C470HD C455HD C450HD C448HD and C435HD IP Phones for Microsoft Teams

Version 1.19

Microsoft
Solutions Partner

Modern Work

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Related Documentation

Document Name
C448HD IP Phone for Microsoft Teams Quick Guide
C450HD IP Phone for Microsoft Teams Quick Guide
C455HD IP Phone for Microsoft Teams Quick Guide
C470HD IP Phone for Microsoft Teams Quick Guide
C435HD C448HD C450HD C455HD C470HD IP Phone for Microsoft Teams User's and Administrator's Manuals
Device Duo Application Note for Personal Use
Android Device Utility User's Manual
https://docs.microsoft.com/en-us/MicrosoftTeams/phones-for-teams

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1 Introduction

This document describes the new features and known constraints of AudioCodes' C470HD, C455HD, C450HD, C448HD and C435HD IP Phones for Microsoft Teams.

1.1 Overview

The AudioCodes C470HD, C455HD, C450HD, C448HD and C435HD IP phones are native Microsoft Teams high-end executive business phones with a large color touch screen and full UC integration for the Native Microsoft Teams Online market.

The phones can be managed by Microsoft Teams & Skype for Business Admin Center. See here for more information.

1.1.1 About the C470HD IP Phone

The AudioCodes Microsoft Teams-native C470HD IP phone is a feature-rich, executive high-end business phone for Microsoft Teams. A native Microsoft Teams Total Touch high-end business phone, it features a large color touch screen and full UC integration. The phone is equipped with a large, single surface, full touch interface, incorporating an exceptionally sharp 5.5" color touch screen, with optional support for Wi-Fi and Bluetooth.

AudioCodes IP phones can be offered as part of its Managed IP Phones solution, which defines the IP phone as an IT-managed entity and delivers unique and complete lifecycle management of end-user desktop devices.

Feature highlights:

- Native support for Microsoft Teams
- Graphical portrait 5.5" color touch screen (1280 x 720) with multi-lingual support
- GbE support
- USB port for USB headset
- Bluetooth 5.0 support

1.1.2 About the C455HD IP Phone

The C455HD IP phone is a high-end, native Microsoft Teams executive IP phone with a large, color 5" touch screen, integrated Bluetooth and Wi-Fi, and optional connectivity to a color touch screen Expansion Module (sidecar).

Feature highlights:

- Full duplex speakerphone and headset connectivity
- Graphical 5" color capacitive touch screen (1280 X 720 resolution)
- Multi-lingual support
- Dual GbE support
- PoE or external power supply
- USB port for USB headset
- Applicable to part number **C455HD-DBW**:
  - Integrated Bluetooth and Wi-Fi (contact your local AudioCodes representative for more information about regional availability of Wi-Fi / Bluetooth)
  - Optional Expansion Module support with a graphical 5" color capacitive touch screen, 480 X 854 resolution (the Expansion Module is purchased separately)

1.1.3   About the C450HD IP Phone

The C450HD IP phone features a 5" color capacitive 1280 x 720 resolution touch screen, integrated Bluetooth and Wi-Fi, and optional connectivity to a color touch screen expansion module.

The phone can optionally operate as a Microsoft SIP Gateway phone (recommended).

Feature highlights:

- Full duplex speakerphone and headset connectivity
- Graphical 5" color capacitive touch screen (1280 X 720 resolution)
- Multi-lingual support
- Dual GbE support
- PoE or external power supply
- USB port for USB headset
- Optional integrated Bluetooth and Wi-Fi (contact your local AudioCodes representative for more information about regional availability of Wi-Fi / Bluetooth)
- Expansion module support

A single-click switchover between Microsoft Teams and Skype for Business enables customers to use the C450HD as a Microsoft Skype for Business phone.

1.1.4   About the C448HD IP Phone

The C448HD phone is a Microsoft Teams entry level/common area phone featuring a 5-inch, color 1280 x 720 resolution touch screen.

The phone can optionally operate as a Microsoft SIP Gateway phone (recommended).

Feature highlights:

- Full duplex speakerphone and headset connectivity
- Graphical 5" color touch screen (1280 X 720)
- Multi-lingual support
- Dual GbE support
- PoE or external power supply
- USB port for USB headset

1.1.6   About the C435HD IP Phone

The AudioCodes C435HD IP phones are Microsoft Teams-native entry level/common area phones designed to support the next generation of enterprise collaboration technologies with a large color LCD screen and full UC integration for the Native Microsoft Teams Online market. The phones can be managed by the Microsoft Teams & Skype for Business Admin Center. For more information, see here.

Feature highlights:

- Full duplex speakerphone and headset connectivity
- Color Screen 4.3": Graphic, 480x272 resolution, with multi-lingual support
- Multi-lingual support
- Full duplex speakerphone and headset connectivity
- Dual GbE support
- USB headset support
- PoE or external power supply

1.2   Specifications

The table below summarizes the software specifications of the C470HD, C455HD, C450HD and C448HD IP Phones for Microsoft Teams.

Table 1-1: Software Specifications

Feature	Details
Media Processing	▪ Voice Coders: G.711, G.729, G.722, SILK Opus ▪ Acoustic Echo Cancelation: G.168-2004 compliant, 64-msec tail length ▪ Adaptive Jitter Buffer ▪ Voice Activity Detection ▪ Comfort Noise Generation ▪ Ambient Noise Suppression (applies only to the C448HD and C450HD phones) ▪ Packet Lost Concealment ▪ RTP/RTCP Packetization (RFC 3550, RFC 3551), SRTP (RFC 3711)
Microsoft Teams phones feature set	▪ For a summarized list of features, see here. ▪ In addition, the phones feature the following: 　✓ Sign-in with Modern Authentication, IP phone policies (including sign-in as Common Area Phone (CAP)), lock/unlock phone, unlock with smart PIN, 802.1x Authentication, SSH access, HTTPS Proxy Server, LLDP/CDP 　✓ Incoming/outgoing P2P calls, PSTN calls, Regional Tone Settings, in-call controls via phone screen (mute, hold/resume, transfer, transfer to contacts, call park, call merge, end call, auto dismiss rate my call and call ended screens, Group Call Pickup), auto-dialing to call an extension, distinctive ringtone per call type, People app, add/remove 'Favorites', Delegates, E911, Visual Voicemail 　✓ Calendar and Presence (meeting details; Exchange calendar; contact pictures; Corporate Directory access), Meetings (one-click join; join Skype for Business meetings; meeting call controls [mute/unmute, hold/resume, hang up, add/remove participant, raise hand, live captions]) 　✓ Language Localization; Virtual Keyboard: QWERTY | Numeric, Global Network Banner, Dark Theme 　✓ Wi-Fi (C450HD, C455HD and C470HD), Bluetooth (C450HD, C455HD - applies to PNs **TEAMS-C455HD-DBW** and **TEAMS-C455HDPS-DBW**, C470HD), Better Together over Bluetooth (C450HD, C455HD, C470HD) incl. pairing with the Teams PC client and lock/unlock synchronization, VLANs 　✓ AudioCodes Device Manager (OVOC plugin), AudioCodes Redirect Server 　✓ Dumpstate option, Remote Logging (Syslog) / Device Diagnostics Logs, Android Debug Bridge (ADB) command-line tool

Feature	Details
Configuration / Management	▪ Microsoft Teams admin center (TAC) (Provisioning and Logging) ▪ AudioCodes Device Manager (OVOC plugin)
Debugging Tools	▪ Log upload to Microsoft server (certification for 3rd party Skype for Business clients) ▪ Remote logging via Syslog ▪ Diagnostic Data ▪ SSH Access ▪ Capturing the phone screen ▪ TCPdump ▪ Audio Debug recording logs ▪ Media logs (*.blog) ▪ Port mirroring network monitoring ▪ Remote Packet Capture network sniffer application
Localization Support	▪ Multi-lingual support: the language pack list is not yet final and is subject to modification.

C470HD Hardware	▪ Graphical portrait 5.5" color touch screen, 720 x 1280 resolution, with multi-lingual support
	▪ Wired connectivity:
	  ✓ Two RJ-45 [Gigabit Ethernet (GbE)] (10/100/1000BaseT Ethernet) ports for WAN and LAN
	  ✓ RJ-9 port (jack) for handset
	  ✓ USB port for USB headset
	  ✓ RJ-11 interface
	▪ Wireless connectivity:
	  ✓ Dual band 2.4GHz/5GHz 802.11b/g/n/ac
	  ✓ Wi-Fi supported protocol: 802.1X PEAP/TLS/TTLS/PWD
	  ✓ Integrated optional Bluetooth support (Currently supported at a Beta level)
	▪ Power:
	  ✓ DC jack adapter 12V
	  ✓ Power supply AC 100 ~ 240V
	  ✓ PoE Class 3: IEEE802.3af (optional)
	▪ Keys:
	  ✓ Hold
	  ✓ Mute
	  ✓ Transfer
	  ✓ Volume
	  ✓ Headset (including LED)
	  ✓ Speaker (including LED)
	  ✓ Back
	  ✓ Home

C455HD Hardware	▪ Five-inch color capacitive touch screen, 1280 x 720 resolution, with an intuitive user interface.
	▪ Wired connectivity:
	  ✓ Two RJ-45 [Gigabit Ethernet (GbE)] (10/100/1000BaseT Ethernet) ports for WAN and LAN
	  ✓ RJ-9 port (jack) for headset
	  ✓ RJ-9 port (jack) for handset
	  ✓ USB port for USB headset
	  USB white port - host port (for USB headset)

Feature	Details

	USB black port - device port (default) but it can be configured to host port (see the *device's UM-AM* for more information)
	✔ RJ-11 interface
	▪ Wireless connectivity (applies to PNs **TEAMS-C455HD-DBW** and **TEAMS-C455HDPS-DBW**):
	  ✔ Dual band 2.4GHz/5GHz, 802.11b/g/n Wi-Fi support
	  ✔ Wi-Fi supported protocols: WEP, WPA-PSK/WPA2-PSK and WPA/WPA2 Enterprise (802.1X) PEAP only
	▪ Integrated optional Bluetooth support for (applies to PNs **TEAMS-C455HD-DBW** and **TEAMS-C455HDPS-DBW**):
	  ✔ Bluetooth headsets
	  ✔ Microsoft Better Together for device pairing
	▪ Mounting:
	  ✔ Wall and desktop mounting options
	  ✔ One angle for desktop mount, another angle for wall mount
	▪ Power:
	  ✔ DC jack adapter 12V
	  ✔ Power supply AC 100 ~ 240V
	  ✔ PoE Class 3: IEEE802.3af (optional)
	▪ Keys:
	  ✔ VOICE MAIL message hotkey (including LED)
	  ✔ 4-way navigation button with OK key
	  ✔ MENU
	  ✔ REDIAL
	  ✔ HOLD
	  ✔ MUTE (including LED)
	  ✔ TRANSFER
	  ✔ VOLUME control key
	  ✔ HEADSET (including LED)
	  ✔ SPEAKER (including LED)
	  ✔ BACK
	  ✔ CONTACTS
	  ✔ AC key – for future use – currently used as home key

C450HD Hardware	▪ Five-inch color capacitive touch screen, 1280 x 720 resolution, with an intuitive user interface.
	▪ Wired connectivity:
	  ✔ Two RJ-45 [Gigabit Ethernet (GbE)] (10/100/1000BaseT Ethernet) ports for WAN and LAN
	  ✔ RJ-9 port (jack) for headset
	  ✔ RJ-9 port (jack) for handset
	  ✔ USB port for USB headset
	  USB white port – host port (for USB headset)
	  USB black port – device port (default) but it can be configured to host port (see the *C448HD and C450HD Teams Phone UM-AM* for more information)
	  ✔ RJ-11 interface
	▪ Wireless connectivity:
	  ✔ Dual band 2.4GHz/5GHz, 802.11b/g/n Wi-Fi support
	  ✔ Wi-Fi supported protocols: WEP, WPA-PSK/WPA2-PSK and WPA/WPA2 Enterprise (802.1X) PEAP only
	▪ Integrated optional Bluetooth support for:
	  ✔ Bluetooth headsets
	  ✔ Microsoft Better Together for device pairing

Feature	Details
	- Mounting: ✔ Wall and desktop mounting options ✔ One angle for desktop mount, another angle for wall mount - Power: ✔ DC jack adapter 12V ✔ Power supply AC 100 ~ 240V ✔ PoE Class 3: IEEE802.3af (optional) - Keys: ✔ VOICE MAIL message hotkey (including LED) ✔ 4-way navigation button with OK key ✔ MENU ✔ REDIAL ✔ HOLD ✔ MUTE (including LED) ✔ TRANSFER ✔ VOLUME control key ✔ HEADSET (including LED) ✔ SPEAKER (including LED) ✔ BACK (the 'x' key) ✔ CONTACTS
C448HD Hardware	- Five-inch color capacitive touch screen, 1280 x 720 resolution, with an intuitive user interface. - Wired connectivity: ✔ Two RJ-45 [Gigabit Ethernet (GbE)] (10/100/1000BaseT Ethernet) ports for WAN and LAN ✔ RJ-9 port (jack) for headset ✔ RJ-9 port (jack) for handset ✔ USB port for USB headset ✔ RJ-11 interface - Mounting: ✔ Wall and desktop mounting options ✔ One angle for desktop mount, another angle for wall mount - Power: ✔ DC jack adapter 12V ✔ Power supply AC 100 ~ 240V ✔ PoE Class 3: IEEE802.3af (optional) - Keys: ✔ VOICE MAIL message hotkey (including LED) ✔ 4-way navigation button with OK key ✔ MENU ✔ REDIAL ✔ HOLD ✔ MUTE (including LED) ✔ TRANSFER ✔ VOLUME control key ✔ HEADSET (including LED) ✔ SPEAKER (including LED) ✔ BACK (the 'x' key) ✔ CONTACTS
C435HD Hardware	**Color Screen** 4.3": Graphic, 480x272 resolution, with multi-lingual support - Connectors interfaces: ✔ 2 x RJ-45 ports (10/100/1000BaseT Ethernet) for WAN and LAN (GbE support)

Feature	Details
	✓ RJ-9 port (jack) for headset ✓ RJ-9 port (jack) for handset ✓ USB port for USB headset. Note that C435HD-R (TEAMSC435HD-R) is a PoE Class 2 device (also when connecting a standard USB headset). If used with a loud USB speakerphone, an external power supply must be used. For more information, contact AudioCodes. ✓ RJ-11 interface for DHSG ▪ Mounting: ✓ Wall and desktop mounting options ✓ One angle for desktop mount, another angle for wall mount ▪ Power: ✓ DC jack adapter 12V ✓ Power supply AC 100 ~ 240V ✓ PoE Class 2: IEEE802.3af (optional) ▪ Keys: ✓ Hold ✓ Mute ✓ Transfer ✓ Volume ✓ Headset (including LED) ✓ Speaker (including LED) ✓ Back ✓ Home

1.3   AudioCodes IP Phones for Microsoft Teams

The table below lists the AudioCodes IP Phones for Microsoft Teams.

Table 1-2: AudioCodes IP Phones for Microsoft Teams

Part Number	Product Description
TEAMS-C435HD-R	Teams C435HD IP Phone PoE GbE, black
TEAMS-C435HDPS-R	Teams C435HD-R IP-Phone PoE GbE with an external power supply black
TEAMS-C448HD	Teams C448HD IP Phone PoE GbE, black
TEAMS-C450HD	Teams C450HD IP Phone PoE GbE, black
TEAMS-C470HD	Teams C470HD Total Touch IP Phone PoE GbE
TEAMS-C470HD-DBW	Teams C470HD Total Touch IP Phone PoE GbE with integrated Bluetooth and Dual Band Wi-Fi
TEAMS-C450HD-DBW	Teams C450HD IP Phone PoE GbE black, with integrated Bluetooth and Dual Band Wi-Fi
TEAMS-C450HD-BW	Teams C450HD IP Phone PoE GbE black, with integrated Bluetooth and Wi-Fi
TEAMS-C448HDPS	Teams C448HD IP Phone PoE GbE black, with an external power supply black
TEAMS-C450HDPS	Teams C450HD IP Phone PoE GbE black, with an external power supply black
TEAMS-C470HDPS	Teams C470HD Total Touch IP Phone PoE GbE with an external power supply

Part Number	Product Description
TEAMS-C470HDPS-DBW	Teams C470HD Total Touch IP Phone PoE GbE with integrated Bluetooth, Dual Band Wi-Fi and an external power supply
TEAMS-C450HDPS-DBW	Teams C450HD IP Phone PoE GbE with integrated Bluetooth, Dual Band Wi-Fi and an external power supply black
TEAMS-C450HDPS-BW	Teams C450HD IP Phone PoE GbE with integrated Bluetooth and Wi-Fi and an external power supply, black
TEAMS-C455HD	Teams C455HD IP-Phone PoE GbE black
TEAMS-C455HD-DBW	Teams C455HD IP-Phone PoE GbE black with integrated BT and Dual Band Wi-Fi
TEAMS-C455HD-DBW-TAA	Teams C455HD TAA IP-Phone PoE GbE black with integrated BT and Dual Band Wi-Fi
TEAMS-C455HDPS	Teams C455HD IP-Phone PoE GbE black with an external power supply black

2 Version 1.19.705

> **Note:**
> - Version 1.19.705 includes Microsoft Teams Version **2024011003** (a.k.a. **U3E**).
> - See also <u>here</u> for What's New in Microsoft's Teams Devices.

2.1 What's New in Version 1.19.705

> **Note:**
> - Version 1.19.705 is available for phones that have version 1.19.456 or earlier. Microsoft TAC (Teams admin center) will offer any phone with version 1.19.456 or earlier, to update to version 1.19.705.
> - Customers should not upgrade to version 1.19.705 from versions 1.19.516, 1.19.584 or 1.19.642.
>   Doing so will create a mismatch in Microsoft apps (incorrect combination of Teams and Customer Portal apps). To safeguard the process, AudioCodes will not share version 1.19.705 and it will be offered only via Microsoft TAC to phones with version 1.19.456 or earlier. If there's a special need, contact the IP Phone R&D Support team.

■ Version 1.19.705 is a new intermediate version before the upcoming Android OS12 release. Phones with version 1.19.456 or earlier must be updated to version 1.19.705 before they can proceed to the pending release of Android OS12.

> **Migration to Android OS12 – important note:**
> - Phones with version 1.19.584 or later (including version 1.19.642) do not need to migrate to version 1.19.705 in order to proceed to OS12.
> - Customers will be able to upgrade phones from OS9 to OS12 from version 1.19.456 as well. However, using version 1.19.584 or later, the phone will not be restored to its default settings as a result of the upgrade.
> - Applies to the C435HD, C455HD and C470HD phone models.
> - Inapplicable to the C448HD and C450HD phone models.

■ New Microsoft apps:
  - Microsoft Teams app 2024011003 (a.k.a. U3E)
  - Company Portal app 5484
  - Admin Agent 503 with bug fixes.

■ Customers who update to version 1.19.705 from version 1.19.456 or later should refer to <u>Previous Releases</u> to see the new features and fixes that were added.

2.2 Resolved Limitations in Version 1.19.705

2.2.1 Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.705.

Table 2-1: Resolved Teams Application Limitations in Version 1.19.705

Incident	Description
-	-

2.2.2 Device

Here are the device limitations that have been resolved in Version 1.19.705.

Table 2-2: Resolved Device Limitations in Version 1.19.705

Incident	Description
IPPAN-11324	User-loaded certificates cannot be installed and verified to authenticate with Microsoft Teams.
IPPAN-11139	[C435HD] The RJ9 analog headset malfunctions after the phone is rebooted. The issue will be fixed in the next version release.
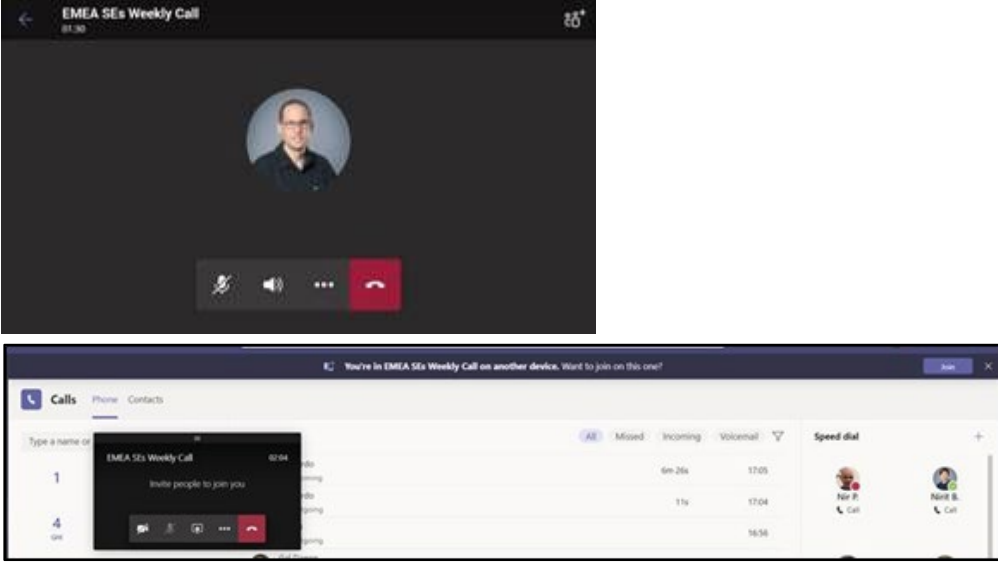
2.3 Known Limitations in Version 1.19.705
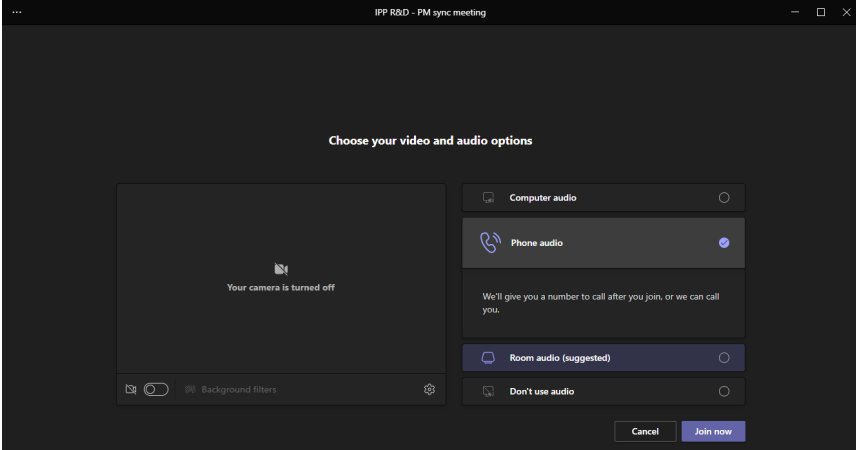
2.3.1 Teams Application

Here are the known Teams application limitations in Version 1.19.705.

Table 2-3: Known Teams Application Limitations in Version 1.19.705

Incident	Description
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
IPPAN-5082	When using right-to-left languages (Hebrew, for example), the soft dial pad and displayed dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.

Incident	Description
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD phone in this version release. However: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) **Note:** ▪ When C435HD is used as a CAP, 'Voice Mail' is supported only when 'Advanced calling' is enabled.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).

Incident	Description
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5086	[C435HD] It's impossible to delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.
IPPAN-10683	[C455HD] On rare occasions, the C455HD phone's sidecar might not function after rebooting the device. Users can use the 'back' or 'menu' key to recover it.

2.3.2   Device

Here are the known device limitations in Version 1.19.705.

Table 2-4: Known Device Limitations in Version 1.19.705

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).

Incident	Description
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 secs occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume increases and decreases during playback.
IPPAN-8981	[Phone lock] After releasing the phone lock, if the user regrets the action and uses the 'back' key, the keyboard is not displayed the next time the user tries to unlock. The issue will be fixed in the next release.
IPPAN-8960	[SCEP] The phone obtains device.crt whose signature algorithm is sha256 from the NDES server and cannot successfully authenticate 802.1x TLS. The issue will be fixed in the next version release.
IPPAN-11807	Ring volume cannot be adjusted in a Call Transfer phase.
IPPAN-11834	Speaker gain is a bit high when it is set to minimum.

3   Previous Releases

3.1   Version 1.19.642

> **Note:**
> - Version 1.19.642 includes Microsoft Teams Version **2024011601** (a.k.a. **U3C2**).
> - See also here for What's New in Microsoft's Teams Devices.

3.1.1   What's New in Version 1.19.642

- Version 1.19.642 is a new intermediate version before the upcoming Android OS12 release. Phones must be updated to this version before they can proceed to the pending release of Android OS12.

> **Note:**
> - Phones with version 1.19.584 do not need to move to 1.19.642 in order to proceed to OS12.
> - Customers will be able to upgrade phones from OS9 to OS12 from version 1.19.456 as well. However, using this version (1.19.642), the phone will not be restored to its default settings as a result of the upgrade.
> - Applies to the C435HD, C455HD and C470HD phone models.
> - Inapplicable to the C448HD and C450HD phone models.

- New Microsoft apps:
  - MicrosoftTeams-2024011601 (a.k.a. U3C2)
  - Company Portal 6061 (for improved sign-in)
  - Admin Agent 503 with bug fixes.
- Important note for customers who use Microsoft SCEP in their deployment:

> **Note:**
> - If you use Microsoft NDES server, you need to modify the 'security/SCEPServerURL' (which can be done via OVOC Device Manager):
>   https://<NDES server IP address/Hostname>/certsrv/mscep/mscep.dll/pkiclient.exe
> - For example: http://xxx.xxx.xxx.xxx/certsrv/mscep/mscep.dll/pkiclient.exe

3.1.1.1   Resolved Limitations in Version 1.19.642

3.1.1.1.1   Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.642.

Table 3-1: Resolved Teams Application Limitations in Version 1.19.642

Incident	Description
-	-

3.1.1.1.2 Device

Here are the device limitations that have been resolved in Version 1.19.642.

Table 3-2: Resolved Device Limitations in Version 1.19.642

Incident	Description
IPPAN-8248	When performing Call Transfer, the transfer ringing tone includes an annoying noise.
IPPAN-11586	On some occasions, phone upgrade from Device Manager fails, mistakenly specifying it's attempting to upgrade to the exact version (304 return code - same ETAG).
IPPAN-10533	The user cannot click on the Settings screen's 'Back' softkey after signing out from the device.
IPPAN-11404	On some occasions, when the phone is located behind a Proxy, it cannot upgrade from Microsoft Teams admin center (TAC).
IPPAN-11129	The phone certificate is generated with "Issued to" = placeholder instead of model name.
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.
IPPAN-11139	[C435HD] The RJ9 analog headset malfunctions after the phone is rebooted.
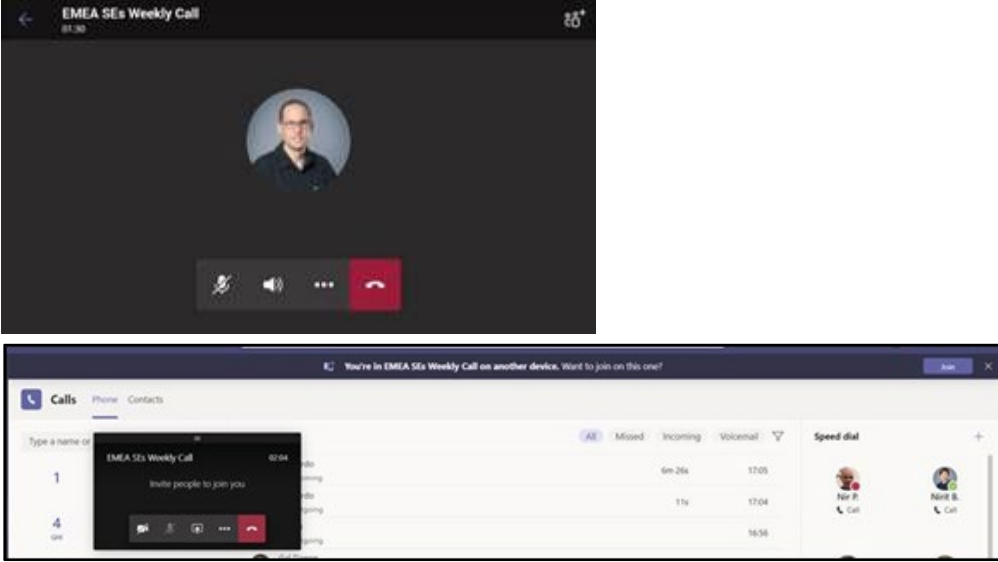
3.1.1.2 Known Limitations in Version 1.19.642
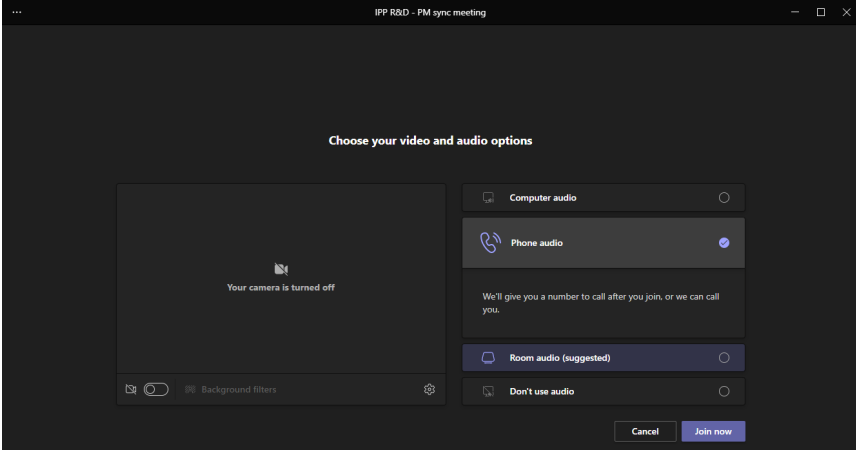
3.1.1.2.1 Teams Application

Here are the known Teams application limitations in Version 1.19.642.

Table 3-3: Known Teams Application Limitations in Version 1.19.642

Incident	Description
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
IPPAN-5082	When using right-to-left languages (Hebrew, for example), the soft dial pad and displayed dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.

Incident	Description
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD phone in this version release. However: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) **Note:** ▪ When C435HD is used as a CAP, 'Voice Mail' is supported only when 'Advanced calling' is enabled.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).

Incident	Description
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5086	[C435HD] It's impossible to delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.
IPPAN-10683	[C455HD] On rare occasions, the C455HD phone's sidecar might not function after rebooting the device. Users can use the 'back' or 'menu' key to recover it.

3.1.1.2.2 Device

Here are the known device limitations in Version 1.19.642.

Table 3-4: Known Device Limitations in Version 1.19.642

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).

Incident	Description
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 secs occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume increases and decreases during playback.
IPPAN-8981	[Phone lock] After releasing the phone lock, if the user regrets the action and uses the 'back' key, the keyboard is not displayed the next time the user tries to unlock. The issue will be fixed in the next release.
IPPAN-8960	[SCEP] The phone obtains device.crt whose signature algorithm is sha256 from the NDES server and cannot successfully authenticate 802.1x TLS. The issue will be fixed in the next version release.
IPPAN-11139	[C435HD] The RJ9 analog headset is malfunctioning after the phone is rebooted. The issue will be fixed in the next version release.
IPPAN-11807	Ring volume cannot be adjusted in a Call Transfer phase.
IPPAN-11834	Speaker gain is a bit high when it is set to minimum.

3.2   Version 1.19.584

> **Note:**
> - Version 1.19.584 includes Microsoft Teams Version **2023100602** (a.k.a. **U3C**).
> - See also here for What's New in Microsoft's Teams Devices.

3.2.1   What's New in Version 1.19.584

■ Version 1.19.584 is a new intermediate version before the upcoming Android OS12 release. Phones must be updated to this version before they can proceed to the pending release of Android OS12.

Important: Customers will be able to upgrade phones from OS9 to OS12 from version 1.19.456 as well. However, using this version (1.19.584), the phone will not be restored to its default settings as a result of this upgrade.
Applies to the C435HD, C455HD and C470HD phone models.
Inapplicable to the C448HD and C450HD phone models.

■ New Microsoft apps:

- MicrosoftTeams-2023100602 (a.k.a. U3C)
- Company Portal 5.0.5954.0
- Admin Agent 486

New Microsoft Teams App Features

Updated Teams app U3C 2023100602 with the following features:

■ Support added for reverse number lookup of PSTN contacts that were added via the Teams desktop app. For detailed information about this feature, see here.

■ [Applies to C450HD and C455HD phones] Performance of phones with the Expansion Module (sidecar) has improved. Contacts displayed on the sidecar screen are now displayed *without contacts' pictures*, improving device responsiveness and functioning. For more information, see here.
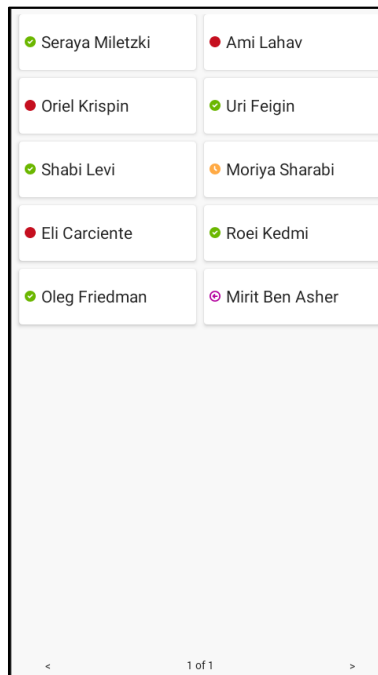
■ [Applies to all AudioCodes Android IP phones for Microsoft Teams] **Bosses can share their phone line with their assistants/delegates** to make and receive calls on

their behalf. The boss' experience has been further enhanced by letting them:

- View and join active calls handled by delegates as a boss
- Grant delegates permission to join active calls and resume calls

A delegate can:

- View shared call history per boss' line
- Switch between different lines easily
- View other delegates managing a boss
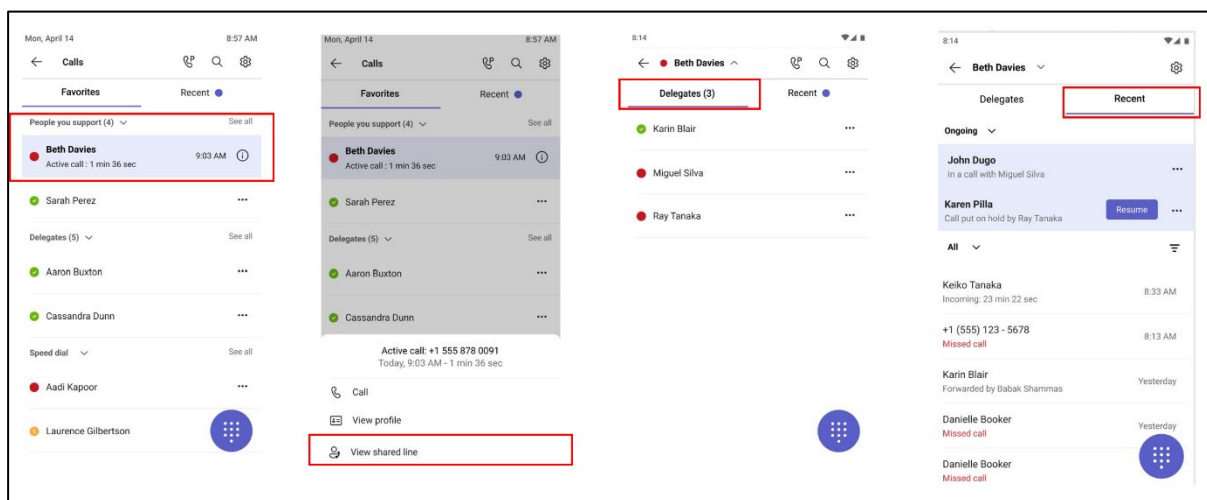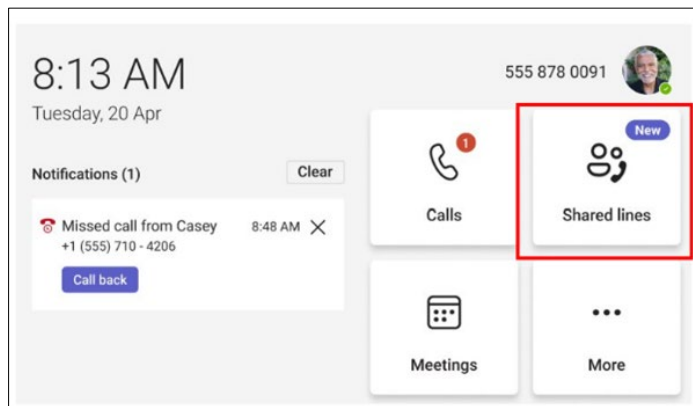
■ [Applies to all AudioCodes Android IP phones for Microsoft Teams] Microsoft's U3C version features new functionalities and improvements to the phone's user interface:

- Default tabs in the main screen were changed and their layout was changed:
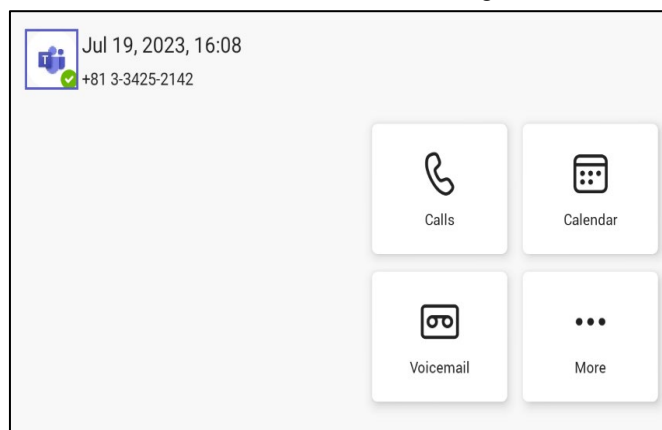
- The setting **Set your work location** has been added.
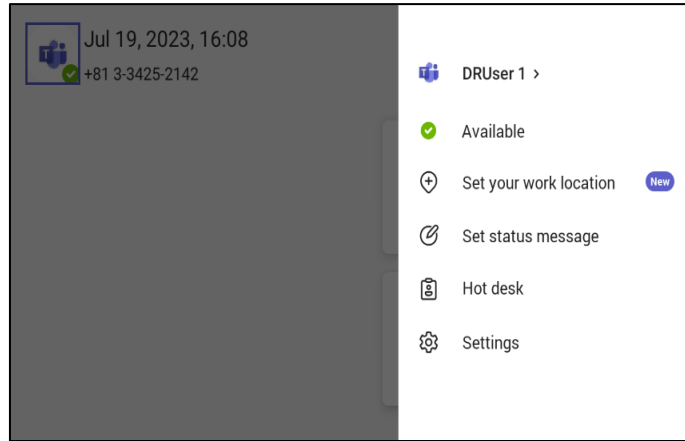
- The font size of the 'Favorites' and 'Recent' tabs in the Calls screen has been increased:
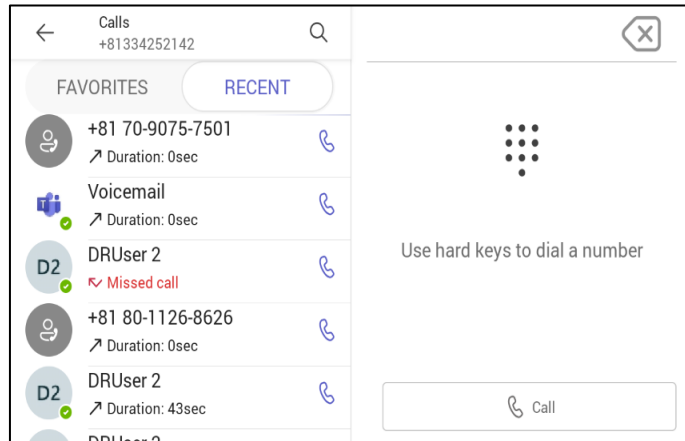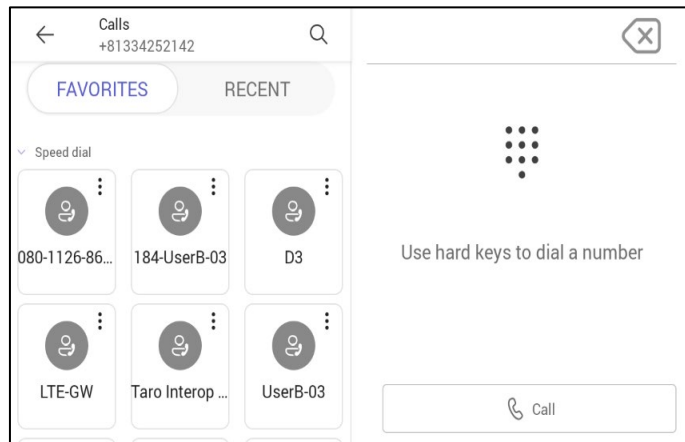
- Users can reorder and customize the tabs in the main screen to suit personal preference by pressing the **More…** option and then **Reorder**.
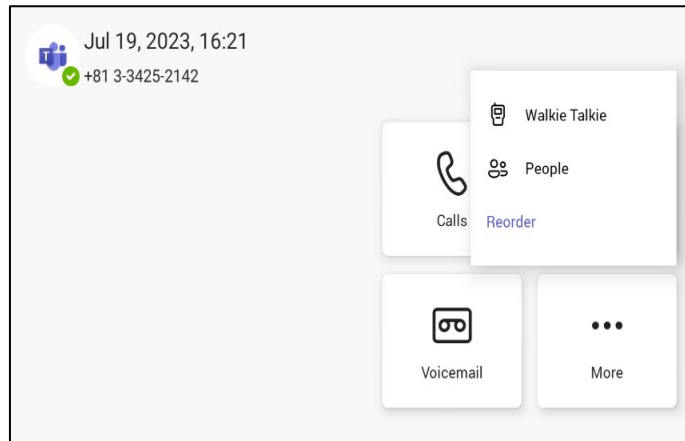
- Users can customize screen layout to suit personal preference. The figure below shows the screen before reordering:
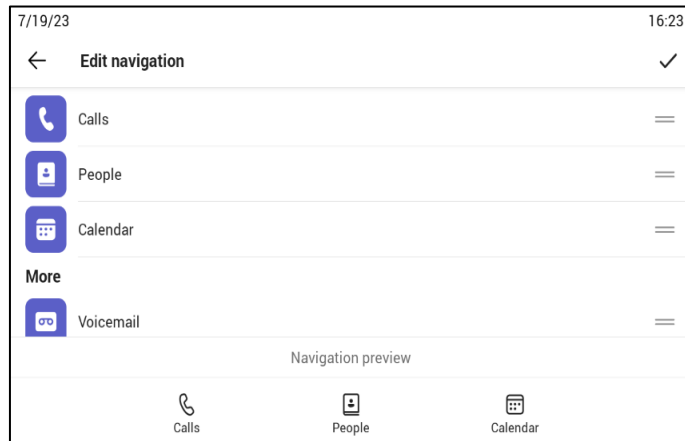
- The figure below shows the screen after reordering:
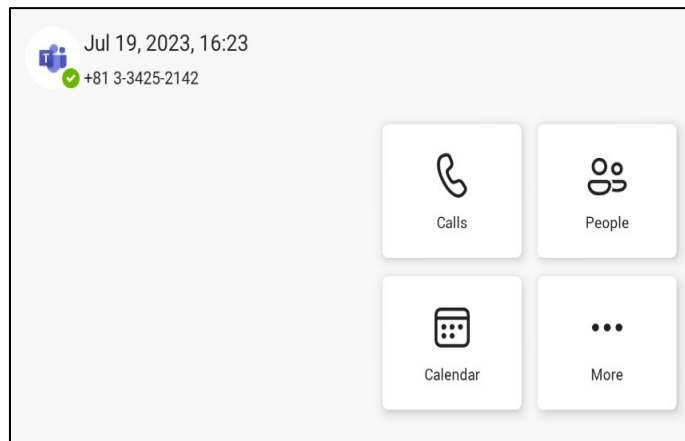
- The figure below shows layout changes that were made to the Delegates screen:
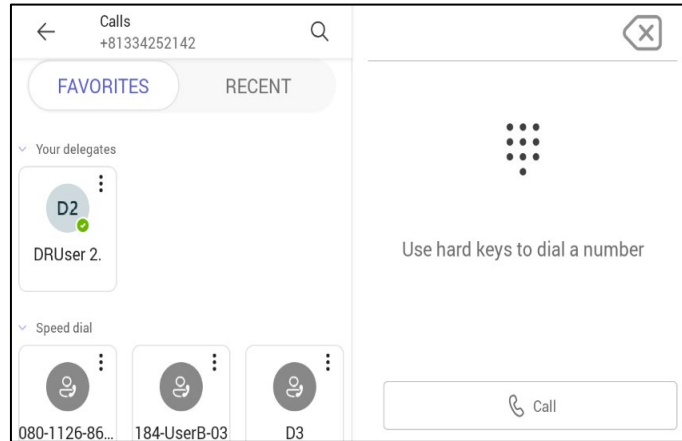
- The search screen's look and feel changed; the 'All' button and the 'People' button are more prominent now to enhance UX. ('People' is to search from the Directory; 'All' is for an overall search.)
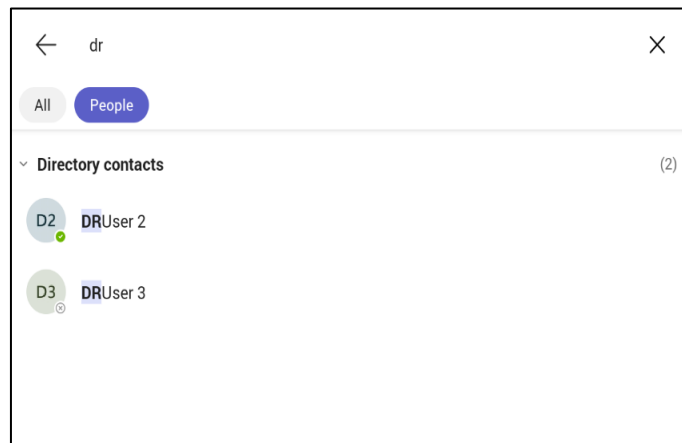
3.3   Resolved Limitations in Version 1.19.584

3.3.1   Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.584.

Table 3-5: Resolved Teams Application Limitations in Version 1.19.584

Incident	Description
IPPAN-7325	On rare occasions, when ending a call, the phone does not go back to idle (showing an incoming call). This may occur in some 'Call and regret' or 'Call reject' scenarios.

3.3.2 Device

Here are the device limitations that have been resolved in Version 1.19.584.

Table 3-6: Resolved Device Limitations in Version 1.19.584

Incident	Description
IPPAN-9951	The user is unable to perform a 'Factory reset' after user data is reset when factory data reset is blocked in the Microsoft Endpoint Manager (MEM) portal.
IPPAN-9952	The screen capture option is not disabled in the device when screen capture is blocked in the MEM portal.
IPPAN-9815	The mute LED does not switch off after restarting the Teams app from the Admin Debugging screen in the device's UI.
IPPAN-9486	The user is able to re-sign in without re-entering their password following a 'user data reset' action.
IPPAN-9548	After configuring a device via Microsoft TAC, the device Lock PIN is not updated on the phone but displayed as 'successful' in the TAC.
IPPAN-10255	[AudioCodes phones] An error popup is not displayed when the user enters an incorrect PIN in the 'Re-enter PIN' prompt, while creating a PIN Lock.
IPPAN-8037	The phone does not sign in when it is configured to Static IP and LLDP.
IPPAN-9890	[Device Lock] After rebooting the device, it performs a sign-out after four incorrect PIN locks instead of five.
IPPAN-10186	The device does not do DHCP in production VLAN.
IPPAN-9878	[C448HD and C450HD] The phone's volumes is not sufficiently high.
IPPAN-9958	[C470HD] The phone's screen occasionally goes black; the phone is fully functional but without the capability to view the screen.
IPPAN-9978	[C448HD and C450HD] Maximum volume is too low; it should be higher.
IPPAN-6663	[TalkBack] There is no option to change the TalkBack volume and the default is very low.
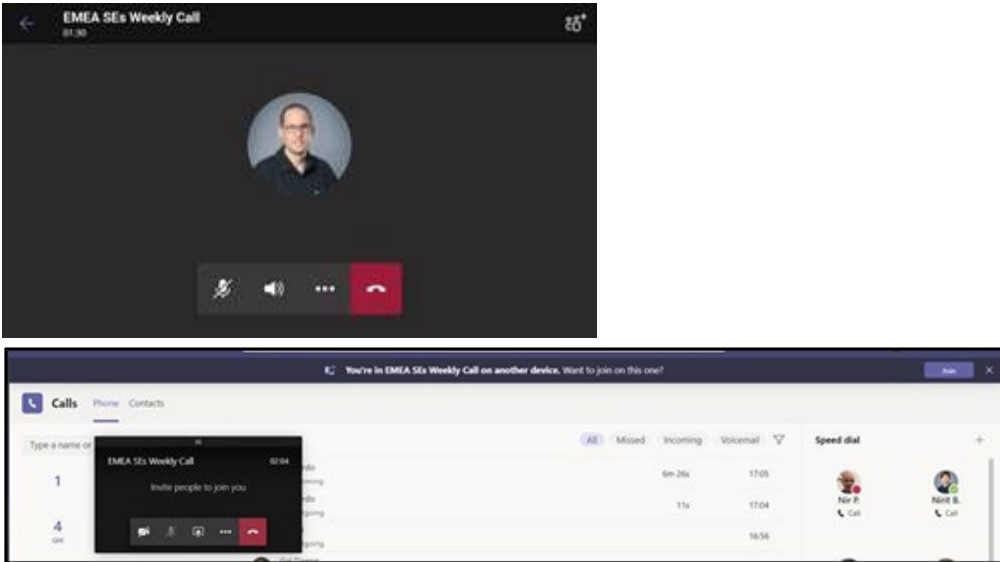
3.4 Known Limitations in Version 1.19.584
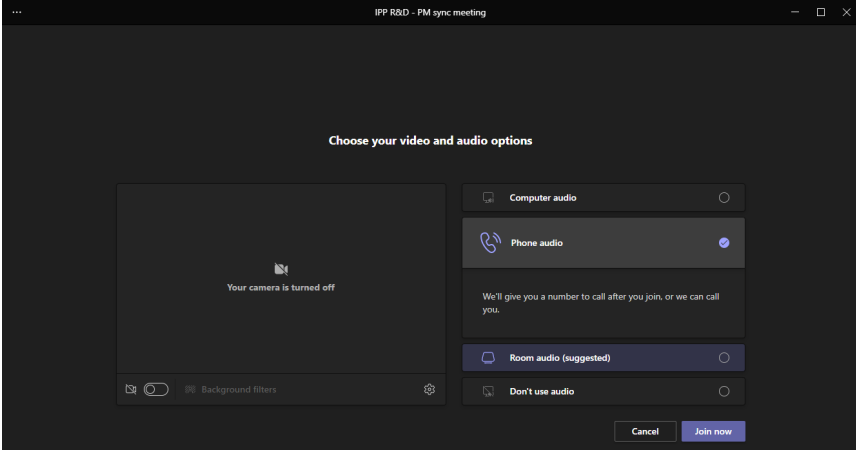
3.4.1 Teams Application

Here are the known Teams application limitations in Version 1.19.584.

Table 3-7: Known Teams Application Limitations in Version 1.19.584

Incident	Description
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
IPPAN-5082	When using right-to-left languages (Hebrew, for example), the soft dial pad and displayed dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.

Incident	Description
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD phone in this version release. However: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) **Note:** ▪ When C435HD is used as a CAP, 'Voice Mail' is supported only when 'Advanced calling' is enabled.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).

Incident	Description
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5086	[C435HD] It's impossible to delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.
IPPAN-10683	[C455HD] On rare occasions, the C455HD phone's sidecar might not function after rebooting the device. Users can use the 'back' or 'menu' key to recover it.

3.4.2   Device

Here are the known device limitations in Version 1.19.584.

Table 3-8: Known Device Limitations in Version 1.19.584

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.

Incident	Description
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 secs occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume increases and decreases during playback.
IPPAN-8981	[Phone lock] After releasing the phone lock, if the user regrets the action and uses the 'back' key, the keyboard is not displayed the next time the user tries to unlock. The issue will be fixed in the next release.
IPPAN-8960	[SCEP] The phone obtains device.crt whose signature algorithm is sha256 from the NDES server and cannot successfully authenticate 802.1x TLS. The issue will be fixed in the next version release.
IPPAN-11139	[C435HD] The RJ9 analog headset is malfunctioning after the phone is rebooted. The issue will be fixed in the next version release.

3.5   Version 1.19.516

> **Note:**
> - Version 1.19.516 includes Microsoft Teams Version **2023060906** (a.k.a. **U2C**).
> - See also here for Microsoft's What's New in Teams Devices.

3.5.1   What's New in Version 1.19.516

■ Version 1.19.516 is a new intermediate version before the upcoming Android OS12 release. Phones must be updated to this version before they can proceed to the pending release of Android OS12.

Important: Customers will be able to upgrade phones from OS9 to OS12 from the previous version release (1.19.456) as well. However, using this version (1.19.516), the phone will not be restored to its default settings as a result of this upgrade.
Applies to the C435HD, C455HD and C470HD phone models.
Not applicable to the C448HD and C450HD phone models.

■ **Admins can disable the device's USB port**.

Applies to AudioCodes' Teams phones C435HD, C448HD, C450HD, C455HD and C470HD.

This newly added functionality complies with the physical security requirements of some customers, specifically, customers who are in the government space.

Customer admins can disable a phone's USB port with the following new parameter available in the phone's .cfg configuration file:

admin/usb_enabled=1

admin/usb_enabled=0

The parameter can be configured via the AudioCodes One Voice Operations Center (OVOC) Device Manager module used to manage AudioCodes' Teams phones, as well as via SSH command.

The parameter is also available in the template which can be applied to multiple phones via the Device Manager.

After setting the parameter to 0, the phone cannot under any circumstances detect a plugged-in USB device. Additionally, all USB-related settings are removed from the phone's user interface.

■ New Microsoft apps:

- MicrosoftTeams-2023060906 (a.k.a. U2C)
- Company Portal 5.0.5882.0
- Admin Agent 463

■ Support has been added for **ringing via an RJ9 headset on the C435HD phone**. (Only the C435HD phone is currently supported).

The figure below shows the RJ9 headset port:

Admins will use parameter **audio/stream/ringer/0/audio_device** to specify which device will ring when a call comes in.

Two new configuration values have been added:

- **TYPE_HEADSET** (regular headset)
- **TYPE_RJ9_HEADSET**

■ AudioCodes Teams devices now provide a new **User data reset** option that is similar to factory reset except that the new option preserves predefined data after firmware upgrade. Admins can access the functionality in the phone's user interface by navigating to Device administration > Debugging > User data reset.

The figure below shows the C470HD phone's user interface.
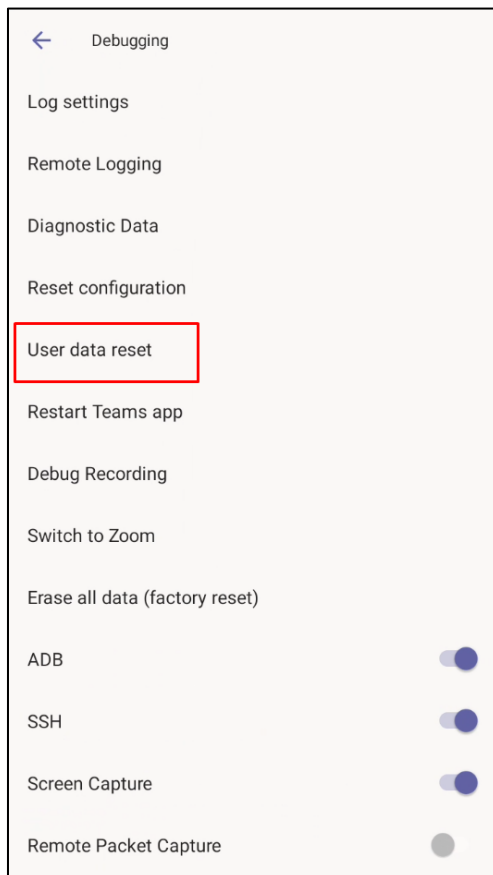
The figure below shows the C435HD | C448HD | C450HD | C455HD phone user interface.
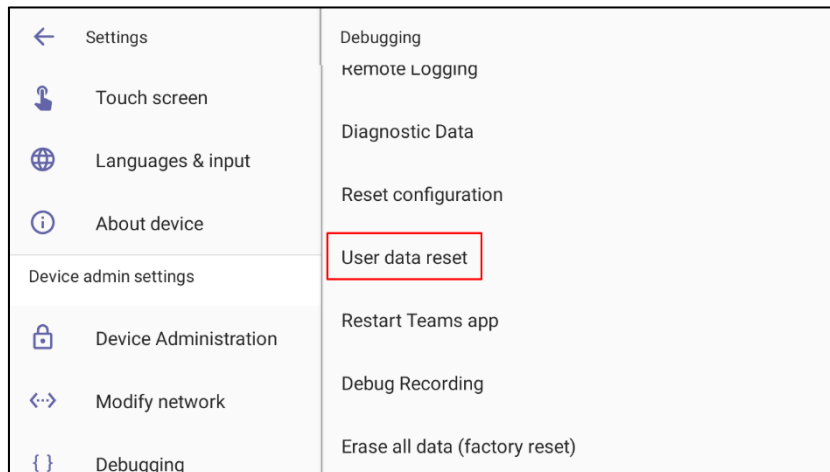
After 'User data reset', network settings are preserved.

The option enables the data to be retained to handle devices more efficiently in scenarios where the factory reset option is inappropriate.

- **All AudioCodes IP phones, including the C435HD, can operate in a Survivable Branch Appliance (SBA) environment**. Branch office survivability is aimed at providing limited calling functionality when the phone no longer has connectivity with the Teams cloud. Basic functionalities are:
  - Making PSTN calls
  - Receiving PSTN calls
  - Hold & Resume of PSTN calls

If a user attempts to make a Teams call and the internet connection is down, they'll be notified that they can try calling a phone number instead.
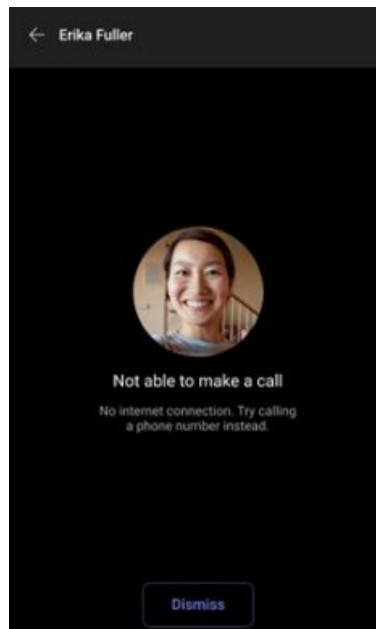
A 'No internet connection' indication is displayed suggesting that calling a phone number is available.
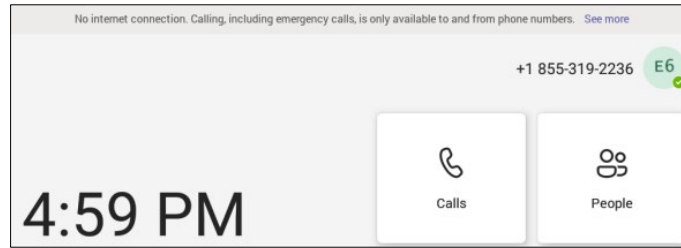
- **AudioCodes Android Device Utility** Version 1.1.39. Optimized functioning and performance. See the *Android Device Utility User's Manual* for more information.

- New capability has been added to **manually define the NTP server**, to comply with enterprise security requirements if those requirements preclude using DHCP Option 42.

  Manual configuration takes precedence over DHCP Option 42 | time servers.

  Two ways to manually define the NTP server are available:

  - Admins can define it in the phone's GUI using the newly added parameter 'Preferred NTP server'.
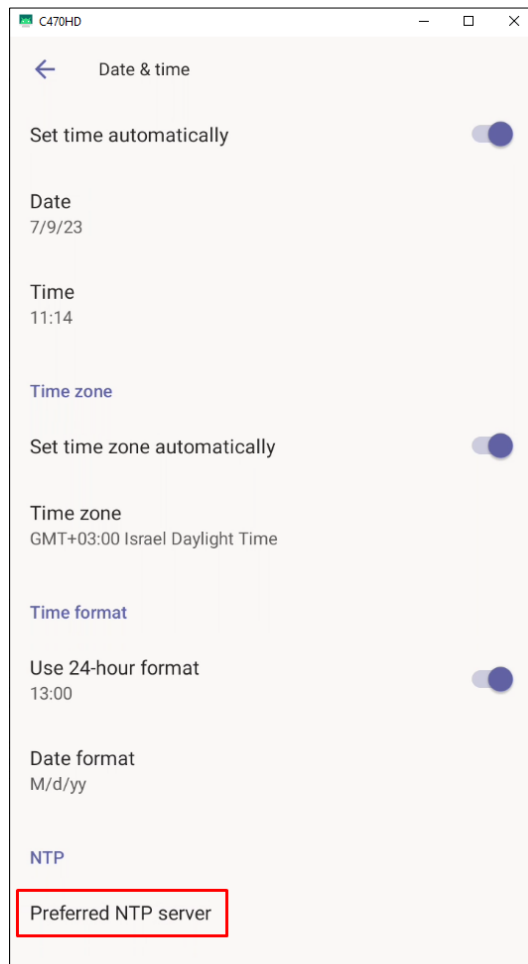
  - Admins can alternatively use the newly added parameter **date_time/ntp/server_address** in the phone's .cfg configuration file.

3.5.2   Resolved Limitations in Version 1.19.516

3.5.2.1   Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.516.

Table 3-9: Resolved Teams Application Limitations in Version 1.19.516

Incident	Description
IPPAN-7325	On rare occasions, when ending a call, the phone does not go back to idle (showing an incoming call). This may occur in some 'Call and regret' or 'Call reject' scenarios.

3.5.2.2   Device

Here are the device limitations that have been resolved in Version 1.19.516.

Table 3-10: Resolved Device Limitations in Version 1.19.516
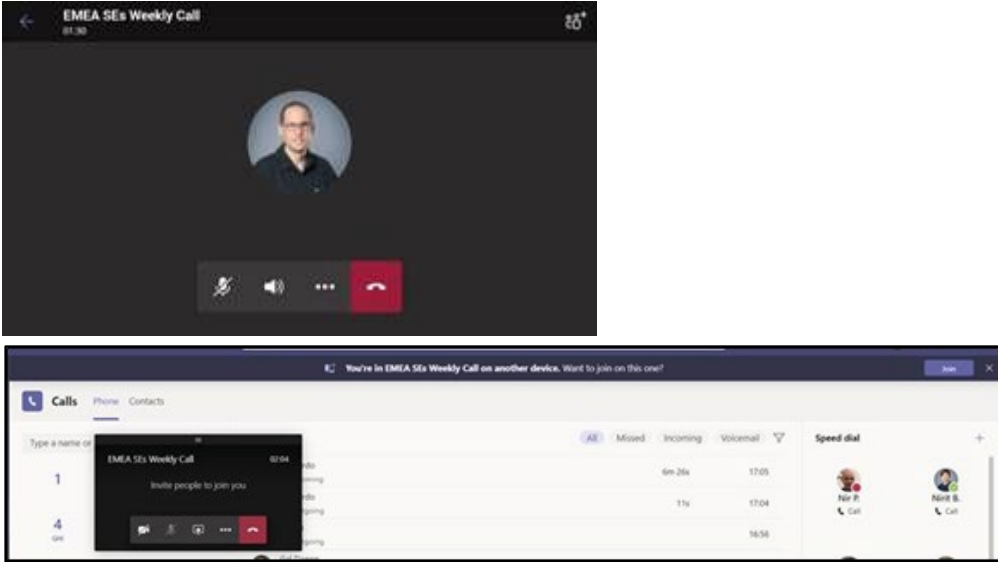
Incident	Description
IPPAN-9561	[C455HD + Expansion Module] On rare occasions, the sidecar screen stops functioning and shuts down, requiring the user to boot the device.
IPPAN-9450	[C470HD] The minimum volume level is too high.
IPPAN-9607	Administrator debugging > Restart Teams app doesn't work.
IPPAN-9239	[C455HD] When using the Wi-Fi interface, the device on rare occasions may malfunction.
IPPAN-9551	[C470HD] The home key mistakenly flashes in a red color due to a certificate failure issue when working with AudioCodes' Device Manager.
IPPAN-9545	[C455HD, C470HD, C435HD] On rare occasions, the device might freeze and require a reboot to recover.
IPPAN-9326	Firmware upgrade via Microsoft TAC can sometimes be very slow and on some occasions, the TAC incorrectly reports 'Firmware update failure'. This happens when the TAC directs the phone to Microsoft Blob and not to Azure Content Delivery Network (CDN).
IPPAN-9111	[C455HD] After a call is ended, the digits that will be pressed might on some occasions get 'cut-off' if they are pressed rapidly.
IPPAN-9165	The phone's dial tone switches from the handset to the speaker when quickly pressing and releasing the hook-switch button.
IPPAN-9120	[C455HD with USB headset] When connecting a USB headset before booting the phone, the handset doesn't function.
IPPAN-9191	[C470HD] On some occasions, the phone's screen goes black; the phone is fully functional but without the capability to view the screen.
IPPAN-9872	Using DHCP Option 160, parameter 'dhcp/provision_url' can be set to a value of up to 91 characters. This might create an issue with connecting to Live Cloud via DHCP Option 160 as it sometimes requires a long URL name.
IPPAN-9440	When rebooting the phone, the ring volume of the first incoming call is very low. From the second call on, it is normal.
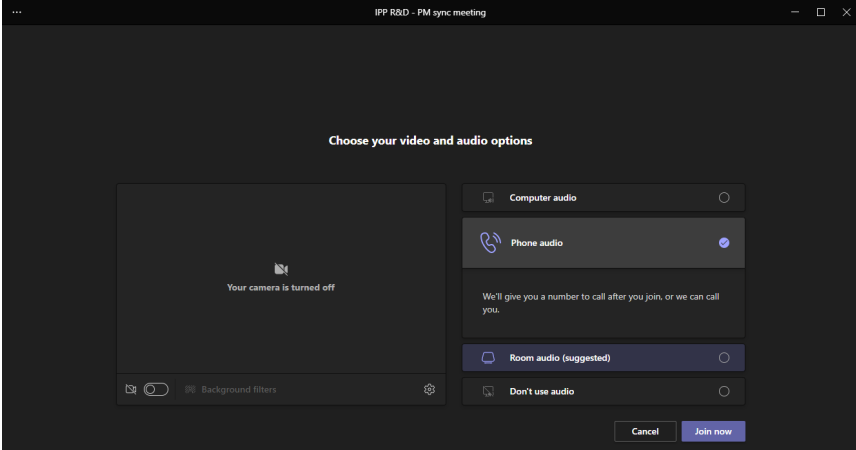
3.5.3 Known Limitations in Version 1.19.516

3.5.3.1 Teams Application

Here are the known Teams application limitations in Version 1.19.516.

Table 3-11: Known Teams Application Limitations in Version 1.19.516

Incident	Description
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
IPPAN-5082	When using right-to-left languages (Hebrew, for example), the soft dial pad and displayed dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD phone in this version release. However: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Queue ▪ CAP: Advanced calling ▪ CAP: Voice Mail ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown)
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5086	[C435HD] It's impossible to delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.

Incident	Description
Using the device with Microsoft U1-A app (2022020602) which is part of 1.19.456	
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7485	[911 Emergency Location] The application does not show the location information displayed in the Calling menu of the Teams app. This additional option does not exist for production users but only for TAP and testing users. Location is displayed on the main UI during a 933 call and heard by listening to the incoming audio. This is a roadmap feature for a future Teams app.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.

3.5.3.2 Device

Here are the known device limitations in Version 1.19.516.

Table 3-12: Known Device Limitations in Version 1.19.516

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 secs occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.

Incident	Description
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume increases and decreases during playback.
IPPAN-8981	[Phone lock] After releasing the phone lock, if the user regrets the action and uses the 'back' key, the keyboard is not displayed the next time the user tries to unlock. The issue will be fixed in the next release.
IPPAN-8960	[SCEP] The phone obtains device.crt whose signature algorithm is sha256 from the NDES server and cannot successfully authenticate 802.1x TLS. The issue will be fixed in the next version release.
IPPAN-8037	The phone encounters sign-in issues when configured with 'Static IP' and 'LLDP'.
IPPAN-8037	The phone does not sign in when it is configured to 'Static IP' and 'LLDP'.

3.6   Version 1.19.456

Note:
- Version 1.19.456 includes Microsoft Teams Version **2023020602**.
- See also here for Microsoft's What's New in Teams Devices.

3.6.1   What's New in Version 1.19.456

- Version 1.19.456 is an intermediate version before the upcoming Android OS12 release. Phones must be updated to this version before they can proceed to the pending release of Android OS12.

  Applies to the C435HD, C455HD and C470HD phone models.
  Not applicable to the C448HD and C450HD phone models.

- C450HD and C448HD phone models: Preparations have been made for smooth future switching from Microsoft Teams to the Microsoft SIP Gateway.

- Version 1.19.456 supports Live Teams Cloud deployments. It's mandatory for devices managed by Device Manager Live Teams Cloud (OVOC Version 8.2.1000_FIX1) to use this version.

- **The C435HD phone can operate in a Survivable Branch Appliance (SBA) environment.** Branch office survivability is aimed at providing limited calling functionality when the C435HD phone no longer has connectivity with the Teams cloud. Basic functionalities are:

  - Making PSTN calls
  - Receiving PSTN calls
  - Hold & Resume of PSTN calls

  If a user attempts to make a Teams call and the internet connection is down, they'll be notified that they can try calling a phone number instead.
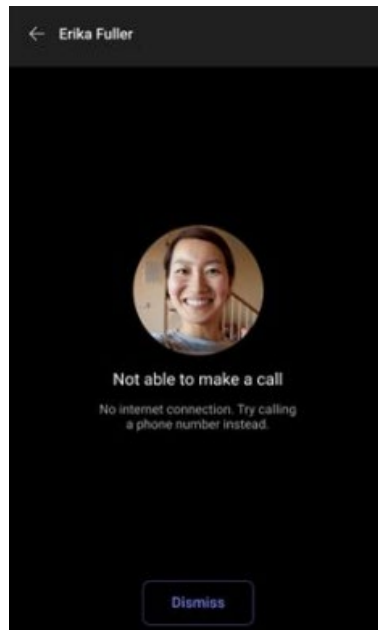
A 'No internet connection' indication is displayed suggesting that calling a phone number is available.
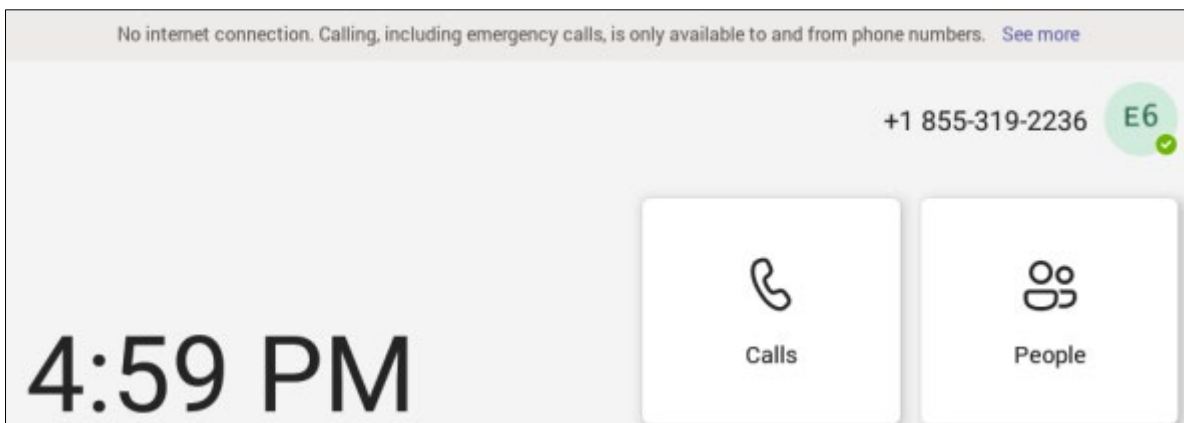
- **AudioCodes Android Device Utility**: If the enterprise IT admin doesn't know the device's IP address, they can nonetheless **connect to it using host name**, e.g., <model>-<mac> or C470HD-00908fc8b250 as shown in the figure below.
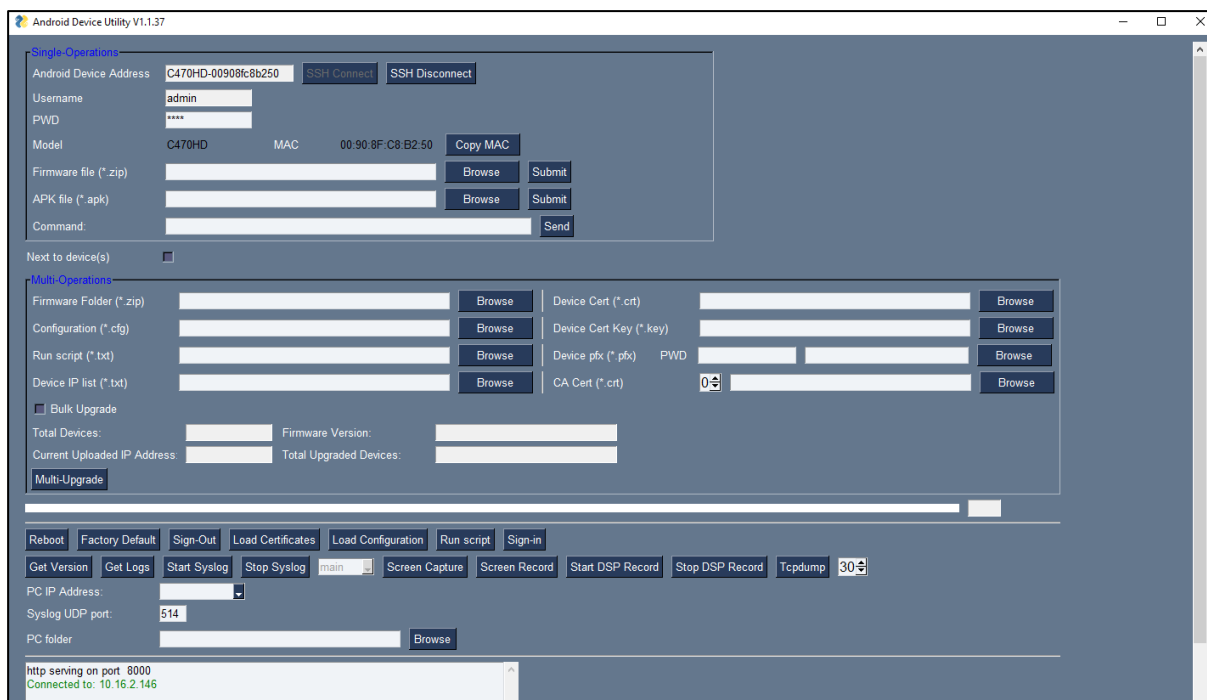
See also the new *Android Device Utility User's Manual* for more information.

3.6.2   Resolved Limitations in Version 1.19.456

3.6.2.1   Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.456.

> **Note:** Some limitations were already solved in previous Teams app versions but were mentioned under 'Known Limitations' due to error.

Table 3-13: Resolved Teams Application Limitations in Version 1.19.456

Incident	Description
IPPAN-4465	On some occasions, the sign-out action cannot be completed smoothly and requires a hard reboot of the phone.
IPPAN-5202	[C455HD with Expansion Module (sidecar)] When no speed dial is configured on the Expansion Module, the text displayed on the sidecar is in black color.
IPPAN-5324	[C435HD] The people search functionality does not function optimally.
IPPAN-6195	[C435HD] When pressing the 'Back' key from an existing call, the call still remains but there is no indication of the call and as a result, no option to go back to the Call screen.
IPPAN-5120	[C455HD or C450HD with Expansion Module (sidecar)] After removing a user from the sidecar list, the sidecar still displays the user.
IPPAN-7130	Occasionally, a mute that was left on when ending the previous call stays on for the next call.

Incident	Description
IPPAN-7274	On rare occasions, when updating the device with the U4 app, it results in very low volume.
IPPAN-7558	When creating an ad hoc meeting (by calling user A and then adding more users to the call) and using the 'Mute all' functionality, the 'Mic' softkey shows the incorrect state (the opposite of what it should be). The 'mute' hard key shows the correct state.
IPPAN-7475	[C435HD] The dial pad does not open when the user presses the 'speaker' key or picks up the handset. It does open when the user starts to dial.
IPPAN-7431	When disconnecting an emergency call (933 or 911) by using the 'End Call' softkey, the speaker LED remains illuminated and the user needs to press the speaker key once to bring the device to idle.

3.6.2.2 Device

Here are the device limitations that have been resolved in Version 1.19.456.

Table 3-14: Resolved Device Limitations in Version 1.19.456

Incident	Description
IPPAN-8807	[C455HD] The Proxy configuration is missing or incorrect when Link Layer Discovery Protocol (LLDP) is disabled.
IPPAN-8834	[Microsoft Government Community Cloud High (GCCH)] Firmware Update is successful on the device but sometimes in Microsoft TAC it is reported as unsuccessful.
IPPAN-8797	[C455HD + Expansion Module (sidecar)] The phone reboots due to a certain configuration that is pulled via the Company Portal application (to shut down the phone screen when the screensaver is enabled).
IPPAN-8777	[SCEP] When Simple Certificate Enrollment Protocol (SCEP) parameters are unchanged and the phone is rebooted, the phone again receives a new device.crt (certificate) from Microsoft's Network Device Enrollment Service (NDES) server. The phone shouldn't get the certificate again (after reboot) if SCEP parameters are not changed.
IPPAN-8094	[SCEP] The C455HD phone is not contacting the SCEP server to retrieve the certificate.
IPPAN-8959	[SCEP] The phone is not getting a CA certificate from the NDES server. The issue will be fixed in the next version release.
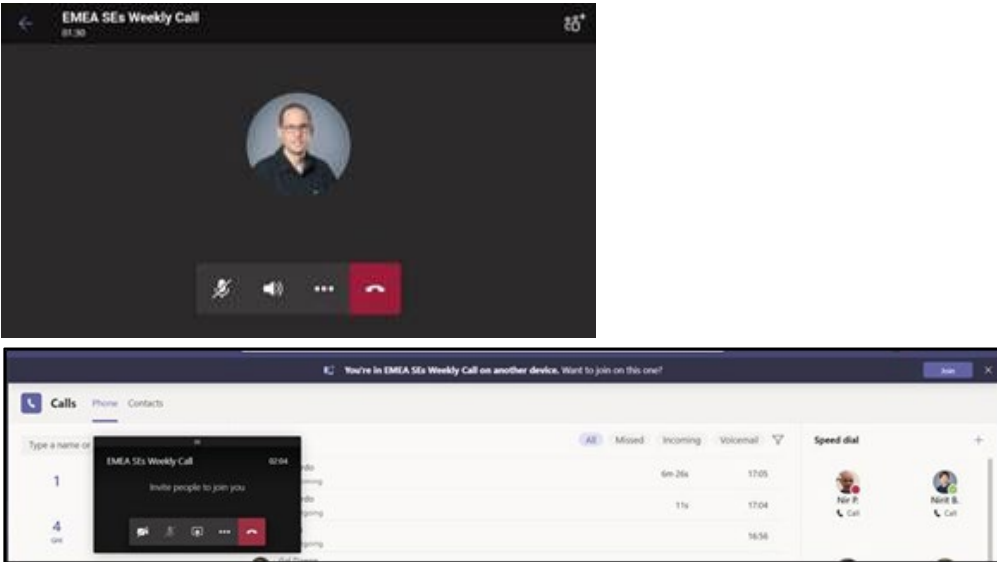
3.6.3 Known Limitations in Version 1.19.456
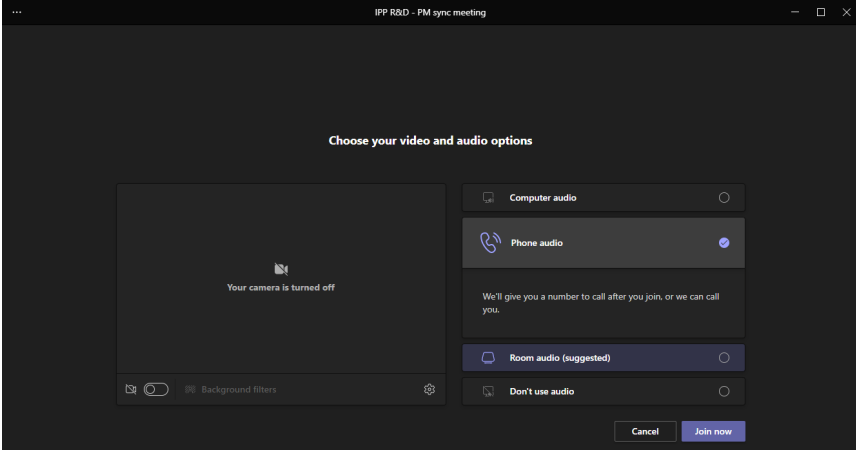
3.6.3.1 Teams Application

Here are the known Teams application limitations in Version 1.19.456.

Table 3-15: Known Teams Application Limitations in Version 1.19.456

Incident	Description
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.

Incident	Description
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
IPPAN-5082	When using right-to-left languages (Hebrew, for example), the soft dial pad and displayed dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD phone in this version release. However: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Queue ▪ CAP: Advanced calling ▪ CAP: Voice Mail ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown)
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5086	[C435HD] It's impossible to delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6089	In call queue, the phone of Agent-2 is not displaying the 'Call answered by Agent-1' message.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.

Incident	Description
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.
Using the device with Microsoft U1-A app (2022020602) which is part of 1.19.456	
IPPAN-7325	On rare occasions, when ending a call, the phone does not go back to idle (showing an incoming call). This may occur in some 'Call and regret' or 'Call reject' scenarios.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7485	[911 Emergency Location] The application does not show the location information displayed in the Calling menu of the Teams app. This additional option does not exist for production users but only for TAP and testing users. Location is displayed on the main UI during a 933 call and heard by listening to the incoming audio. This is a roadmap feature for a future Teams app.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.

3.6.3.2   Device

Here are the known device limitations in Version 1.19.456.

Table 3-16: Known Device Limitations in Version 1.19.456

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).

Incident	Description
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module (sidecar), there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 seconds occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume increases and decreases during playback.
IPPAN-8981	[Phone lock] After releasing the phone lock, if the user regrets the action and uses the 'back' key, the keyboard is not displayed the next time the user tries to unlock. The issue will be fixed in the next release.
IPPAN-8960	[SCEP] The phone obtains device.crt whose signature algorithm is sha256 from the NDES server and cannot successfully authenticate 802.1x TLS. The issue will be fixed in the next version release.
IPPAN-8037	The phone encounters sign-in issues when configured with 'Static IP' and 'LLDP'.

3.7   Version 1.19.341

> **Note:**
>
> - Version 1.19 includes Microsoft Teams Version **2022110803**.
> - Due to security changes made by AudioCodes in this version, when downgrading devices from version 1.19 to any previous release, restoring to defaults is mandatory; the downgrade might cause the device to enter recovery mode and require the user to perform 'Restore defaults' to move the phone out of recovery state.

3.7.1   What's New in Version 1.19.341

- **Microsoft Lightweight Calling Experience**. AudioCodes' phones now feature a simplified look and feel for incoming and outgoing calls, with improved performance. This new capability is enabled by default. It can be disabled from the phone screen (Teams Application Settings > Calling > Enable lightweight calling experience).

  The figure below left shows an incoming call screen (on the C470HD phone) while the figure below right shows the ongoing call screen (on the C470HD phone).
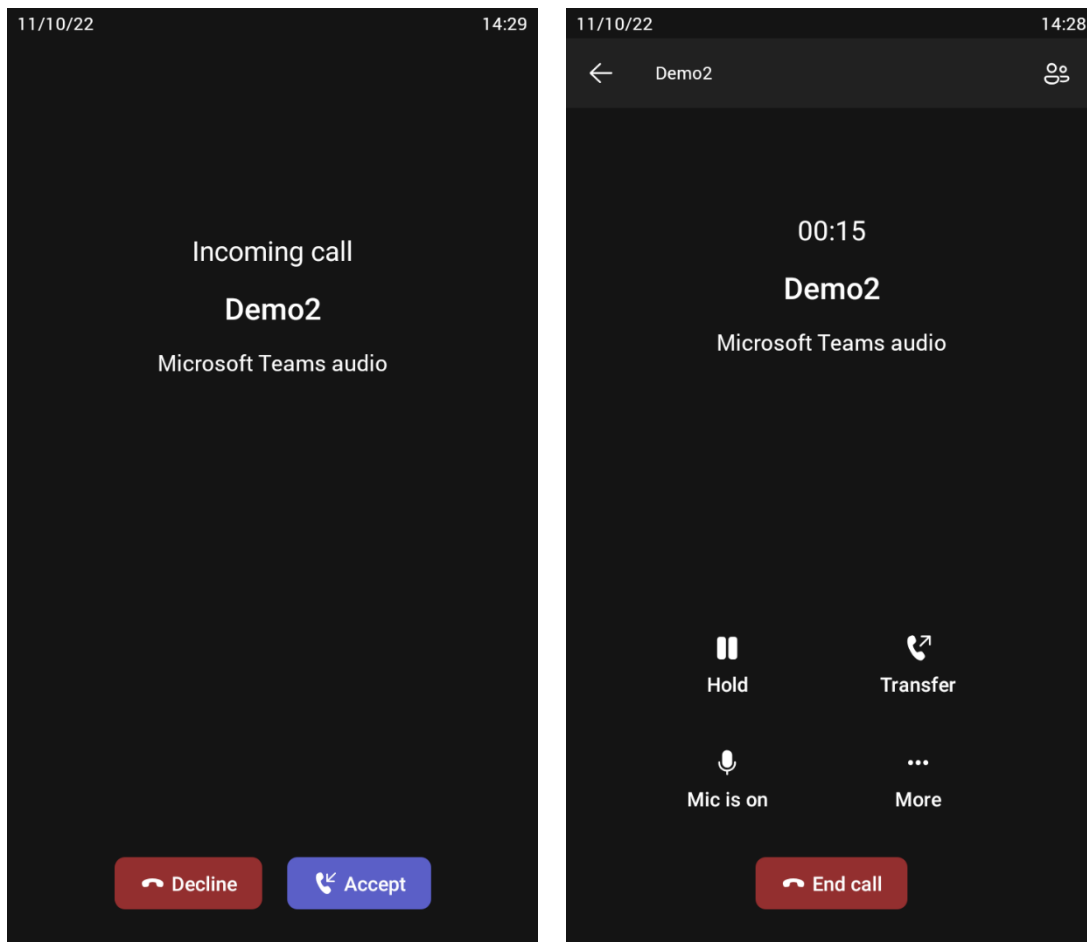
- All phones now support **a strong password check** in order to log in as Administrator. The feature strengthens security.

  Note that the default password:

  - Must be changed before accessing the device via SSH.

- Can be changed per device in the phone screen (the user first enters the default password and is then prompted to modify it to a more complete password) or via bulk configuration of multiple devices using Microsoft's TAC or AudioCodes' Device Manager.

  Criteria required for a strong password are provided. The password must:

  - be greater than or equal to 8 characters in length
  - contain one or more uppercase characters
  - contain one or more lowercase characters
  - contain one or more numeric values
  - contain one or more special characters

- The **voice quality of calls made via Device Duo** has been improved.

- **Automatic Gain Control (AGC) has been enhanced** to improve voice quality.

- [Feature in preview] The devices now support **certificate enrollment using Simple Certificate Enrollment Protocol** (SCEP) using Microsoft's Network Device Enrollment Service (NDES) server, thereby allowing device certificates and CA certificate provisioning to be scaled to multiple devices.

  After devices are provisioned with a SCEP-related configuration, they receive a CA certificate from the NDES, issue a Certificate Signing Request (CSR) to the NDES and receive a device certificate signed by the CA certificate (the one that the device received from NDES).

  Network administrators must configure the following three parameters:

  - security/SCEPEnroll/ca_fingerprint
  - security/SCEPEnroll/password_challenge
  - security/SCEPServerURL

  See the table in the device *UM-AM* for parameter descriptions.

- **Device certificates can be provisioned in .pfx format** (combining .crt and key). The following parameter values can consequently be configured in the devices' Configuration File:

  - /security/device_certificate_url = <url>/certificate.pfx
  - /security/device_private_key_url = NULL
  - security/device_certificate/password=<pfx password>

  The feature is also supported by AudioCodes' Android Phone Utility (see here for more information).

- [Feature in preview] [Requires an updated 1.19 build] [Applies to C455HD and C470HD] USB host mode is now supported as a feature in preview, i.e., the phone can be connected to a PC via USB allowing it to be used as the PC's audio device such as an external speaker.

  1. In the phone's Device Settings > USB, the user must first enable 'Audio Device Mode'.
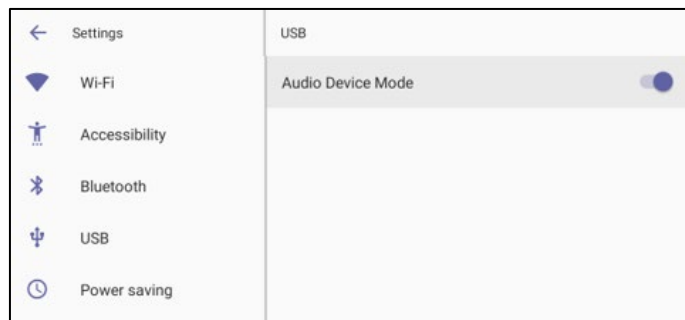
2.   The user then connects the USB cable from the phone to the PC.

> **Note:**
>
> • It is important to set the feature up *in this order* (first enable USB mode and then connect the USB cable).
>
> • If the user connects the cable before enabling the mode, they'll get this message:
>
>
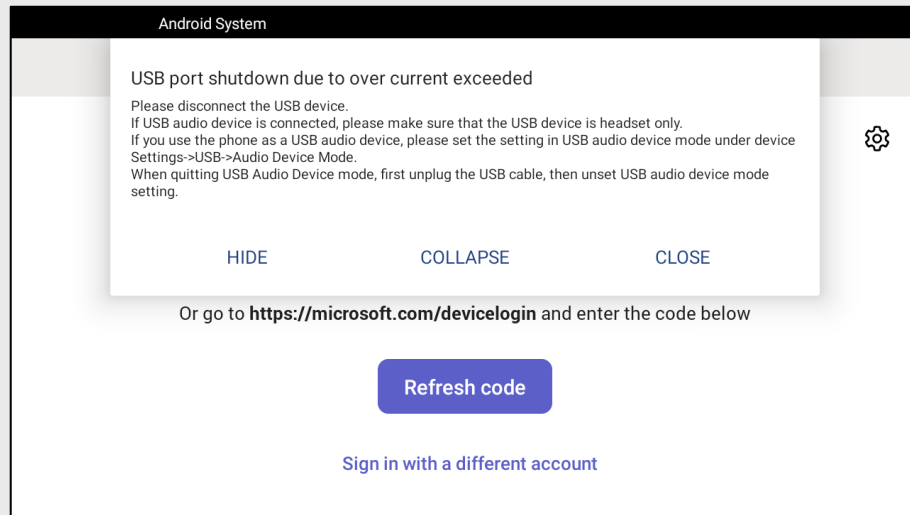
3.   On a PC running Windows OS, the user must navigate to Settings > Devices > Audio and make sure the phone is set to be the PC's default audio device.

4.   Media such as YouTube and Windows Media Player can be played via the phone speaker.

■   [Applies to Native Teams devices that support Wi-Fi] Network administrators can manually **configure Wi-Fi settings via the Configuration File** as an alternative method to configuring them via the phone's user interface. The Wi-Fi settings application on the device and the Configuration Database are synchronized. See the phone's *User's and Administrator's Manual* for more information.

■   In previous versions, if network VLAN mode 'network/lan/vlan/mode' was set to LLDP, the phone retrieved the VLAN and LLDP switch (for location purposes) from LLDP. Now, 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.

■   Microsoft Teams application's 'Report an issue' option can be triggered by simultaneously pressing the Vol up + Vol down keys. This can help to report an issue even if the application is stuck and does not allow the user to report the issue via the Application > Settings tab.

■   AudioCodes' *Android Phone Utility* management application has been updated to version 1.1.27, including a name change (it was previously *Teams IP Phone Utility*). Updates include:

•   A new drop-down allowing network administrators to take screenshots of the phone's Expansion Module (sidecar) (C450HD models or C455HD models). By default, the field indicates 'main', i.e., the phone's main screen.
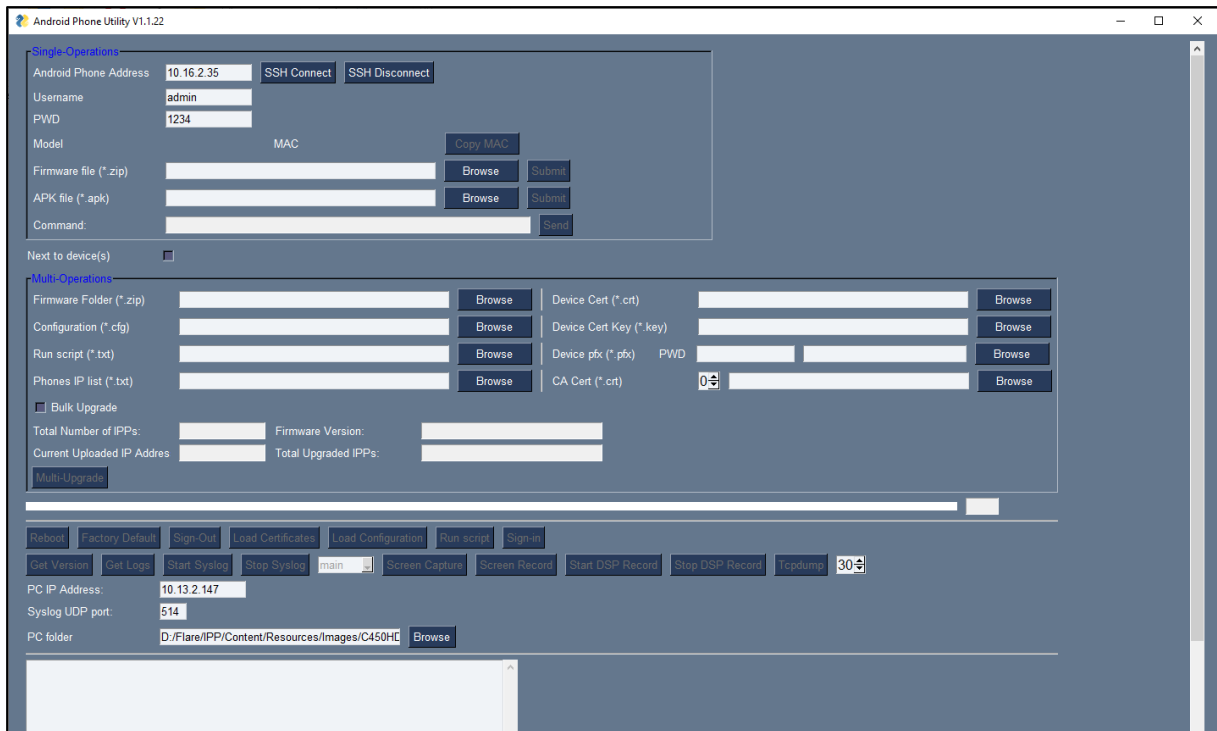
The figure below shows an example of a screenshot of the Expansion Module (sidecar).
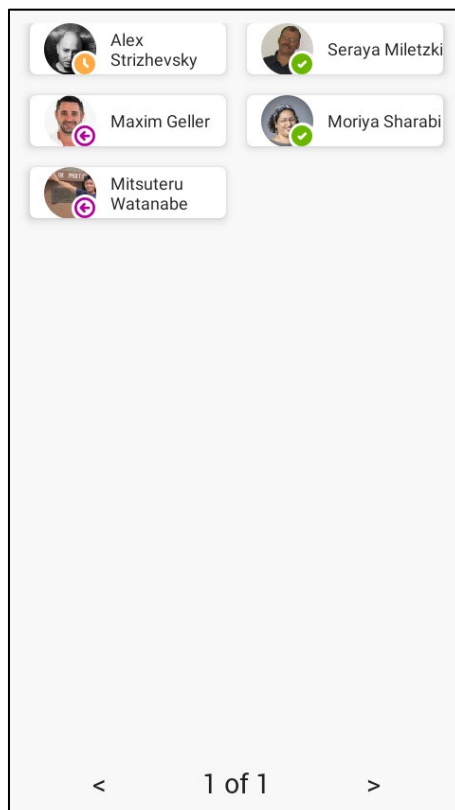
- Updated certificate loading mechanism: It's now performed using HTTP; it was previously performed using SCP. The HTTP port is 8000. Network administrators must make sure the port is not blocked by the organization's firewall.

- New support for **device certificates to be provisioned in .pfx format** (combining .crt and key) (see also <u>here</u>).

Device pfx (*.pfx)	PWD			Browse

3.7.2 Resolved Limitations in Version 1.19.341

3.7.2.1 Teams Application

Here are the Teams application limitations that have been resolved in Version 1.19.

Table 3-17: Resolved Teams Application Limitations in Version 1.19

Incident	Description
IPPAN-6739	Occasionally, when it's necessary to re-authenticate towards the device (e.g., due to MFA, or user password change) and the device stays for a while without re-authenticating towards it, it may enter an endless loop and the app may crash resulting in the user not able get a new refresh code. On some occasions, the phone may even display the recovery screen. Workaround: Try to repeatedly press the back key and sign in on the device or restore the device to its default settings.

3.7.2.2 Device

Here are the device limitations that have been resolved in Version 1.19.

Table 3-18: Resolved Device Limitations in Version 1.19

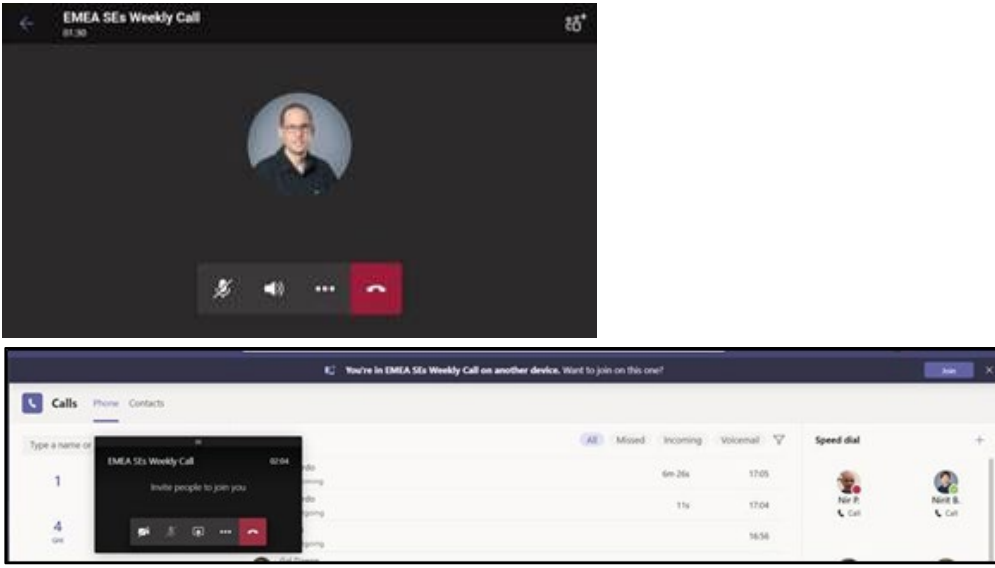| Incident	Description
IPPAN-6398	[C450HD/C448HD] An application storage leak may prevent the firmware upgrade process. If this occurs when trying to update version 1.14 to 1.17, contact AudioCodes support for assistance.
IPPAN-7281	[C435HD] Occasionally, after a restore to default (or first boot out of the box), the device loads the Teams application before the user selects the chosen language.
IPPAN-7176	The phone includes an incorrect 'Switch To Zoom' option. (This is not supported in version 1.17; it will be supported from version 1.18, for C470HD only).
IPPAN-7336	The user is not able to access the Company Portal permission screen after a Restore Defaults and while trying to sign into the device. This is due to missing Application Admin privileges.
IPPAN-6615	[C450HD] When switching the phone from Skype for Business to Teams, the 802.1x certificate is not copied to the Teams partition.
IPPAN-6528	Provisioned CAs are not used when 'Use system certificates' is chosen.
IPPAN-7300	**Language & Input** > **Voice input key** does not work when the toggle button is enabled.
IPPAN-7176	A 'Switch to Zoom' option appears for models that do not support the Zoom phone appliance.
IPPAN-7179	The 'Page soft key back button' option is not present in the 'Pico TTS page' settings.
IPPAN-6134	The 'back' arrow is missing in Japanese IME keyboard settings.

Incident	Description
IPPAN-6831	The 'Time' parameter in **Device Settings** > **Power saving** mode is displayed in 24-hour format even when 'Time Format' is set to 12-hour.
IPPAN-6800	[C435HD] The user is unable to search for contacts in the 'People' tab using the QWERTY keyboard.
IPPAN-6829	[C435HD] The keypad UI and navigation functionality is not functioning correctly in the Static IP settings screen.
IPPAN-2992	[C435HD] Screensaver clock settings is not highlighted when the user navigates through it.
IPPAN-5251	[C455HD with sidecar] The Lock screen sidecar color looks different to the main LCD screen.
IPPAN-6285	When using Japanese language, the "." (period) does not function.
IPPAN-5520	[C455HD, C470HD & C435HD] The device does not function well when using an EPOS USB headset.
IPPAN-6954	After a new device certificate has been provisioned (replacing the factory certificate), it cannot be seen in the phone screen so the user cannot select it.
IPPAN-5064	[C435HD] The phone displays an 'Incorrect PIN' message when dialing an emergency call from lock screen.
IPPAN-7815	[Device Duo] On some occasions, an incoming call is answered automatically (as a Device Duo call) immediately after ending a Teams meeting.
IPPAN-7844	[Device Duo] When using a dual account (i.e., signing in to the phone using Teams user and with Device Duo), "accept by PC" is mistakenly displayed on the phone screen.
IPPAN-6015	In the pre-join meeting screen, when selecting the 'speaker' icon and then configuring 'audio off', after connecting to the meeting the speaker is not in 'audio off' state.
IPPAN-7927	[HTTPS Proxy] On some occasions, when the phone gets its configuration from the Device Manager, the proxy configuration gets deleted. As a result, the phone becomes unusable; users aren't able to make or receive calls and the phone is displayed as 'offline' in the TAC.
IPPAN-7583	[HTTP Proxy] HTTP Proxy isn't accepted when entered using the phone's user interface; there was no support for using * as Wildcard and using the URL as domain name in addition to the IP address.
IPPAN-7390	Disconnecting an emergency call (933 or 911), the call does not completely disconnect. To put the phone back into idle state, you need to press the 'Speaker' hard key twice immediately after disconnecting the call.
IPPAN-7048	With 'Lightweight calling experience', there is no sync between the 'Switch audio route' softkey and the 'Speaker' key LED.
IPPAN-7049	With 'Lightweight calling experience', the device fails to initiate outgoing calls to a PSTN number.
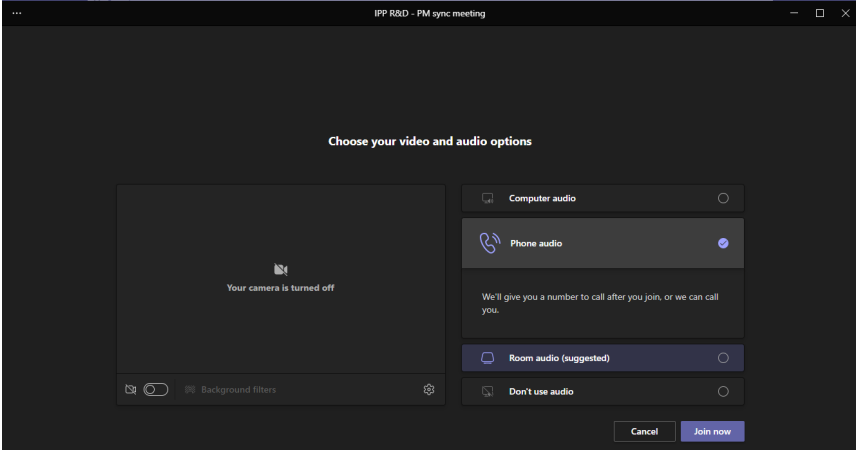
3.7.3   Known Limitations in Version 1.19.341

3.7.3.1   Teams Application

Here are the known Teams application limitations in Version 1.19.

Table 3-19: Known Teams Application Limitations in Version 1.19

Incident	Description
IPPAN-4465	On some occasions, the sign-out action cannot be completed smoothly and requires a hard reboot of the phone.
IPPAN-3752	[C450HD, Call Queue] The second agent is not notified when a call is received by the first agent (this is an Android OS 7 issue).
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
-	When using right to left languages (Hebrew, for example) the soft dial pad and presented dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.

Incident	Description
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD in this version release (Roadmap), though: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Queue ▪ CAP: Advanced calling ▪ CAP: Voice Mail ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Survivable Branch Appliance (SBA) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) (support pending in the next version release)
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5202 VSO 269091	[C455HD with Expansion Module (sidecar)] When no speed dial is configured on the Expansion Module (sidecar), the text displayed on the sidecar is marked black. The issue will be solved in an upcoming product release.
IPPAN-5324	[C435HD] The people search functionality does not function optimally. The issue will be solved in an upcoming product release.
IPPAN-6195	[C435HD] When pressing the 'Back' key from an existing call, the call still remains but there is no indication of the call and as a result, no option to go back to the Call screen.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.

Incident	Description
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5086	[C435HD] It's impossible to Delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6089	In call queue, the phone of Agent-2 is not displaying the 'Call answered by Agent-1' message.
IPPAN-5120	[C455HD or C450HD with Expansion Module (Sidecar)] After removing a user from the sidecar list, the sidecar still displays the user.
IPPAN-5535	When viewing the 'Favorites' tab, the last speed dial line is cut off.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.
Using the device with Microsoft U4-A app (from 2022110803) which is part of 1.19.341	
IPPAN-7325	On rare occasions, when ending a call, the phone does not go back to idle (showing an incoming call). This may occur in some 'Call and regret' or 'Call reject' scenarios.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7274	On rare occasions, when updating the device with the U4 app, it results in very low volume. Workaround: Restore the device to its default settings.
IPPAN-7130	Occasionally, a mute that was left on when ending the previous call stays on for the next call.
IPPAN-7558	When creating an ad hoc meeting (by calling user A and then adding more users to the call) and using the 'Mute all' functionality, the 'Mic' softkey shows the incorrect state (the opposite of what it should be). The 'mute' hard key shows the correct state.
IPPAN-7475	[C435HD] The dial pad does not open when the user presses the 'speaker' key or picks up the handset. It does open when the user starts to dial.
IPPAN-7485	[911 Emergency Location] The application does not show the location information displayed in the Calling menu of the Teams app. This additional option does not exist for production users but only for TAP and testing users. Location is displayed on the main UI during a 933 call and heard by listening to the incoming audio. This is a roadmap feature for a future Teams app.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call on hold' notification is missing.
IPPAN-7431	Disconnecting an emergency call (933 or 911) using the softkey 'End Call', the 'speaker' LED stays lit and the user needs to press the speaker key once to bring the device to idle.

3.7.3.2 Device

Here are the known device limitations in Version 1.19.

Table 3-20: Known Device Limitations in Version 1.19

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 seconds occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-6169	On rare occasions, the device may enter the recovery screen due to a Teams application loop of crashes. To recover from this state, the user must restore the device to default via the recovery options.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
IPPAN-7723	[C470HD] [Device Duo USB] The volume goes up and down during playback.
IPPAN-7507	[C455HD] On rare occasions, Wi-Fi cannot be enabled.

3.8   Version 1.17.764

⚠️ **Note:** Version 1.17.764 includes Microsoft Teams Version 2022062103.

3.8.1   What's New in Version 1.17.764

None

3.8.2   Resolved Limitations in Version 1.17.764

3.8.2.1   Teams Application

Here are the Teams application limitations that have been resolved in Version 1.17.764.

Table 3-21: Resolved Teams Application Limitations in Version 1.17.764

Incident	Description
-	-

3.8.2.2   Device

Here are the device limitations that have been resolved in Version 1.17.764.

Table 3-22: Resolved Device Limitations in Version 1.17.764

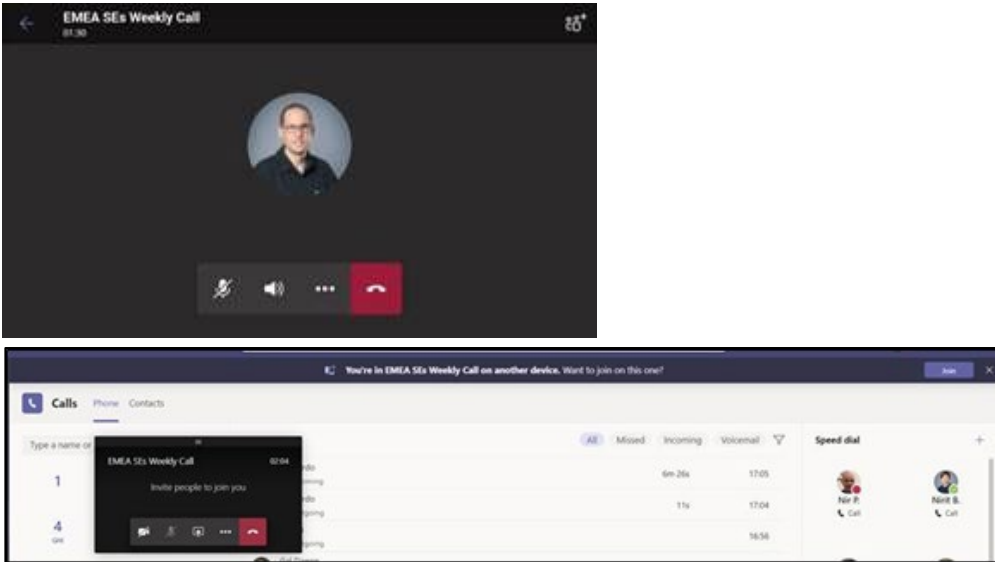| Incident	Description
IPPAN-6398	[C450HD/C448HD] An application storage leak may prevent the firmware upgrade process. If this occurs when trying to update version 1.14 to 1.17, contact AudioCodes support for assistance.
IPPAN-7281	[C435HD] Occasionally, after a restore to default (or first boot out of the box), the device loads the Teams application before the user selects the chosen language.
IPPAN-7176	The phone includes an incorrect 'Switch To Zoom' option. (This is not supported in version 1.17; it will be supported from version 1.18, for C470HD only).
IPPAN-7336	The user is not able to access the Company Portal permission screen after a Restore Defaults and while trying to sign into the device. This is due to missing Application Admin privileges.
IPPAN-6615	[C450HD] When switching the phone from Skype for Business to Teams, the 802.1x certificate is not copied to the Teams partition.
IPPAN-6528	Provisioned CAs are not used when 'Use system certificates' is chosen.
Using the device with Microsoft U4 app (from 20220907)	
IPPAN-7390	Disconnecting an emergency call (933 or 911), the call does not completely disconnect. To put the phone back into idle state, you need to press the 'Speaker' hard key twice immediately after disconnecting the call.
IPPAN-7048	With 'Lightweight calling experience', there is no sync between the 'Switch audio route' softkey and the 'Speaker' key LED.

Incident	Description
IPPAN-7049	With 'Lightweight calling experience', the device fails to initiate outgoing calls to a PSTN number.

3.8.3   Known Limitations in Version 1.17.764

3.8.3.1   Teams Application

Here are the known Teams application limitations in Version 1.17.764.

Table 3-23: Known Teams Application Limitations in Version 1.17.764

Incident	Description
IPPAN-4465	On some occasions, the sign-out action cannot be completed smoothly and requires a hard reboot of the phone.
IPPAN-3752	[C450HD, Call Queue] The second agent is not notified when a call is received by the first agent (this is an Android OS 7 issue).
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
-	When using right to left languages (Hebrew, for example) the soft dial pad and presented dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.

Incident	Description
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD in this version release (Roadmap), though: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Queue ▪ CAP: Advanced calling ▪ CAP: Voice Mail ▪ Music on Hold ▪ Better Together (over Bluetooth) ▪ Survivable Branch Appliance (SBA) ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) (support pending in the next version release)
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5202 VSO 269091	[C455HD with Expansion Module (sidecar)] When no speed dial is configured on the Expansion Module (sidecar), the text displayed on the sidecar is marked black. The issue will be solved in an upcoming product release.
IPPAN-5324	[C435HD] The people search functionality does not function optimally. The issue will be solved in an upcoming product release.
IPPAN-6195	[C435HD] When pressing the 'Back' key from an existing call, the call still remains but there is no indication of the call and as a result, no option to go back to the Call screen.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.

Incident	Description
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5086	[C435HD] It's impossible to Delete short (~1 second) voicemail messages.
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6089	In call queue, the phone of Agent-2 is not displaying the 'Call answered by Agent-1' message.
IPPAN-5120	[C455HD or C450HD with Expansion Module (Sidecar)] After removing a user from the sidecar list, the sidecar still displays the user.
IPPAN-5535	When viewing the 'Favorites' tab, the last speed dial line is cut off.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.
IPPAN-6739	Occasionally, when it's necessary to re-authenticate towards the device (e.g., due to MFA, or user password change) and the device stays for a while without re-authenticating towards it, it may enter an endless loop and the app may crash resulting in the user not able get a new refresh code. On some occasions, the phone may even display the recovery screen. Workaround: Try to repeatedly press the back key and sign in on the device or restore the device to its default settings.
IPPAN-5810	[C455HD with Expansion Module] Occasionally, the sidecar displays very large fonts and a yellow screen for a very short period and then it automatically corrects itself.
Using the device with Microsoft U4 app (from 20220907)	
IPPAN-7325	On rare occasions, when ending a call, the phone does not go back to idle (showing an incoming call). This may occur in some 'Call and regret' or 'Call reject' scenarios.
IPPAN-7324	After Phone A transfers Phone B to another party, when the transfer is established, Phone B displays the idle screen with 'Touch to return to the call' in the upper tab. The user must touch the tab to go back to the existing call.
IPPAN-7274	On rare occasions, when updating the device with the U4 app, it results in very low volume. Workaround: Restore the device to its default settings.
IPPAN-7130	Occasionally, a mute that was left on when ending the previous call stays on for the next call.
IPPAN-7558	When creating an ad hoc meeting (by calling user A and then adding more users to the call) and using the 'Mute all' functionality, the 'Mic' softkey shows the incorrect state (the opposite of what it should be). The 'mute' hard key shows the correct state.
IPPAN-7475	[C435HD] The dial pad does not open when the user presses the 'speaker' key or picks up the handset. It does open when the user starts to dial.

Incident	Description
IPPAN-7485	[911 Emergency Location] The application does not show the location information displayed in the Calling menu of the Teams app. This additional option does not exist for production users but only for TAP and testing users. Location is displayed on the main UI during a 933 call and heard by listening to the incoming audio. This is a roadmap feature for a future Teams app.
IPPAN-7567	When switching back to a held call (i.e., when the remote party puts a local phone on hold and the local phone meanwhile answers another call and then resumes), the 'Call oh hold' notification is missing.

3.8.3.2 Device

Here are the known device limitations in Version 1.17.764.

Table 3-24: Known Device Limitations in Version 1.17.764

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable the power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be resumed from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 seconds occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.

Incident	Description
IPPAN-6356	[Device Duo] On rare occasions, the voice quality in the direction of a remote party is not smooth.
IPPAN-6169	On rare occasions, the device may enter the recovery screen due to a Teams application loop of crashes. To recover from this state, the user must restore the device to default via the recovery options.
IPPAN-6089	[Call queue] When Agent-1 answers an incoming call, Agent-2 should pop up a message that the call is answered by Agent-1; it doesn't.
IPPAN-7402	[USB headset] If the phone is booted while a USB headset is connected, the handset cannot be used. Workaround: Boot up the phone and only then plug in the USB headset.
Using the device with Microsoft U4 app (from 20220907)	
IPPAN-7431	Disconnecting an emergency call (933 or 911) using the softkey 'End Call', the 'Speaker' LED stays lit and you need to press the speaker key once to bring the device to idle.

3.9   Version 1.17.686

⚠️ **Note:** Version 1.17.686 includes Microsoft Teams Version **2022022305/0223**.

3.9.1   What's New in Version 1.17.686

Features related to Microsoft Teams

■   None. Microsoft Teams Version 2022022305/0223 was already part of the previous GA.
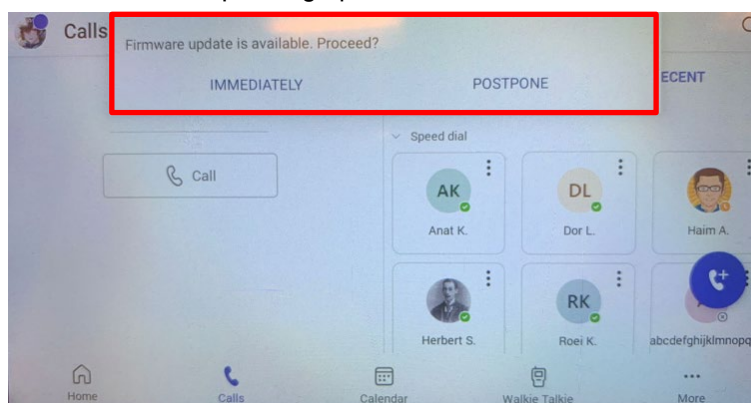
Features related to AudioCodes devices

■   **'Collect Logs' action by AudioCodes Device Manager was expanded and now includes additional logs.**

The .zip file includes the following files:

- Android BugReport
- AdminAgentLogs.zip - includes logcat collected by the OVOC/Device Manager.
- blog files (media logs)
    - Skylib-XXX.blog
    - app_process32.XXX.blog
- config.cfg & status.cfg – Device configuration and status
- ac_config.xml and ac_status.xml – Device configuration and status for internal use.
- Dmesg - diagnostic messages command useful for debugging hardware or OS related issues.
- SessionID_For_Company_Portal_Logs.txt (this is the CP SSDI, not the logs; the logs are sent to the OVOC / Device Manager server).

■   **Upgrade to Android 9 security patch level dated April 5, 2021**. Applies to the C448HD and C450HD models.

- On most C450HD / C448HD devices, the upgrade is performed with no further actions required by the user or the network administrator. For exceptions, see the bullets following.
- Upgrade to 1.17 on C450HD / C448HD can be performed only if the device was upgraded to 1.14 before.
- Upgrade from 1.14 to 1.17 can be performed through Microsoft TAC or through AudioCodes Device Manager.
- Customers upgrading from 1.8 / 1.10 must take these steps:
    1. Upgrade to 1.14. Since direct upgrade to 1.17 is not possible, the customer must first upgrade to 1.14 and then to 1.17.
    2. Customers with 1.8 / 1.10 cannot use the TAC to upgrade to 1.17. An upgrade can be performed using AudioCodes Device Manager or AudioCodes Teams IP Phone Tool. Contact AudioCodes support for further assistance.
- With C450HD 2G-RAM devices (TEAMS-C450HD-DBW), a restore to default will automatically occur and must be followed with a sign-in by the users (per device); the device will become non-encrypted, similar to the C450HD non-DBW and the C448HD that were non-encrypted in previous versions.

- **New support in the device's Configuration File for the 802.1x settings** enables customers to perform pre-staging configuration for 802.1x parameters. Until now, the 802.1x settings were only available via the phone screen.
  The 802.1x settings now available in the Configuration File are:

  - Enable/Disable

  - EAP method

  - Identity

  - Password IPPAN-5272

- Before applying an update, **active user interaction is detected and the user is notified** about the impending update.

  When any update is pushed to the device, the device's firmware detects whether the user is actively using the device. After determining this, an appropriate message and options are provided for the user to either delay the update or apply it immediately.

  Until now, updates have been pushed without any prior notification, thereby forcing the user to disengage from their ongoing activity on the device, e.g., to disengage from an ongoing call, causing disruption to communications.

- **Android security has been hardened by limiting SSH access**. With this release, administrator users who access SSH have reduced file system privileges. For example, files cannot be deleted, and some parts of the file system cannot be reviewed. This change was made to prevent malicious actions or unintended errors that might cause damage to the device.

- **Disconnecting from Wi-Fi on the C470HD phone is performed silently, without built-in audial notifications | noisy 'beep' distractions**.

- **New capability was added to configure parameters related to audio**. The capability was added in order to support the phone in special environments such as noisy environments. To use the capability, contact AudioCodes Support.

- **The Android WebView app has been updated**.

3.9.2   Resolved Limitations in Version 1.17.686

3.9.2.1 Teams Application

Here are the Teams application limitations that have been resolved in Version 1.17.686.

Table 3-25: Resolved Teams Application Limitations in Version 1.17.686

Incident	Description
IPPAN-5457	[C435HD] Even though a call has already been answered, the phone on some occasions keeps showing the 'Incoming call' screen with the 'Answer' softkey.

Incident	Description
IPPAN-5435	[C435HD] If a phone gets an incoming call while another call is already established, after answering the second call the 'Incoming call' screen with the 'Answer' softkey continues to be displayed and the user must again press the 'Answer' softkey.
IPPAN-3343	The Date format does not take effect on the phone when a configuration file is pushed from Microsoft Teams admin center (TAC).

3.9.2.2 Device

Here are the device limitations that have been resolved in Version 1.17.686.

Table 3-26: Resolved Device Limitations in Version 1.17.686

Incident	Description
IPPAN-6036	A firmware update failure occurs due to a network disconnection (requires a better retry mechanism).
IPPAN-4939	When the screen saver is enabled and the phone's soft keyboard opens, the keyboard overlaps the screen saver.
IPPAN-4690	Keypad notification is mistakenly shown on lock screen.
IPPAN-3992	When the language is set to Ukrainian and a reboot/change language action is triggered via the phone screen, the confirmation message then displayed is in English instead of Ukrainian.
IPPAN-4941	In Device Admin settings, some options are reflected in English after the language has been changed to Polish.
IPPAN-5938	[C450HD] The phone needs a restart to get static IP configuration.
IPPAN-5913	The 'Teams admin settings' option appears under the Device Admin settings even when the user is not signed in; it should not appear.
IPPAN-2204	[C450HD, C448HD] On some occasions, disconnecting a USB headset during a call may result in the phone getting stuck and a reboot is then required to recover from this state.
DSP-1144	[C470HD] The handset's maximum volume is not high enough.
IPPAN-4110	On some occasions, there is no voice when powering Off /On a Bluetooth headset device.
IPPAN-5727	[Device Duo] Communication between the device and the PC app disconnects on some occasions.
IPPAN-5282	[C455HD] On some occasions, several attempts to press the dial pad key are required when trying to unlock the phone using 'PIN Unlock'.
IPPAN-5520	Interoperability issues occur with some EPOS USB headsets.
IPPAN-5394	[C435HD] Date and Time cannot be changed manually when 'Automatic Date & Time' is disabled.
IPPAN-4463	The first authentication of 802.1x EAP TLS is successful but after the device is rebooted, 802.1x re-authentication is unsuccessful.
IPPAN-5251	[C455HD + Expansion Module (sidecar)] When locking the phone, the colors of the lock background in the main screen are different to those on the sidecar LCDs.
IPPAN-2130	[C455HD + Expansion Module (sidecar)] The Expansion Module's LCDs' screen saver is partially displayed.

Incident	Description
IPPAN-5509	[C455HD] The C455HD without Bluetooth and Wi-Fi appears as [Model = C455HD_CR] instead of [Model = C455HD].
IPPAN-6305	[HTTPS Proxy] Unable to resolve the Proxy IP in the Proxy Auto-Configuration (PAC) file.
IPPAN-6451	[Talk Back] When the user enables Talk Back, the Pico Text-to-Speech (TTS) app persistently crashes / stops and there is no Talk Back voice.
IPPAN-6385	[C450HD + Expansion Module] The Expansion Module does not function in a specific C450HD batch (GGWV00705/706 Rev3).
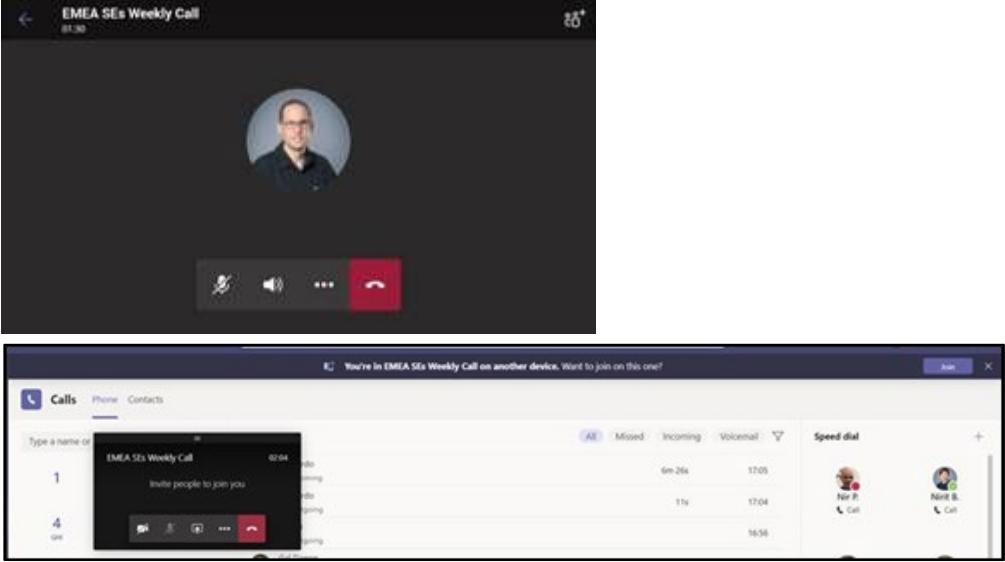
3.9.3   Known Limitations in Version 1.17.686
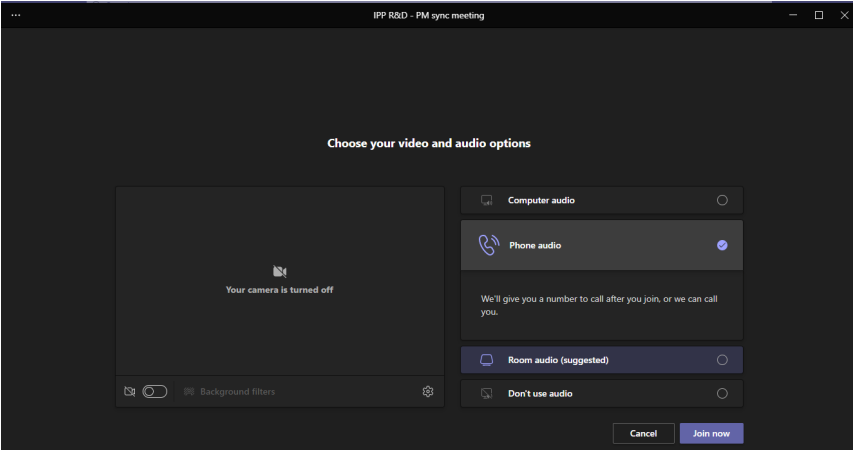
3.9.3.1   Teams Application

Here are the known Teams application limitations in Version 1.17.686.

Table 3-27: Known Teams Application Limitations in Version 1.17.686

Incident	Description
IPPAN-4465	On some occasions, the sign-out action cannot be completed smoothly and requires a hard reboot of the phone.
IPPAN-3941	On some occasions, the phone prompts the user to re-enter the user's password even though it was already entered remotely during the 'Sign in from another device'. Re-entering the password works around the issue.
IPPAN-3752	[C450HD, Call Queue] The second agent is not notified when a call is received by the first agent (Android OS 7 bug).
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
-	When using right to left languages (Hebrew, for example) the soft dial pad and presented dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
IPPAN-3946	The sign-out action occasionally doesn't land in the Sign-in screen. Instead, the phone shows the 'Device settings' screen, or gets stuck while displaying a 'signing out…' message. A reboot can be performed to recover from this scenario.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.

Incident	Description
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD in this version release (Roadmap), though: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) (support pending in the next version release)
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5202 VSO 269091	[C455HD with Expansion Module (sidecar)] When no speed dial is configured on the Expansion Module (sidecar), the text displayed on the sidecar is marked black. The issue will be solved in an upcoming product release.
IPPAN-5324	[C435HD] The people search functionality does not function optimally. The issue will be solved in an upcoming product release.
IPPAN-6195	[C435HD] When pressing the 'Back' key from an existing call, the call still remains but there is no indication of the call and as a result, no option to go back to the Call screen.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5086	[C435HD] It's impossible to Delete short (~1 second) voicemail messages.

Incident	Description
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6089	In call queue, the phone of Agent-2 is not displaying the 'Call answered by Agent-1' message.
IPPAN-5120	[C455HD or C450HD with Expansion Module (Sidecar)] After removing a user from the sidecar list, the sidecar still displays the user.
IPPAN-5535	When viewing the 'Favorites' tab, the last speed dial line is cut off.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.

3.9.3.2 Device

Here are the known device limitations in Version 1.17.686.

Table 3-28: Known Device Limitations in Version 1.17.686

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable the power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be resumed from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A delay of 10 seconds occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.

Incident	Description
-	[Device Duo] Starting a desktop call from the paired device isn't supported.

3.10   Version 1.17.561

> ⚠️ **Note:**
>
> - Version 1.17.561 includes Microsoft Teams Version **2022022305/0223**.
> - Version 1.17.561 was released for C470HD only.
> - Version 1.17 for all models will be released within ~1 month.

3.10.1   What's New in Version 1.17.561

Features related to Microsoft Teams

■ None. Microsoft Teams Version 2022022305/0223 was already part of the previous GA.

Features related to AudioCodes devices

■ **'Collect Logs' action by AudioCodes Device Manager was expanded and now includes additional logs.**

The .zip file includes the following files:

- Android BugReport
- AdminAgentLogs.zip - includes logcat collected by the OVOC/Device Manager.
- blog files (media logs)
    - ♦ Skylib-XXX.blog
    - ♦ app_process32.XXX.blog
- config.cfg & status.cfg – Device configuration and status
- ac_config.xml and ac_status.xml – Device configuration and status for internal use.
- Dmesg - diagnostic messages command useful for debugging hardware or OS related issues.
- SessionID_For_Company_Portal_Logs.txt (this is the CP SSDI, not the logs; the logs are sent to the OVOC / Device Manager server).

■ **Upgrade to Android 9 security patch level dated April 5, 2021**. Applies to the C448HD and C450HD models.

- On most C450HD / C448HD devices, the upgrade is performed with no further actions required by the user or the network administrator. For exceptions, see the bullets following.
- Upgrade to 1.17 on C450HD / C448HD can be performed only if the device was upgraded to 1.14 before.
- Upgrade from 1.14 to 1.17 can be performed through Microsoft TAC or through AudioCodes Device Manager.
- Customers upgrading from 1.8 / 1.10 must take these steps:
    3. Upgrade to 1.14. Since direct upgrade to 1.17 is not possible, the customer must first upgrade to 1.14 and then to 1.17.
    4. Customers with 1.8 / 1.10 cannot use the TAC to upgrade to 1.17. An upgrade can be performed using AudioCodes Device Manager or AudioCodes Teams IP Phone Tool. Contact AudioCodes support for further assistance.

- With C450HD 2G-RAM devices (TEAMS-C450HD-DBW), a restore to default will automatically occur and must be followed with a sign-in by the users (per device); the device will become non-encrypted, similar to the C450HD non-DBW and the C448HD that were non-encrypted in previous versions.

■ **New support in the device's Configuration File for the 802.1x settings** enables customers to perform pre-staging configuration for 802.1x parameters. Until now, the 802.1x settings were only available via the phone screen.
The 802.1x settings now available in the Configuration File are:

- Enable/Disable

- EAP method

- Identity

- Password IPPAN-5272

■ Before applying an update, **active user interaction is detected and the user is notified** about the impending update.

When any update is pushed to the device, the device's firmware detects whether the user is actively using the device. After determining this, an appropriate message and options are provided for the user to either delay the update or apply it immediately.

Until now, updates have been pushed without any prior notification, thereby forcing the user to disengage from their ongoing activity on the device, e.g., to disengage from an ongoing call, causing disruption to communications.

■ **Android security has been hardened by limiting SSH access**. With this release, administrator users who access SSH have reduced file system privileges. For example, files cannot be deleted, and some parts of the file system cannot be reviewed. This change was made to prevent malicious actions or unintended errors that might cause damage to the device.

■ **Disconnecting from Wi-Fi on the C470HD phone is performed silently, without built-in audial notifications | noisy 'beep' distractions**.

■ **New capability was added to configure parameters related to audio**. The capability was added in order to support the phone in special environments such as noisy environments. To use the capability, contact AudioCodes Support.

■ **The Android WebView app has been updated**.

3.10.2   Resolved Limitations in Version 1.17.561

3.10.2.1 Teams Application

Here are the Teams application limitations that have been resolved in Version 1.17.561.

Table 3-29: Resolved Teams Application Limitations in Version 1.17.561

Incident	Description
IPPAN-5457	[C435HD] Even though a call has already been answered, the phone on some occasions keeps showing the 'Incoming call' screen with the 'Answer' softkey.
IPPAN-5435	[C435HD] If a phone gets an incoming call while another call is already established, after answering the second call the 'Incoming call' screen with the 'Answer' softkey continues to be displayed and the user must again press the 'Answer' softkey.
IPPAN-3343	The Date format does not take effect on the phone when a configuration file is pushed from Microsoft Teams admin center (TAC).

3.10.2.2 Device

Here are the device limitations that have been resolved in Version 1.17.561.

Table 3-30: Resolved Device Limitations in Version 1.17.561

Incident	Description
IPPAN-6036	A firmware update failure occurs due to a network disconnection (requires a better retry mechanism).
IPPAN-4939	When the screen saver is enabled and the phone's soft keyboard opens, the keyboard overlaps the screen saver.
IPPAN-4690	Keypad notification is mistakenly shown on lock screen.
IPPAN-3992	When the language is set to Ukrainian and a reboot/change language action is triggered via the phone screen, the confirmation message then displayed is in English instead of Ukrainian.
IPPAN-4941	In Device Admin settings, some options are reflected in English after the language has been changed to Polish.
IPPAN-5938	[C450HD] The phone needs a restart to get static IP configuration.
IPPAN-5913	The 'Teams admin settings' option appears under the Device Admin settings even when the user is not signed in; it should not appear.
IPPAN-2204	[C450HD, C448HD] On some occasions, disconnecting a USB headset during a call may result in the phone getting stuck and a reboot is then required to recover from this state.
DSP-1144	[C470HD] The handset's maximum volume is not high enough.
IPPAN-4110	On some occasions, there is no voice when powering Off /On a Bluetooth headset device.
IPPAN-5727	[Device Duo] Communication between the device and the PC app disconnects on some occasions.
IPPAN-5282	[C455HD] On some occasions, several attempts to press the dial pad key are required when trying to unlock the phone using 'PIN Unlock'.

Incident	Description
IPPAN-5520	Interoperability issues occur with some EPOS USB headsets.
IPPAN-5394	[C435HD] Date and Time cannot be changed manually when 'Automatic Date & Time' is disabled.
IPPAN-4463	The first authentication of 802.1x EAP TLS is successful but after the device is rebooted, 802.1x re-authentication is unsuccessful.
IPPAN-5251	[C455HD + Expansion Module (sidecar)] When locking the phone, the colors of the lock background in the main screen are different to those on the sidecar LCDs.
IPPAN-2130	[C455HD + Expansion Module (sidecar)] The Expansion Module's LCDs' screen saver is partially displayed.
IPPAN-5509	[C455HD] The C455HD without Bluetooth and Wi-Fi appears as [Model = C455HD_CR] instead of [Model = C455HD].
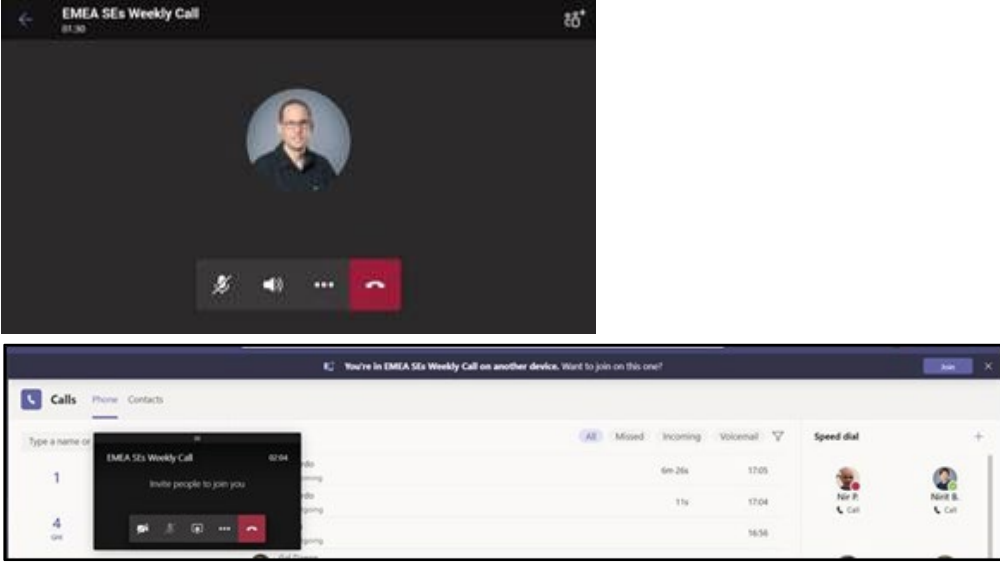
3.10.3   Known Limitations in Version 1.17.561
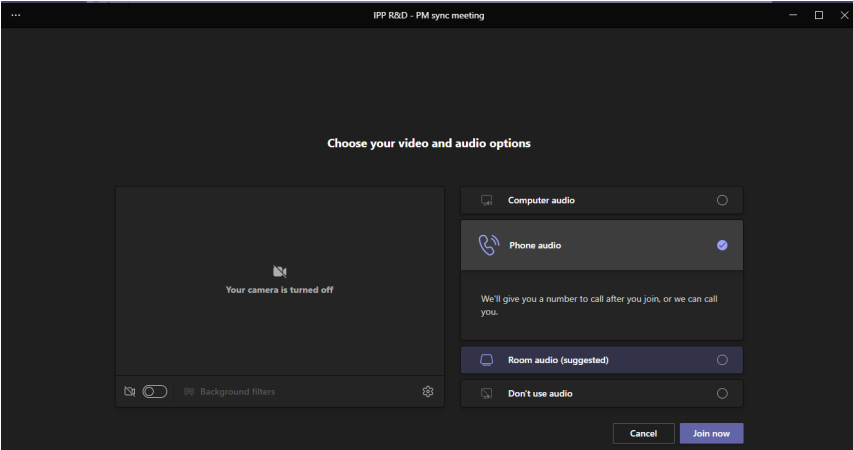
3.10.3.1 Teams Application

Here are the known Teams application limitations in Version 1.17.561.

Table 3-31: Known Teams Application Limitations in Version 1.17.561

Incident	Description
IPPAN-4465	On some occasions, the sign-out action cannot be completed smoothly and requires a hard reboot of the phone.
IPPAN-3941	On some occasions, the phone prompts the user to re-enter the user's password even though it was already entered remotely during the 'Sign in from another device'. Re-entering the password works around the issue.
IPPAN-3752	[C450HD, Call Queue] The second agent is not notified when a call is received by the first agent (Android OS 7 bug).
IPPAN-2270, IPPAN-4548	[RXV80, C450HD] The device sometimes displays 'Poor internet connection' in the main screen for a few seconds and then disappears.
IPPAN-2566	A muted phone that receives another incoming call and rejects it results in a non-voluntary unmute of the original call.
-	When using right to left languages (Hebrew, for example) the soft dial pad and presented dial string are reverted.
IPPAN-2476	[C470HD] The phone displays an irrelevant 'Meeting' string when a parked call is picked up.
IPPAN-2510	An incorrect date format is displayed when the current language is Simple Chinese.
IPPAN-3946	The sign-out action occasionally doesn't land in the Sign-in screen. Instead, the phone shows the 'Device settings' screen, or gets stuck while displaying a 'signing out…' message. A reboot can be performed to recover from this scenario.
-	[Better Together] Peer-to-Peer (direct) calls are still not supported.
-	[Better Together] Pairing the phone with the PC client might in some cases fail. Quitting the PC client and restarting it may solve the issue.

Incident	Description
-	[Better Together] Though users can join meetings from a phone or from the PC client, it's recommended to join from the phone. After joining, the phone is used as the audio device and the PC client notifies 'You're in a meeting on another device'; the user is then prompted to join the meeting on the PC client as well, for content sharing. The following figures show joining from a phone and from the PC client respectively:
-	[Better Together] When the phone is the PC client audio device, video cannot be used on the PC client.
-	In some cases, signing in as user B after the device was used by user A does not proceed flawlessly. Restore to default is consequently recommended after signing out.

Incident	Description
-	[C435HD] The phone excludes few features that are supported by the other Teams Native phones. The **Calendar** and **Meet now** features are unavailable on the C435HD in this version release (Roadmap), though: ▪ The user can escalate a peer-to-peer call to meeting when adding another user ▪ The user who joins from the PC client can add the phone as audio by selecting the **Phone Audio** option in the **Join** options, shown here: In addition, the following features are not supported: ▪ Call Park ▪ The 'Delegation' setting from the Teams application settings (though using the phone with a delegated user who was preconfigured from the client is possible) ▪ Accepting two incoming calls at the same time (only one call will be shown) (support pending in the next version release)
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5202 VSO 269091	[C455HD with Expansion Module (sidecar)] When no speed dial is configured on the Expansion Module (sidecar), the text displayed on the sidecar is marked black. The issue will be solved in an upcoming product release.
IPPAN-5324	[C435HD] The people search functionality does not function optimally. The issue will be solved in an upcoming product release.
IPPAN-6195	[C435HD] When pressing the 'Back' key from an existing call, the call still remains but there is no indication of the call and as a result, no option to go back to the Call screen.
IPPAN-5700	[C435HD] When answering a second call, there is no option to return back to the first call.
IPPAN-3167	[C435HD] During sign-in from another device (using the PC/Mobile) the application requests re-typing the password on the phone UI (in addition to entering it on the PC/Mobile).
IPPAN-5100	[C435HD] [Multiple Calls] Resuming the second call after ending the first call results in the speaker hard key light on the phone being off when it should be on.
IPPAN-5082	[C435HD] When using right-to-left languages (Hebrew, for example), the soft dial pad and the displayed dial string are reverted.
IPPAN-5086	[C435HD] It's impossible to Delete short (~1 second) voicemail messages.

Incident	Description
IPPAN-5776 VSO 304429	When using the phone's T9 Search functionality, the phone doesn't show the letters after entering a name to search for.
IPPAN-6089	In call queue, Agent-2'S phone isn't displaying message 'Call answered by Agent-1'.
IPPAN-5120	[C455HD or C450HD with Expansion Module (Sidecar)] After removing a user from the sidecar list, the sidecar still displays the user.
IPPAN-5535	When viewing the 'Favorites' tab, the last speed dial line is cut off.
IPPAN-6087	[C450HD with Expansion Module (Sidecar)] On some occasions, the phone gets stuck when changing the language from one to another.

3.10.3.2 Device

Here are the known device limitations in Version 1.17.578.

Table 3-32: Known Device Limitations in Version 1.17.578

Incident	Description
-	[Device Manager] Network administrators are recommended not to provision phones from both the Device Manager and the Microsoft admin portal, though they can *monitor* from both Device Manager and Microsoft admin portal at the same time.
-	It's recommended to avoid connecting PoE and power simultaneously even though no damage occurs. If a Power Supply is used, users should disable the power from the ETH port. In some cases, an endless auto-negotiation with the Ethernet switch may occur if the phone is connected to the Power Supply and to PoE simultaneously.
IPPAN-2542	[C470HD, C455HD] Sometimes, touching one of the keys results in the speaker emitting a little noise. This usually happens immediately after phone restart.
IPPAN-3283	When using multiple users on a single phone (i.e., if user A signs out and then signs in with user B), AudioCodes' Device Manager may present the wrong username.
IPPAN-2561	[C450HD] On some occasions, reconnecting a USB headset during a call causes the call to be disconnected.
IPPAN-4910	[Device Duo] When a call comes in, there's a mix of local & remote ringer.
-	[Device Duo] During a Teams Desktop call, if the phone receives an incoming call which is answered by hard key on the phone thus creating an active Native Teams call, the first call (the Teams Desktop call) will be placed on hold (internal call) and can be resumed only after the Native Teams call ends.
-	[Device Duo] When music is played from the PC app via the paired phone, if you perform a pause on the app, the window of the music player on the phone screen closes and cannot be resumed from the phone (but can be resumed from the PC app).
-	[Device Duo] When you're in an active desktop call and you make an outgoing call with a phone using its Expansion Module, there's no option to return to the idle screen during the active desktop call; the 'back' key doesn't return to the idle screen.
-	[Device Duo] A 10-second delay occurs before the music player window appears.
-	[Device Duo] When any audio sound (not necessarily music) plays from the PC, the music player window opens in the paired phone's screen for a few seconds.
-	[Device Duo] Starting a desktop call from the paired device isn't supported.

3.11   Version 1.14.524

> ⚠️ **Note:** Version 1.14.524 (M2) includes Microsoft Teams Version **2022022305/0223**.

3.11.1   What's New in Version 1.14.524

Features related to Microsoft Teams

■   Upgrade to Microsoft Teams 2022022305/0223

Features related to the AudioCodes Device

■   **Setting a unique hostname for Android devices**. The default hostname has been modified to include the device MAC address in addition to the model name: (**C470HD-[MAC address]** instead of **C470HD**, for example**).**

In addition, new capability has been added for network administrators to configure the hostname. The hostname can be configured via the configuration file using the AudioCodes Device Manager.

The purpose of this modification is to allow a unique hostname to be set per device. To configure a different hostname, network administrators can set parameter 'system/hostname'. Default: **{model}-{mac}**

3.12 Version 1.14.500

⚠️ **Note:** Version 1.14.500 (M1) includes Microsoft Teams Version **2022011305/0113**.

3.12.1 What's New in Version 1.14.500

**Features related to Microsoft Teams**

- Upgrade to Microsoft Teams 2022011305/0113
- Upgrade to Microsoft Company Portal application version 5.0.5304.0
- Upgrade to Microsoft Admin Agent application version 322

Features related to the AudioCodes Device

- Feature in preview: The **Device Duo** enables AudioCodes' IP phones to be configured as *a paired audio device*. The feature allows users to use their phone not only as a standalone desk phone but also as a smart audio device for all kinds of UC applications running on the PC. From the Teams app perspective, the phone is like any USB speaker with all controls available in the Teams app on the USB speaker interface. This feature is currently not supported for the C435HD phone. See the *Device Duo Application Note for Personal Use* for more information.

- **Power Consumption adaptations were made to all devices**. In addition to the PoE class reported by the device hardware, the device also publishes Power Consumption via LLDP/CDP to allow the far-end smart switch to consume more accurate power per device. Updated Power Consumption measurements were applied to all devices and some adjustments were made.

- The phone features new capability to **ring via the USB headset** in addition to via the phone speaker. A new option was added to play an incoming call ring through the USB headset in addition to the phone's speaker.

  A new parameter was added for this purpose:

  audio/stream/ringer/0/audio_device=BOTH (default), **BUILTIN_SPEAKER**, **TYPE_USB**

3.13   Version 1.14.449

⚠️ **Note:** Version 1.14.449 includes Microsoft Teams Version **2021101205**.

3.13.1   What's New in Version 1.14.449

Features related to Microsoft Teams

- ■ Upgrade to Microsoft Teams application version **2021101205**
- ■ Upgrade to Microsoft Company Portal application version 5.0.5304.0
- ■ Upgrade to Microsoft Admin Agent application version 298
- ■ Moving between the phone's 'home' screen and the tabs (Calls, Calendar, People, Voicemail) has been optimized and it now performs faster.
- ■ **Remote sign out can be performed from Microsoft Teams admin center** (TAC). Network administrators can provision devices from the TAC, remotely sign in, and now also sign out from devices.
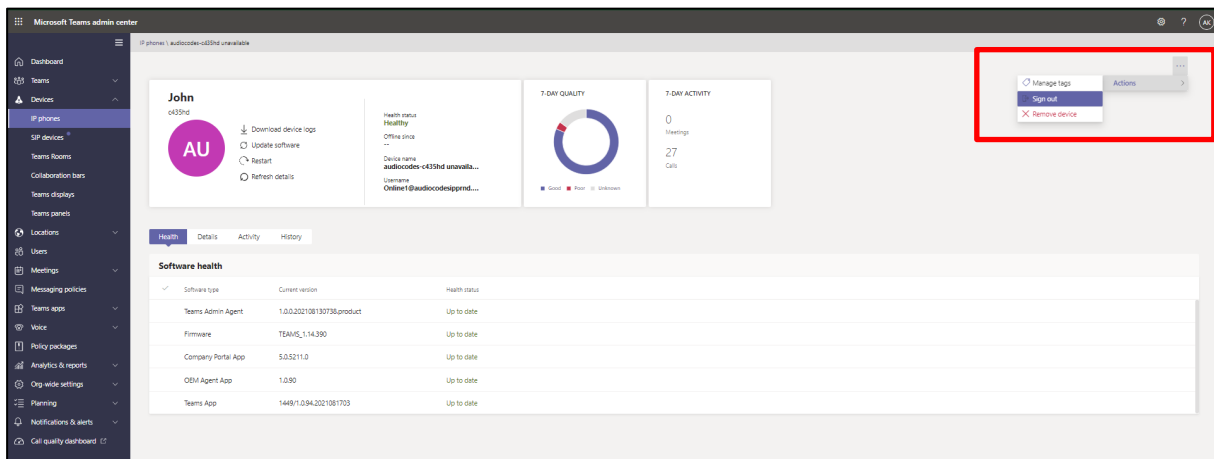
- 🔷 Log collection enhancements via **Microsoft Teams admin center** (TAC). Network administrators can now download all logs from the TAC. Logs include logcat, dumpsys, ANRs, Client Log, Call Policies File, Call Log Info File, Sky lib Log Files, Media Log Files, and CP.
- 🔷 **Teams phones can operate in a Survivable Branch Appliance (SBA) environment**. Branch office survivability is aimed at providing limited calling functionality when the Teams phone no longer has connectivity with the Teams cloud. Basic functionalities are:

  - 🔹 Making PSTN calls
  - 🔹 Receiving PSTN calls
  - 🔹 Hold & Resume of PSTN calls

  If a user attempts to make a Teams call and the internet connection is down, they'll be notified that they can try calling a phone number instead.
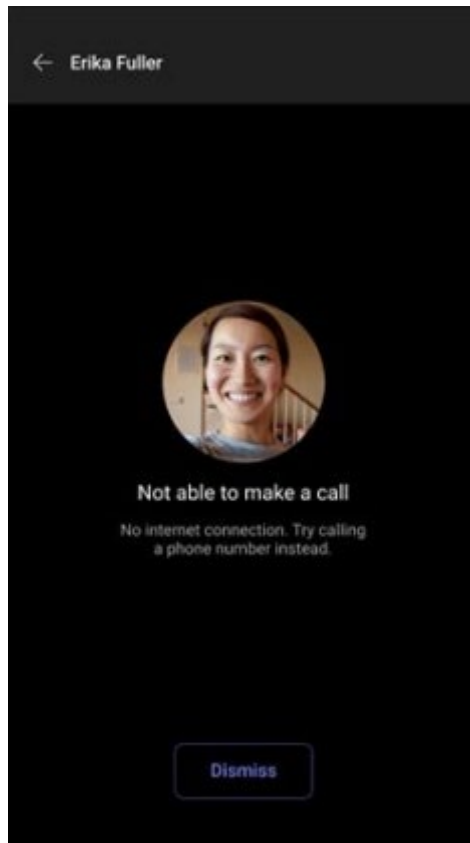
A 'No internet connection' indication is displayed suggesting that calling a phone number is available.
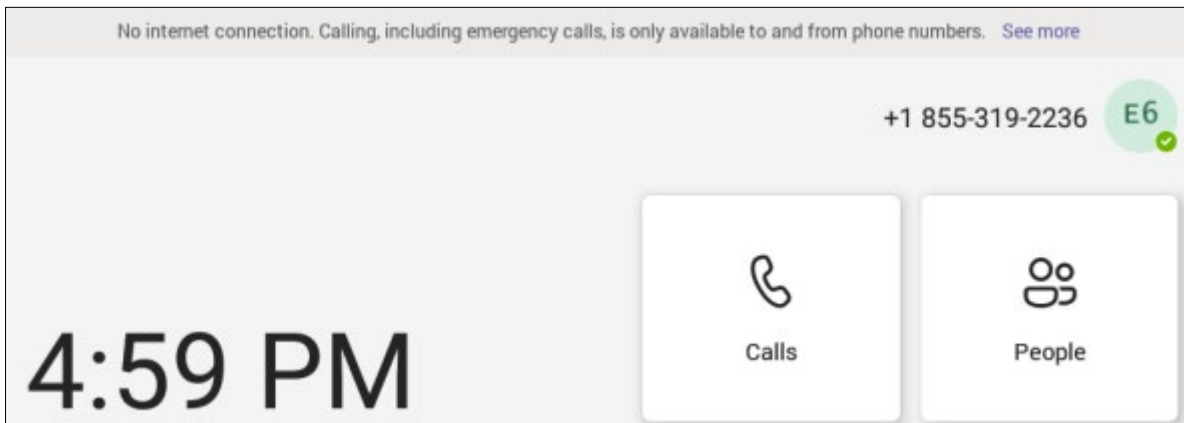
■ **Hide names and meeting titles for individual devices**. A new setting has been added allowing users to hide names and meeting titles for individual devices. Users can hide meeting information via the Meetings page (**More** > **Settings** > **Meetings**) shown here:
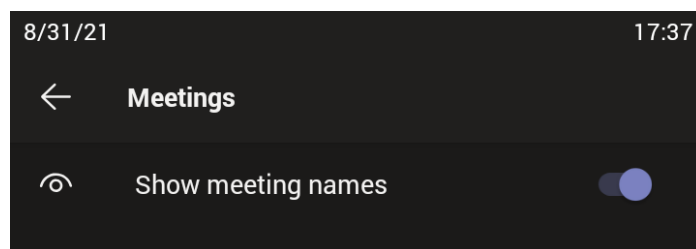
Features related to the AudioCodes Device

■ AudioCodes' Device Manager features new capabilities for the Teams phones:

- Connected peripheral devices are displayed in a dedicated new Show Info screen. Network administrators can navigate to the screen via the **Show Info** menu option (**Monitor** > **Dashboard** > **Devices Status** and then click the button Actions ☰ next to the device).
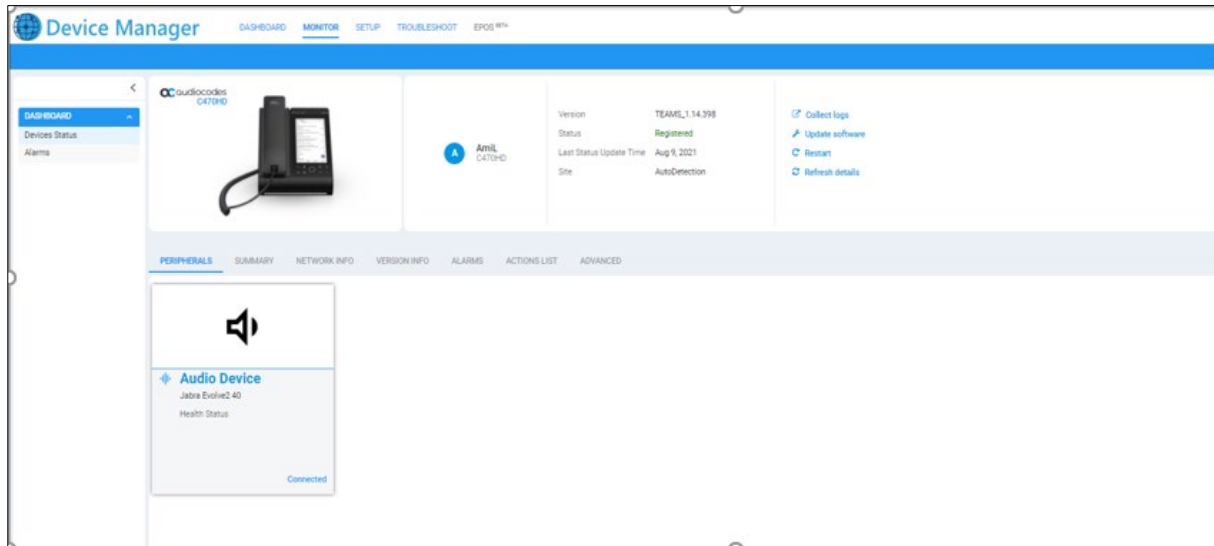
The Show Info screen displays all information related to the device needed by the network administrator. The **Peripherals** tab is displayed (by default) if a peripheral such as a headset is connected, as shown in the previous figure. All information that the peripheral device sends to the OVOC as raw data composes the Peripherals screen.

Network administrators can also view information under the tabs **Summary**, **Network Info**, **Version Info**, **Alarms**, **Actions List** and **Advanced**.

For the feature to function, network administrators must make sure that the parameter 'dm/report_status/paths' exists in the device's template in the Device Manager (it's part of the default template); the value that must be configured for this parameter needs to be **status/audio/stream/*, status/network/wifi/mac, status/installed/*, status/peripheral/device/***

- Valid values are:

  status/audio/stream/*

  status/network/wifi/mac

  status/installed/*

  status/peripheral/device/*

- Information related to the device's version is displayed under the **Version Info** tab in the Show Info screen. Network administrators can navigate to it via **Monitor** > **Dashboard** > **Devices Status** and then clicking Actions ☰ next to the listed device and selecting **Show Info**).
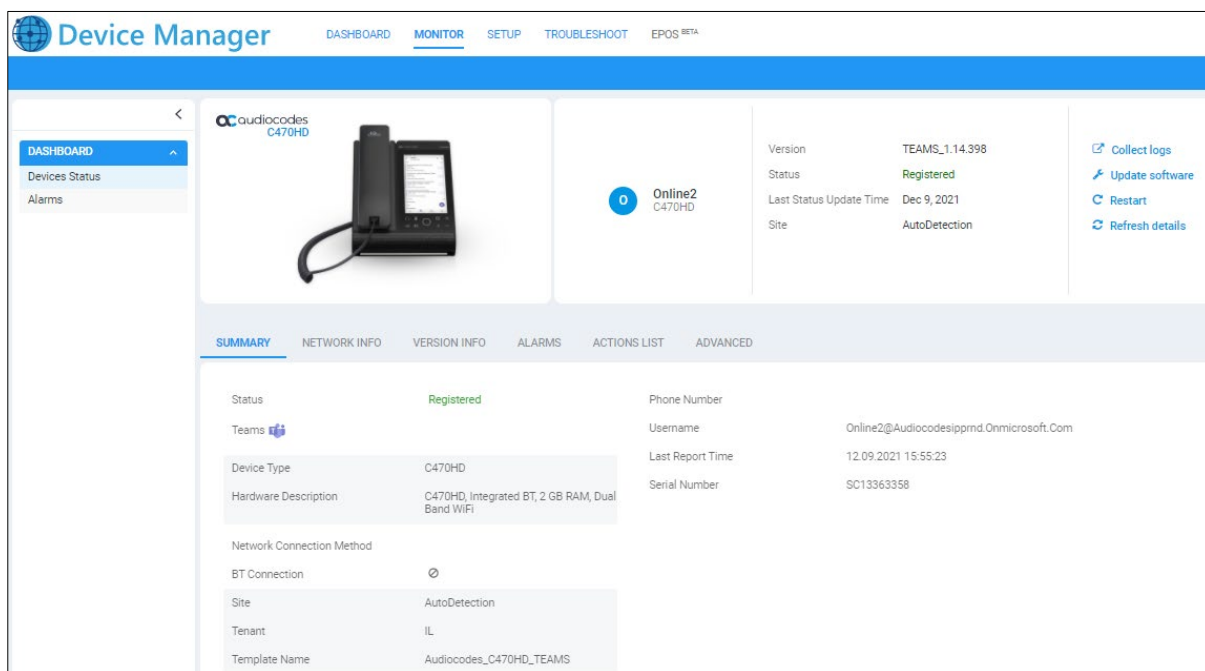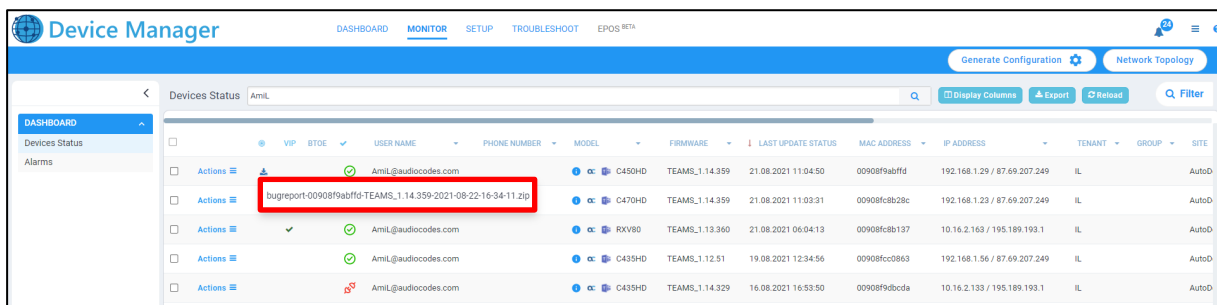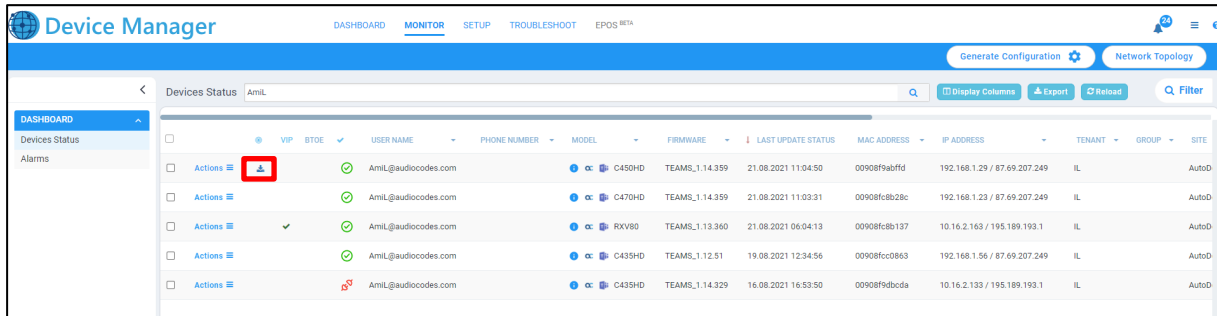
- Network administrators can get logs from devices for debugging purposes without needing to go to the device The **Collect Logs** option in AudioCodes' Device Manager, shown in the next figure, allows this. Network administrators can navigate to the option via **Monitor** > **Dashboard** > **Devices Status** and then click **Actions ☰** next to the device.
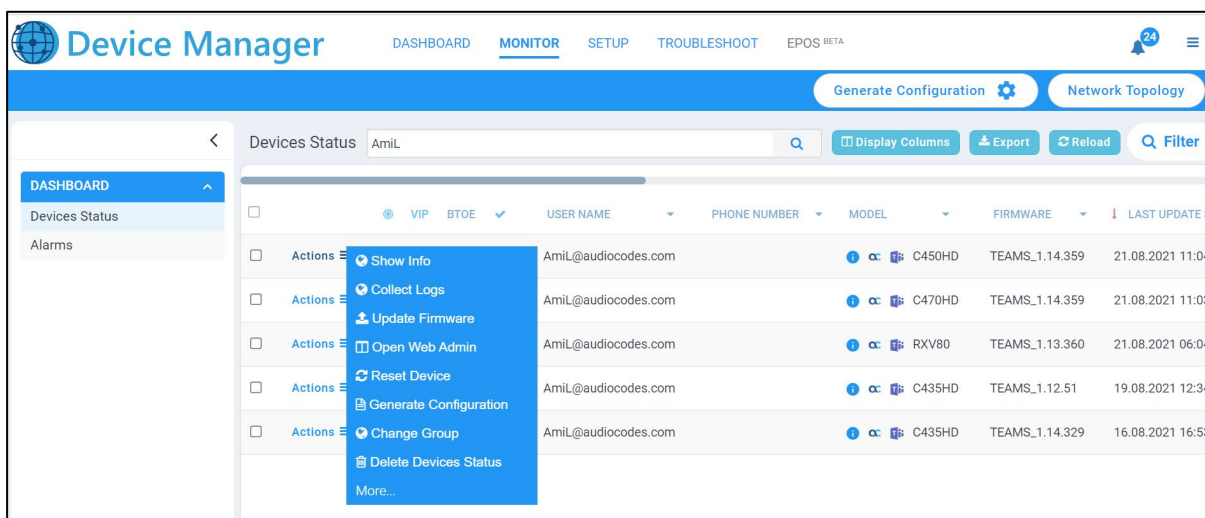

Administrators can alternatively click the **Collect logs** link in the Show Info screen as shown in the next figure.
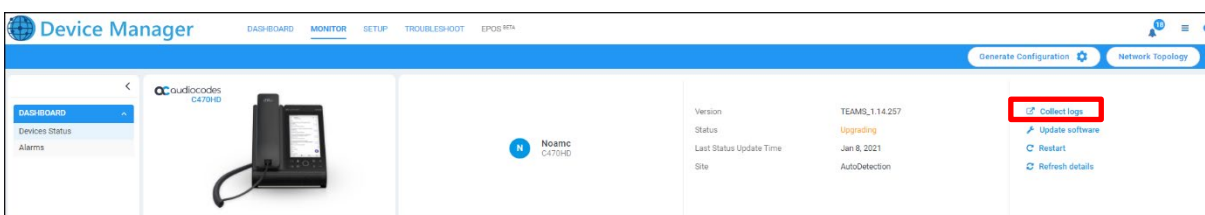
After the logs are collected, the Devices Status page displays 📥 in the same row as the device from which logs were collected, as shown in the next figure. Network administrators can click the icon to download the logs.


• Information related to the device's hardware specification is now displayed under the **Summary** tab in the Device Manager's Show Info screen. Network administrators can navigate to the Show Info screen via **Monitor** > **Dashboard** > **Devices Status** and then click Actions ☰ next to the device to select **Show Info**.
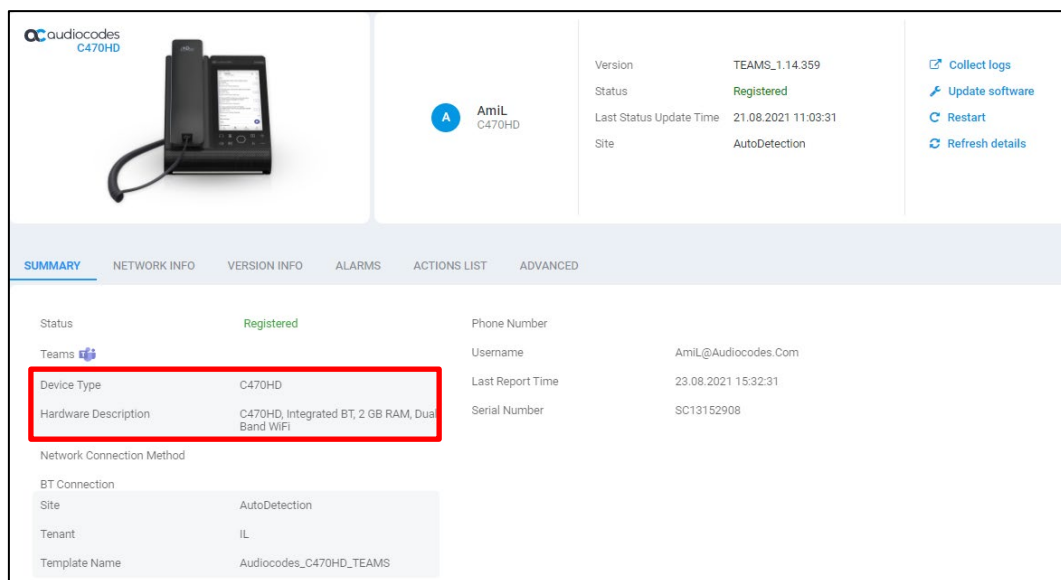
Note that pointing the mouse over the ℹ️ icon next to the device in the Devices Status page also displays information related to the device's hardware specification, in a popup, as shown here:
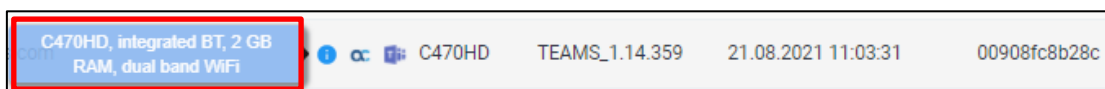
■ **Automatic Time Zone Detection**. Starting from this version release, a new mechanism was added that allows the device to automatically detect the time zone via geographical location. If time zone is not provisioned using the Device Manager, this feature is implemented.

■ **Improved background noise block [Applies to C450HD and C448HD]**. When a user speaks on the phone in handset mode, ambient noise (noise from the device's immediate environment) is suppressed and not heard by the far end participant/s of the call or Teams Meeting. Starting from this release, the feature is enabled by default.

■ **Security updates**

- **Security enhancement**. Starting from this version release, the device does not allow access to ADB, and SSH is by default disabled and can be enabled with Administrator permissions.

- Security patch level for Android devices. AudioCodes regularly adopts and integrates Android security updates. In this release, the C470HD device was updated with Android security patch level (June 2021).

■ **Bluetooth Wideband Speech** (WBS) is now supported for headsets. [Applies to the C450HD phone; the C470HD already supports WBS for headsets].

■ For recovery purposes, **firmware can be applied to a phone from a USB disk**. To apply the firmware from the USB disk, network administrators enter recovery mode by long-pressing the reset key for 4 seconds (C470HD) or by simultaneously pressing the 'back' key + the MENU key (other phones); the device's LED lights up red. The network administrator then inserts the USB disk with the target firmware, chooses the 'Apply update from USB disk' option (see the figure below) and then chooses the correct firmware image from the disk.
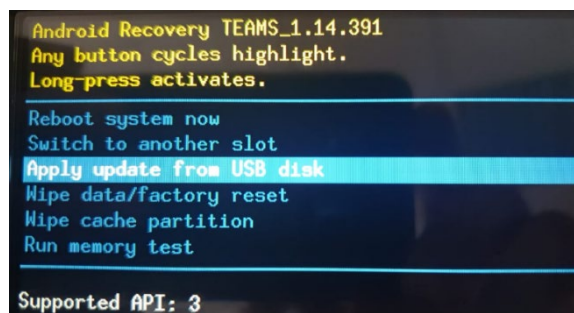
■ [Applies only to the C470HD phone] The 'home' key supports new functionalities:

- Illuminated red constantly (without flashing) indicates 'No network'; touching the key then gives the user direct access to the Network menu.

- Flashing red indicates a system alert, for example, when a user tries to charge via the device's USB port (see previous feature description).

- Flashing yellow indicates that the phone is in the process of a software upgrade.

■ New capability allows the network administrator **to install a third-party certificate** on the Teams phone in the customer's trusted environment. Network administrators should follow the following guidelines when replacing the existing trusted CAs:

- The device certificate URL will only be valid if no SCEP server URL is present

- Use the following two parameters to set the device certificate in the phone's configuration file:

    ♦ security/device_certificate_url=http://<server-ip>/device.crt

    ♦ security/device_private_key_url=http://<server-ip>/device.key

- **New localization support for Japanese**; the phone UI is now available in Japanese.
- **New localization support for Korean** (Applies to C470HD); the phone UI is now available in Korean, including Korean keyboard.
- **Echo Canceler (EC) debug recording -** A new debugging ability was added to collect Echo Canceler (EC) debug recording. [Applies only to the C470HD].

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