

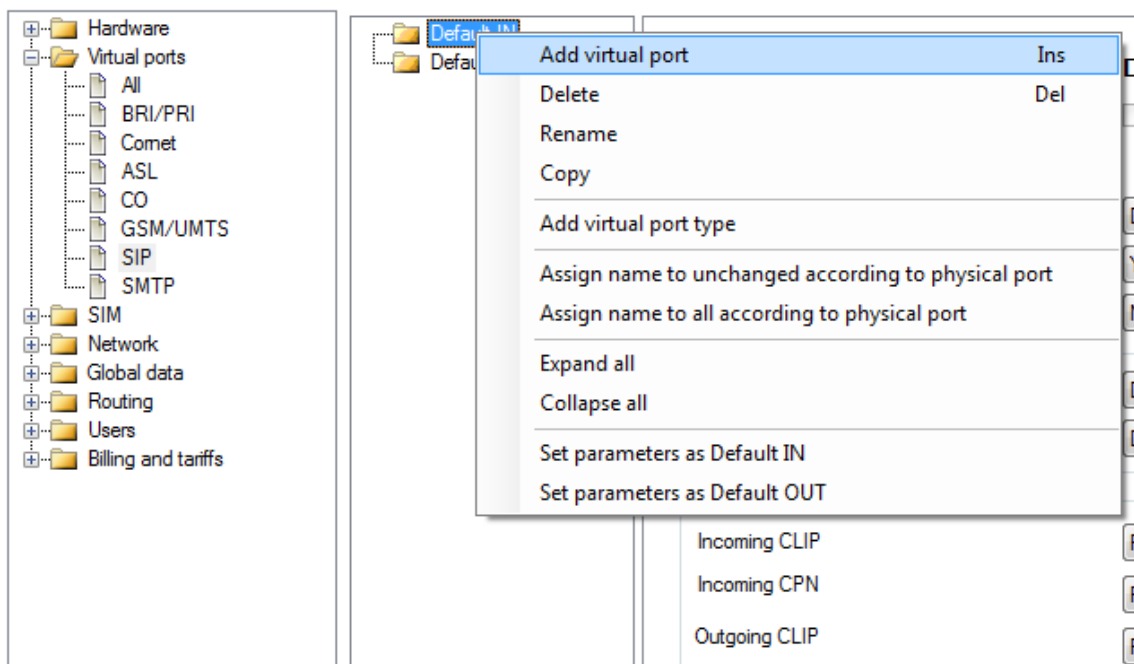
How to register 2N® Helios IP Mobile v4 with SIP Proxy on 2N® NetStar PBX

i This FAQ describes how to create a SIP Proxy on the 2N® NetStar PBX and how to register the 2N® Helios IP Mobile application version 4 with this proxy. The FAQ is valid for the FW version 4.3.2 of 2N® NetStar and the FW version 1.6.7 of 2N® Indoor Touch/2N® Helios IP Mobile application version 4.0 or higher. FAQ is divided into two parts. Part one describes how to create a SIP Proxy on 2N® NetStar, and how to create a terminal for this Proxy. Part two explains how to configure the Proxy settings in 2N® Helios IP Mobile v4 in order to register the application with SIP Proxy created in part one. By the end of this FAQ you should have successfully created a SIP Proxy on 2N® NetStar, and 2N® Helios IP Mobile application v4 should be registered to this Proxy.

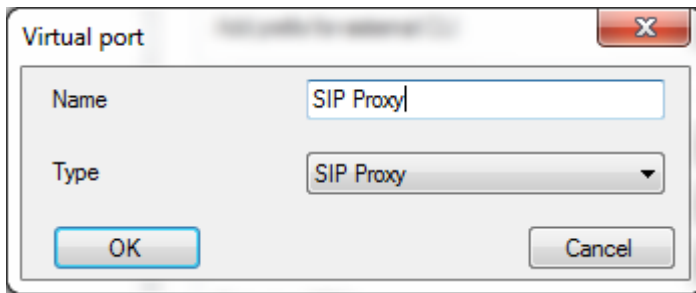
1. Configuration of PBX 2N® NetStar

Create SIP Proxy

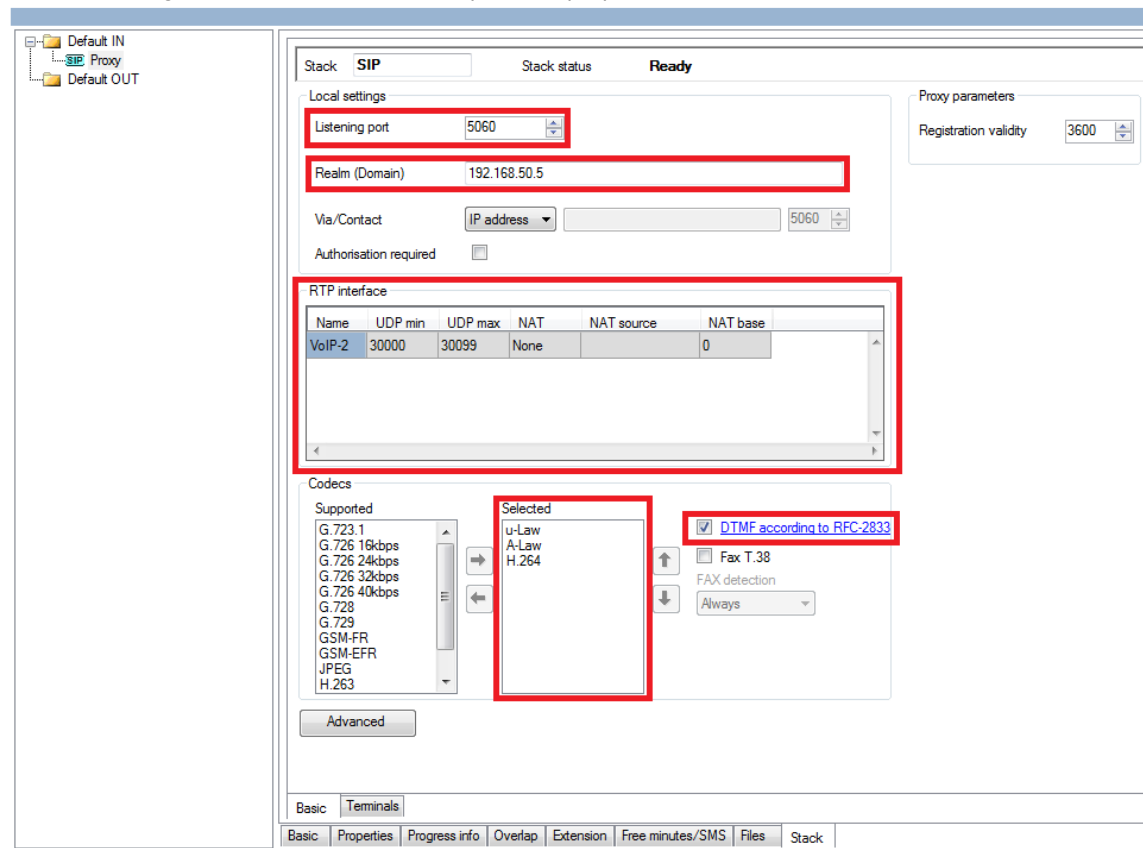
1. Go to Virtual ports -> SIP and add a new virtual port.



2. In the popped window specify the SIP Proxy name and choose in parameter "Type" option "SIP Proxy".

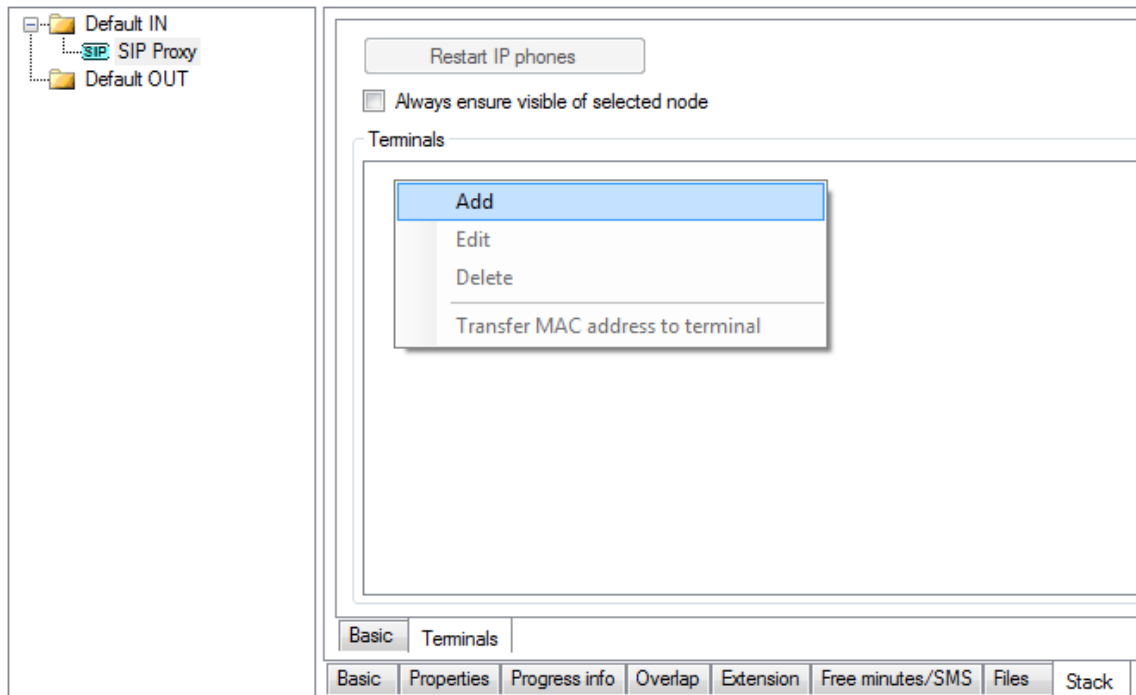


- Then go to SIP Proxy and in bookmark "Stack" set parameters according to picture below.
 - Realm (Domain) - IP address of 2N® NetStar CPU.
 - Listening Port - Port for SIP signalling. You can leave it as it is on default SIP port 5060. Alternatively you can change if it will be necessary for some reason, it is possible to change this port in SIP Proxy settings of 2N® Helios IP Mobile application.
 - Realm (Domain) - Here fill IP address of 2N® NetStar CPU
 - RTP interface - Here make a right mouse button click and add RTP interface. RTP interface is VOIP card of the PBX.
 - Codecs - Transfer required codecs from "Supported" to "Selected". IndoorTouch supports codecs u-Law and A-law for audio and H.264 for video.
 - DTMF according to RFC-2833 - Check this option for proper transmission of DTMF

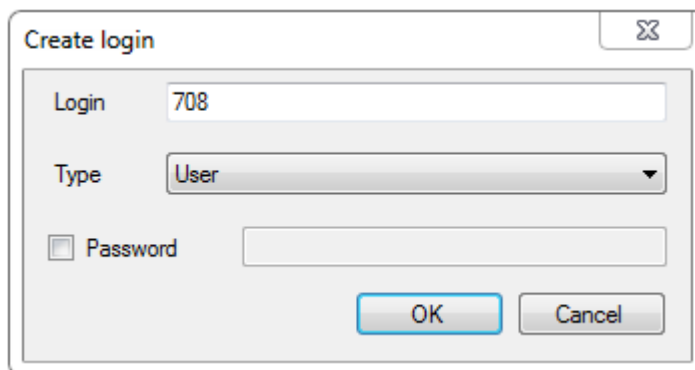


Create of VoIP terminal

- Go to SIP Proxy -> Stack -> Terminals and add new terminal.

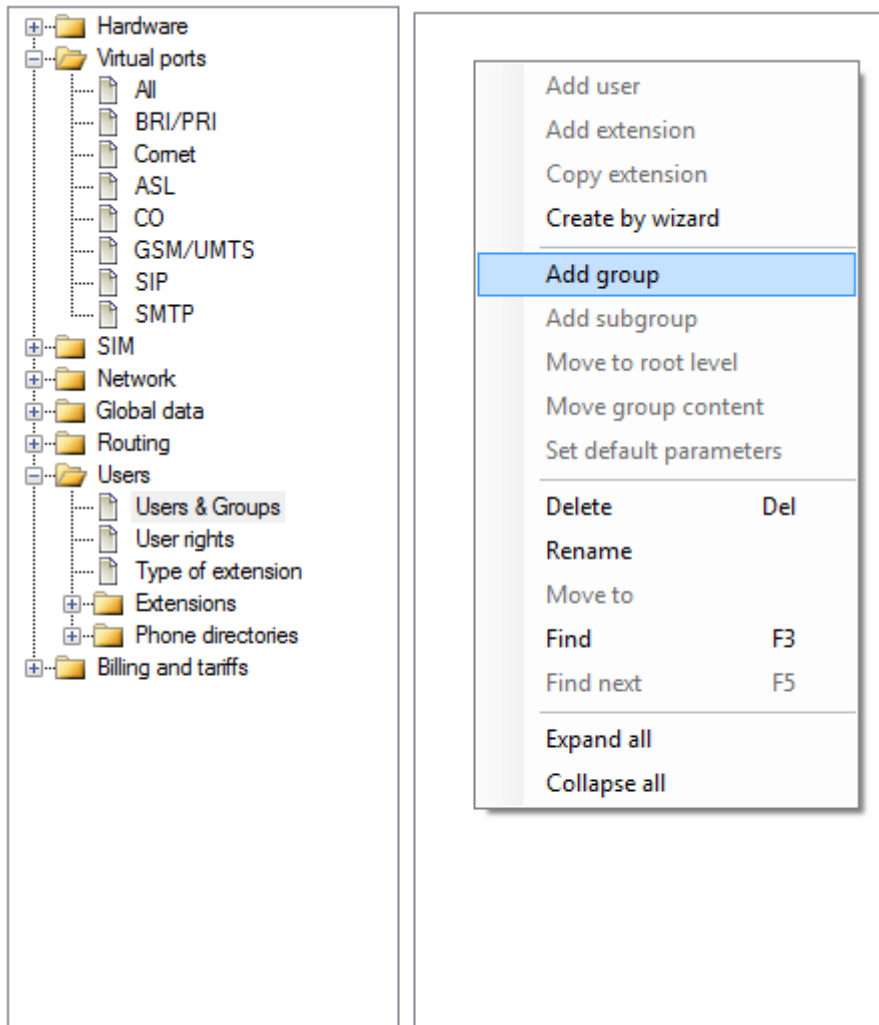


2. Specify the terminal name - it has to correspond with SIP extension name! Then click "OK" and the terminal is created.

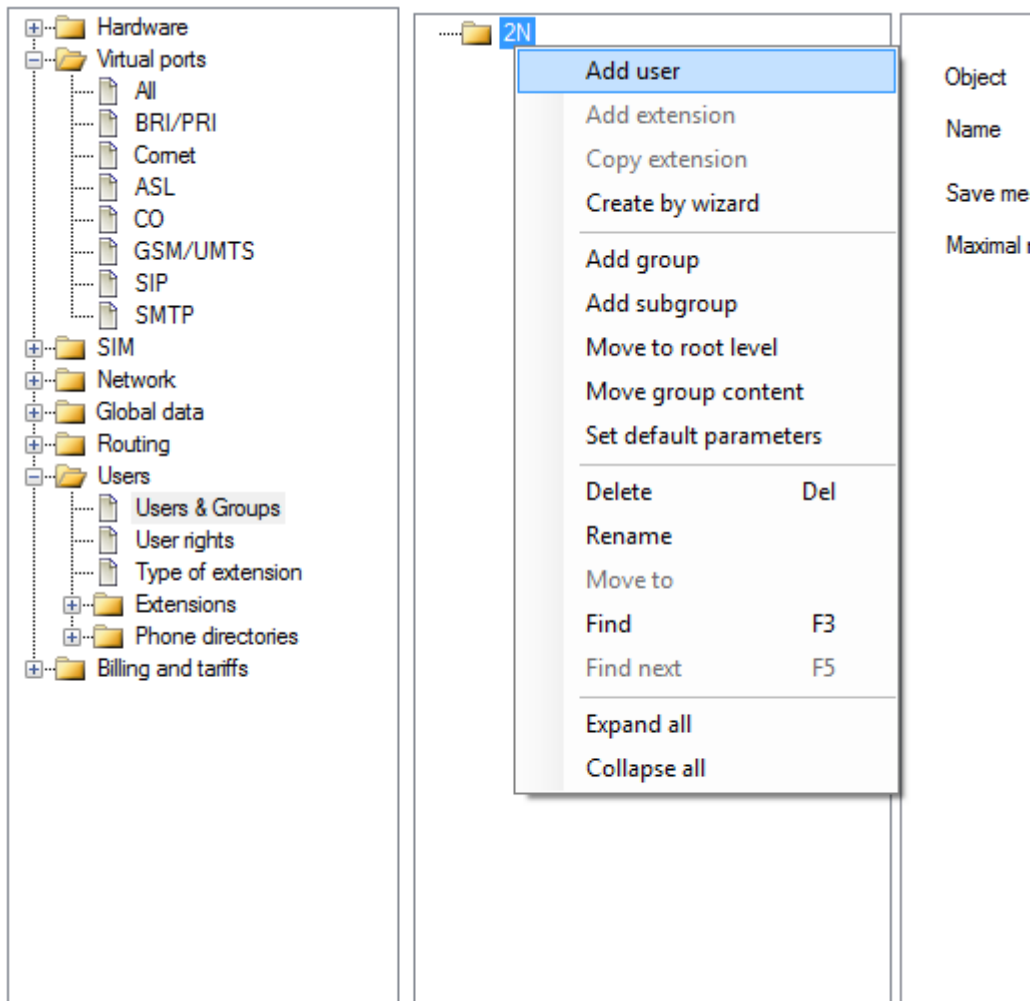


Create of SIP station

1. First of all you need to create the User Group. Go to Users -> Users & Groups and add new group.



2. When the group is created, add a new user to it.



3. Fill name for the new user, for our example it is 708. Also you can create SIP extension in this step by checking "Create" on the row "SIP extension". For user internal number and SIP extension we used number 708.

User

Creation of user

Name

User internal number

Login

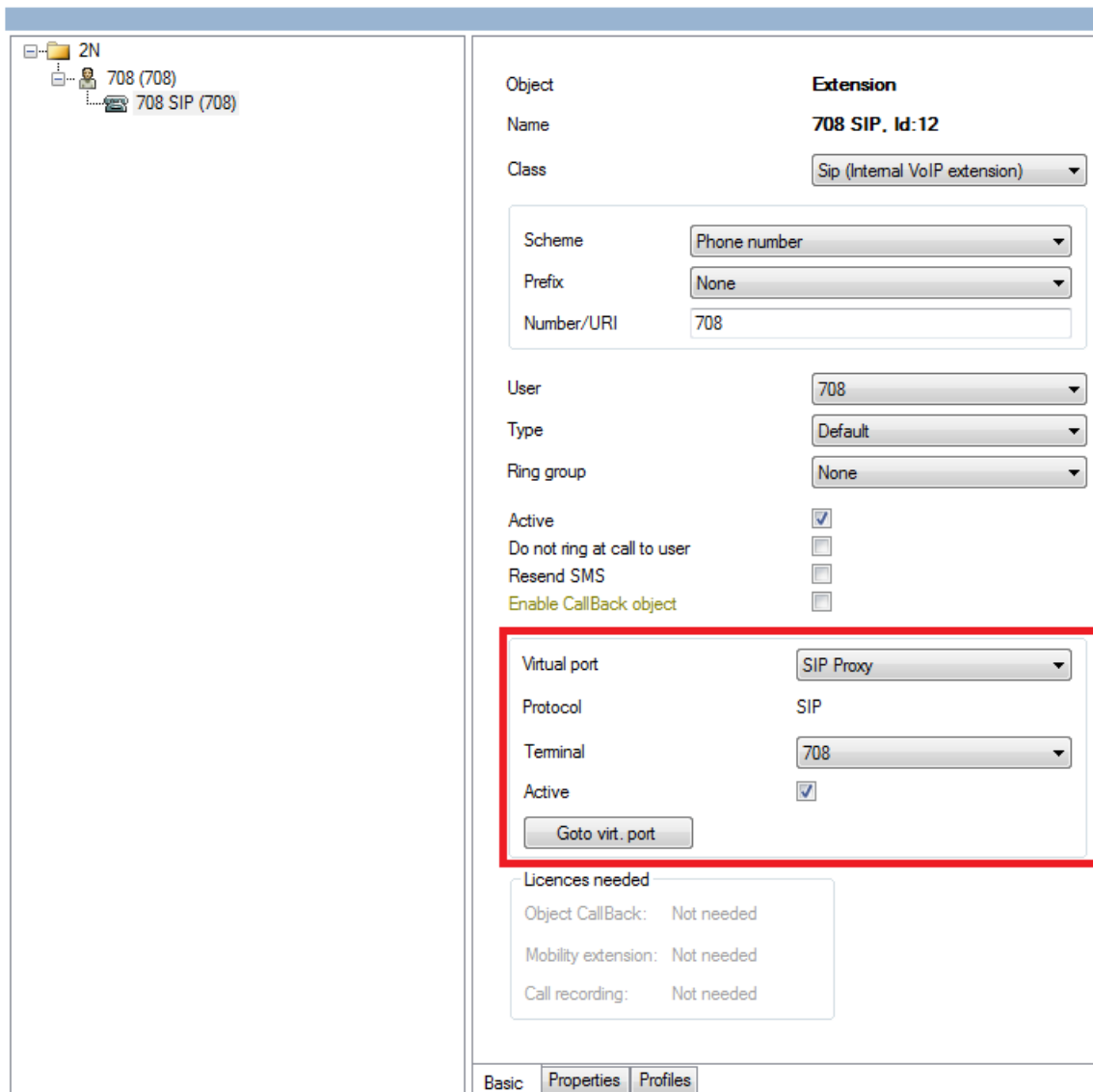
Login type

User's stations

Station type	Create	Title*	Number/URI*	Prefix	Resend SMS
Extension	<input type="checkbox"/>			None	<input type="checkbox"/>
Extension II	<input type="checkbox"/>			None	<input type="checkbox"/>
SIP extension	<input checked="" type="checkbox"/>	708 SIP	708	None	<input type="checkbox"/>
GSM Mobility Extension	<input type="checkbox"/>			None	<input checked="" type="checkbox"/>
PSTN Mobility Extension	<input type="checkbox"/>			None	<input checked="" type="checkbox"/>
Email extension	<input type="checkbox"/>			None	<input type="checkbox"/>

OK Cancel

- When the new user and extension are created, go to extension setting and assign this extension to previously created terminal 708.



Object Extension

Name 708 SIP, Id:12

Class Sip (Internal VoIP extension)

Scheme Phone number

Prefix None

Number/URI 708

User 708

Type Default

Ring group None

Active

Do not ring at call to user

Resend SMS

Enable CallBack object

Virtual port SIP Proxy

Protocol SIP

Terminal 708

Active

Goto virt. port

Licences needed

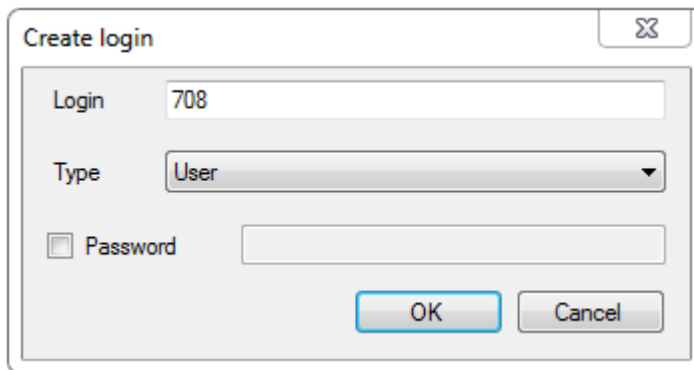
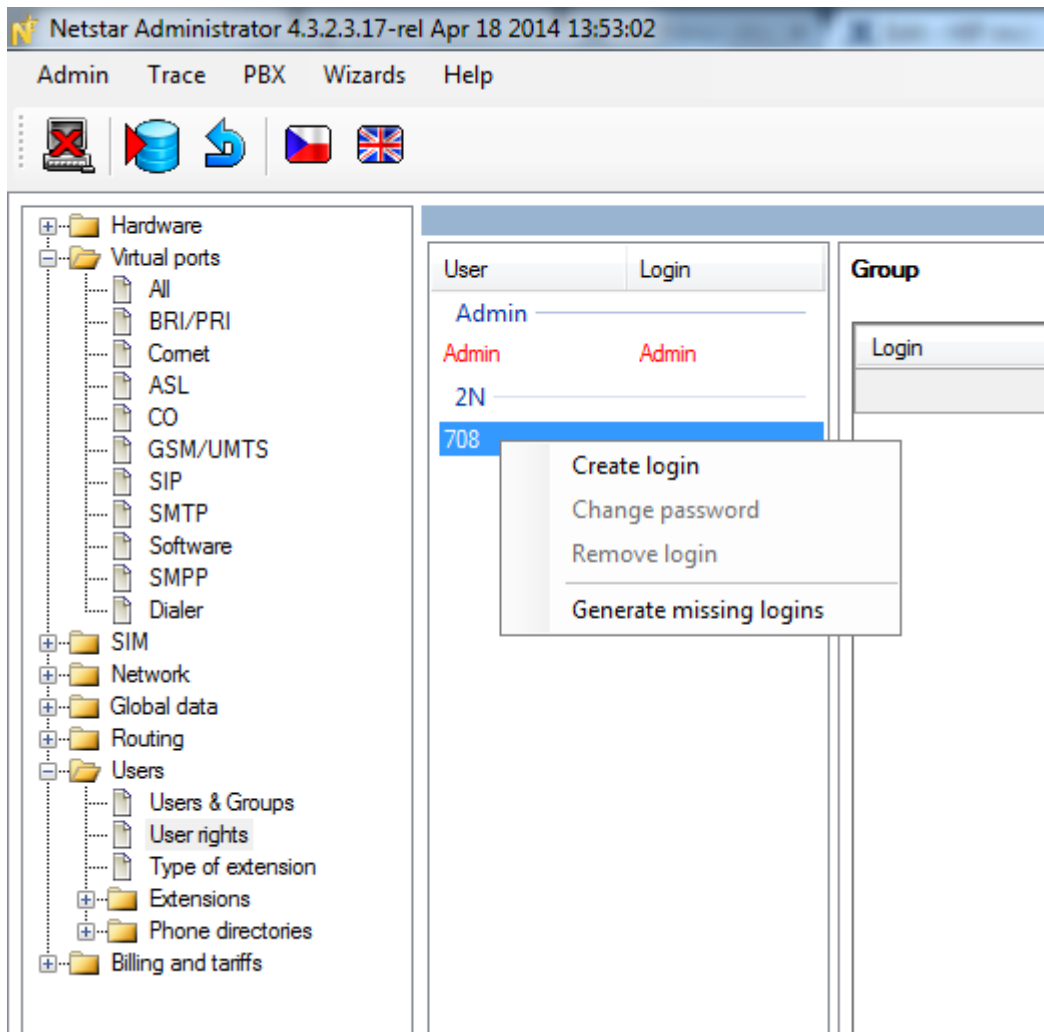
Object CallBack: Not needed

Mobility extension: Not needed

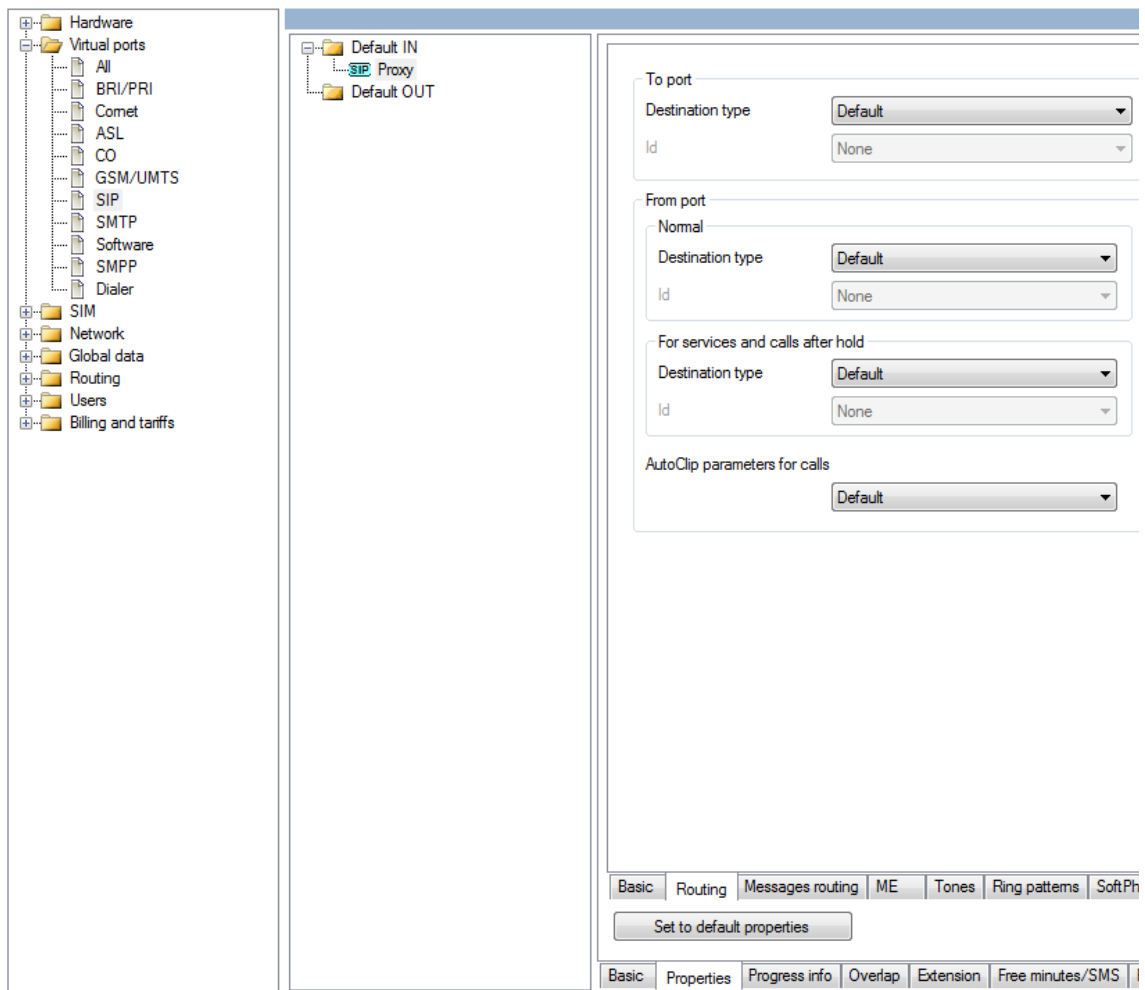
Call recording: Not needed

Basic Properties Profiles

5. Last thing you have to do is assign the login to the newly created extension. You can do it in section Users -> User rights.



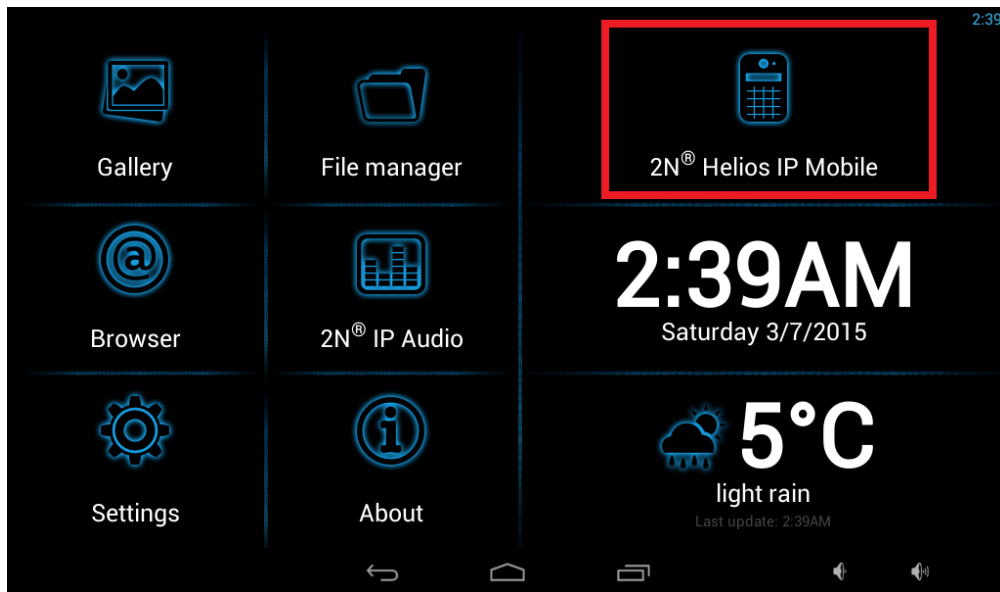
- Now everything is set correctly, you can connect SIP station to sip proxy. In this case the credentials are:
Username: 708
Password: 708
- The final step is configure routing for SIP Proxy. Go to Virtual Ports->SIP->Proxy->Properties and click on Create properties. Then switch to Routing and for From port choose where you want to route the calls.



2. Register 2N® Helios IP Mobile to SIP Proxy

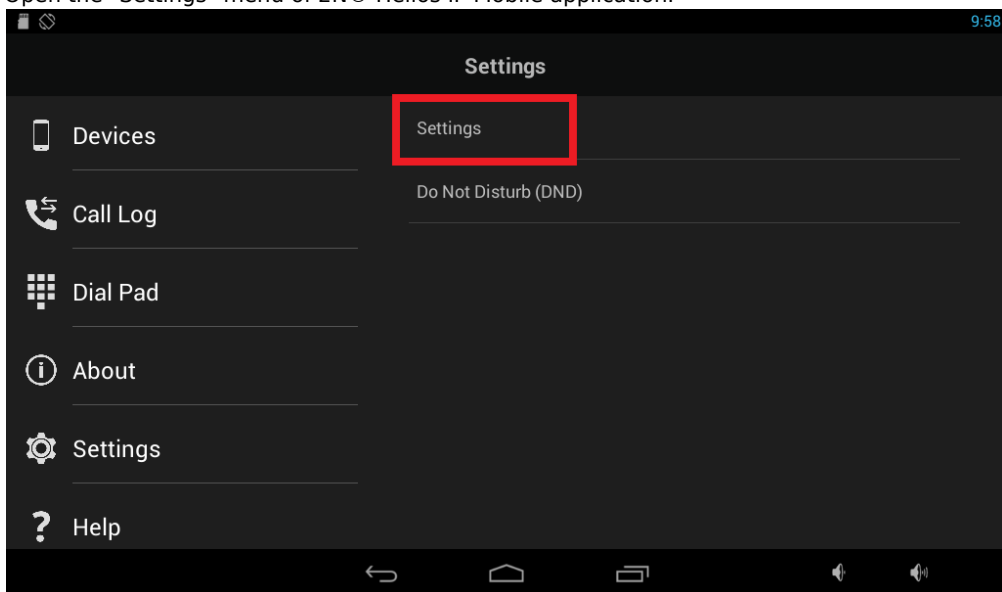
2N® Helios IP Mobile application can be registered to any SIP proxy as a regular SIP client.

First you need to run the 2N® Helios IP Mobile application by clicking on its icon.

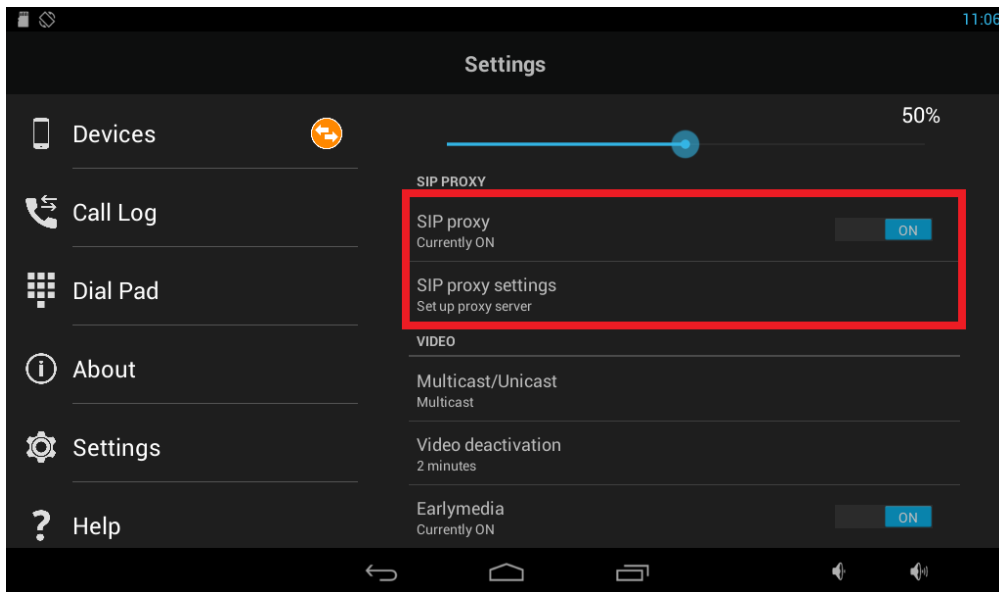


Now proceed please following configuration steps:

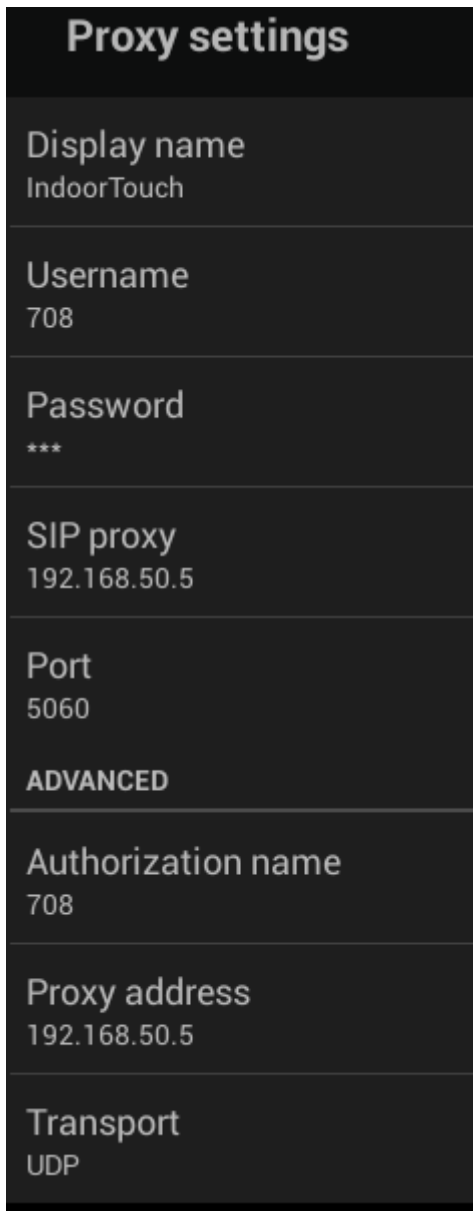
1. Open the "Settings" menu of 2N® Helios IP Mobile application.




2. Enable the SIP proxy client by clicking on the "SIP Proxy ON" button:




3. Then proceed to the "SIP proxy settings" menu in order to set the account details. Enter please all necessary details such as the Username, password, SIP proxy address etc. you get from an administrator of the SIP proxy/PBX.




4. Once you configure the SIP proxy connection and save the settings by clicking on the confirmation button , you will see the proxy status in the "Devices" row.




Devices  Connected - successfully connected to the proxy, ready to place and receive calls

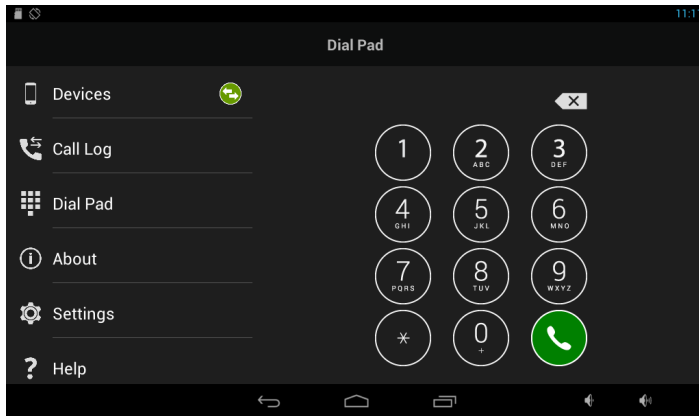


Devices  Connecting - trying to connect to the proxy, wait for a while please

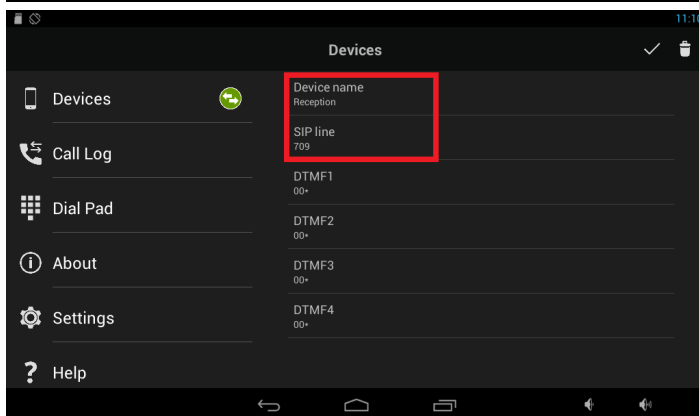
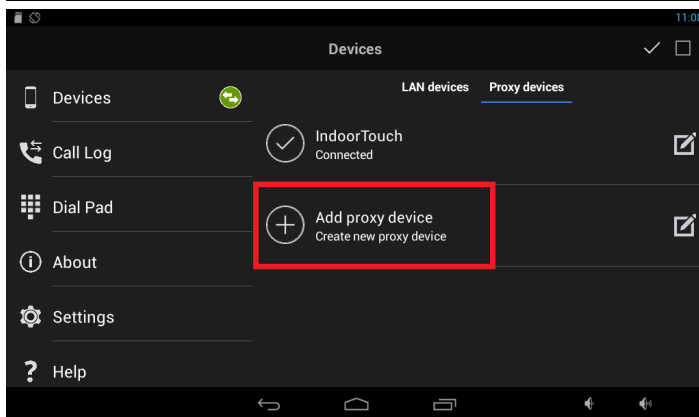
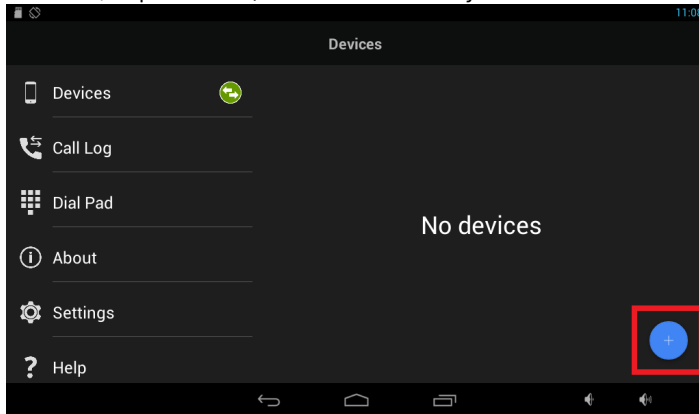


Devices  Disconnected - disconnected from the proxy, check the configuration again please

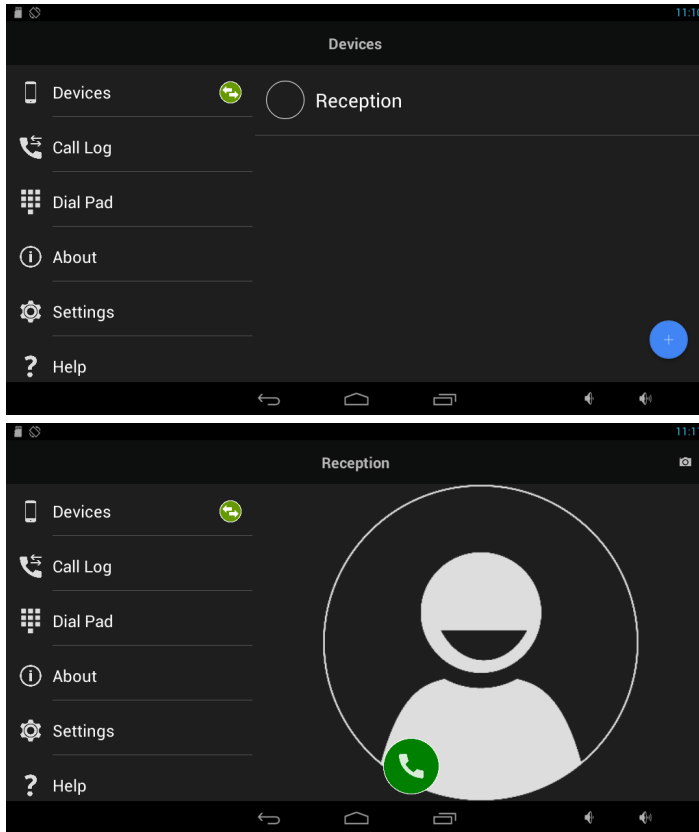
5. Outgoing calls within the SIP proxy can be now easily placed directly using the "Dial Pad" by entering the phone number to be dialled.



6. Alternatively you can also manually add some proxy devices (=phone numbers of eg. 2N® Helios IP intercom, IP phone etc.) to have them ready in the "Devices" menu.



If you would like to call the 2N® Helios IP intercom over proxy, in the device configuration you can also adjust the DTMF code for door opening. Once you configure the desired proxy device and save the settings by clicking on the confirmation button , you will see it in the "Devices" menu.



2N® Helios IP Mobile bandwidth requirements

Way of communication	Codecs Protocols	Bandwidth
2N® Helios IP → 2N® Indoor Touch/2N® Helios IP Mobile	H.264 unicast video, G.711/G.722 SIP audio	~2 Mbit/s per each 2N® Helios IP
2N® Indoor Touch/2N® Helios IP Mobile application → 2N® Helios IP	G.711/G.722 SIP audio	~85 kbit/s per each 2N® Indoor Touch

In order to perform correctly, all components are required to use appropriate connectivity with a sufficient bandwidth. For further details see please this FAQ: [What LAN/Wi-Fi infrastructure do I need?](#)