

How to configure 3G network connection for Vigor2910

For 3G [USB Modem](#) is connected to USB port and replace the function of WAN2, the original WAN1 still can be used normally. Therefore, WAN1 and WAN2 can be activated for performing load-balance. Also, 3G USB Modem can be treated as backup WAN interface.

For detailed configuration of 3G network connection, please do the following:

- (1) Power off the router.
- (2) Insert 3G USB Modem into USB port of Vigor2910. ([3G modem / cellphone list.](#))
- (3) Power on the router.
- (4) Access into the webpage of Vigor2910. Please make sure the firmware version of vigor2910 is later than V3.0.6. To upgrade the firmware, please refer to [Ways for firmware upgrade](#) and the latest version : <http://www.draytek.com/support/download.php>
- (5) Open WAN >> General Setup and choose 3G USB Modem as physical mode for WAN2.

WAN >> General Setup

General Setup

WAN1	WAN2
Enable: <input type="checkbox"/> Yes	Enable: <input type="checkbox"/> Yes
Display Name: <input type="text"/>	Display Name: <input type="text"/>
Physical Mode: Ethernet	Physical Mode: 3G USB Modem
Physical Type: Auto negotiation	Physical Type: Ethernet
Load Balance Mode: Auto Weight	Load Balance Mode: Auto Weight
Line Speed(Kbps): DownLink <input type="text"/> 0	Line Speed(Kbps): DownLink <input type="text"/> 0
UpLink <input type="text"/> 0	UpLink <input type="text"/> 0
Active Mode: Always On	Active Mode: Always On
Active on demand: <input type="radio"/> WAN2 Fail <input checked="" type="radio"/> WAN2 Upload speed exceed <input type="text"/> 0 Kbps WAN2 Download speed exceed <input type="text"/> 0 Kbps	Active on demand: <input type="radio"/> WAN1 Fail <input checked="" type="radio"/> WAN1 Upload speed exceed <input type="text"/> 0 Kbps WAN1 Download speed exceed <input type="text"/> 0 Kbps

Note: WAN2 and LAN P1 share the P1 port. When WAN2 is enabled, P1 is used as WAN2.

- (6) Go to WAN >> [Internet Access](#). Choose PPP as the Access Mode for WAN2.

WAN >> Internet Access

Internet Access

Index	Display Name	Physical Mode	Access Mode	
WAN1		Ethernet	Static or Dynamic IP	Details Page
WAN2		3G USB Modem	PPP	Details Page

Enable PPP Client Mode at first, input the APN name (for example: Internet) and Apply.

WAN >> Internet Access

WAN 2

PPP Client Mode

Enable Disable

SIM PIN code

Modem Initial String

AT&FE0V1X1&D2&C1S0=0

(Default:AT&FE0V1X1&D2&C1S0=0)

APN Name

Internet

Apply

Modem Dial String

ATDT*99#

(Default:ATDT*99#)

PPP Username

(Optional)

PPP Password

(Optional)

Index(1-15) in [Schedule](#) Setup:

=> , , ,

OK

Cancel

Default

Then modem Initial string would refer the APN.

WAN >> Internet Access

WAN 2

PPP Client Mode

Enable Disable

SIM PIN code

Modem Initial String

APN:Internet

(Default:AT&FE0V1X1&D2&C1S0=0)

APN Name

Apply

Modem Dial String

ATDT*99#

(Default:ATDT*99#)

PPP Username

(Optional)

If the [ISP provider](#) gives the modem initial string but not APN , then we just only input the modem initial string (ie:AT+CGDCONT=1,"IP","internet") instead of APN.

By the way, if the [SIM card](#) has been setting PIN code , we have to set the current PIN code in the page.

Troubleshooting

When you have trouble in using 3G [network transmission](#), please check the following:

(1) Check if USB [LED lights](#) on or off :

You have to wait about 15 seconds after inserting 3G USB Modem into your Vigor2910. Later, the USB LED will light on which means the installation of USB Modem is successful. If the USB LED does not light on, please remove and reinsert the modem again. If it still fails, restart Vigor2910.

(2) USB LED lights on but the network connection does not work :

Check the PIN Code of SIM card is disabled or not. Please use the utility of 3G USB Modem to disable PIN code and try again. If it still fails, it might be the compliance problem of system. Please open DrayTek Syslog Tool to capture the connection information (WAN Log) and send the page (similar to the following graphic) to the service center of DrayTek.

The screenshot displays the DrayTek Syslog 3.7.1 interface. At the top, there are controls for IP address (192.168.1.1) and device name (DrayTek Vigor2910). Below this, there are status sections for LAN and WAN. The LAN Status shows TX Packets: 30991 and RX Packets: 7626. The WAN Status shows Gateway IP, WAN IP, TX Packets, RX Packets, TX Rate, and RX Rate, all currently at 0. A navigation bar includes tabs for Firewall Log, VPN Log, User Access Log, Call Log, WAN Log (selected), Others, Network Information, Net State, and Traffic Graph. The main area is a log table with columns for Time, Host, and Message. The log entries show a sequence of events related to USB modem initialization and PPPoE connection attempts, including several 'sync timeout' messages and a final 'USB Modem initialize successful' message. At the bottom, there is an ADSL Status section with fields for Mode, State, Up Speed, Down Speed, SNR Margin, and Loop Att, all currently showing '...'.

Time	Host	Message
Sep 16 09:18:59	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:58	Vigor	[3G]Send default init command AT&FE0V1X1&D2&C1S0=0 #61
Sep 16 09:18:58	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:58	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:57	Vigor	[3G]Modem stop
Sep 16 09:18:57	Vigor	WAN2 PPPoE <== V:1 T:1 PADT ID:0
Sep 16 09:18:57	Vigor	WAN2 PPPoE ==> V:1 T:1 PADT ID:0
Sep 16 09:18:53	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:52	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:52	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:51	Vigor	[3G]Send default init command AT+CFUN=0 #60
Sep 16 09:18:51	Vigor	[3G]Change AT command type 1
Sep 16 09:18:51	Vigor	WAN2 PPPoE ==> V:1 T:1 PADT ID:0
Sep 16 09:18:40	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:39	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:39	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:38	Vigor	[3G]Send default init command AT&FE0V1X1&D2&C1S0=0 #59
Sep 16 09:18:37	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:36	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:36	Vigor	USB: submit_urb() sync timeout
Sep 16 09:18:35	Vigor	[3G]Send default init command AT+CFUN=1 #58
Sep 16 09:18:34	Vigor	[3G]Modem status:A1 20 00 00 00 00 02 00 00 00
Sep 16 09:18:34	Vigor	[3G]Modem status:A1 20 00 00 00 00 02 00 00 00
Sep 16 09:18:34	Vigor	[3G]USB Modem initialize successful

(3) Transmission Rate is not fast enough :

Please connect your Notebook with 3G USB Modem to test the connection speed to verify if the problem is caused by Vigor2910. In addition, please refer to the manual of 3G USB Modem for LED Status to make sure if the modem connects to Internet via HSDPA mode. If you want to use the modem indoors, please put it on the place near the window to obtain better signal receiving.