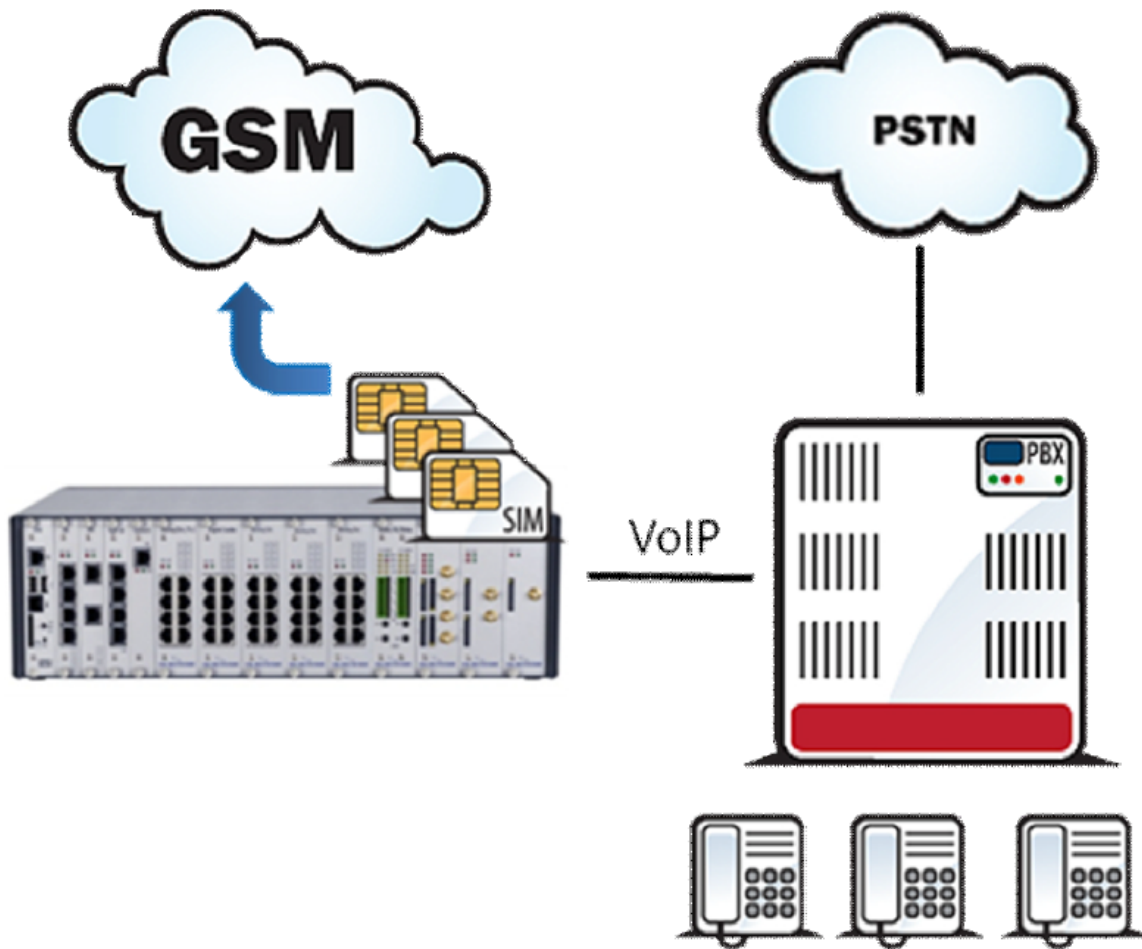


VoIP gateway - How to set 2N® NetStar as a VoIP gateway

- This „how to“ manual will help you to set up 2N® NetStar as a SIP <-> GSM/UMTS gateway. Before you start programming the system, it is highly recommended to read configuration manual.



1. Check your licence (Global data -> Licence). If you do not have it, please contact us.

Licence files		
File	ID	Status
/data/netstar/licence/7.key	NS2LIC-Gbc8dfd035d97	OK

2. Set up a VoIP card

Network setting

Interface IP parameters

IP address: 192.168.3.188

Subnet mask: 255.255.255.252

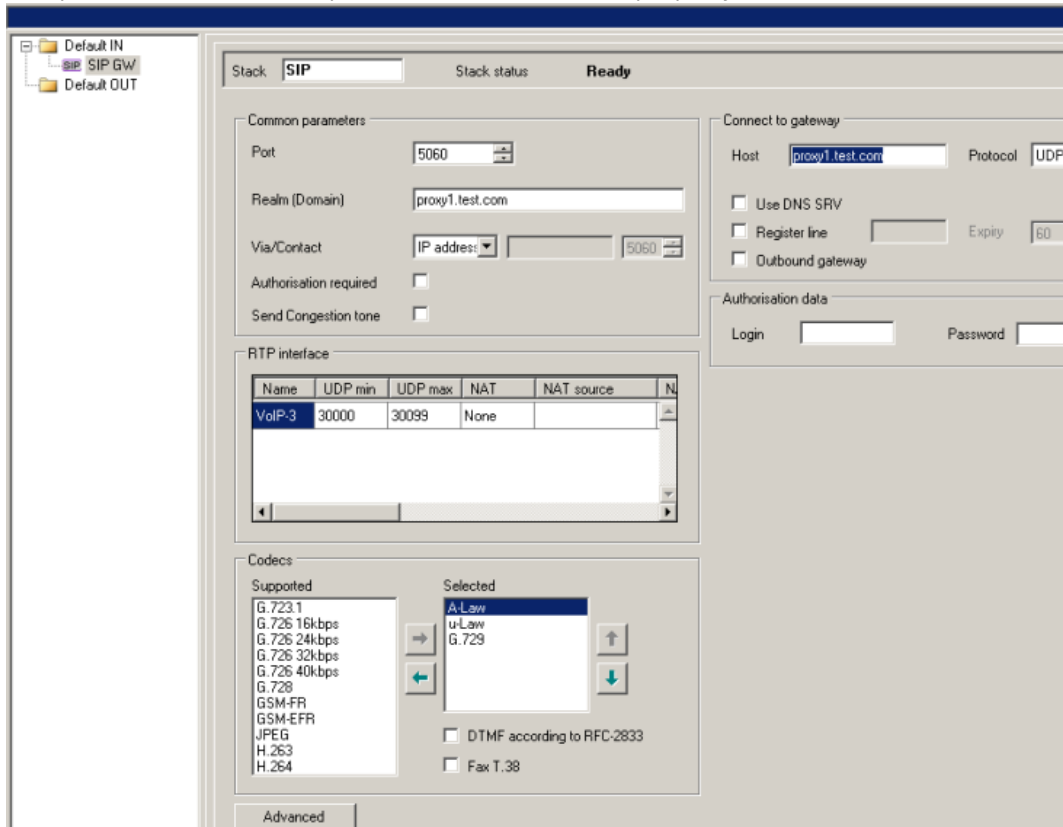
Default gateway: 192.168.1.5

Additional information

Descr.: SURF C6412 VER. 6.0.1.3 Jan 11

Producer:

3. Set up a SIP trunk.
 - a. Create a SIP trunk - SIP GW. (Virtual ports -> SIP -> SIP Gateway).
Add RTP interface
Select codecs
Set up IP address of the other peer and realm (in our example proxy1.test.com)



Stack: SIP Stack status: Ready

Common parameters

Port: 5060

Realm (Domain): proxy1.test.com

Via/Contact: IP address: 5060

Authorisation required:

Send Congestion tone:

Connect to gateway

Host: proxy1.test.com Protocol: UDP

Use DNS SRV

Register line Expiry: 60

Outbound gateway

Authorisation data

Login: Password:

RTP interface

Name	UDP min	UDP max	NAT	NAT source
VoIP-3	30000	30099	None	

Codecs

Supported:

- G.723.1
- G.726 16kbps
- G.726 24kbps
- G.726 32kbps
- G.726 40kbps
- G.728
- GSM-FR
- GSM-EFR
- JPEG
- H.263
- H.264

Selected:

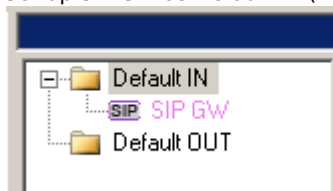
- A-Law
- u-Law
- G.729

DTMF according to RFC-2833

Fax T.38

Advanced

- b. Set up SIP GW as Default IN (important for proper network tones transmission).

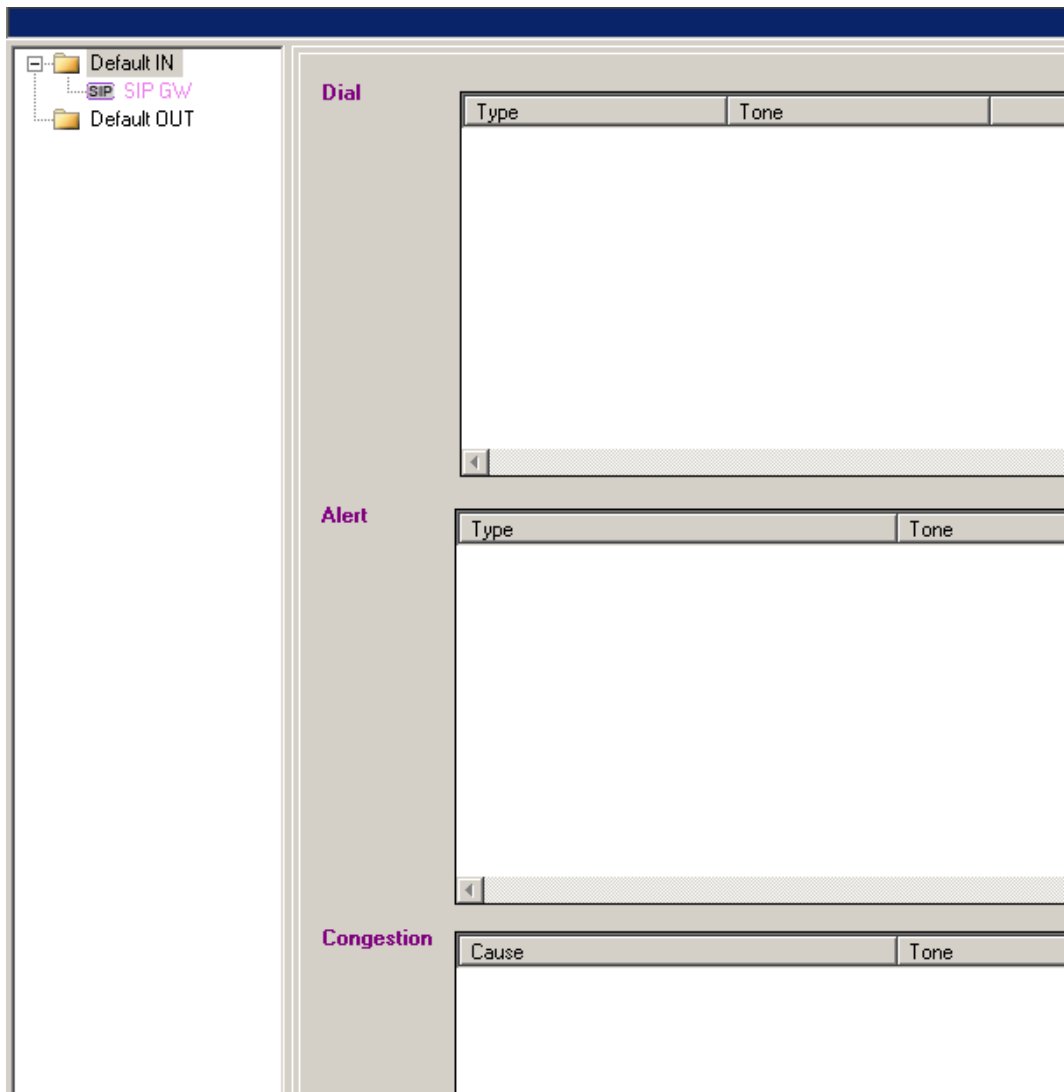


Default IN

SIP SIP GW

Default OUT

- c. Delete all tones from Default IN (Properties -> Tones)



Dial

Type	Tone

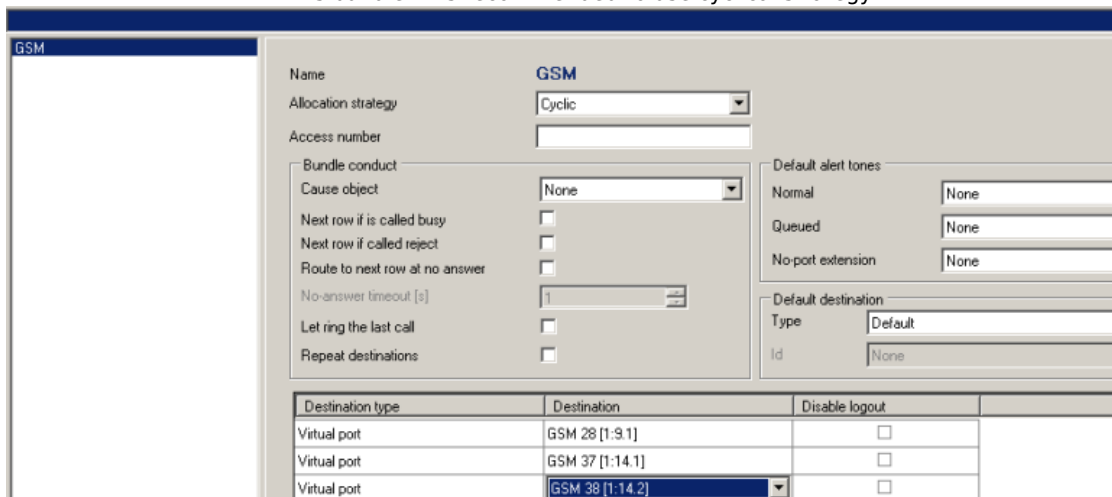
Alert

Type	Tone

Congestion

Cause	Tone

4. Set up GSM/UMTS ports
 - a. Create a bundle - GSM (Routing -> Routing objects -> Bundle) and use all GSM ports in this bundle. It is recommended to use cyclical strategy.



GSM

Name: GSM

Allocation strategy: Cyclic

Access number:

Bundle conduct

Cause object: None

Next row if called busy:

Next row if called reject:

Route to next row at no answer:

No-answer timeout [s]: 1

Let ring the last call:

Repeat destinations:

Default alert tones

Normal: None

Queued: None

No-port extension: None

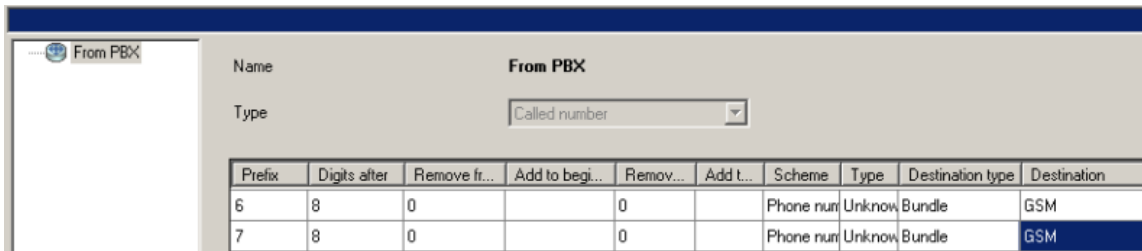
Default destination

Type: Default

Id: None

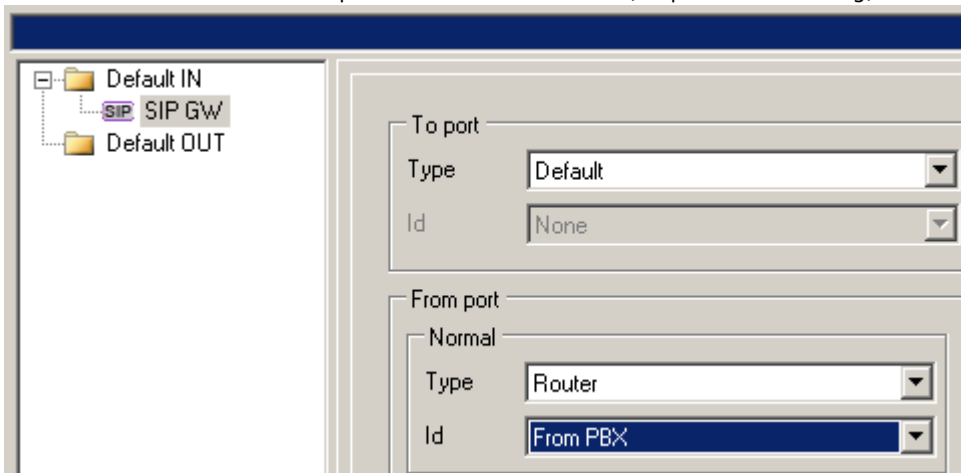
Destination type	Destination	Disable logout
Virtual port	GSM 28 [1:9.1]	<input type="checkbox"/>
Virtual port	GSM 37 [1:14.1]	<input type="checkbox"/>
Virtual port	GSM 38 [1:14.2]	<input type="checkbox"/>

5. Create a router - From PBX. (Routing -> Routers -> Called party number Router) this router will send all calls to GSM. It is very important to specify the length of the numbers. In our example GSM prefixes are 6 and 7 and numbers are 9-digit long.



Prefix	Digits after	Remove fr...	Add to begi...	Remov...	Add t...	Scheme	Type	Destination type	Destination
6	8	0		0		Phone num	Unknow	Bundle	GSM
7	8	0		0		Phone num	Unknow	Bundle	GSM

6. Use router From PBX as a from port router on the SIP GW. (Properties -> Routing)



To port

Type: Default

Id: None

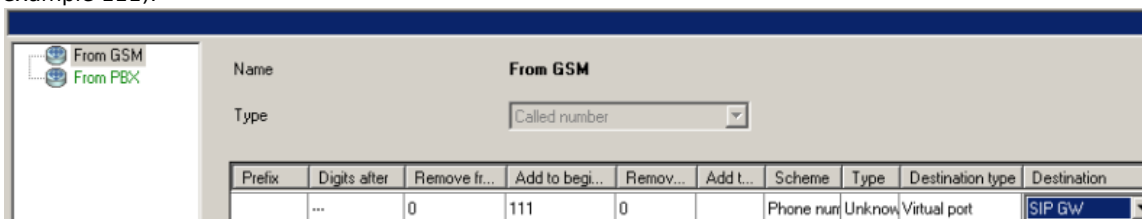
From port

Normal

Type: Router

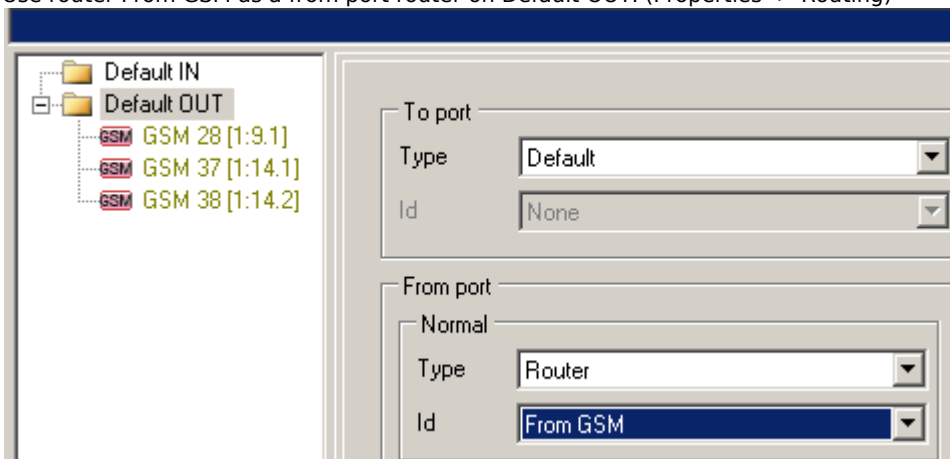
Id: From PBX

7. Create router - From GSM. (Routing -> Routers -> Called party number Router) the purpose of this router is to route all calls from GSM to a predefined extension in the PBX (in our example 111).



Prefix	Digits after	Remove fr...	Add to begi...	Remov...	Add t...	Scheme	Type	Destination type	Destination
...		0	111	0		Phone num	Unknow	Virtual port	SIP GW

8. Use router From GSM as a from port router on Default OUT. (Properties -> Routing)



To port

Type: Default

Id: None

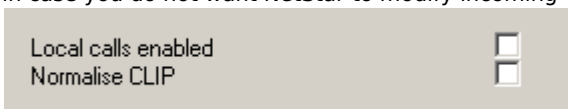
From port

Normal

Type: Router

Id: From GSM

9. Switch off CLIP normalizing (Global Data -> Localisation) in case you do not want NetStar to modify incoming CLI (e.g. strip international prefix)



Local calls enabled

Normalise CLIP

More product information:



2N[®] NetStar IP (Official Website 2N)

2N[®] NetStar (Official Website 2N)

Manuals:

Product support for 2N[®] NetStar (wiki.2n.cz)