

# snom

## VoIP phones



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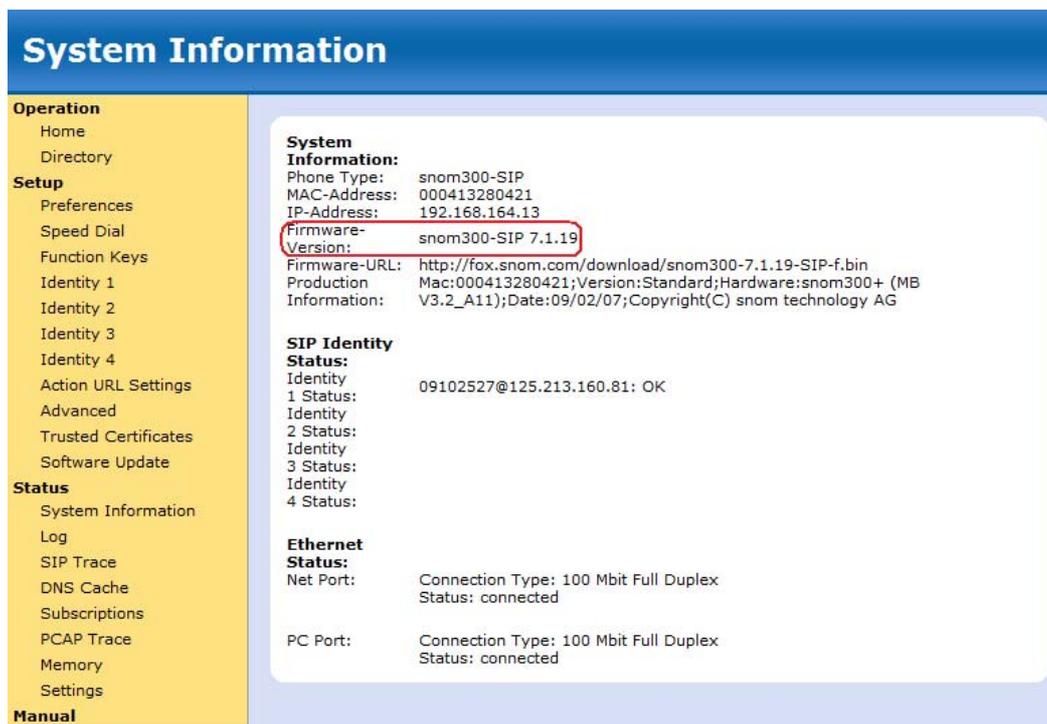
## Introduction

“Snom technology AG manufactures VoIP (Voice-over-IP) telephones, primarily based on the IETF open standard SIP (Session Initiation Protocol). With customers located throughout more than 20 countries, Snom’s phones are targeted toward small- and medium-sized businesses, home offices, Internet Service Providers, carriers, and OEM customers.

All of Snom’s software exists in the firmware on its phones, and its Linux-based VoIP telephones support all common standards, as well as the latest technology platforms including **STUN** (Simple Traversal of UDP through NATs), **NAT** (Network Address Translation) and **ENUM** (telephone **nu**umber **m**apping). All Snom phones are compatible with SIP-based telephone systems and system components including open source platforms such as Asterisk, SER or sipXpbx, and proprietary solutions offered by companies such as Pandora (Worksmart), Kapsch (Mississippi), Objectworld (UC Server), and many more. snom’s phones also include security features based on the two VoIP security standards sips (RFC2246) and SRTP (RFC3711).”

<http://en.wikipedia.org/wiki/Snom>

## Firmware



**System Information**

<b>Operation</b>	<ul style="list-style-type: none"> <li>Home</li> <li>Directory</li> </ul>
<b>Setup</b>	<ul style="list-style-type: none"> <li>Preferences</li> <li>Speed Dial</li> <li>Function Keys</li> <li>Identity 1</li> <li>Identity 2</li> <li>Identity 3</li> <li>Identity 4</li> <li>Action URL Settings</li> <li>Advanced</li> <li>Trusted Certificates</li> <li>Software Update</li> </ul>
<b>Status</b>	<ul style="list-style-type: none"> <li>System Information</li> <li>Log</li> <li>SIP Trace</li> <li>DNS Cache</li> <li>Subscriptions</li> <li>PCAP Trace</li> <li>Memory</li> <li>Settings</li> </ul>
<b>Manual</b>	

**System Information:**

Phone Type: snom300-SIP  
 MAC-Address: 000413280421  
 IP-Address: 192.168.164.13  
**Firmware-Version: snom300-SIP 7.1.19**  
 Firmware-URL: http://fox.snom.com/download/snom300-7.1.19-SIP-f.bin  
 Production Mac:000413280421;Version:Standard;Hardware:snom300+ (MB V3.2\_A11);Date:09/02/07;Copyright(C) snom technology AG

**SIP Identity Status:**

Identity 1 Status: 09102527@125.213.160.81: OK  
 Identity 2 Status:  
 Identity 3 Status:  
 Identity 4 Status:

**Ethernet Status:**

Net Port: Connection Type: 100 Mbit Full Duplex  
 Status: connected

PC Port: Connection Type: 100 Mbit Full Duplex  
 Status: connected

The version of firmware that has been tested by My Net Fone engineers is 7.1.19. This is a beta version that was found to be most stable at the time.

### 7.1.19 beta

#### GUI

- F\_DIRECTORY\_SEARCH handles ldap & presence directory lookup
- scheme 'tel:' was not working well

#### LID

- fixed extension-keypad-bug (timing @init was still off, thus disabling exp.KeypadsV2 in 7.1.18)

#### AUDIO

- fixed sending first packet with wrong codec

#### SETTINGS

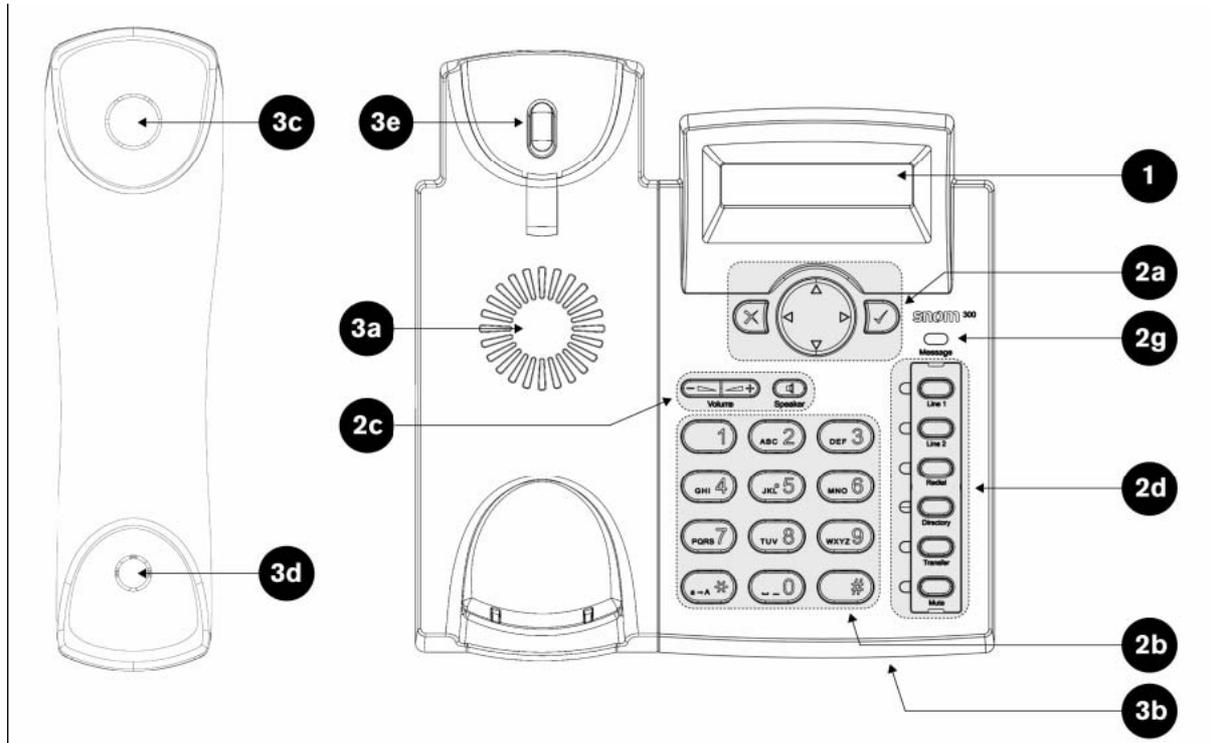
- old values were not overwritten by the same characters in a different case

[http://wiki.snom.com/Snom300/Firmware/Release\\_Notes](http://wiki.snom.com/Snom300/Firmware/Release_Notes)

There have been additional releases since testing was done and the current released version is **7.1.30**. It is expected that this new firmware will be tested shortly and a corresponding sample configuration be produced. A feature that the new firmware will include is the ability to provision prefix dialling to outbound calls. This is something that was required for Artas to accommodate for their various offices located around Australia. The prefix for the state (NSW 02, QLD 03, etc) that the phones were in was added to the Snom configuration so that the staff would not have to dial the area code for 'local' numbers.

## Phone Layout

### Snom 300



For further information regarding the above diagram, please download the full User manual in English from:  
[http://wiki.snom.com/Documentation/User\\_Manual](http://wiki.snom.com/Documentation/User_Manual)

## Basic Sample Configuration for My Net Fone

### Web GUI access

There is no remote access available to the Snom phones. The only way that modifications can be made to the configuration is either locally or through a TFTP server.

To be able to login to the phones graphical user interface locally, you need to first obtain the IP address that has been allocated to the phone. To determine what that IP is press the down direction on the circular navigation key (2a) until you get to the Information Menu (as shown below):

Information  
IPAdr

Here, you can look up the IP and MAC addresses and the software version of the phone.

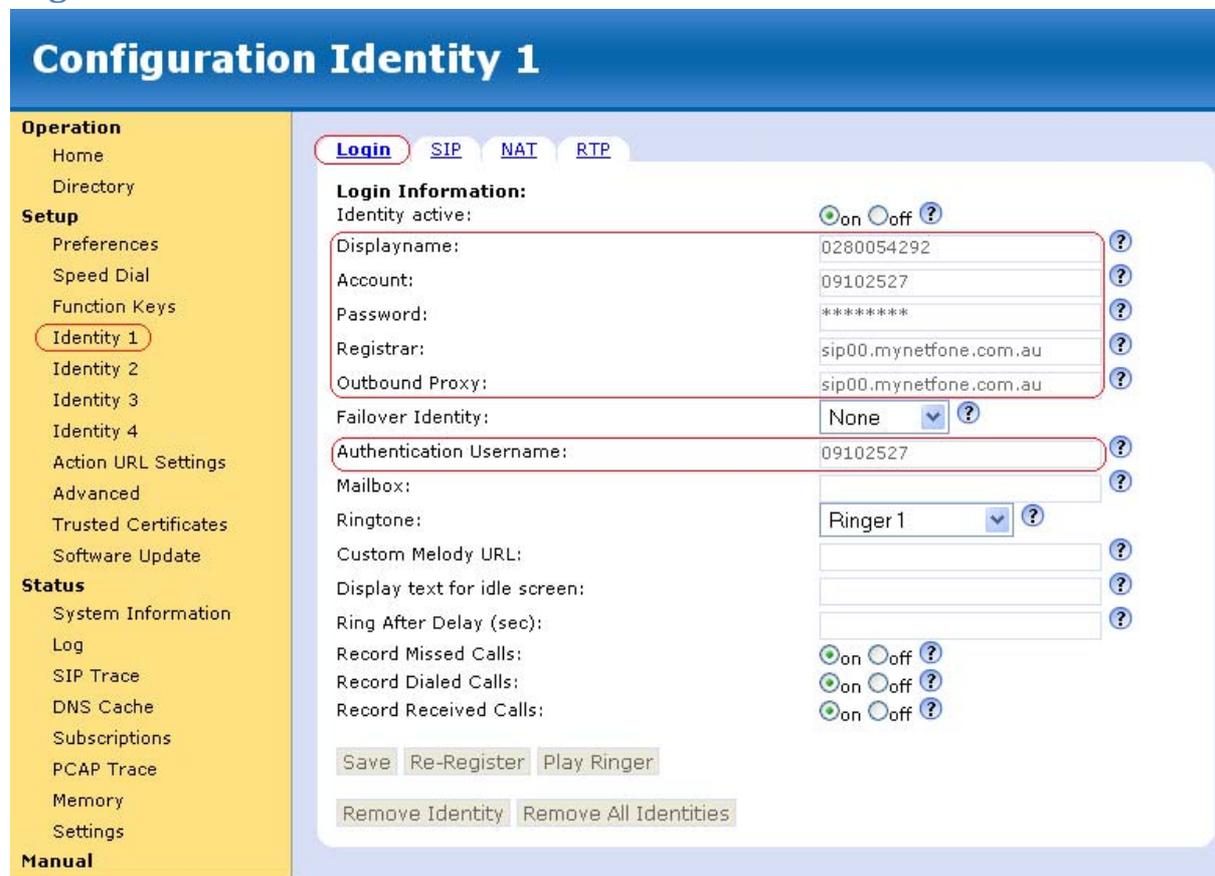
**IPAdr:** Press the function key ([tick button, 2a](#)) IPAdr to view the IP address currently assigned to the phone.

IP Address:  
192.168.9.80

Login to the interface using the IP address shown on the phone. E.g. <http://192.168.9.80/>

**Note:** You need to be connected to the LAN port (labelled PC) on the back of the Snom phone, or to the WAN port (labelled NET) and have a computer in the same subnet/IP range, to be able to connect to the user interface.

### Login



The screenshot shows the 'Configuration Identity 1' web interface. On the left is a navigation menu with sections: Operation (Home, Directory), Setup (Preferences, Speed Dial, Function Keys, Identity 1, Identity 2, Identity 3, Identity 4, Action URL Settings, Advanced, Trusted Certificates, Software Update), Status (System Information, Log, SIP Trace, DNS Cache, Subscriptions, PCAP Trace, Memory, Settings), and Manual. The main content area has tabs for Login, SIP, NAT, and RTP. The 'Login Information' section includes: Identity active (radio buttons for on/off), Displayname (0280054292), Account (09102527), Password (masked with asterisks), Registrar (sip00.mynetfone.com.au), Outbound Proxy (sip00.mynetfone.com.au), Failover Identity (None), Authentication Username (09102527), Mailbox, Ringtone (Ringer 1), Custom Melody URL, Display text for idle screen, Ring After Delay (sec), Record Missed Calls (radio buttons for on/off), Record Dialed Calls (radio buttons for on/off), and Record Received Calls (radio buttons for on/off). At the bottom are buttons for Save, Re-Register, Play Ringer, Remove Identity, and Remove All Identities.

## SIP

### Configuration Identity 1

**Operation**

- Home
- Directory

**Setup**

- Preferences
- Speed Dial
- Function Keys
- Identity 1
- Identity 2
- Identity 3
- Identity 4
- Action URL Settings
- Advanced
- Trusted Certificates
- Software Update

**Status**

- System Information
- Log
- SIP Trace
- DNS Cache
- Subscriptions
- PCAP Trace
- Memory
- Settings

**Manual**

[Login](#)
[SIP](#)
[NAT](#)
[RTP](#)

**SIP Identity Settings:**

Music on hold server:  ?

Alert Info URL:  ?

User picture URL:  ?

Proxy Require:  ?

Q-Value: 0.8 ?

Proposed Expiry: 10 mins ?

Auto Answer:  on  off ?

Long SIP-Contact (RFC3840):  on  off ?

Support broken Registrar:  on  off ?

Shared Line:  on  off ?

DTMF via SIP INFO:  on  off ?

Send display name on INVITE:  on  off ?

Extension Monitoring Call Pickup List:  on  off ?

Extension Monitoring Call Pickup List URI:  ?

Contact List:  on  off ?

Contact List URI:  ?

Server Type Support: Default ?

Remove all bindings on unregister:  on  off ?

## NAT

### Configuration Identity 1

**Operation**

- Home
- Directory

**Setup**

- Preferences
- Speed Dial
- Function Keys
- Identity 1
- Identity 2
- Identity 3
- Identity 4
- Action URL Settings
- Advanced
- Trusted Certificates
- Software Update

**Status**

- System Information
- Log
- SIP Trace
- DNS Cache
- Subscriptions
- PCAP Trace
- Memory
- Settings

**Manual**

[Login](#)
[SIP](#)
[NAT](#)
[RTP](#)

**NAT Identity Settings:**

Offer ICE:  on  off ?

STUN server (IP-addr:port):  ?

STUN interval (seconds):  ?

Keepalive interval (seconds): 60 ?

## Advanced - Behaviour

# Advanced Settings

<p><b>Operation</b></p> <ul style="list-style-type: none"> <li>Home</li> <li>Directory</li> </ul> <p><b>Setup</b></p> <ul style="list-style-type: none"> <li>Preferences</li> <li>Speed Dial</li> <li>Function Keys</li> <li>Identity 1</li> <li>Identity 2</li> <li>Identity 3</li> <li>Identity 4</li> <li>Action URL Settings</li> <li style="border: 1px solid red; border-radius: 50%; padding: 2px;">Advanced</li> <li>Trusted Certificates</li> <li>Software Update</li> </ul> <p><b>Status</b></p> <ul style="list-style-type: none"> <li>System Information</li> <li>Log</li> <li>SIP Trace</li> <li>DNS Cache</li> <li>Subscriptions</li> <li>PCAP Trace</li> <li>Memory</li> <li>Settings</li> </ul> <p><b>Manual</b></p>	<div style="background-color: #e6e6fa; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;"> <span style="color: #000080; text-decoration: underline;">Network</span> <span style="border: 1px solid #000080; border-radius: 50%; padding: 2px 5px; color: #000080; font-weight: bold;">Behavior</span> <span style="color: #000080; text-decoration: underline;">Audio</span> <span style="color: #000080; text-decoration: underline;">SIP/RTP</span> <span style="color: #000080; text-decoration: underline;">QoS/Security</span> <span style="color: #000080; text-decoration: underline;">Update</span> </div> <p><b>Phone Behavior:</b></p> <p>Call Completion: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Peer to Peer Call Completion: <input checked="" type="radio"/> on <input type="radio"/> off ?</p> <p>IDNA (RFC 3490) Support: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p style="border: 1px solid red; border-radius: 5px; padding: 2px;">Auto Dial: after 2 sec ▾ ?</p> <p>Overlap Dialing: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Number Guessing: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Number Guessing Minimum Length: <input style="width: 50px;" type="text" value="4"/> ?</p> <p>Block URL Dialing: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Deny All Feature: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Challenge Response on Phone: <input checked="" type="radio"/> on <input type="radio"/> off ?</p> <p>Enable Intercom: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>'Answer After' Policy: only in idle ▾ ?</p> <p>CMC Feature: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Dialog-Info Call Pickup: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Show dialog info call pickup on xml screen: <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>Disconnect on Hook: <input checked="" type="radio"/> on <input type="radio"/> off ?</p> <p>Call join on Xfer (2 calls): <input type="radio"/> on <input checked="" type="radio"/> off ?</p> <p>AOC Amount Display: <input style="width: 50px;" type="text" value="off"/> ?</p> <p>AOC Pulse Currency: <input style="width: 50px;" type="text" value="\$"/> ?</p> <p>AOC Cost/Pulse: <input style="width: 50px;" type="text" value="1"/> ?</p>
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## Additional Documentation

Online Manual:

[http://wiki.snom.com/Snom300/Online\\_Manual](http://wiki.snom.com/Snom300/Online_Manual)

Sample Web Interfaces (sorted by Menu)

[http://wiki.snom.com/Web\\_Interface](http://wiki.snom.com/Web_Interface)

Snom 300 Support

<http://wiki.snom.com/Snom300>

## Factory Reset

You should reset the phone only in the following situations:

- The phone configuration was changed and the phone is not functioning anymore.
- The help desk of your vendor or Snom partner advised you to do so.

Reset the phone configuration to factory values

1. Press the down direction on the circular navigation key (2a) until you get to the **Configuration** Menu
2. Press the right direction on the circular navigation key (2a) until you get to the **Reset** sub-menu
3. Press the function key (tick button)
4. When prompted for the Admin Mode Pwd, enter the administrator password and press the function key
5. The phone will display "Rebooting..." and the phone configuration is being reset.

**Note:** The default administrator password is "0000"