

How to configured the Snom 821:

Snom has discontinued production of this device and has marked it as EOL (End of Life).

The configuration for this device is relevant. This device bears many similarities to the current Snom 760

The 820 supports up to 12 SIP accounts and up to 12 simultaneous calls. All line keys, four of which are available on the right side of the display, are also BLF capable.

Note: this device does support POE (Power over Ethernet). It may or may not come with a power supply. However the customer can easily obtain one. The input ratings are 5V 2A.

This guide will cover the following steps:

1. Logging into the phone.
2. Upgrading the firmware (if necessary).
3. Entering all provisioning information.
4. *Optional* BLF configuration.
 - a. This does require that Directed Call Pickup features be enabled on the account.

1. Accessing the Web Interface

- a. Connect the phone to a DHCP enabled network and allow the phone to pull and IP address.
- b. Gather the phone via one of the two options:
 - i. Softperfect Netscan (Windows), Angry IP Scanner (Mac OS).
 - ii. The phones menu:  Menu > Information > System Info
 1. The third line will show the IPv4 address.
 - iii. Navigate to the phones UI by using the following format in your browsers URL/Address bar.
 1. <http://192.168.0.0>
 - iv. Default username and password is: root / blank (literally blank)

2. Upgrading the firmware

- a. As of November 2015, the latest firmware is 8.7.5.35, and can be located [here](#).
- b. Within the phones Web Interface go to: Setup > Software Update
 - i. There is a field labeled “Manual Software Update”
 - ii. Right click on the appropriate link for your Snom, and select “Copy Link Location.” For the purposes of this guide, we are looking for the 821
 - iii. Paste the link into the dialog for the manual firmware update, then click “Load.”

3. Configuring the Phone with Generic Sip device information from the Host Pilot Portal.

- Pull up Host Pilot and locate the specific Generic SIP device you are looking to configure.
- In the web interface of the Snom deskphone navigate to: Identity 1 > Login Tab
- Identity active: On
- Following the example below, after entering the information, click on “Apply.”

| | |
|---|---|
| Displayname | SIP DiD or Extension |
| Account | Unique 9 digit ID located in Host Pilot |
| Authentication Username | Unique 9 digit ID located in Host Pilot |
| SIP Password/Password | Unique alpha-numeric password located in Host Pilot. |
| SIP Sever/Registrar | usbc.telecomsvc.com or UC70.telecomsvc.com |
| Outbound Proxy/Outbound Proxy Server | usbc.telecomsvc.com or UC70.telecomsvc.com |
| Mailbox | Generic SIP DiD |

Configuration Identity 1

SNOM

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Login Information:

Identity active: on off ?

Displayname: ?

Account: ?

Password: ?

Registrar: ?

Outbound Proxy: ?

Failover Identity: ?

Authentication Username: ?

Mailbox: ?

Ringtone: ?

Custom Melody URL: ?

Display text for idle screen: ?

XML Idle Screen URL: ?

Ring After Delay (sec): ?

Record Missed Calls: on off ?

Record Dialed Calls: on off ?

Record Received Calls: on off ?

Identity is hidden: on off ?

- e. To set up call forwarding or busy options, navigate to the Features tab.
- f. Target fields will use the DiD

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Call Forwarding:

Always on off [?](#)

Target: [?](#)

On Code: [?](#)

Off Code: [?](#)

Busy on off [?](#)

Target: [?](#)

On Code: [?](#)

Off Code: [?](#)

Timeout on off [?](#)

Timeout (sec): [?](#)

Target: [?](#)

On Code: [?](#)

Off Code: [?](#)

DND: on off [?](#)

On Code: [?](#)

Off Code: [?](#)

Server Managed:

Call Forwarding Always on off [?](#)

Call Forwarding Busy on off [?](#)

Call Forwarding Timeout on off [?](#)

DND on off [?](#)

Disconnect on Hook: on off [?](#)

- g. Navigate to the SIP tab, change the Sever Type Support to “Asterisk.”

- h. Navigate to the NAT tab, change the Keepalive interval (seconds) to 50.

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Identity 4

Login Features SIP **NAT** RTP

NAT Identity Settings:

Offer ICE: on off ?

STUN server (IP-addr:port): ?

STUN interval (seconds): ?

Keepalive interval (seconds): ?

Apply

- i. Navigate to the RTP tab and set the following
- i. Paste the following information into the Codec field
 1. g729,pcmu,telephone-event
 - ii. Media Transport Offer: UDP

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Login Features SIP NAT **RTP**

RTP Identity Settings:

Codec: ?

Packet Size: ?

Filtered codec list: g729, pcmu, telephone-event

Full SDP Answer: on off ?

Symmetrical RTP: on off ?

RTP Encryption: on off ?

G.726 Byte Order: RFC3551 AAL2 ?

SRTP Auth-tag: AES-32 AES-80 ?

RTP/SAVP: ?

Media Transport Offer: ?

Media Transport Offer Setup: ?

Multicast relay address: ?

Apply

- j. Navigate to Advanced > Network
- i. To set the Time, select the appropriate Time Zone.

- k. Navigate to Advanced > SIP/RTCP and set the following
 - i. Network identity (port):
 1. 3 Digit Extension: 6 + ext
 - a. Exe: port for ext 103 = 6103
 2. 4 – 6 Digit Extension: 6 + last 3 of extension
 - a. 4 > Ext 1004 = 6004
 - b. 5 > Ext 10005 = 6005
 - c. 6 > Ext 100006 = 6006
 - ii. RTP/RTCP
 1. Dynamic RTP port start: 30000
 2. Dynamic RTP port stop: 50000

Advanced Settings

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Manual

Network
Behavior
Audio
SIP/RTCP
QoS/Security
Update

SIP:

Network identity (port): ?

SIP T1 (ms): ?

Timer Support (RFC4028): on off ?

SIP Session Timer (s): ?

SIP Dirty Host TTL (s): ?

SIP Max Forwards: ?

ENUM Suffix: ?

Retry interval after failed registration (s): ?

Use user:phone: on off ?

Require PRACK: on off ?

Send PRACK: on off ?

Offer GRUU: on off ?

Offer MPO: on off ?

Use Outbound: on off ?

Use SIP Compact Headers: on off ?

Register HTTP contact: on off ?

Disable blind transfer (REFER): on off ?

Disable deflection (code 302): on off ?

Show History-Info: on off ?

Show Diversion: on off ?

Use NAPTR on SIP URIs: on off ?

RTCP-XR Report Format: ?

Check SDP Version: on off ?

Release Transferred Party On: ?

Retrieve Transferred Party On: ?

Allow SIP Settings: on off ?

Minibrowser:

XML NOTIFY Support: on off ?

RTP/RTCP:

Dynamic RTP port start: ?

Dynamic RTP port stop: ?

RTCP Support: on off ?

RTP Keepalive: on off ?

Multicast:

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4. If BLF (Busy Lamp Field) is desired
 - a. Directed Call Pickup must be active on the account if Call Pickup features are desired.
 - b. Navigate to > Function Keys
 - c. To activate BLF adjust the following
 - i. Context: Select the registered account
 - ii. Type: Select from the drop down BLF
 - iii. Number: [sip:ext@server.com;user=phone*95](#)
 1. Example: [sip:100@uc70.telecomsvc.com;user=phone*95](#)
 - d. Repeat the above process for the desired number of BLF options.

Function Keys

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Identity 3

Identity 4

Identity 5

Identity 6

Identity 7

Identity 8

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Identity 11

Identity 12

Action URL Settings

Key Settings:

On this page you can specify the settings for programmable keys on your snom phone. Use **Context** to specify the identity context for that key e.g. this identity will be used to subscribe for a particular extension. **Type** will select the actual functionality of a particular key. In the last argument field **Number**, the actual telephone number, sip url, dtmf sequence, action url or key type can be stored. Please refer to your phone manual for more details.

| Context | Type | Number | Short Text | |
|------------------------|------|----------------------------|------------|---------|
| Active | Line | | 796 | P1 (1) |
| Active | Line | | 796 | P2 (2) |
| 900325803@usbc.telecom | BLF | sip:794@usbc.accessline.co | 794 | P3 (3) |
| 900325803@usbc.telecom | BLF | sip:792@usbc.accessline.co | 792 | P4 (4) |
| 900325803@usbc.telecom | BLF | sip:791@usbc.accessline.co | 791 | P5 (5) |
| 900325803@usbc.telecom | BLF | sip:790@usbc.accessline.co | 790 | P6 (6) |
| 900325803@usbc.telecom | BLF | sip:788@usbc.accessline.co | 788 | P7 (7) |
| 900325803@usbc.telecom | BLF | sip:786@usbc.accessline.co | 786 | P8 (8) |
| 900325803@usbc.telecom | BLF | sip:784@usbc.accessline.co | 784 | P9 (9) |
| 900325803@usbc.telecom | BLF | sip:782@usbc.accessline.co | 782 | P10 (*) |
| 900325803@usbc.telecom | BLF | sline.com;user=phone*95 | 781 | P11 (0) |
| 900325803@usbc.telecom | BLF | sip:778@usbc.accessline.co | 778 | P12 (#) |

** If no advanced features are requested, but it is desired that the same extension show for multiple line keys, this can be done by enabling the Identities 2 thru 4 and entering the following information from Step 3.

| | |
|---|---|
| Displayname | SIP DiD or Extension |
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| Authentication Username | Unique 9 digit ID located in Host Pilot |
| SIP Password/Password | Unique alpha-numeric password located in Host Pilot. |
| SIP Sever/Registrar | usbc.telecomsvc.com or UC70.telecomsvc.com |
| Outbound Proxy/Outbound Proxy Server | usbc.telecomsvc.com or UC70.telecomsvc.com |
| Mailbox | Generic SIP DiD |