

Vigor 2910 3G HSDPA Router User's Guide

DrayTek Corp.

1. Introduction

For 3G mobile communications are setup one after another all over the world, Vigor 2910 adds the function of 3G network connection for such purpose. By connecting Huawei E220 HSDPA USB Modem to the USB port of Vigor2910, it can support HSDPA/UMTS/EDGE/GPRS/GSM and the download rate can reach up to 3.6Mbps. Vigor2910 with E220 allows you to receive 3G signals at any place such as your car or certain location holding outdoor activity and share the bandwidth for using by more people. Users can use four LAN ports on the router to access Internet. Also, they can access Internet via SuperG wireless function of Vigor2910G, and enjoy the powerful firewall, bandwidth management, VPN, VoIP features of Vigor2910 series.

After connecting into the router, Huawei E220 HSDPA USB Modem will be regarded as the second WAN port. However, the original Ethernet WAN1 still can be used and Load Balance can be done in the router. Besides, Huawei E220 HSDPA USB Modem in WAN2 also can be used as backup device. So, when WAN1 is not available, the router will use 3G for supporting automatically.

2. Operation

- (1) Insert Huawei E220 HSDPA USB Modem into USB Port of Vigor2910 and power on the router.
- (2) Open a web browser on your PC and type http://192.168.1.1 to access into the web configurator of the router. Choose **3G USB Modem** as the physical type in **WAN2**.

WAN >> General Setup

General Setup

WAN1	WAN2
Enable: Yes	Enable: Yes
Display Name: [Text Box]	Display Name: [Text Box]
Physical Mode: Ethernet	Physical Mode: 3G USB Modem
Physical Type: Auto negotiation	Physical Type: 3G USB Modem
Load Balance Mode: Auto Weight	Load Balance Mode: Auto Weight
Line Speed(Kbps): DownLink [0] UpLink [0]	Line Speed(Kbps): DownLink [0] UpLink [0]

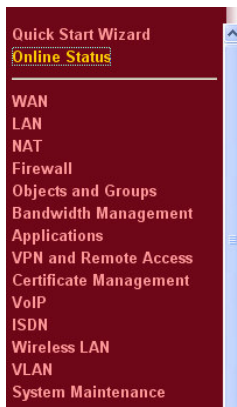
- (3) Go to **WAN>> Internet Access**. 3G USB Modem is available for WAN2. At present, only **Huawei E220** is supported by this router. It is not necessary for you to do other configuration.

WAN >> Internet Access

Internet Access

Index	Display Name	Physical Mode	Access Mode	
WAN1		Ethernet	Static or Dynamic IP	Details Page
WAN2		3G USB Modem	Huawei E220	Details Page

- (4) Open **Online Status** page. The connection status (failed or successful) of the router will be displayed. If the connection fails, please refer to “3. Troubleshooting”.



Online Status

System Status System Uptime: 0:33:17

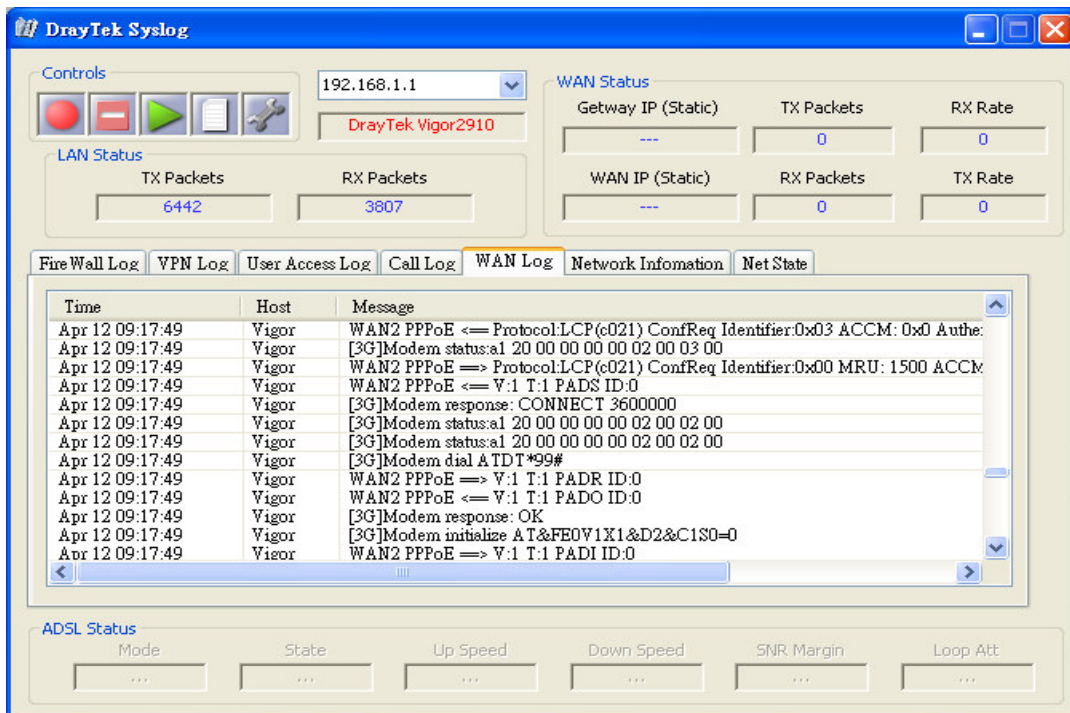
LAN Status		Primary DNS: 168.95.1.1	Secondary DNS: 168.95.192.1
IP Address	TX Packets	RX Packets	
192.168.1.1	1834	415	

WAN 1 Status					
Enable	Line	Name	Mode	Up Time	
Yes	Ethernet		Static IP	00:00:00	
IP	GW IP	TX Packets	TX Rate	RX Packets	RX Rate
172.17.3.51	172.17.3.2	0	0	0	0

WAN 2 Status						>> Drop PPPoE
Enable	Line	Name	Mode	Up Time		
Yes	3G USB Modem		PPPoE	0:09:03		
IP	GW IP	TX Packets	TX Rate	RX Packets	RX Rate	
221.120.36.222	221.120.36.222	175	8	253	6	

3. Troubleshooting

- (1) **Check if LED of HSDPA USB Modem lights on or off :** You have to wait about 15 seconds after inserting Huawei E220 HSDPA 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) **LED of HSDPA USB Modem 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 Huawei E220 HSDPA 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.



- (3) **Transmission Rate is not fast enough:** If the 3G signal is well, the download rate can reach above 1Mbps. Please connect your Notebook with Huawei E220 HSDPA USB Modem to test the connection speed to verify if the problem is caused by Vigor2910. In addition, please refer to **Appendix: LED Status for Huawei E220 HSDPA USB Modem** to make sure if the modem connects to Internet via HSDPA mode. If you want to use the

HSDPA USB modem indoors, please put it on the place near the window to obtain better signal receiving.

Appendix: LED Status for Huawei E220 HSDPA USB Modem

Note: HSDPA high-speed transmission can be done while cyan LED lights on.

Indicator

This indicator indicates the status of E220.

Indicator Status	Description
Off	E220 is powered off.
Blinking twice every 2.7 seconds (green)	E220 is searching for a network or no network is available.
Blinking once every 2.9 seconds (green)	The GSM network is normal.
Blinking once every 2.9 seconds (blue)	The WCDMA network is normal.
On (green)	The GPRS data service is established.
On (cyan)	The HSDPA data service is established.
On (blue)	The WCDMA data service is established.