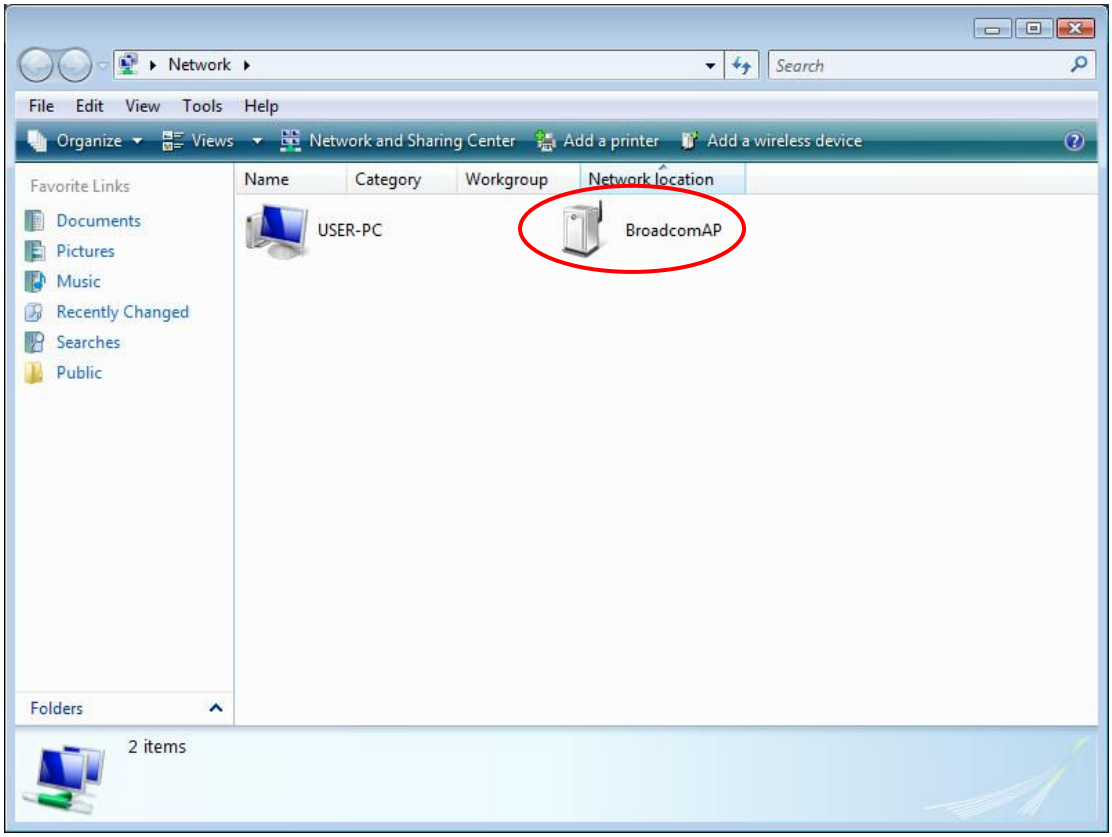
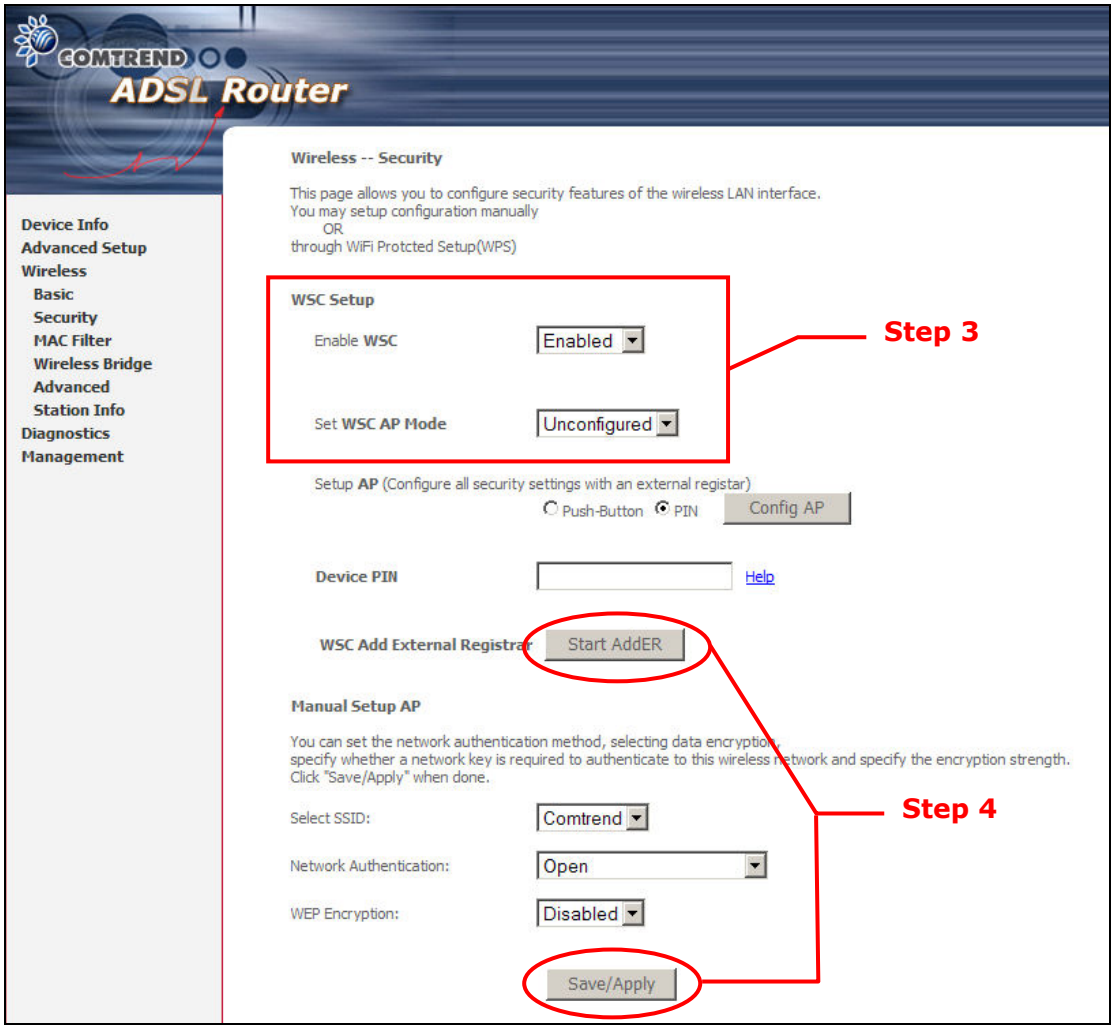
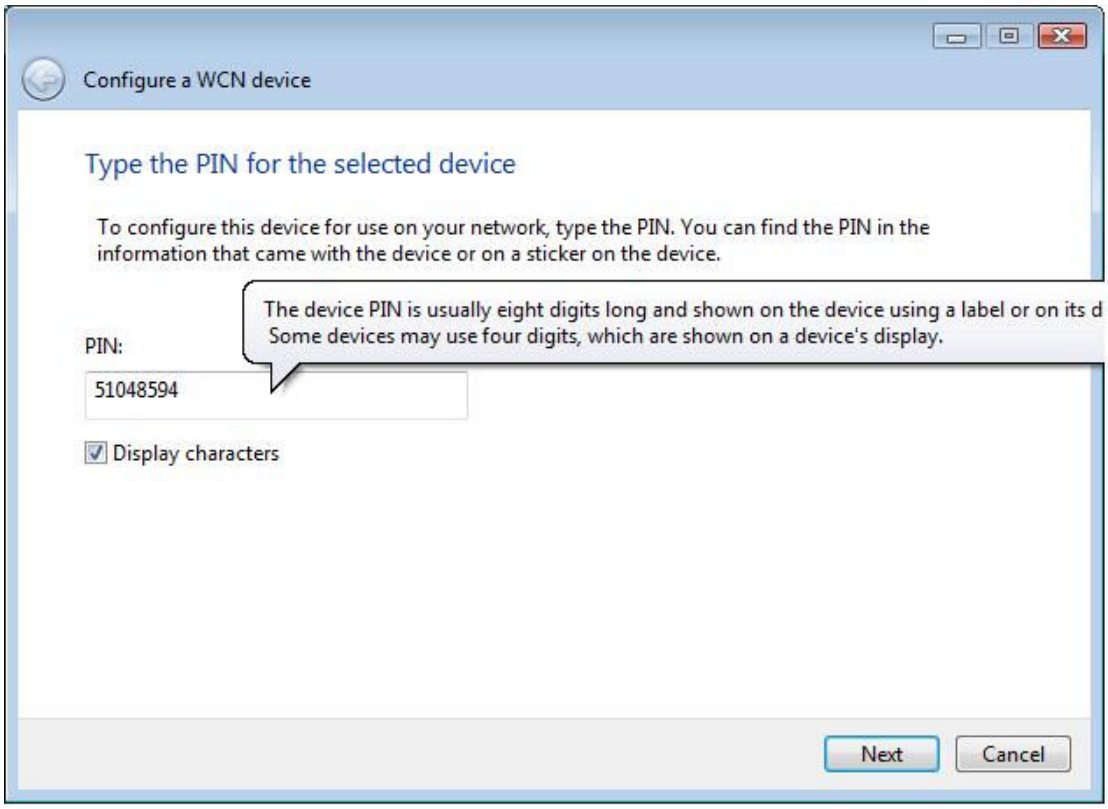


Step 3: On the Wireless → Security screen, enable WSC by selecting **Enabled** from the drop down list box and set the WSC AP Mode to Unconfigured.

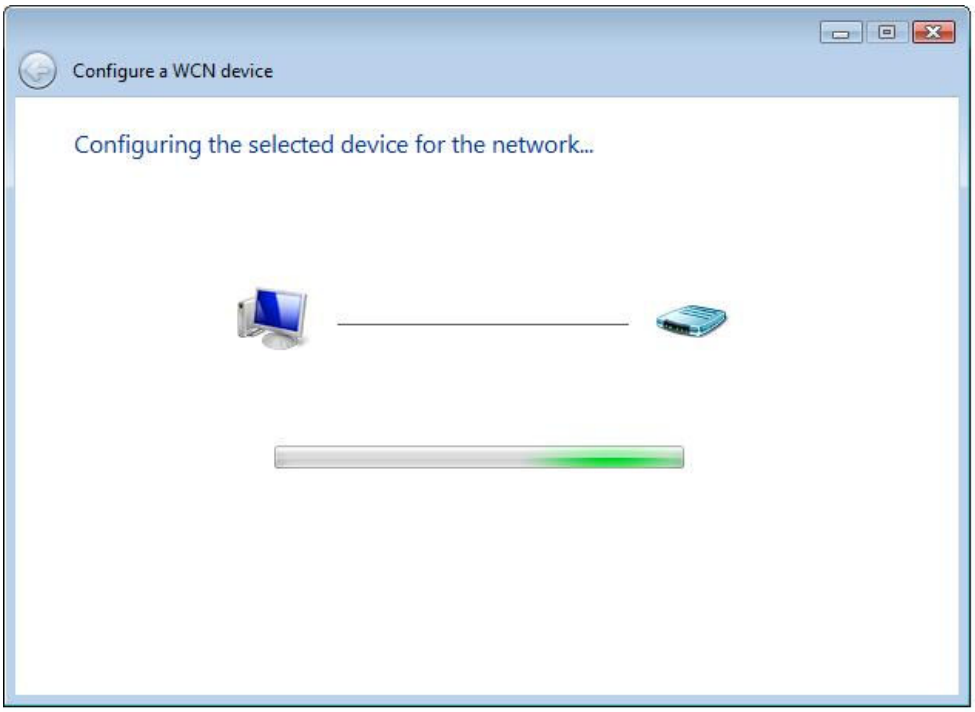


Step 4: Click the **Save/Apply** button at the bottom of the screen. The screen will go blank while the router applies the new Wireless settings. When the screen returns, press the **Start AddER** button, as shown above.

Step 5: Now return to the Network folder and click the BroadcomAP icon. A dialog box will appear asking for the Device PIN number. Enter the Device PIN as shown on the Wireless → Security screen. Click **Next**.



Step 6: Windows Vista will attempt to configure the wireless security settings.



Step 7: If successful, the security settings will match those in Windows Vista.

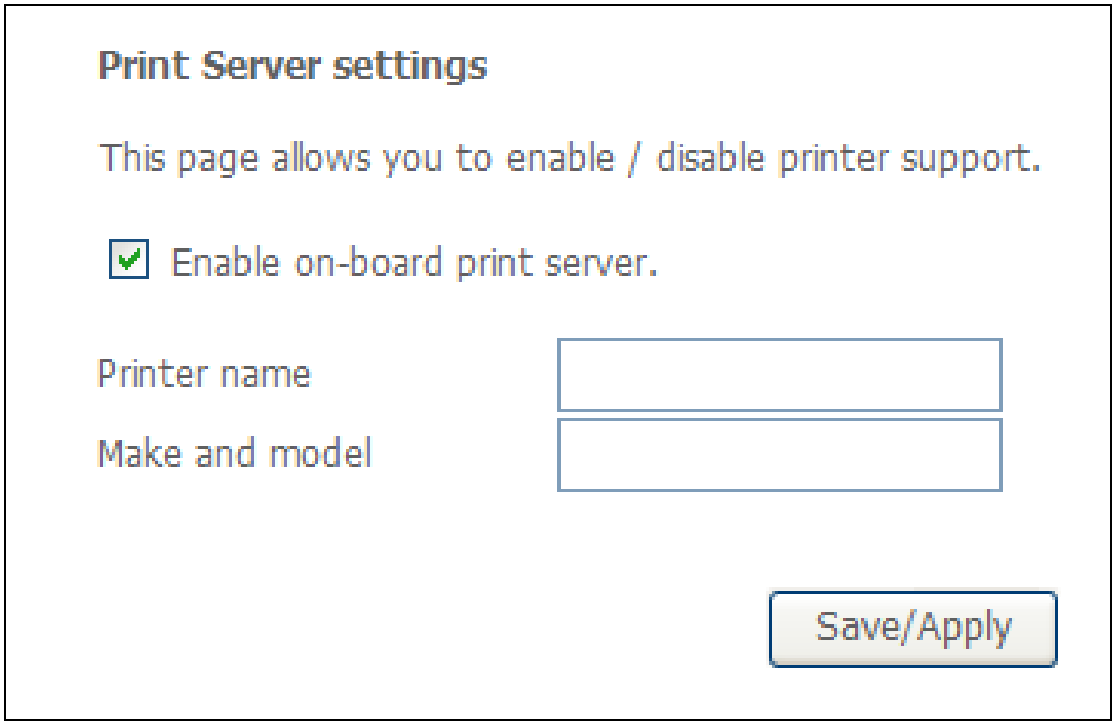
Appendix F - Printer Server

These steps explain the procedure for enabling the Printer Server.

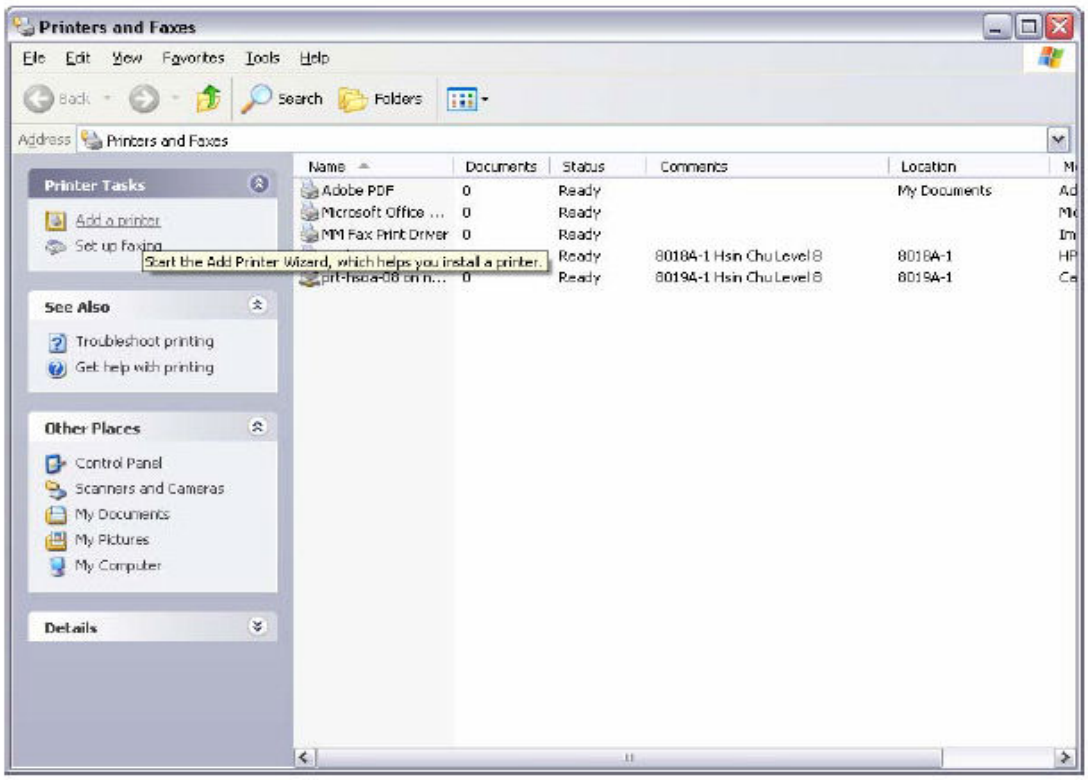
NOTE:	This function only applies to models with an USB host port.

STEP 1: Enable Print Server from Web User Interface. Select Enable on-board print server checkbox ☑ and enter Printer name and Make and model

NOTE:	The **Printer name** can be any text string up to 40 characters. The **Make and model** can be any text string up to 128 characters.

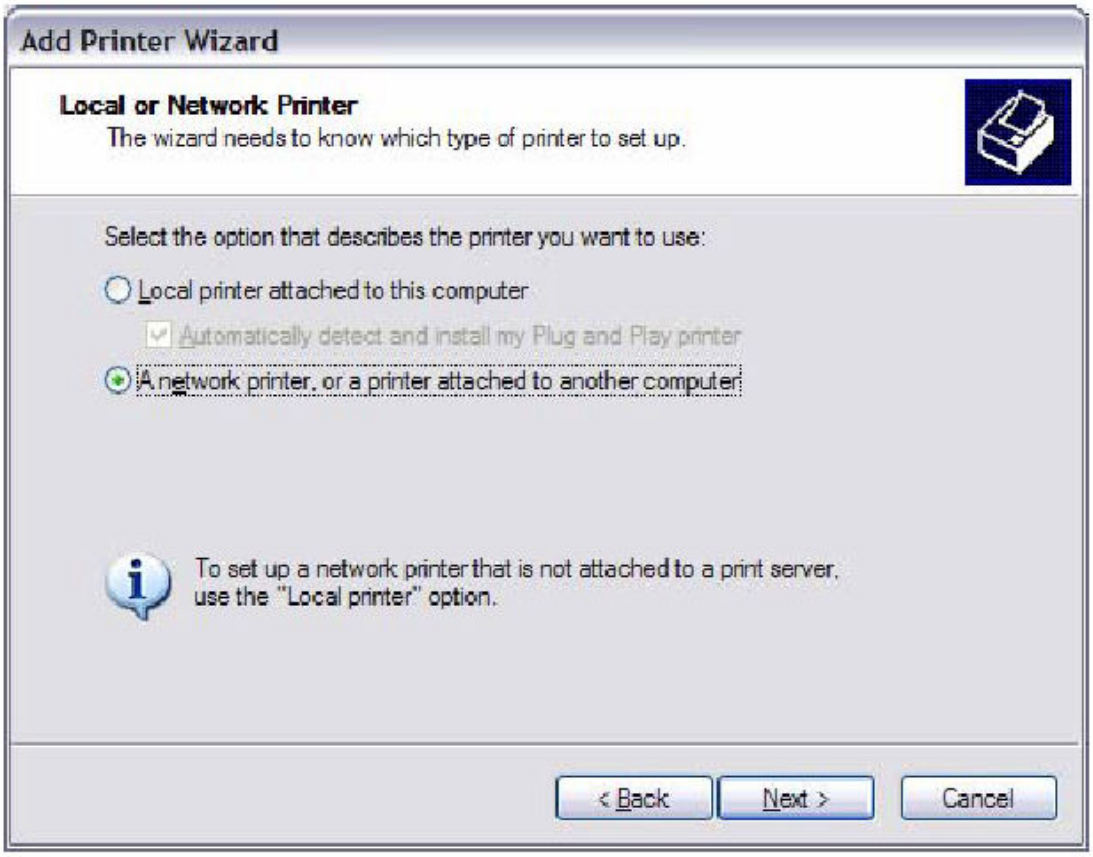


STEP 2: Go to the **Printers and Faxes** application in the **Control Panel** and select the **Add a printer** function (as located on the side menu below).



STEP 3: Click **Next** to continue when you see the dialog box below.

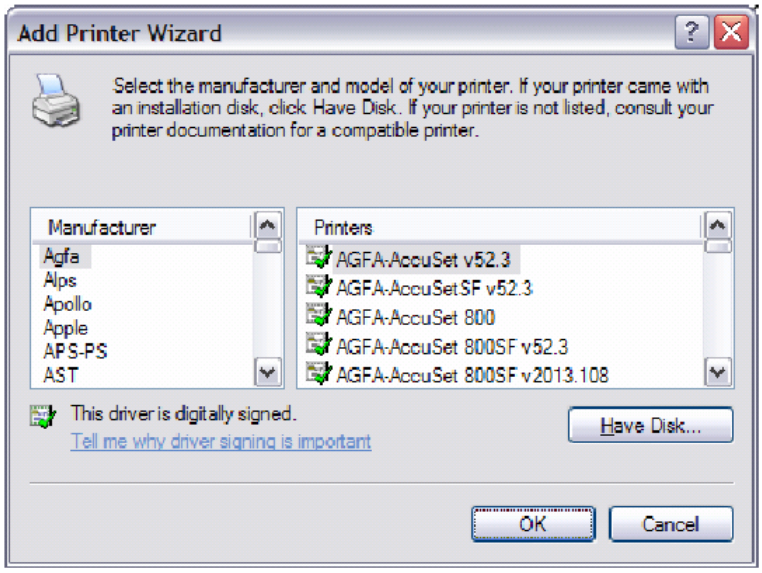
STEP 4: Select **Network Printer** and click **Next**.



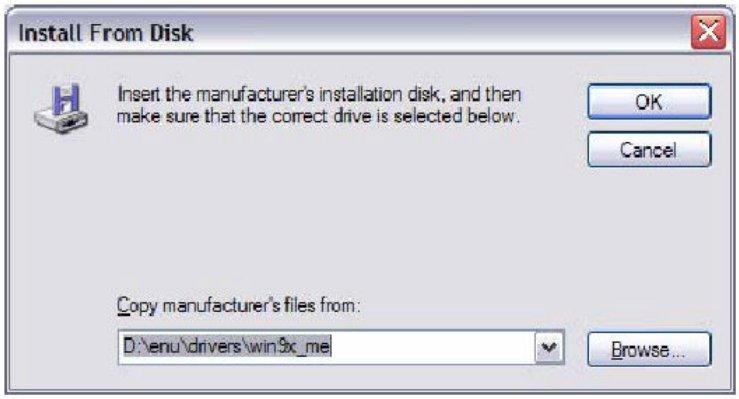
STEP 5: Select Connect to a printer on the Internet and enter your printer link. (e.g. http://192.168.1.1:631/printers/hp3845) and click **Next**.

NOTE:	The printer name must be the same name entered in the ADSL modem WEB UI "printer server setting" as in step 1.

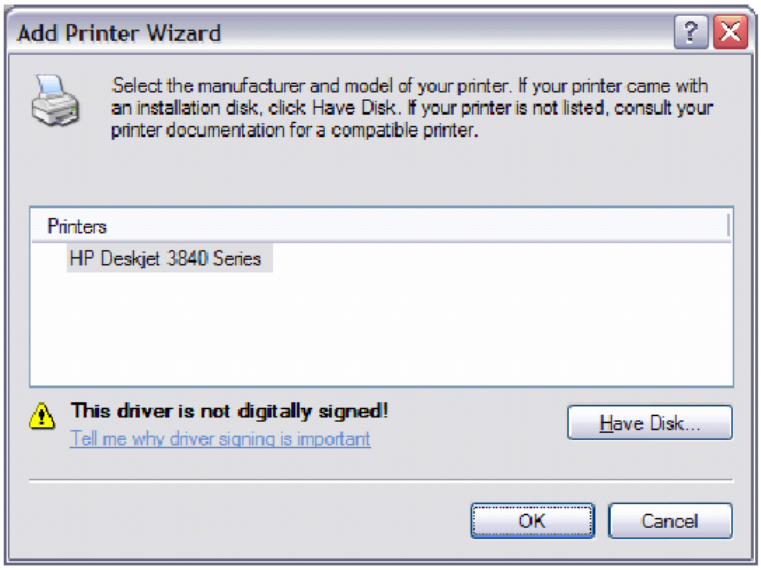
STEP 6: Click **Have Disk** and insert the printer driver CD.



STEP 7: Select driver file directory on CD-ROM and click **OK**.

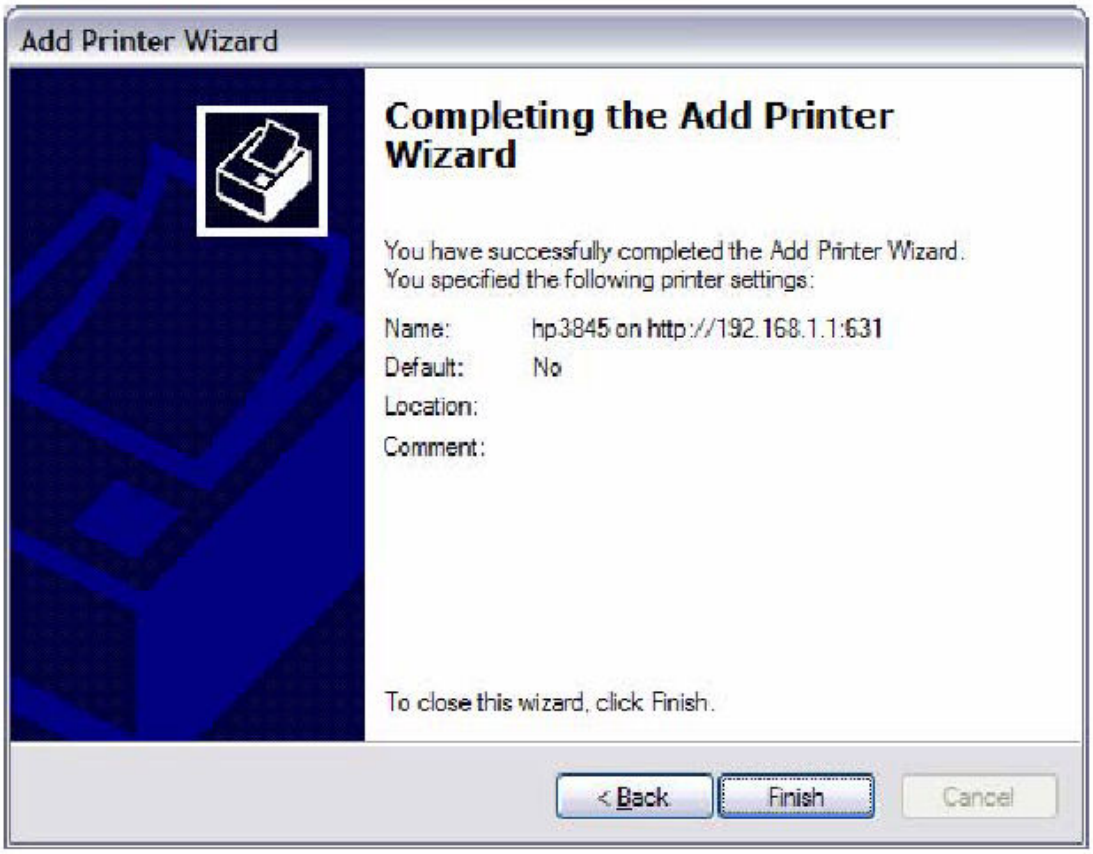


STEP 8: Once the printer name appears, click **OK**.

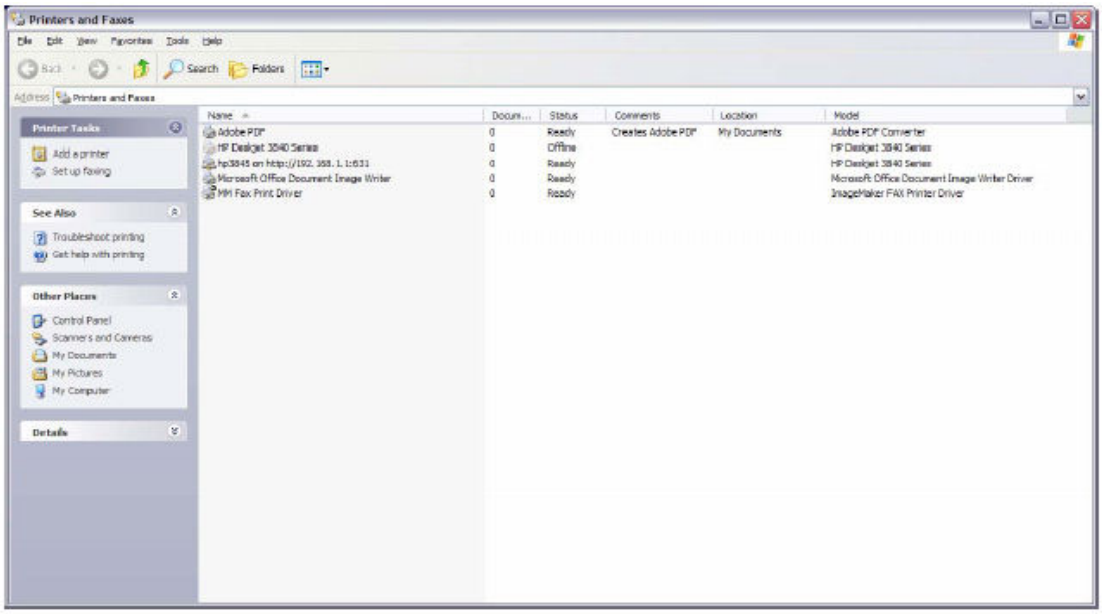


STEP 9: Choose **Yes** or **No** for default printer setting and click **Next.**

STEP 10: Click Finish.



STEP 11: Check the status of printer from Windows Control Panel, printer window. Status should show as **Ready**.



Appendix G - Connection Setup

Creating a WAN connection is a two-stage process.

1 - Setup a Layer 2 Interface (ATM, PTM or Ethernet).
2 - Add a WAN connection to the Layer 2 Interface.

The following sections describe each stage in turn.

G1 ~ Layer 2 Interfaces

Every layer2 interface operates in one of three modes: Default, VLAN Mux or MSC. A short introduction to each of these three modes is included below for reference. It is important to understand the differences between these connection modes, as they determine the number and types of connections that may be configured.

DEFAULT MODE

In this mode there is a 1:1 relationship between interfaces and WAN connections, in that an interface in default mode supports just one connection. However, unlike the multiple connection modes described below, it supports all five connection types. The figure below shows the five connection types available in ATM default mode.

Interface	Description	Type	Vlan8021p	VlanMuxId	ConnId	Igmp	NAT	Firewall	IPv6	Mld	Remove
atm0	br_0_0_35	Bridge	N/A	N/A	N/A	Disabled	N/A	Disabled	Disabled	Disabled	☐
atm1	ipoe_0_0_36	IPoE	N/A	N/A	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐
ppp0	pppoe_0_0_37	PPPoE	N/A	N/A	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐
pppoa1	pppoa_0_0_34	PPPoA	N/A	N/A	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐
ipoa0	ipoa_0_0_33	IPoA	N/A	N/A	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐

VLAN MUX MODE

This mode uses VLAN tags to allow for multiple connections over a single interface. PPPoE, IPoE, and Bridge are supported while PPPoA and IPoA connections are not. The figure below shows multiple connections over a single VLAN Mux interface.

Interface	Description	Type	Vlan8021p	VlanMuxId	ConnId	Igmp	NAT	Firewall	IPv6	Mld	Remove
atm0.100	br_0_0_35.100	Bridge	2	100	N/A	Disabled	N/A	Disabled	Disabled	Disabled	☐
atm0.101	ipoe_0_0_35.101	IPoE	2	101	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐
ppp0.102	pppoe_0_0_35.102	PPPoE	2	102	N/A	Disabled	Enabled	Disabled	Disabled	Disabled	☐

MSC MODE

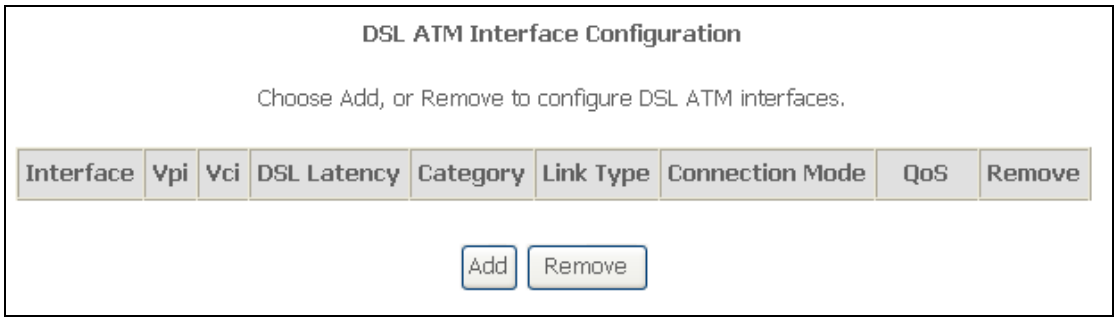
Multi-Service Connection (MSC) mode supports multiple connections over a single interface. As with VLAN Mux mode, PPPoA and IPoA connection types are not supported, while Bridging is unavailable for Ethernet WAN interfaces. After adding WAN connections to an interface, you must also create an Interface Group to connect LAN/WAN interfaces (see section G3 ~ More About MSC Mode).

G1.1 ATM Interfaces

Follow these procedures to configure an ATM interface.

NOTE:	The CT-5374 supports up to 16 ATM interfaces.

STEP 1: Go to Advanced Setup → Layer2 Interface → ATM Interface.

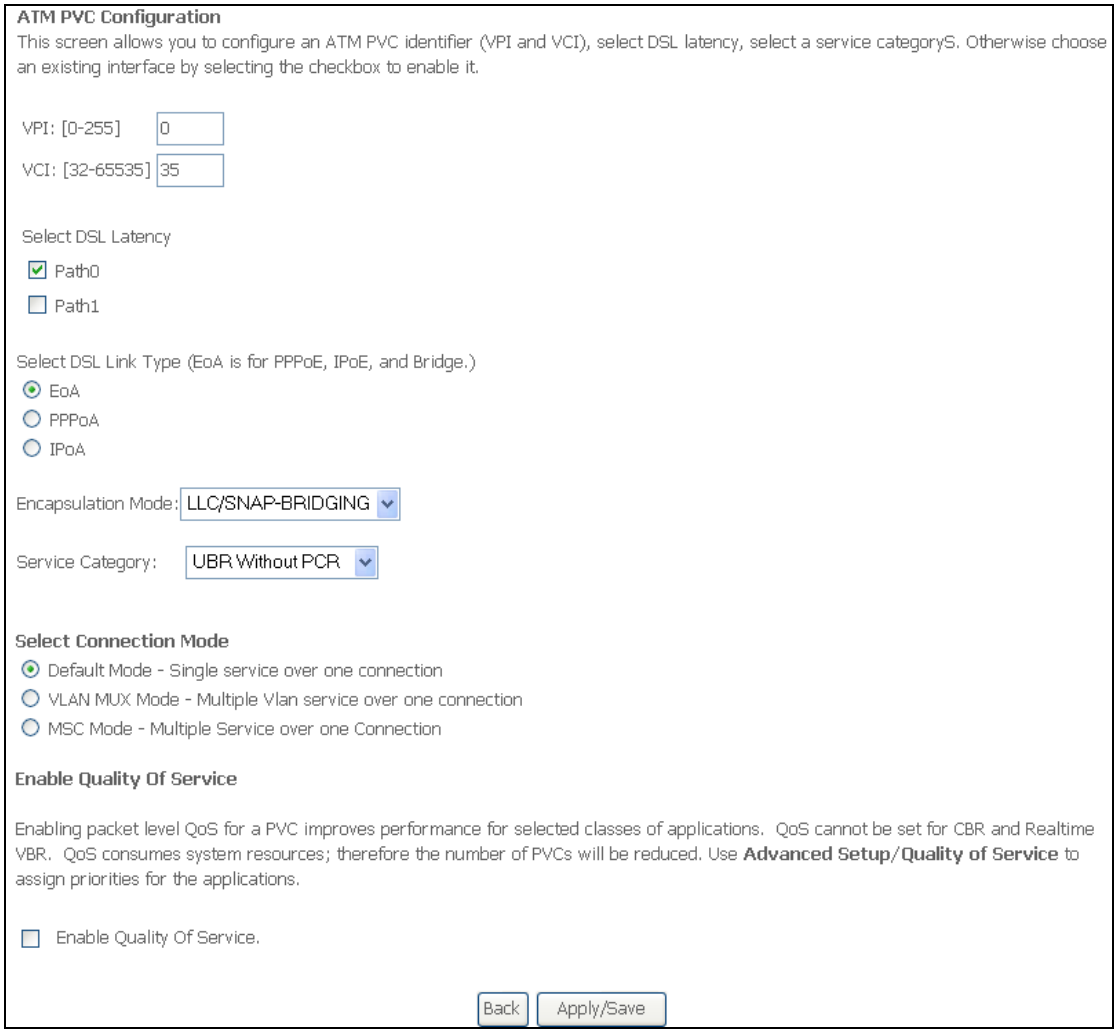


This table is provided here for ease of reference.

Heading	Description
Interface	WAN interface name.
VPI	ATM VPI (0-255)
VCI	ATM VCI (32-65535)
DSL Latency	{Path0} → portID = 0 {Path1} → port ID = 1 {Path0&1} → port ID = 4
Category	ATM service category
Link Type	Choose EoA (for PPPoE, IPoE, and Bridge), PPPoA, or IPoA.
Connection Mode	Default Mode – Single service over one connection Vlan Mux Mode – Multiple Vlan service over one connection MSC Mode – Multiple Service over one Connection
QoS	Quality of Service (QoS) status
Remove	Select items for removal

STEP 2: Click **Add** to proceed to the next screen.

NOTE:	To add WAN connections to one interface type, you must delete existing connections from the other interface type using the **remove** button.



There are many settings here including: VPI/VCI, DSL Latency, DSL Link Type, Encapsulation Mode, Service Category, Connection Mode and Quality of Service.

The table below shows xDSL Link Type availability with each Connection Mode.

	xDSL Link Type		
Connection Mode	EoA*	PPPoA	IPoA
Default Mode	OK	OK	OK
VLAN Mux Mode	OK	X	X
MSC Mode	OK	X	X

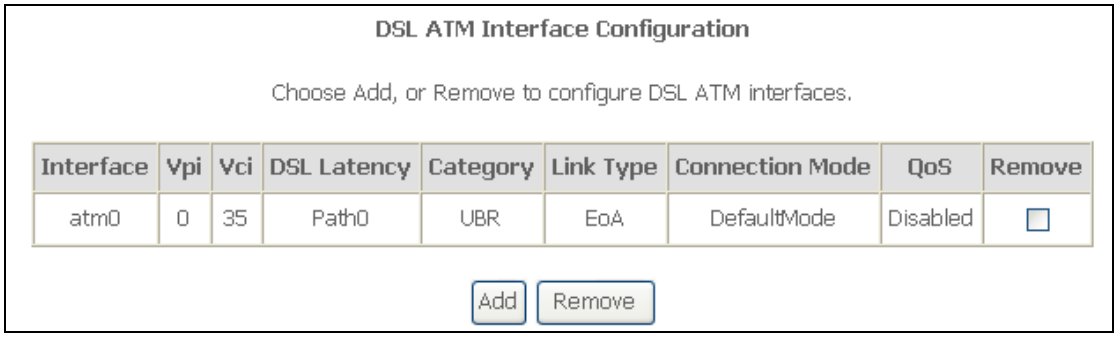
* EoA includes PPPoE, IPoE, and Bridge link types.

Here are the available encapsulations for each xDSL Link Type:

- EoA- LLC/SNAP-BRIDGING, VC/MUX
- PPPoA- VC/MUX, LLC/ENCAPSULATION
- IPoA- LLC/SNAP-ROUTING, VC MUX

STEP 3: Click **Apply/Save** to confirm your choices.

On the next screen, check that the ATM interface is added to the list. For example, an ATM interface on PVC 0/35 in Default Mode with an EoA Link type is shown below.



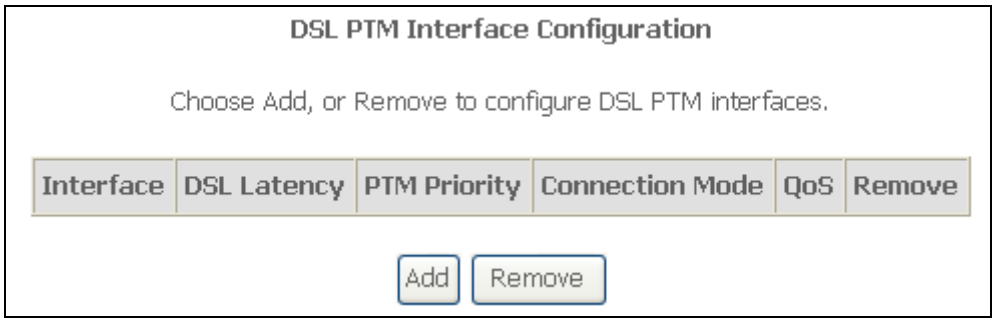
To add a WAN connection, go to section G2 ~ WAN Connections.

G1.2 PTM Interfaces

Follow these procedures to configure a PTM interface.

NOTE:	The CT-5374 supports up to four PTM interfaces.

STEP 4: Go to Advanced Setup → Layer2 Interface → PTM Interface.

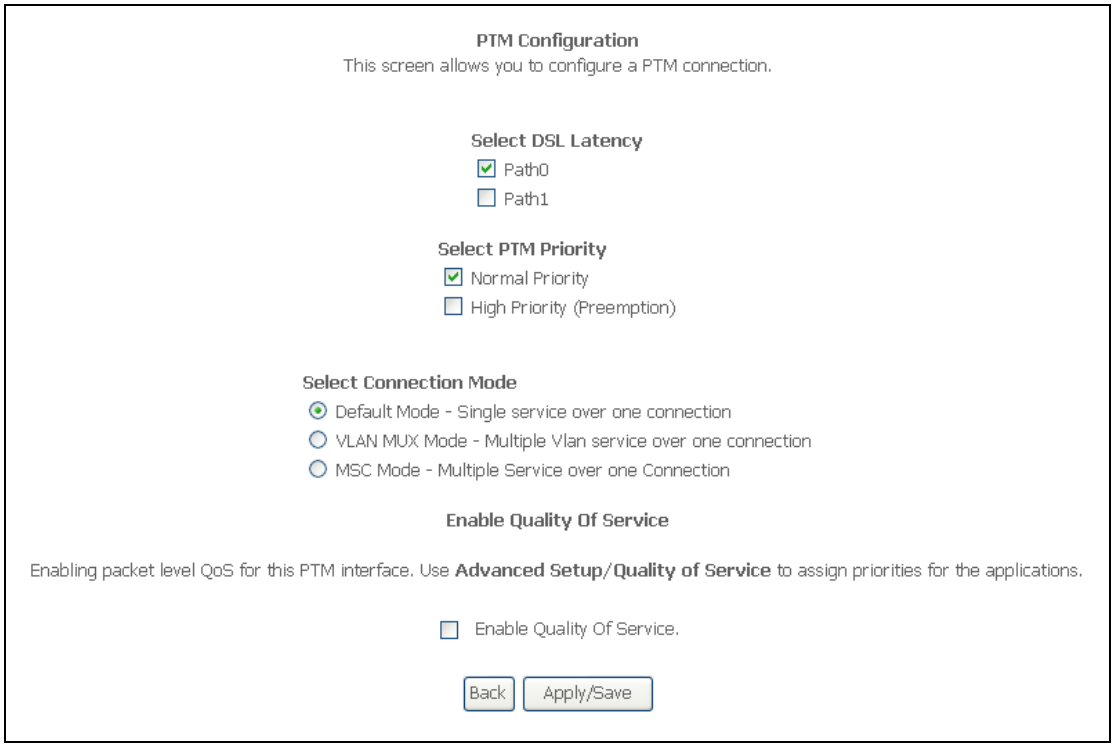


This table is provided here for ease of reference.

Heading	**Description**
Interface	WAN interface name.
DSL Latency	{Path0} → portID = 0 {Path1} → port ID = 1 {Path0&1} → port ID = 4
PTM Priority	Normal or High Priority (Preemption).
Connection Mode	Default Mode – Single service over one interface. Vlan Mux Mode – Multiple Vlan services over one interface. MSC Mode – Multiple Services over one interface.
QoS	Quality of Service (QoS) status.
Remove	Select interfaces to remove.

STEP 5: Click **Add** to proceed to the next screen.

NOTE:	To add WAN connections to one interface type, you must delete existing connections from the other interface type using the **remove** button.

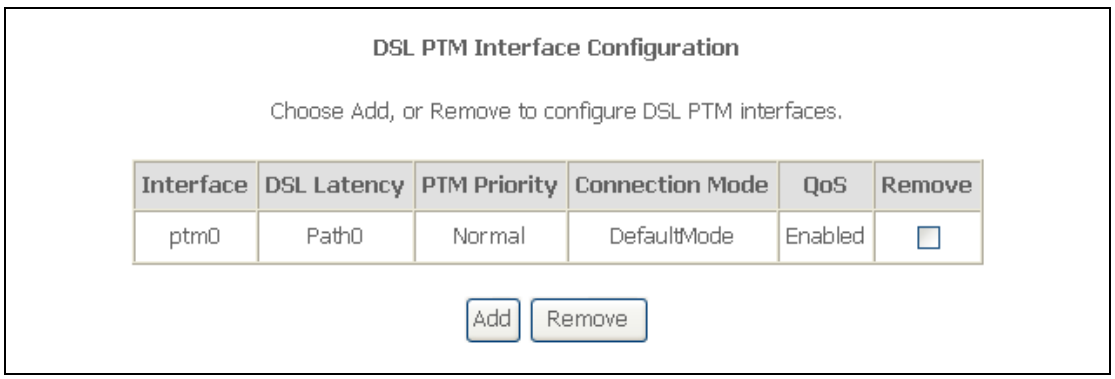


There are many settings that can be configured here including:
DSL Latency, PTM Priority, Connection Mode and Quality of Service.

STEP 6: Click **Apply/Save** to confirm your choices.

On the next screen, check that the PTM interface is added to the list.

For example, an PTM interface in Default Mode is shown below.



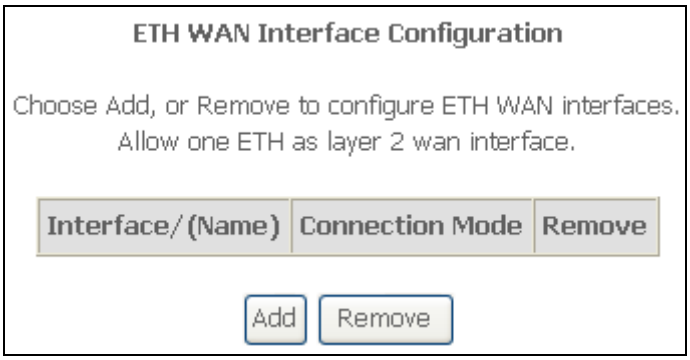
To add a WAN connection, go to section G2 ~ WAN Connections.

G1.3 Ethernet WAN Interface

Some models of the CT-5374 support a single Ethernet WAN interface over the ETH WAN port. Follow these procedures to configure an Ethernet WAN interface.

NOTE:	To add WAN connections to one interface type, you must delete existing connections from the other interface type using the **remove** button.

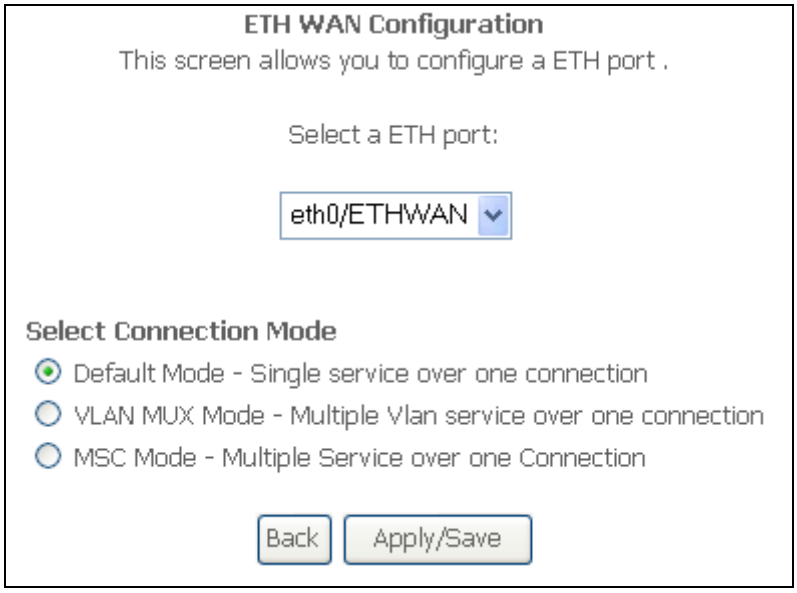
STEP 1: Go to Advanced Setup → Layer2 Interface → ETH Interface.



This table is provided here for ease of reference.

Heading	Description
Interface/ (Name)	ETH WAN Interface
Connection Mode	Default Mode – Single service over one connection Vlan Mux Mode – Multiple Vlan service over one connection MSC Mode – Multiple Service over one Connection
Remove	Select the checkbox and click **Remove** to remove the connection.

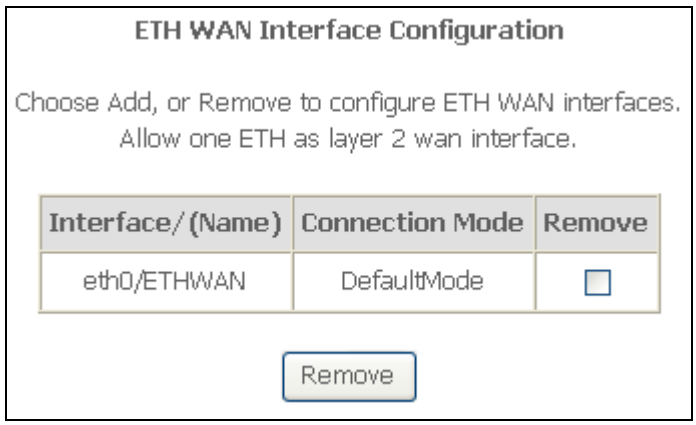
STEP 2: Click **Add** to proceed to the next screen.



STEP 3: Select a Connection Mode from the options shown above.

STEP 4: Click **Apply/Save** to confirm your choice.

The figure below shows an Ethernet WAN interface configured in Default Mode.



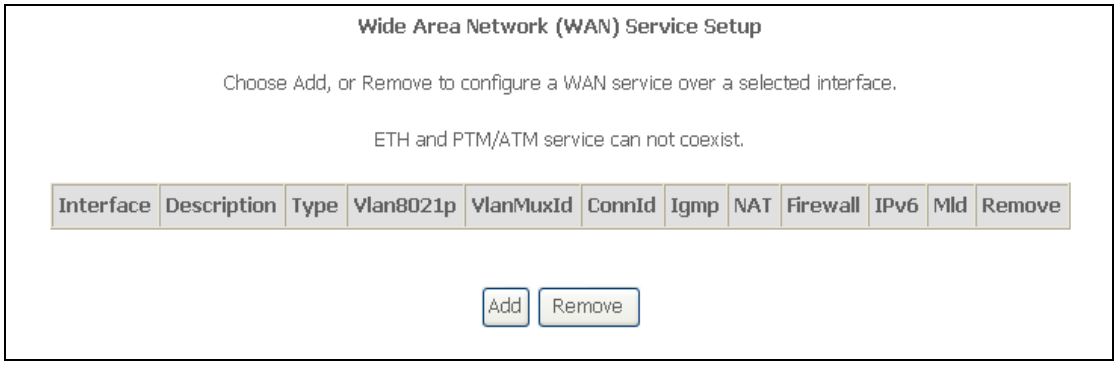
To add a WAN connection, go to section G2 ~ WAN Connections.

G2 ~ WAN Connections

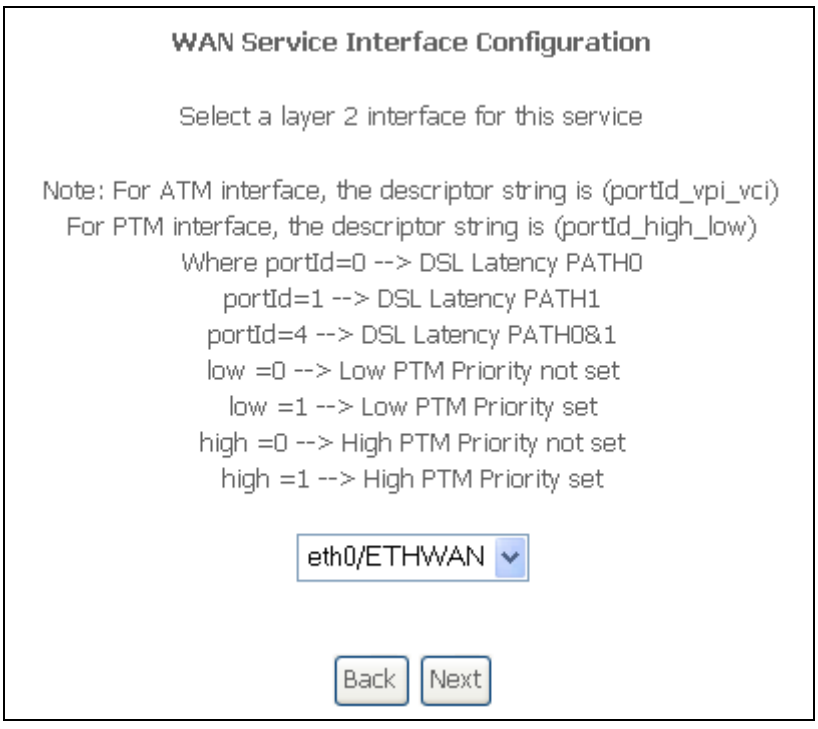
In Default Mode, the CT-5374 supports one WAN connection for each interface, up to a maximum of 8 connections. VLAN Mux and MSC support up to 16 connections.

To setup a WAN connection follow these instructions.

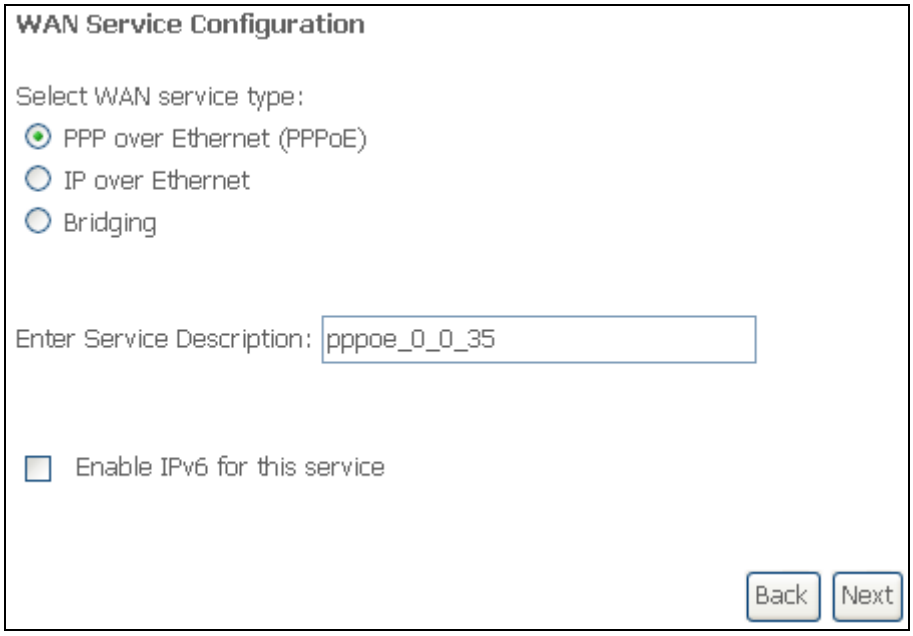
STEP 1: Go to the Advanced Setup → WAN Service screen.



STEP 2: Click **Add** to create a WAN connection. The following screen will display.

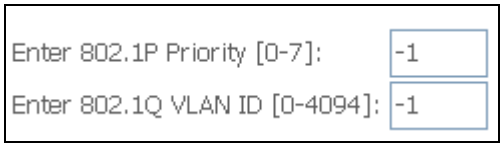


STEP 3: Choose a layer 2 interface from the drop-down box and click **Next**. The WAN Service Configuration screen will display as shown below.



NOTE:	The WAN services shown here are those supported by the layer 2 interface you selected in the previous step. If you wish to change your selection click the **Back** button and select a different layer 2 interface.

STEP 4: For VLAN Mux Connections only, you must enter Priority & VLAN ID tags.



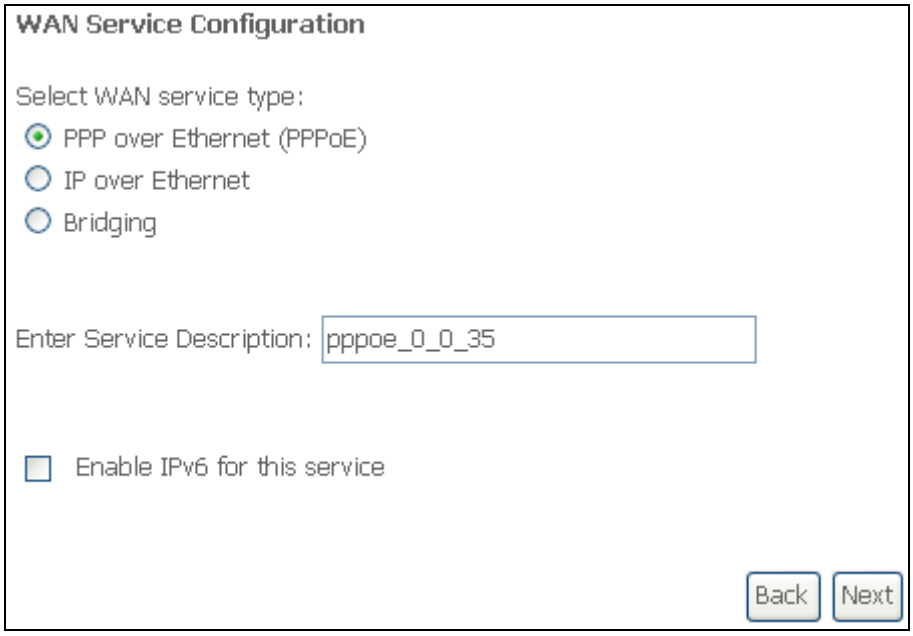
STEP 5: You will now follow the instructions specific to the WAN service type you wish to establish. This list should help you locate the correct procedure:

(1) For G2.1 PPP over ETHERNET (PPPoE), go to page 118.
(2) For G2.2 IP over ETHERNET (IPoE), go to page 123.
(3) For G2.3 Bridging, go to page 128.
(4) For G2.4 PPP over ATM (PPPoA), go to page 129.
(5) For G2.5 IP over ATM (IPoA), go to page 134.

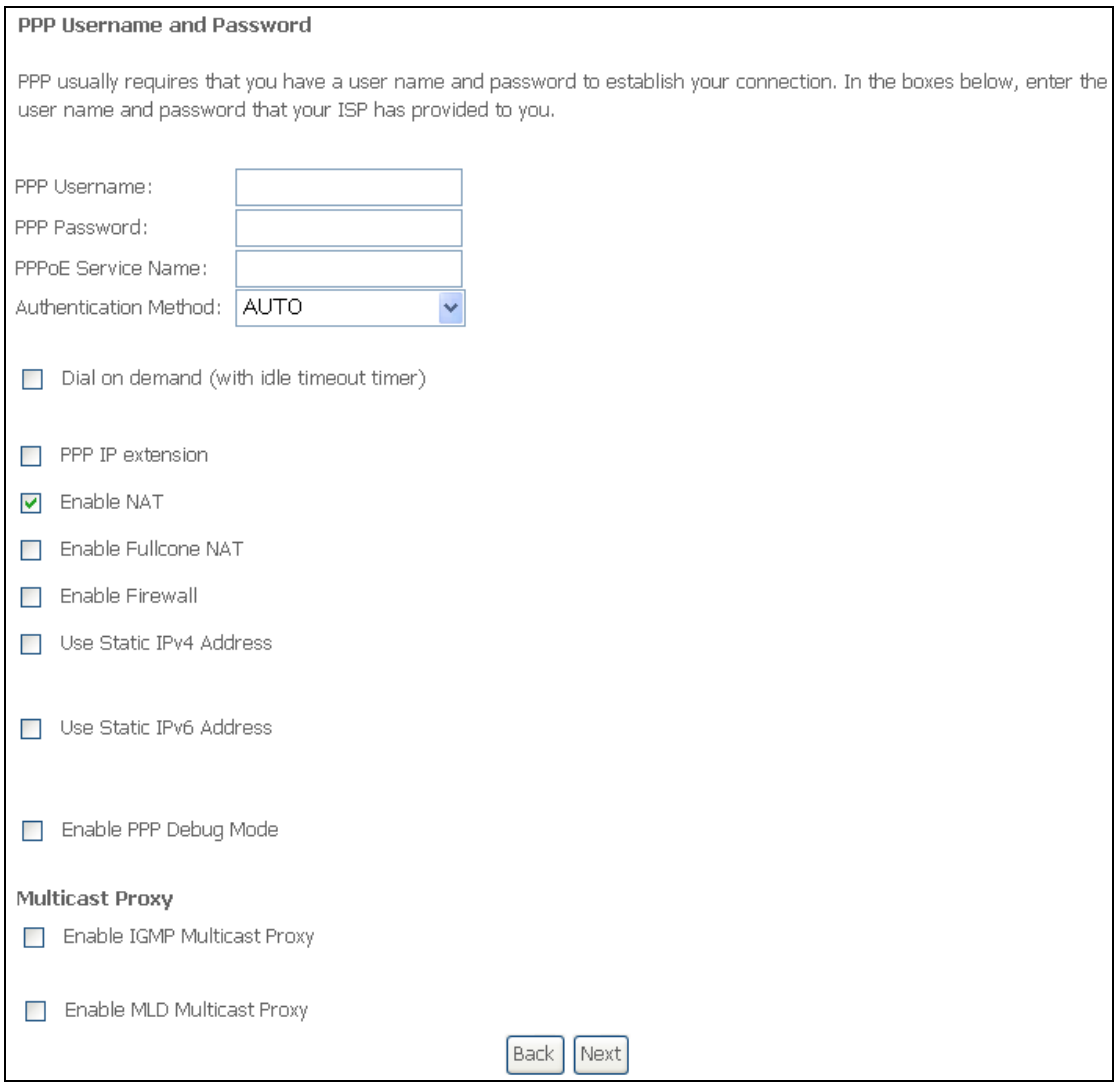
The subsections that follow continue the WAN service setup procedure.

G2.1 PPP over ETHERNET (PPPoE)

STEP 1: Select the PPP over Ethernet radio button and click **Next**. You can also enable IPv6 by ticking the checkbox ☑ at the bottom of this screen.



STEP 2: On the next screen, enter the PPP settings as provided by your ISP. Click **Next** to continue or click **Back** to return to the previous step.

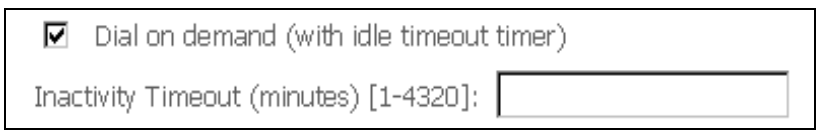


The settings shown above are described below.

PPP SETTINGS
The PPP Username, PPP password and the PPPoE Service Name entries are dependent on the particular requirements of the ISP. The user name can be a maximum of 256 characters and the password a maximum of 32 characters in length. For Authentication Method, choose from AUTO, PAP, CHAP, and MSCHAP.

ENABLE FULLCONE NAT
This option becomes available when NAT is enabled. Known as one-to-one NAT, all requests from the same internal IP address and port are mapped to the same external IP address and port. An external host can send a packet to the internal host, by sending a packet to the mapped external address.

DIAL ON DEMAND
The CT-5374 can be configured to disconnect if there is no activity for a period of time by selecting the **Dial on demand** checkbox ☑. You must also enter an inactivity timeout period in the range of 1 to 4320 minutes.



PPP IP EXTENSION
The PPP IP Extension is a special feature deployed by some service providers. Unless your service provider specifically requires this setup, do not select it.

PPP IP Extension does the following:

- Allows only one PC on the LAN.
- Disables NAT and Firewall.
- The device becomes the default gateway and DNS server to the PC through DHCP using the LAN interface IP address.
- The device extends the IP subnet at the remote service provider to the LAN PC. i.e. the PC becomes a host belonging to the same IP subnet.
- The device bridges the IP packets between WAN and LAN ports, unless the packet is addressed to the device's LAN IP address.
- The public IP address assigned by the remote side using the PPP/IPCP protocol is actually not used on the WAN PPP interface. Instead, it is forwarded to the PC LAN interface through DHCP. Only one PC on the LAN can be connected to the remote, since the DHCP server within the device has only a single IP address to assign to a LAN device.

ENABLE NAT
If the LAN is configured with a private IP address, the user should select this checkbox ☑. The NAT submenu will appear in the Advanced Setup menu after reboot. On the other hand, if a private IP address is not used on the LAN side (i.e. the LAN side is using a public IP), this checkbox ☑ should not be selected to free up system resources for better performance.

ENABLE FIREWALL
If this checkbox ☑ is selected, the Security submenu will be displayed on the Advanced Setup menu after reboot. If firewall is not necessary, this checkbox ☑ should not be selected to free up system resources for better performance.

USE STATIC IPv4 ADDRESS
Unless your service provider specially requires it, do not select this checkbox ☑. If selected, enter the static IP address in the **IPv4 Address** field. Don't forget to adjust the IP configuration to Static IP Mode as described in 3.2 IP Configuration.

USE STATIC IPv6 ADDRESS
This option displays when IPv6 is enabled. Unless your service provider specially requires it, do not select this checkbox ☑. If selected, enter the static IP address in the **IPv6 Address** field along with a value for **Prefix Length**. Don't forget to adjust the IP configuration to Static IP Mode as described in 3.2 IP Configuration.

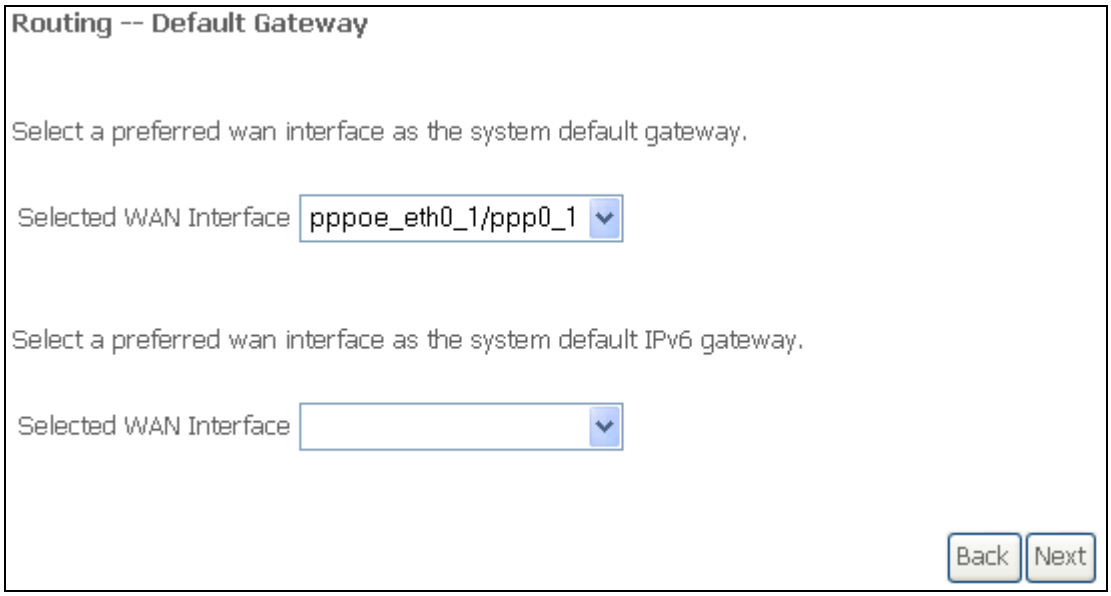
ENABLE PPP DEBUG MODE
When this option is selected, the system will put more PPP connection information into the system log. This is for debugging errors and not for normal usage.

BRIDGE PPPOE FRAMES BETWEEN WAN AND LOCAL PORTS
(This option is hidden when PPP IP Extension is enabled)
When Enabled, this creates local PPPoE connections to the WAN side. Enable this option only if all LAN-side devices are running PPPoE clients, otherwise disable it. The CT-5374 supports pass-through PPPoE sessions from the LAN side while simultaneously running a PPPoE client from non-PPPoE LAN devices.

ENABLE IGMP MULTICAST PROXY
Tick the checkbox ☑ to enable Internet Group Membership Protocol (IGMP) multicast. This protocol is used by IPv4 hosts to report their multicast group memberships to any neighboring multicast routers.

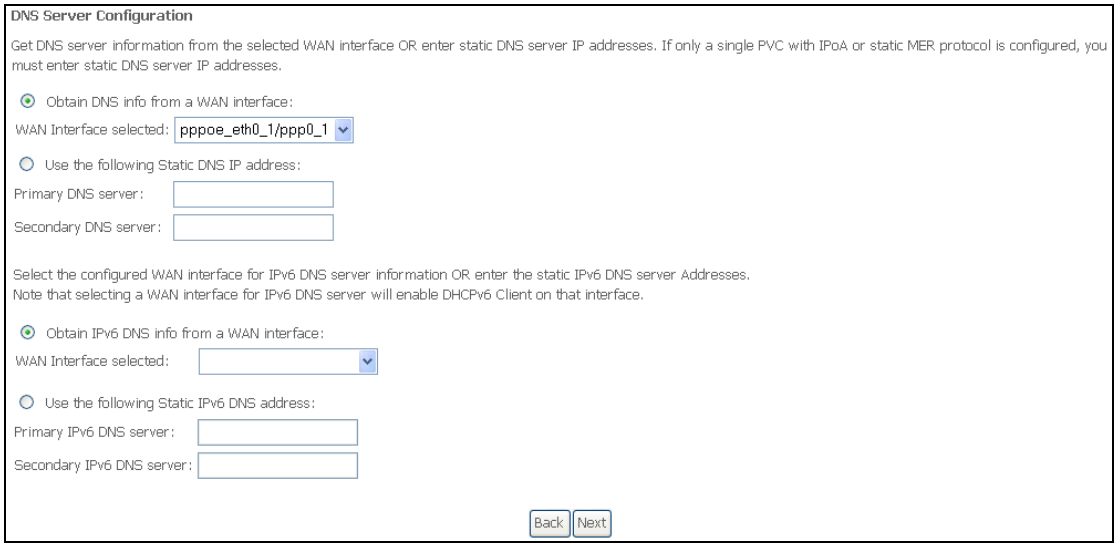
ENABLE MLD MULTICAST PROXY
This option displays when IPv6 is enabled. Tick the checkbox ☑ to enable Multicast Listener Discovery (MLD). This protocol is used by IPv6 hosts to report their multicast group memberships to any neighboring multicast routers.

STEP 3: Select WAN interfaces as system default IPv4/v6 gateways. When IPv6 is enabled a second WAN interface selection box will appear, as shown here.



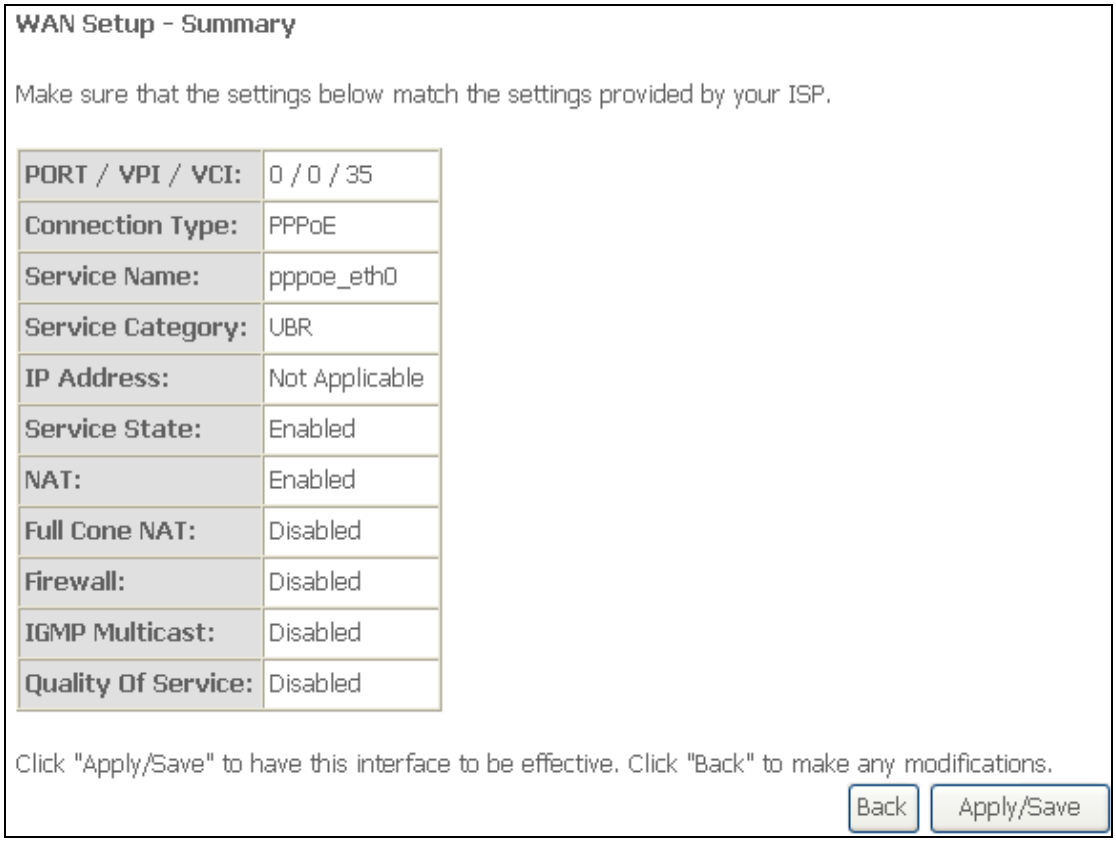
Click **Next** to continue or click **Back** to return to the previous step.

STEP 4: Select a WAN interface or enter static IP address to IPv4/v6 DNS Servers. When IPv6 is enabled, a second set of entries will appear, as shown here.



Click **Next** to continue or click **Back** to return to the previous step.

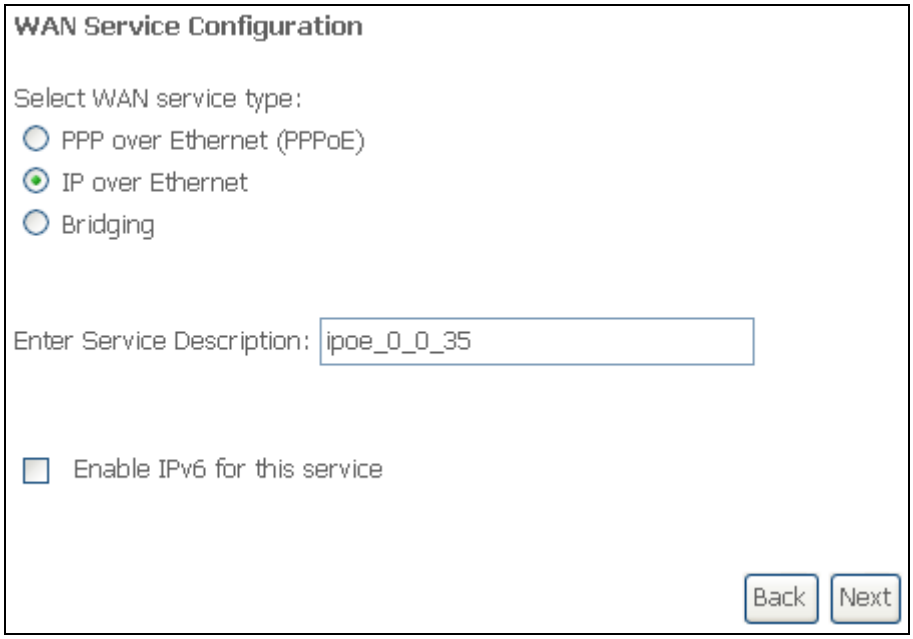
STEP 5: The WAN Setup - Summary screen shows a preview of the WAN service you have configured. Check these settings and click **Apply/Save** if they are correct, or click **Back** to modify them.



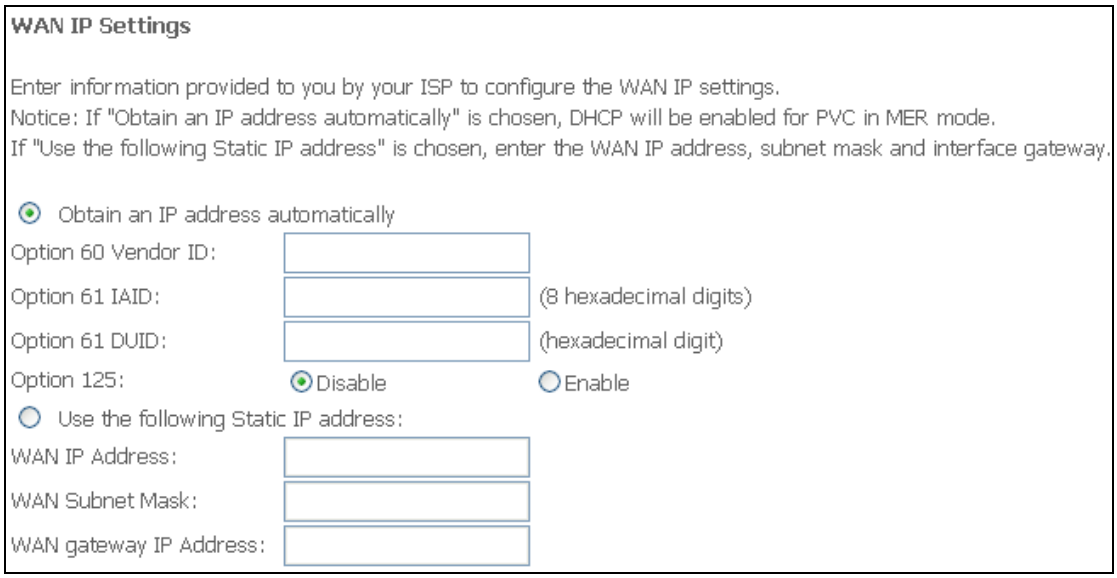
After clicking **Apply/Save**, the new service should appear on the main screen. To activate it you must reboot. Go to Management → Reboot and click **Reboot**.

G2.2 IP over ETHERNET (IPoE)

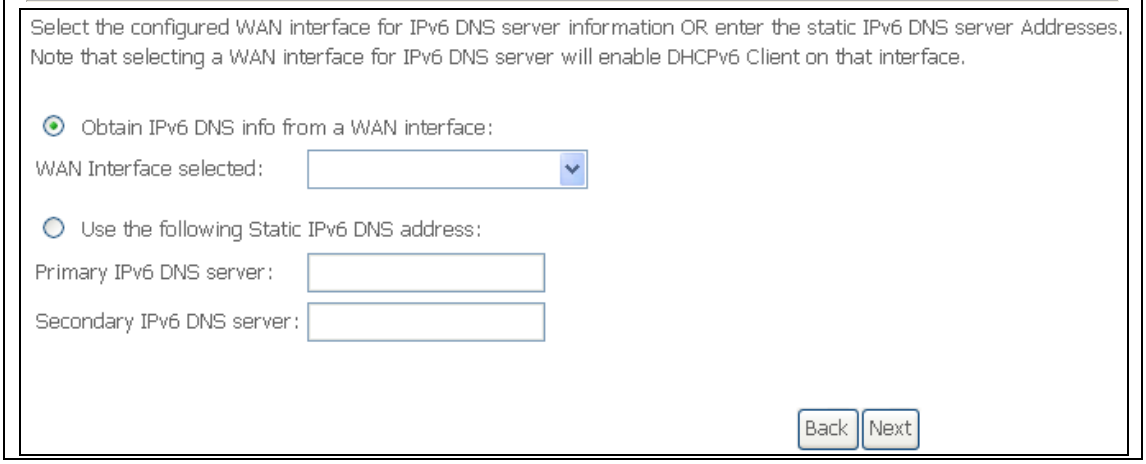
STEP 1: Select the IP over Ethernet radio button and click **Next**. You can also enable IPv6 by ticking the checkbox ☑ at the bottom of this screen.



STEP 2: The WAN IP settings screen provides access to the DHCP server settings. You can select the **Obtain an IP address automatically** radio button to enable DHCP (use the DHCP Options only if necessary). However, if you prefer, you can instead use the **Static IP address** method to assign WAN IP address, Subnet Mask and Default Gateway manually.

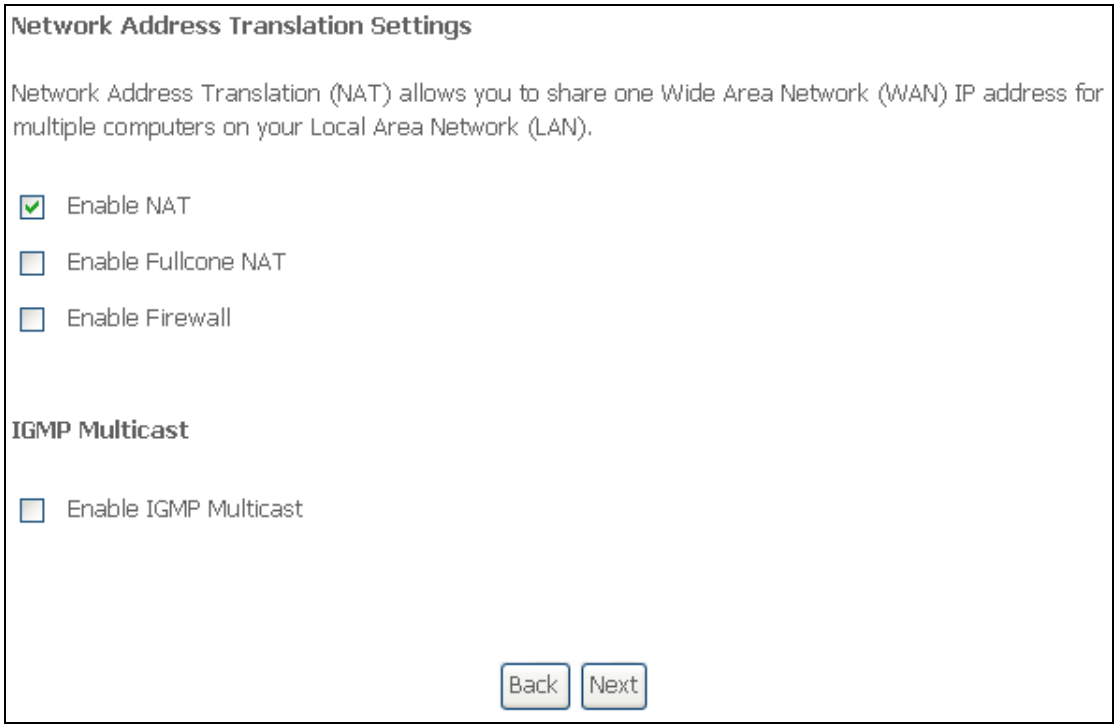


NOTE: If IPv6 networking is enabled, an additional set of instructions, radio buttons, and text entry boxes will appear at the bottom of the screen. These configuration options are quite similar to those for IPv4 networks.



Click **Next** to continue or click **Back** to return to the previous step.

STEP 3: This screen provides access to NAT, Firewall and IGMP Multicast settings. Enable each by selecting the appropriate checkbox ☑. Click **Next** to continue or click **Back** to return to the previous step.



ENABLE NAT

If the LAN is configured with a private IP address, the user should select this checkbox ☑. The NAT submenu will appear in the Advanced Setup menu after reboot. On the other hand, if a private IP address is not used on the LAN side (i.e. the LAN side is using a public IP), this checkbox ☑ should not be selected, so as to free up system resources for improved performance.

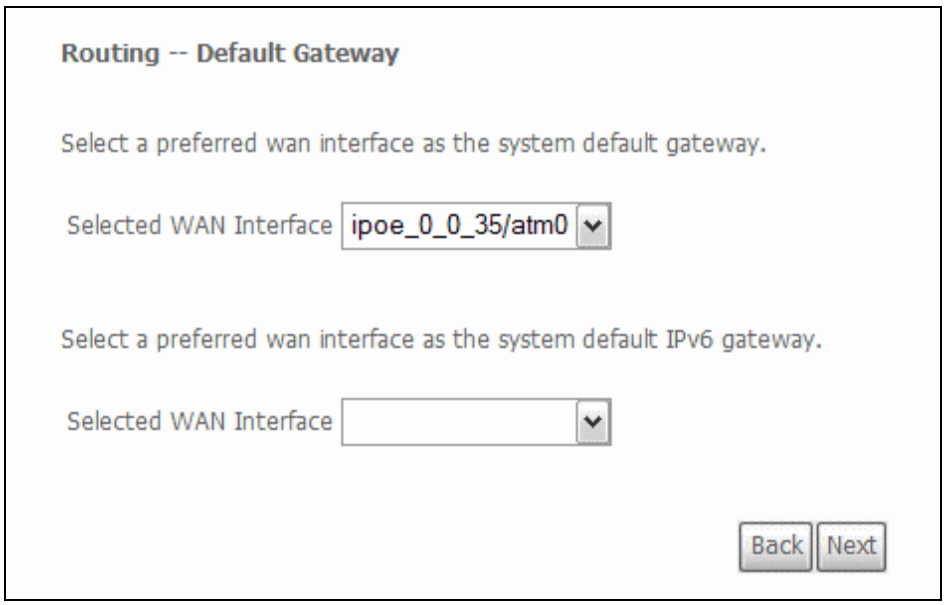
ENABLE FULLCONE NAT
This option becomes available when NAT is enabled. Known as one-to-one NAT, all requests from the same internal IP address and port are mapped to the same external IP address and port. An external host can send a packet to the internal host, by sending a packet to the mapped external address.

ENABLE FIREWALL
If this checkbox ☑ is selected, the Security submenu will be displayed on the Advanced Setup menu after reboot. If firewall is not necessary, this checkbox ☑ should not be selected so as to free up system resources for better performance.

ENABLE IGMP MULTICAST
Tick the checkbox ☑ to enable Internet Group Membership Protocol (IGMP) multicast. IGMP is a protocol used by IPv4 hosts to report their multicast group memberships to any neighboring multicast routers.

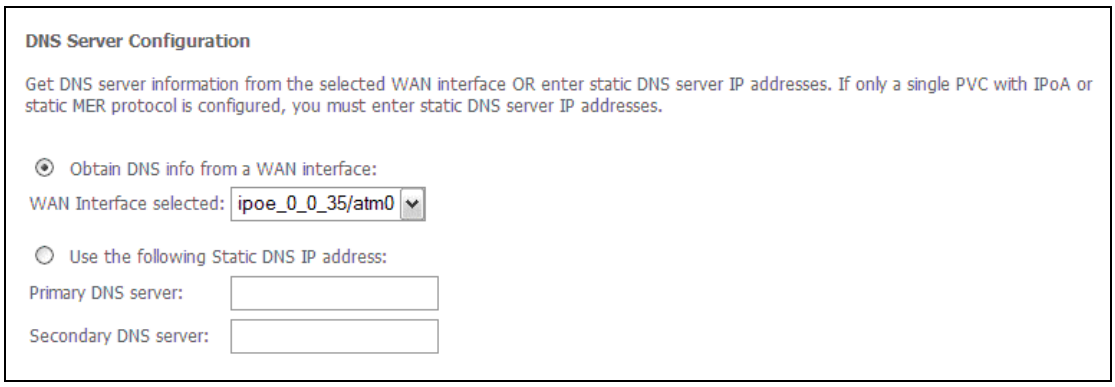
ENABLE MLD MULTICAST PROXY
This option displays when IPv6 is enabled. Tick the checkbox ☑ to enable Multicast Listener Discovery (MLD). This protocol is used by IPv6 hosts to report their multicast group memberships to any neighboring multicast routers.

STEP 4: Select WAN interfaces as system default IPv4/v6 gateways. When IPv6 is enabled a second WAN interface selection box will appear, as shown here.

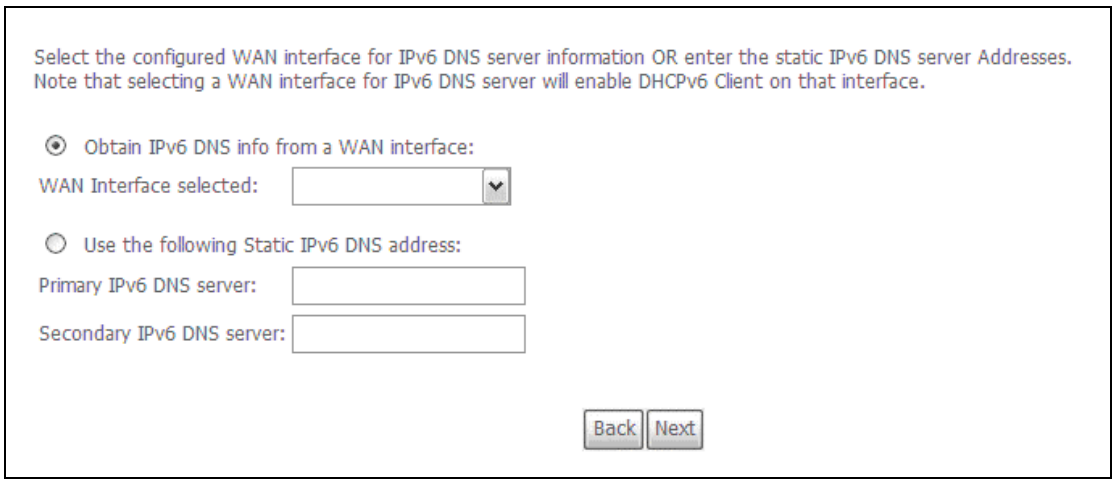


Click **Next** to continue or click **Back** to return to the previous step.

STEP 5: Select a WAN interface or enter static IP address to IPv4/v6 DNS Servers.

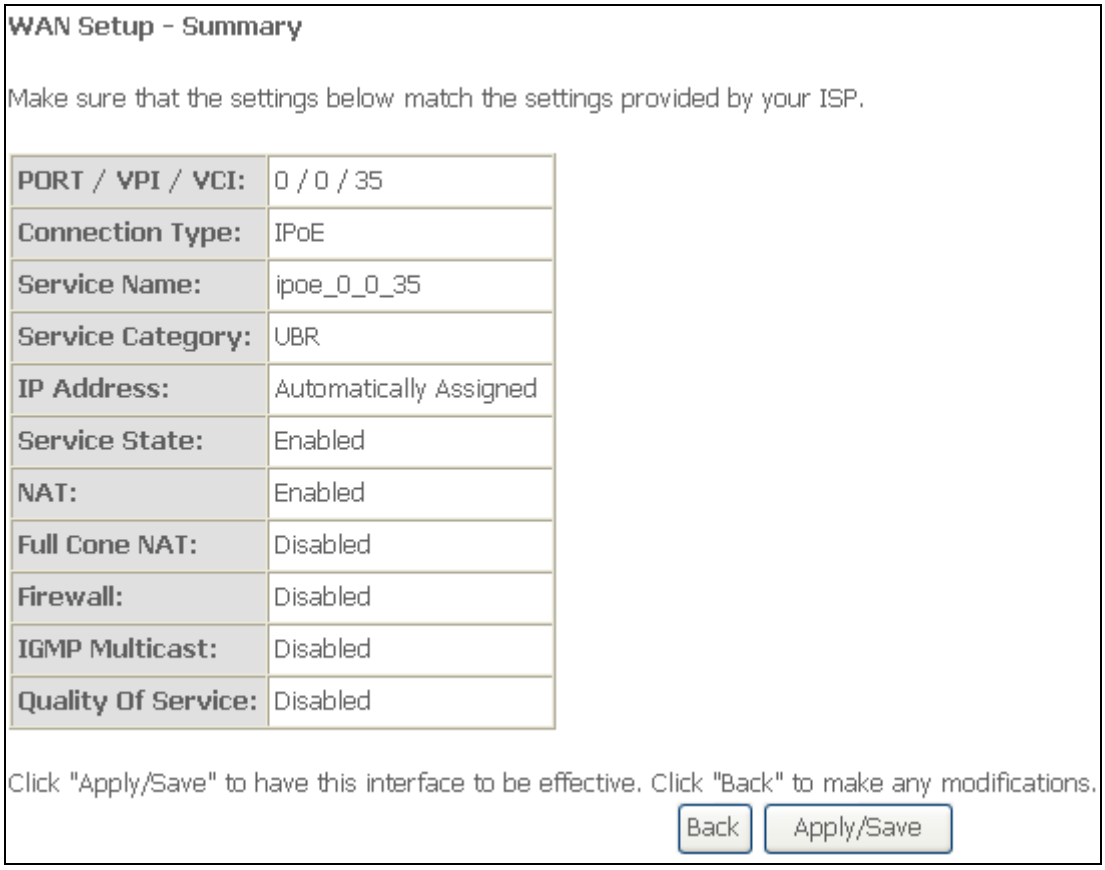


If IPv6 is enabled, an additional set of options will be shown.



Click **Next** to continue or click **Back** to return to the previous step.

STEP 6: The WAN Setup - Summary screen shows a preview of the WAN service you have configured. Check these settings and click **Apply/Save** if they are correct, or click **Back** to modify them.

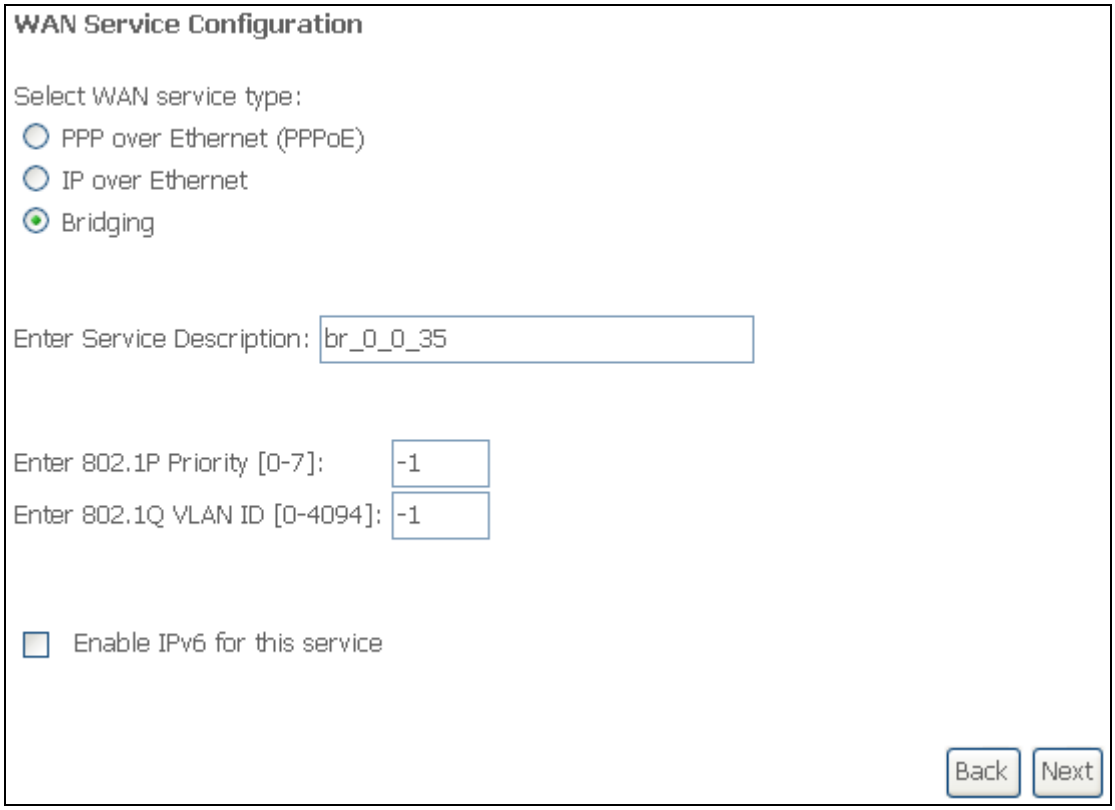


After clicking **Apply/Save**, the new service should appear on the main screen. To activate it you must reboot. Go to Management → Reboot and click **Reboot**.

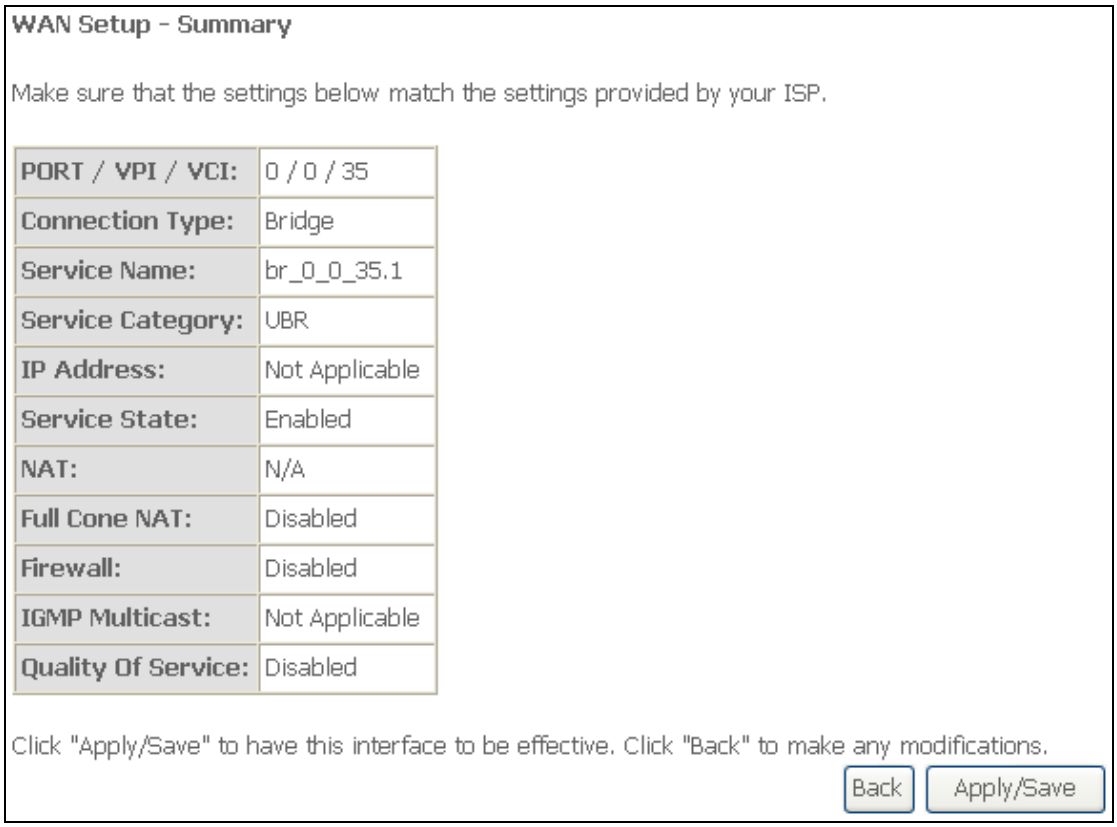
G2.3 Bridging

NOTE:	This connection type is not available on the Ethernet WAN interface.

STEP 1: Select the Bridging radio button and click **Next**. You can also enable IPv6 by ticking the checkbox ☑ at the bottom of this screen.



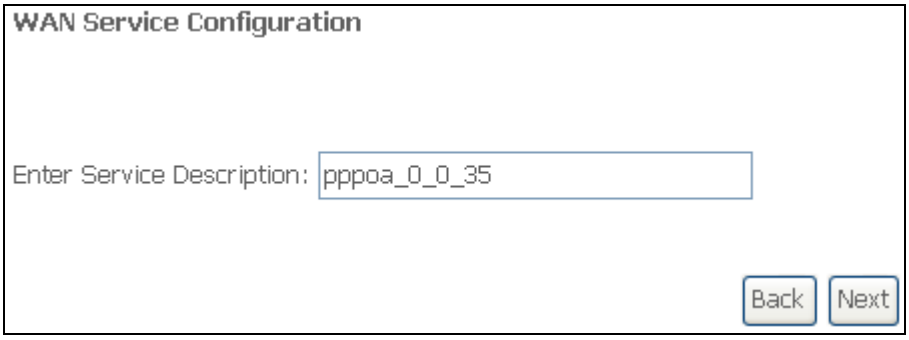
STEP 2: The WAN Setup - Summary screen shows a preview of the WAN service you have configured. Check these settings and click **Apply/Save** if they are correct, or click **Back** to return to the previous screen.



After clicking **Apply/Save**, the new service should appear on the main screen. To activate it you must reboot. Go to Management → Reboot and click **Reboot**.

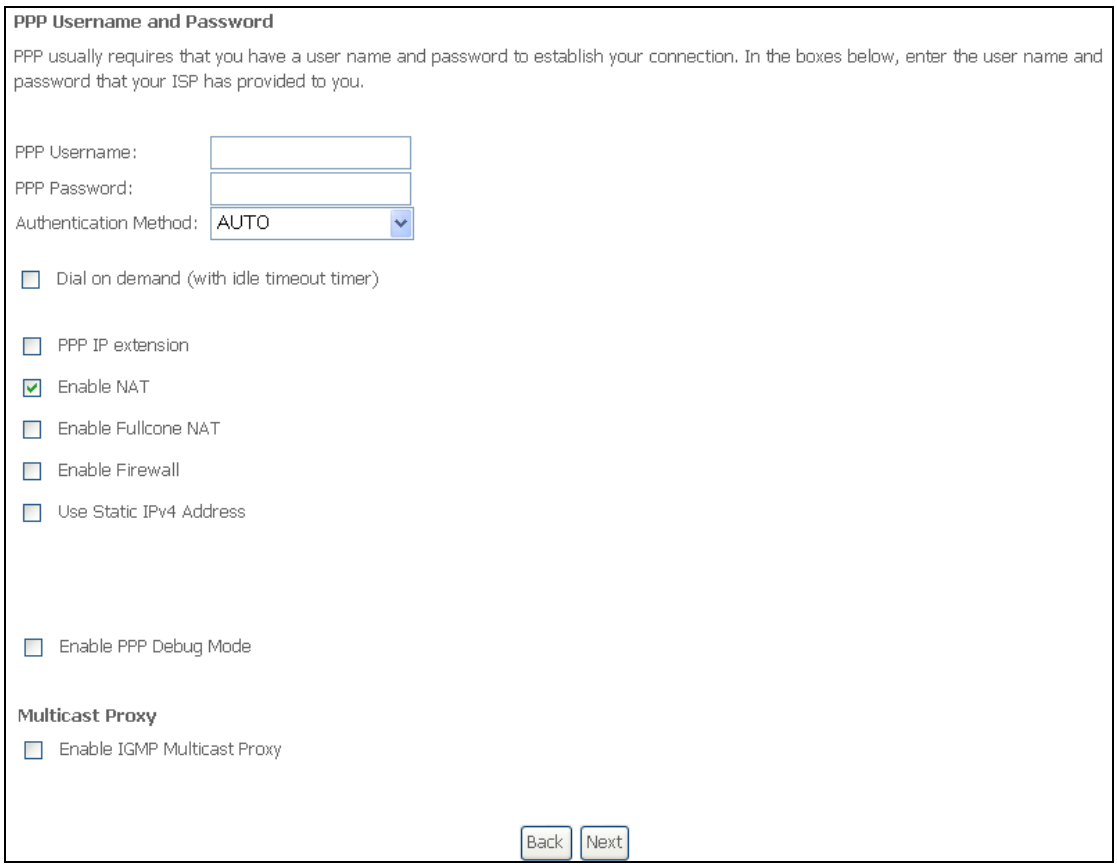
NOTE:	If this bridge connection is your only WAN service, the CT-5374 will be inaccessible for remote management or technical support from the WAN.

G2.4 PPP over ATM (PPPoA)



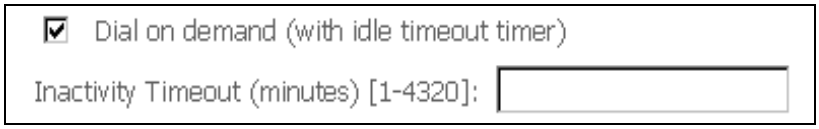
STEP 1: Click **Next** to continue.

STEP 2: On the next screen, enter the PPP settings as provided by your ISP. Click **Next** to continue or click **Back** to return to the previous step.



PPP SETTINGS
The PPP username and password are dependent on the requirements of the ISP. The user name can be a maximum of 256 characters and the password a maximum of 32 characters in length. (Authentication Method: AUTO, PAP, CHAP, or MSCHAP.)

DIAL ON DEMAND
The CT-5374 can be configured to disconnect if there is no activity for a period of time by selecting the **Dial on demand** checkbox ☑. You must also enter an inactivity timeout period in the range of 1 to 4320 minutes.



PPP IP EXTENSION
The PPP IP Extension is a special feature deployed by some service providers. Unless your service provider specifically requires this setup, do not select it.

PPP IP Extension does the following:

- Allows only one PC on the LAN.
- Disables NAT and Firewall.
- The device becomes the default gateway and DNS server to the PC through DHCP using the LAN interface IP address.
- The device extends the IP subnet at the remote service provider to the LAN PC. i.e. the PC becomes a host belonging to the same IP subnet.
- The device bridges the IP packets between WAN and LAN ports, unless the packet is addressed to the device's LAN IP address.

- The public IP address assigned by the remote side using the PPP/IPCP protocol is actually not used on the WAN PPP interface. Instead, it is forwarded to the PC LAN interface through DHCP. Only one PC on the LAN can be connected to the remote, since the DHCP server within the device has only a single IP address to assign to a LAN device.

ENABLE NAT
If the LAN is configured with a private IP address, the user should select this checkbox ☑. The NAT submenu will appear in the Advanced Setup menu after reboot. On the other hand, if a private IP address is not used on the LAN side (i.e. the LAN side is using a public IP), this checkbox ☑ should not be selected to free up system resources for better performance.

ENABLE FULLCONE NAT
This option becomes available when NAT is enabled. Known as one-to-one NAT, all requests from the same internal IP address and port are mapped to the same external IP address and port. An external host can send a packet to the internal host, by sending a packet to the mapped external address.

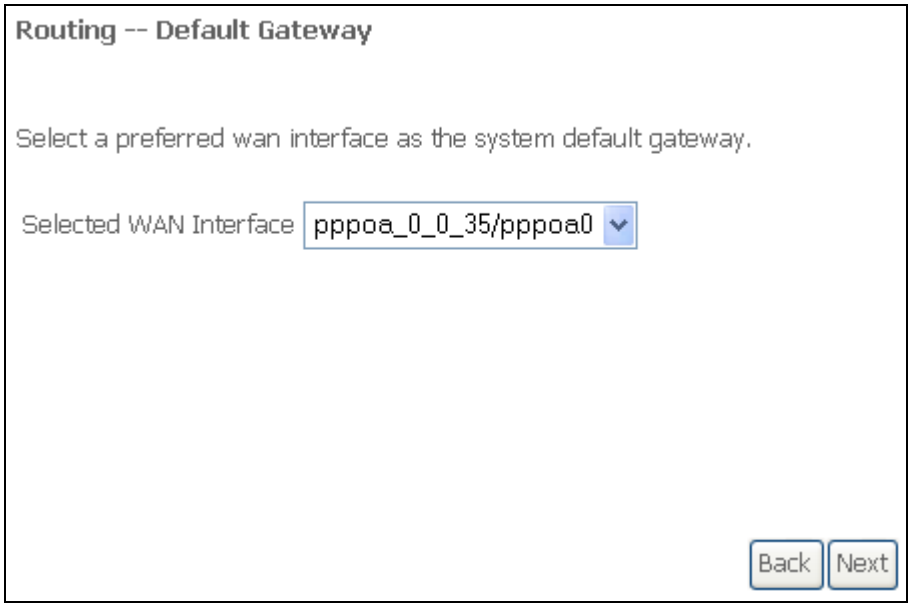
ENABLE FIREWALL
If this checkbox ☑ is selected, the Security submenu will be displayed on the Advanced Setup menu after reboot. If firewall is not necessary, this checkbox ☑ should not be selected to free up system resources for better performance.

USE STATIC IPv4 ADDRESS
Unless your service provider specially requires it, do not select this checkbox ☑. If selected, enter the static IP address in the **IP Address** field. Also, don't forget to adjust the IP configuration to Static IP Mode as described in 3.2 IP Configuration.

ENABLE PPP DEBUG MODE
When this option is selected, the system will put more PPP connection information into the system log. This is for debugging errors and not for normal usage.

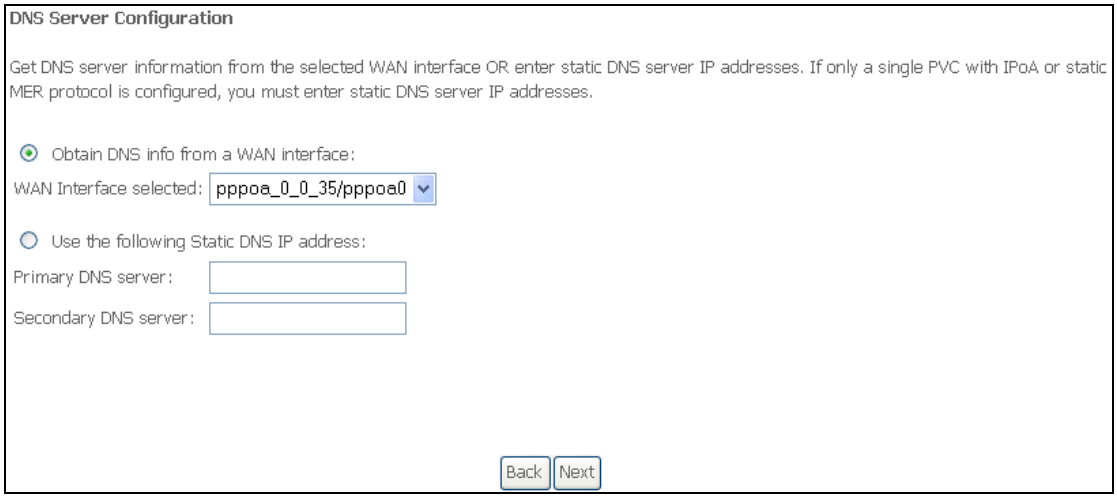
ENABLE IGMP MULTICAST PROXY
Tick the checkbox ☑ to enable Internet Group Membership Protocol (IGMP) multicast. IGMP is a protocol used by IPv4 hosts to report their multicast group memberships to any neighboring multicast routers.

STEP 3: Select a WAN interface as the preferred default gateway route.



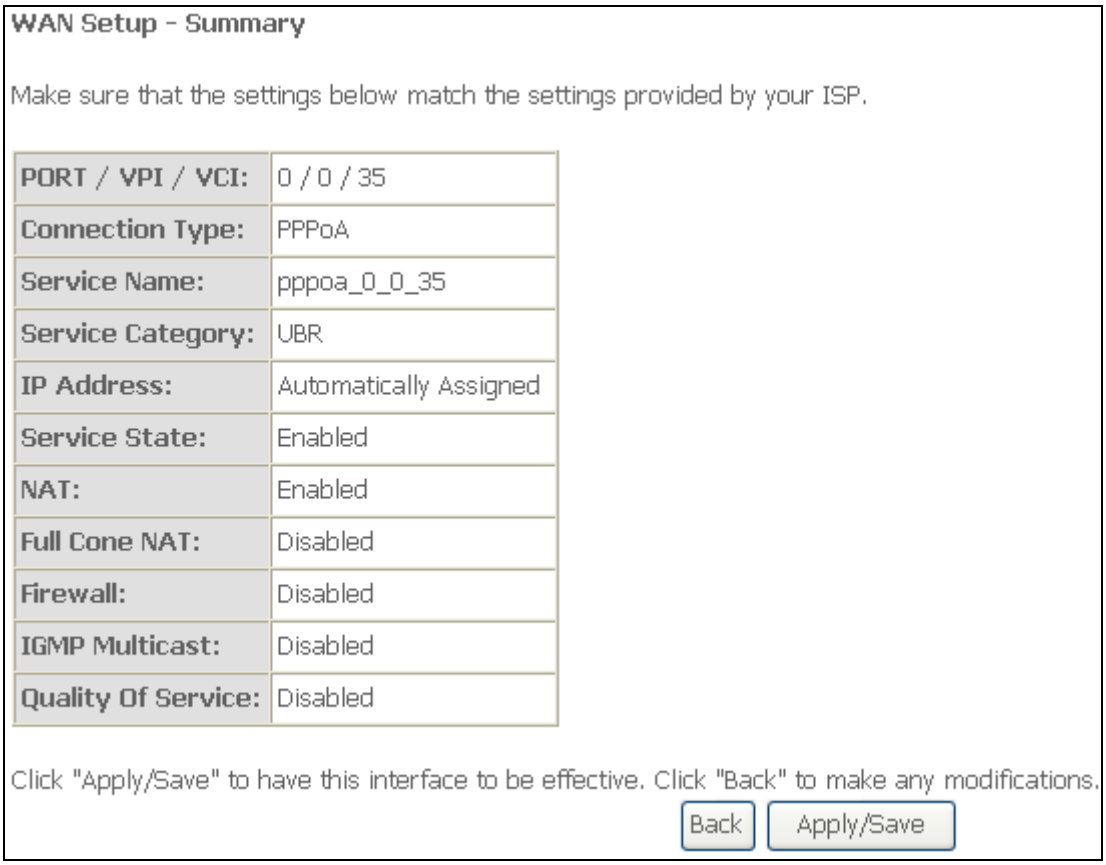
Click **Next** to continue or click **Back** to return to the previous step.

STEP 4: Select a WAN interface or enter a static IP address to the DNS Server.



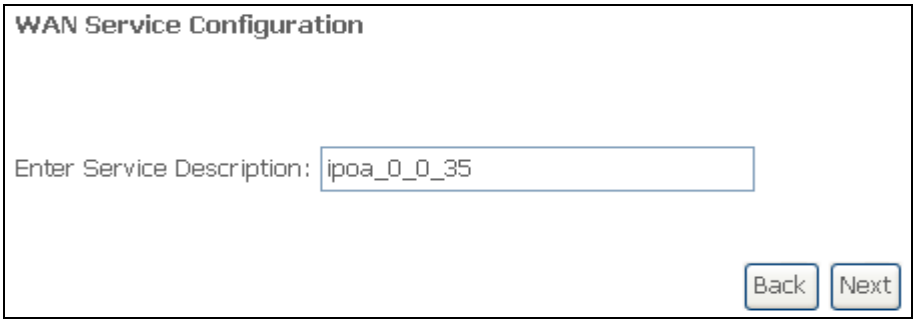
Click **Next** to continue or click **Back** to return to the previous step.

STEP 5: The WAN Setup - Summary screen shows a preview of the WAN service you have configured. Check these settings and click **Apply/Save** if they are correct, or click **Back** to modify them.



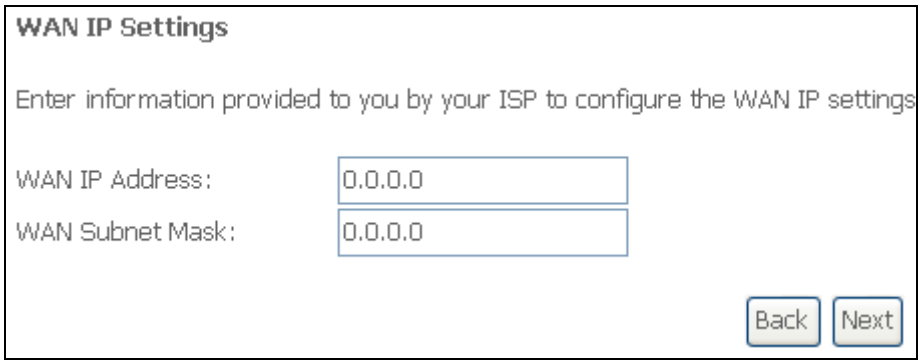
After clicking **Apply/Save**, the new service should appear on the main screen. To activate it you must reboot. Go to Management → Reboot and click **Reboot**.

G2.5 IP over ATM (IPoA)

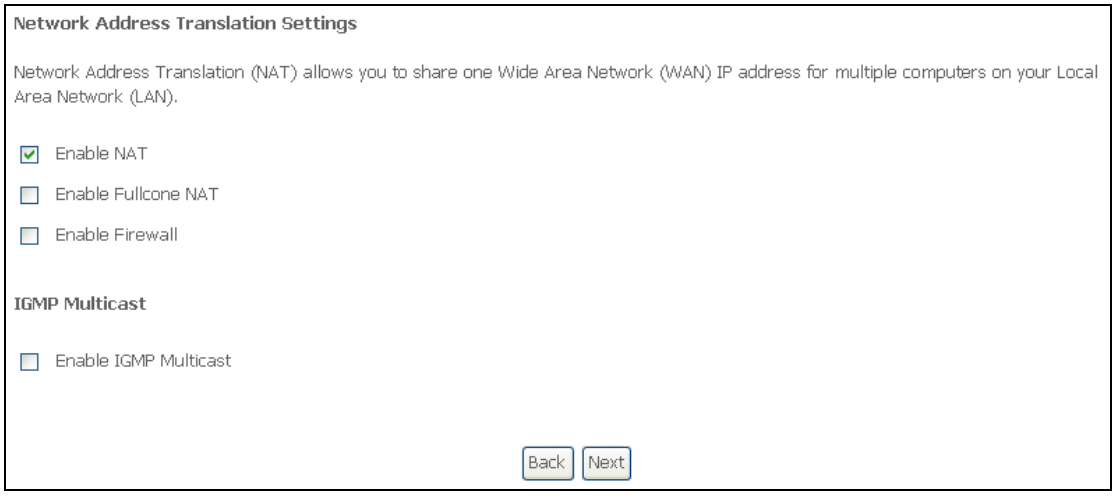


STEP 1: Click **Next** to continue.

STEP 2: Enter the WAN IP settings provided by your ISP. Click **Next** to continue.



STEP 3: This screen provides access to NAT, Firewall and IGMP Multicast settings. Enable each by selecting the appropriate checkbox ☑. Click **Next** to continue or click **Back** to return to the previous step.



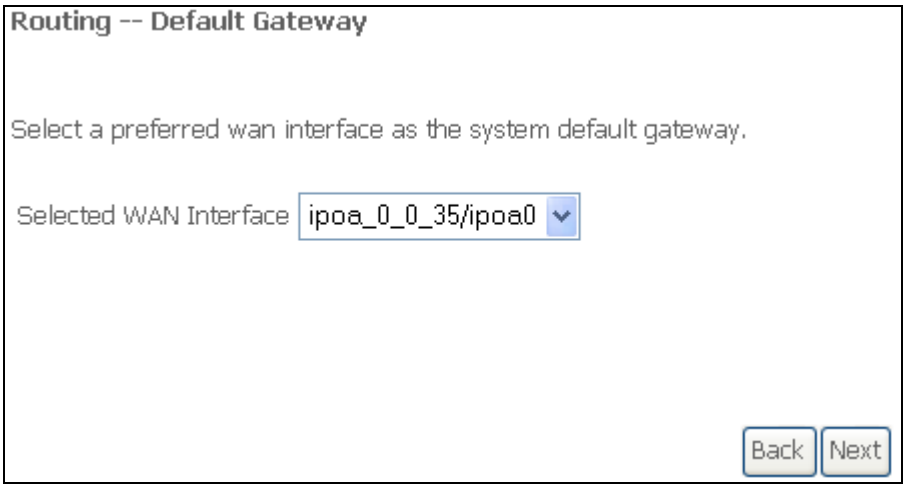
ENABLE NAT
If the LAN is configured with a private IP address, the user should select this checkbox ☑. The NAT submenu will appear in the Advanced Setup menu after reboot. On the other hand, if a private IP address is not used on the LAN side (i.e. the LAN side is using a public IP), this checkbox ☑ should not be selected, so as to free up system resources for improved performance.

ENABLE FULLCONE NAT
This option becomes available when NAT is enabled. Known as one-to-one NAT, all requests from the same internal IP address and port are mapped to the same external IP address and port. An external host can send a packet to the internal host by sending a packet to the mapped external address.

ENABLE FIREWALL
If this checkbox ☑ is selected, the Security submenu will be displayed on the Advanced Setup menu after reboot. If firewall is not necessary, this checkbox ☑ should not be selected so as to free up system resources for better performance.

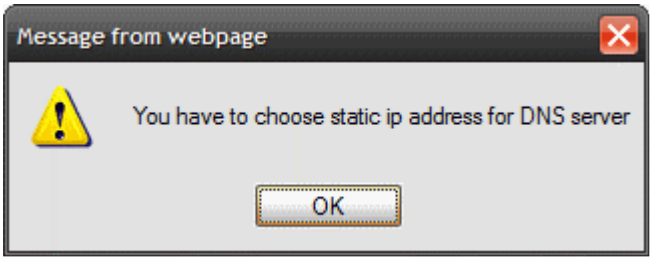
ENABLE IGMP MULTICAST
Tick the checkbox ☑ to enable Internet Group Membership Protocol (IGMP) multicast. IGMP is a protocol used by IPv4 hosts to report their multicast group memberships to any neighboring multicast routers.

STEP 4: Select a WAN interface as the preferred default gateway route.

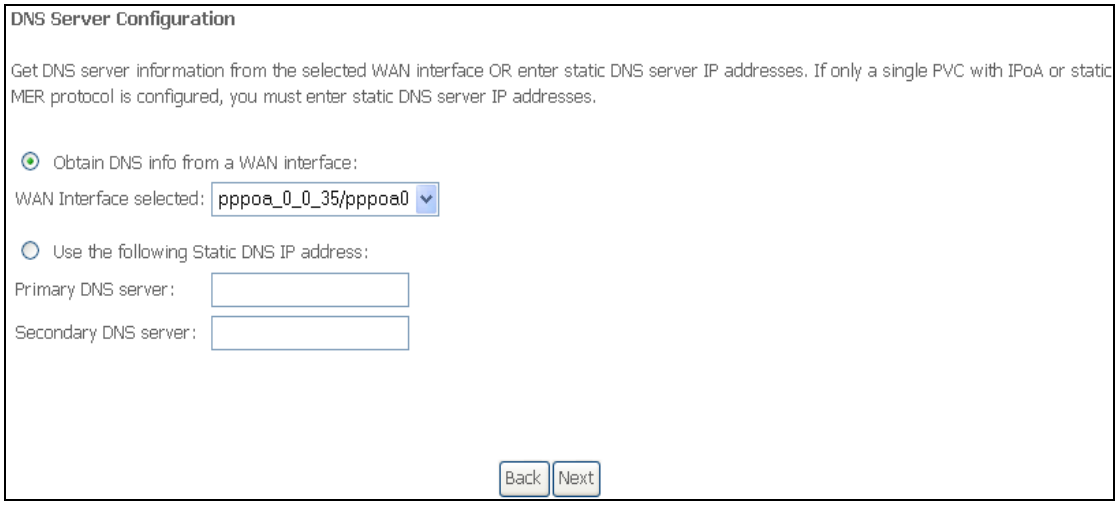


Click **Next** to continue or click **Back** to return to the previous step.

NOTE: If the DHCP server is not enabled on another WAN interface then the following notification will be shown before the next screen.

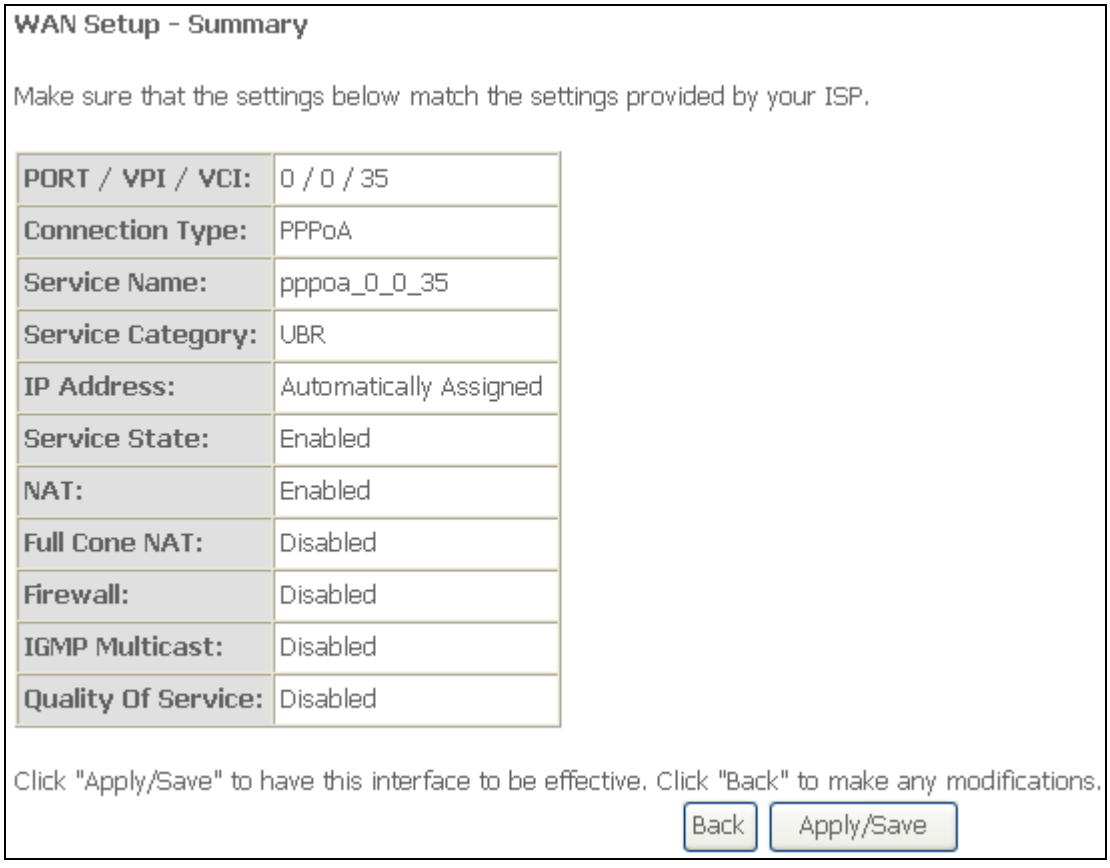


STEP 5: Select a WAN interface or enter a static IP address to the DNS Server.



Click **Next** to continue or click **Back** to return to the previous step.

STEP 7: The WAN Setup - Summary screen shows a preview of the WAN service you have configured. Check these settings and click **Apply/Save** if they are correct, or click **Back** to modify them.



After clicking **Apply/Save**, the new service should appear on the main screen. To activate it you must reboot. Go to Management → Reboot and click **Reboot**.

G3 ~ More About MSC Mode

The procedure for WAN connection setup in MSC mode is as follows:

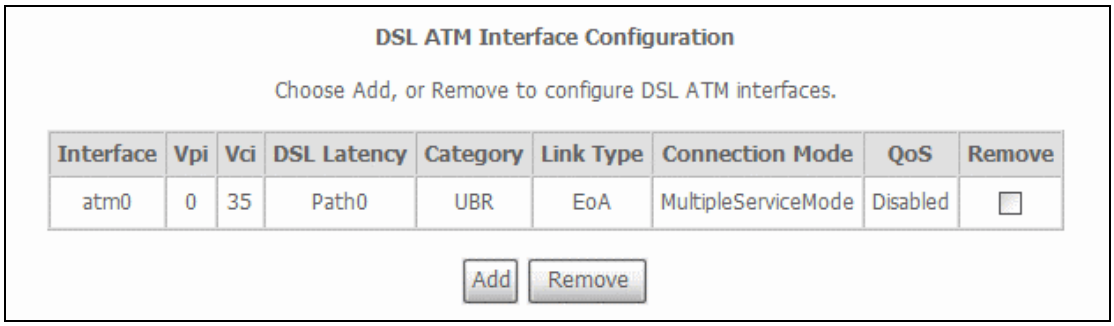
STEP 1: Create a Layer2 interface in MSC connection mode.

STEP 2: Add WAN connections to the interface (Bridge, PPPoE or IPoE).

STEP 3: Use 5.14 Interface Grouping to connect LAN and WAN interfaces.

These three steps are repeated below with screenshots added for reference.

STEP 1: Create a Layer2 interface in MSC connection mode.



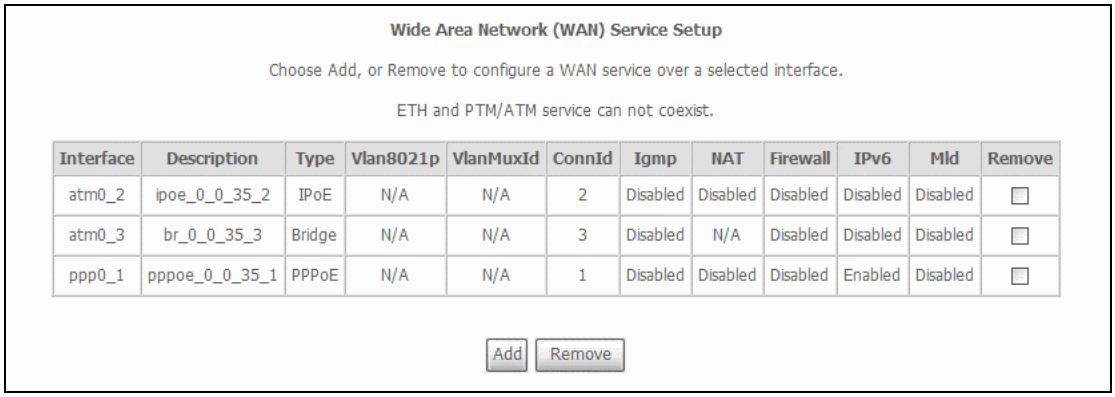
DSL ATM Interface Configuration

Choose Add, or Remove to configure DSL ATM interfaces.

Interface	Vpi	Vci	DSL Latency	Category	Link Type	Connection Mode	QoS	Remove
atm0	0	35	Path0	UBR	EoA	MultipleServiceMode	Disabled	☐

Add Remove

STEP 2: Add WAN connections to the interface (Bridge, PPPoE or IPoE).



Wide Area Network (WAN) Service Setup

Choose Add, or Remove to configure a WAN service over a selected interface.

ETH and PTM/ATM service can not coexist.

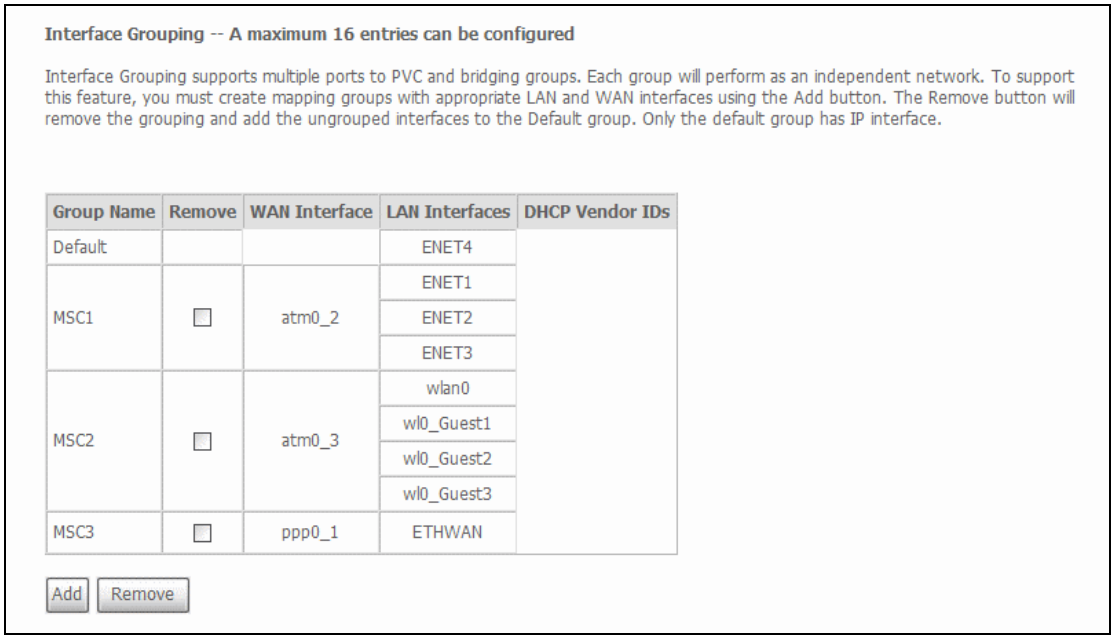
Interface	Description	Type	Vlan8021p	VlanMuxId	ConnId	Igmp	NAT	Firewall	IPv6	Mld	Remove
atm0_2	ipoe_0_0_35_2	IPoE	N/A	N/A	2	Disabled	Disabled	Disabled	Disabled	Disabled	☐
atm0_3	br_0_0_35_3	Bridge	N/A	N/A	3	Disabled	N/A	Disabled	Disabled	Disabled	☐
ppp0_1	pppoe_0_0_35_1	PPPoE	N/A	N/A	1	Disabled	Disabled	Disabled	Enabled	Disabled	☐

Add Remove

NOTES: If QoS is configured on the first MSC connection, it will be configured by default for all subsequent connections.

If a MSC connection is removed every other MSC connection should be removed to avoid potential configuration problems.

STEP 3: Use 5.14 Interface Grouping to connect LAN and WAN interfaces.



Interface Grouping -- A maximum 16 entries can be configured

Interface Grouping supports multiple ports to PVC and bridging groups. Each group will perform as an independent network. To support this feature, you must create mapping groups with appropriate LAN and WAN interfaces using the Add button. The Remove button will remove the grouping and add the ungrouped interfaces to the Default group. Only the default group has IP interface.

Group Name	Remove	WAN Interface	LAN Interfaces	DHCP Vendor IDs
Default			ENET4	
MSC1	☐	atm0_2	ENET1	
			ENET2	
			ENET3	
MSC2	☐	atm0_3	wlan0	
			wl0_Guest1	
			wl0_Guest2	
			wl0_Guest3	
MSC3	☐	ppp0_1	ETHWAN	

Add Remove

See the instructions in 5.14 Interface Grouping for help with this final step.