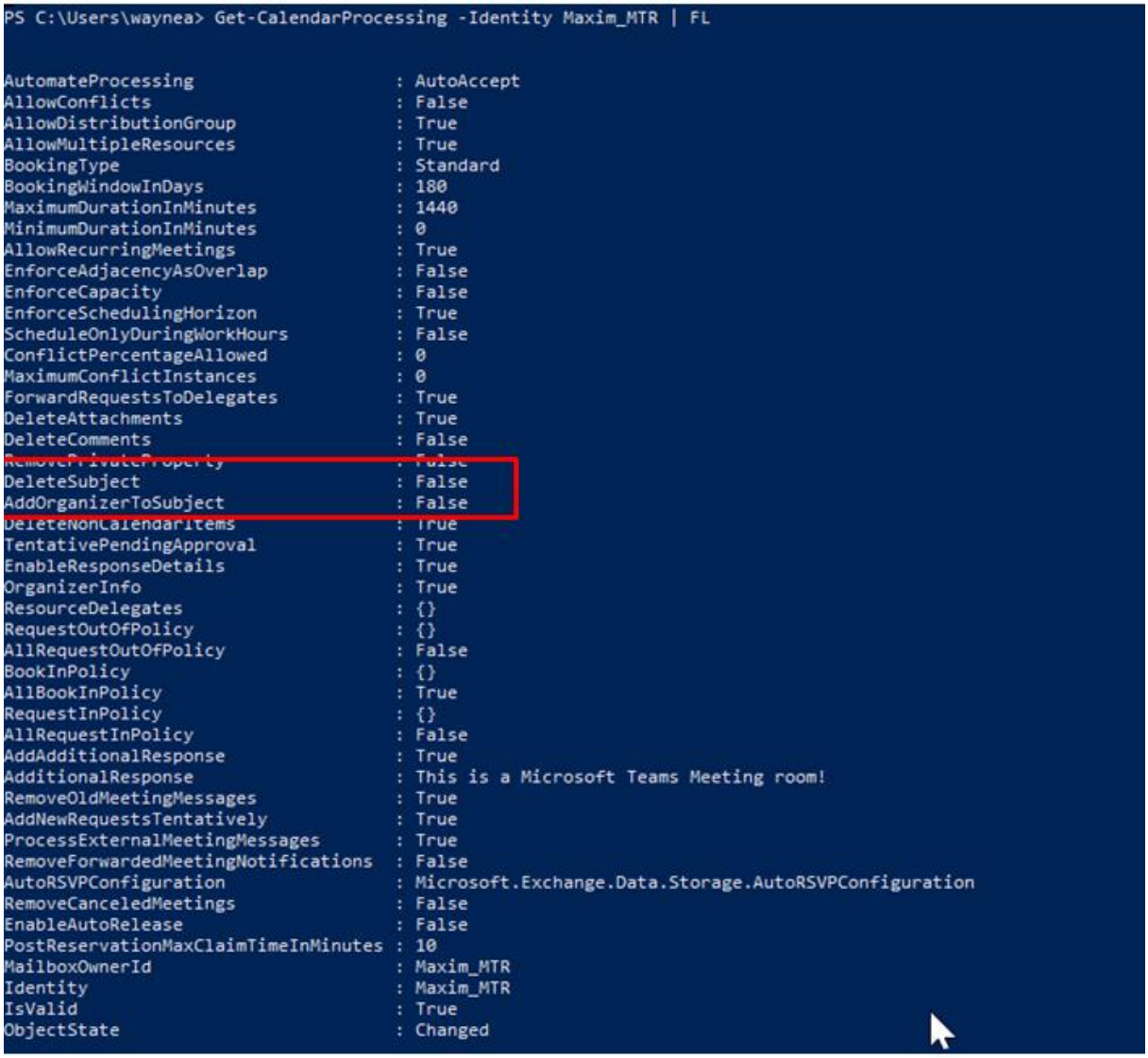
2. Adjust the settings to suit personal requirements.

5.2.3 Setting Live Captions

Live Captions can be set in regular one-on-one calls as well as in Teams meetings.

5.2.4 Enabling Display of Meeting Name using Exchange Online PowerShell

See here for information about how to access the exchange instance (the tenant). Admin must set the two parameters indicated in the figure below to 'False':

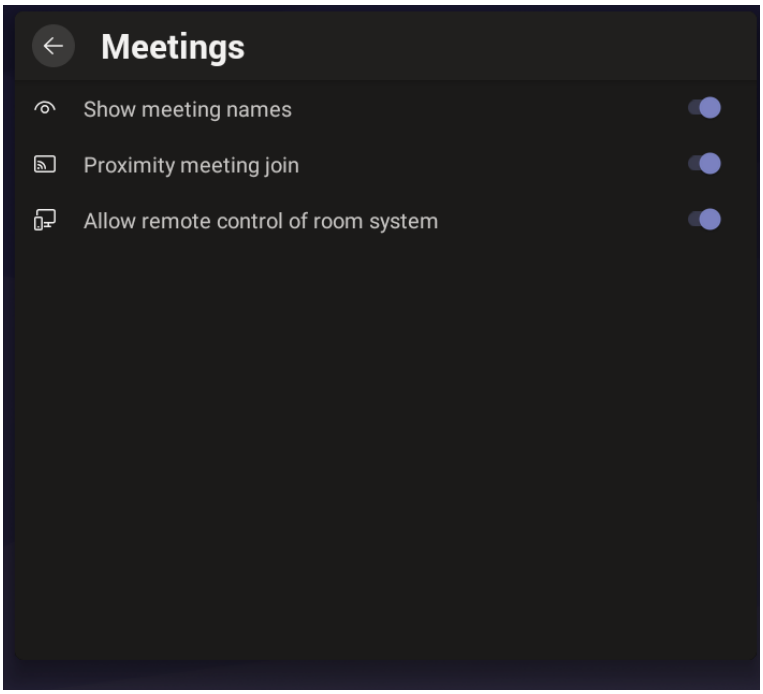


'Identity' is the name of the account to which admin wants to apply these two settings:

- Set-CalendarProcessing -Identity "Maxim_MTR" -DeleteSubject $false
- Set-CalendarProcessing -Identity "Maxim_MTR" -AddOrganizerToSubject $false

5.2.5 Hiding Names and Meeting Titles

You can hide information such as names and meeting titles for individual devices via the Meetings page (**More** > **Settings** > **Meetings**):



5.2.6 Rebooting RXV200

Rebooting allows you to exit from and reconnect without needing to sign in again.

To reboot:

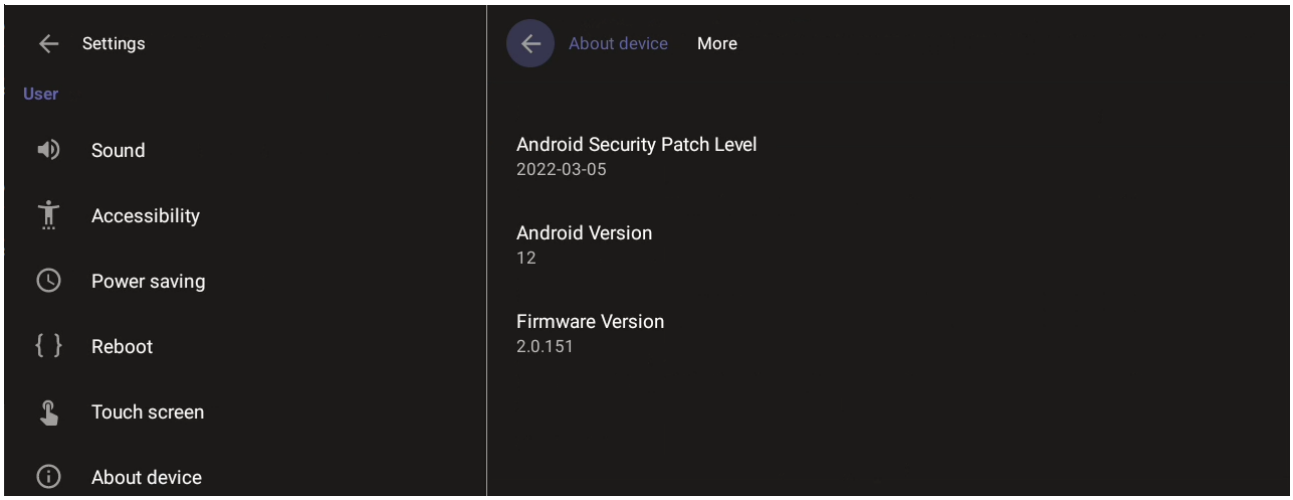
- Under 'User', navigate to and select **Reboot**.

5.2.7 Viewing About RXV200

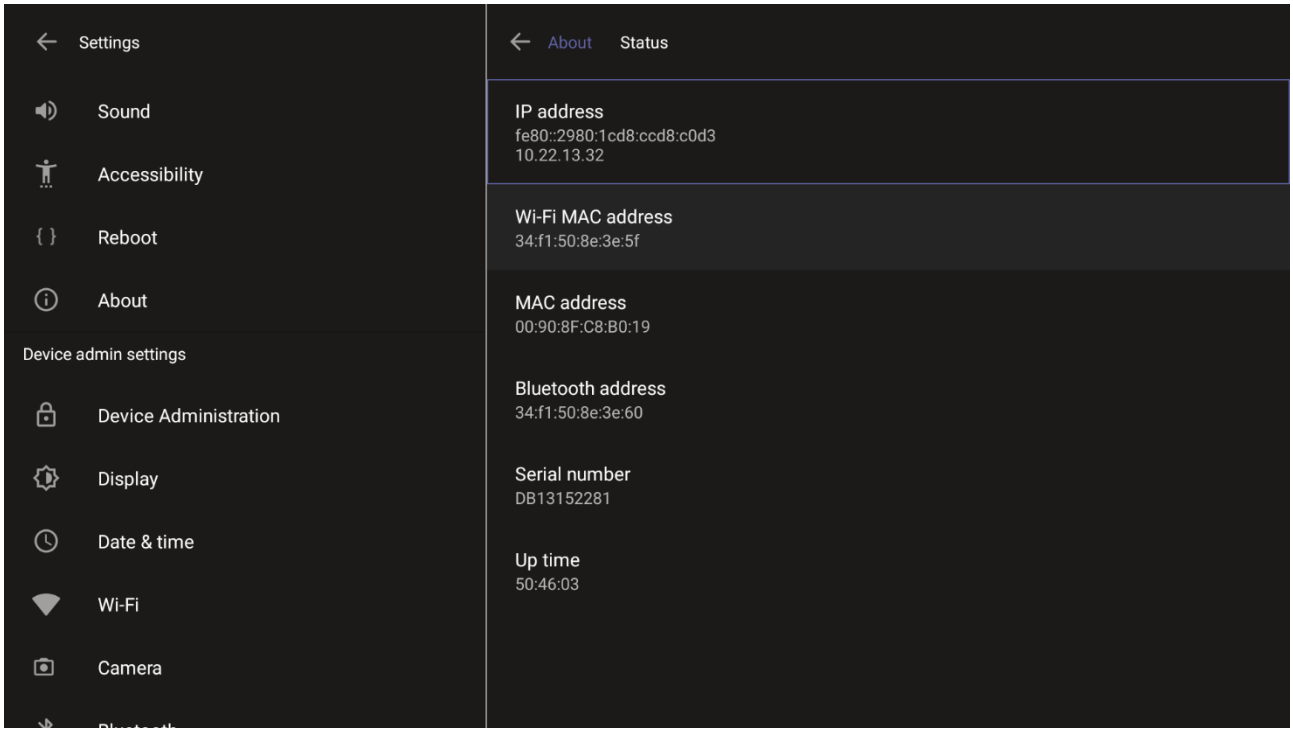
The ‘About’ screen gives you quick access to information about the RXV200 deployment.

To access the About screen:

1. Navigate to and select **About device**.



2. Navigate to and select **Status**.



3. View the RXV200’s firmware information.
4. Admins can monitor the status of the device’s software modules from the System State page.

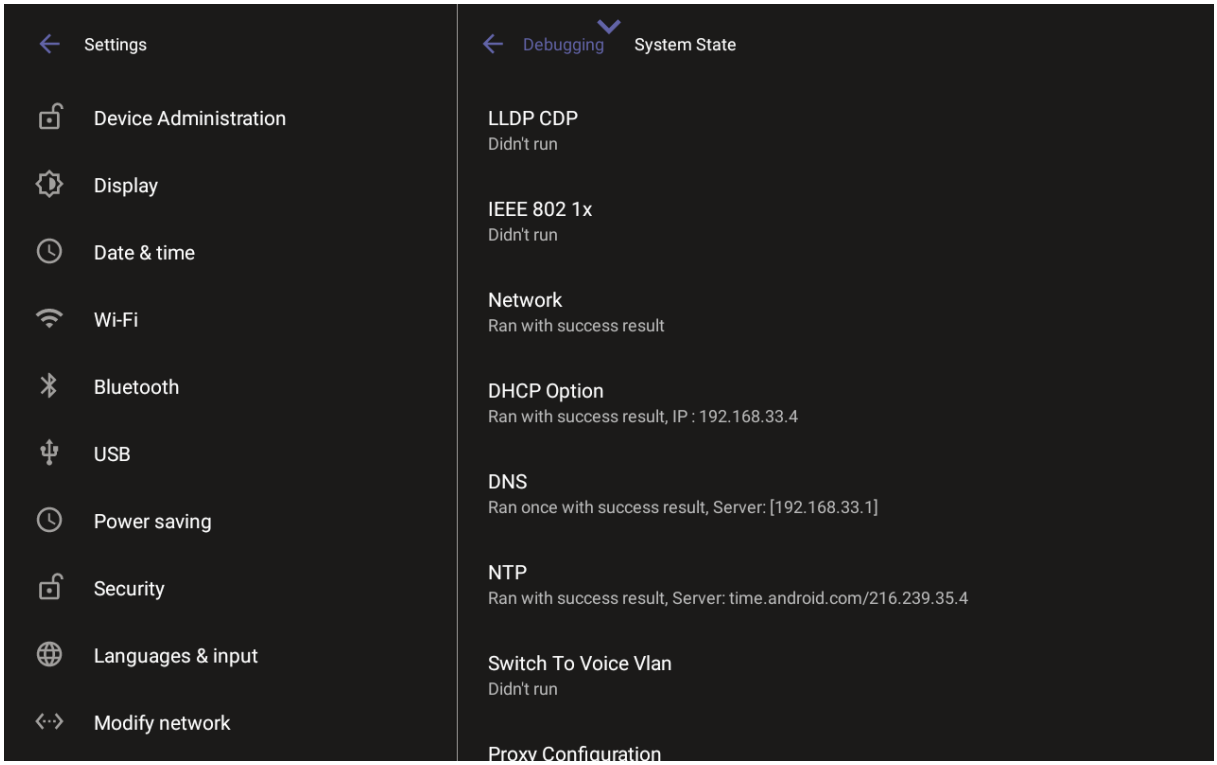
6 Monitoring Modules Operational States

AudioCodes provides out-of-the-box troubleshooting capability: Admins can monitor the state of the device's modules from the System State page. If initial provisioning is unsuccessful or if admin encounters an issue related to the network / connection to Device Manager, the feature gives admin an indication as to why.

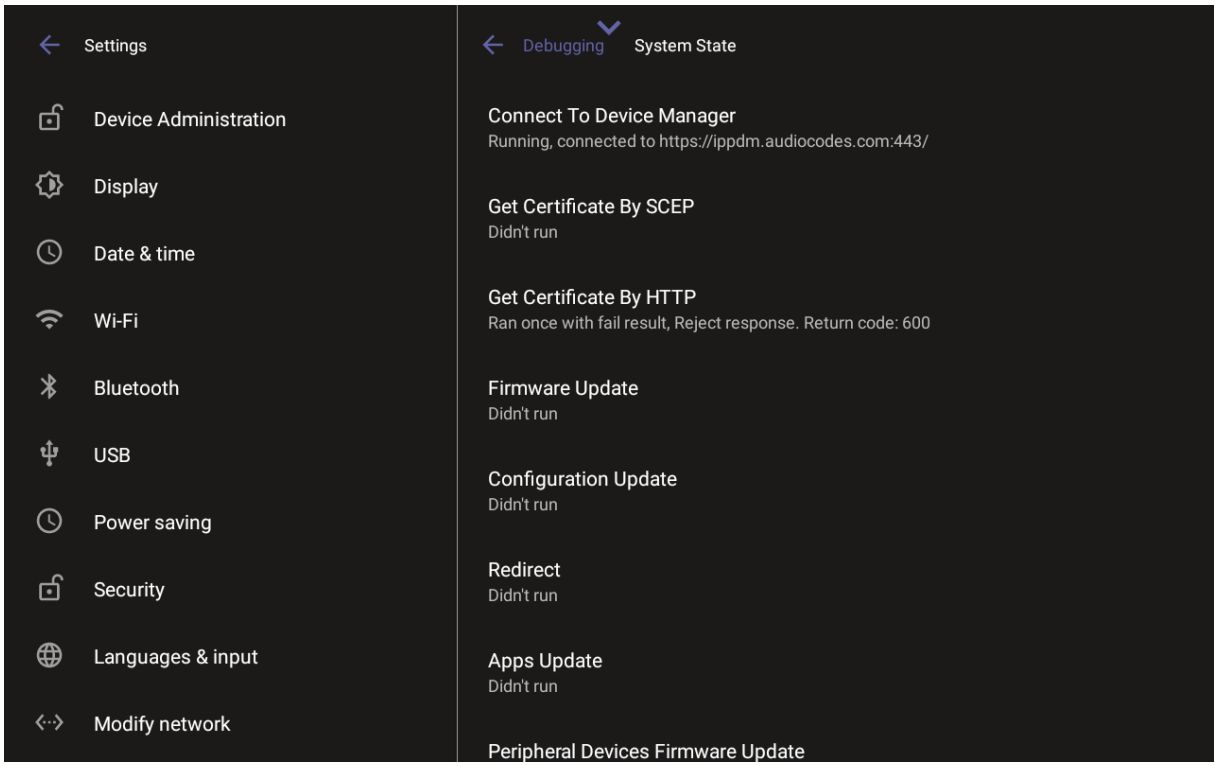
The feature enables debugging via the device's screen *without requiring external systems*. Admin can check connectivity *independently of external apps*.

To monitor the device's modules states:

- Open the System State page (**Settings** > **Debugging** > **System State**).



- Each state displays its operational result: Successful or Failed
- For some states, the reason for failure will be displayed as well.



- Each state displays its operational result - successful or failed.
- For some states, the reason for failure will be displayed as well.

7 Advanced Features

7.1 Using Composite AI Camera

The RXV200 supports composite AI camera technology. **Composite AI** enhances video conferencing by intelligently combining streams from two cameras into a single, seamless layout. This innovation ensures remote participants gain an optimized and immersive view of the meeting room and its participants.

This feature applies to the following setups:

- **RXV200 with RXVCam70:** Combines streams from the RXVCam50 (full-room view) and RXVCam360 (Smart Gallery mode).
- **RXV200 with RXVCam360 and RXVCam50:** Utilizes the dual cameras of the RXVCam70: the wide-angle camera (full-room view) and the mechanical camera (Smart Gallery mode).

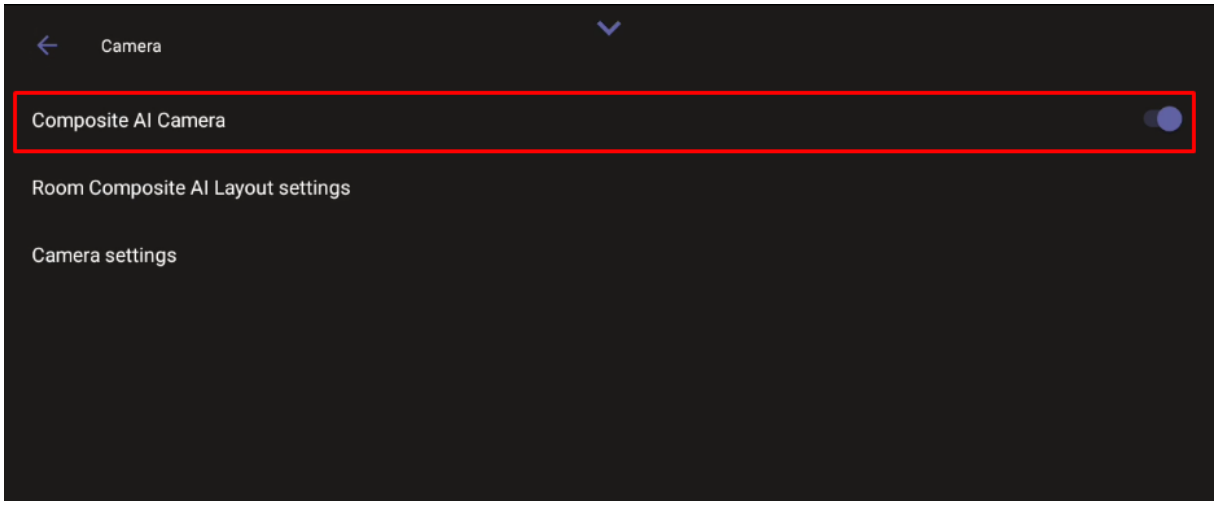
Key capabilities:

- **Enhanced room visibility:** Provides a comprehensive view of the meeting room capturing all participants clearly.
- **Intelligent Layout**: Automatically arranges the combined streams into a cohesive and intuitive layout.
- **Manual Layout adjustment**: Allows users to resize room view and enable or disable room view or smart gallery.
- **Adjustment of Individual Camera Settings:** Allows users to adjust each individual camera, for example, brightness and saturation, without leaving the Room Composite AI Layouts.

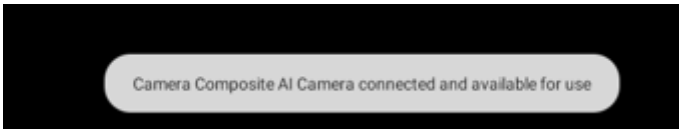
- Composite AI is disabled by default.
- Changing the Composite AI settings (layout, enabling/disabling Smart Gallery, or Room View) in idle state (no active meeting) can only be done by the Admin. During an active Teams meeting, both admin and non-admin users can change the Composite AI settings. Once the meeting ends, these settings automatically revert to the system's pre-configured defaults.
- During a meeting, only the admin can disable the Composite AI mode.

To enable composite AI:

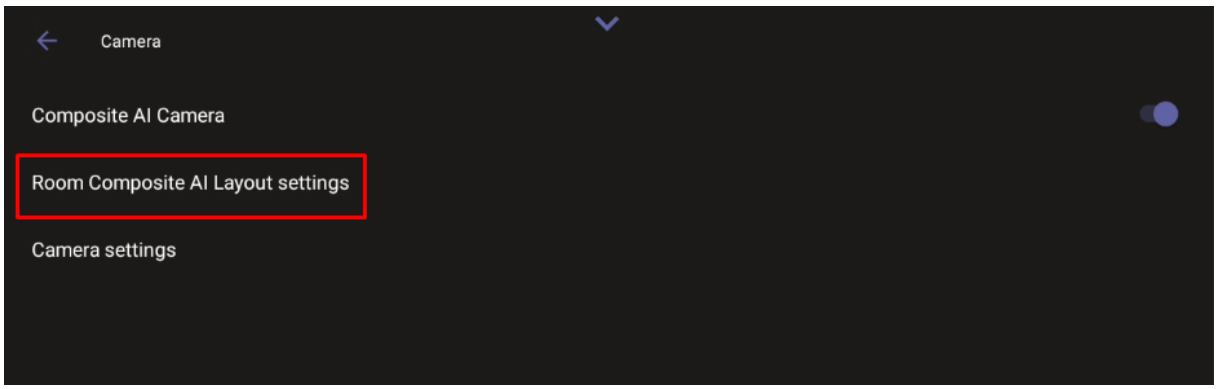
1. On the RX-PAD, navigate to **Device Settings** > **Camera Settings** as an Administrator, and then tap the **Composite AI Camera** toggle button so that it is on:



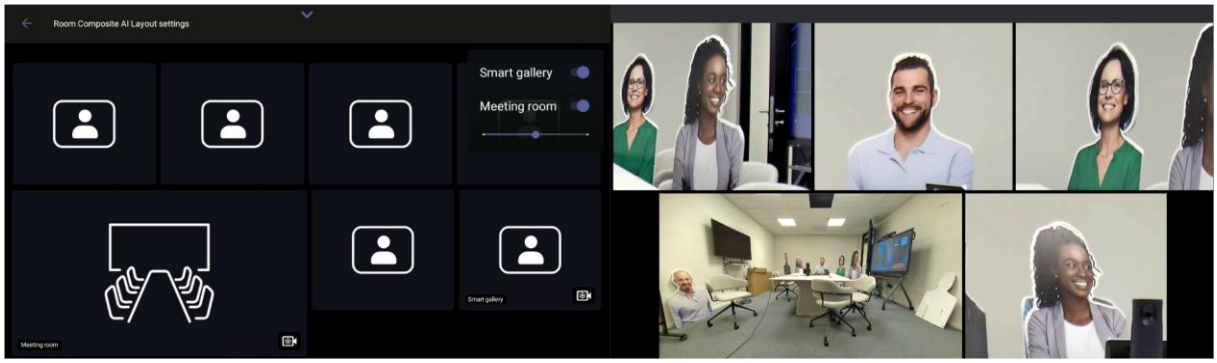
The following pop-up displays on the screen that the RXV200 is connected to:



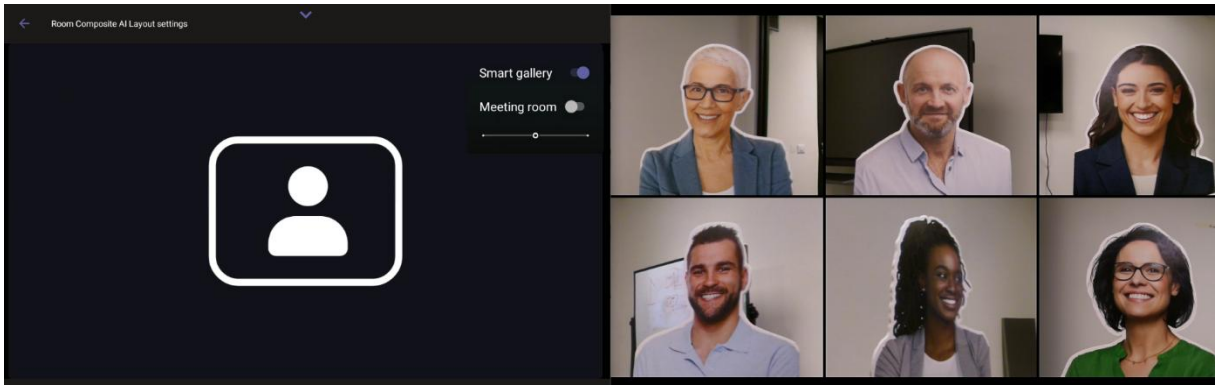
2. Tap **Room Composite AI Layout Settings** to choose the layout:



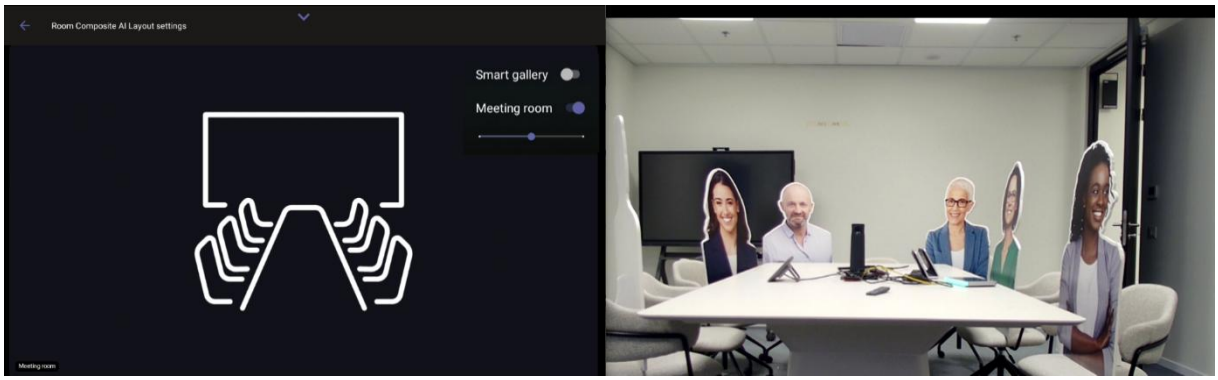
The connected camera stream opens. On RX-PAD, the layouts are displayed as shown below:



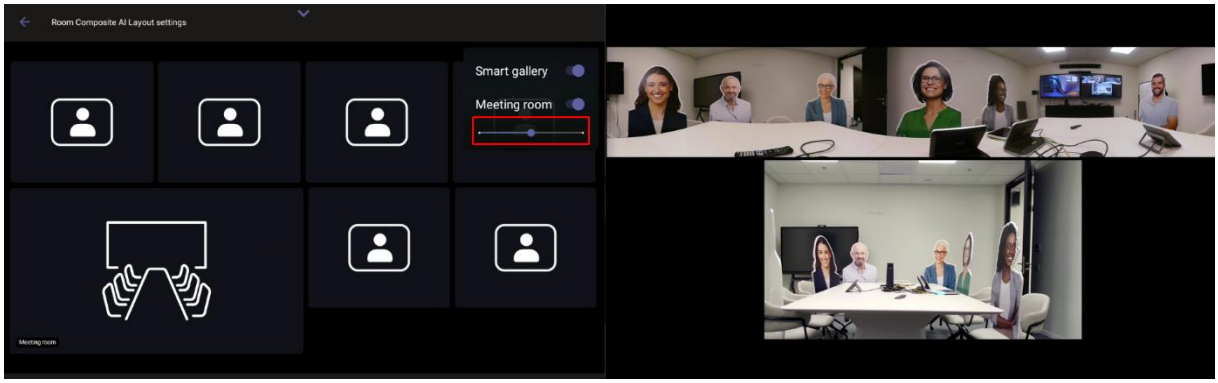
In the RXV200 screen (when RXV200 is connected to RXVCam70), the main camera is in the center of the screen and the wide-angle camera at the lowermost left.



3. Disabling 'Room view' closes the wide-angle camera and centers the main camera feed in the screen.

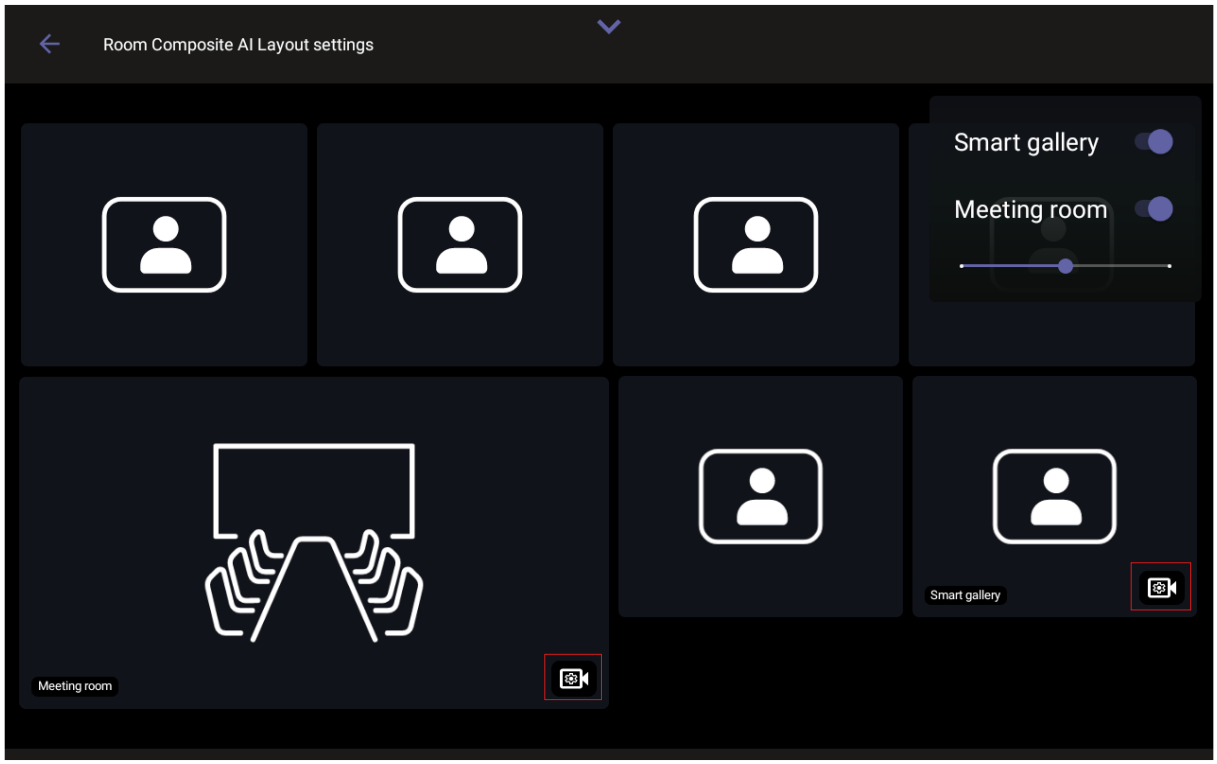


4. To close the main camera and center the wide-angle camera feed in the screen, disable the **Smart gallery**.

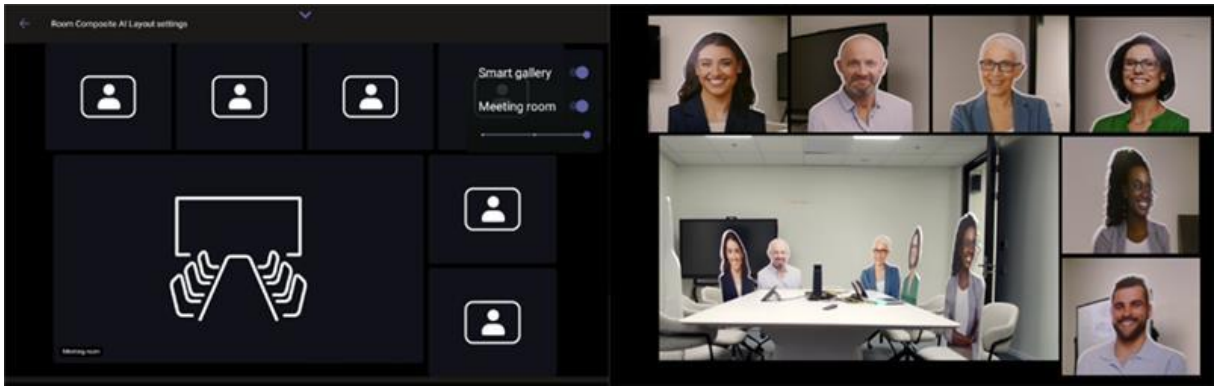


5. Using the scaling bar shown in the preceding figure to control the ratio between the main camera size and the wide-angle camera size; move the slide bar to adjust the size
6. of the **Meeting room** view accordingly.

7. To adjust the settings (e.g., brightness and saturation) of a specific camera, click its icon:



When connected to the RXVCam360 and RXVCam50 the screen below displays:

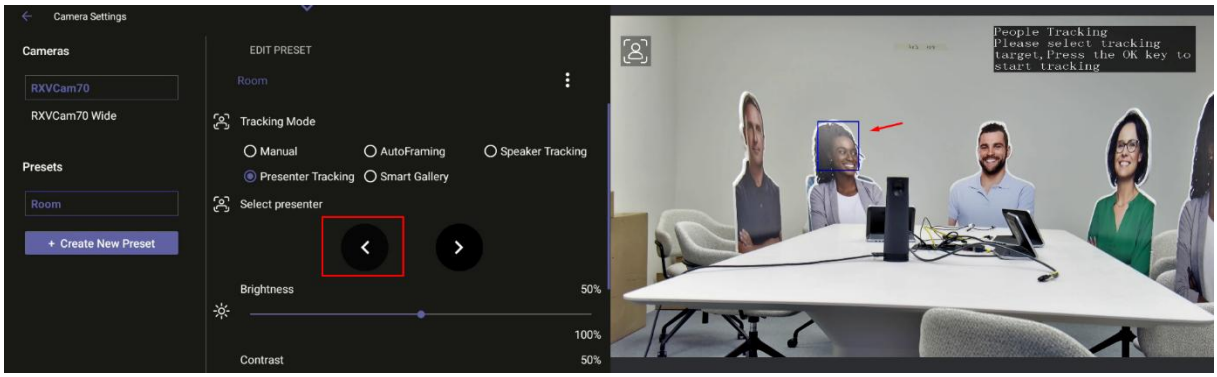


7.2 Selecting Presenter in Tracking Mode for Non-Composite AI

In **Camera Settings**, when Composite AI is disabled, you can select the presenter you want the camera to track.

To select a presenter to track:

1. On the RX-PAD, navigate to **Device Settings** > **Camera Settings** as an Administrator.
2. Open the Edit Preset page (**Room** > **Edit Preset**).
3. Under **Tracking Mode**, select the **Presenter Tracking** option.
4. Use the right-left arrows to choose the presenter. The presenter is accepted after a timeout of a few seconds, following the marking of the person in the room.

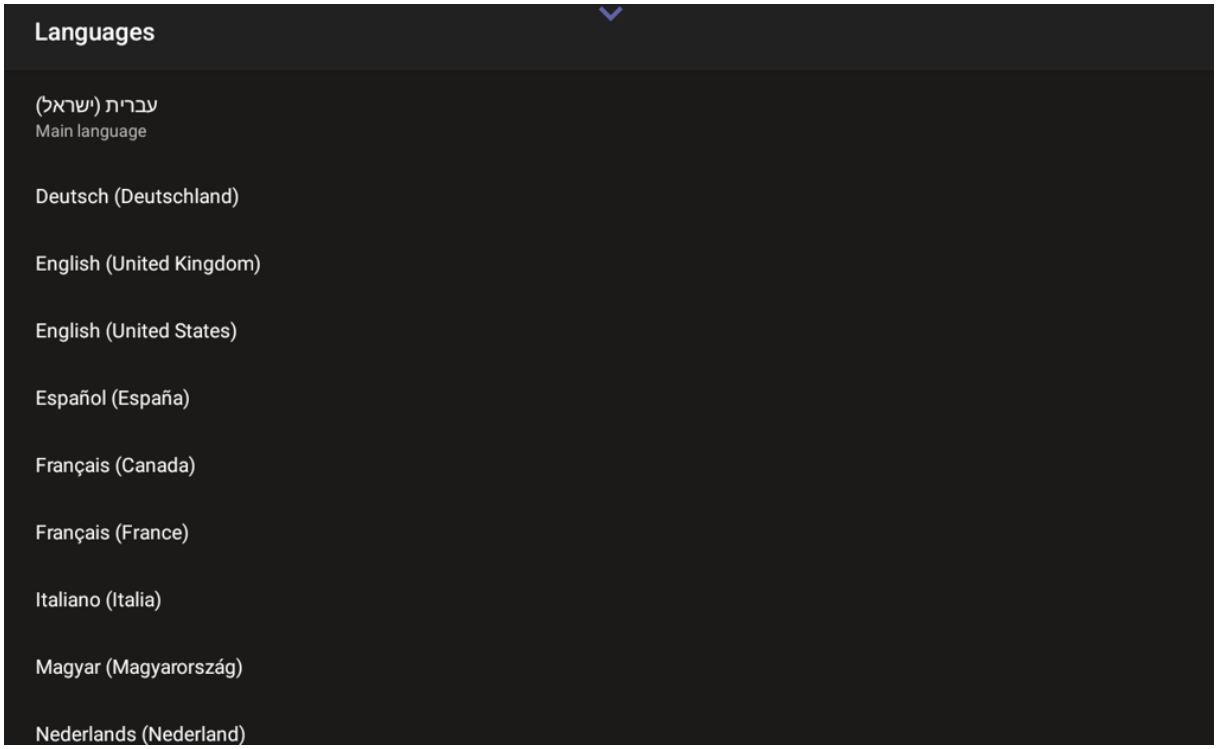


7.3 Setting Up RXV200 using Wizard

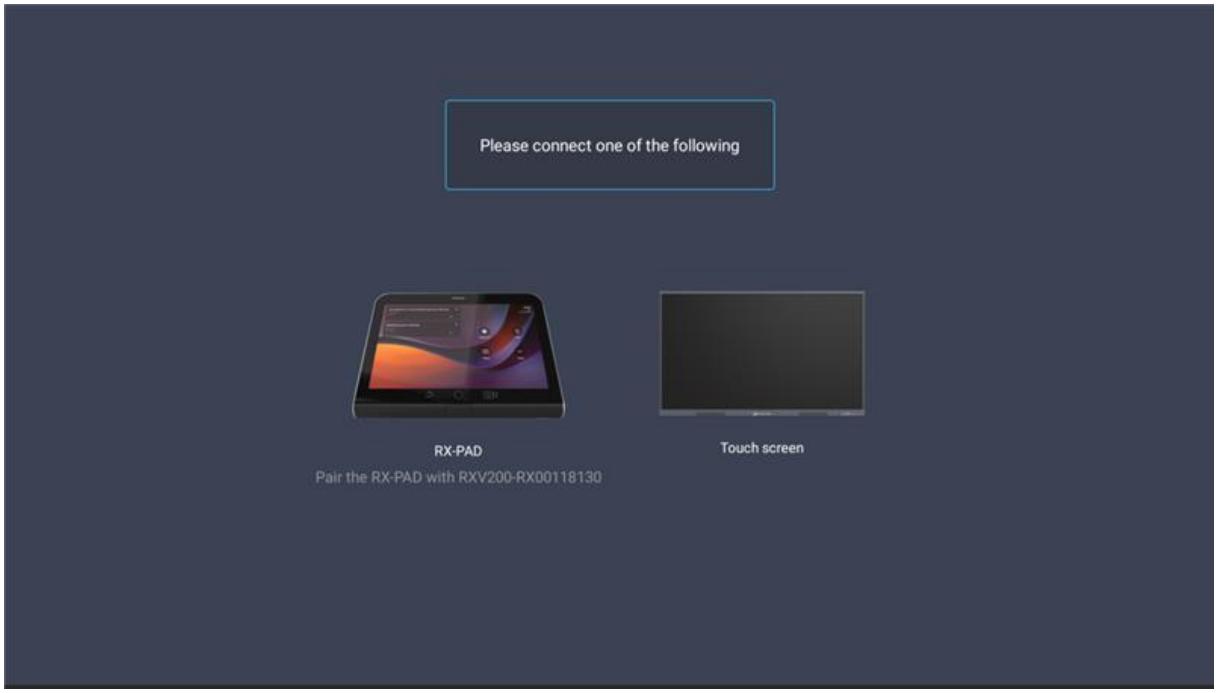
You can use the new wizard for an Out-of-Box (OOB) experience.

To set up RXV200 using wizard:

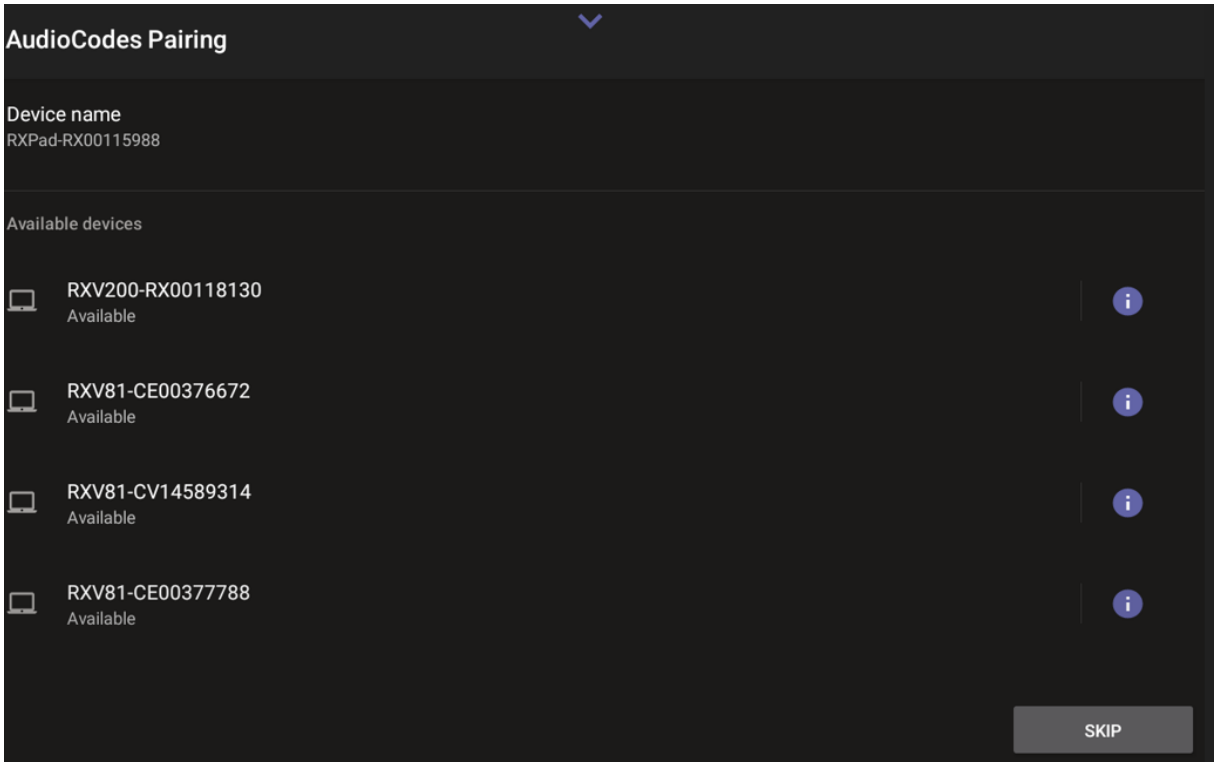
1. When you set up a paired MTRA (RXV81/RXV200 and RX-PAD), the RX-PAD prompts you to select the language:



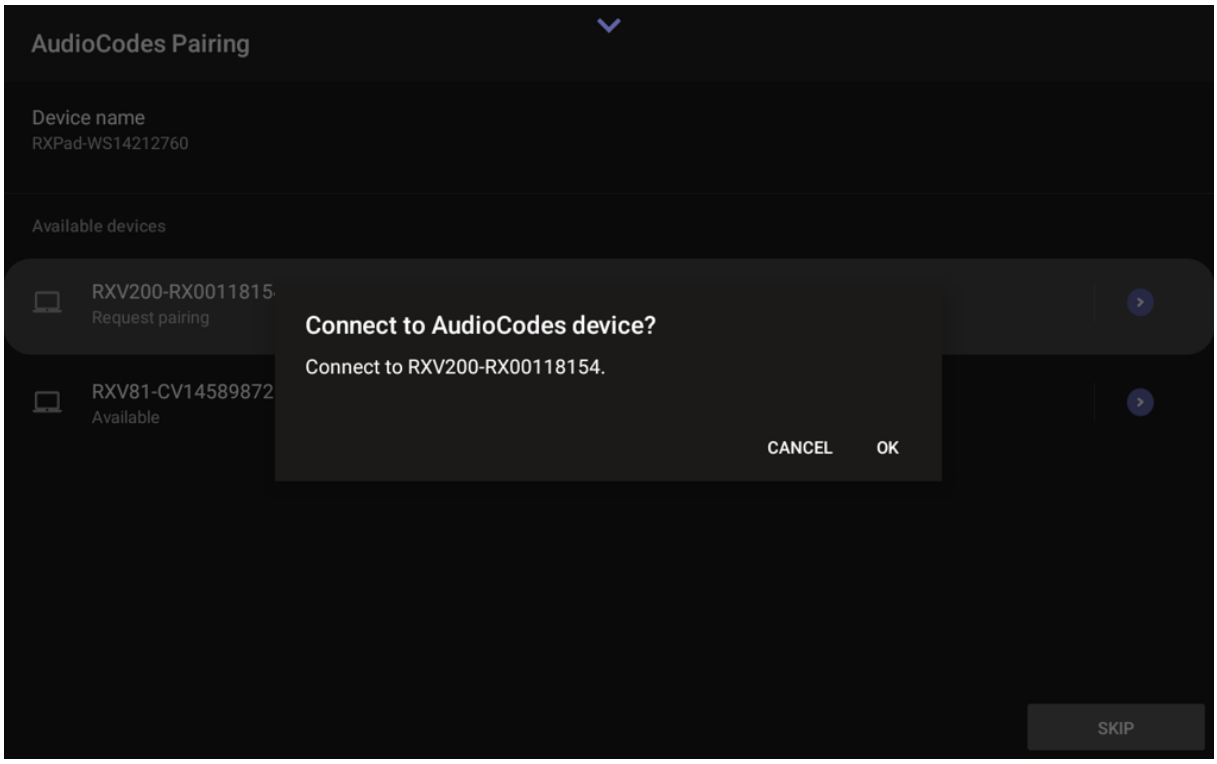
2. The MTRA prompts you to connect to an input device if there is not one already connected. An Input device can be an RX-PAD or a touch screen (or RCU in case it is part of the RXV81 bundle):



3. After you select the language, the **AudioCodes Pairing** page is displayed:

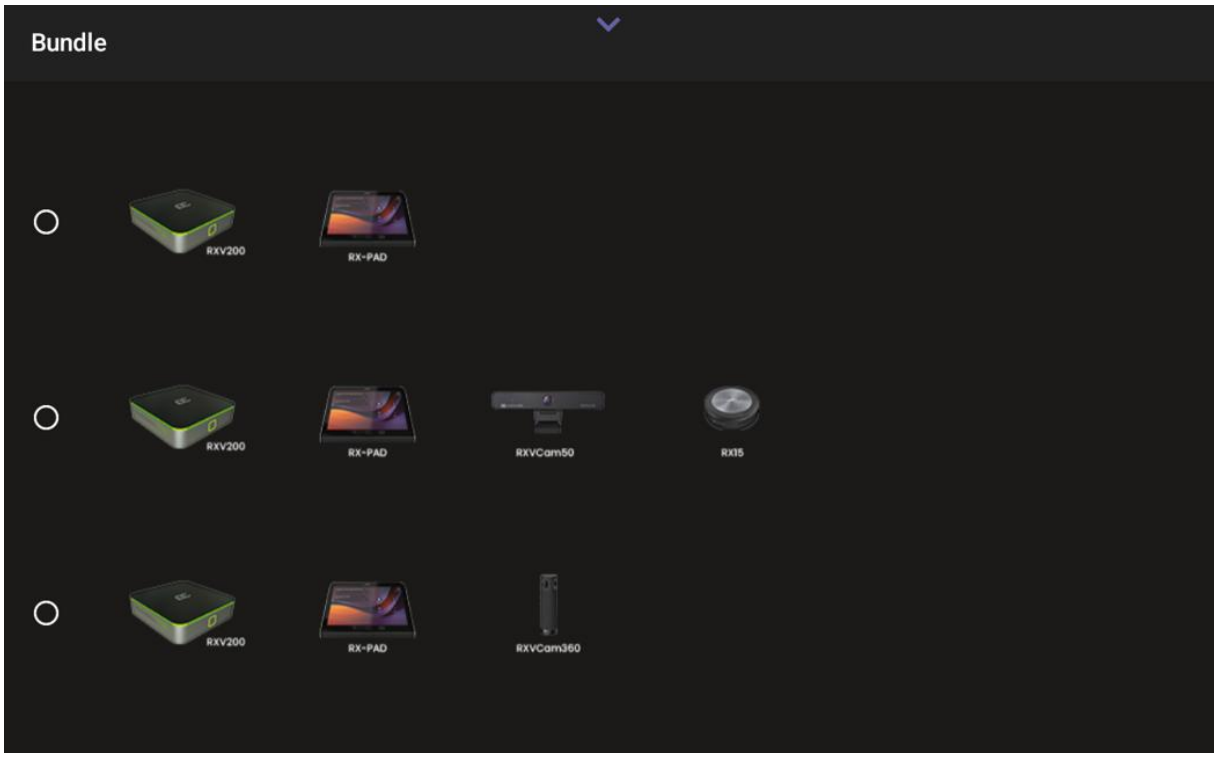


4. Tap the selected MTRA, the following prompt is displayed:

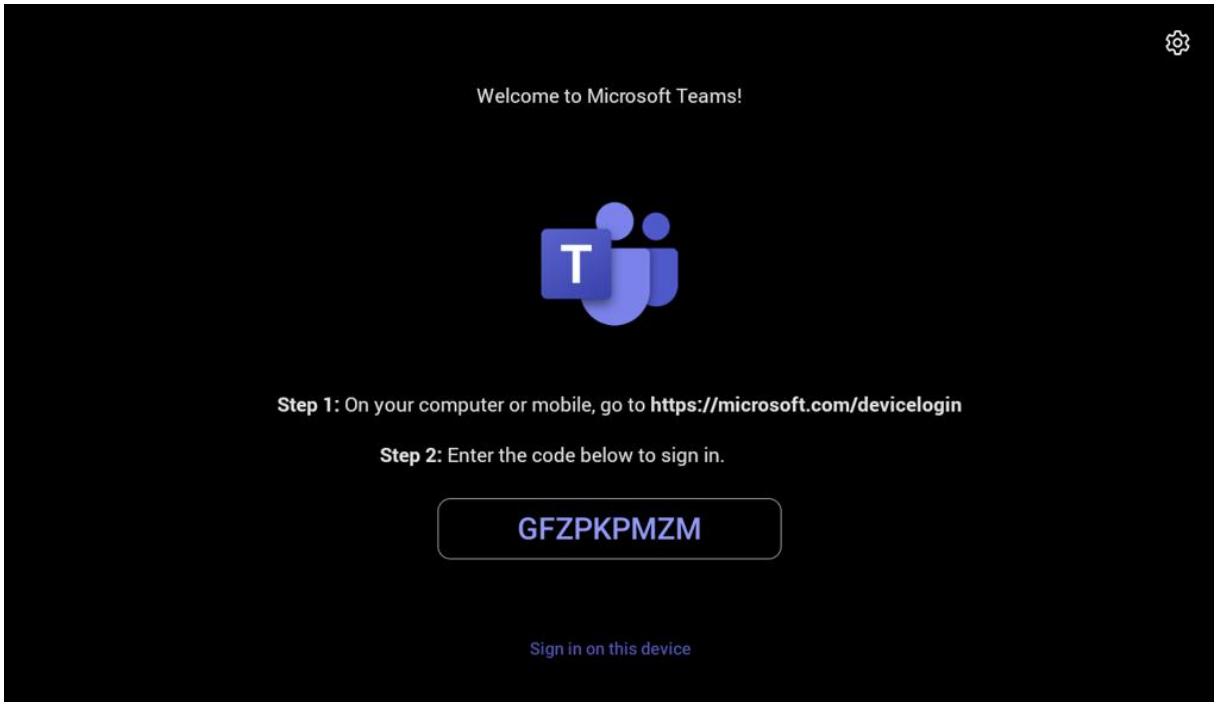


5. Tap **OK** to confirm: the RX-PAD finalizes the pairing process and assigns the appropriate bundle with the MTRA.

6. If you need to choose a bundle (for example, RXV200 with RXVCam360), the RX-PAD displays the **Bundle** screen:



7. After this process is completed, the following screen is displayed showing the code you need to sign into your Microsoft account. The sign-in displays on both devices:

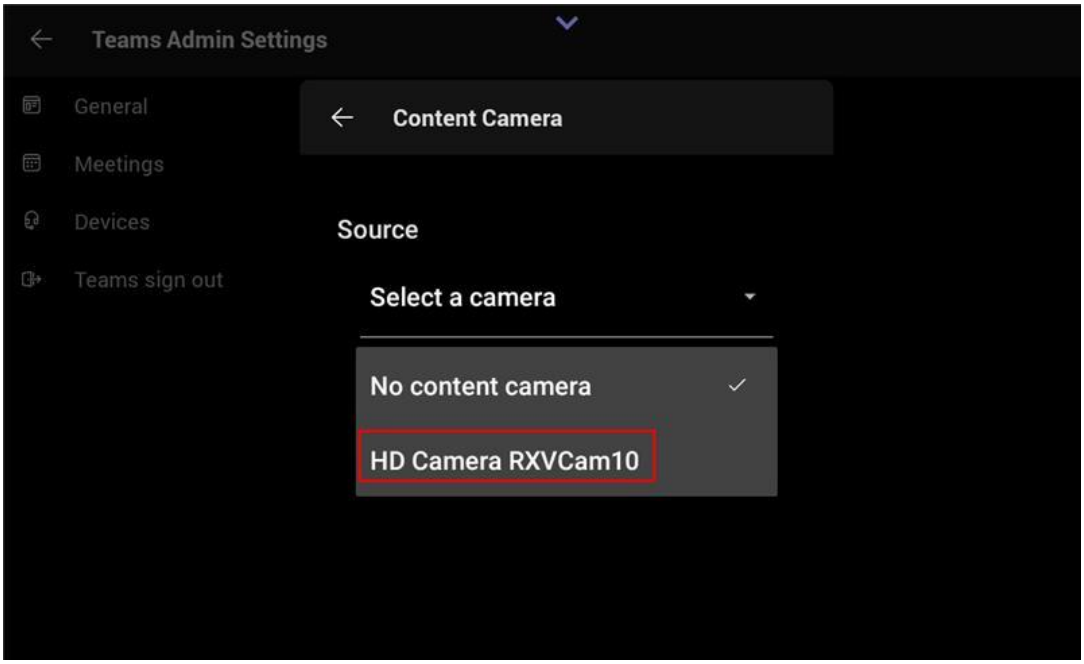


8. Sign in to your Microsoft account.

7.4 Content Camera Framing on a Whiteboard

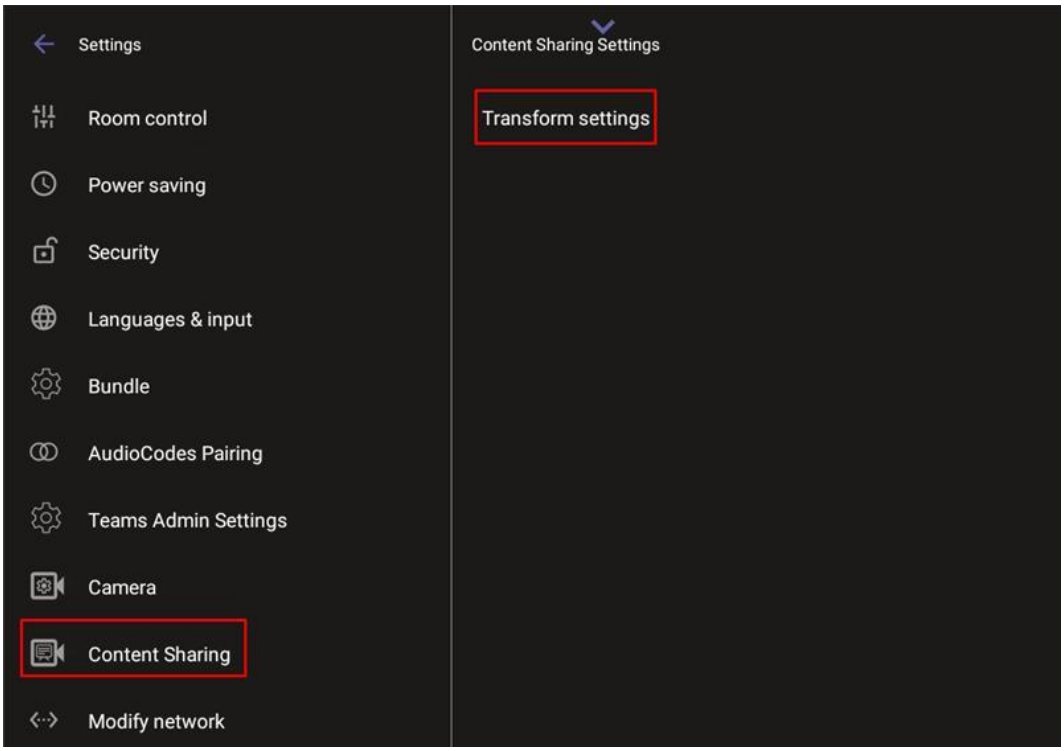
Presenters can share their physical whiteboard with remote participants using the **Content Camera** feature. To optimize the view, use **Transform settings** to define and capture the area precisely, isolating the whiteboard and removing unwanted margins beyond its edges.

Before starting, the admin must confirm the RXVCam10-CC is set as the content camera in **Teams Admin Settings** > **Devices**:

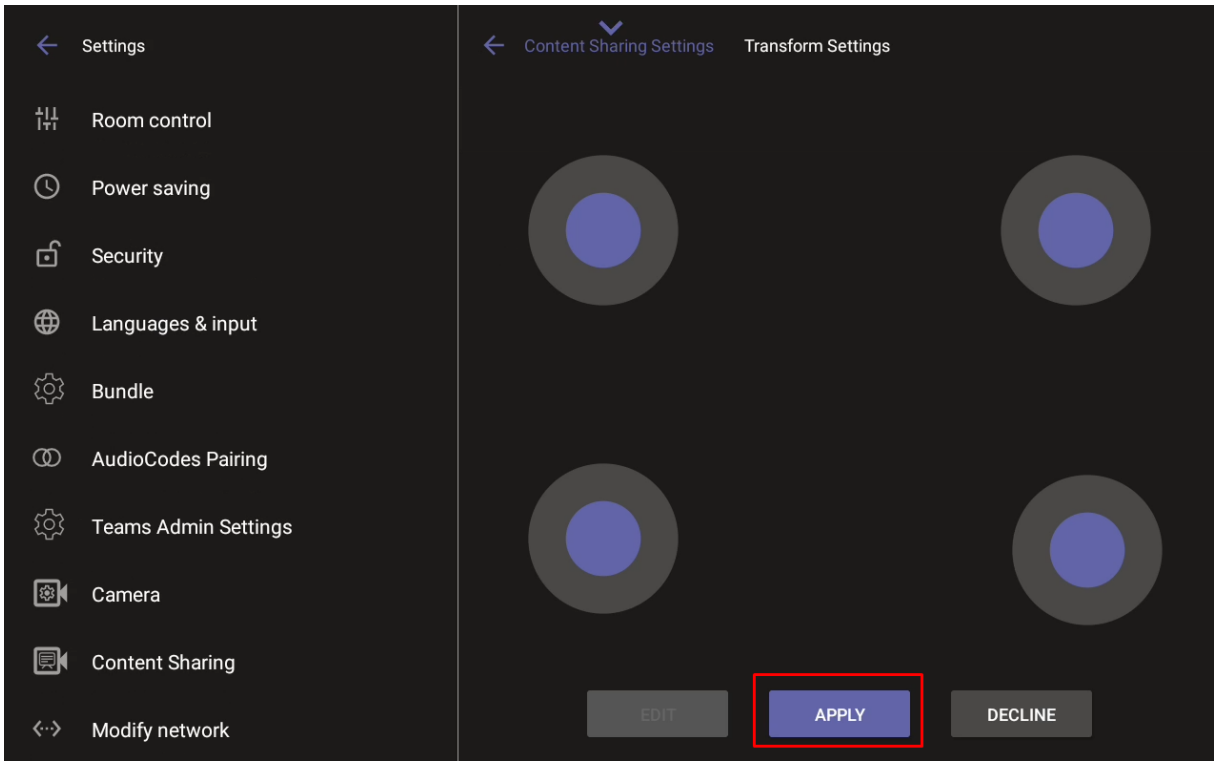


To share content:

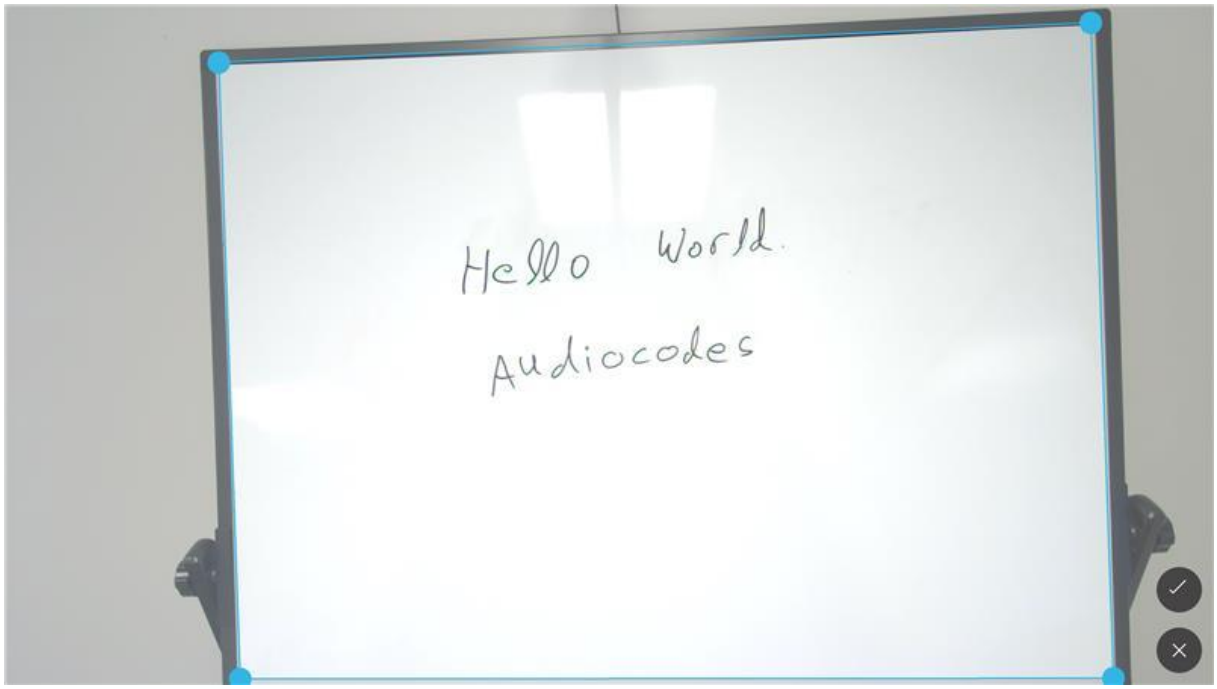
1. Navigate to Content Sharing > Transform settings:



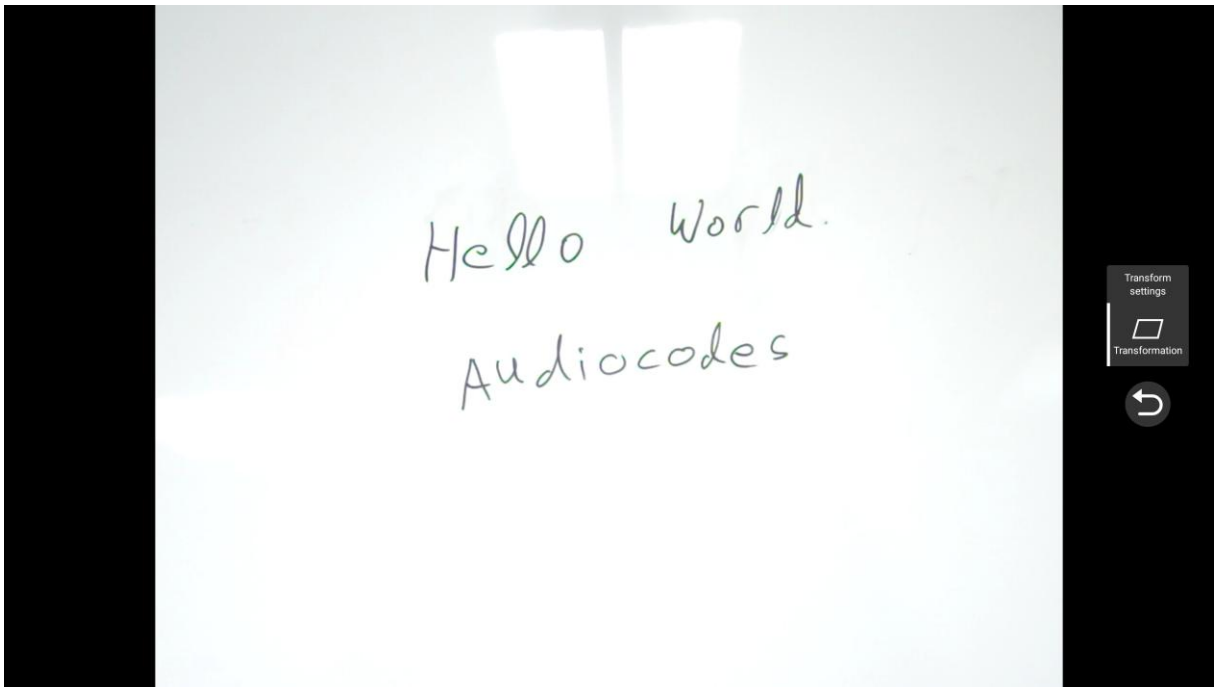
2. Use the four joysticks on the RX-PAD to adjust the boundaries of the content camera's capture area:



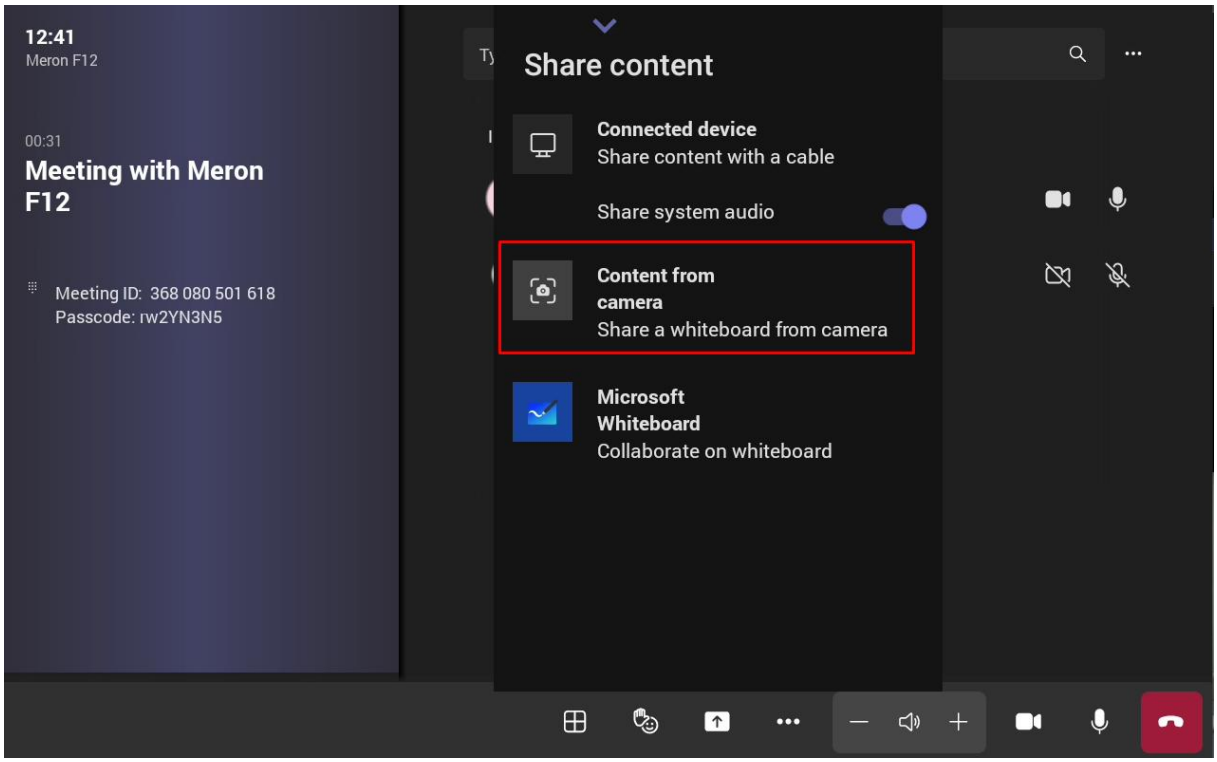
The admin can view the adjustment on the display:



3. When the desired shape is chosen, tap **Apply** to confirm. The shape can now be cut out and displayed on the screen:



4. To edit or delete the shape, return to the **Transform settings** screen.
5. In the Teams meeting, the user can share content from the connected camera:



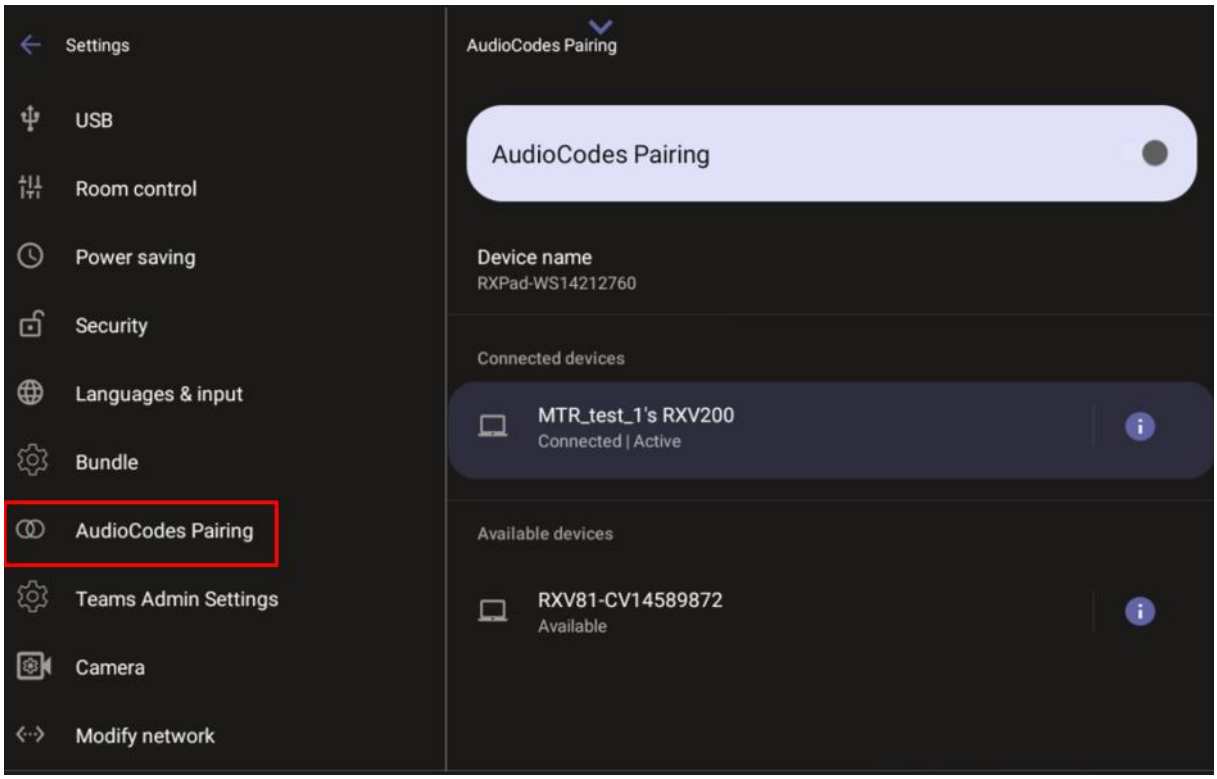
7.5 Pairing Devices

You can control your paired MTRA devices with the current RX-PAD and decide which MTRA you wish to pair, or unpair with on a current connection.

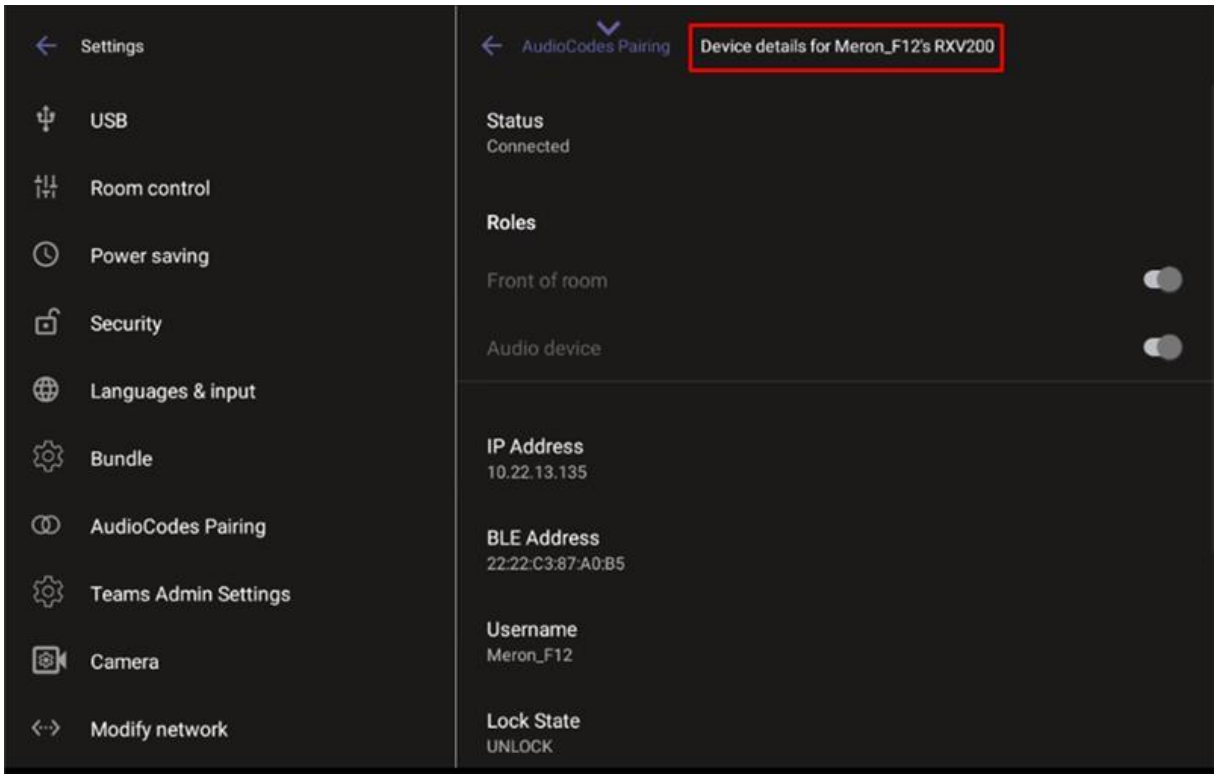
> Teams unpairing must occur prior to pairing with a new MTRA device.

To pair a device:

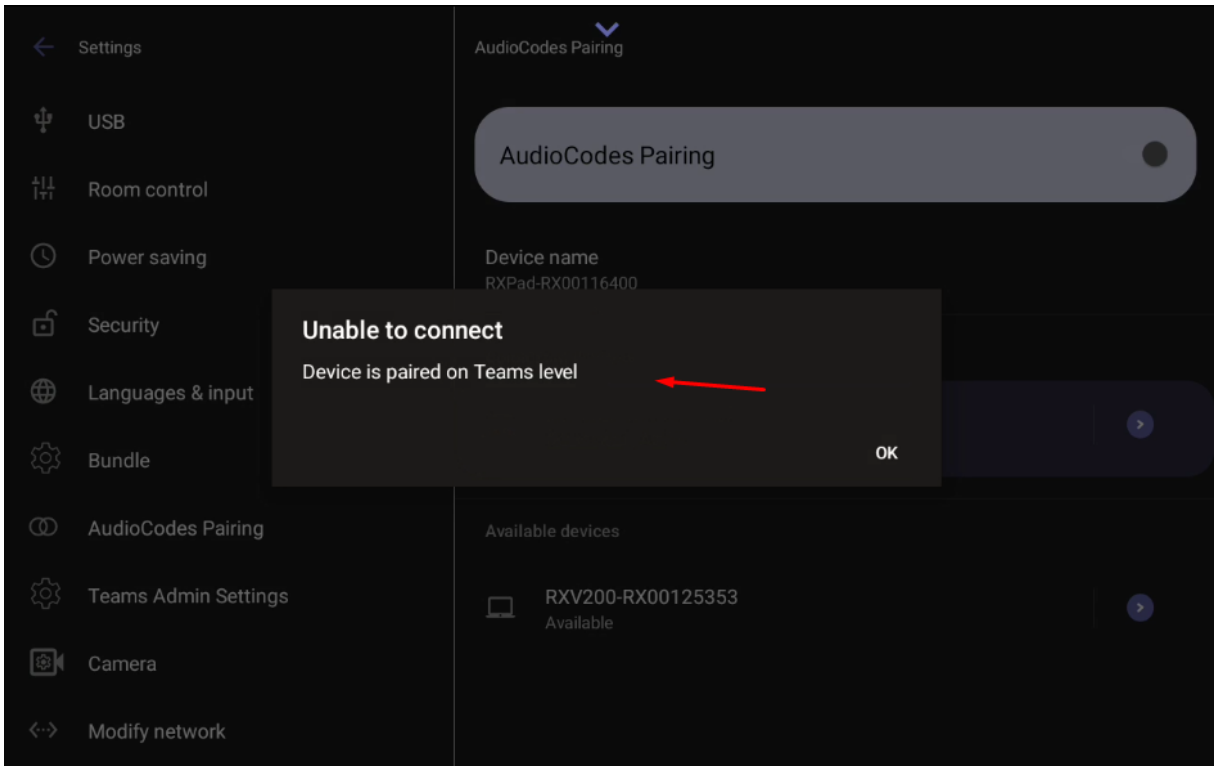
1. Navigate to Settings, and then tap AudioCodes Pairing.



2. Tap the **i** icon to view the information of the paired device from RX-PAD). For example, the IP address, device model, MAC address:



3. Navigate to **Teams Admin Settings** > **Devices** menu to break a currently paired set and pair a new MTRA. Admin must unpair the devices at the Teams level.

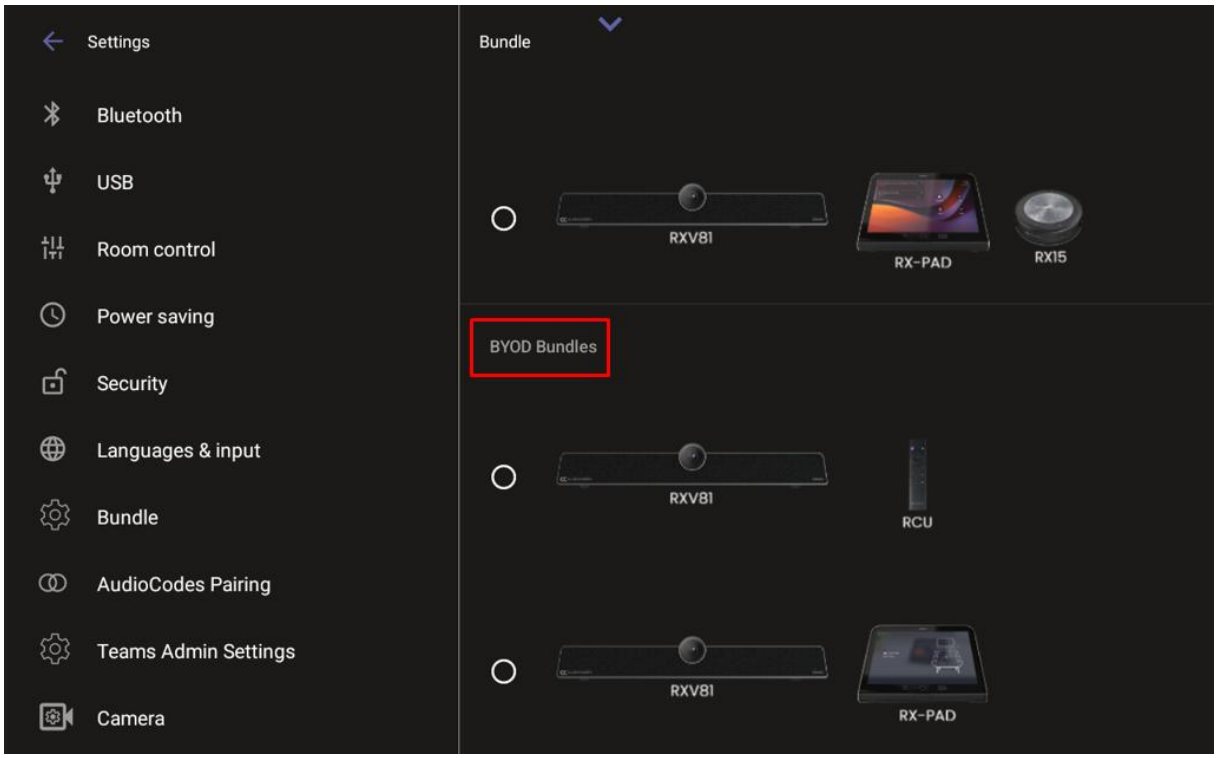


7.6 Modifying RXV81 Connection to BYOD Bundles

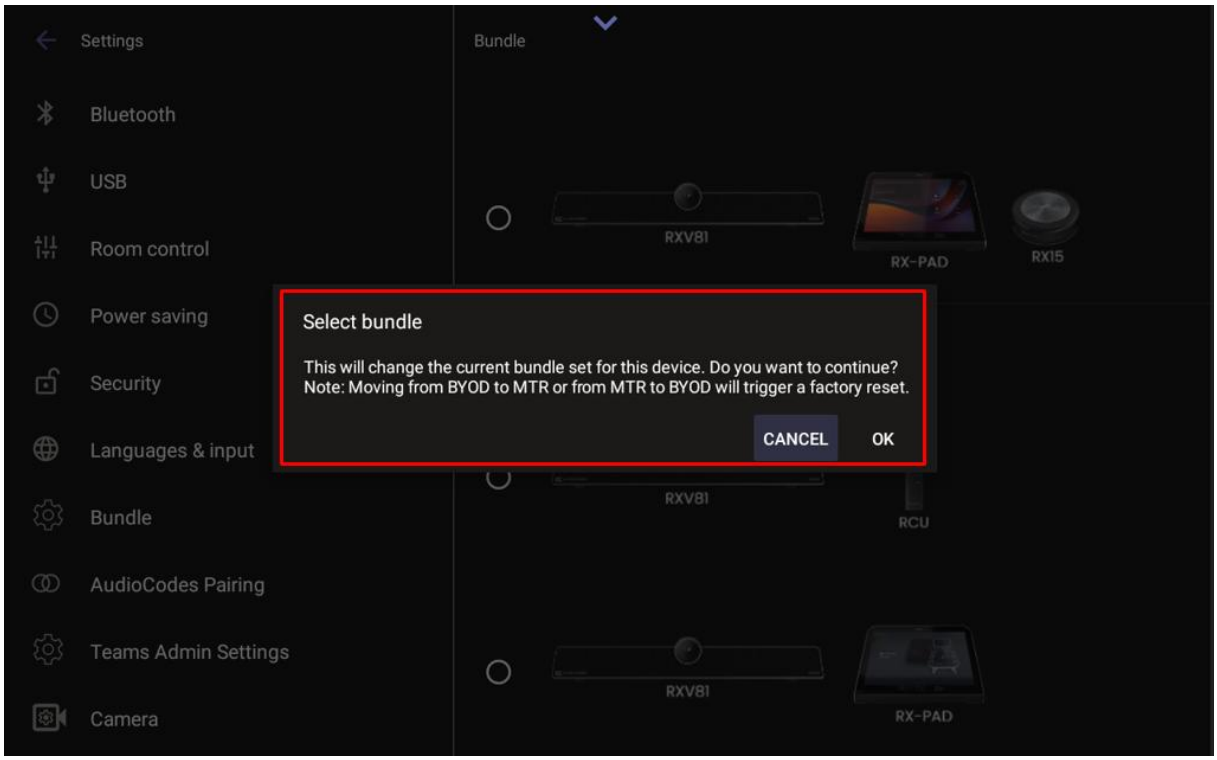
Connect your RXV81 to BYOD bundles which is MTR-ready.

To modify RXV81 to new BYOD bundles:

1. Navigate to **Settings** > **Bundle.**
2. Tap the Bundle you want to connect to:



3. The **Select bundle** confirmation window is displayed. Tap **OK** to confirm.



Using the ad-hoc option under Teams mode is still possible when connecting the RXV81 with USB-C cable to a laptop.

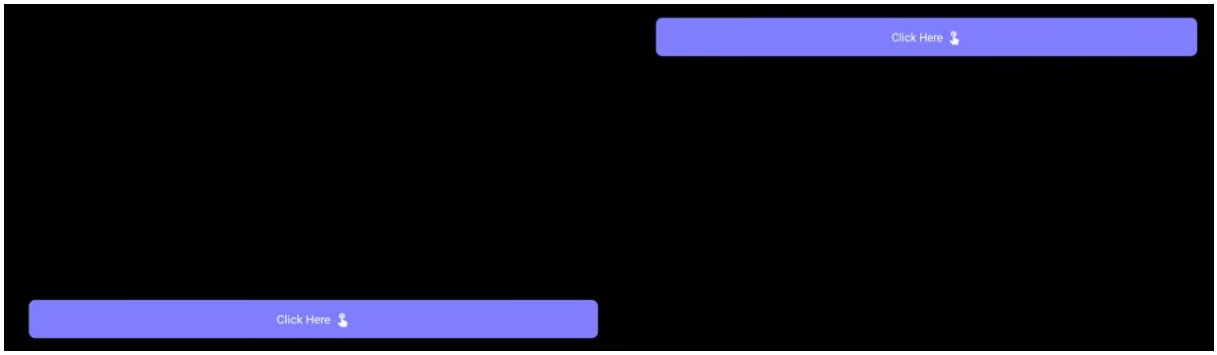
Important note: Changing this setup 'on the fly' triggers a factory reset on the MTRA.

7.7 Dual Touch Screen Orientation [Applies to RXV200]

When two touch screens connect to the MTRA they can simultaneously display.

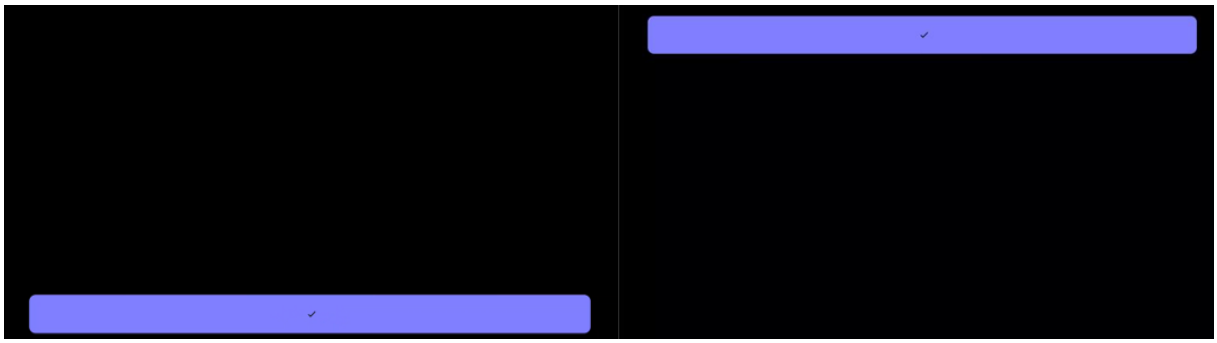
To display two screens:

1. In the Out-of-Box phase, connect both screens and their USB cables to the RXV200 before the device is booted. The following screen is displayed:



The screens display before every other phase only when the touch screens are connected.

2. Tap each **Click Here** button: a tick is displayed on each button:



The UI now displays the language phase options.

For a new installation, the dual touch GUI pops up when the setup has two screens, also for a single touch (to know to which screen this touch belongs).

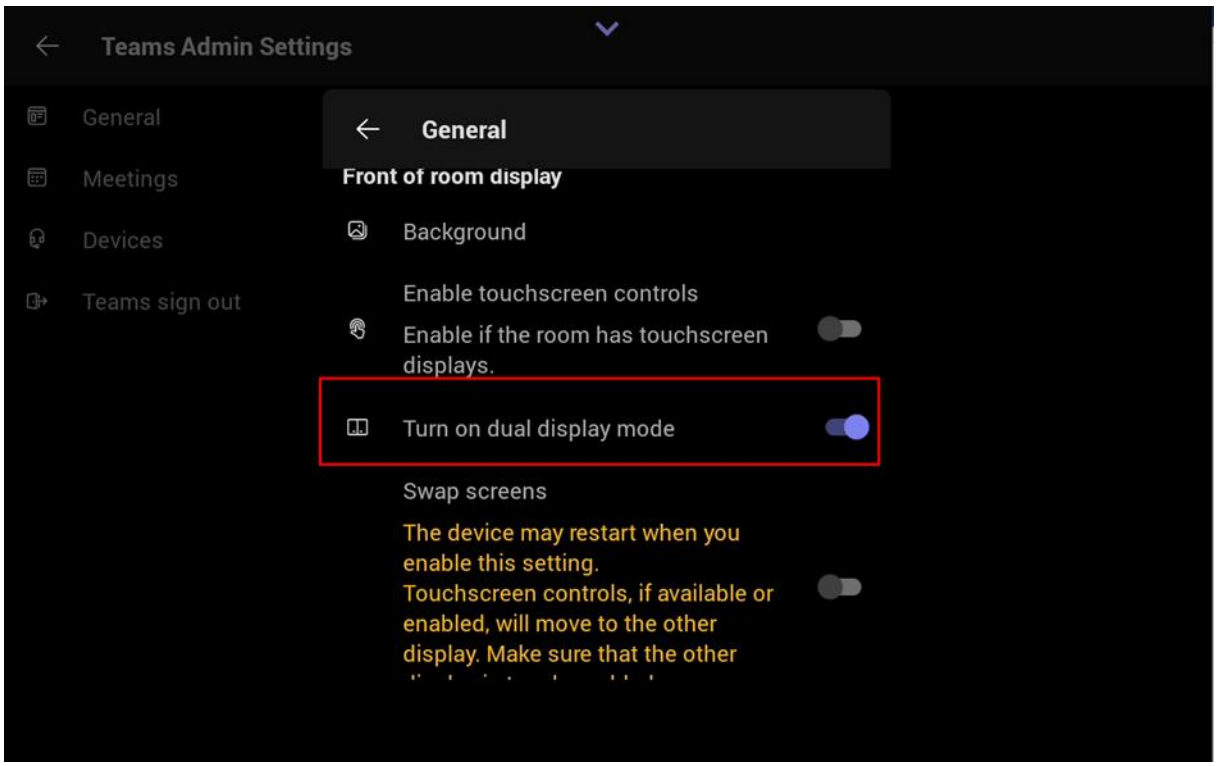
7.8 Dual Display Mode and Swap Screens Admin Controls Pro

> This feature is for RX-PAD paired with RXV200 only, and for a Pro room account, as described below. The devices must run the following Teams app version or later - 1449/1.0.96.2024110701 (November 2024).

Admins can configure Teams Rooms on Android devices to run in dual display mode and to switch the screens in these rooms when set up invertedly as front-of-room display. This can be done without physically disconnecting and reconnecting the HDMI OUT cables from the RXV200.

To disable dual display mode or switch screens:

1. Tap Teams Admin Settings > General:



7.9 HDMI Input Source Features

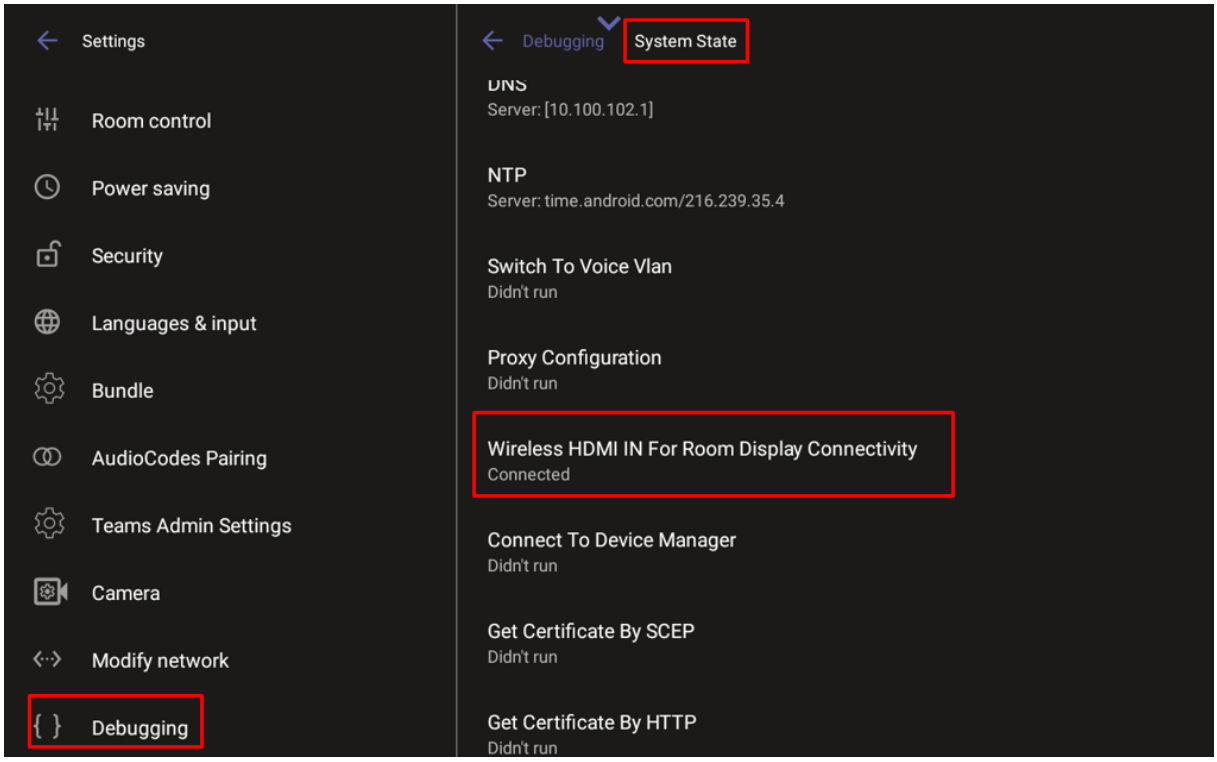
This section describes HDMI Input (HDMI IN) source features.

7.9.1 Monitoring Wireless HDMI IN Service

You can monitor the HDMI IN source.

To monitor HDMI IN:

1. Navigate to Settings > Debugging > System State.
2. Check the status of the Wireless HDMI IN service. The following shows a Connected status:



7.9.2 Automatic HDMI Source Selection

This feature improves user experience when multiple HDMI-IN inputs are used, typically involving both a physical HDMI-IN input and a wireless HDMI-IN (from an RX-PAD).

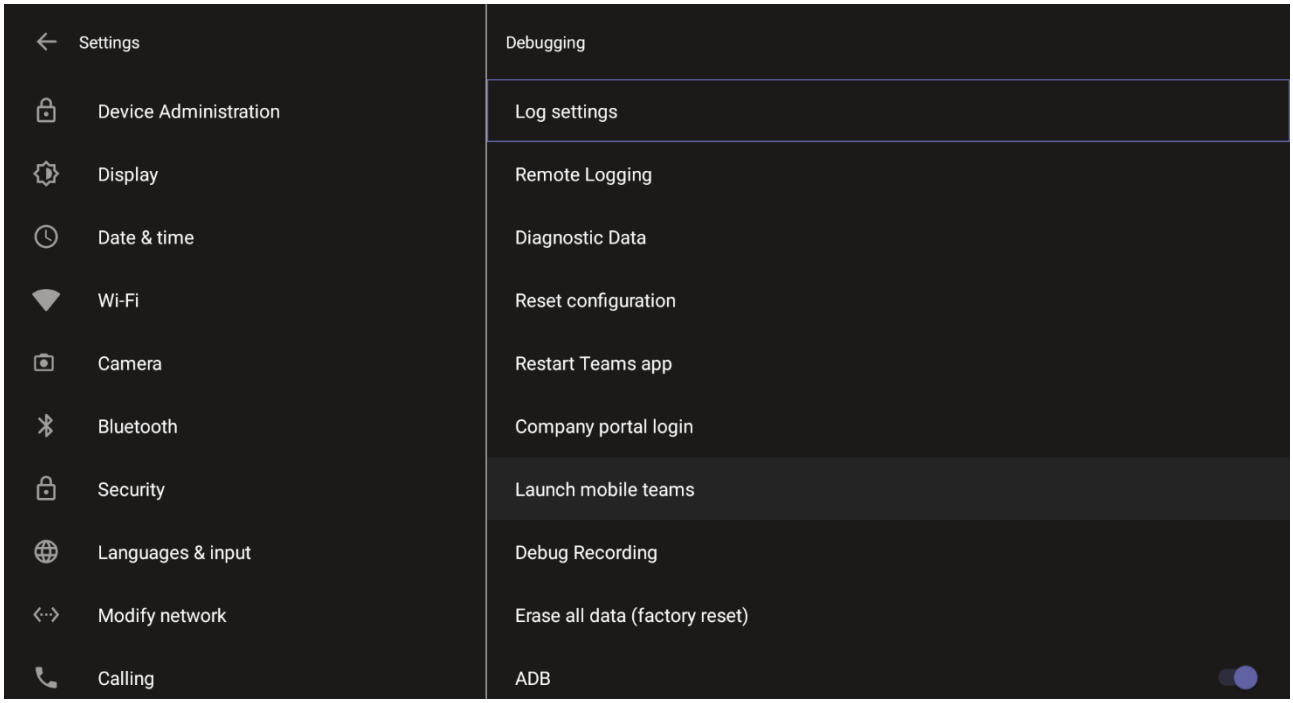
- When a new HDMI-IN input is connected during a sharing session, it automatically becomes the current active source.
- When an HDMI-IN input is unplugged, the remaining connected HDMI-IN source automatically becomes the active source.

8 Debugging

Admin users can perform debugging for troubleshooting purposes.

To perform debugging:

1. In the Settings screen under **Device administration**, select **Debugging**.



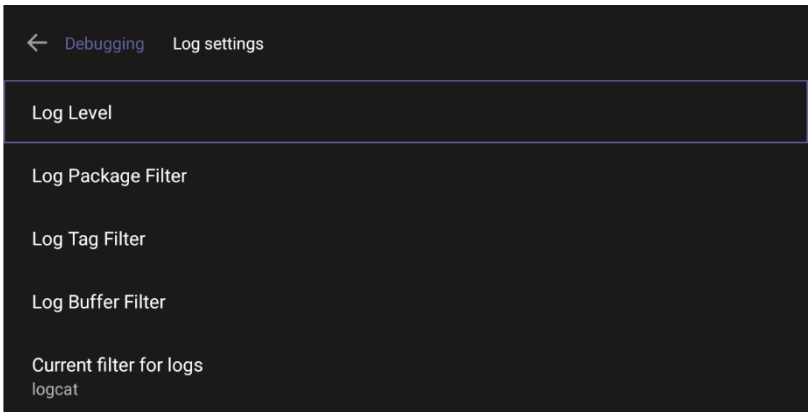
2. Use the following debugging features available to Admin users:
   - Log settings (see Log Settings | Collecting Logs)
   - Remote Logging (see Remote Logging)
   - Diagnostic Data (see Diagnostic Data)
   - Reset configuration (see Reset configuration)
   - Restart Teams app (see Restart Teams app)
   - Company portal login (see Company Portal Login)
   - Launch mobile teams (see Launch Mobile Teams)
   - Debug Recording (see Debug Recording)
   - Erase all data (see Erase all data (factory reset)
   - Screen Capture (see Screen Capture)

8.1 Log Settings | Collecting Logs

Device diagnostics (Logcat) can be collected using the Microsoft Admin Portal. For support purposes, general logs can be collected also using the Microsoft Admin Portal. The logs can help debug Teams application issues and also for issues related to the device.

To configure log settings:

1. In the **Debugging** screen, select **Log settings**.

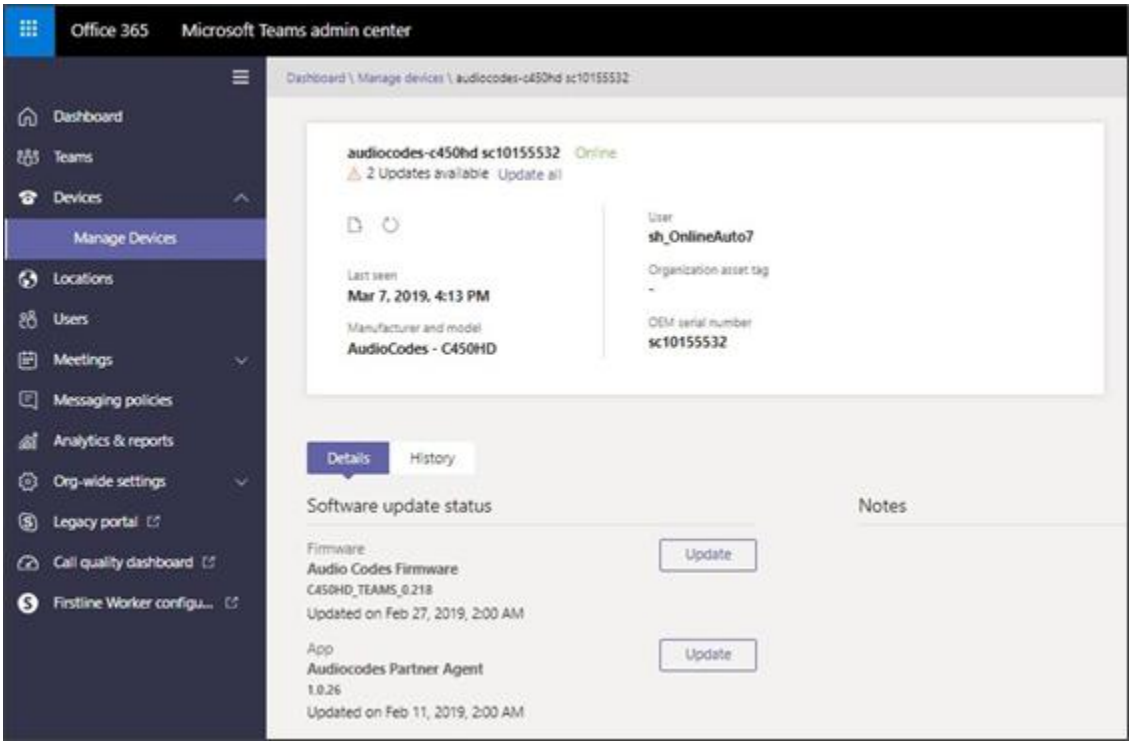


2. Navigate to and select **Log Level** and then select either **Verbose**, **Debug**, **Info**, **Warning**, **Error**, **Assert** -or-**None**
3. Navigate to and select **Log Package Filter** and enter the filter.
4. Navigate to and select **Log Tag Filter** and enter the filter.
5. Navigate to and select **Log Buffer Filter**.

6. Navigate to and select **Current filter for logs**.

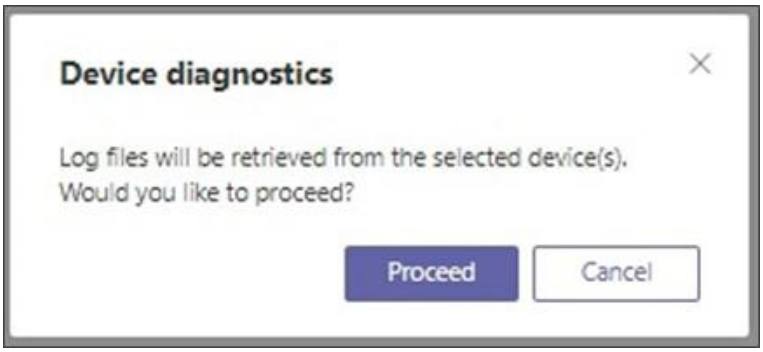
To collect logs:

1. Reproduce the issue
2. Access Microsoft Admin Portal and under the **Devices** tab click the **Diagnostics** icon.

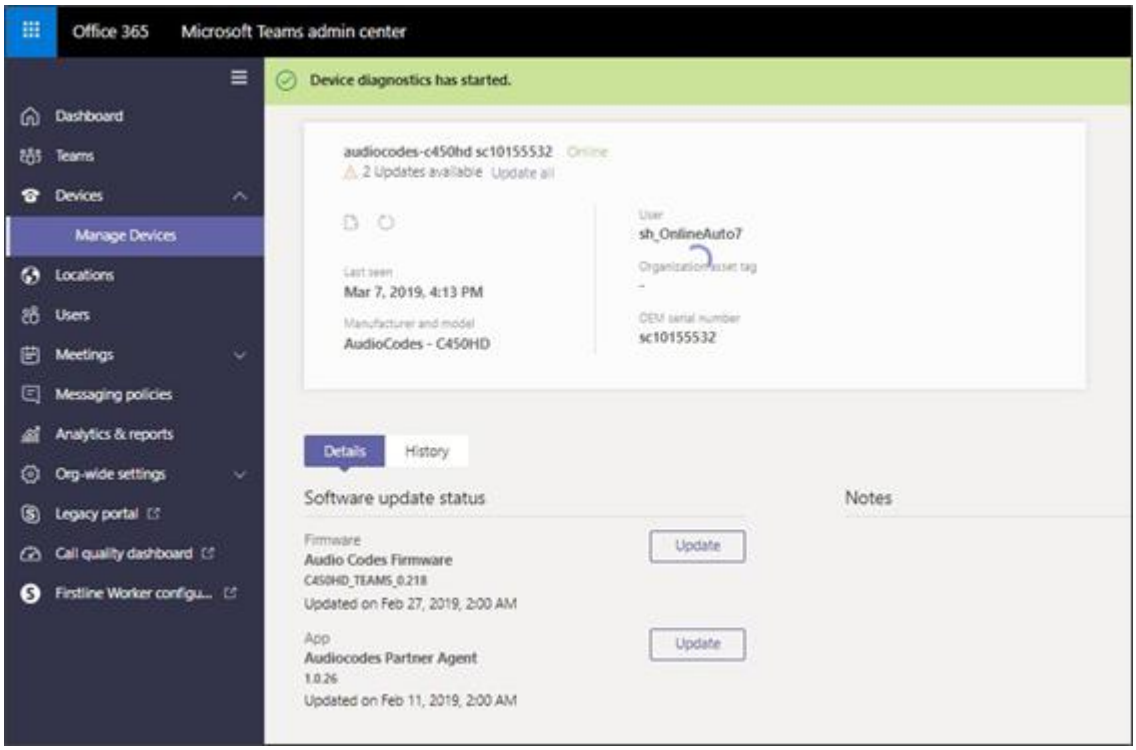


The preceding figure is for illustrative purposes. It shows an AudioCodes phone. The same screen is displayed for the RXV200.

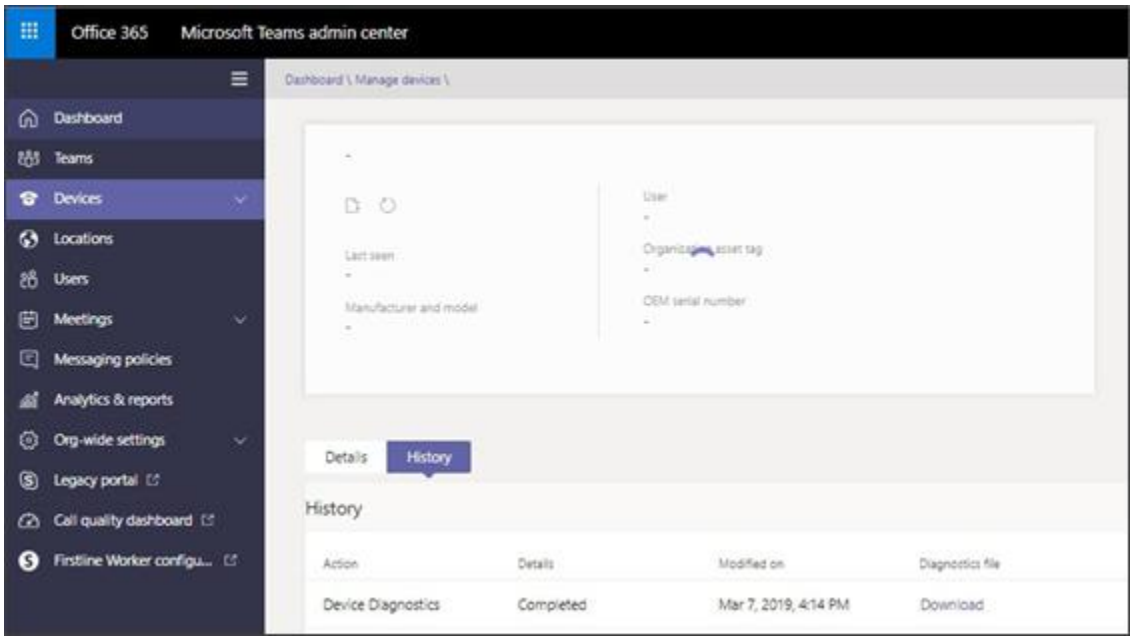
3. Click the **Diagnostics** icon. The **Device diagnostics** windows displays:



4. Click **Proceed**; the logs are uploaded to theserver:



5. Click the **History** tab.



6. Click **Download** to download the logs.

8.2 Remote Logging

Remote Logging via Syslog provides the same log level as Device Diagnostics (performed via the Microsoft Admin Portal) with some additional information that may be relevant to device issues (not Teams application issues).

Diagnostics via the Microsoft Admin Portal are saved to the device sdcard and collected after the event. Remote Logging via Syslog is different. The logs are collected in real time.

To enable Remote Logging via Syslog:

1. Navigate to and select **Remote logging**.

2. Configure the **Remote IP address** and **Remote port** and enable **Remote Logging**; the device starts sending logs to the Syslog server.

Network administrators can also enable Syslog using Secure Shell (SSH) protocol.

To enable Syslog using SSH protocol, type the following command at the shell prompt:

```
setprop persist.ac.rl_address <syslog_server_ip>:<port>.
```

To disable Syslog using SSH, type the following command at the shell prompt:

```
setprop persist.ac.rl_address ""
```

8.3 Diagnostic Data

Admin users who need to get logs from the device can dump the logs to the phone's Secure Digital (SD) Card and then later collect them using Secure Copy Protocol (SCP) based on Secure Shell (SSH) protocol. Whenever an issue occurs, the Admin can dump the logs into the SD Card.

To use the tool:

1. Navigate to and select **Diagnostic Data**.

2. Navigate to and select **OK** to confirm 'Copy logs to sdcard'; the RXV200 creates all necessary logs and copies them to the its SD Card / Logs folder.
3. Get the logs using SCP notation as follows:

```
scp -r admin@host_IP:/sdcard/logs/ .
```

Following are the relevant logs (version and ID may be different to those shown here):

- dmesg.log
- dumpstate-TEAMS_1.3.16-undated.txt
- dumpstate_log-undated-2569.txt
- logcat.log

8.4 Reset configuration

Admin users can opt to 'clean up' their configuration history and return the RXV200 to an Out of Box Experience (OOBE). If the Teams app isn't running well, this might help.

To reset the configuration:

1. Navigate to and select **Reset configuration**.

2. Navigate to and select **OK**; all data is erased and default factory settings are restored but sign-in is retained.

See also here.

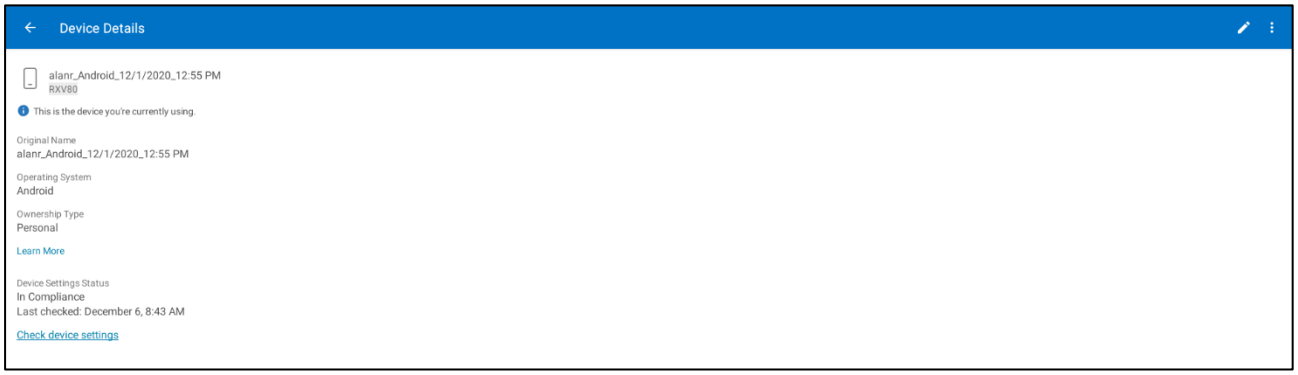
8.5 Restart Teams app

If the Teams application freezes or malfunctions, a good way to resolve this is to restart the app.

To restart the Teams app:

- Navigate to and select **Restart Teams app**; only the Teams app is restarted.

8.6 Company Portal Login

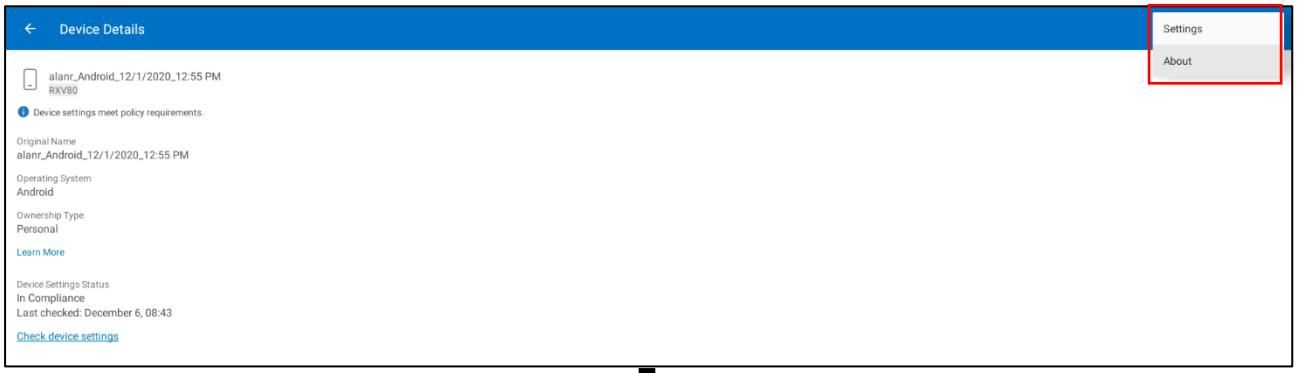


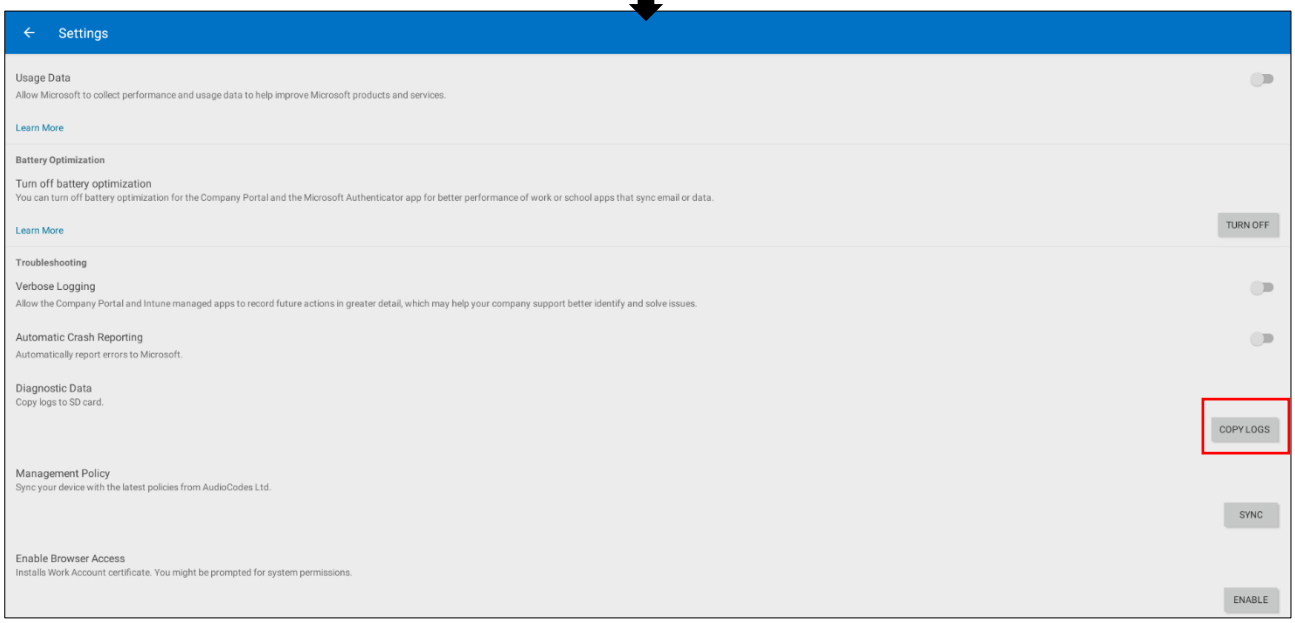
8.7 Getting Company Portal Logs

Company Portal logs help network administrators when there are issues with signing in to Teams from the phone.

To get Company Portal logs:

1. Reproduce the issue (logs are saved to the device so you first need to reproduce the issue and then get the logs).
2. Log in to the RXV200 as an Administrator and then go back.
3. Navigate to and select the **Debugging** option.
4. Navigate to and select **Company Portal login**.
5. In the **Device Details** screen that opens, navigate to and select **Settings**:





6. Navigate to and select **Copy Logs**.

   Company portal logs are copied to:

```
sdcard/Android/data/com.microsoft.windowsintune.companyportal/files/
```

7. To pull the logs, use ssh:

```
scp -r admin@hosp_ ip:/sdcard/android/data/com.microsoft.windowsintune.companyportal/files/
```

> Files are quite heavy so you may need to pull them one by one.

8.8 Launch Mobile Teams

'App not found'. N/A in this release.

8.9 Debug Recording

This feature enables Admin users to perform media/DSP debugging.

> DSP recording can be activated on the fly without requiring the network administrator to reset the phone.

To reset the configuration:

1. Navigate to and select **Debug Recording**.

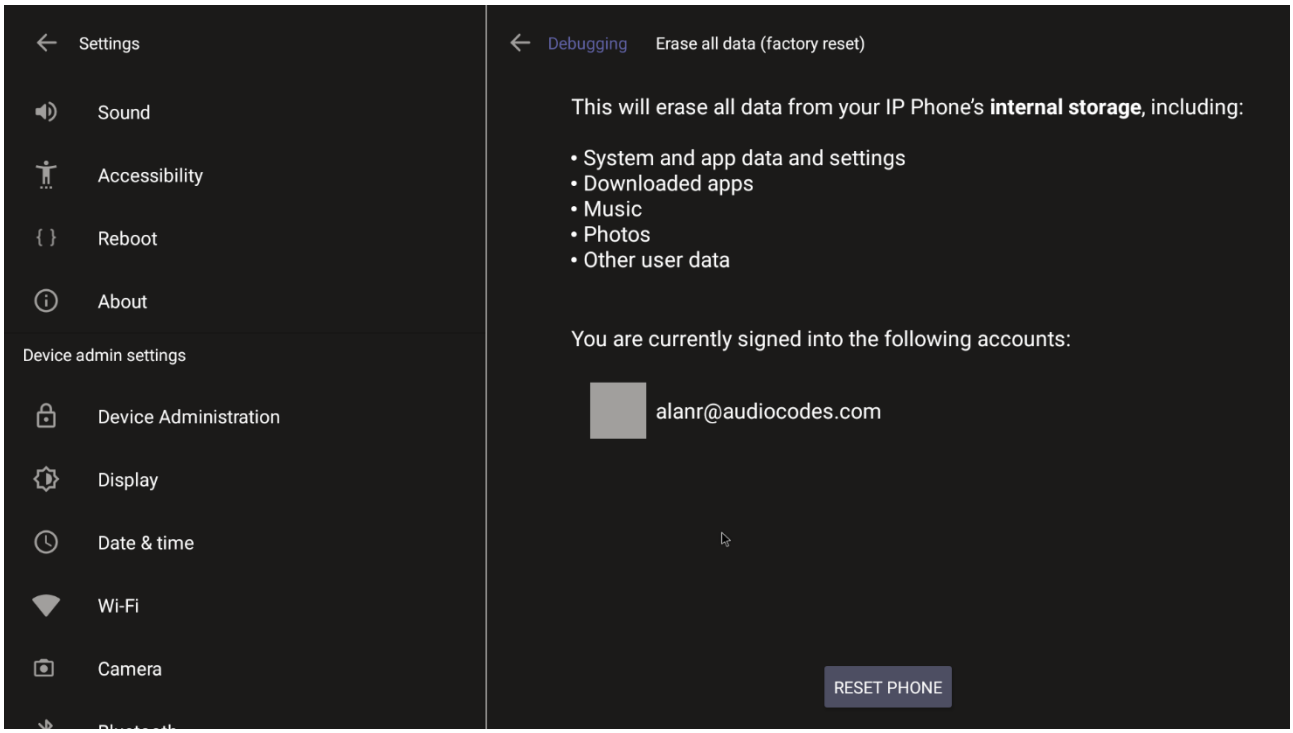
2. Navigate to and select **Voice record** to enable the feature.
3. Navigate to and select **Remote IP address** to input the IP address of the device whose traffic you want to record.
4. Navigate to and select **Remote port** and input it (Default: 5000).
5. Start Wireshark on your PC to capture audio traffic.

8.10 Erase all data (factory reset)

This option is the equivalent of restore to defaults, including logout and device reboot.

To erase all data (factory reset):

1. Navigate to and select **Erase all data** (factory reset).



2. Navigate to and select **RESET PHONE**.

8.11 Screen Capture

By default, this setting is enabled. If disabled, the phone won't allow its screens to be captured.

8.12 Determining Device Status from LED Color Indications

Users and admins can determine the status of the RXV200 from its LED color indications.

Use the following table as reference to determine status.

Table 5: RXV200 Status

Color Indication	Status
Blue	Indicates the RXV200 is currently booting up
Green	Indicates the RXV200 is currently idle
Flashing red	Indicates the RXV200 is currently receiving an incoming call/meeting
Red	Indicates the RXV200 is currently in a call/ meeting/mute

8.13 Performing Recovery Operations using Power Button

Network administrators can perform recovery operations using the power button on the front panel of the RXV200.

> Besides this recovery option, Android devices also feature an independent, automatic problem detection and recovery attempt capability that can culminate in recovery mode or in switching image slots.

The following figure shows the power button.

To perform recovery operations:

1. Disconnect the power cord from the RXV200 while long pressing the power button shown in the preceding figure.
2. Reconnect the power cord and continue pressing the power button.

Table 6: Recovery Operations

Press button	Action	Press button for	LED indication after releasing the button
On Uboot	Nothing	<= 4 seconds	
	ENTER_RECOVERY	4 ~ 6 seconds	Red
	SWITCH_AB_SLOT	6 ~ 8 seconds	Green
	ENTER_LOADER	8 ~ 10 seconds	Blue
	RESTORE_DEFAULTS	>= 10 seconds	Yellow

3. In the recovery menu use the power button to navigate between menus in the recovery mode. l long press selects the highlighted option.

8.14 Saving Logs while Device is in Recovery Mode

The device features USB log export while in recovery mode. This feature enables users to seamlessly save logs while their device is in recovery mode.

In Android recovery mode, the system automatically mounts a partition, enabling users to connect a USB stick.

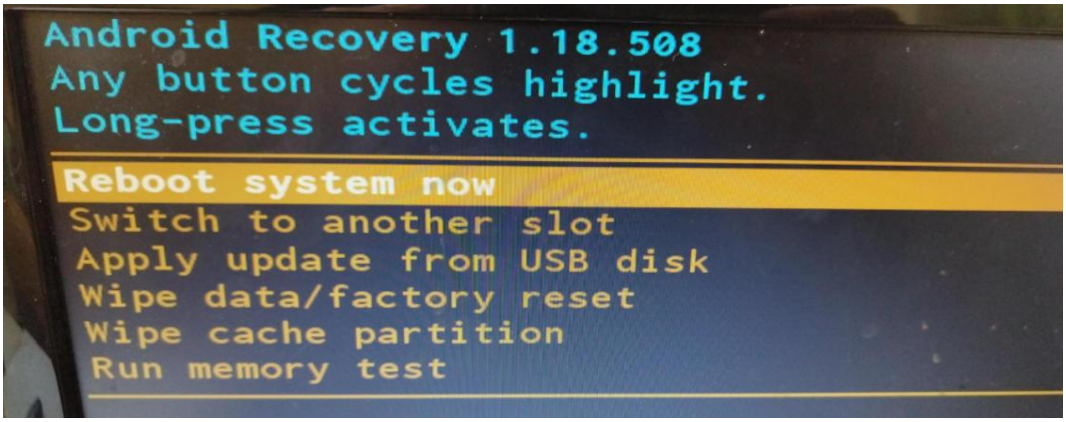
By simply clicking the **Export logs to USB disk** option, all logs are efficiently copied to the USB stick, providing a convenient and reliable method for log management during recovery procedures.

8.15 Restoring RXV200 Firmware via USB Disk

For recovery purposes, firmware can be applied to the RXV200 from a USB disk.

To apply the firmware from the USB disk:

1. Enter recovery mode by pressing for 2-4 seconds the power button (Action: ENTER_RECOVERY); the device's LED lights up red.
2. Short-press the power button to move down the menu options, and long-press to select an option.
3. Insert the USB disk with the target firmware.



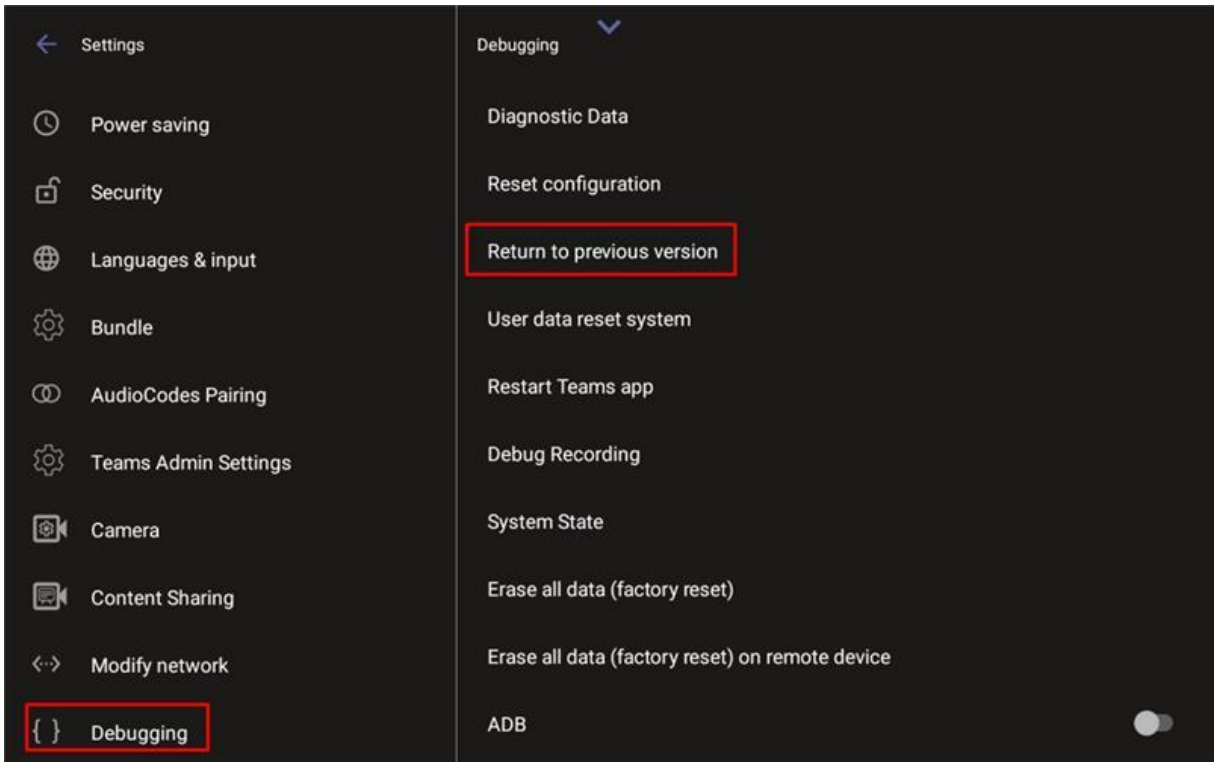
4. Select the **Apply update from USB disk** option and then choose the correct firmware image from the disk.

8.16 Return to Previous Version

When a customer receives a build for testing and completes the testing, they must switch back to the previous firmware version. This version is the General Availability build running on the device.

To return to the previous version:

- Navigate to **Settings** > **Debugging** > **Return to previous version**. The device changes the active firmware slot and undergoes a factory reset.



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