zoomphone

Configuration Guide for Patton SmartNode (Trinity 3.2x)

Template guidelines on how to create a configuration guide for a Patton SmartNode SIP device certified for Zoom Phone

Zoom Confidential

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Revision History

Version	Date	Author	Change
1.0	3/15/2022	Danny Staub	Original Draft
1.1	7/27/2022	Danny Staub	Added online or native web wizard section Edited trust statement in SIP interface of referenced web wizard Added TLS license overview and installation procedure
1.2	11/29/2022	Danny Staub	Added supported model numbers Removed Cloud Config info Added supported features Added configuration steps. i.e. Connecting to Endpoint Added Discovery Tool and Trinity manual link
1.3	1/18/2023	Danny Staub	Changed software version from 3.x to 3.2x.
1.4	1/23/2023	Danny Staub	Added fax capabilities

1. Overview

This section provides an overview for the document. This document provides instructions on how to configure and add your device to the Zoom Web Portal.

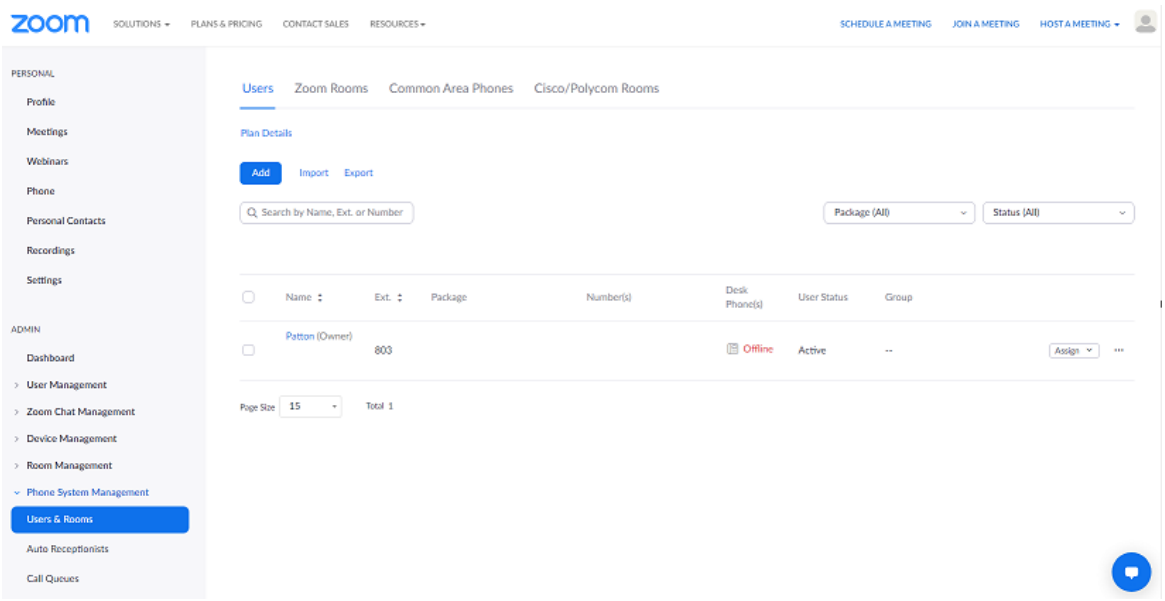
Vendor SIP Endpoints can register to Zoom Phone as a third-party SIP Endpoint and provide Telephony features and capability such as calling, paging and other phone system/PBX functions.

2. Configuration Steps - Zoom Web Portal

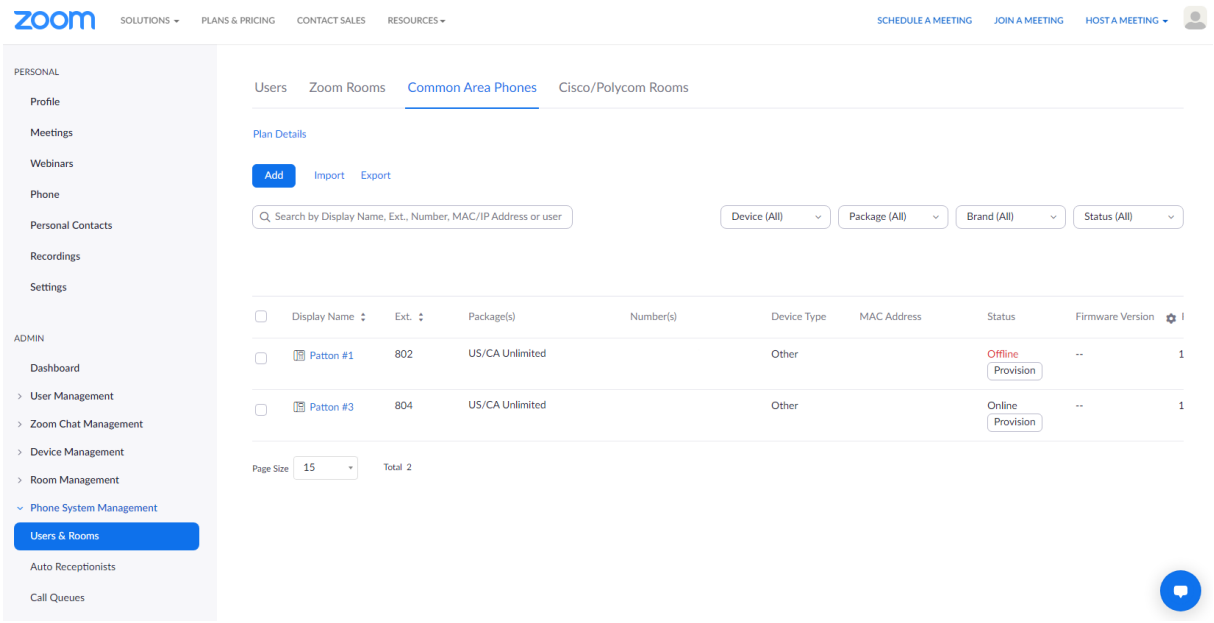
This section provides instructions on how to configure SIP Endpoint in Zoom Web Portal (does not include steps for configuring Vendor Endpoint specifically)

To register a SIP Endpoint to Zoom Phone, start by creating a new common area phone in the Zoom Web Portal. See the Zoom support site for more information.

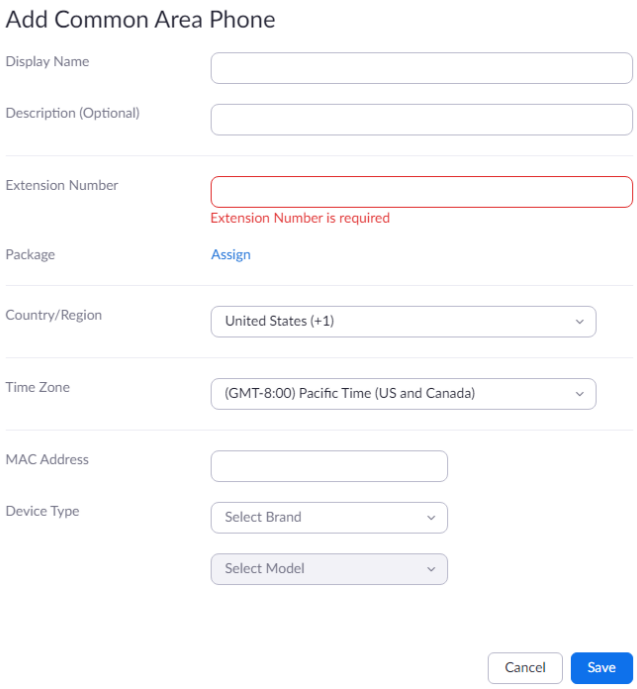
1. **Sign in**to the Zoom Web Portal
2. Click **Phone system management** > Users & Rooms



3. Click the **Common Area Phones or Phones & Devices** tab



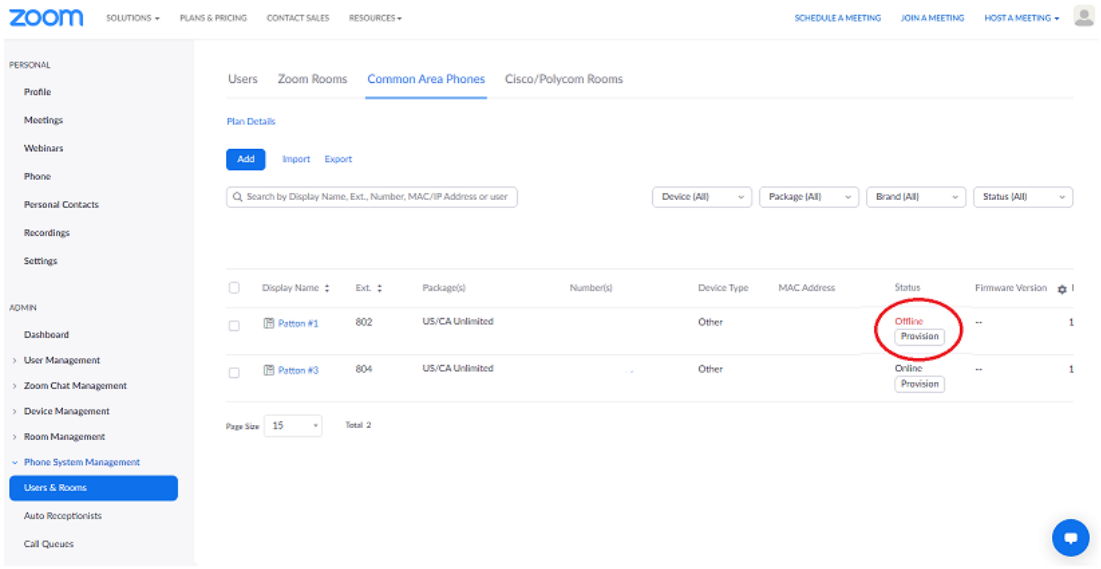
4. Click **Add** and enter the following information

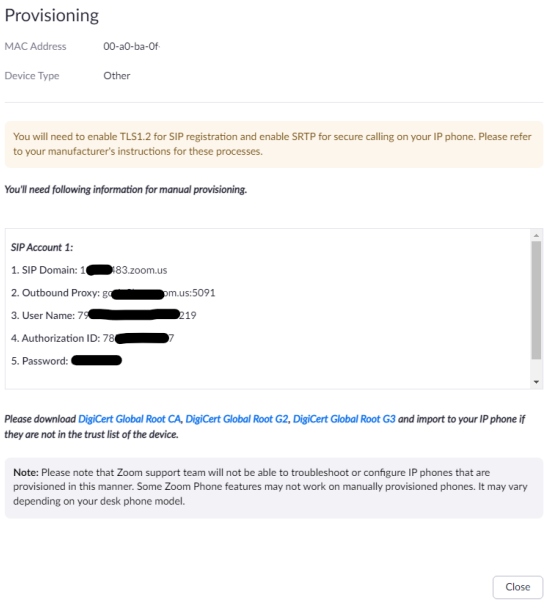


a. **Site** (only visible if you have multiple sites): Select the site you want the device to belong to
b. **Display Name**: Enter a display name to identify the device
c. **Description (Optional)**: Enter a description to help you identify the location of the device

d. **Extension Number**: Enter an extension number to assign it to the device
e. **MAC Address**: Enter the 12-digit MAC address of the Endpoint. The MAC can be found on the product label
f. **Device Type**: Select **Other**
    i. Note: If you don't have the other option, contact your Zoom sales representative. By default, support for a generic SIP profile is not enabled
g. **Emergency Address** (only visible if you don't have multiple sites): Select an emergency address to assign to the desk phone. If you selected a site for common area phone, the site's emergency address will be applied to the phone

5. Click **Save**
6. Click **Provision** to view the SIP credentials. You will need this information to complete the provisioning





3. Configuration Steps - Vendor Endpoint

This section provides instructions on how to check for and install feature licenses, how to connect to the device, and how to configure your Patton SmartNode SIP Endpoint to register to Zoom. The following SmartNode Endpoints are supported:

- SN5540 series
- SN5570 series
- SN4140 series
- SN200 series

Supported Features

- SIPv2 & SIPv2 over TCP
- SIPv2 TLS
- SIPv2 over IPv6
- SIP call transfer, redirect
- Overlap or en-bloc dialing
- DTMF in-band, out-of-band
- Configurable tones Call Routing & Services
- Regular expression number matching
- Regular expression number manipulation
- Least Cost Routing
- Number blocking
- Short-Dialing
- Digit collection
- Distribution-Groups and Hunt-groups
- Fax - T.38 and G711 Passthrough

TLS Licensing

A TLS license is needed to communication to the ZOOM service.

- SNSW-SIP-TLS

The following units will have this license pre-installed from the factory.

- SN5540 series
- SN5570 series

The following units require a TLS license (SNSW-SIP-TLS) to be purchased and installed. Please contact sales@patton.com for more information. (Licenses can also be purchased and pre-installed in the factory before shipping.)

- SN4140 series
- SN200 series

How to install a TLS license file

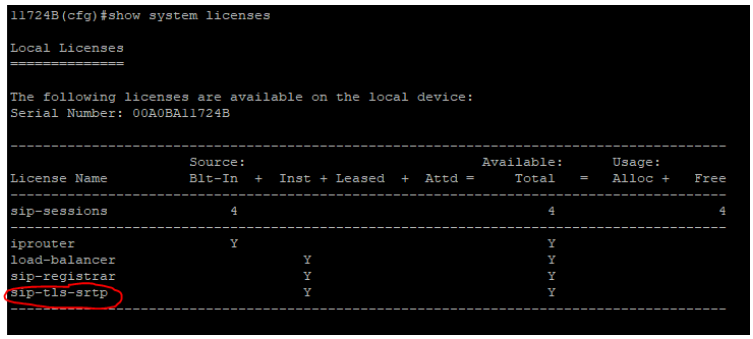
If you order licenses from Patton, you will receive an e-mail with a set of CLI commands - one command for each feature. Copy the commands and paste them into an open Telnet, SSH, or console connection. This unlocks the corresponding licensed feature.

Example: Install a license as received by e-mail from Patton

```
node>install license 10011002R1Ws63yKV5v28eVmhDsVGj/JwKqIdpC4Wr1BHaN- tenXUYF/
2gNLoihifacaTPLKcV+uQDG8LJis6EdW6uNk/ GxVObDEwPFJ5bTV3bIIfUZ1eUe+8c5OpCCd7PSAe83Ty2c/
CnZPSlEjIrVlJrr8VhOr1DYxkEV9evBp+tSY+y9sCeXhDWt5Xq15SAPlznTLQmym7fDakvm+zltzswX/
KX13sdkR0ub9IX4Sjn6YrvkyrJ2dCGivTTB3iOBmRjV1u
```

To view the licenses installed, enter in the command

```
Node> show system licenses
```



Connecting to the SmartNode Endpoint

The SmartNode Endpoints come with either 1 or 2 Ethernet ports, depending on the model. There are multiple ways to gain access to the unit.

- Ethernet port 0/0
  - Acts as a DHCP Client and will take a DHCP address from your networks DHCP server. You can then use the SmartNode discovery tool*, to find what IP was assigned to the device.
  - The SN200 and SN4140 series have the static IP addresses of 192.168.200.10/24 assigned by default.
- Ethernet port 0/1
  - Acts as a DHCP Server. You can connect this directly to your computer and it can receive a DHCP address from the SmartNode.
  - The SN5500 series have the static IP addresses of 192.168.1.1/24 assigned by default.

Once the IP Address is known, you can access the device's GUI by entering in the IP Address into a web browser. The default username is 'administrator' and the password is left blank. (Telnet and SSH are also supported.)

*Download the SmartNode Discovery tool from https://patton.com/files/support/zoom/SNDiscovery_V107.zip

Register a SmartNode Endpoint using the online or native Web Wizard

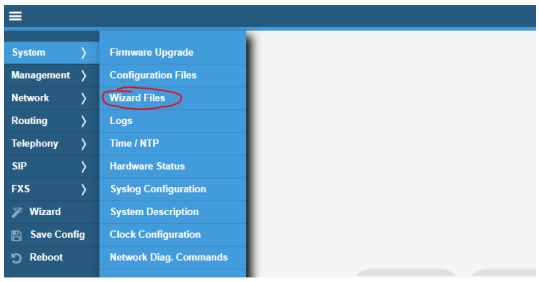
The SmartNode can be configured using a Web Wizard xml file that runs natively through the GUI of the device.

Download Wizard

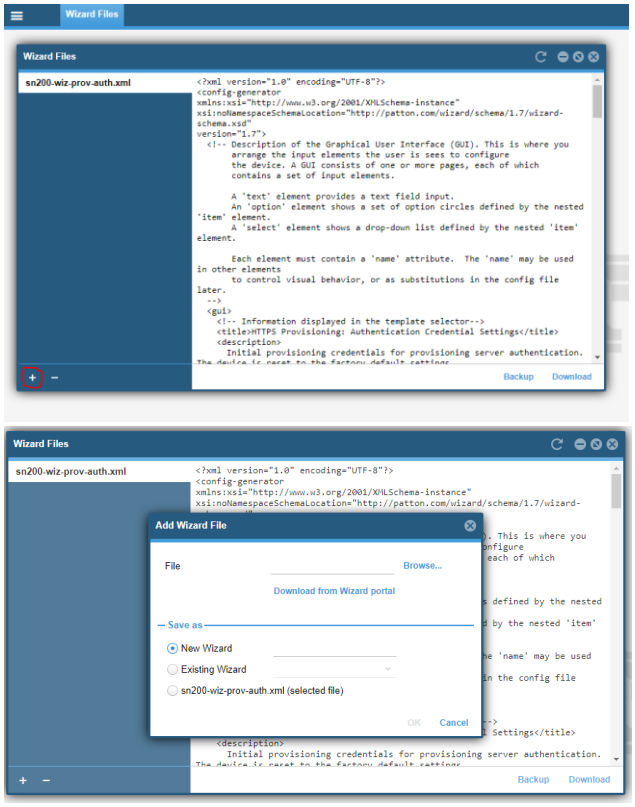
You can download this wizard from https://patton.com/files/support/zoom/FXS_ZOOM_Wizard.zip.

Install Wizard

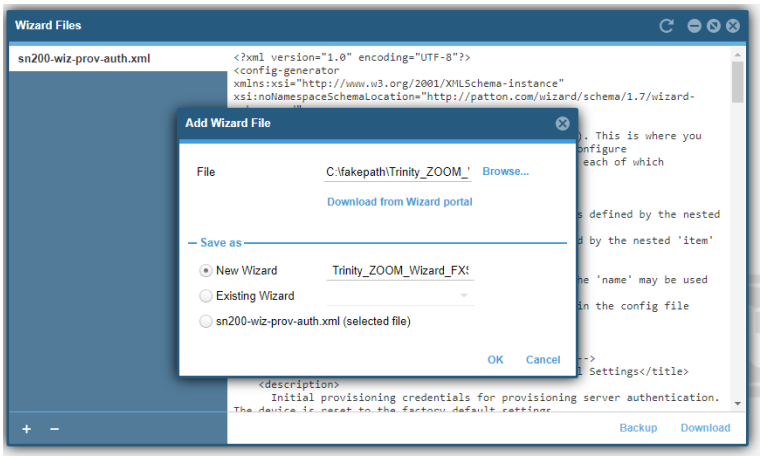
To load this wizard into a SmartNode endpoint, navigate to the unit's GUI and once logged in (administrator/Blank Password), select 'System/Wizard Files' from the menu in the upper lefthand corner.



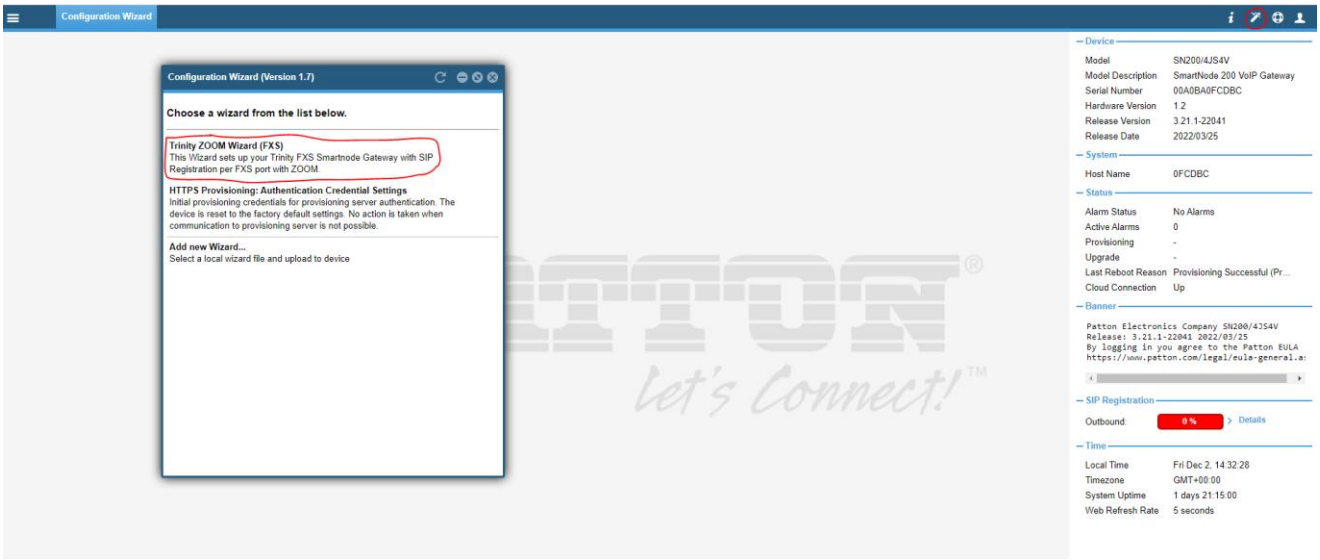
Once here, click the '+' button to add a wizard, and a popup will appear.



Browse to the wizard xml file and select it as a ‘New Wizard’ and then hit ‘OK’.



Now you can click the wizard wand on the top righthand side of the GUI to launch the wizard selection page. From here, select the wizard you just loaded, and you will then walk through the following steps to configure the unit.

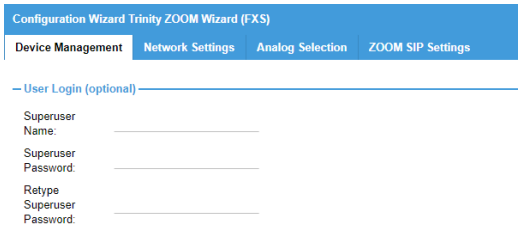


Execute Wizard

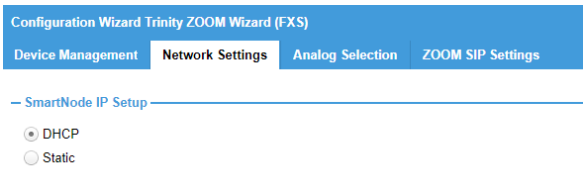
There are 4 tabs that require input for the configuration to be generated.

- Device Management – Configure the management access username and password
- Network Settings – Configure the endpoint to use a DHCP address or statically set it
- Analog Settings – Select the amount of FXS ports in use
- ZOOM SIP Settings – Input SIP registration information received from ZOOM

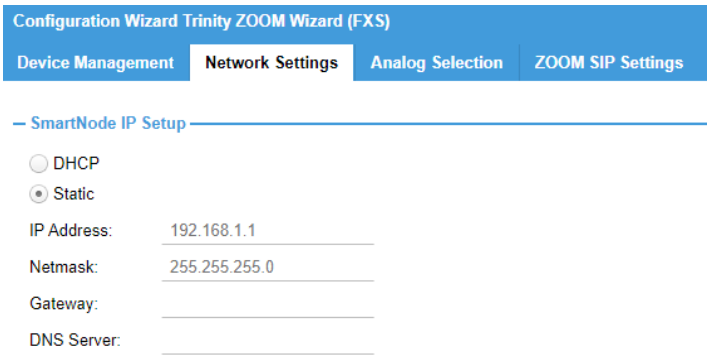
1. Device Management tab
    a. Create a Superuser name and password



2. Network Settings tab
    a. DHCP – Acts as a DHCP Client

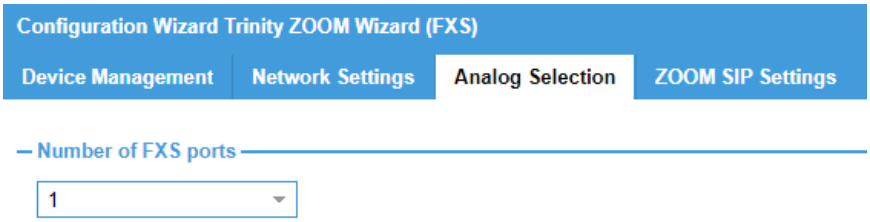


    b. Static – Manually set the IP Address

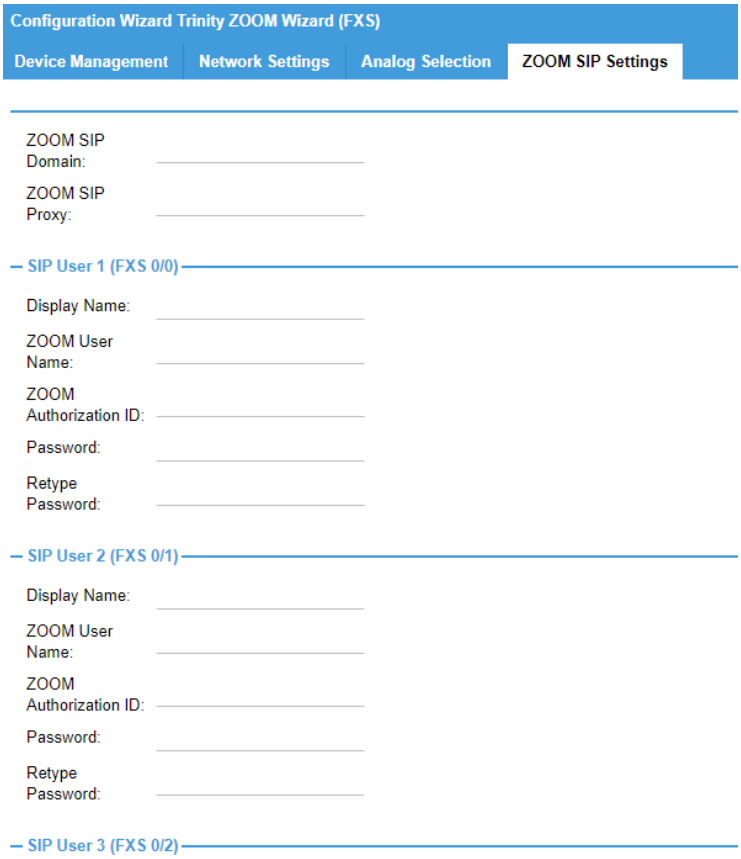


- **IP Address** – IP address of the SmartNode
- **Netmask** – Netmask of the SmartNode
- **Gateway** – Default Gateway IP Address
- **DNS Server** – DNS Server IP address

3. Analog Selection tab
    a. Select the number of FXS ports to be used



4. ZOOM SIP Settings tab
    a. ZOOM SIP Domain – Provided from ZOOM
    b. ZOOM SIP Proxy – Provided from ZOOM (If using FQDN, you do not have to specify the port)
    c. SIP User X
        i. A SIP User section is created for the amount of FXS ports chosen in the previous tab. You will need to fill in the following for each user.
            - ZOOM Username – Provided from ZOOM
            - ZOOM Authorization ID – Provided by ZOOM
            - Password – Provided by ZOOM



5. Once all tabs are filled in, you can then Select one of the following from the lower right-hand section of the wizard.
    a. Preview – You can preview the config before loading it and also download a copy.
    b. Save – This will save the config and activate it on the unit as the new startup-config.

4. Troubleshooting

This section provides debugging information for your Patton SmartNode. Below are the debugs commands that you can run to troubleshoot or verify any issues.

Protocol	Trinity Command	Description
SIP:	debug sip-transport full-detail	Logs all SIP messages sent or received over the IP network
ISDN BRI/PRI:	debug isdn-signaling full-detail	Prints all ISDN layer 3 signaling messages
FXO:	debug fxo detail 4	Enables/Disables FXO port trace
	debug fxo-signaling detail 4	Enables/Disables call-control FXO signaling trace
FXS:	debug fxs detail 4	Enables/Disables FXS port trace
	debug fxs-signaling detail 4	Enables/Disables call-control FXS signaling trace

5. FAQ

Patton's Knowledge Base is available 24/7 on our website https://www.patton.com/support/kb.asp.

6. Resources

If you have any issues with your Patton SmartNode, please contact Patton Support for further assistance.

Trinity User Manual - https://www.patton.com/manuals/trinity3.14cli.pdf
Online Ticketing System – https://support.patton.com or email to support@patton.com