

2N[®] VoiceBlue Lite gateway installation guide

1) How to connect VoiceBlue Lite

Open the newest version of config program (you can download it from <u>www.2n.cz</u>) Choose Settings – Communication settings

📋 VoiceBlue Program	A 101 7
File Gateway Gateway control	Settings Help
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Topics Alphabetical glossary	Language •
Gateway control Gateway configuration Restart	

Choose the type of communication

Communication settings	x
Communication type	
Communication type	Serial communication
Serial communication settings	
Serial port :	COM6
Communication LOG Save communication LOG to a	file
Append LOG file	
ОК	Cancel

Connect to the gateway





Download parameters from the gateway

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Gateway control Gateway configuration Restart	
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In Gateway configuration you can find System parameters

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File Gateway Gateway control Se	ttings Help	Network parameters	
		for VoiceBlue Lite	
Topics Alphabetical glossary			
Gateway control	-IP address :	Modes :	
System parameters	IP address : 192.168.50.71	CDR mode : All	-
GSM graups parameters	Subnet mask : 255.255.255.0		
GSM outgoing groups	Default gateway : 192.168.50.1	PIN for SIM cards	
GSM incoming groups		, (same for all SIMs)	
LCR table CLIP Routing table	PIN :	End Or Oreannes #	
Mobility extension	Enable upgrading FW through Ethernet	Port : 2222	•
	Mobility Extension (DTMF settings) :		
	Start dialing (quick call forwarding) :	"Follow me" activation :	.5
	End dialing (quick call forwarding) :	"Follow me: deactivation : #5	55
	Hold call : 7*	"SMS at no answer" activation :	3
	Hang up call : 9#	"SMS at no answer" deactivation : #3	33
	Save to the gate Load from the gate	Default Save to file	

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2) How to set up connection to the oposite device (PBX)

For the setting of the trunk between the VoiceBlue Next and your PBX you need to configure SIP proxy (GSM \rightarrow IP) for GSM incoming calls. SIP proxy (IP \rightarrow GSM) is designed for secure comunication 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.

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File Gateway Gateway control Set	tings Help	
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Topics Alphabetical glossary		VoIP parameters
Gateway control Gateway configuration System parameters VoIP parameters GSM basic parameters GSM groups assignment GSM outgoing groups GSM incoming groups CCIP Routing table CLIP Routing table	Mode/protocol Day of deleting statistics : Voice parameters : First RTP port : 30600 [1] Last RTP port : 30698 ec	SIP Codecs settings : VAD 1 (0=off) G711 4 Image: Codecs settings : st RTP port must be igher than 1024 and 2nd ort must be higher or qual by 10 than 1st port) G723 1 Image: Codecs settings : G723 1 Image: Codecs settings : Image: Codecs settingsettings : Image: Codecs settings
CLIP Houting table	SIP registration : Registration expires : Reatempt registration : Registration domain (realm): Name : Username : Password :	Codecs priority : Select supported codec : G.723 (● G.729 Priority 1: Priority 2: Priority 1: Priority 2: SIP protocol settings : Select supported of 183 Session progress Send 180 Ringing instead of 183 Session progress Send 200 OK and BYE when refused from GSM Replace CLIP from GSM with Caller ID Sending DTMF according to RFC2833
	P addresses :	
	SIP proxy (IP->GSM) :	0.0.0.0 Vise default port 5060
	SIP proxy (GSM-> IP)	192.168.50.5 Use default port 5060
	SIP registrar :	0.0.0.0 Vise default port
	NAT firewall :	0.0.0
	STUN server :	0.0.0.0 Vise default port 3478
	Next STUN server request : (60 - 6553s)	600 [s]



3) How to configure LCR table

Situation...

Let's say we have SIM cards of two GSM operators:

The first operator (e.g. T-mobile) has the following prefixes (602, 606, 607, 723, 724) and it requires you to dial the number from your mobile phone with the international prefix (+420). All numbers have a nine digit length with the prefix but without the international prefix. The second one, we may call it Vodafone, has the following prefixes (901, 902, 907, 909) and requires you to dial the number with the prefix (420). All numbers have a nine digit length with the prefix and without "420".

We have to assign modules to two GSM outgoing groups (for each operator). The first step we have to do is to place the SIM cards into the SIM holders. We will start with modules 0 using the T-mobile operator SIM. Module 2 will follow the same procedure but using the Vodafone SIM.





Configuration of GSM outgoing groups:

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

File Gateway Gateway Control Settings Her Tabs for GSM outgoing group1 Image: Control	🝵 VoiceBlue Program		and the later
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O your plantets GSM basic parameters GSM outgoing groups GSM outgoing groups GSM incoming groups CLIR : Default Delay for ALERTING [s]: (D = off) Day of deleting stats in group: 1 ÷ SMS messages number: (D = off) Day of deleting stats: (D = off) Day of deleting s	Gateway control	1 GSM group 2 GSM group 3 GSM group 4 GSM group	Parameter CLIR
GSM groups assignment GSM incruing groups GSM incoming groups Prefixes Prefixes LCR table CLIP Routing table Max. number of called minutes : (0 = off) Day of deleting stats in groups SMS messages number : (0 = off) Day of deleting stats in group : 1 \$ Max. number of called minutes : (0 = off) Day of deleting stats in group : Day of deleting stats in group : 1 \$ Mobility extension Day of deleting stats : (0 = off) Day of deleting stats : (0 = off) Text of 'SMS at no answer'': Minimal length of call after connect [s] : 1 \$ Text of SMS for all calls (number = %N) : Precision of counting length of call : 1 \$ CLIP to GSM modification : Use CLIP to GSM from INVITE field : Contact \$ For proper functionality "Clip to GSM separator" has to be set Save to the gate Load from the gate Default Save to file	VoIP parameters	Roaming enabled for network code: Del	
GSM incoming groups Max. number of called minutes : (D = off) Day of deleting stats in group : 1 ± Prefixes LCR table CLIP Routing table Minimal ring duration to send "SMS at no (D = off) ① Mobility extension Restart Day of deleting stats : (D = off) ① Minimal ring duration to send "SMS at no (D = off) ① Precision Restart Image: SMS in construction of call after connect [s]: 1 ± Text of SMS for all calls (number = %N): Image: SMS in construction of call after connect [s]: 1 ± CLIP to GSM separator: (empty = off) Precision of counting length of call : 1 ± CLIP to GSM modification : Image: Save to the gate Load from the gate Default Save to file	GSM groups assignment	CLIR : Default Def	lay for ALERTING [s]: (0 = off) 1 €
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Prefix lists

We have to create two network lists, the first one for T-mobile and the second one for Vodafone.

T-mobile network list:

We configure the normalization of Called party number in the Table of replaced prefixes (the number in front of the slash mark is replaced by number behind the slash mark, if there is not any number in front of the slash mark it is equaled to "everything").

We also have to fill in the Table of prefixes with all prefixes of the T-mobile operator. Because all numbers are 9 digits length, it is not necessary to specify for each prefix, we can use the parameter Default number of digits and fill there the value 9.

For the match in prefix list, the Table of replaced prefixes, Table of accepted prefixes and Count of digits must correspond with called number.





Vodafone network list:

We configure the normalization of Called party number in the Table of replaced prefixes (the number in front of the slash mark is replaced by number behind the slash mark, if there is not any number in front of the slash mark it is equaled to "everything"). We also have to fill in the Table of prefixes with all prefixes of the Vodafone operator. Because all numbers are 9 digits length, it is not necessary to specify for each prefix, we can use the parameter Default number of digits and fill there the value 9.



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We have to configure lines in the LCR table where we bind together GSM Outgoing groups with Prefix lists. Click on ADD button (or edit the first line of LCR table) to add the first line and configure it the following way for the T-mobile:

Add LCR entry		X
Prefix list :	Prefix list 1/	Outgoing destination : GSM group 1
From : 00:00 To :	24:00	<none></none>
Use whole weekend		<none></none>
 Use whole weekend Use the time set above 		<none></none>
Maximal duration of call :	(0 = off) 0	<none></none>
	OK Cancel	

Click on ADD button to add the second line and configure it the following way for the Vodafone:

Add LCR entry		×
Prefix list :	Prefix list 2/	Outgoing destination :
Time limitation of use :		<none></none>
From : 00:00 To :	24:00	<none></none>
✓ Use whole weekend		<none></none>
C Use whole weekend		<none></none>
 Use the time set above 		<none></none>
Maximal duration of call :	(0 = off) 0	<none> 💌</none>
	OK Cancel	

Now you can see two LCR lines in the LCR table:

		LCR table		
Prefix List	Valid from/to	Outgoing destination	Call duration limit	
1/	00:00/24:00	1	0	A00
2/	00:00/24:00	2	U	Edit
				Remove



Incomming calls

For incomming calls you can define 4 groups with the different behavior and assign them to the GSM modules. The settings is simmilar with GSM groups assignment for outgoing calls.

Groups assignment	:			Incoming groups	
Module : 0	Dutgoing :	Incoming :		assignement	
0. module	1. Group 💌	1. Group	•		
1. module	1. Group 💌	1. Group	•		
2. module	2. Group 💌	1. Group	•		
3. module	2. Group 💌	1. Group	•		
Save to the ga	te Load	from the gate			
Default	Sa	ave to file			

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

	GS	SM incoming groups	
1 GSM group 2 GSM group 3 GSM group 4 G	GSM group	Viode	
Mode : Accept incoming calls +	dialtone	List of called numbers :	_
(Call number by %A, %G958 or none or answer ar	nd wait for DTMF)	100	
Min. digits in DTMF :	3 🗢	Receptionist	
Max. digits in DTMF :	3 🔶	extension	
Timeout for entering DTMF digist [s] :	5 🔹		
Day of deleting GSM inc. group stastics :		Add Remove Remove a	II
Prefive Timeout for DTMF dial			
CLIP:			
CLIP to VoIP separator:		(empty = off)	
CLIP to VoIP modification :		 For proper functionality "Clip to VoIP separator" h. to be set 	as
Time to keep CLIP in table [hours] :	0 🔶	I Off	
Add record only for unconnected call			
Delete record for connected answer			
Save to the gate Load from the ga	ate D	Default Save to file	

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You can define the list of called numbers which will be automatically dialled after DTMF dialling timeout if the customer don't press any button till the specified time. From the configuration, you can see 5 seconds for DTMF dialling 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).