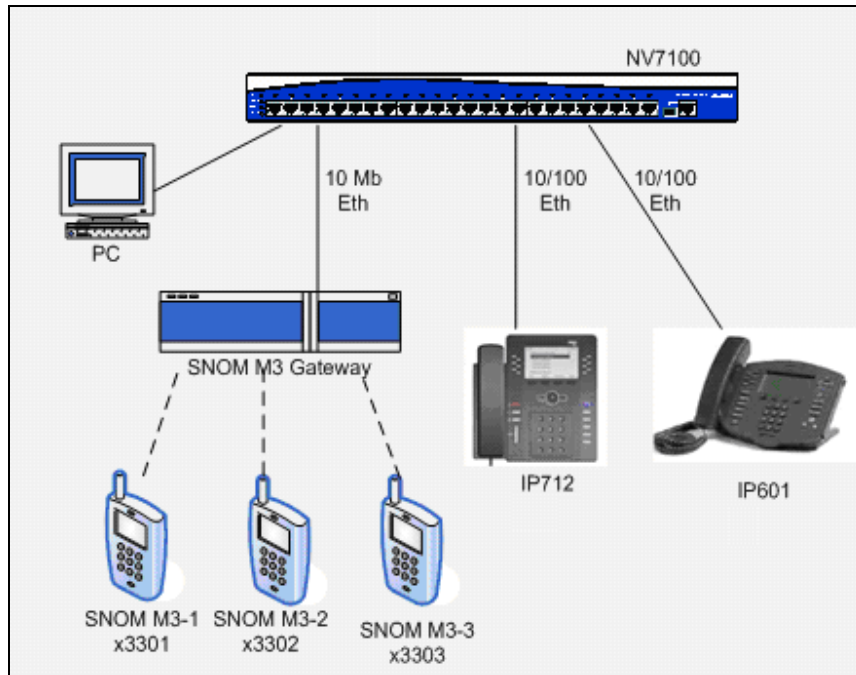# ADTRAN

Quick Configuration Guide

Configuring a SNOM M3 with the NetVanta 7000 Series

The NetVanta 7000 series IP PBXs have been interoperability tested with the SNOM M3 DECT system. The following guide explains how to configure the NetVanta and the Snom gateway.

While older software revisions may work, the gateway was tested with the following firmware revisions:

Firmware Version used in testing	
NV7000 Firmware	**A2.02.00**
ADTRAN IP 712 Firmware	**1.3.10**
Polycom IP 601 Firmware	**3.1.1**
SNOM M3 Gateway Firmware	**01.22**
SNOM M3 Handset Firmware	**01.22**

Application Overview

The SNOM gateway acts as a wireless base for multiple SNOM handsets. The gateway registers SIP extensions to the NetVanta 7000. Unlike other SIP phones, the handsets themselves are completely controlled by the M3 gateway and will never communicate to the NetVanta 7000 series directly.

Pre-configuring the NetVanta 7000 users

Before configuring the SNOM gateway, user accounts for the SNOM extensions should be configured on the NetVanta. The simplest way to do this is via the NetVanta 7000 web GUI. After logging into the admin page of the GUI, open the Voice>User Accounts page:

Add / Modify / Delete Users

Use this page to add and configure users.

Add New User

Extension: x[ ]

First Name: [ ]   *40 characters max*

Last Name: [ ]   *40 characters max*

Phone Type: SIP

Phone MAC Address:
⦿ <Not Set>
○ New Address:
[ ] : [ ] : [ ] : [ ] : [ ] : [ ]
○ Known Address:
00:04:F2:04:98:60

Phone Model: ADTRAN/Polycom SoundPoint IP 501

[Apply] [Apply and Add Another User]

In the example diagram above, three extensions were created, 3301, 3302 and 3303. Under "Extension", enter the desired user extension, **3301**, for example. A first and last name can be entered if desired. This name will show up when a local 7000 user receives a call from this extension. Make sure the "Phone Type" selected is **SIP** and that a Phone MAC Address is NOT selected. Then, click **Apply** or **Apply and Add Another User**.

Add as many users as required in this manner.

Accessing the SNOM Gateway

By default, the gateway will be configured to receive an IP address via DHCP. Simply connect the SNOM gateway to any switch port on the front of the NetVanta 7000 or to any other LAN port on your network that will provide DHCP. For information on configuring a DHCP pool on a NetVanta, reference this document:
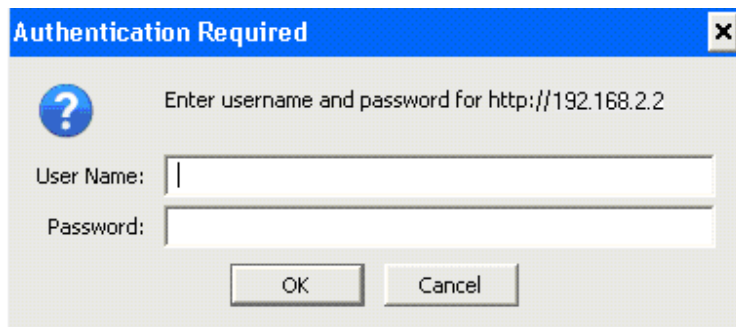http://kb.adtran.com/article.asp?article=2149&p=2

NOTE: If the NetVanta is not acting as the DHCP server for the native VLAN, another DHCP server will need to be able to provide an address to the gateway.

After the gateway has booted, you can place one of the SNOM handsets into their charger in order to register with the gateway. After the phone has registered, you can press the "volume up" button on the handset to determine the IP address of the gateway.

NOTE: SNOM handsets are designated their handset identity by the order that they register to the gateway. For example, the first handset to register will be "handset 1", the second "handset 2", etc. Also of note, after one phone has registered, the SNOM gateway listens for registration from other handsets for 5 minutes. If 5 minutes has passed, but new handsets need to be added, the gateway will need to be reset before the new registrations can be successful.

Enter this IP address into a web browser on a PC that has connectivity to that IP address, and you should be prompted for login information from the SNOM gateway.

The default login username is "admin" and the default password is also "admin". You should then see a screen similar to this:

Configuring the SNOM Gateway – General

For the most part, the default SNOM gateway settings under "Advanced" will work fine with the NetVanta 7000 series, but in most cases, the 7000 will use VLAN 2 as the phone VLAN. The VLAN used by the SNOM gateway and thereby the connected phones, can be configured in the "VLAN Id" field. After this setting is changed and saved, the SNOM gateway will need to reset in order to boot onto this VLAN. Keep in mind that this will change the IP address being used by the SNOM gateway and this new IP address will need to be used in order to re-login to the GUI.

Advanced Settings:

Network:

DHCP:	DHCP ▼
IP Address:	192.168.2.2 Write as AAA.BBB.CCC.DDD
Netmask:	255.255.255.0 Write as AAA.BBB.CCC.DDD
Default gateway:	192.168.2.1 Write as AAA.BBB.CCC.DDD
DNS Server 1:	Write as AAA.BBB.CCC.DDD
DNS Server 2:	Write as AAA.BBB.CCC.DDD

DHCP Settings:

Boot Server:	Custom+Option 66 ▼
Boot Server Option:	160
Boot Server Option Type:	String ▼

VLAN Settings:

VLAN Id:	2
VLAN User Priority:	0

NAT Provisioning:

Enable Keep alive:	No ▼
Keep alive time:	90
STUN server:	
STUN bindtime guard:	80
STUN bindtime determine:	Yes ▼
Enable STUN:	No ▼
Enable RPORT:	No ▼

Configuring the SNOM Gateway - Identities

To configure a SIP account on the gateway, start by clicking on "Identity 1".

Configuration Identity 1

Server is local:	Yes ▾
Display Name:	
Account:	3301
Password:	••••
Account Name:	
Account Mailbox Name:	
Account Mailbox Number:	*98
Registrar:	192.168.2.1
Outbound Proxy:	192.168.2.1
Authentication Username:	3301
Server Port:	5060
Outbound Proxy Port:	5060
Re-registration time:	600
Registrar Config:	Add domain ▾
DTMF Signalling:	RFC 2833 ▾
Codec Priority:	PCMU PCMA iLBC (20ms) G729AB
	Up Down Reset Remove
Enable Silence Suppression:	Yes ▾

Calling Line Identification Restriction:

CLIR:	Disable ▾
CLIR prefix code:	

Call Forwarding:

Forward on busy activate:	
Forward on busy deactivate:	
Forward on no answer activate:	
Forward on no answer deactivate:	
Forward unconditional activate:	
Forward unconditional deactivate:	

Save Cancel Reboot

The information entered on this page will detail how the SNOM gateway sends calls to the NetVanta 7000.

1) If the SNOM system is located on the local LAN of the 7000, select **Yes**, under the "Server is local" dropdown box.

2) Under "Account", one of the user extensions previously built on the 7000 should be entered. For example, **3301**.
3) The "Password" needs to match the SIP Auth Password on the 7000, **1234** by default.
4) Entering an "Account Mailbox Number" of ***98** will allow the SNOM phone to dial the 7000s voicemail auto-attendant when the Messages option is chosen from the SNOM handset. The Messages section is reachable from the handset by hitting the "OK" button in the middle of the handset.

NOTE: In most cases, the "OK" button is not labeled, and is easily overlooked. The button resides between the "up", "down", "left" and "right" keys.

5) The "Registrar" and the "Outbound Proxy" fields must be populated with the NetVanta 7000s IP address. If the SNOM gateway has been placed on VLAN 2, this IP address will need to be the VLAN 2 address of the 7000.
6) The "Authentication Username" needs to be the same number as the number used in the "Account" field, **3301** in this example.
7) All other settings can stay as default in order to operate with the user account previously configured on the 7000. Click **Save** at the bottom of the page.

Additional Identities can be programmed using the same procedure as above. For the example application mentioned, extension **3302** and **3303** were also configured with the above procedure.

Configuring the SNOM Gateway – Telephony Settings

By default all SNOM handsets are members of all identities, so they will receive calls for any and all of the configured accounts. This can be modified under the "Telephony Settings" page in the SNOM GUI.:

Telephony Settings

Destination for incoming call:

Identity number

	1	2	3	4	5	6	7	8
Handset 1:	☑	☐	☐	☑	☑	☑	☑	☑
Handset 2:	☐	☑	☐	☑	☑	☑	☑	☑
Handset 3:	☐	☐	☑	☑	☑	☑	☑	☑
Handset 4:	☑	☑	☑	☑	☑	☑	☑	☑
Handset 5:	☑	☑	☑	☑	☑	☑	☑	☑
Handset 6:	☑	☑	☑	☑	☑	☑	☑	☑
Handset 7:	☑	☑	☑	☑	☑	☑	☑	☑
Handset 8:	☑	☑	☑	☑	☑	☑	☑	☑

Outgoing Identity to be used for:

	Line	Handset name	DND	CW
Handset 1:	1		Disabled ▾	CW ▾
Handset 2:	1		Disabled ▾	CW ▾
Handset 3:	1		Disabled ▾	CW ▾
Handset 4:	1		Disabled ▾	CW ▾
Handset 5:	1		Disabled ▾	CW ▾
Handset 6:	1		Disabled ▾	CW ▾
Handset 7:	1		Disabled ▾	CW ▾
Handset 8:	1		Disabled ▾	CW ▾

SAVE CHANGES   CANCEL   REBOOT

In the example config, and in the output above, handset 1 is configured to only receive calls for the first identity, 3301, handset 2 only allow calls from identity 2, 3302, and handset 3 only allows calls from identity 3, 3303. This configuration can be tailored to match the customers needs.

Configuring the SNOM handset - Caller-ID

By default, all handsets will dial out from the first identity. In order to change this, the handsets "VoIP Line" must be changed to match the desired identity. The "VoIP Line" menu can be reached from each handset, with the following key path: OK>Settings>Telephony Settings>VoIP Line.

NOTE: In most cases, the "OK" button is not labeled, and is easily overlooked. The button resides between the "up", "down", "left" and "right" keys.

The default handset password is **0000**. Once in the VoIP line menu, the specific identity can be chosen that will be used on outbound calls. This is important to set when each

handset needs to have different caller-ID. Caller-ID name is configured on the NetVanta 7000 user as "first name" and "last name".

Related Links

SNOM Support - http://www.snom.com/en/support/tips-on-using/
Adtran Knowledgebase – http://kb.adtran.com
NetVanta DHCP Guide - http://kb.adtran.com/article.aspx?article=2149&p=2
NetVanta User Config Guide - http://kb.adtran.com/article.aspx?article=1896&p=2