

# How to Setup SmartMonitor Environment with Vigor2820?

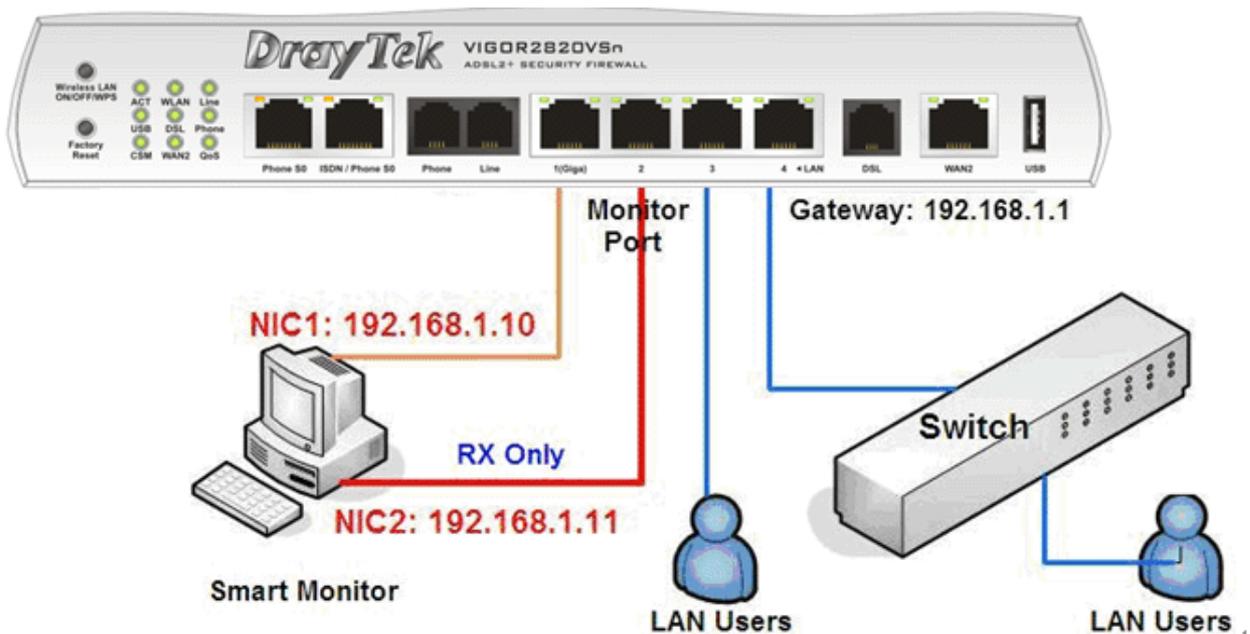
You have three options listed as the following:

- With port mirroring function on Vigor2820
- With an Ethernet switch which supports port mirroring
- With a network hub or repeater hub

## I. With port mirroring function on Vigor2820

A network switch can use the function of **Port Mirroring** to send a copy of packets from one port to another port that network monitoring server installed. This is commonly used for network applications that require monitoring network traffic, such as Smart Monitor.

The switch built in Vigor2820 also supports port mirroring function. However, the port on Vigor2820 in mirroring status is limited to receive packets only. Since SmartMonitor authentication and the remote management require the port to be able to send packets as well, the network connection must be set as figure shown below:



1. Prepare two NICs on the SmartMonitor server.
2. Connect NIC1 to LAN port 1 and NIC2 to LAN port 2.
3. Assign two different IP addresses to these two NIC's respectively. They must be within the same subnet. In this example, 192.168.1.10 is assigned to NIC1 and 192.168.1.11 is assigned to NIC2.
4. Open the web configurator of Vigor2820 and open **LAN >> LAN Port Mirror** page to configure the router as shown below. In this example, P2 (LAN port 2) is configured as mirror

port. Thus all the other LAN ports (P1, P3 and P4) will send a copy of network packets to P2.

### LAN >> LAN Port Mirror

**LAN Port Mirror**

Port Mirror:  
 Enable  Disable

Mirror port:  
 P2  P3  P4

Mirrored port:  
 P1  P2  P3  P4

OK

5. Since NIC2 is connected to LAN port 2, it will receive the network packets from other LAN ports. Select this NIC as the Interface in the system setting page of SmartMonitor.

### Setting

**SMTP**  
Server: 172.16.2.8  
Port: 25  
Mail Box:   
Need authentication:   
Username: chaochen  
Password: ●●●●●●●●

**Admin Login Control** When retry over 3 times, block IP for 10 Min. [Current blocking list](#)

**Recording**  
 FTP  MAIL  HTTP  IM  TELNET  P2P  WEBDOWN  STOCK  
Months to keep backup files in disk 6 (1-12) months  
Max FTP filesize 10 (1-100) MB  
Max mail attached file size 10 (1-10) MB  
WebDown file type: avi bin bz2 doc exe gz gzip img iso lzh m4a mov mp3 mp4 mpa mpe mpeg mpg msi ogg pdf ppt plj pps qt ra ram rar rm rmvb sea sit sitx tar wav wma wmv z zip

**Administration**  
When free disk space is below 200 (>200) MB  Warn at firstpage  Send email  
Session Timeout 60 Min.  
Allow login anonymously

**Interface**  
Intel(R) PRO/100 VE Network Connection - 数据包计划程序微型端口  
IP:192.168.1.11 Gateway: Mask: 255.255.255.0

Please note that in port mirroring mode, P2 is unable to send any packet out. It can just receive packets. In the following situations, SmartMonitor server must be able to send packets.

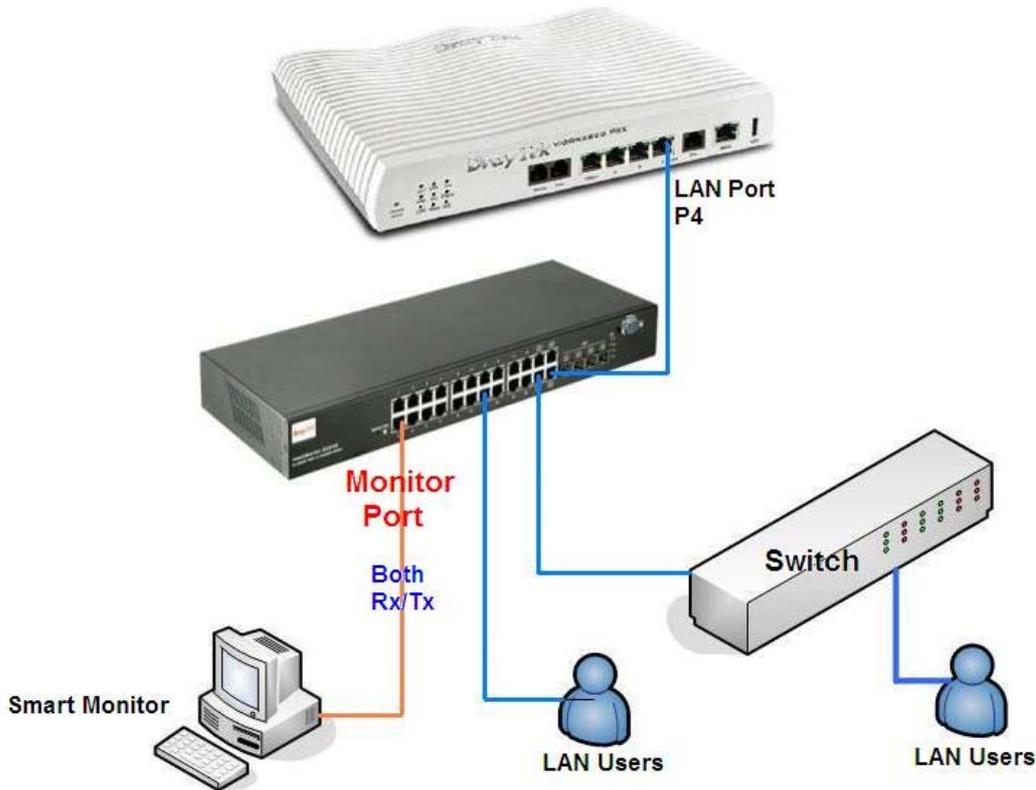
- SmartMonitor server sends authentication information to the router.
- For the remote management and monitor via http://(IP of smart monitor).

That's why we configure the other NIC on the SmartMonitor server and connects it to the router.

- NIC1 is connected to a normal LAN port and it will send authentication packets to Vigor2820. Furthermore, NIC1 is for remote access as well. If you want to access SmartMonitor server from other computers in the same LAN, you must use the IP address of NIC1 (http://192.168.1.10). If you want SmartMonitor server to be accessed from Internet, you must type the default gateway (192.168.1.1) for NIC1.

## II. With an Ethernet switch which supports port mirroring

You don't want to install two NICs on the SmartMonitor server. And, you have an Ethernet switch supporting port mirroring. Most of important, the mirror port is able to receive and send packets at the same time. Then, you can connect the devices as shown below:

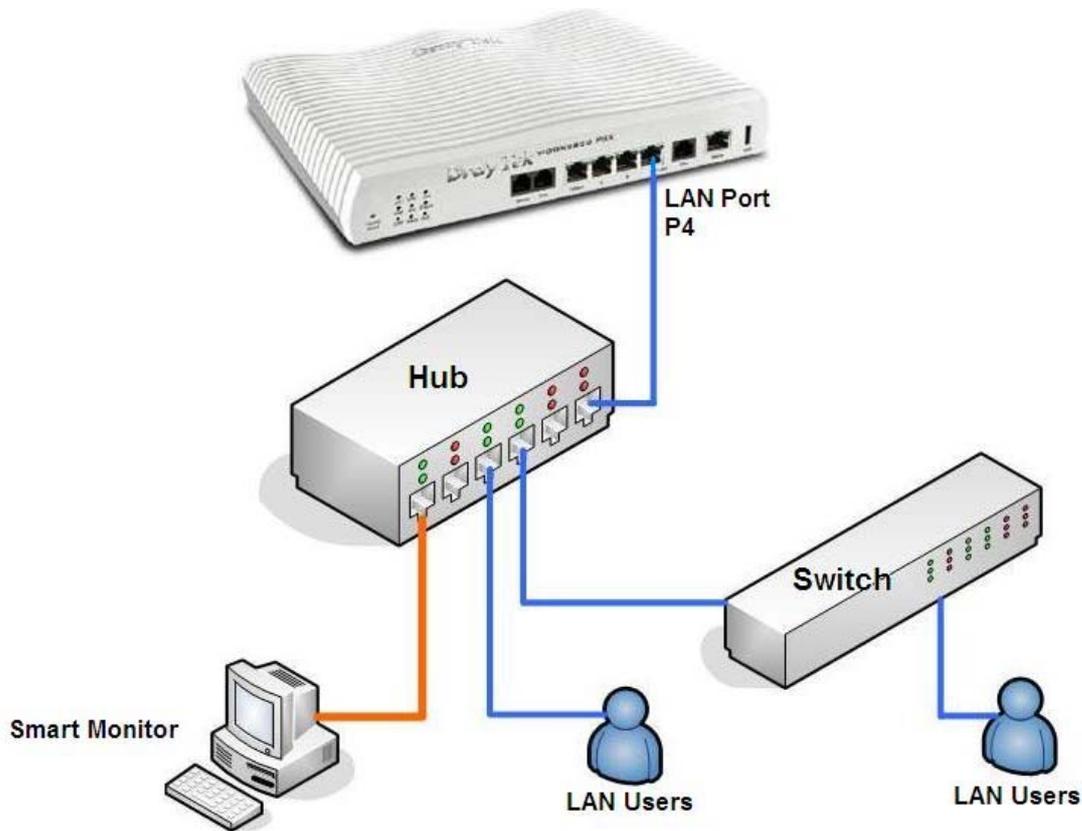


1. Connect one of Vigor2820's LAN ports to the switch.
2. Assign one of switch's ports as Mirror Port to do port mirroring. Setup the other ports to send a copy of network packets to this Mirror Port.
3. Connect the SmartMonitor server to the Mirror Port of the switch.
4. Connect all the other computers to the same switch directly or through other switch.

**Note:** With the above configuration, if you connect a computer to one of Vigor2820's LAN ports directly, the traffic will not be monitored by SmartMonitor Server.

### III. With a network hub or repeater hub

Any packet entering one port on a hub will be broadcasted out on all other ports. **For inserting a protocol analyzer into a network connection**, a hub is an alternative to a port mirroring. To setup a SmartMonitor environment with a hub, you must connect SmartMonitor server, Vigor router and all **internal network nodes** to the same hub as figure shown below:



1. Connect one of Vigor2820's LAN ports to the hub.
2. Connect SmartMonitor server to the same hub.
3. Connect all the other computers to the same hub directly or through other switch.

**Note:** With the above setup, if you connect a computer to one of Vigor2820's LAN ports directly, the traffic will not be monitored by SmartMonitor Server.