

Onboarding AudioCodes Analog Telephone Adapters (ATA) to Microsoft SIP Gateway for Teams

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Notice

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Stay in the Loop with AudioCodes



Abbreviations and Terminology

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

Document Revision Record

LTRT	Description
25102	Initial document release.
25103	IniFileURL value.
25104	Remote management.
25105	Pairing ATA with Teams user, updated with LAN MAC of MP-50x.
25106	Bulk sign in; connectivity.
25107	ATA models list updated; URL software version.
25108	Note re client default configuration file for specific MP-50x models.

Documentation Feedback

AudioCodes continually strives to produce high quality documentation. If you have any comments (suggestions or errors) regarding this document, please fill out the Documentation Feedback form on our website at <https://online.audiocodes.com/documentation-feedback>.

Related Documentation

Description
MediaPack 5xx User's Manual Ver. 7.2
MediaPack 5xx Voice Gateway Basic Configuration
MP-11x and MP-124 SIP User's Manual Ver. 6.6
MP-1288 High-Density Analog Media Gateway User's Manual Ver. 7.4

1 Introduction

This document describes how to onboard AudioCodes SIP-compatible analog telephone adapters (ATA) to a **Microsoft SIP Gateway** in a Teams environment.

1.1 SIP Gateway Overview

An ATA is a device for connecting traditional analog devices to a digital telephone system. The ATA connects the analog devices to Microsoft Teams through a SIP Gateway. AudioCodes offers a variety of ATA models to support SIP Gateway functionality (see Supported ATA Models).

An ATA can connect N number of devices using N number of FXS ports (RJ-11 interfaces). Each port represents a SIP device from Microsoft Teams Admin Center perspective, and there is no notation for ATA. However, the hardware ID of each device is composed of the MAC address of the ATA and a port number. For example, "00-90-8F-49-28-78:001" represents ATA MAC address 00-90-8f-49-28-78 and port number 001.

Teams Admin Center doesn't have a notion of ATA and each ATA port is abstracted as an independent device. However, ATA onboarding to SIP Gateway is done per ATA instance versus port. In other words, ATA as a "box" MUST be factory reset and the server URL of the ATA MUST be set with appropriate regional HTTP URL, as documented in [Configure SIP Gateway](#). The capacity (i.e., maximum number of ports supported per ATA) is a device attribute and documented per ATA model. In other words, if ATA has N ports, then the maximum number of ports that can be provisioned to meet SIP Gateway security requirements (i.e., TLS and SRTP) might be less than or equal to N (please check link to OEM documentation for exact number of ports that can be onboarded to SIP Gateway for a given ATA model).

Analog devices are supported only for CAP (Common Area Phone) accounts; hence the Admin MUST use remote sign-in/sign-out from Teams Admin Center for analog devices as they would for any other CAP accounts. Before remote sign-in, the admin must [enroll the port of the ATA](#), by dialing the feature code plus verification code from an analog device connected to that port to validate that it is a trusted device. The **Add device** menu in the Teams Admin Center remote provisioning includes an option to select, in addition to existing MAC address, analog device and populate Hardware ID in the MAC plus port # format, as described above.

ATA settings are managed using OEM tools or the Web interface of the ATA. However, user's settings are sent to the device by the SIP Gateway device manager, like every SIP Phone, for each port if analog devices are connected to an ATA.

The ATA port is listed as a regular SIP device in the Teams Admin Center. The admin can activate it using OTP and sign in/out like for any other device. However, if the admin tries to restart this device, the command is ignored because there is no option to restart a single port on an ATA and the admin should use the ATA management tool to perform this command. In addition, all accounts that are signed-in MUST be in the same region because there is no option to "transfer" a port to another region due to regulations (such as EUDB).

1.2 Bulk Sign in

For bulk sign in, please refer to Microsoft documentation on [Bulk sign in](#).



Bulk sign in is applicable only to Common Area Phone (CAP) licensed users.

1.3 Disclaimers – Known Issues

- Teams Admin Center **Restart** command (i.e., per port) restarts the entire ATA instead of the specific FXS port.

2 AudioCodes ATAs for SIP Gateway

This section lists the AudioCodes ATA devices for Microsoft SIP Gateway functionality.

2.1 Supported ATA Models

The following table lists the AudioCodes ATA models that support SIP Gateway functionality.










The SIP Gateway requires the use of secured RTP (SRTP). For some ATA models (see table below) SRTP causes a minor reduction in channel capacity.



The SIP Gateway supports only FXS functionality (not FXO).

Table 1: AudioCodes ATAs for SIP Gateway Functionality

ATA Model	FXS Channel Capacity	
	RTP	SRTP
MP-112 	2	2
MP-114 	4	3
MP-118 	8	6
MP-124 	24	17
MP-1288 	288	288
MP-504 	4	4
MP-508 	8	8

2.2 Compatible Firmware per ATA Model

The following table lists the compatible AudioCodes ATA models and minimum firmware versions:

Table 2: Compatible AudioCodes ATA Models and Firmware

Model	Minimum Firmware	Microsoft Approved Firmware
MP-118 FXS	6.60A.367.001	6.60A.367.005
MP-114 FXS	6.60A.367.001	6.60A.367.005
MP-112 FXS	6.60A.367.001	6.60A.367.005

Model	Minimum Firmware	Microsoft Approved Firmware
MP-124/124E	6.60A.367.001	6.60A.367.005
MP-1288	7.40A.400.063	7.40A.400.063
MP-504	7.26A.356.075	7.26A.356.630
MP-508	7.26A.356.075	7.26A.356.630



- You can download the latest firmware files, Client Default Configuration files, and documentation of the ATA models, by clicking [here](#).
- For the below listed ATA models, you need to upload a special Client Default Configuration file (.ini) to enable connectivity with the SIP Gateway:
 - **M500L-I8S** (SIP-GW-MP508_Client_Default.ini)
 - **M500L-I4S** (SIP-GW-MP504_Client_Default.ini)
 - **M500L-I4S/RS** (SIP-GW-MP504_Client_Default.ini)
 - **M500L-I8S/RS** (SIP-GW-MP508_Client_Default.ini)

3 ATA Setup for SIP Gateway Functionality

This section describes how to set up your AudioCodes ATA device for SIP Gateway functionality in Microsoft Teams environment.

3.1 Connecting to ATA's Web Interface

To connect to the ATA's Web interface, please refer to the relevant device's manual:

- **MP-1xx:** Chapter 2 "Assigning the OAMP IP Address" in [MP-11x and MP-124 SIP User's Manual Ver. 6.6](#)
- **MP-1288:** [MP-1288 High-Density Analog Media Gateway User's Manual Ver. 7.4](#)
- **MP-50x:** [MediaPack 5xx Voice Gateway Basic Configuration](#)



For WAN connectivity:

- For MP-1xx and MP-1288, you need to configure a static IP address, netmask, default gateway, and DNS.
- For MP-50x, you don't need to configure a static IP address because the device uses DHCP by default for obtaining an IP address.

3.2 Updating ATA with Compatible Firmware

Once you have downloaded the required firmware version file (see

Compatible Firmware per ATA Model), you need to install it on the ATA. For more information, refer to the relevant device's manual:

- **MP-1xx:** Chapter 31 "Software Upgrade" in [MP-11x and MP-124 SIP User's Manual Ver. 6.6](#)
- **MP-1288:** [MP-1288 High-Density Analog Media Gateway User's Manual Ver. 7.4](#)
- **MP-50x:** [MediaPack 5xx User's Manual Ver. 7.2](#)

3.3 Configuring SIP Gateway Provisioning Server URL

This section describes how to restore the device to factory defaults and apply the SIP Gateway provisioning server's URL through AudioCodes ATA's web interface.

To configure provisioning server URL:

1. Access the device's Admin page, by appending "AdminPage" to the device's IP address in the Web browser's URL (e.g., <http://10.13.4.13/AdminPage>).
2. In the Navigation pane, click **ini Parameters**.
3. For each parameter listed in the table below, do the following:
 - a. In the 'Parameter Name' field, enter the parameter's name.
 - b. In the 'Enter Value' field, enter the parameter's value.
 - c. Click **Apply New Value**.

Parameter Name:	Parameter Value
IniFileURL	"
AUPDRresetURLonWebConfig	1
SetDefaultOnIniFileProcess	1

4. In the Navigation pane, click **Back to Main**.
5. Upload an empty configuration file (.ini) to reset the device to factory defaults:
 - a. Using a text-based editor (e.g., Notepad), create an empty [.] .ini file with any name on your computer.
 - b. Open the Configuration File page (**Maintenance > Software Update > Configuration File**).
 - c. Click **Choose File**, and then select the empty .ini file.
 - d. Click **Load INI File**.



The path to the above page and the button names may be slightly differ, depending on ATA device or software version.

6. Access the Admin Page again, in the Navigation pane, click **ini Parameters**, and then apply the following parameter:
 - a. In the 'Parameter Name' field, enter **IniFileURL**.
 - b. In the 'Enter Value' field, enter '**http://noam.ipp.sdg.teams.microsoft.com/<mac>.ini**'.
 - c. Click **Apply New Value**.



- The URL above is for the NoAM region. Instead, use the SIP Gateway provisioning server's URL for your region, as provided in [Microsoft SIP Gateway documentation](#).
- You must append the URL with `<mac>.ini`.

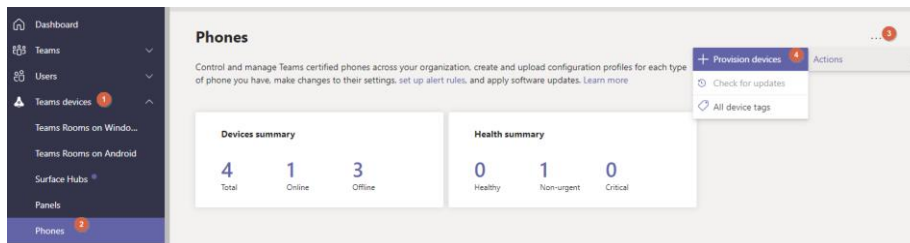
7. Analog Gateway obtains the onboarding configuration and reboots.

3.4 Pairing ATA FXS Port with Teams User (Remote Sign-in)

This section describes how to pair an FXS port on AudioCodes ATA with a Teams user, using a one-time password (OTP). Perform the procedure for each FXS port.

To pair FXS port with Teams user:

1. Access the Microsoft Teams Admin Center at <https://admin.teams.microsoft.com>, using the tenant admin's credentials.
2. Navigate to **Teams devices > Phones > Actions > Provision devices**:



3. Click **Add**; the following pane is displayed on the right of the window:

Add MAC addresses or hardware IDs

ID type Enter hardware ID

Hardware ID (analog)

Hardware ID (analog) is only for SIP analog devices

Location

4. Add the MAC address of the ATA:
- From the 'ID type' drop-down list, select **Hardware ID (analog)**.
 - In the 'Enter hardware ID' field, type the ATA's MAC address and FXS port (e.g., "00-90-8F-49-28-78:001").



For MP-50x devices, specify the MAC address of the **LAN** interface (not WAN).

- Click **Save**.
5. Select the device (MAC:port) in the table, and then click **Generate verification code**; a verification code (OTP) is generated and displayed in the 'Verification code' column, as shown in the following example:

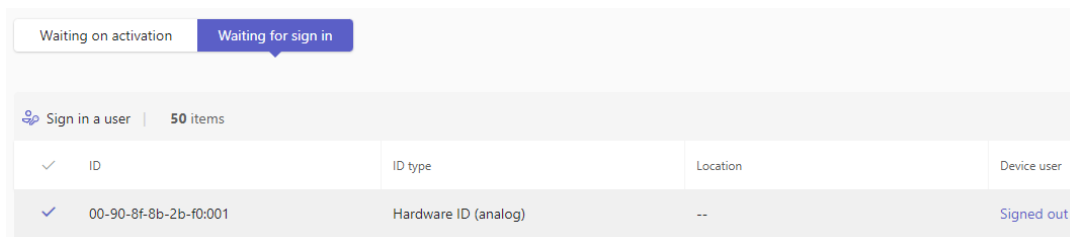
Waiting on activation | Waiting for sign in

+ Add Upload Generate verification code + Edit Delete 1 item selected

✓	ID	ID type	Location	Verification code
✓	00-11-22-33-44-55:001	Hardware ID (analog)	Analog Preview Phone	101360

6. Dial from the analog phone to sign-in:
- Connect an analog phone to the **same** FXS port on the ATA.
 - Off hook the phone, and then dial ***55***<Verification code from Teams Admin Center>; a confirmation tone is played.
 - On hook the phone.

7. In the Teams admin center, click the **Waiting for sign in** tab, select the Hardware ID, and then click **Sign in a user**:



ID	ID type	Location	Device user
00-90-8f-8b-2b-f0:001	Hardware ID (analog)	--	Signed out

8. Complete the web sign-in process, by following the on-screen instructions, using the account that you want assigned to the FXS port.

Sign in a user

Selected device

A7 **00-90-8f-8b-2b-f0:001** (MAC address)
--

Most recent signed in user

SO **Signed out**
--

To remotely sign in the user to that selected device, follow the steps below.

1. Open this URL.
<https://aka.ms/siploginppe>
2. Copy and paste this code.
930N46MEA [Refresh the code](#)
3. Select the user.
When you select the user, we'll remotely sign them in to this device.
4. Return to the Microsoft Teams admin center.
You're all set.

Note: Remote sign in doesn't support personal user credentials, so you'll need a device user account created in Azure Active Directory. A shared device, like a conference phone, will only be signed in as a shared device when a personal user isn't signed in.

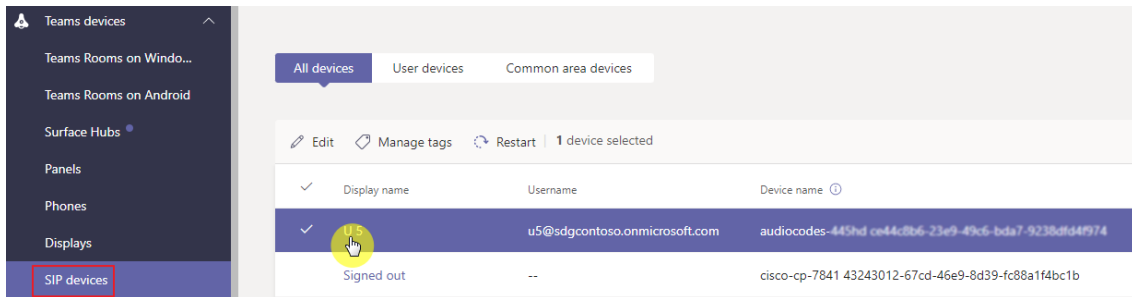
Close

3.5 Signing Out ATA FXS Port from Teams (Remote Sign-in)

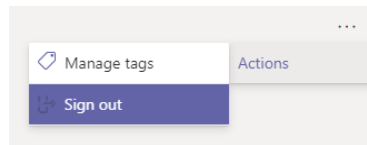
This section describes how to sign out (unpair) the ATA's FXS port from Teams.

To sign out FXS port from Teams:

1. Access the Microsoft Teams Admin Center at <https://admin.teams.microsoft.com>, using the tenant admin's credentials.
2. Navigate to **Teams devices** > **SIP devices**.
3. Select the device:



4. Click the three dots (...) in the upper-right corner, from the drop-down menu, click **Actions**, and then choose **Sign out**:



International Headquarters

1 Hayarden Street,
Airport City
Lod 7019900, Israel
Tel: +972-3-976-4000
Fax: +972-3-976-4040

AudioCodes Inc.

80 Kingsbridge Rd
Piscataway, NJ 08854, USA
Tel: +1-732-469-0880
Fax: +1-732-469-2298

Contact us: <https://www.audiocodes.com/corporate/offices-worldwide>

Website: <https://www.audiocodes.com>

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