

# Configuration Guide for Snom M500

Zoom Confidential

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# **Revision History**

Version	Date	Author	Change
1.0	06/13/2023	Bindu Pondugula	Created document for Snom M500

# **DUT and Zoom Software Versions**

	Equipment	Software Version
Snom(Device under test)	M500(BASE)	1.11.1
Snom(Device under test)	M55(CORDLESS)	1.11.1
Zoom	Zoom Desktop application	5.14.0(13888)
Zoom	Zoom Mobile application	5.14.7(8043)

## Features Supported by Snom M500

- Multiple Line Keys
- Multiple Users per Device
- Custom Time Format and Zone
- Sync time with NTP server
- Enable or disable phone web admin portal
- TLS and SRTP
- Make and Receive Calls
- Inbound and Outbound Call via Opus codec negotiation
- Call Hold and Resume
- Long Duration call
- SIP Session Timer
- Call Waiting
- DND
- Call Forward Always
- Call Forward No Answer
- Call Forward Busy
- Blind/Cold Transfer
- Consultative/Warm Transfer
- 3-party Conference
- Voicemail
- Call History
- Auto Receptionist IVR



• Call Park/Retrieve

# 1. Overview

This document outlines the configuration best practices for the Snom M500 as Zoom generic SIP phone.

# 2. Configuration Steps - Zoom Web Portal

This section provides instructions on how to configure Snom M500 in Zoom Web Portal

This section is mainly for adding phone devices M500 and assign Zoom users to the devices

#### **Prerequisites:**

- Zoom Phone account: a valid Zoom Phone subscription is required in order to assign to a Snom M500 endpoint.
- Zoom approval for provisioning of Snom M500 as Generic SIP devices. Administrators should contact Zoom Account Executive to start an approval process

Login to Zoom Web portal at <u>https://zoom.us/.</u>

The following Zoom SIP Device configurations are included in this section

- 1. Create Zoom Users
- 2. Add Device



### 1. Create Zoom Users

Zoom Users are created in order to login to Zoom clients on desktop or mobile, it can also be assigned to SIP Device. The steps for creating a user are as follows:

1. Navigate to Admin -> User Management > Users. Click + Add Users to create new Zoom users. "A pop-up window will appear titled "Add Users". Fill out the pop-up with the desired user info and select 'Add'.

ZOOM Products Solut	ions Resources Plans & Pricing						Si	chedule Joir	n Host - Whiteboard 🛛
Phone Personal Contacts	Users You have licenses <u>still evailable</u> to	users. Assign licens	e to users or manage	your license count.					Document
Whiteboards	Users Pending Advanced		Add Users						
Recordings Settings	Q Search Advanced Search Y		Add users with t You can add user their accounts wi	heir email addresses s of all types to your account. I II be added to this account.	f you enter the email address of ac	count owners, all users on		Import	Export Y + Add Users
Scheduler	Email/Name ID \$	First Name 🌻	( · · · · @g	mail.com			Departme	nt	٢
Analytics & Reports	kishore@tekvizion.com	Kishore	User Type 🕥	) Basic O Licensed	On-Prem ()				Edit
Dashboard	apambrose®tekvizion.com	Amul Priya		Meeting (9 available)		)	Managed		Edit
Users	abelardo@tekvizion.com	Abeelardo1		<ul> <li>Large Meeting (500 par</li> <li>Zoom Webinars (500 at</li> </ul>	ticipants) (20 available) tendees) (18 available)				Edit
Groups Roles Contacts	obhishanth507@gmail.com	Abhishanth	Department Manager	Managed Kis(		•	Managed		Edit
Team Chat Management     Device Management	aguajardo@tekvizion.com	Abelardo	Job Title Location	Engineer Plano			test		Edit
Room Management     Workspaces Management	aksomalingam@tekvizion.com	Arunkumar				Add Cancel			Edit
Phone System Management     Account Management	arun716©gmail.com	Arun		Kumar	Member	Basic - Zoom Phone			Edit
> Advanced	asayani@tekvizion.com	Abhishanth		Sayani	Member	Licensed - Zoom Phone			Edit
Zoom Learning Center	Dindu.pondugula@gmail.com	Bindu		Pondugula	Member	Basic - Zoom Phone	Program		Edit

Figure 1 : Add Users

- 2. A Zoom activation email is sent to the email address used in creating the user, follow the instruction to activate the zoom account.
- 3. Navigate to Phone System Management > Users & Rooms. Click Add



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Users	Zoom Po						
	200111 KU	oms Com	imon Areas Cisco/Pol	ycom Rooms			
Plan De	etails						
Add	Import E	xport					
Q Se	arch by Name, E	ct. or Number					
Depa	rtment v Ente	r department fu	II name Package (All)	Status (All)	V Site (/	AII)	)
							)
					Desk		
	Name 💲	Ext. ‡	Package	Number(s)	Phone(s)	User Status	Site
	-						
		8036	Zoom Phone Basic (Migrated)		🔲 Online	Active	Main Sit
	@gmail.com		(migrated)				
	_						
	@tekvizi on.com	8035	US/CA Unlimited	(719)	Offline	Active	Main Sit
	Pian De Add Q Se Depa	Plan Details          Add       Import       E         Q. Search by Name, E       E         Department ~       Ente         Import       E         Import       E <tr< td=""><td>Add       Import       Export         Q. Search by Name, Ext. or Number       Department v       Enter department fut         Department v       Enter department fut         Base       Base         Base       Base         Import       Ext. ‡         Base       Base         Base       Base</td><td>Add       Import       Export         Q. Search by Name, Ext. or Number       Q. Search by Name, Ext. or Number         Department V       Enter department full name       Package (All)         Import       Import       Ext. ‡       Package         Import       Ext. ‡       <t< td=""><td>Add       Import       Export         Q Search by Name, Ext. or Number      </td><td>Add       Import       Export         Q. Search by Name, Ext. or Number      </td><td>Plan Details         Add       Import       Export            <ul> <li>Search by Name, Ext. or Number</li> <li>Department              <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul> <ul> <li>Name              <ul> <li>Ext.              <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </li></ul>          Department          <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul>          Name          <ul> <li>Ext.              <li>Package</li> <li>Number(s)</li> <li>Desk Phone(s)</li> <li>User Status <li>Gonine Active</li> </li></li></ul> <ul> <li>Gonine Basic <ul> <li>Gonine Active</li> <li>Status (Migrated)</li> <li>(T19)</li> <li>Offline Active</li> </ul></li></ul></li></ul></li></ul></td></t<></td></tr<>	Add       Import       Export         Q. Search by Name, Ext. or Number       Department v       Enter department fut         Department v       Enter department fut         Base       Base         Base       Base         Import       Ext. ‡         Base       Base         Base       Base	Add       Import       Export         Q. Search by Name, Ext. or Number       Q. Search by Name, Ext. or Number         Department V       Enter department full name       Package (All)         Import       Import       Ext. ‡       Package         Import       Ext. ‡ <t< td=""><td>Add       Import       Export         Q Search by Name, Ext. or Number      </td><td>Add       Import       Export         Q. Search by Name, Ext. or Number      </td><td>Plan Details         Add       Import       Export            <ul> <li>Search by Name, Ext. or Number</li> <li>Department              <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul> <ul> <li>Name              <ul> <li>Ext.              <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </li></ul>          Department          <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul>          Name          <ul> <li>Ext.              <li>Package</li> <li>Number(s)</li> <li>Desk Phone(s)</li> <li>User Status <li>Gonine Active</li> </li></li></ul> <ul> <li>Gonine Basic <ul> <li>Gonine Active</li> <li>Status (Migrated)</li> <li>(T19)</li> <li>Offline Active</li> </ul></li></ul></li></ul></li></ul></td></t<>	Add       Import       Export         Q Search by Name, Ext. or Number	Add       Import       Export         Q. Search by Name, Ext. or Number	Plan Details         Add       Import       Export <ul> <li>Search by Name, Ext. or Number</li> <li>Department              <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul> <ul> <li>Name              <ul> <li>Ext.              <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </li></ul>          Department          <ul> <li>Enter department full name</li> <li>Package (All)</li> <li>Status (All)</li> <li>Site (All)</li> </ul>          Name          <ul> <li>Ext.              <li>Package</li> <li>Number(s)</li> <li>Desk Phone(s)</li> <li>User Status <li>Gonine Active</li> </li></li></ul> <ul> <li>Gonine Basic <ul> <li>Gonine Active</li> <li>Status (Migrated)</li> <li>(T19)</li> <li>Offline Active</li> </ul></li></ul></li></ul></li></ul>

4. Click Choose beside Users and when the pop-up window opens, select the proper user and Confirm

ZOOM Products Sole	utions Resources Plans & Pricir	g	
Whiteboards	Users & Rooms > Users > Add		_
Recordings	Add Users	Choose from Users	
Settings	You can assign extension numbers to	Q Search by Name or Email Address	
Scheduler	plans to those users who need to mak		
Analytics & Reports	Site	□ Name 븆	Email Address 븆
ADMIN	Users Choose	□ s	@yahoo.com
Dashboard		□ ≤	@gmail.com
> User Management	Package Zoom F		
> Team Chat Management	Assign		)@gmail.com
> Device Management		Page Size 10 🔻 Total 3	
> Room Management	<ul> <li>Specify a template to be assigned</li> </ul>		
> Workspaces Management	Save Cancel		Confirm
<ul> <li>Phone System Management</li> </ul>			
Users & Rooms			
Auto Receptionists			
Call Queues			
Shared Lines			

Figure 3 : Choose user



5. Click **Assign** beside Package and at new window, select proper Calling plan. **US/CA Unlimited Calling Plan** was picked up, click **Save** to complete adding users under Phone System Management

ZOOM Products Solu	itions Resources	Plans & Pricing
PERSONAL	Users & Rooms > Use	ers > Add
Profile		
Meetings	Add Users	
Webinars	You can assign extens plans to those users w	ion numbers to existing users in your account. After that, you can assign calling ho need to make outbound calls. You can add up to 100 users each time.
Phone	Site	Main Site
Personal Contacts		
Whiteboards	Users	Choose
Recordings	Package	Zoom Phone Basic (Migrated) 💿
Settings		Assign
Scheduler		
Analytics & Reports	Specify a template	to be assigned to users
ADMIN	Save Cancel	
Dashboard		
> User Management		
> Team Chat Management		
> Device Management		
> Room Management		
> Workspaces Management		
<ul> <li>Phone System Management</li> </ul>		
Users & Rooms		

#### Figure 4 (a): Assign Calling Plan

ZOOM Products Solution	ons Resources Plans	& Pricing
Whiteboards	Users & Rooms > Users >	Add
Recordings	Add Users	
Settings	You can agaign avtancian nu	mbore to evicting upper in your operant. After that you can easing calling
Scheduler	plans to those users who nee	mbers to existing users in your account. After that, you can assign calling ad to make outbound calls. You can add up to 100 users each time.
Analytics & Reports	Site	Main Site
ADMIN	Users	Chosen: 1
Dashboard		×
> User Management		Choose
> Team Chat Management		
> Device Management	Раскаде	Select Package
> Room Management		US/CA Unlimited Calling Plan (O Available) Pro Features - Unlimited Domestic
> Workspaces Management	Specify a template to be	as Zoom Phone Power Pack (20 Available)
<ul> <li>Phone System Management</li> </ul>	Save Cancel	Power Pack Features
Users & Rooms		
Auto Receptionists		
Call Queues		





6. Click Assign and select Assign Numbers to the newly added user

ZOOM Products Sol	utions Re	esources P	lans & Pricing	Areas Cisco/Poly	rcom Rooms				Schedule	Join	Host ~	Whiteboard	
Whiteboards	Plan De	etails											
Recordings	Add	Import E	xport										
Settings													
Scheduler	Q Se	arch by Name, Ex	tt. or Number	l	Department ~ Enter	r department full name	Package (All)	~	Status (All)	~	Site (All)		
Analytics & Reports													
ADMIN		Name 🛊	Ext. \$	Package	Number(s)	Desk Phone(s)	User Status	Site	Group				
Dashboard		P'											
> User Management		mail.com	@g 8036	(Migrated)		Online	Active	Main Site				Assign ~	
> Team Chat Management													
> Device Management		u , om	.c 8035	US/CA Unlimited	(719)	Offline	Active	Main Site				Assign ~	
Room Management											Assign	Packages	
> Workspaces Management		U .	8034	US/CA Unlimited	(719)		Active	Main Site			Assign	Numbers	
<ul> <li>Phone System Management</li> </ul>		gmail.com											
Users & Rooms		E	8033	US/CA Unlimited	(719)		Active	Main Site				Assign ~	
Auto Receptionists		n.com			(10)		10010		-				

Figure 6 : Assign Numbers

7. Select the desired DID and click **confirm** to assign the DID to the user

Ass	sign Numbers htry/Region				
Un	ited States 🗸 🗸				
	Search		Site (All)	Number Type (All) 🗸	Get Numbere
•	Number	Агеа	Number Type	Voice Capability	Site
	(719) 5	Canon City, Colorado, United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	Canon City, Colorado, United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	Canon City, Colorado, United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	United States	Toll Number	Incoming & Outgoing	Main Site
	(716	United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	United States	Toll Number	Incoming & Outgoing	Main Site
	(715	United States	Toll Number	Incoming & Outgoing	Main Site
	(716	United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	United States	Toll Number	Incoming & Outgoing	Main Site
	(719)	United States	Toll Number	Incoming & Outgoing	Main Site
Page	1 of 2 < > Page	e Size 10 -	Total 13		
				Co	nfirm Cancel

ect DID Number Igl



#### 2. Add SIP Devices

- 1. Navigate to ADMIN -> Phone System Management -> Phones & Devices. Click Add
  - Set **Display Name**: Add any name.
  - Set MAC Address: add the Snom M500 MAC Address here
  - Set **Device Type**: select **Other** as the phone type is not certified yet
  - Click Assign under Assigned To and select the newly created user in previous steps
  - Click Save

ZOOM Products Solution	ons Resources Plans &	& Pricing							Schedule Joir	i Host - Whiteb	ard
Settings											
Scheduler	Assigned Unassigne	d									
Analytics & Reports			Í								
ADMIN	Analog Telephone Adapter a	and Shared Office manage	ement functions are now	Add Device		ed to crea	ate a profile/extension and th	en IP Phones, Analog Tele	phone Adapters, or Zooi	n Phone Appliance device	is
Dashboard	can be added to the Commo	on Area. This is a consiste e devices can be assigne	nt workflow with manag d to Common Area. To r	Display Name	B						
> User Management		-		Description							
> Team Chat Management	Add Export @			(Optional)						Resync by Accor	nt/Site
> Device Management											
> Room Management	C Search by User, Ext., MAC		ļ	MAC Address	00		Ľ	evice (All)	(All) V Status (	LII) V Site (All)	
> Workspaces Management				Device Type	Other						
<ul> <li>Phone System Management</li> </ul>											
Users & Rooms	Display Name 💲	Device Type	MAC Address		This device type supports up to 1 assignee.		IP Address	Hot Desking (Signed In)	Provision Template	Call Control from Desktop Client ()	0
Auto Receptionists						_					
Call Queues		Other	_	Assigned to	Ext 8036	Site		Unsupported	Unsupported	Unsupported	
Shared Lines					ER. 0000						
Group Call Pickup		Other						Unsurgented		Unsupported	
Phone Numbers		Other			Save	Cancel					
Provider Exchange				_	Offline						
Phones & Devices		Other		Ext. 8015	Provision	Main Site		Unsupported	Unsupported	Unsupported	
Monitoring											
Assets Library	0 8	Other	_	Ext. 8019	Offline	Main Site		Unsupported	Unsupported	Unsupported	
Logs					Provision						
Company Info	-				Offline						
> Account Management		other		Ext. 8016	Provision	Main Site		unsupported	Unsupported	unsupported	
Advanced											

Figure 8 : Add Desk Phone



2. Select the Display Name of the newly created Desk Phone "**SNOM M500-8035**" to navigate to its profile and click the **Actions** and select **Provision** button. The SIP Account detail is displayed which will be used in the Snom M500 provisioning (section Provisioning through Phone's Web Interface)

3. Download the Certificates and import them to the device, so that device will be considered in the trust list. (Importing the certificates to the phone is described later in (section 3.4.3 Apply trusted certificates))

SONAL		
Profile	Phones & Devices > Ass	signed > SNOM M500-8035
Meetings	SNOM M500-8	8035 Rename
Webinars	No description	
Phone	Profile	
Personal Contacts	Site	Main Site (Main Site)
Whiteboards	Assigned to	
Recordings		Ext. 8035 ×
Settings		
Scheduler	IP Address	10
	Device Type	Other
	Firmware Version	
User Management	MAC Address	00-0
Team Chat Management	Provision Template	Unsupported 💿
Device Management	Status	Online
Room Management		
Workspaces Management	Actions 🗸 Rem	ove
Users & Rooms	Provision	
Auto Receptionists	Resync	

Figure 9(a): Provisioning

ZOOM Products Solution	ons Resources Pla	ans & Pricing	
PERSONAL	Phones & Devices > Ass	ligned > SNOM M500-8035	
Profile			
Meetings	SNOM M500-8	Rename	Provisioning
Webinars	No description		MAC Address 00-04-13-bb-09-c7
Phone	Profile		Device Type Other
Personal Contacts	Site	Main Site (Main Site)	
Whiteboards	Assigned to		You will need to enable TLS1.2 for SIP registration and enable SRTP for secure calling on your IP phone.
Recordings		Ext. 8035 ×	Please refer to your manufacturer's instructions for these processes.
Settings			You'll need following information for manual provisioning.
Scheduler	IP Address	10	
Analytics & Reports	Davice Type	Other	SIP Account 1:
ADMIN	Cierco Type	Other	1. SIP Domain: 7000766863.zoom.us 2. Outbound Prover ue01sip0b.sc zoom.us: 5001
Dashboard			3. User Name: 9
> User Management	MAC Address	004	4. Authorization ID: 7
> Team Chat Management	Provision Template	Unsupported (®	5. Password: m
> Device Management	Status	Online	
Room Management			import to your IP phone if they are not in the trust list of the device.
Workspaces Management     Phone System Menagement	Actions Y Rem	ove	Note: Please note that Zoom support team will not be able to troubleshoot or configure IP phones that
Users & Rooms			are provisioned in this manner. Some Zoom Phone features may not work on manually provisioned phones. It may vary depending on your desk phone model.
Auto Receptionists			
Call Queues			Circa
Shared Lines			Ciuse
Group Call Pickup			

Figure 10(b): Provisioning



## 3. Snom M500 Provisioning

This section provides instructions on how to configure Snom M500 to register to Zoom Phone Services.

#### 3.1 Deployment Topology Diagram



#### 3.2 Network

Figure 9: Network Diagram

By default, Snom M500 has DHCP mode enabled, if the router to which phone is connected does not support DHCP, you can configure static IP manually. You can find the IP address of Snom M500 by navigating the physical phone: Settings  $\rightarrow$  Status $\rightarrow$  Network $\rightarrow$ IP4

#### 3.3 Firmware Upgrade

This section ensures the phone is upgraded with the required firmware. The firmware used for this test is 1.11.1

- From the phone's home page, Navigate to: Servicing→ Firmware Upgrade→ Auto and Manual Upgrade.
- Please choose Base File and Handset File and click update from file/Install Handset file (Phone may have to restart to get applied with the changes)



SN()M	
STATUS SYSTEM NETWORK CONTACTS SERVICING Reboot	WARNING     Update login passwords for security reason
Time and Date	Firmware Server Settings
Custom Language Firmware Upgrade Auto Upgrade Manual Upgrade	Base Firmware URL: Update Base Firmware Now Handset Firmware URL: Installed Handset Firmware Not Available
Security	Cordless Deskset Firmware URL:
Tr369	Installed Cordless Not Available Deskset Firmware
System Logs SIP Trace	Install Cordless Deskset Firmware Now Server Authentication Name:
Settings	Server Authentication Password: Save

Figure 11(a): Auto Firmware Upgrade



SN()M		
STATUS SYSTEM NETWORK CONTACTS SERVICING Reboot	• Update login pas	sswords for security reason
Time and Date	Manual Firmware Updat	te Settings
Custom Language	Base File Name:	No file chosen
Firmware Upgrade Auto Upgrade		Choose File
Manual Upgrade	Update from File	
Provisioning		
Security	Handset File name:	No file chosen
Certificates		Choose File
11309	Installed Handset Firmware	Not Available
System Logs	Install Handset File	
SIP Trace		
Settings		
	Cordless deskset File name::	No file chosen
		Choose File
	Installed cordless deskset Firmware	Not Available
	Install cordless deskset File	

Figure 12(b) : Manual Firmware Upgrade



### **3.4 Provisioning**

The Snom M500 can be provisioned in two ways:

- 1. Provisioning through a HTTP/TFTP Server
- 2. Provisioning through Web Interface

3.4.1 Provisioning through a HTTP/TFTP server

From the phone's home page, Navigate to: Servicing  $\rightarrow$  Provisioning  $\rightarrow$  Server URL

- In a HTTP/TFTP Server, upload the below file in order for the phone to download the necessary configuration files and get provisioned. In this example, we have used <u>tftp://10.64.xx.xx/</u>" or "<u>http://10.64.xx.xx/</u>", then DUT will fetch 2 files: snomM500.htm and snomM500-{MAC}.htm
- Place sip\_account.sips\_uri\_enable = 0 in a text file and import it into the phone.
- You can then export the configuration and check to ensure the setting was set properly.

SNOm			
STATUS SYSTEM NETWORK CONTACTS SERVICING Reboot	WARNING     Update login passwords for security reason		
Time and Date Custom Language Firmware Upgrade Provisioning Reputs	Provisioning Server           Server URL: <a href="https://secure.prov/sionling.s">https://secure.prov/sionling.s</a> Server Authentication Name: <a href="https://secure.prov/sionling.s">https://secure.prov/sionling.s</a> Server Authentication Name: <a href="https://secure.prov/sionling.s">https://secure.prov/sionling.s</a>		
Certificates	Plug-and-Play Settings		
Tr369	Enable PnP Subscribe		
System Logs	DHCP Settings		
ser race Settings	Use DHCP Options      DHCP Option Priority 1: <u>56     </u> DHCP Option Priority 2: <u>150     </u> DHCP Option Priority 3: <u>160     </u> Vendor Class ID (DHCP 60): <u>snorm&amp;500     </u> User Class Into (DHCP 77): <u>snorm&amp;500     </u>		
	Resynchronization		
	Moda: Brotup Check: On Brotup Check: On Schedule Check: Brotup Check: Drotup Check		
	Import from File:	Update from File	No file chosen Choose File
	Export Configuration		
	Export to File:	Export Export XML	
	Reset Configuration		
	Reset Configuration to Default Settings:	Reset	
	See		

Figure 13 : Manual Provisioning



• From Web UI of phone, Click Servicing→Reboot

SNOM	
STATUS SYSTEM NETWORK CONTACTS SERVICING	WARNING     Update login passwords for security reason
Reboot	
Time and Date	Reboot
Custom Language	This Base Reboot
Firmware Upgrade	
Provisioning	
Security	
Certificates	
Tr369	
System Logs	
SIP Trace	
Settings	

Figure 142 : Reboot

• Once the Phone reboots, enter the phone's IP address in the browser's address bar (https://ip-address) and enter. There is a default administrator username and password (admin/admin)

Sign in			
http://10	ion to this site	is not private	
four connect		is not private	
Username			
Password			
		Sign in	Cancel

Figure 153 : Phone Login



#### 3.4.2 Provisioning through Phone's Web Interface

•

This section explains how the device can be registered in Zoom portal using SIP Account details that is populated in Zoom portal (explained earlier in <u>2. Add SIP Devices -> Provisioning</u>)

- Snom M500 configuration is done via web interface, enter the phone's IP address in the browser's address bar (https://ip-address) and enter
  - Navigate to System →SIP Account Management→ Account 1
    - 1. Select Account 1 and Enable Account
    - 2. Account Label: Enter any label.
    - 3. Display name: Enter any name/Number
    - 4. User Identifier: User Name (from Zoom provisioning)
    - 5. Authentication Name: Authorization ID (from Zoom provisioning)
    - 6. Authentication Password: Password (from Zoom provisioning)
    - 7. SIP Server, Registration, Outbound Proxy, and Backup Outbound Proxy (from Zoom Provisioning).
      - a). Registrar: SIP Server and Registration: Server Address: **xxxxxxxx.zoom.us and Port:5060**(Provided by Zoom)

b). Outbound Proxy and Backup outbound Proxy: **Server Address**: **xxxxxxxxx.sc.zoom.us and Port:5091** (Provided by Zoom)

c). Click Save

SN()M	
STATUS SYSTEM SIP Account Management Base Preferences User Preferences	WARNING     Update login passwords for security reason
Programmable Keys	SYSTEM ACCOUNT MANAGEMENT ACCOUNT
	Account: 1 -
CONTACTS	Registration Features Audio Signaling Call Settings
	General Account Settings
	✓ Enable Account         Account Type       Key Line Emulation ▼         Account label:       snom1         Display Name:       8036         User Identifier:          Authentication Name:          Authentication Password:          SIP Server       3.200m.us         Port:       5080
	Registration
	Server Address:         3.2com.us           Port:         5080           Expiration (secs):         1800           Registration Freq (secs):         10           Outbound Proxy         10
	Server Address:         0.200m.us           Port:         5091
	Backup Outbound Proxy
	Server Address: c.zoom.us Port: 5091
	Save

Figure 16 : Identity Settings



• Navigate to Network -> Basic. Ensure the below parameters are set and Click Save

STATUS SYSTEM NETWORK Basic Advanced CONTACTS SERVICING	WARNIN • Update Basic Network	IG login passwords for sec Settings	urity reason
	IPv4 Disable DHCP Static IP	IP Address: Subnet Mask: Gateway: Username: Password:	10. 255.2 10
	Manually Configure	DNS Primary DNS: Secondary DNS:	10.
	● Disable ○ Auto Configuration ○ Static IP	IP Address: Prefix (0-128): Gateway:	64 
	Manually Configure Save Eigure 17 - N	Primary DNS: Secondary DNS:	

• Navigate to System→SIP Account Management→Signaling→ Transport=TLS. Ensure the parameters are set and click Save.



SNOM			
STATUS SYSTEM SIP Account Management Base Preferences User Preferences	WARNING • Update Ic	gin passwords for security reason	
Programmable Keys	SYSTEM ACCOUNT		UNT
Paoioo Configuration	STSTEMACCOUN	I MANAGENIEN I ACCO	
NETWORK	Account: 1	•	
CONTACTS SERVICING	Registration Featu Signaling Setting	ures Audio Signaling S	Call Settings
	Local SIP Port	5080	
	Transport.	TLS V	
	Caller Identity		
	Source Priority 1:	PAI V	
	Source Priority 2:	RPID V	
	Source Priority 3:	From V	
	Session Timer		
	Enable Session Timer		
	Minimum Value (secs):	90	
	Maximum Value (secs):	1800	
	Keep Alive		
	Enable Keep Alive		
	Keep Alive interval (secs):	15	
	Ignore Keep Alive Faile	ure	
	NAT Traversal		
	C Enable STUN		
	Server Address:		
	Port.	3478	
	Z Enable STUN Keep-Al	ive	
	Keep-Alive Interval (secs):	30	
	Save		

Figure 18 : SIP-Basic Settings

• Navigate to System→SIP Account Management→ Audio→ Enable Voice Encryption(SRTP). Ensure the parameters are set and click Save



STATUS   STRACOUNT Management   Bise Preferences   User Preferences   Paging Configuration   NETWORK   NETWORK   CONTACTS   SERVICING     Audio   Codes Priority 1:   Codes Priority 2:	SNOM			
Programmable Mays Pageng Configuration SUSTEM ACCOUNT MANAGEMENT ACCOUNT Account:  I	STATUS SYSTEM SIP Account Management Base Preferences User Preferences	WARNING     Update login p	asswords for security reason	
Pageng Configuration:       Account:       I         Registration       Features       Audio       Signaling       Call Settings         Audio       Codes Priority 1:       G 711a       V         Codes Priority 2:       G 711a       V         Codes Priority 3:       G 722       V         Codes Priority 7:       Codes Priority 3:       G 722       V         Codes Priority 7:       Codes Priority 7:       Codes Priority 7:       Codes Priority 7:         Codes Priority 7:       Codes Priority 7:       Codes Priority 7:       Codes Priority 7:         Codes Priority 7:       None       V       Codes Priority 7:       Codes Priority 7:         Codes Priority 7:       None       V       Codes Priority 7:       Codes Priority 7:       Codes Priority 7:         Codes Priority 7:       None       V       Codes Priority 7:       None       V         Codes Priority 7:       None       V       Codes Priority 7:       None       V         Max Local RTP Port:       10000       Image: Priority 1:       10000       Image: Priority 1:       Image: Pr	Programmable Keys	SYSTEM ACCOUNT M		UNT
CONTACTS SERVICING       Registration       Features       Audio       Signaling       Call Settings         Audio       Codes Priority 1:       G.711u       ▼         Codes Priority 1:       G.711u       ▼         Codes Priority 1:       G.711a       ▼         Codes Priority 1:       G.711a       ▼         Codes Priority 1:       G.712a       ▼         Codes Priority 1:       G.722a       ▼         Codes Priority 1:       G.722a       ▼         Codes Priority 1:       Codes priority 2:       G.722a         Codes Priority 1:       None       ▼         Enable 0:720 Annex 8       ▼       ▼         Preferred Packetization Time (ms):       20       ▼         DTMF Payload Type:       101       ▼         DSCP (voice):       102       ▼         Max Local RTP Port:       10000       ●         DSCP (voice):       102       ●         DSCP (voice):       102       ●         Pried       ●       ●         Prined	Paging Configuration	Account: 1		
SERVICING         Audio         Codec Priority 1:       0.711u         Codec Priority 2:       0.711a         Codec Priority 3:       0.722         Codec Priority 3:       0.722         Codec Priority 3:       0.722         Codec Priority 4:       0.722         Codec Priority 5:       Dpus         Codec Priority 6:       None         Codec priority 7:       None         DTMF Payload Type:       101         Min Local RTP Port:       18000         DSCP (volce):       26         DSCP (signaling):       20	CONTACTS	Registration Features	Audio Signaling	Call Settings
Codec Priority 1: G.711u v Codec Priority 2: G.711a v Codec Priority 2: G.713a v Codec Priority 3: G.722 v Codec Priority 4: G.728 v Codec Priority 6: Dous v Codec priority 6: None v Codec priority 7: None v DTMF Payload Type: 101 Voice DSCP (voice): 40 DSCP (voice): 40 DSCP (voice): 40 DSCP (voice): 20 Jitter Buffer Codec priority 8: 20 Minimum Delay (ms): 20 Codec priority 8: 20 Minimum Delay (ms): 20 Codec priority 8: 20 Codec priority	SERVICING	Audio		
Codec Priority 2: G711a Codec Priority 3: G722 Codec Priority 4: G728 Codec Priority 5: Opus Codec priority 6: None Codec priority 7: None Codec priority 8: None Codec priority 8: None Codec priority 9: None Codec priority 7: None Codec priority 8: 101 Codec priority 7: None Codec priority 8: 101 Codec priority 8: 100 Codec priority 8:		Codec Priority 1:	(G.711u 🗸	
Codec Priority 3: 6.722 Codec Priority 4: 6.723 Codec Priority 5: 0pus Codec priority 6: None Codec priority 7: None Codec priority 8: N		Codec Priority 2:	G.711a 🗸	
Codee Priority 4: G.728 V Codee Priority 5: Opus V Codee priority 6: None V Codee priority 7: None V Codee priority 8: 20 V DTMF Payload Type: 101 Voice Min Local RTP Port: 18000 Max Local RTP Port: 18000 Max Local RTP Port: 19000 Quality of Service DSCP (voice): 46 DSCP (voice): 46 DSCP (signaling): 28 Jitter Buffer Fixed Fixed Delay (ms): 70 @ Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		Codec Priority 3:	G.722 🗸	
Codec Priority 5:       Opus       ✓         Codec priority 7:       None       ✓         Codec priority 6:       None       ✓         DTMF Payload Type:       101       ✓         DTMF Payload Type:       101       ✓         Voice        18000       ✓         Min Local RTP Port:       19000       ✓       Øuality of Service         DSCP (voice):       48       ●       ●         DSCP (voice):       48       ●       ●         Jitter Buffer       ○       ●       ●         ○ Fixed       ?       ?       ●         Priced Delay (ms):       ?0       ●       ●         Ormal Delay (ms):       80       ●       ●         Minimum Delay (ms):       8		Codec Priority 4:	G.728 🗸	
Codec priority 8: None ✓ Codec priority 7: None ✓ ☑ Enable Voice Encryption (SRTP) □ Enable G.720 Annex 8 Preferred Packetization Time (ms): 20 ✓ DTMF Payload Type: 101 Voice Min Local RTP Port: 18000 Max Local RTP Port: 18000 Quality of Service DSCP (voice): 48 DSCP (voice): 48 DSCP (signaling): 28 Jitter Buffer ○ Fixed Fixed Delay (ms): 70 ◎ Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		Codec Priority 5:	Opus 🗸	
Codec priority /:       None		Codec priority 8:	None 🗸	
Lable Voice Encryption (SRTP)   □ Enable G.729 Annex B   Preferred Packetization Time (ms): 20   DTMF Payload Type:   101   Voice Min Local RTP Port: 18000 Max Local RTP Port: 19000 Quality of Service DSCP (voice): 48 DSCP (signaling): 28 Jitter Buffer  Fixed Fixed Delay (ms): 70  Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		Codec priority /:	None 🗸	
□ Enable G.729 Annex B   Preferred Packetization Time (ms):   20   DTMF Payload Type:   101     Voice     Min Local RTP Port:   18000   Max Local RTP Port:   19000     Quality of Service   DSCP (voice):   48   DSCP (signaling):   28   Jitter Buffer   ○ Fixed   Fixed Delay (ms):   ? Fixed Normal Delay (ms):   80   Minimum Delay (ms):		C Enable Voice Encryption (SP	(TP)	
DTMF Payload Type:   DTMF Payload Type:   101   Voice   Min Local RTP Port:   18000   Max Local RTP Port:   19000   Quality of Service   DSCP (voice):   48   DSCP (signaling):   28   Jitter Buffer   Fixed   Fixed Delay (ms):   % Adaptive   Normal Delay (ms):   80   Minimum Delay (ms):   70		Enable G.729 Annex B     Reviewed	who (20	
Voice Min Local RTP Port: 18000 Max Local RTP Port: 19000 Quality of Service DSCP (voice): 48 DSCP (voice): 28 Jitter Buffer Fixed Fixed Delay (ms): 70 • Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		DTME Pauload Tuper	(a). [20 V]	-
Voice   Min Local RTP Port:   18000   Max Local RTP Port:   19000     Quality of Service   DSCP (voice):   48   DSCP (signaling):   28   Jitter Buffer   Fixed   Fixed Delay (ms):   70   @ Adaptive   Normal Delay (ms):   80   Minimum Delay (ms):		DTWP Payload Type.	[10]	
Min Local RTP Port: 18000 Max Local RTP Port: 19000 Quality of Service DSCP (voice): 48 DSCP (signaling): 28 Jitter Buffer Fixed Fixed Delay (ms): 70 @ Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		Voice		
Max Local RTP Port: 19000 Quality of Service DSCP (voice): 48 DSCP (signaling): 28 Jitter Buffer Fixed Fixed Delay (ms): 70 Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		Min Local DTP Darts	110000	-
Quality of Service DSCP (voice): DSCP (signaling): DSCP (signaling		Max Local RTP Port	10000	1
Quality of Service         DSCP (voice):       40         DSCP (signaling):       20         Jitter Buffer         O Fixed         Fixed Delay (ms):       70            • Adaptive         Normal Delay (ms):       80         Minimum Delay (ms):       80			10000	
DSCP (voice): 40 DSCP (signaling): 20 Jitter Buffer Fixed Fixed Delay (ms): 70 Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 60		Quality of Service		
DSCP (signaling): 20 Jitter Buffer O Fixed Fixed Delay (ms): 70 @ Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 60		DSCP (voice):	48	T
Jitter Buffer  Fixed Fixed Delay (ms): Adaptive Normal Delay (ms): 80 Minimum Delay (ms): 80		DSCP (signaling):	28	7
<ul> <li>○ Fixed</li> <li>Fixed Delay (ms):</li> <li>Adaptive</li> <li>Normal Delay (ms):</li> <li>80</li> <li>Minimum Delay (ms):</li> <li>80</li> </ul>		Jitter Buffer	. Arros	
Fixed Delay (ms):     70		O Fixed		
Adaptive Normal Delay (ms):     80 Minimum Delay (ms):     60		Fixed Delay (ms):	70	
Normal Delay (ms): 80 Minimum Delay (ms): 80		Adaptive		76
Minimum Delay (ms): 60		Normal Delay (ms):	80	1
		Minimum Delay (ms):	60	
Maximum Delay (ms): [240		Maximum Delay (ms):	240	
Save a second seco		Save The	A.	

Figure 19: Audio Settings



- Under System → Programmable Keys → PFK. Ensure the below parameters are set.
  - 1. Define each PFK (1-6) with different types of functionalities to perform
  - 2. Assign the functionality and click **Save.**

SNOM				
STATUS SYSTEM SIP Account Management Base Preferences User Preferences	WARNING     Update login passe	rords for security reason		
Programmable Keys	M55 Programmable Keys			
Paging Configuration NETWORK CONTACTS SERVICING	Select Handset: Handse Handset Name: Handset Default Account: Account	1 v 1 1 v		
	Trine	Account	Value	
	PFK 1 Line	Account 1	✓ 1	
	PFK 3 KeyLi	the sount 1	<ul> <li>✓ 1</li> <li>✓ 1</li> </ul>	PFK 2
	Line Call L	st count 1	✓ 4	PFK 4
	PFK 5 Dialin Direct	J Line count 1	<ul> <li>✓ 1</li> <li>✓ 1</li> </ul>	PFK 6
	Call H Redia Save Save Do Ni Call F Call F Call F User Spee Intero Silent Callbi Spee	istory ges t Disturb orward All orward Busy orward No Answer ettings Dial List Ringer Mode ck Dialling		

Figure 20: Programmable keys



#### 3.4.3 Provisioning through Phone's Web Interface

In order to register the phone to zoom portal, ensure that the following certificates are uploaded in the phone successfully.

- From phone's Web UI, Navigate to Servicing→ Certificates→Device
- From Custom Certificate, Choose File to Import

SNOM	
STATUS SYSTEM NETWORK CONTACTS SERVICING Reboot	WARNING . Update login passwords for security reason
Time and Date	
Custom Language	Device Certificate
Firmware Upgrade	
Provisioning	Installed Certificate: Factory
Security	Custom Certificate: No file chosen Choose File
Certificates Device	Import
Trusted Certificates	Remove Custom Certificate
Tr369	
System Logs	
SIP Trace	
Settings	

Figure 19: Device Certificate



- Click Servicing→Certificates→Trusted Certificates→: DigiCertGlobalRootCA.crt.pem, DigiCertGlobalRootG2.crt.pem, DigiCertGlobalRootG3.crt.pem
- Click Save.

	ARNING			
· ·	Update login passwords for security reason			
Trusted Cert	lificate			
Select All				
Total: 16	Issue to	Issue by	Expiration	Prote
	Snom Phone 1 SHA-256	snom technology AG SHA-256 CA	Dec 31 15:19:52 2037 GMT	
	Deutsche Telekom Root CA 2	Deutsche Telekom Root CA 2	Jul 9 23:59:00 2019 GMT	
	DST Root CA X3	DST Root CA X3	Sep 30 14:01:15 2021 GMT	
	Verizon Public SureServer CA G14-SHA2	Baltimore CyberTrust Root	Apr 9 16:02:10 2021 GMT	
	Baltimore CyberTrust Root	Baltimore CyberTrust Root	May 12 23:59:00 2025 GMT	
	Go Daddy Root Certificate Authority - G2	Go Daddy Root Certificate Authority - G2	Dec 31 23:59:59 2037 GMT	
	COMODO RSA Certification Authority	COMODO RSA Certification Authority	Jan 18 23:59:59 2038 GMT	
	GlobalSign	GlobalSign	Mar 18 10:00:00 2029 GMT	
	VeriSign Universal Root Certification Authority	VeriSign Universal Root Certification Authority	Dec 1 23:59:59 2037 GMT	
	Certum CA	Certum CA	Jun 11 10:46:39 2027 GMT	
	Go Daddy Secure Certificate Authority - G2	Go Daddy Root Certificate Authority - G2	May 3 07:00:00 2031 GMT	
	Go Daddy Class 2 Certification Authority	Go Daddy Class 2 Certification Authority	Jun 29 17:06:20 2034 GMT	
		DigiCert Global Root CA	Nov 10 00:00:00 2031 GMT	
	DigiCert Global Root CA			
	DigiCert Global Root CA DigiCert Global Root G2	DigiCert Global Root G2	Jan 15 12:00:00 2038 GMT	
	DigiCert Global Root CA DigiCert Global Root G2 DigiCert Global Root G3	DigiCert Global Root G2 DigiCert Global Root G3	Jan 15 12:00:00 2038 GMT Jan 15 12:00:00 2038 GMT	

Figure 21: Trusted CA Certificates



# 4. Troubleshooting

Online how-to guides:

- <u>https://service.snom.com/display/wiki/M500</u>
- <u>https://service.snom.com/display/wiki/How+to+set+up+M500+Pro+in+a+dual-cell+configuration</u>

#### Support:

Outside North America

- <u>https://helpdesk.snom.com</u>
- <u>https://www.snom.com/en/support/help-center/</u>
- <u>https://www.snom.com/en/contact/contact-person/</u>

Within North America

- Email: <a href="mailto:supportusa@snom.com">supportusa@snom.com</a>
- Phone: (339) 227-6160 Option 2
- Helpdesk (create a ticket): <u>https://helpdesk.snom.com</u>

## 5. FAQ

Online FAQ:

• <a href="https://service.snom.com/display/wiki/M500">https://service.snom.com/display/wiki/M500</a>

## 6. Resources

Firmware:

- <u>https://service.snom.com/display/wiki/DECT+M500-Series+Firmware</u>
- <u>https://service.snom.com/display/wiki/DECT+M500+Pro-Series+Firmware</u>

Online Service Hub:

• <u>https://service.snom.com/</u>

