Metaswitch Snom Hospitality Phones guide HXXXX

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Support	https://helpdesk.snom.com
Metaswitch Endpoint Pack covered by the guide	snom_HXXXX_certified.1.zip
Snom phones firmware version	Handsets: • HD1-HS-1.2.15-0 • HD3-HS-1.2.15-0 • HM2-HS-1.04.01-27
	Bases/Phones: • HD100-1.0.0.3-0 • HD101-1.0.0.3-0 • HD350W-1.0.0.3-0 • HD351W-1.0.0.3-0 • HM201-1.0.0.3-0
Relevant Metaswitch community pages	

- Products supported by this guide
- Configuring via the Metaswitch Endpoint Pack (EP)
 - General Configuration
 - Steps for Provisioning
- Configuration of Devices via CommPortal
- Specific Feature Configuration/Phone Configuration
 - DNS Discovery
 - Dial Plan
 - Shared Line
 - Accessing the phone Web UI
 - Firmware Update
 - Handsets firmware upgrade
- Troubleshooting
 - Configuring a syslog server
 - PCAP trace
 - Settings
- Factory defaulting a device
 - Using the phones web interface (if you can still access it)
 - Using buttons on the device

Products supported by this guide

Snom HXxxx family			
HD100	HD101		



Configuring via the Metaswitch Endpoint Pack (EP)

General Configuration

Basically all the configuration done for the phone is done via Web Interface of the Metaswitch platform

There are three levels of access/rights:

- Subscriber
- Admin
- Provider

A subscriber can not see settings which are marked as "readonly" for admins. Same applies for changing settings. This level of access is defined in the Endpoint Packs.

Steps for Provisioning

- Install EP on Metaswitch Platform. EP can be downloaded via Metaswitch Communities: https://community.metaswitch.com/
 Configure MAC address for user as accepted device on Metaview
- 3. Connect the Phone and provide the provisioning URL to the phone via SRAPS, DHCP, PnP or manually via the web interface (Servicing Provisioning Provisioning Server). If the device isn't set for temporary authentication you should enter also the user credentials (DN and password into the fields Server Authentication Name and Server Authentication Password)

					7
SERVICING	STATUS	SYSTEM	NETWORK	CONTACTS	SERVICING
Reboot					
Time and Date	Desidada alta a Comun				
Firmware Upgrade	Provisioning Server				
Auto Upgrade	Server URL:	http://matterhorn.metas			
Manual Upgrade	Server Authentication Name:				
Provisioning	Server Authentication Passwo	rd:			

4. Phone will directly fetch the provisioning files

Configuration of Devices via CommPortal

After accessing the CommPortal of the proper line you should choose the device you want to configure:



Group	Section	Settings	Description
User	Locale	 Phone Language Date Format Time Format Time zone Daylight Savings Time 	Localization specific settings
	Call Services	Call Waiting	Enable / Disable call waiting feature
	Handset Settings	 Handset 1X Name Handset 1X Accounts Handset 1X Default Account Handset Ringer volume Handset Ring Tone DECT Rx Power 	Handsets settings: you can configure the handset name and the accounts (lines) available on each handset For the models with DECT handset, it's possible to configure also the ringer type and ringer level, plus the DECT Rx power

	Account 1 Account X	 Directory Number Ring Tone Ringer volume MWI Config g729 Annex B enabled Codec with priority X SRTP Line type Inter-digit timeout Dial plan Restriction Dial Plan Page/Intercom auto answer 	Line Preferences (please notice, hospitality phones are limited to one line)
Provisioning	Transport	Use HTTPS	Enable / Disable HTTPS for provisioning
	Polling	 Resynchronization Mode Check-Sync support Bootup Check Interval Enable PnP 	Configure the provisioning polling mode, you can also set the support for Check-Sync and Plug&Play
	Firmware version	 Firmware version Use custom firmware URL Handset Firmware Version Use custom firmware URL (HS) 	Set the firmware version, you can select between the binary files provided by the endpoint pack or enter a custom URL IMPORTANT: be careful when updating the device to a version not supported by the endpoint pack. Handset firmware settings are available only on HD101. HD351W. HM201
	Security		Here you can enable/disable the web interface access and set the credentials
Network Settings	Diagnostics	 Diagnostics Level Diagnostics Server Diagnostics Server port 	Enabling the TLS Server Certificate Check the device will accept provisioning only from a trusted server The device logging level and the diagnostic (syslog) server
	IP Settings	 Enable DHCP Static IP Subnet Mask Gateway Address Primary DNS Secondary DNS 	You can configure the device with DHCP or static configuration
	SIP	 SIP Server DNS Discovery SIP Server SIP Server Port Outbound Proxy The port to use on the outbound proxy Backup Outbound Proxy Server Backup Outbound Proxy Port Registration expiry (s) Registration expiry (s) 	Some SIP-related settings
	VLAN Settings	 Enable LAN Port VLAN VID VLAN Priority 	You can configure the VLAN settings for the device
	NTP Server	NTP Server	Define the NTP server to be used
	QoS Account 1X	 DSCP (signalling) DSCP - voice 	You can configure the DSCP values for SIP and RTP per each account
			1

Speed Dial keys		 Handset Speed Dial X Base/phone Speed Dial X Handset message speed dials Base message speed dials Handset speed dial one touch Base speed dial one touch 	Here you can define the numbers that need to be dialled once the dial keys are pressed One touch speed dial Handset/Base speed dial one touch setting is used to enable/disable speed dial functionality when phone is in idle, this can be used to prevent unwanted calls if keys are pressed by mistake
Emergency Dialing		 Enable emergency di alling Emergency number to dial Delay 	Here you can configure a number that will be automatically called if the telephone goes off hook for a period of time specified by Delay
Paging Groups	Paging Zone 1 Paging Zone 10	 Name Multicast IP Multicast Port Priority Enable Incoming Page 	Definition of Zones for Paging /Multicast, in this section you should define the IP address and the port of each multicast paging zone
Custom Settings		 Custom Setting Name Custom Setting Value Custom Setting Comment 	Here you can define custom settings/parameters that are not included in the web portal

Specific Feature Configuration/Phone Configuration

DNS Discovery

SIP Server DNS Discovery	Via SRV and Transport Protocol]		
	Via SRV and Transport Protocol			
Transport 👔	Via A Record and Port		A	

- Via SRV and Transport Protocol: if you select this option the phone will find the SIP proxy address via NAPTR/SRV DNS discovery and the defined transport protocol
- Via A Record and Port: in this case the phone will use the DNS A record and the defined port

Dial Plan

Trough the User Account Dial Plan you can define the dial plan.

The dial plan consists of a series of dialling rules, or strings, that determine whether what the user has dialled is valid and when the device should dial the number

For a detailed description of the feature and syntax please refer to the device manual

Shared Line

The first Identity is automatic deployed by the EP as Private

If you want to configure it as Shared you can change the setting in User Account Line Type

≁User		
> Locale		
>Call Services		
✓Account 1		
Directory Number 💿	{DirectoryNumber}	
Ring Tone 😧	Ringtone 1	~
Ringer volume 💿	6	~
Message Waiting Indicator 🕢	@ Yes ○ No	
g729 Annex B enabled 🔮	○ Yes ⊛ No	
Enable SRTP 🚱	○ Yes ⊛ No	
Enable register route header	 Yes No 	
DTMF transport method	auto	~
Line type 💿	Private	~
Inter-digit timeout 👩	Private Shared	
Dial Plan 🕤	χ+Ρ	

Accessing the phone Web UI

By default the phone web interface is disabled by the EP

You can manage the access to the phone WUI via the settings Provisioning Security

>Transport			
>Polling			
✓Security			
*Web Interface (2)	○ Yes		Reset
	o No		
*Admin Password (2)			Reset
Http User 👔		-	Default
*Http Password			Reset
Web Interface Access Protocol	HTTP and HTTPS	\$	Reset
TLS Server FQDN Check	• Yes		Default
(D785/D735 mandatory) 😨	○ No		
Hostname Validation Flag 👩	0		Default

In this section you can toggle the web interface access and you can set the credentials:

- Admin Password: the password to access the Phone Web Interface as admin (username: admin)
- Web Interface Access Protocol: the protocol used by the phone web server

Web Interface O	○ Yes ● No	Default
Administrator Password	ADminp@ssw0rd	Default
Web Interface Access Protocol	HTTPS v	Default

Firmware Update

The Endpoint Pack also provides the firmware update feature through the page **Provisioning Firmware Version** you can configure the firmware to be used on the device

You can select between one of the built-in binary files or you can provide an external Custom URL, in case you select Custom URL you must also fill the C ustom firmware URL field

✓Firmware Version			
*Firmware Version 🥥	HD101-1.0.0.3-0.img	*	Reset
Use custom firmware URL			Default
*Handset Firmware Version	HD1-HS-1.2.15-0.img	*	Reset
Use custom firmware URL (HS)			Default

Handsets firmware upgrade

Endpoint pack provides handsets firmware management facility

Updating DECT cordless handset firmware using the WebUI is a two-step process

First you must download the handset firmware and install it on the base station

Second, you must install the handset firmware on the handset.: the handset downloads the firmware over the air from the base station

The first step can be accomplished via the endpoint pack filling the Handset firmware version and optionally the Use custom firmware URL (HS)

After this step you can trigger the firmware download on the base:

- **1.** Logon the web interface
- 2. Click Configuration on the top right
- 3. Click the Firmware Upgrade sub-menu on the left
- 4. Double-check that the Handset Firmware URL is filled with the handset firmware URL
- 5. Click the Install Handset Firmware Now button

CONFIGURATION	STATUS	SYSTEM	NETWORK	CONTACTS	CONFIGURATION
Reboot					
Time and Date	Firmware Server S	Settings			
Custom Language	Base Firmware UBL	http://matterborn.metas			
Firmware Upgrade	baser initiale enter	Lindete Dana Circurat Maria			
Auto Upgrade		Opdate base Firmware Now			
Manual Upgrade	Handset Firmware URL:	http://matterhorn.metas			
Provisioning	Installed Handset	1 38 43-0			
Security	Firmware		_		
Certificates		Install Handset Firmware Now			

- 6. A confirmation pop-up will appear, after clicking the Ok button, the firmware download will start
- 7. After a successful download, the message Firmware installation successful appears on the WebUI

Troubleshooting

Configuring a syslog server

The endpoint pack allows you to configure a syslog server on the device, you can access this menu from the Network Settings Diagnostics

✓ Network Settings				
✓ Diagnostics				
Log Level 🛛	5 - ALL	•		Reset
Diagnostics Server O	10.16.0.108		•	Reset
Diagnostics Server Port \varTheta	514		-	Default

After applying the setting the device will start sending the messages to the server, it is suggested to use the higher level of debugging (5 - ALL) during troubleshooting

PCAP trace

For more serious issues, a pcap trace can be gathered directly from the phone, the trace includes both SIP and RTP traffic

The buffer for the trace is limited so if a long time-period is being monitored then a switch with port-mirroring and Wireshark running on a separate laptop /desktop computer is better suited for this, but to quickly see what's going on on the phone this feature can be useful

In order to activate the trace you have to login on the device WebUI, click on the **Configuration** top right menu, then on the **System Logs** sub-menu on the left

To start the trace you must click the Start button under Network Trace, once you reproduced the issue click Stop and then download the trace file

Settings

If problems are raised to either Metaswitch or Snom, they'll frequently request a copy of the configuration loaded on the phone

This can be obtained by clicking on the Configuration Provisioning Export link on the web UI, where there are links for the files in text or XML format

Factory defaulting a device

Using the phones web interface (if you can still access it)

- 1. Inside the web interface select the tab: SERVICING
- 2. Select the Section: Provisioning
- 3. Look for: Reset Configuration and Press the Reset button
- 4. Following dialog will pop up asking for your confirmation
- blocked URL
- 5. When you are sure, press OK

Using buttons on the device

HD100 & HD101 (on the base)

- 1. Long press (> 5s) Vol+
- 2. Press Vol-
- 3. Press Vol+
- 4. Press Vol-
- 5. Press Vol+
- 6. Press Vol-
- 7. Press Speed Dial Key 1
- 8. Press Speed Dial Key 2
- 9. Press Speed Dial Key 1
- 10. If completed you will notice a short confirmation sound and the device will reboot, if not managed remotely (e.g. by provisioning) it will come up on factory default state as desired

HD350W & HD351W

- **1.** Dial: + 9 9 0 0 0 0 #
- 2. If completed you will notice a short confirmation sound and the device will reboot, if not managed remotely (e.g. by provisioning) it will come up on factory default state as desired

HM201

- 1. On the backside of the base, short press for less than 2s to reboot the phone (base)
- 2. Long press for at least 10s to restore to factory defaults in Static IP mode and then reboot phone (base)