



2N<sup>®</sup>

# VoiceBlue Next



## **2N<sup>®</sup> VoiceBlue Next & Innovaphone PBX (IP302)**

connected via SIP trunk

Quick guide

Version 1.00

[www.2n.cz](http://www.2n.cz)

## 2N® VoiceBlue Next has these parameters:

- IP address 192.168.22.42
- Incoming port: 5060

## Innovaphone PBX parameters:

- IP address 192.168.22.227
- Incoming port: 5060

## SIP TRUNK INTERCONNECTION

- 1) For the setting of the trunk between the VoiceBlue Next and your PBX you need to configure SIP proxy (GSM→IP) for GSM incoming calls. SIP proxy (IP→GSM) is designed for secure communication just with traffic from your PBX. You can specify the IP address and port which will accept SIP packets from.

In case you leave there 0.0.0.0 it will be open for all traffic.

The screenshot displays the configuration page for a 2N Gateway. The interface includes a sidebar with navigation options such as 'Gateway control', 'Gateway configuration', and 'Configuration backup'. The main content area is titled 'Gateway' and contains several configuration sections:

- Codec priority:** G711 and G729 are both set to '3 x 10ms'.
- IP addresses:**
  - SIP proxy (IP->GSM): 0.0.0.0 : 5060
  - SIP proxy (GSM->IP): 192.168.22.227 : 5060
  - SIP registrar: 0.0.0.0 : 5060
  - NAT firewall: 0.0.0.0
  - STUN server: 0.0.0.0 : 3478
  - Next STUN server request (60-6553, 0=off) [s]: 6000
- Tones generated to VoIP:** Dial tone to VoIP is set to 'English'.

Two callout boxes provide additional context:

- A callout pointing to the 'SIP proxy (GSM->IP)' field contains the text: "The IP address to which the traffic is send".
- A callout pointing to the 'SIP proxy (IP->GSM)' field contains the text: "The IP address and port which will accept traffic from".

At the bottom left, there is a 'Logout' button with a user icon. At the bottom right, there are icons for saving, deleting, and refreshing the configuration.

## 2) Configuration of the LCR (Least Cost Routing)

The GSM operator has e.g. in our country prefix 7 and 8 with a nine digit the length number. The setting is below.

The screenshot displays the 'Gateway' configuration interface. At the top left is the '2N TELECOMMUNICATIONS' logo. At the top right is the 'Gateway' logo with a mobile phone icon and the text 'Gateway | Update | Restart'. A left sidebar contains a navigation menu with categories: 'Gateway control', 'Gateway configuration' (with sub-items: System parameters, VoIP parameters, GSM basic parameters, GSM groups assignment, GSM outgoing groups, GSM incoming groups, 'Prefixes', LCR table, CLIP Routing table, Mobility Extension, Ethernet configuration, Login configuration, Web configuration, Report configuration), and 'Configuration backup'. At the bottom left of the sidebar is a 'Logout' button with a help icon.

The main content area is titled 'Prefixes' and contains the following sections:

- GSM prefix lists:** A horizontal tabbed interface with tabs for 'Prefixlist 1' through 'Prefixlist 8'. 'Prefixlist 7' is currently selected.
- Basic settings:** Includes a 'GSM network ID' text input field and a 'Default count of digits' dropdown menu set to '9'.
- Table of replaced prefixes:** A table with a header 'Only 0123456789\*#+ characters are allowed'. It is currently empty. To its right are input fields for 'Prefix' and 'Replace with:', and buttons for 'Add', 'Remove', and 'Remove all'.
- Table of accepted prefixes:** A table with a header 'Only 0123456789\*#+ characters are allowed'. It contains two entries: '7' and '8'. To its right are input fields for 'Prefix' and '[Digits count]', and buttons for 'Add', 'Remove', and 'Remove all'.

At the bottom right of the main content area, there are three icons representing file operations: a document with a pencil (edit), a document with a plus sign (add), and a document with a minus sign (remove).

- 3) You need to create LCR rule for defined prefixes. The GSM group says thru with outgoing group the call will follow and in the GSM group assignment you can define, which SIM card belongs to which GSM outgoing group.

The screenshot shows the 'Gateway' configuration interface. At the top left is the '2N TELECOMMUNICATIONS' logo. At the top right is the 'Gateway' logo with a mobile phone icon and the text 'Gateway | Update | Restart'. On the left side, there is a navigation menu under 'Gateway control' and 'Gateway configuration'. The 'Gateway configuration' menu includes: System parameters, VoIP parameters, GSM basic parameters, GSM groups assignment, GSM outgoing groups, GSM incoming groups, Prefixes, LCR table (highlighted), CLIP Routing table, Mobility Extension, Ethernet configuration, Login configuration, Web configuration, and Report configuration. Below the menu is a 'Configuration backup' section and a 'Logout' button. The main content area is titled 'LCR table' and contains a table with the following data:

Prefix list	Time limitation	Weekend usage	Max. length of call	Groups	Add	Remove all
1/	0:00/24:00	Use as in week	Off	2	Edit	Remove
2/	0:00/24:00	Use as in week	Off	1	Edit	Remove

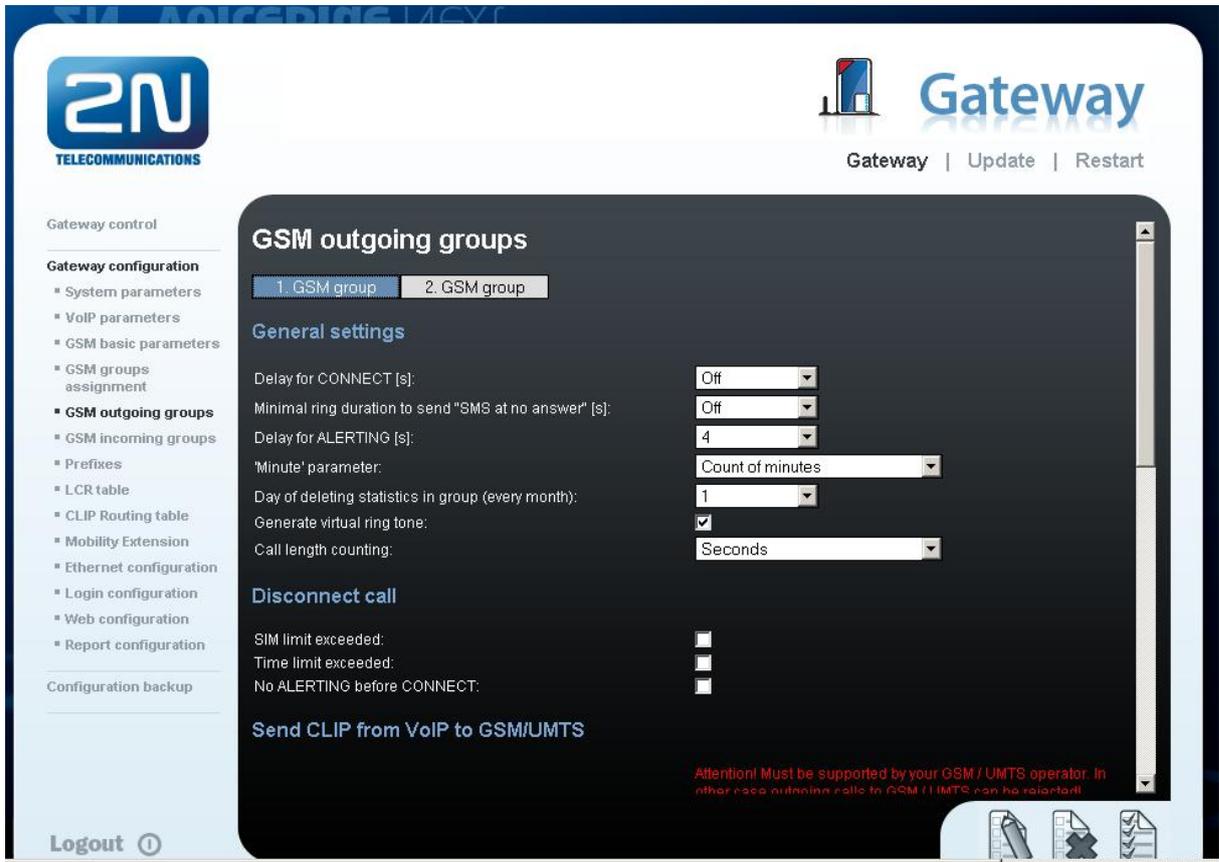
At the bottom right of the main content area, there are three icons: a document with a pencil, a document with a cross, and a document with a checkmark.

The screenshot shows the 'GSM groups assignment' configuration interface. On the left side, there is a navigation menu under 'Gateway control' and 'Gateway configuration'. The 'Gateway configuration' menu includes: System parameters, VoIP parameters, and GSM basic parameters. The main content area is titled 'GSM groups assignment' and contains the following configuration options:

Module:	Outgoing:	Incoming:
0. module	1. Group	1. Group
1. module	2. Group	1. Group

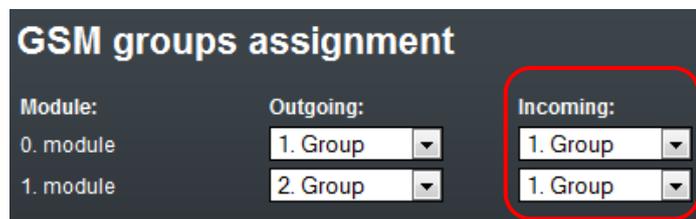
#### 4) Configuration of GSM outgoing groups:

You are able to set up different setting for each GSM group (CLIR, free minutes, Virtual ring tone, roaming and others)

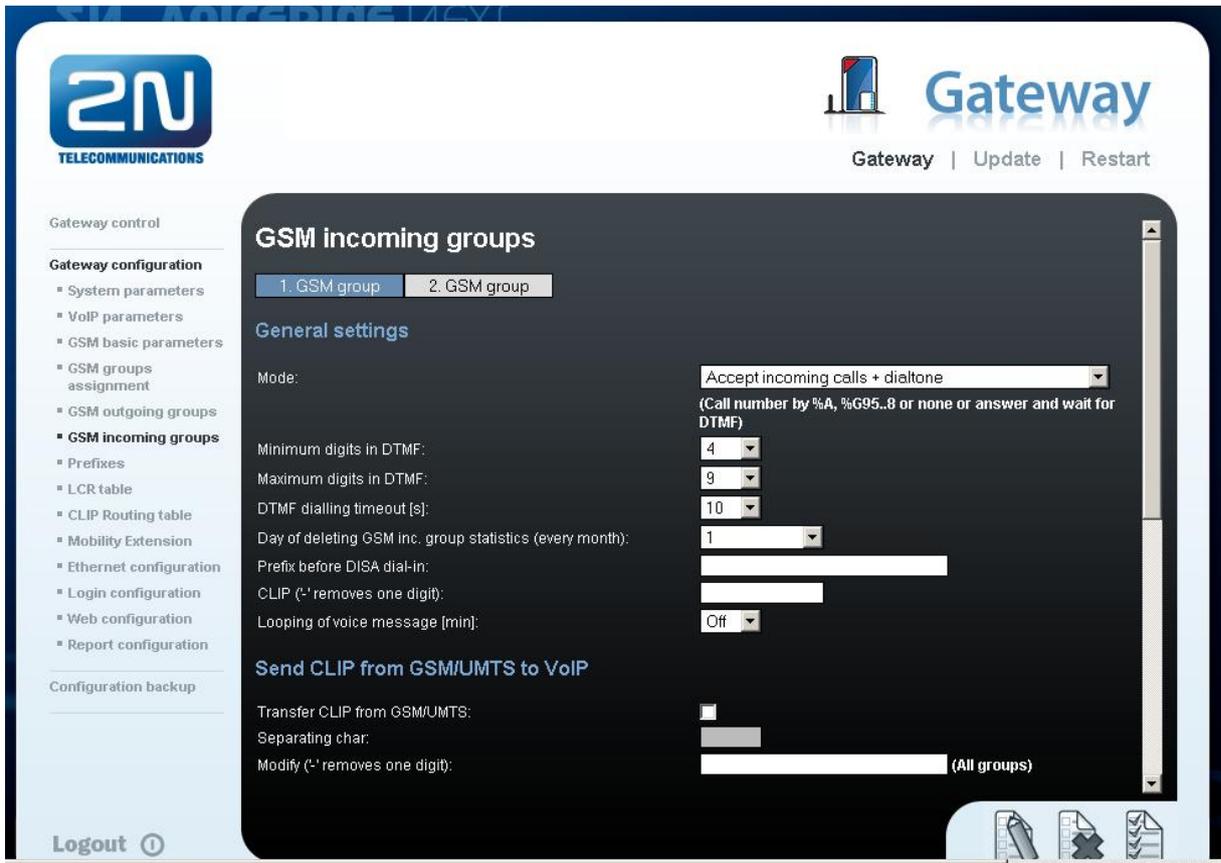


#### 5) Incoming calls

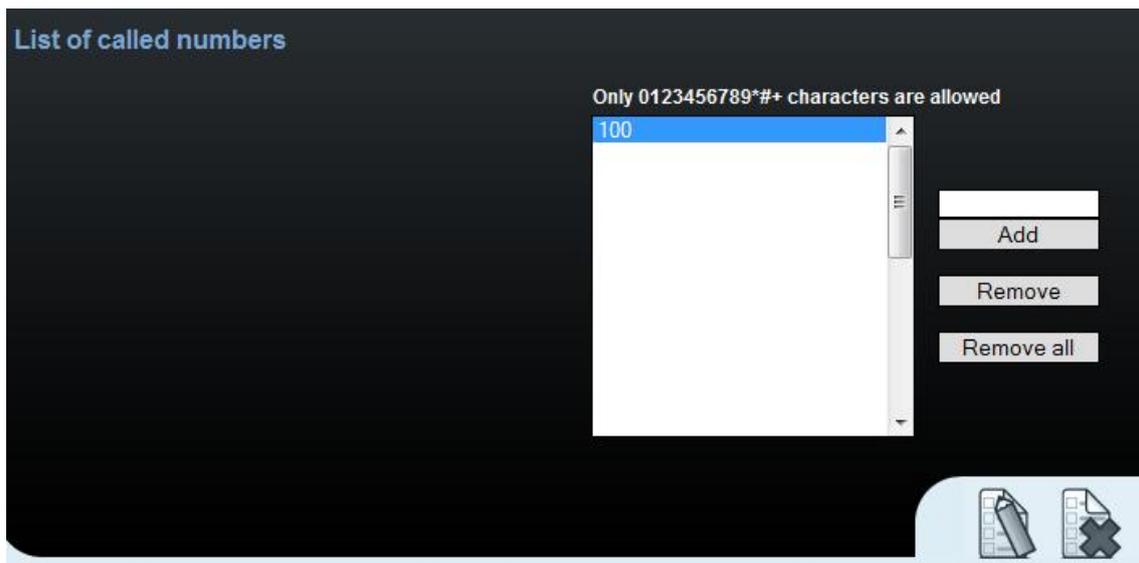
For incoming calls you can define 2 groups with the different behavior and assign them to the GSM modules. The settings are similar with GSM groups assignment for outgoing calls.



In GSM incoming groups you can define the behavior for each GSM incoming group. Choose the mode to Reject, Ignore, Accept incoming calls or Callback.



You can define the list of called numbers which will be automatically dialed after DTMF dialing timeout if the customer don't press any button till the specified time. From the configuration, you can see 10 seconds for DTMF dialing and after that the call will be routed to the extension 100 to your PBX (if you set up SIP proxy (GSM->IP) in VoIP parameters).



# INNOVAPHONE PBX SETTING

- 1) You need to set up Domain and Address for the IP address of the 2N® VoiceBlue Next. Communication protocol is SIP with the Mode: "Gateway without registration).

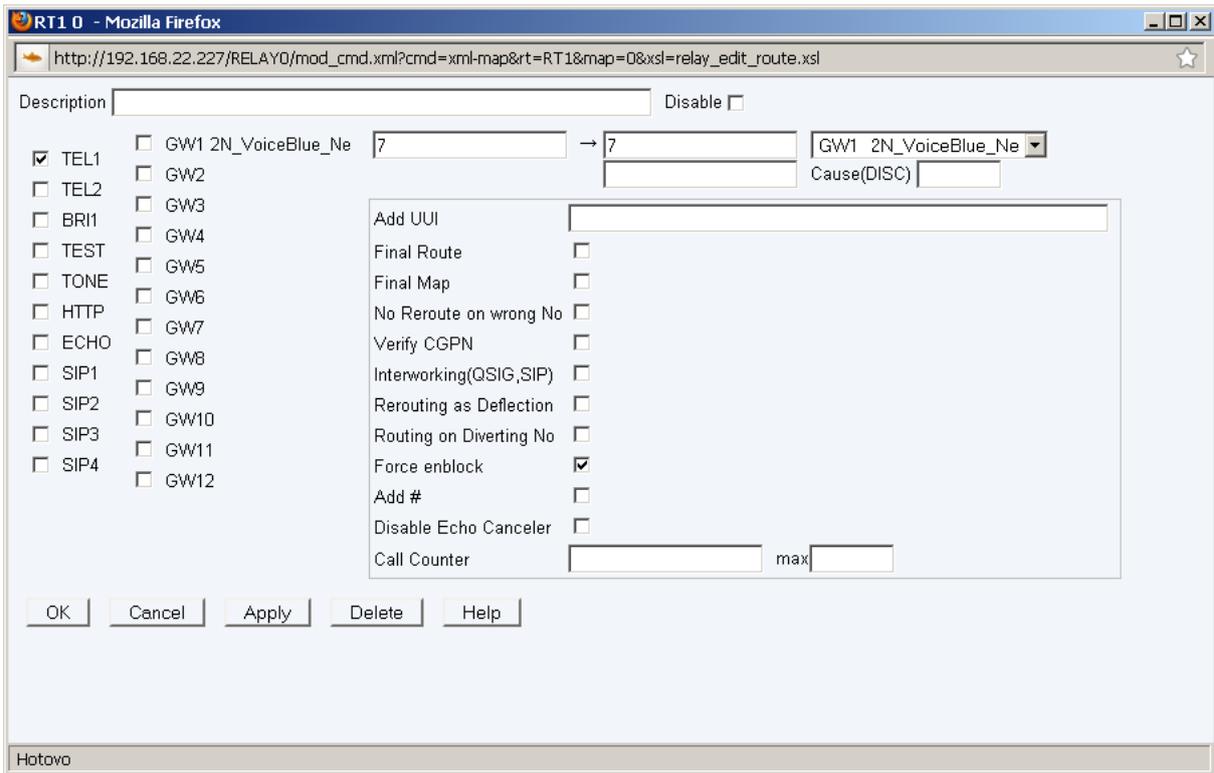
The screenshot shows the configuration page for GW1 2N\_VoiceBlue\_Ne in Mozilla Firefox. The URL is [http://192.168.22.227/RELAY0/mod\\_cmd.xml?cmd=xml-ifs&id=GW1&xsl=relay\\_edit\\_voip.xsl](http://192.168.22.227/RELAY0/mod_cmd.xml?cmd=xml-ifs&id=GW1&xsl=relay_edit_voip.xsl). The configuration fields are as follows:

Name	2N_VoiceBlue_Ne								
Disable	<input type="checkbox"/>								
Protocol	SIP								
Mode	Gateway without Registration								
Domain	192.168.22.42								
Address(Proxy)	192.168.22.42								
Mask									
STUN Server									
Local Signaling Port	5060								
Media Properties									
General Coder Preference	G729A	Framesize [ms]	30	Silence Compression	<input type="checkbox"/>	Exclusive	<input type="checkbox"/>		
Local Network Coder	G711A	Framesize [ms]	30	Silence Compression	<input type="checkbox"/>				
Enable T.38	<input type="checkbox"/>	Enable SRTP	<input type="checkbox"/>	No DTMF Detection	<input type="checkbox"/>	Enable PCM	<input type="checkbox"/>	Media-Relay	<input type="checkbox"/>
Record to (URL)									
SIP Interop Tweaks									
Accept INVITE's from Anywhere	<input type="checkbox"/>	(affects registered interfaces only)							
Enforce Sending Complete	<input type="checkbox"/>	(affects outgoing SIP calls only)							
No Inband Information on Error	<input type="checkbox"/>	(affects incoming SIP calls only)							
From Header when Sending INVITE	Fixed AOR	(affects registered interfaces only)							
Identity Header when Sending INVITE	CGPN in user part of URI	(affects registered interfaces only)							
Reliability of Provisional Responses	Supported	(affects outgoing SIP calls only)							

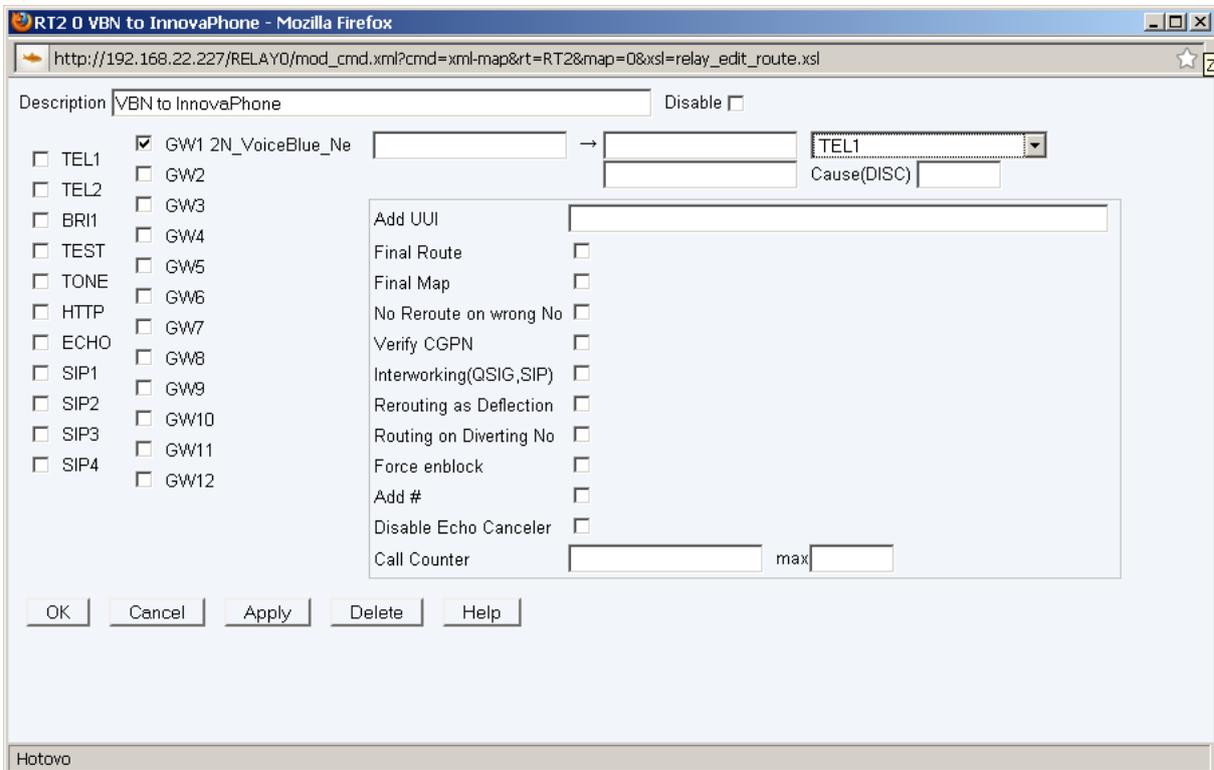
Buttons: OK, Cancel, Apply, Delete, Help

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- 2) Then you need to set up prefixes (routing table) which will be routed to the 2N® VoiceBlue Next. In the example is defined just prefix 7.



- 3) In the picture below is setting for incoming calls to Innovaphone PBX. The call is directed to the phone 1.



4) In the picture below is the complete setting for the Innovaphone PBX routing.

## 192.168.22.227: innovaphone IP302

Configuration	General	Interfaces	SIP	GK	Routes	CDR0	CDR1	Calls
General								
IP								
ETH0								
ETH1								
LDAP								
TEL1								
TEL2								
BRI1								
Administration								
PBX								
Gateway								
Download								
Upload								
Diagnostics								
Reset								

From	To	Counter	CGPN	Maps
TEL1	7 → 7 GW1:2N_VoiceBlue_Ne	b	→	
GW1:2N_VoiceBlue_Ne	TEL1	→		VBN to InnovaPhone



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