

## Dialthru gateway - How to set 2N® NetStar as a dialthru gateway

 This "how to" manual will help you to set up 2N<sup>®</sup> NetStar as a dialthru PRI <-> GSM/UMTS gateway. Before you start programming the system, it is highly recommended to read the configuration manual.



1. Check your licence – you need at least 2 PRI ports licence (Global data -> Licence) . If you do not have it, please contact us at https://support2n.cz.

File	ID	Status
/data/netstar/licence/7.key	NS2LIC-Gbc8dfd	1035d97 OK

- 2. Set up both PRI ports.
  - a. Port connected to PSTN as TE, port connected to PBX as NT. (Set up the jumpers too!)
    b. Set up TE port as Default OUT and NT port as Default IN important for proper network tones transmission. (Virtual ports -> BRI/PRI -> Basic).



c. Set up TE port as a port used for synchronisation. (Hardware -> Synchronisation).



TE ports unused for synchronisation		TE ports used for synchronisation
		ISDN PRI 2 [1:5.1]
	→	
	+	

d. Delete all tones from Default IN (Properties -> Tones).

Default IN	Dial	P	
🗖 🗁 Default OUT		Type Tone	
Englis Do 1     ISDN PRI 2 [1:5.1]			I
	Alert	Туре	Tone
	Congestion	Cause	Tone

- 3: Set up GSM/UMTS ports
  - a. Create a bundle GSM (Routing -> Routing objects -> Bundle) and use all GSM ports in this bundle. It is recommenced to use cyclical strategy.



м					
Name	GSM				
Allocation strategy	Cyclic				
Access number		1			
Bundle conduct		De	fault alert to	nes	
Cause object	None	No	rmal	. I	None
Next row if is called busy		Qu	eued	Ē	None
Next row if called reject					
Route to next row at no answer		No	-port extensi	on [1	None
No-answer timeout [s]	1	De	fault destina	tion	
Let ring the last call		Тур	e	Default	
Repeat destinations	Γ	Id		None	
Destination type	Destination		Disable lo	gout	
Virtual port	GSM 28 [1:9.1]				
Virtual port	GSM 37 [1:14.1]				
Virtual port	GSM 38 [1:14.2]	•			

b. If you want to have an overflow to PSTN network (in case all GSM/UMTS modules are busy), create another bundle - GSM overflow (linear strategy).

GSM GSM overflow	Name Allocation strategy	GSM overflow		
4. Create a router	Access number Bundle conduct Cause object	None	Default alert tones	one 💌
- From PSTN . (	Next row if is called busy Next row if called reject Route to next row at no answer No-answer timeout [s]		Queued No- No-port extension No	one 💌
Routing -> Routers	-> Called party num	nber Router	Type Default	
)	Repeat destinations	Γ	Id None	
<ul> <li>the purpose of this rout route all traffic transpare</li> </ul>	er Stonation type ntly from PSTN to the PE	Destination BX GSM	Disable logout	
. Check the format of the	called party number, wi	nic្ <sub>សិរ</sub> ទេត្រទុក្ខត្ þy the pro	ovider (DDI, nationa	l format) and set u

om PSTN						
alled number		7				
dd to begi	Remov	Add t	Scheme	Туре	Destination type	Destination
	0		Phone num	Unknow	Virtual port	ISDN PRI 1 [1:3.1]

## 5. Use router From PSTN as a from port router on the TE port. (Properties -> Routing)



□ <sup>-</sup> □ Default IN ISDN PRI 1 [1:3.1] □ <sup>-</sup> □ Default OUT ISDN PRI 2 [1:5.1]	To port Type	Default 💌
	From port	
	- Normal	
	Туре	Router
	Id	From PSTN
	Service	s and holded
	Туре	Default
	Id	None
	AutoClip p	arameters for calls
		Default

6. Create a router - From PBX. (Routing -> Routers -> Called party number Router)

- the purpose of this router is to be a decision maker which will send GSM calls to GSM and all other calls to PSTN. (In our example the GSM prefix is 7 and GSM numbers are 9-digit long).

From PBX	Name			From PBX						
	Туре			Called number		Ŧ				
	Prefix	Digits after	Remove fr	Add to begi	Remov	Add t	Scheme	Туре	Destination type	Destination
	7	8	0		0		Phone nur	Unknow	Bundle	GSM overflow
	?		0		0		Phone num	Unknow	Virtual port	ISDN PRI 2 [1:5.1]

7. Use router From PBX as a from port router on the NT port. (Properties -> Routing)



Default IN     ISDN PRI 1 [1:3.1]     Default OUT     ISDN PRI 2 [1:5.1]	To port Type Id	Default 💌
	From port	
	- Normal -	
	Туре	Router
	ld	From PBX
	Services	and holded
	Туре	Default
	Id	None
	AutoClip pa	arameters for calls
		Default

8. Create router - From GSM. (Routing -> Routers -> Called party number Router)

- the purpose of this router is to route all calls from GSM to a predefined extension in the PBX (in our example 111).

From GSM From PBX From PSTN	Name Type			From GSM		¥				
	Prefix	Digits after	Remove fr	Add to begi	Remov	Add t	Scheme	Туре	Destination type	Destination
			0	111	0		Phone nur	Unknow	Virtual port	ISDN PRI 1 [1:3.1]

9. Use router From GSM as a from port router on Default OUT. (Properties -> Routing)



Default IN Default OUT GSM 28 [1:9.1] GSM 37 [1:14.1] GSM 38 [1:14.2]	To port — Type Id	Default  None
	From port	
	Normal -	
	Туре	Router
	ld	From GSM
	Services	and holded
	Туре	Default
	Id	None
	AutoClip pa	arameters for calls
		Default

10. Switch off CLIP normalizing (Global Data -> Localisation)

- in case you do not want NetStar to modify incoming CLI (e.g. strip international prefix)



Now you should be able to make inbound and outbound calls. In case you have any problem, do not hesitate to contact us at https://support.2n.cz. Many answers can be also found at faq.2n.cz.

More product information: 2N<sup>®</sup> NetStar IP (Official Website 2N) 2N<sup>®</sup> NetStar (Official Website 2N)

Manuals: Product support for  $2N^{$   $\otimes}$  NetStar (wiki.2n.cz)