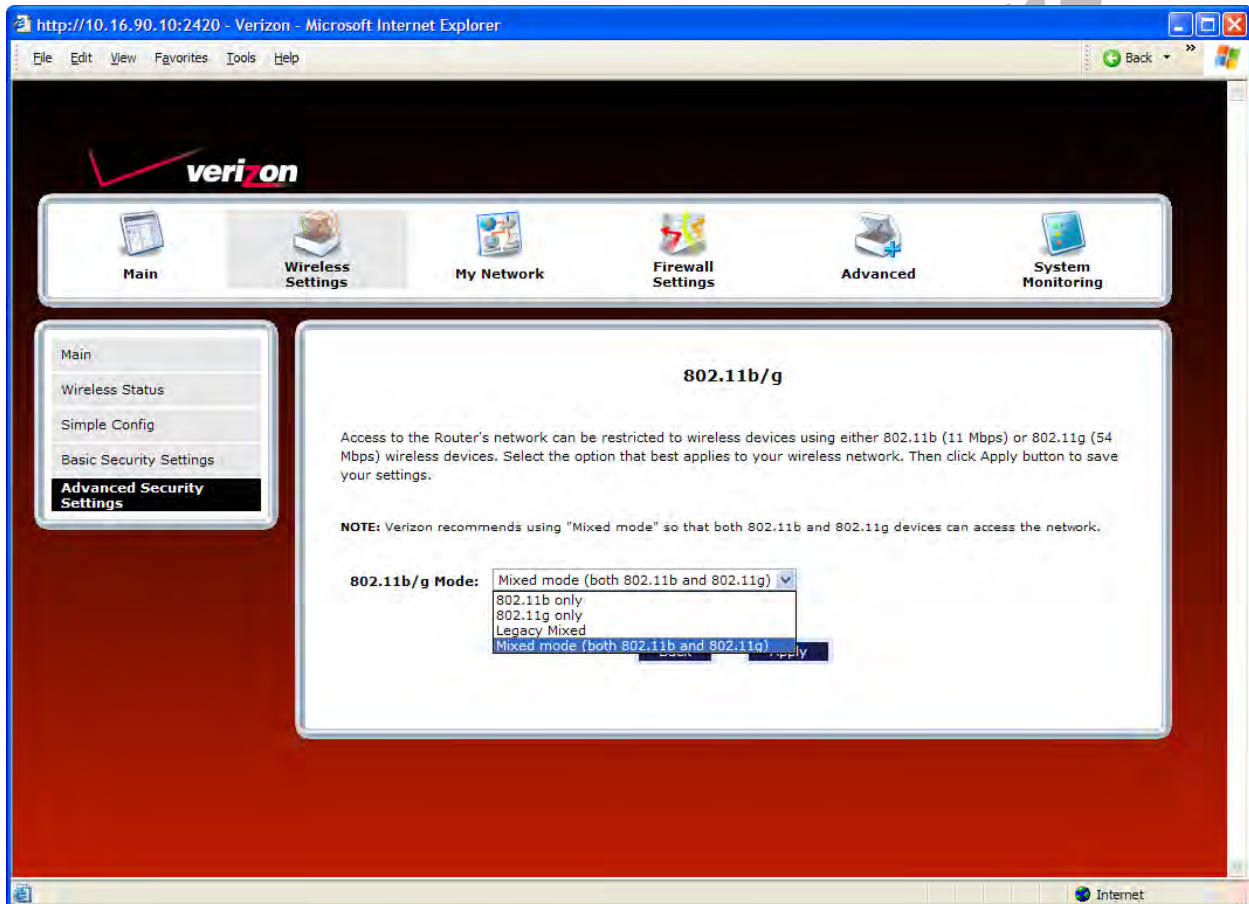


13.4.4 802.11b/g Mode

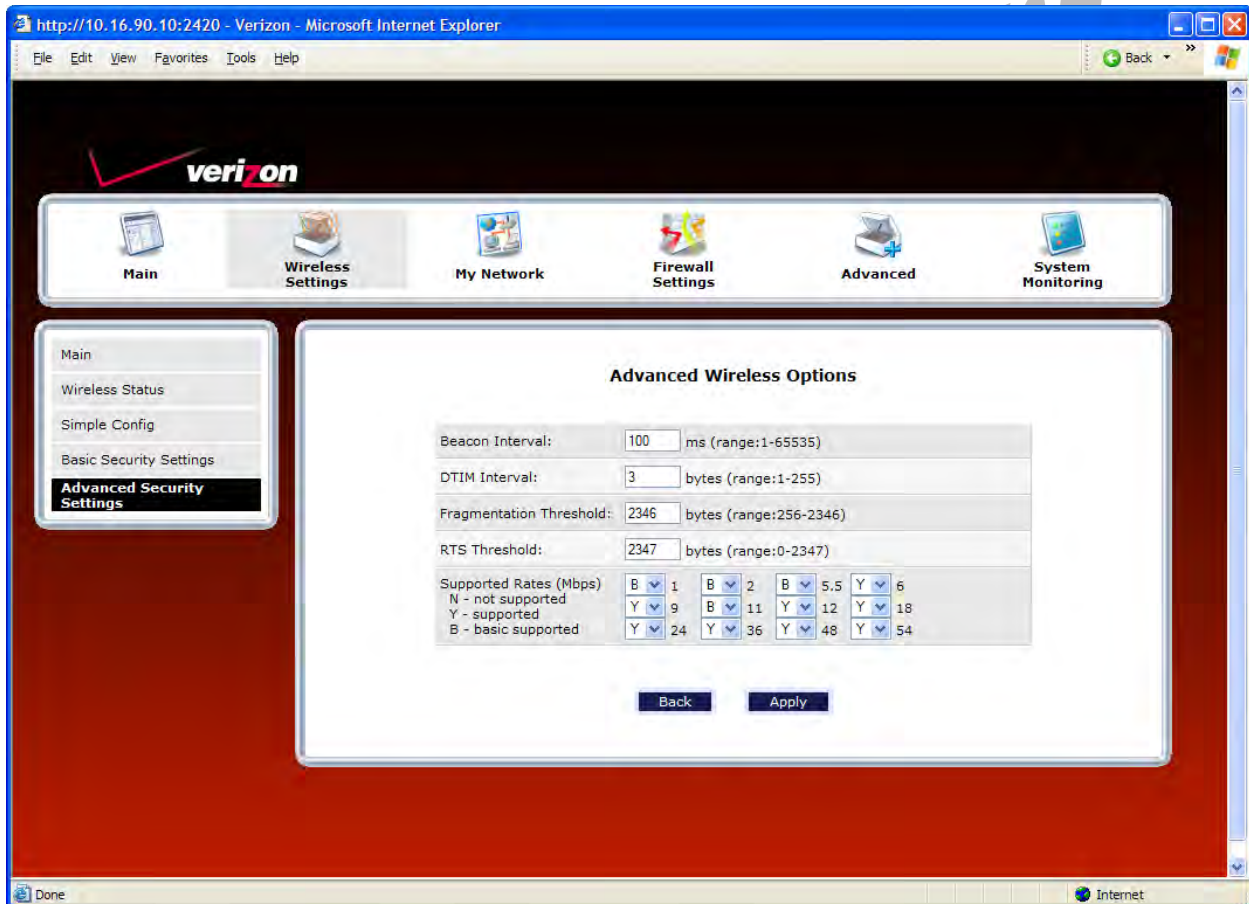
If you select the **802.11b/g Mode** link in the **Advanced Security Settings** screen, the following screen will be displayed. This screen allows you to limit access to your Router based on technology type. From the drop-down menu, select the desired setting. Then, click **Apply** to allow the settings to take effect.



802.11b/g Mode	11b only: Communication with VersaLink is limited to 802.11b
	11g only: Communication with VersaLink is limited to 802.11g
	Legacy Mixed: Communication with VersaLink is limited to 802.11b/g
	Mixed mode: Computers using 802.11b or 802.11g technology can communicate with VersaLink.

13.4.5 Other Advanced Wireless Options

If you select the **Other Advanced Wireless Options** link in the **Advanced Security Settings** screen, the following screen will appear. From the drop-down menus, select the desired settings. Then, click **Apply** to allow the settings to take effect.



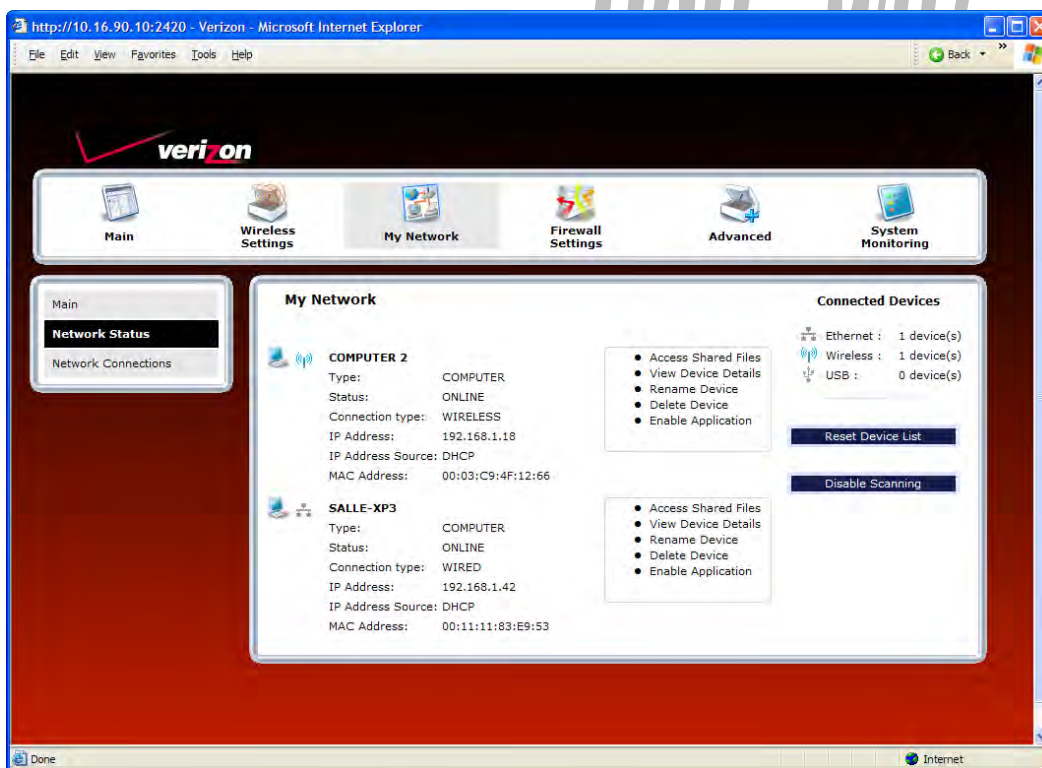
Wireless Advanced Configuration	
Beacon Interval	The time interval between beacon frame transmissions. Beacons contain rate and capability information. Beacons received by stations can be used to identify the access points in the area.
DTIM Interval	The number of Beacon intervals between DTIM transmissions. Multicast and broadcast frames are delivered after every DTIM
Fragmentation Threshold	Any MSDU or MPDU larger than this value will be fragmented into an MPDU of the specified size.
RTS Threshold	RTS/CTS handshaking will be performed for any data or management MPDU containing a number of bytes greater than the threshold. If this value is larger than the MSDU size (typically set by the fragmentation threshold), no handshaking will be performed. A value of zero will enable handshaking for all MPDUs.
Supported Rates (Mbps) 802.11b Rates (Mbps) 802.11g Rates (Mbps)	These are the allowable communication rates that VersaLink will attempt to use. The rates are also broadcast within the connection protocol as the rates supported by VersaLink.

14. MY NETWORK

This section discusses details about your Router's network.

14.1 Network Status

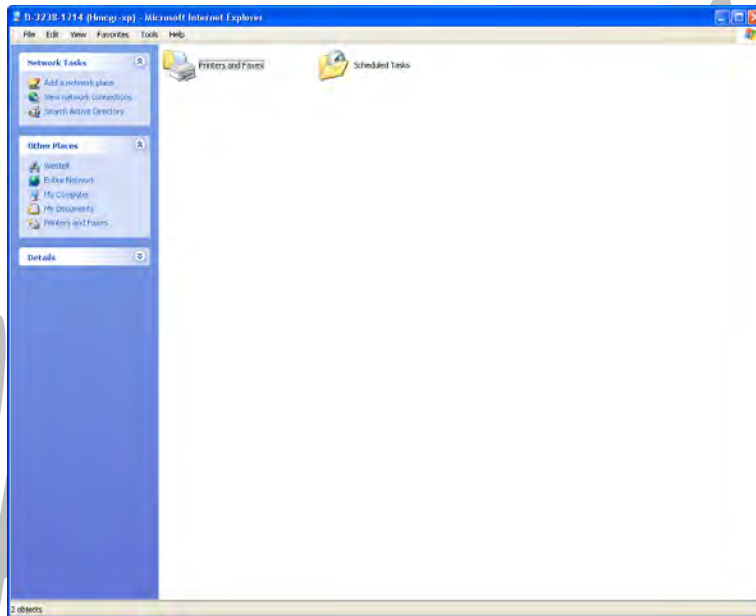
To view your Router's network settings, from the top navigational menu, select **My Network**. Next, click **Network Status** in the submenu at the left of the screen. The following screen will appear. This screen displays information about the devices connected to your local area network (LAN).



My Network	
Type	The type of device connected to your network
Status	The connection status for the device.
Connection Type	The physical connection used to interface with your Router.
IP Address	The IP address assigned to your computer.
IP Address Source	The method by which your computer receives its IP address.
MAC Address	The Media Access Controller; the hardware address assigned to the device by the manufacturer.
Connected Devices	<p>The interfaces used to connect to your Router to the computer.</p> <p>Ethernet: Displays the number of devices that are connected to the Router via Ethernet 10/100 BaseT connection.</p> <p>Wireless: Displays the number of devices that are connected to the Router wirelessly.</p> <p>USB: Displays the number of devices that are connected to the Router via USB connection.</p> <p>Note: If you have computers on your network that are not being displayed, check the firewall setting on the PCs to ensure that the firewall is disabled.</p>

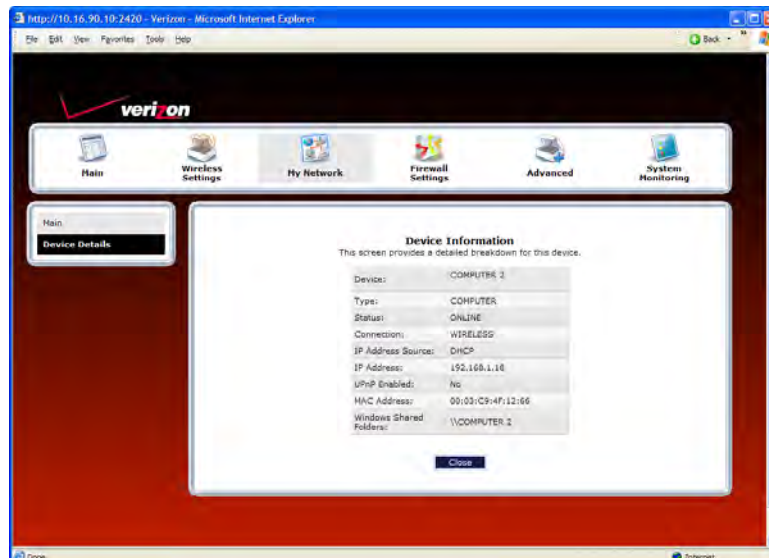
14.1.1 Access Shared Files

In the **My Network** panel, click the **Access Shared Files** link to access files from a device on your local network. (The device from which you will access files must have file sharing enabled.) If the device has a firewall turned on, you will not be able to access shared files from the device.



14.1.2 View Device Details

In the **My Network** panel, click the **View Device Details** link to view details about your device. After you have finished viewing this screen, click **Close** to return to the My Network page.



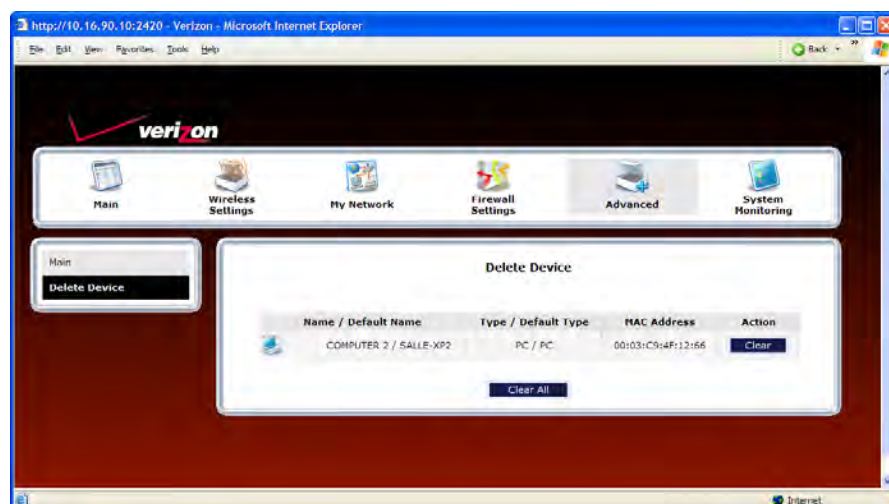
14.1.3 Rename Device

In the **My Network** panel, click the **Rename Device** link to rename a device on your network. In the following screen, type the desired name in the **New Name** box, and then (if desired) select an icon from the **New Icon** drop-down menu to assign a different icon to this device. Next, click the **Rename Device** button to allow the changes to take effect. Click **Back** to return to the **My Network** panel.



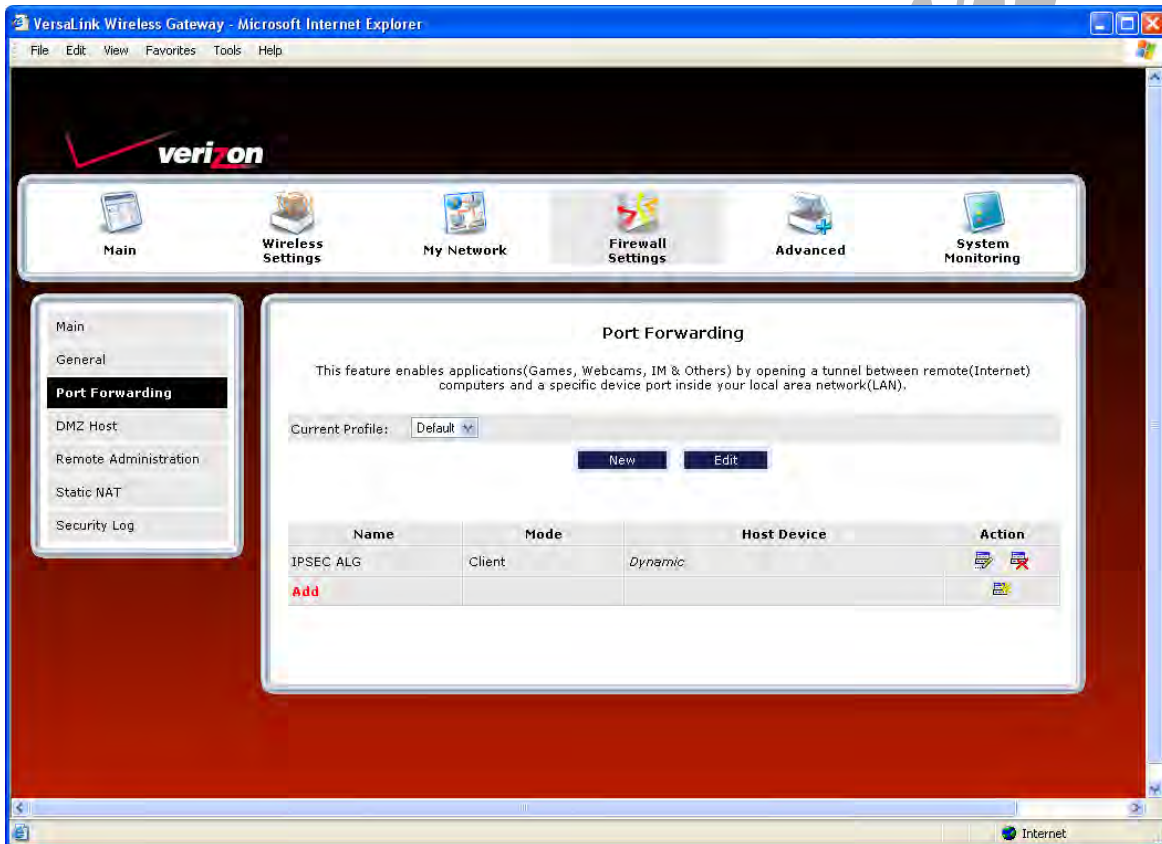
14.1.4 Delete Device

In the **My Network** panel, click the **Delete Device** link to remove a device from your network. Click the **Clear** button next to the device that you want to remove from your network, or click **Clear All** to remove all devices from your network.



14.1.5 Enable Application

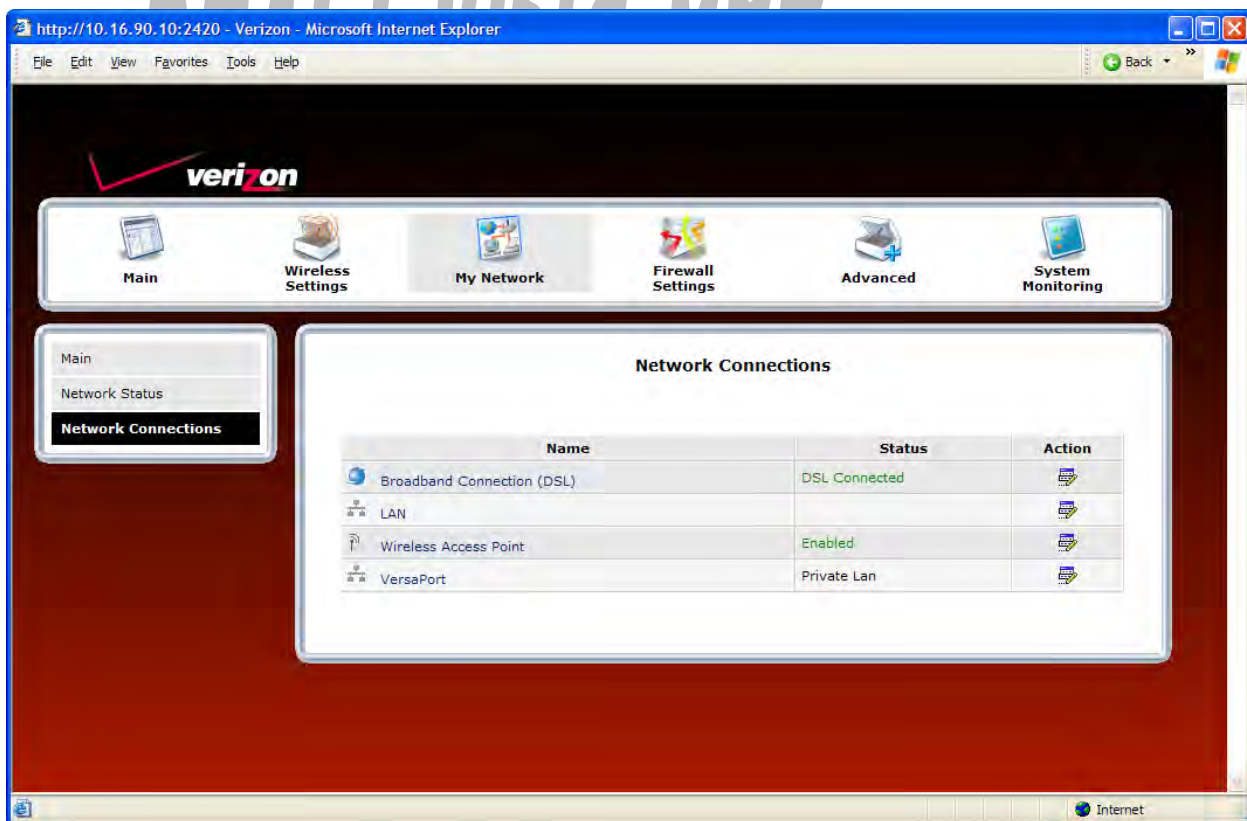
In the **My Network** panel, click the **Enable Application** link to set up applications for your service profile. This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (Internet) computers and a specific device port inside your local area network (LAN). Details on this screen will be discussed later in section 15.3, “Port Forwarding.”



14.2 Network Connections

To edit your connection settings, from the top navigational menu select **My Network**. Next, select **Network Connections** in the submenu options at the left of the screen; the following screen will be displayed. This screen allows you to access your Router's connection settings and your local area network (LAN) settings. The following sections discuss the details of this screen.

- To access the Router's Broadband connection settings, in the **Network Connections** screen click the **Broadband Connection (DSL)** link. The **Basic DSL Configuration** screen will appear. Refer to section 14.2.1 for details about this feature.
- To access the Router's LAN settings, in the **Network Connections** screen click the **LAN** link. The **Private LAN** screen will appear. Refer to section 16.18 for details about this feature.
- To access the Router's Wireless settings, in the **Network Connections** screen, click the **Wireless Access Point** link. Refer to section 13.3 for details about this feature.
- To access the Router's Uplink settings, in the **Network Connections** screen, click the **VersaPort** link. Refer to section 14.2.3 for details about this feature.

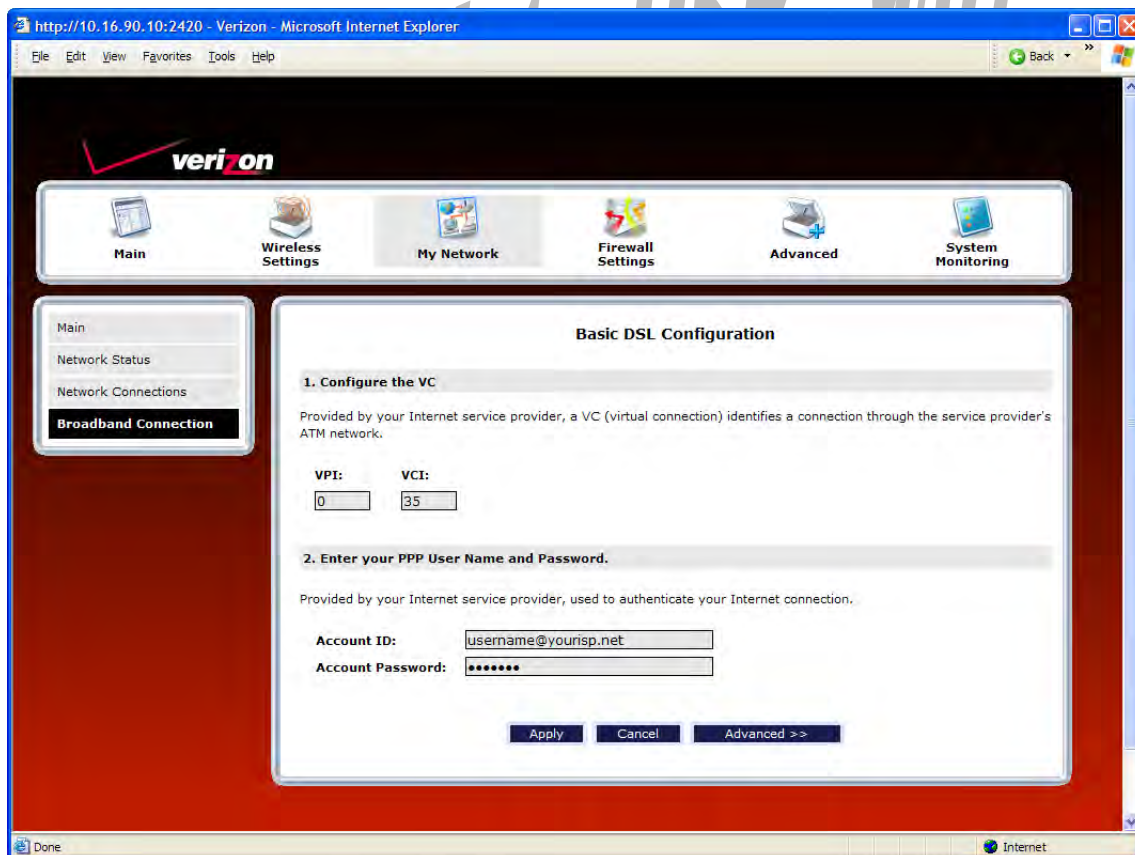


14.2.1 Basic DSL Configuration

If you clicked the **Broadband Connection (DSL)** link in the **Network Connections** screen, the following screen will appear. This screen displays the virtual connection (VC) settings and the account information needed to authenticate your Internet connection. A virtual connection identifies a connection through the service provider's ATM network to Verizon. Unlike physical hardware connections, virtual connections are defined by data. The VPI/VCI and account parameters are provided by Verizon.

IMPORTANT: You should not change the VPI/VCI settings unless instructed by Verizon.




If you change any settings in this screen, click **Apply** to allow the settings to take effect. To access the Advanced DSL Configuration screen, click the **Advanced** button.



Basic DSL Configuration	
VPI	Displays the VPI (Virtual Path Indicator) value for a particular VC, which is defined by Verizon.
VCI	Displays the VCI (Virtual Channel Indicator) value for a particular VC, which is defined by Verizon.
Account ID	The account ID is provided by Verizon.
Account Password	The account password is provided by Verizon.

14.2.2 Advanced DSL Configuration

If you clicked **Advanced** in the preceding screen, the following **Advanced DSL Configuration** screen will appear. Depending on the connection settings you want to edit, you can:


- Click the **Edit** icon  adjacent to My Connection to edit your connection profile settings.
- Click the **New** icon  (or click **Add**) to add a new connection profile.
- Click the **Edit** icon  in the VCs section to edit your virtual connection (VC) settings.

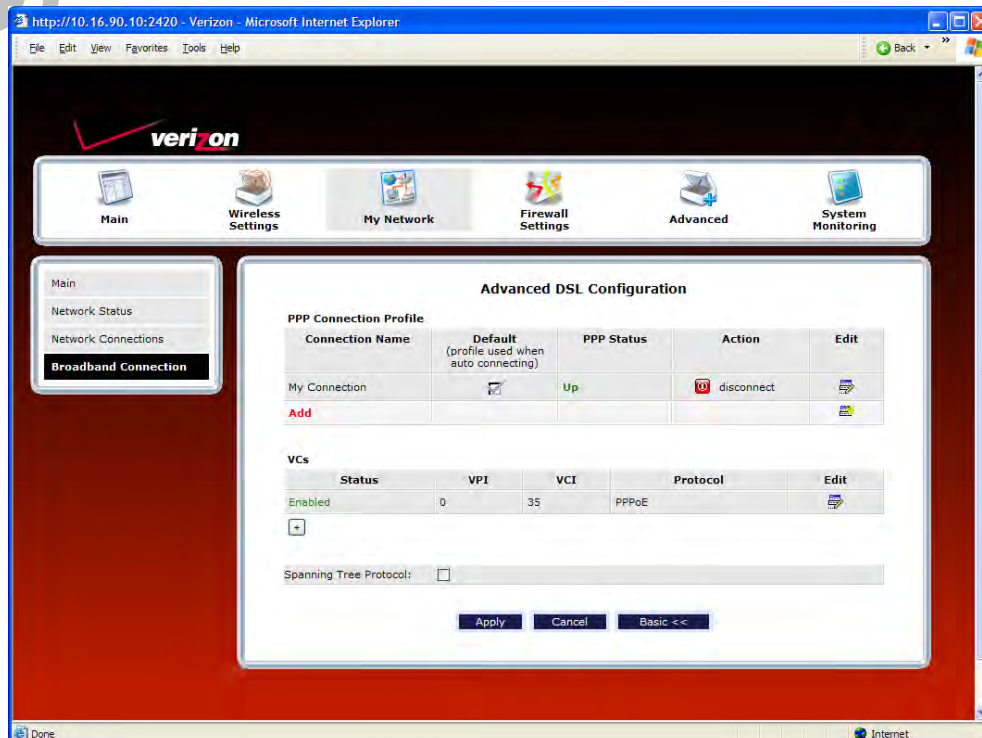
14.2.2.1 Editing VC Protocol Settings

The following sections discuss your virtual connection (VC) settings. A virtual connection (VC) identifies a connection through the service provider's ATM network to Verizon.

IMPORTANT:

1. The screens displayed in the following sections reflect the Router when it is configured for LAN Ethernet port mode, which is the Router's factory default setting. For details on configuring the Router's VC settings while in WAN Uplink port mode, refer to section 14.2.3, "Configuring VersaPort."
2. You should not change the VC settings unless instructed by Verizon.


If you change any settings in this screen, you must click **Apply** to allow the settings to take effect. To expand the VCs list, click the expand icon  located below **Status**.






VC Settings	
Status	Allows you to enable or disable your VC (Virtual Connection). This field must display “Enable” in order to allow edits to the VC settings.
VPI	Displays the VPI (Virtual Path Indicator) value for a particular VC, which is defined by your Service Provider.
VCI	Displays the VCI (Virtual Channel Indicator) value for a particular VC, which is defined by your Service Provider.
Protocol NOTE: The configuration specified by your Service Provider will determine which Protocols are available to you.	Displays the Protocol for each VC, which is specified by your Service Provider. Possible Responses: PPPoA = Point to Point Protocol over ATM (Asynchronous Transfer Mode) PPPoE = Point to Point Protocol over Ethernet Bridge = Bridge Protocol Classical IPoA = Internet Protocol over ATM (Asynchronous Transfer Mode). This is an ATM encapsulation of the IP protocol.
Bridge Broadcast	Factory Default = Enabled (box contains a check mark) When this setting is enabled, the Router will allow Broadcast IP packets to/from the WAN. When this setting is disabled (box is cleared), the Router will block Broadcast IP packets to/from the WAN. Bridge Broadcast is only valid if one of the Virtual Channels is configured for Bridge mode.
Bridge Multicast	Factory Default = Enabled When this setting is disabled, the Router will block Multicast IP packets to/from the WAN. When this setting is enabled, the Router will allow Multicast IP packets to/from the WAN. Bridge Multicast is only valid if one of the Virtual Channels is configured for Bridge mode.
Spanning Tree Protocol	Factory Default = Disabled Spanning Tree Protocol is a link management protocol that provides path redundancy while preventing undesirable loops in the network. For Ethernet network to function properly, only one active path can exist between two stations. When enabled, two bridges are used to interconnect the same two computer network segments. Spanning Tree Protocol will allow the bridges to exchange information so that only one of them will handle a given message that is being sent between two computers within the network.

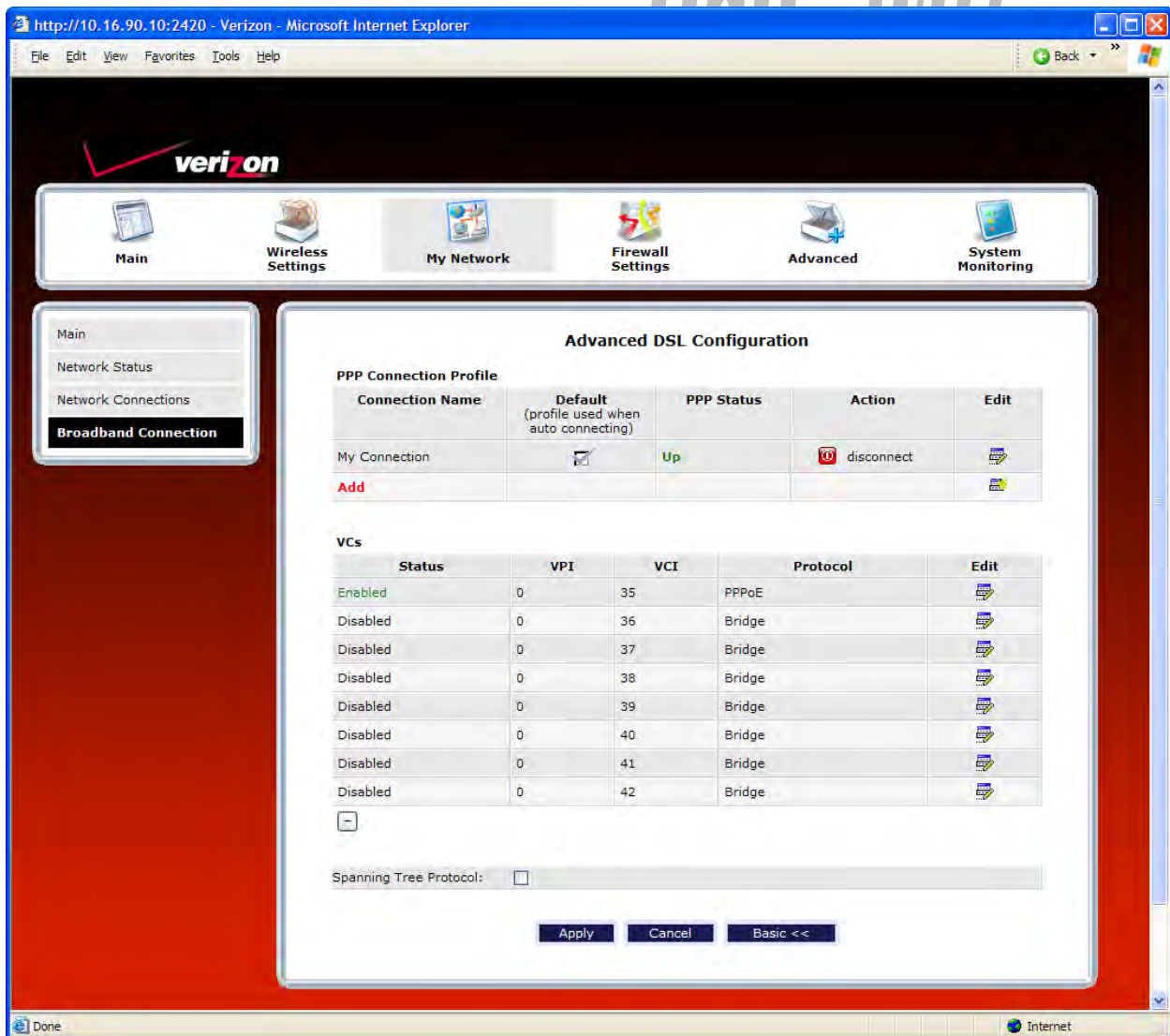


If you clicked the expand icon in the preceding screen, the following screen will appear. When you are ready to collapse the VCs list, click the collapse icon .

NOTE:

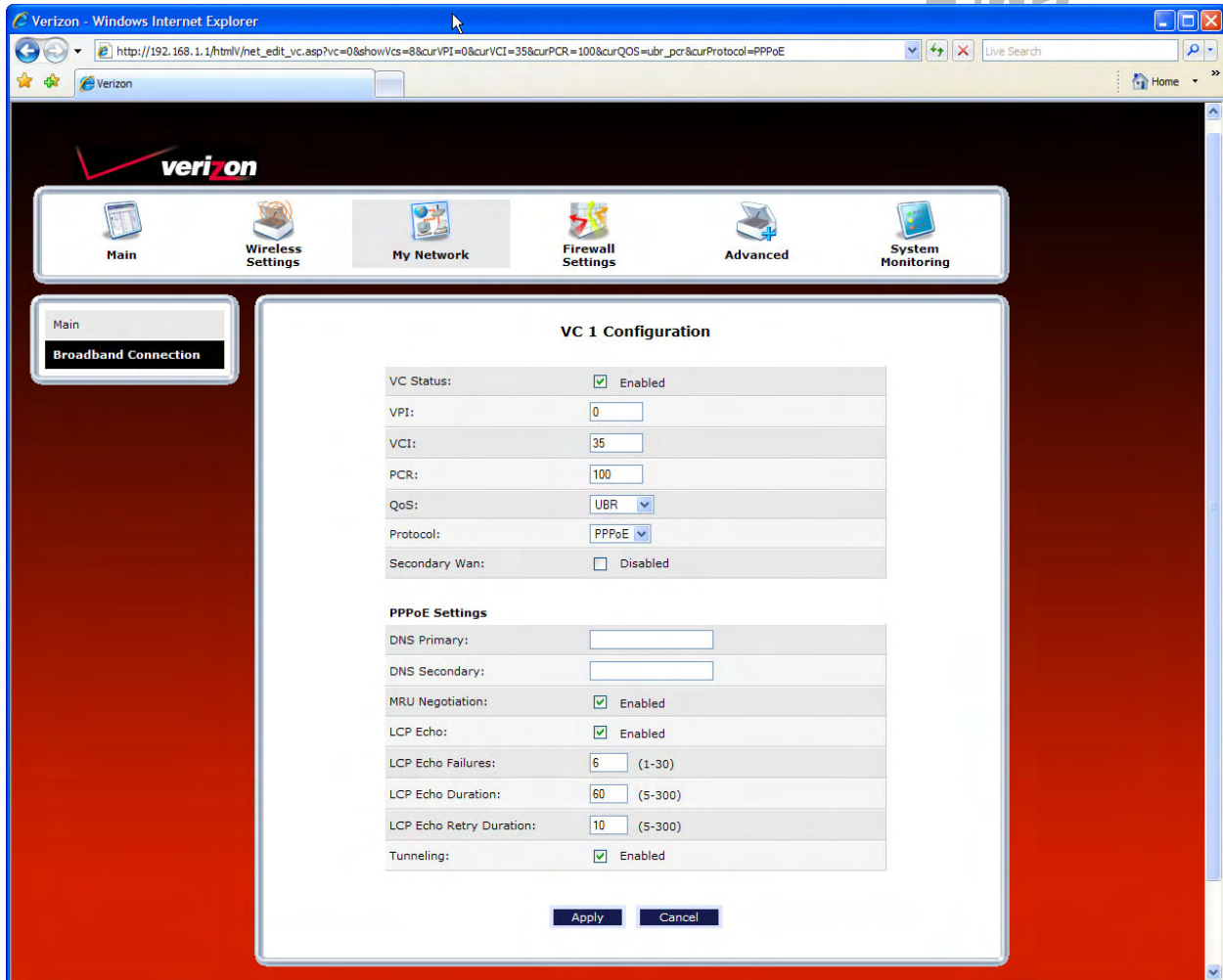
- 1. A VC's **Status** field must display **Enabled** before you can edit its VC settings.
- 2. The actual values displayed in the following screen may vary, depending on the network connection established. If you have questions about the settings in this screen, please contact Verizon.

To edit a VC setting, click the edit icon  adjacent to the “Enabled” VC protocol that you want to edit.



The following table explains the settings in the **VC 1 Configuration** screen. If you change any VC settings in this screen, click **Apply** to save the settings.

NOTE: If you experience problems, reset the Router via the hardware reset button at the rear of the Router. Or follow the instructions in section 16.2, “Restore Defaults,” to restore the Router to factory default settings. After the Router has been reset, the values in the screens will display the factory default settings, and any settings that you have previously configured will be discarded.



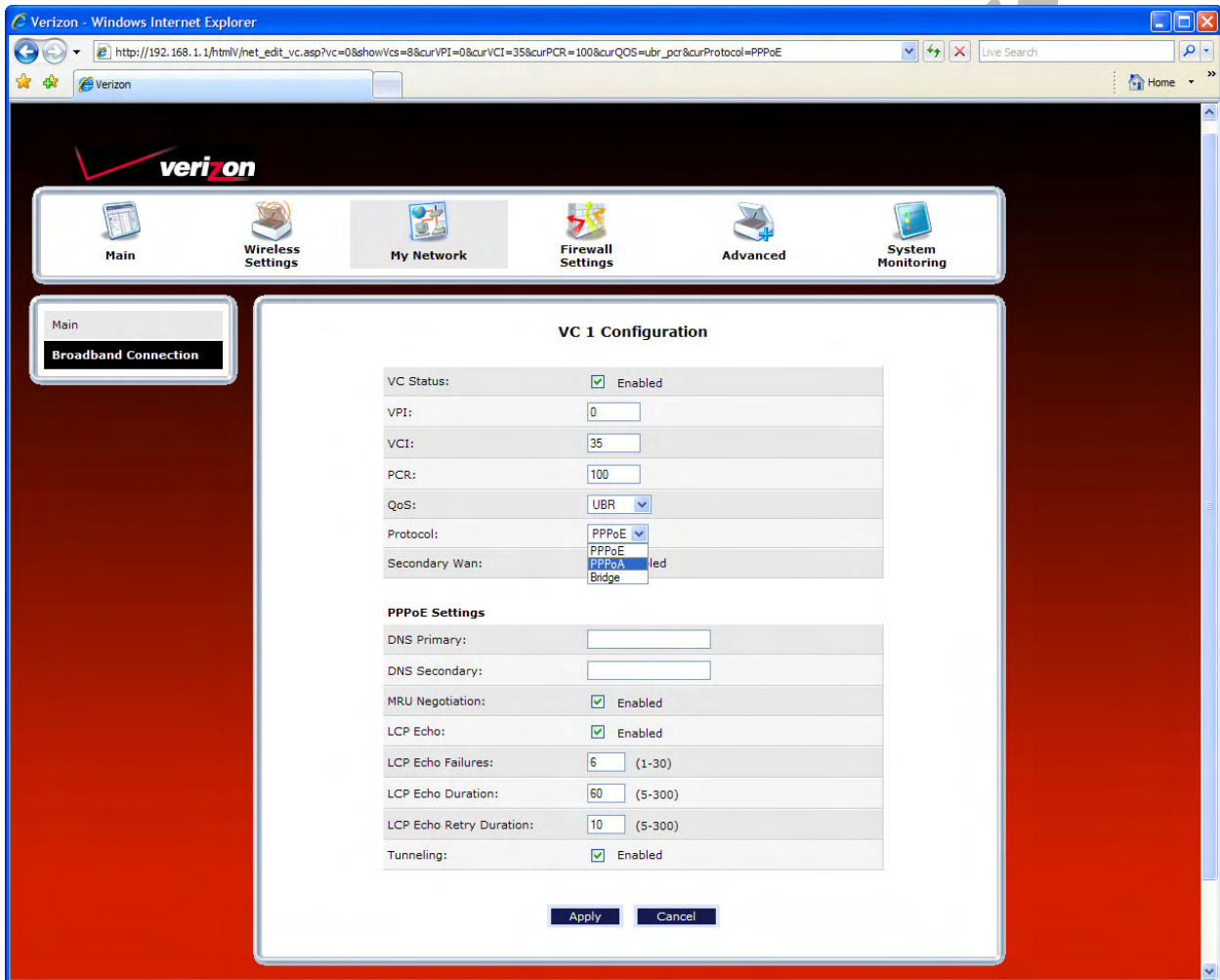
VC 1 Configuration	
VPI	This field allows you to change your VPI (Virtual Path Indicator) value for a particular VC, which is defined by your Service Provider.
VCI	This field allows you to change your VCI (Virtual Channel Indicator) value for a particular VC, which is defined by your Service Provider.
PCR	<p>Factory Default = 100%</p> <p>Peak Cell Rate (PCR)-The maximum rate at which cells can be transmitted across a virtual circuit, specified in cells per second and defined by the interval between the transmission of the last bit of one cell and the first bit of the next.</p> <p>This value is a percentage of the current data rate.</p> <p>100 allows this VC to use 100% of the available bandwidth.</p> <p>80 allows this VC to use 80% of the available bandwidth.</p>



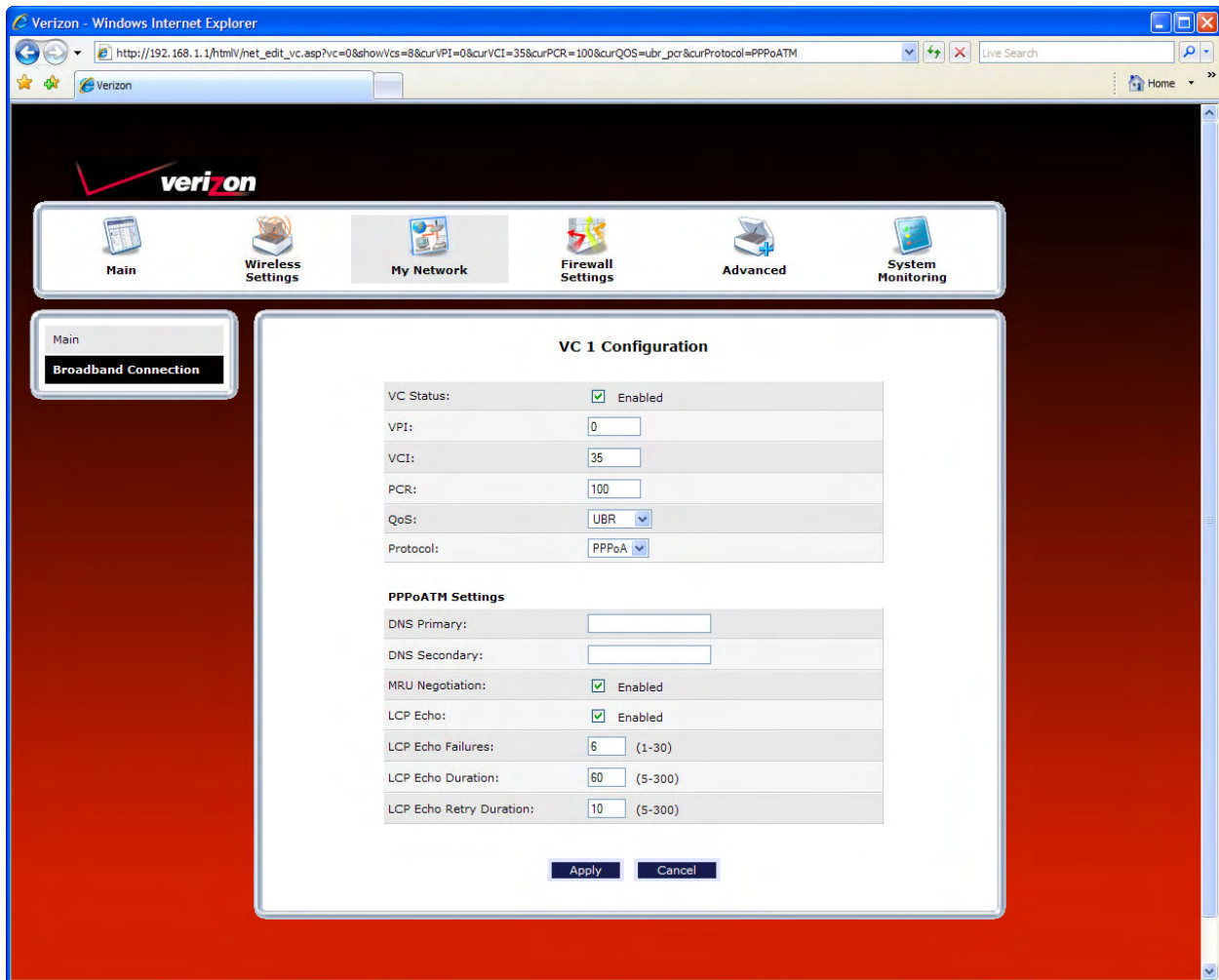
QoS	Quality of Service, which is determined by your Service Provider. Possible Responses: CBR = Constant Bit Rate UBR = Unspecified Bit Rate VBR = Variable Bit Rate
Protocol	The Protocol for each VC, which is specified by your Service Provider. Possible Responses: PPPoA = Point to Point Protocol over ATM (Asynchronous Transfer Mode) PPPoE = Point to Point Protocol over Ethernet Bridge = Bridge Protocol Classical IPoA = Internet Protocol over ATM (Asynchronous Transfer Mode). This is an ATM encapsulation of the IP protocol.
Status	The protocol status.
PPPoE / PPPoA Settings	
IP Address	Displays the IP network address that your Router is on.
Gateway	Displays the Router's IP address
DNS Primary	Provided by Verizon
DNS Secondary	Provided by Verizon
MRU Negotiation	Factory Default = Disabled If Enabled, the Maximum Received Unit (MRU) would enforce MRU negotiations. Note: Enable this option only at your Internet's provider's request.
LCP Echo Disable	Factory Default = Disabled If checked, this option will disable the modem LCP Echo transmissions.
LCP Echo Failures	Indicates number of continuous LCP echo non-responses received before the PPP session is terminated.
LCP Echo Duration	The interval between LCP Echo transmissions with responses.
LCP Echo Retry Duration	The interval between LCP Echo after no response.
Tunneling	Factory Default = Enable If Enabled, this option allows PPP traffic to be bridged to the WAN. This feature allows you to use a PPPoE shim on the host computer to connect to the Internet Service Provider, by bypassing the Router's capability to do this. Note: Tunneling is available in PPPoE mode only.
Note: The values for the IP Address, Gateway, DNS Primary, and DNS Secondary are all "Override of the value obtained from the PPP connection," They default to "0.0.0.0," in which case the override is ignored. It is recommended that you do not change the values unless your Internet service provider instructs you to do so.	

14.2.2.2 Configuring the Router's Protocol Settings for PPPoE or PPPoA

To configure the Router's protocol settings for PPPoE or PPPoA, access to the **VC 1 Configuration** screen, as explained earlier in section 14.2.2.1 "Editing VC Protocol Settings." At the **VC 1 Configuration** screen, select PPPoE or PPPoA from the **Protocol** drop-down menu.



For example, the following **VC 1 Configuration** screen displays **PPPoA** as the selected Protocol. The PPPoA and PPPoE screens have identical configuration options with the exception of the Tunneling feature. Tunneling is available only for PPPoE protocol and is not displayed when the Router is configured for PPPoA protocol. After you have made the appropriate changes to **VC 1 Configuration** screen, click **Apply** to continue.



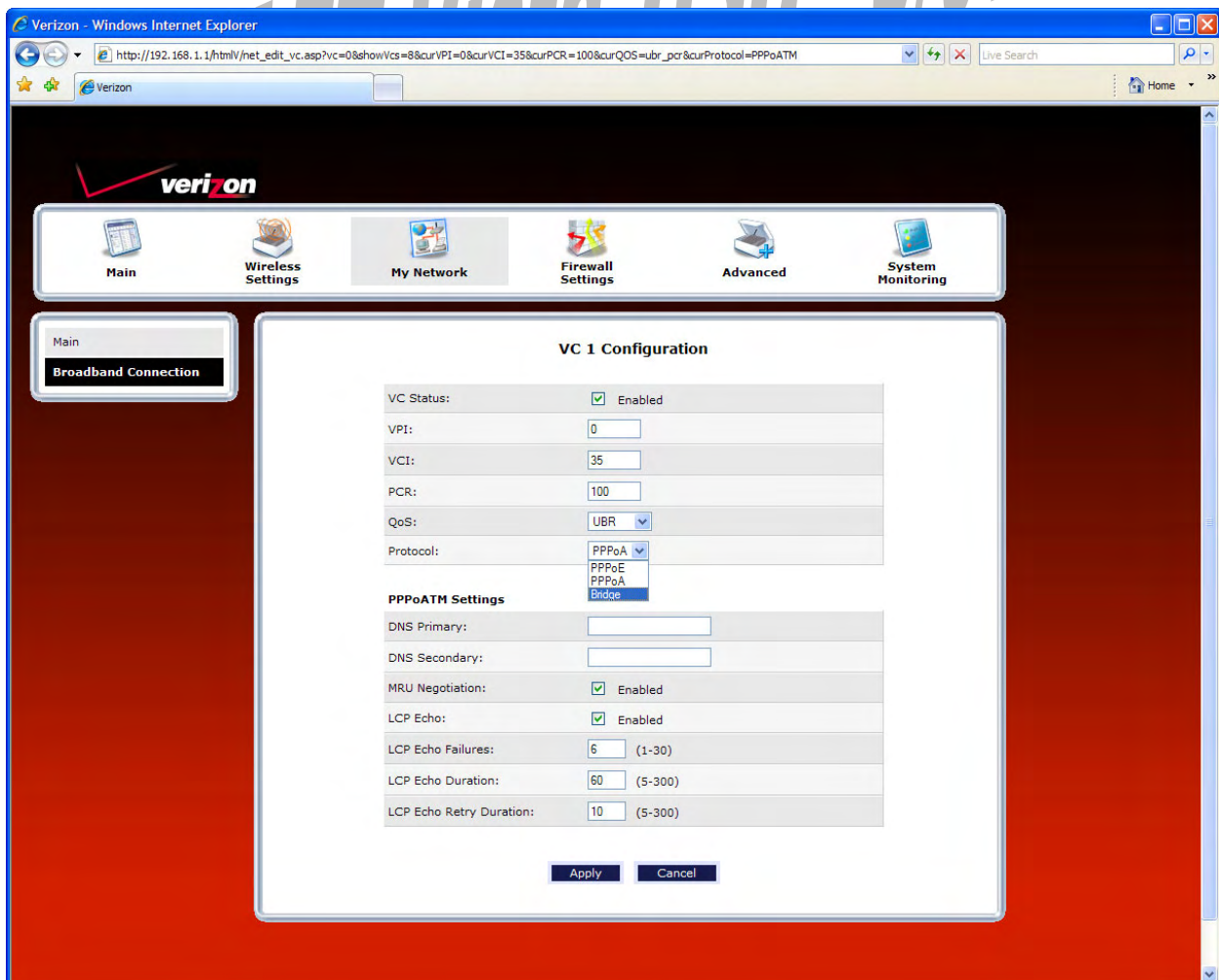
14.2.2.3 Configuring the Router's Protocol Settings for Bridge

To configure the Router's protocol settings for Bridge, access the **VC 1 Configuration** screen, as explained earlier in section 14.2.2.1, "Editing VC Protocol Settings."

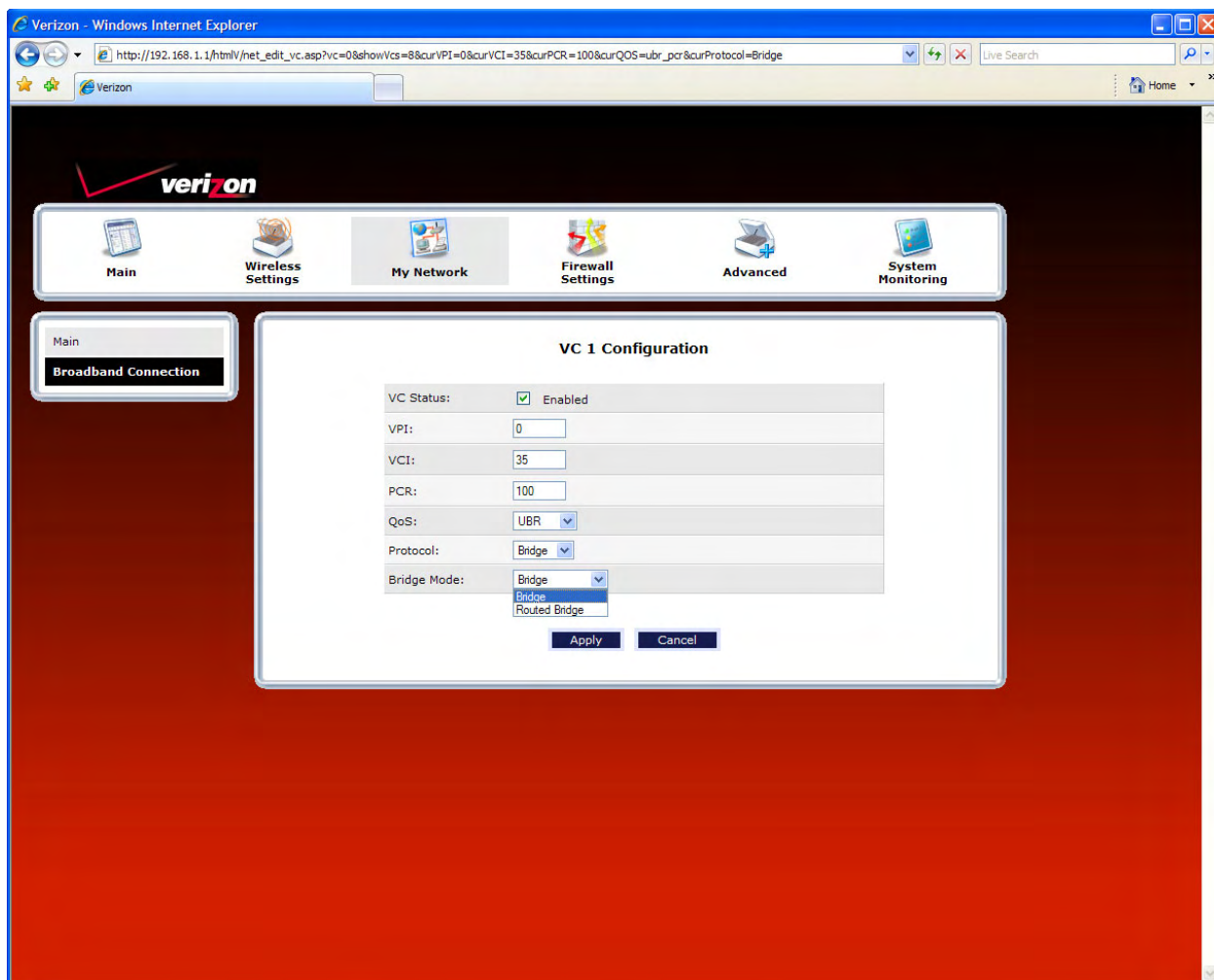
To configure the Router's Bridge settings, follow these steps at the **VC 1 Configuration** screen:

1. Select **Bridge** in the **Protocol** drop-down menu.
2. Select the desired Bridge mode from **Bridge Mode** drop-down menu.
3. Enter the desired values in the fields provided (if requested).
4. Click **Apply** to save your settings.
5. Click **OK** in the pop-up screen to reset the Router.

For example, at the **VC 1 Configuration** screen, select **Bridge** from the **Protocol** drop-down menu.

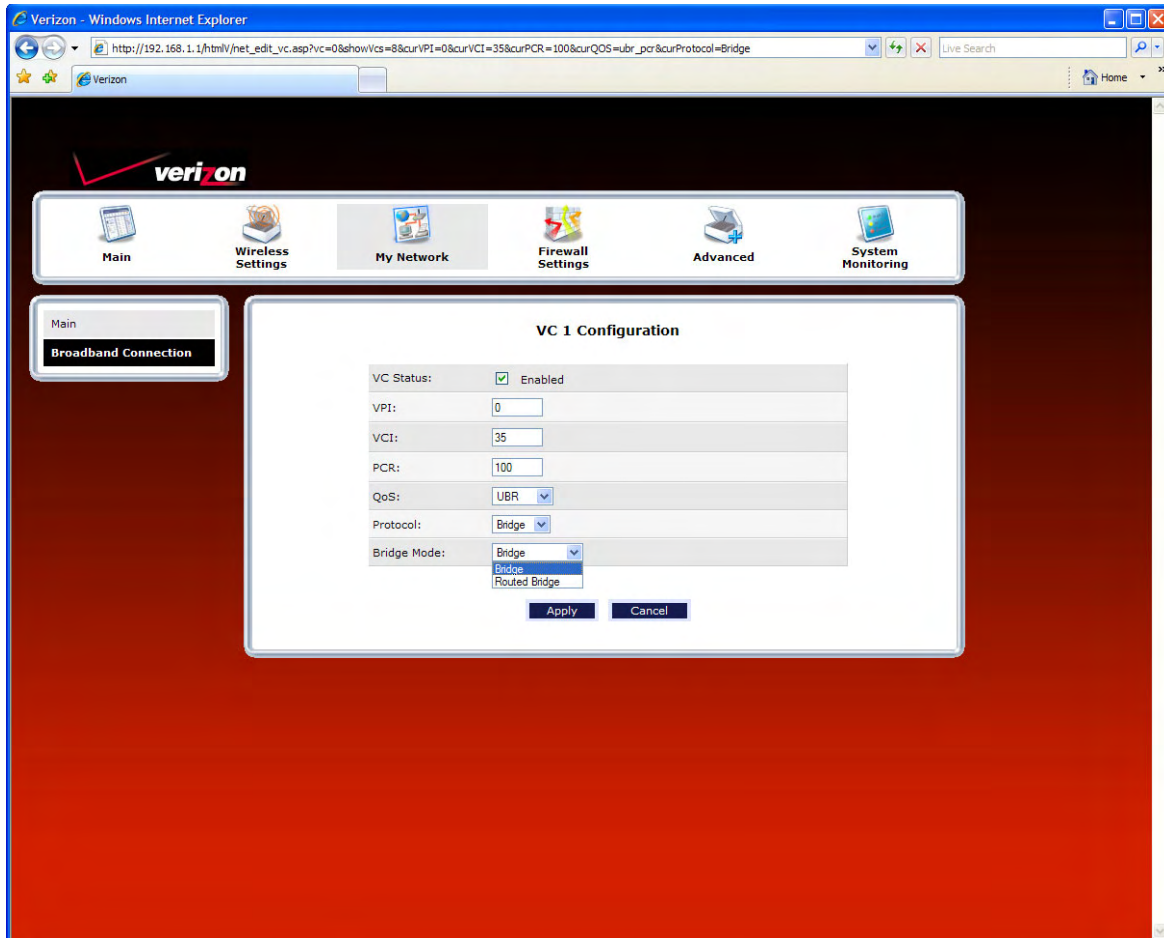


The following screen will appear. Bridge settings are described in the following table.



Protocol	Mode	Description
Bridge	Bridge	A bridge is a layer 2 device that connects two segments of the same LAN that use the same protocol such as Ethernet. The modem does not have a WAN IP address in this mode. The client PC will typically get an IP address from a DHCP server in the network or the IP address can be assigned to the client PC statically.
	Routed Bridge	Routed Bridged Encapsulation (RBE) is the process by which a bridged segment is terminated on a routed interface. Specifically, the Router is routing on an IEEE 802.3 or Ethernet header carried over RFC 1483 bridged ATM. RBE was developed to address the known RFC1483 bridging issues, including broadcast storms and security. The modem will get a WAN IP address through DHCP or can be assigned statically. NAT will use the global address assigned to the modem.

Next, select the desired Bridge mode from **Bridge Mode** drop-down menu.

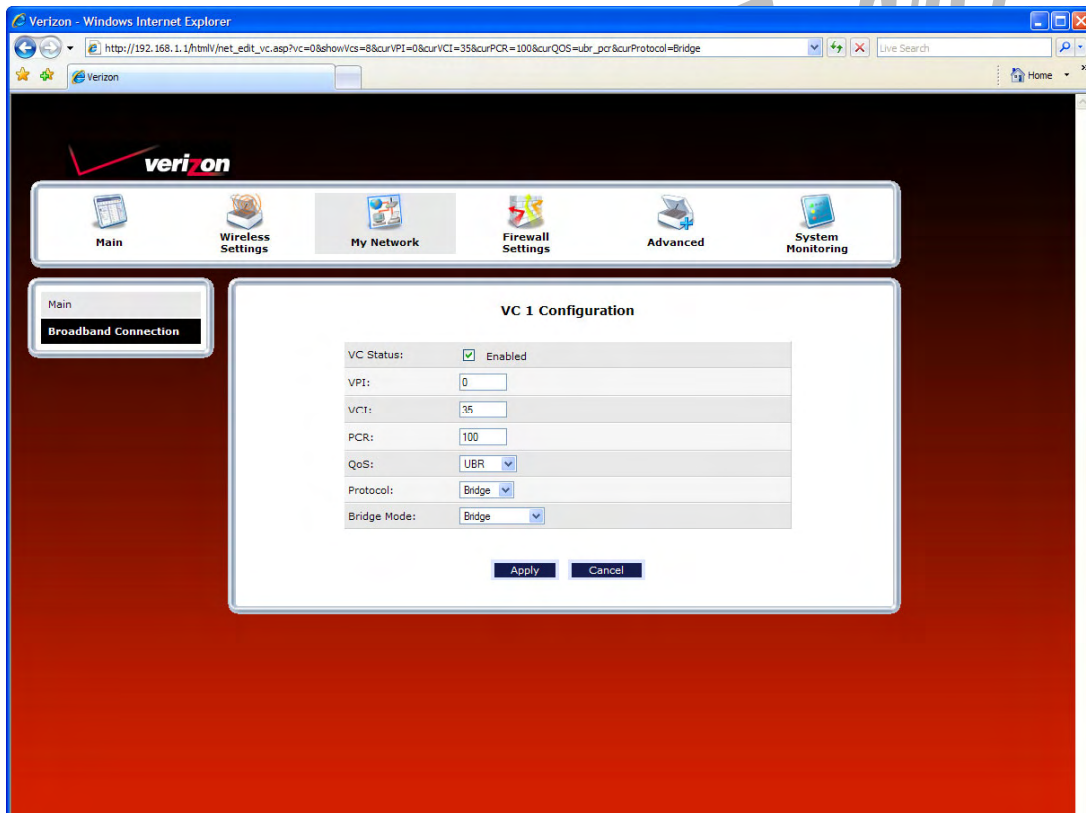




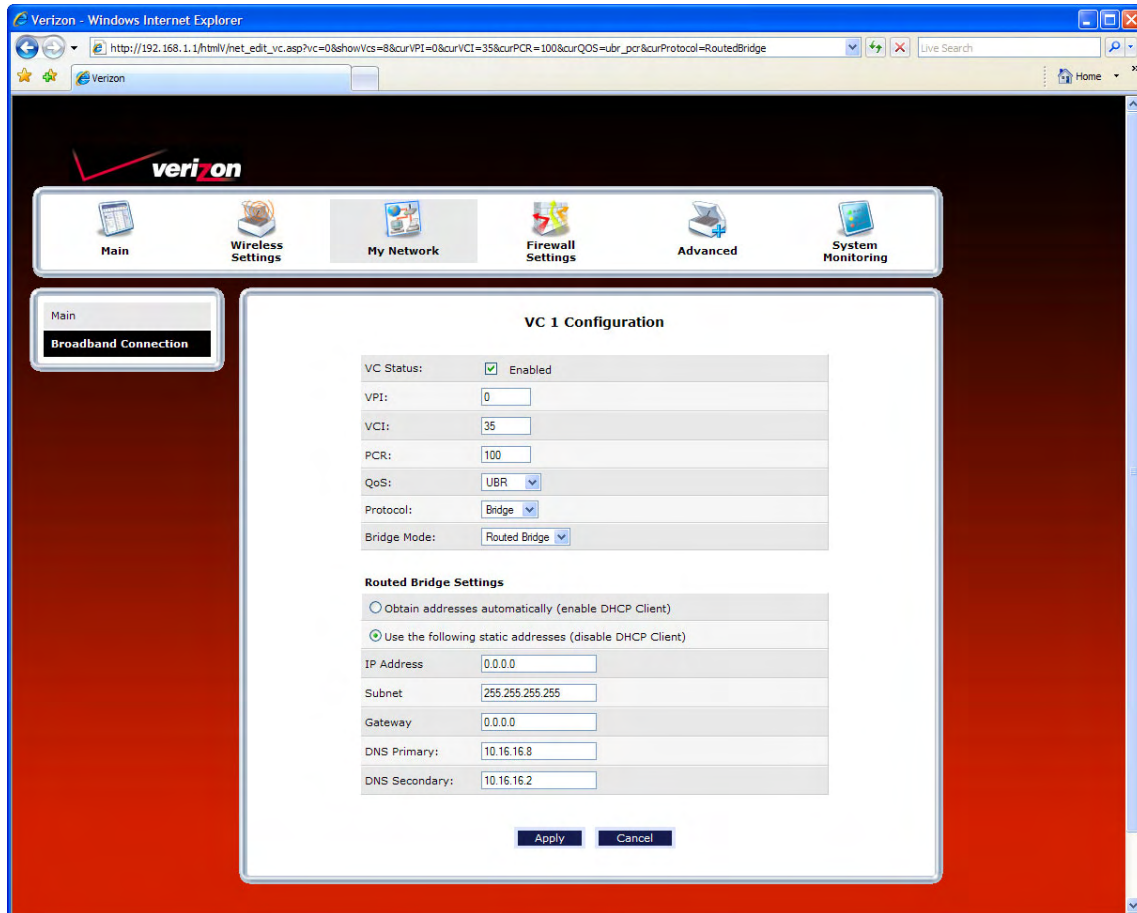
VC 1 – Bridge Protocol (Bridge Mode)	
VC Status	The protocol status is Enabled.
VPI	This setting allows you to change your VPI (Virtual Path Indicator) value for a particular VC, which is defined by your Service Provider.
VCI	This setting allows you to change your VCI (Virtual Channel Indicator) value for a particular VC, which is defined by your Service Provider.
PCR	<p>Factory Default = 100%</p> <p>Peak Cell Rate (PCR)-The maximum rate at which cells can be transmitted across a virtual circuit, specified in cells per second and defined by the interval between the transmission of the last bit of one cell and the first bit of the next.</p> <p>This value is a percentage of the current data rate.</p> <p>100 allows this VC to use 100% of the available bandwidth.</p> <p>80 allows this VC to use 80% of the available bandwidth.</p>
QoS	<p>Quality of Service, which is determined by your Service Provider.</p> <p>Possible Responses:</p> <p>CBR = Constant Bit Rate</p> <p>UBR = Unspecified Bit Rate</p> <p>VBR = Variable Bit Rate</p>
Protocol	<p>The Protocol for each VC, which is specified by your Service Provider.</p> <p>Possible Responses:</p> <p>PPPoA = Point to Point Protocol over ATM (Asynchronous Transfer Mode)</p> <p>PPPoE = Point to Point Protocol over Ethernet</p> <p>Bridge = Bridge Protocol</p>
Bridge Mode	<p>Bridge</p> <p>A bridge is a layer 2 device that connects two segments of the same LAN that use the same protocol such as Ethernet. The modem does not have a WAN IP address in this mode. The client PC will typically get an IP address from a DHCP server in the network or the IP address can be assigned to the client PC statically.</p>
	<p>Routed Bridge</p> <p>Routed Bridged Encapsulation (RBE) is the process by which a bridged segment is terminated on a routed interface. Specifically, the Router is routing on an IEEE 802.3 or Ethernet header carried over RFC 1483 bridged ATM. RBE was developed to address the known RFC1483 bridging issues, including broadcast storms and security. The modem will get a WAN IP address through DHCP or can be assigned statically. NAT will use the global address assigned to the modem.</p>

If you select **Bridge** as the Protocol, and then select **Bridge** from the **Bridge Mode** drop-down menu, the following screen will appear. Click **Apply** to save your selection.

IMPORTANT: If you configure the Router to use Bridge protocol and Bridge Mode, you must disable the Router's DHCP server. By disabling the DHCP server and using Bridge protocol (Bridge mode), you will allow the computer to receive its IP address directly from the ISP's DHCP server, not from the Router's DHCP server. For instructions on disabling the Router's DHCP server, see section 16.17, "IP Address Distribution." **After you have disabled the Router's DHCP server, you must reboot the computer to allow the change to take effect.**



If you select **Bridge** as the Protocol, and then select **Routed Bridge** from the **Bridge Mode** drop-down menu, the following screen will appear. Enter the desired values in the fields provided, and then click **Apply**.



VC 1 – Bridge Protocol (Routed Bridge Mode)	
DHCP Client	Allows you to either Enable or Disable the DHCP Client. Select (enable DHCP Client) to obtain IP address automatically. Select (disable DHCP Client) to use the static IP address that you enter into fields provided.
IP Address	The IP network address that your Router is on.
Subnet Mask	The subnet mask, which determines if an IP address belongs to your local network.
Gateway	The Router's IP gateway address.
DNS Primary	This value is provided by Verizon.
DNS Secondary	This value is provided by Verizon.

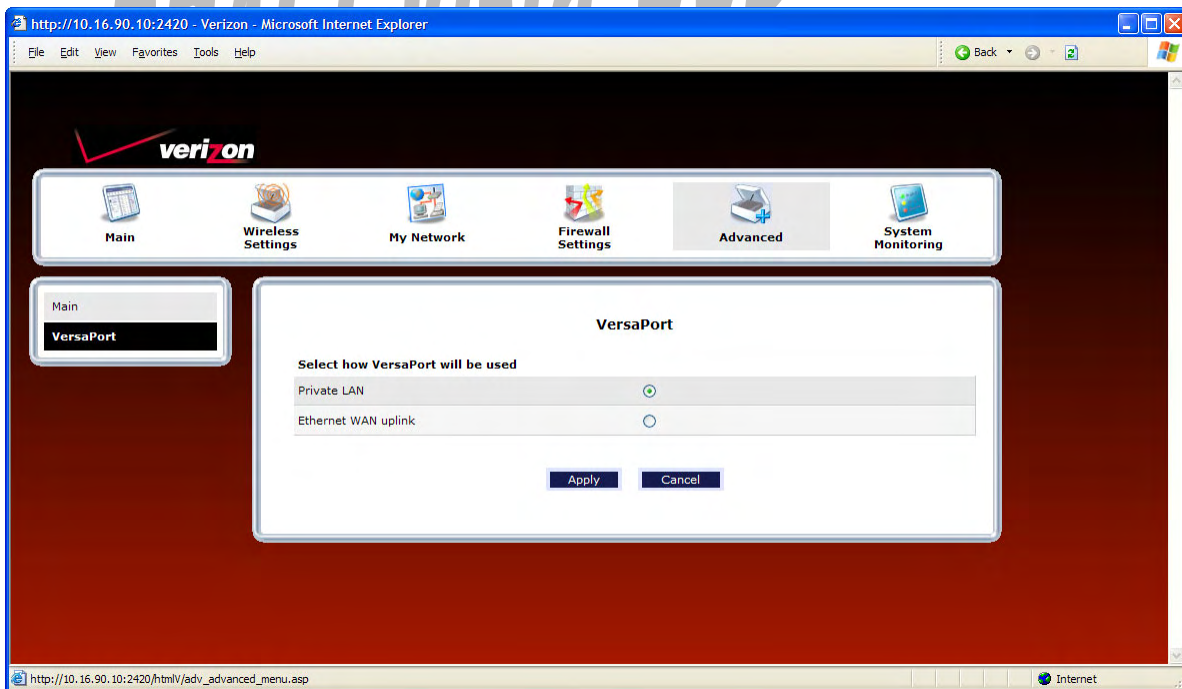
14.2.3 Configuring VersaPort (Ethernet WAN Uplink)

If you clicked the **VersaPort** link in the **Network Connections** screen, the following screen will appear. This screen allows you to select how the UPLINK/E1 port on the rear of the Router will be used.

Select one of the following options:

- **Private LAN:** This mode allows you to use the Router's DSL port for WAN access (the Router's DSL functionality is enabled).
- **Ethernet WAN Uplink.** This mode allows you to use the Router as an Ethernet Gateway (for example, connecting to a cable modem or to another ADSL device that provides WAN access). In **WAN Uplink** mode, the Router's DSL functionality is disabled.

NOTE: The menu options displayed will vary according to the configuration you have chosen to use, LAN Ethernet port or WAN Uplink port. If you are using WAN Uplink port, some menu options will not be available. However, all menu options will be available when the Router is enabled for LAN Ethernet port. Instructions on enabling and disabling LAN Ethernet port and WAN Uplink port are explained in the following sections. This document was created with the Router configured for LAN Ethernet port.



14.2.3.1 Enabling Private LAN—Disabling Ethernet WAN Uplink

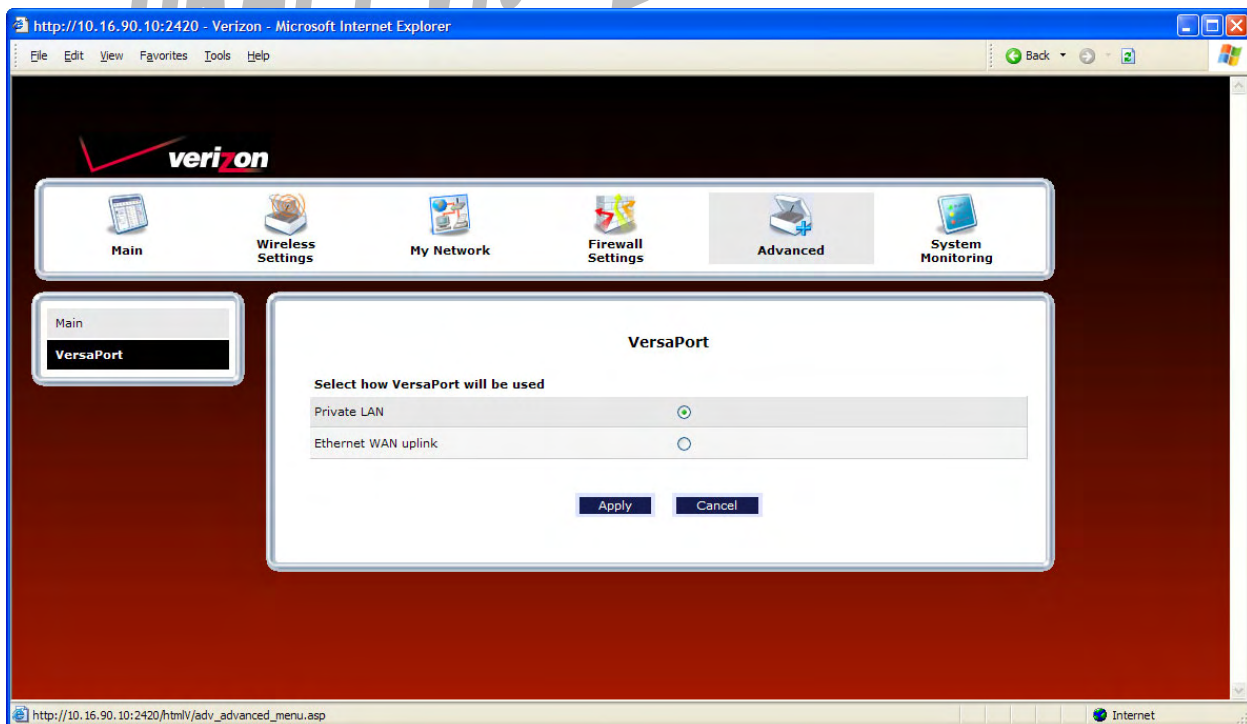
If you selected **Private LAN** in the **VersaPort** screen, this will enable the Router's DSL transceiver, and the Router will use its DSL port as the WAN interface. This configuration will disable the WAN Uplink port (**UPLINK/E1** on the rear of the Router).

- When **Private LAN** is selected, the **DSL** port on the rear of the Router is enabled and is the WAN interface to the Internet.
- When **Ethernet WAN Uplink** is selected, the **UPLINK/E1** port on the rear of the Router is enabled and is the WAN uplink to another ADSL device through which you will make your Internet connection.

Remember, you must click **Apply** to allow the settings to take effect in the Router.

NOTE:

1. When using the optional UPLINK/E1 port, Ethernet LAN connection is limited to E2, E3, and E4. The WAN Uplink feature is optional and, if it is disabled, the Router will use DSL only as the WAN interface.
2. Some menu options are unavailable when the Router is configured for **WAN Uplink port**. However, all of the Router's menu options are displayed when the Router is configured for **LAN Ethernet port**.
3. The Router's factory default setting is **Private LAN**.
4. If WAN Uplink is not enabled in the .ini file, the Router will use DSL only as the WAN interface.



14.2.3.2 Enabling Ethernet WAN Uplink—Disabling Private LAN

If you selected **Ethernet WAN Uplink** in the **VersaPort** screen, this will disable the Router's DSL transceiver and the DSL port. This configuration allows the port labeled **UPLINK/E1** on the rear of the Router to become the WAN interface port. Then, you can use **UPLINK/E1** to uplink to another ADSL device, through which you can connect to the Internet.

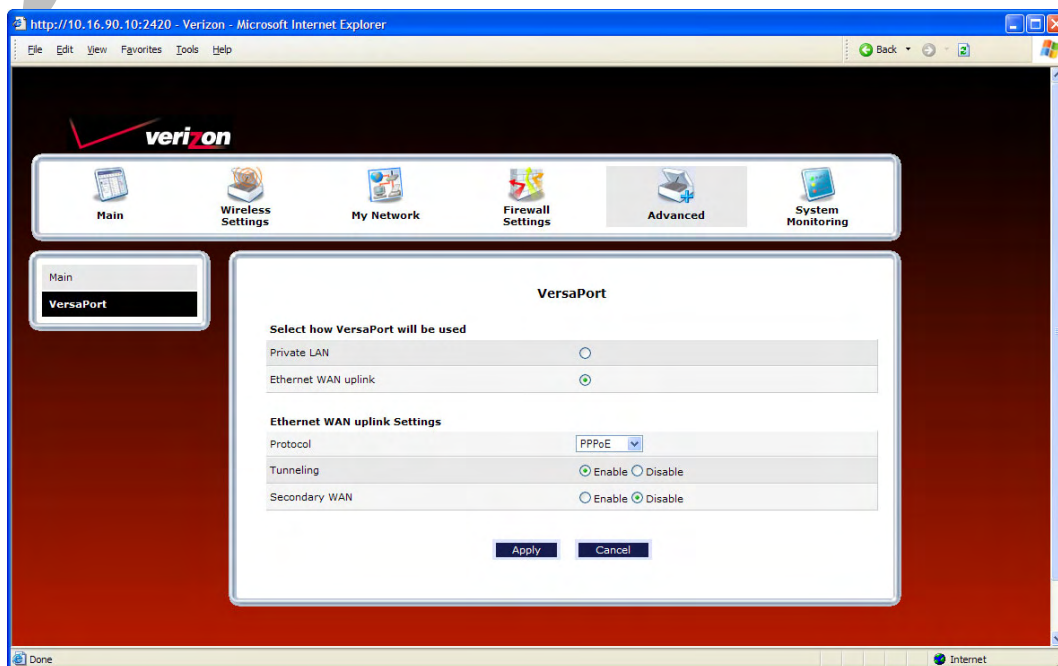
- When **Private LAN** is selected, the **DSL** port on the rear of the Router is enabled and is the WAN interface to the Internet.
- When **Ethernet WAN Uplink** is selected, the **UPLINK/E1** port on the rear of the Router is enabled and is the WAN uplink to another ADSL device through which you will make your Internet connection.

Remember, you must click **Apply** to allow the settings to take effect in the Router.

NOTE:

1. When using the optional UPLINK/E1 port, Ethernet LAN connection is limited to E2, E3, and E4. The UPLINK feature is optional and, if it is disabled, the Router will use DSL only as the WAN interface.
2. All of the Router's menu options are displayed when the Router is configured for **LAN Ethernet port**. However, some menu options are unavailable when the Router is configured for **WAN Uplink port**. The sections explained throughout this document will indicate when a menu item is unavailable.
3. The Router's factory default setting is **Private LAN**.
4. If UPLINK is not enabled in the .ini file, the Router will use DSL only.

If you selected **Ethernet WAN Uplink**, the following screen will be displayed. Proceed to the next section for instructions on editing the Ethernet WAN Uplink settings.



14.2.3.3 Editing the VC Protocol Settings for Ethernet WAN Uplink

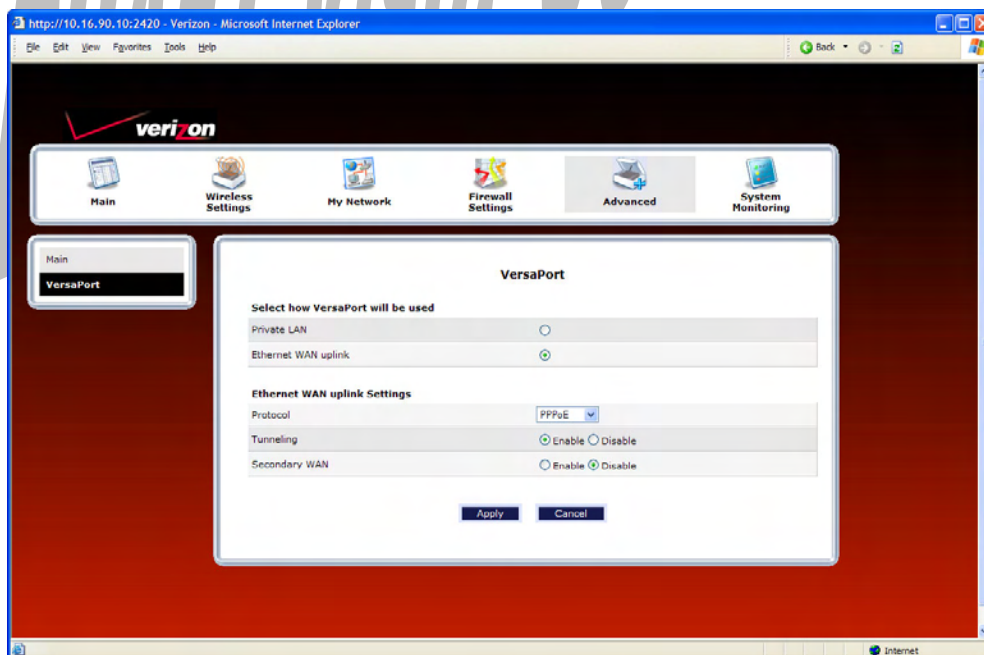
NOTE: The instructions in this section refer to the Router configured for **Ethernet WAN Uplink** mode. Be sure that you have selected **Ethernet WAN Uplink** in the **VersaPort** screen.

14.2.3.3.1 Configuring the WAN Uplink Protocol Settings for PPPoE

After you have selected **Ethernet WAN Uplink**, in the preceding steps, select the desired protocol from the **Protocol** drop-down menu. If you select PPPoE, the following screen will appear. Select the desired options, and then click **Apply** to save the settings.

NOTE:

1. If you experience any problems, reset the Router by pressing the reset button on the rear of the Router. Or follow the instructions in section 16.2, “Restore Defaults,” to restore the Router to factory default settings. The actual information displayed in this screen may vary, depending on network connection established.
2. PPPoE is the factory default setting for Ethernet WAN Uplink.



Uplink Settings for Ethernet WAN Uplink (PPPoE protocol)

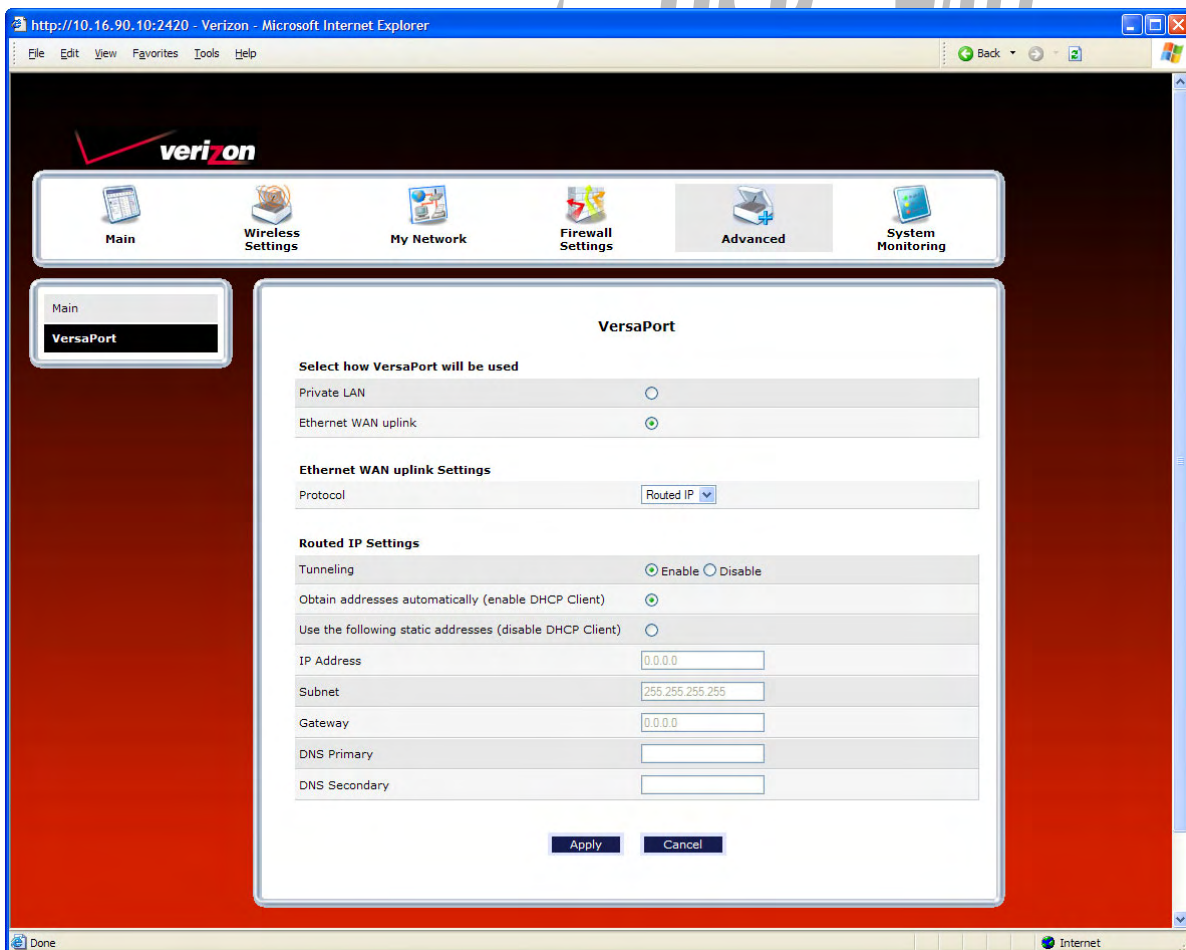
Tunneling	<p>Factory Default = Enable</p> <p>If Enabled, this option allows PPP traffic to be bridged to the WAN. This feature allows you to use a PPPoE shim on the host computer to connect to the Internet Service Provider, by bypassing the Router’s capability to do this. Factory default is “Enable.”</p>
Secondary WAN	<p>Factory Default = Disable</p> <p>The secondary WAN interface is used for multicast traffic. This feature applies only when you are using PPPoE as the Primary WAN protocol.</p>

14.2.3.3.2 Configuring the Ethernet WAN Uplink Protocol Settings for Routed IP

If you select **Routed IP** from the **Protocol** drop-down menu, the following screen will appear. Enter the desired options, and then click **Apply** to save the settings.

NOTE:

1. If you experience any problems, reset the Router by pressing the reset button on the rear of the Router. Or follow the instructions in section 16.2, “Restore Defaults,” to restore the Router to factory default settings. The actual information displayed in this screen may vary, depending on network connection established.
2. PPPoE is the factory default setting for Ethernet WAN Uplink.



The screenshot shows a web browser window displaying the VersaPort configuration page. The browser address bar shows `http://10.16.90.10:2420 - Verizon - Microsoft Internet Explorer`. The page features a navigation menu with icons for Main, Wireless Settings, My Network, Firewall Settings, Advanced, and System Monitoring. The main content area is titled "VersaPort" and contains the following settings:

- Select how VersaPort will be used**
 - Private LAN:
 - Ethernet WAN uplink:
- Ethernet WAN uplink Settings**
 - Protocol: Routed IP (dropdown menu)
- Routed IP Settings**
 - Tunneling: Enable Disable
 - Obtain addresses automatically (enable DHCP Client):
 - Use the following static addresses (disable DHCP Client):
 - IP Address:
 - Subnet:
 - Gateway:
 - DNS Primary:
 - DNS Secondary:

At the bottom of the configuration area, there are "Apply" and "Cancel" buttons.



Uplink Settings for Ethernet WAN Uplink (Routed IP protocol)	
Tunneling	Factory Default = Enable If Enabled, this option allows PPP traffic to be bridged to the WAN. This feature allows you to use a PPPoE shim on the host computer to connect to the Internet Service Provider, by bypassing the Router's capability to do this.
DHCP Client	Selecting a option allows you to either Enable or Disable the DHCP Client. Click the top option labeled (enable DHCP Client) to allow the Router to obtain an IP address automatically from your service provider. Click the bottom option labeled (disable DHCP Client) to allow the Router to accept static IP address information. Then, manually enter the IP values into the fields. Obtain these values from Verizon.
IP Address	The IP network address that your Router is on.
Subnet	The IP subnet address that your Router is on.
Gateway	The Router's IP gateway address.
DNS Primary	Provided by Verizon.
DNS Secondary	Provided by Verizon.
Note: The values for the IP Address, Gateway, DNS Primary, and DNS Secondary are all "Override of the value obtained from the PPP connection." They default to "0.0.0.0," in which case the override is ignored. It is recommended that you do not change the values unless Verizon instructs you to do so.	

15. FIREWALL SETTINGS

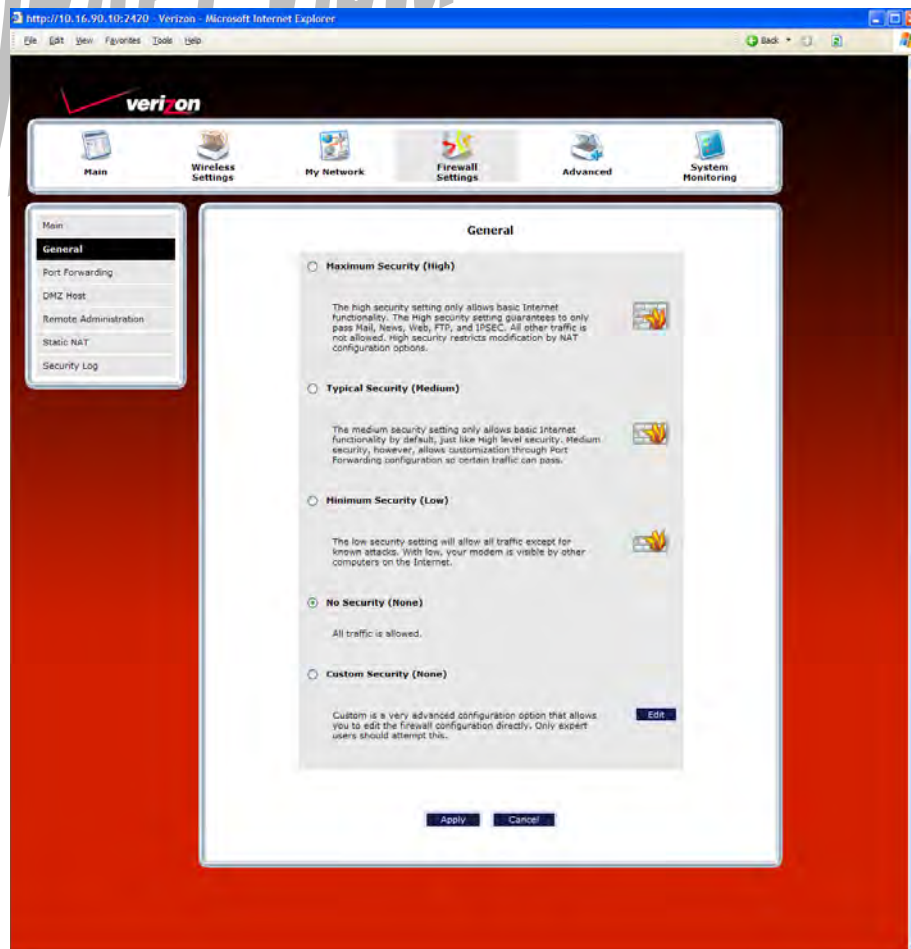
15.1 General Firewall Security Settings

This section explains how to configure your Router's firewall security features. The Router's firewall security settings allow you reduce the risk of unauthorized access to your network by prohibiting certain types of inbound and outbound network traffic and by allowing you to configure specific firewall rules.

IMPORTANT: If you need help, click **Main** in the top navigational menu to go to the home page. In the **Quick Links** section of the home page, click **Verizon Help**. Clicking this link takes you to Verizon's OnLine Help site, where you can access additional information about your DSL Router.

To change your firewall security level, click the option next to the desired security setting. Next, click **Apply** to allow the changes to take effect.

IMPORTANT: It is recommended that you do not change the settings in this **User Defined Firewall Rules** screen. If you need to reset your Router to factory default settings, push the reset button on the rear of the Router. Or follow the instructions in section 16.2, "Restore Defaults," to restore the Router to factory default settings. The factory default security level for your Router is **No Security (None)**.



General Firewall Settings	
Maximum Security (High)	High security level only allows basic Internet functionality. Only Mail, News, Web, FTP, and IPSEC are allowed. All other traffic is prohibited.
Typical Security (Medium)	Like High security, Medium security only allows basic Internet functionality by default. However, Medium security allows customization through NAT configuration so that you can enable the traffic that you want to pass.
Minimum Security (Low)	Low security setting will allow all traffic except for known attacks. With Low security, your Router is visible to other computers on the Internet.
No Security (None)	Factory Default = No Security (None) The Firewall is disabled. (All traffic is passed)
Custom Security (Custom)	Custom is a security option that allows you to edit the firewall configuration directly. Note: Only the most advanced users should try this.

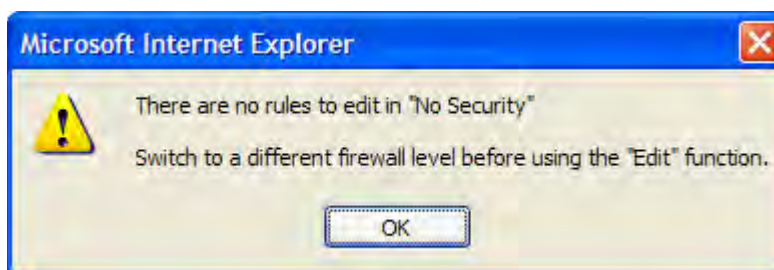
15.2 Editing Firewall Security Rules

To edit the firewall security rules and customize them to your preference, in the **General** screen, click **Edit**. If no security rules have been previously configured, the following pop-up screen will appear. Click **OK** in the pop-up screen. At the **General** screen, select the security option that want to edit, and then click **Apply**.

Next, select the **Custom Security (None)** option in the **General** screen, and then click **Apply**. Click **Edit** to go to the **User Defined Firewall Rules** screen and edit the security rules for the security option you selected (High, Medium, Low, None) in the **General** screen.

IMPORTANT:

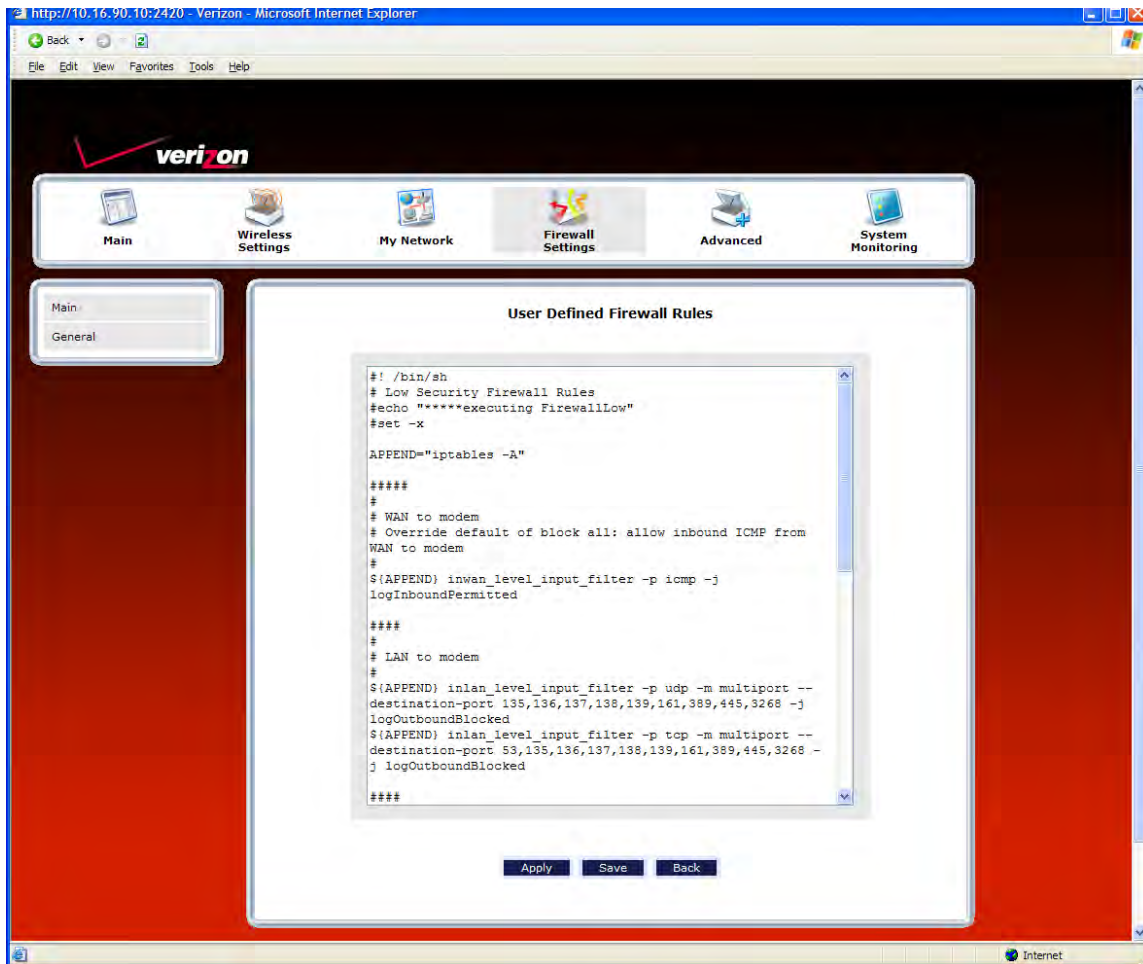
1. Custom Security is a very advanced configuration option that allows you to edit the firewall configuration directly. Only expert users should attempt this. It is recommended that you do not change the settings in this screen. If you need to reset your Router to factory default settings, push the reset button on the rear of the Router. Or follow the instructions in section 16.2, "Restore Defaults," to restore the Router to default settings.
2. If you need help, click **Main** in the top navigational menu to go to the home page, and then click **Verizon Help** to access Verizon's Online Help Web site for your DSL Router.



The **User Defined Firewall Rules** screen allows you to configure the security parameters on your Inbound and Outbound traffic. Inbound rules will restrict inbound traffic from the WAN to the LAN. Outbound rules will restrict outbound traffic from the LAN to WAN. Enter the desired parameters, click **Save**, and then click **Apply** to allow the settings to take effect in your Router.

NOTE: Clicking **Save** allows the firewall rules to be saved to flash (a temporary storage area in your Router).

NOTE: The information displayed in this screen may differ from your actual screen, depending on the level of security you have selected.

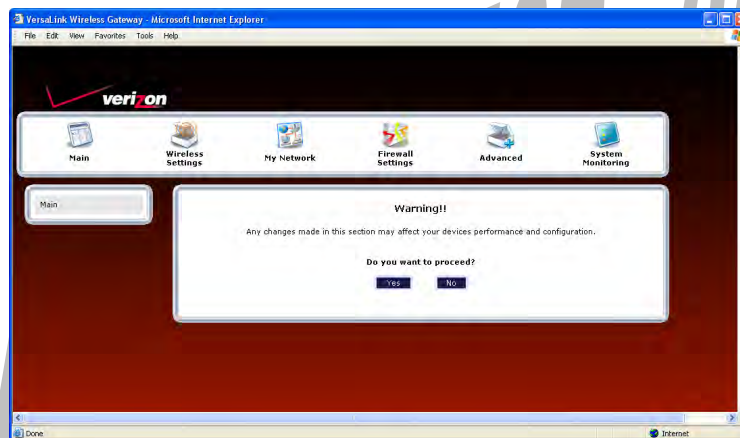


15.3 Port Forwarding

To access the Port Forwarding screen, from the top navigational menu, select **Firewall Settings**. Then select **Port Forwarding** from the menu options at the left of the screen. A warning screen will display the following message:

**Any changes made in this section may affect your device's performance and configuration.
Do you want to proceed?**

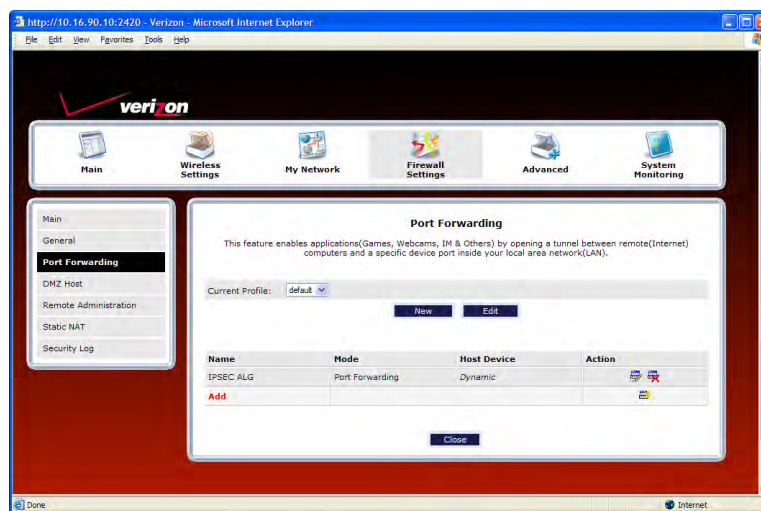
Click **Yes** to proceed.



If you clicked **Yes**, in the preceding warning screen, the following **Port Forwarding** screen will be displayed. 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).

The **Port Forwarding** screen allows you to do the following:

- Edit connection profiles, create new connection profiles
- Configure port forwarding services: predefined, customized, and port forwarding/port triggering services

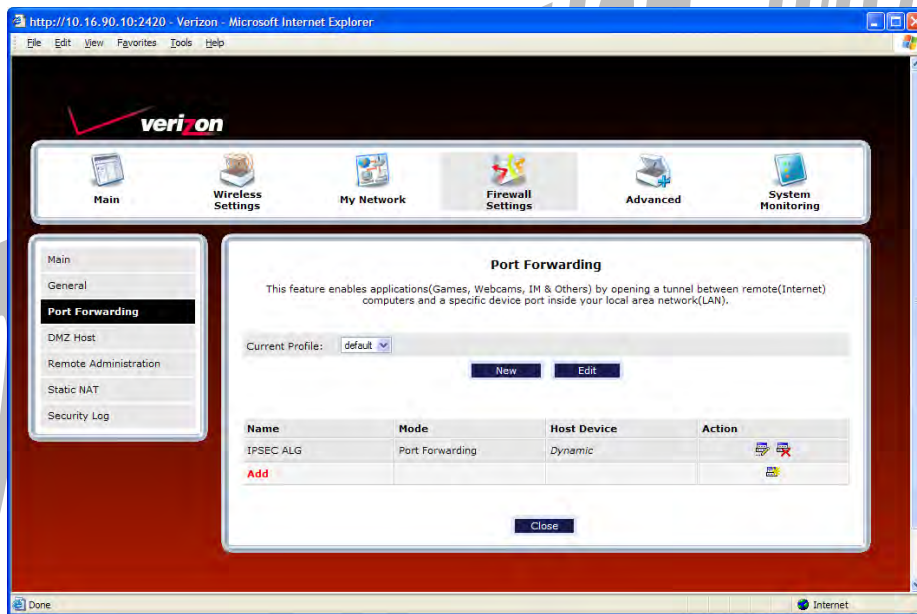


15.3.1 Editing a Profile Name

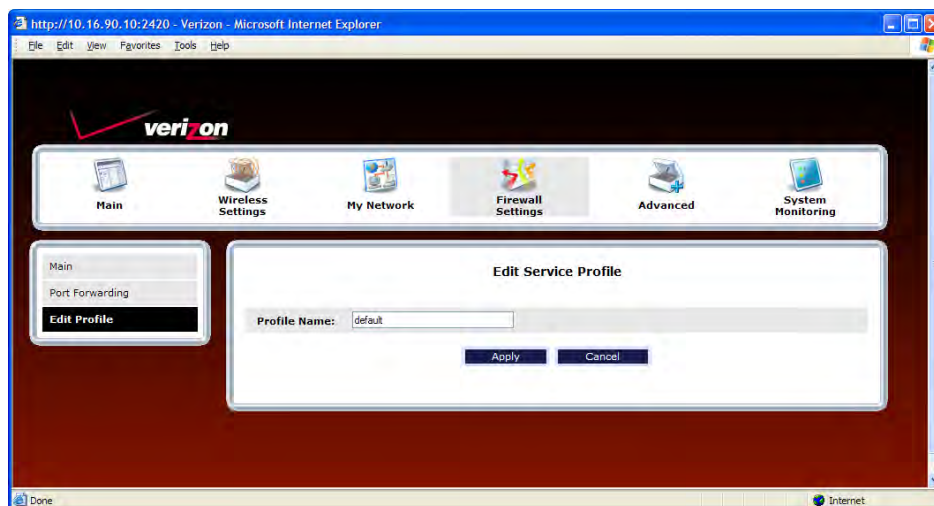
Port Forwarding services can be added to connection profiles. To edit an existing profile name, and then later add port forwarding services to the profile, follow the instructions in this section.

To edit a connection profile name, in the **Port Forwarding** screen, click the **Current Profile** drop-down menu, and then select the name of the profile that you want to edit. Next, click **Edit**.

NOTE: If you have not previously configured a profile, the “Default” profile will be displayed.

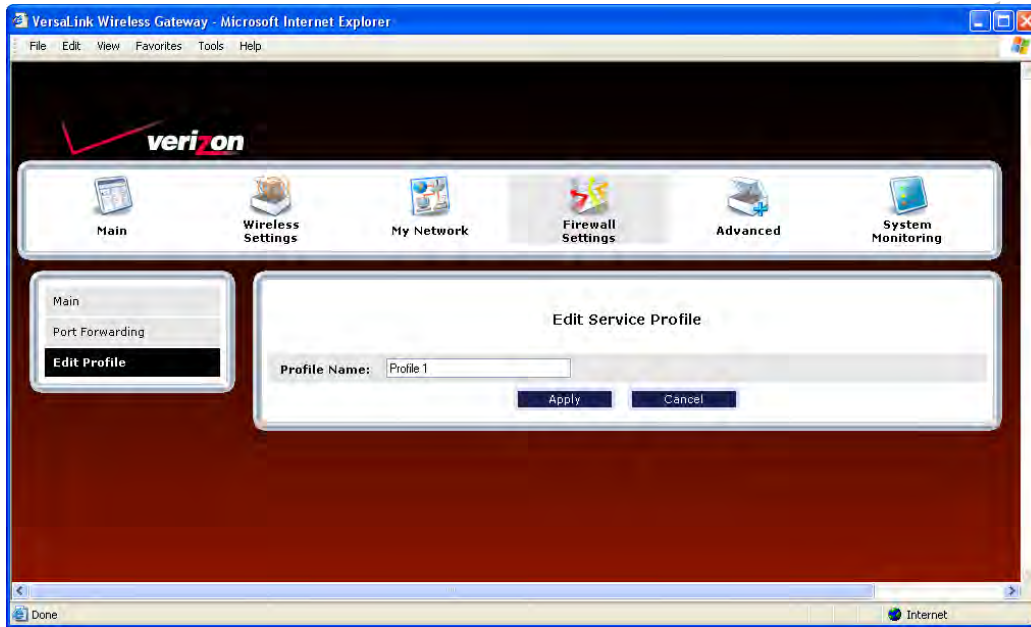


If you have selected a profile and clicked **Edit**, the following screen will appear. In the following example, “Default” has been selected from the **Current Profile** drop-down menu displayed in the preceding screen. This is the profile name that will be edited.

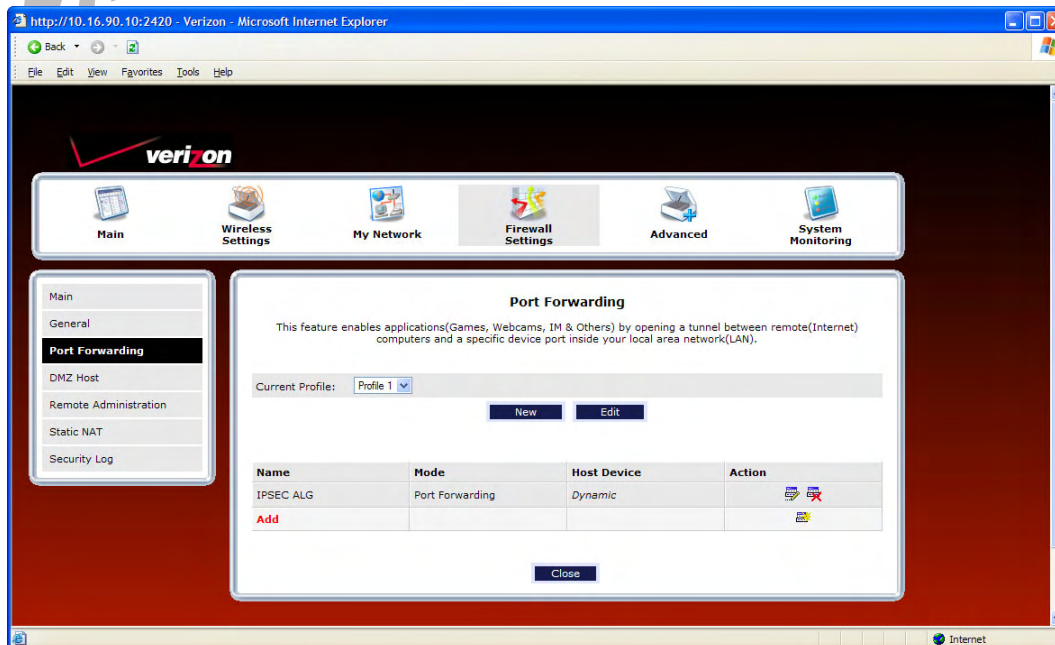


Type the name of your choice in the field provided. Then, click **Apply** to allow the change to take effect.

NOTE: If you reset your Router to factory default settings, the default profile “Default” will be displayed, and any previously configured settings will be lost.



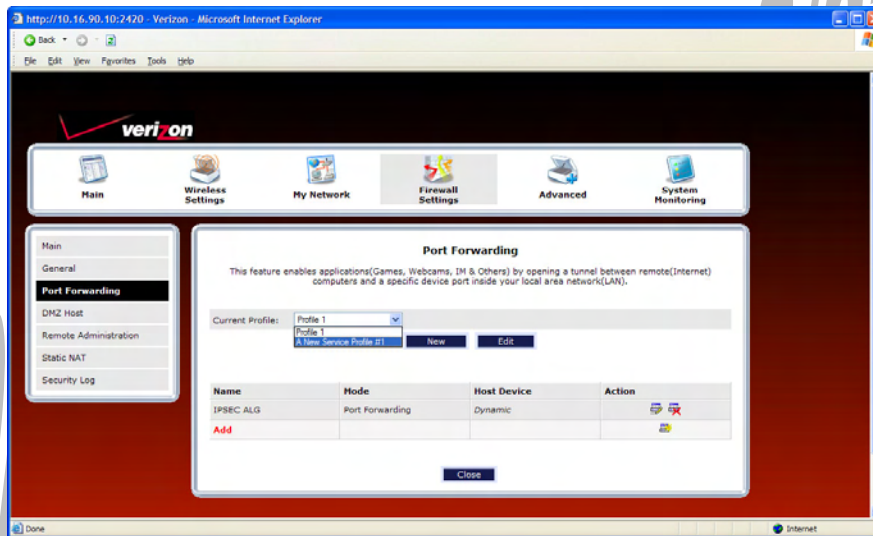
The name you entered should now be displayed in the **Current Profile** drop-down menu.



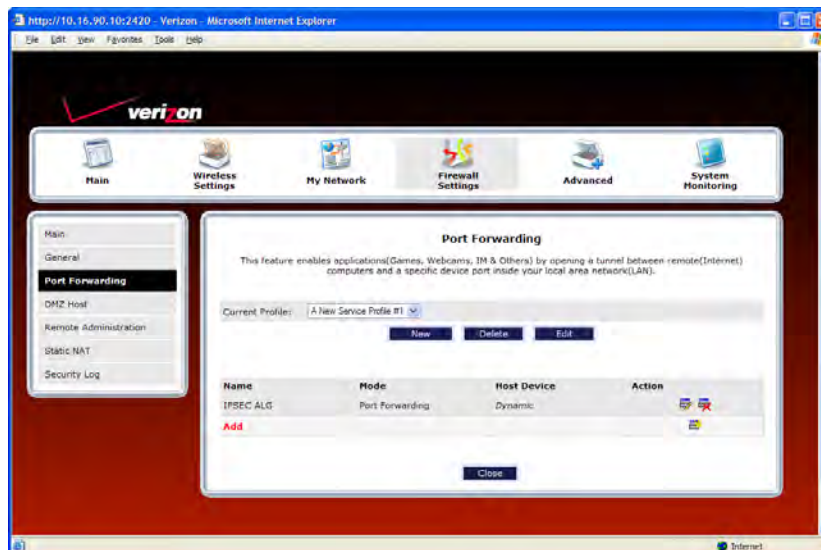
15.3.2 Creating a New Connection Profile

If you desire to create a new profile, and then later add port forwarding services to the new profile, follow the instructions in this section.

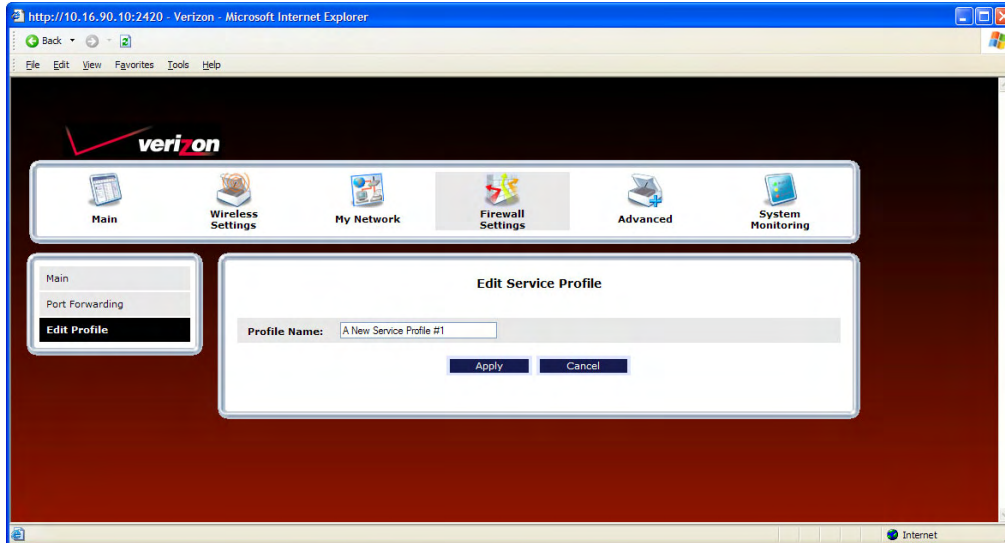
To create a new connection profile, in the **Port Forwarding** screen, click **New**. Then, from the **Current Profile** drop-down menu, select **A New Service Profile #1**.



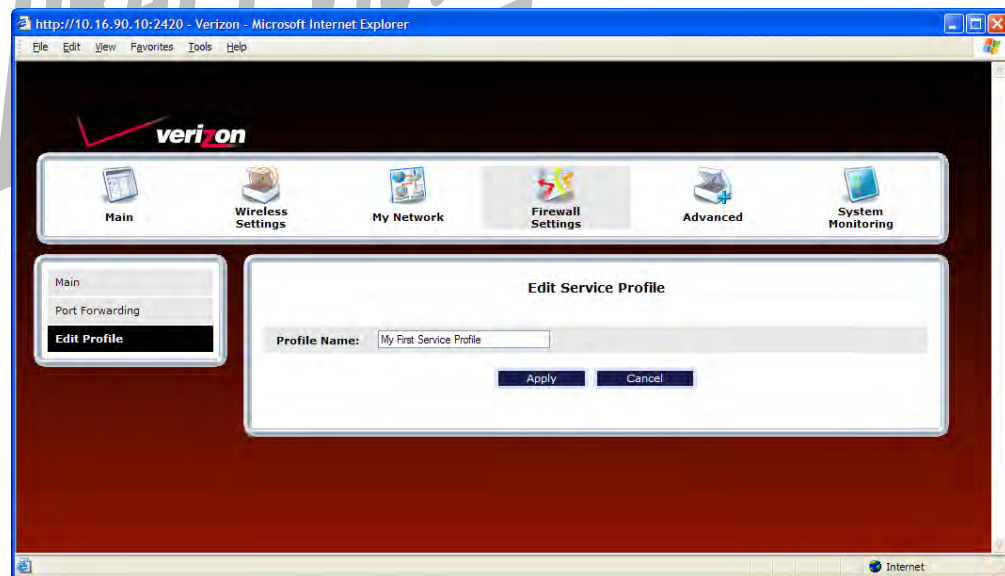
Next, click the **Edit** button to edit the profile.



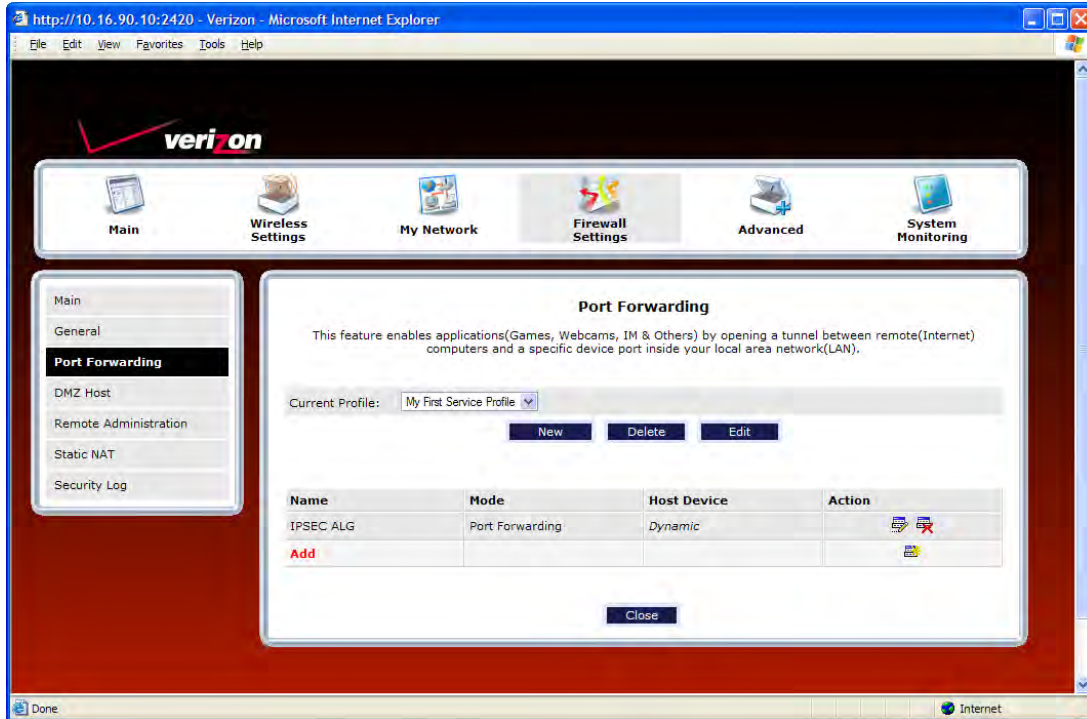
If you clicked the **Edit** button, the following screen will appear. Type the profile name of your choice in the field, and then click **Apply** to allow the change to take effect.



For example, “**My First Service Profile**” is the name that has been entered in the **Profile Name** field. Click **Apply**.



If you clicked **Apply**, the following screen will be displayed. The **Current Profile** field now displays the profile name that you entered.

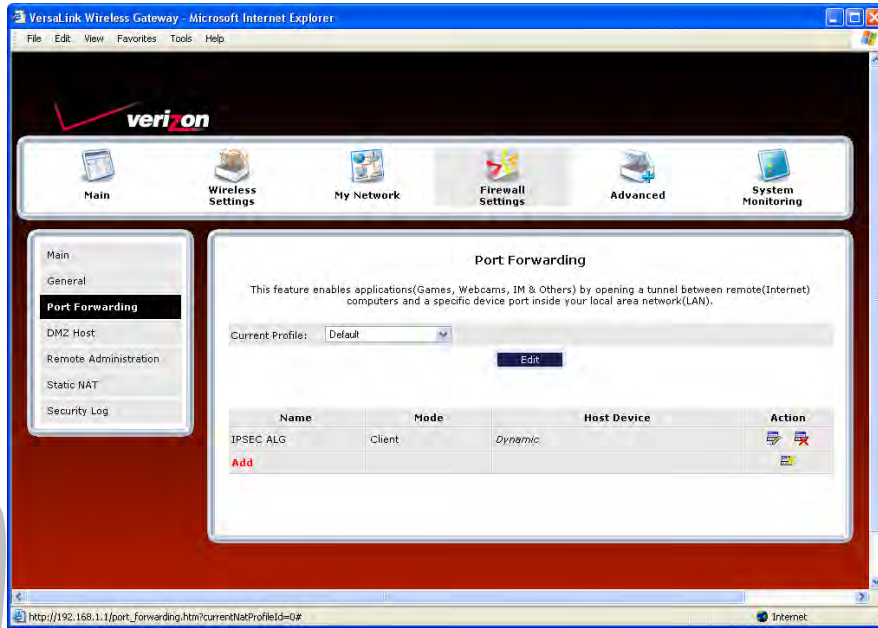


15.3.3 Configuring Port Forwarding Services

Port Forwarding Services contain specific service settings. The service can then be associated with connection profiles, allowing you to customize profiles for specific users. For example, if you want to attach specific services to a profile or if you want to set up a different connection setting for a profile. You can create new service profiles and customize them to your preference.

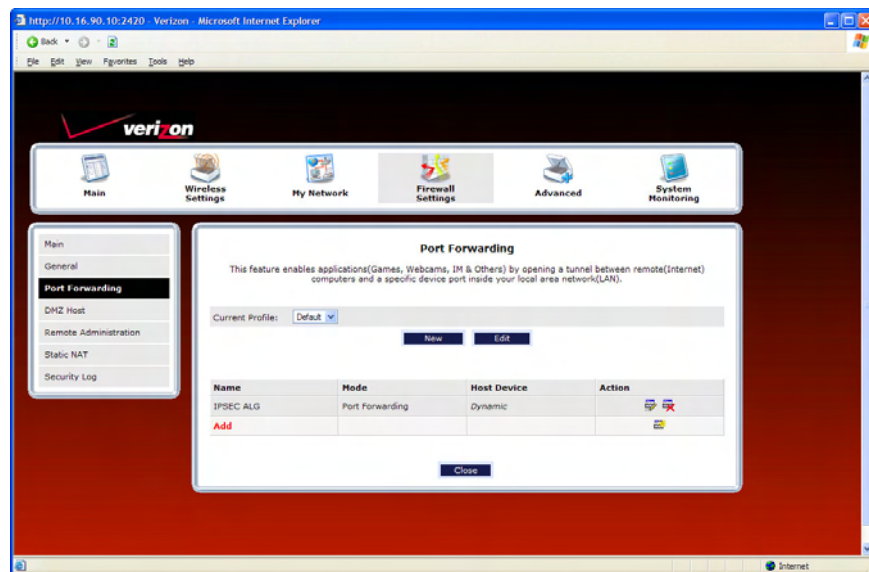
Your Router contains a list of predefined Port Forwarding services, and you can select any service from this list. By selecting your specific service and setting up a profile, you will ensure that the appropriate ports on your Router are open and that the required application traffic can pass through your local area network (LAN). For a list of supported services, go to section 18, "Port Forwarding Services."

NOTE: You can create up to four service profiles and attach an unlimited number of services to each profile. The current profile labeled "Default" is the factory default profile.



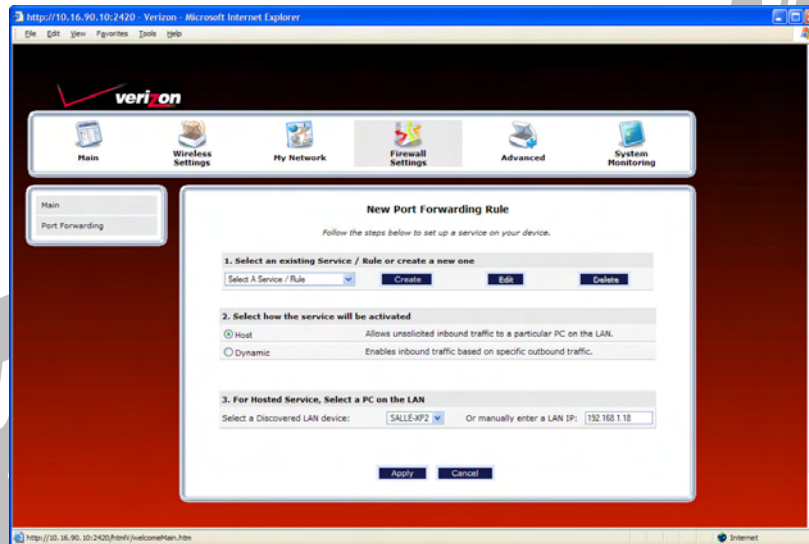
15.3.3.1 Adding Port Forwarding Services to a Profile

To add a predefined service to a profile, in the **Port Forwarding** screen, click the **Current Profile** drop-down menu, and then select the name of the profile to which you want to add services. Next, click **Add**.



If you clicked **Add**, the following **New Port Forwarding Rule** screen will appear. Using this screen, you can do any of the following:

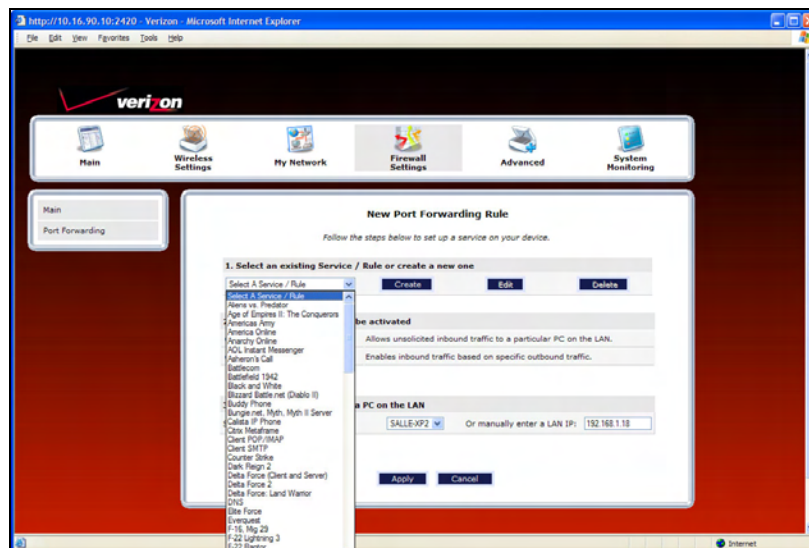
- Add a predefined service to a profile
- Create a customized service
- Edit an existing service profile
- Delete an existing profile



15.3.3.2 Adding a Predefined Port Forwarding Service to a Profile

To add a predefined port forwarding service to a profile, in the **New Port Forwarding Rule** screen, perform the following steps:



1. Select the desired service from the **Select a Service** drop-down menu. After you have selected a service, it will appear in the window.

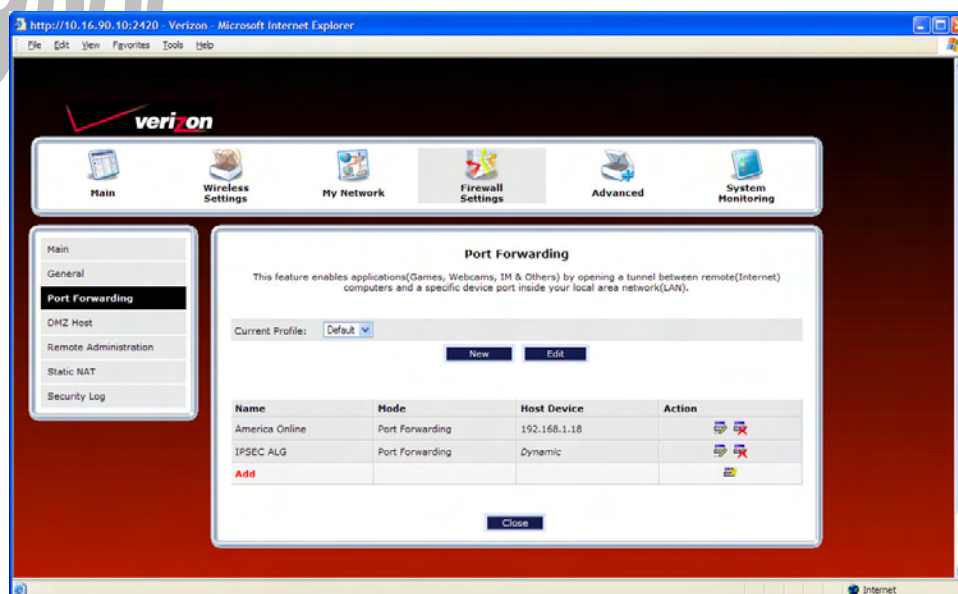


2. Select the option that describes how you want the service to be activated.
 - **Host:** Allows the unsolicited inbound traffic to a particular PC on the LAN
 - **Dynamic:** Enables inbound traffic based on specific outbound traffic
3. Select the desired IP address from the drop-down menu or manually enter the LAN IP address of the device that you want to host the service.
4. Click **Apply** to allow the settings to take effect.

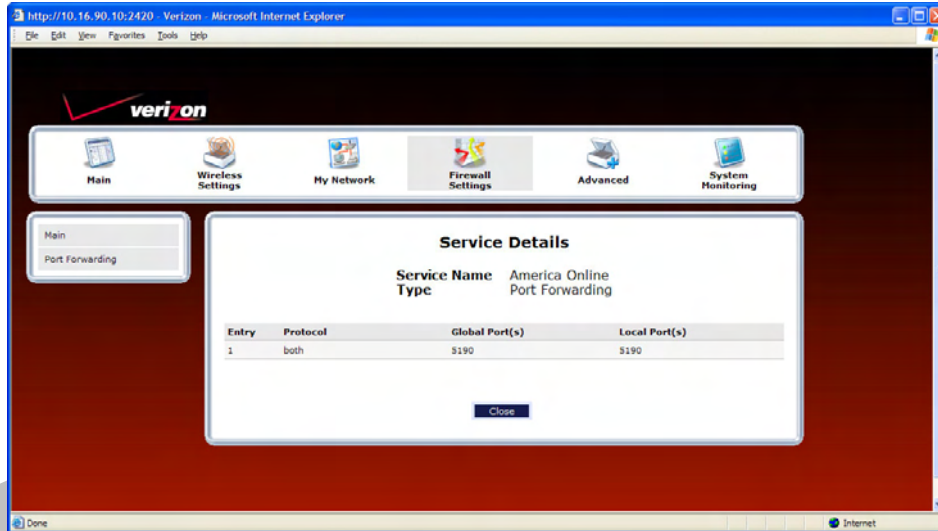
NOTE: If you click **Cancel** in the **New Port Forwarding Rule** screen, the service you selected will be displayed; however, it will not be assigned to a device on the LAN. You must click **Apply** to allow the settings to take effect.

If you clicked **Apply**, the following screen will be displayed. In this example, the screen shows that service “America Online” has been added to the “Default” profile.

- To add additional predefined services, in the **Port Forwarding** screen, first select the desired profile from the **Current Profile** drop-down menu. Next, click **Add** and then repeat the preceding steps 1 through 4.
- To view the details of a service you have added, in the **Action field** click the details icon .
- To delete a service from your list of active services, at the **Port Forwarding** screen, click the delete icon  next to the service that you want to delete. The selected service will be deleted from the Router’s list of active services.



If you clicked the details icon in the preceding screen, the following screen will be displayed. Click **Cancel** when you are ready to return to the **Port Forwarding** screen.



15.3.3.3 Creating a Customized Port Forwarding Service

To create a customized port forwarding service, click **Add** in the **Port Forwarding** screen.

