# Snom IP Phone Configuration Guides

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# Snom IP phone Configuration Guides

This guide has been tested for Snom 300, 320,360,370, 820, 821, 870 with firmware version 8.7.3.X. Be aware that different firmware revisions may have different web interface formats and functionality.

This guide will configure the IP phone with default configuration. If you are not sure about the configuration of your IP phone, please reset your phone.

# **Register with MyPBX manually**

- 1. Start up the phone and identify its IP Address by pressing the "Help" or "7" button. For this example we will assume the IP Address of the phone is 192.168.5.126, and IP Address of the MyPBX Phone System machine is 192.168.5.250
- 2. Point your browser to the web interface of the phone: http://192.168.5.126
- 3. We now need to set the phone to register with MyPBX Phone System. Go to the "Setup -> Identity 1" page, and in the "Login" tab:



Figure 1-1

- 1) Set the "Identity Active" field to "on"
- 2) Set the "Display name" field to the name you want to appear on the



Phone display

- 3) Set the "Account" field to the extension number you want to associate with this phone
- 4) Set the "Password" field to the extension's Authentication Password
- 5) Set the "Register" field to the IP Address of the MyPBX Phone System in this example, 192.168.5.250:5060.
- 6) Set the "Authentication Name" field to the extension's Authentication ID
- 7) Set the "Mailbox" field to your system's Special Voice Mail Extension Number.
- Next, we need to adjust the audio parameters. Click on the "RTP" tab and set the "RTP Encryption" field to "off" if you disable the SRTP in extension settings of MyPBX Management Console

RTP Identity Settings:	
Codec 1:	G.711u 💌 🕐
Codec 2:	G.711a 💌 🕐
Codec 3:	G.729A 💌 🕐
Codec 4:	GSM FR 💌 🕐
Codec 5:	GSM FR 💌 🕐
Codec 6:	G.729A 💌 🕐
Codec 7:	G.723.1 💌 🕐
Packet Size:	20 ms 💌 🕐
Full SDP Answer:	Con Coff ?
Symmetrical RTP:	Con Coff ?
RTP Encryption:	Con Coff ?
Dynamic G.726 payload:	€on Coff ⑦
G.726 Byte Order:	•RFC3551 CAAL2 🕐
SRTP Auth-tag:	€ AES-32 C AES-80 ?
RTP/SAVP:	off 💽 🕐
Save	

Figure 1-2

5. Click the "Save" button, and then click the "Reboot" button that appears at the top of the page. Your phone will restart. After rebooting, the phone will retrieve its configuration files and register with MyPBX Phone System. This can be verified via the "Extension Status" page of MyPBX Management Console.



6. For some issues about function of intercom, please refer to the following setting on snom web interface

Operation		
Home	Network Behavior Audio SIP/RTP	QoS/Security Update
Directory	Phone Behavior:	
Setup	Call Completion:	Con 📀 off ?
Preferences	Peer to Peer Call Completion:	• on C off ?
Speed Dial	IDNA (REC 3490) Support:	Con © off ?
Function Keys	Auto Diale	
Identity 1		
Identity 2	Overlap Dialing:	C on (* off 🕐
Identity 3	Number Guessing:	C on C off C
Identity 4	Number Guessing Minimum Length:	4
Identity 5	Block URL Dialing:	C on 📀 off ?
Identity 6	Deny All Feature:	Con 🖲 off 🕐
Identity 7	Challenge Response on Phone:	€ on C off ?
Identity 8	Type of Intercom Answering:	Handsfree 🖌 🕐
Identity 9	Intercom Policy:	only in idle 🗸 🕐
Identity 10	CMC Feature:	off
Identity 11	Dialog-Info Call Pickup:	only in idle
Identity 12	Show display name in Dialog-Info:	always
Action URL Settings	Show dialog info call pickup on yml screen:	
Advanced	Disconnect on Healty	G C m
Certificates	Disconnect on Hook:	C C r
Software Update	Call join on Xfer (2 calls):	on to off 🙂

Figure 1-3



## **Provisioning for MyPBX**

Provisioning a Snom 300, 320, 360, 370 for MyPBX

This guide has been tested for Snom 300, 320, 360, 370 with firmware version 8.7.3.7.

The easiest way to set up a Snom phone for use with MyPBX is to use the built-in plug and play provisioning functionality inside MyPBX. This will allow the phone to configure itself by retrieving a generated phone configuration file. Alternatively you can configure using DHCP and option. For more information, see this configuration guide.

#### 1. Verify Firmware Installed on your Phone

Verify the firmware version currently installed on the phone as older firmware will not have the plug and play feature. You can power up the phone and press "Menu > Status > Firmware" to check. Go to Snom Support Website to download the latest firmware for your phone.

#### 2. Plug phone into the network

Plug your Snom phone into your LAN. (The Phone must be on the same LAN as that of MyPBX IP PBX).

#### 3. Approve phone and Assign an Extension

To do provisioning with Snom IP phones, you can choose PnP mode or DHCP mode. When you phone provisioning via PnP mode, there is no need to set MyPBX working as the only DHCP server any more.



### Phone provisioning via PnP mode

**Step1.** Check if PnP is enabled in IP phone side Here is an example of Snom IP Phone Click Setup  $\rightarrow$  Advanced  $\rightarrow$  Update to check the details

Operation		
Home	Network Behavior Audio SIP/RTP	QoS/Security Update
Directory	Update:	
Setup	Update Policy:	Never update, load settings only
Preferences	Setting URL:	http://provisioning.spom.com/s ?
Speed Dial	Settings refresh timer	
Function Keys	Dep Coeffer	сс. <i>и</i> О
Identity 1	PhP Config:	• on • off •
Identity 2	Apply	Reset Reboot
Identity 3	OPPU	Reset Resour
Identity 4		
Identity 5		
Identity 6	By clicking on the Load button below the phone	will <b>RESET</b> its settings, load the new settings from
Identity 7	the specified file and reboot. So all current set	tings will be lost!
Identity 8		
Identity 9	Upload Setting File manually:	浏览
Identity 10	Load	
Identity 11	Load	
Identity 12		
Action URL Settings		
Advanced	Load TR069 Parameter Map Manually:	浏览
Certificates	Load	
Software Update		

Figure 3-1

**Step2.** Check MAC address of your Snom IP Phone on "Status→System Information" page.

Operation		
Home	System Information:	
Directory	Phone Type:	snom360-SIP
Setup	MAC-Address:	00041329EBE1
Preferences	Firmware-Version:	spom360-SIP 8.7.3.7
Speed Dial	Firmware-URL:	
Function Keys	Production Information:	Mac:00041329EBE1;Version:Standard;Hardware:snom360 (H: R2A):Date:12/01/10:Copyright(C) snom technology AG
Identity 1	Uptime:	6 days, 6 hours, 42 minutes
Identity 2	LCS: Memfree:	0 days, 0 hours, 2 minutes (0)
Identity 3	CPU:	0.17 0.14 0.09 1/16 22
Identity 4	Bootloader-Version:	1.1.3-s
Identity 5	Expansion Module.	(0)
Identity 6	SIP Identity Status:	
Identity 7	Identity 1 Status:	
Identity 8	Identity 3 Status:	
Identity 9	Identity 4 Status:	
Identity 10	Identity 5 Status: Identity 6 Status:	
Identity 11	Identity 7 Status:	
Identity 12	Identity 8 Status: Identity 9 Status:	
Action URL Settings	Identity 10 Status:	
Advanced	Identity 11 Status: Identity 12 Status:	
Certificates		
Software Update	Ethernet Status:	
Status	Net Port:	Connection Type: 100 Mbit Full Duplex Status: connected
System Information		
Log	PC Port:	Connection Type:
SIP Trace		Status: not connected
DNS Cache		

Figure 3-2



#### Step3. Reboot Snom IP phone.

**Step4.** Search MAC address you would like configure in "phone provisioning"  $\rightarrow$ " Not Configured Phone" page

In this case, the MAC address of Snom IP phone is 00041329EBE1

71	0015651b2821	Yealink	-
72	0015653416a8	Yealink	-
73	00041329ebe1	Snom	snom360
74	0015652991f2	Yealink	-
75	00156540ae00	Yealink	-
76	001565113256	Yealink	-
77	001565132161	Yealink	T28
78	00a859c7740a	Fanvil	C62

Fia	ure	3-3
	u	55

Fill in the phone detail message on the pop-up windows.

Input Name, Call waiting, Line, Extension, Label, Line active and so on for the phone.

Add I	Phone							х
_ C	General							1
	Enabled:	Yes	*	_				
	MAC Address:	000413	29ebe1		Name:	Jane		
	Manufacturer:	Snom	~	Phone	Type:	360 💌		
	Call Waiting:	Enabled	~	Key As	Send:	#		
	Phone Book	: Enabled	*					
	ine							
☑	Line1	Extension:	506 🗸	Label:	506	Line	Active: 🔽	
	Line2	Extension:	~	Label:		Line	Active: 📕	
	Line3	Extension:	~	Label:		Line	Active: 📕	
	Line4	Extension:	~	Label:		Line	Active: 📕	
	Line5	Extension:	~	Label:		Line	Active: 📕	
	Line6	Extension:	×	Label:		Line	Active: 📕	
	Line7	Extension:	×	Label:		Line	Active: 📕	
	Line8	Extension:	×	Label:		Line	Active: 📕	
	Line9	Extension:	~	Label:		Line	Active: 📕	
	Line10	Extension:	~	Label:		Line	Active: 🗖	
	Line11	Extension:	~	Label:		Line	Active: 🗖	
	Line12	Extension:	~	Label:		Line	Active:	
Eu	nction Key Settin	as ≫						J
	, ootaan	5						
			<b>~</b>	Save 🔀 Cano	el			
				Figure 3-4				



ОК

Cancel

**Step5.** Save the settings and reboot the IP phone. After you save the changes, system will prompt you to save the changes and reboot to save changes without rebooting. Click OK to reboot the IP phone and provisioning the phone.

Are you sure to reboot the phone now? Click 'OK' to save the changes and reboot; click 'Cancel' to save the changes without rebooting.



Then IP phone will reboot twice to apply the configurations take effect, when done, you can find the account 500 is registered in MyPBX's line status page and Snom IP phone's status page.



### Phone provisioning via DHCP mode

**Step1.** Disable DHCP Server on your local network. E.g. Disable DHCP Server on Linksys Router.

LINKSYS <sup>®</sup> A Division of Cisco Systems, Inc.						Firmware Version: 1.04.06
				Etherfast	® Cable/DSL R	outer BEFSR41
Setup	Setup	Security	Applications & Gaming	Administratio	on Status	
	Basic Setup	DDNS	MAC Addres	ss Clone	Advanced Routing	
Internet Setun					B	asic Setup
Internet Connection Type	Obtain an IP au	itomatically 🗸			The	e Basic Setup screen is
Optional Settings (required by some ISPs)	Host Name:				per Se	rformed. Some ISPs (Internet rvice Providers) will require
	Domain Name: MTU:	C Enable 🧕	Disable Size: 15	00	tha in fo be you	t you enter the DNS ormation. These settings can obtained from your ISP. After J have configured these
Network Setup					set pas Ad	tings, you should set a router ssword from the ministration->Management
Router IP	Local IP Address: Subnet Mask:	255.255.2	. 1 . 1 55.0 💌		sci Co	reen. mpleting the Internet Setup
Network Address Server Settings (DHCP)	Local DHCP Serve	🗉 🔘 Enable 💽	Disable		sed set	ction is all that is required to up for your specific ISP. ase look at the table below to
	Start IP Address:	<b>192.168.1.</b> 10	00		COL	nfigure the Router for your
	Number of Address:	50				
	DHCP Address Range:	192.168.1.100	to 192.168.1.149		Mo	<u>ore</u>
	Client Lease Time:	0 minu	ites (0 means one day	y)		
	Static DNS 1:	0.0	. 0 . 0			
	Static DNS 2:	0.0	. 0 . 0			
	Static DNS 3:	0.0	. 0 . 0			
	WINS:	0.0	. 0 . 0			
						CISCO SYSTEMS
			Save Settings	Cancel Ch	anges	authu

Figure 3-6



**Step2.** Enable DHCP Server on MyPBX.

Login MyPBX web interface, System Settings  $\rightarrow$  DHCP Server  $\rightarrow$  Enable DHCP Server.

<b>My</b> PBX	Embedded Hybrid IP-PBX for Small Businesses
Status Monitor Basic 😵	DHCP Server 0 DHCP Server
Inbound Call Control Internal Settings 🖇 Network Settings 🍣	DHCP is running
LAN Settings WAN Settings	Router : 192.168.5.1
Static Route Firewall	Subnet Mask : 255.255.0
<u>DHCP Server</u> VLAN Settings	Primary DNS : 192.168.5.1
VPN Settings DDNS Settings	Secondary DNS :
System Settings 😵	To: 192.168.5.254
Reports 🏾 🎽	TFTP Server 0: tftp://192.168.5.150
Yeastar	NTP Server:
	✓ Save ★ Cancel

Figure 3-7

**Step3.** Configure phones on MyPBX Auto-Provision page.

1. Login MyPBX web interface, Basic  $\rightarrow$  Auto Provision  $\rightarrow$  Create New Phone.



Figure 3-8



2. Fill in the phone detail message on the pop-up windows.

Input IP Phone's MAC address, configure Name, Call waiting, Line, Extension, Label, Line active and so on for the phone.

Save it and	apply	the	changes	on	web
-------------	-------	-----	---------	----	-----

Add Phone			X
General			
Enabled:	Yes 💌		
MAC Address:	00041329EBE1	Name: Sandy	
Manufacturer:	Snom 💌	Phone Type: 360	
Call Waiting:	Enabled 🔹	Key As Send: #	
Phone Book:	Enabled		
Line			
🗹 Line1 Ex	rtension: 502 💌	Label: 502	Line Active: 🔽
Line2 Ex	atension:	Label:	Line Active:
🗖 Line3 Ex	rtension:	Label:	Line Active:
Line4 Ex	rtension:	Label:	Line Active:

Figure 3-9

**Step4.** Save the settings and reboot the IP phone. After you save the changes, system will prompt you to save the changes and reboot to save changes without rebooting. Click OK to reboot the IP phone and provisioning the phone.

Are you sure to reboot the phone now? Click 'OK' to save the changes and reboot; click 'Cancel' to save the changes without rebooting.

Figure 3-10



**Remark**: The factory default setting of DHCP for IP Phone is "enable", so you can skip this step to step 5.

If the DHCP is disabled, please follow below step to enable it. (e.g.: Snom's IP Phone).

- 1. Login IP phone's web page.
- 2. Enable DHCP.

Advanced Settings		
Operation		
Home	Network Behavior Audio	<u>SIP/RTP</u> <u>QoS/Security</u> <u>Update</u>
Directory	Network:	
Setup	DHCP:	◉on ◯off ?
Preferences	Options on DHCP:on	1 3 4 6 12 15 42 43 51 66 6
Speed Dial	Options on DHCP:off	125
Function Keys	IP address:	192 168 5 2
Identity 1	Netmaski	255 255 255 0
Identity 2	Heat Name	255.255.255.0
Identity 3	Host Name:	
Identity 4	IP Gateway:	192.168.5.1
Identity 5	DNG	
Identity 6	DNS:	
Identity 7	Domain:	МУРВХ
Identity 8	DNS Server 1:	192.168.5.1
Identity 9	DNS Server 2:	
Identity 10		
Identity 11	Time:	
Identity 12	NTP Time Server:	192.168.5.150
Action URL Settings	NTP Refresh Time (sec):	1000
Advanced	<b>T</b> ime <b>1</b>	-8 Canada (Vancouver, Whitehorse)
Certificates	ninezone:	?
Software Update		



Then IP phone will reboot twice to apply the configurations take effect, when done, you can find the account 500 is registered on MyPBX's line status page.

Step5. Done

<Finish>