verizon✓

Fios Home Router

USER GUIDE

Model G3100

CONTENTS

01 / INTRODUCTION

02 / CONNECTING YOUR FIOS HOME ROUTER

03 / WIRELESS SETTINGS

04 / CONFIGURING NETWORK SETTINGS

05 / USING NETWORK CONNECTIONS

06 / SETTING PARENTAL CONTROLS

07 / CONFIGURING SECURITY SETTINGS

08 / CONFIGURING ADVANCED SETTINGS

CONTENTS

09 / TROUBLESHOOTING

10 / SPECIFICATIONS

11 / NOTICES

01/

INTRODUCTION

The Verizon Fios Home Router lets you transmit and distribute digital entertainment and information to multiple devices in your home/office.

Your Fios Home Router supports networking using coaxial cables, Ethernet, or Wi-Fi, making it one of the most versatile and powerful routers available.

PACKAGE CONTENTS, SYSTEM REQUIREMENTS AND FEATURES

1.0/ PACKAGE CONTENTS

Your package contains:

- Fios Home Router
- Power adapter
- Ethernet cable, three meters (white)
- OSS (Open Source Software) insert guide

1.1/ SYSTEM REQUIREMENTS

System and software requirements are:

- A computer or other network device supporting Wi-Fi or wired Ethernet
- A web browser, such as Chrome™, Firefox®, Internet Explorer 8® or higher, or Safari® 5.1 or higher

1.2/ FEATURES

Your Fios Home Router features include:

- Support for multiple networking standards, including
  - WAN – Gigabit Ethernet and MoCA 1.1 interfaces
  - LAN – 802.11 b/g/n/ac/ax, Gigabit Ethernet and MoCA 2.5 interfaces
- Integrated wired networking with 4-port Ethernet switch and Coax (MoCA)

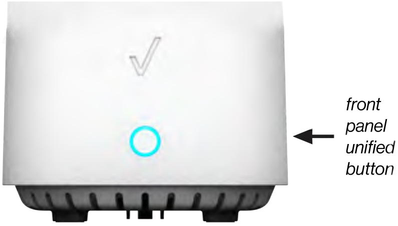
  - Ethernet supports speeds up to 1000 Mbps
  - MoCA 2.5 and 1.1 enabled to support speeds up to 700 Mbps over coaxial cable
- Integrated wireless networking with 802.11b/g/n/ac/ax access point featuring:
  - Enabled 802.11b capable speeds (based on device)
  - Enabled 802.11g capable speeds (based on device)
  - Enabled 802.11n capable speeds (based on device)
  - Enabled 802.11ac capable speeds (based on device)
  - Enabled 802.11ax capable speeds (based on device)
- Enterprise-level security, including:
  - Fully customizable firewall with Stateful Packet Inspection (SPI)
  - Content filtering with URL-keyword based filtering, parental controls, and customizable filtering policies per computer
  - Intrusion detection with Denial of Service protection against IP spoofing attacks, scanning attacks, IP fragment overlap exploit, ping of death, and fragmentation attacks
  - Event logging
  - MAC address filtering
  - Static NAT
  - Port forwarding
  - Port triggering

  - Access control
  - Advanced wireless protection featuring WPA2/WPA Mixed Mode and MAC address filtering
- Options, including:
  - DHCP server
  - WAN interface auto-detection
  - Dynamic DNS
  - DNS server
  - LAN IP and WAN IP address selection
  - MAC address cloning
  - IPv6 support
  - QoS support (end to end layer 2/3) featuring: Differentiated Services (Diffserv), 802.1p/q prioritization, and pass-through of WAN-side DSCPs, Per Hop Behaviors (PHBs), and queuing to LAN-side devices
  - Remote management and secured remote management using HTTPS
  - Static routing
  - VPN (VPN pass through only)
  - IGMP
  - Daylight savings time support

1.3/ GETTING TO KNOW YOUR FIOS HOME ROUTER

1.3a/ FRONT PANEL

The front panel's unified button allows quick access to the Wi-Fi Protected Setup (WPS) feature and pairing mode.



The Router Status LED will be on white and solid when your router is turned on, connected to the internet, and functioning normally.

Router Status LED

Condition Status	LED Color	Fios Home Router
Normal	WHITE	Normal operation (solid) Router is booting (fast blink)
	BLUE	Pairing mode (slow blink) Pairing successful (solid)
	GREEN	Wi-Fi has been turned off (solid)
Issue(s)	YELLOW	No internet connection (slow blink) Poor backhaul signal (solid)
	RED	Hardware/System failure detected (solid) Overheating (fast blink) Pairing Failure (slow blink)
Power	OFF	Power off

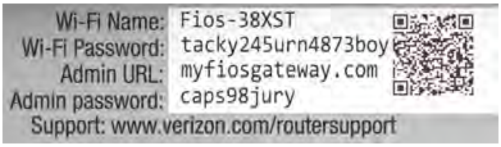
The WPS button is used to initiate Wi-Fi Protected Setup. This is an easy way to add WPS capable devices to your wireless network. To activate the WPS function, press and hold the unified button located on the front of your Fios Home Router for more than two seconds. When WPS is initiated from your router, the Router Status LED slowly flashes blue for up to two minutes, allowing time to complete the WPS pairing process on your wireless device (also known as a wireless client). When a device begins connecting to your router using WPS, the Router Status LED rapidly flashes blue for a few seconds, and turns solid blue and then solid white as the connection completes.

If there is an error during the WPS pairing process, the Router Status LED slowly flashes red for two minutes after the error occurs.

Refer to the “Connecting A Wi-Fi Device Using WPS” for more details. In addition, the unified button also provides a quick view of the operational state of the Fios Home Router using various colors as indicated in the chart above. Please refer to section 9.0h for details on the rear LEDs.

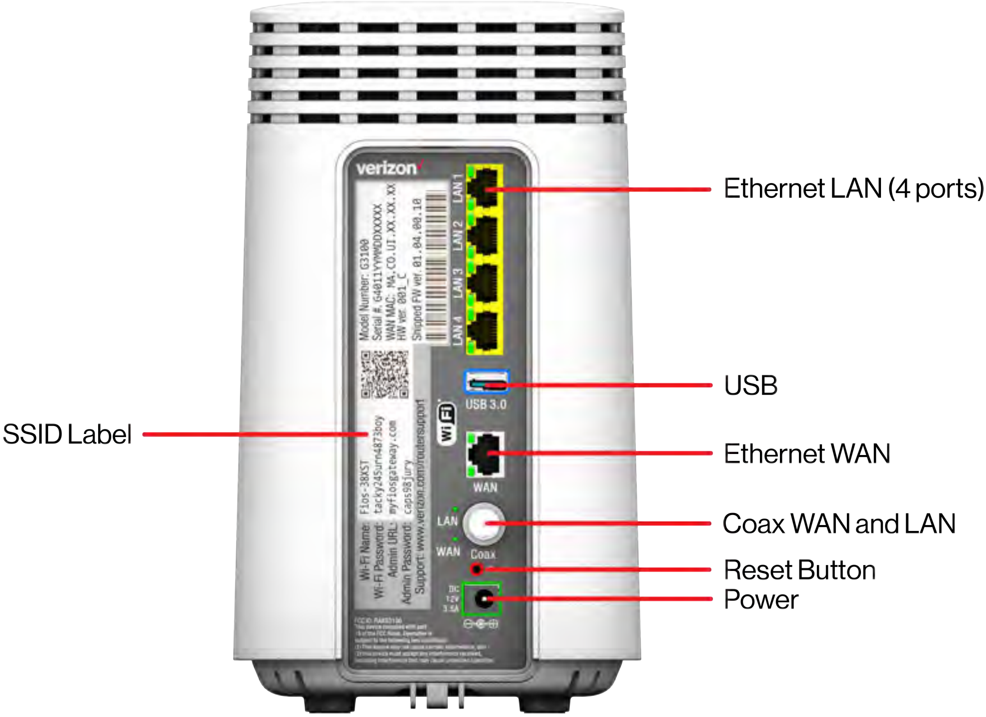
1.3b/ REAR PANEL

The rear panel of your router has a label that contains important information about your device, including the default settings for the router’s wireless network name (SSID), wireless password (WPA2 key), local URL for accessing the router’s administrative pages, and administrator password. The label also contains a QR code that you can scan with your smartphone, tablet, or other camera-equipped Wi-Fi device to allow you to automatically connect your device to your Wi-Fi network without typing in a password (requires a QR code reading app with support for Wi-Fi QR codes).



Wi-Fi Name: Fios-38XST
Wi-Fi Password: tacky245urn4873boy
Admin URL: myfiosgateway.com
Admin password: caps98jury
Support: www.verizon.com/routersupport

The rear panel has seven ports; F-type coax, Ethernet LAN (four), Ethernet WAN, and USB. The rear panel also includes a DC power jack and a reset button.



- **Ethernet LAN** - connects devices to your Fios Home Router using Ethernet cables to join the local area network (LAN). The four Ethernet LAN ports are 10/100/1000 Mbps auto-sensing and can be used with either straight-through or crossover Ethernet cables.
- **USB** - provides up to 1000 mA at 5 VDC for attached devices. For example, you could charge a cell phone. With a firmware upgrade, the USB host functionality may be available for other devices, such as external storage and cameras. Firmware updates are performed automatically by Verizon.
- **Ethernet WAN** - connects your Fios Home Router to the internet using an Ethernet cable.
- **Coax WAN and LAN** - connects your router to the internet and/or to other MoCA devices using a coaxial cable.

  Warning: The WAN coax port is intended for connection to Verizon Fios only. It must not be connected to any exterior or interior coaxial wires not designated for Verizon Fios.
- **Reset Button** - allows you to reset your router to the factory default settings. To perform a soft reboot, press and hold the button for at least three seconds. To reset your router to the factory default settings, press and hold the button for at least ten seconds.
- **Power** - connects your Fios Home Router to an electrical wall outlet using the supplied power adapter.

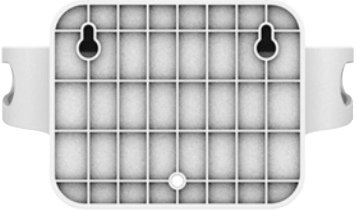
  Warning: The included power adapter is for home use only, supporting voltages from 105-125 voltage in AC. Do not use in environments with greater than 125 voltage in AC.

1.3c/ MOUNTING THE FIOS HOME ROUTER TO A WALL

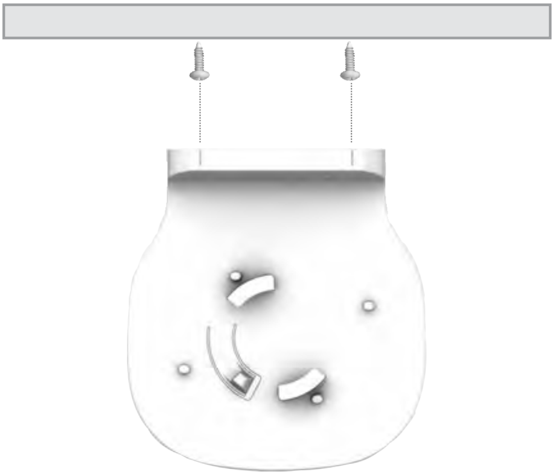
For optimum performance, the Fios Home Router is designed to stand in a vertical upright position. Verizon does not recommend wall mounting the Fios Home Router. However, if you wish to mount your Fios Home Router, you can purchase a wall mount bracket from the Verizon Fios Accessories Store at verizon.com/fiosaccessories.

To mount your Fios Home Router to a wall:

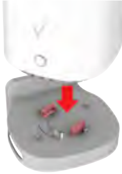
1. You may use the wall mount bracket as a template for positioning the Fios Home Router.



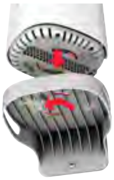
2. Mark the mounting holes, then remove the wall mount bracket from the wall.
3. Drive two screws into the wall. Leave the screws extended about 0.2 inches from the wall.
4. Verify the screws are positioned correctly by placing the wall bracket on the screws. Then remove the wall bracket from the wall.



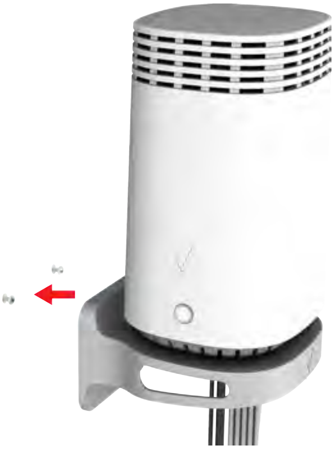
5. There are two mounting slots located on the bottom of the Fios Home Router. It allows you to securely attach your router to the wall. Align the slots with the wall mount bracket.



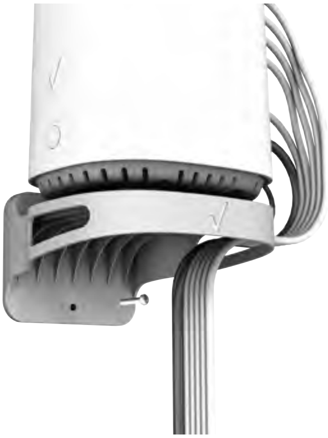
6. Attach the router to the wall mount bracket through an easy twist and lock action.



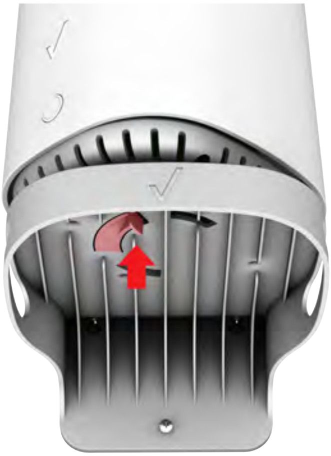
7. Align the wall mount bracket with the attached router to the screws, then slide the bracket down until it locks in place.



8. To secure the bracket, place one screw into the small hole of the bracket and tighten the screw into your wall.



Note: To release the lock, twist the router counter-clockwise and press down on the small clip on the bottom of the bracket.



02 /

CONNECTING YOUR FIOS HOME ROUTER

Connecting your Fios Home Router and accessing its web-based Graphical User Interface (GUI) are both simple procedures.

Accessing the GUI may vary slightly, depending on your device's operating system and web browser.

SETTING UP YOUR FIOS HOME ROUTER

2.0/ SETTING UP YOUR FIOS HOME ROUTER

There are three basic steps to set up your Fios Home Router:

Step 1: Connect your Fios Home Router to the internet.

Step 2: Connect your network device to your Fios Home Router.

Step 3: Configure your Fios Home Router.

Before you begin, if you are replacing an existing router, disconnect it. Remove all old router components, including the power supply. They will not work with your new Fios Home Router.

2.0a/ STEP 1 - CONNECT YOUR FIOS HOME ROUTER TO THE INTERNET

1. Remove your Fios Home Router, Ethernet cables, and power adapter from the box.
2. Locate your high-speed internet (WAN) outlet. This would be the wall jack installed previously by Verizon. Note the type of jack may be either Ethernet or coaxial.
3. Connect your Fios Home Router to the internet (WAN).
    - If connecting the WAN using Ethernet, plug one end of an Ethernet cable into the white Ethernet WAN port on the back of your router. Plug the other end of the cable into the high-speed Ethernet wall jack.

- If connecting the WAN using coaxial cable, locate a coaxial cable and connect one end to the coax port on the back of your router. Connect the other end of the coaxial cable to a coax wall jack.

  Tighten the coaxial cables by hand until snug. Tightening the coaxial cable should not require a wrench.

4. Plug the power cord into the power port on the back of your Fios Home Router and then into a power outlet. The router automatically turns on as soon as power is plugged in.

Important: Wait until the Router Status LED on the front of the Fios Home Router stops flashing and is solid white. If the light turns red, check the steps in the Troubleshooting section of this user guide.

2.0b/ STEP 2 - CONNECT YOUR NETWORK DEVICE TO YOUR FIOS HOME ROUTER

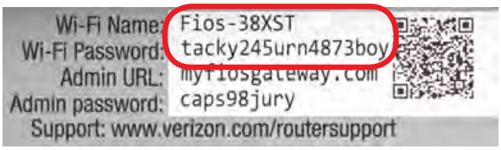
If connecting a device using Ethernet (preferred for initial setup):

- Plug one end of an Ethernet cable into one of the four yellow Ethernet ports on the back of your Fios Home Router.
- Plug the other end of the Ethernet cable into the Ethernet port of your network device.

SETTING UP YOUR FIOS HOME ROUTER

If connecting a wireless device:

- Access the Wi-Fi setting on your wireless device, then select your new Fios Home Router using the wireless network name (SSID) shown on the sticker located on the rear of your Fios Home Router.
- Enter the wireless password (WPA2 key) also shown on the sticker.

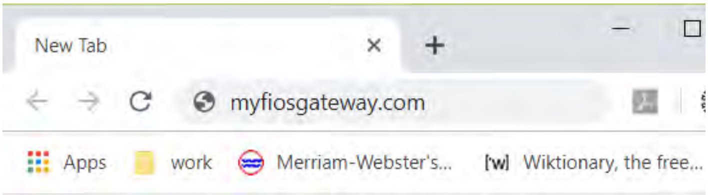


Wi-Fi Name: Fios-38XST
Wi-Fi Password: tacky245urn4873boy
Admin URL: myfiosgateway.com
Admin password: caps98jury
Support: www.verizon.com/routersupport

2.0c/ STEP 3 - CONFIGURE YOUR FIOS HOME ROUTER

1. Open a web browser on the device connected to your Fios Home Router network.
2. In the browser address field (URL), enter: myfiosgateway.com, then press the **Enter** key on your keyboard.

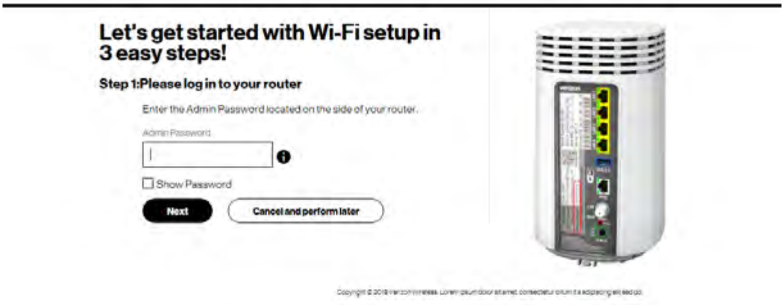
   Alternately, you can enter: https://192.168.1.1



myfiosgateway.com

The first time you access your Fios Home Router, an Easy Setup Wizard displays to help step you through the setup process.

3. On the **Step 1: Please log in to your router** screen, enter the password that is printed next to the Admin password on the label on the rear of your router.



Let's get started with Wi-Fi setup in 3 easy steps!

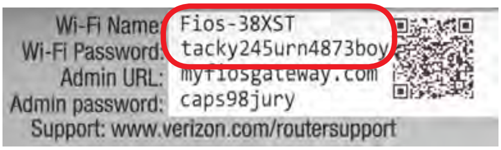
Step 1:Please log in to your router

Enter the Admin Password located on the side of your router.

Admin Password

□ Show Password

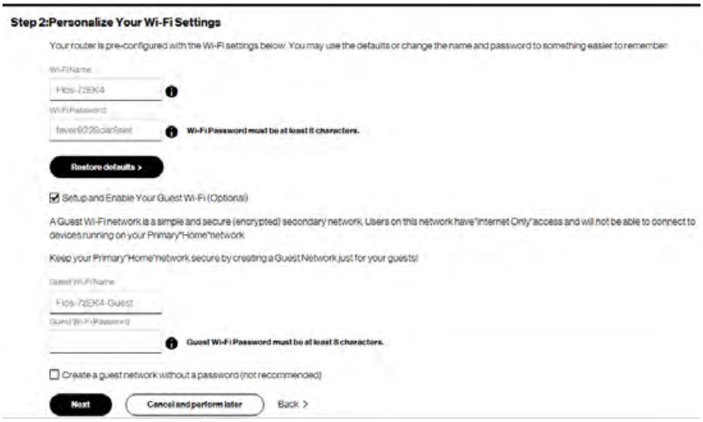
Copyright © 2019 verizonwireless. Lorem ipsum dolor sit amet, consectetur [illegible] adipiscing elit sed do



Wi-Fi Name: Fios-38XST
Wi-Fi Password: tacky245urn4873boy
Admin URL: myfiosgateway.com
Admin password: caps98jury
Support: www.verizon.com/routersupport

4. Click **Next**. The **Step 2: Personalize Your Wi-Fi Settings** screen displays. Click on the check box next to **Setup and Enable Your Guest Wi-Fi (Optional)** to personalize your Guest Wi-Fi Name and Password.

SETTING UP YOUR FIOS HOME ROUTER



Step 2:Personalize Your Wi-Fi Settings

Your router is pre-configured with the Wi-Fi settings below. You may use the defaults or change the name and password to something easier to remember.

Wi-Fi Name: Fios-72EK4

Wi-Fi Password: 1ever9228clarifset

Wi-Fi Password must be at least 8 characters.

☑ Setup and Enable Your Guest Wi-Fi (Optional)

A Guest Wi-Fi network is a simple and secure (encrypted) secondary network. Users on this network have"Internet Only"access and will not be able to connect to devices running on your Primary"Home"network.

Keep your Primary"Home"network secure by creating a Guest Network just for your guests!

Guest Wi-Fi Name: Fios-72EK4-Guest

Guest Wi-Fi Password:

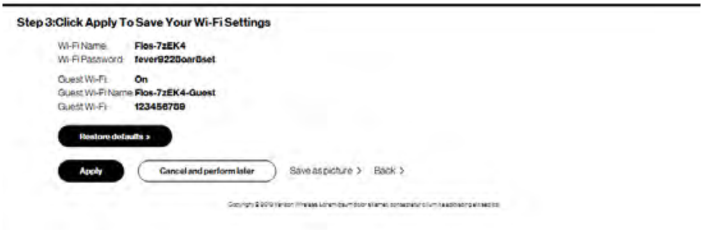
Guest Wi-Fi Password must be at least 8 characters.

□ Create a guest network without a password (not recommended)

For your protection, your Fios Home Router is pre-set at the factory to use WPA2 (Wi-Fi Protected Access) encryption for your wireless network. This is the best setting for most users and provides maximum security.

5. Click **Next**. The **Step 3: Click Apply to Save Your Wi-Fi Settings** screen appears. You have an option of saving the Wi-Fi settings as an image on your device by clicking the **Save as picture** button. After you click **Save as picture** to save your Wi-Fi settings as an image, click **Apply** to save the Wi-Fi changes to your Fios Home Router.

Important: If you are on a Wi-Fi device when setting up your Fios Home Router, you will be disconnected from the Wi-Fi network when you change the Wi-Fi name or Wi-Fi password. When this occurs, your Fios Home Router will detect this situation and prompt you to reconnect using the new settings.



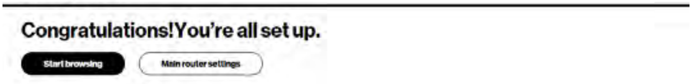
Step 3:Click Apply To Save Your Wi-Fi Settings

Wi-Fi Name: Fios-7zEK4
Wi-Fi Password: fever9228oar8set

Guest Wi-Fi: On
Guest Wi-Fi Name: Fios-7zEK4-Guest
Guest Wi-Fi: 123456789

Copyright © 2019 Verizon Wireless [illegible]

The Congratulations! You’re all set up screen displays once your Fios Home Router verifies the final settings and has successfully connected to the internet and is ready for use. You can click on Main router settings to access the main screen of the Fios Home Router or click on Start browsing and you will be directed to the
Verizon.com website.



Congratulations!You’re all set up.

If your Fios Home Router is subsequently reset to the factory default settings, the settings printed on the label will again be in effect.

If your Fios Home Router fails to connect, follow the troubleshooting steps in the Troubleshooting section of this guide.

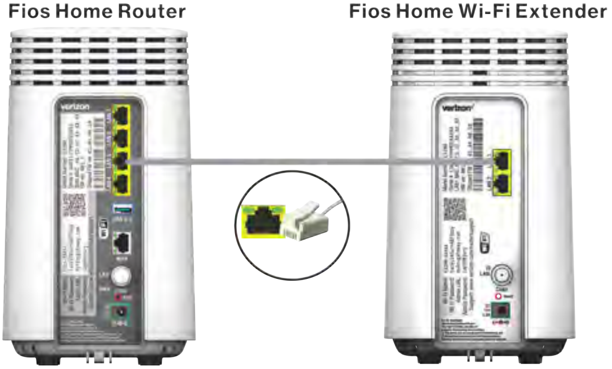
EXPANDING WI-FI COVERAGE

2.1/ EXPANDING WI-FI COVERAGE

Connecting Verizon's Fios Home Wi-Fi Extender to the Fios Home Router allows you to extend wireless signal range of the Fios Home Router for eliminating Wi-Fi dead zones on your Wi-Fi network.

To connect a Fios Home Wi-Fi Extender to your existing Fios Home Router:

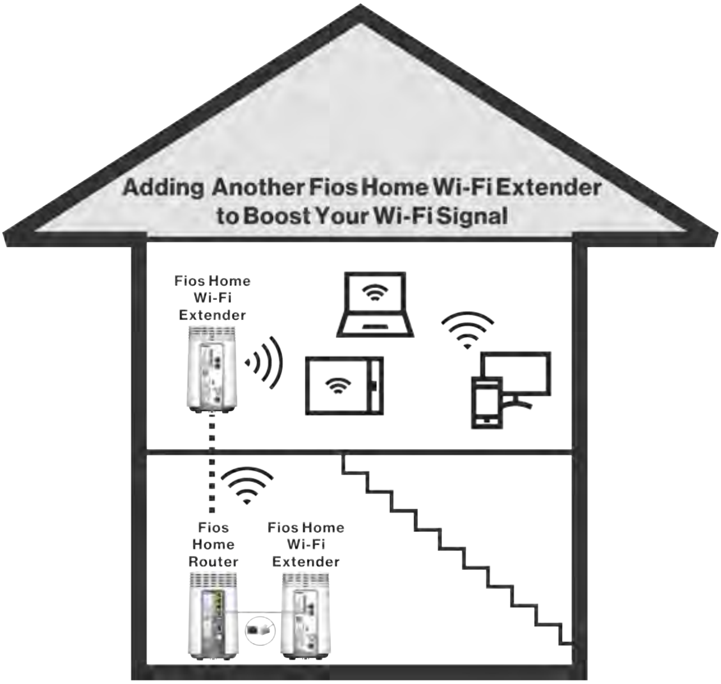
1. Connect one end of an Ethernet cable into the LAN port on the Fios Home Router. Then insert the other end of the cable into the Ethernet port of the Fios Home Wi-Fi Extender.



2. Plug the power adapter into the power inlet on the rear of the Fios Home Router and Fios Home Wi-Fi Extender, and the other end into a power outlet.
3. Wireless Link: On the Windows desktop of your PC, click **Start/Control Panel/Network** and **Internet/View network status and tasks/Connect** to a network to browse the available wireless networks. Choose the SSID name of the

Fios Home Router from the list and click **Connect** button to start using the wireless network.

4. If you need to add another Fios Home Wi-Fi Extender on your network, repeat step 1 and step 2. If the LED becomes flashing blue, it indicates that the device is in software synchronization process. Please wait for the LED to turn solid white again. Then unplug the power and network cable of the secondary Fios Home Wi-Fi Extender, and place it to your desired location.


Adding Another Fios Home Wi-Fi Extender
to Boost Your Wi-Fi Signal
Fios Home
Wi-Fi
Extender
Fios
Home
Router
Fios Home
Wi-Fi
Extender

5. Then connect the power to the secondary Fios Home Wi-Fi Extender.

2.2/ COMPUTER NETWORK CONFIGURATION

Each network interface on your computer should either automatically obtain an IP address from the upstream Network DHCP server (default configuration) or be manually configured with a statically defined IP address and DNS address. We recommend leaving this setting as it is.

2.2a/ CONFIGURING DYNAMIC IP ADDRESSING

To configure a computer to use dynamic IP addressing:

WINDOWS 7/8

1. In the Control Panel, locate **Network and Internet**, then select **View Network Status and Tasks.**
2. In the **View your active networks – Connect or disconnect** section, click **Local Area Connection** in the **Connections** field. The Local Area Connection Status window displays.
3. Click **Properties.** The Local Area Connection Properties window displays.
4. Select **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties.** The Internet Protocol Version 4 (TCP/IPv4) Properties window displays.
5. Click the **Obtain an IP address automatically** radio button.
6. Click the **Obtain DNS server address automatically** radio button, then click **OK.**
7. In the Local Area Connection Properties window, click **OK** to save the settings.

8. To configure Internet Protocol Version 6 (TCP/IPv6) to use dynamic IP addressing, repeat step 1 to 7. However for step 4, select **Internet Protocol Version 6 (TCP/IPv6)** in the **Properties** option (refer to IPv6 section for Fios Home Router configuration).

WINDOWS 10

1. On the Windows desktop, click on the **Start** icon. Select **Settings** and click **Network & Internet.**
2. In the Network & Internet, click **Ethernet.**
3. Select **Network and Sharing Center.** The **View your basic network information and set up connections** window displays.
4. In the **View your active networks**, click **Ethernet** in the **Connections** field. The **Ethernet Status** window displays.
5. Click **Properties.** The **Ethernet Properties** window displays.
6. Select **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties.** The **Internet Protocol Version 4 (TCP/IPv4) Properties** window displays.
7. Click the **Obtain an IP address automatically** radio button.
8. Click the **Obtain DNS server address automatically** radio button, then click **OK.**
9. In the **Local Area Connection Properties** window, click **OK** to save the settings.

10. To configure Internet Protocol Version 6 (TCP/IPv6) to use dynamic IP addressing, repeat step 1 to 9. However for step 6, select **Internet Protocol Version 6 (TCP/IPv6)** in the **Properties** option (refer to IPv6 section for Fios Home Router configuration).

MACINTOSH OS X

1. Click the **Apple** icon in the top left corner of the desktop. A menu displays.
2. Select **System Preferences.** The System Preferences window displays.
3. Click **Network.**
4. Verify that **Ethernet**, located in the list on the left, is highlighted and displays **Connected.**
5. Click **Assist Me.**
6. Follow the instructions in the Network Diagnostics Assistant.

2.2b/ CONNECTING OTHER COMPUTERS AND NETWORK DEVICES

You can connect your Fios Home Router to other computers or set top boxes using an Ethernet cable, wireless connection (Wi-Fi), or coaxial cable.

ETHERNET

1. Plug one end of an Ethernet cable into one of the open yellow Ethernet ports on the back of your Fios Home Router.
2. Plug the other end of the Ethernet cable into an Ethernet port on the computer.
3. Repeat these steps for each computer to be connected to your Fios Home Router using Ethernet. You can connect up to four.

CONNECTING A WI-FI DEVICE USING WPS

Wi-Fi Protected Setup (WPS) is an easier way for many devices to set up a secure wireless network connection. Instead of manually entering passwords or multiple keys on each wireless client, such as a laptop, printer, or external hard drive, your Fios Home Router creates a secure wireless network.

In most cases, this only requires the pressing of two buttons – one on your Fios Home Router and one on the wireless client. This could be either a built-in button or one on a compatible wireless adapter/ card, or a virtual button in software. Once completed, this allows wireless clients to join your wireless network.

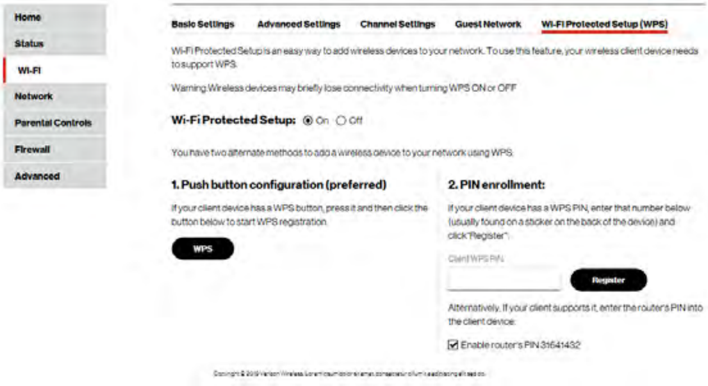
To initialize the WPS process, you can either press and hold the unified button located on the front of your Fios Home Router for more than two seconds or use the GUI and press the on-screen button.

COMPUTER NETWORK CONFIGURATION

You can easily add wireless devices to your wireless network using the WPS option if your wireless device supports the WPS feature.

To access WPS using the user interface:

1. From the main menu, select **Wi-Fi** settings, then select **Wi-Fi Protected Setup (WPS)**.



Wi-Fi Protected Setup is an easy way to add wireless devices to your network. To use this feature, your wireless client device needs to support WPS.

Warning: Wireless devices may briefly lose connectivity when turning WPS ON or OFF

Wi-Fi Protected Setup: ● On ○ Off

You have two alternate methods to add a wireless device to your network using WPS.

1. Push button configuration (preferred)

If your client device has a WPS button, press it and then click the button below to start WPS registration.

2. PIN enrollment:

If your client device has a WPS PIN, enter that number below (usually found on a sticker on the back of the device) and click "Register".

Client WPS PIN

Alternatively, if your client supports it, enter the router's PIN into the client device.

☑ Enable router's PIN 31641432

Copyright © 2019 Verizon Wireless [illegible]

2. Enable the protected setup by moving the selector to **On**.
3. Use one of the following methods:
   - If your wireless client device has a WPS button, press the unified button on your router for more than two seconds, then click the WPS button on your wireless device (client) to start the WPS registration process.
   - If your client device has a WPS PIN, locate the PIN printed on the client's label or in the client documentation. Enter the PIN number in the **Client WPS PIN** field. The

Client WPS PIN field is located in the section **2 - PIN enrollment** on the user interface.

- Click **Register.**
- Alternatively, you can enter the router's PIN shown on this screen into the WPS user interface of your device, if this PIN mode is supported by your wireless device.

4. After pressing the unified button (WPS) on your router, you have two minutes to press the WPS button on the client device before the WPS session times out.

   When the unified button (WPS) on your router is pressed, the Router Status LED on the front of your router begins flashing blue. The flashing continues until WPS pairing to the client device completes successfully. At this time, the Router Status LED turns solid blue.

   If WPS fails to establish a connection to a wireless client device within two minutes, the Router Status LED on your router flashes red for two minutes to indicate the WPS pairing process was unsuccessful. After flashing red, the light returns to solid white to indicate that Wi-Fi is on.

CONNECTING A WI-FI DEVICE USING A PASSWORD

1. Verify each device that you are connecting wirelessly (using Wi-Fi) has a built-in wireless or external wireless adapter.
2. Open the device's wireless settings application.

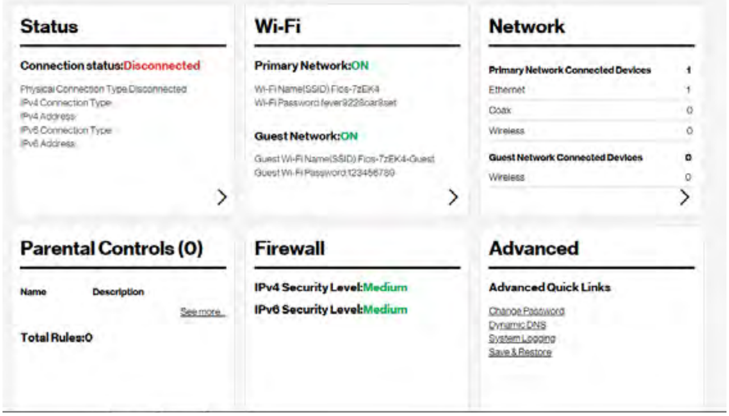
3. Select your Fios Home Router's wireless network name (SSID) from the device's list of discovered wireless networks.
4. When prompted, enter your Fios Home Router's wireless password (WPA2 key) into the device's wireless settings. Your router's default wireless network name and wireless password are located on the sticker on the rear panel of your Fios Home Router.
5. Verify the changes were implemented by using the device's web browser to access a site on the internet.
6. Repeat these steps for every device that you are wirelessly connecting to your router.

COAX

1. Verify all coax devices are turned off.
2. Disconnect any adapter currently connected to the coaxial wall jack in the room where your router is located.
3. Connect one end of the coaxial cable to the coaxial wall jack and the other end to the coax port on your network device.
4. Power up the network device.

2.3/ MAIN SCREEN

When you log into your router, the dashboard main page displays the main navigation menu of connection status, Wi-Fi settings, network settings, parental control, firewall security level, and advanced quick links.



Status

Connection status:Disconnected

Physical Connection Type:Disconnected
IPv4 Connection Type
IPv4 Address
IPv6 Connection Type
IPv6 Address

Wi-Fi

Primary Network:ON

Wi-Fi Name(SSID):Fios-7zEK4
Wi-Fi Password:fever9228car8set

Guest Network:ON

Guest Wi-Fi Name(SSID):Fios-7zEK4-Guest
Guest Wi-Fi Password:123456789

Network

Primary Network Connected Devices	**1**
Ethernet	1
Coax	0
Wireless	0
Guest Network Connected Devices	**0**
Wireless	0

Parental Controls (0)

Name	**Description**

See more..

Total Rules:0

Firewall

IPv4 Security Level:Medium
IPv6 Security Level:Medium

Advanced

Advanced Quick Links

Change Password
Dynamic DNS
System Logging
Save & Restore

2.3a/ Menu

The main menu contains the following configuration options and chapters:

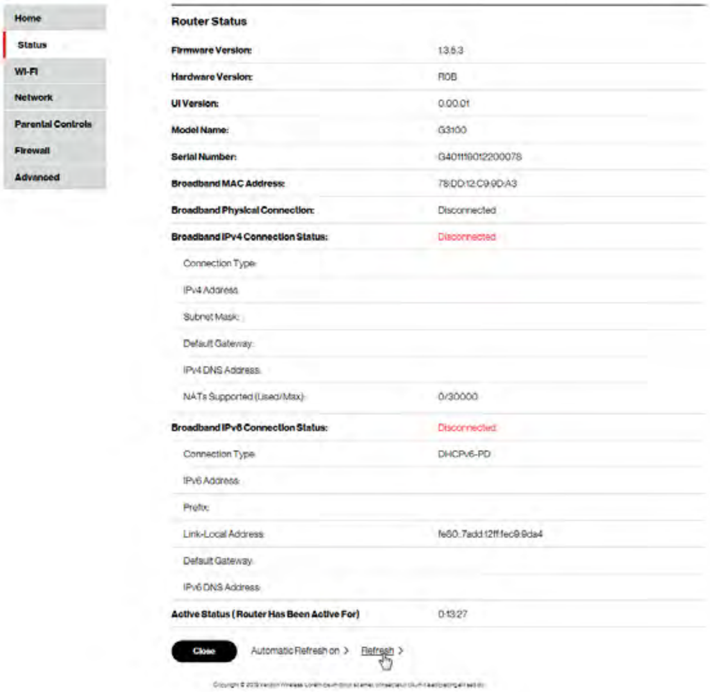
- Status - this chapter
- Wi-Fi - Chapter 3
- Network - Chapter 4 and Chapter 5
- Parental Controls - Chapter 6
- Firewall - Chapter 7
- Advanced - Chapter 8

MAIN SCREEN

2.3b/ STATUS

Router Status

This section displays firmware and hardware version numbers, and the status of your router's local network (LAN) and internet connection (WAN).



Router Status

Firmware Version:	1.3.6.3
Hardware Version:	R0B
UI Version:	0.00.01
Model Name:	G3100
Serial Number:	G401119012200078
Broadband MAC Address:	78:DD:12:C9:9D:A3
Broadband Physical Connection:	Disconnected
Broadband IPv4 Connection Status:	Disconnected
Connection Type:	
IPv4 Address:	
Subnet Mask:	
Default Gateway:	
IPv4 DNS Address:	
NATs Supported (Used/Max):	0/30000
Broadband IPv6 Connection Status:	Disconnected
Connection Type:	DHCPv6-PD
IPv6 Address:	
Prefix:	
Link-Local Address:	fe80::7add:12ff:fec9:9da4
Default Gateway:	
IPv6 DNS Address:	
Active Status (Router Has Been Active For)	0:13:27

Copyright © 2019 Verizon Wireless [illegible]

03/

WIRELESS SETTINGS

Wireless networking enables you to free yourself from wires, making your devices more accessible and easier to use.

You can create a wireless network, including accessing and configuring wireless security options.

OVERVIEW

3.0/ OVERVIEW

Your Fios Home Router provides you with wireless connectivity using the 802.11b, g, n, ac or ax standards. These are the most common wireless standards.

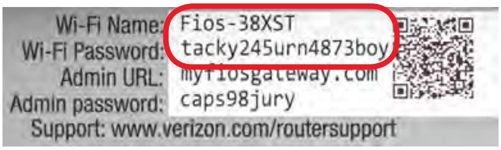
802.11b has a maximum data rate of 11 Mbps, 802.11g has a maximum data rate of 54 Mbps, 802.11n has a maximum data rate of 450 Mbps, 802.11ac has a maximum data rate of 3.12 Gbps, and 802.11ax has a maximum data rate of 4.8 Gbps.

802.11b and g standards operate in the 2.4 GHz range. 802.11ac operates in the 5 GHz range. 802.11n and ax operate in both the 2.4 GHz and 5 GHz ranges.

Note: 802.11 b is a legacy mode and is not recommended. Even one 802.11b device connected to the network will slow your entire wireless network.

The wireless service and wireless security are activated by default. The level of security is preset to WPA2 encryption using a unique default WPA2 key (also referred to as a passphrase or password) pre-configured at the factory. This information is displayed on a sticker located on the rear of your router.

Your router integrates multiple layers of security. These include Wi-Fi Protected Access (WPA/WPA2), and firewall.



Wi-Fi Name: Fios-38XST
Wi-Fi Password: tacky245urn4873boy
Admin URL: myfiosgateway.com
Admin password: caps98jury
Support: www.verizon.com/routersupport

3.1/ WIRELESS STATUS

Use the Wi-Fi status feature to view the status of your router's wireless network.

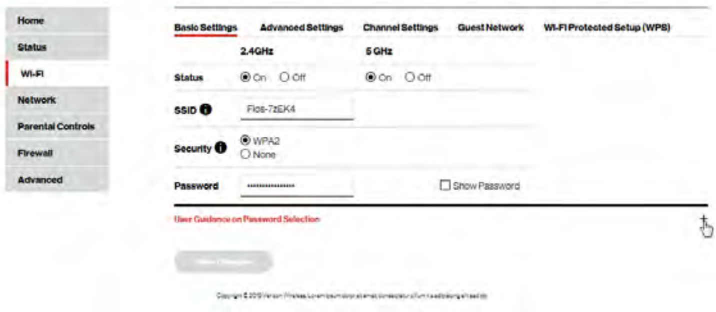
To view the status:

1. Access the dashboard main page. You can quickly view your router's wireless status in the **Wi-Fi** column.
2. In the **Wi-Fi** column for **Primary Network** and **Guest Network**, the following information displays:
   - **ON/OFF** - displays whether the wireless radio is active. When the radio is not enabled, no wireless devices will be able to connect to the home network.
   - **Wi-Fi Name (SSID)** - displays the SSID (Service Set Identifier) shared among all devices on a wireless network. The SSID is the network name. All devices must use the same SSID.
   - **Wi-Fi Password** - displays the Pre-Shared Key of the Wi-Fi security.

BASIC SETTINGS

3.2/ BASIC SETTINGS

You can configure the basic security settings for either 2.4 GHz or 5 GHz of your wireless network.



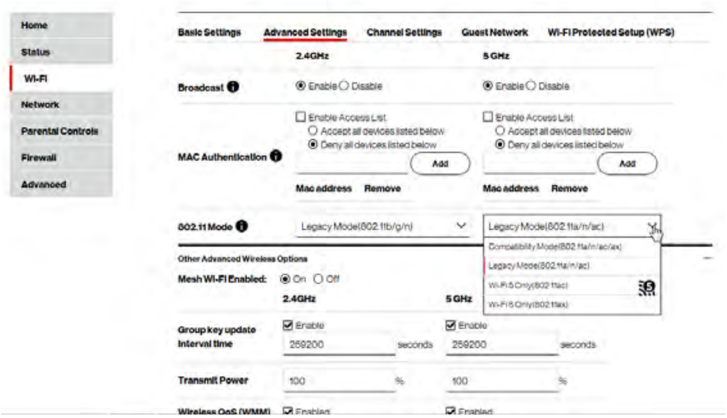
	2.4GHz	5 GHz
Status	● On ○ Off	● On ○ Off
SSID	Fios-7zEK4	
Security	● WPA2 ○ None	
Password	•••••••••••••••••	□ Show Password

To configure the basic security radio, SSID and security settings:

1. Select Wi-Fi from the left pane, and then click **Basic Settings.**
2. To activate the wireless radio, click the **On** radio button.
3. If desired, enter a new name for the wireless network in the SSID field or leave the default name that displays automatically.
4. To activate the wireless security, click the **WPA** radio button.
5. Enter the Pre-Shared Key.
6. Click **Save Changes** to save the changes.

3.3/ ADVANCED SETTINGS

You can change your advanced wireless security settings, such as disable your SSID broadcast to secure your wireless traffic; stop your Fios Home Router from broadcasting your SSID; set wireless MAC authentication to limit access to specific wireless devices; and change the wireless mode to limit or allow access to your wireless network based on the type of technology as well as other advanced wireless options.



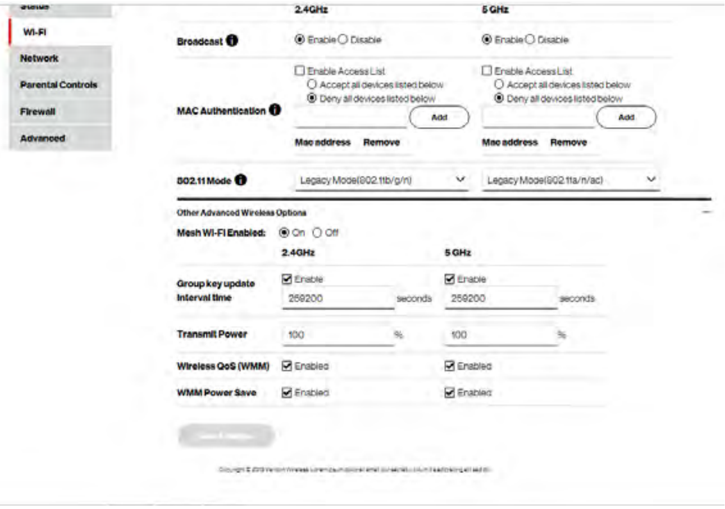
	2.4GHz	5 GHz
Broadcast	● Enable ○ Disable	● Enable ○ Disable
MAC Authentication	□ Enable Access List ○ Accept all devices listed below ● Deny all devices listed below	□ Enable Access List ○ Accept all devices listed below ● Deny all devices listed below
802.11 Mode	Legacy Mode(802.11b/g/n)	Legacy Mode(802.11a/n/ac)

Other Advanced Wireless Options

Mesh Wi-Fi Enabled: ● On ○ Off

	2.4GHz	5 GHz
Group key update Interval time	☑ Enable 259200 seconds	☑ Enable 259200 seconds
Transmit Power	100 %	100 %
Wireless QoS (WMM)	☑ Enabled	☑ Enabled

ADVANCED SETTINGS



	2.4GHz	5 GHz
Broadcast	● Enable ○ Disable	● Enable ○ Disable
MAC Authentication	□ Enable Access List ○ Accept all devices listed below ● Deny all devices listed below Mac address Remove	□ Enable Access List ○ Accept all devices listed below ● Deny all devices listed below Mac address Remove
802.11 Mode	Legacy Mode(802.11b/g/n)	Legacy Mode(802.11a/n/ac)

Other Advanced Wireless Options

Mesh Wi-Fi Enabled: ● On ○ Off

	2.4GHz	5 GHz
Group key update interval time	☑ Enable 259200 seconds	☑ Enable 259200 seconds
Transmit Power	100 %	100 %
Wireless QoS (WMM)	☑ Enabled	☑ Enabled
WMM Power Save	☑ Enabled	☑ Enabled

3.3a/ BROADCAST

You can configure the Fios Home Router's SSID broadcast capabilities to allow or disallow wireless devices from automatically using a broadcast SSID name to detect your router wireless network.

1. Select **Wi-Fi** from the left pane, and then click **Advanced Settings.**
2. To enable SSID broadcasting, click the **Enable** radio button. SSID broadcast is enabled by default. The SSID of the wireless network will be broadcast to all wireless devices.

   To disable SSID broadcasting, click the **Disable** radio button. The public SSID broadcast will be hidden from all wireless devices. You will need to manually configure additional wireless devices to join the wireless network.

3. When all changes are complete, click **Save Changes** to save the changes.

3.3b/ MAC AUTHENTICATION

You can configure your router to limit access to your wireless network allowing access only to those devices with specific MAC addresses.

To set wireless MAC authentication:

1. To enable access control, select the **Enable Access List** check box.
2. Select either:
   - **Accept all devices listed below –** allows only the listed devices to access the wireless network.

   Warning: This will block wireless network access for all devices not in the list. Only devices in the list will be able to connect to the wireless network.

   - **Deny all devices listed below –** denies access to the listed devices. All other wireless devices will be able to access the wireless network if they use the correct wireless password.
3. Enter the MAC address of a device, then click the **Add** button.
4. Repeat step 2 and step 3 to add additional devices, as needed.

5. To remove a specific device's MAC address, click the **Remove** button next to the specific MAC address.
6. When all changes are complete, click **Save Changes** to save the changes.

3.3c/ 802.11 MODE

From the 802.11 Mode page, you can limit the wireless access to your network by selecting the 2.4 GHz and 5 GHz wireless communication standard (mode) best suited or compatible with the devices you allow access to your wireless network.

Select the wireless mode as follows:

- Compatibility – This is the default mode setting, providing a good balance of performance and compatibility with existing wireless devices. 802.11a,b,g,n,ac and ax devices can connect.
- Legacy – For older wireless devices. Only 802.11a,n and ac devices can connect. Both 802.11n and 802.11ac are available on the 5 GHz frequencies. 802.11a (legacy mode) will cause your wireless network to slow and is not recommended.
- Wi-Fi 5 Mode – This provides maximum performance. 802.11ac devices will have exclusive use of the 5 GHz frequencies and 802.11n devices will not be able to connect at 5 GHz.
- Wi-Fi 6 Mode – For newer wireless 802.11ax devices only. No other devices can be used.
- When all changes are complete, click **Save Changes** to save the changes.

3.3d/ OTHER ADVANCED WIRELESS OPTIONS

You can view additional wireless options.

> *Comment: Recommend leaving defaults as is unless otherwise directed.*

View the following options:

> *Caution: These settings should only be configured by experienced network technicians. Changing the settings could adversely affect the operation of your router and your local network.*

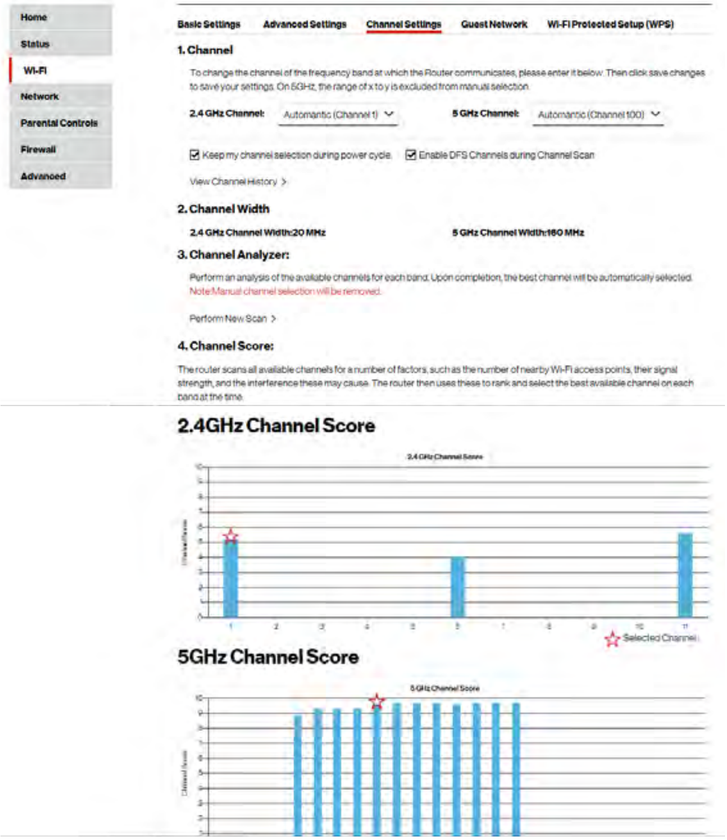
- Mesh Wi-Fi Enabled - allows for smart roaming to provide reliable Wi-Fi network with full signal strength in all areas.
- Group key update interval time – time interval used to update the WPA shared key (used to generate the group key).
- Transmit Power – adjusts the power of the wireless signal.
- Wireless QoS (WMM) - improves the quality of service (QoS) for voice, video, and audio streaming over Wi-Fi by prioritizing these data streams.
- WMM Power Save - improves battery life on mobile Wi-Fi devices such as smart phones and tablets by fine-tuning power consumption.

> *Important: WMM (Wi-Fi Multimedia) QoS and Power Save require a wireless client device which also supports WMM.*

CHANNEL SETTINGS

3.4/ CHANNEL SETTINGS

You can configure the channel settings for either 2.4 GHz or 5 GHz of your wireless network.



1. Channel

To change the channel of the frequency band at which the Router communicates, please enter it below. Then click save changes to save your settings. On 5GHz, the range of x to y is excluded from manual selection.

2.4 GHz Channel: Automantic (Channel 1)   5 GHz Channel: Automantic (Channel 100)

☑ Keep my channel selection during power cycle.   ☑ Enable DFS Channels during Channel Scan

View Channel History >

2. Channel Width

2.4 GHz Channel Width:20 MHz   5 GHz Channel Width:160 MHz

3. Channel Analyzer:

Perform an analysis of the available channels for each band. Upon completion, the best channel will be automatically selected.
Note:Manual channel selection will be removed.

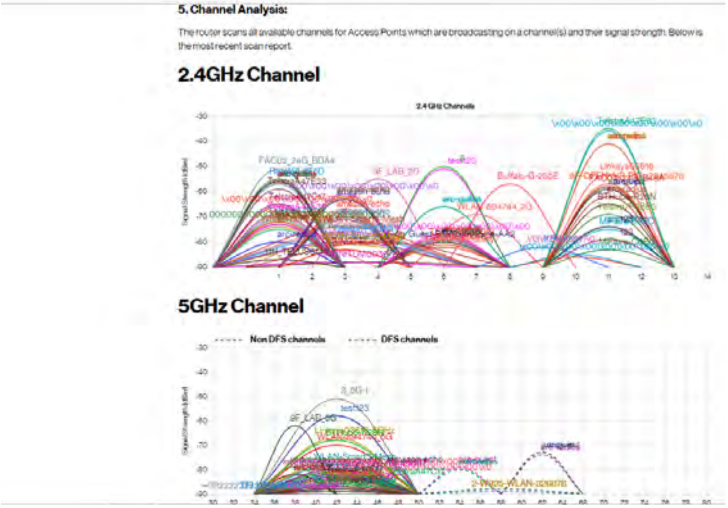
Perform New Scan >

4. Channel Score:

The router scans all available channels for a number of factors, such as the number of nearby Wi-Fi access points, their signal strength, and the interference these may cause. The router then uses these to rank and select the best available channel on each band at the time.

2.4GHz Channel Score

5GHz Channel Score



5. Channel Analysis:

The router scans all available channels for Access Points which are broadcasting on a channel(s) and their signal strength. Below is the most recent scan report.

2.4GHz Channel

5GHz Channel

On the **Channel Settings** page for either 2.4 GHz or 5 GHz, the following information displays:

- **Channel** - this is the radio channel used by the wireless router and its clients to communicate with each other. The channel must be the same on the router and all of its wireless clients.
  - Select the channel you want the wireless radio to use to communicate, or accept the default **Automatic** channel selection. Then the router will automatically assign itself a radio channel.
  - Select the **Keep my channel selection during power cycle** check box to save your channel selection when your Fios Home Router is rebooted.

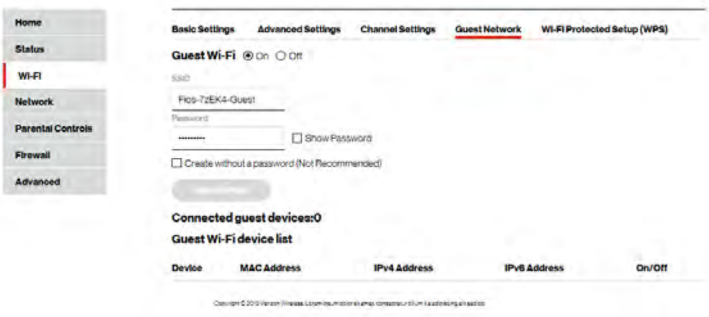
  - Select the **Enable DFS Channels during Channel Scan** (DFS, dynamic frequency selection) check box to perform channel availability check in the 5GHz band.
- **Channel Width** - scans and displays the channel the wireless connection is currently using.
- **Channel Analyzer** - displays the analysis of channel availability.

  Click **Perform New Scan** to perform channel availability scan for the Fios Home Router accommodating the best radio channel and providing the best Wi-Fi performance.
- **Channel Score** - scans and displays a network congestion score of one to ten in each wireless channel. It can be used to determine which channels to use or to avoid. Higher score indicates less congestion in a channel.
- **Channel Analysis** - scans and displays channel bandwidth and signal strength of available APs.

3.5/ GUEST NETWORK

The **Guest Network** is designed to provide internet connectivity to your guests but restricts access to your primary network and shared files. The primary network and the guest network are separated from each other through firewalls. You create one Guest Wi-Fi SSID and one password, and use it for all guests. **Guest Wi-Fi** can be managed using either the Fios Home Router’s web interface, or via the Verizon MyFios app. The guest network SSID does not change when you make a change to your primary network SSID.

The Fios Home Router is shipped from the factory with Guest Wi-Fi turned off. The default SSID for Guest Wi-Fi is preconfigured at the factory to the default wireless network name (SSID) which is displayed on a sticker located at the rear of the router followed by hyphen guest (-Guest). For example – if the router is shipped with a default SSID of “Fios-ABCDE” then the default SSID for Guest Wi-Fi is “Fios-ABCDE-Guest”.



Guest Wi-Fi ● On ○ Off

SSID

Fios-7zEK4-Guest

Password

•••••••••• □ Show Password

□ Create without a password (Not Recommended)

Connected guest devices:0

Guest Wi-Fi device list

Device	MAC Address	IPv4 Address	IPv6 Address	On/Off

3.5a/ GUEST WI-FI

To enable Guest Wi-Fi:

1. From the main menu, select **Wi-Fi**, then select **Guest Network.**
2. Click the **On** radio button and enter a valid **SSID** and **Password.**
3. Press **Save Changes** to save the changes.

Important: It is not recommended to create a guest network without a password.

GUEST NETWORK

3.5b/ GUEST WI-FI DEVICES

The devices on the **Guest Network** can be viewed on the **Guest Wi-Fi device list.** If the admin toggles the button next to a device to **Off**, that device will be blocked from accessing the internet.

> *Refer to "Connecting A Wi-Fi Device Using WPS" on page 31 for the Wi-Fi Protected Setup (WPS) setup.*

04 /

CONFIGURING NETWORK SETTINGS

You can configure the basic network settings for your Fios Home Router's network.

ACCESSING NETWORK SETTINGS

Caution: The settings described in this chapter should only be configured by experienced network technicians. Changes could adversely affect the operation of your router and your local network.

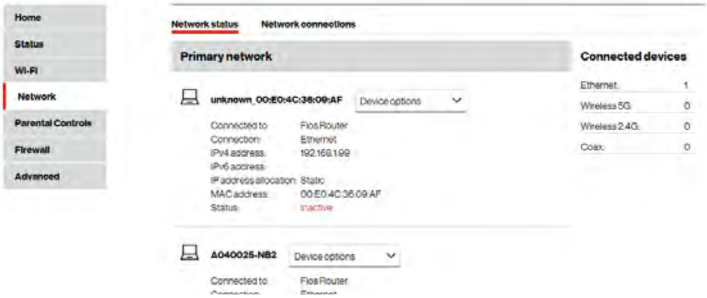
4.0/ ACCESSING NETWORK SETTINGS

The **Network** section allows you to view and manage your network connections and devices. You can block websites and internet services, set port forwarding, view device details, and rename devices.

4.0a/ NETWORK STATUS

To view your network connections:

1. Select **Network** from the left pane, and then click **Network status.**



unknown_00:E0:4C:36:09:AF

Connected to: Fios Router
Connection: Ethernet
IPv4 address: 192.168.1.99
IPv6 address:
IP address allocation: Static
MAC address: 00:E0:4C:36:09:AF
Status: Inactive

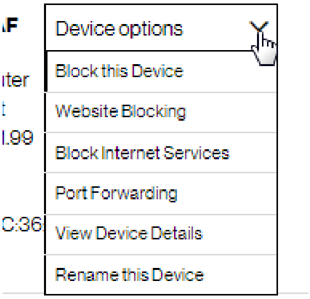
A040025-NB2

Connected to: Fios Router

Connected devices

Ethernet	1
Wireless 5G	0
Wireless 2.4G	0
Coax	0

2. To view and edit the details of a specific network connection, click the hyperlinked name from the **Device options** drop-down menu. The following sections detail the types of network connection settings that you can view and configure.



4.1/ USING NETWORK SETTINGS

You can access and configure common network parameters:

- **Block this Device/Un-Block this Device** - Click this option to quickly enable/disable a device from having internet access.
- **Website Blocking** - To block specific websites, click Website Blocking. The Parental Controls page displays. For additional information about blocking websites, refer to Chapter 8 Setting Parental Controls.
- **Block Internet Services** - Internet services blocking prevents a device on your network from accessing specific services, such as receiving email or downloading files from FTP sites. Block Internet services by locating the device, then clicking Block Internet Services. The Access Control page displays. For additional information on blocking internet services, refer to the Access Control section in Chapter 7 Configuring Security Settings.

- **Port Forwarding** - Port Forwarding allows your network to be exposed to the internet in specific limited and controlled ways. For example, you could allow specific applications, such as gaming, voice, and chat, to access servers in the local network. To access the Port Forwarding page, click Port Forwarding.

  For additional information, refer to the Port Forwarding section in Chapter 7 Configuring Security Settings.
- **View Device Details** - Click View Device Details to display the Device Information page and view the selected device's information, such as IP Address, MAC address, Network Connection, Lease Type, Port Forwarding Services, as well as the **Ping Test** option.
- **Rename this Device** - To change the name of a specific device, click Rename this Device. The Rename Device page displays. If desired, enter the new device name and/or select a different icon. Click **Apply** to save changes. The Network status page will open with the new name and icon displayed.

05/

USING NETWORK CONNECTIONS

Your Fios Home Router supports various local area network (LAN) and wide area network (WAN), or internet connections using Ethernet or coaxial cables.

You can configure aspects of the network and internet connections as well as create new connections.

ACCESSING NETWORK CONNECTIONS

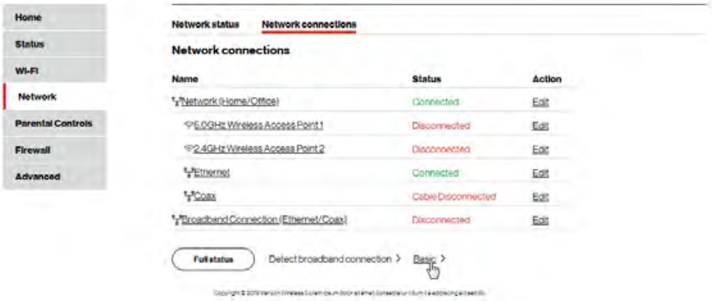
Caution: The settings described in this chapter should only be configured by experienced network technicians. Changes could adversely affect the operation of your router and your local network.

5.0/ ACCESSING NETWORK CONNECTIONS

You can access your network connections and view the connections by connection type.

To access the network connections:

1. Select **Network**, then select **Network Connections**.
2. To display all connection entries, click the **Advanced** button.



Network connections

Name	Status	Action
Network (Home/Office)	Connected	Edit
5.0GHz Wireless Access Point 1	Disconnected	Edit
2.4GHz Wireless Access Point 2	Disconnected	Edit
Ethernet	Connected	Edit
Coax	Cable Disconnected	Edit
Broadband Connection (Ethernet/Coax)	Disconnected	Edit

Copyright © 2019 Verizon Wireless Lorem ipsum dolor sit amet, consectetur [illegible] adipiscing elit sed do.

3. To view and edit the details of a specific network connection, click the hyperlinked name or the action icon. The following sections detail the types of network connections that you can view.

5.1/ NETWORK (HOME/OFFICE) CONNECTION

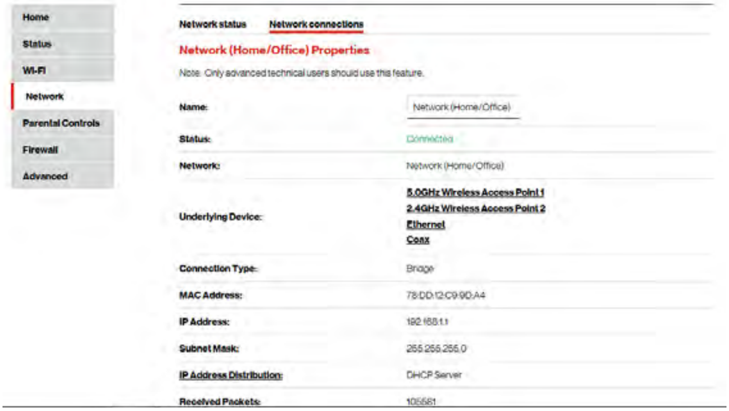
You can view the properties of your local network. This connection is used to combine several network interfaces under one virtual network. For example, you can create a home/office network connection for Ethernet and other network devices.

Note: When a network connection is disabled, the formerly underlying devices connected to it will not be able to obtain a new DHCP address from that Fios Home Router network interface.

To view the connection:

1. On the **Network Connections** page, click the **Network (Home/Office)** connection link. The **Network (Home/ Office) Properties** page displays.

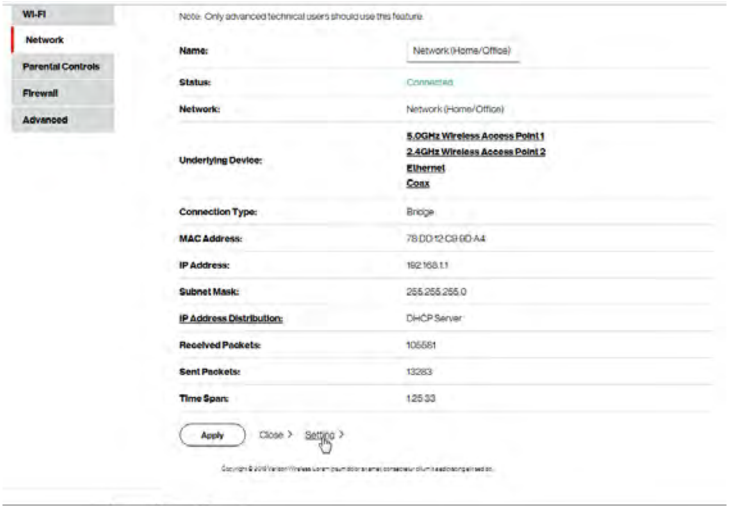
NETWORK (HOME/OFFICE) CONNECTION



Network (Home/Office) Properties

Note: Only advanced technical users should use this feature.

Name:	Network (Home/Office)
Status:	Connected
Network:	Network (Home/Office)
Underlying Device:	5.0GHz Wireless Access Point 1 2.4GHz Wireless Access Point 2 Ethernet Coax
Connection Type:	Bridge
MAC Address:	78:DD:12:C9:9D:A4
IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0
IP Address Distribution:	DHCP Server
Received Packets:	105561



Note: Only advanced technical users should use this feature.

Name:	Network (Home/Office)
Status:	Connected
Network:	Network (Home/Office)
Underlying Device:	5.0GHz Wireless Access Point 1 2.4GHz Wireless Access Point 2 Ethernet Coax
Connection Type:	Bridge
MAC Address:	78:DD:12:C9:9D:A4
IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0
IP Address Distribution:	DHCP Server
Received Packets:	105561
Sent Packets:	13283
Time Span:	1:25:33

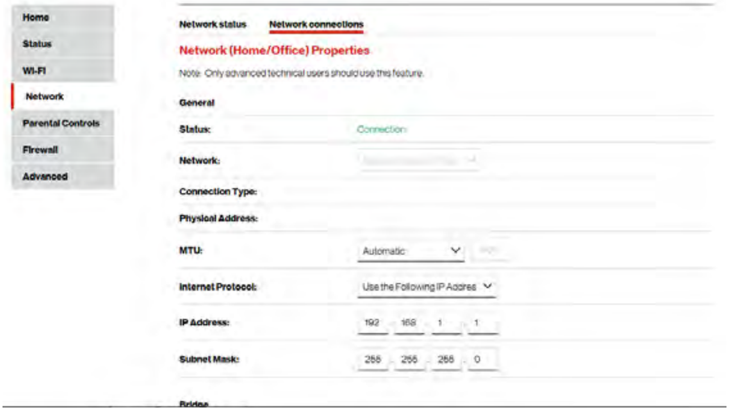
Copyright © 2018 Verizon Wireless Lorem ipsum dolor sit amet, consectetur [illegible]

2. To rename a network connection, enter the new network name in the **Name** field.
3. Click **Apply** to save the changes.

5.1a/ CONFIGURING THE HOME/OFFICE NETWORK

To configure the network connection:

1. In the **Network (Home/Office) Properties** page, click **Settings**. The configuration page displays.

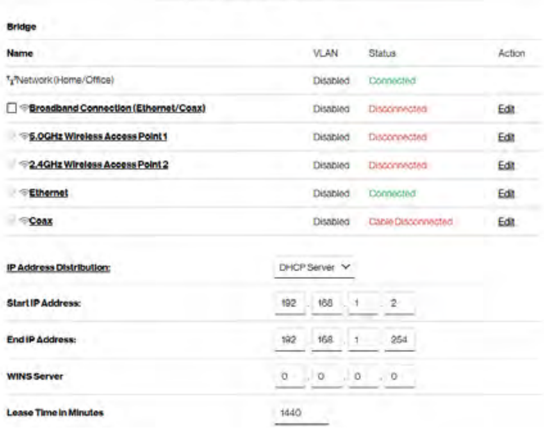


Network (Home/Office) Properties

Note: Only advanced technical users should use this feature.

General

Status:	Connection
Network:	
Connection Type:	
Physical Address:	
MTU:	Automatic
Internet Protocol:	Use the Following IP Addres
IP Address:	192 . 168 . 1 . 1
Subnet Mask:	255 . 255 . 255 . 0

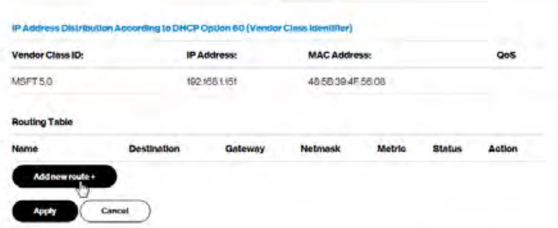


Bridge

Name	VLAN	Status	Action
Network (Home/Office)	Disabled	Connected	
□ Broadband Connection (Ethernet/Coax)	Disabled	Disconnected	Edit
5.0GHz Wireless Access Point 1	Disabled	Disconnected	Edit
2.4GHz Wireless Access Point 2	Disabled	Disconnected	Edit
Ethernet	Disabled	Connected	Edit
Coax	Disabled	Cable Disconnected	Edit

IP Address Distribution:	DHCP Server
Start IP Address:	192 . 168 . 1 . 2
End IP Address:	192 . 168 . 1 . 254
WINS Server	0 . 0 . 0 . 0
Lease Time in Minutes	1440

NETWORK (HOME/OFFICE) CONNECTION



IP Address Distribution According to DHCP Option 60 (Vendor Class Identifier)

Vendor Class ID:	IP Address:	MAC Address:	QoS
MSFT 5.0	192.168.1.151	48:5B:39:4F:56:08	

Routing Table

Name	Destination	Gateway	Netmask	Metric	Status	Action

2. Configure the following sections, as needed.

GENERAL

In the **General** section, verify the following information:

- **Status** - displays the connection status of the network.
- **Network** – displays the type of network connection.
- **Connection Type** - displays the type of connection interface.
- **Physical Address** - displays the physical address of the network card used for the network.
- **MTU** - displays the Maximum Transmission Unit (MTU) indicating the largest packet size permitted for internet transmissions:
  - **Automatic**: sets the MTU (Maximum Transmission Unit) at 1500.
  - **Automatic by DHCP**: sets the MTU according to the DHCP connection.
  - **Manual**: allows you to manually set the MTU.

- **Internet Protocol**

  In the Internet Protocol section, specify one of the following:

  – **No IPv4 Address**: the connection has no IP address. This is useful if the connection operates under a bridge.

  – **Obtain an IPv4 Address Automatically**: the network connection is required by Verizon to obtain an IP address automatically. The server assigning the IP address also assigns a subnet mask address, which can be overridden by entering another subnet mask address.

  – **Use the Following IP Address**: the network connection uses a permanent or static **IP address** and **Subnet Mask** address, provided by Verizon or experienced network technician.

BRIDGE

In the **Bridge** section of the **Network (Home/Office) Properties**, you can configure the various LAN interfaces.

Caution: Do not change these settings unless specifically instructed to by Verizon. Changes could adversely affect the operation of your Fios Home Router and your local network.

Verify the following information:

- **Status –** displays the connection status of a specific network connection.
- **Action –** contains an **Edit** hyperlink that, when clicked, generates the next level configuration page for the specific network connection or network device.

IP ADDRESS DISTRIBUTION

The **IP Address Distribution** section is used to configure the Dynamic Host Configuration Protocol (DHCP) server parameters of your Fios Home Router.

Once enabled and configured, the DHCP server automatically assigns IP addresses to any network devices which are set to obtain their IP address dynamically.

If DHCP Server is enabled on your Fios Home Router, configure the network devices as DHCP Clients. There are 2 basic options in this section: **Disabled** and **DHCP Server.**

To set up the Fios Home Router's network bridge to function as a DHCP server:

1. In the **IP Address Distribution** section, select the **DHCP server.** Once enabled, the DHCP server provides automatic IP assignments (also referred to as IP leases) based on the preset IP range defined below.

- **Start IP Address –** Enter the first IP address in the IP range that the Fios Home Router will automatically begin assigning IP addresses from. Since your Fios Home Router's IP address is 192.168.1.1, the default Start IP Address is 192.168.1.2.
- **End IP Address –** Enter the last IP address in the IP range that the Fios Home Router will automatically stop the IP address allocation at. The maximum end IP address range that can be entered is 192.168.1.254.

2. If Windows Internet Naming Service (WINS) is being used, enter the **WINS Server** address.
3. In the **Lease Time in Minutes** field, enter the amount of time a network device is allowed to connect to the Fios Home Router with its currently issued dynamic IP address.
4. Click **Apply** to save changes.

IP ADDRESS DISTRIBUTION ACCORDING TO DHCP OPTION 60 (VENDOR CLASS IDENTIFIER)

DHCP vendor class is related to DHCP option 60 configuration within the router. Adding option 60 configurations allows for particular vendor to get lease from a specified pool of address.

NETWORK (HOME/OFFICE) CONNECTION

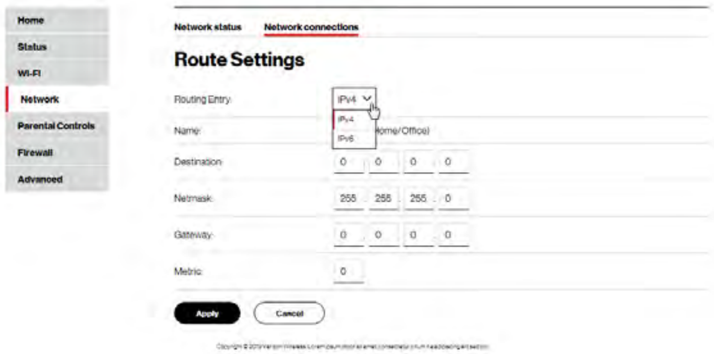
ROUTING TABLE

You can configure your Fios Home Router to use static or dynamic routing.

- **Static routing** – specifies a fixed routing path to neighboring destinations based on predetermined metrics.
- **Dynamic routing** – automatically adjusts how packets travel on the network. The path determination is based on network/device reachability and status of network being traveled.

To configure routing:

1. In the **Routing Table** section, click **Add new route** button to display and modify the new route configuration page.



Route Settings

Routing Entry: IPv4

Name: ome/Office)

Destination: 0 . 0 . 0 . 0

Netmask: 255 . 255 . 255 . 0

Gateway: 0 . 0 . 0 . 0

Metric: 0

2. To save your changes click **Apply.**

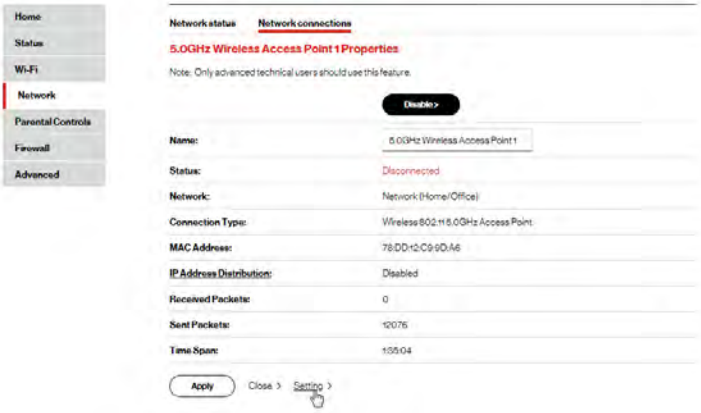
5.2/ WIRELESS ACCESS POINT CONNECTION

A Wireless Access Point network connection allows wireless devices to connect to the local area network (LAN) using the 2.4 GHz or 5 GHz Wi-Fi network.

Note: Once disabled, all wireless devices connected to that wireless network will be disconnected from the LAN network and internet.

To view the connection settings:

1. In the **Network Connections** page, click the **Network(Home/ Office)** connection link.
2. To access the **5.0GHz Wireless Access Point 1 Properties** or **2.4GHz Wireless Access Point 2 Properties** page, click the **5.0GHz Wireless Access Point 1** or **2.4GHz Wireless Access Point 2** link listed under the **Underlying Device** section.



5.0GHz Wireless Access Point 1 Properties

Note: Only advanced technical users should use this feature.

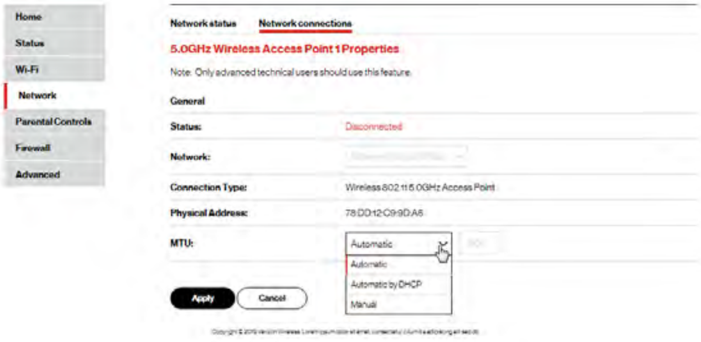
Name:	5.0GHz Wireless Access Point 1
Status:	Disconnected
Network:	Network (Home/Office)
Connection Type:	Wireless 802.11 5.0GHz Access Point
MAC Address:	78:DD:12:C9:9D:A6
IP Address Distribution:	Disabled
Received Packets:	0
Sent Packets:	12076
Time Span:	1:35:04

3. To disable the connection, click the **Disable** button.
4. To rename the connection, enter a name in the **Name** field.
5. Click **Apply** to save the changes.
6. Reboot your Fios Home Router.

5.2a/ CONFIGURING WIRELESS ACCESS POINT PROPERTIES

To configure the connection:

1. In the **5.0GHz Wireless Access Point 1 Properties** or **2.4GHz Wireless Access Point 2 Properties** page, click **Setting.** The configuration page displays.



5.0GHz Wireless Access Point 1 Properties

Note: Only advanced technical users should use this feature.

General

Status: Disconnected

Network:

Connection Type: Wireless 802.11 5.0GHz Access Point

Physical Address: 78:DD:12:C9:9D:A6

MTU: Automatic

- Automatic
- Automatic by DHCP
- Manual

2. Verify the following information:
   - **Status** - displays the connection status of the network.
   - **Network** – displays the type of network connection.
   - **Connection Type** - displays the type of connection interface.

- **Physical Address** - displays the physical address of the network card used for the network.
- **MTU** - specifies the largest packet size permitted for internet transmissions:
  - **Automatic**: set the MTU (Maximum Transmission Unit) at 1500.
  - **Automatic by DHCP**: sets the MTU according to the DHCP connection.
  - **Manual**: allows you to manually set the MTU.

3. Click **Apply** to save changes.

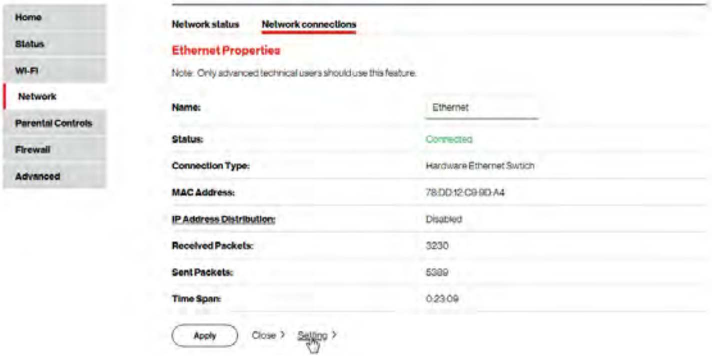
ETHERNET CONNECTION

5.3/ ETHERNET CONNECTION

You can view the properties of your Ethernet LAN connection using an Ethernet cable inserted into one of your Fios Home Router’s Ethernet LAN ports.

To view the connection settings:

1. In the **Network Connections** page, click the **Network(Home/ Office)** connection link.
2. Next, to access the **Ethernet Properties** page, click the **Ethernet** link listed under the **Underlying Device** section.



Ethernet Properties

Note: Only advanced technical users should use this feature.

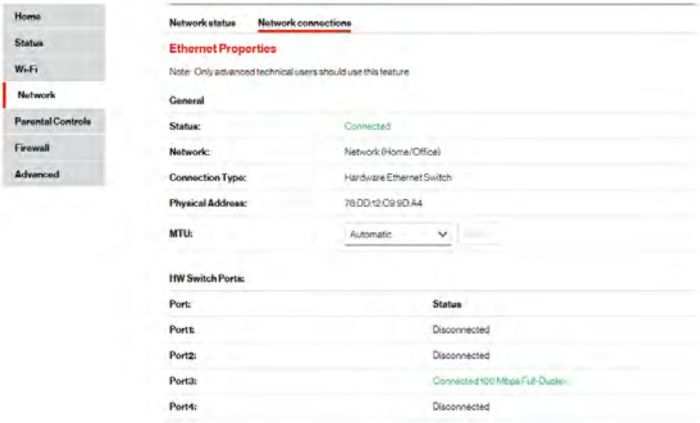
Name:	Ethernet
Status:	Connected
Connection Type:	Hardware Ethernet Switch
MAC Address:	78:DD:12:C9:9D:A4
IP Address Distribution:	Disabled
Received Packets:	3230
Sent Packets:	5389
Time Span:	0:23:09

3. To rename the network connection, enter the new name in the **Name** field.
4. Click **Apply** to save changes.

5.3a/ CONFIGURING ETHERNET PROPERTIES

To configure the connection:

1. 1. In the **Ethernet Properties** page, click **Settings.** The configuration page displays.



Ethernet Properties

Note: Only advanced technical users should use this feature

General

Status:	Connected
Network:	Network (Home/Office)
Connection Type:	Hardware Ethernet Switch
Physical Address:	78:DD:12:C9:9D:A4
MTU:	Automatic

HW Switch Ports:

Port:	Status
Port1:	Disconnected
Port2:	Disconnected
Port3:	Connected 100 Mbps Full-Duplex
Port4:	Disconnected

2. Configure the following settings, as needed.

GENERAL

Verify the following information:

- **Status** - displays the connection status of the network.
- **Network** – displays the type of network connection.
- **Connection Type** - displays as **Hardware Ethernet Switch.**

- **Physical Address** - displays the physical address of the network card used for the network.
- MTU - specifies the largest packet size permitted for
  - **Automatic**: sets the MTU (Maximum Transmission Unit at 1500).
  - **Automatic by DHCP**: sets the MTU according to the DHCP connection.
  - **Manual**: allows you to manually set the MTU.
- **HW Switch Ports** - displays the status of each LAN port.

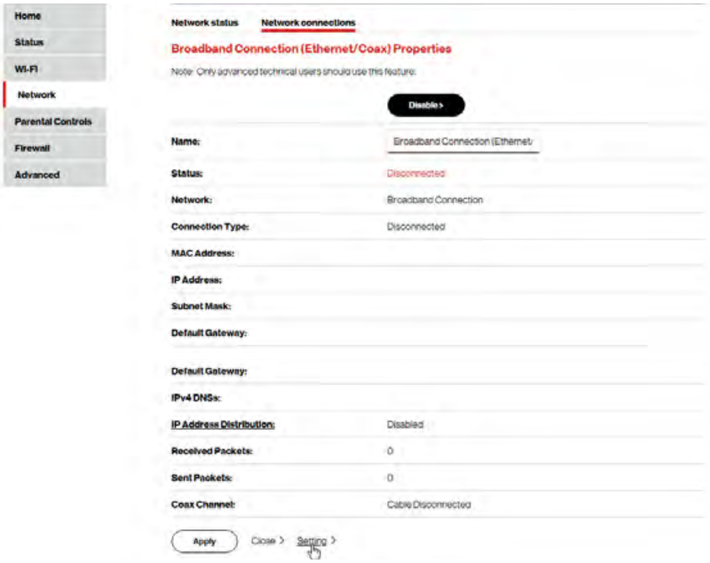
3. Click **Apply** to save the changes.

5.4/ BROADBAND CONNECTION (ETHERNET/COAX)

You can view the properties of your broadband connection (your connection to the internet). This connection may be via either Ethernet or Coaxial cable.

To view the connection settings:

1. In the **Network Connections** page, click the **Broadband Connection (Ethernet/Coax)** or **Coax** link.

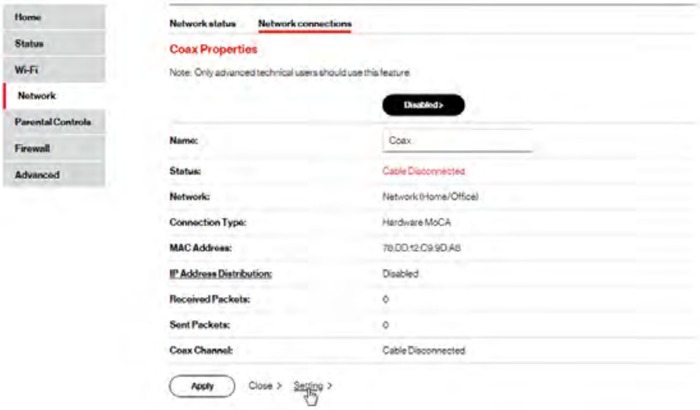


Broadband Connection (Ethernet/Coax) Properties

Note: Only advanced technical users should use this feature.

Name:	Broadband Connection (Ethernet/
Status:	Disconnected
Network:	Broadband Connection
Connection Type:	Disconnected
MAC Address:	
IP Address:	
Subnet Mask:	
Default Gateway:	
Default Gateway:	
IPv4 DNSs:	
IP Address Distribution:	Disabled
Received Packets:	0
Sent Packets:	0
Coax Channel:	Cable Disconnected

Coax Properties



Coax Properties

Note: Only advanced technical users should use this feature.

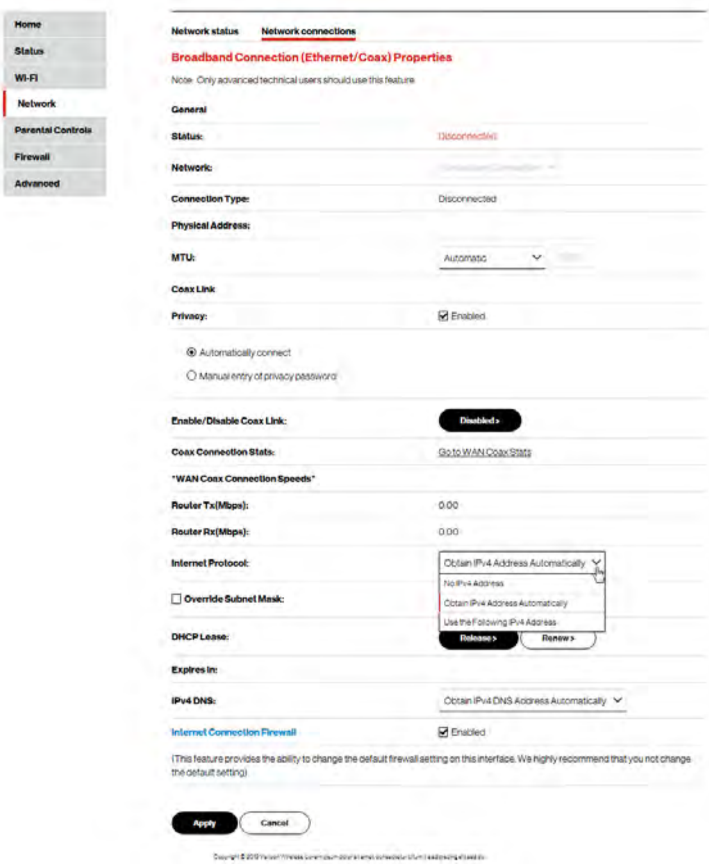
Name:	Coax
Status:	Cable Disconnected
Network:	Network (Home/Office)
Connection Type:	Hardware MoCA
MAC Address:	78:DD:12:C9:9D:A8
IP Address Distribution:	Disabled
Received Packets:	0
Sent Packets:	0
Coax Channel:	Cable Disconnected

2. To rename the network connection, enter the new name in the **Name** field.
3. Click **Apply** to save changes.

5.4a/ CONFIGURING THE ETHERNET/COAX CONNECTION

To configure the connection:

1. In the **Broadband Connection (Ethernet/Coax) Properties** page, click **Settings.** The configuration page displays.



Broadband Connection (Ethernet/Coax) Properties

Note: Only advanced technical users should use this feature

General

Status:	Disconnected
Network:	
Connection Type:	Disconnected
Physical Address:	
MTU:	Automatic

Coax Link

Privacy:	☑ Enabled

● Automatically connect

○ Manual entry of privacy password

Enable/Disable Coax Link:	Disabled >
Coax Connection Stats:	Go to WAN Coax Stats

"WAN Coax Connection Speeds"

Router Tx(Mbps):	0.00
Router Rx(Mbps):	0.00
Internet Protocol:	Obtain IPv4 Address Automatically
□ **Override Subnet Mask:**	
DHCP Lease:	Release > Renew >
Expires In:	
IPv4 DNS:	Obtain IPv4 DNS Address Automatically
Internet Connection Firewall	☑ Enabled

No IPv4 Address
Obtain IPv4 Address Automatically
Use the Following IPv4 Address

(This feature provides the ability to change the default firewall setting on this interface. We highly recommend that you not change the default setting)

2. Configure the following settings, as needed.

GENERAL

Verify the following information:

- **Status** - displays the connection status of the network.
- **Network** – displays the type of network connection.
- **Connection Type** - displays the type of connection interface.
- **Physical Address** - displays the physical address of the network card used for the network.
- **MTU** - specifies the largest packet size permitted for internet transmissions:
  - **Automatic**: sets the MTU (Maximum Transmission Unit at 1500).
  - **Automatic by DHCP**: sets the MTU according to the DHCP connection.
  - **Manual**: allows you to manually set the MTU.

COAX LINK

- **Privacy -** to set **Privacy**, select the **Enabled** check box. This causes all devices connected to the coaxial cable to use the same password. This is recommended. To set the password, enter the Coax Link password in the **Password** field.
- To enable or disable the Coax link, click **Disable** or **Enable**.

- To view the devices connected using the coaxial cable, click the **Go to WAN Coax Status** link.
- In the **Internet Protocol** section, specify one of the following:
  - **No IPv4 Address**: the connection has no IP address. This is useful if the connection operates under a bridge.
  - **Obtain an IPv4 Address Automatically**: the network connection is required by Verizon to obtain an IP address automatically. The server assigning the IP address also assigns a subnet mask address, which can be overridden by entering another subnet mask address.
  - **Use the Following IP Address**: the network connection uses a permanent or static **IP address** and **Subnet Mask** address, provided by Verizon or experienced network technician.
- To override the subnet mask, select the **Override Subnet Mask** check box, then enter the new subnet mask.
- Click **Release/Renew** in the **DHCP Lease** field to drop/get an IP address from the DHCP server.
- In the **Expire Time** field, enter the amount of time a network device is allowed to connect to the Fios Home Router with its currently issued dynamic IP address.

- IPv4 DNS: selects **Obtain IPv4 DNS Address Dynamically** for using Dynamic DNS. Each time the public IP address changes, the DNS database is automatically updated with the new IPv4 address. In this way, even though the IP address changes often, the domain name remains constant and accessible.

3. Click **Apply** to save changes.

06/

SETTING PARENTAL CONTROLS

The abundance of harmful information on the internet poses a serious challenge for employers and parents alike as they ask “How can I regulate what my employee or child does on the internet?”

With that question in mind, your Fios Home Router’s Parental Controls were designed to allow control of internet access on all locally networked devices.

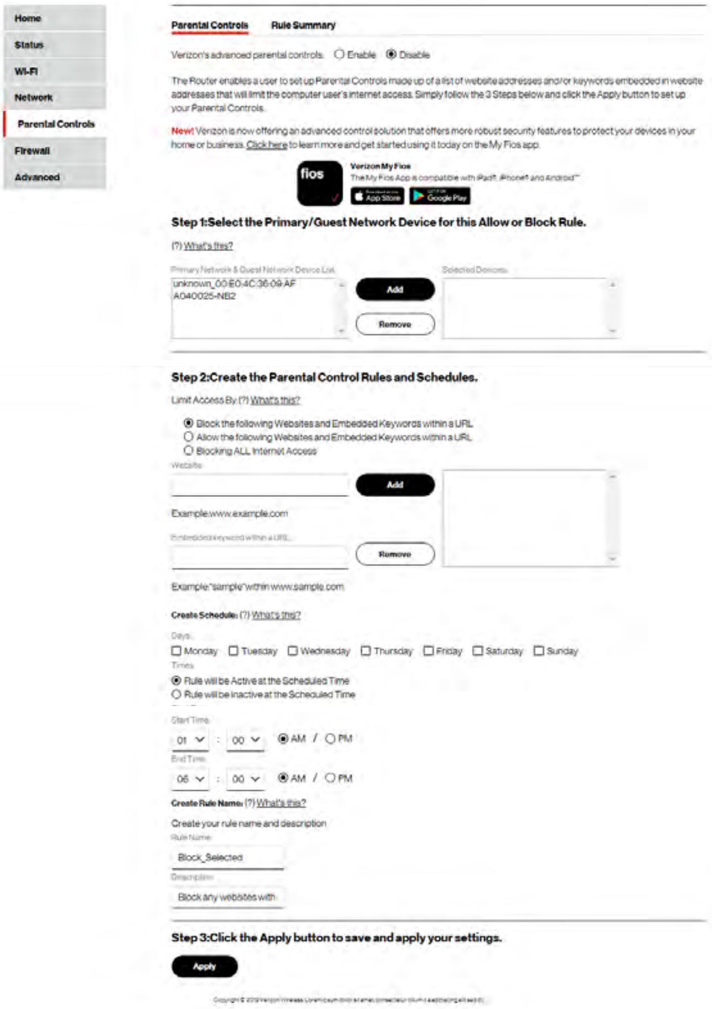
6.0/ ACTIVATING PARENTAL CONTROLS

You can create a basic access policy for any computer or device on your Fios Home Router network. Parental controls limit internet access to specific websites based on a schedule that you create.

Access can be limited on specific websites or keywords embedded in a website. For example, you can block access to the 'www.anysite.com' as well as block any website that has the word 'any' in its site name.

To limit computer access:

1. Select **Parental Controls.**
2. In Step 1 (optional), select the computers or device where you are limiting access in the **Primary Network & Guest Network Device List** box, then click **Add.** The devices display in the **Selected Devices** section.
3. To remove a device from the **Selected Devices** list box, select the device, then click **Remove.** The device displays in the **Primary Network & Guest Network Device List** list box.
4. In Step 2, click one of the following options in the **Limit Access By** section:
    - **Block the following Websites and Embedded Keywords within a URL** – blocks the specified websites and websites with names containing the specified keyword.
    - **Allow the following Websites and Embedded Keywords within a URL** – allows the specified websites and websites with names containing the specified keyword.
5. Enter the name of the **Website** or **Embedded keyword within a URL**, then click **Add.**



Parental Controls | **Rule Summary**

Verizon's advanced parental controls. ○ Enable ● Disable

The Router enables a user to set up Parental Controls made up of a list of website addresses and/or keywords embedded in website addresses that will limit the computer user's internet access. Simply follow the 3 Steps below and click the Apply button to set up your Parental Controls.

New! Verizon is now offering an advanced control solution that offers more robust security features to protect your devices in your home or business. Click here to learn more and get started using it today on the My Fios app.

Verizon My Fios
The My Fios App is compatible with iPad®, iPhone® and Android™

Step 1:Select the Primary/Guest Network Device for this Allow or Block Rule.

(?) What's this?

Primary Network & Guest Network Device List
unknown_00:E0:4C:36:09:AF
A040025-NB2

Selected Devices:

Step 2:Create the Parental Control Rules and Schedules.

Limit Access By: (?) What's this?

● Block the following Websites and Embedded Keywords within a URL
○ Allow the following Websites and Embedded Keywords within a URL
○ Blocking ALL Internet Access

Website

Example:www.example.com

Embedded keyword within a URL

Example:"sample" within www.sample.com

Create Schedule: (?) What's this?

Days:
□ Monday □ Tuesday □ Wednesday □ Thursday □ Friday □ Saturday □ Sunday

Times:
● Rule will be Active at the Scheduled Time
○ Rule will be Inactive at the Scheduled Time

Start Time:
01 : 00 ● AM / ○ PM

End Time:
06 : 00 ● AM / ○ PM

Create Rule Name: (?) What's this?

Create your rule name and description

Rule Name: Block_Selected

Description: Block any websites with

Step 3:Click the Apply button to save and apply your settings.

Copyright © 2019 Verizon Wireless [illegible]

6. To remove a website or keyword, select the word, then click **Remove.**

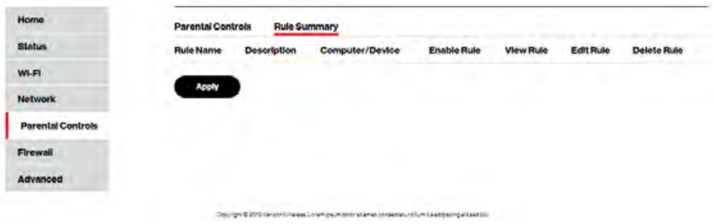
7. Create a schedule by selecting the days of the week when the rule will be active or inactive.
8. Set the time when the rule will be active or inactive, then specify the start time and end time.
9. Create a rule name and description.
10. Click **Apply** to save changes.

*NEW! The **Verizon My Fios** app provides robust security to protect your home and business networks. Click the **Click here** link to download the My Fios app for using the My Fios app on the iOS or Android OS.*

6.1/ RULE SUMMARY

You can view the rules created for your Fios Home Router.

To view the rule summary, select **Rule Summary**. The Rule Summary page opens with the rule name, description, and computer or device displayed.



You can enable, view, edit, or delete the rule; refer to Scheduler Rules for additional setting details.

07/

CONFIGURING SECURITY SETTINGS

Your Fios Home Router's security suite includes comprehensive and robust security services, such as stateful packet inspection, firewall security, user authentication protocols, and password protection mechanisms.

These and other features help protect your computers from security threats on the internet.

FIREWALL

This chapter covers the following security features:

- Firewall - select the security level for the firewall.
- Access Control - restrict access from the local network to the internet.
- Port Forwarding - enable access from the internet to specified services provided by computers on the local network.
- Port Triggering - define port triggering entries to dynamically open the firewall for some protocols or ports.
- DMZ Host - allows a single device on your primary network to be fully exposed to the internet for special purposes such as internet gaming.
- Static NAT - allow multiple static NAT IP addresses to be designated to devices on the network.
- IPv6 Pinhole - provide access tunnel to a service on a host for a particular application.
- Security Log - view and configure the security log.

7.0/ FIREWALL

The firewall is the cornerstone of the security suite for your Fios Home Router. It has been exclusively tailored to the needs of the residential or office user and is pre-configured to provide optimum security.

The firewall provides both the security and flexibility that home and office users seek. It provides a managed, professional level of network security while enabling the safe use of interactive applications, such as internet gaming and video conferencing.

Additional features, including surfing restrictions and access control, can also be configured locally through the user interface or remotely by a service provider.

The firewall regulates the flow of data between the local network and the internet. Both incoming and outgoing data are inspected, then either accepted and allowed to pass through your Fios Home Router or rejected and barred from passing through your Fios Home Router, according to a flexible and configurable set of rules. These rules are designed to prevent unwanted intrusions from the outside, while allowing local network users access to internet services.

The firewall rules specify the type of services on the internet that are accessible from the local network and types of services in the local network that are accessible from the internet.

Each request for a service that the firewall receives is checked against the firewall rules to determine whether the request should be allowed to pass through the firewall. If the request is permitted to pass, all subsequent data associated with this request or session is also allowed to pass, regardless of its direction.

For example, when accessing a website on the internet, a request is sent to the internet for this site. When the request reaches your Fios Home Router, the firewall identifies the request type and origin, such as HTTP and a specific computer in the local network. Unless your Fios Home Router is configured to block requests of this type from this computer, the firewall allows this type of request to pass to the internet.

FIREWALL

When the website is returned from the web server, the firewall associates the website with this session and allows it to pass; regardless HTTP access from the internet to the local network is blocked or permitted. It is the origin of the request, not subsequent responses to this request, which determines whether a session can be established.

7.0a/ SETTING FIREWALL CONFIGURATION

You can select a maximum, typical, or minimum security level to block, limit, or permit all traffic. The following table shows request access for each security level.

Security Level	Internet Requests Incoming Traffic	Local Network Requests Outgoing Traffic
Maximum	Blocked	Limited
Typical	Blocked	Unrestricted
Minimum	Unrestricted	Unrestricted

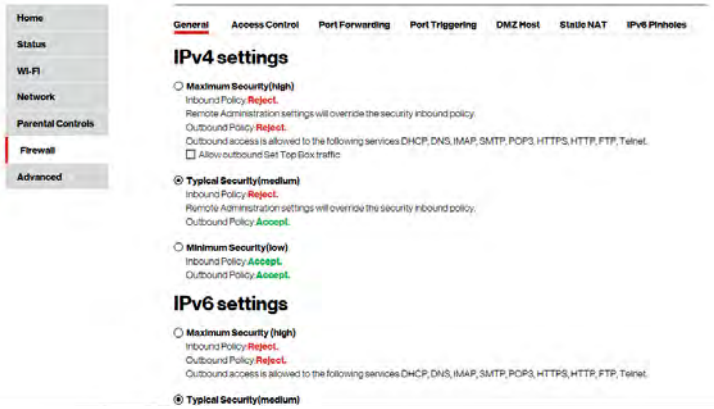
The request access is defined as:

- Blocked traffic - no access allowed, except as configured in Port Forwarding and Remote Access
- Limited - permits only commonly used services, such as email and web browsing
- Unrestricted - permits full access of incoming traffic from the internet and allows all outgoing traffic, except as configured in Access Control

7.0b/ SPECIFYING GENERAL SETTINGS FOR IPV4 OR IPV6

To set your firewall configuration:

1. From the Firewall **General** settings page, click on desired **IPv4 settings/IPv6 settings** option to configure IPv4/IPv6 security.



IPv4 settings

○ Maximum Security(high)
Inbound Policy: Reject.
Remote Administration settings will override the security inbound policy.
Outbound Policy: Reject.
Outbound access is allowed to the following services DHCP, DNS, IMAP, SMTP, POP3, HTTPS, HTTP, FTP, Telnet.
□ Allow outbound Set Top Box traffic

● Typical Security(medium)
Inbound Policy: Reject.
Remote Administration settings will override the security inbound policy.
Outbound Policy: Accept.

○ Minimum Security(low)
Inbound Policy: Accept.
Outbound Policy: Accept.

IPv6 settings

○ Maximum Security (high)
Inbound Policy: Reject.
Outbound Policy: Reject.
Outbound access is allowed to the following services DHCP, DNS, IMAP, SMTP, POP3, HTTPS, HTTP, FTP, Telnet.

● Typical Security(medium)

2. Select a security level by clicking one of the radio buttons. Using the **Minimum Security** setting may expose the local network to significant security risks, and should only be used for short periods of time to allow temporary network access.
3. Click **Apply** to save changes.

ACCESS CONTROL

7.1/ ACCESS CONTROL

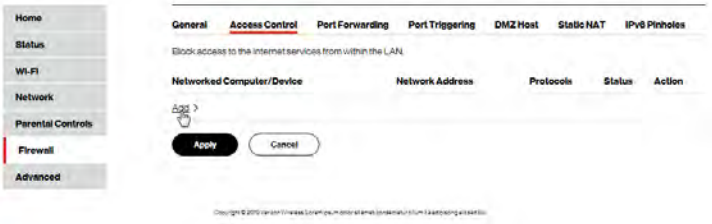
You can block individual computers on your local network from accessing specific services on the internet. For example, you could block one computer from accessing the internet, then block a second computer from transferring files using FTP as well as prohibit the computer from receiving incoming email.

Access control incorporates a list of preset services, such as applications and common port settings.

7.1a/ ALLOW OR RESTRICT SERVICES

To allow or restrict services:

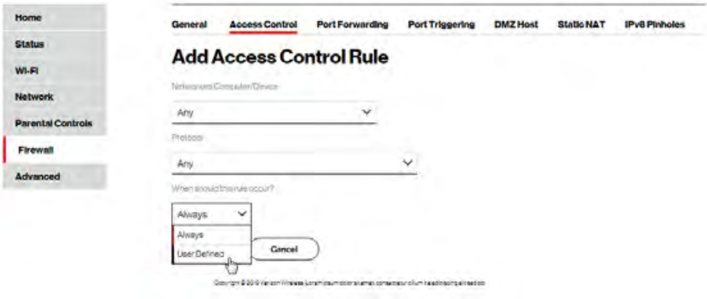
1. From the Firewall page, select **Access Control**. The Access Control page opens with the Allows and Blocked sections displayed. The Allowed section only displays when the firewall is set to maximum security.



Block access to the internet services from within the LAN.

Networked Computer/Device	Network Address	Protocols	Status	Action

2. To block a service, click **Add**. The **Add Access Control Rule** page displays.



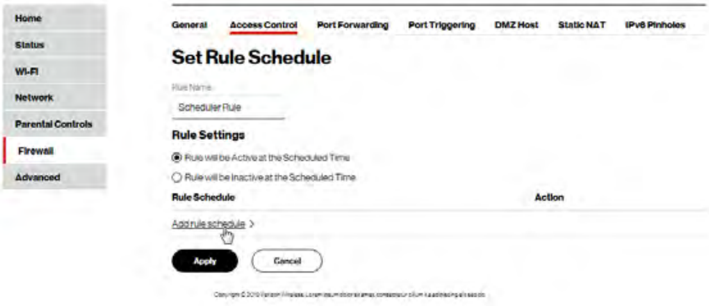
Add Access Control Rule

Networked Computer/Device: Any

Protocol: Any

When should this rule occur? Always

3. To apply the rule to:
   - Networked Computer/Device - select **Any.**
   - Specific devices only - select **User Defined.**
4. In the Protocol field, select the internet protocol to be allowed or blocked. If the service is not included in the list, select **User Defined.** The **Edit Service** page displays. Define the service, then click **OK.** The service is automatically added to the **Add Access Control Rule** section.
5. Specify when the rule is active as **Always** or **User Defined.**



Set Rule Schedule

Rule Name: Scheduler Rule

Rule Settings

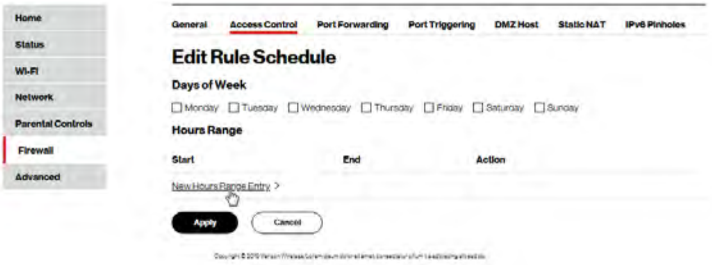
● Rule will be Active at the Scheduled Time

○ Rule will be Inactive at the Scheduled Time

Rule Schedule	Action

ACCESS CONTROL

6. Then click **Add rule schedule** to specify the days of the week when the rule will be active.



Edit Rule Schedule

Days of Week

□ Monday □ Tuesday □ Wednesday □ Thursday □ Friday □ Saturday □ Sunday

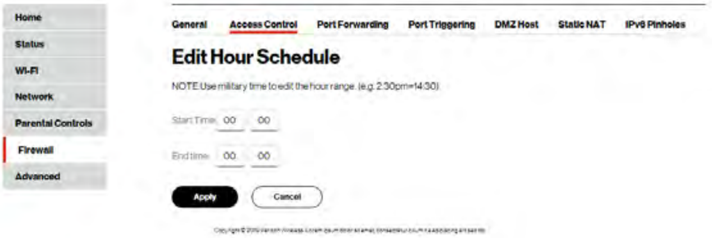
Hours Range

Start	End	Action

New Hours Range Entry >

Copyright © [illegible]

7. Click **New Hours Range Entry** and set the start time and end time when the rule will be active.



Edit Hour Schedule

NOTE:Use military time to edit the hour range. (e.g. 2:30pm=14:30)

Start Time: 00 : 00

End time: 00 : 00

Copyright © [illegible]

8. Click **Apply** to save changes.
9. Click **Apply** again to save all changes.
10. The Access Control page displays a summary of the new access control rule.

7.1b/ DISABLE ACCESS CONTROL

You can disable an access control and enable access to the service without removing the service from the Access Control table. This can make the service available temporarily and allow you to easily reinstate the restriction later.

- To disable an access control, clear the check box next to the service name.
- To reinstate the restriction, select the check box next to the service name.
- To remove an access restriction, select the service and click **Remove**. The service is removed from the Access Control table.

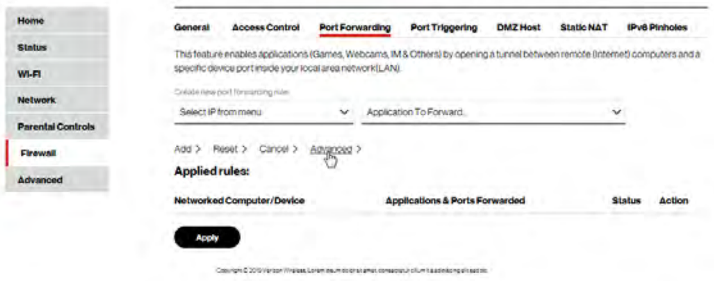
7.2/ PORT FORWARDING

You can activate port forwarding to expose the network to the internet in a limited and controlled manner. For example, enabling applications, such as gaming and voice, to work from the local network as well as allowing internet access to servers within the local network.

To create port forwarding rules:

1. From the **Firewall** page, select **Port Forwarding**. The **Port Forwarding** page opens with the current rules displayed.

PORT FORWARDING



This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (Internet) computers and a specific device port inside your local area network(LAN).

Create new port forwarding rule

Select IP from menu

Application To Forward

Applied rules:

Networked Computer/Device	Applications & Ports Forwarded	Status	Action

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur cillum adipisicing elit sed do

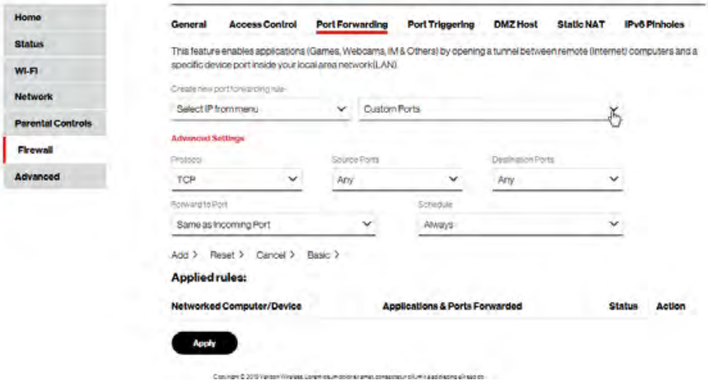
2. To create a new rule, select the IP address in the **Select IP from menu** drop down.
3. Select the application in the **Application To Forward** drop down.
4. Click **Add**. The rule displays in the **Applied Rules** section.
5. Click **Apply** to save changes.

7.2a/ ADVANCED PORT FORWARDING RULES

You can configure advanced port forwarding rules.

To configure the rules:

1. In the **Port Forwarding** page, select **Advanced**.



This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (Internet) computers and a specific device port inside your local area network(LAN)

Create new port forwarding rule-

Select IP from menu

Custom Ports

Advanced Settings

Protocol: TCP

Source Ports: Any

Destination Ports: Any

Forward to Port: Same as Incoming Port

Schedule: Always

Applied rules:

Networked Computer/Device	Applications & Ports Forwarded	Status	Action

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur [illegible]

2. If needed, to select a port to forward communication to, select an option in the **Custom Ports** drop down.
3. If a single port or range of ports is selected, text boxes display. Select the **Protocol** and the port numbers.
4. To schedule the rule, select either **Always** or **User Defined** in the **Schedule** list box.
5. Click **Add**. The rule displays in the **Applied Rules** section.
6. Click **Apply** to save changes.

7.3/ PORT TRIGGERING

Port triggering can be described as dynamic port forwarding. By setting port triggering rules, inbound traffic arrives at a specific network host using ports that are different than those used for outbound traffic. The outbound traffic triggers the ports where the inbound traffic is directed.

For example, a gaming server is accessed using UDP protocol on port 2222. The gaming server then responds by connecting the user using UDP on port 3333, when a gaming session is initiated.

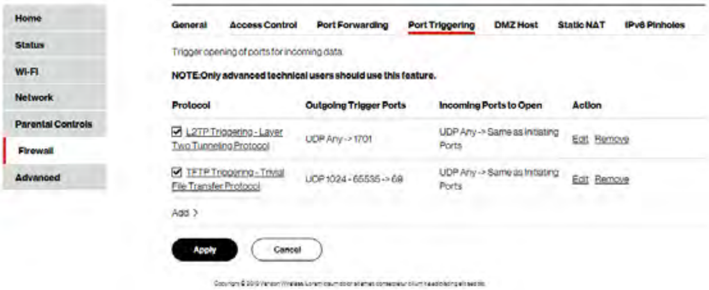
In this case, port triggering must be used since it conflicts with the following default firewall settings:

- Firewall blocks inbound traffic by default.
- Server replies to your Fios Home Router IP, and the connection is not sent back to the host since it is not part of a session.

To resolve the conflict, a port triggering entry must be defined, which allows inbound traffic on UDP port 3333 only after a network host generated traffic to UDP port 2222. This results in your Fios Home Router accepting the inbound traffic from the gaming server and sending it back to the network host which originated the outgoing traffic to UDP port 2222.

To configure port triggering:

1. Select Port Triggering.

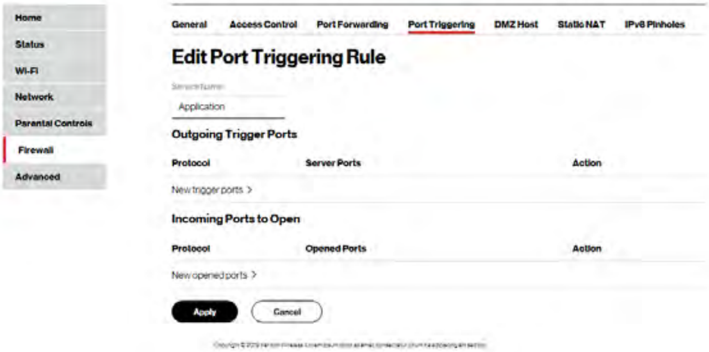


Trigger opening of ports for incoming data.

NOTE:Only advanced technical users should use this feature.

Protocol	Outgoing Trigger Ports	Incoming Ports to Open	Action
☑ L2TP Triggering - Layer Two Tunneling Protocol	UDP Any -> 1701	UDP Any -> Same as Initiating Ports	Edit Remove
☑ TFTP Triggering - Trivial File Transfer Protocol	UDP 1024 - 65535 -> 69	UDP Any -> Same as Initiating Ports	Edit Remove

2. To add a service as an active protocol, click **Add**. The **Edit Port Triggering Rule** page displays.



Edit Port Triggering Rule

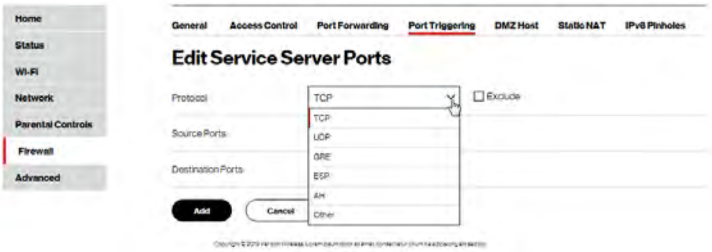
Service Name: Application

Outgoing Trigger Ports

Protocol	Server Ports	Action
New trigger ports >		

Incoming Ports to Open

Protocol	Opened Ports	Action
New opened ports >		



Edit Service Server Ports

Protocol: TCP ☐ Exclude

Source Ports

Destination Ports

3. Enter the service name then configure its inbound and outbound trigger ports. Click **Apply** to save changes.
4. Click **Apply** again to save all changes.

7.4/ DMZ HOST

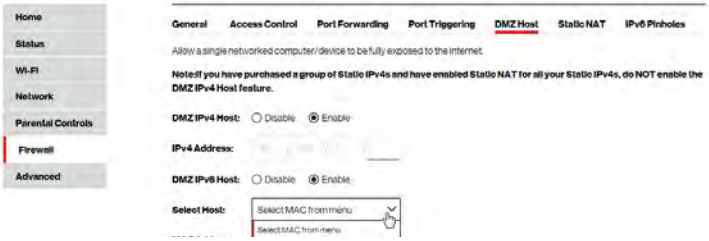
DMZ Host allows a single device on your primary network to be fully exposed to the internet for special purposes like internet gaming.

Warning: Enabling DMZ Host is a security risk. When a device on your network is a DMZ Host, it is directly exposed to the internet and loses much of the protection of the firewall. If it is compromised, it can also be used to attack other devices on your primary network.

Follow these steps to designate a device on your primary network as a DMZ Host:

1. From the **Firewall** page, select **DMZ Host**.
2. Select **Enable** for the DMZ Host.
3. Enter the IP address of the device you want to designate as the DMZ Host.

4. Click **Apply**.



Allow a single networked computer/device to be fully exposed to the internet.

Note:If you have purchased a group of Static IPv4s and have enabled Static NAT for all your Static IPv4s, do NOT enable the DMZ IPv4 Host feature.

DMZ IPv4 Host: ○ Disable ● Enable

IPv4 Address:

DMZ IPv6 Host: ○ Disable ● Enable

Select Host: Select MAC from menu

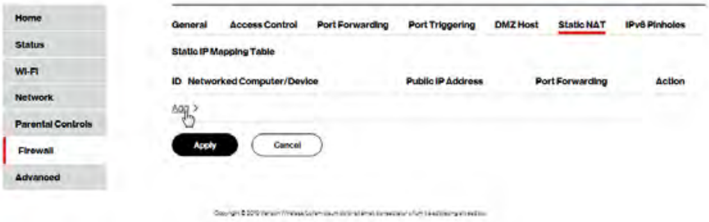
Select MAC from menu

7.5/ STATIC NAT

Static NAT allows devices located behind a firewall that is configured with private IP addresses to appear to have public IP addresses to the internet. This allows an internal host, such as a web server, to have an unregistered (private) IP address and still be accessible over the internet.

To configure static NAT:

1. Select **Static NAT**.

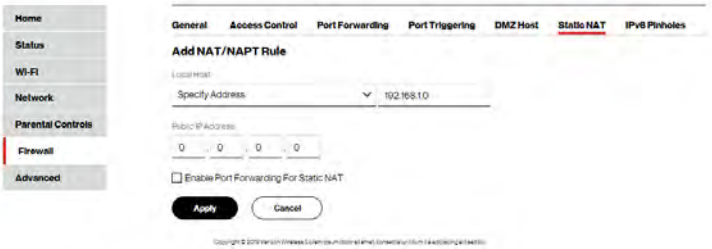


Static IP Mapping Table

ID	Networked Computer/Device	Public IP Address	Port Forwarding	Action

IPV6 PINHOLES

2. To create a static NAT, click **Add**. The **Add NAT/NAPT Rule** page displays.



Add NAT/NAPT Rule

Local Host

Specify Address 192.168.1.0

Public IP Address

0 . 0 . 0 . 0

□ Enable Port Forwarding For Static NAT

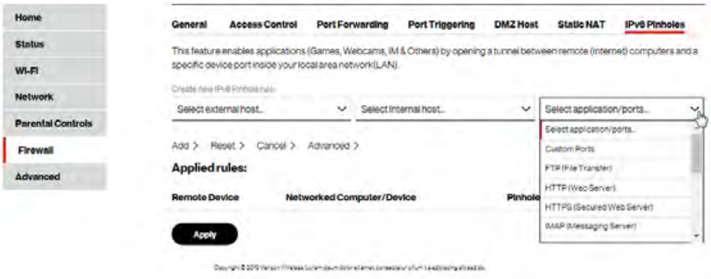
3. Select a source address in the **Specify Address** field or enter an IP address in the text box.
4. Enter the **Public IP Address**.
5. If using port forwarding, select the **Enable Port Forwarding for Static NAT** check box.
6. Click **Apply** to save changes.
7. Repeat these steps to add additional static IP addresses.

7.6/ IPV6 PINHOLES

The IPv6 Pinhole feature of the Fios Home Router allows an application to send incoming packets for a certain port number to the destination computer by setting up the rule of authorization.

You can view the Pinhole rules created for your Fios Home Router.

To view the rule summary, select **IPv6 Pinhole.** The screen displays opened pinhole port and its status. It shows the IP addresses of remote device and connected device on your network.



This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (internet) computers and a specific device port inside your local area network(LAN).

You can enable, view, edit, or delete the rules as shown on the above screen.

08 /

CONFIGURING ADVANCED SETTINGS

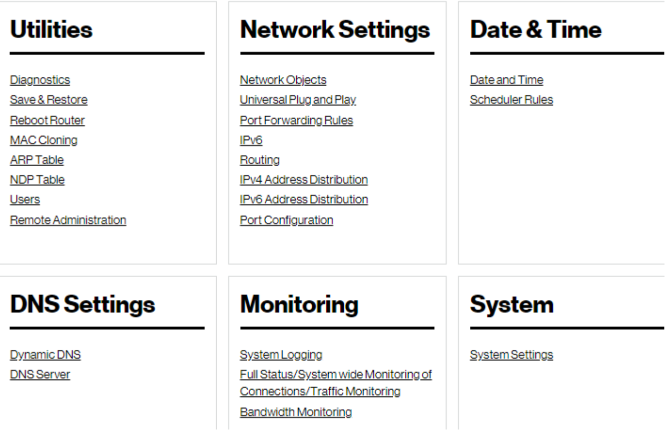
Advanced settings cover a wide range of sophisticated configurations for your Fios Home Router's firmware and network.

USING ADVANCED SETTINGS

Caution: Many of the settings described in this section should only be configured by experienced network technicians. Changes could adversely affect the operation of your Fios Home Router and local network.

8.0/ USING ADVANCED SETTINGS

You can access the following settings:



Utilities

Diagnostics
Save & Restore
Reboot Router
MAC Cloning
ARP Table
NDP Table
Users
Remote Administration

Network Settings

Network Objects
Universal Plug and Play
Port Forwarding Rules
IPv6
Routing
IPv4 Address Distribution
IPv6 Address Distribution
Port Configuration

Date & Time

Date and Time
Scheduler Rules

DNS Settings

Dynamic DNS
DNS Server

Monitoring

System Logging
Full Status/System wide Monitoring of Connections/Traffic Monitoring
Bandwidth Monitoring

System

System Settings

To access the advanced settings:

1. Select **Advanced** from the left pane.
2. Select a topic by clicking the topic name.

8.1/ UTILITIES

You can access the following advanced settings:

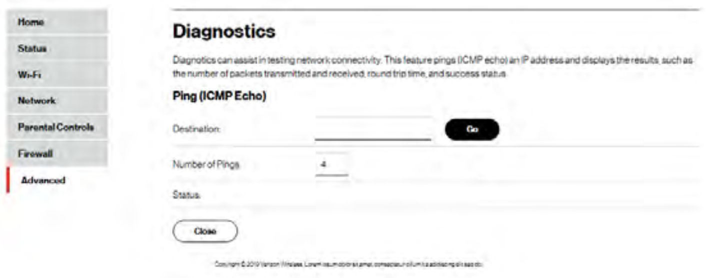
- Diagnostics – performs diagnostic tests.
- Save and Restore – resets your Fios Home Router to its default settings.
- Reboot Router – restarts your Fios Home Router.
- MAC Cloning – clones the MAC address.
- ARP Table – displays active devices with their IP and MAC addresses.
- NDP (Neighbor Discovery Protocol) Table – displays active devices with their IPv6 and MAC addresses of DHCP connection.
- Users – creates and manages remote users.
- Remote Administration – enable remote configuration of your Fios Home Router from any internet-accessible computer.

8.1a/ DIAGNOSTICS

You can use diagnostics to test network connectivity.

To diagnose network connectivity:

1. Select **Diagnostics** in the **Utilities** section.
2. To ping an IP address, enter the IP address or domain name in the **Destination** field and click **Go**.



Diagnostics

Diagnotics can assist in testing network connectivity. This feature pings (ICMP echo) an IP address and displays the results, such as the number of packets transmitted and received, round trip time, and success status.

Ping (ICMP Echo)

Destination:

Number of Pings 4

Status:

The diagnostics will display the number of pings, status, packets sent, and round trip time.

If no diagnostic status displays, click refresh in your web browser.

3. Click **Close** to exit the session.

8.1b/ SAVE AND RESTORE

You can use this functionality to save and load configuration files. These files are used to backup and restore the current configuration of your Fios Home Router.

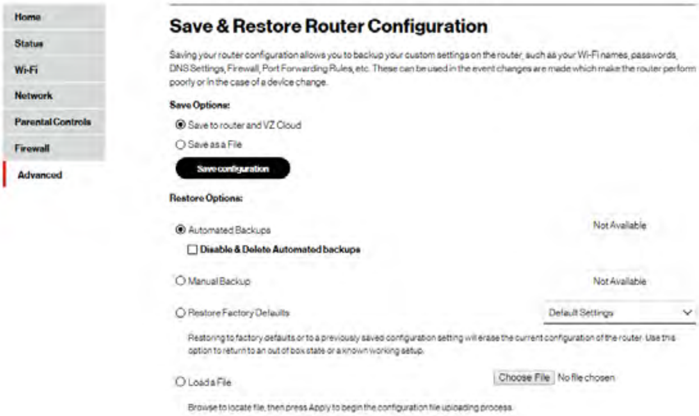
Only configuration files saved on a specific Fios Home Router can be applied to that Fios Home Router. You cannot transfer configuration files between Fios Home Routers.

Warning: Manually editing a configuration file can cause your Fios Home Router to malfunction or become completely inoperable.

Save Options

To save the configuration file:

1. Select **Save & Restore** in the **Utilities** section.



Save & Restore Router Configuration

Saving your router configuration allows you to backup your custom settings on the router, such as your Wi-Fi names, passwords, DNS Settings, Firewall, Port Forwarding Rules, etc. These can be used in the event changes are made which make the router perform poorly or in the case of a device change.

Save Options:

● Save to router and VZ Cloud

○ Save as a File

Restore Options:

● Automated Backups — Not Available

□ **Disable & Delete Automated backups**

○ Manual Backup — Not Available

○ Restore Factory Defaults — Default Settings

Restoring to factory defaults or to a previously saved configuration setting will erase the current configuration of the router. Use this option to return to an out of box state or a known working setup.

○ Load a File — No file chosen

Browse to locate file, then press Apply to begin the configuration file uploading process.

2. Select **Save to router and VZ Cloud** or **Save as a File** to save the current configuration, then click **Save configuration.**
3. If you select **Save as a File**, the configuration file is saved to you web browser's download folder.

Restore Options

You can restore your configuration settings to your Fios Home Router factory default settings. Restoring the default settings erases the current configuration, including user defined settings and network connections. All connected DHCP clients must request new IP addresses. Your Fios Home Router must restart.

Prior to restoring the factory defaults, you may want to save your current configuration to a file. This allows you to reapply your current settings and parameters to the default settings, as needed.

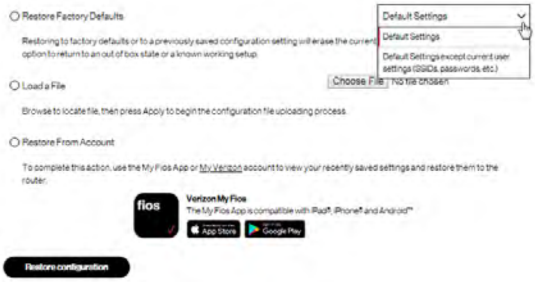
Note: When restoring defaults, the setting and parameters of your Fios Home Router are restored to their default values. This includes the administrator password. A user-specified password will no longer be valid.

To backup your Fios Home Router's settings:

1. Select **Save & Restore** in the **Utilities** section.
2. To take a backup of the current settings, click **Automated Backups** or **Manual Backup**. You will be prompted to save a file with the extension ".enc".
3. Click **Backup** to begin the configuration backup process.

To restore your Fios Home Router's factory default settings:

1. Select **Save & Restore** in the **Utilities** section.
2. Click **Restore Factory Defaults**.



○ Restore Factory Defaults

Default Settings
- Default Settings
- Default Settings except current user settings (SSIDs, passwords, etc.)

Restoring to factory defaults or to a previously saved configuration setting will erase the current option to return to an out of box state or a known working setup.

○ Load a File

Choose File No file chosen

Browse to locate file, then press Apply to begin the configuration file uploading process.

○ Restore From Account

To complete this action, use the My Fios App or My Verizon account to view your recently saved settings and restore them to the router.

Verizon My Fios
The My Fios App is compatible with iPad®, iPhone® and Android™

- Default Settings – will erase all router settings including user settings for SSID and Passwords.
- Default Settings except current user settings – will erase all router settings but will retain the user settings for SSID and passwords.

3. Click **Restore configuration** button. The factory default settings are applied and your Fios Home Router restarts. Once complete, the Login page for the First Time Easy Setup Wizard displays.

To load the configuration file:

1. Select **Save & Restore** in the **Utilities** section.
2. To load a previously saved configuration file, click **Choose File.**
3. Browse to the location of the file, and click **Apply** to begin the configuration uploading process.
4. Accessing the **My Fios** app or the **My Verizon** account also allows you to restore the previously saved settings.
5. Click **Restore configuration** button. Your Fios Home Router will automatically restart with that configuration.

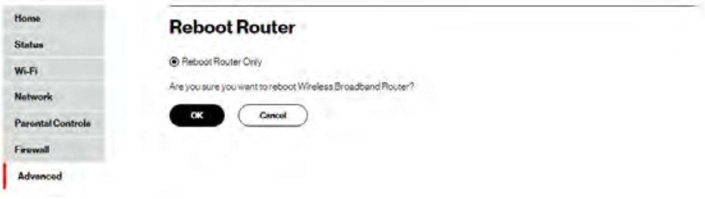
8.1c/ REBOOT FIOS HOME ROUTER

Warning: Only select Reboot Router if instructed to do so by Verizon support.

You can reboot your Fios Home Router using the Reboot Router Only feature. Refer to 1.3b/ REAR PANEL for power button options.

To reboot your Fios Home Router using the user interface:

1. Select **Reboot Router Only** in the **Utilities** section.



Reboot Router

● Reboot Router Only

Are you sure you want to reboot Wireless Broadband Router?

2. To reboot, click **OK**. Your router will reboot. This may take up to a minute.
3. To access your Fios Home Router user interface, refresh your web browser.
4. After the Router Status LED on the front panel turns solid white, you will automatically be sent to the web browser login page.

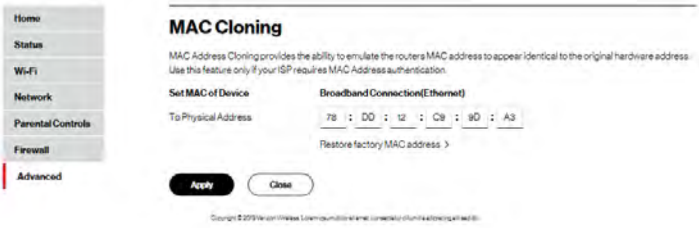
8.1d/ MAC CLONING

A MAC address is a hexadecimal code that identifies a device on a network. All networkable devices have a unique MAC address.

When replacing a network device on your Fios Home Router, you can simplify the installation process by copying the MAC address of the existing device to your Fios Home Router.

To copy the MAC address of the existing device:

1. Select **MAC Cloning** in the **Utilities** section.



MAC Cloning

MAC Address Cloning provides the ability to emulate the routers MAC address to appear identical to the original hardware address. Use this feature only if your ISP requires MAC Address authentication.

Set MAC of Device — Broadband Connection(Ethernet)

To Physical Address — 78 : DD : 12 : C9 : 9D : A3

Restore factory MAC address >

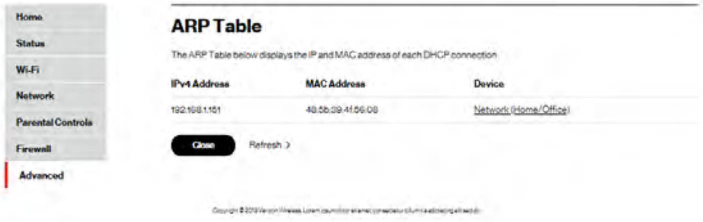
2. In the **To Physical Address** field, enter the MAC address of your new device.
3. To locate the MAC address, refer to the documentation from the device manufacturer.
4. Click **Apply** to save changes.

8.1e/ ARP TABLE

You can view the IPv4 and MAC addresses of each DHCP connection.

To view the IPv4 and MAC addresses:

1. Select **ARP Table** in the **Utilities** section.



ARP Table

The ARP Table below displays the IP and MAC address of each DHCP connection

IPv4 Address	MAC Address	Device
192.168.1.161	48:5b:39:41:56:08	Network (Home/Office)

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do

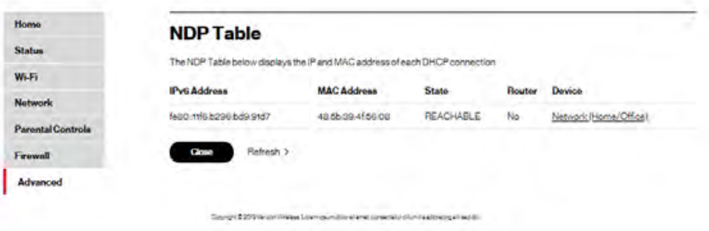
2. Review the IPv4 and MAC address for each device.
3. When complete, click **Close**.

8.1f/ NDP TABLE

You can view the IPv6 and MAC addresses of each DHCP connection.

To view the IPv6 and MAC addresses:

1. Select **NDP** (Neighbor Discovery Protocol) **Table** in the **Utilities** section.



NDP Table

The NDP Table below displays the IP and MAC address of each DHCP connection

IPv6 Address	MAC Address	State	Router	Device
fe80::11f6:b296:bd9:91d7	48:6b:39:4f:56:08	REACHABLE	No	Network (Home/Office)

Copyright © 2019 Verizon Wireless [illegible]

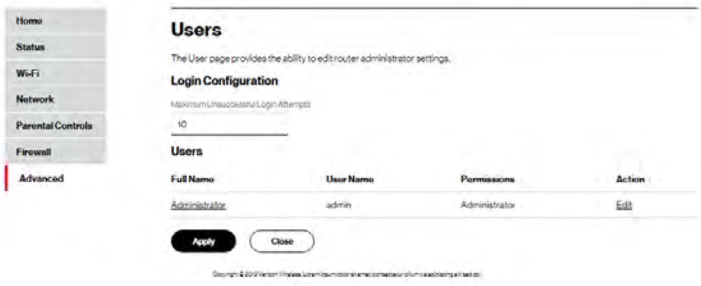
2. Review the IPv6 and MAC address for each device.
3. When complete, click **Close**.

8.1g/ USERS

You can view the users that can currently access your wireless network. In addition, you can modify their login password and name as well as manage the number of unsuccessful login attempts a user can enter before your Fios Home Router temporarily denies all further login attempts by that user.

To view users:

1. Select **Users** in the **Utilities** section.



Users

The User page provides the ability to edit router administrator settings.

Login Configuration

Maximum Unsuccessful Login Attempts

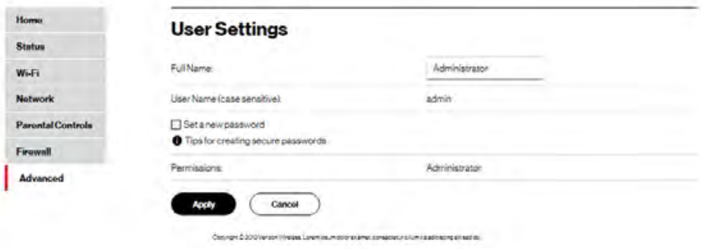
10

Users

Full Name	User Name	Permissions	Action
Administrator	admin	Administrator	Edit

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do.

2. In the **Login Configuration** section, enter the maximum number of unsuccessful login attempts.
3. To edit usernames and passwords, click the **Edit** in the **Action** column. The **User Settings** page displays.



User Settings

Full Name: Administrator

User Name (case sensitive): admin

□ Set a new password

● Tips for creating secure passwords

Permissions: Administrator

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do.

4. Edit the username and set a new password, as needed.

5. To add a new user, specify the following parameters:
    - **Full Name** - name of the user.
    - **User Name** – name the user enters to remotely access the home or office network. This field is case-sensitive.
6. To set a new Password, select the **Set a new password** check box. The **New Password** fields display.
7. Verify the level of access for the user in the **Permissions** field.
8. Click **Apply** to save changes. The **Users** page opens with the user information displayed.
9. Click **Apply** again to save changes and exit.

8.1h/ REMOTE ADMINISTRATION

Caution: Enabling Remote Administration places your Fios Home Router network at risk from outside attacks.

You can access and control your Fios Home Router not only from within the local network, but also from the internet using **Remote Administration.**

You can allow incoming access to the following:

- **Allow incoming WAN Access to Web Management** - used to obtain access to your Fios Home Router's GUI and gain access to all settings and parameters through a web browser.

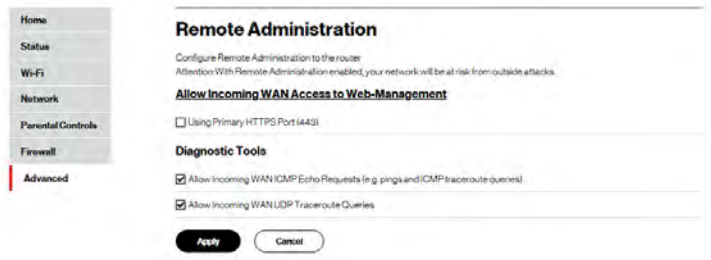
UTILITIES

- **Diagnostic Tools** - used for troubleshooting and remote system management by a user or Verizon.

Web Management remote administration access may be used to modify or disable firewall settings. Web Management services should be activated only when absolutely necessary.

To enable remote administration:

1. Select **Remote Administration.**



Remote Administration

Configure Remote Administration to the router
Attention With Remote Administration enabled, your network will be at risk from outside attacks.

Allow Incoming WAN Access to Web-Management

□ Using Primary HTTPS Port (443)

Diagnostic Tools

☑ Allow Incoming WAN ICMP Echo Requests (e.g. pings and ICMP traceroute queries)

☑ Allow Incoming WAN UDP Traceroute Queries

2. To enable access, select the check box.
3. Click **Apply** to save changes.
4. To remove access, clear the check box.
5. Click **Apply** again to save changes.

8.2/ NETWORK SETTINGS

You can configure the following network settings:

- **Network Objects** – defines a group, such as a group of computers.
- **Universal Plug and Play (UPnP)** – checks the validity of all UPnP services and rules.
- **Port Forwarding Rules** – displays port forwarding rules.
- **IPv6** – enables IPv6 support.
- **Routing** – manages the routing and IP address distribution rules.
- **IPv4/IPv6 Address Distribution** - adds computers configured as DHCP clients to the network.
- **Port Configuration** – sets up the Ethernet ports as either full- or half-duplex ports, at either 10 Mbps, 100 Mbps, or 1000 Mbps.

8.2a/ NETWORK OBJECTS

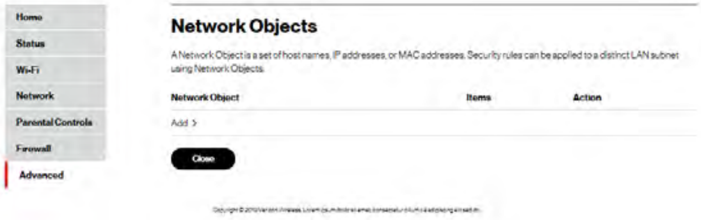
Network objects define a group, such as a group of computers, on your Fios Home Router network by MAC address, IP address, and/or host name. The defined group becomes a network object. You can apply settings, such as configuring system rules, to all devices defined in the network object.

For example, instead of setting the same website filtering configuration individually to five computers one at a time, you can define the computers as a network object. Website filtering can then be simultaneously applied to all the computers.

You can use network objects to apply security rules based on host names, instead of IP addresses. This is useful since IP addresses change from time to time. In addition, you can define network objects according to MAC address to make the rule application more persistent against network configuration settings.

To define a network object:

1. 1. Select **Network Objects** in the **Network Settings** section.

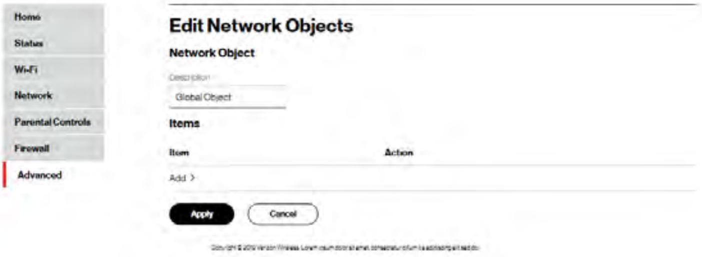


Network Objects

A Network Object is a set of host names, IP addresses, or MAC addresses. Security rules can be applied to a distinct LAN subnet using Network Objects.

Network Object	Items	Action
Add >		

2. To define a network object, click **Add**. The **Edit Network Objects** page displays.



Edit Network Objects

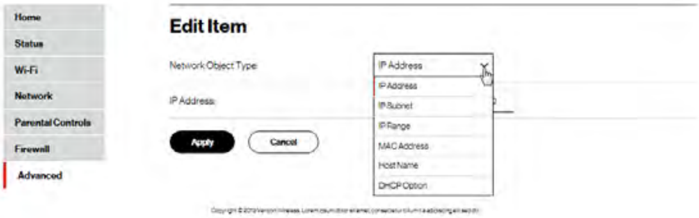
Network Object

Description: Global Object

Items

Item	Action
Add >	

3. In the **Description** field, enter a name for the network object.
4. Click **Add**. The **Edit Item** page displays.



Edit Item

Network Object Type: IP Address

IP Address:

5. Select the type of network object as IP address, IP subnet, IP range, MAC address, host name, or DHCP option, and click **Apply** to save changes.
6. Repeat the above steps to create additional network objects.
7. When complete, click **Apply** to save changes.

8.2b/ UNIVERSAL PLUG AND PLAY

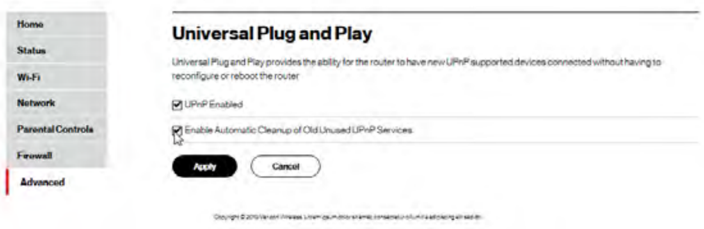
You can use Universal Plug and Play (UPnP) to support new devices without configuring or rebooting your Fios Home Router.

In addition, you can enable the automatic cleanup of invalid rules. When enabled, this functionality verifies the validity of all UPnP services and rules every five minutes. Old and unused UPnP defined services are removed, unless a user-defined rule depends on it.

UPnP services are not deleted when disconnecting a computer without proper shutdown of the UPnP applications, such as messenger. Services may often not be deleted and eventually this leads to the exhaustion of rules and services. No new services can be defined. The cleanup feature locates the invalid services and removes them, preventing services exhaustion.

To access this setting:

1. Select **Universal Plug and Play** (UPnP) in the **Network Settings** section.



Universal Plug and Play

Universal Plug and Play provides the ability for the router to have new UPnP supported devices connected without having to reconfigure or reboot the router

☑ UPnP Enabled

☑ Enable Automatic Cleanup of Old Unused UPnP Services

Copyright © [illegible]

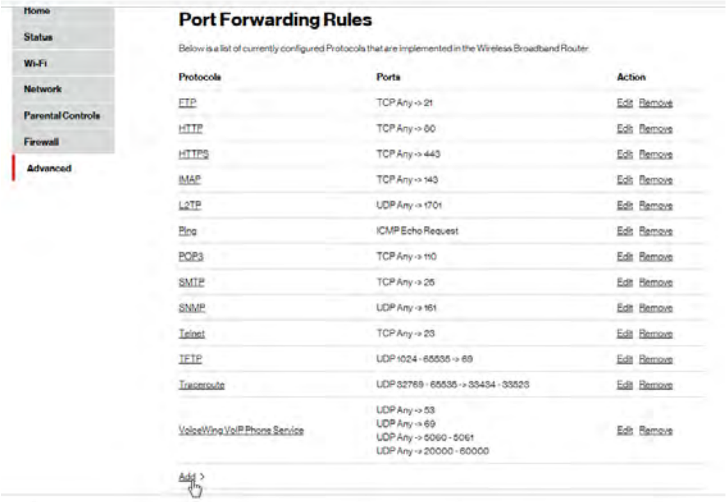
2. To enable UPnP and allow UPnP services to be defined on any network hosts, select the **UPnP Enabled** check box.
3. To enable automatic cleanup of invalid rules, select **Enable Automatic Cleanup of Old Unused UPnP Services** check box.
4. Click **Apply** to save changes.

8.2c/ PORT FORWARDING RULES

You can view, modify, and delete port forwarding rules.

To access the rules:

1. Select **Port Forwarding Rules** in the **Network Settings** section.



Port Forwarding Rules

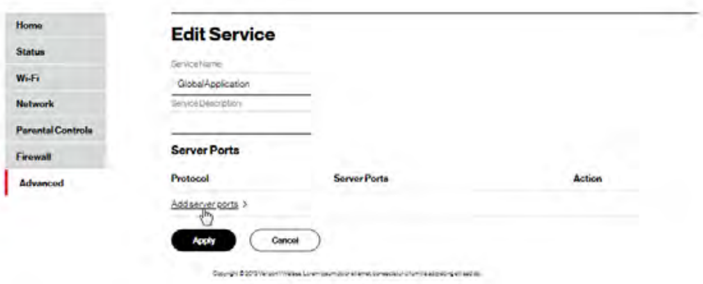
Below is a list of currently configured Protocols that are implemented in the Wireless Broadband Router

Protocols	Ports	Action
FTP	TCP Any -> 21	Edit Remove
HTTP	TCP Any -> 80	Edit Remove
HTTPS	TCP Any -> 443	Edit Remove
IMAP	TCP Any -> 143	Edit Remove
L2TP	UDP Any -> 1701	Edit Remove
Ping	ICMP Echo Request	Edit Remove
POP3	TCP Any -> 110	Edit Remove
SMTP	TCP Any -> 25	Edit Remove
SNMP	UDP Any -> 161	Edit Remove
Telnet	TCP Any -> 23	Edit Remove
TFTP	UDP 1024 - 65535 -> 69	Edit Remove
Traceroute	UDP 32769 - 65535 -> 33434 - 33523	Edit Remove
VoiceWing VoIP Phone Service	UDP Any -> 53 UDP Any -> 69 UDP Any -> 5060 - 5061 UDP Any -> 20000 - 60000	Edit Remove

Add >

2. To edit a protocol rule, click the **Edit** icon in the Action column. The **Edit Service** page displays.

NETWORK SETTINGS



Edit Service

Service Name: Global Application

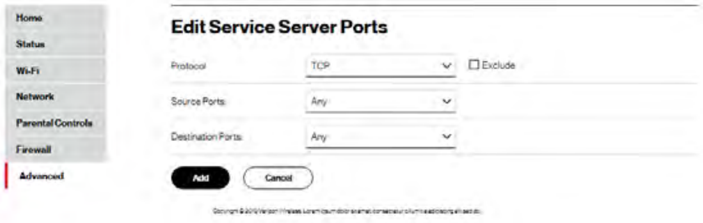
Service Description:

Server Ports

Protocol	Server Ports	Action

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do.

3. Modify the **Service Name** and **Service Description**, as needed.
4. To modify the current protocol, click the **Edit** icon in the Action column. The **Edit Service Server Ports** page displays.



Edit Service Server Ports

Protocol: TCP □ Exclude

Source Ports: Any

Destination Ports: Any

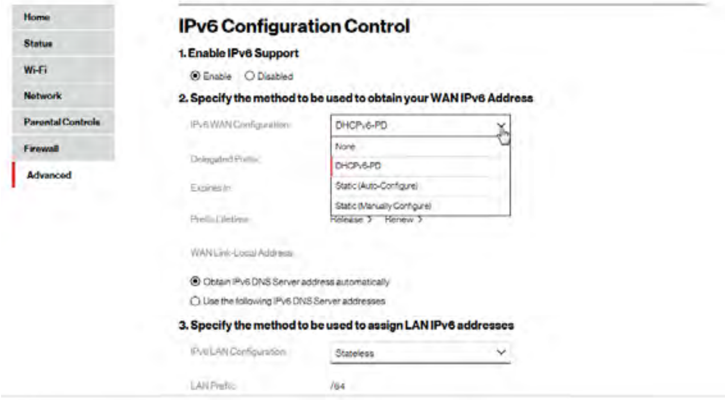
Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do.

5. Enter the **Protocol, Source Ports** and **Destination Ports**, as needed.
6. To add server ports, click **Add server ports**.
7. Click **Apply** to save changes.

8.2d/ IPv6

Use the IPv6 feature settings to enable, disable, or configure an IPv6 Internet connection and IPv6 LAN settings.

1. To configure your network to use the IPv6 Internet connection type, select IPv6 from the Advanced page to display the IPv6 service options:



IPv6 Configuration Control

1. Enable IPv6 Support

● Enable ○ Disabled

2. Specify the method to be used to obtain your WAN IPv6 Address

IPv6 WAN Configuration: DHCPv6-PD

Delegated Prefix:

Expires In:

Prefix Lifetime:

WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

LAN Prefix: /64

2. Select **Enable** in the **Enable IPv6 Support** field. (Once IPv6 is enabled the default setting will be IPv6 WAN as DHCPv6 and IPv6 LAN as Stateless).
3. Select the appropriate IPv6 connection method from the drop-down list (DHCPv6 or Static) to specify the method to be used to obtain your WAN IPv6 Address.

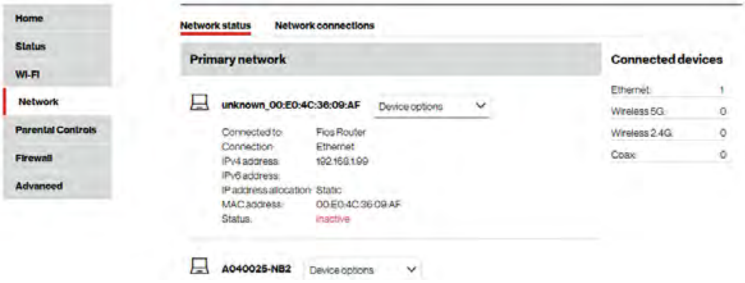
4. Click **Apply** to have changes take effect.

Note: The Internet IPv6 service is required for this feature to work over the internet.

5. To disable the IPv6 service, click on the **Disable** option in the **Enable IPv6 Support** field.
6. Click **Apply** to have changes take effect.

Once configured using valid IPv6 WAN and LAN configurations, you should not see any errors when you click on the **Apply** button and the **Status** page on the main menu will reflect the router's new IPv6 address.

You should also see the IPv6 address for all IPv6 supported devices on your local network displayed on the Network/Network Status page.



Primary network

unknown_00:E0:4C:36:09:AF

Connected to: Fios Router
Connection: Ethernet
IPv4 address: 192.168.1.99
IPv6 address:
IP address allocation: Static
MAC address: 00:E0:4C:36:09:AF
Status: inactive

A040025-NB2

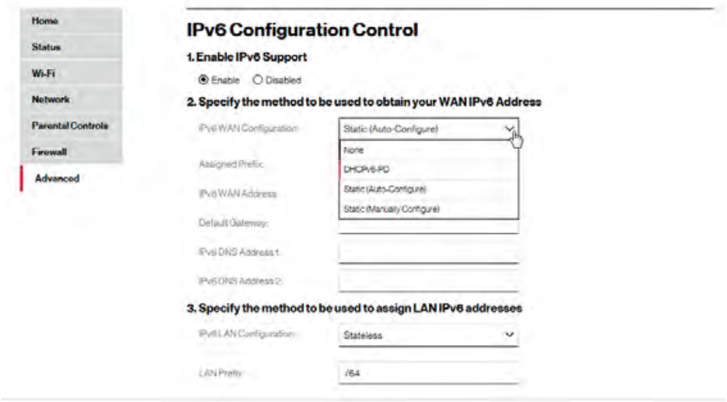
Connected devices

Ethernet:	1
Wireless 5G:	0
Wireless 2.4G:	0
Coax:	0

STATIC - WAN IPv6 ADDRESS CONNECTION

The IPv6 WAN Static configurations are IPv6 settings that you enter manually. These specific IPv6 addresses and settings are not expected to change frequently.

1. To configure IPv6 WAN Static mode, select the **Static** option on the **IPv6 Configuration Control** page as shown below:



IPv6 Configuration Control

1. Enable IPv6 Support

● Enable ○ Disabled

2. Specify the method to be used to obtain your WAN IPv6 Address

IPv6 WAN Configuration: Static (Auto-Configure)

Assigned Prefix:

IPv6 WAN Address:

Default Gateway:

IPv6 DNS Address 1:

IPv6 DNS Address 2:

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

LAN Prefix: /64

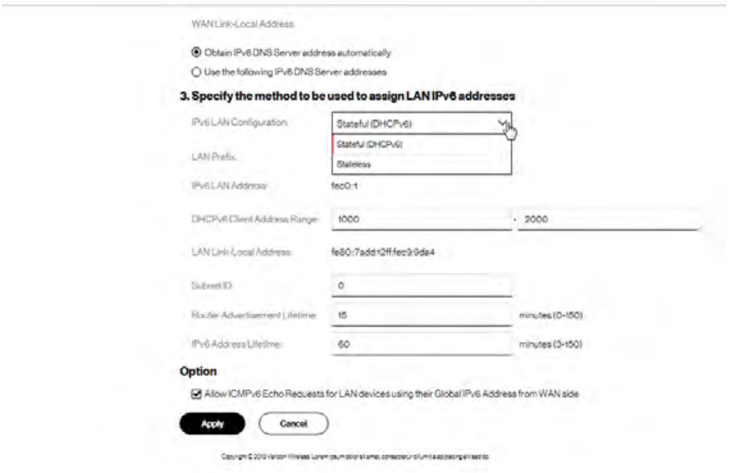
2. Specify the **Static** method to be used to obtain your WAN IPv6 Address by entering:
   - **IPv6 WAN Configuration** (select Static)
   - **Assigned Prefix** (A numeric value between 16 and 128)
   - **IPv6 WAN Address**
   - **Default Gateway**: Fios Home Router

- IPv6 (Primary) **DNS Address 1**
- IPv6 (Secondary) **DNS Address 2**

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

Static WAN with LAN IPv6 Stateful Settings

1. To configure IPv6 LAN Stateful mode with **Static** WAN, select the **Stateful (DHCPv6)** option on the **IPv6 Configuration Control** page as shown below:



WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically
○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateful (DHCPv6)

LAN Prefix:

IPv6 LAN Address: fec0::1

DHCPv6 Client Address Range: 1000 - 2000

LAN Link-Local Address: fe80::7add:12ff:fec9:9da4

Subnet ID: 0

Router Advertisement Lifetime: 15 minutes (0-150)

IPv6 Address Lifetime: 60 minutes (3-150)

Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

Copyright © 2019 Verizon Wireless Lorem ipsum dolor sit amet, consectetur adipiscing elit sed do

2. Specify the **Stateful (DHCPv6)** settings to be used to assign LAN IPv6 addresses by entering the following details:
   - **IPv6 LAN Configuration** (select Stateful from the dropdown list)

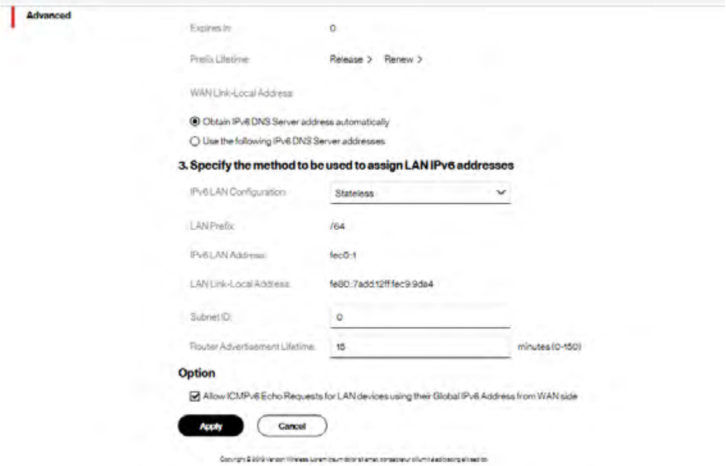
- **LAN Prefix** (automatically populated)
- **Guest Wi-Fi Prefix** (automatically populated)
- **IPv6 LAN Address** (automatically populated)
- **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
- **DHCPv6 Client Address Range** (start and end)
- **LAN Link Local Address** (automatically populated)
- **Guest Wi-Fi Link Local Address** (automatically populated)
- **Subnet ID** - set the site topology for your internal site
- **Router Advertisement Lifetime** (minutes between 0-150)
- **IPv6 Address Lifetime** (minutes between 3-150)

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

Static WAN with LAN IPv6 Stateless Settings

1. To configure IPv6 LAN Stateless mode with **Static** WAN, select the **Stateless** option on the **IPv6 Configuration Control** page as shown below:

NETWORK SETTINGS



Advanced

Expires In: 0

Prefix Lifetime: Release > Renew >

WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

LAN Prefix: /64

IPv6 LAN Address: fec0::1

LAN Link-Local Address: fe80::7add:12ff:fec9:9da4

Subnet ID: 0

Router Advertisement Lifetime: 15 minutes (0-150)

Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

Copyright © 2019 Verizon Wireless Lorem ipsum dolor sit amet, consectetur [illegible] adipiscing alit sed do

2. Specify the settings to be used to assign LAN IPv6 addresses by entering the following details:
   - **IPv6 LAN Configuration** (select Stateless from the drop-down list)
   - **LAN Prefix** (automatically populated)
   - **Guest Wi-Fi Prefix** (automatically populated)
   - **IPv6 LAN Address** (automatically populated)

- **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
- **LAN Link Local Address** (automatically populated)
- **Guest Wi-Fi Link Local Address** (automatically populated)
- **Subnet ID** - set the site topology for your internal site
- **Router Advertisement Lifetime** (minutes between 0-150)
- **Option: Allow ICMPv6 Echo Request for LAN devices using their Global IPv6 Address from WAN side** - requesting an IPv6 address from any available DHCPv6 servers available on the ISP

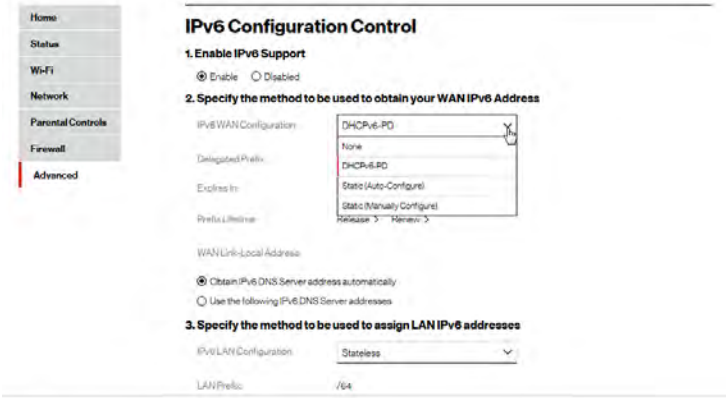
3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

DHCPv6 PD - WAN IPv6 ADDRESS CONNECTION

The IPv6 WAN DHCPv6 configurations are IPv6 settings that you enter that will allow your IPv6 connection to be updated by the ISP as needed.

1. To configure IPv6 WAN Stateful (DHCPv6) mode, select the **DHCPv6-PD** option on the **IPv6 Configuration Control** page as shown below:

NETWORK SETTINGS



IPv6 Configuration Control

1. Enable IPv6 Support

● Enable ○ Disabled

2. Specify the method to be used to obtain your WAN IPv6 Address

IPv6 WAN Configuration: DHCPv6-PD

Delegated Prefix

Expires In

Prefix Lifetime

WAN Link-Local Address

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

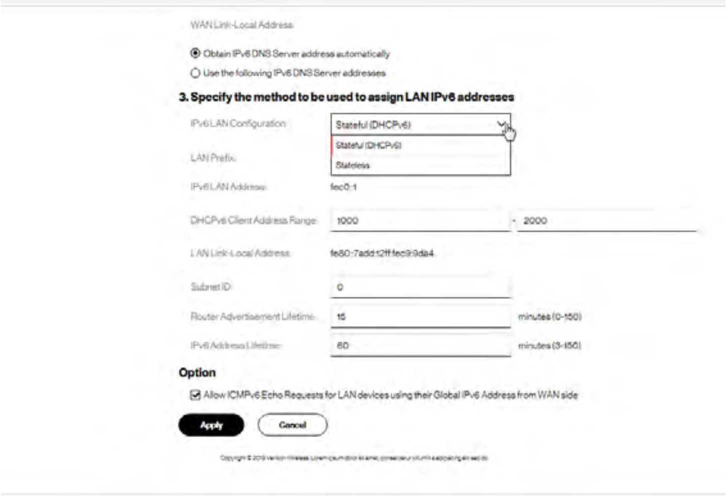
LAN Prefix: /64

2. Check to either **Obtain IPv6 DNS Server address automatically**, or **Use the following IPv6 DNS Server addresses**

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

DHCPv6 WAN with LAN IPv6 Stateful (DHCPv6) Settings

1. To configure IPv6 WAN Stateful (DHCPv6) mode, select the **Stateful (DHCPv6)** option on the **IPv6 Configuration Control** page as shown below:



WAN Link-Local Address

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration	Stateful (DHCPv6) Stateful (DHCPv6) Stateless		
LAN Prefix			
IPv6 LAN Address	fec0::1		
DHCPv6 Client Address Range	1000	- 2000	
LAN Link-Local Address	fe80::7add:12ff:fec9:9da4		
Subnet ID	0		
Router Advertisement Lifetime	15	minutes (0-150)	
IPv6 Address Lifetime	60	minutes (3-150)	

Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

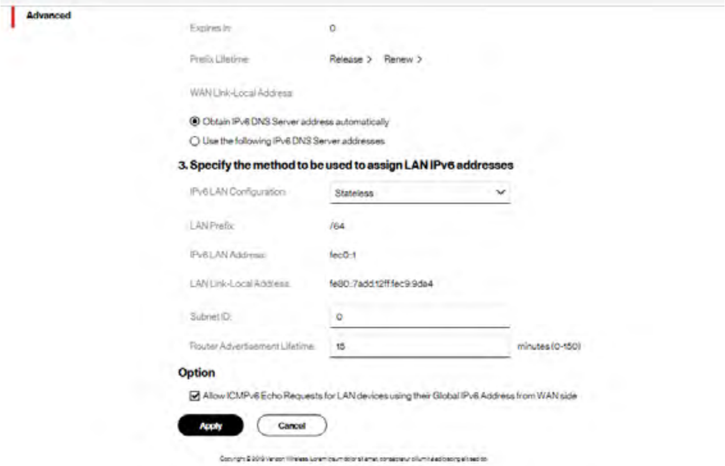
2. Specify the **Stateful (DHCPv6)** settings to be used to assign LAN IPv6 addresses by entering the following details:
   - **IPv6 LAN Configuration** (select Stateful from the dropdown list)
   - **LAN Prefix** (automatically populated)
   - **Guest Wi-Fi Prefix** (automatically populated)
   - **IPv6 LAN Address** (automatically populated)

- **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
- **DHCPv6 Client Address Range** (start and end)
- **LAN Link Local Address** (automatically populated)
- **Guest Wi-Fi Link Local Address** (automatically populated)
- **Subnet ID** - set the site topology for your internal site
- **Router Advertisement Lifetime** (minutes between 0-150)
- **IPv6 Address Lifetime** (minutes between 3-150)

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

DHCPv6 WAN with LAN IPv6 Stateless Settings

1. To configure IPv6 LAN Stateless mode with DHCPv6 WAN, select the **Stateless** option on the **IPv6 Configuration Control** page as shown below:



Expires In: 0

Prefix Lifetime:

WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

LAN Prefix: /64

IPv6 LAN Address: fec0::1

LAN Link-Local Address: fe80::7add:12ff:fec9:9da4

Subnet ID: 0

Router Advertisement Lifetime: 15 minutes (0-150)

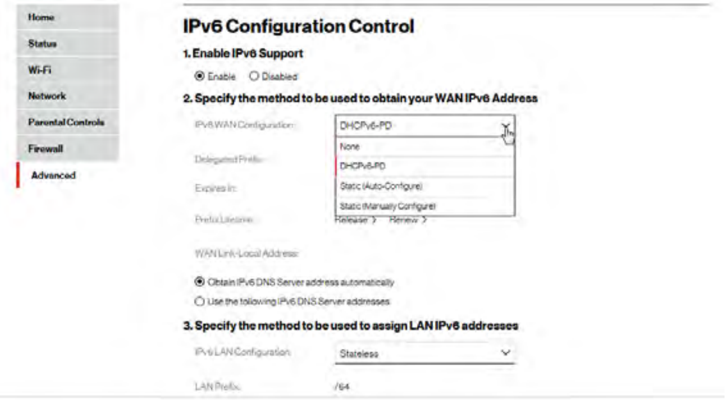
Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

2. Specify the settings to be used to assign LAN IPv6 addresses by entering the following details:
   - **IPv6 LAN Configuration** (select Stateless from the drop-down list)
   - **LAN Prefix** (automatically populated)
   - **Guest Wi-Fi Prefix** (automatically populated)
   - **IPv6 LAN Address** (automatically populated)
   - **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
   - **LAN Link Local Address** (automatically populated)
   - **Guest Wi-Fi Link Local Address** (automatically populated)
   - **Subnet ID** - set the site topology for your internal site
   - **Router Advertisement Lifetime** (minutes between 0-150)
3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

LAN IPv6 CONFIGURATION WITHOUT AN IPv6 WAN CONNECTION

1. To configure IPv6 to use either the IPv6 LAN Stateful or Stateless mode without using an IPv6 Internet WAN connection, select the **None** option on the **IPv6 Configuration Control** page.



IPv6 Configuration Control

1. Enable IPv6 Support

● Enable ○ Disabled

2. Specify the method to be used to obtain your WAN IPv6 Address

IPv6 WAN Configuration: DHCPv6-PD

None
DHCPv6-PD
Static (Auto-Configure)
Static (Manually Configure)

Delegated Prefix:

Expires In:

Prefix Lifetime: Release > Renew >

WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

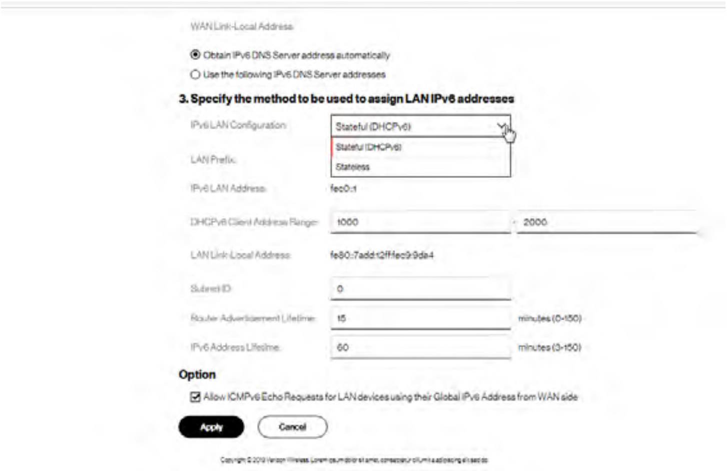
IPv6 LAN Configuration: Stateless

LAN Prefix: /64

2. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

LAN IPv6 Stateful (DHCPv6) with No WAN Settings

1. To configure IPv6 LAN Stateful mode with No WAN connection, select the Stateful option on the IPv6 Configuration Control page as shown below:



WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically

○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateful (DHCPv6)

LAN Prefix:

IPv6 LAN Address: fec0::1

DHCPv6 Client Address Range: 1000 - 2000

LAN Link-Local Address: fe80::7add:12ff:fec9:9da4

Subnet ID: 0

Router Advertisement Lifetime: 15 minutes (0-150)

IPv6 Address Lifetime: 60 minutes (3-150)

Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur [illegible]

2. Specify the **Stateful (DHCPv6)** settings to be used to assign LAN IPv6 addresses by entering the following details:

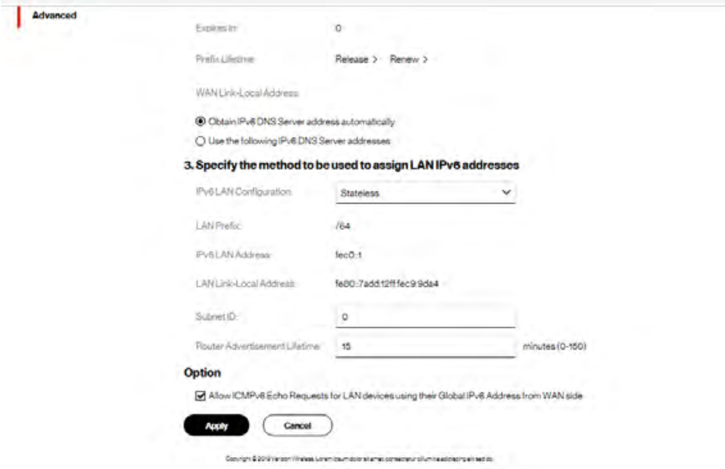
   - **IPv6 LAN Configuration** (select Stateful from the dropdown list)

- **LAN Prefix** (automatically populated)
- **Guest Wi-Fi Prefix** (automatically populated)
- **IPv6 LAN Address** (automatically populated)
- **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
- **DHCPv6 Client Address Range** (start and end)
- **LAN Link Local Address** (automatically populated)
- **Guest Wi-Fi Link Local Address** (automatically populated)
- **Subnet ID** - set the site topology for your internal site
- **Router Advertisement Lifetime** (minutes between 0-150)
- **IPv6 Address Lifetime** (minutes between 3-150)

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

LAN IPv6 Stateless with No WAN Settings

1. To configure IPv6 LAN Stateless mode with No WAN connection, select the **Stateless** option on the **IPv6 Configuration Control** page as shown below:



Expires In: 0

Prefix Lifetime: Release > Renew >

WAN Link-Local Address:

● Obtain IPv6 DNS Server address automatically
○ Use the following IPv6 DNS Server addresses

3. Specify the method to be used to assign LAN IPv6 addresses

IPv6 LAN Configuration: Stateless

LAN Prefix: /64

IPv6 LAN Address: fec0::1

LAN Link-Local Address: fe80::7add:12ff:fec9:9da4

Subnet ID: 0

Router Advertisement Lifetime: 15 minutes (0-150)

Option

☑ Allow ICMPv6 Echo Requests for LAN devices using their Global IPv6 Address from WAN side

Copyright © 2019 Verizon Wireless [illegible]

2. Specify the settings to be used to assign LAN IPv6 addresses by entering the following details:
   - **IPv6 LAN Configuration** (select Stateless from the drop-down list)
   - **LAN Prefix** (automatically populated)
   - **Guest Wi-Fi Prefix** (automatically populated)
   - **IPv6 LAN Address** (automatically populated)
   - **Guest Wi-Fi IPv6 LAN Address** (automatically populated)
   - **LAN Link Local Address** (automatically populated)
   - **Guest Wi-Fi Link Local Address** (automatically populated)
   - **Subnet ID** - set the site topology for your internal site
   - **Router Advertisement Lifetime** (minutes between 0-150)

]

3. After entering all appropriate IPv6 settings, click **Apply** to have changes take effect.

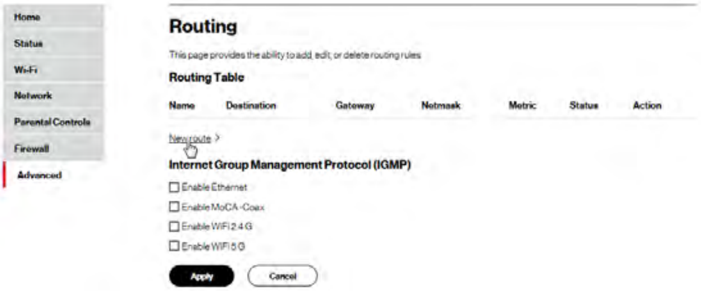
8.2e/ ROUTING SETTINGS

You can view the routing and IP address distribution rules as well as add, edit, or delete the rules.

Routing Table

To view the rules:

1. Select **Routing** in the **Network Settings** section.



Routing

This page provides the ability to add, edit, or delete routing rules

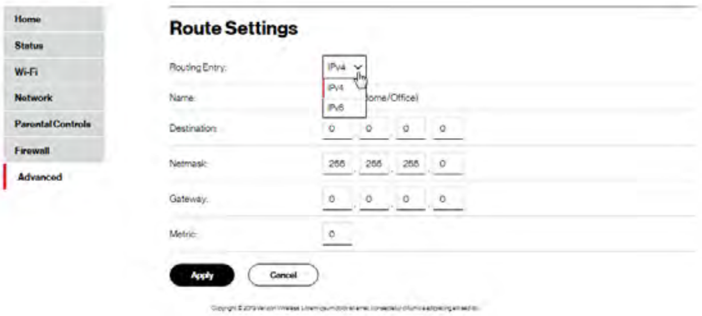
Routing Table

Name	Destination	Gateway	Netmask	Metric	Status	Action

Internet Group Management Protocol (IGMP)

□ Enable Ethernet
□ Enable MoCA -Coax
□ Enable WiFi 2.4 G
□ Enable WiFi 5 G

2. To add a new Route, click **New route.**



Route Settings

Routing Entry: IPv4

Name: ome/Office)

Destination: 0 . 0 . 0 . 0

Netmask: 255 . 255 . 255 . 0

Gateway: 0 . 0 . 0 . 0

Metric: 0

3. Specify the following parameters:
   - **Name** – select the network type.
   - **Destination** - enter the destination IP of the destination host, subnet address, network address, or default route. The destination for a default route is 0.0.0.0.
   - **Netmask** – enter the network mask. This is used in conjunction with the destination to determine when a route is used.
   - **Gateway** – enter the IP address of your Fios Home Router.
   - **Metric** – enter a measurement preference of the route. Typically, the lowest metric is the most preferred route. If multiple routes exist to a specific destination network, the route with the lowest metric is used.
4. Click **Apply** to save changes.

Internet Group Management Protocol (IGMP)

IGMP allows for managing a single upstream interface and multiple downstream interfaces of the IGMP/MLD (Multicast Listener Discovery)-based forwarding. This function enables the system to send IGMP host messages on behalf of hosts that the system discovers through standard IGMP interfaces. Also, IGMP snooping allows an Ethernet switch to “listen in” on the IGMP conversation between hosts and routers, while IGMP querier will send out periodic IGMP queries.

To enable this function:

1. Choose the IGMP interfaces by clicking on the radio buttons on the screen.
2. Click **Apply** to save changes.

8.2f/ IPv4 ADDRESS DISTRIBUTION

You can easily add computers configured as DHCP clients to the network. The DHCP server provides a mechanism for allocating IP addresses to these hosts and for delivering network configuration parameters to the hosts.

For example, a client (host) sends a broadcast message on the network requesting an IP address for itself. The DHCP server then checks its list of available addresses and leases a local IP address to the host for a specific period of time and simultaneously designates this IP address as taken. At this point, the host is configured with an IP address for the duration of the lease.

The host can renew an expiring lease or let it expire. If it renews a lease, the host receives current information about network services, as it did during the original lease, allowing it to update its network configurations to reflect any changes that occurred since the first connection to the network.

If the host wishes to terminate a lease before its expiration, it sends a release message to the DHCP server. This makes the IP address available for use by other hosts.

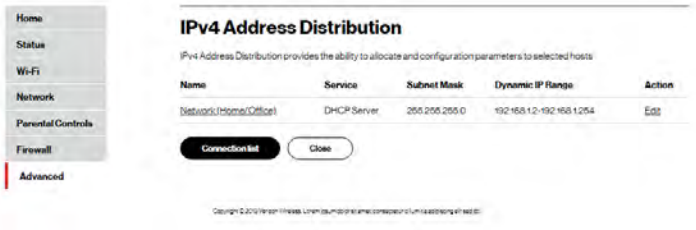
The DHCP server performs the following functions:

- Displays a list of all DHCP host devices connected to your Fios Home Router
- Defines the range of IP addresses that can be allocated in the network
- Defines the length of time the dynamic P addresses are allocated
- Provides the above configurations for each network device and can be configured and enabled or disabled separately for each network device
- Assigns a static lease to a network computer to receive the same IP address each time it connects to the network, even if this IP address is within the range of addresses that the DHCP server may assign to other computer
- Provides the DNS server with the host name and IP address of each computer connected to the network

NETWORK SETTINGS

To view a summary of the services provided by the DHCP server:

1. Select **IPv4 Address Distribution** in the **Network Settings** section.



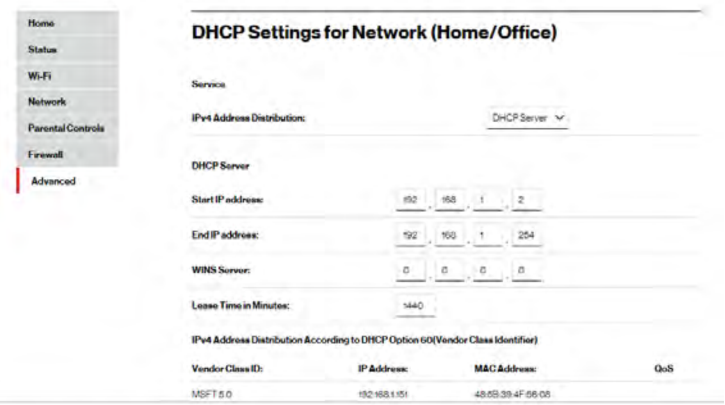
IPv4 Address Distribution

IPv4 Address Distribution provides the ability to allocate and configuration parameters to selected hosts

Name	Service	Subnet Mask	Dynamic IP Range	Action
Network (Home/Office)	DHCP Server	255.255.255.0	192.168.1.2-192.168.1.254	Edit

Copyright © [illegible]

2. You can edit the DHCP server settings for a device. On the **IPv4 Address Distribution** page, click the **Edit** icon in the **Action** column. The DHCP Settings page opens with the device information displayed.
3. To enable the DHCP server, select **DHCP Server** in the **IPv4 Address Distribution** field.
4. Once enabled, the DHCP server provides automatic IP assignments (IP leases) based on the preset IP range defined below.



DHCP Settings for Network (Home/Office)

Service

IPv4 Address Distribution: DHCP Server

DHCP Server

Start IP address: 192 . 168 . 1 . 2

End IP address: 192 . 168 . 1 . 254

WINS Server: 0 . 0 . 0 . 0

Lease Time in Minutes: 1440

IPv4 Address Distribution According to DHCP Option 60(Vendor Class Identifier)

Vendor Class ID:	IP Address:	MAC Address:	QoS
MSFT 5.0	192.168.1.151	48:5B:39:4F:56:08	

5. To configure the DHCP server, complete the following fields:
   - **Start IP Address –** enter the first IP address that your Fios Home Router will automatically begin assigning IP addresses from. Since your Fios Home Router's default IP address is 192.168.1.1, the default start IP address should be 192.162.1.2.
   - **End IP Address –** enter the last IP address that your Fios Home Router will stop at for the IP address allocation. The maximum end IP address range that can be entered is 192.168.1.254.
   - **WINS Server –** determines the IP address associated with a network device.

- **Lease Time in Minutes** – assigns the amount of time in minutes that each device is assigned an IP address by the DHCP server when it connects to the network.

  When the lease expires, the server determines if the computer has disconnected from the network. If it has, the server may reassign this IP address to a newly connected computer.

6. Click **Apply** to save changes.

IPv4 Address Distribution According to DHCP option 60 (Vendor Class Indentifier)

DHCP vendor class is related to DHCP option 60 configuration within the router. User can add option 60 configurations such that particular vendor can get lease from a specified pool of address. The existing vendor class ID, IP address, MAC address and QoS are shown on the screen above.

DHCP Connection List

You can view a list of the connections currently assigned and recognized by the DHCP server.

To view a list of computers:

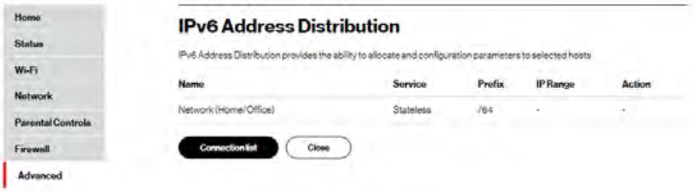
1. On the IP Address page, click **Connection List**.
2. To define a new **Static** Connection with a fixed IP address, click **Add Static Connection**.

3. Enter the host name.
4. Enter the fixed IP address to be assigned.
5. Enter the MAC address of the network interface of the computer used with this DHCP static connection.
6. Click **Apply** to save changes.

8.2g/ IPv6 ADDRESS DISTRIBUTION

To view a summary of the services provided by the DHCP server:

1. Select **IPv6 Address Distribution** in the **Network Settings** section.



IPv6 Address Distribution

IPv6 Address Distribution provides the ability to allocate and configuration parameters to selected hosts

Name	Service	Prefix	IP Range	Action
Network (Home/Office)	Stateless	/64	-	-

2. You can edit the DHCP server settings for a device. On the **IPv6 Address Distribution** page, click the **Edit** icon in the **Action** column. The DHCP Settings page opens with the device information displayed.
3. To configure the DHCP server complete the following fields:
   - **Start IPv6 Address** – the starting IPv6 address in the consecutive list of addresses that makes up this LAN pool for the DHCPv6 server.

- **End IPv6 Address –** the ending IPv6 address in the consecutive list of addresses that makes up this LAN pool for the DHCPv6 server.
- **Lease Time in Minutes –** assigns the amount of time in minutes that each device is assigned an IP address by the DHCP server when it connects to the network.

  When the lease expires, the server determines if the computer has disconnected from the network. If it has, the server may reassign this IP address to a newly connected computer.

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

DHCP Connection List

You can view a list of the connections currently assigned and recognized by the DHCP server.

To view a list of computers:

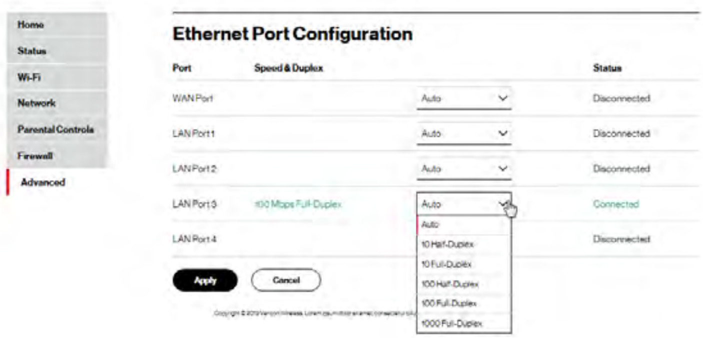
1. On the IP Address page, click **Connection List**.
2. To define a new **Static** Connection with a fixed IP address, click **Add Static Connection**.
3. Enter the host name.
4. Enter the fixed IP address to be assigned.
5. Enter the MAC address of the network interface of the computer used with this DHCP static connection.
6. Click **Apply** to save changes.

8.2h/ PORT CONFIGURATION

Ethernet port configuration allows you to set up the Ethernet ports as either full- or half-duplex ports, at either 10 Mbps, 100 Mbps, or 1000 Mbps.

To configure the ports:

1. Select **Port Configuration** in the **Network Settings** section.



Ethernet Port Configuration

Port	Speed & Duplex		Status
WAN Port		Auto	Disconnected
LAN Port 1		Auto	Disconnected
LAN Port 2		Auto	Disconnected
LAN Port 3	100 Mbps Full-Duplex	Auto	Connected
LAN Port 4			Disconnected

2. To emulate the speed and duplex configuration of the port with which it's communicating, select **Auto** or select the port speed and duplicity.
3. Click **Apply** to save changes.

8.3/ DATE AND TIME

You can configure the following settings:

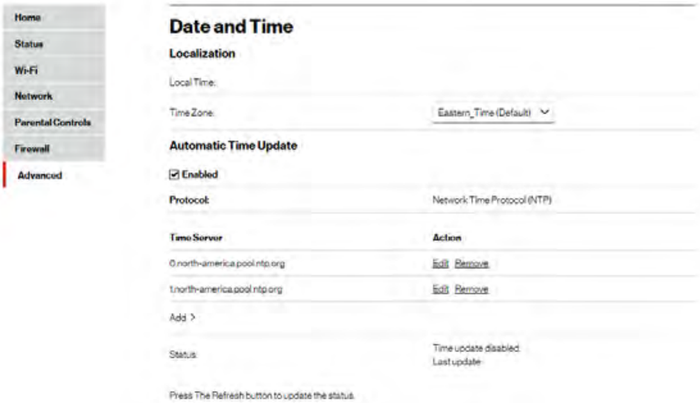
- Date and Time Settings – sets the time zone and enables automatic time updates.
- Scheduler Rules – limits the activation of firewall rules to specific time periods.

8.3a/ DATE AND TIME SETTINGS

You can set the time zone and enable automatic time updates.

To configure the settings:

1. Select Date and Time in the Date and Time section.



Date and Time

Localization

Local Time:

Time Zone: Eastern_Time (Default)

Automatic Time Update

☑ Enabled

Protocol: Network Time Protocol (NTP)

Time Server	Action
0.north-america.pool.ntp.org	Edit Remove
1.north-america.pool.ntp.org	Edit Remove

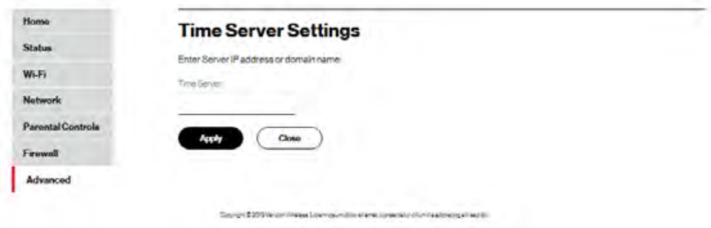
Add >

Status: Time update disabled.
Last update:

Press The Refresh button to update the status.

2. Select the local time zone. Your Fios Home Router automatically detects daylight saving times for selected time zone.

3. In the **Automatic Time Update** section, select the **Enabled** check box to perform an automatic time update.
4. Define the time server addresses by clicking **Add**. The **Time Server Settings** page displays.



Time Server Settings

Enter Server IP address or domain name

Time Server

5. Enter the IP address or domain name of the time server, then click **Apply** to save changes.

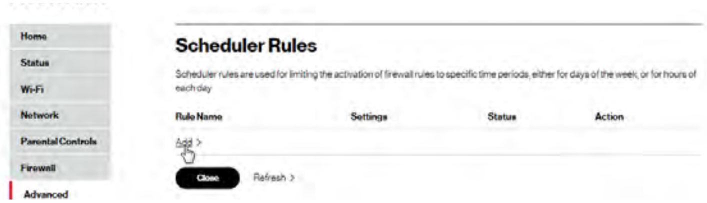
8.3b/ SCHEDULER RULES

Scheduler rules are used for limiting the activation of firewall rules to specific time periods. The time periods are either for days of the week or for hours of each day based on activity or inactivity.

To define a rule:

1. Verify that the date and time of your Fios Home Router is correct.
2. Select Scheduler Rules in the Date and Time section.

DATE AND TIME

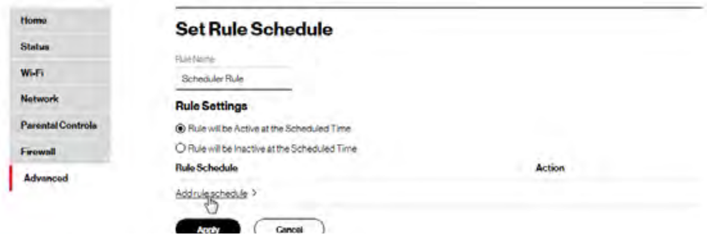


Scheduler Rules

Scheduler rules are used for limiting the activation of firewall rules to specific time periods, either for days of the week, or for hours of each day

Rule Name	Settings	Status	Action

3. Click **Add**. The **Set Rule Schedule** page displays.



Set Rule Schedule

Rule Name

Scheduler Rule

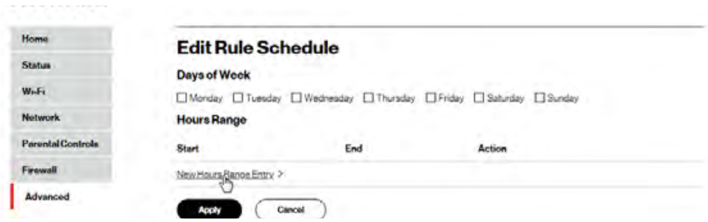
Rule Settings

● Rule will be Active at the Scheduled Time

○ Rule will be Inactive at the Scheduled Time

Rule Schedule	Action

4. Enter the name of the rule.
5. In the **Rule Settings** section, specify if the rule is active at the scheduled time or inactive at the scheduled time.
6. Click the **Add rule schedule**. The **Edit Rule Schedule** page displays.



Edit Rule Schedule

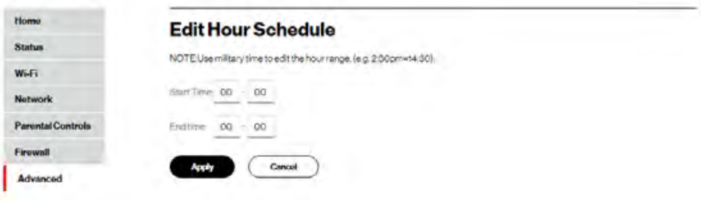
Days of Week

□ Monday □ Tuesday □ Wednesday □ Thursday □ Friday □ Saturday □ Sunday

Hours Range

Start	End	Action

7. Select the active or inactive days of the week.
8. To define a new active or inactive hourly range, click **New Hours Range Entry.**



Edit Hour Schedule

NOTE:Use military time to edit the hour range. (e.g. 2:00pm=14:30).

Start Time 00 : 00

End time 00 : 00

9. Enter the start and end time, then click **Apply** to save changes.
10. Click **Apply** again to save the rule schedule.

8.4/ DNS SETTINGS

You can view and manage the DNS server host name and IP address as well as add a new computer. The DNS server does not require configuration.

8.4a/ DYNAMIC DNS

Typically, when connecting to the internet, your router is assigned an unused public IP address from a pool, and this address changes periodically.

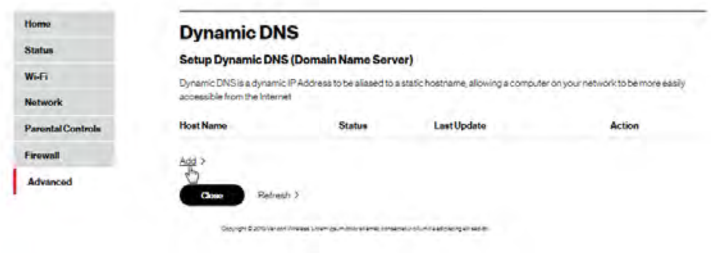
Dynamic DNS allows a static domain name to be mapped to the dynamic IP address, allowing a computer within your network to be more easily accessible from the internet.

DNS SETTINGS

When using Dynamic DNS, each time the public IP address changes, the DNS database is automatically updated with the new IP address. In this way, even though the IP address changes often, the domain name remains constant and accessible.

To set up dynamic DNS:

1. Select **Dynamic DNS** in the **DNS** section.



Dynamic DNS

Setup Dynamic DNS (Domain Name Server)

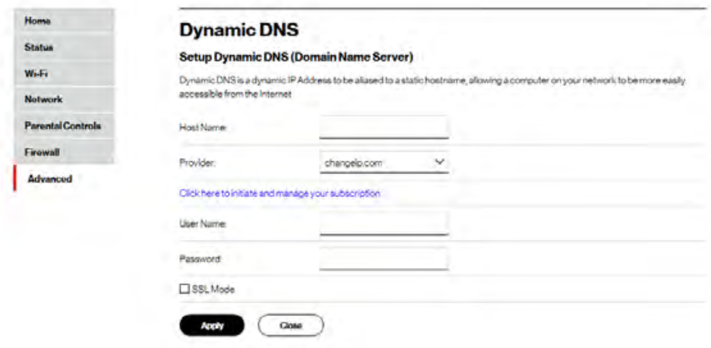
Dynamic DNS is a dynamic IP Address to be aliased to a static hostname, allowing a computer on your network to be more easily accessible from the Internet

Host Name	Status	Last Update	Action

Add >

Copyright © [illegible]

2. To set up a new entry, click the **Add** button.



Dynamic DNS

Setup Dynamic DNS (Domain Name Server)

Dynamic DNS is a dynamic IP Address to be aliased to a static hostname, allowing a computer on your network to be more easily accessible from the Internet

Host Name:

Provider: changeip.com

Click here to initiate and manage your subscription

User Name:

Password:

□ SSL Mode

3. Configure the following parameters:
   - **Host Name** – enter the full domain name for your Dynamic DNS domain.
   - **Provider** – select the Dynamic DNS account provider from the menu.
   - **User Name** – enter your user name for your Dynamic DNS account.
   - **Password** – enter the password for your Dynamic DNS account.
   - **SSL Mode** – select if your Dynamic DNS service supports SSL.
4. Click **Apply** to save your changes.

To edit the host name or IP address:

1. In the **Action** column, click the **Edit** icon. The DNS Entry page displays.
2. Edit the settings.
3. Click **Apply** to save the changes.

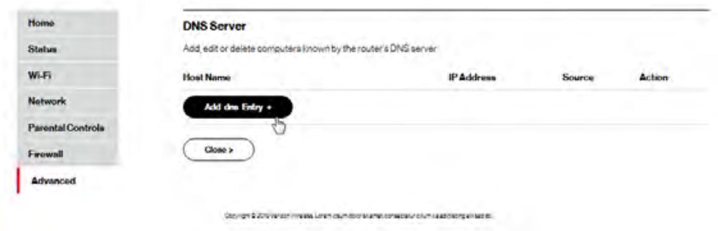
DNS SETTINGS

8.4b/ DNS SERVER

You can edit the host name and/or IP address, if the host was manually added to the DNS table. If not, you can only modify the host name.

To access the DNS server:

1. Select **DNS Server** in the **DNS** section.

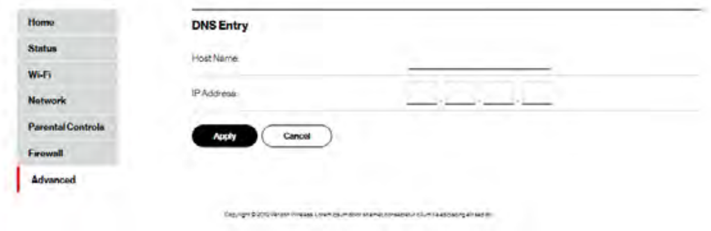


DNS Server

Add, edit or delete computers known by the router's DNS server

Host Name	IP Address	Source	Action

2. To view and add computers stored in the **DNS** table, click **Add DNS Entry**. The **DNS Entry** page displays.



DNS Entry

Host Name: ____________

IP Address: ____ . ____ . ____ . ____

3. In the **Host Name** field, enter the name of the computer, then enter the **IP address** and click **Apply** to save changes.
4. Then the **DNS Server** page displays.

5. To edit the host name or IP address, click the **Edit** icon in the **Action** column. The **DNS Entry** page displays. Edit the host name and/or IP address, then click **Apply** to save changes.
6. To remove a host from the DNS table, click the **Delete** icon in the **Action** column.

8.5/ MONITORING

You can view the details and status of:

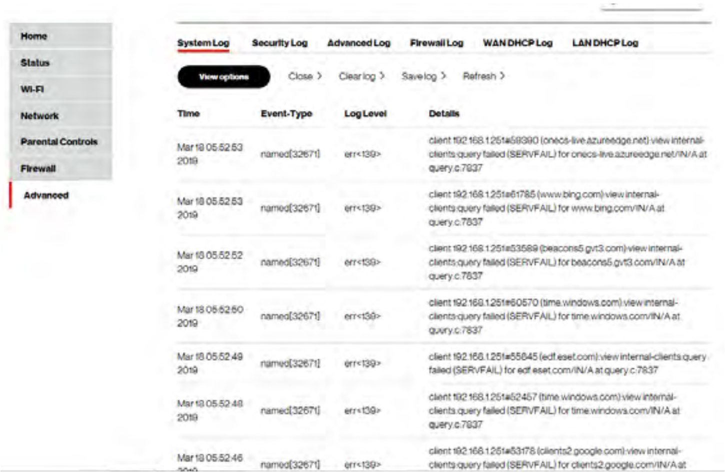
- System Logging
- Full Status/System wide Monitoring of Connections/Traffic Monitoring
- Bandwidth Monitoring

8.5a/ SYSTEM LOGGING

System logging provides a view of the most recent activity of your Fios Home Router. In addition, you can view additional logs, such as the security, advanced, firewall, WAN, DHCP, and LAN DHCP.

To view the system log:

1. In the **Monitoring** section, click the **System Logging** link.



Time	Event-Type	Log Level	Details
Mar 18 05:52:53 2019	named[32671]	err<139>	client 192.168.1.251#58390 (onecs-live.azureedge.net): view internal-clients: query failed (SERVFAIL) for onecs-live.azureedge.net/IN/A at query.c:7837
Mar 18 05:52:53 2019	named[32671]	err<139>	client 192.168.1.251#61785 (www.bing.com): view internal-clients: query failed (SERVFAIL) for www.bing.com/IN/A at query.c:7837
Mar 18 05:52:52 2019	named[32671]	err<139>	client 192.168.1.251#53589 (beacons5.gvt3.com): view internal-clients: query failed (SERVFAIL) for beacons5.gvt3.com/IN/A at query.c:7837
Mar 18 05:52:50 2019	named[32671]	err<139>	client 192.168.1.251#60570 (time.windows.com): view internal-clients: query failed (SERVFAIL) for time.windows.com/IN/A at query.c:7837
Mar 18 05:52:49 2019	named[32671]	err<139>	client 192.168.1.251#55845 (edf.eset.com): view internal-clients: query failed (SERVFAIL) for edf.eset.com/IN/A at query.c:7837
Mar 18 05:52:48 2019	named[32671]	err<139>	client 192.168.1.251#52457 (time.windows.com): view internal-clients: query failed (SERVFAIL) for time.windows.com/IN/A at query.c:7837
Mar 18 05:52:46	named[32671]	err<139>	client 192.168.1.251#53178 (clients2.google.com): view internal-clients: query failed (SERVFAIL) for clients2.google.com/IN/A at

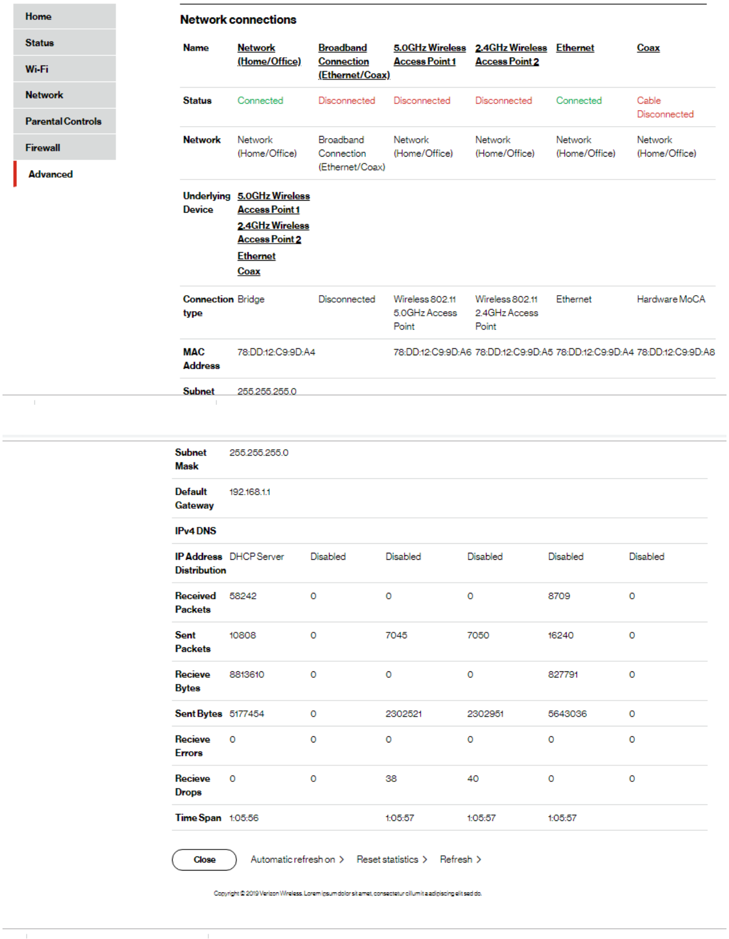
2. To view a specific type of log event such as Security Log, WAN DHCP Log, etc., click the appropriate link in the menu on the top.
3. To update the data, click **Refresh**.

8.5b/ FULL STATUS/SYSTEM WIDE MONITORING OF CONNECTIONS

You can view a summary of the monitored data collected for your Fios Home Router.

To view your Fios Home Router's full system status and traffic monitoring data:

1. In the **Monitoring** section, click **Full Status/System wide Monitoring of Connections/Traffic Monitoring.**



Network connections

Name	Network (Home/Office)	Broadband Connection (Ethernet/Coax)	5.0GHz Wireless Access Point 1	2.4GHz Wireless Access Point 2	Ethernet	Coax
Status	Connected	Disconnected	Disconnected	Disconnected	Connected	Cable Disconnected
Network	Network (Home/Office)	Broadband Connection (Ethernet/Coax)	Network (Home/Office)	Network (Home/Office)	Network (Home/Office)	Network (Home/Office)
Underlying Device	5.0GHz Wireless Access Point 1 2.4GHz Wireless Access Point 2 Ethernet Coax					
Connection type	Bridge	Disconnected	Wireless 802.11 5.0GHz Access Point	Wireless 802.11 2.4GHz Access Point	Ethernet	Hardware MoCA
MAC Address	78:DD:12:C9:9D:A4		78:DD:12:C9:9D:A6	78:DD:12:C9:9D:A5	78:DD:12:C9:9D:A4	78:DD:12:C9:9D:A8
Subnet Mask	255.255.255.0					
Default Gateway	192.168.1.1					
IPv4 DNS						
IP Address Distribution	DHCP Server	Disabled	Disabled	Disabled	Disabled	Disabled
Received Packets	58242	0	0	0	8709	0
Sent Packets	10808	0	7045	7050	16240	0
Recieve Bytes	8813610	0	0	0	827791	0
Sent Bytes	5177454	0	2302521	2302951	5643036	0
Recieve Errors	0	0	0	0	0	0
Recieve Drops	0	0	38	40	0	0
Time Span	1:05:56		1:05:57	1:05:57	1:05:57	

Copyright © 2019 Verizon Wireless. Lorem ipsum dolor sit amet, consectetur cillumit a adipiscing elit sed do.

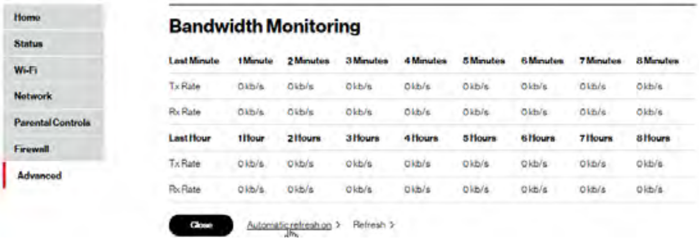
2. To modify the connection properties, click the individual connection links.
3. To refresh the page, click **Refresh**.
4. To continuously refresh the page, click **Automatic refresh on**.

8.5c/ BANDWIDTH MONITORING

You can view and monitor the recorded bandwidth usage measured in Kbps.

To view the bandwidth:

1. In the **Monitoring** section, select **Bandwidth Monitoring**.



Bandwidth Monitoring

Last Minute	1 Minute	2 Minutes	3 Minutes	4 Minutes	5 Minutes	6 Minutes	7 Minutes	8 Minutes
Tx Rate	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s
Rx Rate	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s
Last Hour	**1 Hour**	**2 Hours**	**3 Hours**	**4 Hours**	**5 Hours**	**6 Hours**	**7 Hours**	**8 Hours**
Tx Rate	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s
Rx Rate	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s	0 kb/s

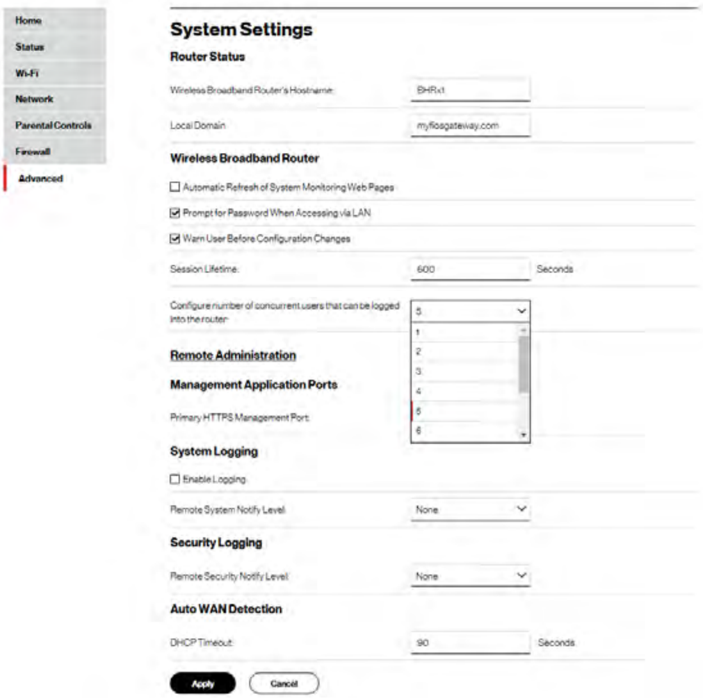
2. To refresh the page, click **Refresh**.
3. To continuously refresh the page, click **Automatic refresh on**.

8.6/ SYSTEM SETTINGS

You can configure various system and management parameters.

To configure system settings:

1. Select System Settings in the **System** section.



System Settings

Router Status

Wireless Broadband Router's Hostname: BHRx1

Local Domain: myfiosgateway.com

Wireless Broadband Router

☐ Automatic Refresh of System Monitoring Web Pages

☑ Prompt for Password When Accessing via LAN

☑ Warn User Before Configuration Changes

Session Lifetime: 600 Seconds

Configure number of concurrent users that can be logged into the router: 5

Remote Administration

Management Application Ports

Primary HTTPS Management Port:

System Logging

☐ Enable Logging

Remote System Notify Level: None

Security Logging

Remote Security Notify Level: None

Auto WAN Detection

DHCP Timeout: 90 Seconds

2. In the **Router Status** section, configure the following:
   - **Wireless Broadband Route's Hostname –** enter the host name or URL address of your Fios Home Router. Both names are the same.
   - **Local Domain –** view the local domain of the network.
3. In the **Wireless Broadband Router** section, configure the following by selecting the check box:
   - **Automatic Refresh of System Monitoring Web Pages –** activates the automatic refresh of system monitoring web pages.
   - **Prompt for Password when Accessing via LAN –** causes your Fios Home Router to ask for a password when trying to connect to the network.
   - **Warn User Before Configuration Changes –** activates user warnings before network configuration changes take effect.
4. In the **Session Lifetime** field, specify the length of time required before re-entering a user name and password after your Fios Home Router has been inactive.
5. In the **Configure number of concurrent users that can be logged into the router** field, select the number of users that can access your Fios Home Router at the same time.

6. Select **Remote Administration** to configure the remote administration to your Fios Home Router.
7. In the **Management Application Ports** section, change the primary HTTP management and SSH ports.

   Refer to 8.1h Remote Administration for using this feature.
8. In the **System Logging** section, configure the following system log options:
   - **Enable Logging** – activates system logging.
   - **Remote System Notify Level** – specify the type of information, such as none, error, warning, and information, received for remote system logging.
9. In the **Security Logging** section, configure the following security logging options:
   - Low Capacity Notification Enabled – activates low capacity notification. This works in conjunction with the Allowed Capacity before Email Notification and System Log Buffer Size.
   - Allowed Capacity before Email Notification – specify the capacity before an email notification is sent.
   - System Log Buffer Size – specify the size of the system log buffer.

10. In the **Auto WAN Detection** section, specify the DHCP timeout.
11. Click **Apply** to save changes.

09/

TROUBLE SHOOTING

This chapter lists solutions for issues that may be encountered while using your Fios Home Router as well as frequently asked questions.

Although the majority of the Fios Router's internet connectivity is automatic and transparent, if an issue does occur accessing the internet (e.g. complete loss of connectivity, inability to access services, etc.), you may need to take additional steps to resolve the problem.

TROUBLESHOOTING TIPS

Note: The advanced settings should only be configured by experienced network technicians to avoid adversely affecting the operation of your Fios Home Router and your local network.

9.0/ TROUBLESHOOTING TIPS

9.0a/ IF YOU ARE UNABLE TO CONNECT TO THE INTERNET:

- The first thing to check is whether your Fios Home Router is powered on and is connected to the internet. Check the Unified Button on the front of the Fios Home Router. Be sure to refer to the “1.3a/ FRONT PANEL” on page 10 to determine status of the Fios Home Router. Check the WAN cable (Ethernet or coaxial) connecting your Fios Home Router to the internet to make sure it is properly connected on both ends.
- If the prior tips do not resolve your connection issue, try restarting (rebooting) the router portion of the Fios Home Router by manually pressing the protruding ‘red’ reset power button on the rear panel of the Fios Home Router for 2-4 seconds (the Router Status LED should go off) to begin rebooting your Fios Home Router. Your Fios Home Router will begin rebooting and will return to service in 3 - 5 minutes depending on your network connection. Check Router Status LED and if it is solid white, try again to access the internet.

- If rebooting your router does not resolve your connection issue, try power cycling the Fios Home Router by unplugging the power cable from the adapter or the wall and wait 2 minutes. During the 2 min. wait period, also power cycle the network device (e.g. the computer, tablet, etc.) and then plug the power cable back into the Fios Home Router. After 3-5 minutes, recheck the Router Status LED and try again to access the internet.

9.0b/ IF YOU ARE UNABLE TO CONNECT TO YOUR FIOS HOME ROUTER USING WI-FI:

- Be sure your wireless device is within range of your Fios Home Router; move it closer to see if your connection improves.
- Check your network device's Wi-Fi settings to be sure your device's Wi-Fi is on (enabled) and that you have the correct Wi-Fi network and password (if using a Wi-Fi password) as configured on your Fios Home Router.
- Be sure you are connecting to the correct Wi-Fi network; check to be sure you are using your Fios Home Router's SSID. In some cases, if using a wireless password, you may need to enter the Wi-Fi password into your network device again to be sure your device accepts the password.
- Check to be sure you are running the latest software for your network device.

- Try turning your network device's Wi-Fi off and on, and try to connect.
- If you have made any changes in your network settings and turning your network device's Wi-Fi off and on does not help, try to restart your network device.
- You may need to turn the Wi-Fi settings from on to off, and back to on again and apply the changes.
- If you are still unable to access your Fios Home Router, you may need to try connecting to the Fios Home Router using another network device. If the issue goes away with another network device, the issue is likely with that individual network device's configuration.

9.0c/ ACCESSING YOUR FIOS HOME ROUTER IF YOU ARE LOCKED OUT

- If your Fios Home Router connection is lost while making configuration changes, a setting that locks access to your Fios Home Router's GUI may have inadvertently been activated.

The common ways to lock access to your Fios Home Router are:

- Scheduler - If a schedule has been created that applies to the computer over the connection being used, your Fios Home Router will not be accessible during the times set in the schedule.
- Access Control - If the access control setting for the computer is set to block the computer, access to your Fios Home Router is denied.

To gain access, restore the default settings to your Fios Home Router.

9.0d/ RESTORING YOUR FIOS HOME ROUTER'S DEFAULT SETTINGS

There are two ways to restore your Fios Home Router's default settings. It is important to note that after performing either procedure, all previously save settings on your Fios Home Router will be lost.

For additional information regarding the Restore Defaults feature, refer to section 8.1/ Utilities/Save And Restore.

- Using the tip of a ballpoint pen or pencil, press and hold the Reset button on the back of your Fios Home Router for three seconds.
- Access the GUI and navigate to the Advanced Settings page. Select the 8.1b Save and Restore option. After saving your configuration, if desired, click the Restore Factory Defaults radio button. For additional details, refer to the 8.1/ Utilities/Save And Restore section of this guide.

Note: If you reset or reboot your Fios Home Router, you may also need to disconnect your Fios Home Router's power supply for a few minutes (3 or more) and then reconnect the power cable. However, in order to provide full synchronization to the coxial network, disconnecting and reconnecting the power may be required.

TROUBLESHOOTING TIPS

9.0e/ LAN CONNECTION FAILURE

To troubleshoot a LAN connection failure:

- Verify your Fios Home Router is properly installed, LAN connections are correct, and that the Fios Home Router and communicating network devices are all powered on.
- Confirm that the computer and Fios Home Router are both on the same network segment.

If unsure, let the computer get the IP address automatically by initiating the DHCP function, then verify the computer is using an IP address within the default range of 192.168.1.2 through 192.168.1.254. If the computer is not using an IP address within the correct IP range, it will not connect to your Fios Home Router.

- Verify the subnet mask address is set to 255.255.255.0.

9.0f/ TIMEOUT ERROR OCCURS WHEN ENTERING THE URL OR IP ADDRESS

Verify the following:

- All computers are working properly.
- IP settings are correct.
- Fios Home Router is on and connected properly.
- Fios Home Router settings are the same as the computer.

For connections experiencing lag or a slow response:

- Check for other devices on the network utilizing large portions of the bandwidth and if possible temporarily stop their current utilization and recheck the connection.
- If lag still exists, clear the cache on the computer and if still needed, unplug the Ethernet cable or disable the wireless connection to the computer experiencing the slow connection and then reconnect or enable the wireless connection and try the connection again.

In rare cases you may also need to:

- Unplug the Ethernet cable to Fios Home Router and restart the Fios Home Router, wait 1-2 mins. and insert the Ethernet cable again.
- Under limited circumstances you may use a port forwarding configuration on the router, based on the application you are using (refer to the 7.2/ Port Forwarding section or Verizon's support online help for more details).

9.0g/ FRONT UNIFIED BUTTON

The front panel's Unified Button allows quick access to the Wi-Fi Protected Setup (WPS) feature and handset paging/paring mode. In addition, the Unified Button provides a visual display of the Fios Home Router's current condition. Refer to the chart below for details.

Condition Status	LED Color	Fios Home Router
Normal	WHITE	Normal operation (solid) Router is booting. (fast blink)
	BLUE	Pairing mode (slow blink) Pairing successful (solid)
	GREEN	Wi-Fi has been turned off. (solid)
Issue(s)	YELLOW	No internet connection (slow blink) Poor backhaul signal (solid)
	RED	Hardware/System failure detected (solid) Overheating (fast blink) Pairing Failure (slow blink)
Power	OFF	Power off

9.0h/ REAR LIGHTED INDICATORS

Flash Speed

- Slow flash – Two times per second
- Fast flash – Four times per second

WAN Ethernet

- Unlit – Indicates no Ethernet link
- Solid green – Indicates a network link
- Fast flash green – Indicates network activity. The traffic can be in either direction.

LAN Ethernet – Upper LED

- Unlit – Indicates no 1 Gbps link
- Solid green – Indicates 1 Gbps link
- Fast flash green – Indicates LAN activity. The traffic can be in either direction.

LAN Ethernet – Lower LED

- Unlit – Indicates no 10/100/1000 Mbps link
- Solid green – Indicates 10/100/1000 Mbps link

LAN Coax

- Unlit – Indicates no MoCA network connection to the device
- Solid green – Indicates network link

WAN Coax

- Unlit – Indicates no link to the upstream MoCA device
- Solid green – Indicates network link
- Fast flash green – Indicates LAN activity. The traffic can be in either direction

FREQUENTLY ASKED QUESTIONS

9.1/ FREQUENTLY ASKED QUESTIONS

9.1a/ I'VE RUN OUT OF ETHERNET PORTS ON MY FIOS HOME ROUTER. HOW DO I ADD MORE COMPUTERS OR DEVICES?

Plugging in an Ethernet hub or switch expands the number of ports on your Fios Home Router.

- Run a straight-through Ethernet cable from the Uplink port of the new hub to the Fios Home Router.

Use a crossover cable if there is no Uplink port/switch on your hub, to connect to the Fios Home Router.

- Remove an existing device from the yellow Ethernet port on your Fios Home Router and use that port.

9.1b/ HOW DO I CHANGE THE PASSWORD ON MY FIOS HOME ROUTER GUI?

To change the password:

1. On the main screen, select **Advanced**, then select **Users** in the **Utilities** section.
2. Click the **Edit** in the **Action** column. The **User Settings** page displays.
3. Edit the user name and set a new password.

9.1c/ IS THE WIRELESS OPTION ON BY DEFAULT ON MY FIOS HOME ROUTER?

Yes, your Fios Home Router's wireless option is activated out of the box.

9.1d/ IS THE WIRELESS SECURITY ON BY DEFAULT WHEN THE WIRELESS OPTION IS ACTIVATED?

Yes, with the unique WPA2 (Wi-Fi Protected Access II) key that is printed on the sticker on the rear panel of your Fios Home Router.

9.1e/ WHICH CONNECTION SPEEDS DOES MY FIOS HOME ROUTER SUPPORT?

The Ethernet WAN Internet connection supports 10/100/ 1000 Mbps. The LAN Ethernet connections support 10/100/1000 Mbps. The 802.11ax wireless connection supports up to 4800 Mbps The 802.11ac wireless connection supports up to 3120 Mbps and the 802.11n supports up to 450 Mbps, depending on signal quality.

9.1f/ ARE MY FIOS HOME ROUTER'S ETHERNET PORTS AUTO-SENSING?

Yes. Either a straight-through or crossover Ethernet cable can be used.

9.1g/ CAN I USE AN OLDER WIRELESS DEVICE TO CONNECT TO MY FIOS HOME ROUTER?

Yes, your Fios Home Router can interface with 802.11b, g, n, ac or ax devices. Your Fios Home Router also can be setup to handle only n wireless cards, g wireless cards, b wireless cards, or any combination of the three.

9.1h/ CAN MY WIRELESS SIGNAL PASS THROUGH FLOORS, WALLS, AND GLASS?

The physical environment surrounding your Fios Home Router can have a varying effect on signal strength and quality. The denser the object, such as a concrete wall compared to a plaster wall, the greater the interference. Concrete or metal reinforced structures experience a higher degree of signal loss than those made of wood, plaster, or glass.

9.1i/ HOW DO I LOCATE THE IP ADDRESS THAT MY COMPUTER IS USING?

In Windows 7 or Windows 10, click the Windows button and select Control Panel, then click View Network Status and Tasks. In the next window, click Local Area Connection. In the Local Area Network Connection Status window, click Details.

On Mac OS X, open System Preferences and click the Network icon. The IP address displays near the top of the screen.

9.1j/ I USED DHCP TO CONFIGURE MY NETWORK. DO I NEED TO RESTART MY COMPUTER TO REFRESH MY IP ADDRESS?

No. In Windows 7, Windows 10 and OSX, unplug the Ethernet cable or wireless card, then plug it back in.

9.1k/ I CANNOT ACCESS MY FIOS HOME ROUTER GUI. WHAT SHOULD I DO?

If you cannot access the GUI, verify the computer connected to your Fios Home Router is set up to dynamically receive an IP address.

9.1l/ I HAVE A FTP OR WEB SERVER ON MY NETWORK. HOW CAN I MAKE IT AVAILABLE TO USERS ON THE INTERNET?

For a web server, enable port forwarding for port 80 to the IP address of the server. Also, set up the web server to receive that port. Configuring the server to use a static IP address is recommended.

For a FTP server, enable port forwarding for port 21 to the IP address of the server. Also, set up the web server to receive that port. Configuring the server to use a static IP address is recommended.

9.1m/ HOW MANY COMPUTERS CAN BE CONNECTED THROUGH MY FIOS HOME ROUTER?

Your Fios Home Router is capable of 254 connections, but we recommend having no more than 45 connections. As the number of connections increase, the available speed for each computer decreases.

10 /

SPECIFICATIONS

The specifications for your Fios Home Router are as follows.

This includes standards, cabling types and environmental parameters.

GENERAL SPECIFICATIONS

Note: The specifications listed in this chapter are subject to change without notice.

10.0/ GENERAL SPECIFICATIONS

Model Number: G3100

Standards:	IEEE 802.3x, 802.3u IEEE 802.11b/g/n/ac/ax
IP:	IP versions 4 and 6
MoCA:	MoCA WAN: 1350 – 1675 MHz and 975 - 1025 MHz
MoCA LAN:	1125 – 1225 MHz
Speed:	Wired WAN Ethernet: 10/100/1000 Mbps auto-sensing Wired LAN Ethernet: 10/100/1000 Mbps auto-sensing Wireless LAN: 802.11b – up to 11 Mbps 802.11g – up to 54 Mbps 802.11n – up to 450 Mbps 802.11ac – up to 1300 Mbps 802.11ac – up to 4800 Mbps

Cabling Type:	Ethernet 10BaseT: UTP/STP Category 3 or 5 Ethernet 100BaseT: UTP/STP Category 5 Ethernet 1000BaseT: UTP/STP Category 5e
Firewall:	ICSA certified

10.1/ LED INDICATORS

Front Panel:	Unified Button: Router Status LED
Rear Panel:	WAN Coax, LAN Coax, WAN Ethernet, and LAN Ethernet [4]

10.2/ ENVIRONMENTAL PARAMETERS

DIMENSIONS AND WEIGHT

Fios Home Router (unit only):	
	Size: 5.32” wide x 9.27” high x 5.94” deep
	Weight: 2.50 lbs / 1.138 kg
Complete System (inc. packaging):	
	Size: 12.24” wide x 6.26” high x 7.09” deep
	Weight: 4.00 lbs ~ 4.05 lbs / 1.81 kg ~ 1.83 kg
Power:	External, 12V, 3.5A
Screws (optional):	PH TP+N: 0.157” x 0.984” Anchor PE: 0.197” x 0.984”
Certifications:	FCC, UL 60950-1
Operating Temperature:	5° C to 40° C (41° F to 104° F)
Storage Temperature:	-5° C to 50° C (23° F to 122° F)
Operating Humidity:	5% to 85%
Storage Humidity:	5% to 93% (non-condensing)

11/

NOTICES

This chapter lists various compliance and modification notices, as well as the NEBS requirements and GPL.

REGULATORY COMPLIANCE NOTICES

11.0/ REGULATORY COMPLIANCE NOTICES

11.0a/ Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF Exposure:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 32 cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2.4GHz operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

This device is restricted for indoor use.

REGULATORY COMPLIANCE NOTICES

11.0b/ Safety Warning:

1. The circuit of cable distribution system under consideration is TNV-1 circuit.
2. The common sides or earthed side of the circuit are connected to the screen of the coaxial cable through an antenna connector of tuner and to all accessible parts and circuits (SELV, LCC and accessible metal parts).
3. The screen of the coaxial cable is intended to be connected to earth in the building installation.

11.0c/ Alerte de sécurité:

1. Le circuit de distribution par câble considéré est le circuit TNV-1.
2. Les côtés communs ou côté terre du circuit sont connectés à l’écran du câble coaxial via un connecteur d’antenne du syntoniseur et à toutes les parties et circuits accessibles (SELV, LCC et parties métalliques accessibles).
3. L’écran du câble coaxial est destiné à être mis à la terre dans l’installation du bâtiment.

The cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable.

Le système de distribution par câble doit être mis à la terre conformément à ANSI / NFPA 70, Code national de l’électricité (NEC), en particulier à la section 820.93, Mise à la terre du blindage conducteur extérieur d’un câble coaxial.

Caution: The Broadband Home Router must be installed inside the home. The Router is not designed for exterior installation.

11.0d/ GENERAL PUBLIC LICENSE

This product contains certain software that is covered by open source licensing requirements. Copies of the licenses and a downloadable copy of the source code for the open source software that is used in this product are available on the following website:

http://verizon.com/opensource/

All open source software contained in this product is distributed WITHOUT ANY WARRANTY. All such software is subject to the copyrights of the authors and to the terms of the applicable licenses included in the download.

You may also obtain a copy of the source code for the open source software used in this product for a period of three years after your receipt of the product by sending a check for $10, payable to VERIZON, to the address below:

Verizon
One Verizon Way
Basking Ridge, NJ 07920
Attn: Legal, Open Source Requests

Note: This information is provided for those who wish to edit or otherwise change such programs. You do not need a copy of any of such open source software source code to install or operate the device.