NETGEAR®

Installation Guide

FVX538 ProSafe™ VPN Firewall 200

Start Here

Follow these instructions to set up your firewall. You can also consult the online *FVX538 ProSafe VPN Firewall 200 Reference Manual* or the NETGEAR Knowledgebase at *http://kbserver.netgear.com.* A link to the online Reference Manual is on the *Resource CD*.

Prepare to Install Your FVX538 VPN Firewall

This guide provides instructions for setting up a simple dual WAN port rollover configuration. Refer to the Reference Manual for other WAN port configuration options.

First, Connect the FVX538

1. CONNECT THE CABLES BETWEEN THE FVX538, THE MODEMS, AND A COMPUTER

a. Turn off *and* unplug the broadband modems.
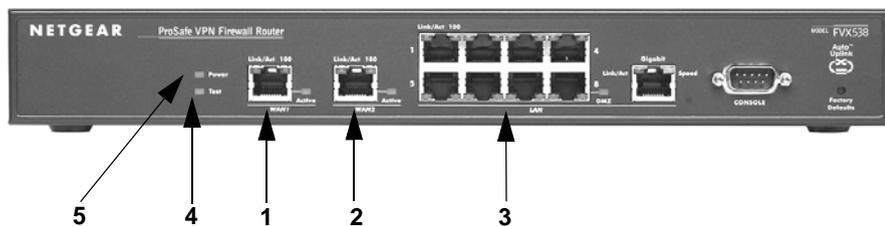
b. Insert an Ethernet cable from a modem into the WAN1 port (1) of the FVX538.

c. Insert an Ethernet cable from the other modem into the WAN2 port (2) of the FVX538.

d. Insert the Ethernet cable that came with your firewall into a LAN port on the router (3) and insert the other end into the Ethernet port of your computer.

Your network cables are connected and you are ready to restart your network.

2. RESTART YOUR NETWORK IN THE CORRECT SEQUENCE

Warning: Failure to restart your network in the correct sequence could prevent you from connecting to the Internet.

a. First, power on the broadband modems. Wait approximately 2 minutes until they power up.

b. Now, power on the FVX538.

c. Last, turn on your computer.

d. Before configuring your FVX538, check the status lights to verify the following:

- *Power.* The power light (5) should turn solid green. If it does not turn solid green, see the Troubleshooting section of the full manual.

- *Test.* When you first turn on the router, the amber test light (4) will be lit for approximately 2 minutes. If it is still on after several minutes, see the Troubleshooting Tips below.

- *WAN.* The Link/Act lights on each WAN port (1) and (2) should be lit. If not, make sure the Ethernet cable is securely attached to the modem and the WAN port, and that the modem is powered on.

- *LAN.* A LAN light (3) should be lit. Green indicates your computer is communicating at 100 Mbps; amber indicates communication at 10 Mbps. If a LAN light is not lit, ensure that the Ethernet cable from the computer to the router is securely attached at both ends, and that the computer is turned on.

Next, Configure the FVX538 for Internet Access

Before you begin, be sure you have the configuration parameters from your ISP handy.

1. LOG IN TO THE ROUTER

a. Use a browser to connect to http://192.168.1.1

Note: To connect to the firewall, your computer needs to be configured to obtain an IP address automatically via DHCP. If you need instructions on how to do this, please refer to the online reference manual. A link to the manual is on your *Resource CD*.

b. For security reasons, the firewall has its own user name and password.

When prompted, enter **admin** for the firewall User Name and **password** for the firewall Password.

c. Click **Login.** You are now connected to the firewall. The **WAN1 ISP Settings** screen will display.
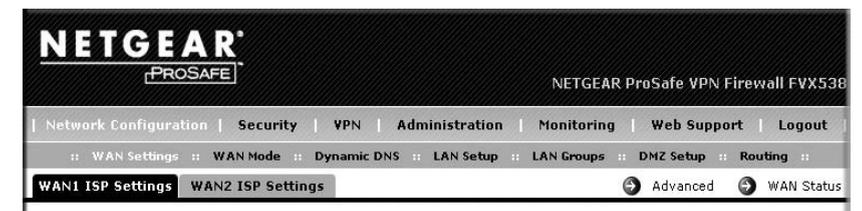
The **Web Support** tab on the main menu contains links to the online NETGEAR FVX538 product documentation and support Knowledgebase. Be aware that the default login time-out is 5 minutes of inactivity, after which automatic logout will occur.

2. CONNECT TO THE INTERNET

a. Click **Auto Detect** at the bottom of the **WAN1 ISP Settings** screen. The router will automatically attempt to detect your connection type. If you know your ISP connection type, you can manually configure the router settings on the **WAN1 ISP** screen. If connecting manually, click **Apply** to save your settings.

b. When finished, click **Test** to verify that the Internet connection is active.

c. Select the **WAN2 ISP** tab and complete the same steps you just completed in steps a and b.

Now, Configure WAN Rollover Mode

The dual WAN ports of the FVX538 ProSafe™ VPN Firewall 200 can be configured for either rollover for increased system reliability or load balancing for maximum bandwidth efficiency. The rollover option is presented here; refer to the manual for instructions on configuring the load balancing mode.

In rollover mode, expect the following:

- You designate one WAN port as primary and the other as the rollover link.
- While the primary link is up, all traffic goes over the primary WAN port. If the primary link goes down, traffic is sent over the rollover link.
- Traffic will automatically roll back to the primary link once it is back up.

To configure the dual WAN ports for rollover:

1. Select **WAN Mode** from the sub-menu. The **WAN Mode** screen will display.
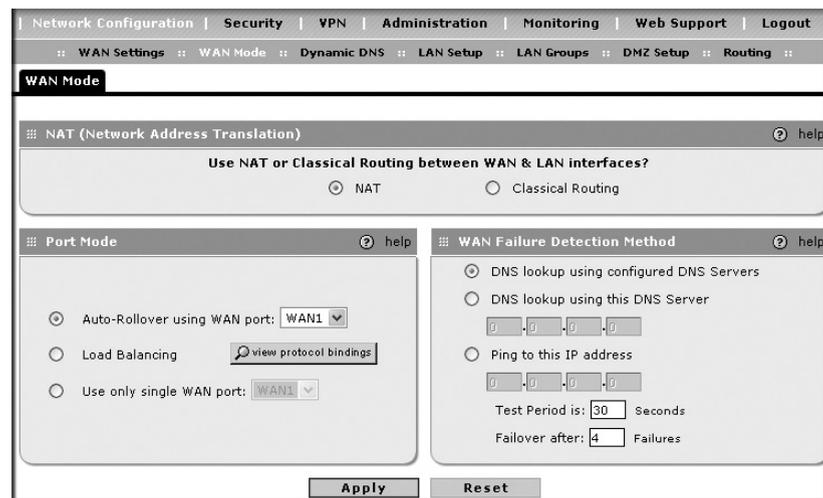
2. From the Auto-Rollover pull-down menu, select which WAN port will be primary.

3. WAN failure is detected using DNS queries to the DNS server or PING messages to an IP address. If the replies are not received, the WAN interface is considered down. Fill in the appropriate fields:
   - Configured DNS Servers – In this case, DNS queries are sent to the ISP DNS servers configured on the WAN ISP pages.
   - Using this DNS Server – In this case, DNS queries are sent to a specified DNS Server.
   - Ping to this IP address – In this case, PING queries are sent to the specified IP address.
   - Test Period – a DNS or PING query is sent after every test period. The minimum test period is 30 seconds.
   - Failover after – The WAN link is considered down after the configured number of queries fail to get a reply. The minimum number of failed queries is four. The rollover link is brought up after this.

4. Click **Apply** to save your changes.

Troubleshooting Tips

Here are some tips for correcting common problems you may encounter.

Be sure to restart your network in this sequence:

1. Turn off *and* unplug the modems, turn off the FVX538, and shut down the computer.
2. Plug in and turn on the modems. Wait for the modems to power up (approximately 2 minutes).
3. Turn on the FVX538. Wait until the amber test light goes out.
4. Turn on the computer.

Make sure the Ethernet cables are securely plugged in.

- The WAN Link/Act light on the firewall will be lit if the Ethernet cable to the firewall from each modem is plugged in securely and the modems and firewall are turned on.
- For each powered on computer connected to the firewall with a securely plugged in Ethernet cable, the corresponding firewall LAN port status light should be lit. The front of the FVX538 identifies the number of each LAN port.

Make sure the network settings of the computer are correct.

Computers *must* be configured to obtain IP *and* DNS addresses automatically via DHCP. For help with this, please see the online *FVX538 ProSafe VPN Firewall 200 Reference Manual*; a link to the manual is on the *Resource CD*.

For Cable Modem connections, use MAC spoofing.

Some cable modem ISPs require that you use the MAC address of the computer registered on the account. If so, in the **Router's MAC Address** section (accessed through the **Advanced** link on the **WAN1 ISP Settings** screen), select either "Use this Computer's MAC" or "Use this MAC address" and enter the appropriate MAC address. The router will then capture and use the MAC address of the computer that you identified. You must select the computer that is registered with the ISP. Click **Apply** to save your settings. Restart the network in the correct sequence.

Use the FVX538 status lights to verify correct operation.

If the FVX538 Test light does not go out approximately 2 minutes after turning the router on, reset the router as described in the *FVX538 ProSafe VPN Firewall 200 Reference Manual*.

Technical Support

Thank you for selecting NETGEAR products.

After configuring your FVX538 VPN Firewall, locate the serial number on the bottom label of your product and use it to register your product at *http://www.netgear.com/register*. Registration on the web site is required before you can use our telephone support service.

The phone numbers for worldwide regional customer support centers are on the Warranty and Support Information card that came with your product.

Go to *http://www.netgear.com/support* for product updates and web support.

This symbol was placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.