



Topic / Issue: **Basic snom Configuration Guide for use as a local Quadro Extension**

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Public Directory: <http://voip.alloy.com.au/config.htm>

Due to the strategic partnership between Epygi and snom you can auto-provision a snom IP Phone as an extension of a Quadro PBX using the automatic configuration capability of Quadro.

The Quadro must be running firmware version 4.1.33 or later and the snom phones must be running firmware 6.5.12 or later.

Option 1: Full Auto-Deployment

This relies on using Quadro's DHCP server to assign IP parameters to the snom phone. When this is the case, the Quadro will provide the IP parameters to the snom phone, setting itself as the Boot Server and providing the phone with a configuration file that will provision the phone as an extension.

By default, the Quadro's DHCP service is enabled.

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DHCP Settings for the LAN Interface

Enable DHCP Server
 Give leases only to hosts listed in the Special devices table.

Dynamic IP Address Range: from 172 . 30 . 0 . 100 IP-Clipboard to 172 . 30 . 0 . 254 IP-Clipboard

WINS Server: 0 . 0 . 0 . 0 IP-Clipboard

Special devices:

[Add](#) [Edit](#) [Delete](#) [Select all](#) [Inverse Selection](#)

Hostname	MAC Address	Static IP Address
No items in list.		

[View DHCP leases](#)

The Special Devices table allows you to assign specific IP address to certain devices based on their MAC address. If the 'Give leases only to hosts listed in the Special Devices table' setting is enabled only devices listed in the table will be given an IP lease from the Quadro.

The Quadro recognises the particular MAC address scheme of the various snom models and they are considered to be 'Special Devices'. Based on the MAC scheme the Quadro will recognize the snom and provide the config. You do not need to enter the snom phone into the special devices table.

Each IP Phone connected to a Quadro PBX uses one IP Line to register. The setting 'UPnP for IP Lines' is enabled by default. This is required for the full auto-deployment.

When a snom phone with default settings is connected to the LAN, The Quadro will provide the IP parameters to the phone and also the configuration file for that model. The first available IP Line will be used to provision the phone and it will be assigned the corresponding extension number. Once the config is loaded the snom will reboot. Connect the IP Phones to the LAN in the order you want them to be numbered as extensions. Wait until the phone is fully provisioned before connecting the next phone.

Once the extension is provisioned, you will see a Web hyperlink in the details column of the IP Lines list. You can click on this link to open the phones GUI in a new browser window.

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Line Settings

Onboard Line Settings **IP Line Settings**

Available IP Lines	Attached Extension	Type	Details
IP Line 1	11	SIP	UserName: locext11, Model: 53i, 00:08:5D:18:D7:31, Web
IP Line 2	12	SIP	UserName: locext12, Model: Snom 300, 00:04:13:28:00:56, Web
IP Line 3	13	Inactive	
IP Line 4	14	Inactive	
IP Line 5	15	Inactive	
IP Line 6	16	Inactive	
IP Line 7	17	Inactive	
IP Line 8	18	Inactive	

Enable PnP for IP lines
 Enable firmware version control

Option 2: Partial Auto-Deployment

Using this method, you do not rely on the Quadro DHCP service. This allows you to statically address the IP Phones and still use the Quadro's snom configuration file.

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IP Line Settings - IP Line 2

Inactive
 SIP Phone

Phone Model:

MAC Address:

Line Appearance:

Username:

Password:

Use Session Timer

Go to Telephony > Line Settings > IP Line settings and select an available IP Line. Set the line to SIP Phone and select the snom model from the drop-down list. Enter the MAC address of the phone. Set the Line Appearance as required. This will restrict the number of calls that the phone can handle at one time. Set a Username and Password for authentication to the Quadro.

Connect a snom handset on default settings to the LAN. Cancel the DHCP request using the X key. Manually enter the IP parameters and set the language and Time zone settings. Cancel out of the remaining settings using the X key. Using the handset menu reboot the Phone. The phone will reboot and download the config file from the Quadro and be provisioned as an extension.

Additional snom configuration

The config file provided by the Quadro will provision the phone as an extension and configures some of the hard coded function keys on the phone but will not setup the programmable keys. To do that, you can use the phones GUI and set the parameters of these keys manually in the Function Keys page.

Snom 300's will only have a total of 6 programmable keys. Other snom models have dedicated function keys as well as 12 programmable keys.

	Context	Type	Number
P1	Active	Line	
P2	Active	Line	
P3	Active	Extension	11
P4	Active	Extension	13
P5	Active	Key Event	F_TRANSFER
P6	Active	Key Event	F_MUTE

Save

To configure the keys so they can monitor the status of other Quadro extensions, set the key type to Extension and set the extension number of the monitored phone in the Number field. The LED assigned to this key on the phone will show the status of the monitored extension.

You can also pickup a ringing call from a monitored extension by pressing the programmable key when the LED is flashing.

Summary:
(If required)

Simplify the configuration of snom IP phones as Quadro extensions using Epygi's Auto-Deployment feature.