



2N[®]

VoiceBlue Next



2N[®] VoiceBlue Next & Alcatel OXO

connected via SIP trunk

Quick guide

Version 1.00

www.2n.cz

2N® VoiceBlue Next has these parameters:

- IP address 192.168.92.200
- Incoming port: 5060
- Firmware version: 01.00.03i10

Alcatel OXO parameters:

- IP address 192.168.92.246
- Incoming port: 5060
- version 7.7.1

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 Gateway configuration interface for 2N Telecommunications. The interface is divided into several sections:

- Gateway control:** Includes options for Gateway, Update, and Restart.
- Gateway configuration:** Contains sub-sections for 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, and Report configuration.
- Configuration backup:** A section for managing configuration backups.
- Logout:** A button to log out of the interface.

The main configuration area is titled "Gateway" and includes the following settings:

- Codec priority:** Priority 1: 11a (8), Priority 2: 1u (0), Priority 3: -.
- IP addresses:**

Setting	IP Address	Port	Action
SIP proxy (IP->GSM):	192.168.92.246	5060	Set default port
SIP proxy (GSM->IP):	192.168.92.246	5060	Set default port
SIP registrar:	0.0.0.0	5060	Set default port
NAT firewall:	0.0.0.0		
STUN server:	0.0.0.0	3478	Set default port
Next STUN server request (60-6553, 0=off) [s]:	600		
- Tones generated to VoIP:** Dial tone to VoIP: English.

Two callout boxes provide additional context:

- The first callout box points to the SIP proxy (IP->GSM) setting, stating: "The IP address to which the traffic is send".
- The second callout box points to the SIP proxy (GSM->IP) setting, stating: "The IP address and port which will accept traffic from".

2) Configuration of the LCR (Least Cost Routing)

The GSM operator has e.g. in our country prefix 6 and 7 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'. On the left side, there is a navigation menu with 'Gateway control' and 'Gateway configuration' sections. The 'Gateway configuration' section includes: System parameters, VoIP parameters, GSM basic parameters, GSM groups assignment, GSM outgoing groups, GSM incoming groups, **Prefixes** (selected), LCR table, 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 'Prefixes' and contains 'GSM prefix lists' with tabs for Prefixlist 1 through 8. Under 'Basic settings', there are fields for 'GSM network ID' and 'Default count of digits' (set to 9). Below this are two tables: 'Table of replaced prefixes' and 'Table of accepted prefixes'. Both tables have a warning: 'Only 0123456789*#+ characters are allowed'. The 'Table of replaced prefixes' is currently empty. The 'Table of accepted prefixes' contains two entries: '6' and '7'. To the right of each table are input fields for 'Prefix' and '[Digits count]', and buttons for 'Add', 'Remove', and 'Remove all'. At the bottom right of the main area are three icons: a pencil, a document with a red X, and a document with a checkmark.

- 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 2N Gateway web 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	1	Edit	Remove
2/	0:00/24:00	Use as in week	Off	2	Edit	Remove

At the bottom right of the main content area, there are three icons: a pencil (edit), a document with an 'X' (delete), and a document with a checkmark (save).

The screenshot shows the 'GSM groups assignment' configuration page. 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:

- 0. module
- 1. module

Outgoing:

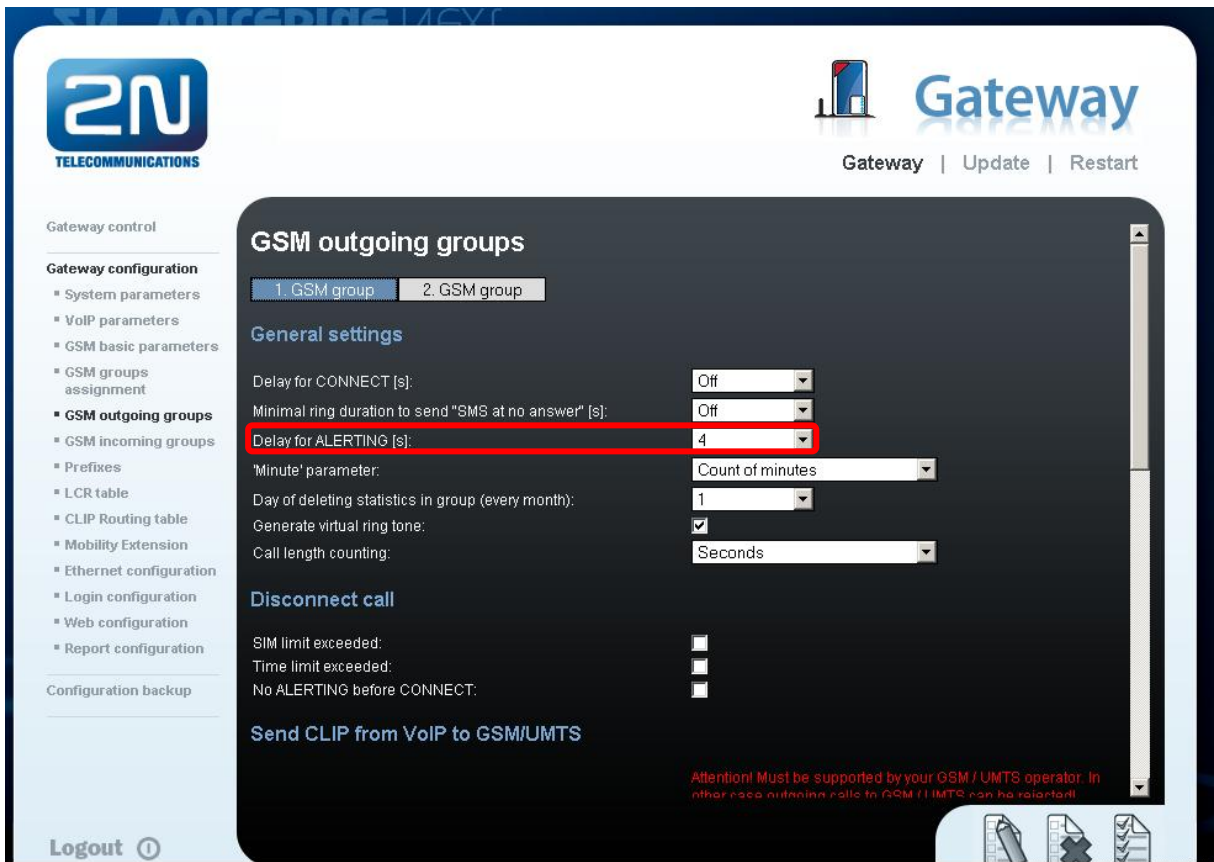
- 1. Group
- 2. Group

Incoming:

- 1. Group
- 1. Group

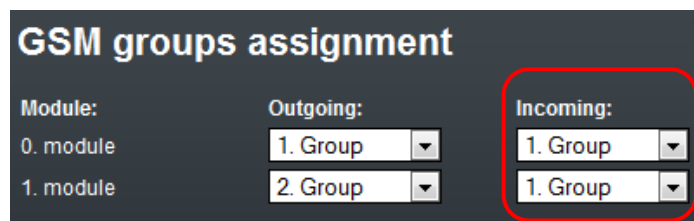
4) Configuration of GSM outgoing groups:

You are able to set up different setting for each GSM group (CLIR, free minutes, Virtual ring tone, roaming and others). In case you don't have a Ring back tone, set up Delay for ALERTING to option 4.



5) Incoming calls

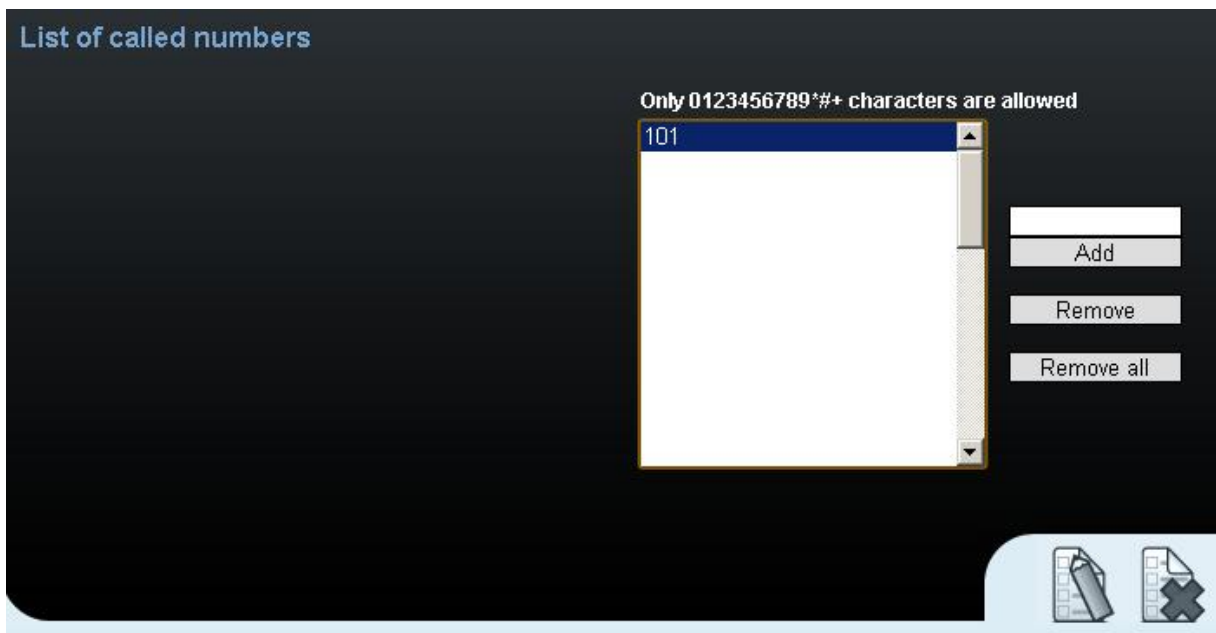
For incoming calls you can define 2 groups with the different behavior and assign them to the GSM modules. The settings are similar with GSM groups assignment for outgoing calls.



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.

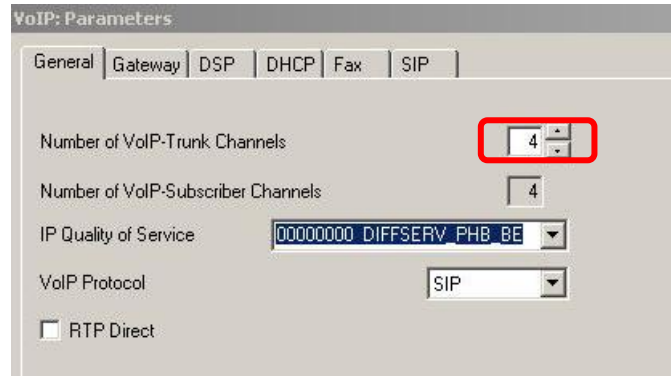


You can define the list of called numbers which will be automatically dialed after DTMF dialing timeout if the customer don't press any button till the specified time. From the configuration, you can see 10 seconds for DTMF dialing and after that the call will be routed to the extension 101 to your PBX (if you set up SIP proxy (GSM->IP) in VoIP parameters).



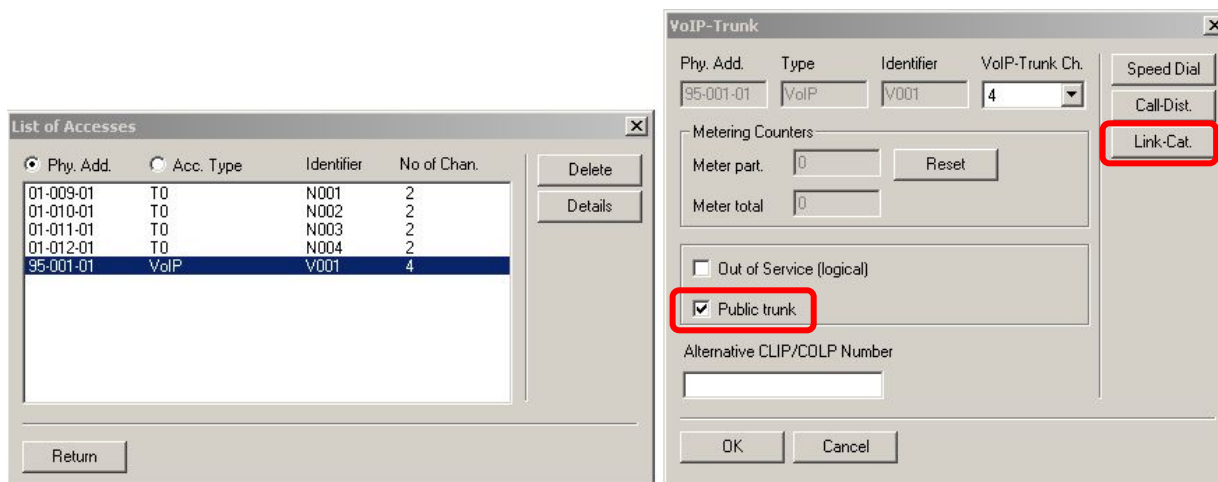
Alcatel OXO configuration

Setup a count of VoIP-Trunk channels for VoIP trunk to 2N[®] VoiceBlue Next



The 'VoIP: Parameters' window shows the 'General' tab. The 'Number of VoIP-Trunk Channels' is set to 4, highlighted with a red box. Other settings include 'Number of VoIP-Subscriber Channels' set to 4, 'IP Quality of Service' set to '00000000 DIFFSERV PHB BE', and 'VoIP Protocol' set to 'SIP'. The 'RTP Direct' checkbox is unchecked.

Choose Trunk group and check Public trunk checkbox. Change Link Category settings

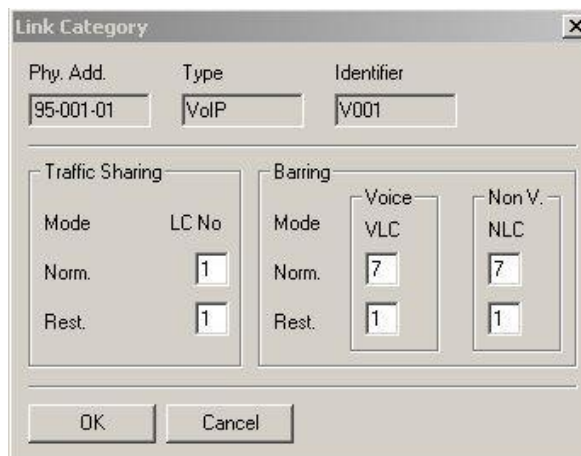


The 'List of Accesses' window shows a table with the following data:

Phy. Add.	Acc. Type	Identifier	No of Chan.
01-009-01	T0	N001	2
01-010-01	T0	N002	2
01-011-01	T0	N003	2
01-012-01	T0	N004	2
95-001-01	VoIP	V001	4

The 'VoIP-Trunk' window shows the configuration for the selected trunk. The 'Phy. Add.' is '95-001-01', 'Type' is 'VoIP', and 'Identifier' is 'V001'. The 'VoIP-Trunk Ch.' is set to 4. The 'Link-Cat.' button is highlighted with a red box. The 'Public trunk' checkbox is checked, also highlighted with a red box. The 'Out of Service (logical)' checkbox is unchecked.

At Link Category menu setup all necessary parameters



The 'Link Category' window shows the configuration for the selected trunk. The 'Phy. Add.' is '95-001-01', 'Type' is 'VoIP', and 'Identifier' is 'V001'. The 'Traffic Sharing' section has 'Mode' set to 'Norm.' and 'LC No' set to 1. The 'Barring' section has 'Mode' set to 'Voice' and 'VLC' set to 7, and 'Non V.' set to 'NLC' and 'NLC' set to 7. The 'Rest.' section has 'Mode' set to 'Rest.' and 'VLC' set to 1, and 'NLC' set to 1.

Assign Trunk Groups

List of Trunk Groups

Index
 No.
 Type
 Name

Index	No.	Type	Name
1		Cyclic	
2	500	Cyclic	
3	501	Cyclic	
4	502	Cyclic	
5	503	Cyclic	
6	504	Cyclic	
7	505	Cyclic	
8	506	Cyclic	
9	507	Cyclic	
10	508	Cyclic	
11	509	Cyclic	
12	510	Cyclic	

Trunk Groups : Details

Index	No.	Type	Name
1		Cyclic	

Phy. Add.	Acc. Type	Identifier	No of Chan.
95-001-01	VolP	V001	4

Setup Numbering plans table. As Base settings choose ARS

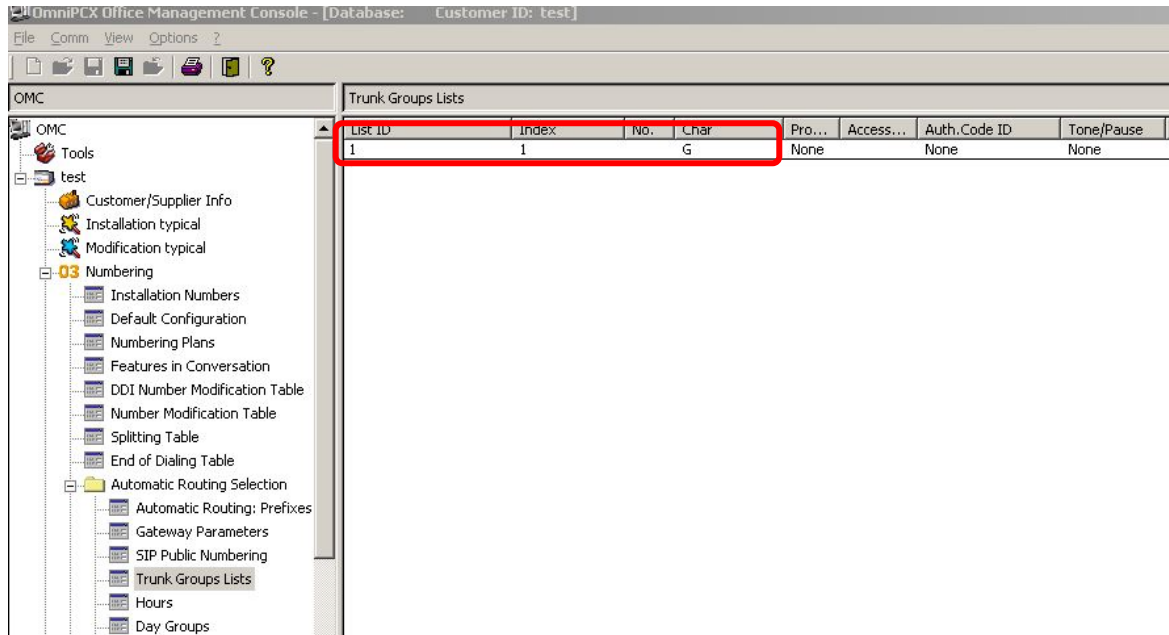
Numbering Plans

Internal Numbering Plan
 Public Numbering Plan
 Restricted Public Numbering Plan
 Private Numbering Plan

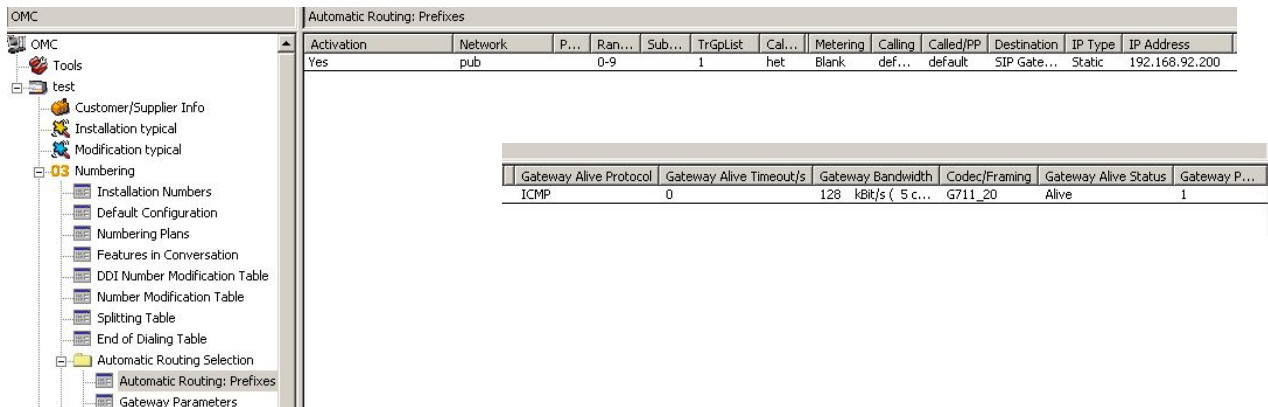
Function	Start	End	Base	NMT	Priv	Fax
Main Trunk Group	0	0	ARS	Drop	No	
Protect Communication	*84	*84		Drop	No	
Lock/Unlock	*85	*85		Drop	No	
Programming Mode	*87	*87		Drop	No	
Account Code New	*33	*33		Drop	No	
Main Trunk Group	0	0	ARS	Drop	No	
Subscriber	110	139	110	Drop	No	
Subscriber	200	299	200	Drop	No	
Subscriber	300	399	300	Drop	No	
Secondary Trunk Group	500	534	1	Drop	No	
Hunting Group	540	565	540	Drop	No	
ACD Prefix	80	81	0	Drop	No	
Attendant Call	9	9	9	Drop	No	

Check Public numbering plan for incoming calls.

At Trunk Groups List assign List ID with Index at menu **Numbering** → **Automatic Routing Selection** → **Trunk Groups List**



Setup IP address of 2N[®] VoiceBlue Next, codecs, bandwidth and GW keepalive timeout for VoIP trunk at menu **Numbering** → **Automatic Routing Selection** → **Automatic Routing: Prefixes**



At menu **Numbering** → **Automatic Routing Selection** → **Gateway Parametres** setup listening port 5060. If you want to use 2N[®] VoiceBlue Next with different listening port (for example 5065), just setup the number of the port here.

Gateway Parameters							
Index	Login	Password	Domain Name	Realm	RFC 3325	Re...	SIP Numbers ...
1			192.168.92.200		Yes	5060	1



2N TELEKOMUNIKACE a.s.

Modřanská 621, 143 01 Praha 4
tel.: 261 301 111, fax: 261 301 999,
e-mail: sales@2n.cz
www.2n.cz