Onboarding Poly ATAs to Teams SIP Gateway

1   Overview

An **analog telephone adapter** (**ATA**) is a device for connecting traditional analog devices to a digital telephone system. In context of SIP GW, it connects these analog devices via SIP GW to Teams.

A single ATA can connect N devices via N ports (RJ11 interface). Each port represents a SIP device from TAC (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" which represents ATA MAC address 00-90-8f-49-28-78 and port number 001.

TAC (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 Server URL of ATA MUST be set with appropriate regional HTTP URL, as documented in Configure SIP Gateway. The capacity (i.e., maximum number of ports that can be supported per ATA), is a device attribute and documented for each ATA model. In other words, if ATA has N ports, then the maximum number of ports that can be provisioned to satisfy SIP GW security requirements (i.e., TLS and SRTP) may 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 Admin MUST use remote sign-in/sign-out from TAC, for analog devices as they would for any other CAP accounts. Before remote sign-in admin must enroll the port of the ATA by dialing the feature code + verification code from an analog device connected to that port to validate that it is a trusted device. "Add device" menu in TAC remote provisioning now includes an option to select in addition to existing MAC address, Analog device and populate Hardware ID in the MAC + port # format, as described above.

ATA Settings are to be managed via OEM tools or Web interface of ATA. However, user's settings are sent to the device by SIP GW device manager, similar to every SIP Phone, for each port in case of analog devices connected to an ATA.

ATA port will be listed as a regular SIP device in TAC. Admin can activate it via OTP and sign in/out, as done for any other device. However, if admin will try to restart this device, then the command will be ignored, since there is no option to restart a single port on an ATA, and Admin should use ATA management tool to perform this command. Furthermore, all accounts that are signed in MUST be within same region, since there is no option to "transfer" a port to another region due to regulations, such as EUDB.

2   Roadmap for Bulk Provisioning

We are aware of challenge to migrate large number of analog ports from another system to Teams, hence we plan to enable bulk Provisioning that will avoid the need to OTP each port and afterwards remote sign in manually. Instead, we plan to have a tool that will accept a list of devices (including Analog ports) as input and will complete the all process with a single transaction.

3   Disclaimers – Known Issues

- TAC Restart command (i.e., per port), currently restarts the entire ATA, hence do not use it unless you are aware of the side effects.

Device enrollment tone is "fast busy" for both success and failure scenarios, this will be fixed by October 10th.

4   Introduction

This document describes how to onboard Poly Obi3 Analog VoIP Adapter (Obi300 & Obi302) with Microsoft SIP Gateway.

This is required for the up-and-coming release of a Microsoft service that pairs SIP endpoints with their Microsoft Teams account, enabling Teams users to make and receive Teams calls on their SIP endpoint.

The Poly Obi3 series includes the following models:

OBi Model		FXS	FXO	Number of FXS ports
Obi300		✓	✗	1
Obi302		✓	✗	2

5   Compatible models and firmware

Model	Minimum Firmware	Approved Firmware
Obi300	3.2.4 (Build 8441)	3.2.5 (Build: 8732)
Obi302	3.2.4 (Build 8441)	3.2.5 (Build: 8732)

6   Enabling Web Admin Configuration

By default, web access to the Internet (WAN) IP address of the OBi3 is disabled. Accessing the Internet (WAN) IP will show, "The requested URL was not found!" or "The webpage cannot be found" in your browser.

To enable web access:

- Dial ***0 from the phone connected to OBi30x ATA
- Enter 30#
- Press 1 to Enter a New Value
- Press 1# to Enable
- Press 1 to Save

7   Firmware version requirement

Approved firmware version for Poly Obi3 series is: **3.2.5 (Build: 8732)**

To update the firmware, follow the steps below:
1. Login to the web interface of the device.
2. On the left pane navigate to **Device Update**
3. Select the firmware file [**Choose File**] then click on **Update**.

4. After the device recovers from reboot, verify Software Version by selecting **Status→ System Status**

8   Configuring Provisioning Server URL

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

First please restore the device to factory defaults

1. Access the web interface

2. Navigate to **System Management→ Device Update→ Reset Configuration→ Reset**

3. After the device recovers from reboot, access web and configure provisioning URL:

System Management→ Auto Provisioning

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Set a value for Parameter Name - ConfigURL then hit 'Submit'
button and 'Reboot'
```

For example if you are provisioning in NoAM region, use the below URL. For EMEA, and APAC regions, edit the provisioning URL string given below to include emea and apac respectively.

Parameter Name	Value
ConfigURL	http://noam.ipp.sdg.teams.microsoft.com

Notes:
- URL above points to SIP Gateway production system
- URL MUST be appended with **/mac.cfg**

4. Analog Gateway obtains the onboarding configuration and reboots

When device recovers from reboot, access the device and verify it is SIP registered with onboarding account.

[**Status→ System Status→ SP1 Service Status→ Status** = **Registered**]

# 9   Provisioning ATA in Teams Admin Center

9.1.1   Pairing Procedure: Remote Sign-in

This section describes how to pair FXS port on Analog Gateway with Teams user using OTP. Procedure described below needs to be performed per FXS port.

1. Access TAC (https://admin.teams.microsoft.com) using the tenant admin's credentials.
2. Select **Teams devices→ Phones→ Actions→ Provision devices**
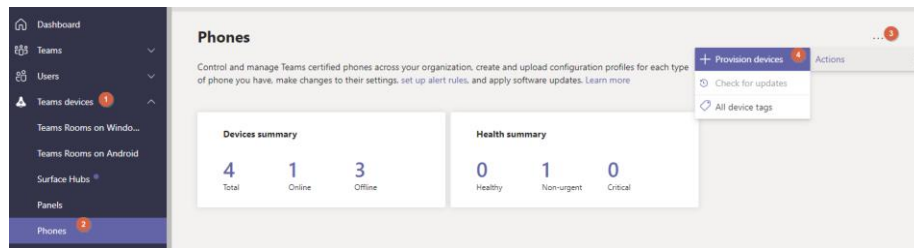
3. Add the Hardware ID (analog), then generate verification code (OTP)
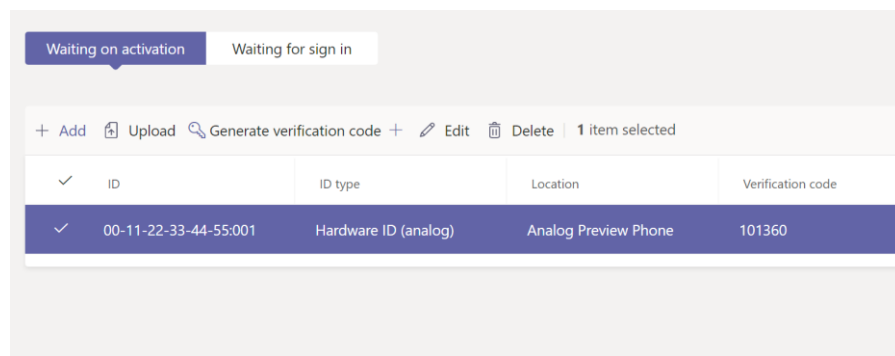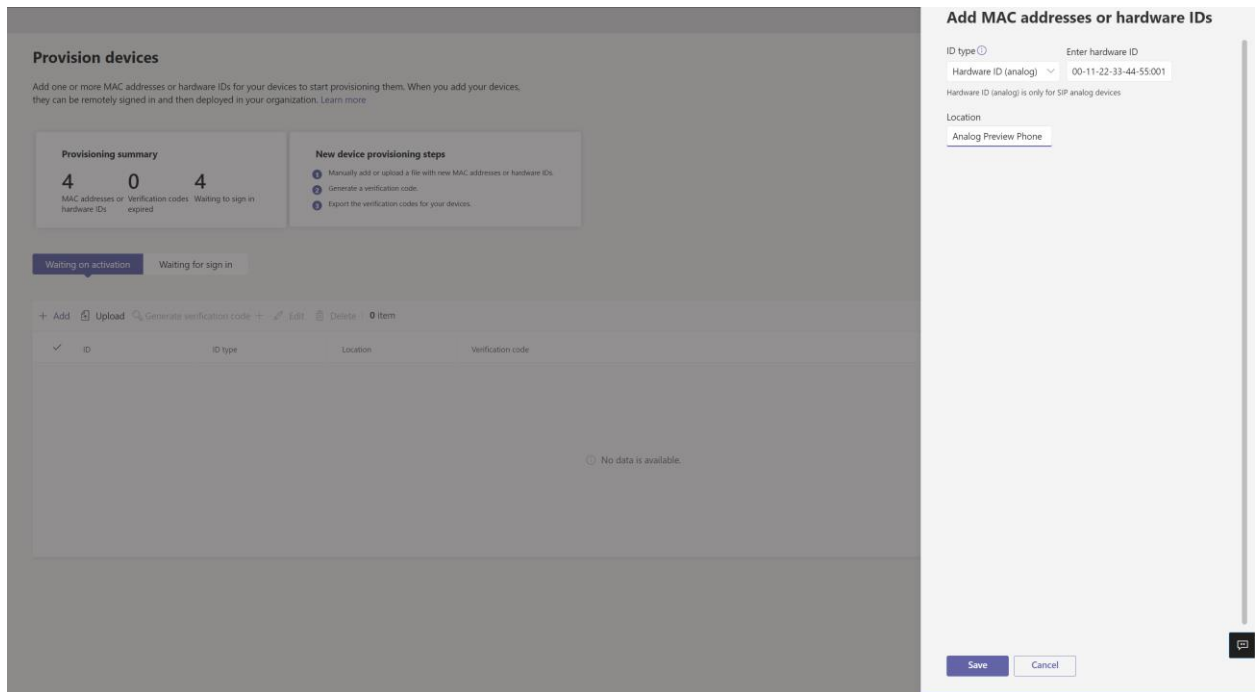
4. Plug analog phone to FXS port of MP-11x, off hook and dial ***55*<Verification Code from TAC>**
5. The system will play confirmation tone – on hook.
6. In TAC switch to **Waiting for sign in** tab, select the MAC address and press **Sign in a user**
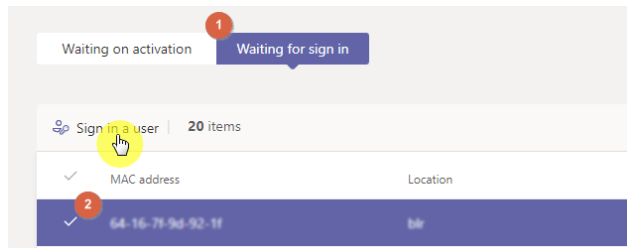
7. Complete the web sign-in process by following the instructions on screen, use the account you want to be assigned to FXS port.

9.1.2   Unpairing Procedure: Remote Sign-out

This section describes how to unpair device/FXS port on Analog Gateway.

8. Access TAC (https://admin.teams.microsoft.com) using the tenant admin's credentials.
9. Select Teams devices→ SIP devices
10. Locate the user and select it
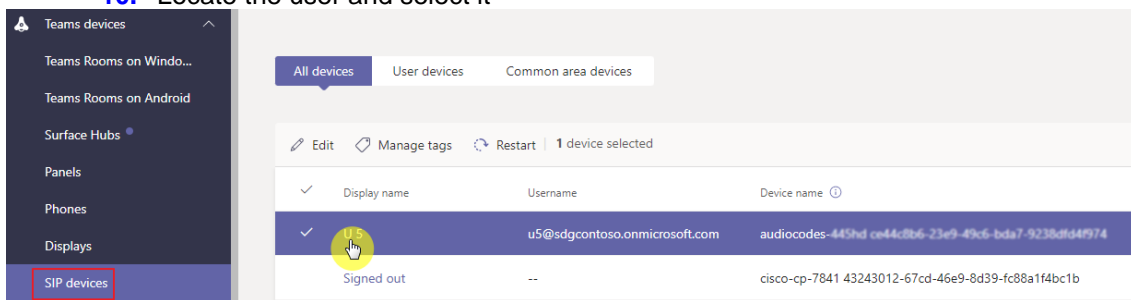
11. Click on three dots (…) in the upper right part of the web page→ **Actions**→ **Sign Out**