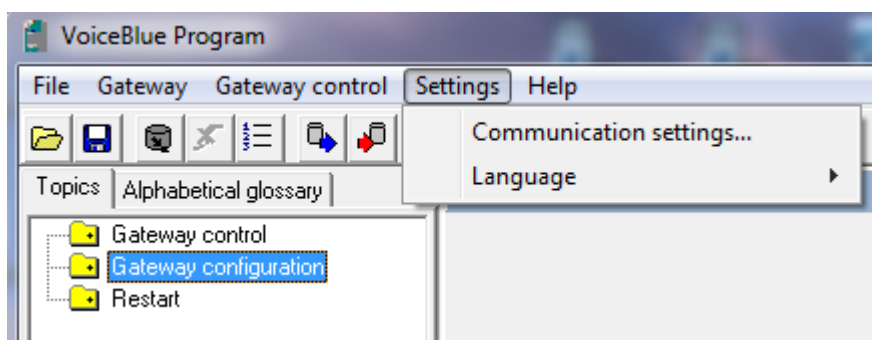


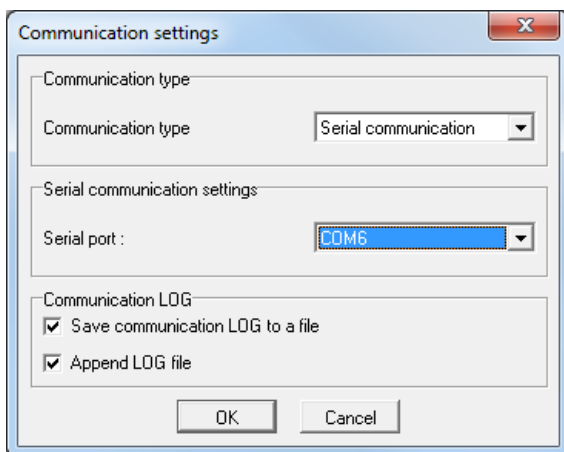
2N[®] VoiceBlue Lite gateway installation guide

1) How to connect VoiceBlue Lite

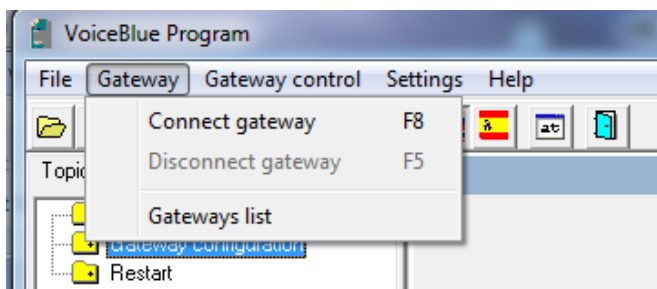
Open the newest version of config program (you can download it from www.2n.cz)
Choose Settings – Communication settings



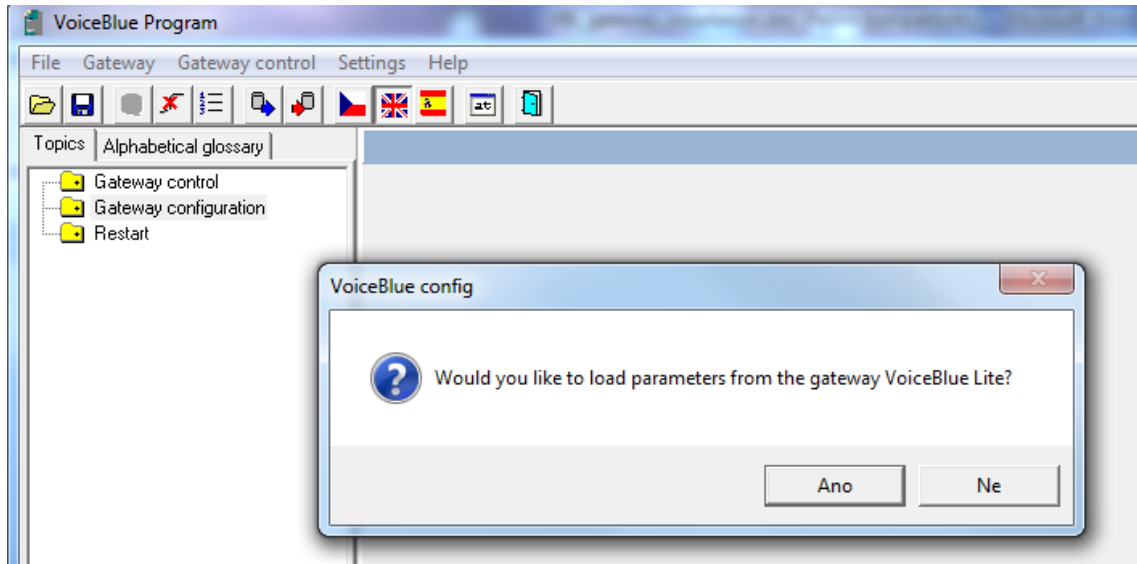
Choose the type of communication



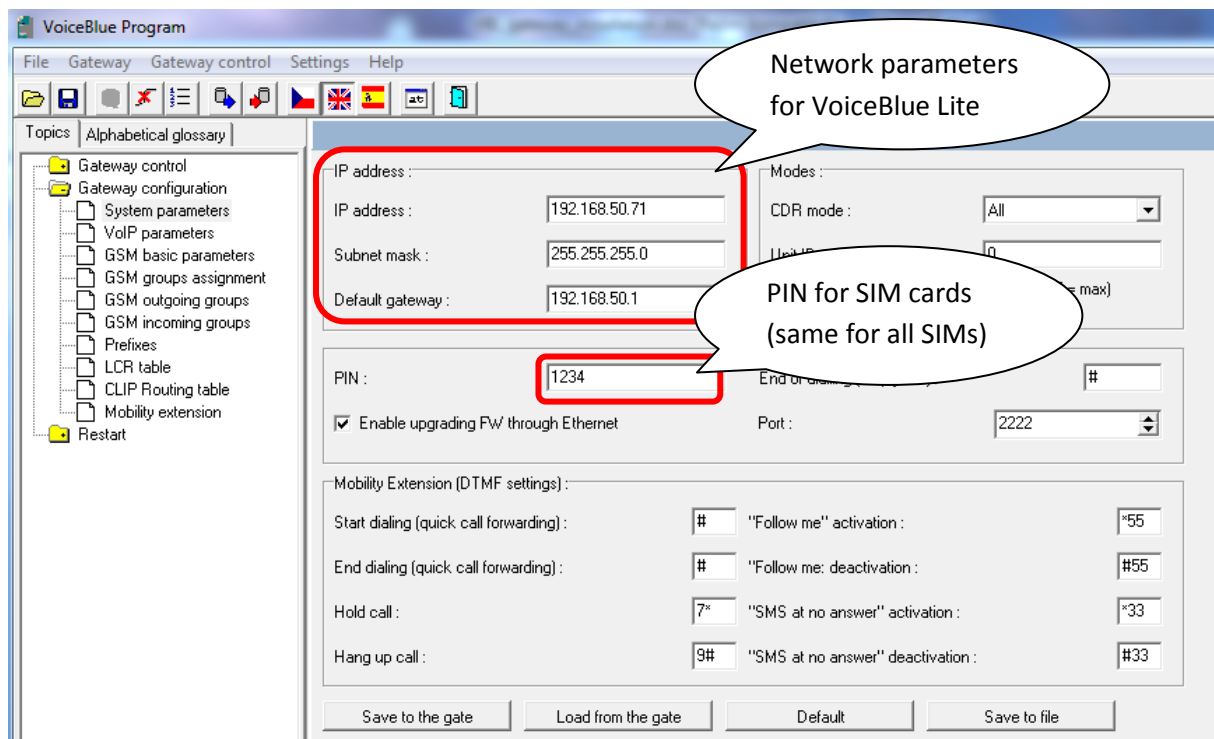
Connect to the gateway



Download parameters from the gateway



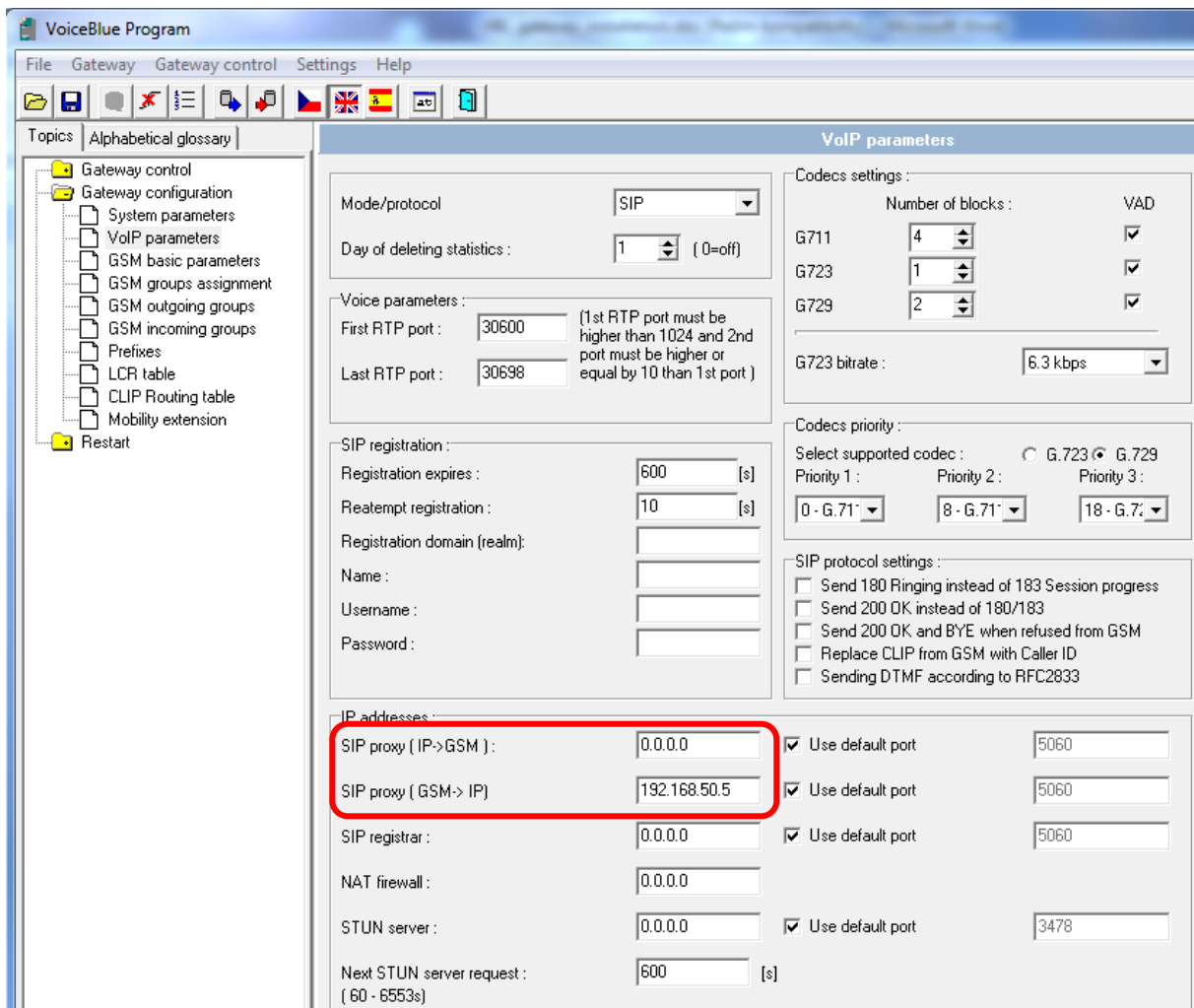
In Gateway configuration you can find System parameters



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→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 shows the 'VoiceBlue Program' configuration window. The 'VoIP parameters' section is active. The 'SIP proxy (IP->GSM)' field is highlighted with a red box and set to '0.0.0.0'. Other fields include 'SIP proxy (GSM->IP)' set to '192.168.50.5', 'SIP registrar' set to '0.0.0.0', and 'NAT firewall' set to '0.0.0.0'. The 'Next STUN server request' is set to '600 [s]'. The 'Codecs settings' section shows 'G711' with 4 blocks, 'G723' with 1 block, and 'G729' with 2 blocks. The 'Codecs priority' section shows 'G.723' selected as the supported codec. The 'SIP protocol settings' section has several checkboxes, all of which are unchecked.

3) How to configure LCR table

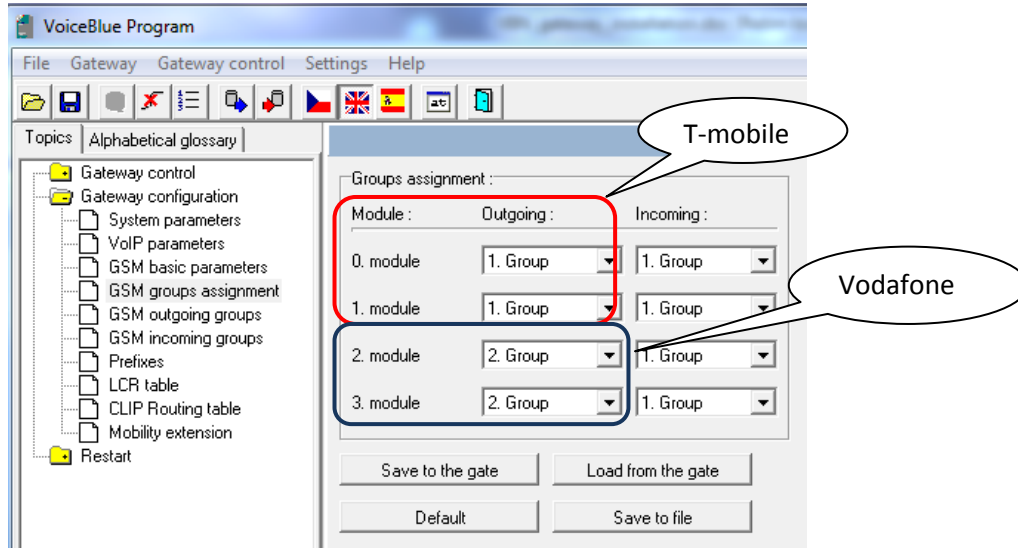
Situation...

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.

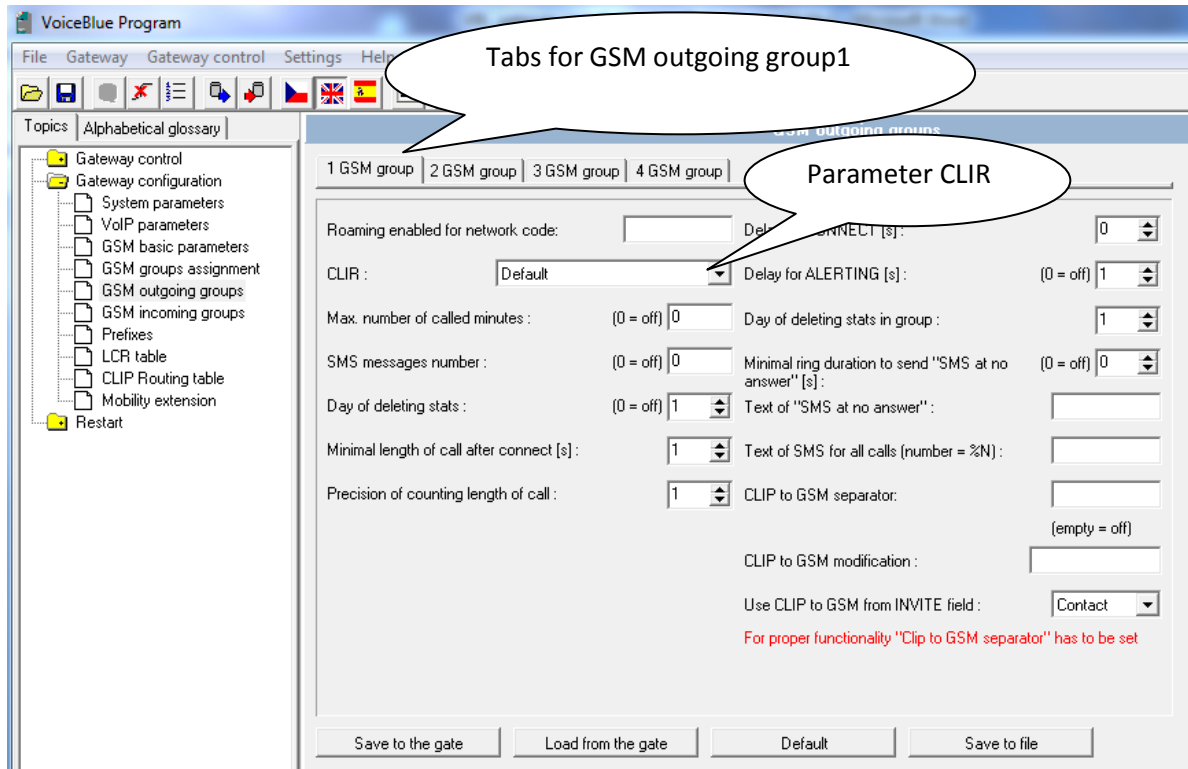
The second one, we may call it Vodafone, has the following prefixes (901, 902, 907, 909) and requires you to dial the number with the prefix (420). All numbers have a nine digit length with the prefix and without "420".

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, Virtual ring tone, roaming and others)



Prefix lists

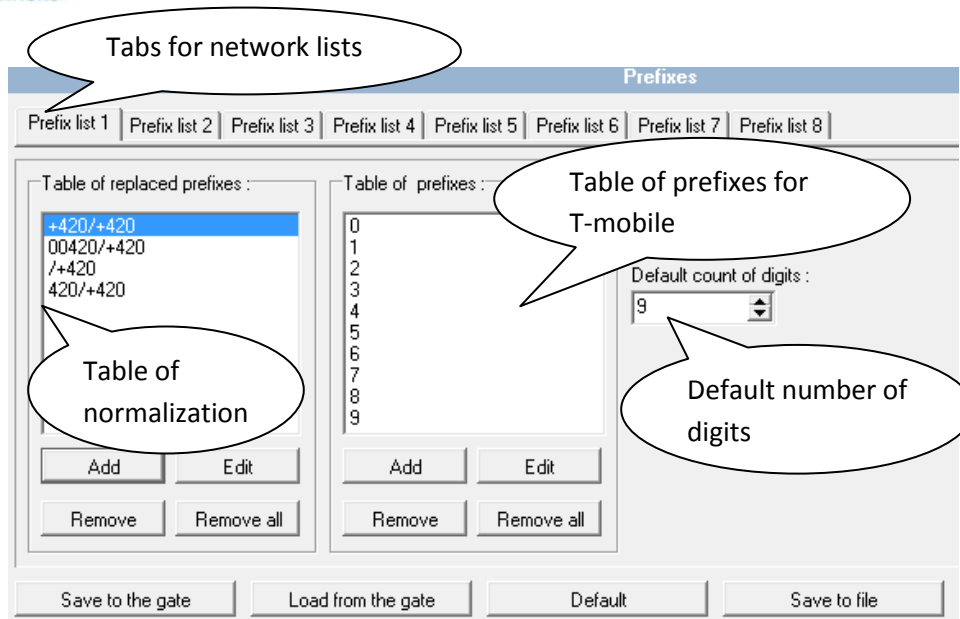
We have to create two network lists, the first one for T-mobile and the second one for Vodafone.

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").

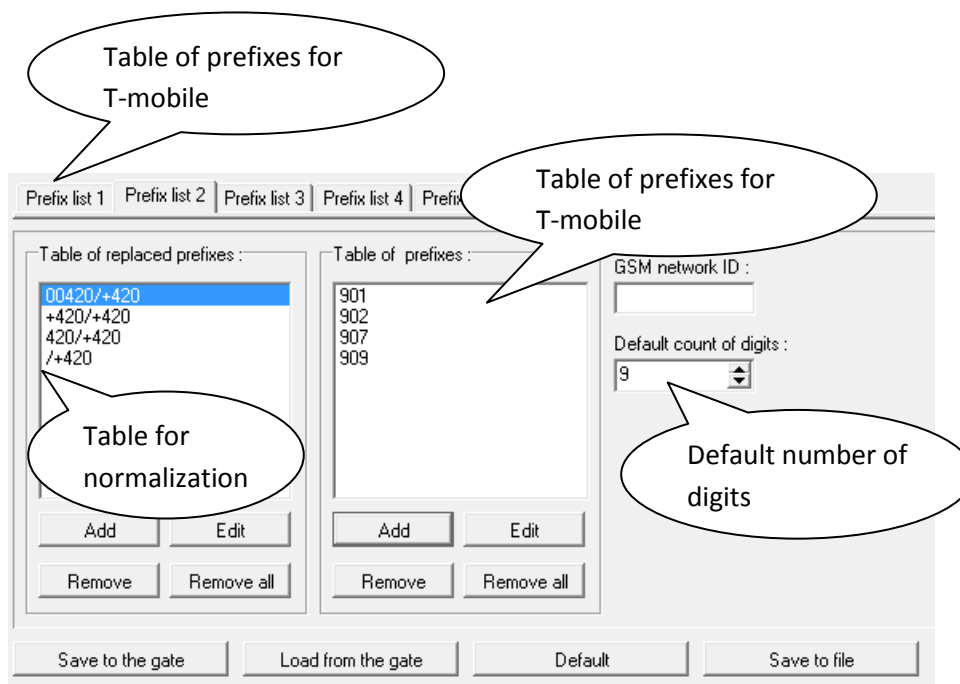
We also have to fill in the Table of prefixes with all prefixes of the T-mobile operator. Because all numbers are 9 digits length, it is not necessary to specify for each prefix, we can use the parameter Default number of digits and fill there the value 9.

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

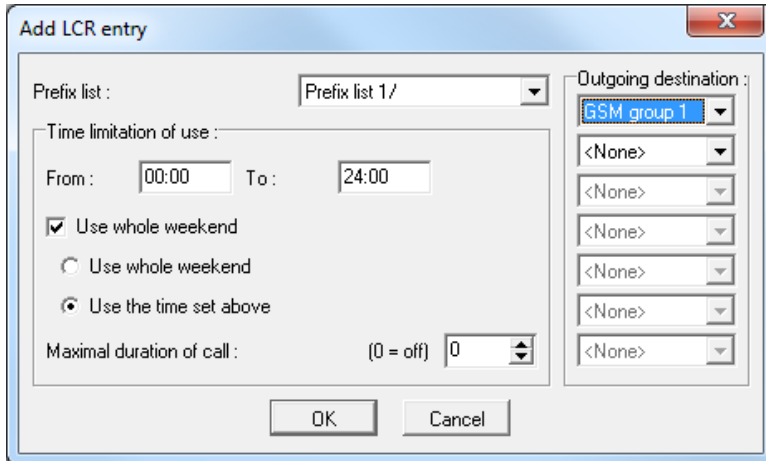


Vodafone network list:

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.



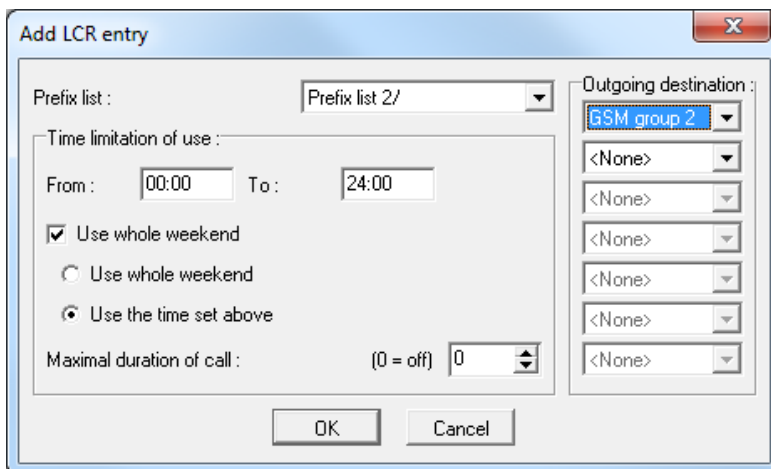
We have to configure lines in the LCR table where we bind together GSM Outgoing groups with Prefix lists. Click on ADD button (or edit the first line of LCR table) to add the first line and configure it the following way for the T-mobile:



The dialog box 'Add LCR entry' is shown with the following configuration:

- Prefix list: Prefix list 1/
- Outgoing destination: GSM group 1
- Time limitation of use: From: 00:00 To: 24:00
- Use whole weekend: Use whole weekend, Use whole weekend, Use the time set above
- Maximal duration of call: (0 = off) 0

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



The dialog box 'Add LCR entry' is shown with the following configuration:

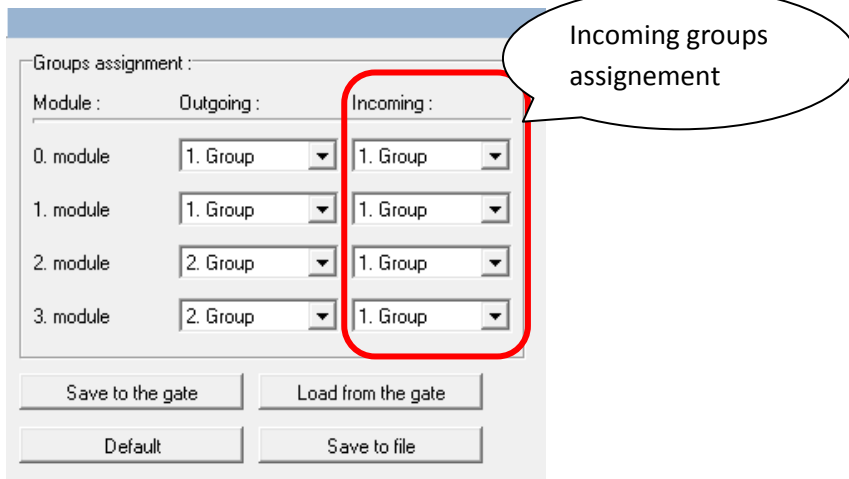
- Prefix list: Prefix list 2/
- Outgoing destination: GSM group 2
- Time limitation of use: From: 00:00 To: 24:00
- Use whole weekend: Use whole weekend, Use whole weekend, Use the time set above
- Maximal duration of call: (0 = off) 0

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
2/	00:00/24:00	2	0

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.

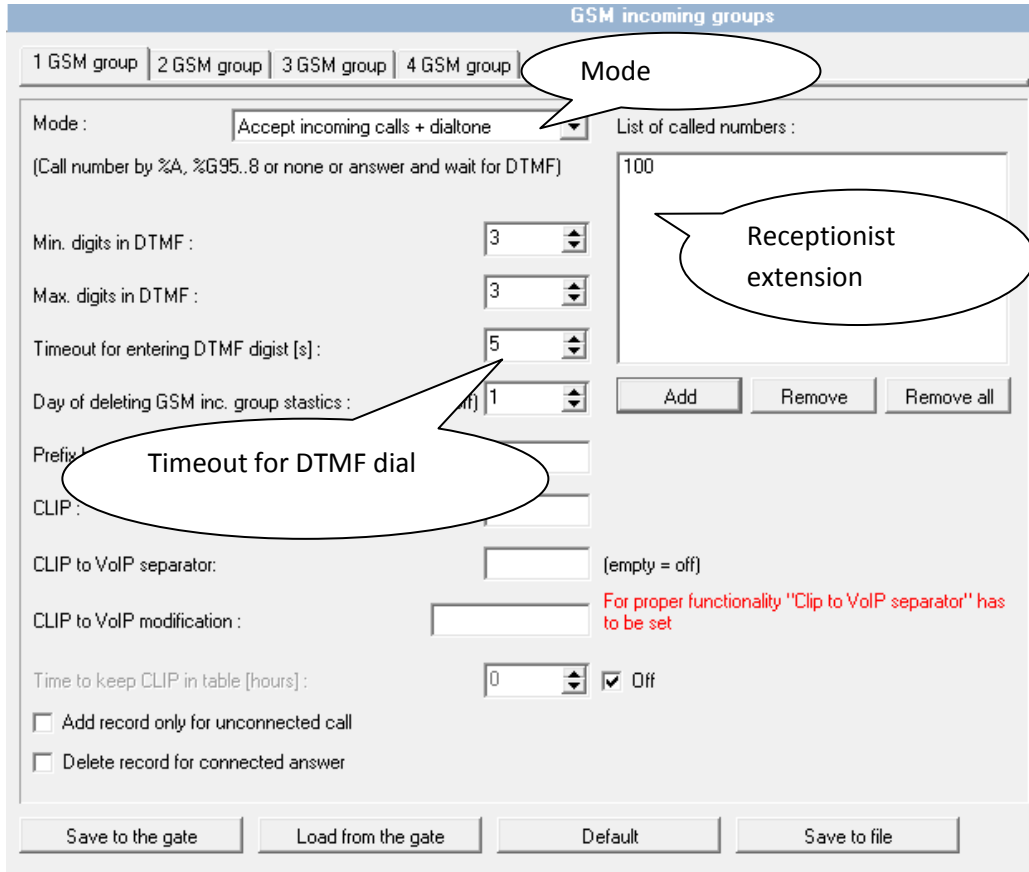


Groups assignment :

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

Buttons: Save to the gate, Load from the gate, Default, Save 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.



GSM incoming groups

1 GSM group | 2 GSM group | 3 GSM group | 4 GSM group

Mode : Accept incoming calls + dialtone

List of called numbers : 100

(Call number by %A, %G95..8 or none or answer and wait for DTMF)

Min. digits in DTMF : 3

Max. digits in DTMF : 3

Timeout for entering DTMF digit [s] : 5

Day of deleting GSM inc. group stastics : 1

Prefix :

CLIP :

CLIP to VoIP separator : (empty = off)

CLIP to VoIP modification : For proper functionality "Clip to VoIP separator" has to be set

Time to keep CLIP in table [hours] : 0 Off

Add record only for unconnected call

Delete record for connected answer

Buttons: Save to the gate, Load from the gate, Default, Save to file



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).