Administrator's Guide

*AudioCodes One Voice Operations Center (OVOC)*

# Device Manager Pro

Version 8.2

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## Related Documentation

| Document Name |
|---|
| 400HD Series IP Phone User Manuals |
| 400HD Series IP Phone with Microsoft Skype for Business User Manuals |
| 400HD Series IP Phones Administrator's Manual |
| 400HD Series IP Phone with Microsoft Skype for Business Administrator's Manual |
| 400HD Series IP Phone Quick Guides |

| Document Name |
|---|
| 400HD Series IP Phone with Microsoft Skype for Business Quick Guides |
| 400HD Series IP Phone for Microsoft Teams User and Administrator Manuals |
| Device Manager for Third-Party Vendor Products Administrator's Manual |
| Device Manager Deployment Guide |
| Device Manager Agent Installation and Configuration Guide |
| One Voice Operations Center IOM Manual |
| One Voice Operations Center User's Manual |

## Document Revision Record

| LTRT | Description |
|---|---|
| 91097 | Initial release for 7.8. Set as VIP. Network Topology page. Poly phones provisioned to sites. System Settings and tabs. Rearranged GUI. |
| 91098 | 7.8.1000. Endpoints Groups. Configuring DHCP Option 160 - tenant and group. Filtering by group in Manage Multiple Devices. Zero Touch: URL to associate device w Tenant and Group. |
| 91188 | 8.0.1000 New look and feel. Devices Status page: Enhanced Show Info feature. Teams phones and devices: RXV80, C435HD, C448HD, C470HD. Tenant / Site Configuration: provision devices using the 'Configuration Set' parameter and the corresponding 'Configuration Key' and 'Configuration Value' parameters auto-populated after selecting a device model. Parameters in configuration file commented to indicate template source. |
| 91189 | Polycom>Poly. EPOS. Poly CCX 500/600. RXV100 (MTR). 'Show Info' page includes detailed info reported by Teams devices (Status/Configuration). New 'Collect logs' link in 'Show Info' page; capability to collect logs on native Teams phones. |
| 91190 | EPOS. RXV100 (MTR). RXV90. DST. |
| 91221 | [8.0.3000 Fix 1] Microsoft SIP Gateway |
| 91222 | [8.0.3000 Fix 2] Finalization of Microsoft SIP Gateway. RX Bundles. |
| 91223 | [8.2.1000 Fix 1] RX-PAD MTR Controller. Peripherals (RX15, RXVcam10). Desktop\|PC. AppSuite. SN status parameter. Bulk Android APK update. |

| LTRT | Description |
|---|---|
| | Renovated. Replaced screenshots. RXV100 status \| version info \| Windows version. |
| 91225 | Document restructured. Fix to section 'Converting Skype for Business Phones to Teams SIP Gateway'. |
| 91226 | MAC prefix. Device Manager FQDN. 'Set Defaults' in ZT Templates Mapping. RX-PANEL. RXV200. RX40. MAC Address of MTR with which RX-PAD is Paired. RXV81 connected as a USB peripheral. RXVCam10 Content Camera peripheral device. Devices Status page displays 'bundle' image. DM displays MAC address of MTR with which RX-PAD is paired. |

# Table of Contents

# 1 Introduction

AudioCodes' Device Manager gives enterprise IT managers | network admins full control of their IP phones, meeting rooms and other devices throughout their lifecycle. Admins benefit from a powerful and easy-to-use tool for everyday tasks such as configuration, monitoring and troubleshooting to increase efficiency and ensure user satisfaction. This is especially true in the era of hybrid working where employee users are likely to be working from home, with meeting rooms in the office.

Device Manager enables admins to provide a reliable desktop phone service within their enterprises. With the ability to deploy and monitor AudioCodes IP phones, meeting rooms, and EPOS and Jabra headsets and speakers, the management interface enables admins to rapidly identify problems and efficiently fix them. This proactive approach ensures quality assurance and employee satisfaction, increased productivity and reduced IT expenses.

- When Device Manager is deployed in a cloud environment, it's strongly recommended to implement VPN communication between OVOC (Device Manager) server and endpoints for security reasons.
- When Device Manager is deployed in an internal network or in a private cloud environment as shown in this document, no additional definitions are required. Deployment of this (on-premises) Device Manager flavor should be restricted to either an internal network or a private cloud environment.

## Commissioning and Provisioning

- Device discovery and auto-registration
- Automatic device zero-touch provisioning
- Network topology planning and design
- Large scale efficient deployment
- Support remote management of devices behind NAT (remote workers)

## Streamline Day-to-Day Operations

- Increase efficiency using centralized real-time monitoring dashboard and maps
- Mass configuration and software updates for all devices or specific tenants / sites / groups
- Improve availability with accurate and correlated alarm indications

## Quality Assurance and Analytics

- Identify and mitigate voice quality issues before they become service affecting using real-time network view and quality alerts
- Troubleshoot quality issues and drill down for simple and effective root cause analysis

- Pattern detection and network planning via advanced reporting tools

## About this Document

This guide shows admins how to enable automatic provisioning (Zero Touch provisioning) of devices in an enterprise network from a single central point.

⚠

- See the *Device Manager Deployment Guide* for the critical steps to take to *deploy* devices in a network.
- For information about third-party vendor devices (e.g., EPOS, Jabra and Poly), see here.

# 2 Starting up | Logging in

After installation, start the Device Manager Pro and log in. Before logging in, you need to run OVOC.

> ⚠
> - To access the Device Manager Pro without running OVOC, point your web browser to https://<OVOC_IP_Address>/ipp and then in the login screen that opens, log in. If the browser is pointed to HTTP, it will be redirected to HTTPS.
> - Device Manager Pro is a secured web client that runs on any standard web browser supporting HTML5: Internet Explorer v11 and later, Chrome or Firefox.

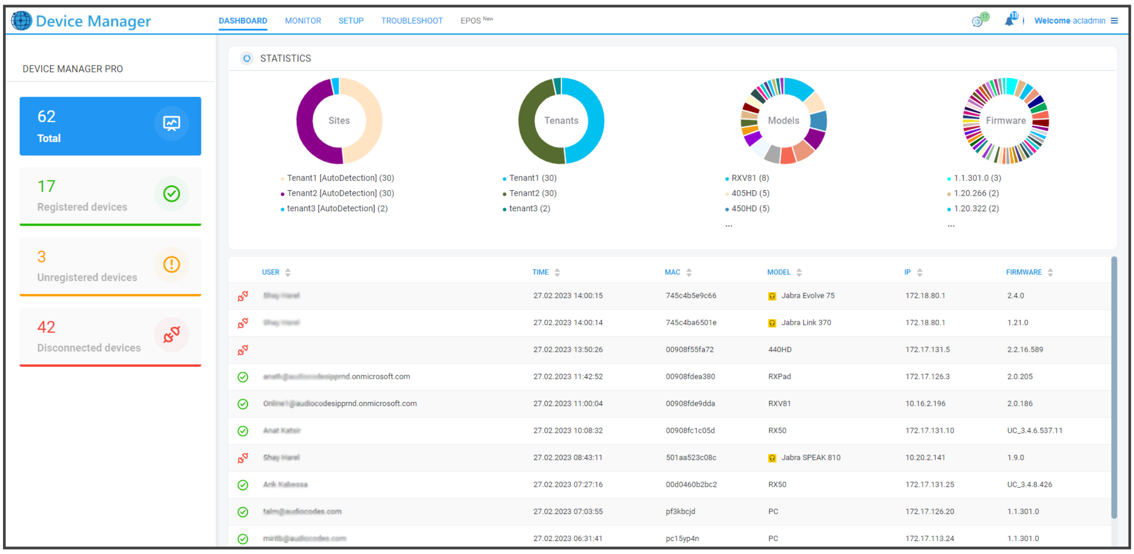
For information on installing and operating OVOC, see the *OVOC Server IOM Manual* and the *OVOC User's Manual*.

### ➢ To log in to the Device Manager Pro via OVOC:

1. In the OVOC's Network page, click the **Endpoints** tab and from the dropdown select **Configurations**.

> ⚠ The 'Username' and 'Password' used to log in to the Device Manager Pro are the same as those used to log in to OVOC.

2. Enter your Username and Password (default = **acladmin** and **pass_1234**) and click **Sign In**; the application is launched and the Monitor Dashboard is displayed.



| | USER | TIME | MAC | MODEL | IP | FIRMWARE |
|---|---|---|---|---|---|---|
| ✗ | [redacted] | 27.02.2023 14:00:15 | 745c4b5e9c66 | ☊ Jabra Evolve 75 | 172.18.80.1 | 2.4.0 |
| ✗ | [redacted] | 27.02.2023 14:00:14 | 745c4ba6501e | ☊ Jabra Link 370 | 172.18.80.1 | 1.21.0 |
| ✗ | | 27.02.2023 13:50:26 | 00908f55fa72 | 440HD | 172.17.131.5 | 2.2.16.589 |
| ✓ | [redacted]pprnd.onmicrosoft.com | 27.02.2023 11:42:52 | 00908fdea380 | RXPad | 172.17.126.3 | 2.0.205 |
| ✓ | [redacted]@audiocodesipprnd.onmicrosoft.com | 27.02.2023 11:00:04 | 00908fde9dda | RXV81 | 10.16.2.196 | 2.0.186 |
| ✓ | [redacted] | 27.02.2023 10:08:32 | 00908fc1c05d | RX50 | 172.17.131.10 | UC_3.4.6.537.11 |
| ✗ | [redacted] | 27.02.2023 08:43:11 | 501aa523c08c | ☊ Jabra SPEAK 810 | 10.20.2.141 | 1.9.0 |
| ✓ | [redacted] | 27.02.2023 07:27:16 | 00d0460b2bc2 | RX50 | 172.17.131.25 | UC_3.4.8.426 |
| ✓ | [redacted] | 27.02.2023 07:03:55 | pf3kbcjd | PC | 172.17.126.20 | 1.1.301.0 |
| ✓ | [redacted] | 27.02.2023 06:31:41 | pc15yp4n | PC | 172.17.113.24 | 1.1.301.0 |

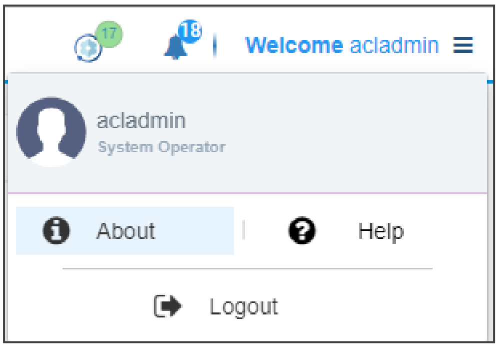
> ⚠
> - See under here for detailed information about monitoring devices.
> - The following topics show how to provision phones using Zero Touch.

## Viewing the About Screen

The About screen allows network administrators to access information about the Device Manager as well as to log out of the application from whatever page they're in. The screen is aligned with the About screen in OVOC.

➢ **To view the About screen:**

- In any page in the Device Manager, click the icon ☰

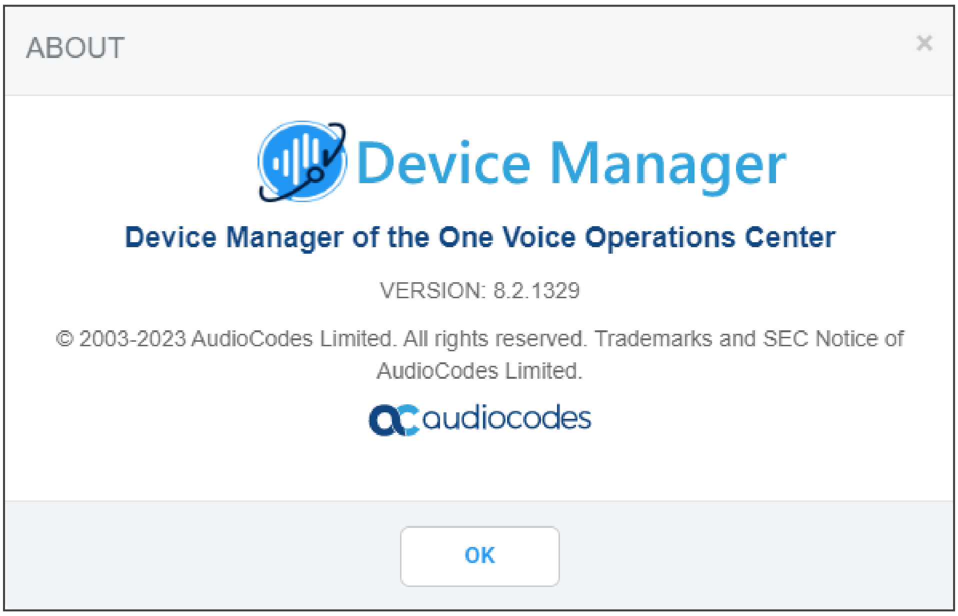


➢ **To log out:**

- Click the **Logout** option.

➢ **To view version information:**

- Click the **i About** option.



ABOUT

Device Manager

**Device Manager of the One Voice Operations Center**

VERSION: 8.2.1329

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audiocodes

OK

# 3 Provisioning

Provisioning covers:

- Using the Zero Touch Setup Wizard to Provision Devices - see here
- Provisioning Devices without the Zero Touch Setup Wizard - see here
- Provisioning Android-based Teams Devices - see here

## Zero Touch Provisioning

AudioCodes' IP phones can be automatically provisioned when they are plugged in to the enterprise's network if Zero Touch provisioning has been implemented.

⚠ Applies to all phones.

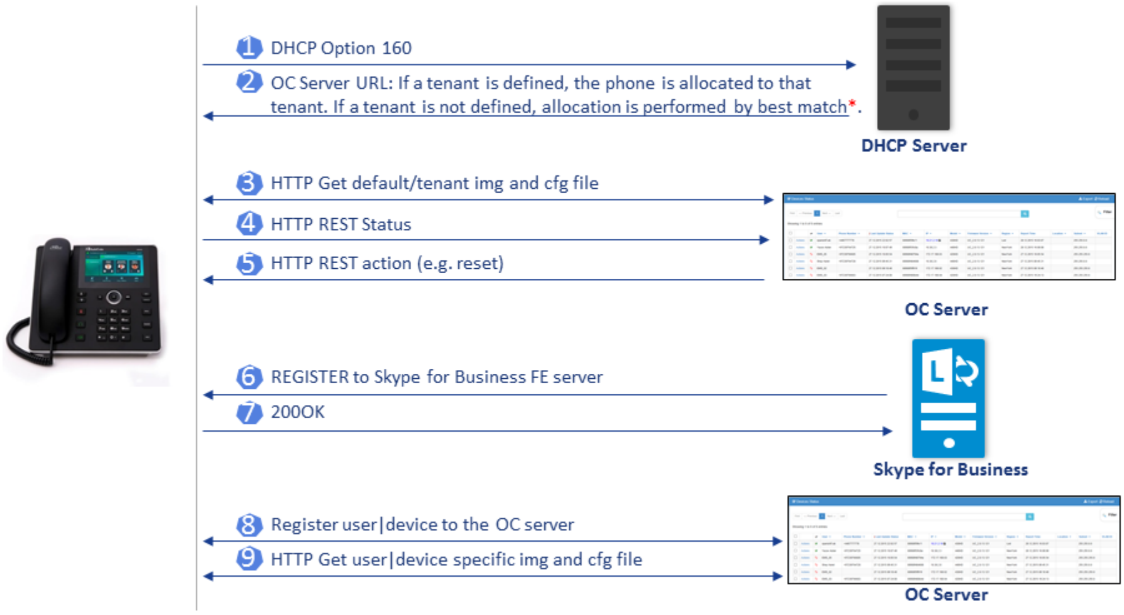
➢ **To implement Zero Touch provisioning:**

1. Build your network topology of tenants and sites using OVOC (see the *One Voice Operations Center User's Manual* for more information).
2. Start up and log in.
3. Choose the Zero Touch provisioning method. Either:
   - Configure the DHCP server to provision the phone with an IP address that is in the tenant/site range. Configure the phone to receive the IP address or subnet mask of the tenant/site.
   - Use DHCP Option 160.
4. Choose the default template for each tenant and device model.

⚠ Devices that reside behind a NAT and whose IP addresses are internal can be managed by OVOC via SBC HTTP proxy. For more information, see here.

### Zero Touch Provisioning Process - Skype for Business Phone

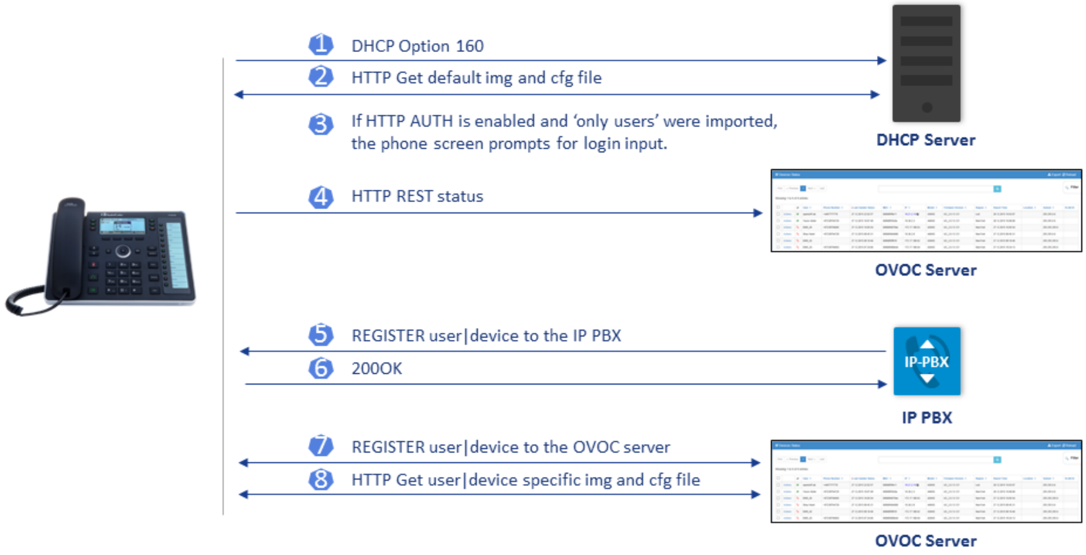
The figure below illustrates the 1-9 step provisioning process for AudioCodes' IP phones for Skype for Business when the Zero Touch feature is implemented.


1 DHCP Option 160
2 OC Server URL: If a tenant is defined, the phone is allocated to that tenant. If a tenant is not defined, allocation is performed by best match*.
DHCP Server
3 HTTP Get default/tenant img and cfg file
4 HTTP REST Status
5 HTTP REST action (e.g. reset)
OC Server
6 REGISTER to Skype for Business FE server
7 200OK
Skype for Business
8 Register user|device to the OC server
9 HTTP Get user|device specific img and cfg file
OC Server

*If the admin doesn't define a tenant in the URL in DHCP Option 160, the phone is allocated a tenant/site according to *best match*, that is, according to either tenant Subnet Mask or site Subnet Mask configured in OVOC. See the *OVOC User's Manual* for more information.

## Zero Touch Provisioning – non Skype for Business Phone

The figure below illustrates the 1-8 step provisioning process for AudioCodes' non Skype for Business phones when the Zero Touch feature is implemented.


1 DHCP Option 160
2 HTTP Get default img and cfg file
3 If HTTP AUTH is enabled and 'only users' were imported, the phone screen prompts for login input.
DHCP Server
4 HTTP REST status
OVOC Server
5 REGISTER user|device to the IP PBX
6 200OK
IP-PBX
IP PBX
7 REGISTER user|device to the OVOC server
8 HTTP Get user|device specific img and cfg file
OVOC Server

## Using the Zero Touch Setup Wizard to Provision Devices

When plugged in to the enterprise network, phones can automatically be provisioned through the Zero Touch feature.

- Zero Touch determines which *template* the phone will be allocated.

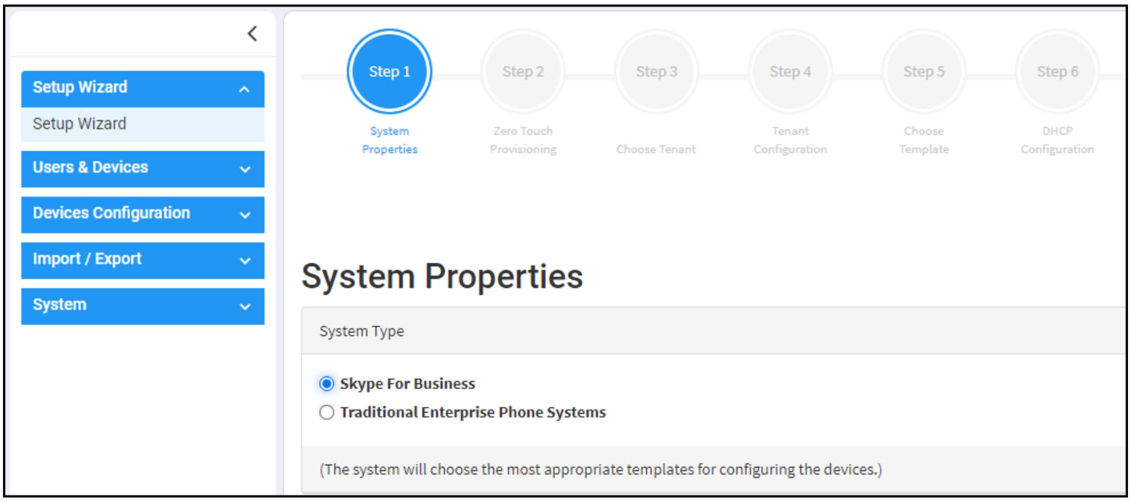
- The template is allocated *per phone model* and *per phone tenant*.
- The template determines which *firmware file* and *configuration file* the phone will be allocated.

> ⚠ Zero Touch provisioning *accelerates uptime* by enabling multiple users and phones to automatically be provisioned and added to the Manager.

You can use the Setup Wizard feature to *set up* Zero Touch provisioning. The Wizard simplifies deployment of phones in the enterprise for network administrators. The Wizard's functions were already implemented in versions of Device Manager Pro earlier than Version 7.4, only now they're centralized in a single location for a friendlier deployment experience. Here are the steps to follow to provision phones using the Wizard.

### ➢ To provision phones using the Zero Touch Setup Wizard:

1. In the main screen, click the 'Setup' menu and then click the **Setup Wizard** option.



System Properties

System Type

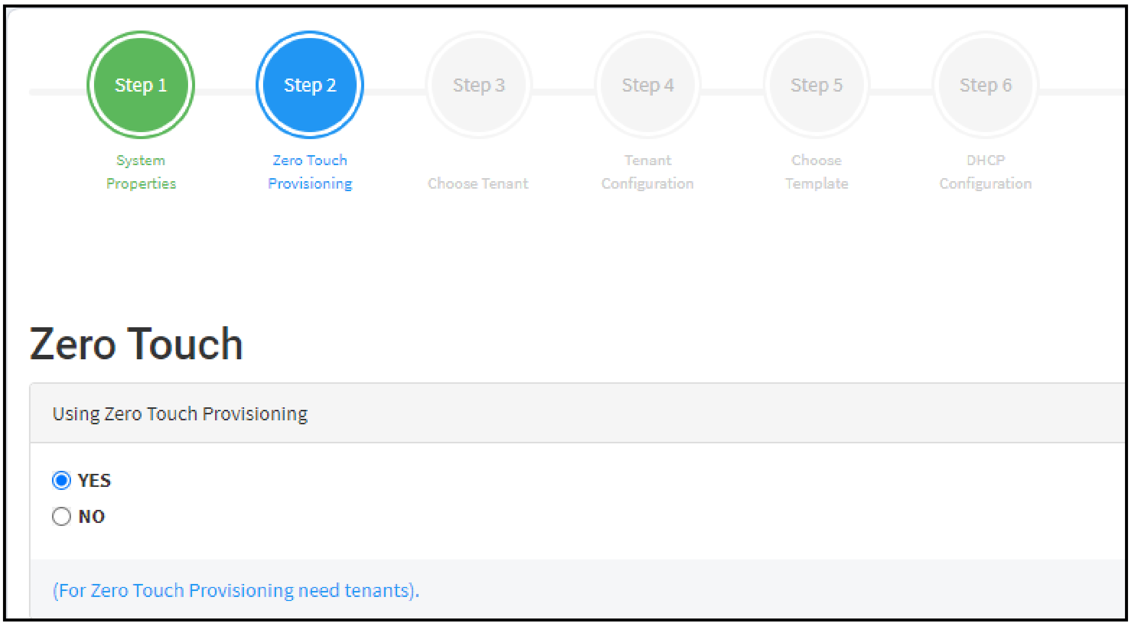
● Skype For Business

○ Traditional Enterprise Phone Systems

(The system will choose the most appropriate templates for configuring the devices.)

2. Select **Skype for Business** if it isn't selected already, and then click **Next**.

> ⚠ The Setup Wizard will be closed if you intend to use other PBXs besides Skype for Business. The Setup Wizard is intended exclusively for Skype for Business.



Zero Touch

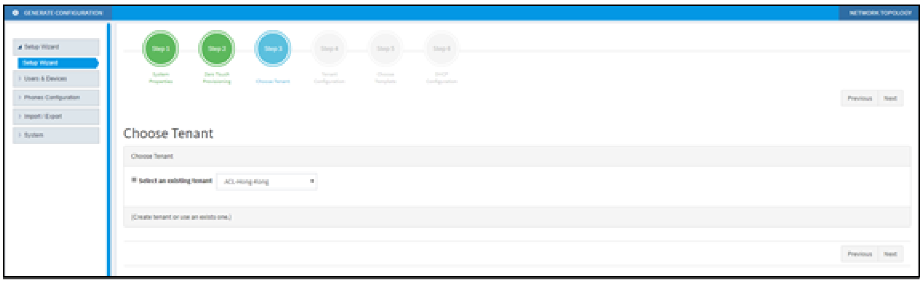
Using Zero Touch Provisioning

● YES

○ NO

(For Zero Touch Provisioning need tenants).

3. Select **Yes** and then click **Next**.



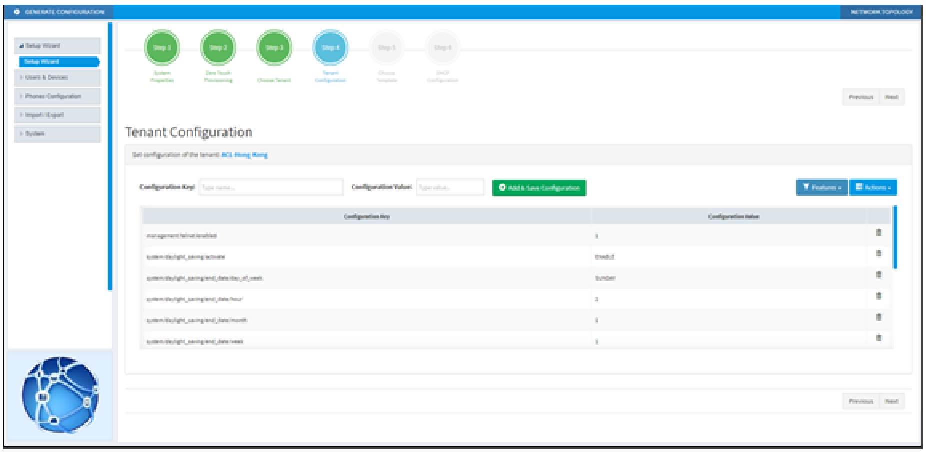
Choose Tenant

Choose Tenant

● Select an existing tenant: ACL Hong Kong

(Create tenant or use an exists one.)

4. Choose an existing tenant from the dropdown and click **Next**. If a tenant doesn't already exist, click **Next** and configure one. This is to be able to create a specific configuration for the tenant and configure the URL in DHCP Option 160 so devices will use this tenant. If there's no specific tenant configuration to configure, click **Next**.



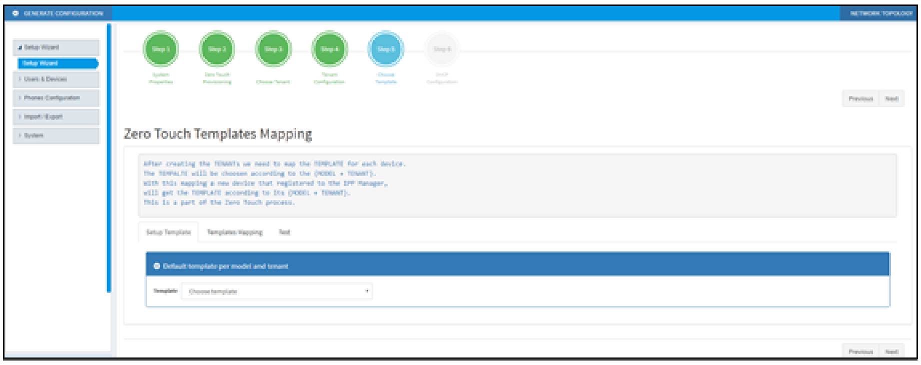
Tenant Configuration

Set configuration of the tenant: ACL Hong Kong

Configuration Key: Type name... Configuration Value: Type value...

| Configuration Key | Configuration Value |
|---|---|
| management.telnet.enabled | 1 |
| system.daylight_saving.activate | ENABLE |
| system.daylight_saving.end_date.day_of_week | SUNDAY |
| system.daylight_saving.end_date.hour | 2 |
| system.daylight_saving.end_date.month | 1 |
| system.daylight_saving.end_date.week | 1 |

5. Click **Next**.



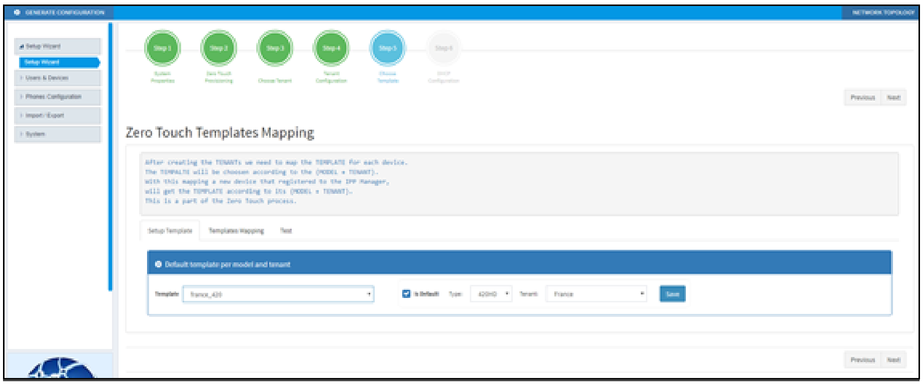
Zero Touch Templates Mapping

```
After creating the TENANTs we need to map the TEMPLATE for each device.
The TEMPALTE will be choosen according to the {MODEL + TENANT}.
With this mapping a new device that registered to the IPP Manager,
will get the TEMPLATE according to its {MODEL + TENANT}.
This is a part of the Zero Touch process.
```

Default template per model and tenant

Template: Choose template

6. From the 'Template' dropdown, choose a template.



Zero Touch Templates Mapping

```
After creating the TENANTs we need to map the TEMPLATE for each device.
The TEMPALTE will be choosen according to the {MODEL + TENANT}.
With this mapping a new device that registered to the IPP Manager,
will get the TEMPLATE according to its {MODEL + TENANT}.
This is a part of the Zero Touch process.
```

Default template per model and tenant

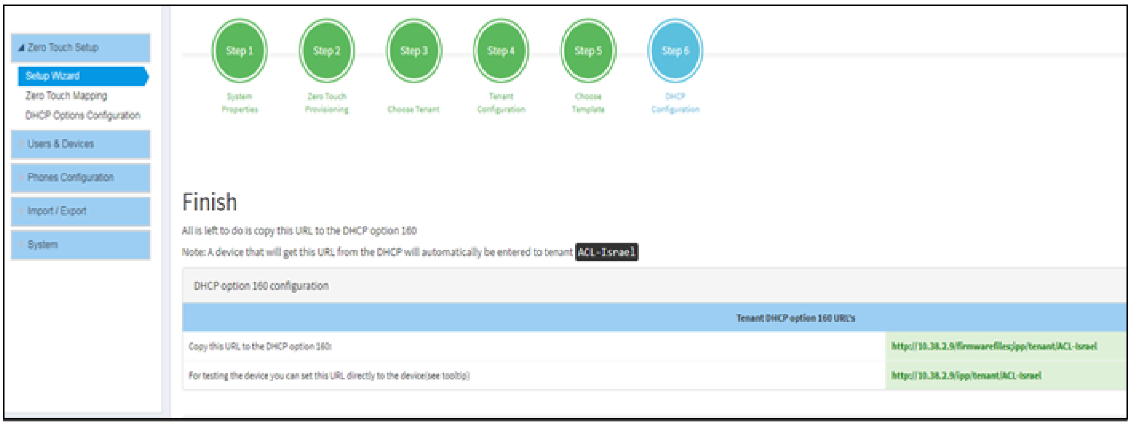
Template: france_420 ☑ Is Default Type: 420HD Tenant: France

7. Associate a template according to the MODEL and TENANT. The page displays a mapping table in which you need to map {MODEL + TENANT} to TEMPLATE.

   a. Select 'IsDefault'; from this point on, the template chosen will be used.

   b. From the 'Phone' dropdown, select the model.

   c. From the 'Tenant' dropdown, select the tenant and then click **Next**.



Finish

All is left to do is copy this URL to the DHCP option 160

Note: A device that will get this URL from the DHCP will automatically be entered to tenant ACL-Israel

DHCP option 160 configuration

| Tenant DHCP option 160 URL's | |
|---|---|
| Copy this URL to the DHCP option 160: | http://10.38.2.9/firmwarefiles;ipp/tenant/ACL-Israel |
| For testing the device you can set this URL directly to the device(see tooltip) | http://10.38.2.9/ipp/tenant/ACL-Israel |

8. Define the URL in DHCP Option 160.

## Signing in to a Phone into which Another User is Signed

⚠ Applies only if the Zero Touch provisioning method was used.

If user B signs in to a phone that user A is signed in to, user A's phone is deleted from the Manage Users page and the newly signed-in phone is added to User A.

The Devices Status page is updated with the newly signed-in phone.

Before version 7.2, the GUI remained unchanged, irrespective of the new sign in.

## Provisioning Devices without the Zero Touch Setup Wizard

You can set up zero touch provisioning in the Manager without using the Setup Wizard. When plugged in to the enterprise network, phones will then automatically be provisioned.

- Zero Touch determines with which *template* the phone will be provisioned.
- The template is provisioned *per phone model* and *per phone tenant*.
- The template determines with which *firmware file* (img) and *configuration file* (cfg) the phone will be provisioned.

⚠ Zero Touch accelerates uptime by enabling multiple users and phones to automatically be provisioned and added to the Manager.

### Before Implementing Zero Touch

Before implementing Zero Touch, you need to prepare the network.

This applies to:

- the network administrator of the enterprise whose OVOC is installed on premises (in the enterprise's LAN)
- the system integrator of the Service Provider whose OVOC is installed in the cloud (WAN)

➢ **To prepare the network for Zero Touch provisioning:**

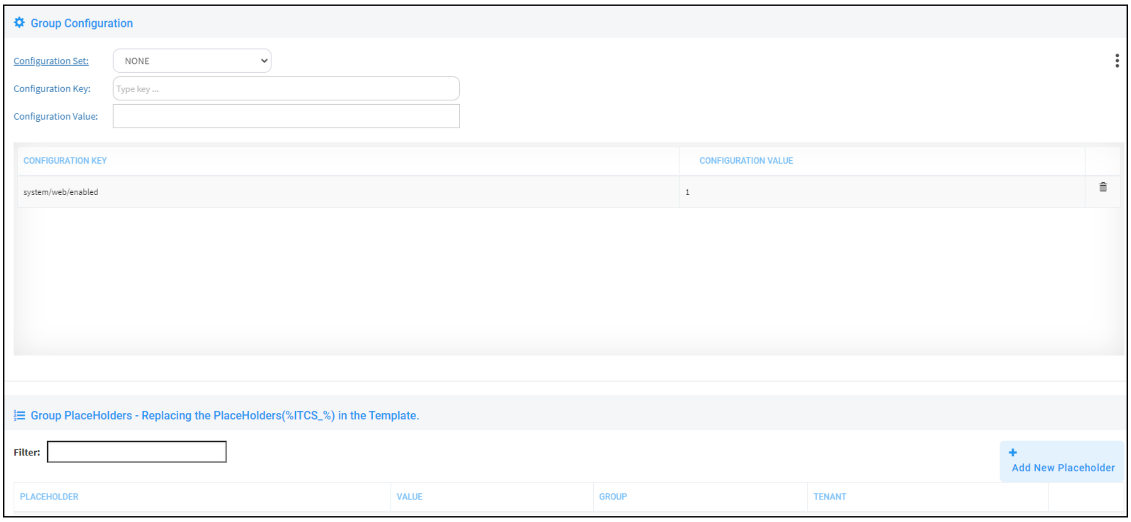
1. Prepare a template per tenant (see here).
2. Upload the firmware .img file to the server (see here).
3. Configure the DHCP server's Option 160 to allocate the phone to the tenant/site URL (see here).

### Configuring an Endpoints Group

After adding a group to OVOC as shown in the *OVOC User's Manual*, you can add an endpoint - or multiple endpoints - to that group as shown here under the action **Change Group**, and then you can configure the endpoints in the group as shown below. The feature benefits a customer who wants for example 10 of 500 phones in a site in their enterprise organized in a group for a software upgrade to apply exclusively to the 10 phones in that group. In contrast to sites, groups are *logical* entities but configuration of both are identical; both are per tenant.

### ➢ To configure an endpoints group:

1. Open the Group Configuration page (**Setup** > **Configuration** > **Group Configuration**).


Group Configuration
Group PlaceHolders - Replacing the PlaceHolders(%ITCS_%) in the Template.
Add New Placeholder

Configuration Set: NONE
Configuration Key: Type key ...
Configuration Value:

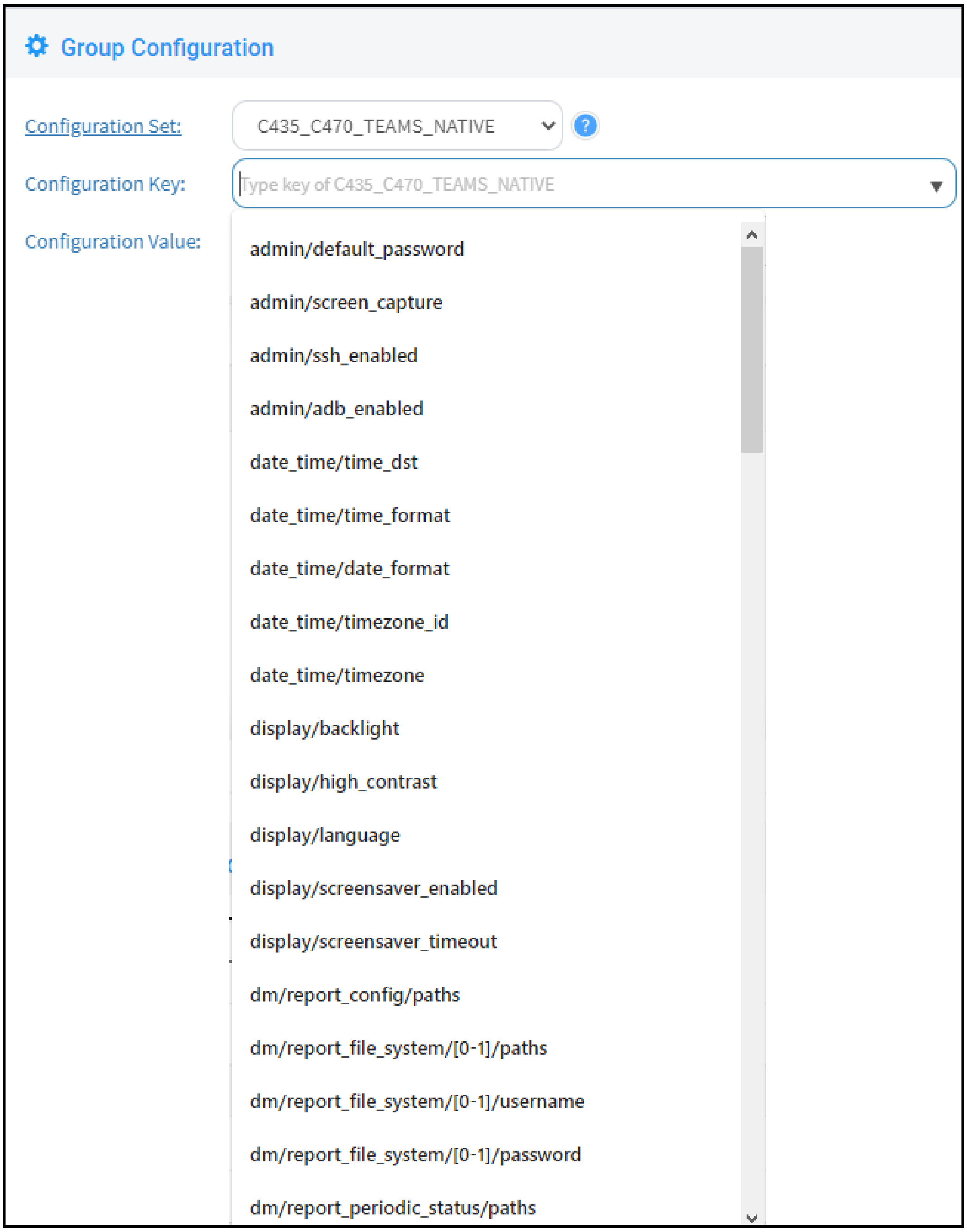
| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| system/web/enabled | 1 |

Filter:

| PLACEHOLDER | VALUE | GROUP | TENANT |
|---|---|---|---|

2. From the 'Select Group' drop-down, choose the group (added to OVOC) under which you want to organize endpoints.

3. From the 'Configuration Key' drop-down, select a parameter to configure for the endpoints group.



Group Configuration

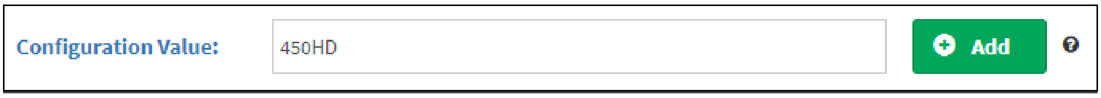
Configuration Set: C435_C470_TEAMS_NATIVE

Configuration Key: Type key of C435_C470_TEAMS_NATIVE

Configuration Value:

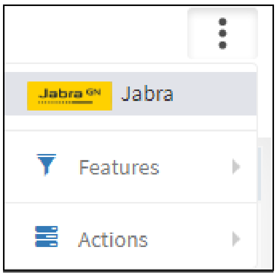
- admin/default_password
- admin/screen_capture
- admin/ssh_enabled
- admin/adb_enabled
- date_time/time_dst
- date_time/time_format
- date_time/date_format
- date_time/timezone_id
- date_time/timezone
- display/backlight
- display/high_contrast
- display/language
- display/screensaver_enabled
- display/screensaver_timeout
- dm/report_config/paths
- dm/report_file_system/[0-1]/paths
- dm/report_file_system/[0-1]/username
- dm/report_file_system/[0-1]/password
- dm/report_periodic_status/paths

4. In the 'Configuration Value' field displayed after a selection, provision the parameter with a value and then click **Add**. Click **?** for more information if necessary.

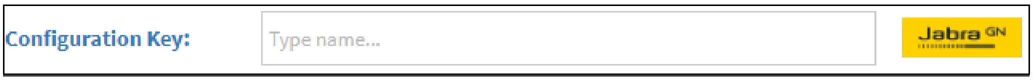


Configuration Value: 450HD

5. To configure Jabra endpoints group parameters, click ⋮ adjacent to the 'Configuration Key' field and select **Jabra**.

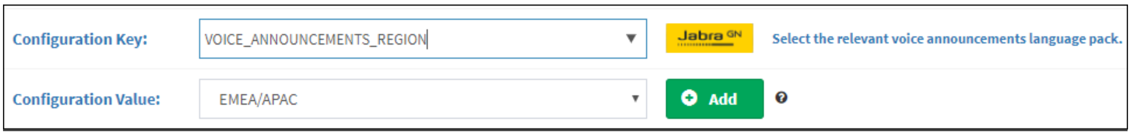


6. View the following:



Configuration Key: Type name...

7. From the 'Configuration Key' drop-down, select a Jabra parameter to configure for the Jabra endpoints group.



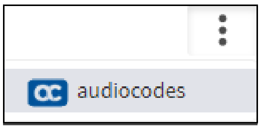
Configuration Key: VOICE_ANNOUNCEMENTS_REGION

Select the relevant voice announcements language pack.

Configuration Value: EMEA/APAC

8. In the 'Configuration Value' field displayed after a selection, provision the parameter with a value and then click **Add**. Click **?** for more information if necessary.

9. To switch back to an AudioCodes (non Jabra) endpoints group, click ⋮ adjacent to the 'Configuration Key' field and select **AudioCodes**.



## Preparing a Template for a Tenant/Model

You need to prepare a template per tenant / type (phone model) in the deployment. The template informs the server how to generate the .cfg configuration file when the phones are plugged in to the network. When the phones are plugged in, the .cfg configuration file is downloaded to them from the server.

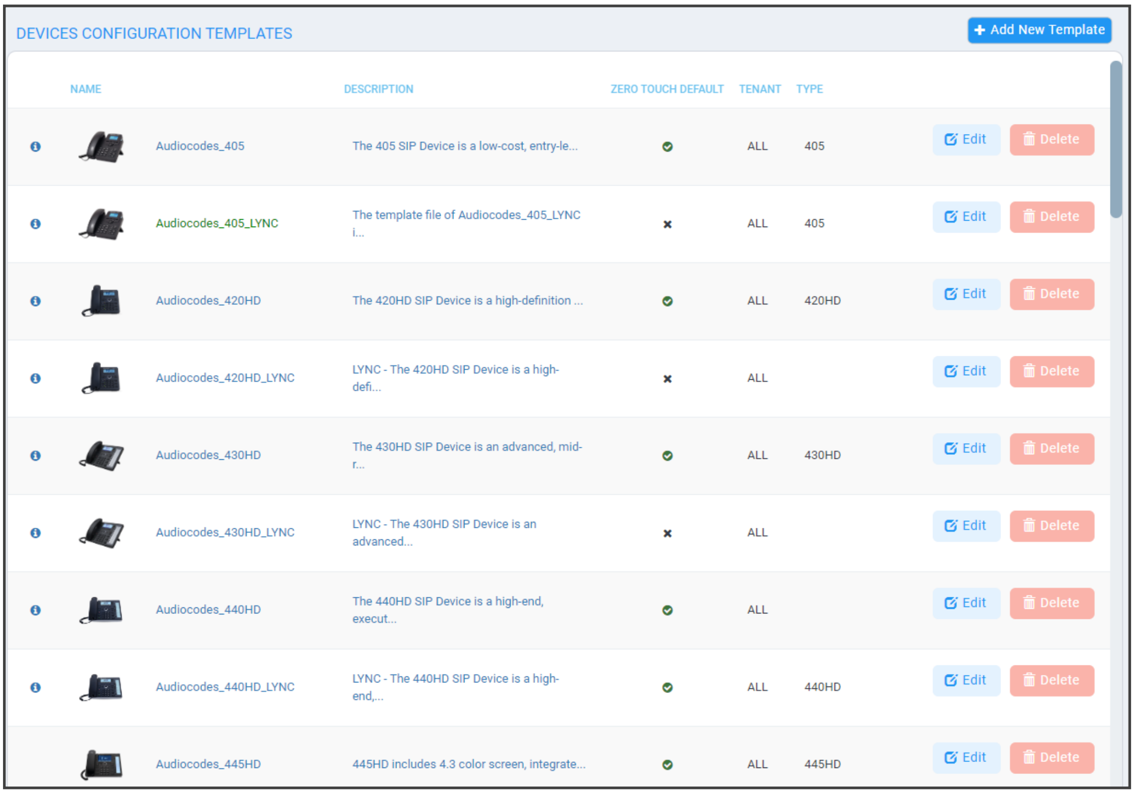
> ⚠ User-configured Speed Dials and Programmable Keys are saved in the device's cfg file and backed up on the server. After the user configures them (see the device's *User's Manual* for details), the phone automatically updates the cfg file on the server. They're downloaded to the phone after:
>
> - they're deleted or some other 'crisis' occurs
> - the phone is restored to factory defaults
> - the user starts working with a new device
> - the user deploys another device at their workstation
> - the user's phone is upgraded

This saves the user from having to configure Speed Dials and Programmable Keys from the beginning. The user only needs to configure them once, initially.

If there is no cfg file on the server, the server gets the data from the phone.

### ➢ To prepare a template for a tenant / phone model:

1. Open the 'Add new template' screen (**Setup** > **Configuration** > **Templates**).

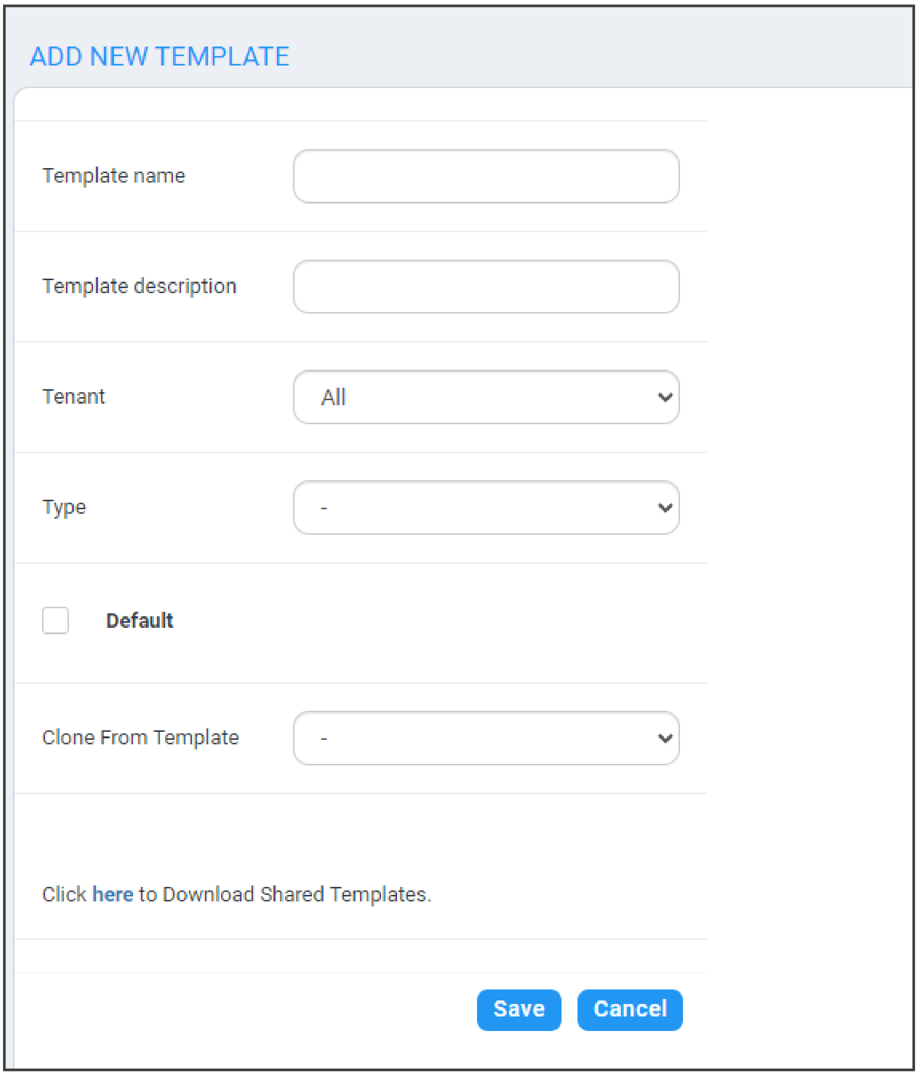


DEVICES CONFIGURATION TEMPLATES

| NAME | DESCRIPTION | ZERO TOUCH DEFAULT | TENANT | TYPE | |
|---|---|---|---|---|---|
| Audiocodes_405 | The 405 SIP Device is a low-cost, entry-le... | ✓ | ALL | 405 | Edit Delete |
| Audiocodes_405_LYNC | The template file of Audiocodes_405_LYNC i... | ✗ | ALL | 405 | Edit Delete |
| Audiocodes_420HD | The 420HD SIP Device is a high-definition ... | ✓ | ALL | 420HD | Edit Delete |
| Audiocodes_420HD_LYNC | LYNC - The 420HD SIP Device is a high-defi... | ✗ | ALL | | Edit Delete |
| Audiocodes_430HD | The 430HD SIP Device is an advanced, mid-r... | ✓ | ALL | 430HD | Edit Delete |
| Audiocodes_430HD_LYNC | LYNC - The 430HD SIP Device is an advanced... | ✗ | ALL | | Edit Delete |
| Audiocodes_440HD | The 440HD SIP Device is a high-end, execut... | ✓ | ALL | | Edit Delete |
| Audiocodes_440HD_LYNC | LYNC - The 440HD SIP Device is a high-end,... | ✓ | ALL | 440HD | Edit Delete |
| Audiocodes_445HD | 445HD includes 4.3 color screen, integrate... | ✓ | ALL | 445HD | Edit Delete |

⚠ For information on third-party vendor products, see the *Device Manager for Third-Party Vendor Products Administrator's Manual*.

2. Click the **Add New Template** button.



Template name

Template description

Tenant: All

Type: -

□ **Default**

Clone From Template: -

Click **here** to Download Shared Templates.

3. Enter a name for the template. Make the name intuitive. Include tenant *and* model aspects in it.

4. Provide a description of the template to enhance intuitive maintenance.

5. From the 'Tenant' dropdown list, select the tenant.

6. From the 'Type' dropdown list, select the phone model.

7. Select the **Default Tenant** option for the template to be the default for this tenant. More than one phone type can be in a tenant. All can have a common template. But only one template can be configured for a tenant. If a second template is configured for the tenant, it overrides the first. After a template is added, it's displayed as shown above in the Devices Configuration Template page (**Setup** > **Configuration** > **Templates**). When a phone is then connected to the network, if the phone is of this type and located in this tenant, it will automatically be provisioned via the DHCP server from the OVOC provisioning server (Zero Touch).

8. From the 'Clone From Template' dropdown list, select a template to clone from. If the template is for phones in a tenant that are Microsoft Skype for Business phones, choose a Skype for Business template.

9. Do this for all tenants and types (phone models) in the network.

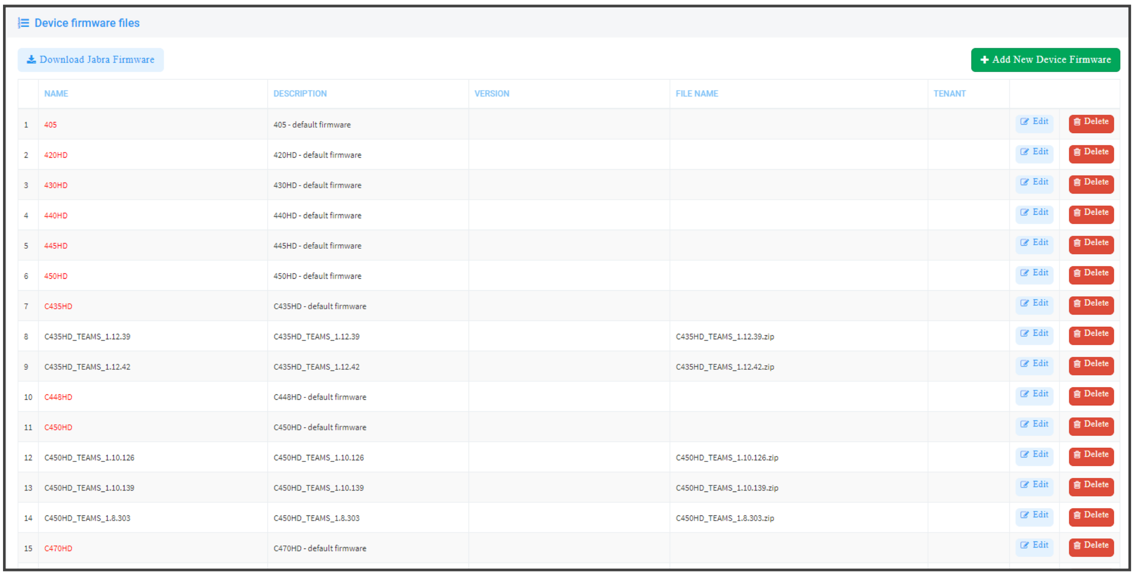
10. If necessary, click the **here** link in 'Click **here** to Download Shared Templates'; your browser opens displaying AudioCodes share file in which all templates are located, for example, the templates used with Genesys.

## Uploading .img Firmware File to the Server

After obtaining the device's latest .img firmware file from AudioCodes, upload it to the OVOC provisioning server. When devices are later connected to the network, they're automatically provisioned with firmware from the server. You can also upload the .dfu firmware files for the speakers of the Huddle Room Solution (HRS).

### ➢ To upload the .img firmware file to the OVOC provisioning server:

1. In the Device Manager Pro, access the Firmware Files page (**Setup** > **Firmware** > **Firmware Files**).



| | NAME | DESCRIPTION | VERSION | FILE NAME | TENANT | | |
|---|---|---|---|---|---|---|---|
| 1 | 405 | 405 - default firmware | | | | Edit | Delete |
| 2 | 420HD | 420HD - default firmware | | | | Edit | Delete |
| 3 | 430HD | 430HD - default firmware | | | | Edit | Delete |
| 4 | 440HD | 440HD - default firmware | | | | Edit | Delete |
| 5 | 445HD | 445HD - default firmware | | | | Edit | Delete |
| 6 | 450HD | 450HD - default firmware | | | | Edit | Delete |
| 7 | C435HD | C435HD - default firmware | | | | Edit | Delete |
| 8 | C435HD_TEAMS_1.12.39 | C435HD_TEAMS_1.12.39 | | C435HD_TEAMS_1.12.39.zip | | Edit | Delete |
| 9 | C435HD_TEAMS_1.12.42 | C435HD_TEAMS_1.12.42 | | C435HD_TEAMS_1.12.42.zip | | Edit | Delete |
| 10 | C448HD | C448HD - default firmware | | | | Edit | Delete |
| 11 | C450HD | C450HD - default firmware | | | | Edit | Delete |
| 12 | C450HD_TEAMS_1.10.126 | C450HD_TEAMS_1.10.126 | | C450HD_TEAMS_1.10.126.zip | | Edit | Delete |
| 13 | C450HD_TEAMS_1.10.139 | C450HD_TEAMS_1.10.139 | | C450HD_TEAMS_1.10.139.zip | | Edit | Delete |
| 14 | C450HD_TEAMS_1.8.303 | C450HD_TEAMS_1.8.303 | | C450HD_TEAMS_1.8.303.zip | | Edit | Delete |
| 15 | C470HD | C470HD - default firmware | | | | Edit | Delete |

2. In the Firmware Files screen, click the **Add New Device Firmware** button.

3. Navigate to the .img file and/or .dfu firmware files for the HRS speakers, and upload to the OVOC provisioning server.

## Configuring DHCP Option 160 with a Tenant URL

You need to point DHCP Option 160 to a tenant URL so that the phones will be automatically provisioned with their .img firmware file and cfg configuration file when they're plugged in to the network for the first time (Zero Touch provisioning).

**Either of the following two methods can be used to implement Zero Touch:**

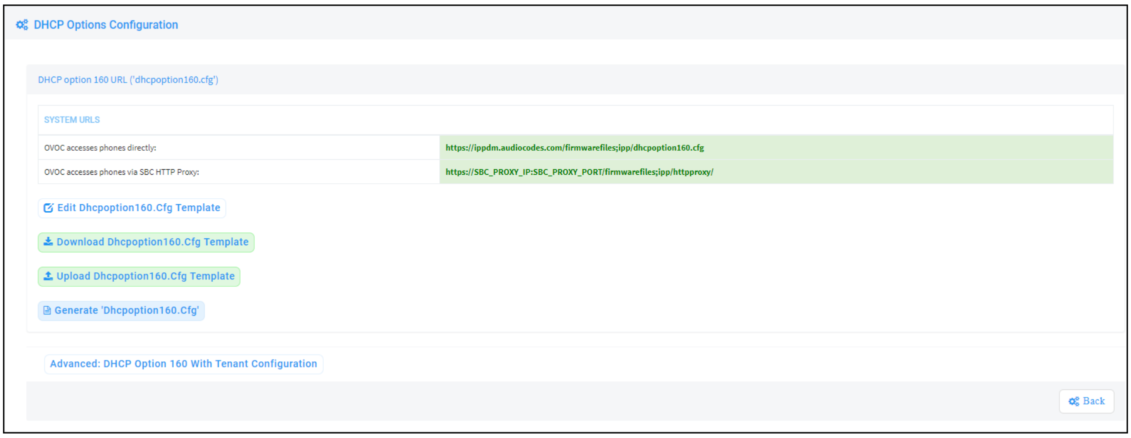
- Configure the DHCP server to provision the phone with an IP address that is in the tenant/site range. Configure the phone to receive the IP address or subnet mask of the tenant/site.
- Use DHCP Option 160

The Device Manager Pro supports backward compatibility so you can point DHCP Option 160 to a region URL. See the *Administrator's Manual* v7.2 and earlier.

Later when the (Skype for Business) phones are signed in, phones and users are automatically added to Device Manager Pro which loads their specific .cfg files to them.

### ➢ To point DHCP Option 160 to a tenant URL:

1. In the Device Manager Pro, open the DHCP Options Configuration page (**Setup** > **Settings** > **DHCP Options Configuration**).



DHCP Options Configuration

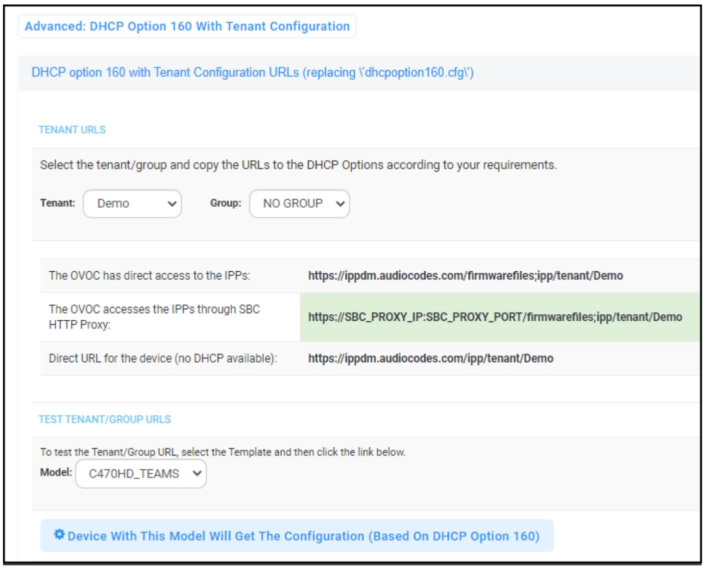
DHCP option 160 URL ('dhcpoption160.cfg')

SYSTEM URLS

| | |
|---|---|
| OVOC accesses phones directly: | https://ippdm.audiocodes.com/firmwarefiles;ipp/dhcpoption160.cfg |
| OVOC accesses phones via SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/httpproxy/ |

Edit Dhcpoption160.Cfg Template
Download Dhcpoption160.Cfg Template
Upload Dhcpoption160.Cfg Template
Generate 'Dhcpoption160.Cfg'
Advanced: DHCP Option 160 With Tenant Configuration
Back

2. Click the **Advanced: DHCP option 160 with Tenant Configuration** link located lowermost.



Advanced: DHCP Option 160 With Tenant Configuration

DHCP option 160 with Tenant Configuration URLs (replacing \'dhcpoption160.cfg\')

TENANT URLS

Select the tenant/group and copy the URLs to the DHCP Options according to your requirements.

Tenant: Demo Group: NO GROUP

| | |
|---|---|
| The OVOC has direct access to the IPPs: | https://ippdm.audiocodes.com/firmwarefiles;ipp/tenant/Demo |
| The OVOC accesses the IPPs through SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/tenant/Demo |
| Direct URL for the device (no DHCP available): | https://ippdm.audiocodes.com/ipp/tenant/Demo |

TEST TENANT/GROUP URLS

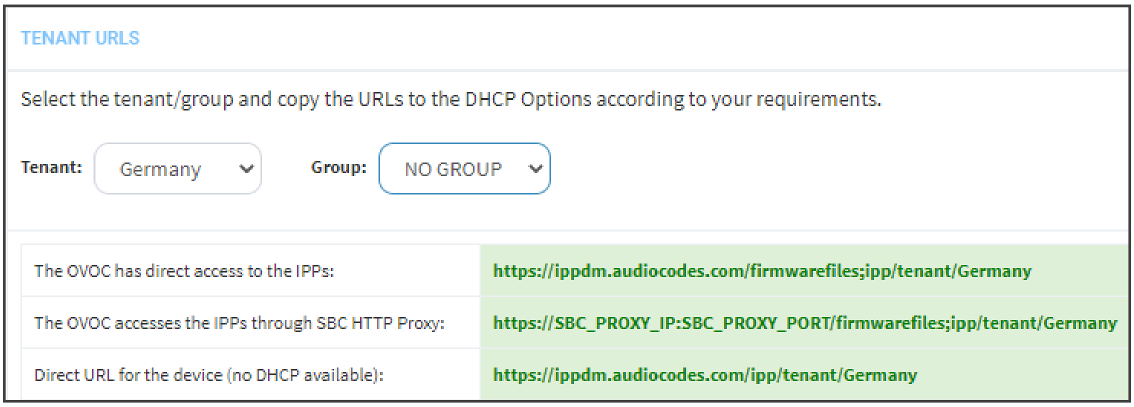
To test the Tenant/Group URL, select the Template and then click the link below.

Model: C470HD_TEAMS

Device With This Model Will Get The Configuration (Based On DHCP Option 160)

3. Under the Tenant URLs section, select from the 'Tenant' dropdown a tenant with which to associate a new device, as shown in the next figure (Germany).

4. From the 'Group' dropdown list, select a group with which to associate a new device, as shown in the next figure (NO GROUP is selected).



TENANT URLS

Select the tenant/group and copy the URLs to the DHCP Options according to your requirements.

Tenant: Germany Group: NO GROUP

| | |
|---|---|
| The OVOC has direct access to the IPPs: | https://ippdm.audiocodes.com/firmwarefiles;ipp/tenant/Germany |
| The OVOC accesses the IPPs through SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/tenant/Germany |
| Direct URL for the device (no DHCP available): | https://ippdm.audiocodes.com/ipp/tenant/Germany |

You can configure the device's tenant URLs to retrieve files either directly from the OVOC server or via an SBC HTTP proxy. Using an SBC HTTP proxy server is useful for customers whose OVOC is installed in the cloud, or when phones are located behind a NAT.

5. Choose either:

   - **The OVOC has direct access to the phones**. The DHCP server will connect the phones directly to the OVOC server IP address.

     - Copy (Ctrl+C) the following URL and paste it into DHCP Option 160 in the enterprise's DHCP server: **HTTP://<OVOC_IP_Address>/firmwarefiles;ipp/tenant/<tenant selected in Step 1>/group/<group selected in step 1>**

   - **The OVOC access the IPP's through the SBC HTTP proxy**. The DHCP server directs the phones firstly to an SBC HTTP proxy server, which then redirects to the OVOC server.

     - If the phones communicate with an SBC HTTP proxy rather than directly with the OVOC server, copy (Ctrl+C) the following URL into DHCP Option 160 in the enterprise's DHCP server: **http://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/tenant/Tenant**

   - **Direct URL for the IPP (No DHCP Available)** – typically used for debugging purposes when no DHCP is available.

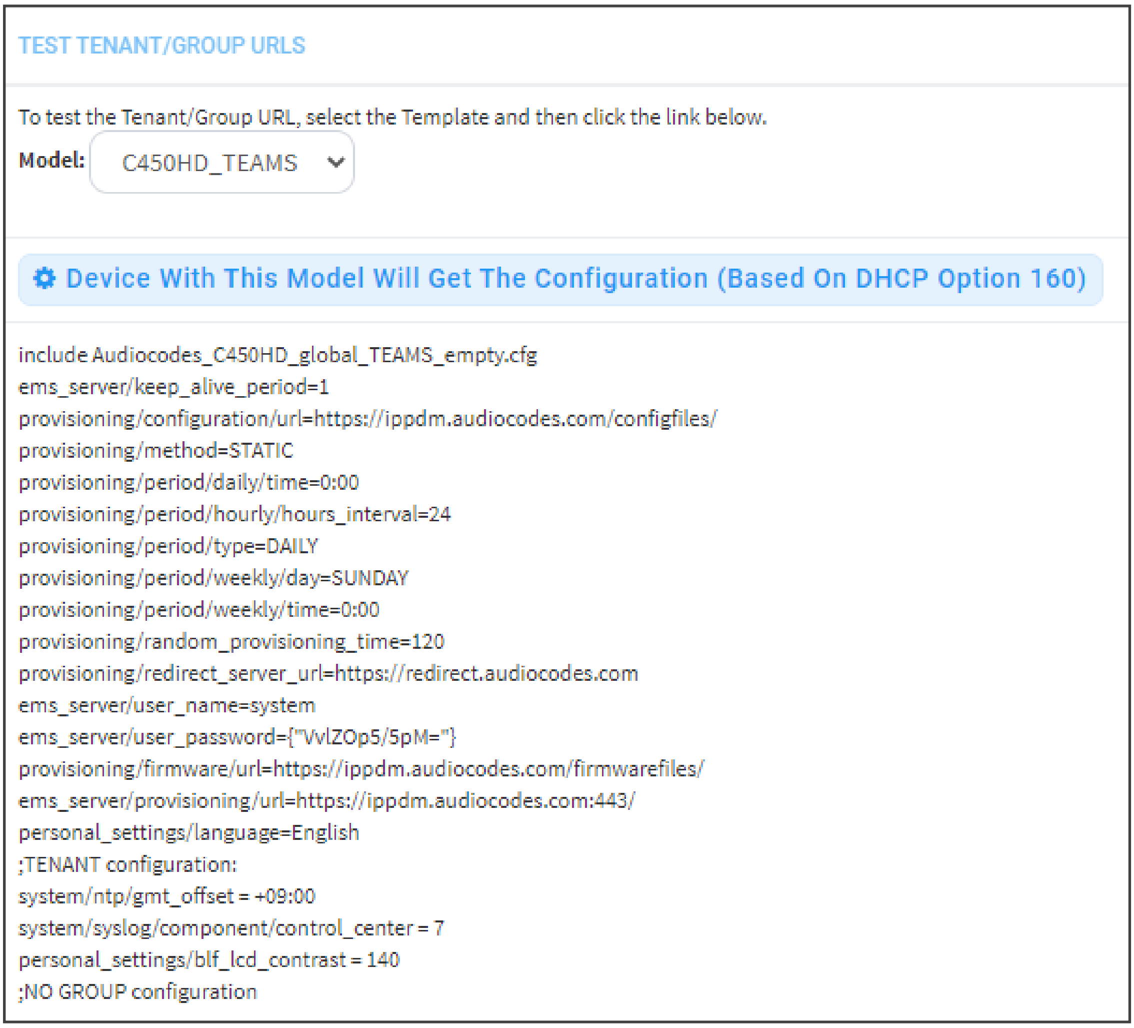
> - Configure DHCP Option 160 to point to the OVOC provisioning server's URL if the phones are not behind a NAT. DHCP Option 66/67 can also be used.
> - If the phones reside behind a NAT and an SBC HTTP proxy is available, configure DHCP Option 160 to point to the SBC HTTP proxy; phone-OVOC communications will then be via the SBC HTTP proxy rather than direct.

6. After copying the tenant URL (Ctrl+C) and pasting it into the enterprise's DHCP server's DHCP Option 160, select the phone model from the 'IPP Model' dropdown and then click the button **IPP with this model will get from the DHCP**; an output of the configuration file that you have configured to provision is displayed. Verify it before committing to provision multiple phones.

When a deployment covers multiple tenants, the tenants definition can be in two main hierarchies:

- DHCP server
- Subnet

For Zero Touch provisioning to function, tenant granularity must correspond with the number of DHCP servers/subnets already located within the enterprise network.



TEST TENANT/GROUP URLS

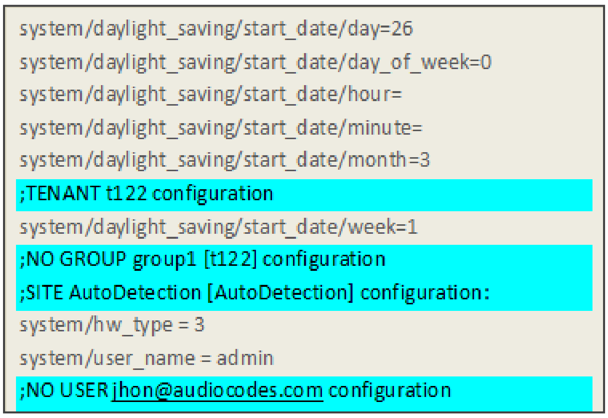
To test the Tenant/Group URL, select the Template and then click the link below.

**Model:** C450HD_TEAMS

Device With This Model Will Get The Configuration (Based On DHCP Option 160)

```
include Audiocodes_C450HD_global_TEAMS_empty.cfg
ems_server/keep_alive_period=1
provisioning/configuration/url=https://ippdm.audiocodes.com/configfiles/
provisioning/method=STATIC
provisioning/period/daily/time=0:00
provisioning/period/hourly/hours_interval=24
provisioning/period/type=DAILY
provisioning/period/weekly/day=SUNDAY
provisioning/period/weekly/time=0:00
provisioning/random_provisioning_time=120
provisioning/redirect_server_url=https://redirect.audiocodes.com
ems_server/user_name=system
ems_server/user_password={"VvlZOp5/5pM="}
provisioning/firmware/url=https://ippdm.audiocodes.com/firmwarefiles/
ems_server/provisioning/url=https://ippdm.audiocodes.com:443/
personal_settings/language=English
;TENANT configuration:
system/ntp/gmt_offset = +09:00
system/syslog/component/control_center = 7
personal_settings/blf_lcd_contrast = 140
;NO GROUP configuration
```

Comments in the configuration file's notation indicate a parameter's template source.



```
system/daylight_saving/start_date/day=26
system/daylight_saving/start_date/day_of_week=0
system/daylight_saving/start_date/hour=
system/daylight_saving/start_date/minute=
system/daylight_saving/start_date/month=3
;TENANT t122 configuration
system/daylight_saving/start_date/week=1
;NO GROUP group1 [t122] configuration
;SITE AutoDetection [AutoDetection] configuration:
system/hw_type = 3
system/user_name = admin
;NO USER jhon@audiocodes.com configuration
```

Template source can be:

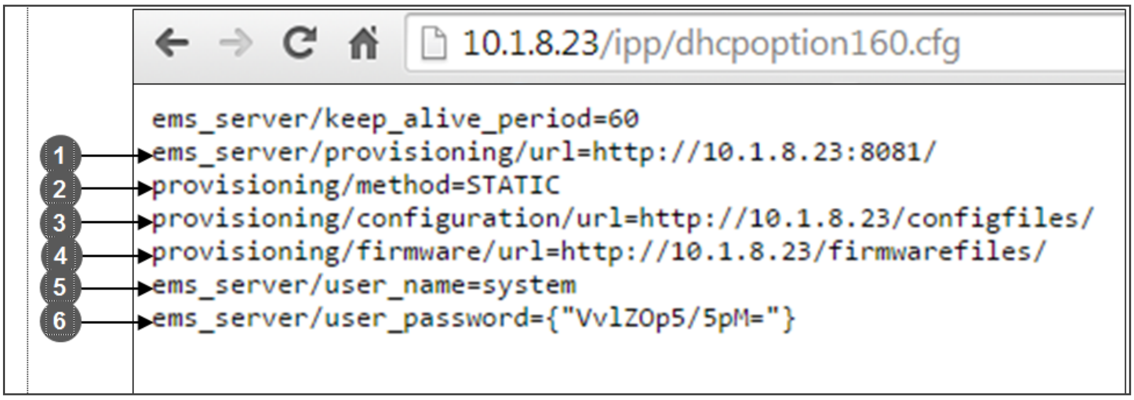
- Device Specific
- Tenant Level
- Group Level
- Site Level
- User Level

Zero Touch is supported for phones with sign-in capabilities only.

### Configuring DHCP Option 160 with System URL

- This configuration is applicable when Zero Touch is not used to provision the phones.
- The instructions below therefore describe a provisioning method that is not the choice method.

The figure below shows the file **dhcpoption160.cfg** located on the server.



```
ems_server/keep_alive_period=60
ems_server/provisioning/url=http://10.1.8.23:8081/
provisioning/method=STATIC
provisioning/configuration/url=http://10.1.8.23/configfiles/
provisioning/firmware/url=http://10.1.8.23/firmwarefiles/
ems_server/user_name=system
ems_server/user_password={"VvlZOp5/5pM="}
```

| Legend | Description |
|---|---|
| 1 | Points to the URL of the OVOC provisioning server. |
| 2 | STATIC provisioning method, so the cfg and img files are automatically pulled from the OVOC provisioning server rather than from the DHCP server. |
| 3 | Location of the cfg file, pulled by the phones when they're plugged into the network, on the OVOC provisioning server. |
| 4 | Location of the img file, pulled by the phones when they're plugged into the network, on the OVOC provisioning server. |
| 5 | Name of the 'system user', necessary for basic REST API authentication when the phones are plugged in to the network for the first time. |

| Legend | Description |
|---|---|
| 6 | (Encrypted) Password of the 'system user', necessary for basic REST API authentication when the phones are plugged in to the network for the first time. |

- The **dhcpoption160.cfg** file is created when logging in for the first time to the Device Manager Pro.
- The file is an internal OVOC file and cannot be manually modified.

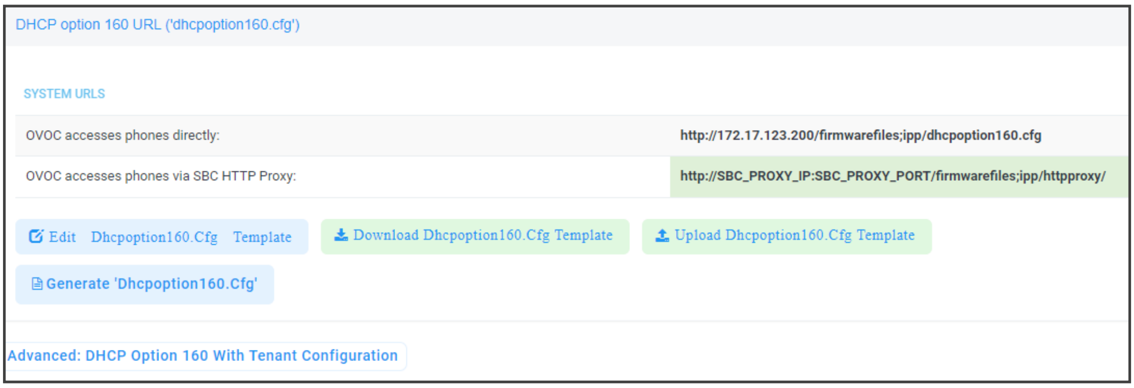
After installation, the first, second and third lines in the file are automatically updated.

### Editing the DHCP Option 160 cfg File

Administrators can opt to edit the initial DHCP Options 160 cfg file. Choose the **DHCP Option Configuration** button if your phones are communicating with a DHCP server. A DHCP server is mandatory if the phones are behind a NAT, or when communicating with an SBC HTTP proxy.

#### ➢ To edit the DHCP Option 160 cfg File:

1. Open the System Settings page (**Setup** > **Settings** > **DHCP Options Configuration**).



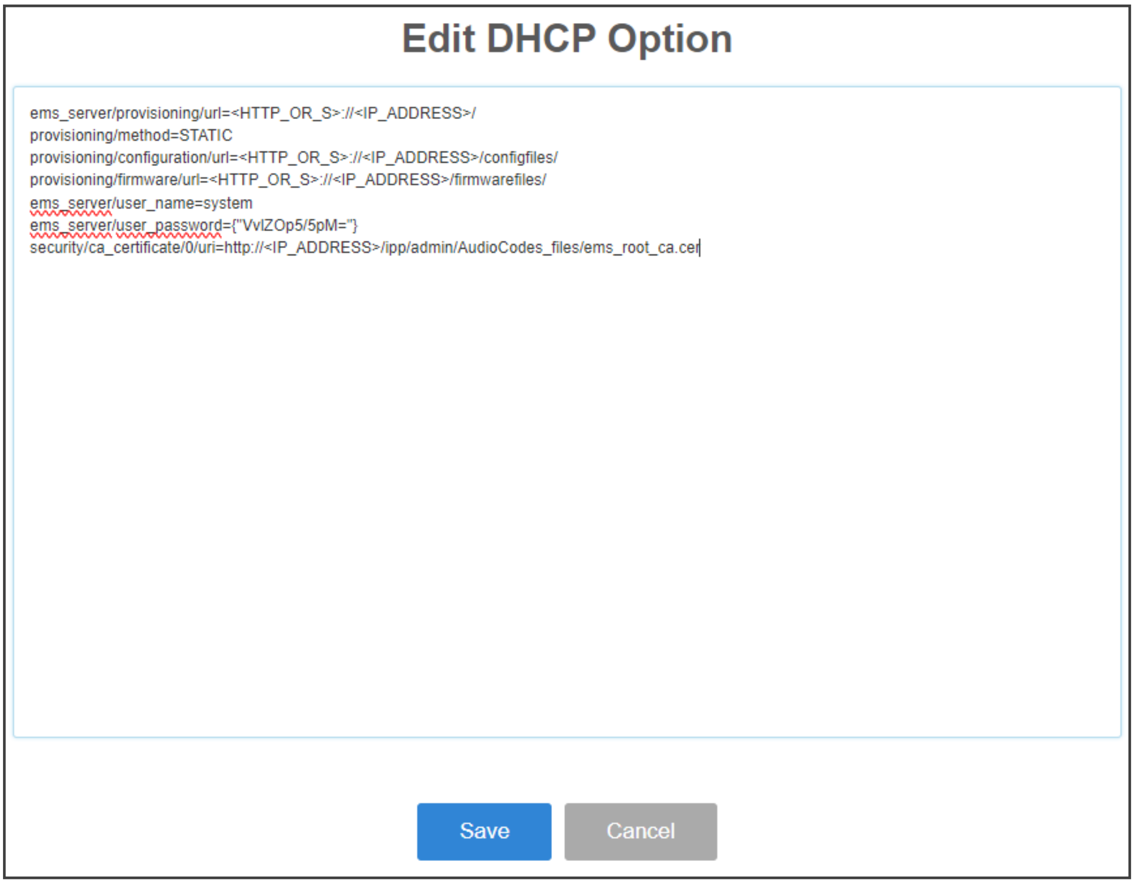
DHCP option 160 URL ('dhcpoption160.cfg')

SYSTEM URLS

| | |
|---|---|
| OVOC accesses phones directly: | http://172.17.123.200/firmwarefiles;ipp/dhcpoption160.cfg |
| OVOC accesses phones via SBC HTTP Proxy: | http://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/httpproxy/ |

Edit Dhcpoption160.Cfg Template
Download Dhcpoption160.Cfg Template
Upload Dhcpoption160.Cfg Template
Generate 'Dhcpoption160.Cfg'
Advanced: DHCP Option 160 With Tenant Configuration

2. Click the **Edit cfg Template** button.



Edit DHCP Option

```
ems_server/provisioning/url=<HTTP_OR_S>://<IP_ADDRESS>/
provisioning/method=STATIC
provisioning/configuration/url=<HTTP_OR_S>://<IP_ADDRESS>/configfiles/
provisioning/firmware/url=<HTTP_OR_S>://<IP_ADDRESS>/firmwarefiles/
ems_server/user_name=system
ems_server/user_password={"VvlZOp5/5pM="}
security/ca_certificate/0/uri=http://<IP_ADDRESS>/ipp/admin/AudioCodes_files/ems_root_ca.cer
```

3. Edit the DHCP option using the table below as reference.

**Table 3-1: DHCP Option**

| Parameter | Description |
|---|---|
| Keep alive period | You can configure how often the phones generate a keep-alive trap towards the Device Manager Pro. Default: Every 60 minutes. It's advisable to configure a period that does not exceed an hour. The management system may incorrectly determine that the phone is disconnected if a period of more than an hour is configured. |
| Provisioning URL | Defines the URL (including IP address and port) of the provisioning server (OVOC server). |
| Provisioning Method | Defines the provisioning method, i.e., STATIC or Dynamic (DHCP). Do not change this setting. The setting must remain STATIC. If not, the phone will continuously perform restarts. |
| Provisioning Configuration URL | Defines the URL of the location of the configuration files (including IP address and port) in the provisioning server (OVOC server). |
| Provisioning Firmware URL | Defines the URL of the location of the firmware files (including IP address and port) in the provisioning server (OVOC server). |

| Parameter | Description |
|---|---|
| User Name | Defines the user name for the REST API. Default: **System**. Later, each phone receives its own unique user name. |
| User Password | Encrypted. Defines the user password for the REST API. Default: **System**. Later, each phone receives its own unique user password. |

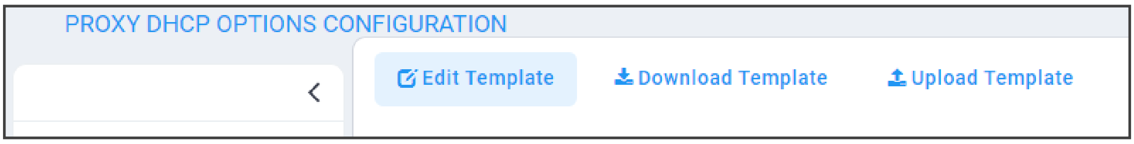
⚠ You can always restore these settings to their defaults if necessary by clicking the **Restore to default** button in the DHCP Option Configuration dialog, but it's advisable to leave these settings unchanged. The button is displayed only after the DHCP Option is changed.

### Editing the SBC HTTP Proxy

Administrators can opt to edit the initial DHCP Options 160 cfg file. Choose the **HTTP Proxy Configuration** button if your phones are communicating with an SBC HTTP proxy, which is required when the phones are behind a NAT.

**➢ To configure the SBC HTTP proxy:**

1. Open the System Settings page (**Setup** > **Settings** > **System Settings**) and then in the System Settings page click the **More** tab and then the **SBC Proxy Configuration** button.



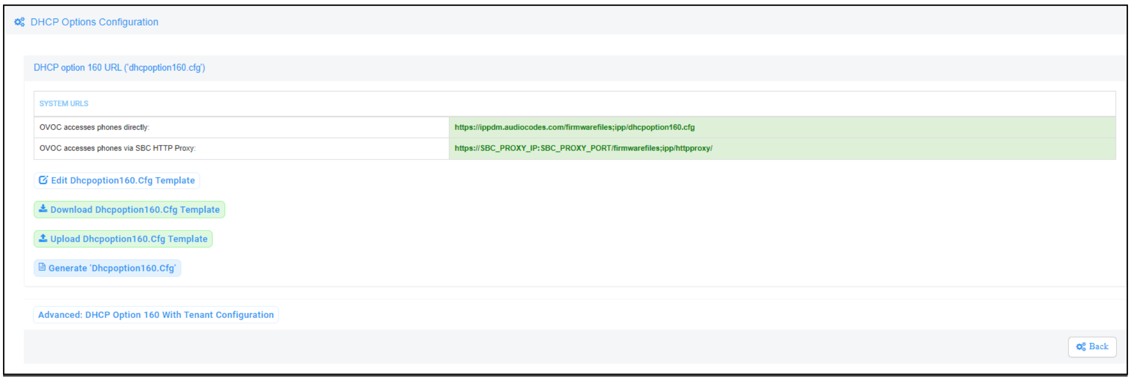
2. Click the **Edit template** button; the same Edit DHCP Option screen shown previously opens. Edit as described previously.

3. Click **Save**.

## Provisioning Android-based Teams Devices

AudioCodes' Device Manager manages Android-based Teams devices in a similar way to UC-type phones. Teams devices' configuration parameters are in the same format as UC phones. A .cfg configuration file is defined for each device. Device Manager version 7.8.2000 and later supports Android-based Teams devices.

Zero Touch Provisioning is supported in a non-tenant aware manner; each local DHCP Option 160 must be configured with a fully-specified URL pointing to **dhcpoption160.cfg** as shown here:



DHCP Options Configuration

DHCP option 160 URL ('dhcpoption160.cfg')

| SYSTEM URLS | |
|---|---|
| OVOC accesses phones directly: | https://ippdm.audiocodes.com/firmwarefiles;ipp/dhcpoption160.cfg |
| OVOC accesses phones via SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/httpproxy/ |

Edit Dhcpoption160.Cfg Template
Download Dhcpoption160.Cfg Template
Upload Dhcpoption160.Cfg Template
Generate 'Dhcpoption160.Cfg'
Advanced: DHCP Option 160 With Tenant Configuration
Back

This URL is displayed in the Device Manager page under **Setup** > **Settings** > **DHCP Options Configuration**. After devices are added to the Device Manager, they're allocated to tenants by selecting **Change Tenant** in the ‘Actions’ menu. Unless already used, it's recommended to leave the default tenant as a ‘lobby’ for the new devices. The above URL can also be configured in AudioCodes' Redirect Server. Android-based Teams devices currently support:

- Provisioning of configuration
- Provisioning of firmware
- Switching to UC / Teams
- Monitoring (based on periodic Keep-Alive messages sent from devices)
- Resetting the device

The Device Manager's ‘internal’ functions (which don't involve devices) are:

- Change tenant
- Change template
- Show info
- Generate Configuration
- Delete device status
- Nickname

The **Check Status** option is irrelevant for Android-based Teams devices therefore it's omitted from the 'Actions' menu.

- Changing a device's configuration using the Device Manager is the same for Android-based Teams devices as for UC devices.
- To commit a change made at the template/tenant/site/group/user level, perform **Generate Configuration**. The change can be validated in the device’s .cfg file. The Android-based endpoint pulls the updated configuration when the next periodic provisioning cycle occurs.

## Configuring a Periodic Provisioning Cycle

Network administrators can configure how often periodic provisioning cycles will occur, to suit enterprise management preference.

### ➢ To configure how often periodic provisioning cycles will occur:

- Use the following table as reference.

| Parameter | Description |
|---|---|
| provisioning/period/type | Defines the frequency of the periodic provisioning cycle. Valid values are:<br>■ HOURLY<br>■ DAILY (default)<br>■ WEEKLY<br>■ POWERUP<br>■ EVERY5MIN<br>■ EVERY15MIN<br>Each value type is accompanied by additional parameters (see Supported Parameters on the next page) that further defines the selected frequency. |

## Configuring TimeZone and Daylight Savings

Network administrators can configure TimeZone and Daylight Savings to suit enterprise requirements.

### ➢ To configure TimeZone and Daylight Savings:

- Use the following table as reference.

| Parameter | Description |
|---|---|
| date_time/-timezone | Defines the Timezone. Valid values are:<br>■ +00:00<br>■ +01:00<br>■ +02:00<br>■ Etc. |
| date_time/time_dst | [Boolean parameter]. Configuring **ENABLED** adds one hour to the configured time. Valid values are: |

| Parameter | Description |
|---|---|
| | ■ 1<br>■ 0 |

For example, to configure Central European Summer Time (CEST) you can either configure:

date_time/timezone=**+01:00**

date_time/time_dst=**1**

-OR-

date_time/timezone=**+02:00**

date_time/time_dst=**0**

## Managing Devices with HTTPS

Android-based Teams devices support an HTTPS connection.

### ➢ To establish an HTTPS connection:

- The server certificate must be signed by a well-known Certificate Authority

  -OR-

- A root/intermediate CA certificate must be loaded to the device’s trust store either via 802.1x or configuration parameter ‘/security/ca_certificate/[0-4]/uri’

### ➢ To maintain backward compatibility with devices previously running UC versions:

- Configure parameter '/security/SSLCertificateErrorsMode' to **Ignore**

## Supported Parameters

Listed here are the configuration file parameters currently supported by Android-based Teams devices. They're in AudioCodes’ UC version format. The parameters are comprised of Microsoft configuration profile settings and AudioCodes’ device-specific parameters.

- general/silent_mode = 0 (default)/1
- general/power_saving = 0 (default)/1
- phone_lock/enabled = 0 (default)/1
- phone_lock/timeout = 900 (default) (in units of seconds)
- phone_lock/lock_pin = 123456
- display/language = English (default)
- display/screensaver_enabled = 0/1
- display/screensaver_timeout = 1800 (seconds)

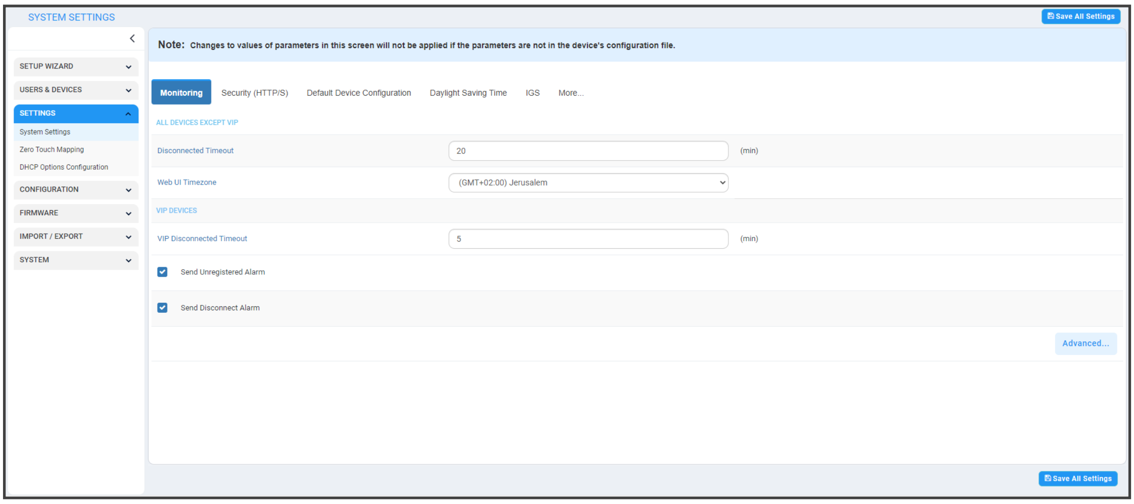
- display/backlight = 80 (0-100)
- display/high_contrast = 0 (default) /1
- date_time/timezone = +02:00
- date_time/time_dst = 0 (default) /1
- date_time/time_format = 12 (default) / 24
- network/dhcp_enabled = 0/1
- network/ip_address =
- network/subnet_mask =
- network/default_gateway =
- network/primary_dns =
- network/pecondary_dns =
- network/pc_port = 0/1
- office_hours/start = 08:00
- office_hours/end = 17:00
- logging/enabled = 0/1
- logging/levels = VERBOSE, DEBUG, INFO, WARN, ERROR, ASSERT, SILENT
- admin/default_password = 1234
- admin/ssh_enabled=0/1 (default)
- security/SSLCertificateErrorsMode = IGNORE, NOTIFICATION, DISALLOW (default)
- security/ca_certificate/[0-4]/uri – uri to download costumer’s root-ca
- provisioning/period/daily/time
- provisioning/period/hourly/hours_interval
- provisioning/period/type = HOURLY, DAILY (default), WEEKLY, POWERUP, EVERY5MIN, EVERY15MIN
- provisioning/period/weekly/day
- provisioning/period/weekly/time
- provisioning/random_provisioning_time

# 4 Configuring System Settings

The System Settings page allows you to configure devices according to enterprise requirements. Settings under some tabs also include placeholders so that when you generate a template, the settings values will be applied to the template. Default placeholder values can be viewed in the Default Placeholders Values page.

### ➢ To configure system settings:

1. Open the System Settings page (**Setup** > **Settings** > **System Settings**).



**Note:** Changes to values of parameters in this screen will not be applied if the parameters are not in the device's configuration file.

ALL DEVICES EXCEPT VIP

Disconnected Timeout: 20 (min)

Web UI Timezone: (GMT+02:00) Jerusalem

VIP DEVICES

VIP Disconnected Timeout: 5 (min)

☑ Send Unregistered Alarm

☑ Send Disconnect Alarm

2. Use the table below as reference; tabs in the page are (L-R): **Monitoring**, **Security (HTTP/S)**, **Default Device Configuration**, **Daylight Saving Time**, **IGS** and **More**...

- The **IGS** tab applies only to enterprises whose environments are non Skype for Business. All other tabs in the screen apply to both Skype for Business and non Skype for Business environments.
- Teams devices function flawlessly behind a NAT in all scenarios; ignore the **IGS** tab if you're using Teams devices.
- Enable **IGS** if
  - ✓ you're using non-Teams devices; if using the 405HD phone, you may require a firmware upgrade
  - ✓ devices are located behind a NAT or Device Manager is unable to establish communication with them
- 420HD, 430HD and 440HD phones are incompatible when behind a NAT.

| Tab \| Parameter | Description |
|---|---|
| **Monitoring** | |
| Disconnected Timeout | Determines how long, in minutes, a device's status will be indicated as 'Disconnected' if not reported otherwise. Default: 20 minutes. The |

| Tab \| Parameter | Description |
|---|---|
| | phone reports its status to the server every hour. If it does not report its status before 'Disconnect Timeout' lapses, i.e., if the parameter is left at its default and two hours pass without a status report, the status will change from **Registered** to **Disconnected** and the device's 'Status' column in the Devices Status screen will be red-coded. |
| Send KEEP-ALIVE Every | [Only displayed after clicking **Advanced**] Determines how often, in minutes, a KEEP-ALIVE message is sent from the device. |
| VIP Disconnected Timeout | Determines how long, in minutes, a VIP device's status will be indicated as 'Disconnected' if not reported otherwise. An alarm can be sent to the network administrator if the timeout is exceeded. Default: 5 minutes. A VIP device is typically a Common Area Phone (CAP) located in the lobby of an enterprise, or a conference phone located in an enterprise's meeting rooms. It's important for a VIP device to be connected, hence the default timeout of 5 minutes compared to the default of 20 minutes for a non VIP device. |
| VIP Send KEEP-ALIVE Every | [Only displayed after clicking **Advanced**] Determines how often, in minutes, a KEEP-ALIVE message is sent from the VIP device. |
| Send Unregistered alarm | Select this option for an alarm to be sent when VIP device status changes to 'Unregistered'. |
| Send Disconnect Alarm | Select this option for an alarm to be sent when VIP device status changes to 'Disconnected'. It's important for a VIP device to be connected, hence the default Disconnected Timeout of 5 minutes compared to the default of 20 minutes for a non VIP device. |
| **Security (HTTP/S)** | |
| Secure (HTTPS) communication from the Device Manager to the Devices | Sends secured (HTTPS) requests from the Device Manager Pro server to the phone. If the option is selected, communications and REST actions such as Restart, Send Message, etc., will be carried out over HTTPS.<br>Not relevant when using an SBC proxy (see Editing the SBC HTTP Proxy on page 23). |
| Secure (HTTPS) communication from the Devices to the Device Manager | Sends secured (HTTPS) requests from the phone to the Device Manager Pro server. If the option is selected, communications and REST updates such as keep-alive, alarms and statuses between phone and server will be carried out over HTTPS. Also used for loading firmware and configuration files, and when there is an SBC proxy (see |

| Tab \| Parameter | Description |
|---|---|
| | Editing the SBC HTTP Proxy on page 23). |
| Devices Status: Open Device Web Administrator using HTTPS | The browser immediately opens the device's Web interface, over HTTPS, without prompting that there is a problem with the website's security certificate and that it is not recommended to continue to the website. |
| Only allow devices added by the administrator into OVOC | Select this option to allow into OVOC only those phones that were added by the network administrator.<br>■ Phones that were not added by the network administrator will be blocked by OVOC.<br>■ If a device's Mac Address is not listed in the 'Manage Users & Devices' page, it will be blocked by OVOC.<br>The OVOC must be restarted for the parameter to take effect. |
| **Default Device Configuration** | |
| Server FQDN | [Recommended] Points phones to the OVOC server using the server's name rather than its IP address. If phones are pointed to the OVOC server's IP address, then if the server is moved due to organizational changes within the enterprise, all phones are disconnected from it. Pointing using the server's name prevents this, making organizational changes easier. |
| Devices Language | From the dropdown select the language you want displayed in the phones' screens: **English** (default), **French**, **German**, **Hebrew**, **Italian**, **Polish**, **Portuguese**, **Russian**, **Spanish** or **Ukraine**. |
| NTP Server IP Address | Enter the IP address of the Network Time Protocol (NTP) server from which the phones can get the time. |
| Voice Mail Number | Enter the number of the enterprise's exchange.<br>Configuration depends on the enterprise environment, specifically, on which exchange the enterprise has. If the enterprise has a Skype for Business environment, ignore this parameter. Default=1000. |
| Require SRTP in the Phone Configuration File | Select this option for *Secure* RTP. Real-time Transport Protocol (RTP) is the standard packet format for delivering voice over IP. |
| **Daylight Saving Time** | |
| Active | Determines whether the phone automatically detects the Daylight Saving Time for the selected Time Zone. |

| Tab \| Parameter | Description |
|---|---|
| | - Disable<br>- Enable (default) |
| Date Format | Configures the date format. Valid values are:<br>- FIXED. Date is specified as: Month, Day of month.<br>- Day of Week. Date is specified as Month, Week of month, Day of week. |
| Start Time | Defines precisely when to start the daylight saving offset.<br>- month - defines the specific month in the year<br>- week – defines the specific week in the month (first – fourth)<br>- day - defines the specific day in the week<br>- hour - defines the specific hour in the day<br>- minute - defines the specific minute after the hour<br>Configures the precise moment the phone will start daylight savings with a specific offset. |
| End Time | Defines precisely when to end the daylight saving offset.<br>- month - defines the specific month in the year<br>- week – defines the specific week in the month (first – fourth)<br>- day - defines the specific day in the week<br>- hour - defines the specific hour in the day<br>- minute - defines the specific minute after the hour<br>Configures the precise moment the phone will end daylight savings with a specific offset. |
| Offset | The offset value for the daylight saving. Range: 0 to 180. |
| **Generic SIP** | |
| Redundant Mode | From the dropdown select **No Redundant** (default) or **Primary/Backup**. Allows the administrator to set the primary PBX / Skype for Business server to which the phone registers and the fallback option if the server is unavailable. Primary/Backup, or 'outbound proxy', is a feature that enables the phone to operate with a primary or backup PBX/Skype for Business server. If the primary falls, the other backs it up. |

| Tab \| Parameter | Description |
|---|---|
| Primary | Enter the primary PBX/Skype for Business server's IP address, i.e., the outbound proxy's IP address. |
| HTTP AUTH Provisioning no password | If set to **Enabled**, only the extension number will be used for provisioning HTTP authentication. The default HTTP AUTH password will be **1234**. In DHCP option 160 and on the templates, the setting 'provisioning/configuration/http_auth/password' must be configured to **1234** to activate the feature. |

3. Click the **More...** tab and if necessary, in the 'Accept Extensions' field define file extensions you'll require which aren't already defined, then click **Save**.

   - For information about the **LDAP Configuration** button, see Configuring the LDAP Directory below
   - For information about the **SBC Proxy Configuration** button, see here.Editing the SBC HTTP Proxy on page 23
   - For information about the **Default Placeholders Values** button, see Viewing Default Placeholders Values on page 119

4. Click **Save All Settings**.

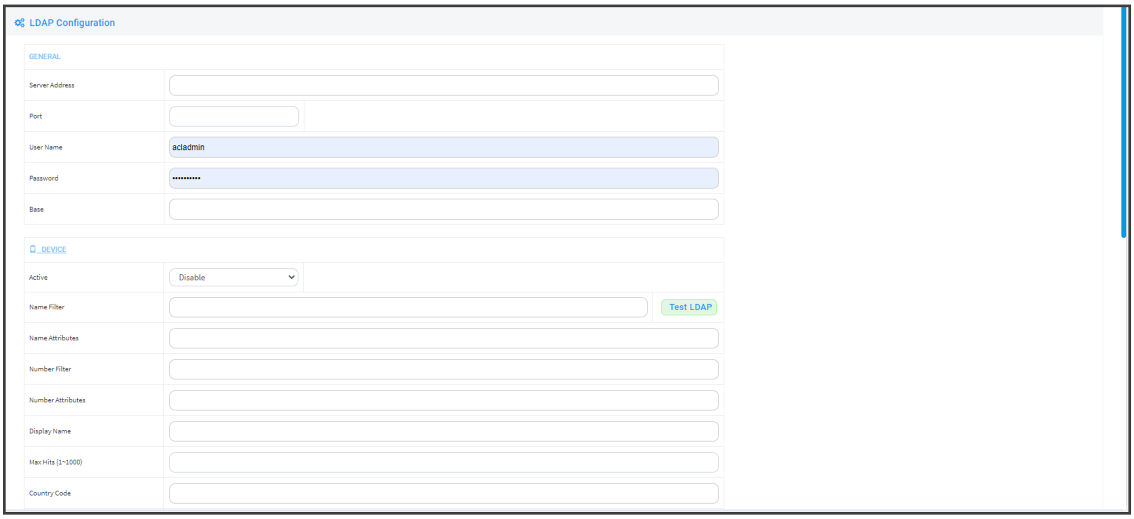
## Configuring the LDAP Directory

⚠ This section is inapplicable if you're operating in a Microsoft Skype for Business environment because Skype for Business uses its own Active Directory server.

The Device Manager Pro lets you configure an enterprise's LDAP directory.

➢ **To access the LDAP directory:**

1. Open the System Settings page (**Setup** > **Settings** > **System Settings**).
2. Click **More...** and then click the **LDAP Configuration** button that is then displayed.



LDAP Configuration

GENERAL

| | |
|---|---|
| Server Address | |
| Port | |
| User Name | acladmin |
| Password | •••••••••• |
| Base | |

DEVICE

| | |
|---|---|
| Active | Disable |
| Name Filter | |
| Name Attributes | |
| Number Filter | |
| Number Attributes | |
| Display Name | |
| Max Hits (1~1000) | |
| Country Code | |

3. From the 'Active' parameter dropdown, select **Enable**.

4. Configure the parameters using the table below as reference.

**Table 4-1: LDAP Configuration**

| Parameter | Description |
|---|---|
| Server address | Enter the IP address, or URL, of the LDAP server. |
| Port | Enter the LDAP service port. |
| User Name | Enter the user name used for the LDAP search request. |
| Password | Enter the password of the search requester. |
| Base | Enter the access point on the LDAP tree. |
| Active | From the dropdown, select **Disable** LDAP (default) or **Enable** LDAP. If **Enable** is selected, the parameters below are displayed. |
| Name Filter | Specify your search pattern for name look ups. For example, when you type in the *(&(telephoneNumber=*)(sn=%))* field*,* the search result includes all LDAP records which have the 'telephoneNumber' field set, and the '(“sn”-->surname)' field starting with the entered prefix.<br>When you type in the *(\|(cn=%)(sn=%))* field*,* the search result includes all LDAP records which have the '(“cn”-->CommonName)' OR the '(“sn”-->Surname)' field starting with the entered prefix.<br>When you type in the *(!(cn=%))* field*,* the search result includes all LDAP records which “do not” have the 'cn' field starting with the entered prefix. |
| Name Attributes | Specifies the LDAP name attributes setting, which can be used to specify the “name” attributes of each record which is returned in the LDAP search |

| Parameter | Description |
|---|---|
| | results. When you type in the following field, for example, *cn sn displayName*”, this requires you to specify 'cn-->commonName'. This is the Full name of the user, sn-->Surname, last name or family name and “displayName” fields for each LDAP record. |
| Number Filter | Specifies your search pattern for number look ups.<br>When you type in the following field, for example, *(\|(telephoneNumber=%)(Mobile=%)(ipPhone=%))*, the search result is all LDAP records which have the “telephoneNumber” OR “Mobile” OR “ipPhone”field match the number being searched.<br>When you type in the *(&(telephoneNumber=%)(sn=*))* field, the search result is all LDAP records which have the 'sn' field set and the “telephoneNumber” match the number being searched. |
| Number Attributes | Specifies the LDAP number attributes setting, which can be used to specify the “number” attributes of each record which is returned in the LDAP search results. When you type in the following field, for example, *Mobile telephoneNumber ipPhone*, you must specify 'Mobile', 'telephoneNumber' and 'ipPhone' fields for each LDAP record. |
| Display Name | Specifies the format in which the “name, e.g. “Mike Black” of each returned search result is displayed on the IPPHONE.<br>When you type in the following field, for example, %sn, %givenName, the displayed result returned should be “Black, Mike”. |
| Max Hits (1~1000) | Specifies the maximum number of entries expected to be sent by the LDAP server (this parameter is sent to the LDAP server). |
| Country Code | Defines the country code prefix added for number search. |
| Area Code | Defines the area code prefix added for number search. |
| Sort Result | Sorts the search result by display name on the client side. |
| Search Timeout | The timeout value (in seconds) for LDAP search (sent to the LDAP server). |
| Call Lookup | Defines the user name used for the LDAP search request. |

5. Click **Save**.

## Adding Users & Devices in Generic SIP Environments

Administrators can import

- users *and* devices -or-
- only users

If the administrator imports users *and* devices, the association between users and devices was made before Version 7.6

- using the device's MAC address
- through user name and password
- via an imported CSV file
- before deployment

### ➢ To add users *and* devices with a version earlier than Version 7.6 of Device Manager Pro:

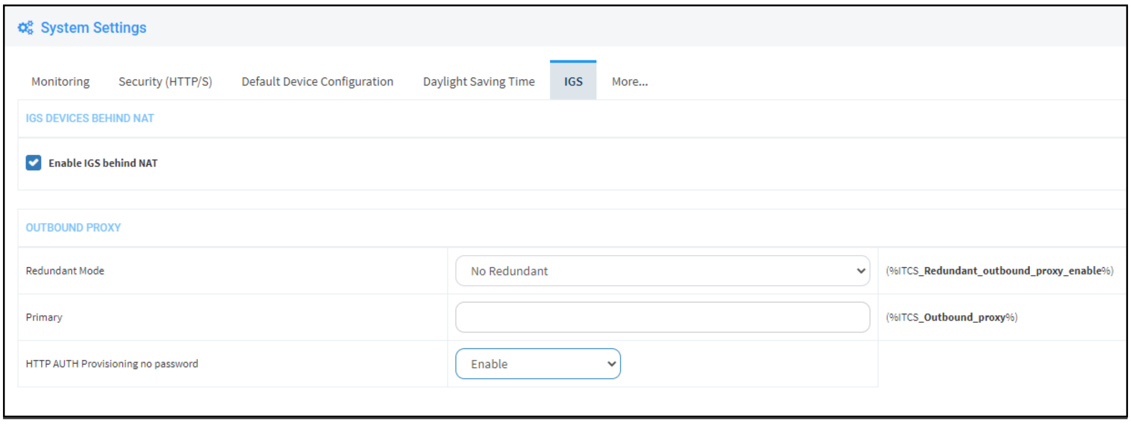
- After plugging the phones into the network, log in to Device Manager Pro and then (best practice):
  - Export the automatically created 'System User' to a zip file (see here)
  - Unzip the zip file, open the csv file and add users and devices in the same format (see here)
  - Import the csv file with users and devices back into Device Manager Pro (see here)

### ➢ To add *only* users:

- Applies only to Version 7.6 and later
- The association is manually made after deployment, using the **Approve** button in the Devices Status page
- When the phone is connected to the network for the first time, the user is prompted to enter their username/password; it's matched with that on the Device Manager Pro. After the match, the Manager associates the device with the user. Usernames/ passwords are then uploaded to the Manager through the import CSV *without using MAC address*. After authentication, the Manager downloads the cfg file to the phone.

1. After installing the Device Manager Pro, add the HTTP authentication configuration properties to the initial configuration file (taken from DHCP Options 160) and to the templates.
2. Select an authentication mode. Two possibilities are available:
   - With username/password
   - Without password; only username or extension

- The default authentication mode is username/password
- The Login screen then allows the user to authenticate with username only, excluding password
- If you want the user to use 'password only' for authentication, enable the 'no password' option as shown in the next figure



System Settings

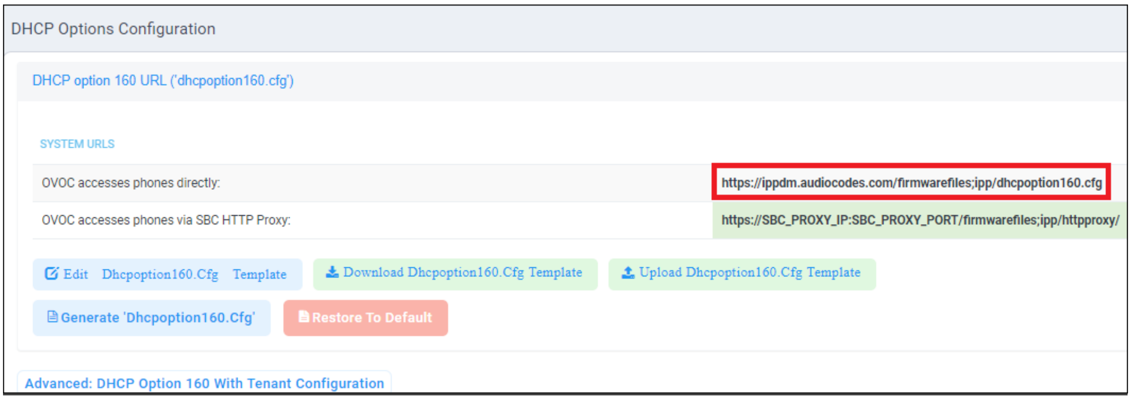
IGS DEVICES BEHIND NAT

☑ Enable IGS behind NAT

OUTBOUND PROXY

| | | |
|---|---|---|
| Redundant Mode | No Redundant | (%ITCS_Redundant_outbound_proxy_enable%) |
| Primary | | (%ITCS_Outbound_proxy%) |
| HTTP AUTH Provisioning no password | Enable | |

3. Configure DHCP Options for HTTP Authentication. To prompt the user for username and password, add the following HTTP authentication parameters to the DHCP option 160 cfg file:
   - provisioning/configuration/http_auth/password=
   - provisioning/configuration/http_auth/ui_interaction_enabled=1
   - provisioning/configuration/http_auth/user_name=
4. Update the parameter 'provisioning/configuration/url'
   - provisioning/configuration/url=<HTTP_OR_S>://<IP_ADDRESS>/ipp/admin/httpauth/auth_prov.php
5. Open the DHCP Option Configuration page (**Setup** > **Settings** > **DHCP Options Configuration**)



DHCP Options Configuration

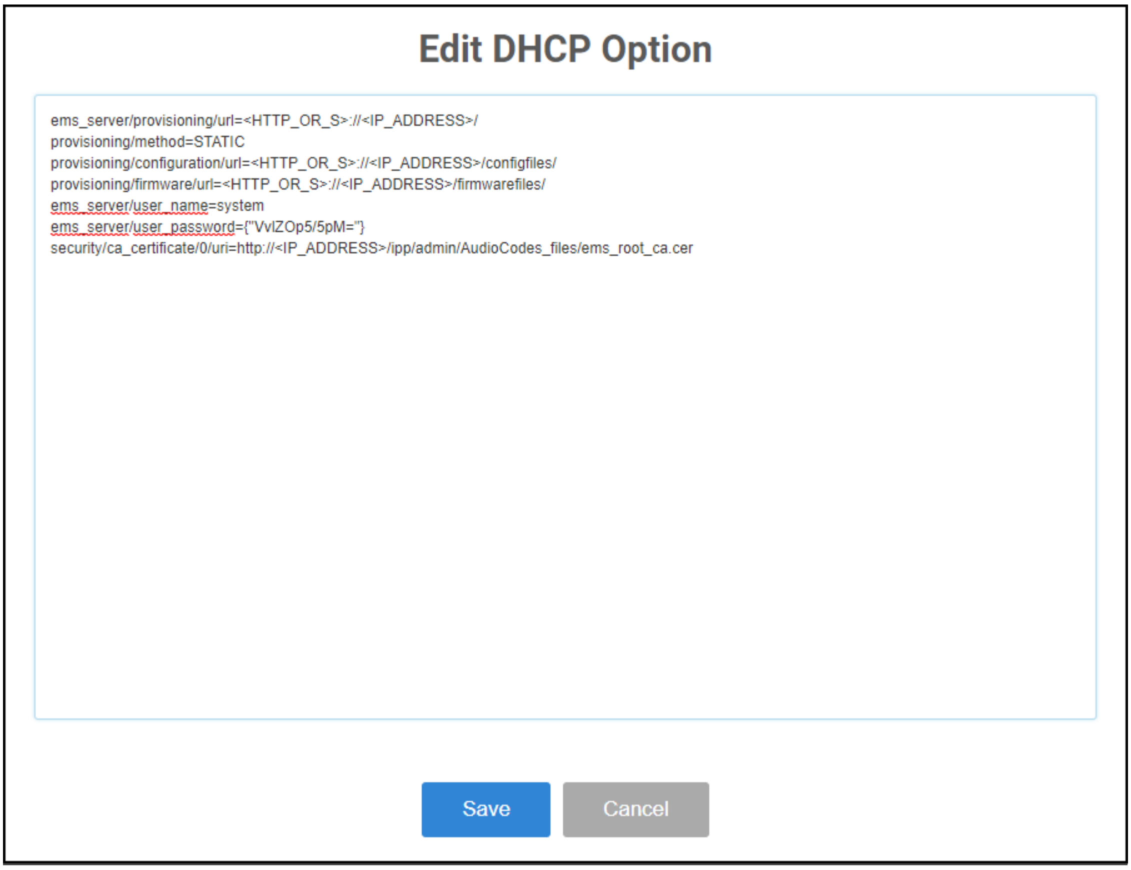
DHCP option 160 URL ('dhcpoption160.cfg')

SYSTEM URLS

| | |
|---|---|
| OVOC accesses phones directly: | https://ippdm.audiocodes.com/firmwarefiles;ipp/dhcpoption160.cfg |
| OVOC accesses phones via SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/httpproxy/ |

Edit Dhcpoption160.Cfg Template
Download Dhcpoption160.Cfg Template
Upload Dhcpoption160.Cfg Template
Generate 'Dhcpoption160.Cfg'
Restore To Default
Advanced: DHCP Option 160 With Tenant Configuration

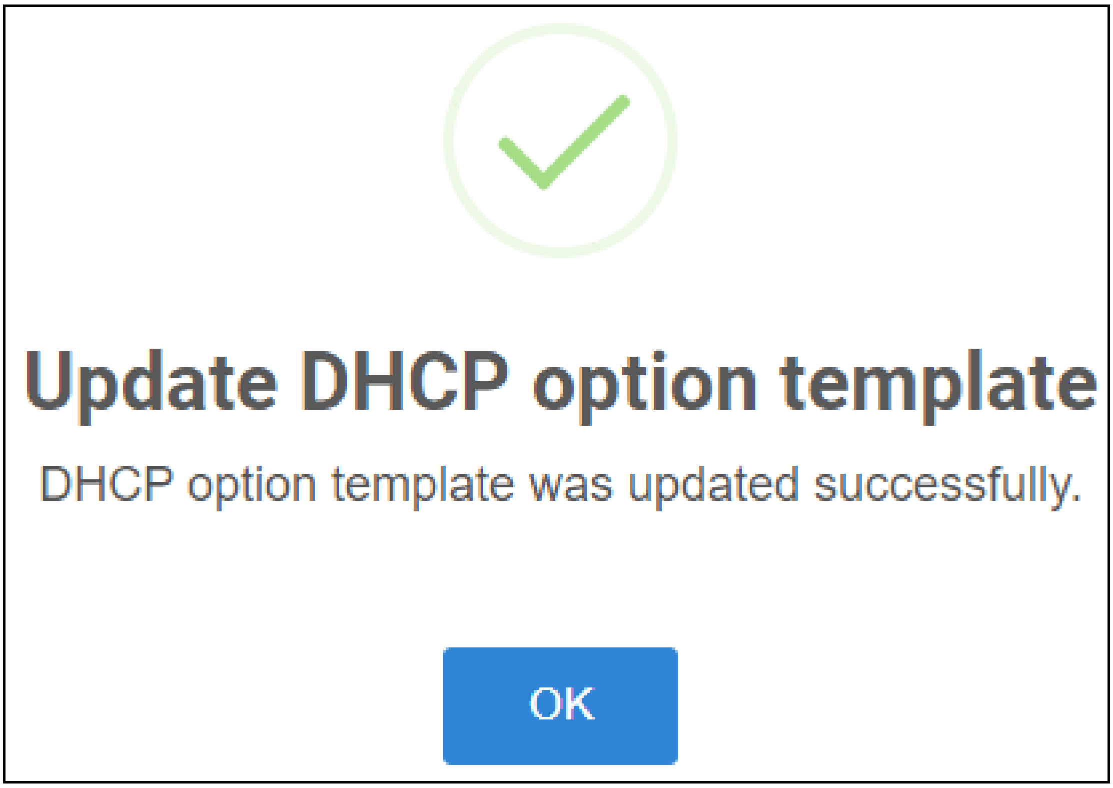
6. Click **Edit configuration template**:



Edit DHCP Option

```
ems_server/provisioning/url=<HTTP_OR_S>://<IP_ADDRESS>/
provisioning/method=STATIC
provisioning/configuration/url=<HTTP_OR_S>://<IP_ADDRESS>/configfiles/
provisioning/firmware/url=<HTTP_OR_S>://<IP_ADDRESS>/firmwarefiles/
ems_server/user_name=system
ems_server/user_password={"VvlZOp5/5pM="}
security/ca_certificate/0/uri=http://<IP_ADDRESS>/ipp/admin/AudioCodes_files/ems_root_ca.cer
```

7. Click **Save**; you're prompted:



Update DHCP option template

DHCP option template was updated successfully.

8. Click **OK**.

If you want password to be excluded from HTTP user authentication, configure parameter 'provisioning/configuration/http_auth/password' to **1234**. Users will then not have to enter a password when performing authentication.

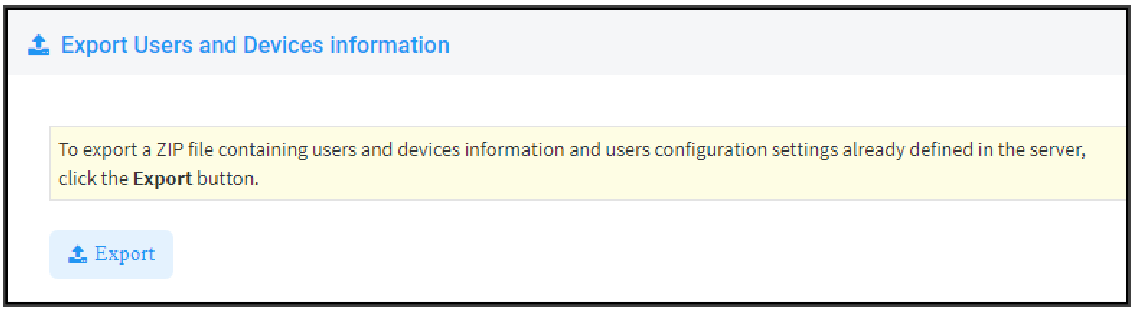
9. Configure each template to operate with HTTP authentication. Open each template you want to operate with HTTP authentication and add the following values to each:
    - provisioning/configuration/http_auth/password=%ITCS_Line1AuthPassword%
    - provisioning/configuration/http_auth/ui_interaction_enabled=1
    - provisioning/configuration/http_auth/user_name=%ITCS_Line1AuthName%
10. Update the parameter 'provisioning/configuration/url':
    - provisioning/configuration/url=%ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/ipp/admin/httpauth/auth_prov.php
11. Close the Directory 'configfiles'. For security reasons, it's preferable to close the 'configfiles' web directory as from now on all cfg files will be downloaded from the new location **http:<SERVER_IP_ADDRESS>/ipprest/lync_auto_prov.php** rather than from **http:<SERVER_IP_ADDRESS>/configfiles/MAC.cfg**

## Exporting 'System User' to zip File

Here's how to export the 'system user' that is automatically created after you log in to Device Manager Pro, to a zip file.

### ➢ To export the 'system user' to a zip file:

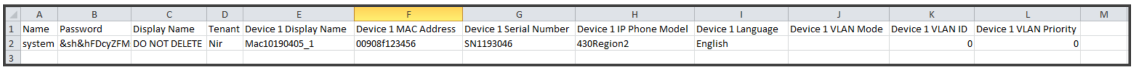
1. Open the Export Users and Devices Information page (**Setup** > **Import/Export**).



Export Users and Devices information

To export a ZIP file containing users and devices information and users configuration settings already defined in the server, click the **Export** button.

2. Click **Export**; a link to the *users.zip* file is added to the lowermost left corner of the page.
3. Click the link; the unzipped file opens displaying a csv file and a cfg file.
4. Open the csv (in Excel):



| | A | B | C | D | E | F | G | H | I | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Name | Password | Display Name | Tenant | Device 1 Display Name | Device 1 MAC Address | Device 1 Serial Number | Device 1 IP Phone Model | Device 1 Language | Device 1 VLAN Mode | Device 1 VLAN ID | Device 1 VLAN Priority | |
| 2 | system | &sh&hFDcyZFM | DO NOT DELETE | Nir | Mac10190405_1 | 00908f123456 | SN1193046 | 430Region2 | English | | 0 | 0 | |
| 3 | | | | | | | | | | | | | |

Excel displays the information related to 'system user'.

## Adding Users and Devices Information to the csv File

You need to add to the csv file the information related to all the users and devices in your enterprise's network.

⚠ To facilitate this task, you can export a csv from your enterprise PBX and then edit it to conform to the 'system user' csv row shown in the figure above and the columns shown in the table below.

| Name | Password | Display Name | Tenant | Display Name | Serial | MAC Address | Phone Model | Language | VLAN Mode | VLAN ID | VLAN Priority |
|---|---|---|---|---|---|---|---|---|---|---|---|

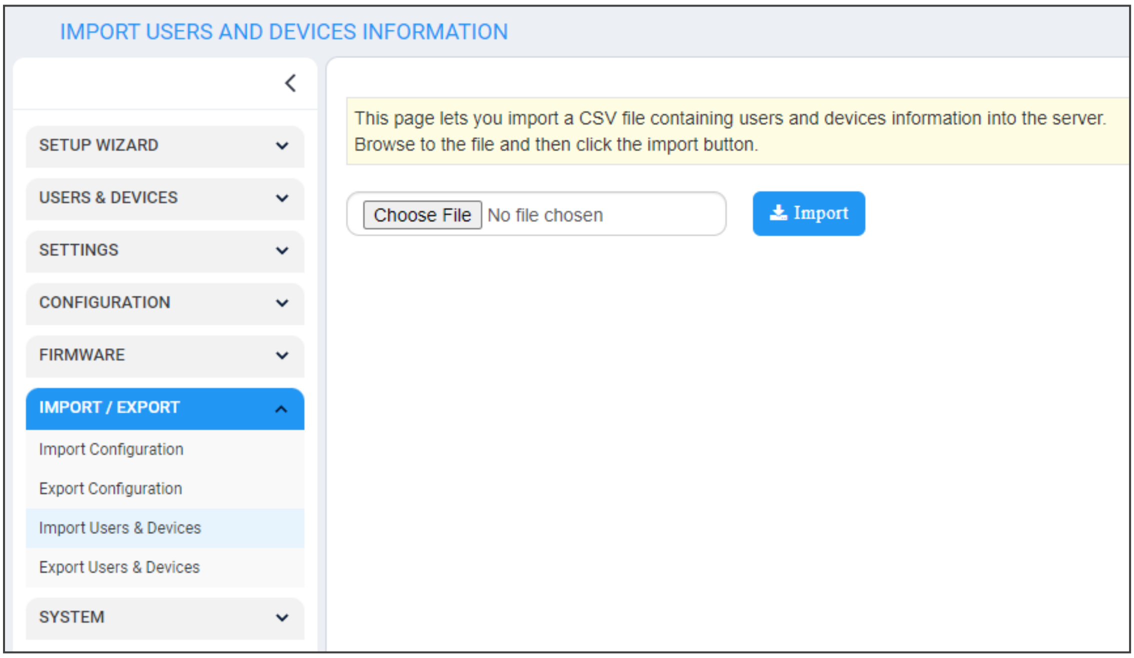
Up to 30000 users and devices can be defined in the csv file. After defining users and devices, save the csv file on your desktop from where you can import it into Device Manager.

## Importing the csv File

After adding to the csv file the information related to all the users and devices in your enterprise's network, import the new csv file into the Device Manager Pro.

### ➢ To import the new csv file into the Device Manager Pro:

1. Open the Import Users & Devices Information page (**Setup** > **Import/Export**).



IMPORT USERS AND DEVICES INFORMATION

This page lets you import a CSV file containing users and devices information into the server. Browse to the file and then click the import button.

2. Click **Import** and then navigate to and select the csv file which you created and saved on your desktop previously; the file is imported into the Device Manager Pro.

3. Open the Manage Users page (**Setup** > **Users & Devices**) and make sure all enterprise users you imported are displayed.

# Approving Users

Approving users is unnecessary

- when using the Zero Touch provisioning method
- when importing a csv file containing devices (as well as users)

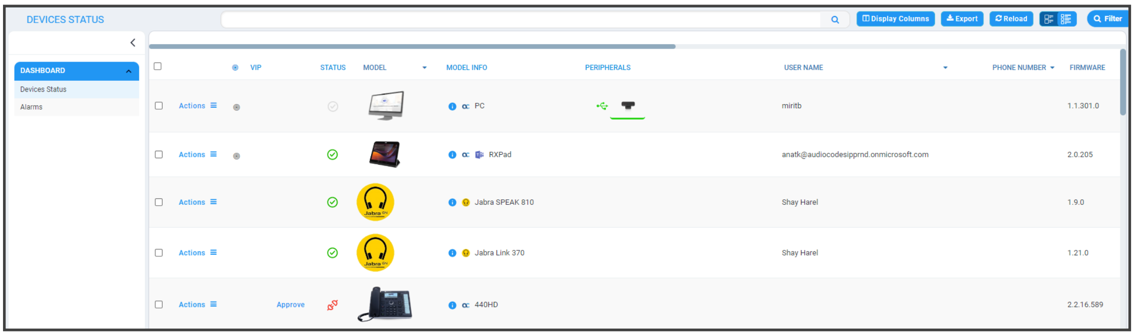
If you're *not* using the Zero Touch provisioning method or importing a csv file, then you need to approve users after plugging the phones into the network.

## Skype for Business Environment

After plugging the phones in, they report to the Device Manager Pro which does not display user name in the UI until sign-in is performed or, until users are approved in the UI.

### ➢ To approve users in a Skype for Business environment:

1. In the Device Manager Pro, open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**).



| □ | | VIP | STATUS | MODEL | MODEL INFO | PERIPHERALS | USER NAME | PHONE NUMBER | FIRMWARE |
|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | ● | | | PC | | miritb | | 1.1.301.0 |
| □ | Actions ≡ | ● | ✓ | | RXPad | | anatk@audiocodesipprnd.onmicrosoft.com | | 2.0.205 |
| □ | Actions ≡ | | ✓ | | Jabra SPEAK 810 | | Shay Harel | | 1.9.0 |
| □ | Actions ≡ | | ✓ | | Jabra Link 370 | | Shay Harel | | 1.21.0 |
| □ | Actions ≡ | Approve | | | 440HD | | | | 2.2.16.589 |

2. Optionally click the 'Export the devices to CSV file' icon; a csv file is generated; a download option is displayed in the lower-left corner. The same information on the page, e.g., Serial Number, which allows administrators to efficiently manage devices stocktaking, is displayed in Excel format.

3. Click **Actions** to select (depending on device and model) Show Info, Open Web Admin, Check Status, Reset Device, Generate Configuration, Change Group, Delete Devices Status, Update Configuration, Change Tenant, Update Firmware, Nickname, Set as VIP.

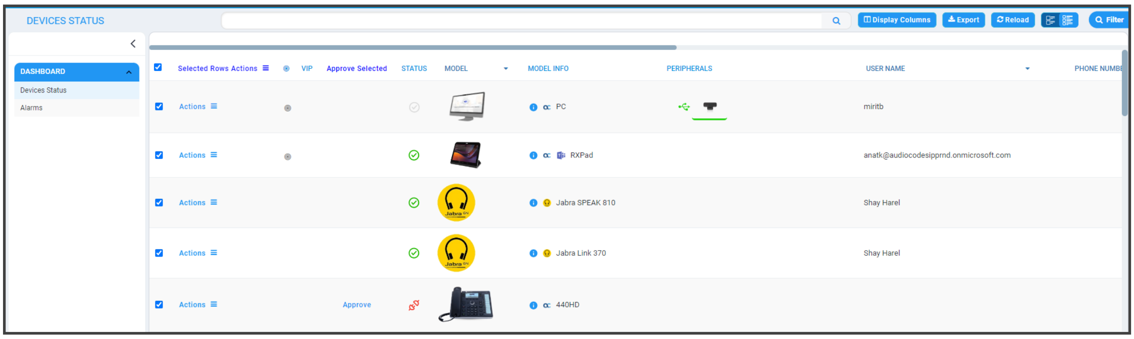
4. Click the **Approve** button (only displayed if the System URL is configured for the DHCP Option because OVOC will then not know the tenant in which the device is located; if the Tenant URL is configured for the DHCP Option, the **Approve** button will not be displayed.

5. View information displayed in the page's columns next to each managed device: User Name, Phone Number, MAC Address, IP, Model, Firmware, Last Update Status, Report Time, Location, Subnet, VLAN ID

   **Search** option

Smart **Filter(s)**

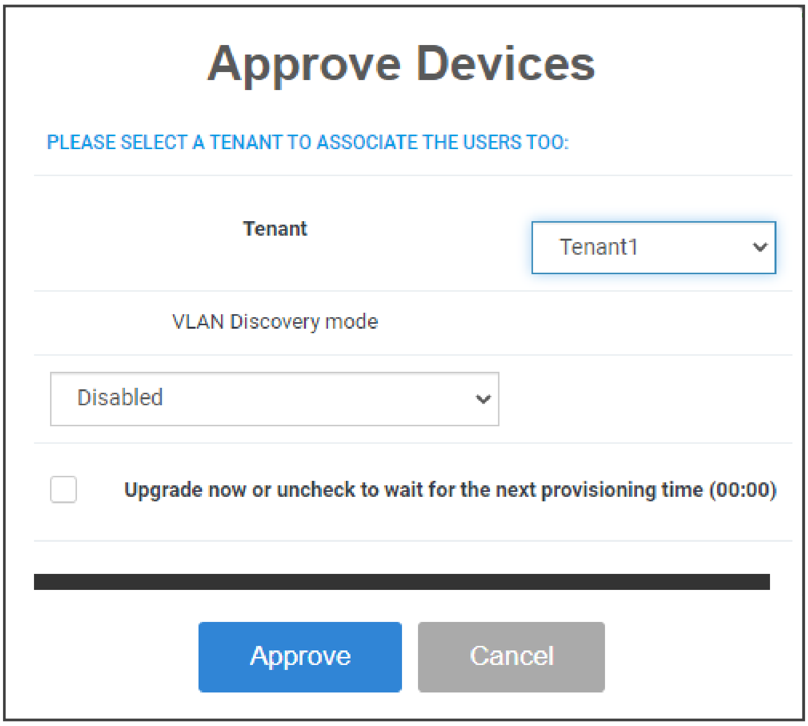
6. Select the upper left checkbox; the **Selected Rows Actions** menu is displayed.



DEVICES STATUS

| ☑ | Selected Rows Actions ☰ | VIP | Approve Selected | STATUS | MODEL | MODEL INFO | PERIPHERALS | USER NAME | PHONE NUMBE |
|---|---|---|---|---|---|---|---|---|---|
| ☑ | Actions ☰ | | | | | PC | | miritb | |
| ☑ | Actions ☰ | | | ✓ | | RXPad | | anatk@audiocodesipprnd.onmicrosoft.com | |
| ☑ | Actions ☰ | | | ✓ | | Jabra SPEAK 810 | | Shay Harel | |
| ☑ | Actions ☰ | | | ✓ | | Jabra Link 370 | | Shay Harel | |
| ☑ | Actions ☰ | | Approve | | | 440HD | | | |

7. (Applies only to SIP devices, not to Teams devices) Click the **Approve Selected** button; you're prompted to approve the selected device/s.



Approve Devices

PLEASE SELECT A TENANT TO ASSOCIATE THE USERS TOO:

Tenant: Tenant1

VLAN Discovery mode: Disabled

□ Upgrade now or uncheck to wait for the next provisioning time (00:00)

8. In the prompt, select the tenant and then click **Approve**; all selected users are approved; all phones restart; the cfg file is automatically uploaded to the phones from the OVOC provisioning server, which the DHCP server points them to.

9. From the 'VLAN Discovery mode' dropdown, select either:

- **NONE**
- **Disabled**
- **Manual Configuration** [of the LAN; static configuration of VLAN ID and priority]
- **Automatic - CDP** [automatic configuration of the VLAN - VLAN discovery mechanism based on Cisco Discovery Protocol]

- **Automatic - LLDP** [automatic configuration of VLAN - VLAN discovery mechanism based on LLDP]
- **Automatic - CDP_LLDP** [automatic configuration of VLAN (default) - VLAN discovery mechanism based on LLDP and Cisco Discovery Protocol. LLDP protocol is with higher priority].

## Non-Skype for Business Environment

Unlike Skype for Business phones, the network administrator in a non Skype for Business environment needs to log in users phones. The network administrator can do this by importing a csv/zip file with the phones properties, or by approving the phones users one at a time.

- In contact centers, where multiple users may use a particular phone, a 'user' is sometimes made the equivalent of the Direct Inward Dialing (DID) number associated with the phone.
- After plugging in phones, the phones report to Device Manager, which does not display user names whose MAC address are unknown.

➢ **To approve users:**

1. Open the Devices Status page (**Monitor** > **Dashboard**); the non Skype for Business screen is identical to the Skype for Business screen.
2. Click **Approve** next to the user; the Approve Device dialog opens – the non Skype for Business screen is identical to the Skype for Business screen.
3. Enter the User Name and the Display Name, and then click **Approve**; the user name is displayed in Device Manager and the user is approved.

   The User Name and Password will function as the SIP user name and password.

- This procedure only applies when connecting phones for the first time. After first-time connection, the cfg file - containing user name and password - is automatically uploaded to the phones from the OVOC provisioning server, which the DHCP server points them to.
- In some non-Skype for Business environments, for example, in Genesys contact centers, Password is not specified.

## Converting Skype for Business Phones to Teams SIP Gateway

Users with AudioCodes' Skype for Business phones aka third-party IP (3PIP) phones can convert them to Microsoft Teams SIP Gateway using the Device Manager to make the conversion.

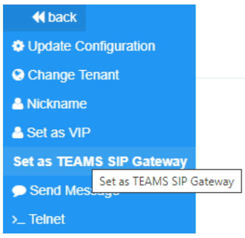
For information on how to configure the Microsoft SIP Gateway, see here.

AudioCodes phone models that can be converted are: 405, 405HD, 420HD, 440HD, 445HD, 450HD and C450HD. (Version 3.4.4.1000.61 and later is supported for the 445HD, 450HD and C450HD models).

After adding Microsoft's SIP Gateway to an enterprise's IP telephony network, users can connect these non Teams-certified AudioCodes phone models to the Microsoft telephony environment and reuse / re-purpose them with the Microsoft Teams cloud telephony service.

### ➢ To convert an AudioCodes phone model:

1. Define the SIP Gateway URL as shown here for SIP Gateway - Device Manager connectivity.
2. In the Monitor page, click the **Actions** link adjacent to the phone to convert and then in the menu that opens click **More...**



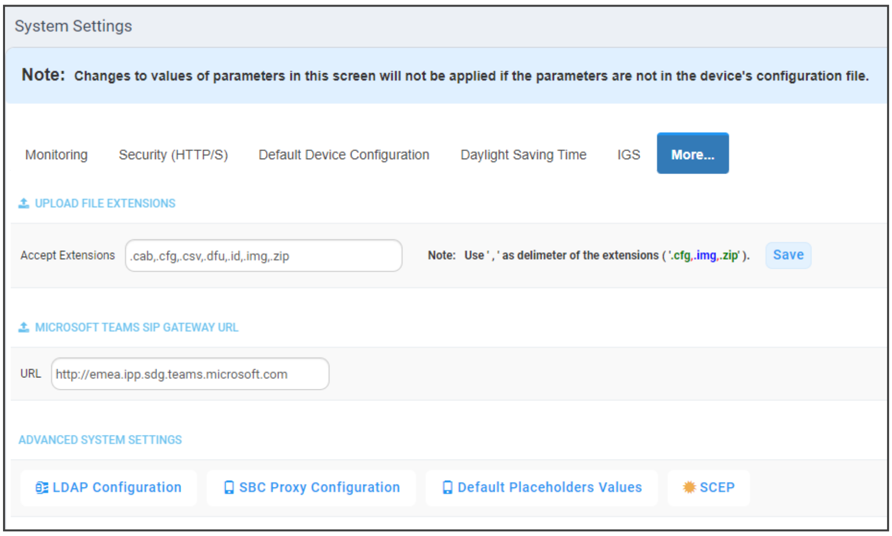
3. Click the **Set as TEAMS SIP Gateway** option.

## Configuring Microsoft Teams SIP Gateway URL

Network administrators must configure the Microsoft SIP Gateway URL for SIP Gateway - Device Manager connectivity.

### ➢ To configure the Microsoft SIP Gateway URL:

1. In the Device Manager, open the System Settings page (**Setup** > **Settings** > **System Settings**) and then click the **More...** tab.



**Note:** Changes to values of parameters in this screen will not be applied if the parameters are not in the device's configuration file.

Accept Extensions: .cab,.cfg,.csv,.dfu,.id,.img,.zip

Note: Use ' , ' as delimeter of the extensions ( '.cfg,.img,.zip' ).

URL: http://emea.ipp.sdg.teams.microsoft.com

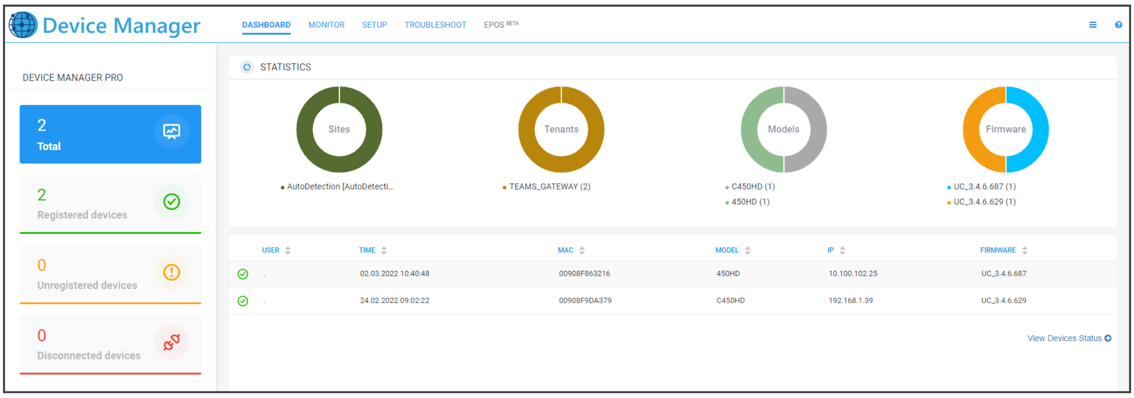
2. In the 'Microsoft Teams SIP Gateway URL' field shown in the preceding figure, enter the Microsoft SIP Gateway's URL and then click **Save all Settings**.

## Verifying that Microsoft SIP Gateway was Added

After adding in the Device Manager Microsoft's SIP Gateway to an enterprise's IP telephony network, verify connectivity.

### ➢ To verify that Microsoft's SIP Gateway has been added to the IP network:

- In the Device Manager, open the Dashboard page and view TEAMS_GATEWAY displayed:



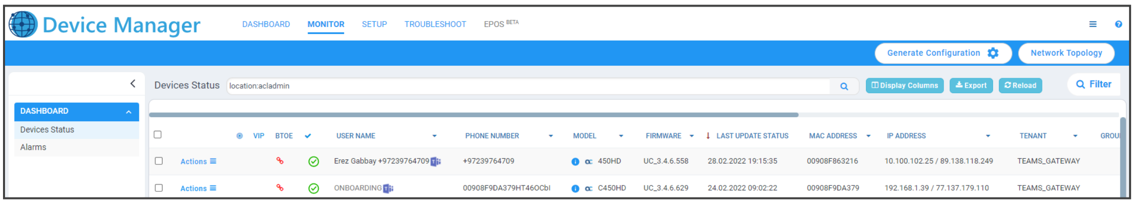
| | USER | TIME | MAC | MODEL | IP | FIRMWARE |
|---|---|---|---|---|---|---|
| ✓ | . | 02.03.2022 10:40:48 | 00908F863216 | 450HD | 10.100.102.25 | UC_3.4.6.687 |
| ✓ | . | 24.02.2022 09:02:22 | 00908F9DA379 | C450HD | 192.168.1.39 | UC_3.4.6.629 |

## Monitoring the Microsoft Teams Phone

After converting a non Teams-certified AudioCodes phone model to a Microsoft Teams phone, the device can be monitored.

### ➢ To monitor an AudioCodes phone converted to a Microsoft Teams phone:

1. In the Device Manager, open the Devices Status page (**Monitor** > **Devices Status**).



| ☐ | | VIP | BTOE | ✓ | USER NAME | PHONE NUMBER | MODEL | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS | TENANT | GROU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | Actions ≡ | | | ✓ | Erez Gabbay +97239764709 | +97239764709 | 450HD | UC_3.4.6.558 | 28.02.2022 19:15:35 | 00908F863216 | 10.100.102.25 / 89.138.118.249 | TEAMS_GATEWAY | |
| ☐ | Actions ≡ | | | ✓ | ONBOARDING | 00908F9DA379HT460Cbl | C450HD | UC_3.4.6.629 | 24.02.2022 09:02:22 | 00908F9DA379 | 192.168.1.39 / 77.137.179.110 | TEAMS_GATEWAY | |

2. View the Teams icon . displayed adjacent to the phone.

3. View the phone's status:

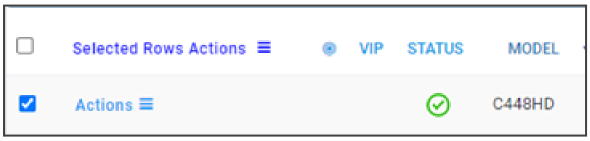
   - Onboarding (waiting for the user to sign in)
   - Registered (sign-in was performed)

## Converting Phones to Teams SIP Gateway

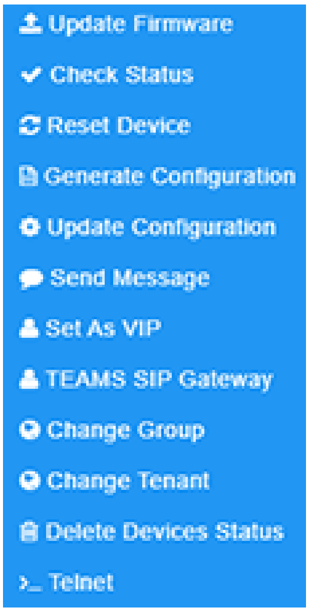
- Applies to all Generic SIP (UC) | Skype for Business phones.
- Applies to C448HD and C450HD Teams phones version 1.19.xxx or later.

### ➢ To convert phones:

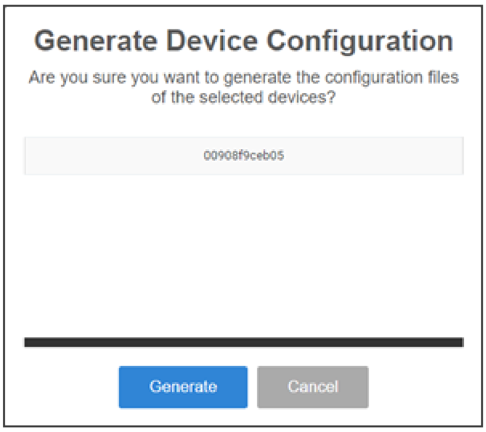
1. Open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**).
2. Select the phones to convert using the checkbox on the left side of the page.



3. Click the **Selected Rows Action** link.



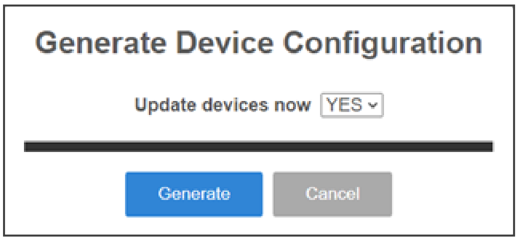
4. Select the **TEAMS SIP Gateway** option.
5. In the popup, select **Add to TEAMS SIP Gateway** and then click **Set**.
6. Repeat step **2**.
7. Select the **Generate Configuration** option.


Generate Device Configuration

Are you sure you want to generate the configuration files of the selected devices?

00908f9ceb05

8. Click **Generate**.

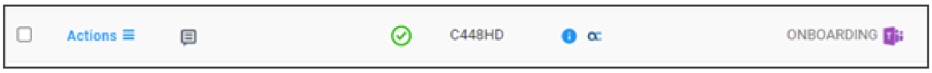


Generate Device Configuration

Update devices now YES

9. From the 'Update devices now' drop-down menu, select **YES** and then click **Generate**.

10. Make sure the relevant phones are displayed as SIP-GW (see ONBOARDING indication):



11. The phone reboots and switches to SIP GW. The process includes rebooting from Android to Linux and updating the configuration from SIP GW.

# 5 Monitoring and Maintenance

Network admins can use the Device Manager to monitor and maintain devices in the network.

## Getting the Latest Firmware Files

The 'Latest Versions' page in the Device Manager allows network administrators to get the latest device firmware files from AudioCodes' firmware repository located in the cloud, before upgrading the devices in the 'Devices Status' page. The 'Latest Versions' page allows network administrators to 'sync' the Device Manager with the repository in the cloud before performing the device upgrade.

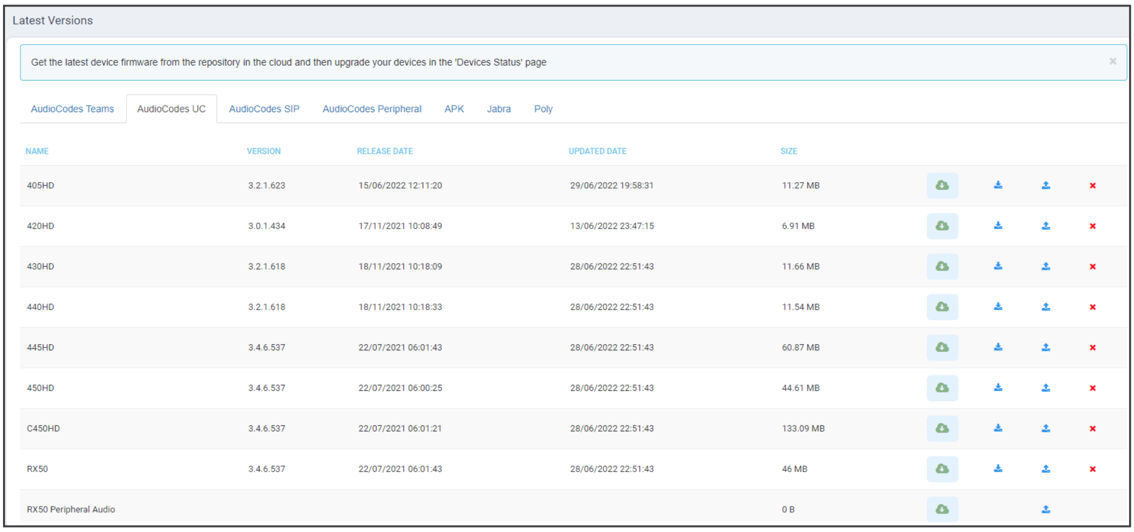
### ➢ To sync Device Manager with cloud:

1. Open the 'Latest Versions' page:

   - On the upper right bar of the Dashboard, locate the 'Latest Versions' icon 26 to view how many (if any) devices are in the network that require a firmware upgrade. If there are, click the icon (there are 26 indicated by the icon shown here); the Latest Versions page shown below opens.

     -OR-

   - Navigate to the page (**Setup** > **Firmware** > **Latest Firmware Versions**).



Get the latest device firmware from the repository in the cloud and then upgrade your devices in the 'Devices Status' page

| NAME | VERSION | RELEASE DATE | UPDATED DATE | SIZE |
|---|---|---|---|---|
| 405HD | 3.2.1.623 | 15/06/2022 12:11:20 | 29/06/2022 19:58:31 | 11.27 MB |
| 420HD | 3.0.1.434 | 17/11/2021 10:08:49 | 13/06/2022 23:47:15 | 6.91 MB |
| 430HD | 3.2.1.618 | 18/11/2021 10:18:09 | 28/06/2022 22:51:43 | 11.66 MB |
| 440HD | 3.2.1.618 | 18/11/2021 10:18:33 | 28/06/2022 22:51:43 | 11.54 MB |
| 445HD | 3.4.6.537 | 22/07/2021 06:01:43 | 28/06/2022 22:51:43 | 60.87 MB |
| 450HD | 3.4.6.537 | 22/07/2021 06:00:25 | 28/06/2022 22:51:43 | 44.61 MB |
| C450HD | 3.4.6.537 | 22/07/2021 06:01:21 | 28/06/2022 22:51:43 | 133.09 MB |
| RX50 | 3.4.6.537 | 22/07/2021 06:01:43 | 28/06/2022 22:51:43 | 46 MB |
| RX50 Peripheral Audio | | | | 0 B |

2. Click a tab to filter the page according to product. By default, the **AudioCodes UC** tab page opens first. The tabs are from L-R:

   - **AudioCodes Teams** displays AudioCodes' Teams devices such as the Teams IP phones and the Meeting Room Solution devices.

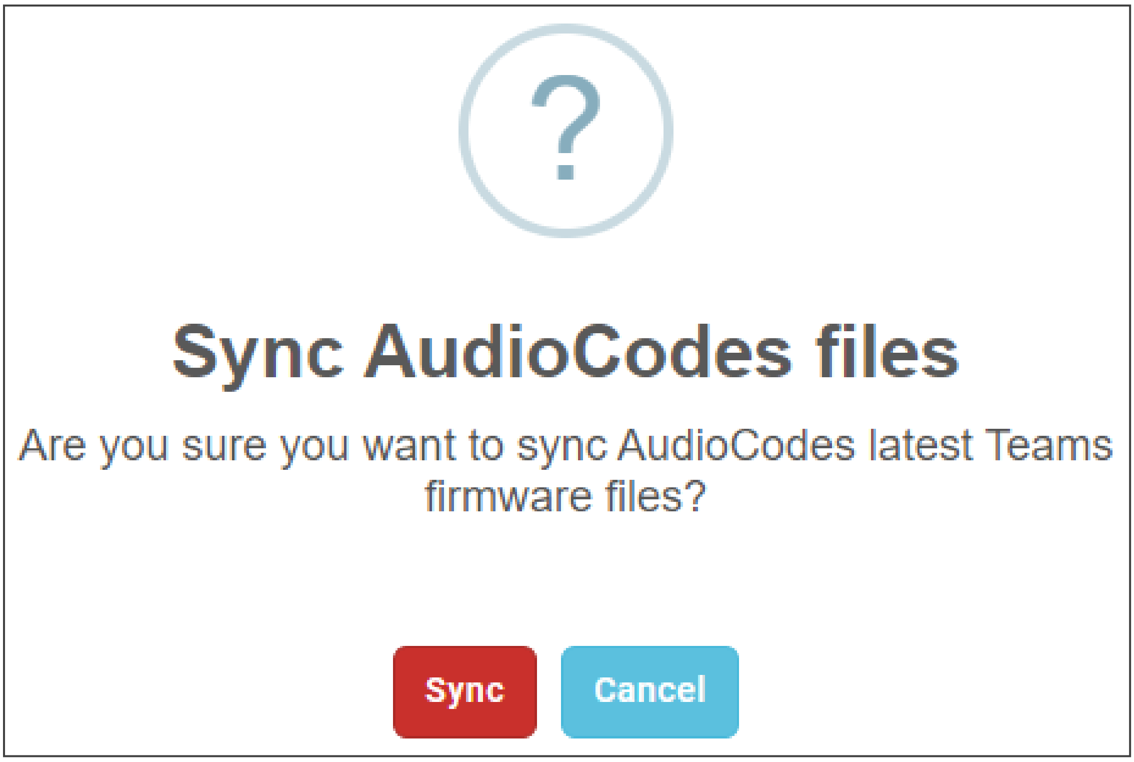
   - **AudioCodes UC** displays for example the IP phones for Skype for Business and the HRS devices for Skype for Business.

- **AudioCodes SIP** displays AudioCodes' generic SIP devices such as the generic SIP IP phones and generic SIP HRS devices.
- **AudioCodes Peripheral** displays AudioCodes' peripheral devices such as the RX15 Speakerphone, RXVCam10 Personal Webcam and RXVCam50 Video Camera.
- **APK** displays Android Package Kits such as the Microsoft Teams APK for all Native Teams Deskphones and the Microsoft Teams Room APK for Adroid. APK is the file format for applications used on the Android operating system.
- **Jabra** displays Jabra devices.
- **Polycom** displays supported Polycom devices.

3. Click the button located lowermost left in each tab's page.
   - **Get latest Skype for Business firmware (Sync)**. Updates the firmware versions on all Skype for Business devices whose versions are old.
   - **Get latest Generic SIP firmware (Sync)**. Updates the firmware versions on all generic SIP devices whose versions are old.
   - **Get latest Teams firmware (Sync)**. Updates the firmware versions on all Teams devices whose versions are old.
   - **Get latest Peripherals version**. Updates the versions of peripheral devices software files.
   - **Get latest APK version**. Updates the versions of APK software files.
   - **Get latest Jabra firmware**. Updates the versions of all Jabra devices firmware files.
   - **Get latest Polycom firmware**. Updates the versions of all Polycom devices firmware.

> ⚠ Few deployments, if any, feature Skype for Business phones *and* generic SIP phones, so when performing a sync, do it for either one or the other, never for both.

4. In the prompt shown in the figure below that is then displayed, click **Sync**; the firmware on *all* Teams devices synchronized.



Sync AudioCodes files

Are you sure you want to sync AudioCodes latest Teams firmware files?

5. In each tab page, view the following icons *adjacent* to each device. The actions here are *per that device*.

   🔄 Click to sync the Device Manager with latest firmware version on the cloud; it will reach the device only after clicking **Generate Configuration**.

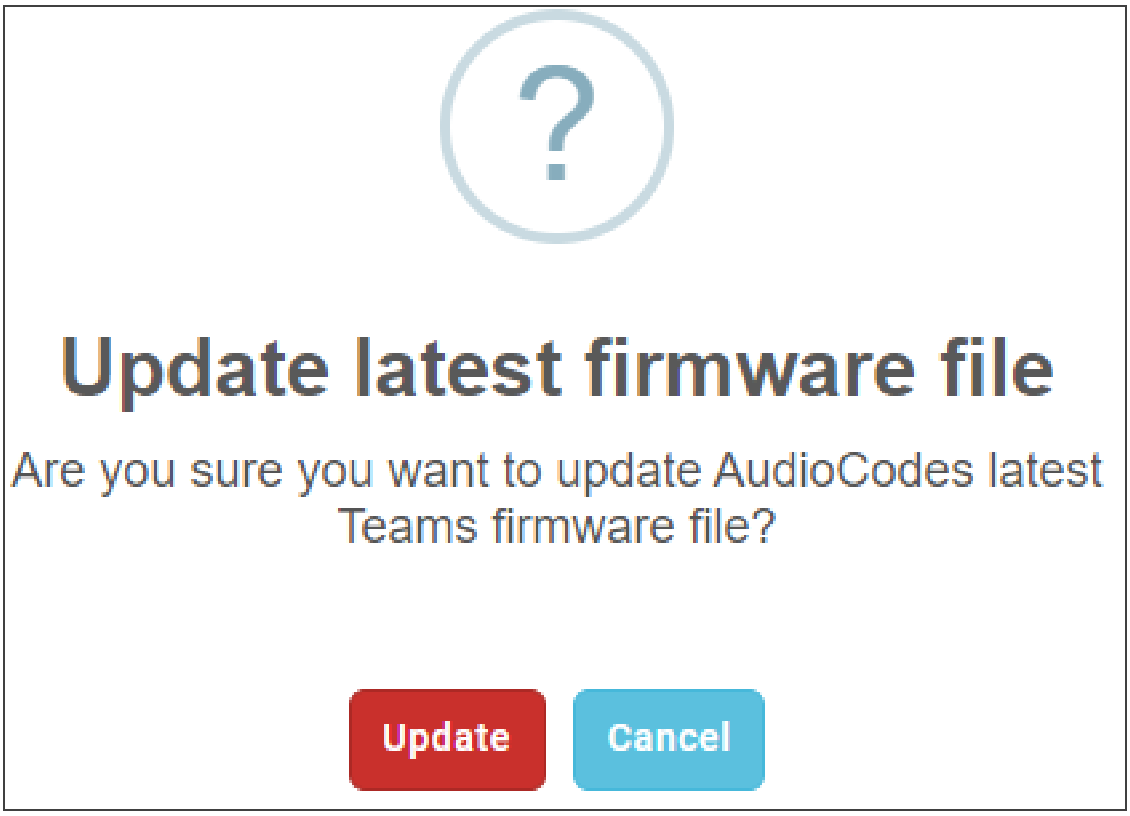
   ☁ Click to download a newer firmware version from the cloud to the Device Manager.

   ⊘ The device is disconnected.

   ⤒ Click to upload firmware from the pc / laptop to the Device Manager.

   ⤓ Click to download the device's current firmware to the pc / laptop.

6. In the prompt shown below displayed after clicking 🔄, click **Update**; the firmware of the specific Teams device is updated.



Update latest firmware file

Are you sure you want to update AudioCodes latest Teams firmware file?

7. Open the 'Devices Status' page (**Monitor** > **Dashboard** > **Devices Status**) and from the 'Actions' button adjacent to a phone, select **Update Firmware**; the phone will use the firmware file listed in the 'Latest Versions' page.

> ⚠ See also Checking Devices Status on page 79.

## Generating a Configuration File

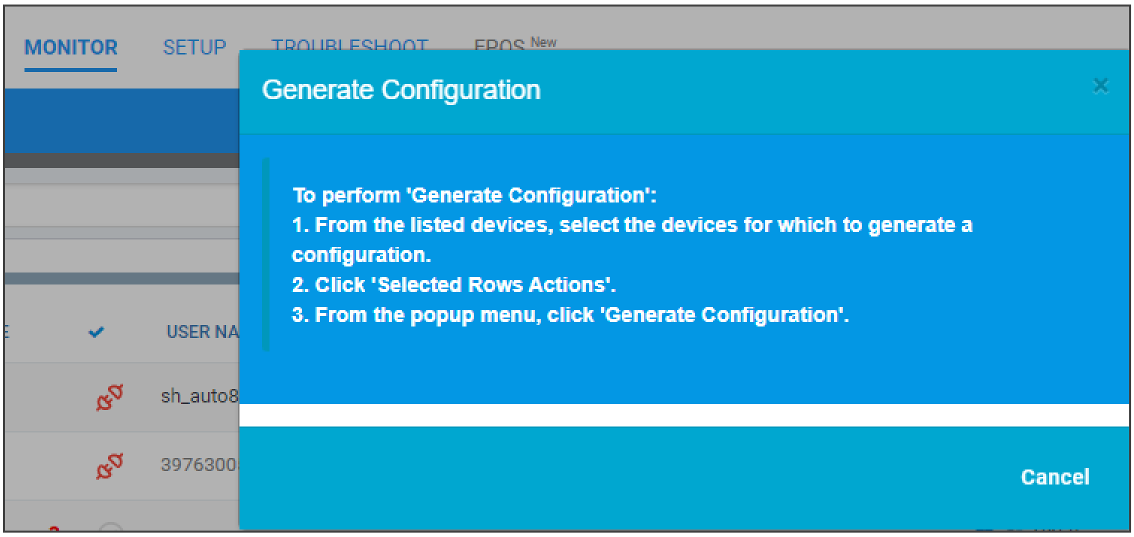
When the Device Manager gets the latest firmware file version from the cloud (see here), a *new configuration file with the firmware file's URL* is generated in the background.

When you perform 'Generate Configuration', the following configuration files are generated:

- cfg files for AudioCodes devices
- xml files for Jabra and Polycom devices

➢ **To generate a configuration:**

1. In the Latest Versions page (in which you synced Device Manager with the latest firmware files versions from AudioCodes' firmware repository on the cloud), click the **Generate Configuration** button; the Devices Status page opens.

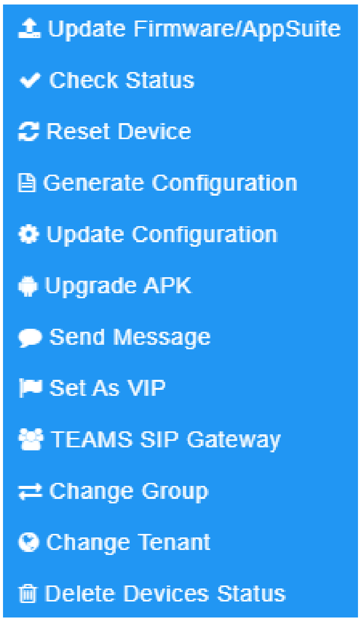


To perform 'Generate Configuration':
1. From the listed devices, select the devices for which to generate a configuration.
2. Click 'Selected Rows Actions'.
3. From the popup menu, click 'Generate Configuration'.

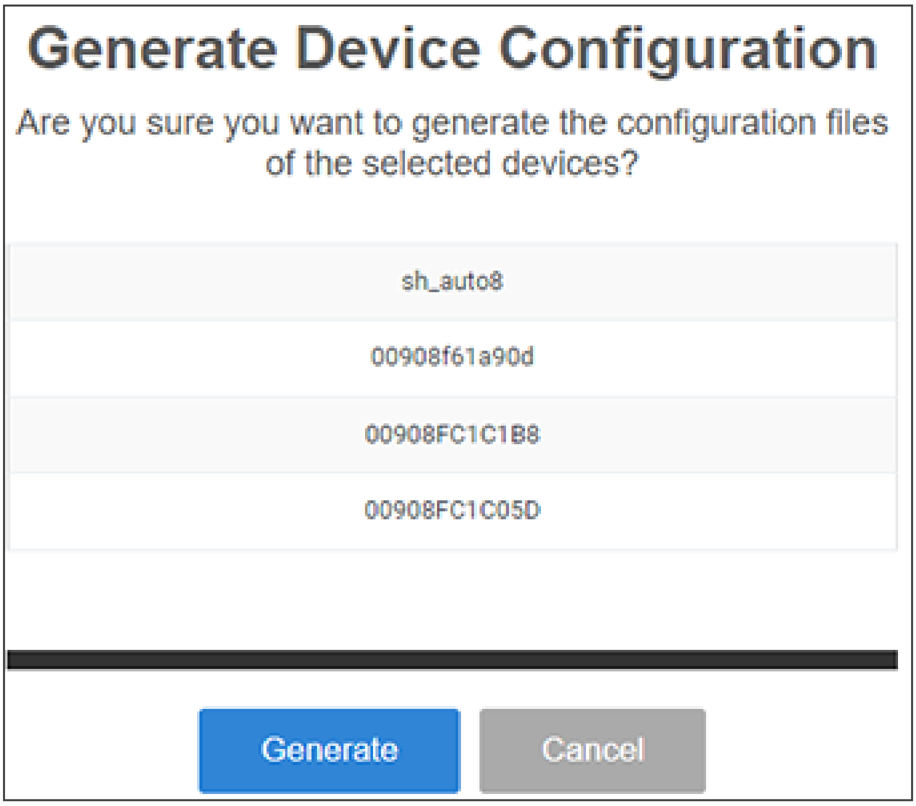
⚠ For detailed information about the 'Devices Status' page, see here.

2. Read the instructions in the prompt and then click **Cancel**:

   a. Select the devices for whom you want to generate a configuration and then click the **Selected Rows Actions** link Selected Rows Actions ☰ now displayed.



   b. Click the **Generate Configuration** option.



Generate Device Configuration

Are you sure you want to generate the configuration files of the selected devices?

sh_auto8

00908f61a90d

00908FC1C1B8

00908FC1C05D

c. Click **Generate**; configuration files are generated for the selected devices; they're not applied directly to the devices; the administrator can choose whether to apply the configuration file immediately or to wait for the device to get it later at a specific time.

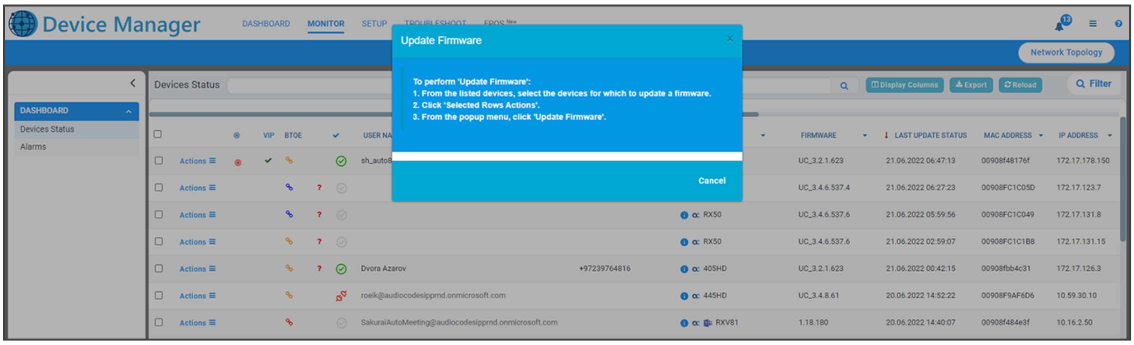
## Updating Device Firmware

After getting the latest firmware file versions from AudioCodes' firmware repository located in the cloud using the Latest Versions page as shown here, network administrators can upgrade their devices in the 'Devices Status' page.

⚠ For detailed information about the 'Devices Status' page, see here.

### ➢ To upgrade devices firmware:

1. In the Latest Versions page (in which you synced Device Manager with the latest firmware files versions from AudioCodes' firmware repository on the cloud), click the **Update Firmware** button; the Devices Status page opens.



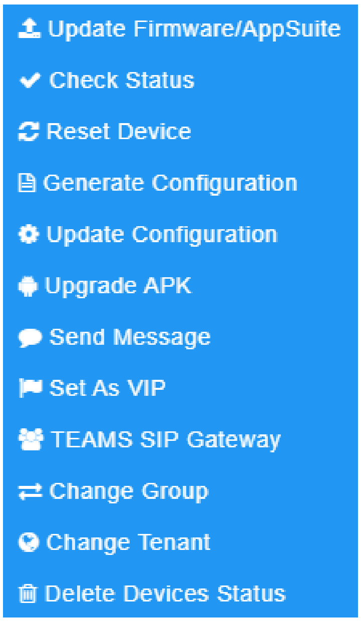
Update Firmware

To perform 'Update Firmware':
1. From the listed devices, select the devices for which to update a firmware.
2. Click 'Selected Rows Actions'.
3. From the popup menu, click 'Update Firmware'.

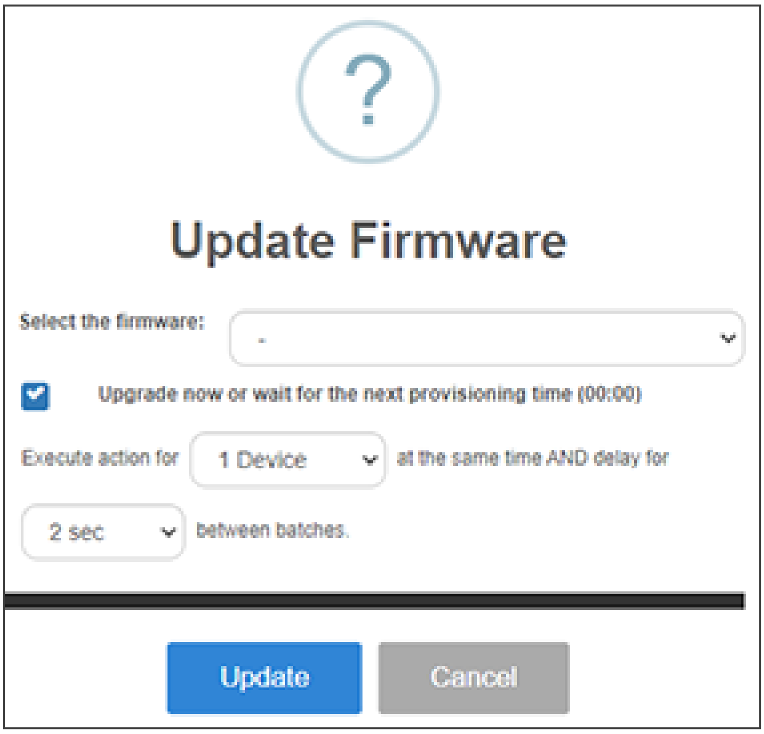
Cancel

2. Read the instructions in the prompt and then click **Cancel**:

   a. Select the devices whose firmware you want to update and then click the **Selected Rows Actions** link Selected Rows Actions ≡ now displayed.



   b. Click the **Update Firmware** option.



Update Firmware

Select the firmware: -

☑ Upgrade now or wait for the next provisioning time (00:00)

Execute action for 1 Device at the same time AND delay for 2 sec between batches.

c. From the Select the firmware' dropdown, choose **LATEST VERSION** and then click **Update**; the selected devices will use the firmware files listed in the 'Latest Firmware Versions' page.

See also Generating a Configuration File on page 50.

## Monitoring & Maintaining Meeting Rooms

Device Manager supports monitoring and maintaining AudioCodes Meeting Rooms and their peripheral devices:

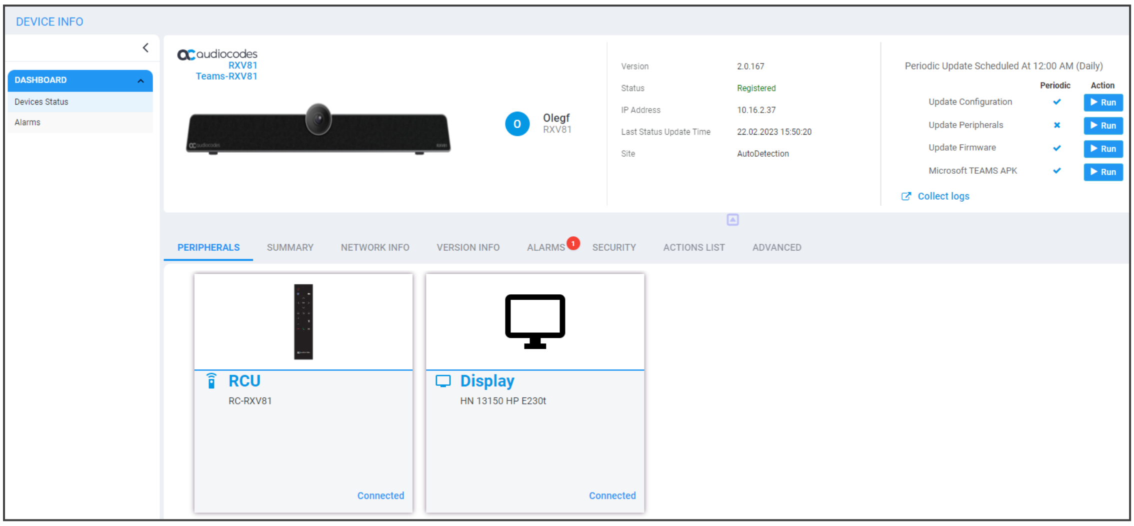
- **RXV100** Meeting Room (Windows-based). See here.
- **RXV81** Meeting Room (Android-based, Microsoft-certified). See here.
- **RXV200** Meeting Room (Android-based, Microsoft-certified). See here.
- **RXV80** Meeting Room. See here.
- **RX-PANEL** Meeting Room Scheduler. See here.
- **Desktop | PC** Meeting Room. See here.

### Upgrading Meeting Room Firmware

The Show Info page in the Device Manager enables admins to upgrade Meeting Room firmware.

### ➢ To upgrade Meeting Room firmware:

1. Open the Show Info page (**Monitor** > **Dashboard** > **Devices Status** > click **i** adjacent to the device).



| | |
|---|---|
| Version | 2.0.167 |
| Status | Registered |
| IP Address | 10.16.2.37 |
| Last Status Update Time | 22.02.2023 15:50:20 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✓ | ▶ Run |

2. In the upper right corner of the page, click the **Run** button adjacent to

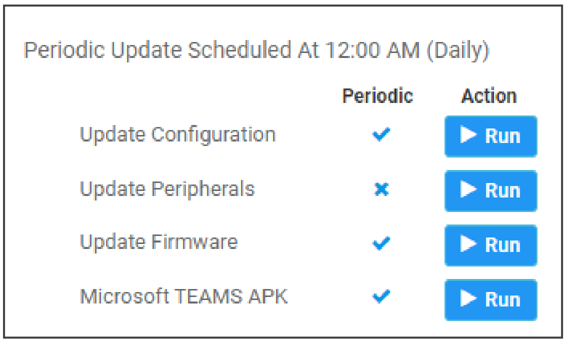
   - **Update Configuration** to update the device's cfg file
   - **Update Peripherals** to update the device's peripherals
   - **Update Firmware** to update the device's firmware img file
   - **Microsoft Teams APK** (to update the Android Package Kit on Android-based Teams devices - phones as well as Meeting Rooms)
   - **Update AudioCodes AppSuite** (applies only to Windows-based Meeting Room devices, e.g., RXV100)

> - **Update Peripherals** is only supported when the device is connected by USB and not by Bluetooth.
> - **Microsoft Teams APK** is supported from version 1.17 and later.
> - **Windows-based devices and Windows are interdependent**. The device checks for a new version for the Windows OS and for the device, and updates both. In the App Suite / Device Manager client, the update schedule is configured.

3. Under the **Version Info** tab, verify the device's Teams | Windows versions.

> The tab for RXV100 displays:
> - Status
> - Version info
> - Windows version

4. Enable / disable automatic upgrade of the Teams application. Allow the device to run the update *without* Device Manager involvement OR allow the Device Manager to control the schedule of updating all elements.



Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✓ | ▶ Run |

5. If you select allowing the Device Manager to be responsible for the device firmware update, two options are available:

   - **Periodic** (similar to Device Manager client)

     Configure 'Periodic' using the following provisioning parameters:

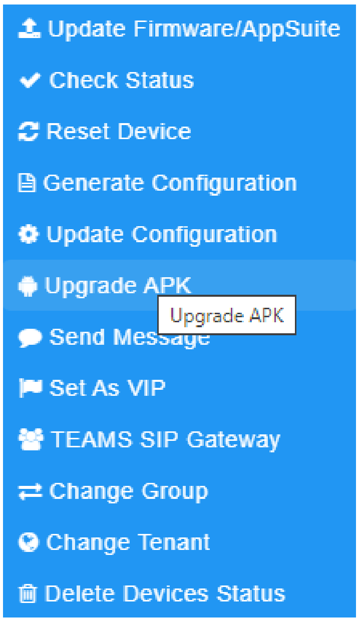
     - provisioning/period/type=DAILY (default value)
     - provisioning/period/daily/time=0:00

   - **Trigger an upgrade** (via an explicit command called 3rd party update per script) of the Teams App of the device according to the repository of the latest version (same as the other products).

> ⚠ The Device Manager supports bulk Android APK update.

### ➢ To perform bulk Android APK update:

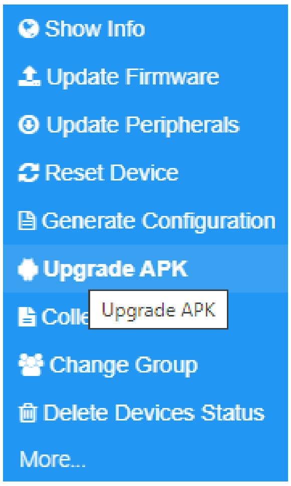
1. In the Devices Status page, select multiple Android-based devices and then click the activated **Selected Rows Actions** links:



2. From the menu that pops up shown in the preceding figure, select **Upgrade APK**.

➢ **To update Android APK on a single device:**

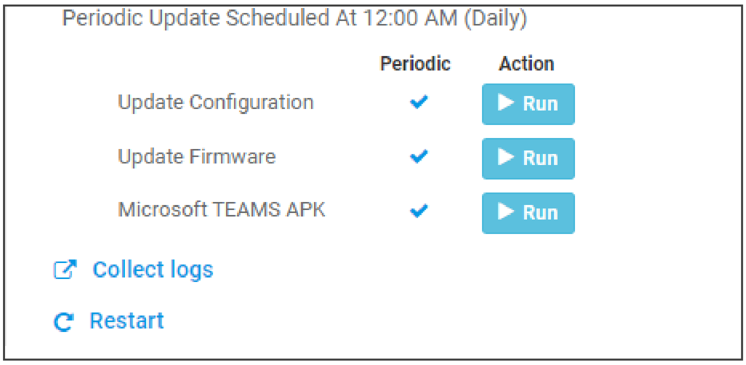
1. In the Devices Status page, click the **Actions** menu adjacent to the device:



2. From the menu that pops up shown in the preceding figure, select **Upgrade APK**.

➢ **To run Android APK on a single device:**

1. In the Devices Status page, click the **Actions** menu adjacent to the device and then from the pop-up menu, select the **Show Info** option:



Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✓ | ▶ Run |

2. Click the **Run** button adjacent to 'Microsoft TEAMS APK'.

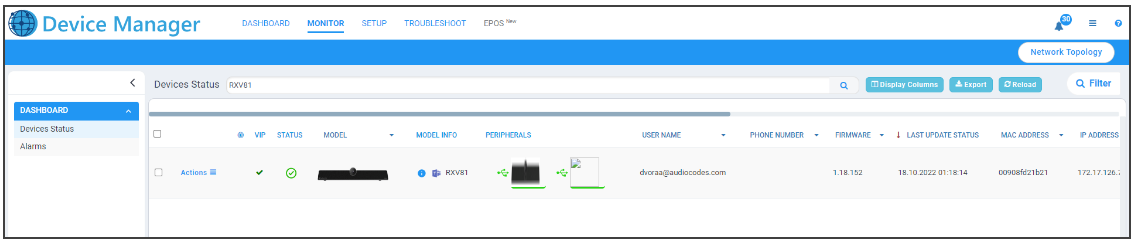
## RXV81 MTR on Android

Administrators can monitor and maintain the RXV81 Microsoft Teams Room on Android in their networks.

> To get started with the RXV81, see the *RXV81 Deployment Guide* available from AudioCodes.

### ➢ To monitor and maintain the RXV81:

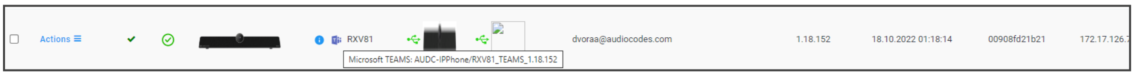
1. Open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**) and optionally reduce clutter by searching for RXV81.



Devices Status RXV81

| □ | | ◉ | VIP | STATUS | MODEL | MODEL INFO | PERIPHERALS | USER NAME | PHONE NUMBER | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | | ✓ | ✓ | | RXV81 | | dvoraa@audiocodes.com | | 1.18.152 | 18.10.2022 01:18:14 | 00908fd21b21 | 172.17.126. |

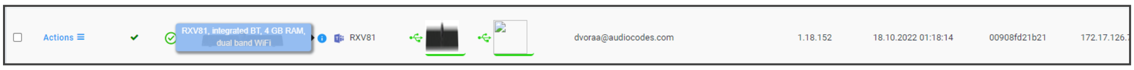
2. Point your mouse at the Teams icon in the row of the device and determine the device version from the tool tip that pops up.



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | ✓ | ✓ | | RXV81 | | dvoraa@audiocodes.com | 1.18.152 | 18.10.2022 01:18:14 | 00908fd21b21 | 172.17.126. |

Microsoft TEAMS: AUDC-IPPhone/RXV81_TEAMS_1.18.152

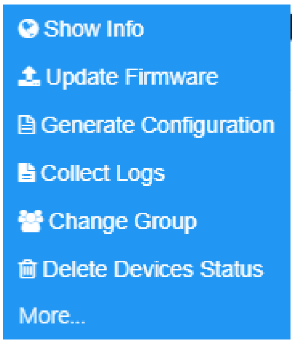
3. Point your mouse at the **i** (information) icon in the row of the device and from the tool tip that pops up determine if the device features Bluetooth, RAM size and Wi-Fi.

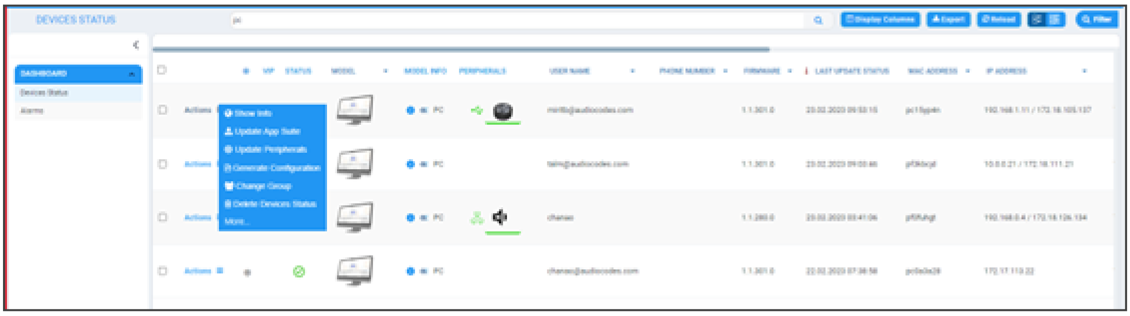


| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | ✓ | ✓ | RXV81 | | dvoraa@audiocodes.com | 1.18.152 | 18.10.2022 01:18:14 | 00908fd21b21 | 172.17.126. |

RXV81, integrated BT, 4 GB RAM, dual band WiFi

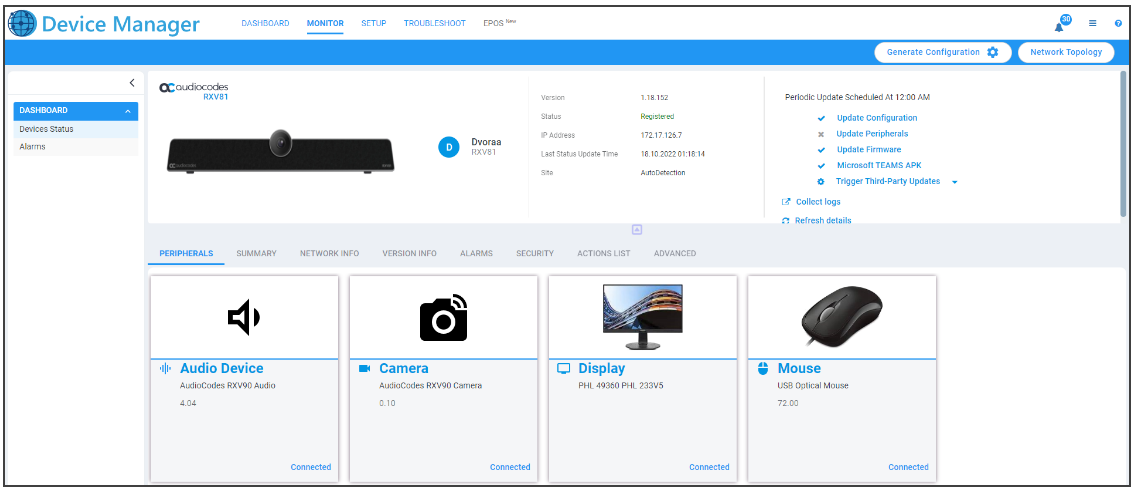
4. Click the Actions ≡ button adjacent to the device to manage -OR- select *multiple* devices and then click the activated Selected Rows Actions ≡ button.





5. From the pop-up menu, select the management action you require; the procedures are the same as for the other managed devices described in this document.

6. Select **Show Info** or click the **i** (information) icon adjacent to the listed device.



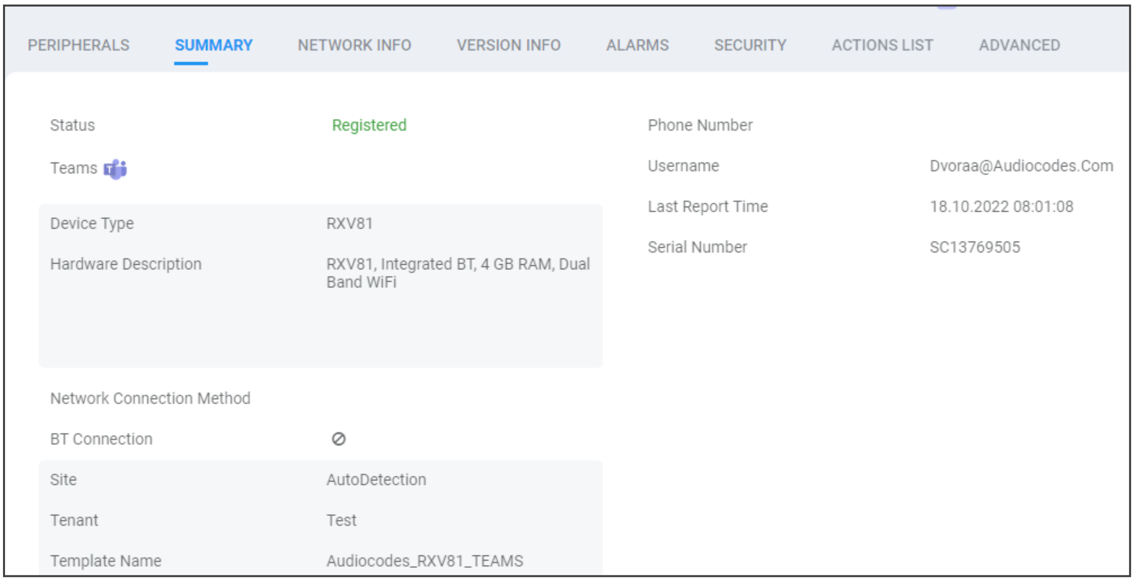
Version 1.18.152
Status Registered
IP Address 172.17.126.7
Last Status Update Time 18.10.2022 01:18:14
Site AutoDetection

Periodic Update Scheduled At 12:00 AM

| Audio Device | Camera | Display | Mouse |
|---|---|---|---|
| AudioCodes RXV90 Audio | AudioCodes RXV90 Camera | PHL 49360 PHL 233V5 | USB Optical Mouse |
| 4.04 | 0.10 | | 72.00 |
| Connected | Connected | Connected | Connected |

7. In the upper pane of the page shown in the preceding figure, view the device's version, status, IP address, Last Status Update Time and Site. In the lower pane, view which peripheral devices are bundled with the device. Optionally use the links on the right side of the page to update configuration, update peripherals, update firmware, update Microsoft Teams APK, trigger third-party updates, collect logs, and / or refresh details.

8. Adjacent to the **Peripherals** tab, click the **Summary** tab.

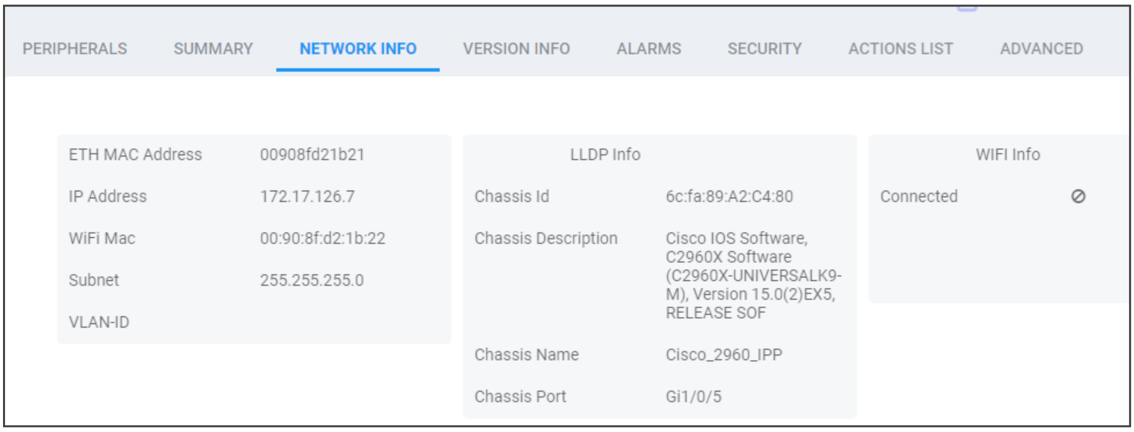


| | |
|---|---|
| Status | Registered |
| Teams | |
| Device Type | RXV81 |
| Hardware Description | RXV81, Integrated BT, 4 GB RAM, Dual Band WiFi |
| Network Connection Method | |
| BT Connection | ⊘ |
| Site | AutoDetection |
| Tenant | Test |
| Template Name | Audiocodes_RXV81_TEAMS |

| | |
|---|---|
| Phone Number | |
| Username | Dvoraa@Audiocodes.Com |
| Last Report Time | 18.10.2022 08:01:08 |
| Serial Number | SC13769505 |

9. View a summary of device-related information such as device type, hardware, network connection method, site, tenant and template name.

10. Click the **Network Info** tab.



| | |
|---|---|
| ETH MAC Address | 00908fd21b21 |
| IP Address | 172.17.126.7 |
| WiFi Mac | 00:90:8f:d2:1b:22 |
| Subnet | 255.255.255.0 |
| VLAN-ID | |

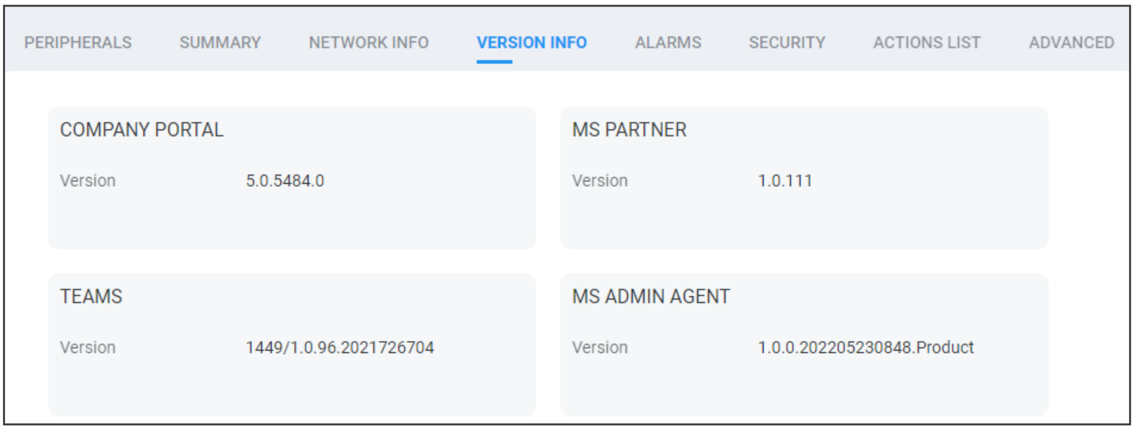
LLDP Info

| | |
|---|---|
| Chassis Id | 6c:fa:89:A2:C4:80 |
| Chassis Description | Cisco IOS Software, C2960X Software (C2960X-UNIVERSALK9-M), Version 15.0(2)EX5, RELEASE SOF |
| Chassis Name | Cisco_2960_IPP |
| Chassis Port | Gi1/0/5 |

WIFI Info

| | |
|---|---|
| Connected | ⊘ |

11. Click the **Version Info** tab; information related to the version of the installed AudioCodes App Suite is displayed.



COMPANY PORTAL
Version 5.0.5484.0

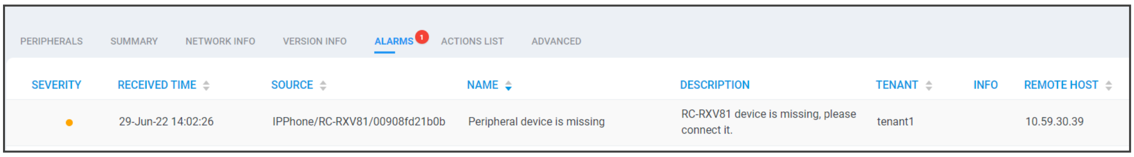
MS PARTNER
Version 1.0.111

TEAMS
Version 1449/1.0.96.2021726704

MS ADMIN AGENT
Version 1.0.0.202205230848.Product

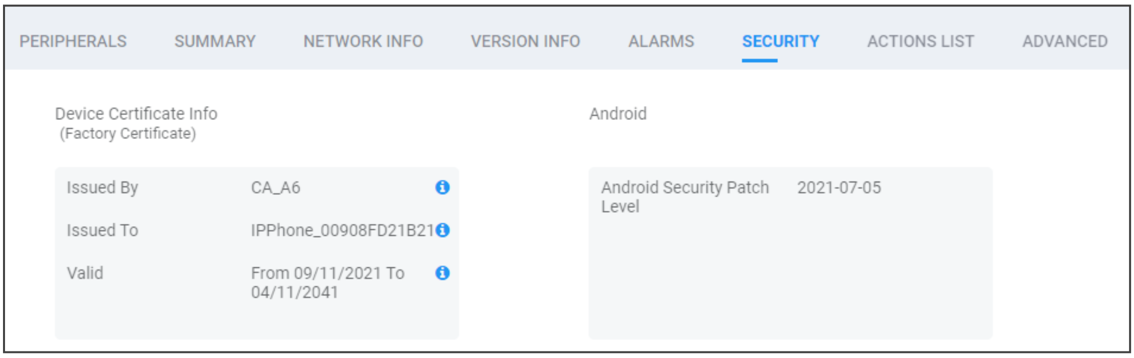
The feature is enabled after installing AudioCodes App Suite (with Device Manager client) on the PC.

12. If an alarm is active on the device, view the indication adjacent to the **Alarms** tab as shown in the figure below.



| SEVERITY | RECEIVED TIME | SOURCE | NAME | DESCRIPTION | TENANT | INFO | REMOTE HOST |
|---|---|---|---|---|---|---|---|
| ● | 29-Jun-22 14:02:26 | IPPhone/RC-RXV81/00908fd21b0b | Peripheral device is missing | RC-RXV81 device is missing, please connect it. | tenant1 | | 10.59.30.39 |

13. Click the **Security** tab.



Device Certificate Info
(Factory Certificate)

| | |
|---|---|
| Issued By | CA_A6 |
| Issued To | IPPhone_00908FD21B21 |
| Valid | From 09/11/2021 To 04/11/2041 |

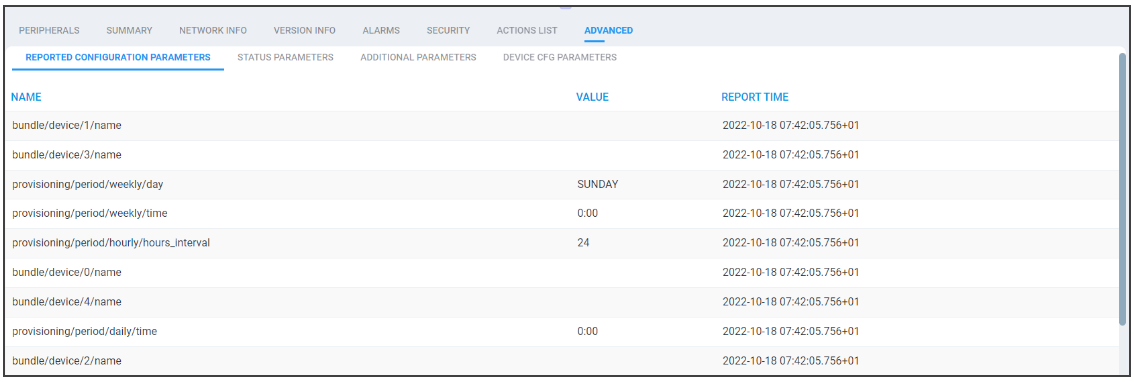
Android

| | |
|---|---|
| Android Security Patch Level | 2021-07-05 |

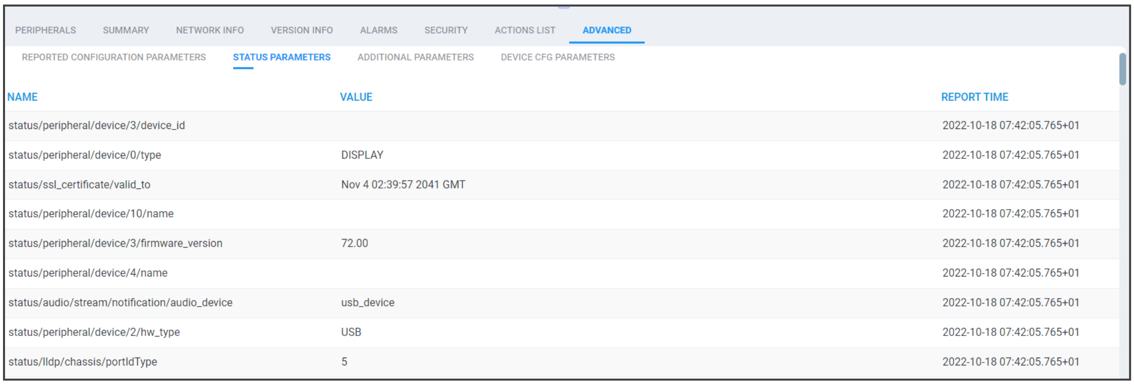
14. View certificate status information related to the device. In the preceding figure, the reporting device is an Android device. Certificate status information includes ‘Issued by’, 'Issued to' and ‘Validity’. The reporting device can alternatively be a UC device (generic SIP phone) or AudioCodes’ Duo Win App.

15. View under the **Advanced** tab information about the device's parameters:

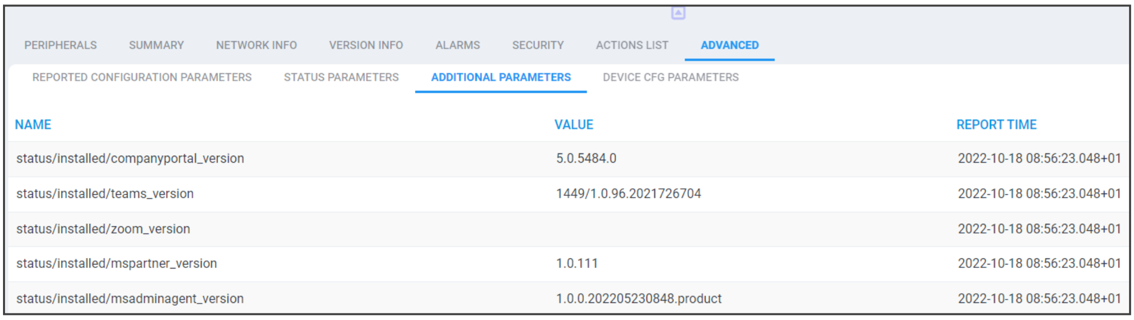
- Reported Configuration Parameters (see below)
- Status Parameters (see below)
- Additional Parameters (see below)
- Device CFG Parameters (see below)



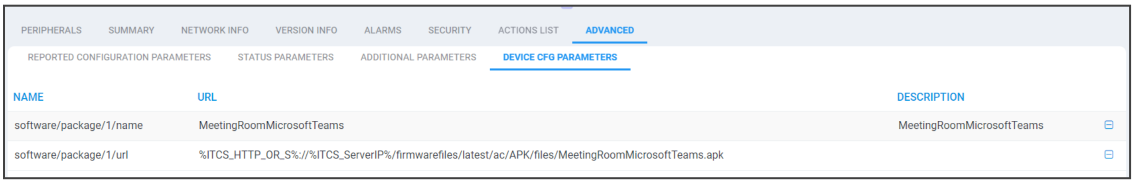
| NAME | VALUE | REPORT TIME |
|---|---|---|
| bundle/device/1/name | | 2022-10-18 07:42:05.756+01 |
| bundle/device/3/name | | 2022-10-18 07:42:05.756+01 |
| provisioning/period/weekly/day | SUNDAY | 2022-10-18 07:42:05.756+01 |
| provisioning/period/weekly/time | 0:00 | 2022-10-18 07:42:05.756+01 |
| provisioning/period/hourly/hours_interval | 24 | 2022-10-18 07:42:05.756+01 |
| bundle/device/0/name | | 2022-10-18 07:42:05.756+01 |
| bundle/device/4/name | | 2022-10-18 07:42:05.756+01 |
| provisioning/period/daily/time | 0:00 | 2022-10-18 07:42:05.756+01 |
| bundle/device/2/name | | 2022-10-18 07:42:05.756+01 |



| NAME | VALUE | REPORT TIME |
|---|---|---|
| status/peripheral/device/3/device_id | | 2022-10-18 07:42:05.765+01 |
| status/peripheral/device/0/type | DISPLAY | 2022-10-18 07:42:05.765+01 |
| status/ssl_certificate/valid_to | Nov 4 02:39:57 2041 GMT | 2022-10-18 07:42:05.765+01 |
| status/peripheral/device/10/name | | 2022-10-18 07:42:05.765+01 |
| status/peripheral/device/3/firmware_version | 72.00 | 2022-10-18 07:42:05.765+01 |
| status/peripheral/device/4/name | | 2022-10-18 07:42:05.765+01 |
| status/audio/stream/notification/audio_device | usb_device | 2022-10-18 07:42:05.765+01 |
| status/peripheral/device/2/hw_type | USB | 2022-10-18 07:42:05.765+01 |
| status/lldp/chassis/portIdType | 5 | 2022-10-18 07:42:05.765+01 |



| NAME | VALUE | REPORT TIME |
|---|---|---|
| status/installed/companyportal_version | 5.0.5484.0 | 2022-10-18 08:56:23.048+01 |
| status/installed/teams_version | 1449/1.0.96.2021726704 | 2022-10-18 08:56:23.048+01 |
| status/installed/zoom_version | | 2022-10-18 08:56:23.048+01 |
| status/installed/mspartner_version | 1.0.111 | 2022-10-18 08:56:23.048+01 |
| status/installed/msadminagent_version | 1.0.0.202205230848.product | 2022-10-18 08:56:23.048+01 |



| NAME | URL | DESCRIPTION |
|---|---|---|
| software/package/1/name | MeetingRoomMicrosoftTeams | MeetingRoomMicrosoftTeams |
| software/package/1/url | %ITCS_HTTP_OR_S%://%ITCS_ServerIP%/firmwarefiles/latest/ac/APK/files/MeetingRoomMicrosoftTeams.apk | |

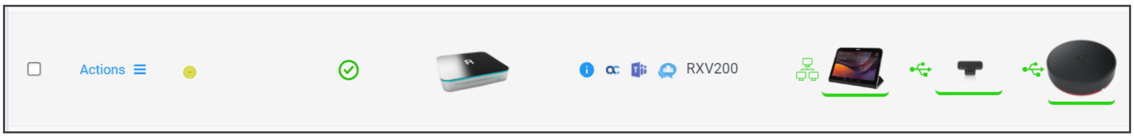
## RXV200 MTR on Android Compute

Admins can monitor and maintain the RXV200 Microsoft Teams Room Compute in their networks. For more information about RXV200, see AudioCodes website here.

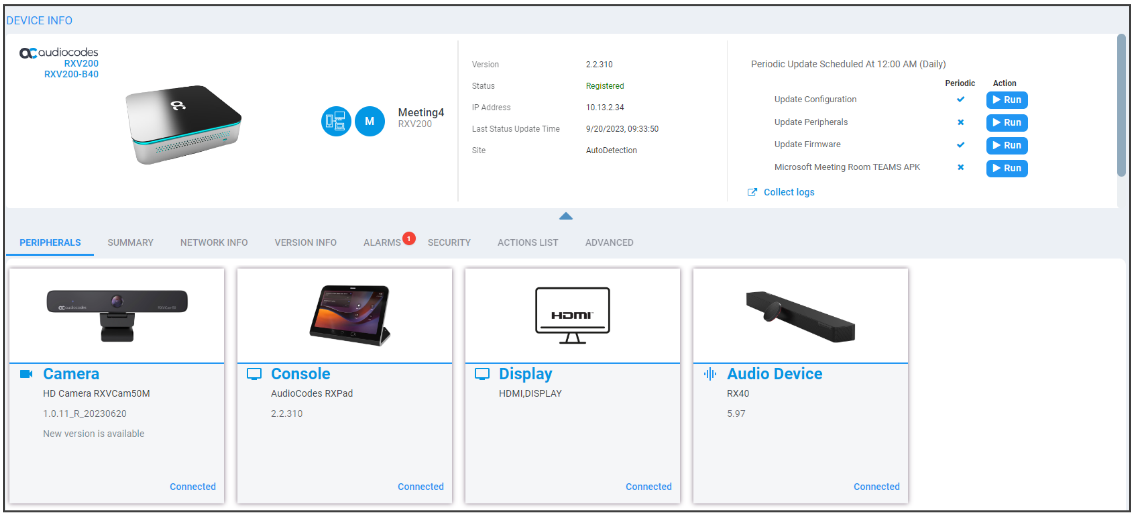
To get started with RXV200, see the quick guide available here.

### ➢ To monitor and maintain RXV200:

1. Open the Monitor page (**Monitor** > **Dashboard** > **Devices Status**) and optionally enter a filter for RXV200.



2. Click the device icon or click **Actions** > **Show Info**.



| | |
|---|---|
| Version | 2.2.310 |
| Status | Registered |
| IP Address | 10.13.2.34 |
| Last Status Update Time | 9/20/2023, 09:33:50 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft Meeting Room TEAMS APK | ✗ | ▶ Run |

Camera
HD Camera RXVCam50M
1.0.11_R_20230620
New version is available
Connected

Console
AudioCodes RXPad
2.2.310
Connected

Display
HDMI,DISPLAY
Connected

Audio Device
RX40
5.97
Connected

3. Adjacent to 'Update Configuration' shown in the preceding figure, click **Run** to update the device with the latest .cfg file.

4. Adjacent to 'Update Peripherals' shown in the preceding figure, click **Run** to update the device's peripherals with the latest software .

5. Adjacent to 'Update Firmware' shown in the preceding figure, click **Run** to update the device with the latest .img file. If there is no latest software to update, you'll be prompted to go to the Latest Versions page to download it (**Setup** > **Firmware** > **Latest Firmware Versions**).

6. Adjacent to 'MSFT Teams Room APK For RX-Panel' shown in the preceding figure, click **Run** to update the device with the latest APK file (Android Package Kit file format).

## RXV100 MTR for Windows

Administrators can monitor and maintain the AudioCodes RXV100 Meeting Room in their networks using Device Manager. For more information about the RXV100, see here.

> ⚠ To *deploy* the RXV100 Meeting Room, see the *Device Manager for RXV100 Deployment Guide*.

### ➢ To connect the RXV100 to Device Manager, use:

- DHCP Option 160 -OR-
- AudioCodes Redirect Server if DHCP Option 160 is unsuccessful -OR-
- Static Provisioning URL if the former two methods are unsuccessful

> ⚠ For detailed information, see the *Device Manager for RXV100 Deployment Guide*.

## RXV80 Standalone Video Collaboration Bar

Administrators can monitor and maintain the RXV80 Standalone Video Collaboration Bar deployed in their networks using the Device Manager.

### ➢ To monitor and maintain the RXV80:

- The monitoring and maintenance procedures on the RXV80 are identical in principal to those on the RXV81. See here for more information.
- See also the *RXV80 Standalone Video Collaboration Bar User's and Administrator's Manual.*
- See also the *RXV80 Standalone Video Collaboration Bar Deployment Guide*.

## RX-PAD Meeting Room Controller

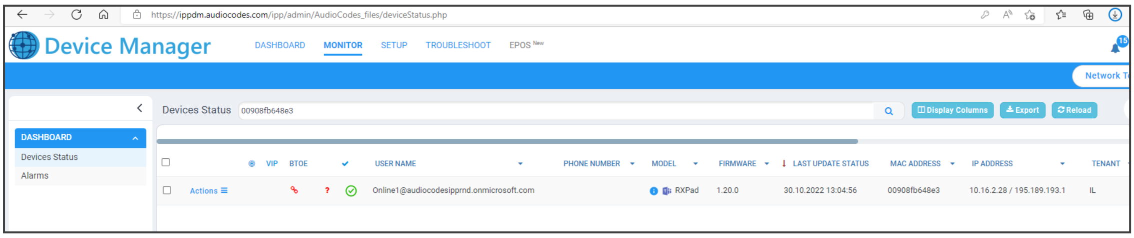
The Device Manager supports AudioCodes' RX-PAD Microsoft Teams Room (MTR) Controller. RX-PAD is an Android-based MTR controller running the Teams App and compute.

For a comprehensive guide on how to get started with RX-PAD, see the *RXV81 User's and Administrator's Manual* available from AudioCodes.

RX-PAD is managed independently – connecting to OVOC – Android device with the Teams APK. After RX-PAD is paired with RXV81, the Device Manager displays it as a peripheral device.

### ➢ To manage RX-PAD:

1. Open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**) and optionally reduce clutter by searching for RXPad.



https://ippdm.audiocodes.com/ipp/admin/AudioCodes_files/deviceStatus.php

Device Manager

DASHBOARD MONITOR SETUP TROUBLESHOOT EPOS New

Network T

DASHBOARD
Devices Status
Alarms

Devices Status 00908fb648e3

Display Columns Export Reload

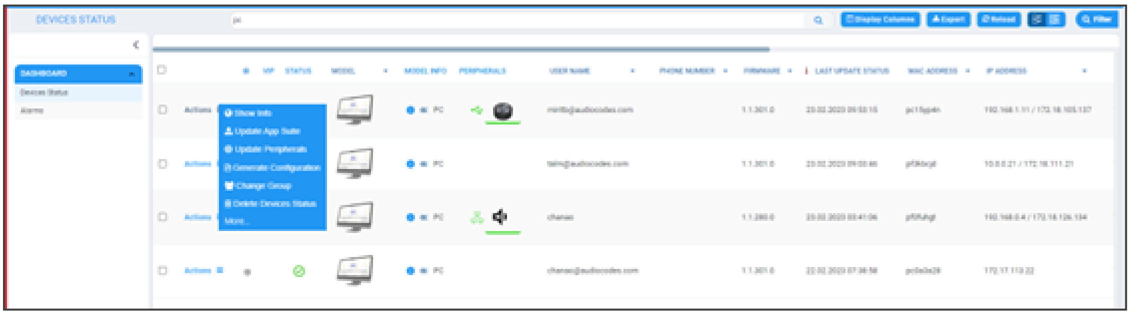
| □ | | ◉ | VIP | BTOE | | ✓ | USER NAME | PHONE NUMBER | MODEL | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS | TENANT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | | | | ? | ✓ | Online1@audiocodesipprnd.onmicrosoft.com | | RXPad | 1.20.0 | 30.10.2022 13:04:56 | 00908fb648e3 | 10.16.2.28 / 195.189.193.1 | IL |

The RXV81 does not upgrade RX-PAD as a peripheral. The Device Manager's 'Latest Firmware versions' repository contains RX-PAD Teams firmware that admins can load to the device.

2. Point your mouse at the Teams icon in the row of the device and determine the device version from the tool tip that pops up.

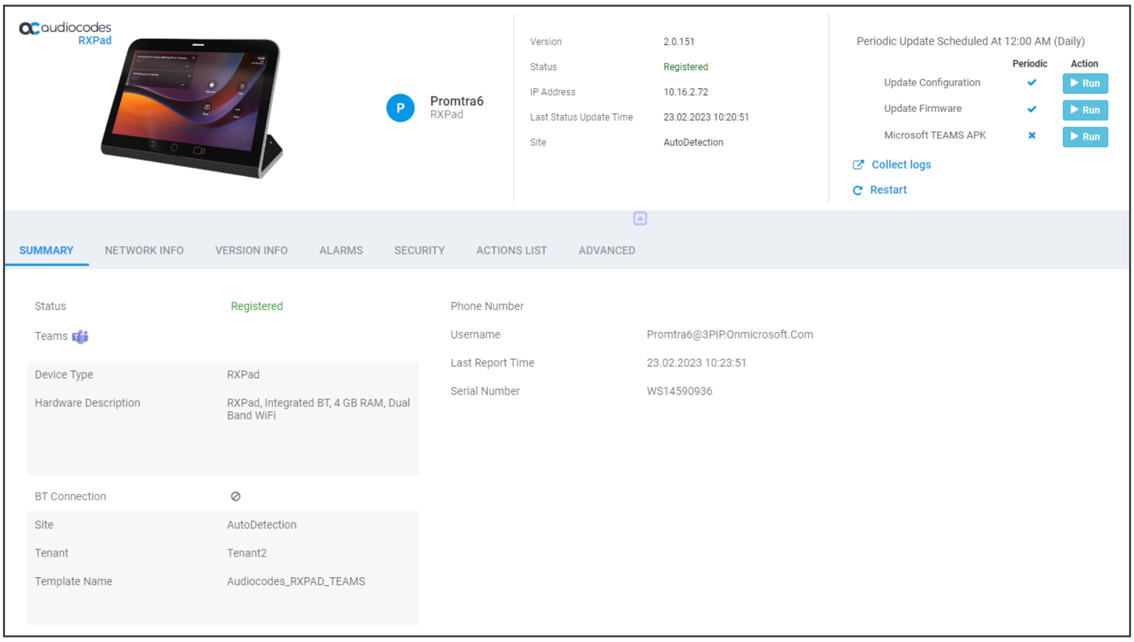
3. Point your mouse at the **i** (information) icon in the row of the device and from the tool tip that pops up determine if the device features Bluetooth, RAM size and Wi-Fi.

4. Click the Actions ≡ button adjacent to the device to manage -OR- select *multiple* devices and then click the activated Selected Rows Actions ≡ button.



The Device Manager supports bulk Android APK update. In the Devices Status page, select multiple Teams devices and then click the activated Selected Rows Actions ≡ button. From the pop-up menu, select the management action you require: **Update App Suite** or **Update Peripherals**; the procedures are the same as for the other managed devices described in this document.

5. Click the **i** (information) icon adjacent to the listed device, or select the **Show info** option from the menu displayed in the preceding figure.



| | |
|---|---|
| Version | 2.0.151 |
| Status | Registered |
| IP Address | 10.16.2.72 |
| Last Status Update Time | 23.02.2023 10:20:51 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

Collect logs

Restart

SUMMARY NETWORK INFO VERSION INFO ALARMS SECURITY ACTIONS LIST ADVANCED

| | |
|---|---|
| Status | Registered |
| Teams | |
| Device Type | RXPad |
| Hardware Description | RXPad, Integrated BT, 4 GB RAM, Dual Band WiFi |
| BT Connection | ⊘ |
| Site | AutoDetection |
| Tenant | Tenant2 |
| Template Name | Audiocodes_RXPAD_TEAMS |

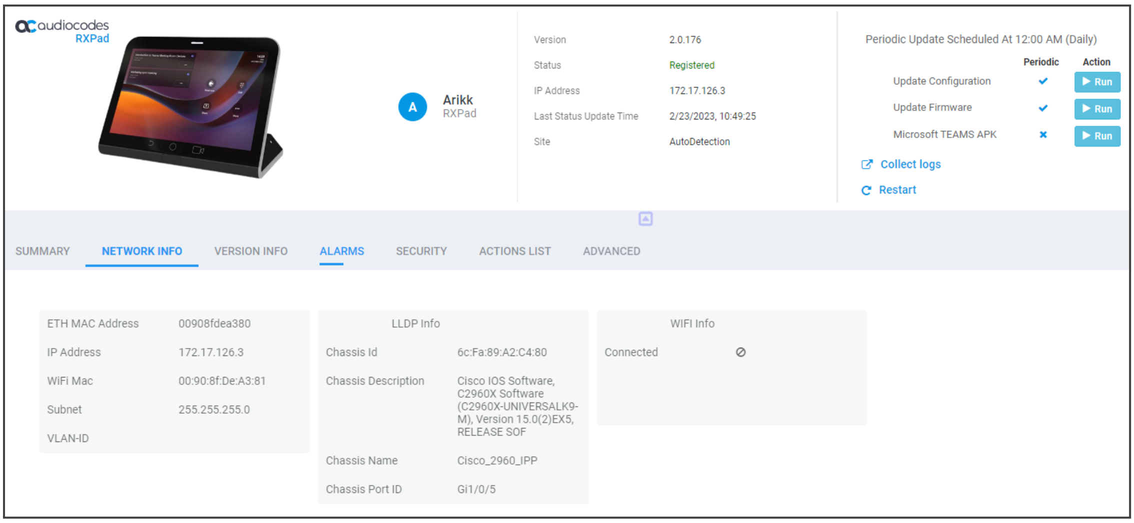
| | |
|---|---|
| Phone Number | |
| Username | Promtra6@3PIP.Onmicrosoft.Com |
| Last Report Time | 23.02.2023 10:23:51 |
| Serial Number | WS14590936 |

6. In the *upper pane* of the page shown in the preceding figure, view the device's version, status, IP address, Last Status Update Time and Site.

   In the *lower pane*, view information such as Tenant, Template Name and Serial Number.

   On the right side of the page, optionally use the links to update configuration, update firmware, update Microsoft Teams APK, collect logs, and / or restart.

7. Click the **Network Info** tab.



Arikk
RXPad

| | |
|---|---|
| Version | 2.0.176 |
| Status | Registered |
| IP Address | 172.17.126.3 |
| Last Status Update Time | 2/23/2023, 10:49:25 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

| | |
|---|---|
| ETH MAC Address | 00908fdea380 |
| IP Address | 172.17.126.3 |
| WiFi Mac | 00:90:8f:De:A3:81 |
| Subnet | 255.255.255.0 |
| VLAN-ID | |

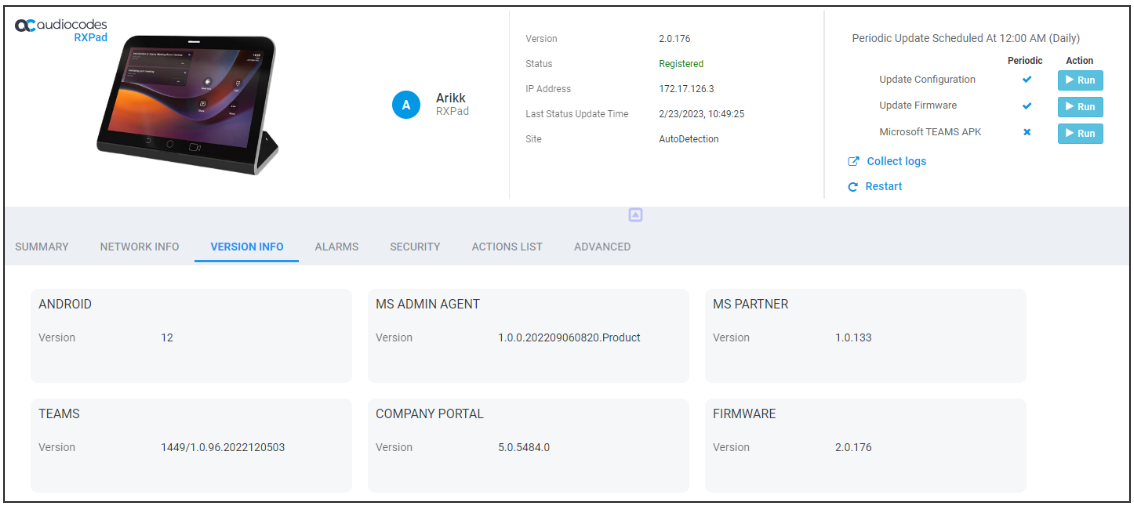
LLDP Info

| | |
|---|---|
| Chassis Id | 6c:Fa:89:A2:C4:80 |
| Chassis Description | Cisco IOS Software, C2960X Software (C2960X-UNIVERSALK9-M), Version 15.0(2)EX5, RELEASE SOF |
| Chassis Name | Cisco_2960_IPP |
| Chassis Port ID | Gi1/0/5 |

WIFI Info

| | |
|---|---|
| Connected | ⊘ |

8. Click the **Version Info** tab; version information is displayed.



Arikk
RXPad

| | |
|---|---|
| Version | 2.0.176 |
| Status | Registered |
| IP Address | 172.17.126.3 |
| Last Status Update Time | 2/23/2023, 10:49:25 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

ANDROID
Version 12

MS ADMIN AGENT
Version 1.0.0.202209060820.Product

MS PARTNER
Version 1.0.133

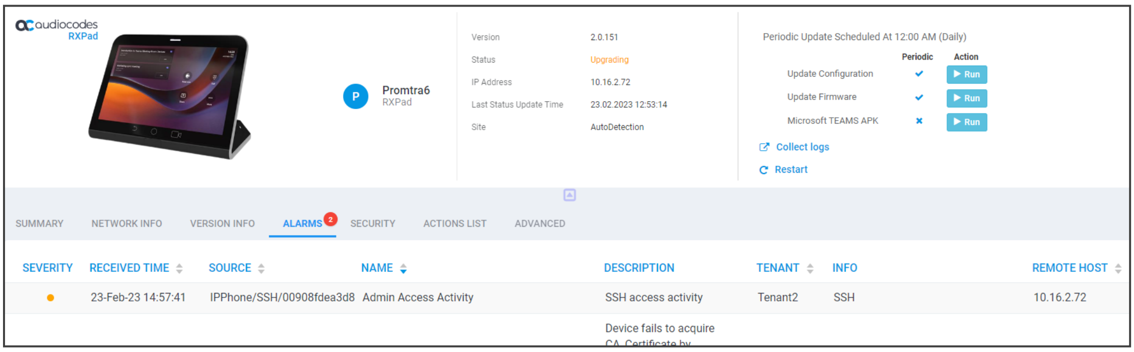
TEAMS
Version 1449/1.0.96.2022120503

COMPANY PORTAL
Version 5.0.5484.0

FIRMWARE
Version 2.0.176

⚠ The feature is enabled after installing AudioCodes App Suite (with Device Manager client) on the PC.

9. If an alarm is active on the device, view the indication adjacent to the **Alarms** tab.



Promtra6
RXPad

| | |
|---|---|
| Version | 2.0.151 |
| Status | Upgrading |
| IP Address | 10.16.2.72 |
| Last Status Update Time | 23.02.2023 12:53:14 |
| Site | AutoDetection |

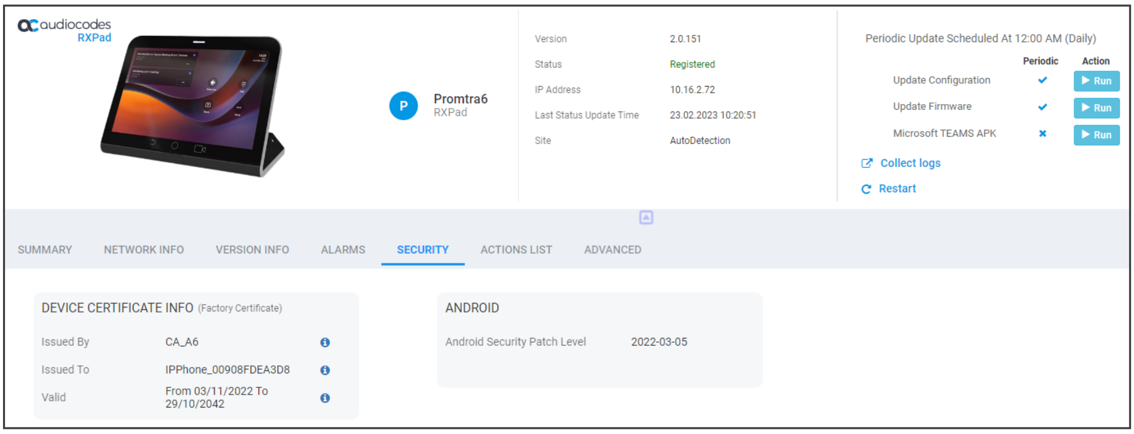
Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

| SEVERITY | RECEIVED TIME | SOURCE | NAME | DESCRIPTION | TENANT | INFO | REMOTE HOST |
|---|---|---|---|---|---|---|---|
| ● | 23-Feb-23 14:57:41 | IPPhone/SSH/00908fdea3d8 | Admin Access Activity | SSH access activity | Tenant2 | SSH | 10.16.2.72 |
| | | | | Device fails to acquire CA Certificate by | | | |

> A 'Teams Pairing Required' alarm is raised when RX-PAD is signed in but is not paired at the Teams level to its Microsoft Teams Room on Android (AudioCodes RXV81 or AudioCodes RXV200, for example).

10. Click the **Security** tab.



audiocodes RXPad

Promtra6 RXPad

Version 2.0.151
Status Registered
IP Address 10.16.2.72
Last Status Update Time 23.02.2023 10:20:51
Site AutoDetection

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

Collect logs
Restart

SUMMARY NETWORK INFO VERSION INFO ALARMS SECURITY ACTIONS LIST ADVANCED

DEVICE CERTIFICATE INFO (Factory Certificate)

| | |
|---|---|
| Issued By | CA_A6 |
| Issued To | IPPhone_00908FDEA3D8 |
| Valid | From 03/11/2022 To 29/10/2042 |

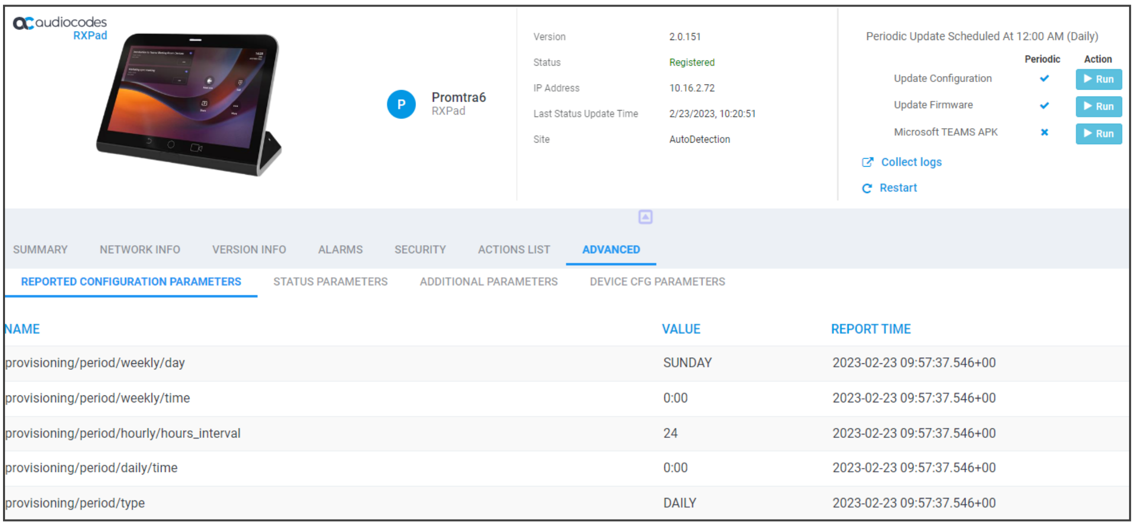
ANDROID

Android Security Patch Level 2022-03-05

11. View certificate status information related to the device. In the preceding figure, the reporting device is an Android device. Certificate status information includes ‘Issued by’, 'Issued to' and ‘Validity’.

12. View under the **Advanced** tab information about the device's parameters:

- Reported Configuration Parameters (see below)
- Status Parameters (see below)
- There are no Additional Parameters
- There are no Device CFG Parameters



audiocodes RXPad

Promtra6 RXPad

Version 2.0.151
Status Registered
IP Address 10.16.2.72
Last Status Update Time 2/23/2023, 10:20:51
Site AutoDetection

Periodic Update Scheduled At 12:00 AM (Daily)

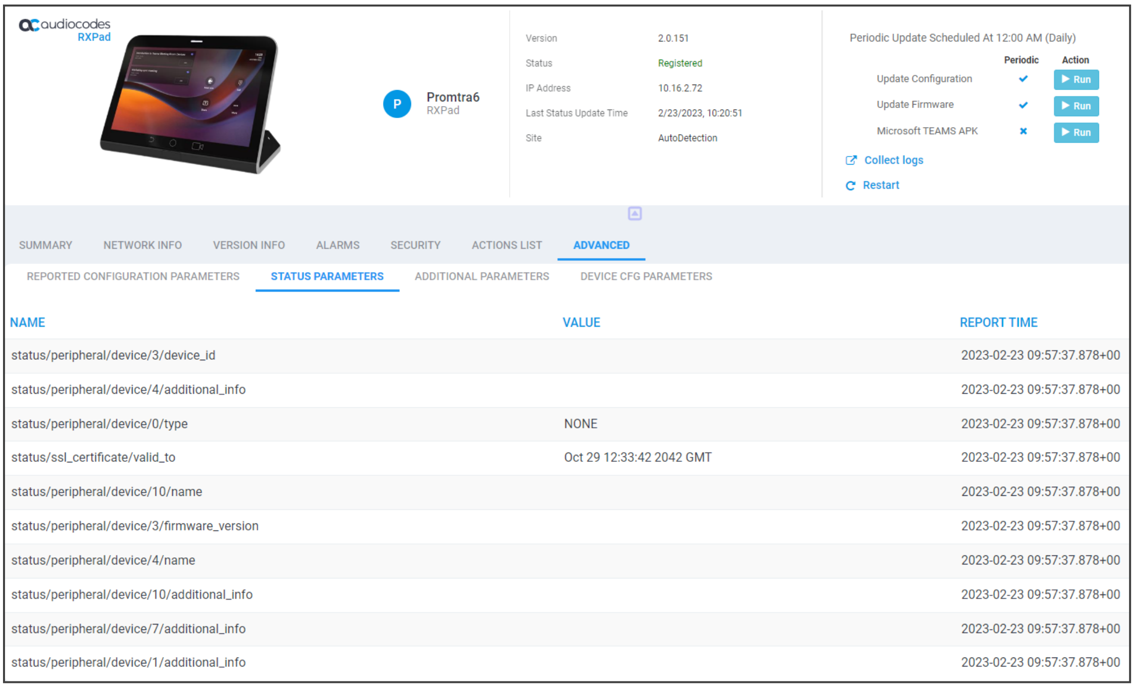
| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

Collect logs
Restart

SUMMARY NETWORK INFO VERSION INFO ALARMS SECURITY ACTIONS LIST ADVANCED

REPORTED CONFIGURATION PARAMETERS STATUS PARAMETERS ADDITIONAL PARAMETERS DEVICE CFG PARAMETERS

| NAME | VALUE | REPORT TIME |
|---|---|---|
| provisioning/period/weekly/day | SUNDAY | 2023-02-23 09:57:37.546+00 |
| provisioning/period/weekly/time | 0:00 | 2023-02-23 09:57:37.546+00 |
| provisioning/period/hourly/hours_interval | 24 | 2023-02-23 09:57:37.546+00 |
| provisioning/period/daily/time | 0:00 | 2023-02-23 09:57:37.546+00 |
| provisioning/period/type | DAILY | 2023-02-23 09:57:37.546+00 |



Version 2.0.151
Status Registered
IP Address 10.16.2.72
Last Status Update Time 2/23/2023, 10:20:51
Site AutoDetection

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

| NAME | VALUE | REPORT TIME |
|---|---|---|
| status/peripheral/device/3/device_id | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/4/additional_info | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/0/type | NONE | 2023-02-23 09:57:37.878+00 |
| status/ssl_certificate/valid_to | Oct 29 12:33:42 2042 GMT | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/10/name | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/3/firmware_version | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/4/name | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/10/additional_info | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/7/additional_info | | 2023-02-23 09:57:37.878+00 |
| status/peripheral/device/1/additional_info | | 2023-02-23 09:57:37.878+00 |

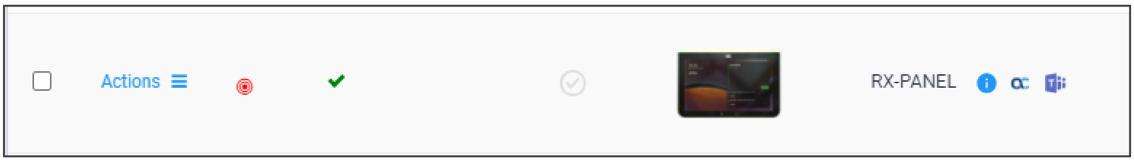
## RX-PANEL Meeting Room Scheduler

Admins can monitor and maintain RX-PANEL Meeting Room Scheduler in their networks. For more information about RX-PANEL, see AudioCodes website here.

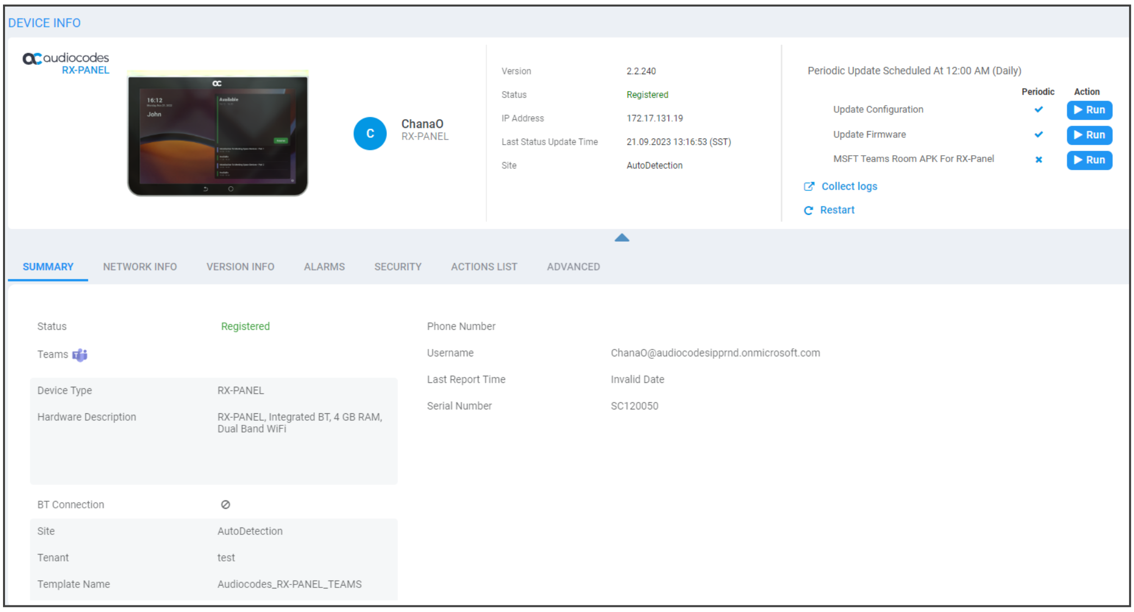
> ⚠ To get started with RX-PANEL, see the *RX-PANEL Quick Guide* available here.

### ➢ To monitor and maintain RX-PANEL:

1. Open the Monitor page (**Monitor** > **Dashboard** > **Devices Status**) and optionally enter a filter text for RX-PANEL.



2. Click the device icon or click **Actions** > **Show Info**.



Version 2.2.240
Status Registered
IP Address 172.17.131.19
Last Status Update Time 21.09.2023 13:16:53 (SST)
Site AutoDetection

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| MSFT Teams Room APK For RX-Panel | ✗ | ▶ Run |

Status Registered
Teams
Device Type RX-PANEL
Hardware Description RX-PANEL, Integrated BT, 4 GB RAM, Dual Band WiFi
BT Connection ⊘
Site AutoDetection
Tenant test
Template Name Audiocodes_RX-PANEL_TEAMS

Phone Number
Username ChanaO@audiocodesipprnd.onmicrosoft.com
Last Report Time Invalid Date
Serial Number SC120050

3. Adjacent to 'Update Configuration' shown in the preceding figure, click **Run** to update the device with the latest .cfg file.

4. Adjacent to 'Update Firmware' shown in the preceding figure, click **Run** to update the device with the latest .img file. If there is no latest firmware to update, you'll be prompted to go to the Latest Versions page to download it (**Setup** > **Firmware** > **Latest Firmware Versions**).

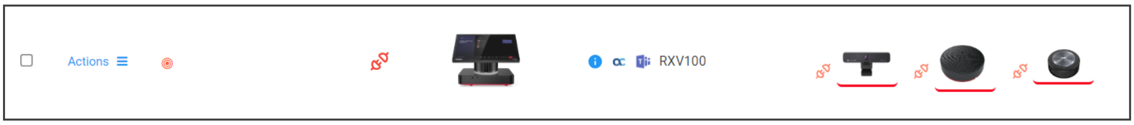
5. Adjacent to 'MSFT Teams Room APK For RX-Panel' shown in the preceding figure, click **Run** to update the device with the latest APK file (Android Package Kit file format).

## RX40 Audio Bar

Admins can monitor and maintain the RX40 Audio Bar in their networks using the Device Manager. RX-40 is a peripheral that is bundled either with RXV100 Windows MTR or RXV200 Android MTR. For more information about RX40, see AudioCodes website here. The figure below shows the RX40 Audio Bar with its two full duplex satellite microphones.

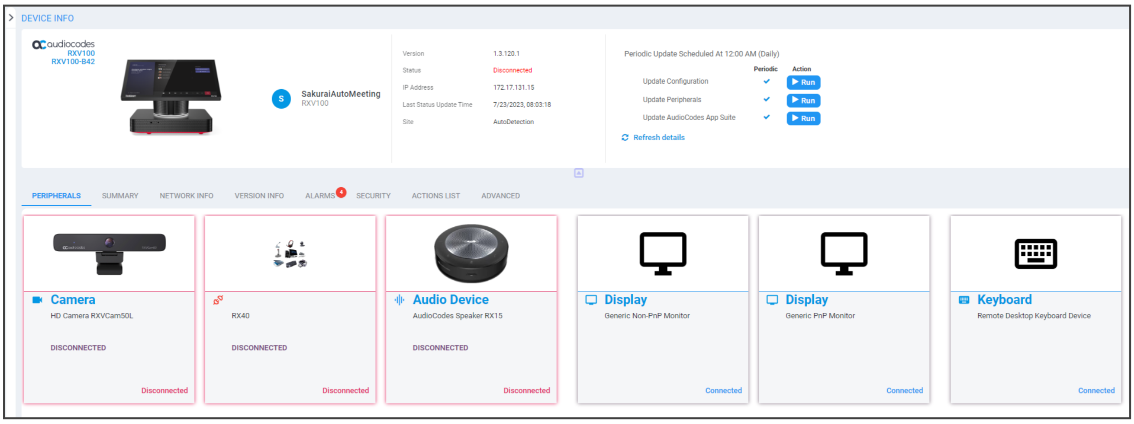
### ➢ To monitor and maintain the RX-40 Audio Bar:

1. Open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**) and search for either the RXV100 windows MTR or the RXV200 Android MTR.



2. View the RX40; the figure above shows RX-40 bundled with RXV100.

3. Click the RXV100 icon (or the RXV200 icon), or click **Actions** > **Show Info**.



SakuraiAutoMeeting
RXV100

Version 1.3.120.1
Status Disconnected
IP Address 172.17.131.15
Last Status Update Time 7/23/2023, 08:03:18
Site AutoDetection

Periodic Update Scheduled At 12:00 AM (Daily)

|  | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✓ | ▶ Run |
| Update AudioCodes App Suite | ✓ | ▶ Run |

Camera
HD Camera RXVCam50L
DISCONNECTED
Disconnected

RX40
DISCONNECTED
Disconnected

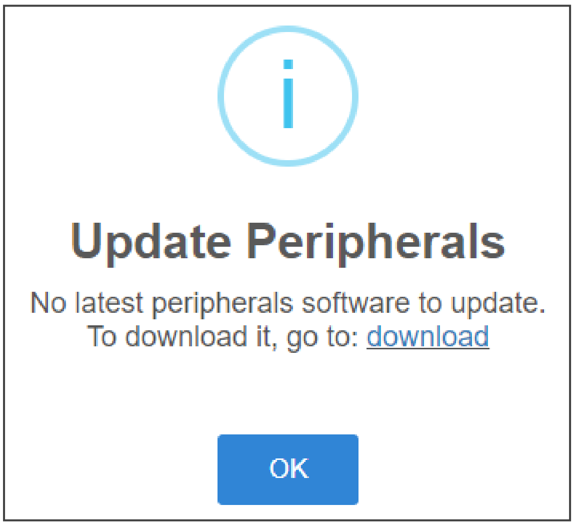
Audio Device
AudioCodes Speaker RX15
DISCONNECTED
Disconnected

Display
Generic Non-PnP Monitor
Connected

Display
Generic PnP Monitor
Connected

Keyboard
Remote Desktop Keyboard Device
Connected

4. Adjacent to 'Update Peripherals' shown in the preceding figure, click **Run**. If there is no latest peripherals software to update, you'll be prompted to go to the Latest Versions page to download it (**Setup** > **Firmware** > **Latest Firmware Versions**).



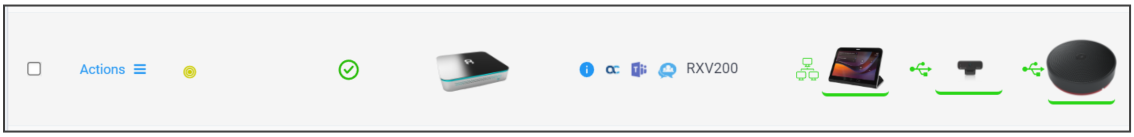
Update Peripherals

No latest peripherals software to update.
To download it, go to: download

## RXVCam10 Content Camera

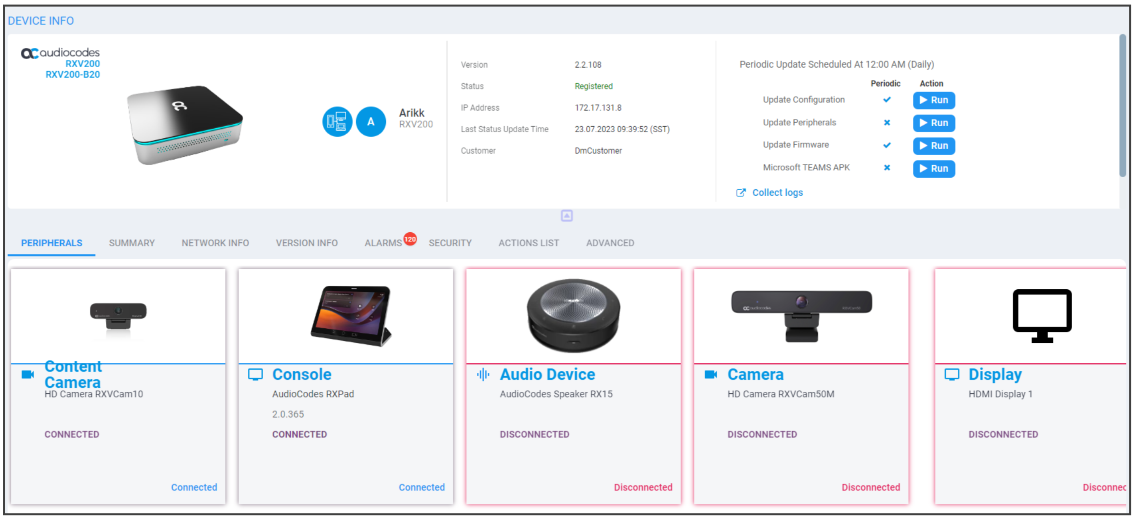
### ➢ To monitor and maintain the RXVCam10 Content Camera:

1. Open the Devices Status page (**Monitor** > **Dashboard** > **Devices Status**) and search for RXV200 (i.e., the device with which it is bundled).



2. View the device displayed in the Monitor page and its peripheral, RXVCam10 Content Camera.

3. Click its icon or click **Actions** > **Show Info**.


DEVICE INFO

audiocodes
RXV200
RXV200-B20

Arikk
RXV200

| | |
|---|---|
| Version | 2.2.108 |
| Status | Registered |
| IP Address | 172.17.131.8 |
| Last Status Update Time | 23.07.2023 09:39:52 (SST) |
| Customer | DmCustomer |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✗ | ▶ Run |

Collect logs

PERIPHERALS SUMMARY NETWORK INFO VERSION INFO ALARMS 120 SECURITY ACTIONS LIST ADVANCED

Content Camera
HD Camera RXVCam10
CONNECTED
Connected

Console
AudioCodes RXPad
2.0.365
CONNECTED
Connected

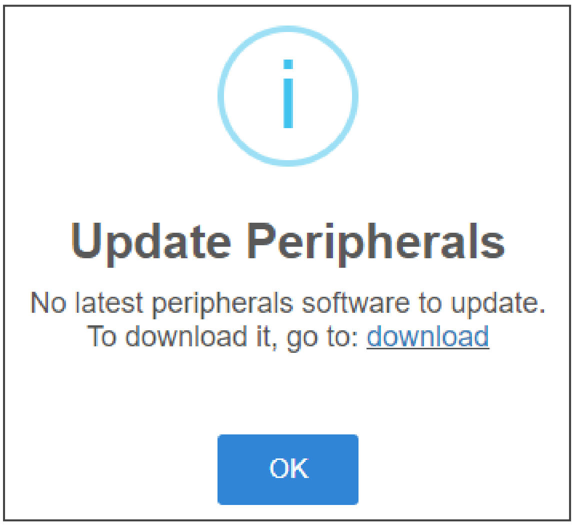
Audio Device
AudioCodes Speaker RX15
DISCONNECTED
Disconnected

Camera
HD Camera RXVCam50M
DISCONNECTED
Disconnected

Display
HDMI Display 1
DISCONNECTED
Disconnec

4. Under the **Peripherals** tab, view RXVCam10 status ('Connected' in the figure above).

5. Adjacent to 'Update Peripherals' shown in the figure above, click **Run**. If there is no latest peripherals software to update, you'll be prompted to go to the Latest Versions page to download it (**Setup** > **Firmware** > **Latest Firmware Versions**).


Update Peripherals

No latest peripherals software to update.
To download it, go to: download

OK

## Upgrading Meeting Room Bundle Peripherals

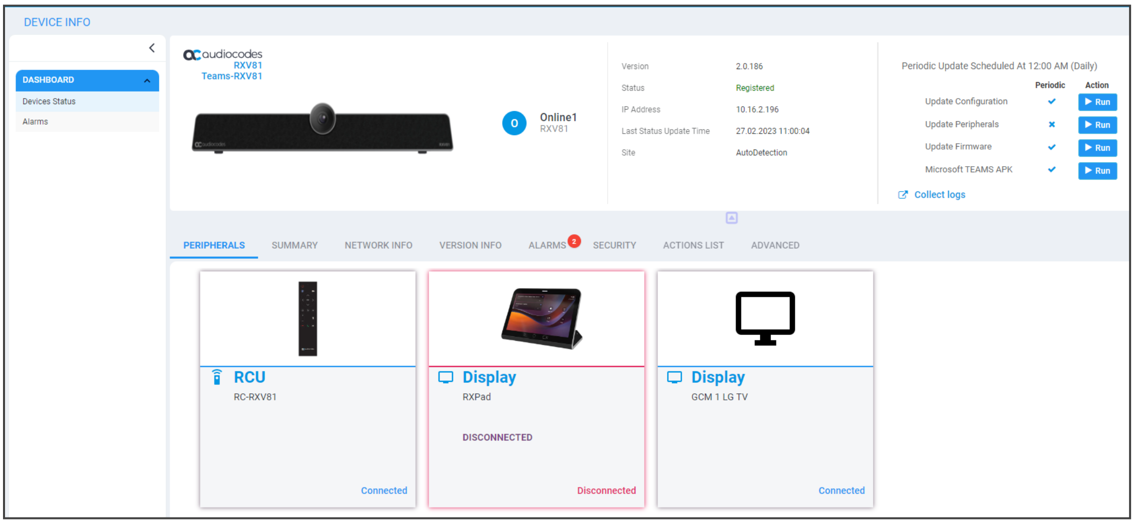
The Device Manager allows network administrators to upgrade Meeting Room bundle peripherals to the latest version similarly to other devices. AudioCodes holds the repository of the latest GA versions of all bundle peripherals in the cloud, in the Latest Firmware page, which holds the repository of the latest GA version *per peripheral*.

The Device Manager enables upgrading for example:

- RXVCam50-M and RXVCam50-L connected to RXV100
- RX-15 connected to RXV80
- RXV40 connected to RXV100 or RXV200

### ➢ To upgrade to the latest version:

1. In the 'Latest Versions' page, sync with the latest GA versions held in AudioCodes' repository for each peripheral (see here for more information) in the same way as with other devices.
2. Open the Show Info page (in the Devices Status page, click the **i** icon adjacent to the device - OR - click the **Actions** link and select **Show Info** from the pop-up menu).



| | |
|---|---|
| Version | 2.0.186 |
| Status | Registered |
| IP Address | 10.16.2.196 |
| Last Status Update Time | 27.02.2023 11:00:04 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

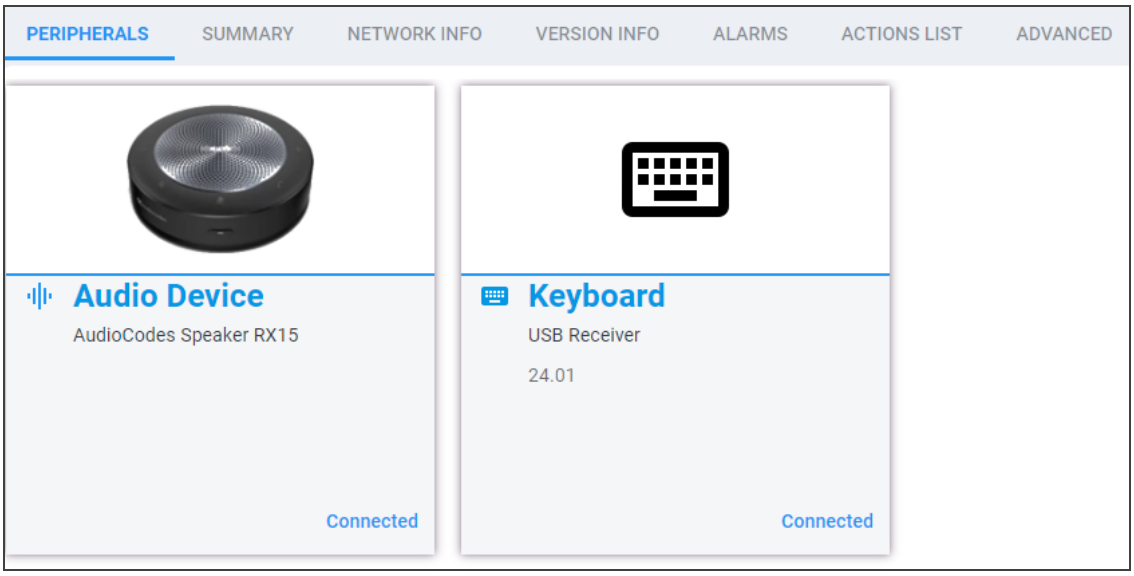
| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update Firmware | ✓ | ▶ Run |
| Microsoft TEAMS APK | ✓ | ▶ Run |

RCU
RC-RXV81
Connected

Display
RXPad
DISCONNECTED
Disconnected

Display
GCM 1 LG TV
Connected

3. View the Meeting Room and its peripherals. The preceding figure shows the RXV81 Meeting Room and peripherals. The next figure shows peripherals associated with the RXV80 Meeting Room.



Audio Device
AudioCodes Speaker RX15
Connected

Keyboard
USB Receiver
24.01
Connected

4. Click the **Run** button adjacent to
   - **Update Configuration**
   - **Update Peripherals**
   - **Update Firmware**
   - **Microsoft Teams APK**

- The peripheral upgrade is only supported when the device is connected by USB and not by Bluetooth.
- Upgrade of Microsoft Teams APK for Teams devices is supported from version 1.17 and later.

## Desktop | PC Meeting Room

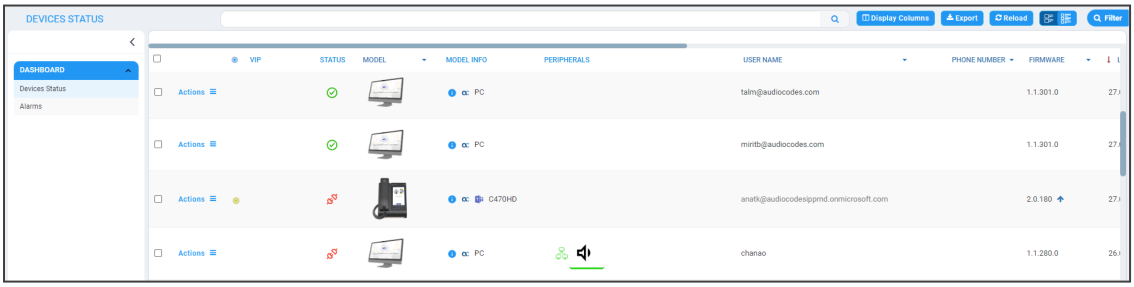
The Device Manager allows admins to manage PC Meeting Room peripherals:

- RX15 Speakerphone
- RXVcam10 Personal Webcam

AudioCodes' AppSuite must be installed on the PC for firmware upgrade functionality.

### ➢ To upgrade the firmware:

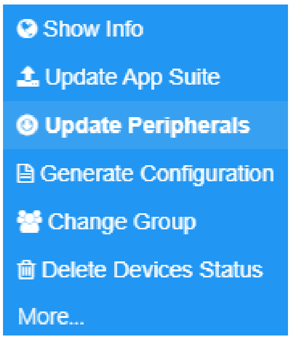
1. Open the Devices Status page (**Monitor** > **Devices Status**).



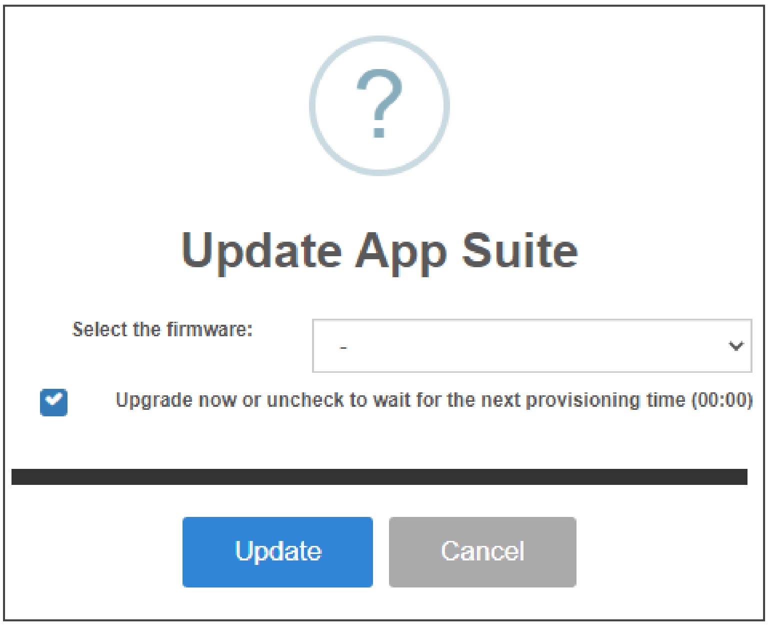
DEVICES STATUS

| □ | | VIP | STATUS | MODEL | MODEL INFO | PERIPHERALS | USER NAME | PHONE NUMBER | FIRMWARE | L |
|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ≡ | | ✓ | | PC | | talm@audiocodes.com | | 1.1.301.0 | 27. |
| □ | Actions ≡ | | ✓ | | PC | | miritb@audiocodes.com | | 1.1.301.0 | 27. |
| □ | Actions ≡ | ● | | | C470HD | | anatk@audiocodesipprnd.onmicrosoft.com | | 2.0.180 ↑ | 27. |
| □ | Actions ≡ | | | | PC | | chanao | | 1.1.280.0 | 26. |

2. Click the **Actions** link adjacent to the PC to upgrade and from the menu that pops up, select **Upgrade Firmware/AppSuite**.



- Select **Update App Suite** to update the app on the PC.

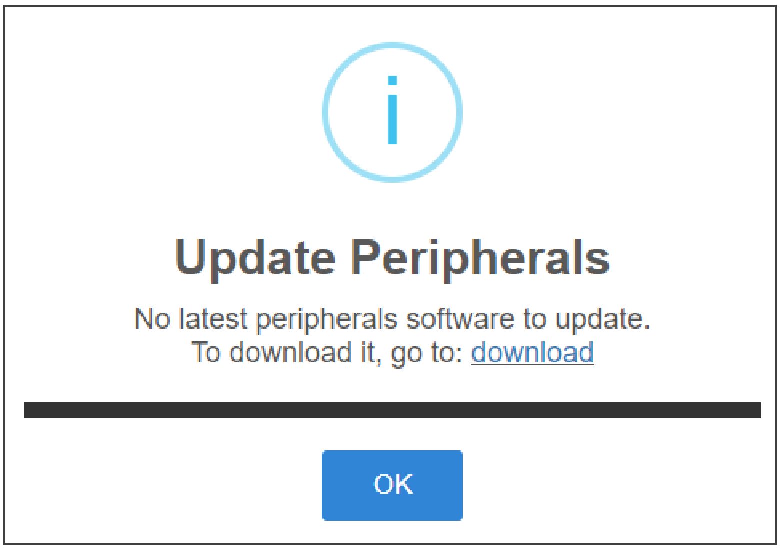


Update App Suite

Select the firmware: -

☑ Upgrade now or uncheck to wait for the next provisioning time (00:00)

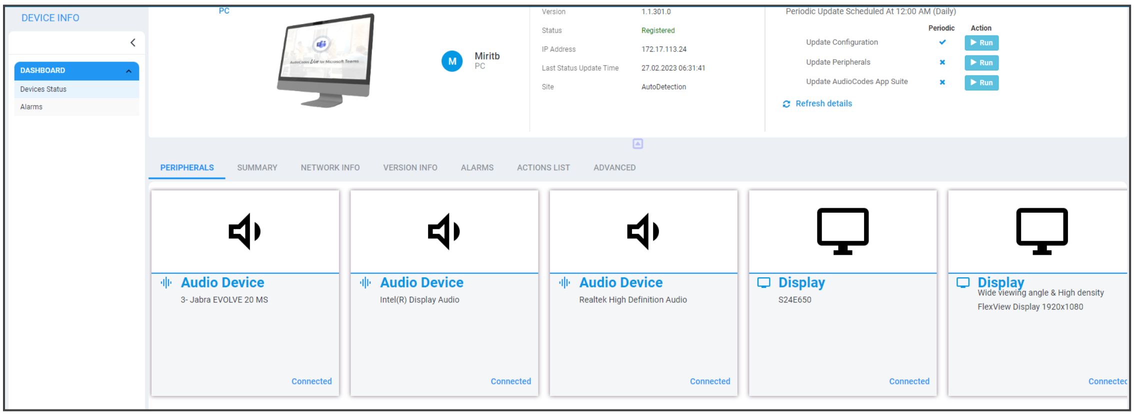
- Select **Update Peripherals** to update RX15 Speakerphone and RXVcam10 Personal Webcam.



Update Peripherals

No latest peripherals software to update.
To download it, go to: download

3. Optionally, schedule periodic updates; select the **Show Info** option in the pop-up menu and then in the uppermost right corner of the Device Info page shown in the next figure, configure the periodic update and / or **Run** action.



| | |
|---|---|
| Version | 1.1.301.0 |
| Status | Registered |
| IP Address | 172.17.113.24 |
| Last Status Update Time | 27.02.2023 06:31:41 |
| Site | AutoDetection |

Periodic Update Scheduled At 12:00 AM (Daily)

| | Periodic | Action |
|---|---|---|
| Update Configuration | ✓ | ▶ Run |
| Update Peripherals | ✗ | ▶ Run |
| Update AudioCodes App Suite | ✗ | ▶ Run |

Refresh details

Audio Device
3- Jabra EVOLVE 20 MS
Connected

Audio Device
Intel(R) Display Audio
Connected

Audio Device
Realtek High Definition Audio
Connected

Display
S24E650
Connected

Display
Wide viewing angle & High density
FlexView Display 1920x1080
Connectec

## Monitoring the Network from the Dashboard

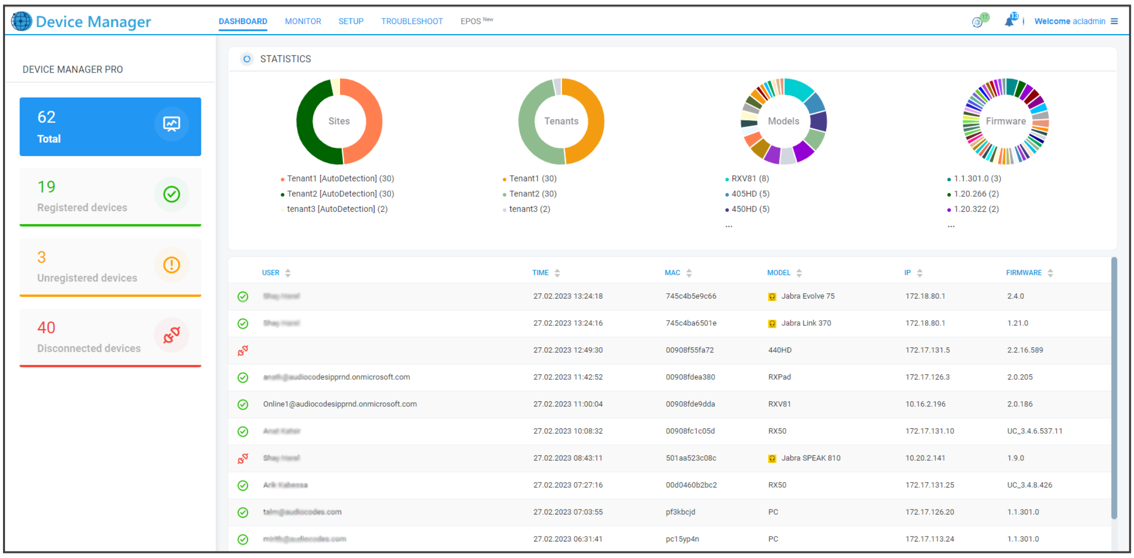
The Dashboard page lets you quickly identify

- which phones' firmware needs to be updated
  - Whenever AudioCodes adds an updated firmware version to the cloud, it's displayed here
  - All devices displayed can be synchronized with the latest firmware versions via the cloud
  - See also here for information about synchronizing per device via the 'Latest Versions' page
- which phones in the network are registered
- which phones in the network are non-registered
- # of registered and non-registered phones (in terms of SIP registration)

- % of registered phones
- MAC and IP address of each phone
- the time the information was reported
- the firmware version

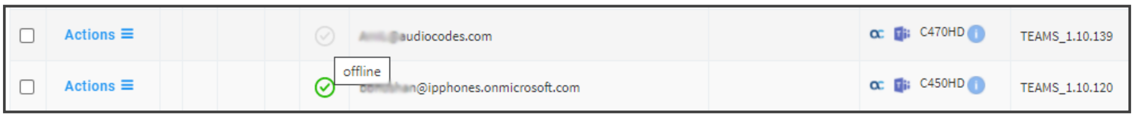
### ➢ To open the Dashboard page:

- The page opens by default (under the **Dashboard** menu) after starting the Device Manager application.



| | USER | TIME | MAC | MODEL | IP | FIRMWARE |
|---|---|---|---|---|---|---|
| ✓ | [redacted] | 27.02.2023 13:24:18 | 745c4b5e9c66 | Jabra Evolve 75 | 172.18.80.1 | 2.4.0 |
| ✓ | [redacted] | 27.02.2023 13:24:16 | 745c4ba6501e | Jabra Link 370 | 172.18.80.1 | 1.21.0 |
| | | 27.02.2023 12:49:30 | 00908f55fa72 | 440HD | 172.17.131.5 | 2.2.16.589 |
| ✓ | [redacted]udiocodesipprnd.onmicrosoft.com | 27.02.2023 11:42:52 | 00908fdea380 | RXPad | 172.17.126.3 | 2.0.205 |
| ✓ | Online1@audiocodesipprnd.onmicrosoft.com | 27.02.2023 11:00:04 | 00908fde9dda | RXV81 | 10.16.2.196 | 2.0.186 |
| ✓ | [redacted] | 27.02.2023 10:08:32 | 00908fc1c05d | RX50 | 172.17.131.10 | UC_3.4.6.537.11 |
| | [redacted] | 27.02.2023 08:43:11 | 501aa523c08c | Jabra SPEAK 810 | 10.20.2.141 | 1.9.0 |
| ✓ | [redacted] | 27.02.2023 07:27:16 | 00d0460b2bc2 | RX50 | 172.17.131.25 | UC_3.4.8.426 |
| ✓ | [redacted] | 27.02.2023 07:03:55 | pf3kbcjd | PC | 172.17.126.20 | 1.1.301.0 |
| ✓ | [redacted] | 27.02.2023 06:31:41 | pc15yp4n | PC | 172.17.113.24 | 1.1.301.0 |

- If a Skype for Business IP phone is signed out (offline, or not registered), you'll see an icon of a gray tick inside a gray circle, and the 'User' column will be blank, as shown in the figure below. It will be counted as a Non Registered Device.

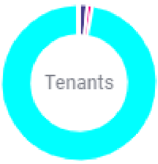
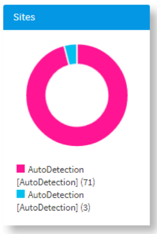
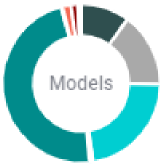
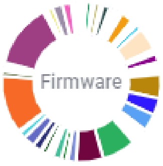


| | | | | | |
|---|---|---|---|---|---|
| □ | Actions ≡ | ✓ | [redacted]audiocodes.com | C470HD | TEAMS_1.10.139 |
| □ | Actions ≡ | ✓ offline | [redacted]@ipphones.onmicrosoft.com | C450HD | TEAMS_1.10.120 |

- Point your mouse over the icon to view the 'offline' tooltip.
- If the phone is not registered, you'll view a red triangle enclosing an exclamation mark.
- View the status thumbnails. Use this table as reference.

**Table 5-1: Dashboard – Status Thumbnails**

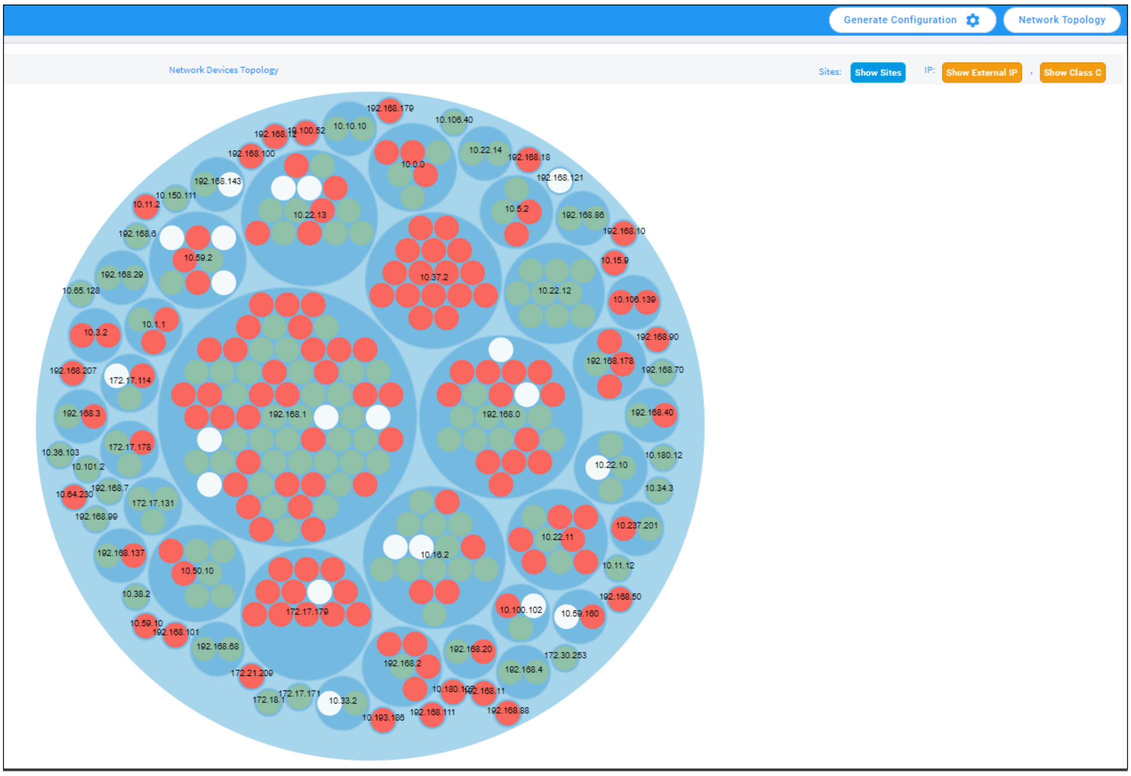
| Status Thumbnail | Description |
|---|---|
| ✓ | Indicates the number of registered devices.<br>Click **MORE DETAILS...** to quickly access the Devices Status page. |

| Status Thumbnail | Description |
|---|---|
| ! | Indicates the number of unregistered devices.<br>Click **MORE DETAILS…** to quickly access the Devices Status page. |
| 🔌 | Indicates the number of disconnected devices.<br>Click **MORE DETAILS…** to quickly access the Devices Status page. |
| 📈 | Indicates the number of devices running the version stated above it. Click **MORE DETAILS…** to quickly access the Devices Status page. |
|  | Pie chart showing the number of *devices per tenant* that are registered. Hover over a segment of the pie to view the tenant's name and the number of devices registered under it. Click a segment of the pie to open the Devices Status page displaying that tenant and the devices registered under it. |
|   Sites<br>AutoDetection [AutoDetection] (71)<br>AutoDetection [AutoDetection] (3) | Pie chart showing the number of *devices per site* that are registered. Click a segment of the pie to open the Devices Status page. |
|  | Pie chart showing how many *phones of each model* are registered. Click a segment of the pie to open the Devices Status page. |
|  | Pie chart showing how many *phones of each firmware version* are registered. Click a segment of the pie to open the Devices Status page. |

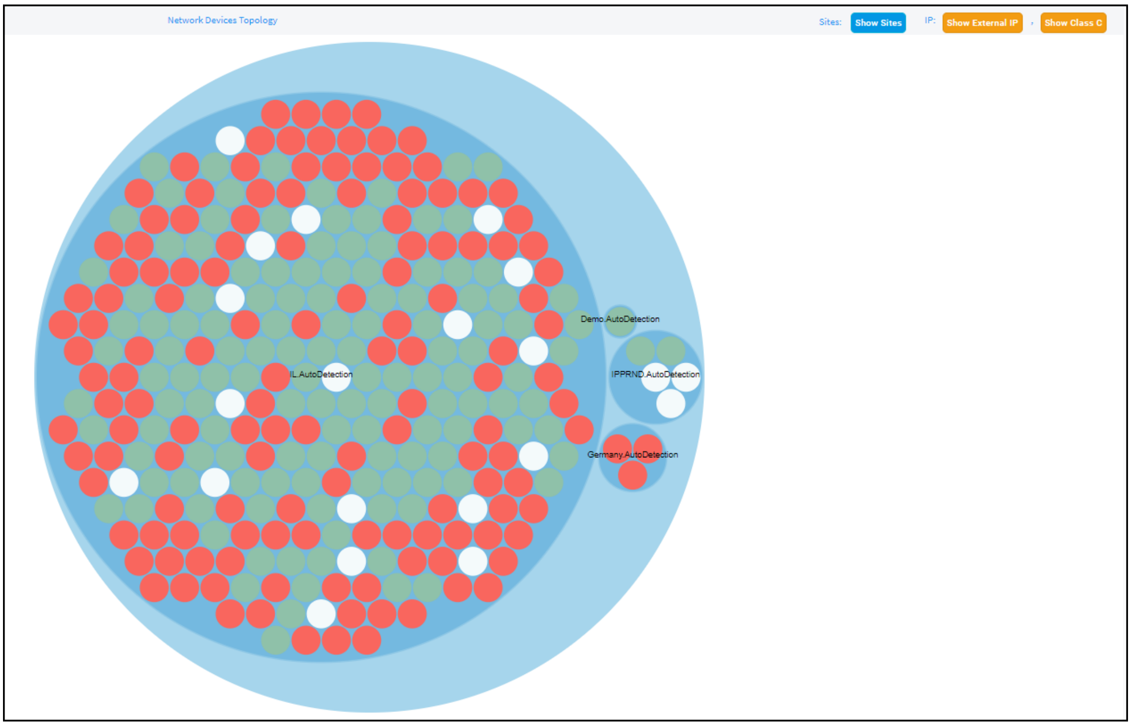
## Viewing Network Topology

Located in the uppermost right corner of the Dashboard page, the **Network Topology** button allows network administrators to view devices in their IP telephony networks according to sites, internal or external IP address, or IP address class.

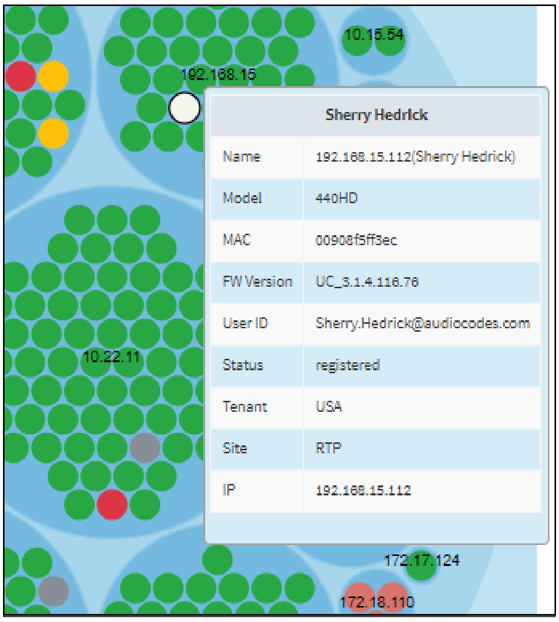
The Network Devices Topology page opens:



Click the **Show Sites** button to display the Network Devices Topology page *according to sites*.



The preceding figure shows multiple sites in a single-tenant network. The page allows administrators to determine at a glance which sites are causing traffic overload (for example). Administrators can point their mouse at a device to view information on that device displayed in a tool tip.



Sherry Hedrick

| | |
|---|---|
| Name | 192.168.15.112(Sherry Hedrick) |
| Model | 440HD |
| MAC | 00908f5ff3ec |
| FW Version | UC_3.1.4.116.76 |
| User ID | Sherry.Hedrick@audiocodes.com |
| Status | registered |
| Tenant | USA |
| Site | RTP |
| IP | 192.168.15.112 |

Click the **Show Internal IP** | **Show LAN IP** button to display devices in the page according to *internal IP address* or *LAN IP address*. Each device in the network has an *internal* IP address - the IP address of the device located *within the enterprise network*. Some devices also use a LAN IP address - the IP address of a router via which calls transit (for example). The button displays devices according to the administrator's choice.

Click the **Show Class B** or **Show Class C** button. Every IP address in quad-dotted notation comprises four 'classes'. This button allows displaying devices according to IP addresses of Class B or Class C.

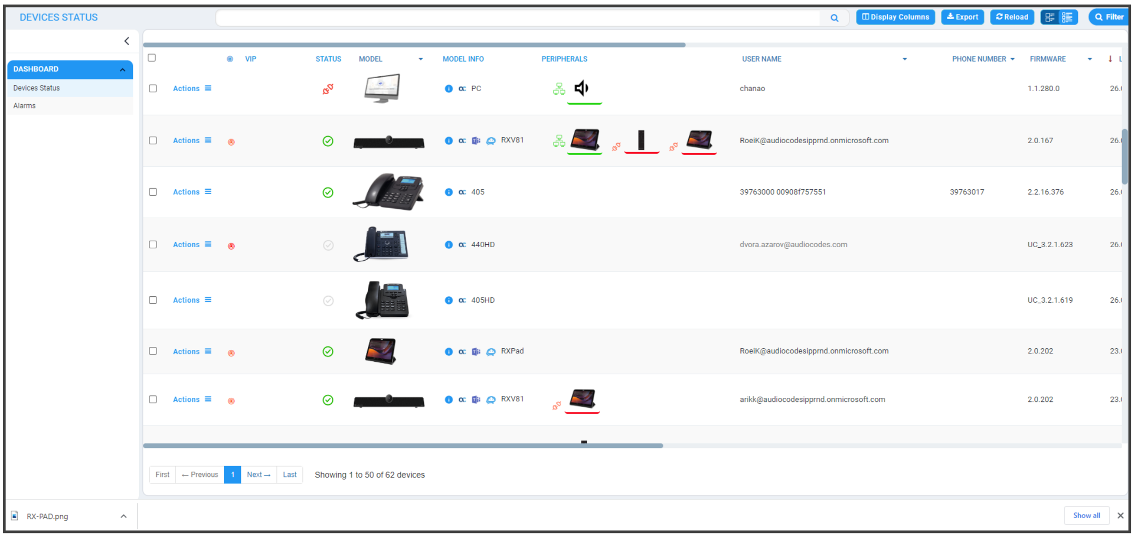
- **Show Class B** shows the first *two* classes, for example, 10.10
- **Show Class C** shows the first *three* classes, for example, 10.10.10.

A higher number of devices will be displayed if **Show Class B** is selected than if **Show Class C** is selected since more devices' IP addresses begin with 10.10 than with 10.10.10.

## Checking Devices Status

The Devices Status page lets you check a device's status, for example, whether it's connected or not, as well as perform actions on an individual device or on multiple selected devices.

### ➢ To check a device's status:



DEVICES STATUS

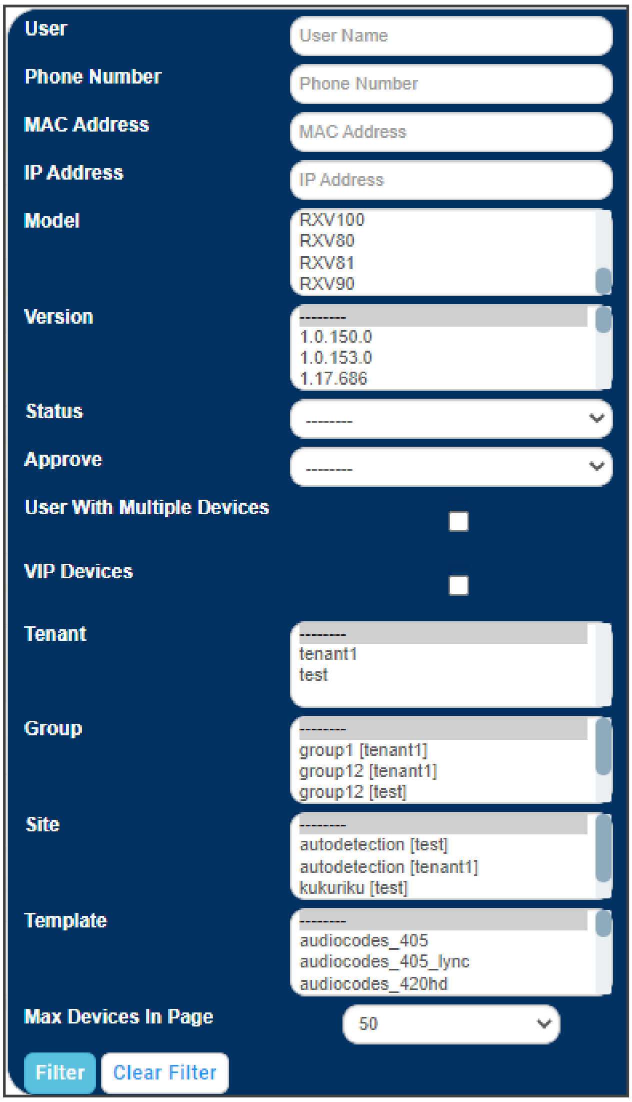
| ☐ | | VIP | STATUS | MODEL | MODEL INFO | PERIPHERALS | USER NAME | PHONE NUMBER | FIRMWARE | L |
|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | Actions ≡ | | | | PC | | chanao | | 1.1.280.0 | 26.( |
| ☐ | Actions ≡ | ● | ✓ | | RXV81 | | RoeiK@audiocodesipprnd.onmicrosoft.com | | 2.0.167 | 26.( |
| ☐ | Actions ≡ | | ✓ | | 405 | | 39763000 00908f757551 | 39763017 | 2.2.16.376 | 26.( |
| ☐ | Actions ≡ | ● | ✓ | | 440HD | | dvora.azarov@audiocodes.com | | UC_3.2.1.623 | 26.( |
| ☐ | Actions ≡ | | ✓ | | 405HD | | | | UC_3.2.1.619 | 26.( |
| ☐ | Actions ≡ | ● | ✓ | | RXPad | | RoeiK@audiocodesipprnd.onmicrosoft.com | | 2.0.202 | 23.( |
| ☐ | Actions ≡ | ● | ✓ | | RXV81 | | arikk@audiocodesipprnd.onmicrosoft.com | | 2.0.202 | 23.( |

First ← Previous 1 Next → Last Showing 1 to 50 of 62 devices

RX-PAD.png

Show all ✕

1. Click **Filter**; the filter lets you view specific information in the page, preventing information irrelevant to you from cluttering the page.



| | |
|---|---|
| User | User Name |
| Phone Number | Phone Number |
| MAC Address | MAC Address |
| IP Address | IP Address |
| Model | RXV100<br>RXV80<br>RXV81<br>RXV90 |
| Version | --------<br>1.0.150.0<br>1.0.153.0<br>1.17.686 |
| Status | -------- |
| Approve | -------- |
| User With Multiple Devices | ☐ |
| VIP Devices | ☐ |
| Tenant | --------<br>tenant1<br>test |
| Group | --------<br>group1 [tenant1]<br>group12 [tenant1]<br>group12 [test] |
| Site | --------<br>autodetection [test]<br>autodetection [tenant1]<br>kukuriku [test] |
| Template | --------<br>audiocodes_405<br>audiocodes_405_lync<br>audiocodes_420hd |
| Max Devices In Page | 50 |

2. You can filter per user, phone #, MAC, IP address, model, version, status (registered, offline or disconnected), approved or approval pending, users with multiple devices, VIP Devices, tenant, site, group, template or maximum devices shown in the page.

3. View in column 'USB Headset Type' if a headset is connected to a phone’s USB port; in addition, column 'IPP Model' displays the USB icon.

4. View in column 'HRS Speaker Model' the Huddle Room Solution model (457 or 458) if an HRS is connected; in addition, you can view in column 'HRS Speaker FW' the speaker firmware version.

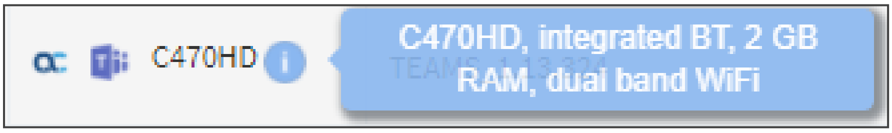
5. Non-Skype for Business phones are displayed differently to Skype for Business phones.

   - The format of 'User Agent' for non-Skype for Business phones is for example **AUDC-IPPhone/2.0.4.30 (430HD; 00908F4867AF)** while the format for Skype for Business phones is **AUDC-IPPhone-430HD_UC_2.0.7.70/1.0.0000.0**
   - Only Skype for Business phones are displayed under the 'Location' column; non-Skype for Business phones are not displayed under the 'Location' column.

6. View in the column 'Model' the entries **Spectralink 8440, Poly Trio 8800**, **Poly VVX**, **Poly CCX 500/600**, etc. if these phone models are connected; they can be monitored, configured and templates can be mapped.

   You can also view in the 'Model' column an **i** icon:

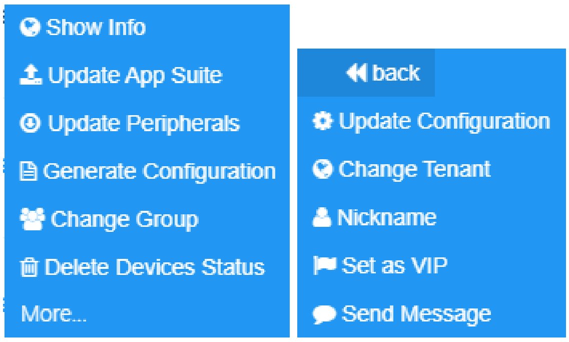
   Point your mouse over it to display the device's vital hardware specifications:



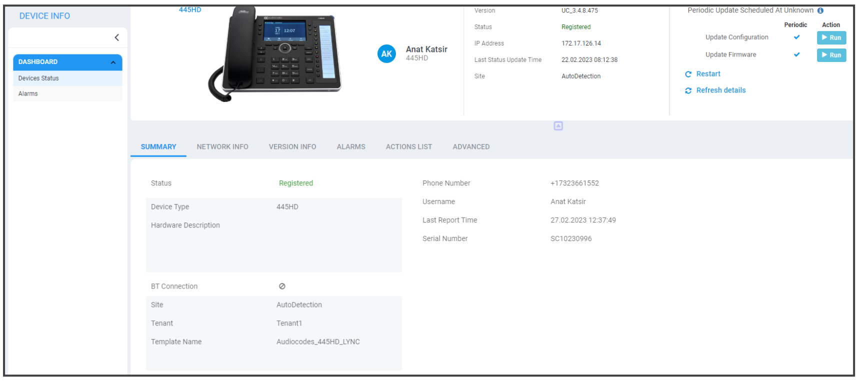
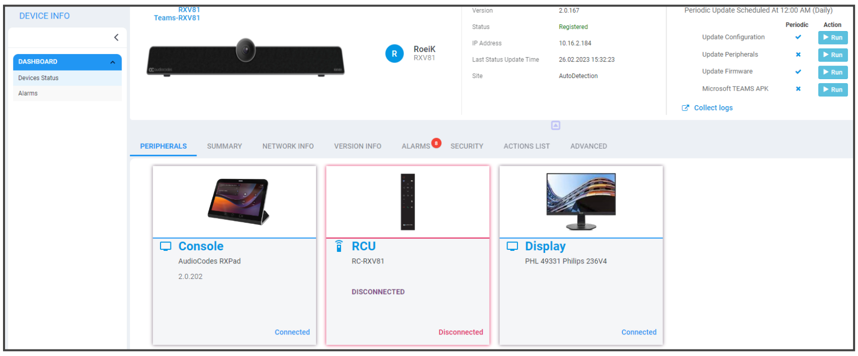
C470HD, integrated BT, 2 GB RAM, dual band WiFi

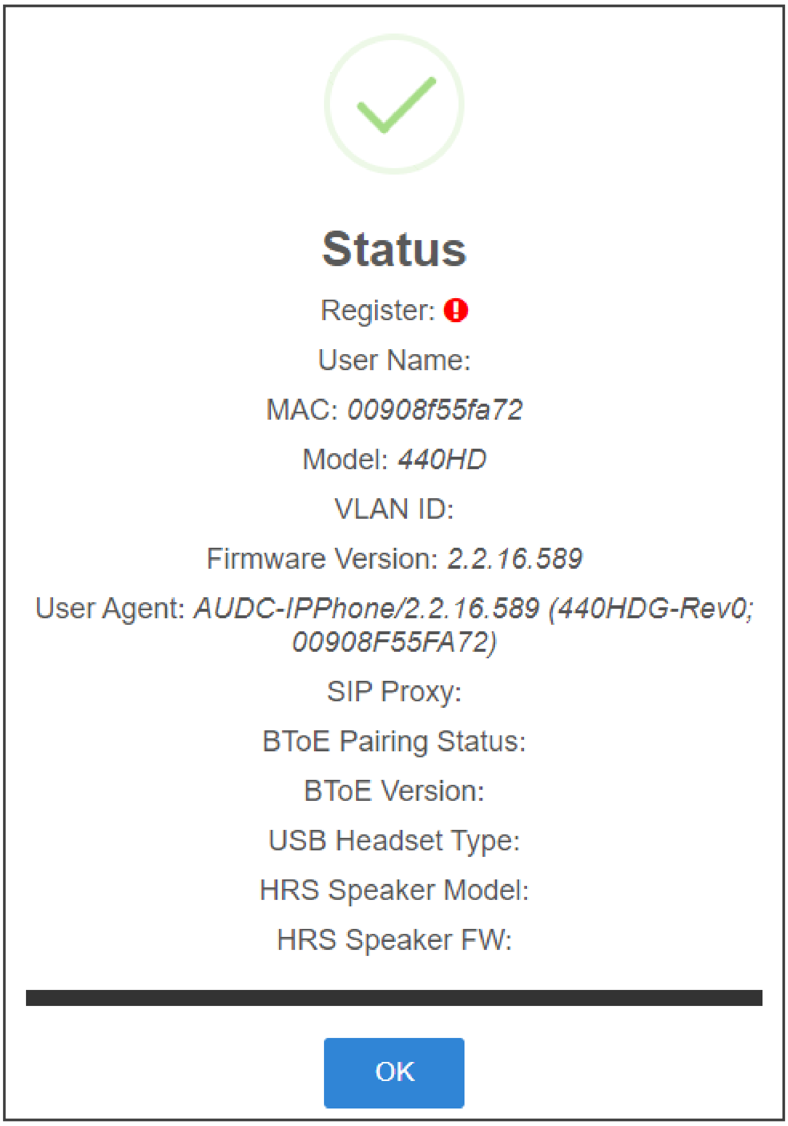
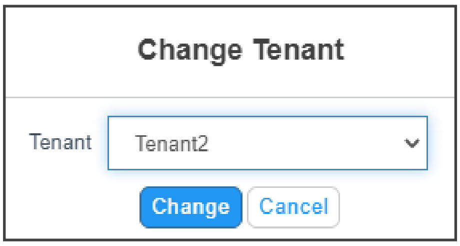
7. Optionally click the **Export** link to export all entries in the page - or a selected list of entries - to a csv file. This facilitates inventory management; it lets you easily obtain a list of phone MAC addresses or serial numbers, for example. After generating a csv file, a download option is displayed in the lower-left corner. You  can save the csv file or open it directly in Excel which displays the same information as that on the page.

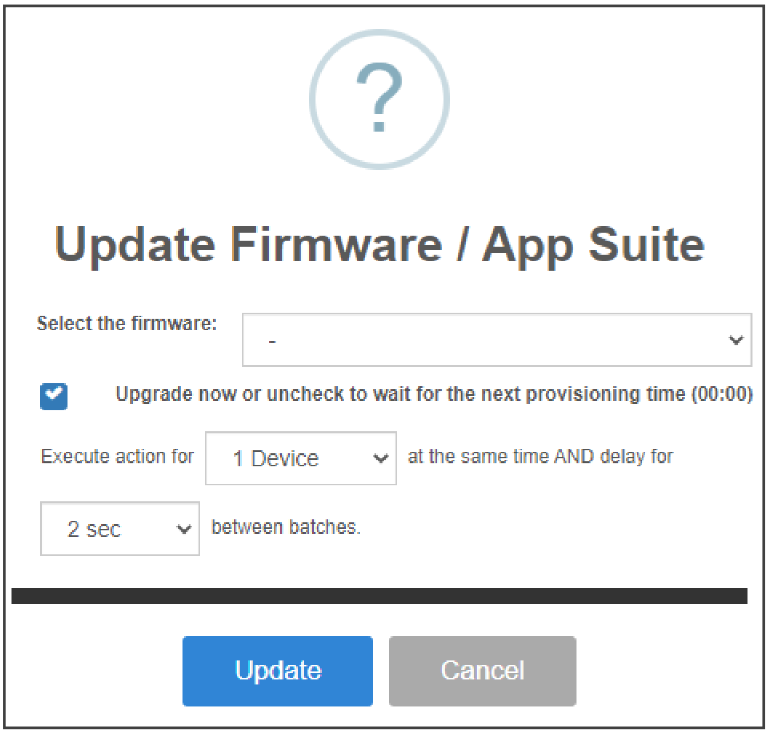
8. Optionally click an individual **Actions** link.

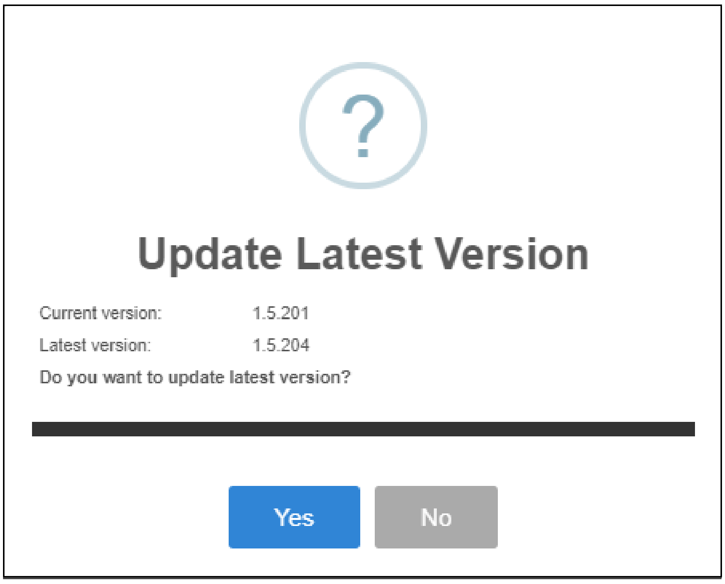
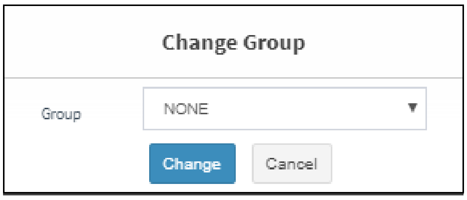


| Action | Description |
|---|---|
| Show Info | Displays all the information about the device needed by the network |

| Action | Description |
|---|---|
| | administrator.<br><br> DEVICE INFO<br>DASHBOARD<br>Devices Status<br>Alarms<br>445HD<br>AK<br>Anat Katsir<br>445HD<br>Periodic Update Scheduled At Unknown<br>Periodic<br>Action<br>Restart<br>Refresh details<br>SUMMARY<br>NETWORK INFO<br>VERSION INFO<br>ALARMS<br>ACTIONS LIST<br>ADVANCED<br>Version UC_3.4.8.475<br>Status Registered<br>IP Address 172.17.126.14<br>Last Status Update Time 22.02.2023 08:12:38<br>Site AutoDetection<br>Update Configuration ✓ ▶ Run<br>Update Firmware ✓ ▶ Run<br>Status Registered<br>Device Type 445HD<br>Hardware Description<br>BT Connection ⊘<br>Site AutoDetection<br>Tenant Tenant1<br>Template Name Audiocodes_445HD_LYNC<br>Phone Number +17323661552<br>Username Anat Katsir<br>Last Report Time 27.02.2023 12:37:49<br>Serial Number SC10230996<br>Information under tabs **Summary**, **Network Info**, **Version Info**, **Alarms**, **Actions List** and **Advanced** is available. All information that the peripheral device sends to OVOC as raw data composes this GUI screen.<br>The Show Info screen differs slightly from device to device. The RXV81, for example, displays the tab **Peripherals**, as shown in the next figure.<br><br> DEVICE INFO<br>DASHBOARD<br>Devices Status<br>Alarms<br>RXV81<br>Teams-RXV81<br>R<br>RoeiK<br>RXV81<br>Periodic Update Scheduled At 12:00 AM (Daily)<br>Periodic<br>Action<br>Collect logs<br>PERIPHERALS<br>SUMMARY<br>NETWORK INFO<br>VERSION INFO<br>ALARMS 8<br>SECURITY<br>ACTIONS LIST<br>ADVANCED<br>Version 2.0.167<br>Status Registered<br>IP Address 10.16.2.184<br>Last Status Update Time 26.02.2023 15:32:23<br>Site AutoDetection<br>Update Configuration ✓ ▶ Run<br>Update Peripherals ✗ ▶ Run<br>Update Firmware ✓ ▶ Run<br>Microsoft TEAMS APK ✗ ▶ Run<br>Console AudioCodes RXPad 2.0.202 Connected<br>RCU RC-RXV81 DISCONNECTED Disconnected<br>Display PHL 49331 Philips 236V4 Connected |
| Collect Logs | Allows network administrators to get logs without needing to go to the phone. See Collecting Logs on page 131 for detailed information. |
| Check Status | [Only applies to UC phones] Select the 'Check Status' option. |

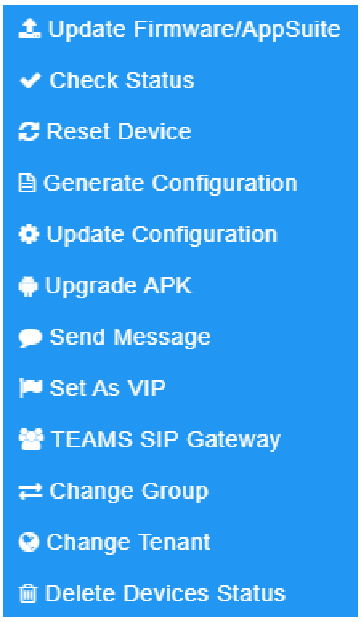
| Action | Description |
|---|---|
| | <br>Status<br>Register: ❗<br>User Name:<br>MAC: *00908f55fa72*<br>Model: *440HD*<br>VLAN ID:<br>Firmware Version: *2.2.16.589*<br>User Agent: *AUDC-IPPhone/2.2.16.589 (440HDG-Rev0; 00908F55FA72)*<br>SIP Proxy:<br>BToE Pairing Status:<br>BToE Version:<br>USB Headset Type:<br>HRS Speaker Model:<br>HRS Speaker FW:<br>OK |
| Change Tenant | Select the 'Change Tenant' option.<br><br>Change Tenant<br>Tenant: Tenant2<br>Change Cancel<br>From the dropdown, select the tenant, and then click **Change**. |
| Update Firmware | You can update firmware per device, or for multiple selected devices. |

| Action | Description |
|---|---|
| | <br>Update Firmware / App Suite<br>Select the firmware: -<br>☑ Upgrade now or uncheck to wait for the next provisioning time (00:00)<br>Execute action for 1 Device at the same time AND delay for 2 sec between batches.<br> <br>The figure above shows the screen that opens after selecting *multiple* devices. The screen for a *single* device is *identical* but *without* the option to execute the action in batches.<br>From the dropdown, select the firmware file, and then click **Update**; the firmware file is updated. You can simultaneously update the device's configuration file.<br>If you select *multiple* devices and then click the **Selected Rows Actions** link in the title bar to choose 'Update Software' from the drop-down, the screen (as shown in the figure above) will include the option to<br>■ update firmware simultaneously for a batch of devices, each batch containing 5 \| 10 \| 20 \| 30 \| 50 \| 100 devices<br>■ configure a 0 second \| 2 second \| 5 second \| 10 second \| 30 second \| 2 minute \| 5 minute delay between batches<br>Note that if the ↑ icon is displayed in the 'Firmware' column adjacent to a listed device in the Devices Status page, it indicates that that device's firmware is not the latest firmware available; you can click the icon to upload the device's latest firmware. |

| Action | Description |
|---|---|
|  |  ? <br> Update Latest Version <br> Current version: 1.5.201 <br> Latest version: 1.5.204 <br> Do you want to update latest version? <br> <br> |
| Open Web Admin | Opens the Web interface (see the device's *Administrator's Manual*). By default, the Web interface opens in HTTPS. |
| Nickname | Allows you to provide a nickname for the enterprise employee to facilitate more effective user and phone management. |
| Reset Phone | Sends a reset command to the selected device/s. Note that some phone models wait for the user to finish an active call, while others may perform an immediate restart. |
| Generate Configuration | Generates the device's configuration file according to its tenant, site and template. The user configuration will also be generated in case it will be needed. |
| Change Group | Allows you to add an endpoint to an endpoints group or to change end-points groups. Endpoints groups are added in OVOC (see the *OVOC User's Manual* for more information). The feature benefits the customer who wants (for example) 10 of 500 phones in a site in the enterprise organized in a group for a software upgrade to apply exclusively to those 10 phones. The groups are across sites, within a specific tenant. After clicking the **Actions** menu option, this prompt is displayed: <br>  Change Group <br> Group: NONE <br> <br> <br> - From the 'Group' drop-down, select the group and click **Change**. |

| Action | Description |
|---|---|
| | ■ Configure an endpoints group in the Group Configuration page as shown here. |
| Update configuration | Sends a command to the phone to check whether there is a new configuration file to upload and updates the phone after a configurable 'Delay Time' (Default = 2 seconds). |
| Send Message | Lets you send a message to the screen/s of the selected device/s. Enter the message in the 'Text' field. You can configure for how long the message will be displayed in the screen/s. |
| Set as VIP | Allows network administrators to configure the phone as a VIP phone; VIP phones feature a different disconnect time interval and support disconnect / unregistered alarms. A phone configured as a VIP phone is typically a Common Area Phone (CAP) located in the lobby of an enterprise, or a conference phone located in an enterprise's meeting rooms. It's important that it be continuously connected hence the different disconnect time interval and the disconnect / unregistered alarms. |
| Delete Devices Status | Deletes the devices from the Devices Status table. |
| Switch to UC | Applies to the two flavors of the C450HD phone: Microscope Teams Native and Microscope Teams Compatible. Select this option to switch the C450HD phone from the one flavor to the other. |
| Telnet | Allows administrators to send Telnet (CLI) debug commands to the phone for debugging purposes.<br>Important: For this feature to function, Telnet must be enabled on the device. You can enable Telnet from the Web interface's Telnet page (**Management** > **Remote Management** > **Telnet**). |

9. Optionally, select multiple rows and then click the activated **Selected Rows Actions** link. The following menu is displayed when multiple Android devices are selected.



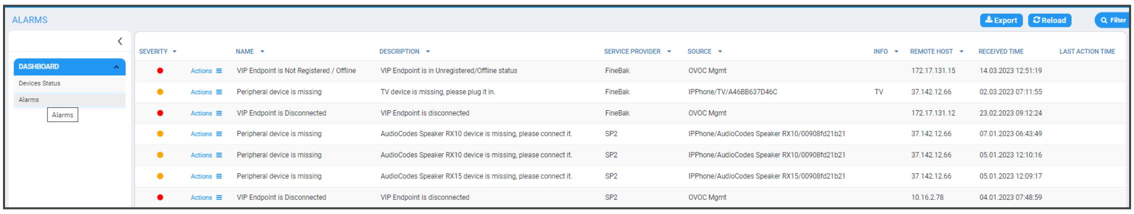
See the table above for descriptions. Any action you choose will apply to all selected rows. For example, select rows, click the **Selected Rows Actions** link, and then select the **Update Firmware** option; all selected devices will be updated with the firmware file you select.

## Monitoring Alarms

You can monitor alarms and correct failures before users encounter them, maintaining high productivity and business without interruption.

### ➢ To monitor alarms:

**1.** Open the Alarms page (**Monitor** > **Dashboard** > **Alarms**).



| SEVERITY | | NAME | DESCRIPTION | SERVICE PROVIDER | SOURCE | INFO | REMOTE HOST | RECEIVED TIME | LAST ACTION TIME |
|---|---|---|---|---|---|---|---|---|---|
| ● | Actions ☰ | VIP Endpoint is Not Registered / Offline | VIP Endpoint is in Unregistered/Offline status | FineBak | OVOC Mgmt | | 172.17.131.15 | 14.03.2023 12:51:19 | |
| ● | Actions ☰ | Peripheral device is missing | TV device is missing, please plug it in. | FineBak | IPPhone/TV/A46BB637D46C | TV | 37.142.12.66 | 02.03.2023 07:11:55 | |
| ● | Actions ☰ | VIP Endpoint is Disconnected | VIP Endpoint is disconnected | FineBak | OVOC Mgmt | | 172.17.131.12 | 23.02.2023 09:12:24 | |
| ● | Actions ☰ | Peripheral device is missing | AudioCodes Speaker RX10 device is missing, please connect it. | SP2 | IPPhone/AudioCodes Speaker RX10/00908fd21b21 | | 37.142.12.66 | 07.01.2023 06:43:49 | |
| ● | Actions ☰ | Peripheral device is missing | AudioCodes Speaker RX10 device is missing, please connect it. | SP2 | IPPhone/AudioCodes Speaker RX10/00908fd21b21 | | 37.142.12.66 | 05.01.2023 12:10:16 | |
| ● | Actions ☰ | Peripheral device is missing | AudioCodes Speaker RX15 device is missing, please connect it. | SP2 | IPPhone/AudioCodes Speaker RX15/00908fd21b21 | | 37.142.12.66 | 05.01.2023 12:09:17 | |
| ● | Actions ☰ | VIP Endpoint is Disconnected | VIP Endpoint is disconnected | SP2 | OVOC Mgmt | | 10.16.2.78 | 04.01.2023 07:48:59 | |

⚠ Devices send alarms via the REST protocol. They're forwarded by the AudioCodes' Device Manager Pro platform as mail, SNMP traps, etc.

**2.** View in the page:

- each device alarm in the network
- a description of each alarm
- MAC address of the device (source)
- alarm severity
- Remote Host IP

- last action time
- date and time of receipt of the alarm

Device Manager LC displays active alarms, not historical alarms.

**Red** indicates a severity level of Critical

**Orange** indicates a severity level of Major

After an alarm is cleared, it disappears from the Alarms page.

## Searching for Alarms

You can search for alarms in the Alarms page. The 'Search' field enables the functionality. You can search by

- alarm name
- a device's MAC address
- a device's IP address

## Performing Actions on Alarms

You can perform actions on alarms in the Alarms page. Click the **Actions** link and from the popup menu select **Delete Alarm** or **Telnet**. The **Telnet** option lets administrators debug directly if an issue arises. See Telnet on page 86 for more information.

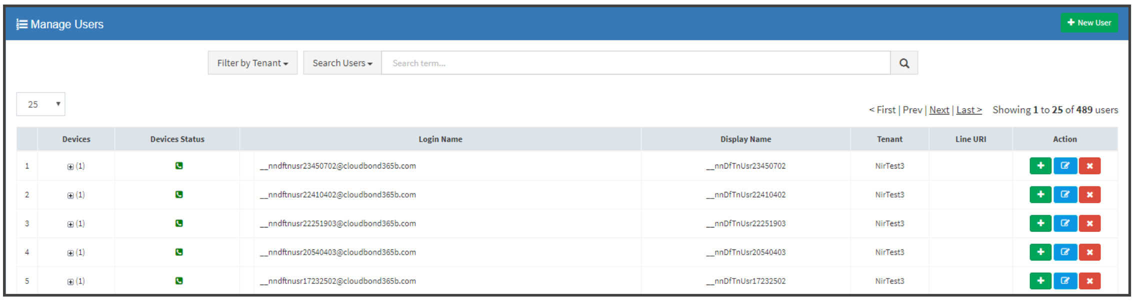
## Maintaining Users

The Manage Users page lets you maintain users. You can

- search for a user/device
- add a user
- add a device to a user
- edit user/device
- view device status
- delete a user/device
- search for a device by tenant
- search for a device by name

### Searching for Users/Devices

You can search for a user in the Manage Users page (**Setup** > **Users & Devices** > **Manage Users**).



< First | Prev | Next | Last > Showing **1** to **25** of **489** users

| | Devices | Devices Status | Login Name | Display Name | Tenant | Line URI | Action |
|---|---|---|---|---|---|---|---|
| 1 | ⊞ (1) | ☎ | __nndftnusr23450702@cloudbond365b.com | __nnDfTnUsr23450702 | NirTest3 | | |
| 2 | ⊞ (1) | ☎ | __nndftnusr22410402@cloudbond365b.com | __nnDfTnUsr22410402 | NirTest3 | | |
| 3 | ⊞ (1) | ☎ | __nndftnusr22251903@cloudbond365b.com | __nnDfTnUsr22251903 | NirTest3 | | |
| 4 | ⊞ (1) | ☎ | __nndftnusr20540403@cloudbond365b.com | __nnDfTnUsr20540403 | NirTest3 | | |
| 5 | ⊞ (1) | ☎ | __nndftnusr17232502@cloudbond365b.com | __nnDfTnUsr17232502 | NirTest3 | | |

When searching for a user or a device:

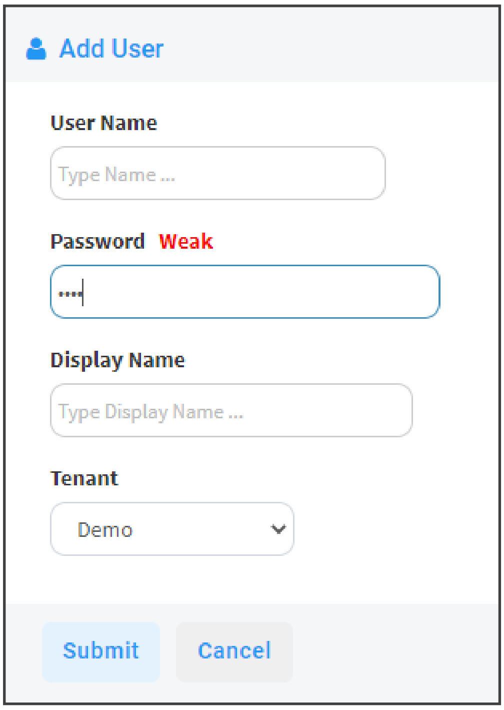
- From the 'Filter by Tenant' dropdown, select a tenant in which to search. This narrows the search.
- From the 'Search Users' dropdown, select **Search Users** and then in the 'Search Item' field enter the name of the user who you are trying to locate.
- From the 'Search Users' dropdown, select **Search Users & Devices** and then in the 'Search Item' field enter the name of the user you are trying to locate or the MAC address of the device you are trying to locate.
- From the '25' dropdown, select the number of users you want displayed per page. The default is 25.

## Adding a User

You can add a user to the Device Manager Pro.

### ➢ To add a user to the Device Manager Pro:

1. Open the Manage Users page (**Setup** > **Users & Devices** > **Manage Users**).
2. Click **+New User**. Before adding phones you need to add users.



Add User

User Name

Type Name ...

Password Weak

Display Name

Type Display Name ...

Tenant

Demo

3. Define a name and password for the user.

4. Define the 'Display Name' and select a tenant from the ' Tenant' dropdown.

> Tenant/s must first be defined in OVOC. See the *One Voice Operations Center User's Manual* for more information.

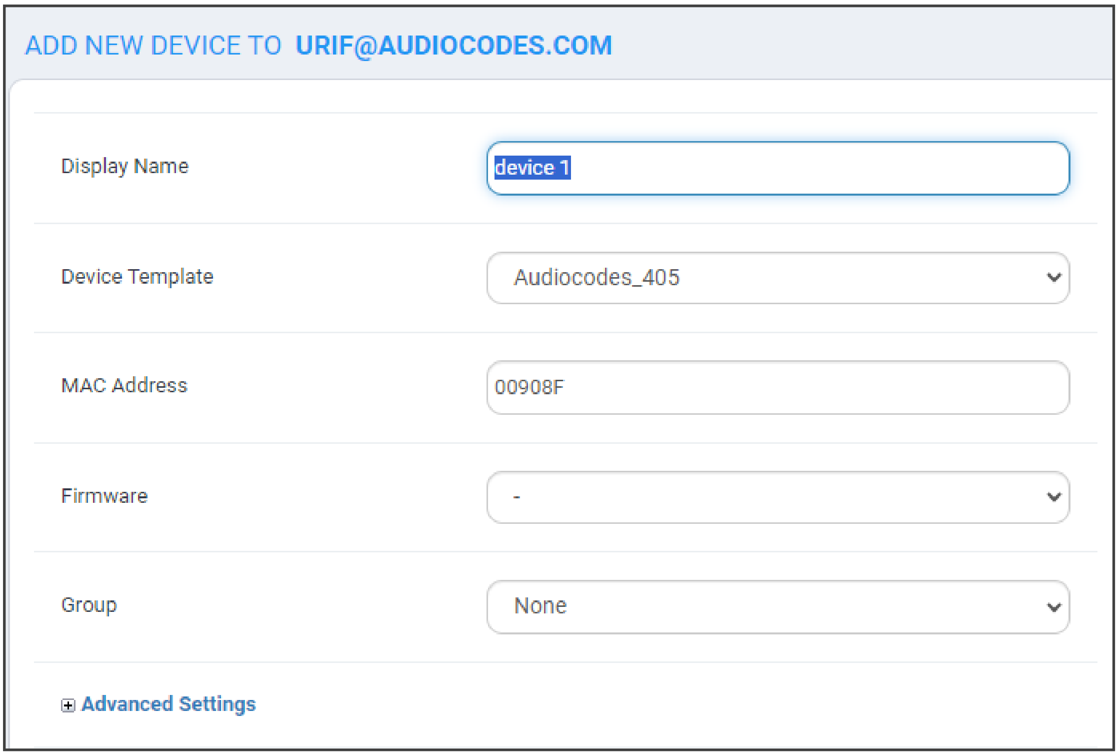
5. Click **Submit**; you're returned to the Manage Users page. Locate the added user.

## Adding a Phone

You can manually add a single phone to the server.

➢ **To add a phone:**

1. In the Manage Users page (**Setup** > **Users & Devices** > **Manage Users**), click **+** in the row of the listed added user.



ADD NEW DEVICE TO URIF@AUDIOCODES.COM

| | |
|---|---|
| Display Name | device 1 |
| Device Template | Audiocodes_405 |
| MAC Address | 00908F |
| Firmware | - |
| Group | None |

2. Enter the 'Display Name', i.e., the device's name to be displayed in Device Manager.
3. From the 'Device Template' dropdown, select a template.
4. Enter the 'MAC Address'. MAC prefix format example: **mac": "00171905c48a**

- AudioCodes MAC addresses' prefixes can be one of the following:
  - ✓ "00908F" -or-
  - ✓ "001719"
- Prior to Version 8.2.2000, AudioCodes had only "00908F"
- From Version 8.2.2000 and later, AudioCodes has "00908F" as well as "001719".
- Each vendor has its own MAC prefixes.

5. From the 'Firmware' dropdown, select the firmware relevant to the phone.
6. [Optional] Expand **+Advanced Settings**.
   - From the 'Devices Language' dropdown, select the language you want the phone interface to display.
   - From the 'VLAN Discovery mode' dropdown, select Manual / CDP / LLDP / CDP_LLDP. See under Appendix Skype for Business Environment on page 40 for more information.
7. Click **Submit** and then click **Back** to see the added device in the Manage Users page under the Devices column (click **+**).

## Editing a User

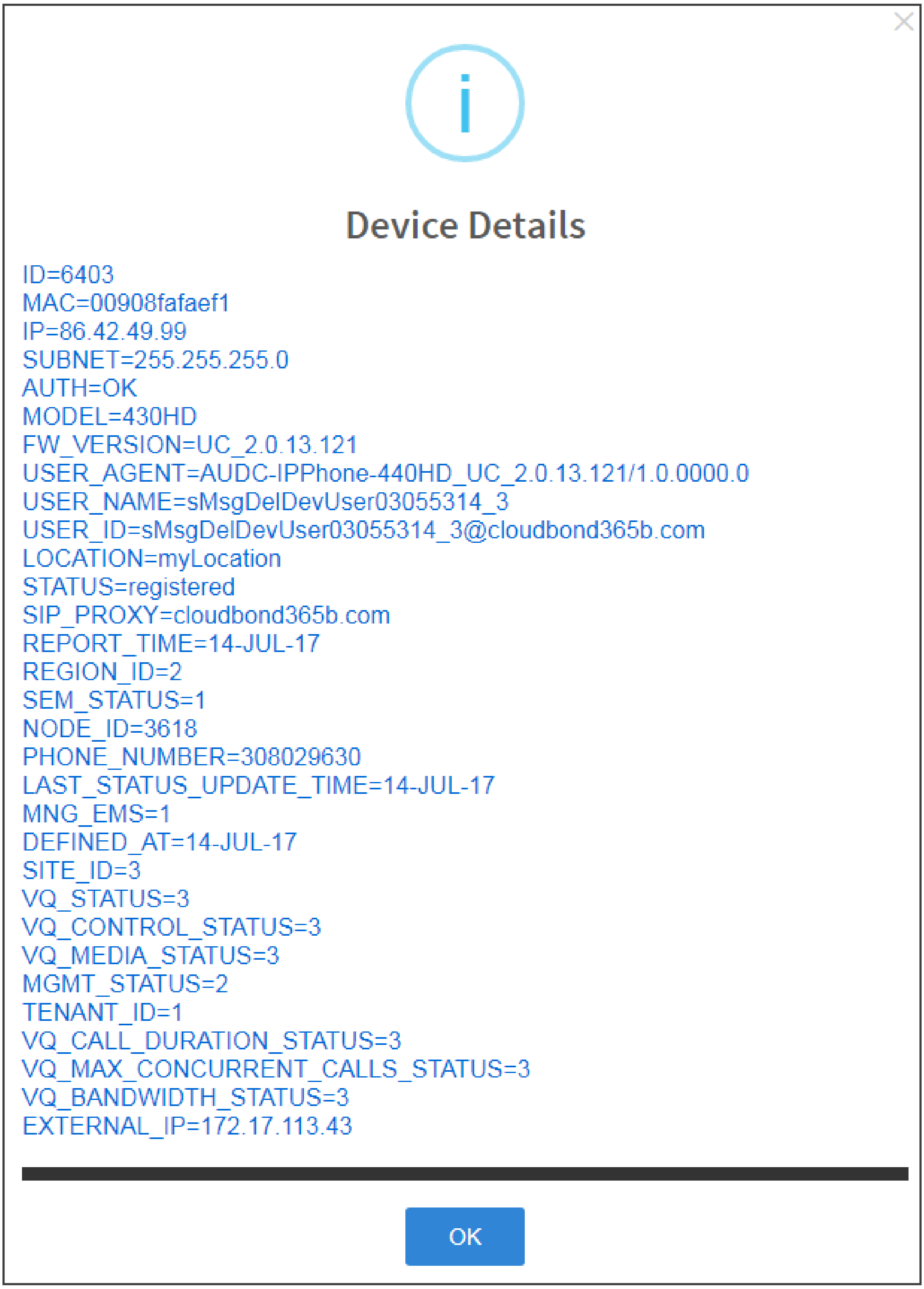
You can edit a user if (for example) they relocate to another tenant or if they are given another phone.

➢ **To edit a user:**

1. Click the **Edit** button in the row adjacent to the user; the Edit User screen opens.
2. Edit the same fields as when adding the device.

## Viewing Device Status

You can quickly assess a device's status from the Manage Users page by clicking the ✓ icon in the Devices Status column.



Device Details

```
ID=6403
MAC=00908fafaef1
IP=86.42.49.99
SUBNET=255.255.255.0
AUTH=OK
MODEL=430HD
FW_VERSION=UC_2.0.13.121
USER_AGENT=AUDC-IPPhone-440HD_UC_2.0.13.121/1.0.0000.0
USER_NAME=sMsgDelDevUser03055314_3
USER_ID=sMsgDelDevUser03055314_3@cloudbond365b.com
LOCATION=myLocation
STATUS=registered
SIP_PROXY=cloudbond365b.com
REPORT_TIME=14-JUL-17
REGION_ID=2
SEM_STATUS=1
NODE_ID=3618
PHONE_NUMBER=308029630
LAST_STATUS_UPDATE_TIME=14-JUL-17
MNG_EMS=1
DEFINED_AT=14-JUL-17
SITE_ID=3
VQ_STATUS=3
VQ_CONTROL_STATUS=3
VQ_MEDIA_STATUS=3
MGMT_STATUS=2
TENANT_ID=1
VQ_CALL_DURATION_STATUS=3
VQ_MAX_CONCURRENT_CALLS_STATUS=3
VQ_BANDWIDTH_STATUS=3
EXTERNAL_IP=172.17.113.43
```

## Deleting a User

You can delete a user if, for example, they leave the company.

### ➢ To delete a user:

- Click the **Delete** button in the row adjacent to the user; the user and device are removed.

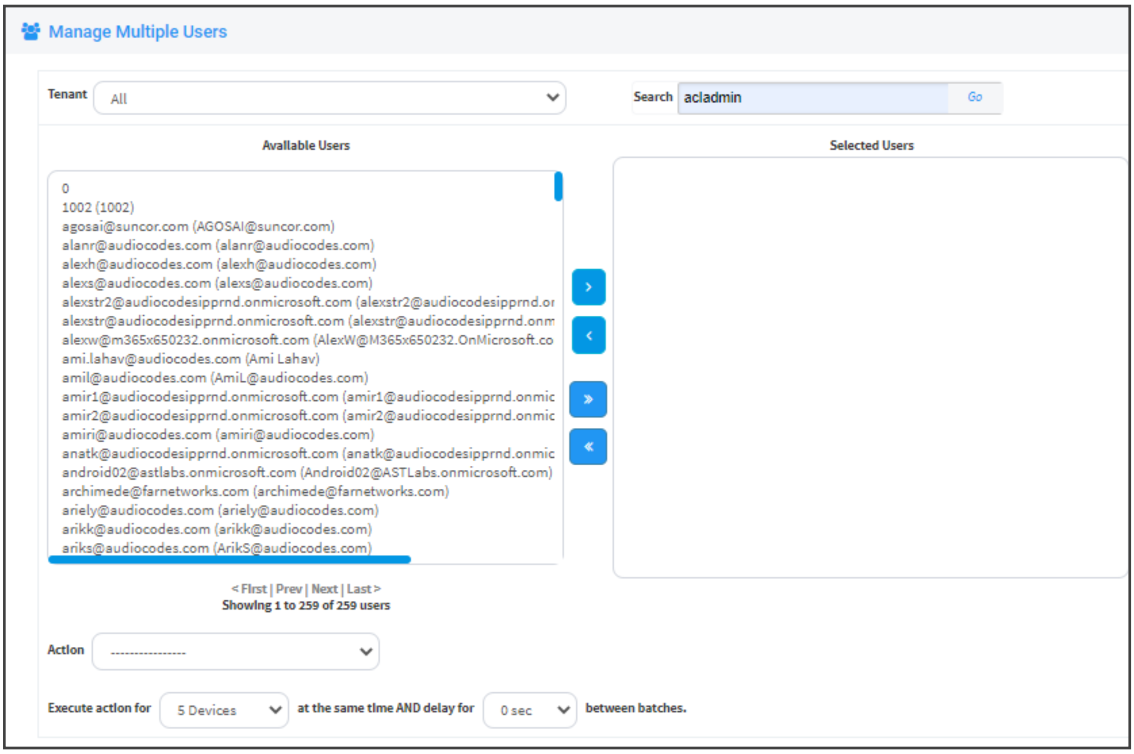
## Managing Multiple Users

The Manage Multiple Users page lets you perform an action on a single user or on multiple users simultaneously:

- reset passwords
- delete users
- restart devices
- generate devices configuration files
- update configuration files
- send a message to multiple phones

### ➢ To manage multiple users:

1. Open the Manage Multiple Users page (**Setup** > **Users & Devices** > **Manage Multiple Users**):



Manage Multiple Users

Tenant: All

Search: acladmin

Available Users

0
1002 (1002)
agosai@suncor.com (AGOSAI@suncor.com)
alanr@audiocodes.com (alanr@audiocodes.com)
alexh@audiocodes.com (alexh@audiocodes.com)
alexs@audiocodes.com (alexs@audiocodes.com)
alexstr2@audiocodesipprnd.onmicrosoft.com (alexstr2@audiocodesipprnd.or
alexstr@audiocodesipprnd.onmicrosoft.com (alexstr@audiocodesipprnd.onm
alexw@m365x650232.onmicrosoft.com (AlexW@M365x650232.OnMicrosoft.co
ami.lahav@audiocodes.com (Ami Lahav)
amil@audiocodes.com (AmiL@audiocodes.com)
amir1@audiocodesipprnd.onmicrosoft.com (amir1@audiocodesipprnd.onmic
amir2@audiocodesipprnd.onmicrosoft.com (amir2@audiocodesipprnd.onmic
amiri@audiocodes.com (amiri@audiocodes.com)
anatk@audiocodesipprnd.onmicrosoft.com (anatk@audiocodesipprnd.onmic
android02@astlabs.onmicrosoft.com (Android02@ASTLabs.onmicrosoft.com)
archimede@farnetworks.com (archimede@farnetworks.com)
ariely@audiocodes.com (ariely@audiocodes.com)
arikk@audiocodes.com (arikk@audiocodes.com)
ariks@audiocodes.com (ArikS@audiocodes.com)

Selected Users

< First | Prev | Next | Last >
Showing 1 to 259 of 259 users

Action: ----------------

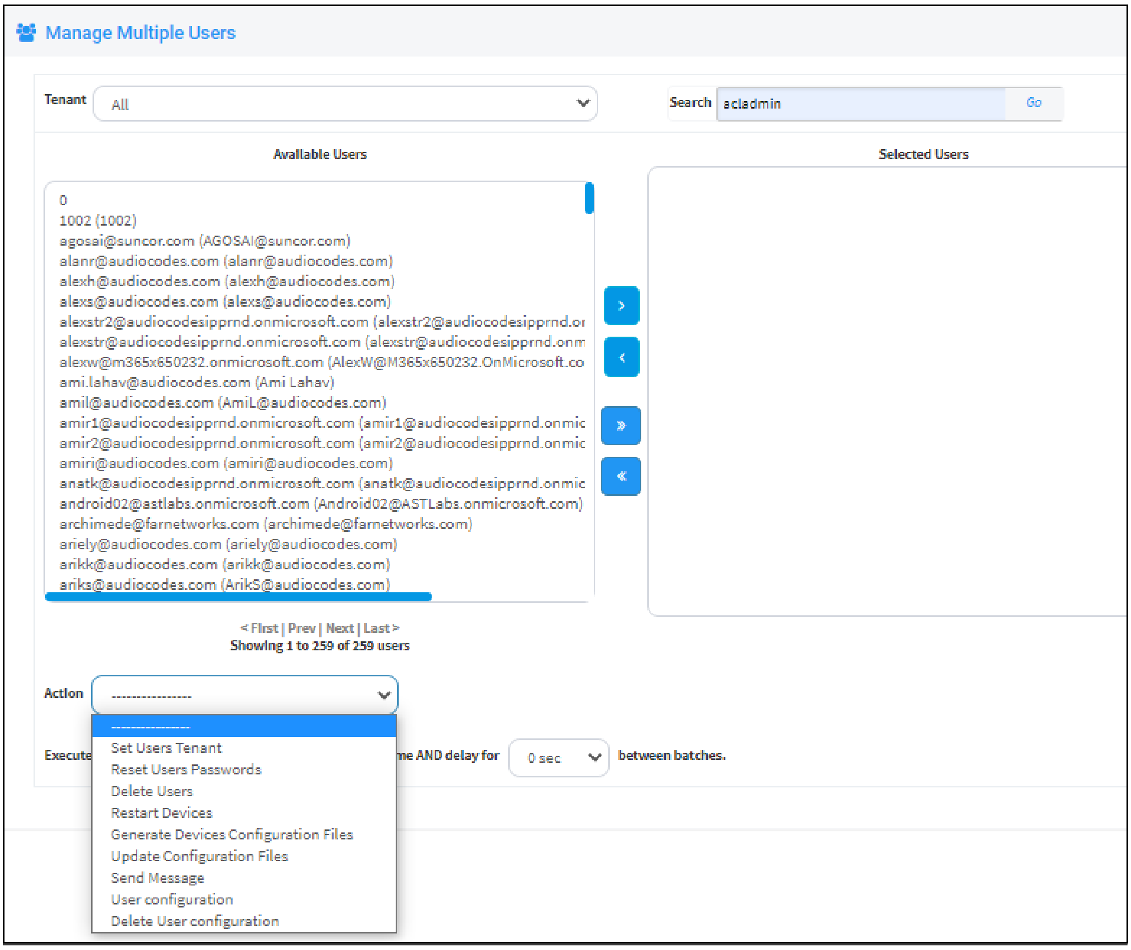
Execute action for 5 Devices at the same time AND delay for 0 sec between batches.

2. In the Available Users pane, select a user or select multiple users on whom to perform an action.
3. Click > to add a single user to the Selected Users pane.
4. Click >> to add multiple users to the Selected Users pane.

5. Click **<** to remove a single user from the Selected Users pane - after selecting them in the pane.

6. Click **<<** to remove multiple users from the Selected Users pane - after selecting them in the pane.

7. From the **Action** dropdown, select the required action.



Manage Multiple Users

Tenant: All

Search: acladmin

Available Users

0
1002 (1002)
agosai@suncor.com (AGOSAI@suncor.com)
alanr@audiocodes.com (alanr@audiocodes.com)
alexh@audiocodes.com (alexh@audiocodes.com)
alexs@audiocodes.com (alexs@audiocodes.com)
alexstr2@audiocodesipprnd.onmicrosoft.com (alexstr2@audiocodesipprnd.or
alexstr@audiocodesipprnd.onmicrosoft.com (alexstr@audiocodesipprnd.onm
alexw@m365x650232.onmicrosoft.com (AlexW@M365x650232.OnMicrosoft.co
ami.lahav@audiocodes.com (Ami Lahav)
amil@audiocodes.com (AmiL@audiocodes.com)
amir1@audiocodesipprnd.onmicrosoft.com (amir1@audiocodesipprnd.onmic
amir2@audiocodesipprnd.onmicrosoft.com (amir2@audiocodesipprnd.onmic
amiri@audiocodes.com (amiri@audiocodes.com)
anatk@audiocodesipprnd.onmicrosoft.com (anatk@audiocodesipprnd.onmic
android02@astlabs.onmicrosoft.com (Android02@ASTLabs.onmicrosoft.com)
archimede@farnetworks.com (archimede@farnetworks.com)
ariely@audiocodes.com (ariely@audiocodes.com)
arikk@audiocodes.com (arikk@audiocodes.com)
ariks@audiocodes.com (ArikS@audiocodes.com)

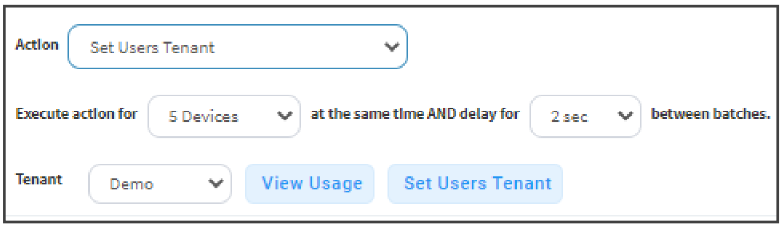
Selected Users

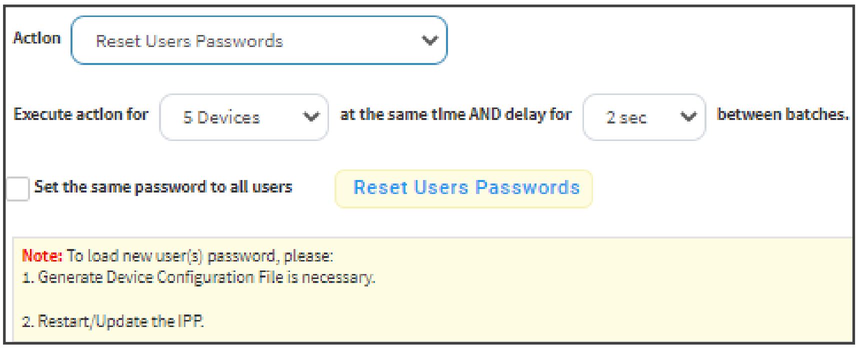
< First | Prev | Next | Last >
Showing 1 to 259 of 259 users

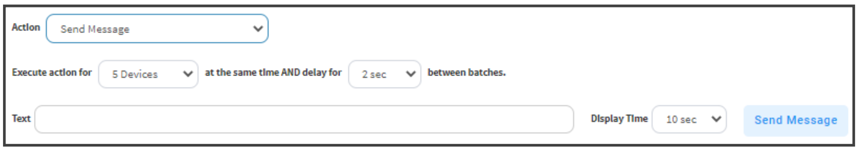
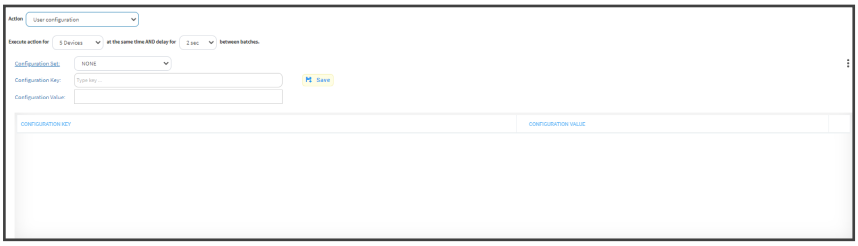
Action: ----------------

Execute ...me AND delay for 0 sec between batches.

- Use the table below as reference.

| Action | Description |
|---|---|
| Set Users Tenant | <br>Action: Set Users Tenant<br>Execute action for 5 Devices at the same time AND delay for 2 sec between batches.<br>Tenant: Demo<br>View Usage<br>Set Users Tenant<br>Sets the tenant for users selected. |

| Action | Description |
|---|---|
| Reset Users Passwords | <br>Action Reset Users Passwords<br>Execute action for 5 Devices at the same time AND delay for 2 sec between batches.<br>□ Set the same password to all users Reset Users Passwords<br>Note: To load new user(s) password, please:<br>1. Generate Device Configuration File is necessary.<br>2. Restart/Update the IPP.<br>Resets users passwords. A random password is generated for each user. To generate a single password for all users selected, select the **Set the same password to all users** option.<br>To load the new user passwords:<br>- Generate the device's configuration file<br>- Restart/Update the device |
| Delete Users | Deletes users and applies a configurable 'Delay Time' (Default = 2 seconds) after each delete is performed. |
| Restart Devices | Restarts devices. A reset command is sent to all selected devices. The commands are sent in batches; each batch contains 5 devices with a delay of 2 minutes between each batch.<br>From the dropdown, choose the type of restart:<br>- Graceful (default)<br>- Force<br>- Scheduled<br>Before restarting, some models wait for the user to finish an active call while others may perform an immediate restart. |
| Generate Devices Configuration Files | Generates new configuration files. Updates each device with the newly generated configuration files after a configurable 'Delay Time' (default = 2 seconds) - if you select the **Updating Devices and restarting Devices after generating files** option. You can generate a private configuration file per user group, device group, or specific tenants. |
| Update Configuration Files | Updates each device after a configurable 'Delay Time' (default = 2 seconds). |
| Send Message | Lets you send a message to the screens of all user devices selected. Enter the message in the 'Text' field. You can configure the length of |

| Action | Description |
|---|---|
| | time the message will be displayed in the screens. Phones beep to alert users when messages come in.<br><br>Action: Send Message<br>Execute action for 5 Devices at the same time AND delay for 2 sec between batches.<br>Text:<br>Display Time: 10 sec<br>Send Message |
| User Configuration | <br>Action: User configuration<br>Execute action for 5 Devices at the same time AND delay for 2 sec between batches.<br>Configuration Set: NONE<br>Configuration Key: Type key ...<br>Save<br>Configuration Value:<br>CONFIGURATION KEY / CONFIGURATION VALUE<br>Configures the values that will be added to the *mac.cfg* file for the selected users. Note that you can copy from one user to multiple users. |
| Delete User Configuration | Deletes the user configuration for the selected users. |

The page also lets you

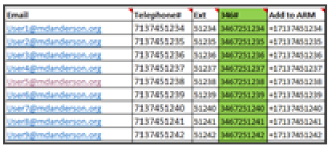
- filter per tenant before selecting users on whom to perform an action
- configure performing the action on a batch of 1 | 5 | 10 | 20 | 30 | 50 | 100 devices simultaneously
- configure a 0 second | 2 second | 5 second | 10 second | 30 second | 2 minute | 5 minute delay between batches

## Applying a Configuration to a List of Users

A configuration can be applied to a *list of users* to move (for example) those users from one VoiceMail platform(Microsoft Exchange, for example) to another third-party VoiceMail platform (for example, Mutare Voice).

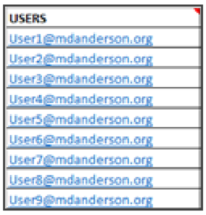
### ➢ To move a select group of users from one VoiceMail platform to another (for example):

1. Obtain the list of names of those users who are to be moved (input list / raw data) as a txt or xls file.



| Email | Telephone# | Ext | [illegible] | Add to ARM |
|---|---|---|---|---|
| User1@mdanderson.org | 7137451234 | 51234 | 3467251234 | +17137451234 |
| User2@mdanderson.org | 7137451235 | 51235 | 3467251235 | +17137451235 |
| User3@mdanderson.org | 7137451236 | 51236 | 3467251236 | +17137451236 |
| User4@mdanderson.org | 7137451237 | 51237 | 3467251237 | +17137451237 |
| User5@mdanderson.org | 7137451238 | 51238 | 3467251238 | +17137451238 |
| User6@mdanderson.org | 7137451239 | 51239 | 3467251239 | +17137451239 |
| User7@mdanderson.org | 7137451240 | 51240 | 3467251240 | +17137451240 |
| User8@mdanderson.org | 7137451241 | 51241 | 3467251241 | +17137451241 |
| User9@mdanderson.org | 7137451242 | 51242 | 3467251242 | +17137451242 |

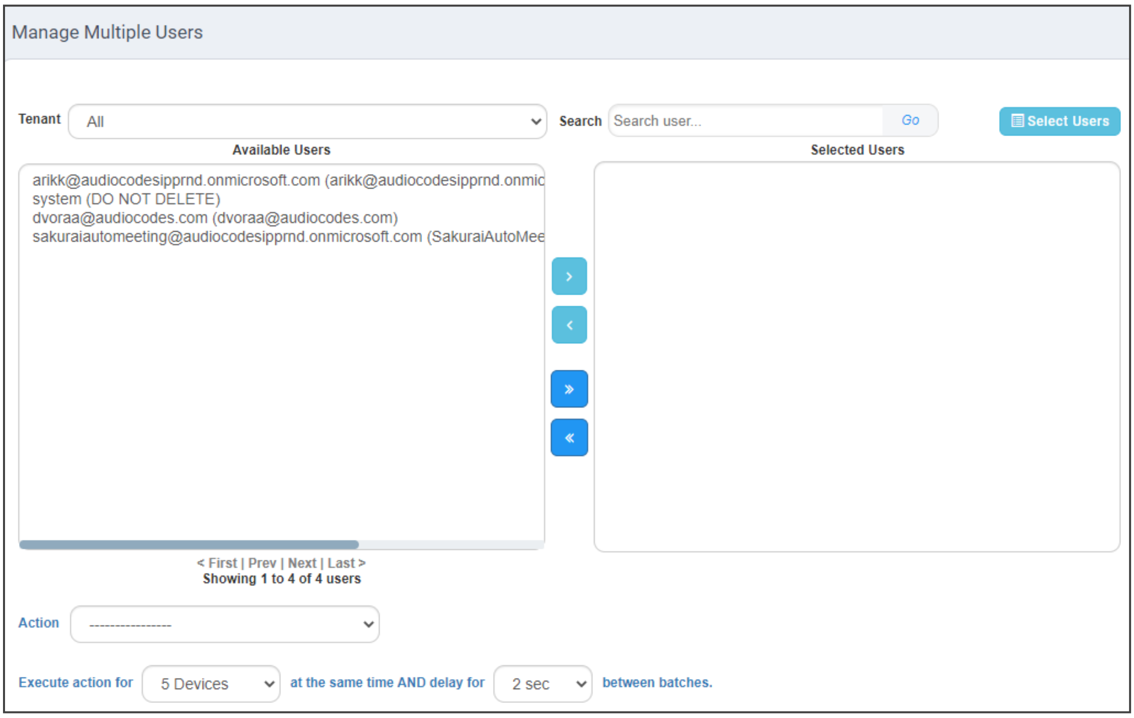
2. In Excel, filter the file, i.e., remove all columns except the 'Users' column.



| USERS |
|---|
| User1@mdanderson.org |
| User2@mdanderson.org |
| User3@mdanderson.org |
| User4@mdanderson.org |
| User5@mdanderson.org |
| User6@mdanderson.org |
| User7@mdanderson.org |
| User8@mdanderson.org |
| User9@mdanderson.org |

- The user is their email address in the enterprise.
- The configuration file will be applied only to phones belonging to *these* users.

3. Open the Manage Multiple Users page (**Setup** > **Users & Devices** > **Manage Multiple Users**).



Manage Multiple Users

Tenant: All

Search: Search user... Go

Available Users

arikk@audiocodesipprnd.onmicrosoft.com (arikk@audiocodesipprnd.onmic
system (DO NOT DELETE)
dvoraa@audiocodes.com (dvoraa@audiocodes.com)
sakuraiautomeeting@audiocodesipprnd.onmicrosoft.com (SakuraiAutoMee

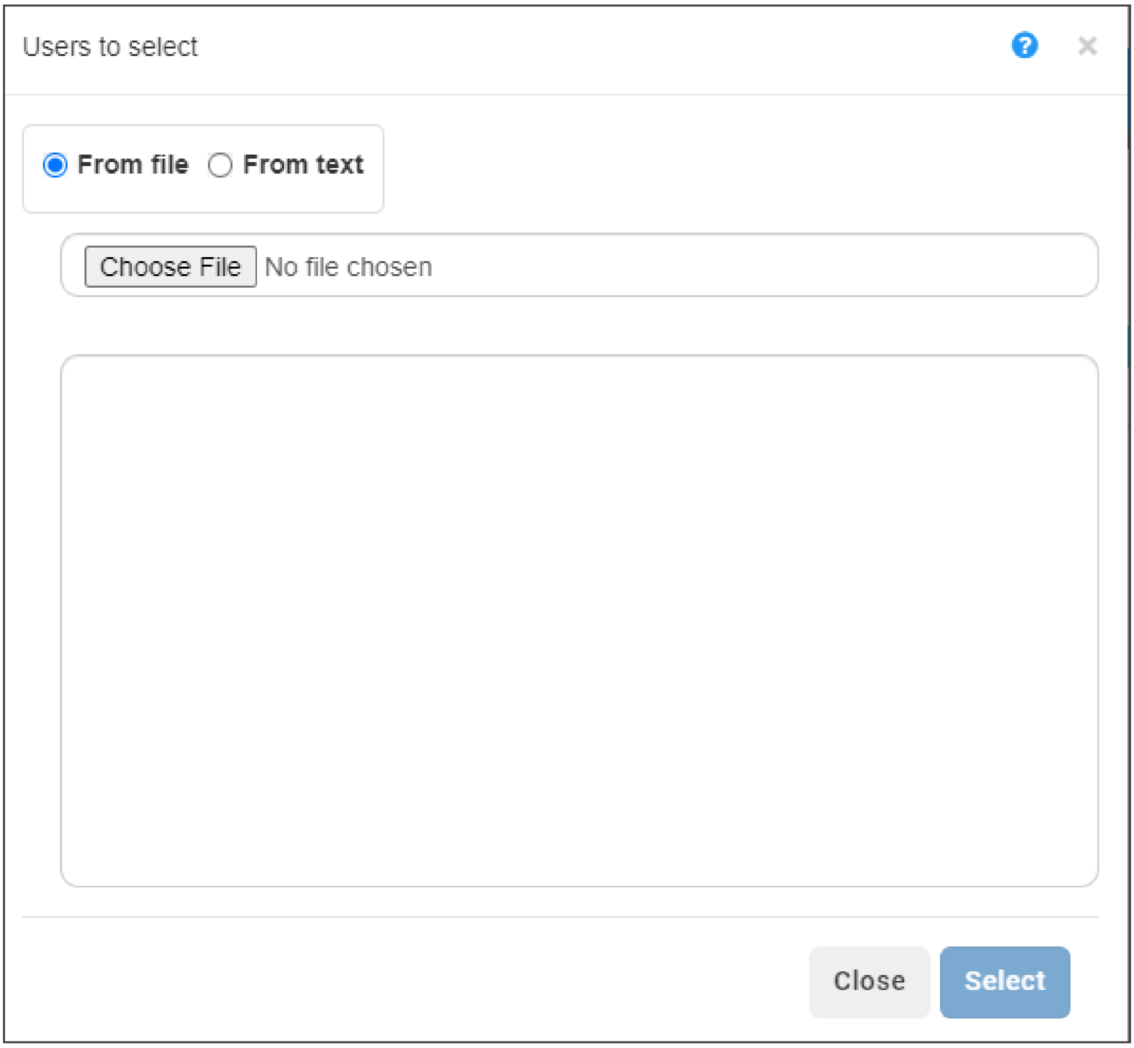
< First | Prev | Next | Last >
Showing 1 to 4 of 4 users

Selected Users

Action: ----------------

Execute action for 5 Devices at the same time AND delay for 2 sec between batches.

4. Click the **Selected Users** button located uppermost right as shown in the previous figure.



5. Import the input list / raw data into the Device Manager:

   - Select the **From file** option (default) and then click the activated **Choose File** button and navigate to the txt or xls file containing the input list (the raw data) of the users to be moved, which you created in the first two steps of this procedure -OR-

   - Select the **From text** option and then copy-paste the contents of the txt or xls file containing the input list (the raw data) of the users to be moved, into the pane located below the option.

6. Click the **Select** button.

- The same user can have multiple devices.
- The configuration file is static data; it's the same for all devices.
- When moving users to a new VoiceMail platform as shown in the example here, the VoiceMail button on the phones associated with these users must also be updated (with the new VoiceMail platform); the change must take place within the same time frame as the move of the users to the new VoiceMail platform.

# Maintaining Multiple Devices

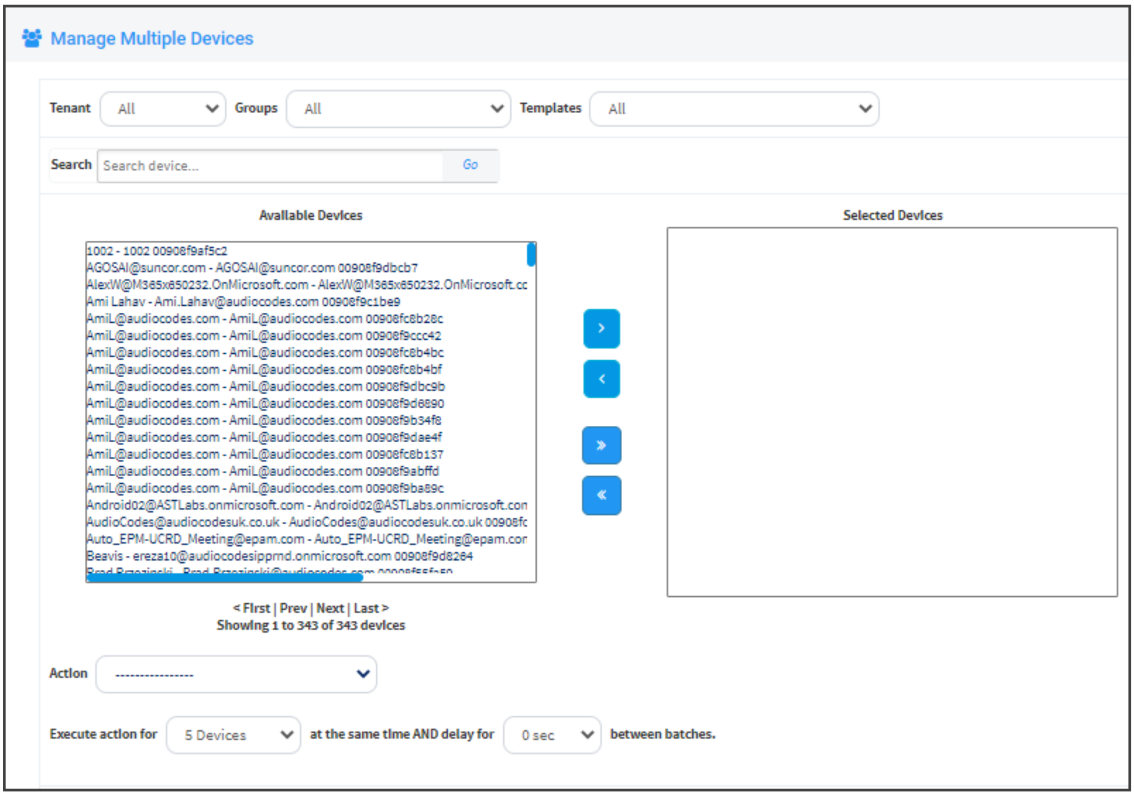
The Manage Multiple Devices page lets you perform a single operation on all or on many user devices. The page lets you

- delete multiple devices
- change devices type
- change language
- restart multiple devices
- generate devices configuration files
- update configuration files
- send a message to multiple phones

> ⚠ These operations can also be performed on an endpoints group or on all endpoints groups; from the 'Groups' drop-down in the Manage Multiple Devices page shown in the figure below, select a single endpoints group, or **All**. For more information about *adding an endpoint to a group*, see under Checking Devices Status on page 79. For more information about *configuring an endpoints group*, see Configuring an Endpoints Group on page 10.

### ➢ To manage multiple devices:

1. Open the Manage Multiple Devices page (**Setup** > **Users & Devices** > **Manage Multiple Devices**):



Manage Multiple Devices

Tenant: All  Groups: All  Templates: All

Search: Search device... Go

Available Devices

1002 - 1002 00908f9af5c2
AGOSAI@suncor.com - AGOSAI@suncor.com 00908f9dbcb7
AlexW@M365x650232.OnMicrosoft.com - AlexW@M365x650232.OnMicrosoft.cc
Ami Lahav - Ami.Lahav@audiocodes.com 00908f9c1be9
AmiL@audiocodes.com - AmiL@audiocodes.com 00908fc8b28c
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9ccc42
AmiL@audiocodes.com - AmiL@audiocodes.com 00908fc8b4bc
AmiL@audiocodes.com - AmiL@audiocodes.com 00908fc8b4bf
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9dbc9b
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9d6890
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9b34f8
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9dae4f
AmiL@audiocodes.com - AmiL@audiocodes.com 00908fc8b137
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9abffd
AmiL@audiocodes.com - AmiL@audiocodes.com 00908f9ba89c
Android02@ASTLabs.onmicrosoft.com - Android02@ASTLabs.onmicrosoft.con
AudioCodes@audiocodesuk.co.uk - AudioCodes@audiocodesuk.co.uk 00908fc
Auto_EPM-UCRD_Meeting@epam.com - Auto_EPM-UCRD_Meeting@epam.cor
Beavis - ereza10@audiocodesipprnd.onmicrosoft.com 00908f9d8264

Selected Devices

< First | Prev | Next | Last >
Showing 1 to 343 of 343 devices

Action: ----------------

Execute action for 5 Devices at the same time AND delay for 0 sec between batches.

2. You can filter devices per tenant, before selecting those to perform an action on.
3. You can enter a string in the 'Search' field and then click **Go** to search for devices.
4. In the Available Devices pane, select a device on which to perform an action and then click **>** to add it to the Selected Devices pane -or- select multiple devices on which to perform an action and then click **>>** to add them to the Selected Devices pane.
5. In the Selected Devices pane, select a single device and then click < to remove it, or select multiple Selected Devices and then click **<<** to remove them.
6. From the **Action** dropdown, select an action. Use the table below as reference.

| Action | Description |
|---|---|
| Delete Devices | Deletes selected devices from the server applying a configurable 'Delay Time' (default = 2 seconds) in the process. |
| Change Template | This action will update the device template in the database. To finish the action, you need to:<br>1. Generate the device's Configuration File<br>2. Restart/Update the phone. |
| Change Language | Changes the phone language. Select the language from the **Language** dropdown and click **Change**. To view the usage of a language, click **View Usage**.<br>To load a new language:<br>1. Generate the device's configuration file.<br>2. Restart/update the phone. |
| Restart Devices | Restarts online devices. Before restarting, some models wait for the user to finish an active call while others may perform an immediate restart. From the dropdown, choose the type of restart:<br>■ Graceful (default)<br>■ Force<br>■ Scheduled |
| Generate Devices Configuration Files | Generates new configuration files. Updates each phone with the newly generated configuration files after a configurable 'Delay Time' (default = 2 seconds) - if you selected the **Updating Devices and restarting Devices after generating files** option (by default it is selected). |
| Update Configuration File | Updates each phone after a configurable 'Delay Time' (default = 2 seconds). |

| Action | Description |
|---|---|
| Send Message | Lets you send a message to the screens of all user phones selected. Enter the message in the 'Text' field. You can configure the length of time the message will be displayed in the screen. Phones beep to alert users when messages come in. |
| Change Firmware | Lets you upload a different .img firmware file to the phone. |
| Change VLAN Discovery Mode | Used to change the virtual phone network's mode of operation. See here for the options descriptions [Manual/CDP/LLDP/CDP_LLDP] |

➢ **To update all existing configuration files according to the new template:**

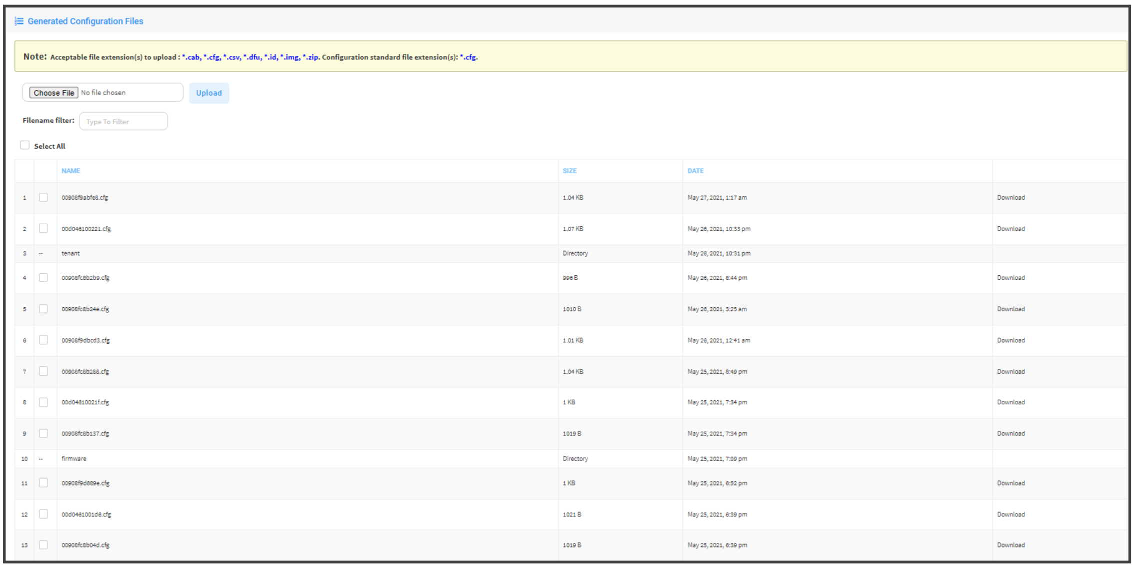
- After selecting devices, select from the 'Action' dropdown the **Generate Devices Configuration Files** option in the Manage Multiple Devices page.

## Managing Configuration Files

You can manage devices' configuration files. All cfg files are created and located on the OVOC server. You can view and manage storage, and upload and delete files from storage. To avoid network congestion, a delay feature enables an interval between each installation.

➢ **To manage devices' configuration files:**

- Open the Manage Configuration Files page (**Setup** > **Configuration** > **Generated Config Files**).



Generated Configuration Files

Note: Acceptable file extension(s) to upload : *.cab, *.cfg, *.csv, *.dfu, *.id, *.img, *.zip. Configuration standard file extension(s): *.cfg.

Choose File No file chosen Upload

Filename filter: Type To Filter

□ Select All

| | | NAME | SIZE | DATE | |
|---|---|---|---|---|---|
| 1 | □ | 00908f9abfe8.cfg | 1.04 KB | May 27, 2021, 1:17 am | Download |
| 2 | □ | 00d046100221.cfg | 1.07 KB | May 26, 2021, 10:33 pm | Download |
| 3 | -- | tenant | Directory | May 26, 2021, 10:31 pm | |
| 4 | □ | 00908fc8b2b9.cfg | 996 B | May 26, 2021, 8:44 pm | Download |
| 5 | □ | 00908fc8b24e.cfg | 1010 B | May 26, 2021, 3:25 am | Download |
| 6 | □ | 00908f9dbcd3.cfg | 1.01 KB | May 26, 2021, 12:41 am | Download |
| 7 | □ | 00908fc8b288.cfg | 1.04 KB | May 25, 2021, 8:49 pm | Download |
| 8 | □ | 00d04610021f.cfg | 1 KB | May 25, 2021, 7:34 pm | Download |
| 9 | □ | 00908fc8b137.cfg | 1019 B | May 25, 2021, 7:34 pm | Download |
| 10 | -- | firmware | Directory | May 25, 2021, 7:09 pm | |
| 11 | □ | 00908f9d689e.cfg | 1 KB | May 25, 2021, 6:52 pm | Download |
| 12 | □ | 00d0461001d6.cfg | 1021 B | May 25, 2021, 6:39 pm | Download |
| 13 | □ | 00908fc8b04d.cfg | 1019 B | May 25, 2021, 6:39 pm | Download |

The page lets you

- Filter the .cfg configuration files listed by name
- Browse to a location on your PC and upload a .cfg configuration file

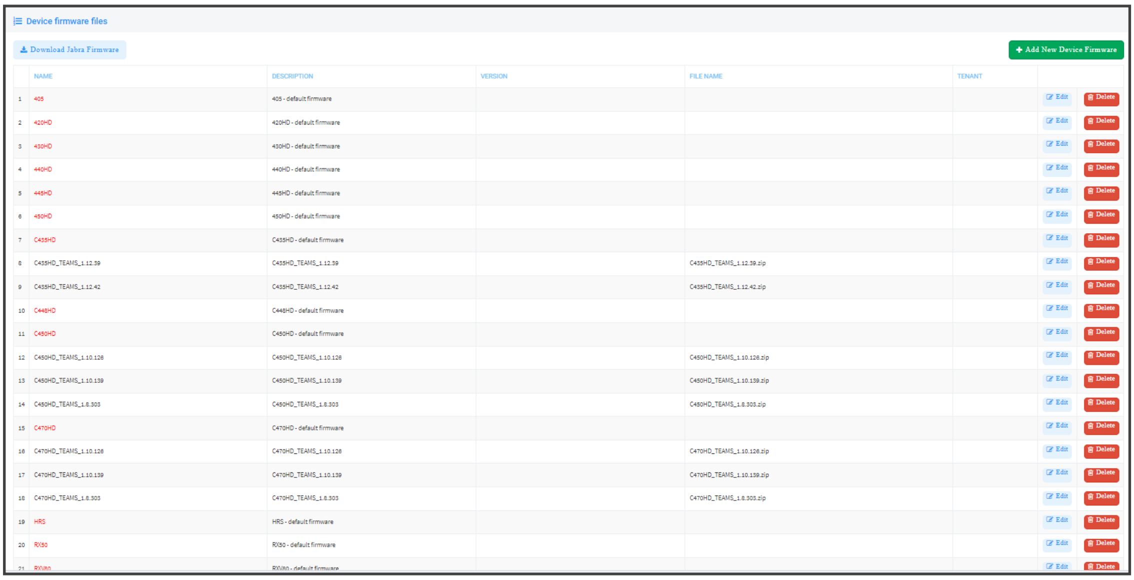
- Select and delete any or all of the .cfg configuration files listed
- Open any of the .cfg configuration files listed in an editor
- Save any of the .cfg configuration files listed
- Download any of the .cfg configuration files listed
- View all configuration files currently located on the server (global configuration files, company directory configuration files, and IP phone configuration files and third-party vendor product configuration files)

## Managing Firmware Files

The 'Device firmware files' page allows network administrators to download, edit, delete and add devices' .img firmware files.

### ➢ To manage the .img firmware files:

- Open the Device Firmware Files page (**Setup** > **Firmware** > **Firmware Files**).



Device firmware files

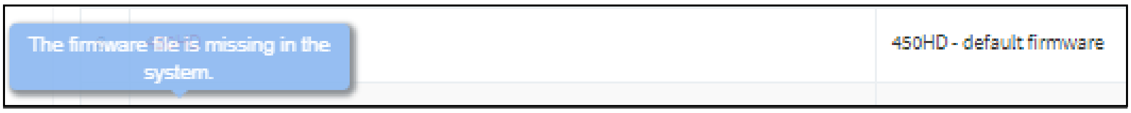
| | NAME | DESCRIPTION | VERSION | FILE NAME | TENANT | |
|---|---|---|---|---|---|---|
| 1 | 405 | 405 - default firmware | | | | Edit Delete |
| 2 | 420HD | 420HD - default firmware | | | | Edit Delete |
| 3 | 430HD | 430HD - default firmware | | | | Edit Delete |
| 4 | 440HD | 440HD - default firmware | | | | Edit Delete |
| 5 | 445HD | 445HD - default firmware | | | | Edit Delete |
| 6 | 450HD | 450HD - default firmware | | | | Edit Delete |
| 7 | C435HD | C435HD - default firmware | | | | Edit Delete |
| 8 | C435HD_TEAMS_1.12.39 | C435HD_TEAMS_1.12.39 | | C435HD_TEAMS_1.12.39.zip | | Edit Delete |
| 9 | C435HD_TEAMS_1.12.42 | C435HD_TEAMS_1.12.42 | | C435HD_TEAMS_1.12.42.zip | | Edit Delete |
| 10 | C448HD | C448HD - default firmware | | | | Edit Delete |
| 11 | C450HD | C450HD - default firmware | | | | Edit Delete |
| 12 | C450HD_TEAMS_1.10.126 | C450HD_TEAMS_1.10.126 | | C450HD_TEAMS_1.10.126.zip | | Edit Delete |
| 13 | C450HD_TEAMS_1.10.139 | C450HD_TEAMS_1.10.139 | | C450HD_TEAMS_1.10.139.zip | | Edit Delete |
| 14 | C450HD_TEAMS_1.8.303 | C450HD_TEAMS_1.8.303 | | C450HD_TEAMS_1.8.303.zip | | Edit Delete |
| 15 | C470HD | C470HD - default firmware | | | | Edit Delete |
| 16 | C470HD_TEAMS_1.10.126 | C470HD_TEAMS_1.10.126 | | C470HD_TEAMS_1.10.126.zip | | Edit Delete |
| 17 | C470HD_TEAMS_1.10.139 | C470HD_TEAMS_1.10.139 | | C470HD_TEAMS_1.10.139.zip | | Edit Delete |
| 18 | C470HD_TEAMS_1.8.303 | C470HD_TEAMS_1.8.303 | | C470HD_TEAMS_1.8.303.zip | | Edit Delete |
| 19 | HRS | HRS - default firmware | | | | Edit Delete |
| 20 | RX50 | RX50 - default firmware | | | | Edit Delete |
| 21 | RXV80 | RXV80 - default firmware | | | | Edit Delete |

For information on third-party vendor products, see the *Device Manager for Third-Party Vendor Products Administrator's Manual*.

In this page you can

- View all .img firmware files currently located on the server
- Add a new device firmware file. Note that if default names are used (e.g., 420HD.img), all devices of this type will automatically use it.
- Manage the .dfu firmware files of the Huddle Room Solution (HRS) speakers.
- Filter by filename the .img firmware files listed

- Determine if the device has firmware or not. If the device does not have firmware, its name will be red-coded and a tool tip will indicate a missing firmware file when you point the cursor at it.

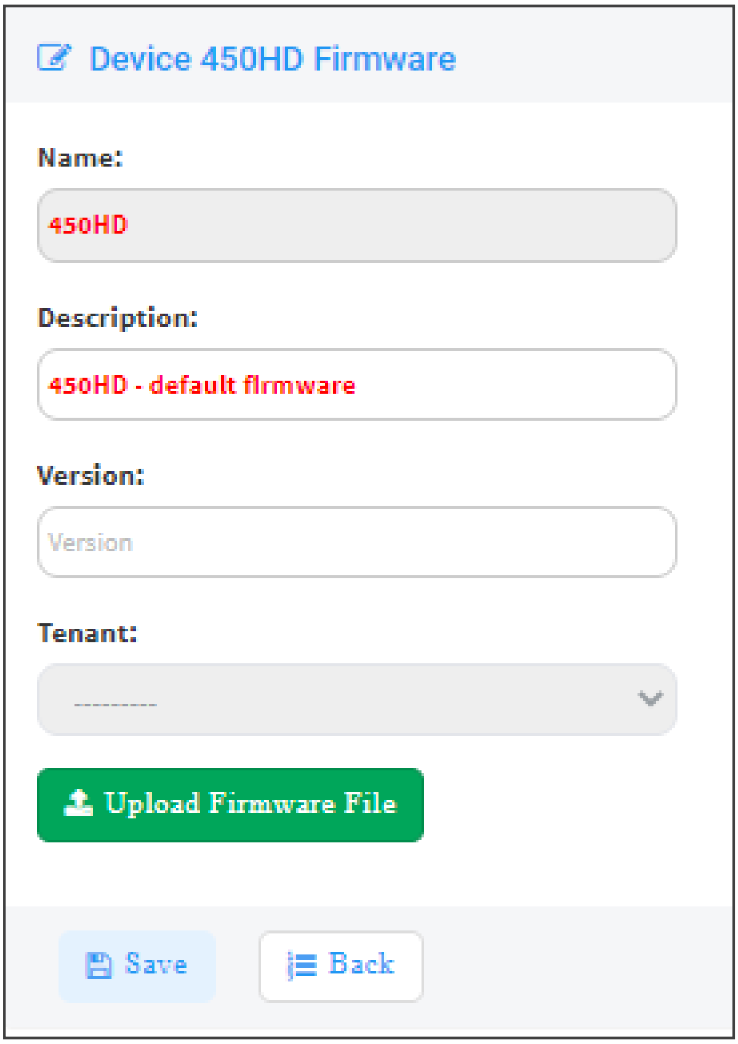


The firmware file is missing in the system.

450HD - default firmware

- If this is the case, upload the device's .img firmware file that you obtained from AudioCodes, to the OVOC provisioning server:

a. Click the red-coded name of the phone.



Device 450HD Firmware

Name: 450HD

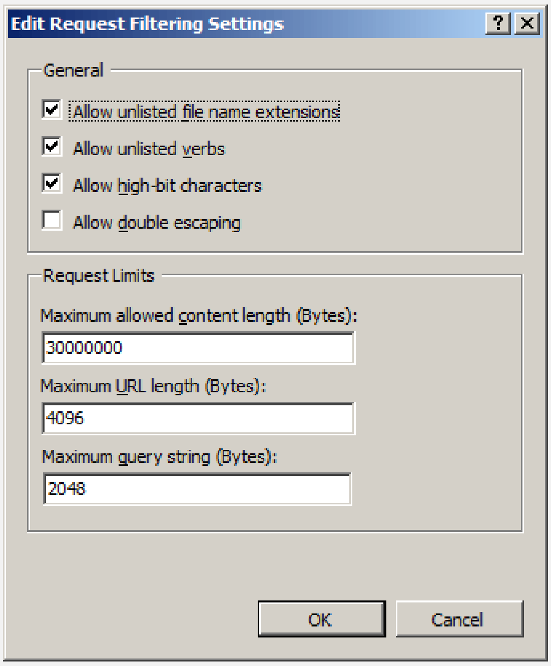
Description: 450HD - default firmware

Version: Version

Tenant: ---------

b. Click the **Upload firmware file** button and then navigate to the .img file you received from AudioCodes and put on the OVOC provisioning server. You can perform this part of the installation procedure before or after configuring your enterprise's DHCP Server with DHCP Option 160.

- If Microsoft's Internet Information Services (IIS) web server is deployed in the network, you need to change the default value of the parameter 'Max allowed content length (Bytes)' (shown in the following figure) to the size of the .img file (at least) before uploading the .img file of the 445HD or 440HD phone to the Device Manager Pro.
- If it's left unchanged at the Microsoft default, the .img file for the 445HD and 440HD phone will not be uploaded to the Device Manager Pro because it's heavier than the Microsoft default.


Edit Request Filtering Settings

General

☑ Allow unlisted file name extensions

☑ Allow unlisted verbs

☑ Allow high-bit characters

☐ Allow double escaping

Request Limits

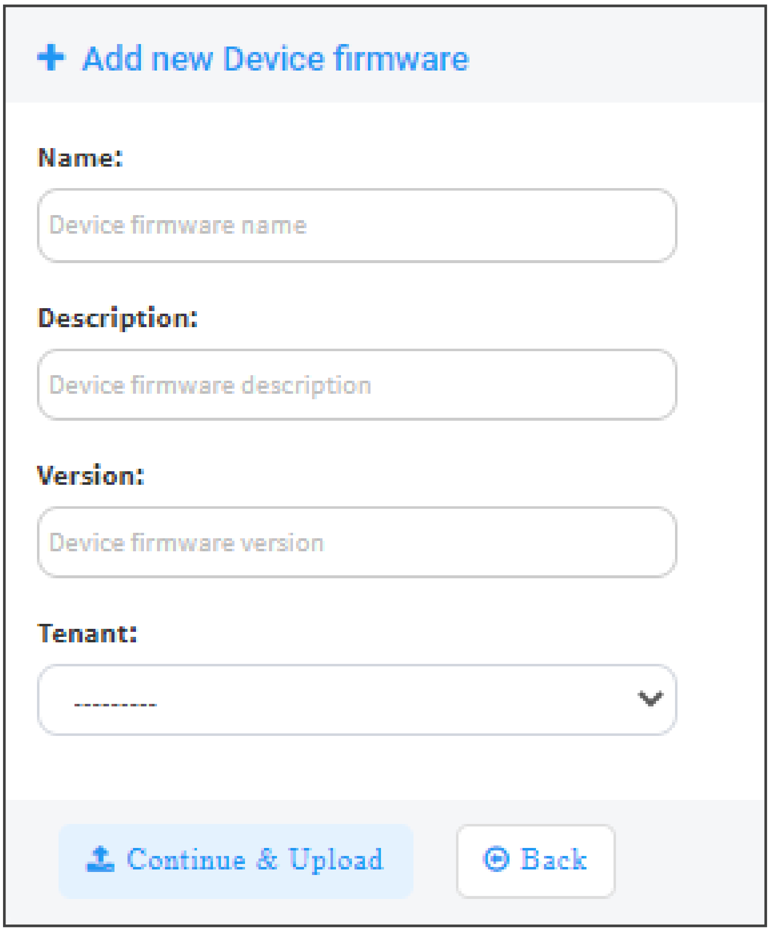
Maximum allowed content length (Bytes): 30000000

Maximum URL length (Bytes): 4096

Maximum query string (Bytes): 2048

- After an .img firmware file has been uploaded to a phone, you can download it to your pc. Click the device's name and then in the screen that opens, click the **Download firmware file** button.
- Edit a device's .img firmware file. Click the name or click the **Edit** button in the row.
- Delete any .img firmware file listed. Click the **Delete** button in the row.
- Manage .img firmware files by grouping them.

  a. In the 'Device firmware files' page, click the **Add New Device Firmware** button located in the upper right corner.



Add new Device firmware

Name:

Device firmware name

Description:

Device firmware description

Version:

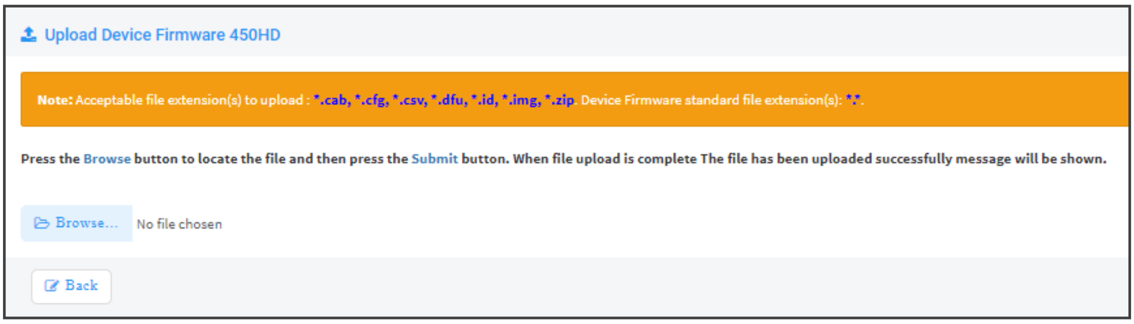
Device firmware version

Tenant:

----------

b. Define an intuitive 'Name' and 'Description' to facilitate easy identification. You can leave the 'Version' field empty, and then click **Continue & Upload**.

c. Click **Upload firmware file**:



Upload Device Firmware 450HD

**Note:** Acceptable file extension(s) to upload : *.cab, *.cfg, *.csv, *.dfu, *.id, *.img, *.zip. Device Firmware standard file extension(s): *.*.

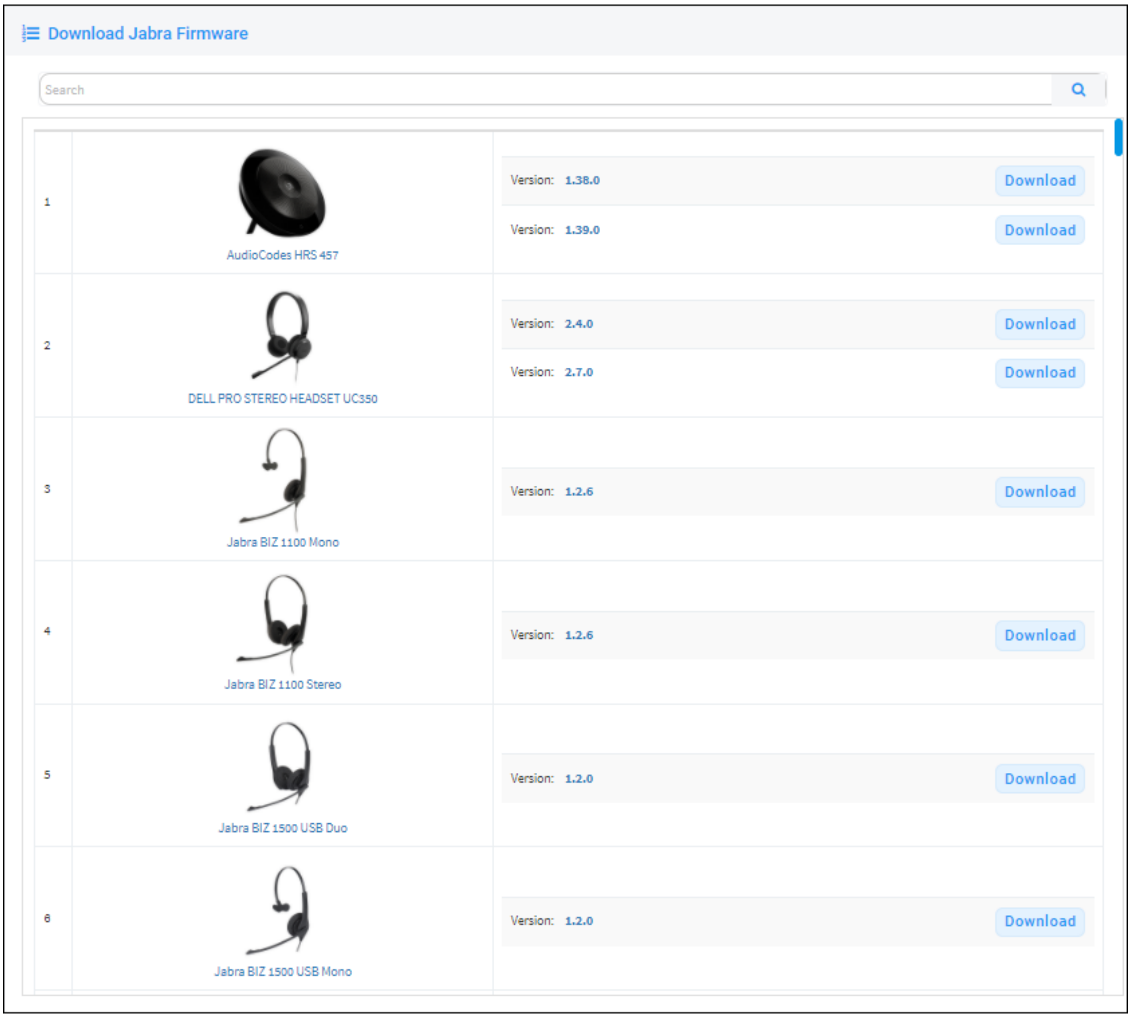
Press the Browse button to locate the file and then press the Submit button. When file upload is complete The file has been uploaded successfully message will be shown.

No file chosen

d. Click **Browse**, navigate to the .img file, and then click **Save**; the 'Version' field is populated and the .img file is uploaded to the phone.

### ➢ To download Jabra firmware files:

1. In the 'Device firmware files' page, click the **Download Jabra Firmware** button.



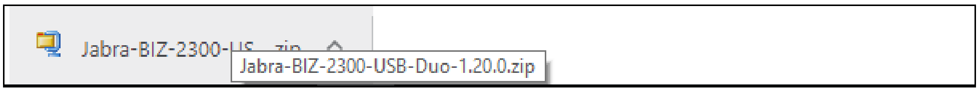
Download Jabra Firmware

Search

| | | |
|---|---|---|
| 1 | AudioCodes HRS 457 | Version: 1.38.0 Download<br>Version: 1.39.0 Download |
| 2 | DELL PRO STEREO HEADSET UC350 | Version: 2.4.0 Download<br>Version: 2.7.0 Download |
| 3 | Jabra BIZ 1100 Mono | Version: 1.2.6 Download |
| 4 | Jabra BIZ 1100 Stereo | Version: 1.2.6 Download |
| 5 | Jabra BIZ 1500 USB Duo | Version: 1.2.0 Download |
| 6 | Jabra BIZ 1500 USB Mono | Version: 1.2.0 Download |

2. Locate the device firmware you require; point your cursor over each entry for detailed information on each device to be displayed, and then click the **Download** button adjacent to the device whose firmware you require.

3. After the download, view the downloaded file indication in the lowermost left corner of the page.



Jabra-BIZ-2300-US....zip

Jabra-BIZ-2300-USB-Duo-1.20.0.zip

4. To upload the file to the device, follow the same procedure as that described for uploading phone firmware.

## Viewing Your License

Use of OVOC server platform processes is managed by a license that controls the time period validity for the use of the platform.

The License page displays the license's properties, including the number of days remaining until it expires.

### ➢ To view your license's properties:

1. Open the License Properties page (**Setup** > **System** > **License**).
2. Use the table below as reference.

| Action | Description |
|---|---|
| Status | Indicates the license's status (Enable or Disable). If enabled and the configured time expires, connection to the OVOC server platform is denied. When it expires, the Device Manager Pro is rendered non-usable. Contact your AudioCodes partner if the license expires. |
| Expiration Date | Displays **DD:MM:YY**. |
| Days Left | The number of days remaining until your license expires. Minus indicates your license has expired. Contact your AudioCodes partner if the license expires. |
| Number of devices | The total number of devices deployed in your enterprise network. |

⚠ If a license expires, communications with all servers will be suspended; users will not be able to log in, and it will not be possible to add new phones.

The time zone is determined by the OVOC server's Date & Time menu settings. If an expiration date is not configured, the 'Expiration Date' field displays **Unlimited**.

⚠

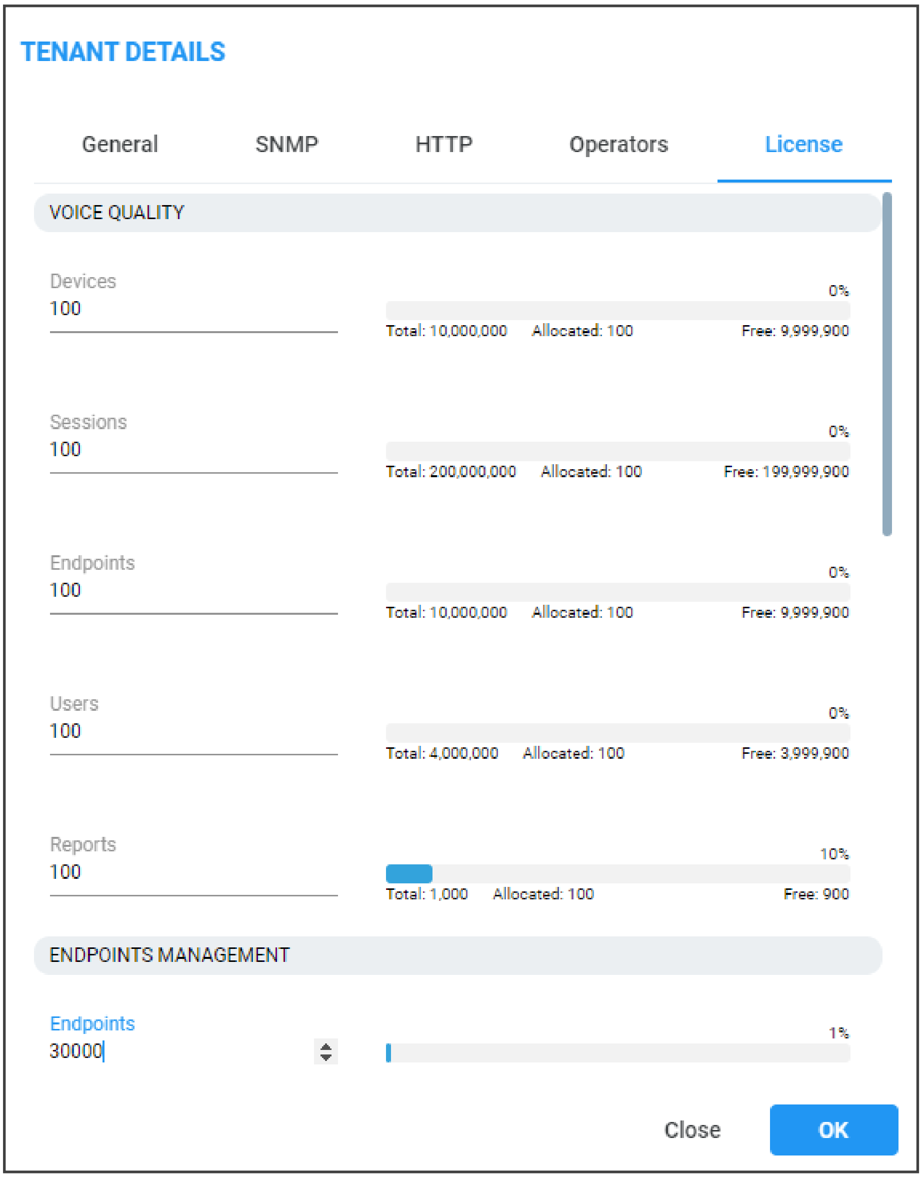
- As the license's expiration date approaches, warning alarms are issued:
  - ✓ A Major alarm is sent when 80% of the period defined in the currently running device's license is consumed
  - ✓ A Critical alarm is sent when 100% of the period defined in the currently running device's license is consumed
- When the maximum number of devices reporting to OVOC is exceeded, the OVOC server blocks them and sends an alert that is displayed in the Home page.

## Licensing Endpoints

You can license endpoints using OVOC (see also the *One Voice Operations Center User's Manual*).

### ➢ To license endpoints:

1. When editing a tenant, click the **License** tab in the OVOC's Tenant Details screen and then scroll down to the 'Endpoints Management' section.



TENANT DETAILS

VOICE QUALITY

Devices: 100 — 0% — Total: 10,000,000 Allocated: 100 Free: 9,999,900

Sessions: 100 — 0% — Total: 200,000,000 Allocated: 100 Free: 199,999,900

Endpoints: 100 — 0% — Total: 10,000,000 Allocated: 100 Free: 9,999,900

Users: 100 — 0% — Total: 4,000,000 Allocated: 100 Free: 3,999,900

Reports: 100 — 10% — Total: 1,000 Allocated: 100 Free: 900

ENDPOINTS MANAGEMENT

Endpoints: 30000 — 1%

2. In the Endpoints field, enter the number of endpoints the Device Manager Pro application supports for this tenant (30000 maximum), and then click **OK**.

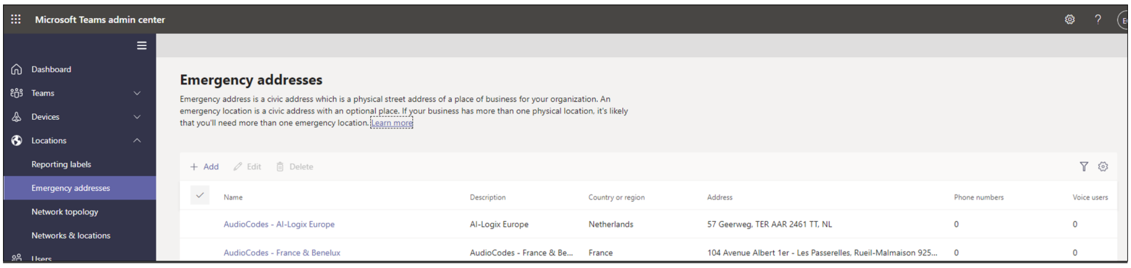
## Enabling Calls to Emergency Numbers

The documentation here shows how to enable users to make emergency calls to emergency numbers (E911) from Skype for Business IP phones. It'll help you get started with configuring the infrastructure elements and call routing needed for making dynamic emergency calls.

- 'Dynamic' means the Teams client gets the emergency address/location based on the network location it is at and transmits it directly to the Public Safety Answering Point (PSAP), bypassing the Emergency Call Relay Center (ECRC).
- Based on the network topology that the tenant administrator defines, the Teams client provides network connectivity information in a request to the Teams Location Information Service (LIS). If there's a match, the Teams LIS returns a location to the client. This location data is transmitted back to the client. See here for more on configuring dynamic emergency calling.
- 'Infrastructure elements' refers to information about the physical address of the building in which the devices are located and the network elements and their locations within it.

### ➢ To configure emergency locations in Microsoft Teams admin center:

1. In the Microsoft Teams admin center, open the 'Emergency addresses' page.

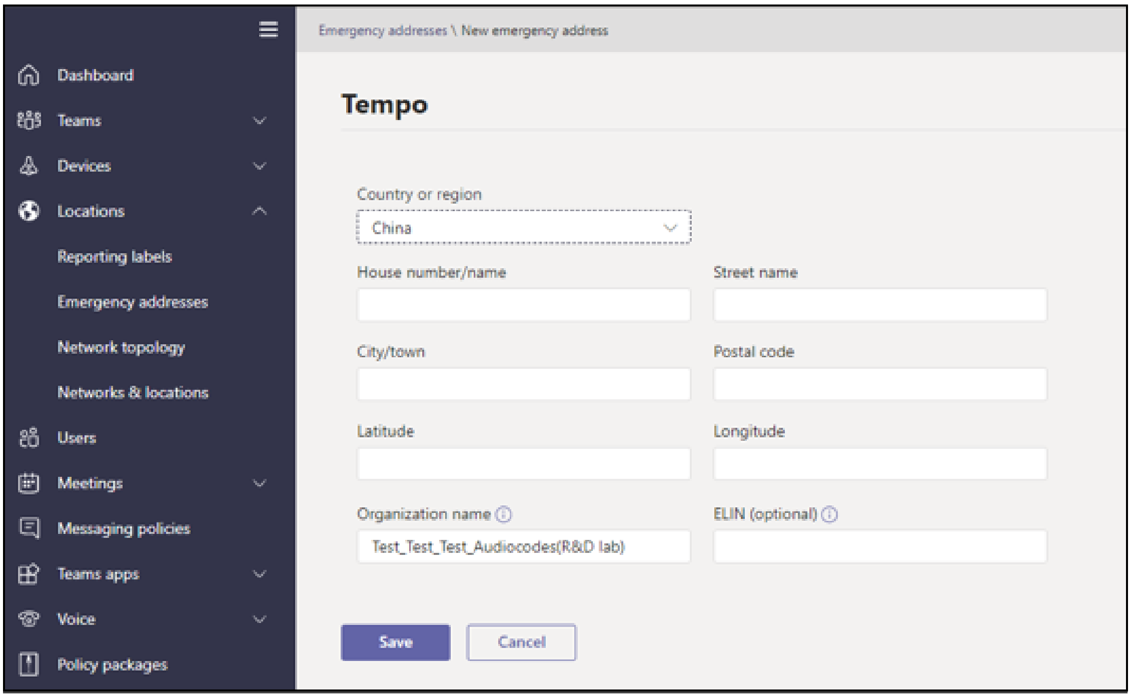


Emergency addresses

Emergency address is a civic address which is a physical street address of a place of business for your organization. An emergency location is a civic address with an optional place. If your business has more than one physical location, it's likely that you'll need more than one emergency location. Learn more

| Name | Description | Country or region | Address | Phone numbers | Voice users |
|---|---|---|---|---|---|
| AudioCodes - AI-Logix Europe | AI-Logix Europe | Netherlands | 57 Geerweg, TER AAR 2461 TT, NL | 0 | 0 |
| AudioCodes - France & Benelux | AudioCodes - France & Be... | France | 104 Avenue Albert 1er - Les Passerelles, Rueil-Malmaison 925... | 0 | 0 |

2. Add addresses using the preceding and next figure as reference.



Emergency addresses \ New emergency address

Tempo

Country or region: China

House number/name:

Street name:

City/town:

Postal code:

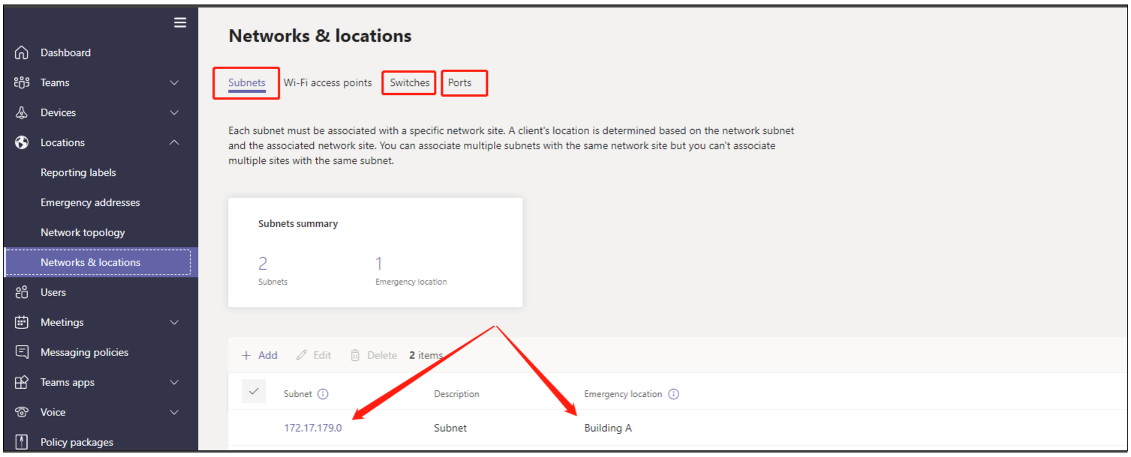
Latitude:

Longitude:

Organization name: Test_Test_Test_Audiocodes(R&D lab)

ELIN (optional):

3. Click **Save** and then open the 'Networks & locations' page.



Each subnet must be associated with a specific network site. A client's location is determined based on the network subnet and the associated network site. You can associate multiple subnets with the same network site but you can't associate multiple sites with the same subnet.

Subnets summary

2 Subnets

1 Emergency location

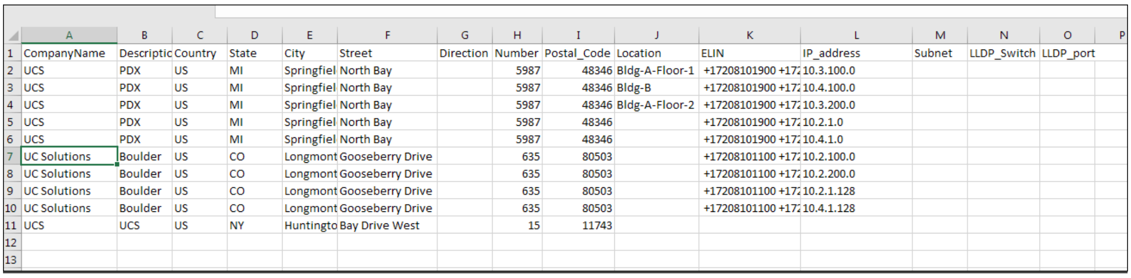
| Subnet | Description | Emergency location |
|---|---|---|
| 172.17.179.0 | Subnet | Building A |

4. Assign an emergency address to the network site using the preceding figure as reference.

After configuring the emergency locations in the Microsoft Teams admin center, you can import them into the Device Manager.

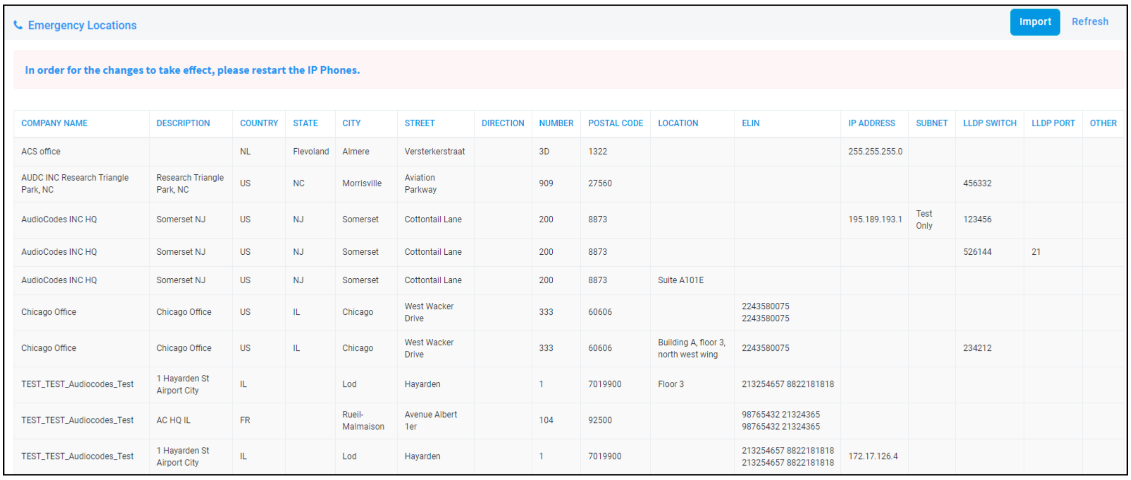
### ➢ To import emergency locations into the Device Manager:

1. After configuring emergency locations in Microsoft Teams admin center, open the Emergency Locations page in the Device Manager (**Setup** > **System** > **Emergency Locations**).
2. Click the **Import** button; a script exports the emergency locations from the Microsoft Teams admin center into OVOC from where they're imported into the Device Manager.
3. Navigate to the folder in which the CSV file is saved.



|  | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CompanyName | Descriptic | Country | State | City | Street | Direction | Number | Postal_Code | Location | ELIN | IP_address | Subnet | LLDP_Switch | LLDP_port |  |
| 2 | UCS | PDX | US | MI | Springfiel | North Bay |  | 5987 | 48346 | Bldg-A-Floor-1 | +17208101900 +172 | 10.3.100.0 |  |  |  |  |
| 3 | UCS | PDX | US | MI | Springfiel | North Bay |  | 5987 | 48346 | Bldg-B | +17208101900 +172 | 10.4.100.0 |  |  |  |  |
| 4 | UCS | PDX | US | MI | Springfiel | North Bay |  | 5987 | 48346 | Bldg-A-Floor-2 | +17208101900 +172 | 10.3.200.0 |  |  |  |  |
| 5 | UCS | PDX | US | MI | Springfiel | North Bay |  | 5987 | 48346 |  | +17208101900 +172 | 10.2.1.0 |  |  |  |  |
| 6 | UCS | PDX | US | MI | Springfiel | North Bay |  | 5987 | 48346 |  | +17208101900 +172 | 10.4.1.0 |  |  |  |  |
| 7 | UC Solutions | Boulder | US | CO | Longmont | Gooseberry Drive |  | 635 | 80503 |  | +17208101100 +172 | 10.2.100.0 |  |  |  |  |
| 8 | UC Solutions | Boulder | US | CO | Longmont | Gooseberry Drive |  | 635 | 80503 |  | +17208101100 +172 | 10.2.200.0 |  |  |  |  |
| 9 | UC Solutions | Boulder | US | CO | Longmont | Gooseberry Drive |  | 635 | 80503 |  | +17208101100 +172 | 10.2.1.128 |  |  |  |  |
| 10 | UC Solutions | Boulder | US | CO | Longmont | Gooseberry Drive |  | 635 | 80503 |  | +17208101100 +172 | 10.4.1.128 |  |  |  |  |
| 11 | UCS | UCS | US | NY | Huntingto | Bay Drive West |  | 15 | 11743 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

After the CSV file is imported, the locations are displayed in the Device Manager's Emergency Locations table. The Device Manager adds the values from the CSV without any manipulation except for removing leading / trailing white spaces.



In order for the changes to take effect, please restart the IP Phones.

| COMPANY NAME | DESCRIPTION | COUNTRY | STATE | CITY | STREET | DIRECTION | NUMBER | POSTAL CODE | LOCATION | ELIN | IP ADDRESS | SUBNET | LLDP SWITCH | LLDP PORT | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS office | | NL | Flevoland | Almere | Versterkerstraat | | 3D | 1322 | | | 255.255.255.0 | | | | |
| AUDC INC Research Triangle Park, NC | Research Triangle Park, NC | US | NC | Morrisville | Aviation Parkway | | 909 | 27560 | | | | | 456332 | | |
| AudioCodes INC HQ | Somerset NJ | US | NJ | Somerset | Cottontail Lane | | 200 | 8873 | | | 195.189.193.1 | Test Only | 123456 | | |
| AudioCodes INC HQ | Somerset NJ | US | NJ | Somerset | Cottontail Lane | | 200 | 8873 | | | | | 526144 | 21 | |
| AudioCodes INC HQ | Somerset NJ | US | NJ | Somerset | Cottontail Lane | | 200 | 8873 | Suite A101E | | | | | | |
| Chicago Office | Chicago Office | US | IL | Chicago | West Wacker Drive | | 333 | 60606 | | 2243580075<br>2243580075 | | | | | |
| Chicago Office | Chicago Office | US | IL | Chicago | West Wacker Drive | | 333 | 60606 | Building A, floor 3, north west wing | 2243580075 | | | 234212 | | |
| TEST_TEST_Audiocodes_Test | 1 Hayarden St Airport City | IL | | Lod | Hayarden | | 1 | 7019900 | Floor 3 | 213254657 8822181818 | | | | | |
| TEST_TEST_Audiocodes_Test | AC HQ IL | FR | | Rueil-Malmaison | Avenue Albert 1er | | 104 | 92500 | | 98765432 21324365<br>98765432 21324365 | | | | | |
| TEST_TEST_Audiocodes_Test | 1 Hayarden St Airport City | IL | | Lod | Hayarden | | 1 | 7019900 | | 213254657 8822181818<br>213254657 8822181818 | 172.17.126.4 | | | | |

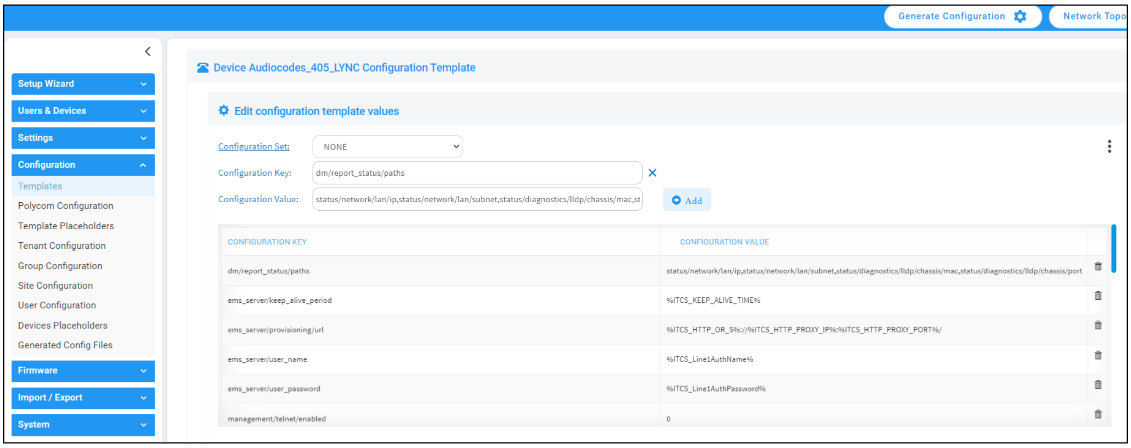
**4.** View the following columns in the newly created Emergency Locations table:

- Company Name - the name of the company in which the devices are deployed
- Description - a description of the company in which the devices are deployed
- Country - the name of the country in which the company is located
- State - the name of the state in which the company is located
- City - the name of the city in which the company is located
- Street - the name of the street in which the company is located
- Direction
- Number - the street number of the company
- Postal Code - the postal code of the company
- Location - the company's department in which the devices are deployed
- ELIN - Emergency Location Identification Number. A 10-digit DID number that can be obtained from the local exchange carrier (LEC). Provide it to the public safety answering point (PSAP) for 911 calls.
- IP address - the device's IP address in the network
- Subnet - the subnet in which the device is deployed
- LLDP Switch - Link Layer Discovery Protocol switch. Devices use this link layer protocol to advertize their identity, capabilities and neighbors in a LAN based on IEEE 802.
- LLDP port - Link Layer Discovery Protocol port.
- OTHER

⚠ Make sure two rows (or more) in the Emergency Locations table do not contain same combination of:

- LLDP Switch Chassis number + LLDP port
- LLDP Switch Chassis number + EMPTY LLDP port
- IP address

5. After importing the CSV file, edit the configuration template in the Configuration Template page (**Setup** > **Configuration** > **Templates**).



Device Audiocodes_405_LYNC Configuration Template

Edit configuration template values

Configuration Set: NONE

Configuration Key: dm/report_status/paths

Configuration Value: status/network/lan/ip,status/network/lan/subnet,status/diagnostics/lldp/chassis/mac,st

| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| dm/report_status/paths | status/network/lan/ip,status/network/lan/subnet,status/diagnostics/lldp/chassis/mac,status/diagnostics/lldp/chassis/port |
| ems_server/keep_alive_period | %ITCS_KEEP_ALIVE_TIME% |
| ems_server/provisioning/url | %ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/ |
| ems_server/user_name | %ITCS_Line1AuthName% |
| ems_server/user_password | %ITCS_Line1AuthPassword% |
| management/telnet/enabled | 0 |

6. Configure the following (refer to the preceding figure):

- Set the parameter 'Configuration Key' to **dm/report_status/paths**
- Set the parameter 'Configuration Value' to

  **dm/report_status/paths=status/network/lan/*,**

  **status/diagnostics/lldp/chassis/chassisId,**

  **status/diagnostics/lldp/chassis/portId**

⚠
- Configuration of these two parameters is mandatory for the feature to function.
- The configuration can be performed at either the device level, Tenant level, Group level or Site level.

# Managing Templates

This topic shows how to manage templates.

## Selecting a Template

Templates are available

- per tenant
- per phone model
- per model for Microsoft Skype for Business phones

- per model for Microsoft Teams phones
- per model for regular (non-Skype for Business) third-party phones

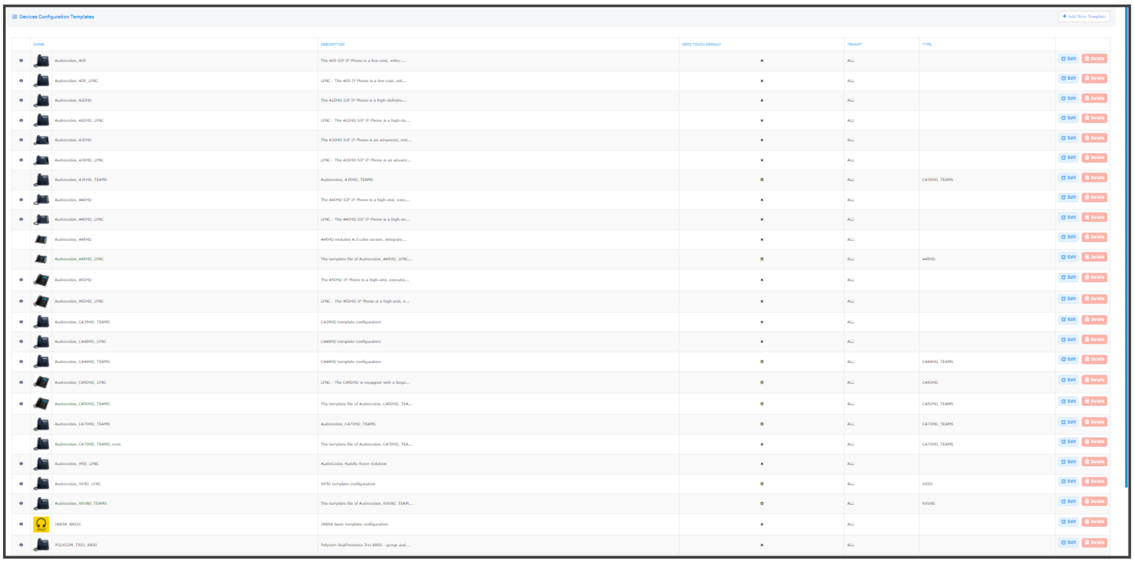
Depending on the tenant, model and the server in the enterprise, select a template for:

- AudioCodes 405
- AudioCodes 420HD
- AudioCodes 430HD
- AudioCodes 440HD
- AudioCodes 450HD
- AudioCodes 420HD Skype for Business
- AudioCodes 430HD Skype for Business
- AudioCodes 440HD Skype for Business
- AudioCodes 450HD Skype for Business
- AudioCodes C435HD Teams
- AudioCodes C448HD Teams
- AudioCodes C450HD Teams
- AudioCodes C455HD Teams
- AudioCodes C470HD Teams
- AudioCodes RXV80 Standalone Video Collaboration Bar for Teams
- AudioCodes RXV81 Meeting Room Solution for Microsoft Teams
- AudioCodes RXV100 Meeting Room Solution for Microsoft Teams
- Jabra
- Poly Trio 8800
- Poly VVX
- Poly CCX 500/600
- Spectralink 8440

> For information on third-party vendor products, see the *Device Manager for Third-Party Vendor Products Administrator's Manual*.

➢ **To select a template:**

- Open the Devices Configuration Templates page (**Setup** > **Configuration** > **Templates**):



Devices Configuration Templates

+ Add New Template

| | | NAME | DESCRIPTION | ZERO TOUCH DEFAULT | TENANT | TYPE | |
|---|---|---|---|---|---|---|---|
| ⓘ | | Audiocodes_405 | The 405 SIP IP Phone is a low-cost, entry-... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_405_LYNC | LYNC - The 405 IP Phone is a low-cost, ent... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_420HD | The 420HD SIP IP Phone is a high-definitio... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_420HD_LYNC | LYNC - The 420HD SIP IP Phone is a high-de... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_430HD | The 430HD SIP IP Phone is an advanced, mid... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_430HD_LYNC | LYNC - The 430HD SIP IP Phone is an advanc... | ✗ | ALL | | Edit Delete |
| | | Audiocodes_435HD_TEAMS | Audiocodes_435HD_TEAMS | ✓ | ALL | C435HD_TEAMS | Edit Delete |
| ⓘ | | Audiocodes_440HD | The 440HD SIP IP Phone is a high-end, exec... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_440HD_LYNC | LYNC - The 440HD SIP IP Phone is a high-en... | ✗ | ALL | | Edit Delete |
| | | Audiocodes_445HD | 445HD includes 4.3 color screen, integrate... | ✗ | ALL | | Edit Delete |
| | | Audiocodes_445HD_LYNC | The template file of Audiocodes_445HD_LYNC... | ✓ | ALL | 445HD | Edit Delete |
| ⓘ | | Audiocodes_450HD | The 450HD IP Phone is a high-end, executiv... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_450HD_LYNC | LYNC - The 450HD IP Phone is a high-end, e... | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_C435HD_TEAMS | C435HD template configuration | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_C448HD_LYNC | C448HD template configuration | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_C448HD_TEAMS | C448HD template configuration | ✓ | ALL | C448HD_TEAMS | Edit Delete |
| ⓘ | | Audiocodes_C450HD_LYNC | LYNC - The C450HD is equipped with a large... | ✓ | ALL | C450HD | Edit Delete |
| ⓘ | | Audiocodes_C450HD_TEAMS | The template file of Audiocodes_C450HD_TEA... | ✓ | ALL | C450HD_TEAMS | Edit Delete |
| | | Audiocodes_C470HD_TEAMS | Audiocodes_C470HD_TEAMS | ✓ | ALL | C470HD_TEAMS | Edit Delete |
| | | Audiocodes_C470HD_TEAMS_ovoc | The template file of Audiocodes_C470HD_TEA... | ✗ | ALL | C470HD_TEAMS | Edit Delete |
| ⓘ | | Audiocodes_HRS_LYNC | AudioCodes Huddle Room Solution | ✗ | ALL | | Edit Delete |
| ⓘ | | Audiocodes_RX50_LYNC | RX50 template configuration | ✓ | ALL | RX50 | Edit Delete |
| ⓘ | | Audiocodes_RXV80_TEAMS | The template file of Audiocodes_RXV80_TEAM... | ✓ | ALL | RXV80 | Edit Delete |
| ⓘ | | JABRA_BASIC | JABRA basic template configuration | ✗ | ALL | | Edit Delete |
| ⓘ | | POLYCOM_TRIO_8800 | Polycom RealPresence Trio 8800 - group aud... | ✗ | ALL | | Edit Delete |

- Click ⓘ for more information about the phone whose template is displayed.
- Click **Edit** to modify a template.

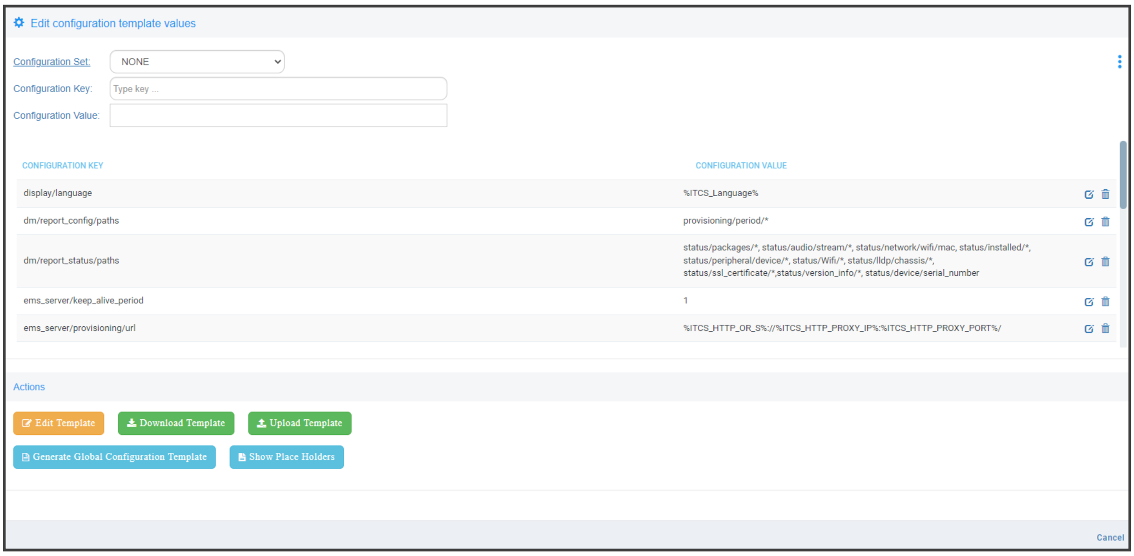
## Editing a Configuration Template

You can edit a device's template but typically it's unnecessary to change it.

> ⚠ For information on third-party vendor products, see the *Device Manager for Third-Party Vendor Products Administrator's Manual*.

### ➢ To edit a template:

1. In the Devices Configuration Templates page (**Setup** > **Configuration** > **Templates**), click the link of the device or its **Edit** icon.



Edit configuration template values

Configuration Set: NONE

Configuration Key: Type key ...

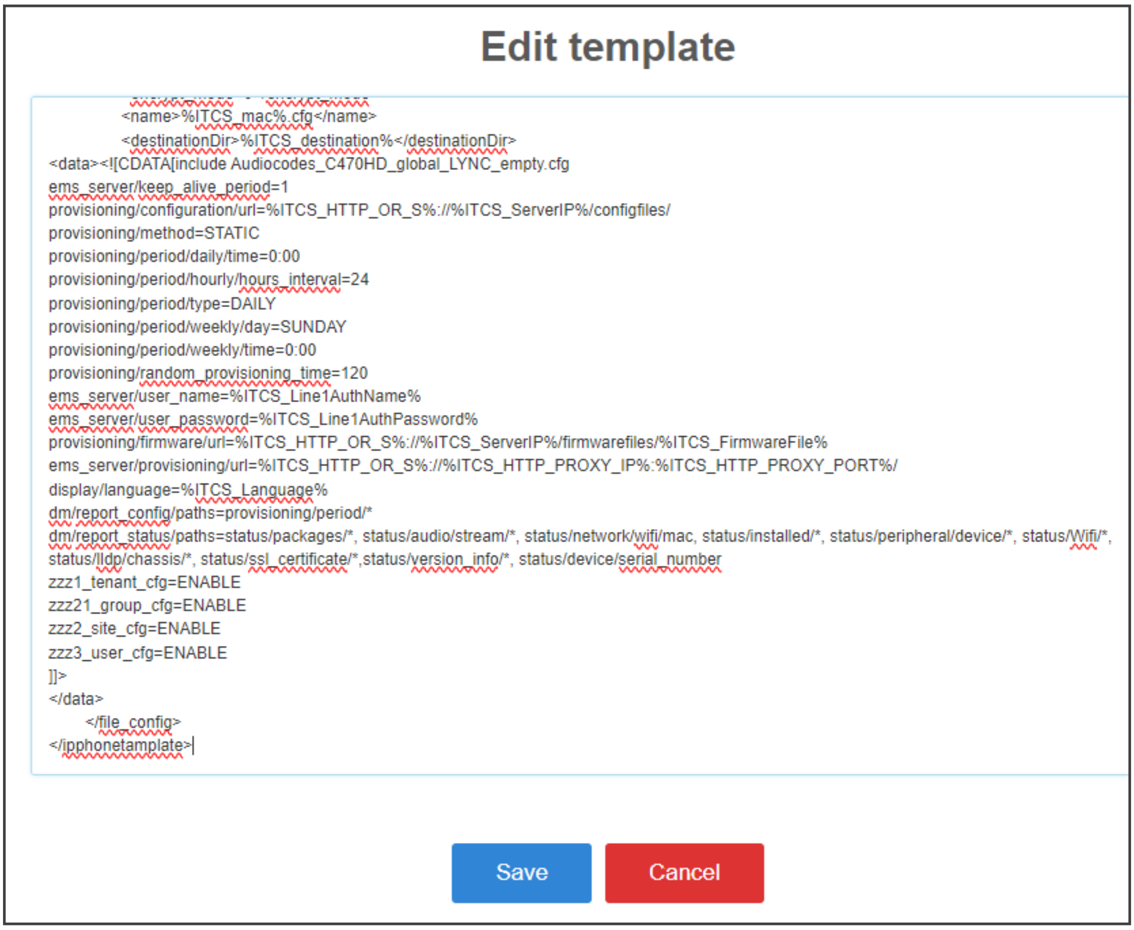
Configuration Value:

| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| display/language | %ITCS_Language% |
| dm/report_config/paths | provisioning/period/* |
| dm/report_status/paths | status/packages/*, status/audio/stream/*, status/network/wifi/mac, status/installed/*, status/peripheral/device/*, status/Wifi/*, status/lldp/chassis/*, status/ssl_certificate/*,status/version_info/*, status/device/serial_number |
| ems_server/keep_alive_period | 1 |
| ems_server/provisioning/url | %ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/ |

Actions

When a new device of model x and tenant y will be connected for the first time to the network, it will use this template.

2. Click the **Edit Template** button; the template opens in an integral editor:

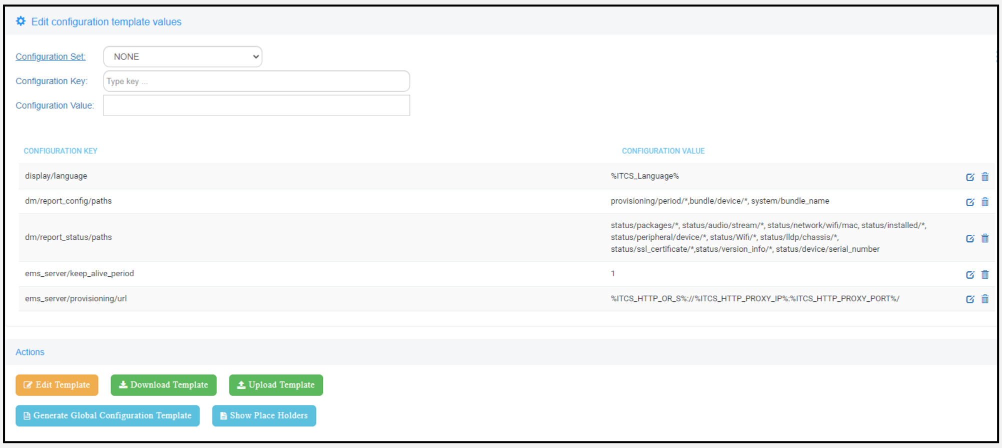


Edit template

```
            <name>%ITCS_mac%.cfg</name>
            <destinationDir>%ITCS_destination%</destinationDir>
<data><![CDATA[include Audiocodes_C470HD_global_LYNC_empty.cfg
ems_server/keep_alive_period=1
provisioning/configuration/url=%ITCS_HTTP_OR_S%://%ITCS_ServerIP%/configfiles/
provisioning/method=STATIC
provisioning/period/daily/time=0:00
provisioning/period/hourly/hours_interval=24
provisioning/period/type=DAILY
provisioning/period/weekly/day=SUNDAY
provisioning/period/weekly/time=0:00
provisioning/random_provisioning_time=120
ems_server/user_name=%ITCS_Line1AuthName%
ems_server/user_password=%ITCS_Line1AuthPassword%
provisioning/firmware/url=%ITCS_HTTP_OR_S%://%ITCS_ServerIP%/firmwarefiles/%ITCS_FirmwareFile%
ems_server/provisioning/url=%ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/
display/language=%ITCS_Language%
dm/report_config/paths=provisioning/period/*
dm/report_status/paths=status/packages/*, status/audio/stream/*, status/network/wifi/mac, status/installed/*, status/peripheral/device/*, status/Wifi/*,
status/lldp/chassis/*, status/ssl_certificate/*,status/version_info/*, status/device/serial_number
zzz1_tenant_cfg=ENABLE
zzz21_group_cfg=ENABLE
zzz2_site_cfg=ENABLE
zzz3_user_cfg=ENABLE
]]>
</data>
      </file_config>
</ipphonetamplate>
```

3. Edit the template and then click **Save**; in the Devices Configuration Templates page, the name of an edited template is displayed in green.

If a device model's template is modified in any way, the Serial Number status parameter **status/device/serial_number** must be added to the template.


Edit configuration template values

Configuration Set: NONE

Configuration Key: Type key ...

Configuration Value:

| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| display/language | %ITCS_Language% |
| dm/report_config/paths | provisioning/period/*,bundle/device/*, system/bundle_name |
| dm/report_status/paths | status/packages/*, status/audio/stream/*, status/network/wifi/mac, status/installed/*, status/peripheral/device/*, status/Wifi/*, status/lldp/chassis/*, status/ssl_certificate/*,status/version_info/*, status/device/serial_number |
| ems_server/keep_alive_period | 1 |
| ems_server/provisioning/url | %ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/ |

SN status reporting is supported by the following models:

UC phones

Teams phones

Windows / Android based Meeting Room devices

Desktop / PC

See the device's *User's & Administrator's Manual* for parameter descriptions.

## About the Template File

The template is an xml file. It defines how a device's configuration file will be generated. The template shows two sections.

- The upper section defines the *global* parameters that will be in the *global* configuration file
- The lower section defines the *private user* parameters that will be in the *device* configuration file

### Restoring a Template to the Default

You can restore a template to the factory default at any time.

➢ **To restore a template to the default:**

- Click the **Restore to default** button (displayed only if a change was made); the template and its description are displayed.

### Downloading a Template

You can download a template, for example, in order to edit it in a PC-based editor.

➢ **To download a template:**

- Click the **Download configuration template** button and save the *xml* file in a folder on your PC.

## Uploading an Edited Template

You can upload a template, for example, after editing it in a PC-based editor.

### ➢ To upload an edited template:

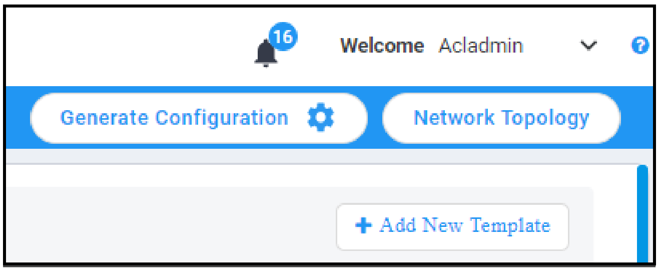
- Click the **Upload template** button and browse to the *xml* template file on your PC. The file will be the new template for the phone model.

## Generating an Edited Template

After editing a template, generate the cfg files for the users/devices with whom/which the template is associated.

### ➢ To generate an edited template:

1. Click the **Generate Configuration** link located in the upper right corner of the screen, shown in the figure below.



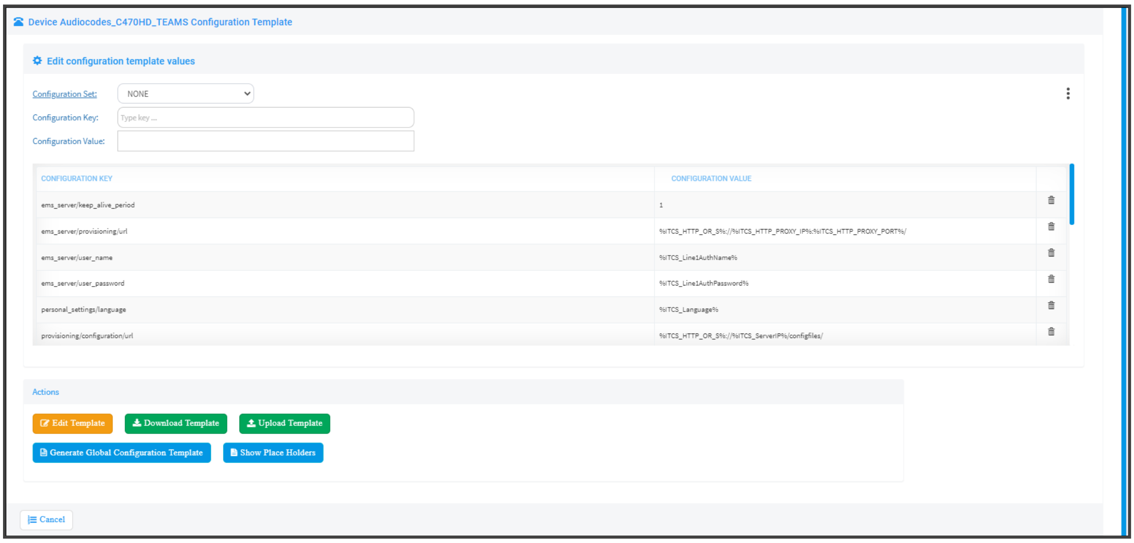
2. In the Manage Multiple Users – Generate Configuration screen that opens shown in the figure below, select the relevant users.
3. After selecting users, click the **Generate Devices Configuration Files** button

## Defining Template Placeholders

Templates include *placeholders* whose values you can define. After defining values, the placeholders are automatically resolved when you generate the template. For example, placeholder **%ITCS_ TimeZoneLocation%** is replaced with local time. Placeholders can be defined per tenant, model, etc. The cfg file includes default values and overwritten values according to configured placeholders. If no placeholder is configured, the cfg file will include only default values.

### ➢ To show placeholders:

1. In the Device Configuration Templates page (**Setup** > **Configuration** > **Templates**), click the **Edit** button in the same row as the device model.



☎ Device Audiocodes_C470HD_TEAMS Configuration Template

Edit configuration template values

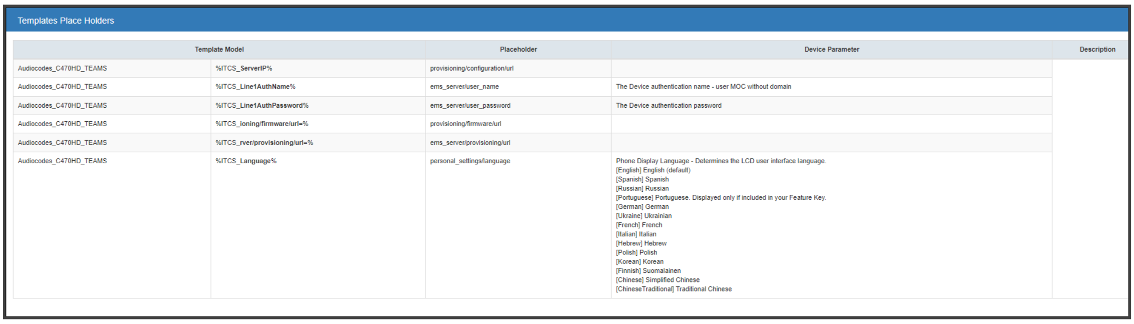
Configuration Set: NONE

Configuration Key: Type key ...

Configuration Value:

| CONFIGURATION KEY | CONFIGURATION VALUE | |
|---|---|---|
| ems_server/keep_alive_period | 1 | 🗑 |
| ems_server/provisioning/url | %ITCS_HTTP_OR_S%://%ITCS_HTTP_PROXY_IP%:%ITCS_HTTP_PROXY_PORT%/ | 🗑 |
| ems_server/user_name | %ITCS_Line1AuthName% | 🗑 |
| ems_server/user_password | %ITCS_Line1AuthPassword% | 🗑 |
| personal_settings/language | %ITCS_Language% | 🗑 |
| provisioning/configuration/url | %ITCS_HTTP_OR_S%://%ITCS_ServerIP%/configfiles/ | 🗑 |

**2.** Click the **Show Placeholders** button.



Templates Place Holders

| Template Model | | Placeholder | Device Parameter | Description |
|---|---|---|---|---|
| Audiocodes_C470HD_TEAMS | %ITCS_ServerIP% | provisioning/configuration/url | | |
| Audiocodes_C470HD_TEAMS | %ITCS_Line1AuthName% | ems_server/user_name | The Device authentication name - user MOC without domain | |
| Audiocodes_C470HD_TEAMS | %ITCS_Line1AuthPassword% | ems_server/user_password | The Device authentication password | |
| Audiocodes_C470HD_TEAMS | %ITCS_ioning/firmware/url=% | provisioning/firmware/url | | |
| Audiocodes_C470HD_TEAMS | %ITCS_rver/provisioning/url=% | ems_server/provisioning/url | | |
| Audiocodes_C470HD_TEAMS | %ITCS_Language% | personal_settings/language | Phone Display Language - Determines the LCD user interface language.<br>[English] English (default)<br>[Spanish] Spanish<br>[Russian] Russian<br>[Portuguese] Portuguese. Displayed only if included in your Feature Key.<br>[German] German<br>[Ukraine] Ukrainian<br>[French] French<br>[Italian] Italian<br>[Hebrew] Hebrew<br>[Polish] Polish<br>[Korean] Korean<br>[Finnish] Suomalainen<br>[Chinese] Simplified Chinese<br>[ChineseTraditional] Traditional Chinese | |

The figure above shows placeholders currently defined in the xml Configuration Template file for the C470HD Teams phone. There are four kinds of placeholders: (1) System (2) Template (3) Tenant (4) Devices.

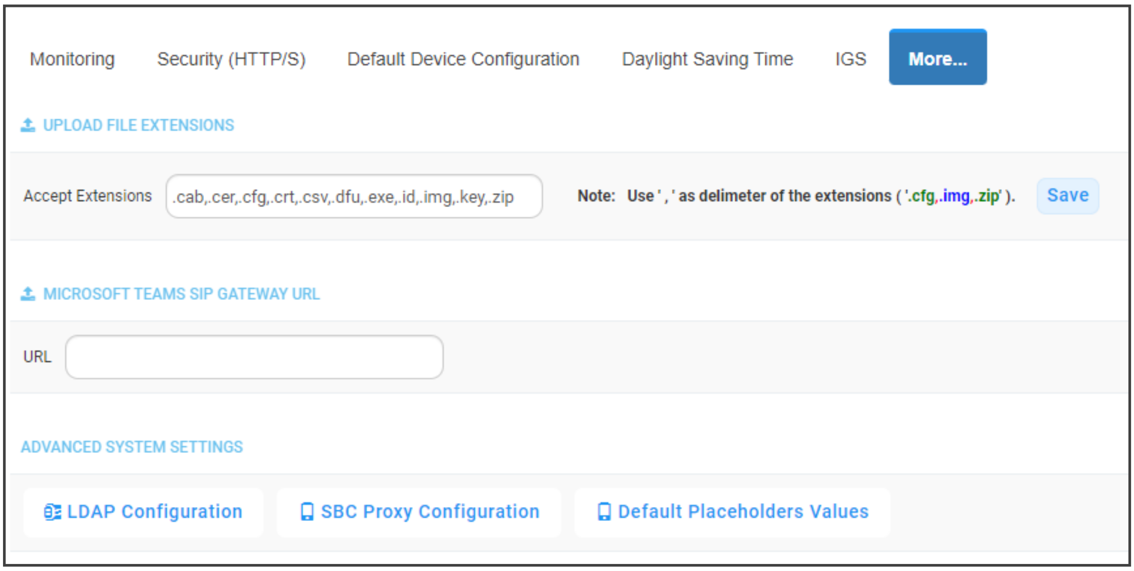
- To add/edit/delete a template placeholder, see Adding a New Template Placeholder on page 121 and Adding a New Template Placeholder on page 121
- To add/edit/delete a tenant placeholder, see Adding a New Tenant Placeholder on page 123 and Editing a Configuration Template on page 115.
- To add/edit/delete a device placeholder, see Devices Placeholders on page 126 and Changing a Device Placeholder Value on page 126

### Viewing Default Placeholders Values

Before defining values for placeholders, you can view the default placeholders values.

➢ **To view default placeholders values:**

**1.** Open the Default Placeholders Values page (**Setup** > **Settings** > **System Settings** and then click the **More...** option).

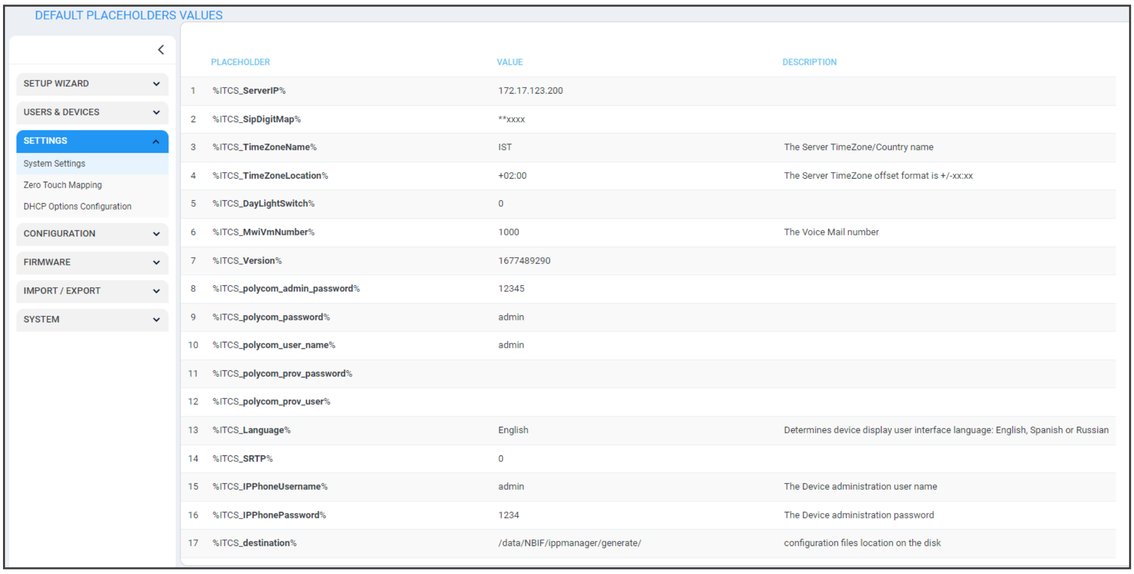


Accept Extensions: .cab,.cer,.cfg,.crt,.csv,.dfu,.exe,.id,.img,.key,.zip

Note: Use ' , ' as delimeter of the extensions ( '.cfg,.img,.zip' ).

URL:

2. Click the **Default Placeholders Values** button.



| | PLACEHOLDER | VALUE | DESCRIPTION |
|---|---|---|---|
| 1 | %ITCS_**ServerIP**% | 172.17.123.200 | |
| 2 | %ITCS_**SipDigitMap**% | **xxxx | |
| 3 | %ITCS_**TimeZoneName**% | IST | The Server TimeZone/Country name |
| 4 | %ITCS_**TimeZoneLocation**% | +02:00 | The Server TimeZone offset format is +/-xx:xx |
| 5 | %ITCS_**DayLightSwitch**% | 0 | |
| 6 | %ITCS_**MwiVmNumber**% | 1000 | The Voice Mail number |
| 7 | %ITCS_**Version**% | 1677489290 | |
| 8 | %ITCS_**polycom_admin_password**% | 12345 | |
| 9 | %ITCS_**polycom_password**% | admin | |
| 10 | %ITCS_**polycom_user_name**% | admin | |
| 11 | %ITCS_**polycom_prov_password**% | | |
| 12 | %ITCS_**polycom_prov_user**% | | |
| 13 | %ITCS_**Language**% | English | Determines device display user interface language: English, Spanish or Russian |
| 14 | %ITCS_**SRTP**% | 0 | |
| 15 | %ITCS_**IPPhoneUsername**% | admin | The Device administration user name |
| 16 | %ITCS_**IPPhonePassword**% | 1234 | The Device administration password |
| 17 | %ITCS_**destination**% | /data/NBIF/ippmanager/generate/ | configuration files location on the disk |

## Template Placeholders

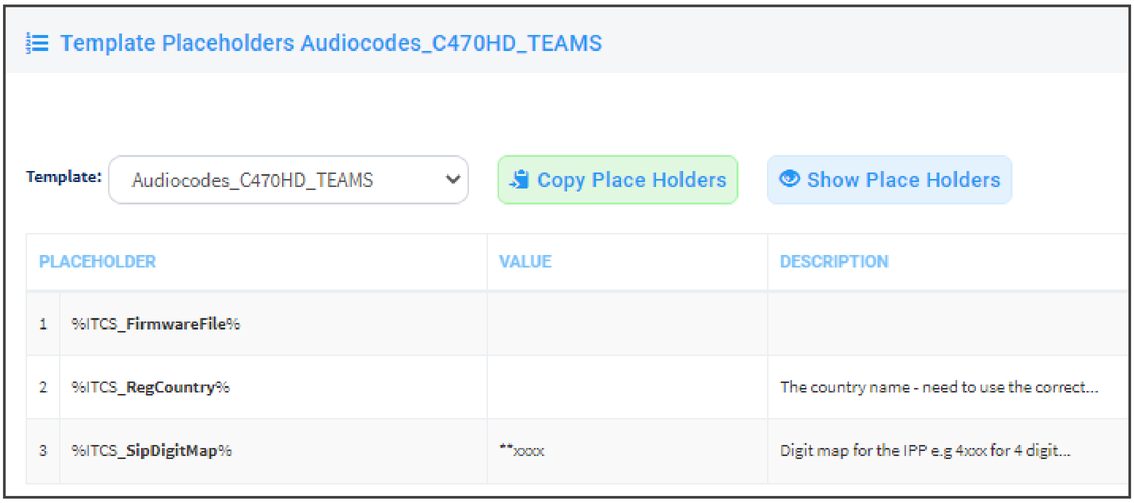
You can edit the values defined for an existing template placeholder and/or you can add a new template placeholder.

### Editing Template Placeholders

You can edit the values for existing template placeholders.

➢ **To edit values for existing template placeholders:**

- Open the Template Placeholders page (**Setup** > **Configuration** > **Template Placeholders**):



Template Placeholders Audiocodes_C470HD_TEAMS

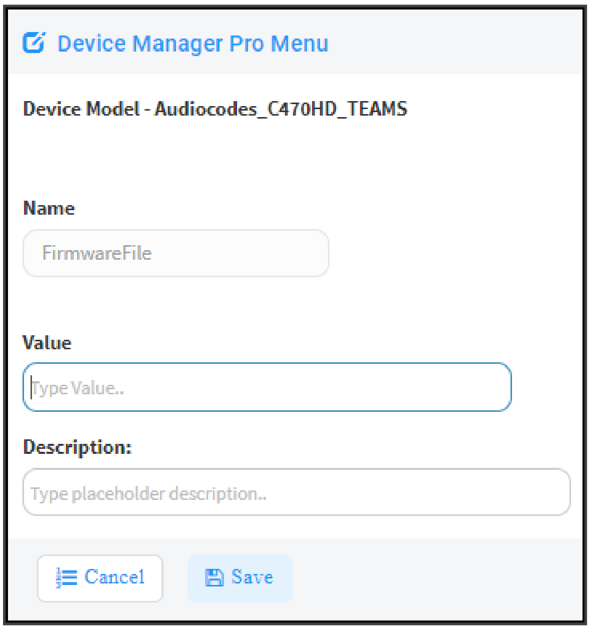
Template: Audiocodes_C470HD_TEAMS

| | PLACEHOLDER | VALUE | DESCRIPTION |
|---|---|---|---|
| 1 | %ITCS_FirmwareFile% | | |
| 2 | %ITCS_RegCountry% | | The country name - need to use the correct... |
| 3 | %ITCS_SipDigitMap% | **xxxx | Digit map for the IPP e.g 4xxx for 4 digit... |

The page shows the placeholders and their values defined for a template.

### ➢ To edit a value of an existing template placeholder:

1. Click the adjacent **Edit** button.



Device Manager Pro Menu

Device Model - Audiocodes_C470HD_TEAMS

Name: FirmwareFile

Value: Type Value..

Description: Type placeholder description..

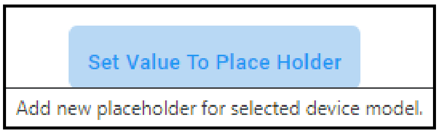
2. In the 'Name' field, you can edit the name of the placeholder.
3. In the 'Value' field, you can edit the value of the placeholder.
4. In the 'Description' field, you can edit the placeholder description.
5. Click **Save**; the edited placeholder is added to the table.

### Adding a New Template Placeholder

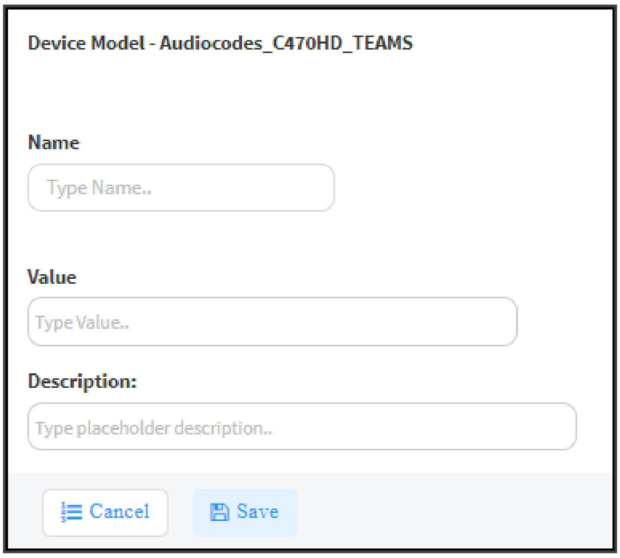
You can add a new template placeholder. A new placeholder can be added and assigned with a new value.

### ➢ To add a new template placeholder:

1. Open the Template Placeholders page (**Setup** > **Configuration** > **Template Placeholders**):
2. From the **Template** dropdown, select the template , e.g., Audiocodes_C470HD_TEAMS.
3. Click the **Set Value to Place Holder** button located in the upper right corner of the screen.



Add new placeholder for selected device model.



Device Model - Audiocodes_C470HD_TEAMS

Name

Type Name..

Value

Type Value..

Description:

Type placeholder description..

4. In the 'Name' field, enter the name of the new placeholder.
5. In the 'Value' field, enter the value of the new placeholder.
6. In the 'Description' field, enter a short description for the new placeholder.
7. Click **Save**; the new placeholder is added to the table.

## Tenant Placeholders

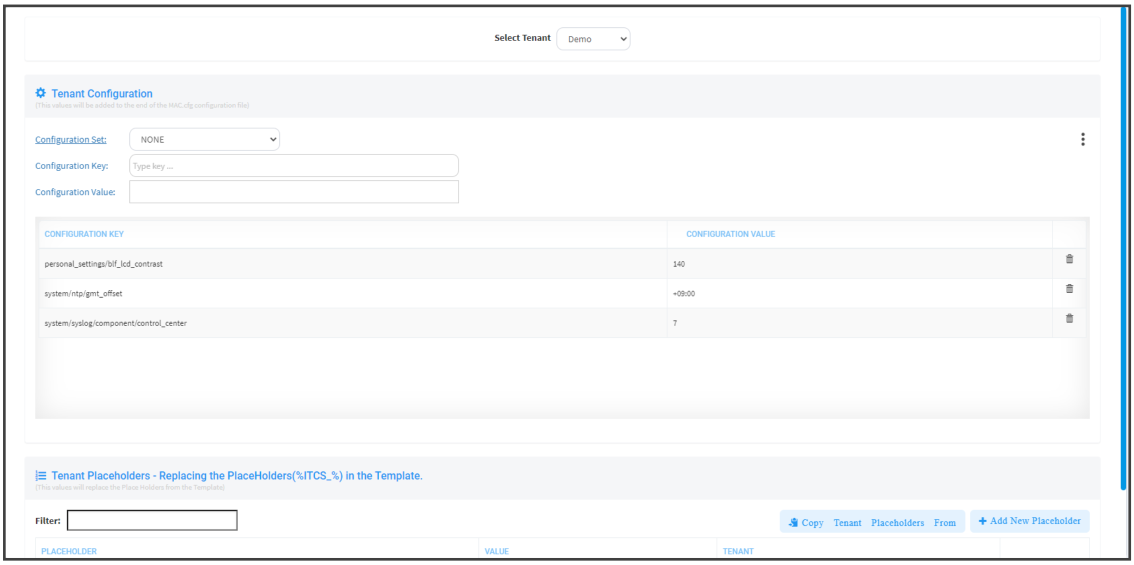
You can edit values for existing tenant placeholders and/or add new tenant placeholders.

### Editing Tenant Placeholders

You can edit the values for existing tenant placeholders.

### ➢ To edit values for existing tenant placeholders:

1. Open the Tenant Configuration page (**Setup** > **Configuration** > **Tenant Configuration**):



Select Tenant: Demo

**Tenant Configuration**
(This values will be added to the end of the MAC.cfg configuration file)

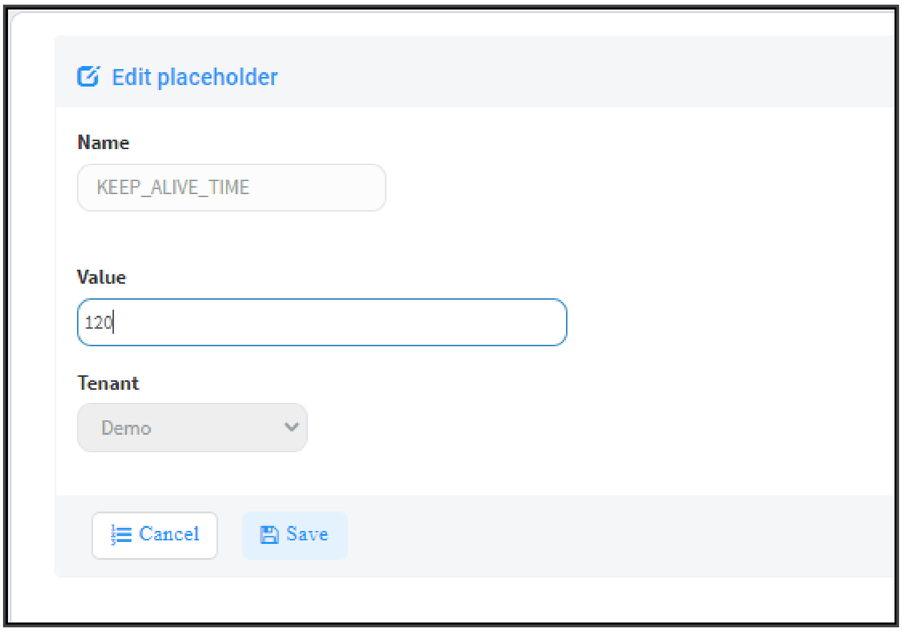
Configuration Set: NONE
Configuration Key: Type key ...
Configuration Value:

| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| personal_settings/blf_lcd_contrast | 140 |
| system/ntp/gmt_offset | +09:00 |
| system/syslog/component/control_center | 7 |

**Tenant Placeholders - Replacing the PlaceHolders(%ITCS_%) in the Template.**
(This values will replace the Place Holders from the Template)

Filter:

2. Under the Tenant Placeholders section, select the placeholder and then click the **Edit** button.



**Edit placeholder**

Name: KEEP_ALIVE_TIME

Value: 120

Tenant: Demo

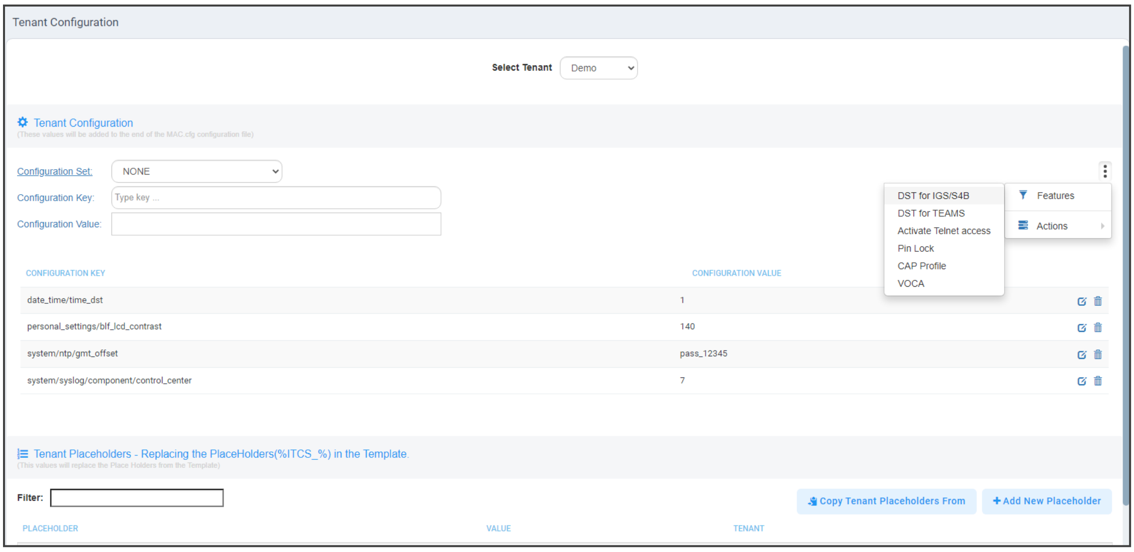
3. In the 'Name' field, you can edit the name of the placeholder.
4. In the 'Value' field, you can edit the value of the placeholder.
5. From the 'Tenant' dropdown, you can select another tenant.
6. Click **Save**; the edited placeholder is added to the table.

### Adding a New Tenant Placeholder

You can add a new tenant placeholder.

➢ **To add a new tenant placeholder:**

1. Open the Tenant Configuration page (**Setup** > **Configuration** > **Tenant Configuration**).



Tenant Configuration

Select Tenant: Demo

Tenant Configuration

(These values will be added to the end of the MAC.cfg configuration file)

Configuration Set: NONE

Configuration Key: Type key ...

Configuration Value:

| CONFIGURATION KEY | CONFIGURATION VALUE |
|---|---|
| date_time/time_dst | 1 |
| personal_settings/blf_lcd_contrast | 140 |
| system/ntp/gmt_offset | pass_12345 |
| system/syslog/component/control_center | 7 |

Tenant Placeholders - Replacing the PlaceHolders(%ITCS_%) in the Template.

(This values will replace the Place Holders from the Template)

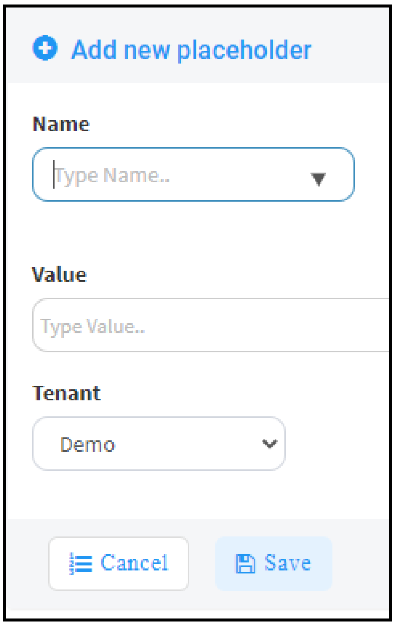
Filter:

| PLACEHOLDER | VALUE | TENANT |
|---|---|---|

2. Under Tenant Configuration, provision devices using the 'Configuration Set' parameter and the corresponding 'Configuration Key' and 'Configuration Value' parameters that are auto-populated after selecting a device model.

   - On the right side of the page, click the vertical ellipsis ⋮ and from the menu that pops up shown in the preceding figure, select **DST for IGS/SFB** or **DST for Teams** and then select **AUTO**, **ENABLE** or **DISABLE**. This menu provides a quick and friendly way to configure Daylight Saving Time (DST) for Generic SIP / Skype for Business phones and for Native Teams phones.

3. Under the lowermost Tenant Placeholders section of the page, click the **+Add New Placeholder** button.



Add new placeholder

Name: Type Name..

Value: Type Value..

Tenant: Demo

4. In the 'Name' field, enter / select the name of the new placeholder.

5. In the 'Value' field, enter the value of the new placeholder.

6. From the 'Tenant' dropdown, select a new tenant.

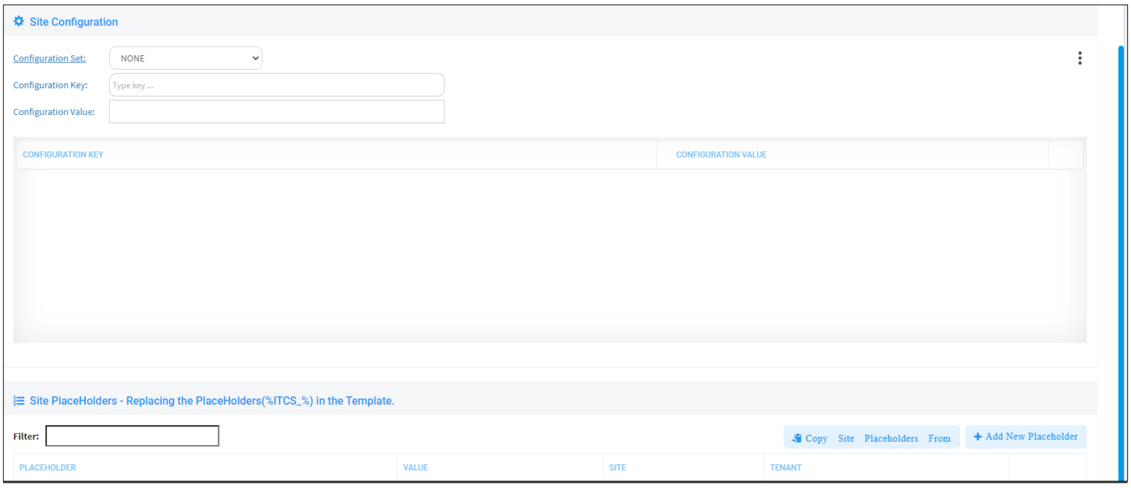
7. Click **Save**; the new placeholder is added to the table.

### Adding a New Site Placeholder

You can add a new site placeholder.

### ➢ To add a new site placeholder:

1. Open the Site Configuration page (**Setup** > **Configuration** > **Site Configuration**).


Site Configuration

Configuration Set: NONE

Configuration Key: Type key ...

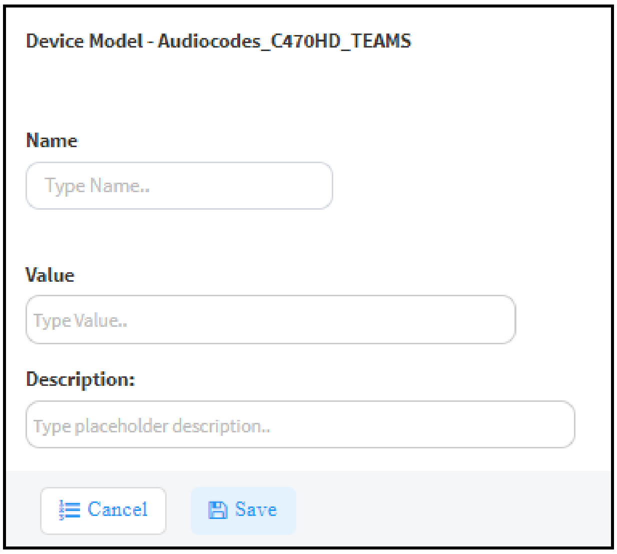
Configuration Value:

Site PlaceHolders - Replacing the PlaceHolders(%ITCS_%) in the Template.

Filter:

2. Under Site Configuration, provision devices using the 'Configuration Set' parameter and the corresponding 'Configuration Key' and 'Configuration Value' parameters that are auto-populated after selecting a device model.

3. Under the Site Placeholders section of the page, click the **+Add new placeholder** button.


Device Model - Audiocodes_C470HD_TEAMS

Name

Type Name..

Value

Type Value..

Description:

Type placeholder description..

4. From the 'Name' field drop-down, select the name of the new placeholder.

5. In the 'Value' field, enter the value of the new placeholder.

6. From the 'Site' drop-down, select a site to which the phone will automatically be provisioned.

> ⚠ Prior to version 7.8, Poly phones could only be provisioned to 'AutoDetection' by default. As of version 7.8, the 'Site' drop-down allows selecting a site to which Poly phones will also be automatically provisioned.

7. Click **Save**; the new placeholder is added to the table.

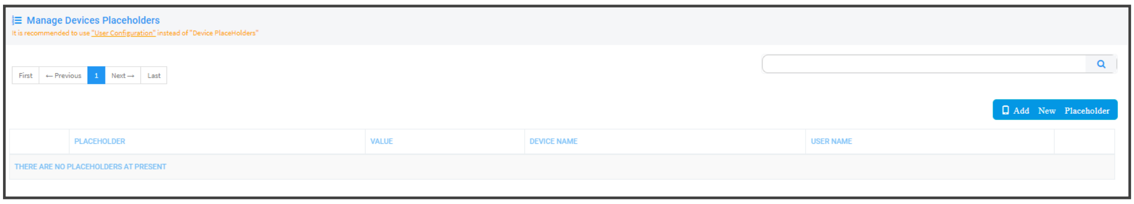
### Devices Placeholders

You can change placeholders values for specific phones, for example, you can change placeholders values for the enterprise CEO's phone. You can also edit a device's placeholders values.

#### Changing a Device Placeholder Value

➢ **To change a device placeholder value:**

1. Open the Manage Devices Placeholders page (**Setup** > **Configuration** > **Devices Placeholders**):



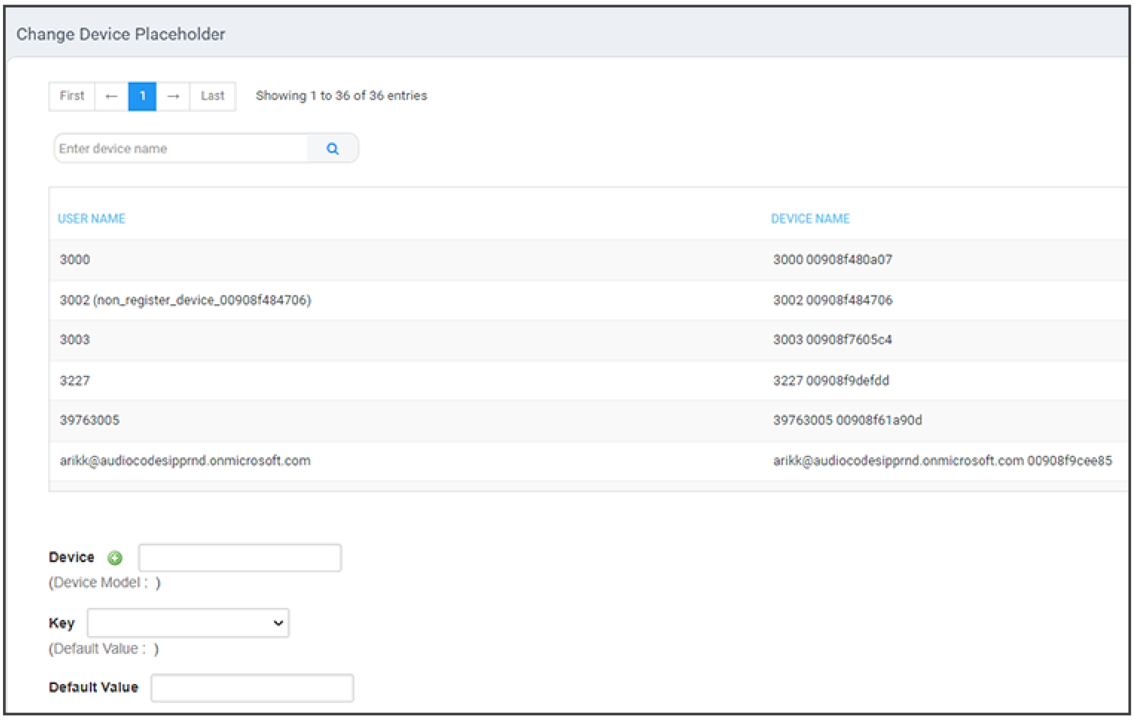
Manage Devices Placeholders

It is recommended to use "User Configuration" instead of "Device PlaceHolders"

| | PLACEHOLDER | VALUE | DEVICE NAME | USER NAME | |
|---|---|---|---|---|---|
| THERE ARE NO PLACEHOLDERS AT PRESENT | | | | | |

Use the 'Filter' field to quickly find a specific device if many are listed. You can search for a device by its name or by its extension

2. Select the device whose placeholder value you want to change and click **Edit**.



Change Device Placeholder

Showing 1 to 36 of 36 entries

Enter device name

| USER NAME | DEVICE NAME |
|---|---|
| 3000 | 3000 00908f480a07 |
| 3002 (non_register_device_00908f484706) | 3002 00908f484706 |
| 3003 | 3003 00908f7605c4 |
| 3227 | 3227 00908f9defdd |
| 39763005 | 39763005 00908f61a90d |
| arikk@audiocodesipprnd.onmicrosoft.com | arikk@audiocodesipprnd.onmicrosoft.com 00908f9cee85 |

Device

(Device Model : )

Key

(Default Value : )

Default Value

3. Make sure the correct device is selected; the read-only 'Device' field is filled.

4. From the **Key** dropdown, choose the phone configuration key.

5. Enter the device's default value in the 'Default Value' field, and then click **Save**; the edited device placeholder is added to the table.

⚠ The new default value is not automatically generated in the device's configuration file. To generate it, choose the relevant device and then click the **Generate Configuration** link.

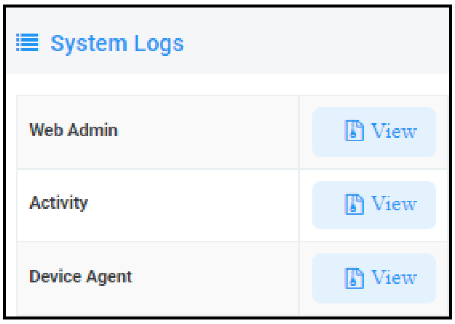
# 6 Troubleshooting

You can display system diagnostics to help troubleshoot problems and determine cause. System diagnostics comprise:

- Logged activities performed in the Web interface
  - Last logged activities
  - Archived activities
- Logged activities performed in the Device Manager Pro
  - Last logged activities
  - Archived activities

➢ **To display system diagnostics:**

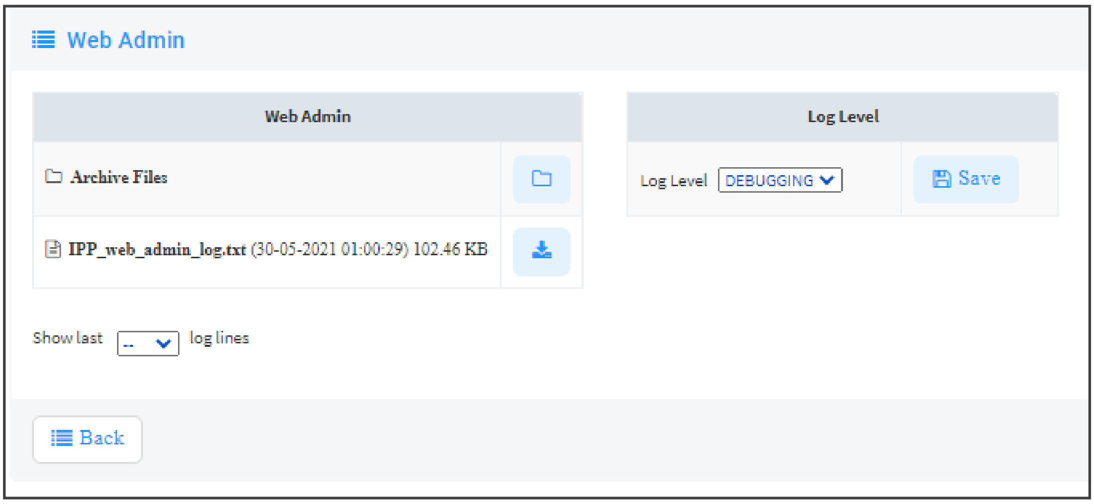
1. Open the System Logs page (**Troubleshoot** > **System Diagnostics**).



## Displaying Last n Activities Performed in the Web Interface

➢ **To display logged activities performed in the Web interface:**

1. Click the **View** button next to **Web Admin**.

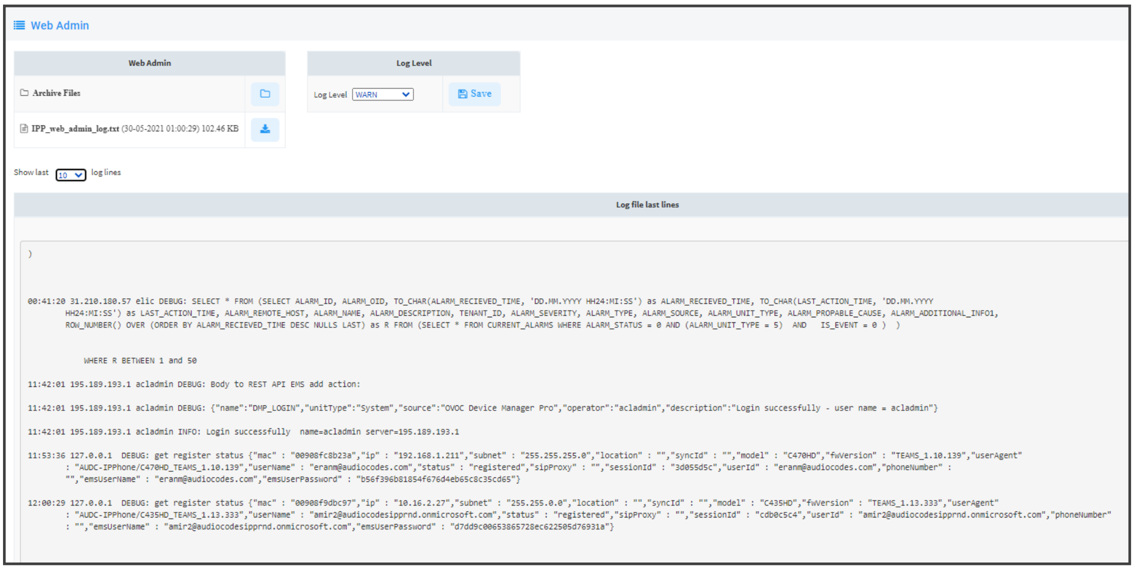


IPP_web_admin_log.txt (30-05-2021 01:00:29) 102.46 KB

Log Level DEBUGGING

Show last -- log lines

2. From the 'Log Level' dropdown select ERROR, WARN, INFO, DEBUGGING (default) or VERBOSE – All Levels (Detailed).
3. From the 'Show last log lines' dropdown select 10, 20, 30, 40, 50 or 100.
4. View the generated *IPP_web_admin_log.txt* file.



Archive Files

IPP_web_admin_log.txt (30-05-2021 01:00:29) 102.46 KB

Log Level WARN

Show last 10 log lines

```
)

00:41:20 31.210.180.57 elic DEBUG: SELECT * FROM (SELECT ALARM_ID, ALARM_OID, TO_CHAR(ALARM_RECIEVED_TIME, 'DD.MM.YYYY HH24:MI:SS') as ALARM_RECIEVED_TIME, TO_CHAR(LAST_ACTION_TIME, 'DD.MM.YYYY
        HH24:MI:SS') as LAST_ACTION_TIME, ALARM_REMOTE_HOST, ALARM_NAME, ALARM_DESCRIPTION, TENANT_ID, ALARM_SEVERITY, ALARM_TYPE, ALARM_SOURCE, ALARM_UNIT_TYPE, ALARM_PROPABLE_CAUSE, ALARM_ADDITIONAL_INFO1,
        ROW_NUMBER() OVER (ORDER BY ALARM_RECIEVED_TIME DESC NULLS LAST) as R FROM (SELECT * FROM CURRENT_ALARMS WHERE ALARM_STATUS = 0 AND (ALARM_UNIT_TYPE = 5)  AND   IS_EVENT = 0 )  )


           WHERE R BETWEEN 1 and 50

11:42:01 195.189.193.1 acladmin DEBUG: Body to REST API EMS add action:

11:42:01 195.189.193.1 acladmin DEBUG: {"name":"DMP_LOGIN","unitType":"System","source":"OVOC Device Manager Pro","operator":"acladmin","description":"Login successfully - user name = acladmin"}

11:42:01 195.189.193.1 acladmin INFO: Login successfully  name=acladmin server=195.189.193.1

11:53:36 127.0.0.1  DEBUG: get register status {"mac" : "00908fc8b23a","ip" : "192.168.1.211","subnet" : "255.255.255.0","location" : "","syncId" : "","model" : "C470HD","fwVersion" : "TEAMS_1.10.139","userAgent"
        : "AUDC-IPPhone/C470HD_TEAMS_1.10.139","userName" : "eranm@audiocodes.com","status" : "registered","sipProxy" : "","sessionId" : "3d055d5c","userId" : "eranm@audiocodes.com","phoneNumber" :
        "","emsUserName" : "eranm@audiocodes.com","emsUserPassword" : "b56f396b81854f676d4eb65c8c35cd65"}

12:00:29 127.0.0.1  DEBUG: get register status {"mac" : "00908f9dbc97","ip" : "10.16.2.27","subnet" : "255.255.0.0","location" : "","syncId" : "","model" : "C435HD","fwVersion" : "TEAMS_1.13.333","userAgent"
        : "AUDC-IPPhone/C435HD_TEAMS_1.13.333","userName" : "amir2@audiocodesipprnd.onmicrosoft.com","status" : "registered","sipProxy" : "","sessionId" : "cdb0c5c4","userId" : "amir2@audiocodesipprnd.onmicrosoft.com","phoneNumber"
        : "","emsUserName" : "amir2@audiocodesipprnd.onmicrosoft.com","emsUserPassword" : "d7dd9c00653865728ec622505d76931a"}
```

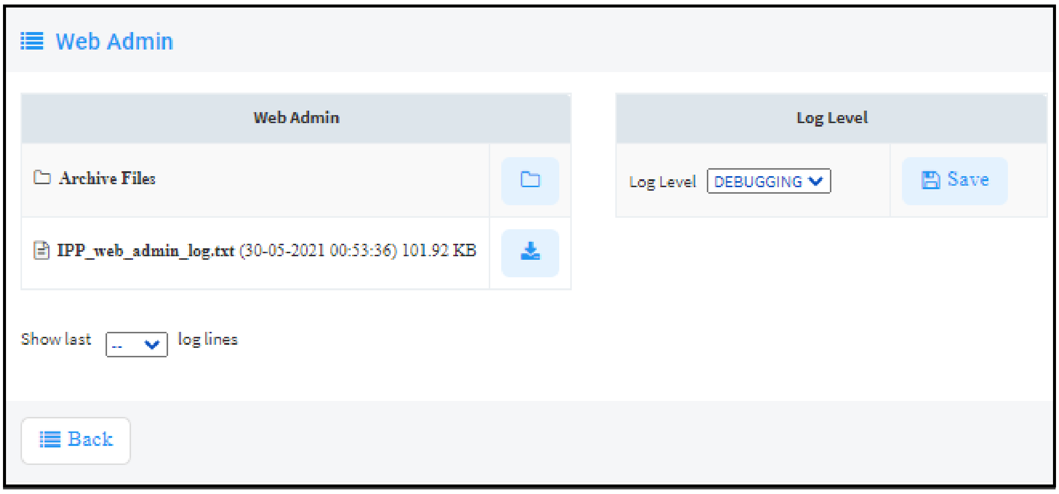
5. Click **Save** to save the last logged activities performed in the Web interface and share the log file with others.

## Displaying Archived Activities Performed in the Web Interface

### ➢ To display archived activities performed in the Web interface:

1. Open the Web Admin page (**Troubleshoot** > **System Diagnostics** > **Web Admin Logs**).

**Figure 6-1: System Logs**



Archive Files

IPP_web_admin_log.txt (30-05-2021 00:53:36) 101.92 KB

Log Level DEBUGGING

Show last -- log lines

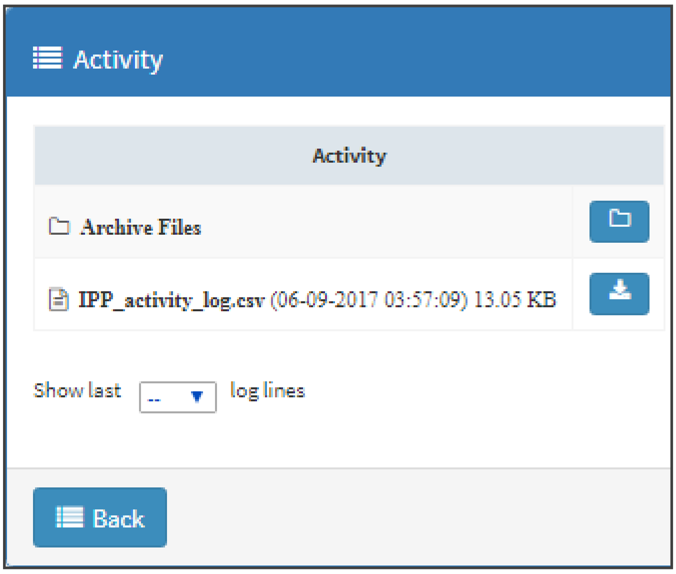
2. Click the icon next to **Archive Files**.

**Figure 6-2: Archive Files**

## Displaying Last n Activities Performed in Device Manager Pro

➢ **To display last activities logged in the Device Manager Pro:**

1. In the System Logs page, click **View** next to **Activity**.



Activity

Activity

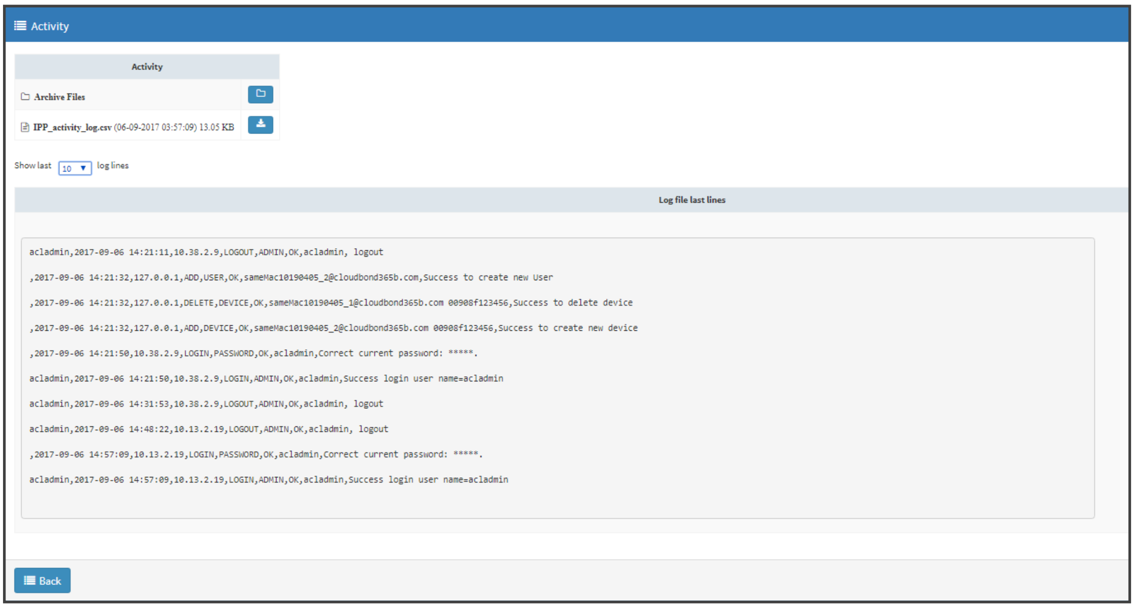
Archive Files

IPP_activity_log.csv (06-09-2017 03:57:09) 13.05 KB

Show last -- log lines

Back

2. From the 'Show last log lines' dropdown select 10, 20, 30, 40, 50 or 100.



Activity

Activity

Archive Files

IPP_activity_log.csv (06-09-2017 03:57:09) 13.05 KB

Show last 10 log lines

Log file last lines

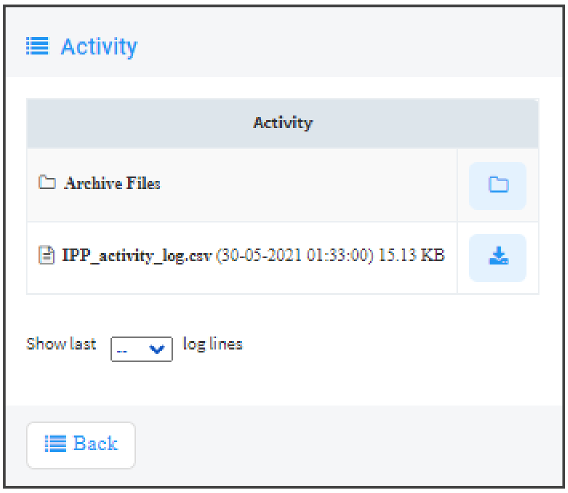
```
acladmin,2017-09-06 14:21:11,10.38.2.9,LOGOUT,ADMIN,OK,acladmin, logout

,2017-09-06 14:21:32,127.0.0.1,ADD,USER,OK,sameMac10190405_2@cloudbond365b.com,Success to create new User

,2017-09-06 14:21:32,127.0.0.1,DELETE,DEVICE,OK,sameMac10190405_1@cloudbond365b.com 00908f123456,Success to delete device

,2017-09-06 14:21:32,127.0.0.1,ADD,DEVICE,OK,sameMac10190405_2@cloudbond365b.com 00908f123456,Success to create new device

,2017-09-06 14:21:50,10.38.2.9,LOGIN,PASSWORD,OK,acladmin,Correct current password: *****.

acladmin,2017-09-06 14:21:50,10.38.2.9,LOGIN,ADMIN,OK,acladmin,Success login user name=acladmin

acladmin,2017-09-06 14:31:53,10.38.2.9,LOGOUT,ADMIN,OK,acladmin, logout

acladmin,2017-09-06 14:48:22,10.13.2.19,LOGOUT,ADMIN,OK,acladmin, logout

,2017-09-06 14:57:09,10.13.2.19,LOGIN,PASSWORD,OK,acladmin,Correct current password: *****.

acladmin,2017-09-06 14:57:09,10.13.2.19,LOGIN,ADMIN,OK,acladmin,Success login user name=acladmin
```

Back

## Displaying Archived Activities Performed in Device Manager Pro

➢ **To display logged archived activities performed in the Device Manager Pro:**

- Open the Activity page (**Troubleshoot** > **Activity Logs**).



Activity

| Activity | |
|---|---|
| 🗀 Archive Files | 🗀 |
| IPP_activity_log.csv (30-05-2021 01:33:00) 15.13 KB | ⤓ |

Show last -- log lines

Back

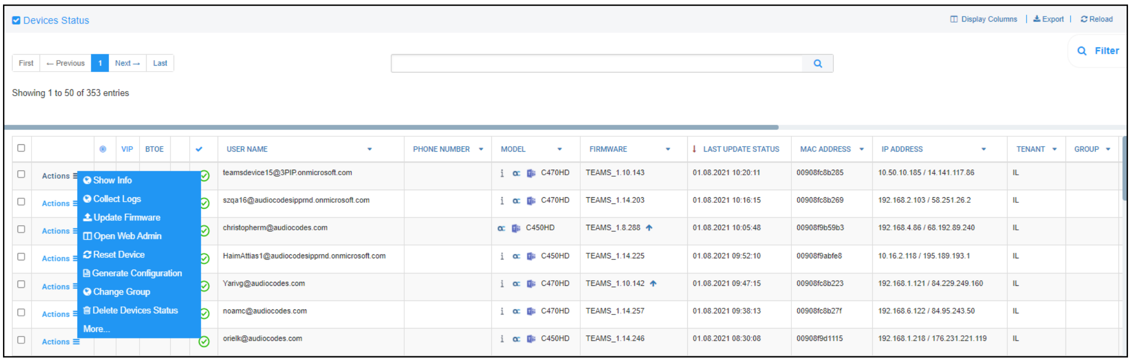
## Collecting Logs

The Device Manager enables network administrators to collect logs from AudioCodes phones / devices for debugging purposes without needing to go to the phone / device.

> ⚠ For detailed information about the logs that are collected, see the *Teams IP Phone User's and Administrator's Manuals* available on AudioCodes' website.

### ➢ To collect logs:

1. In the Monitor page (**Monitor** > **Devices Status**), click **Actions** adjacent to the listed phone from which you want to get logs and then select the **Collect Logs** option from the pop-up menu.



☑ Devices Status

Display Columns | Export | Reload

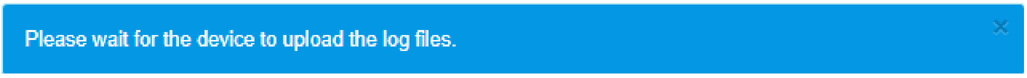
First ← Previous 1 Next → Last

Filter

Showing 1 to 50 of 353 entries

| □ | | VIP | BTOE | ✓ | USER NAME | PHONE NUMBER | MODEL | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS | TENANT | GROUP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions ☰ | | | ✓ | teamsdevice15@3PIP.onmicrosoft.com | | C470HD | TEAMS_1.10.143 | 01.08.2021 10:20:11 | 00908fc8b285 | 10.50.10.185 / 14.141.117.86 | IL | |
| □ | Actions ☰ | | | ✓ | szqa16@audiocodesipprnd.onmicrosoft.com | | C470HD | TEAMS_1.14.203 | 01.08.2021 10:16:15 | 00908fc8b269 | 192.168.2.103 / 58.251.26.2 | IL | |
| □ | Actions ☰ | | | ✓ | christopherm@audiocodes.com | | C450HD | TEAMS_1.8.288 ↑ | 01.08.2021 10:05:48 | 00908f9b59b3 | 192.168.4.86 / 68.192.89.240 | IL | |
| □ | Actions ☰ | | | ✓ | HaimAttias1@audiocodesipprnd.onmicrosoft.com | | C450HD | TEAMS_1.14.225 | 01.08.2021 09:52:10 | 00908f9abfe8 | 10.16.2.118 / 195.189.193.1 | IL | |
| □ | Actions ☰ | | | ✓ | Yarivg@audiocodes.com | | C470HD | TEAMS_1.10.142 ↑ | 01.08.2021 09:47:15 | 00908fc8b223 | 192.168.1.121 / 84.229.249.160 | IL | |
| □ | Actions ☰ | | | ✓ | noamc@audiocodes.com | | C470HD | TEAMS_1.14.257 | 01.08.2021 09:38:13 | 00908fc8b27f | 192.168.6.122 / 84.95.243.50 | IL | |
| □ | Actions ☰ | | | ✓ | orielk@audiocodes.com | | C450HD | TEAMS_1.14.246 | 01.08.2021 08:30:08 | 00908f9d1115 | 192.168.1.218 / 176.231.221.119 | IL | |

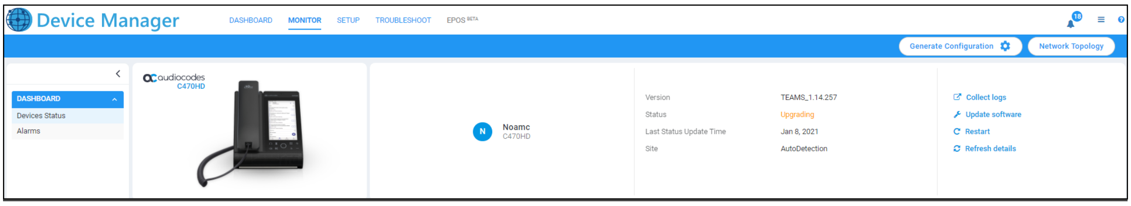
2. View the following notification:



Please wait for the device to upload the log files.

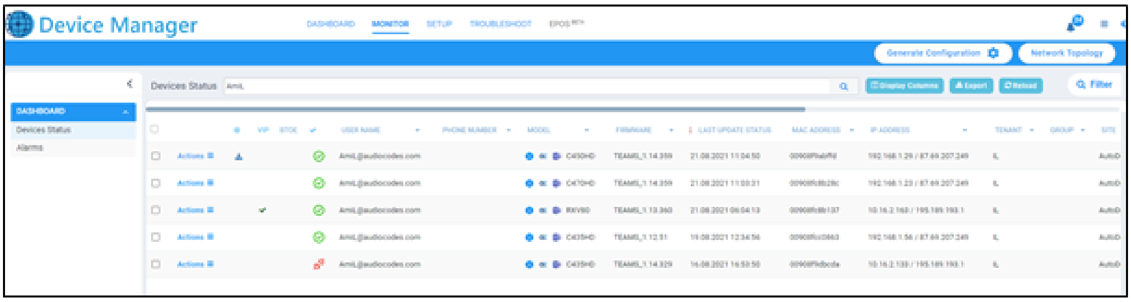
- This action might take a few minutes depending on the number and the size of the logs. If a device is unavailable or if the action time is extended, a relevant icon and notification is displayed for that device, for example: 'Collect Logs: waiting for the Device'. It might be displayed for some time.
- Log files collected via the Device Manager are uploaded in the format of a .zip file. The following zipped file is provided: *bugreport-00908f9d6888-TEAMS_ 1.14.455-2021-12-15-11-14-06.zip*
  After unzipping the .zip file, the log files become available to the network administrator. The zipped file includes the following log files:
  - ✓ blog files (media logs): app_process32.msrtc-0-3054496316.blog and Skylib-0-3692023773.blog
  - ✓ SessionID_For_Company_Portal_Logs.txt [this is the CP SSDI, not the logs; the logs are sent to the server]
    Logs collected via Microsoft's Teams admin center are included in the bugreport so collection of logs via the Device Manager is similar to the collection of logs via Microsoft's TAC. Logs from the TAC include logcat, dumpsys, ANRs, Client Log, Call Policies File, Call Log Info File, Sky lib Log Files, Media Log Files and CP.
    Other logs collected are:
  - ✓ AudioCodes' configuration is packed into the bugreport
  - ✓ DSP logs

3. Alternatively, select the **Show Info** option and after making sure of the phone's identity, click the **Collect Logs** link on the right side of the screen.



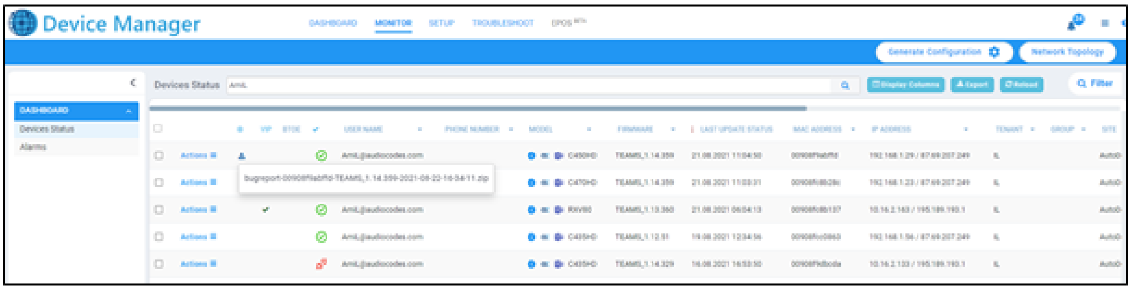
Version TEAMS_1.14.257
Status Upgrading
Last Status Update Time Jan 8, 2021
Site AutoDetection

4. 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. The icon is only displayed if logs were collected for that device.



| | | | VIP | STOE | | USER NAME | PHONE NUMBER | MODEL | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS | TENANT | GROUP | SITE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions | ⬇ | | | ✓ | AmiL@audiocodes.com | | C450HD | TEAMS_1.14.359 | 21.08.2021 11:04:50 | [illegible] | 192.168.1.26 / 87.69.207.249 | IL | | AutoD |
| □ | Actions | | | | ✓ | AmiL@audiocodes.com | | C470HD | TEAMS_1.14.359 | 21.08.2021 11:03:31 | [illegible] | 192.168.1.23 / 87.69.207.249 | IL | | AutoD |
| □ | Actions | | ✓ | | ✓ | AmiL@audiocodes.com | | RXV80 | TEAMS_1.13.360 | 21.08.2021 06:04:13 | [illegible] | 10.16.2.163 / 195.189.193.1 | IL | | AutoD |
| □ | Actions | | | | ✓ | AmiL@audiocodes.com | | C435HD | TEAMS_1.12.51 | 19.08.2021 12:34:56 | [illegible] | 192.168.1.56 / 87.69.207.249 | IL | | AutoD |
| □ | Actions | | | | | AmiL@audiocodes.com | | C435HD | TEAMS_1.14.329 | 16.08.2021 16:53:50 | [illegible] | 10.16.2.133 / 195.189.193.1 | IL | | AutoD |

5. Click the icon to download the logs.



| □ |  |  | VIP | BTOE | ✓ | USER NAME | PHONE NUMBER | MODEL | FIRMWARE | LAST UPDATE STATUS | MAC ADDRESS | IP ADDRESS | TENANT | GROUP | SITE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | Actions |  |  |  |  | AmiL@audiocodes.com |  | C450HD | TEAMS_1.14.359 | 21.08.2021 11:04:50 | 00908f9abffd | 192.168.1.29 / 87.69.207.249 | IL |  | AutoD |
| □ | Actions | bugreport-00908f9abffd-TEAMS_1.14.359-2021-08-22-16-34-11.zip |  |  |  |  |  | C470HD | TEAMS_1.14.359 | 21.08.2021 11:03:31 | 00908f8db28c | 192.168.1.23 / 87.69.207.249 | IL |  | AutoD |
| □ | Actions |  | ✓ |  |  | AmiL@audiocodes.com |  | RXV80 | TEAMS_1.13.360 | 21.08.2021 06:04:13 | 00908fc8b137 | 10.16.2.163 / 195.189.193.1 | IL |  | AutoD |
| □ | Actions |  |  |  |  | AmiL@audiocodes.com |  | C435HD | TEAMS_1.12.51 | 19.08.2021 12:34:56 | 00908fcc0863 | 192.168.1.56 / 87.69.207.249 | IL |  | AutoD |
| □ | Actions |  |  |  |  | AmiL@audiocodes.com |  | C435HD | TEAMS_1.14.329 | 16.08.2021 16:53:50 | 00908f9dbcda | 10.16.2.133 / 195.189.193.1 | IL |  | AutoD |

# 7 Configuring Third-Party Vendor Devices

⚠ For detailed information about configuring third-party vendor devices, see also the *Device Manager for Third-Party Vendor Products Administrator's Manual*.

## Performing Poly Configuration

Poly Trio devices, Poly VVX devices and Poly CCX 500/600 devices can be *automatically provisioned with templates per model* from AudioCodes’ provisioning server.

The feature is an AudioCodes proprietary feature configured from the 'Poly Configuration' page in the Device Manager (**Setup** > **Configuration** > **Poly Configuration**).

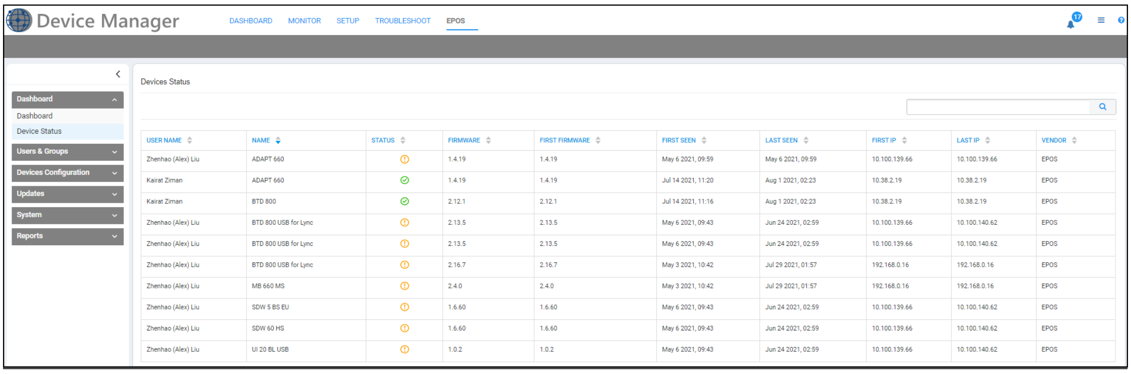
For more information, see the *Device Manager for Third-Party Vendor Products Administrator's Manual* available from AudioCodes.

# Performing EPOS Configuration

The Device Manager enables network administrators to manage and monitor EPOS (Sennheiser) headset devices (beta version). EPOS have a cloud-based EPOS Manager. AudioCodes' Device Manager reflects the EPOS Manager.

## ➢ To configure EPOS device settings:

- From any page in the Device Manager, click the **EPOS** menu.



Devices Status

| USER NAME | NAME | STATUS | FIRMWARE | FIRST FIRMWARE | FIRST SEEN | LAST SEEN | FIRST IP | LAST IP | VENDOR |
|---|---|---|---|---|---|---|---|---|---|
| Zhenhao (Alex) Liu | ADAPT 660 | ⓘ | 1.4.19 | 1.4.19 | May 6 2021, 09:59 | May 6 2021, 09:59 | 10.100.139.66 | 10.100.139.66 | EPOS |
| Kairat Ziman | ADAPT 660 | ✓ | 1.4.19 | 1.4.19 | Jul 14 2021, 11:20 | Aug 1 2021, 02:23 | 10.38.2.19 | 10.38.2.19 | EPOS |
| Kairat Ziman | BTD 800 | ✓ | 2.12.1 | 2.12.1 | Jul 14 2021, 11:16 | Aug 1 2021, 02:23 | 10.38.2.19 | 10.38.2.19 | EPOS |
| Zhenhao (Alex) Liu | BTD 800 USB for Lync | ⓘ | 2.13.5 | 2.13.5 | May 6 2021, 09:43 | Jun 24 2021, 02:59 | 10.100.139.66 | 10.100.140.62 | EPOS |
| Zhenhao (Alex) Liu | BTD 800 USB for Lync | ⓘ | 2.13.5 | 2.13.5 | May 6 2021, 09:43 | Jun 24 2021, 02:59 | 10.100.139.66 | 10.100.140.62 | EPOS |
| Zhenhao (Alex) Liu | BTD 800 USB for Lync | ⓘ | 2.16.7 | 2.16.7 | May 3 2021, 10:42 | Jul 29 2021, 01:57 | 192.168.0.16 | 192.168.0.16 | EPOS |
| Zhenhao (Alex) Liu | MB 660 MS | ⓘ | 2.4.0 | 2.4.0 | May 3 2021, 10:42 | Jul 29 2021, 01:57 | 192.168.0.16 | 192.168.0.16 | EPOS |
| Zhenhao (Alex) Liu | SDW 5 BS EU | ⓘ | 1.6.60 | 1.6.60 | May 6 2021, 09:43 | Jun 24 2021, 02:59 | 10.100.139.66 | 10.100.140.62 | EPOS |
| Zhenhao (Alex) Liu | SDW 60 HS | ⓘ | 1.6.60 | 1.6.60 | May 6 2021, 09:43 | Jun 24 2021, 02:59 | 10.100.139.66 | 10.100.140.62 | EPOS |
| Zhenhao (Alex) Liu | UI 20 BL USB | ⓘ | 1.0.2 | 1.0.2 | May 6 2021, 09:43 | Jun 24 2021, 02:59 | 10.100.139.66 | 10.100.140.62 | EPOS |

⚠ For detailed information about configuring EPOS device settings, see the:

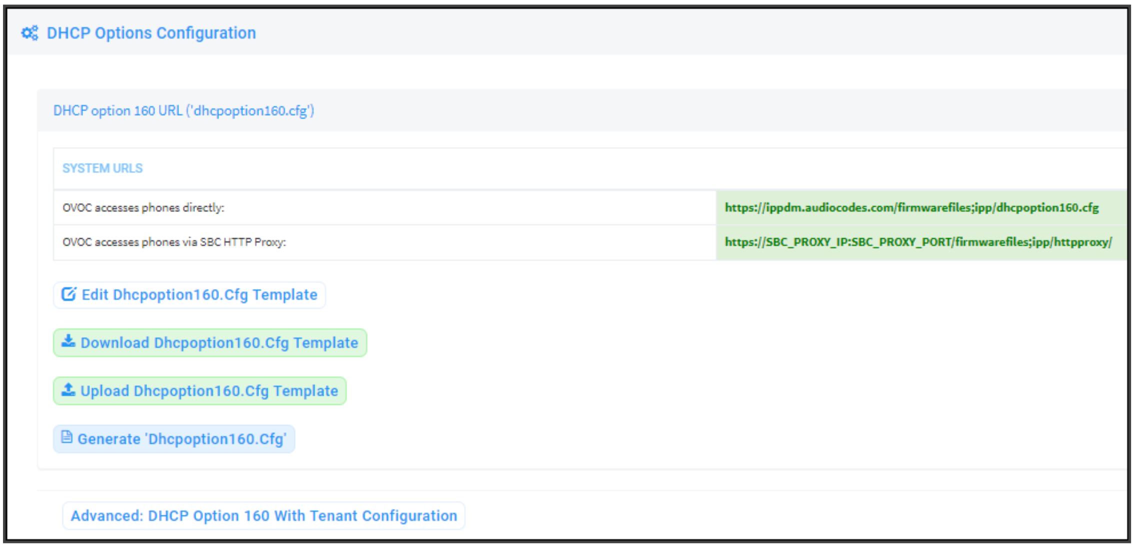
- *EPOS Manager Admin Manual* available here
- *Device Manager for Third-Party Vendor Products Administrator's Manual*

# Configuring Phones to Operate in an OVR Deployment

You can configure phones to operate in an OVR (One Voice Resiliency) deployment. See the *One Voice Resiliency Configuration Note* for a detailed description of OVR.

### ➢ To configure phones to operate in an OVR deployment:

1. Open the DHCP Options Configuration page (**Setup** > **Settings** > **DHCP Options Configuration**).



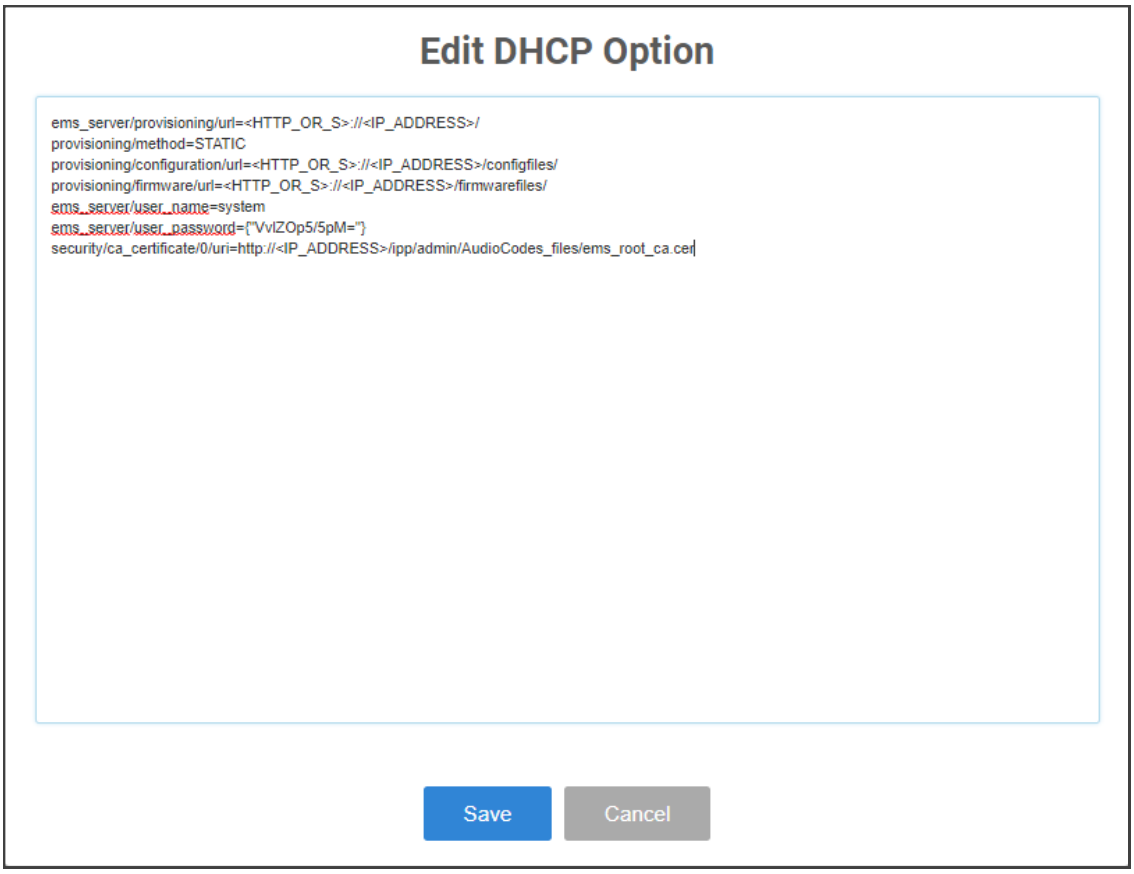
DHCP Options Configuration

DHCP option 160 URL ('dhcpoption160.cfg')

| SYSTEM URLS | |
|---|---|
| OVOC accesses phones directly: | https://ippdm.audiocodes.com/firmwarefiles;ipp/dhcpoption160.cfg |
| OVOC accesses phones via SBC HTTP Proxy: | https://SBC_PROXY_IP:SBC_PROXY_PORT/firmwarefiles;ipp/httpproxy/ |

Edit Dhcpoption160.Cfg Template
Download Dhcpoption160.Cfg Template
Upload Dhcpoption160.Cfg Template
Generate 'Dhcpoption160.Cfg'
Advanced: DHCP Option 160 With Tenant Configuration

2. Click the **Edit dhcpoption160.cfg template** button.



```
ems_server/provisioning/url=<HTTP_OR_S>://<IP_ADDRESS>/
provisioning/method=STATIC
provisioning/configuration/url=<HTTP_OR_S>://<IP_ADDRESS>/configfiles/
provisioning/firmware/url=<HTTP_OR_S>://<IP_ADDRESS>/firmwarefiles/
ems_server/user_name=system
ems_server/user_password={"VvIZOp5/5pM="}
security/ca_certificate/0/uri=http://<IP_ADDRESS>/ipp/admin/AudioCodes_files/ems_root_ca.cer
```

3. Customize dhcpoption160.cfg. Add the following lines:

```
outbound_proxy_address=<SBC IP address>
lync/sign_in/fixed_outbound_proxy_port=<SBC listening port>
lync/sign_in/use_hosting_outbound_proxy=1
```

4. Click **Save**; the phones are configured to operate in an OVR environment.

> ⚠ After configuring phones to operate in an OVR environment, you must configure their template with the same settings.

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Document #: LTRT-91226