Call routing - Changes in call routing in firmware 1.20+ compared to earlier versions on 2N® BRI Lite and BRI Enterprise

In firmware 1.20 the way call routing was configured has been changed. In this FAQ you are going to find out what is different from previous firmware versions.

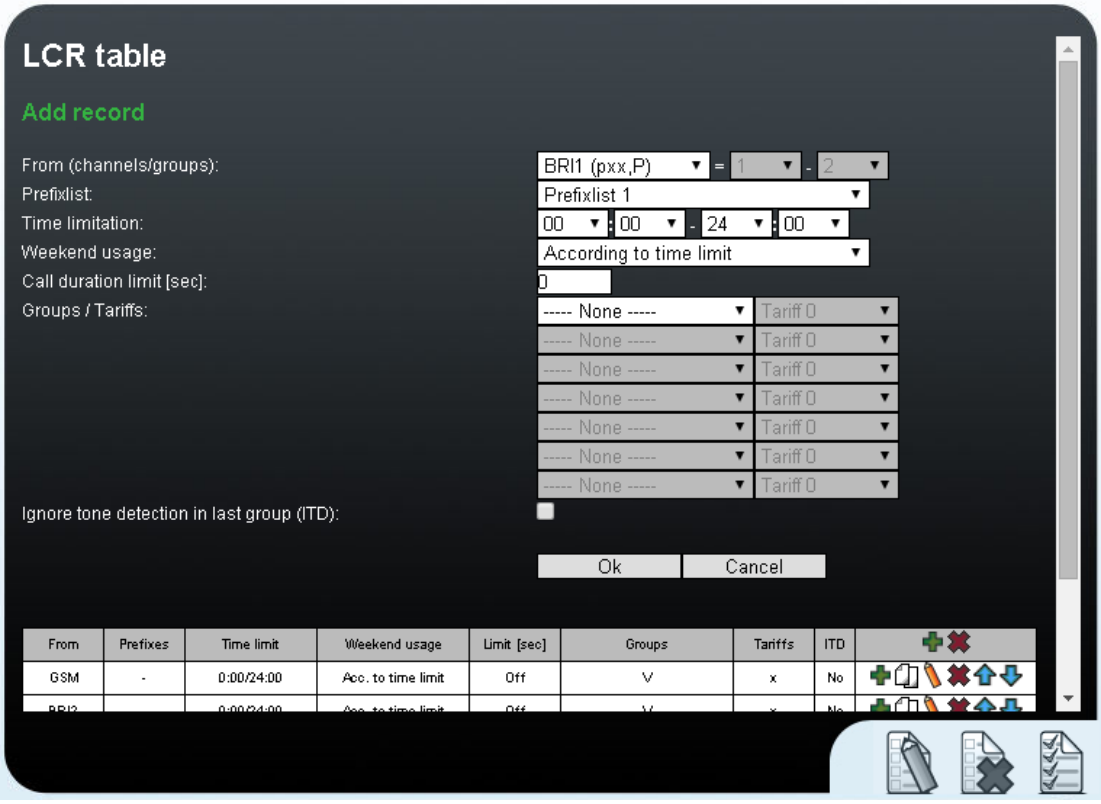
On 2N® BRI Lite and BRI Enterprise following changes have been done:

- In Gateway configuration there is no longer option to select port modes, where you were able to select how calls incoming from one port should be routed (basically allowing you to route calls from BRI to GSM or VoIP). This setting has been merged into LCR table offering an easier configuration.
- LCR table has been redone.

New LCR table allows you to have a complete control over where an incoming call (from VoIP, GSM or BRI interface) should be routed to. On pictures bellow you can see examples of differences between the new LCR table and the old one.

1) Explanation of new LCR table

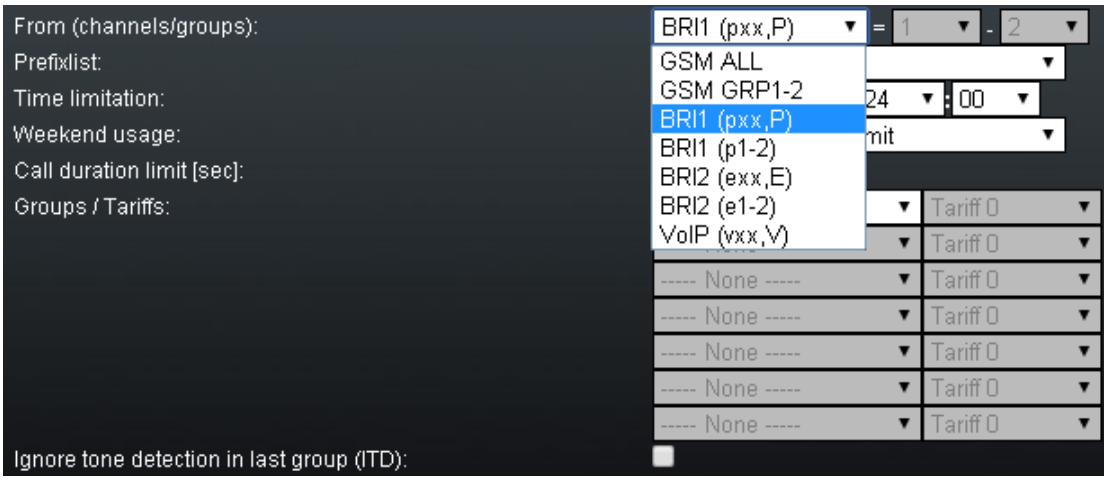
Records in LCR table are read from top to bottow. When a record that matches all conditions is found than the call is going to be sent to outgoing destination specified in that record. Therefore it is important to pay attention to the order in which you have your LCR table records organized!



From (channels/groups) - this parameter specifies where outgoing call originates. In case of BRI gateway it can

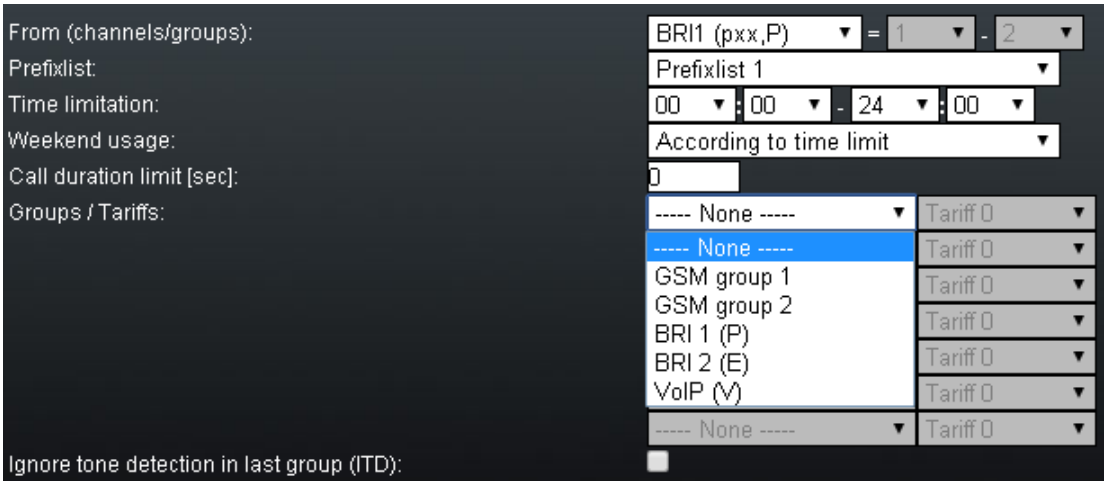
be:

- all GSM channels
- specific GSM incoming group (1-2)
- BRI NT interface all channels
- BRI NT interface, specific channel (1-2)
- BRI TE interface, all channels
- BRI TE interface, specific channel (1-2)
- VoIP



Prefix list - you must specify either one prefixlist, that the outgoing call number must match, or you can select option All prefixlists, where any outgoing call number that matches at least one prefixlist, will be routed by channel specified under Groups/Tarrifs

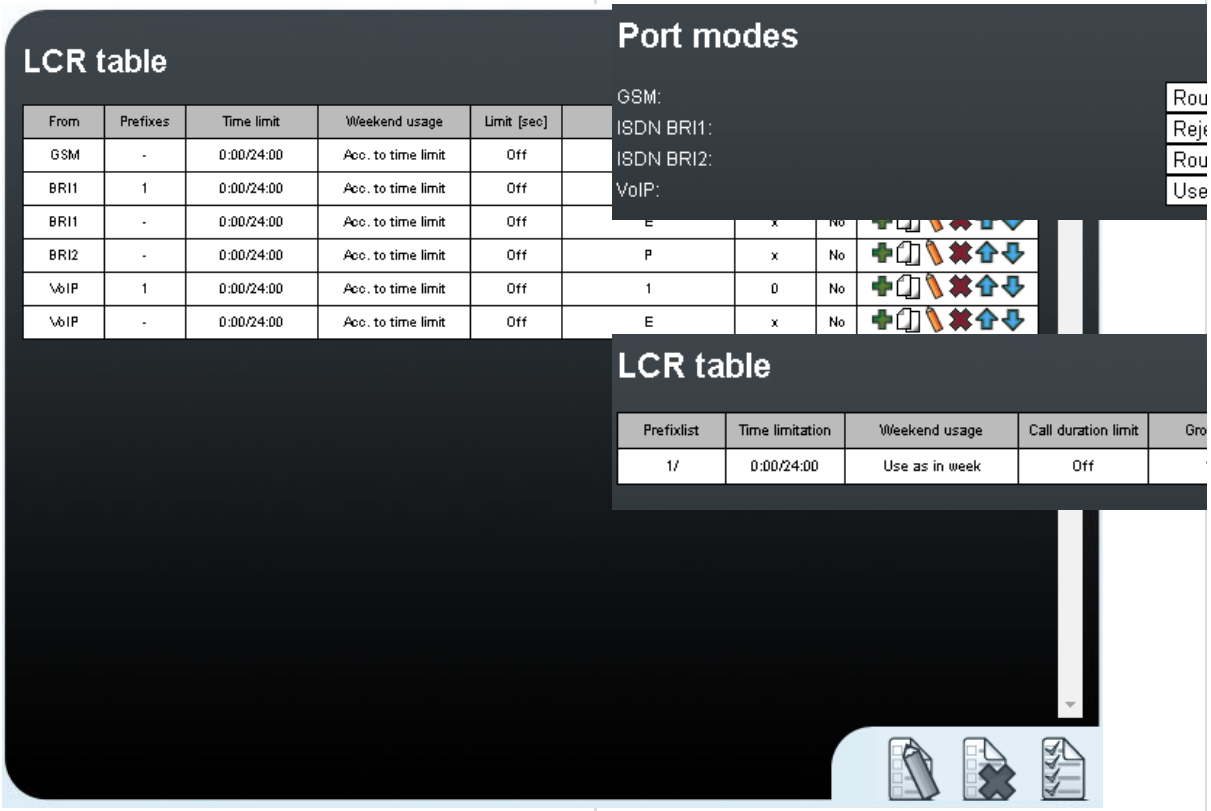
Groups/Tarrifs - this parameter specifies if outgoing call should go through a specifis GSM outgoing group, VoIP or BRI interface (NT/TE)



This way you have a better control over how ougoing and incoming calls are handled and routed. Plus it is possible to route incoming calls from GSM back to GSM which was not possible in older firmware version.

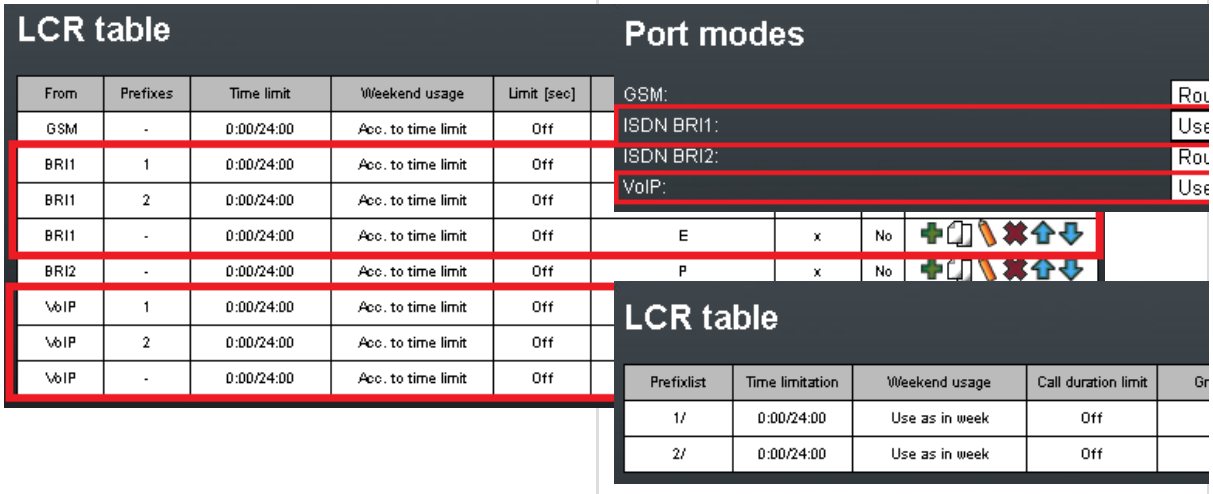
2) Default LCR table settings

Firmware 1.20	Firmware 1.19 and older



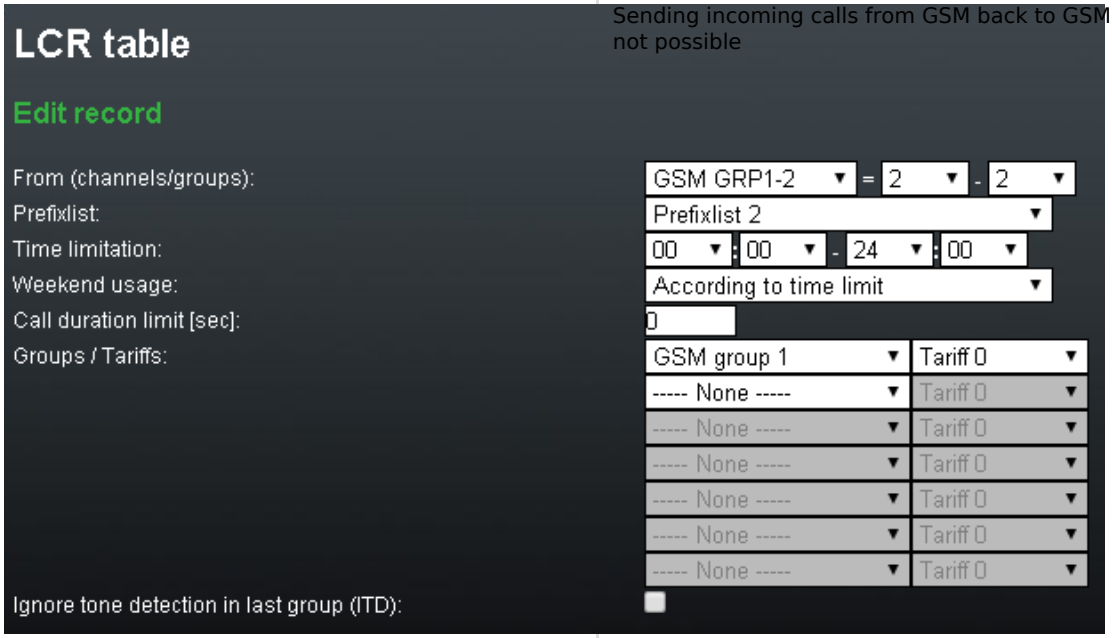
In default there are 6 records which match the default setting of Port modes and LCR table from firmware 1.19 and older	You needed to setup both Port modes and LCR table.

3) Routing outgoing calls from BRI NT interface and VoIP based on prefix lists (2 outgoing GSM groups with 2 prefix lists), incoming calls are left in default

Firmware 1.20	Firmware 1.19 and older
	

Calls coming from BRI NT interface (lines 2-4) are routed based on prefix lists. • if there is a match in prefix list 1, the call is sent over GSM outgoing group 1 • if there is a match in prefix list 2, the call is sent over GSM outgoing group 2 • if dialed number does not match prefix list 1 or 2, or there are no free channels in GSM outgoing group 1 or 2, the call is sent to BRI TE interface Calls coming from VoIP (lines 6-8) are routed based on prefix lists: • if there is a match in prefix list 1, the call is sent over GSM outgoing group 1 • if there is a match in prefix list 2, the call is sent over GSM outgoing group 2 • if dialed number does not match prefix list 1 or 2, or there are no free channels in GSM outgoing group 1 or 2, the call is sent to BRI TE interface	First you needed to change Port modes to match your desired scenarion (top picture above) and than you needed to create 2 rules in your LCR table to match your scenario.

4) Incoming call from GSM group 2 (matching prefix list 2) will be routed back to GSM through GSM outoing group 1. Every other incoming call from GSM will be sent to BRI TE interface. Everything else is left in default.

Firmware 1.20	Firmware 1.19 and older
	Sending incoming calls from GSM back to GSM was not possible
On picture above you can see how to set a scenario where all incoming calls from GSM incoming group 2 should be sent back to GSM through GSM outgoing group 1 (if dialed number will match Prefix list 2)	Sending incoming calls from GSM back to GSM was not possible

LCR table

From	Prefixes	Time limit	Weekend usage	Limit [sec]	Groups	Tariffs	ITD	
g2	2	0:00/24:00	Acc. to time limit	Off	1	0	No	
GSM	-	0:00/24:00	Acc. to time limit	Off	E	x	No	
BRI1	1	0:00/24:00	Acc. to time limit	Off	1	0	No	
BRI1	-	0:00/24:00	Acc. to time limit	Off	E	x	No	
BRI2	-	0:00/24:00	Acc. to time limit	Off	P	x	No	
VoIP	1	0:00/24:00	Acc. to time limit	Off	1	0	No	
VoIP	-	0:00/24:00	Acc. to time limit	Off	E	x	No	

On the picture above you can see how to set described scenario.

All calls from GSM incoming group 2 (matching prefix list 2) are sent back to GSM.
All other calls from GSM are sent to BRI TE interface.

Sending incoming calls from GSM back to GSM was not possible

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