

How to use the Router Application Kit (RAK) Firmware with GSM/GPRS

The DIL/NetPC DNP/9200 Router Application Kit (RAK) supports GSM/GPRS-based links to the Internet.

• 1. Step: Run your web browser and access the web-based interface of the RAK firmware. Just enter: http://192.168.0.126:7777 within the URL field of your web browser.

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• 2. Step: Please use the password *dnp9200* for your login. Please use only lowercase letters within the password. Then press the *Submit* button.

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ssv				
		>	Configuration	
	Status		<u>^</u>	
Status	System status			
System	System name :	DNP/9200	System host name	
Network	System location :	SSV Embedded Systems	Location information	
Services	Contact :	support@ist1.de	Contact information	
General Similar	Time and date :	Fri, 09.03.2007 17:35:26	Current time and date of this system	
Serial port				
DynDNS	Status LAN1			
• Email	IP address :	192.168.0.126	Current device IP address	
Logout	Subnet mask :	255.255.255.0	Current subnet mask of the local network	
Status WAN				
	IP address :	disabled	Current device IP address	
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	or / _ D1/0			
	Status DNS			
@ 2007 SSV	Primary DNS server :	not set	Current DNS server adresse	
	Secondary DNS server :	not set	Current DNS server adresse	
http://192.168.0.126:7777/men	u.htm#			



• 3. Step: Please select the menu item *Network* → *Modem* (see left frame of the web-based user interface). Then enter the pin code of your SIM card two times (please see the two fields *SIM PIN* and *Confirm SIM PIN*). Finally press the *Apply* button.

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• **4. Step:** Press the embedded *Connect* button (see field *Connect type*) and wait until the RAK is connected to the Internet.

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	Nameserver and Gateway configure			
	DNS :	Dynamic 💌		Use static, dynamic or other DNS
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© 2007 SSV				OK Apply Cancel



Please note: Without an Internet connection, there is no interface device with the name *ppp0*. Verify this with the help of a Telnet session. Use *ifconfig* for more details.

• **5. Step:** The web-based user interface shows a connect message if the RAK is connected to the Internet. Within your Telnet session you find then *ppp0*. It's now possible to access host computers within the Internet over the GSM/GPRS wireless link.

Telnet 192.168.0.126	×
DNP/9200 login: root Password: [root@DNP/9200 /root]\$ifconfig eth0 Link encap:Ethernet HWaddr 02:80:AD:20:CA:78 inet addr:192.168.0.126 Bcast:192.168.0.255 Mask:255.255.255.0 UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:10781 errors:0 dropped:0 overruns:0 frame:0 TX packets:6024 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 Interrupt:24 Base address:0xc000	
lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 UP LOOPBACK RUNNING MIU:16436 Metric:1 RX packets:8 errors:0 dropped:0 overruns:0 frame:0 TX packets:8 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0	
PPPØ Link encap:Point-to-Point Protocol inet addr:90.187.43.252 P-t-P:192.168.100.101 Mask:255.255.255.255 UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1 RX packets:6 errors:0 dropped:0 overruns:0 frame:0 TX packets:8 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:3	
<pre>[root@DNP/9200 /root]\$ping dilnetpc.com PING dilnetpc.com (212.227.224.85): 56 data bytes 64 bytes from 212.227.224.85: icmp_seq=0 ttl=51 time=899.1 ms 64 bytes from 212.227.224.85: icmp_seq=2 ttl=51 time=600.7 ms 64 bytes from 212.227.224.85: icmp_seq=3 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=4 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=4 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=5 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=5 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=6 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=7 ttl=51 time=540.6 ms 64 bytes from 212.227.224.85: icmp_seq=7 ttl=51 time=540.7 ms 64 bytes from 212.227.224.85: icmp_seq=8 ttl=51 time=600.7 ms</pre>	
dilnetpc.com ping statistics 10 packets transmitted, 9 packets received, 10% packet loss round-trip min/avg/max = 540.6/613.8/899.1 ms [root@DNP/9200 /root]\$	•

• **6. Step:** Please try out the Internet connection. Run a *ping* command to *dilnet.com* or any other server. E.g.:

ping dilnetpc.com

The DNP/9200 Linux contains three other commands for Internet server access. The following table shows more details.

Command	Function
wget	Read file from or write file to a HTTP server.
ftpput	Linux command line tool for automating FTP (file) transfers.
ftpget	Linux command line tool for automating FTP (file) transfers.

• **7. Step:** Finally disconnect the RAK connection to the Internet. Please press the embedded *Disconnect* button (see field *Disconnect type*) and wait until the RAK is disconnected from the Internet.



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Logout	Connect type :	Manual	Connect	Disconnected
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	Nameserver and Gateway configure			
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DNP/9200 login: Password	root			_
[root@DNP/9200	∕root] <u>\$</u> ifconfig			
eth0 Link	encap:Ethernet HWado addr:192 168 Ø 126 P	lr 02:80:A[Scast:192):20:CA:78 168 0 255 1	Mask: 255 255 255 0
<u>Ŭ</u> P BR	ŎĂĎĊÁŠŢŢŔŨŇŇĬŇĠŦMŨĿŢĪ	CAST MTU	1500 Metr	iç:1
кх ра ТХ ра	ckets:11094 errors:0 ckets:6281 errors:0 c	aroppea:0 dropped:0 (overruns:0 overruns:0 (frame:0 carrier:0
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Inter	rupt:24 Base address:	DACODO		
lo Link	encap:Local Loopback	255 0 0 0		
UP LO	OPBACK_RUNNING MTU:1	16436 Metr	ric:1	
RX pa	ckets:8 errors:0 drop	ped:0 over	runs:0 fra	ne:0
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[root@DNP/9200	/root]\$			
RX pa TX pa colli	ckets:8 errors:0 drop ckets:8 errors:0 drop sions:0 txqueuelen:0	ped:0 over ped:0 over	rruns:0 fran rruns:0 carı	ne:0 rier:0
[root@DNP/9200	/root]\$			

Please note: Within the disconnect process the DNP/9200 Linux removes the *ppp0* interface from the internal device list.

That's all.