ADSL Wireless Router

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Specification

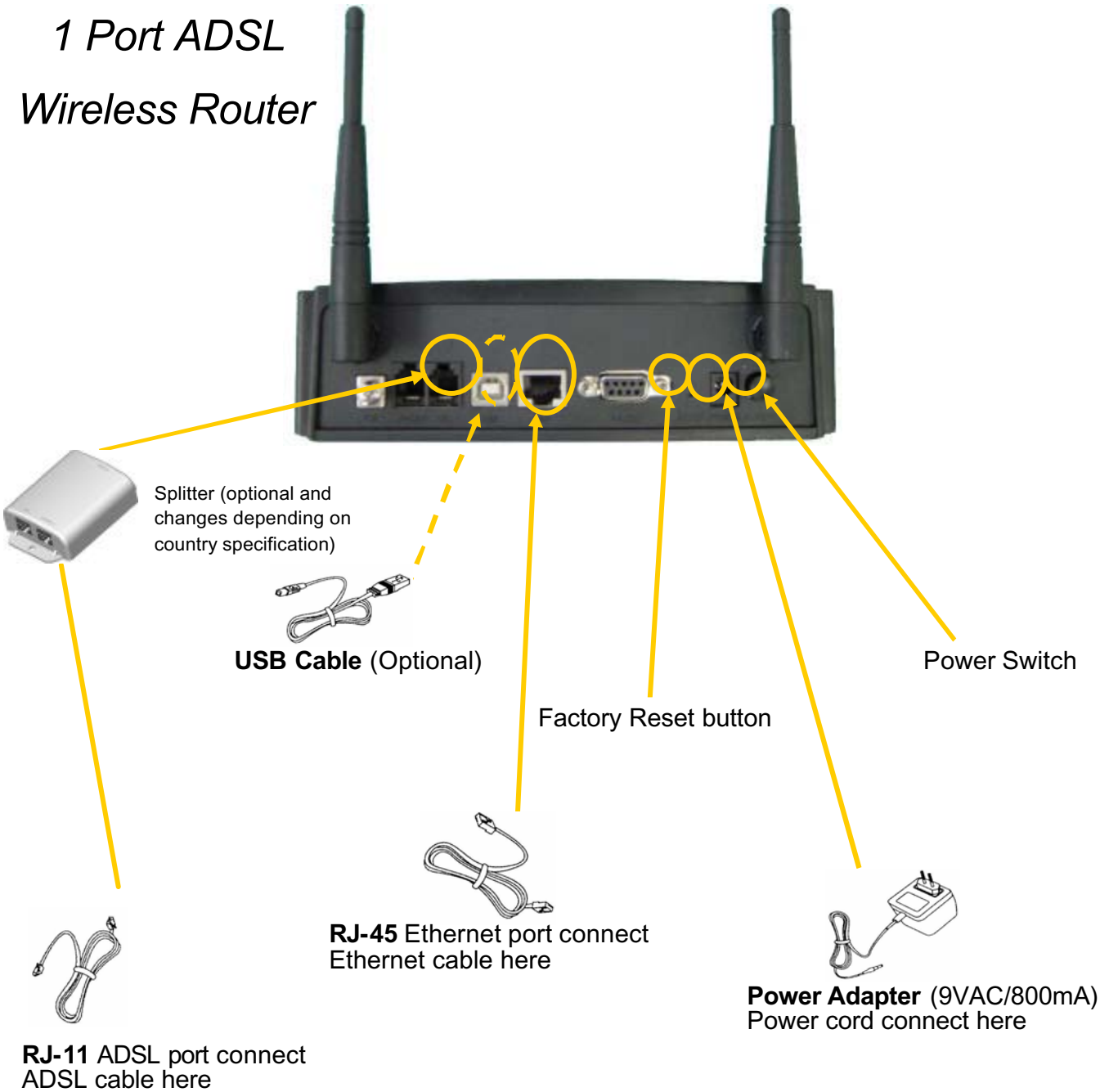
Specification Model Name:	1 Port ADSL Wireless Router Annex A / Annex B/UR2
Chipset	ADSL Wireless Router Chip:(CX82310-14/24) ARM940T Processor
Line Connection	RJ-11(2 wires) Line/Phone ,USB, RJ-45 (4 port) , RS-232CConnection
Features	High speed Asymmetric Digital Subscriber Line (ADSL) connection to the telephone line Complete USB ADSL modem solution DMT modulation and demodulation Supports splitter less ADSL implementation Tone detection for low power mode ATM SAR performed in software driver
Compliant with ADSL standards	Full-rate ANSI T1.413 Issue 2 and ITU G.dmt (G.992.1) standards Splitter less ITU G.lite (G.992.2) specification
Full-rate adaptive modem	Maximum downstream rate of 8 Mbps Maximum upstream rate of 1 Mbps
G.lite adaptive modem	Maximum downstream rate of 1.5 Mbps Maximum upstream rate of 512 Kbps
WAN Mode Support	PPP over ATM (RFC 2364) PPP over Ethernet (RFC 2516)
LAN Mode Support	Bridged/routed Ethernet over ATM (RFC 2684/1483) Classical IP over ATM (RFC 1577) and PPP over Ethernet (RFC 2516)
Bridge Mode Support	Ethernet to ADSL self-learning Transparent Bridging (IEEE 802.1D) Supports up to 128 MAC learning addresses
Router Mode Support	IP routing-RIPv2 (backward compatible with RIPv1) Static routing DHCP (Dynamic Host Configuration Protocol) Server and Client NAPT (Network Address and Port Translation) NAT (Network Address Translation) ICMP (Internet Control Message Protocol) Simultaneous USB and Ethernet operation IGMP (Internet Group Management Protocol)
Ethernet Interface	Compatible with IEEE 802.3 standard 10/100 Mbps auto selection
802.11b/b+ interface (Option)	Support for Intersil PRISM-based designs (11Mbps) Connects to an 802.11b PCMCIA card 128-bit and 64-bit WEP support Support for TI DSSS Technology designs (22Mbps) Connects to an 802.11b+ PCMCIA card 256-bit and 128-bit and 64-bit WEP support
USB host Inerface	Compliant with USB Specification, Revision 1.1
PTT and Safety	FCC Part 15/Part 68, CE
OS	WIN 98SE ; WIN 2000 ; WIN ME ; WIN XP
System Requirement	PII-266 + 32M RAM
Power	External AC adapter Input: 90-120V or 200-240V , 50/60Hz Output: 9VAC/800mA
LED Indication	Power, Ready, Showtime, TXD/RXD, Speed 10M/100M, Link/Activity
Antenna	2 Antenna Optional
SIZE	196mm * 150.5mm
Software Upgrade	Upgrade by USB port

Package Contents

- ADSL Wireless Router
- CD-ROM containing Manual
- Ethernet Cable (CAT5 UTP Straight-Through)
- ADSL Cable (Standard telephone cable)
- USB Cable (Optional)
- Power Adapter
- Quick Installation Guide hardcopy
- Splitter (Optional)

Hardware Connecting

1 Port ADSL Wireless Router



LED Indicators

The LED Indicators are located on the front of the unit, they are green in color. The meanings are as follows:

1 Port ADSL

Wireless Router

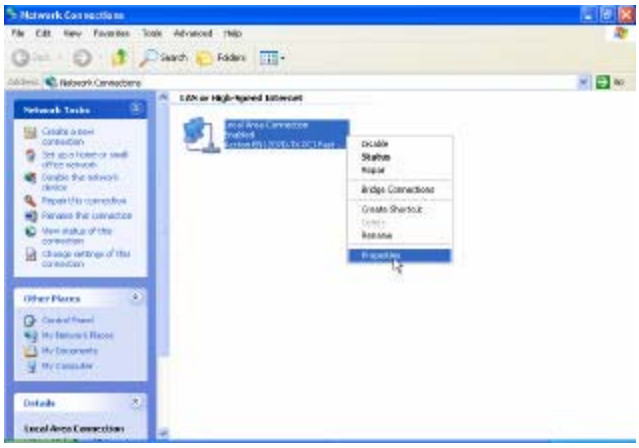
Label	Meaning	Status	Indicates
Power	Power	On	Power is on
		Off	Power is off
WLAN	Wireless LAN	Flashing	Check wireless device.
Ready	Ready	Flashing	Unit is powered up correctly when pulsing steadily. ON or OFF during reboot or when unit switched OFF. If ON or OFF permanently then there is an error. Try powering unit OFF then ON after a minute.
ADSL	Link	Link	A valid ADSL connection.
	Active	Act	An active WAN session.
Rxd	WAN Receive Data	Flashing	Flashes when receiving or sending data on the WAN port.
10/100	Transfer speed	10	Off
		100	On
Link/Act	Link	On	Indicates a link to your LAN or Network card is active.
	Active	Flashing	Flashes when data is being sent or received on the LAN connection.

General Setting

You can use the RJ 45 cable or the USB cable connect to the ADSL Wireless Router. If you use the USB cable connect to the ADSL Wireless Router, about the USB driver install steps please see as chapter “ USB Driver Procedure” .

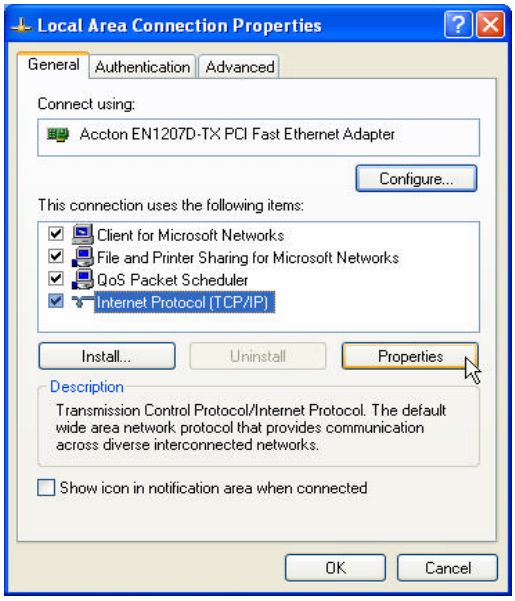
Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Network Connections***

In the ***LAN or High-Speed Internet*** window, right-click on icon corresponding to your network interface card (NIC) and select ***Properties***.(This icon may be labeled Local Area Connection).



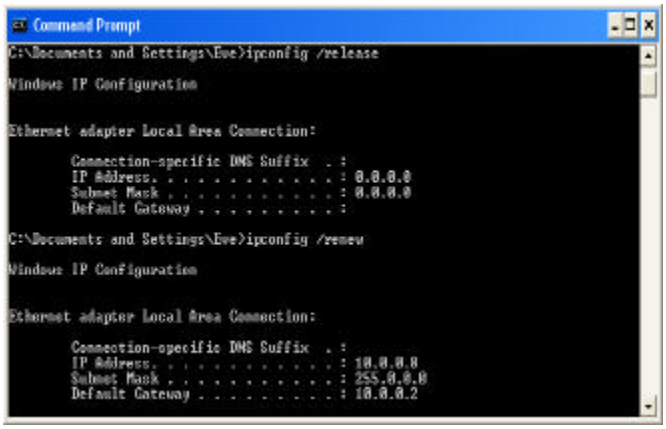
In the ***General*** Tab of the ***Local Area Connection Properties*** menu.

Highlight ***Internet Protocol (TCP/IP)*** under " This connection uses the following items." by click on it once. Click on the ***Properties*** button.

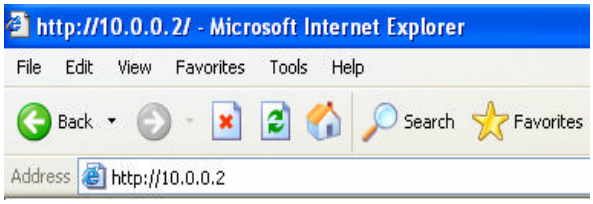


Select ***Obtain an IP Address automatically:*** by clicking once in the circle. Click ***OK*** button to confirm and save your changes, and the close the Control Panel.

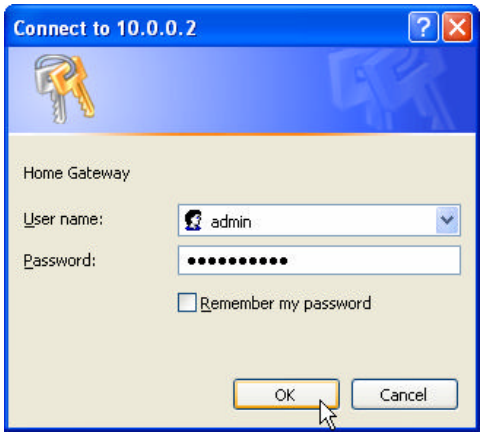
Release IP & Renew IP, then Check Default Gateway: ***10.0.0.2***.



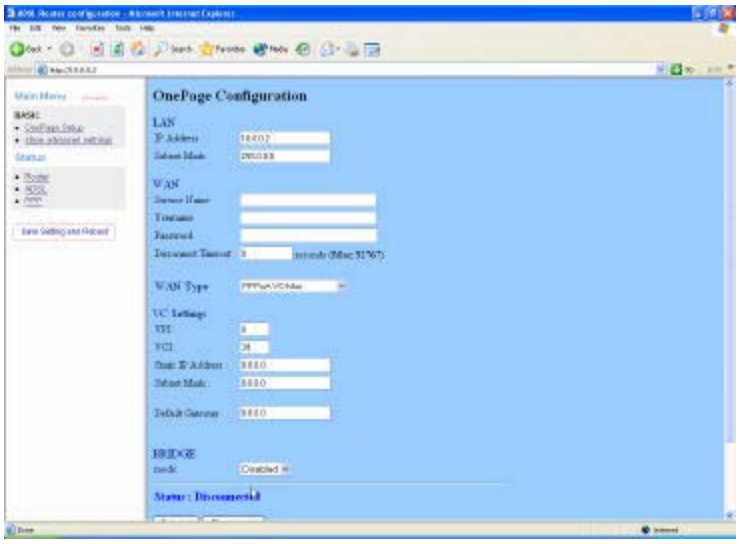
Launch your PC web browser and enter the URL: ***http://10.0.0.2***.



In the ***User name/Password*** prompt, please type in ***admin/epicrouter*** as default.



Please wait for the ***SETUP*** page to appear. Selection WAN Type follow as Table-1 configuration default is PPPoA VC-Mux. Then click the ***Submit*** and ***Save Setting and Reboot*** button. You can now start browsing the web through the ADSL device.



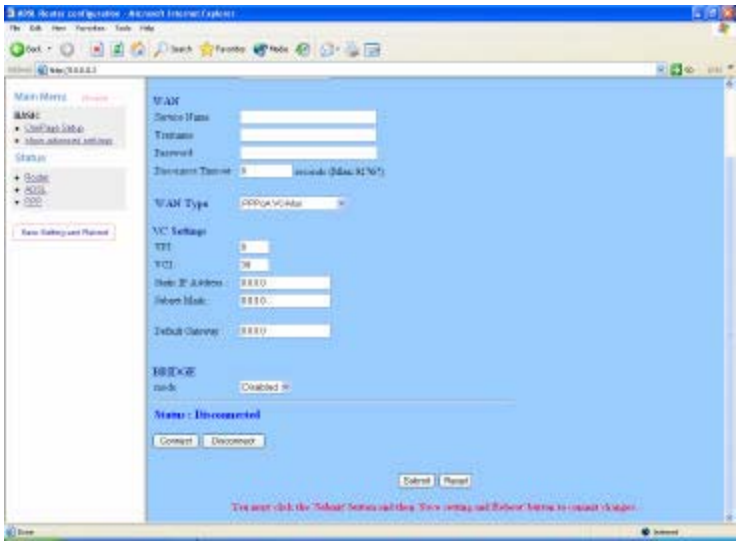


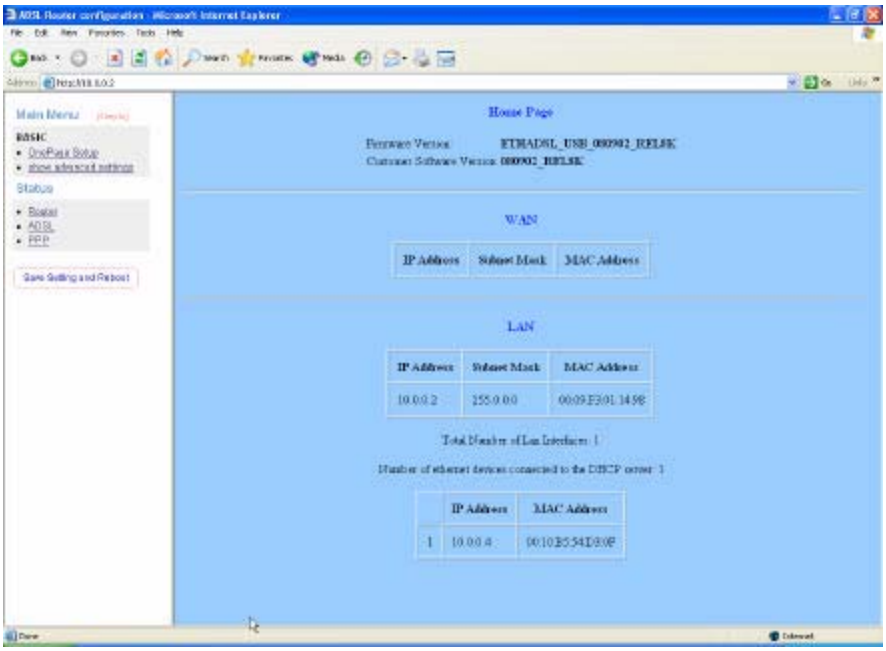
Table-1 Configuration

WAN Configuration	Bridge Mode	Router Mode (PPPoA/PPPoE)	Router Mode (Dynamic IP)	Router Mode (Static IP)
IP address	N/A	Automatically assigned by ISP	Automatically assigned by ISP	Provided by ISP
Subnet Mask	N/A	Automatically assigned by ISP	Automatically assigned by ISP	Provided by ISP
WAN Type	1483 Bridged IP LLC, 1483 Bridged IP VC-Mux	PPPoA LLC/VC-Mux, PPPoE LLC/VC-Mux	1483 Bridged/Routed IP LLC, 1483 Bridged/Routed VC-Mux, Classical IP over ATM	1483 Bridged/Routed IP LLC, 1483 Bridged/Routed VC-Mux, Classical IP over ATM
Bridge	Enabled	Disabled	Disabled	Disabled
PPP Service	N/A	Provided by ISP	N/A	N/A
PPP User name	N/A	Provided by ISP	N/A	N/A
PPP Password	N/A	Provided by ISP	N/A	N/A
DHCP Client enable	Unchecked	Unchecked	Checked	Unchecked

Status

Router

The Bridge page shows the Firmware Version and WAN and LAN interface status.



Firmware Version: This field displays the Firmware Version number.

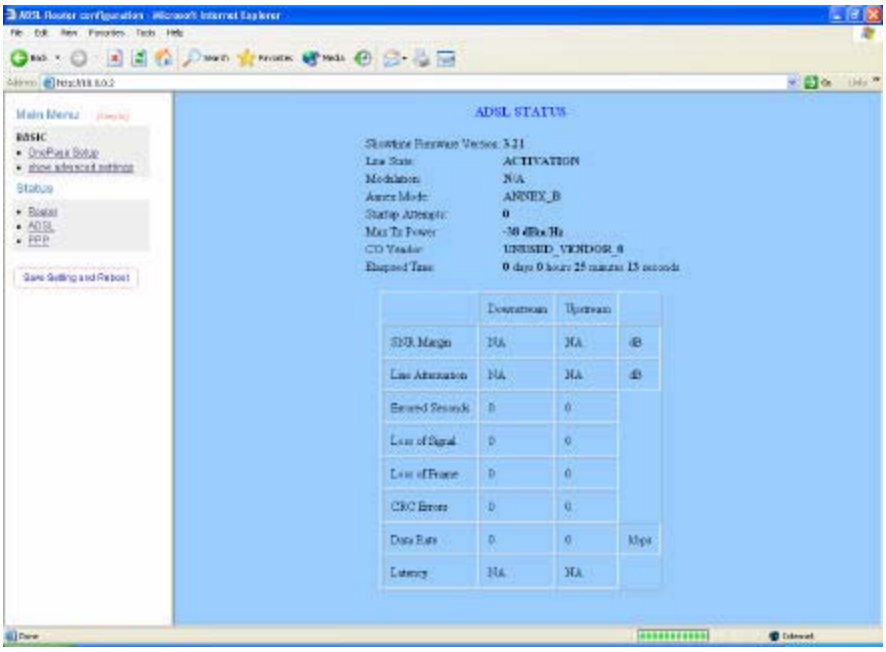
WAN: These fields display the IP Address, Subnet Mask, MAC Address for WAN interface.

LAN: These fields display the IP Address, Subnet Mask, MAC Address for LAN interface.

Number of Ethernet devices connected to the DHCP server: This field displays the number of DHCP clients connected to the ADSL Wireless Router. It also shows the IP address and MAC address of the attached DHCP clients.

ADSL

The ADSL Status page shows the ADSL physical layer status.



Showtime Firmware Version: This field displays the ADSL data pump firmware version number.

Line State: This field displays the ADSL connection process and status.

Modulation: This field displays the ADSL modulation status for G. dmt or T1.413.

Annex Mode: This field displays the ADSL Annex modes for Annex A or Annex B.

Startup Attempts: This field displays the ADSL connection attempts after loss of showtime.

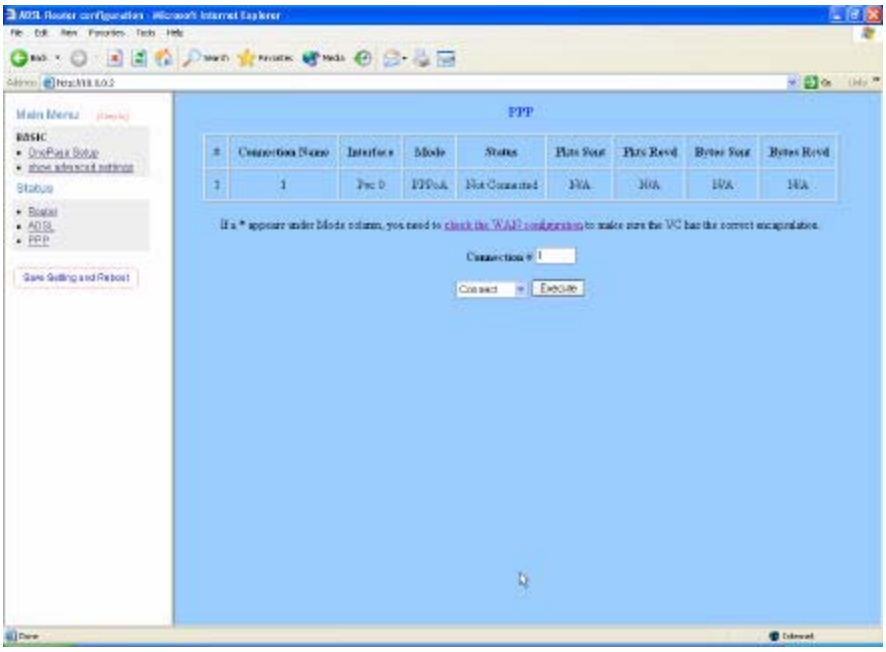
Max Tx Power: This field displays the transmit output power level of the CPE.

CO Vendor: This field displays the Central Office DSLAM vendor name. If available.

Elaspsed Time: This field displays the time of the modem has been in operation.

PPP

The PPP Status page shows the status of PPP for each PPP iterface. See PPP.



These fields display the following information on each PPP interface:

- Connection Name (user defined)
- Interface (PVC)
- Mode (PPPoE or PPPoA)
- Status (Connected or Not Connected)
- Packets Sent
- Packets Received
- Bytes Sent
- Byte Received

Connect and Disconnect: Each PPP session can be individually controlled, simply enter the desired connection number into the " Connection #" field and select either connect or disconnect from the drop down menu and click on the " Execute" button.

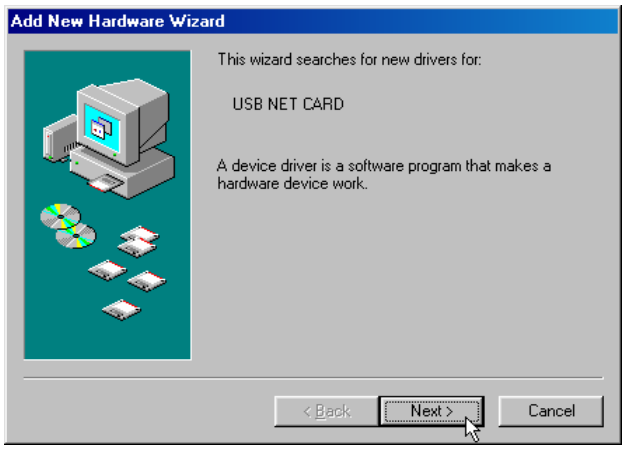
USB Driver Procedures

Installation USB Driver Procedures

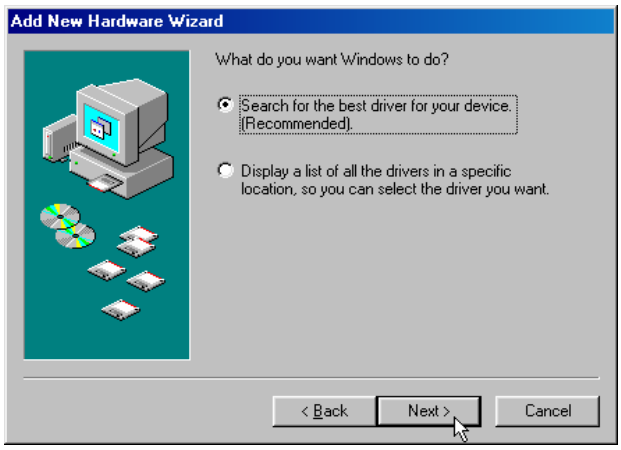
You can use the RJ 45 cable or the USB cable connect to the ADSL Wireless Router. If you use the USB cable connect to the ADSL Wireless Router, about the USB driver install steps please see as below: (Only for 1 Port ADSL Wireless Router)

Microsoft Windows 98SE

1. Please insert the driver CD supplied when you see the message of ***USB NET CARD*** appearing on the screen, then click ***Next***.



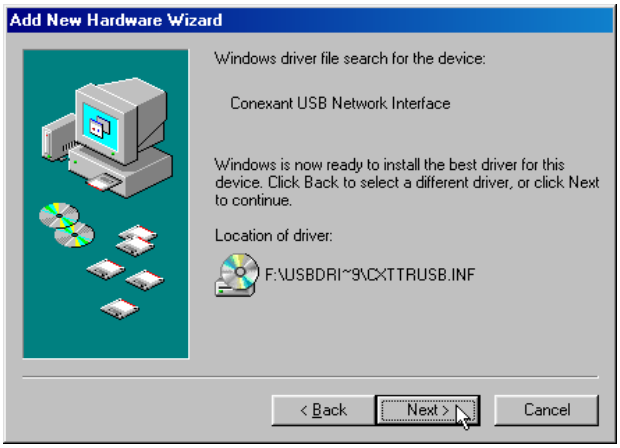
2. Select ***Search for the best driver for your device. [Recommended]*** and click ***Next***.



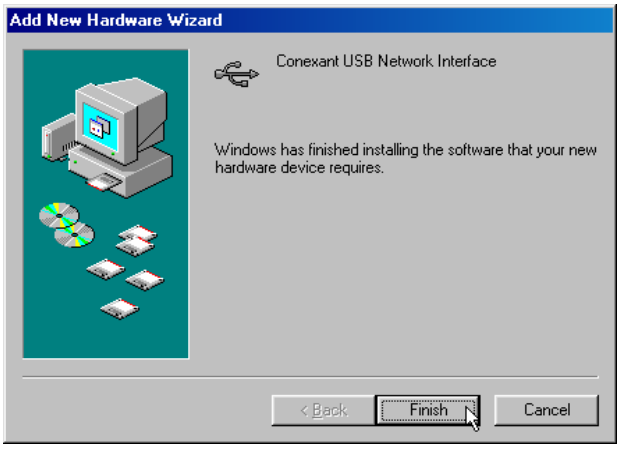
3. Select ***Specify a location*** and type in the path of CD-ROM drive (for example

F:\USB driver), click ***Next***.

4. Windows has found the driver for the ***Conexant USB Network Interface*** and click ***Next***.



5. The installation has been done, click ***Finish***.

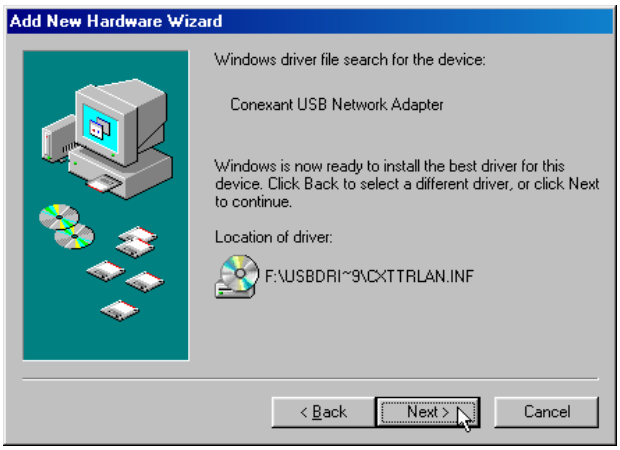


6. Windows has found the driver for the ***Conexant USB Network Device***. and click ***Next***.

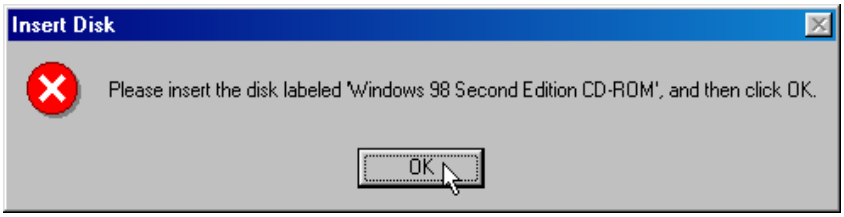
7. Select ***Search for the best driver for your device. [Recommended]*** and click ***Next***.

8. Select ***Specify a location*** and use Browse to open the file of ***F:\USB driver***, click ***Next***.

9. Windows has found the driver for the ***Conexant USB Network Adapter*** and click ***Next***.



10. Please insert the disk labeled 'Windows 98 Second Edition CD-ROM' , then click ***OK***.



11. Windows has finished installing the software that your new hardware device requires. and click ***Finish***.

12. Click ***Yes***. restart your computer now.

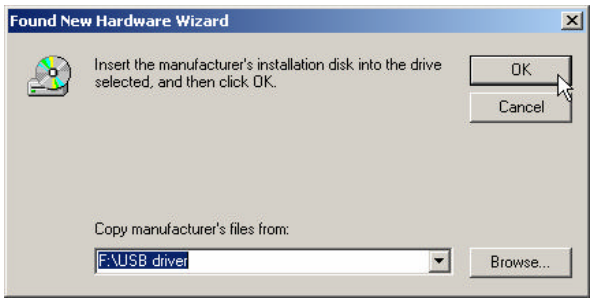
Microsoft Windows 2000

1. Please insert the driver CD into CD-ROM drive and click ***Next***.

2. Select **Search for a suitable driver for my device [recommended]** and click ***Next***.

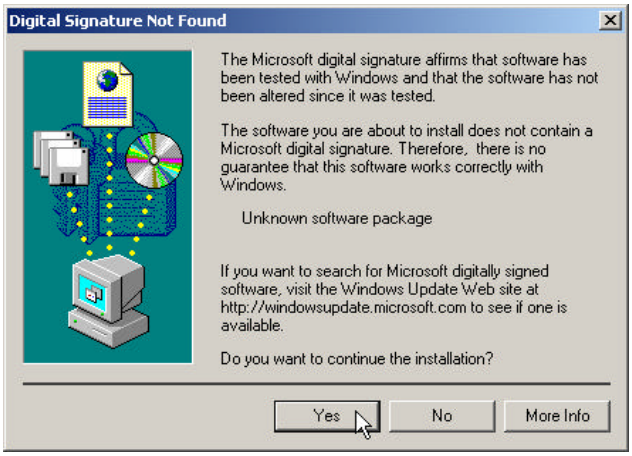
3. Select ***Specify a location*** and click ***Next***.

4. Use Browse to open the file of ***F:\USB driver***, click ***OK***.



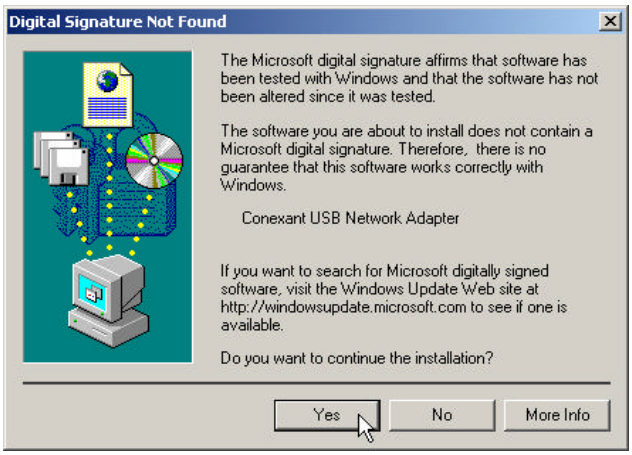
5. Click ***Next***.

6. Click ***Yes***.



7. The installation has been done, click ***Finish***.

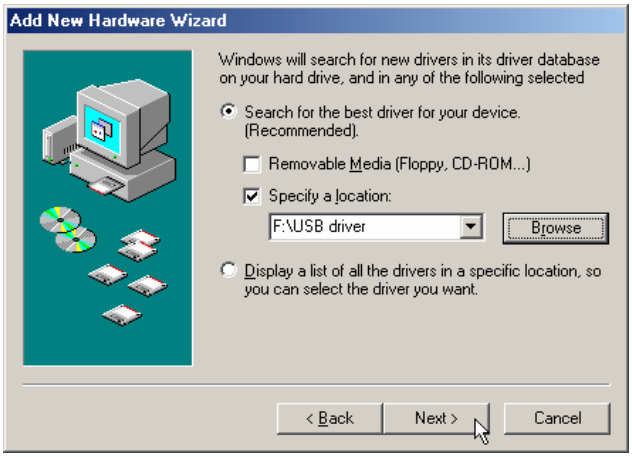
8. Click ***Yes***.



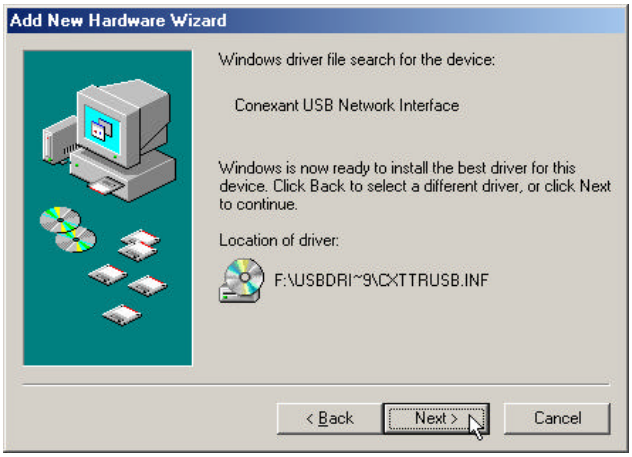
Microsoft Windows ME

1. Please insert the driver CD supplied when you see the message of ***USB NET CARD*** appearing on the screen, select ***Specify the location of the driver (Advanced)***, then click ***Next***.

2. Select ***Search for the best driver for your device. [Recommended]*** and check ***Specify a location***, then type in the path of CD-ROM drive (for example F:\USB driver) and click ***Next***.



3. Windows has found the driver for the Conexant USB Network Interface and click ***Next***.

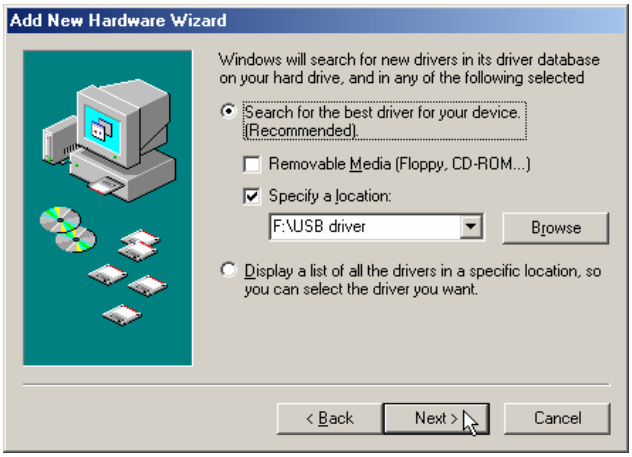


4. The installation has been done, click ***Finish***.

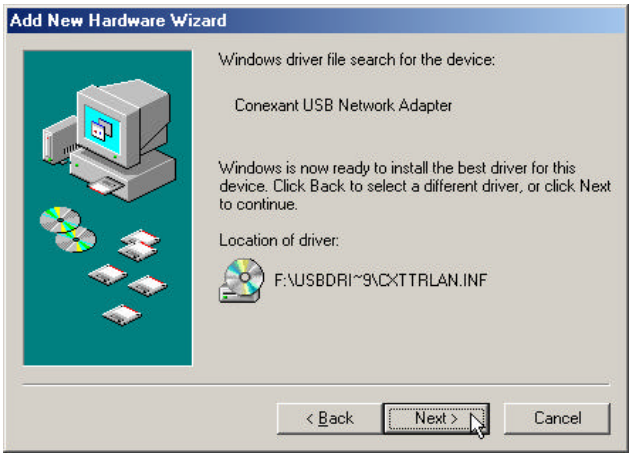
5. Windows has found the driver for the ***Conexant USB Network Device***. Select ***Specify the location of the driver (Advanced)*** and click ***Next***.

6. Select ***Search for the best driver for your device. [Recommended]*** and

check ***Specify a location***, then type in the path of CD-ROM drive (for example F:\USB driver) and click ***Next***.



7. Windows has found the driver for the ***Conexant USB Network Adapter*** and click ***Next***.



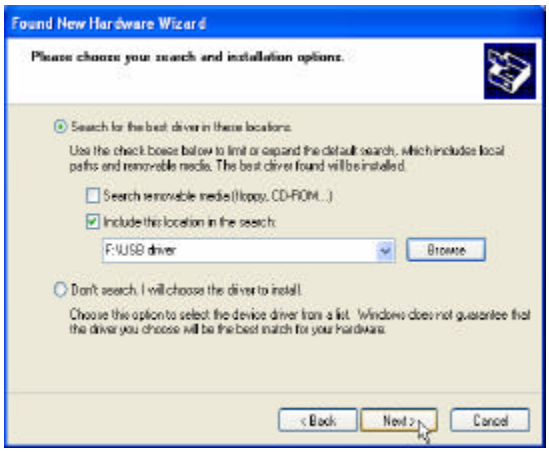
8. Windows has finished installing the new hardware device. and click ***Finish***.

9. Click ***Yes***. restart your computer now.

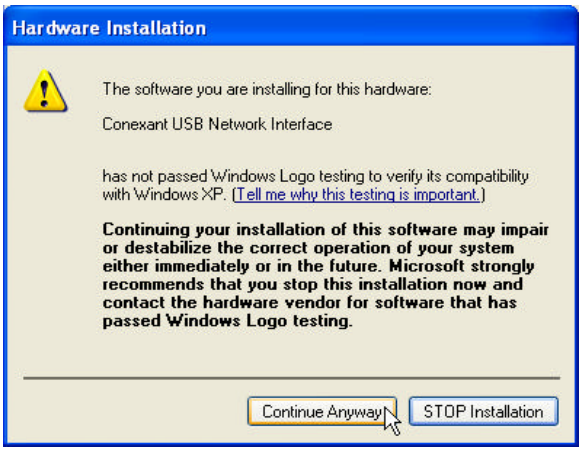
Microsoft Windows XP

1. Please insert the driver CD into CD-ROM drive and select ***Install from a list or specific location (Advanced)*** then click ***Next***.

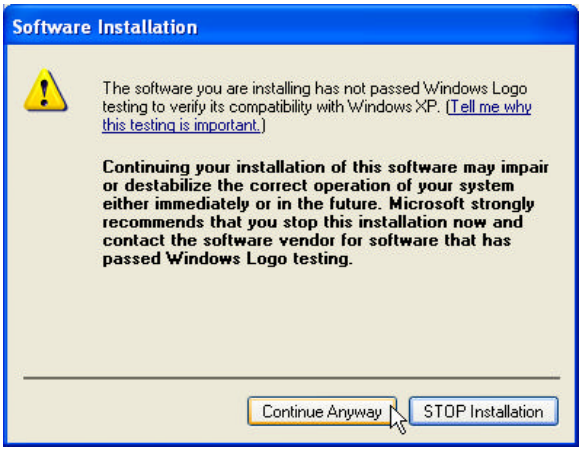
2. Select ***Include this location in the search*** and type in the path of CD-ROM drive (for example F:\USB driver), then click ***Next***.



3. Click ***Continue Anyway***.

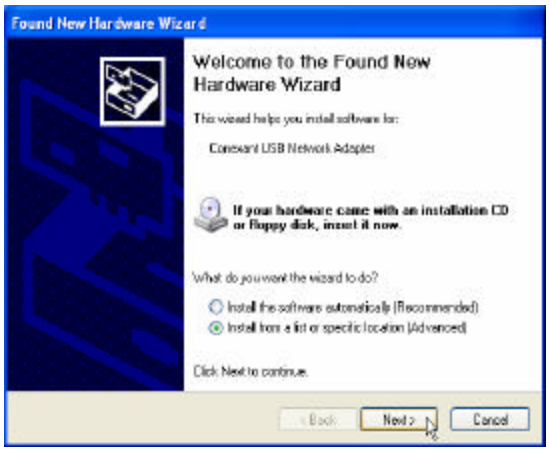


4. Click ***Continue Anyway***.

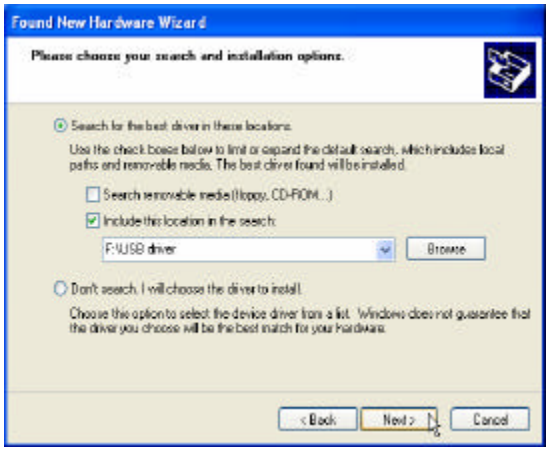


5. The installation has been done, click ***Finish***.

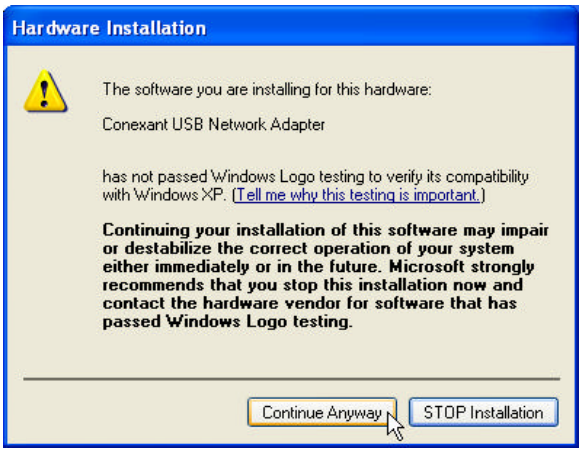
6. The select ***Install from a list or specific location (Advanced)*** then click ***Next***.



7. Select ***Include this location in the search*** and type in the path of CD-ROM drive (for example F:\USB driver), then click ***Next***.



8. Click ***Continue Anyway***.



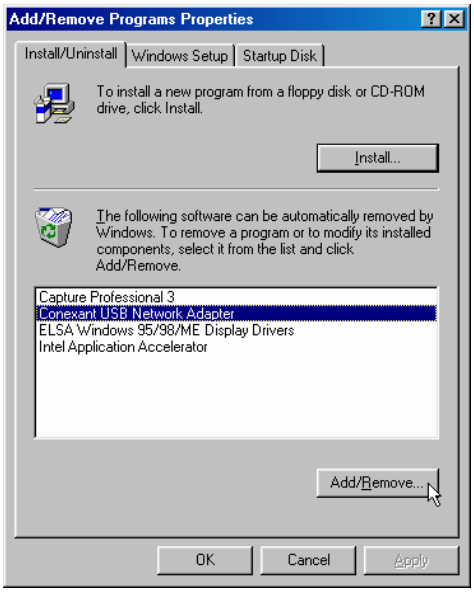
9. The installation has been done, click ***Finish***.

Uninstallation USB Driver Procedures

Microsoft Windows 98SE

1. Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Add/Remove Programs*** icon.

2. Select ***Conexant USB Network Adapter*** from the list and then click the ***Add/Remove*** button.



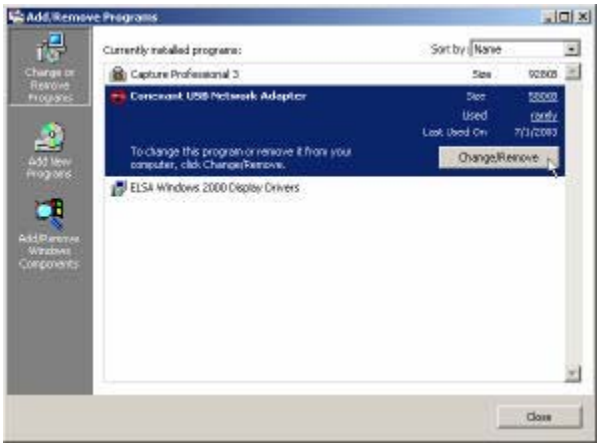
3. Click ***Yes*** to remove the USB device.

4. Click **Yes** to restart your computer.

Microsoft Windows 2000

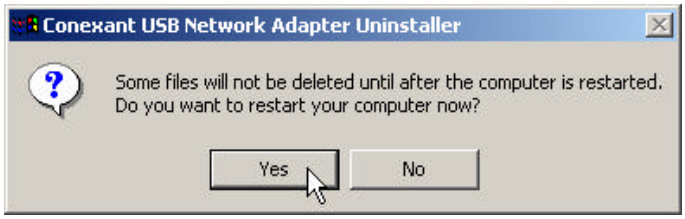
1. Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Add/Remove Programs*** icon.

2. Select ***Conexant USB Network Adapter*** from the list and then click the ***Change/Remove*** button.



3. Click ***Yes*** to remove the USB device.

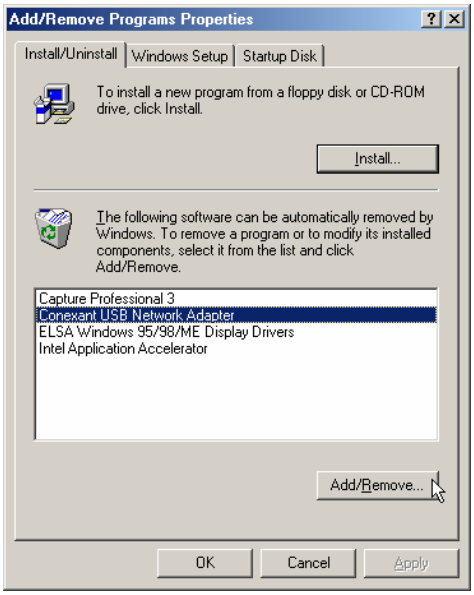
4. Click ***Yes*** to restart your computer.



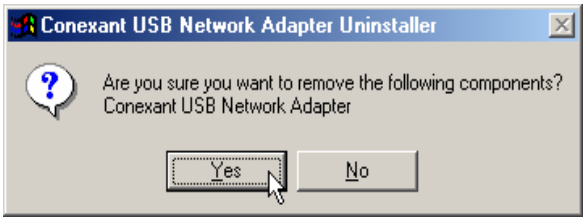
Microsoft Windows ME

1. Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Add/Remove Programs*** icon.

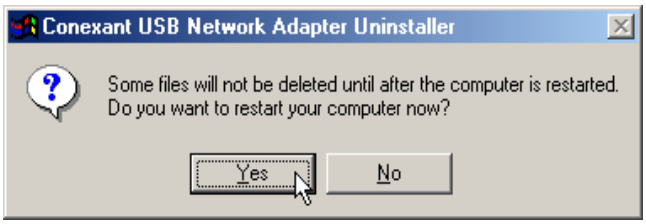
2. Select ***Conexant USB Network Adapter*** from the list and then click the ***Add/Remove*** button.



3. Click ***Yes*** to remove the USB device.



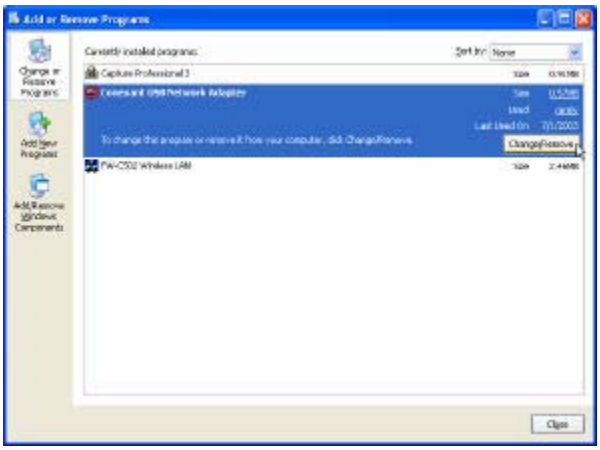
4. Click ***Yes*** to restart your computer.



Microsoft Windows XP

1. Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Add or Remove Programs*** icon.

2. Select Conexant USB Network Adapter from the list and then click the Change/Remove button.



3. Click ***Yes*** to remove the USB device.

4. Click ***Yes*** to restart your computer.

Advanced Setting

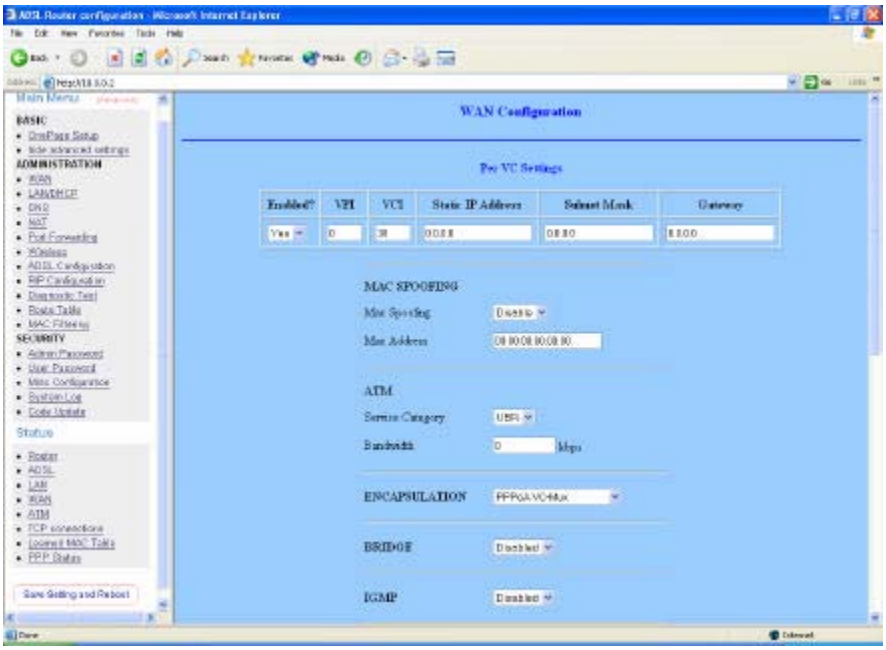
ADMINISTRATION

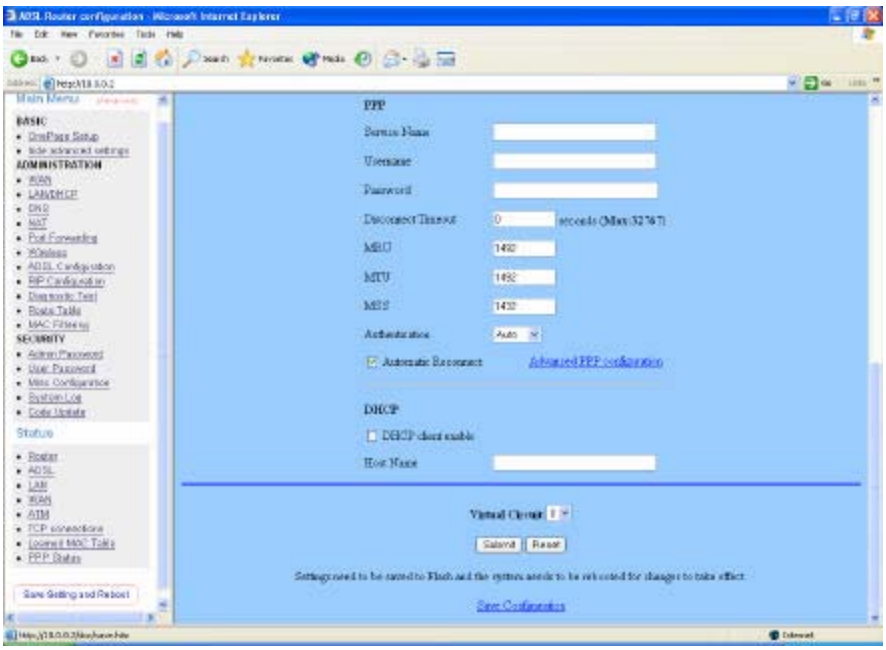
The links under the Administration column are associated to the pages that represent the configurations of system and interfaces.

Note: When the configurations are changed, please click the Save Setting and Reboot button.

WAN

The WAN configuration page allows the user to set the configuration for WAN/ADSL ports.





Per VC Settings

Enabled: This also should be left at the default setting **Enabled**. This enables the PVC used for the initial connection.

VPI: If instructed to change this, type in the VPI value for the initial connection (using PVC 0). Default = **0**.

VCI: If instructed to change this, type in the VCI value for the initial connection (using PVC 0). Default = **38**.

MAC Spoofing:MAC Spoofing is developed to solve the scenario when the ISP only recognizes one MAC address. Copy the ISP-recognized MAC address here.

ATM

Service Category: UBR and CBR are supported from the ATM.

Bandwidth: Bandwidth setting takes effect only when the CBR is selected. The maximum available bandwidth is from the upstream data rate of ADSL status page.

ENCAPSULATION: Selection follow as Table-1 Configuration

BRIDGE: Enabling bridge mode will place the unit into Transparent bridge mode (like a Ethernet ADSL modem) to use this mode you should also set your WAN type to a Bridging option (e.g RFC1482 Bridge using LLC).

IGMP: IGMP relay/proxy specification and environment:

Support IGMP proxy/relay function for ADSL modem, based on the following requirement and case:

On CO side, there must be at least one IGMP querier (router) present. IGMP querier will send IGMP query packet. The ADSL modem is responsible to relay these IGMP query to Ethernet.

End-user multicast application device send IGMP report while receiving IGMP query or being activated by user, the ADSL modem should be responsible to proxy (that is, change source IP to ADSL modem's WAN IP) the IGMP report to ADSL WAN side, include all PVCs. The same case is for IGMP leave packet.

Not necessary to relay multicast routing between two ADSL PVCs or two interfaces in LAN side.

Special purpose multicast packet (such as RIP 2 packet) should run without interference.

Table-2

Rx Entity	Packet Class	TTL	Action	Notes
ADSL	IGMP query	1	Relay to Ethernet	
	IGMP report	1	Ignore	
	IGMP leave	1	Ignore	
	General Multicast IP	-	Relay it to Ethernet.	
Ethernet	IGMP query	1	Ignore	
	IGMP report	1	Relay to all ADSL PVC	
	IGMP leave	1	Relay to all ADSL PVC	
	General Multicast IP	-	Ignore	

PPP: The current release supports multiple PPP sessions per PVC. The PPP configuration in the WAN configuration page is for the first PPP session for each PVC. The predefined PPP Account Name (Account ID) is "Simple PPP Account 0" for PVC0 and predefined PPP Connection Name is "Simple PPP Session 0" for PVC0. For the other PVC X, the predefined account name and connection name will be Simple PPP Account X and Simple PPP Session X. X is the PVC number from 1 to 7.

It can support up to total of 16 PPP sessions, and each PVC can support up to 8 PPP sessions, The multiple PPP sessions may be configured with any combination over 8 PVCs.

Service Name: The service name of PPP is required by some ISPs. If the ISP does not provide the Service Name, please leave it blank.

Username: Your user name provided by your ISP.

Password: Your password provided bye your ISP.

Disconnect Timeout: The Disconnect Timeout allows the user to set the specific period of time to disconnect from the ISP. The default is 0, which means never disconnect from the ISP.

MRU: Maximum Receive Unit indicates the peer of PPP connection the maximum size of the PPP information field this device can be received. The default value is 1492 and is used in the beginning of the PPP negotiation. In the normal negotiation, the peer will accept this MRU and will not send packet with information field larger than this value.

MTU: Maximum Transmission Unit indicates the network stack of any packet is larger than this value will be fragmented before the transmission. During the PPP negotiation, the peer of the PPP connection will indicates its MRU and will be accepted. The actual MTU of the PPP connection will be set to the smaller one of MTU and the peer' s MRU. The default is value 1492.

MSS: Maximum Segment Size is the largest size of data that TCP will send in a single IP packet. When a connection is established between a LAN client and a host in the WAN side, the LAN client and the WAN host will indicate their MSS during the TCP connection handshake. The default value is 1432.

Automatic Reconnect: When it is checked, it will maintain the PPP connection all the time. If the ISP shut down the PPP connection, it will automatically reconnect PPP session.

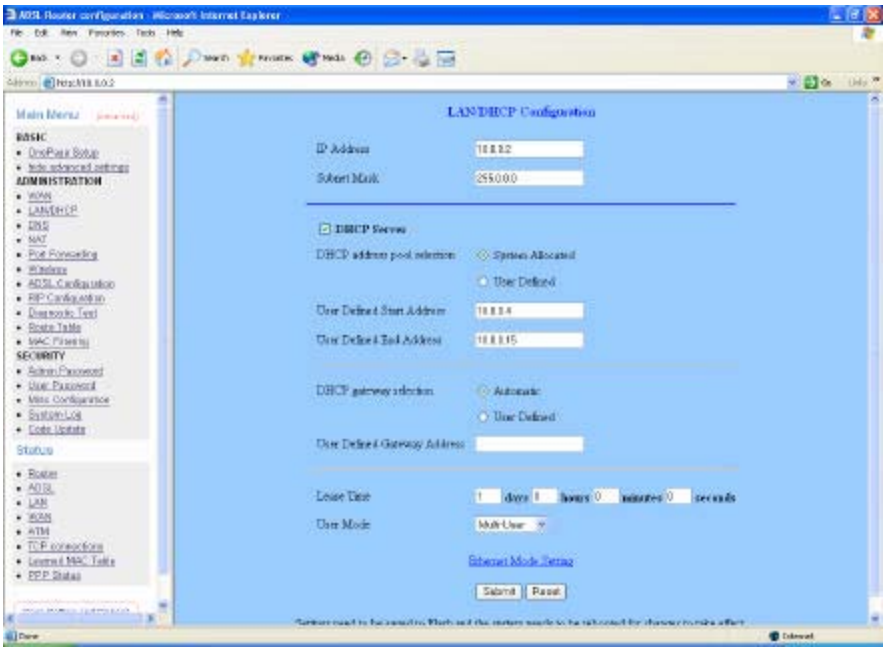
DHCP: Use Table-1 to configure a valid setting for each PVC.

Host Name: Required by some ISPs. If the ISP does not provided the Host name, please leave it blank.

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

LAN/DHCP

The LAN configuration page allows you to set the configuration for the LAN port.



LAN IP Address & Subnet Mask: The default is 10.0.0.2 and 255.0.0.0 you can change it to another private IP address, such as 211.22.10.191 and 255.255.255.0. For most configurations it is recommended to leave it as default.

DHCP Server: System Allocated. The DHCP address pool is based on LAN port IP address plus 12 IP address. For example, the LAN IP address is 10.0.0.2; the DHCP address pool is at the range of 10.0.0.3 to 10.0.0.14.

User Defined: The DHCP address pool is at the range of User Defined Start Address and User Defined End Address. The maximum pool size can be 253 IP address:255 total IP address-1 broadcast address-1 LAN port IP address.

DHCP Gateway Selection: The default setting for the DHCP Gateway Selection is "Automatic". The user can select the "User Defined" to specify "User Defined Gateway Address". The DHCP server will issue the " User Defined Gateway Address" to the LAN DHCP client.

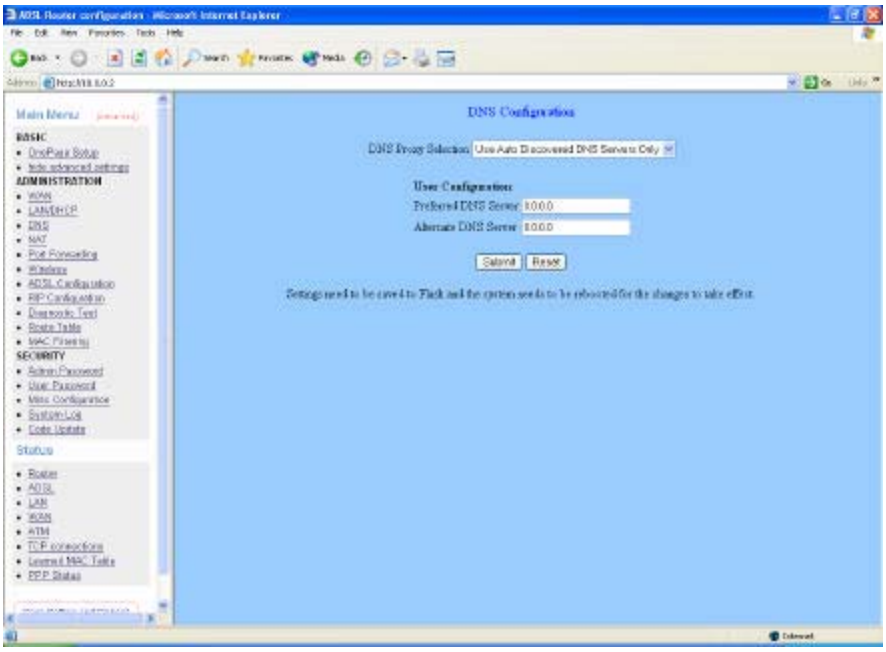
Lease time: The lease time is the amount of time of a network user will be allowed to connect with DHCP server. If all fields are 0, the allocated IP address will be effective forever.

User mode: Under the Single User mode, the DHCP server only allocates one IP address to local PC. Under the Multiple User mode, the DHCP server allocates the IP addresses specified by the DHCP address pool.

Note: Click the Submit button to save the settings in temporary memory. If you changes the configurations.

DNS

The DNS Configuration page allows you to set the configuration of DNS proxy.



Disable DNS Proxy: The LAN port does not process the DNS query message. For the DHCP requests from local PCs, the DHCP server will set the user-configured preferred DNS sever or alternate DNS server whichever is available as the DNS server. Then all DNS query messages will be directly sent to the DNS servers.

Use Auto Discovered DNS Servers Only: The DNS proxy will store the DNS server IP addresses obtained from DHCP client or PPP into the table. And all DNS query messages will be sent to one of the dynamically obtained DNS servers.

Use User Configured DNS Servers Only: The DNS proxy will use the user-configured preferred DNS server and alternate DNS server. And all DNS query message will be sent to one of DNS servers.

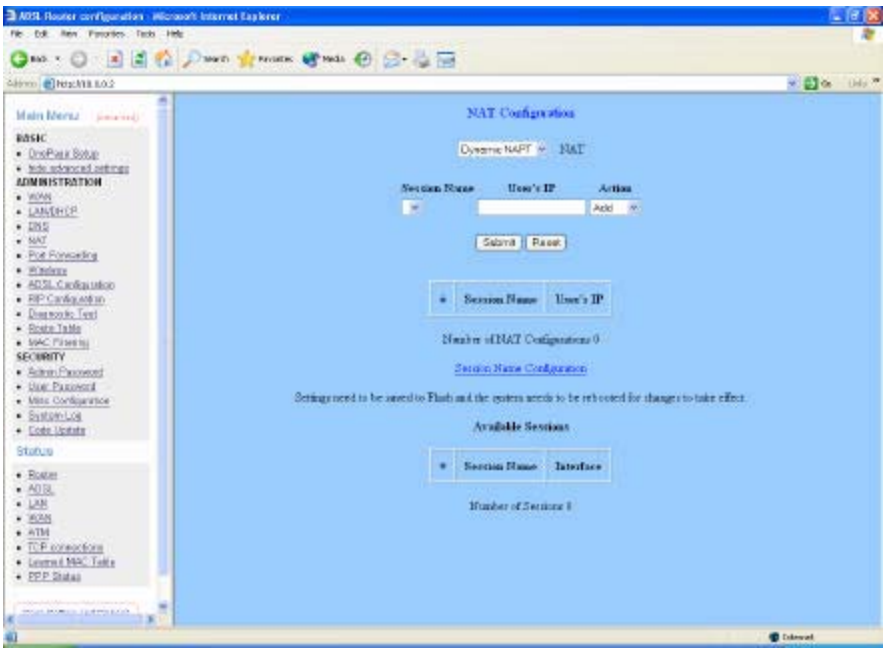
Auto Discovery + User Configured: The DNS proxy's table has all the IP addresses of dynamically obtained and user configured DNS servers.

User Configuration: Place your primary and secondary DNS addresses here.

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

NAT

The NAT Configuration page allows users to set the configuration for the Network Address Translation. The default setting is Dynamic NAPT. It provides dynamic Network Address Translation capability between LAN and multiple WAN connections, and the LAN traffic is routed to appropriate WAN connections based on the destination IP address and Route Table. This eliminates the need for the static NAT session configuration between multiple LAN clients and multiple WAN connections.
When the Dynamic NAPT is chosen, there is no need to configure the NAT Session and NAT Session Name Configuration.



The NAT option only maps single WAN IP address to the local PC IP address. It is peer-to-peer mapping. (1x1) For each WAN interface, only one local PC IP address can be associated with each WAN interface. Click the link Session Name Configuration to add the session name for WAN interface.
The NAPT option only maps single WAN IP address to many local PCs IP address. (1xN). It is the multiple-mapping mechanism. For each WAN Interface, more than one local PC can be associated with one WAN Interface. Click the link Session Name Configuration to add the session name for WAN interface.

Session Name: This field allows the user to select the session form the configured NAT Session Name Configuration.

***User's IP*:** This field allows the user to assign the IP address to map the corresponding NAT/NAPT sessions.

Session Name Status will be displayed at the middle of this page to show the corresponding Session Name with its IP address.

***Number of NAT Configurations*:** This field displays the total number of NAT Sessions is entered.

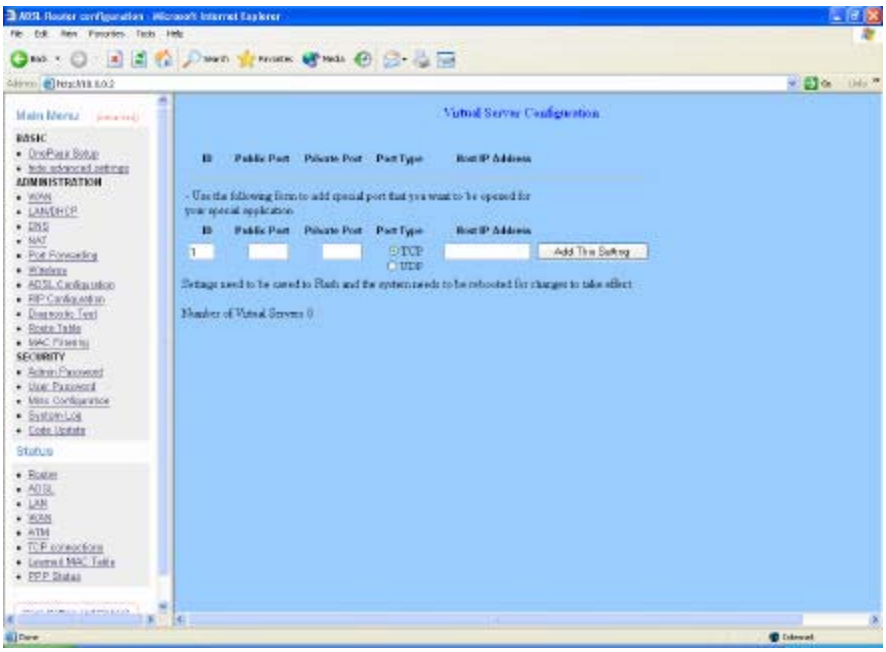
Available Sessions Status will be displayed at the end of this page to show all the Session Name with its WAN Interface.

Interface: This field allows the user to choose specific WAN Interface (PVC or PPP Session) for NAT Session.

***Number* of Session:** This field displays the total number of NAT Sessions Name is entered.

Port Forwarding

The Port Forwarding Configuration page allows the user to set the configuration for Port Forwarding. By default all UDP/TCP ports are protected from intrusion. If any specific local PCs need to be mapped to the UDP/TCP port on WAN side, please input the mappings here.



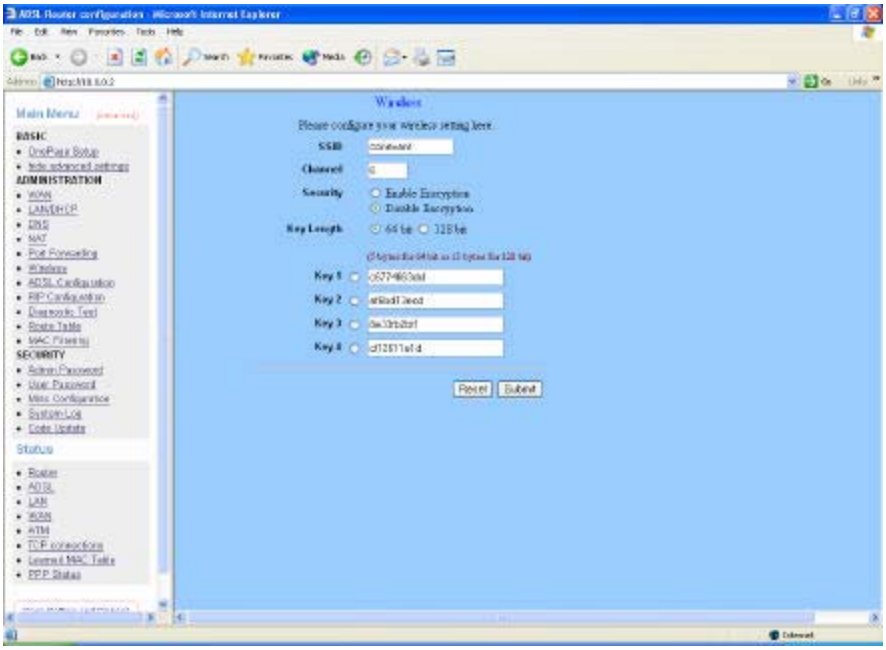
Public Port: This field allows the user to enter the port number of the Public Network.

Private Port: This field allows the user to enter the port number of the Private Network.

Host IP Address: This field allows the user to enter the private network IP address for the particular server.

Wireless

Wireless Access Point builds a wireless LAN and can let all PCs equipped with IEEE 802.11b wireless network adaptor connect to your Intranet.



***SSID*:** This is the name of the wireless LAN. All the devices in the same wireless LAN should have the same SSID.

***Channel*:** The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel.

***Security*:** Enable or disable Wireless encryption.

Disable Encryption

Enable Encryption.

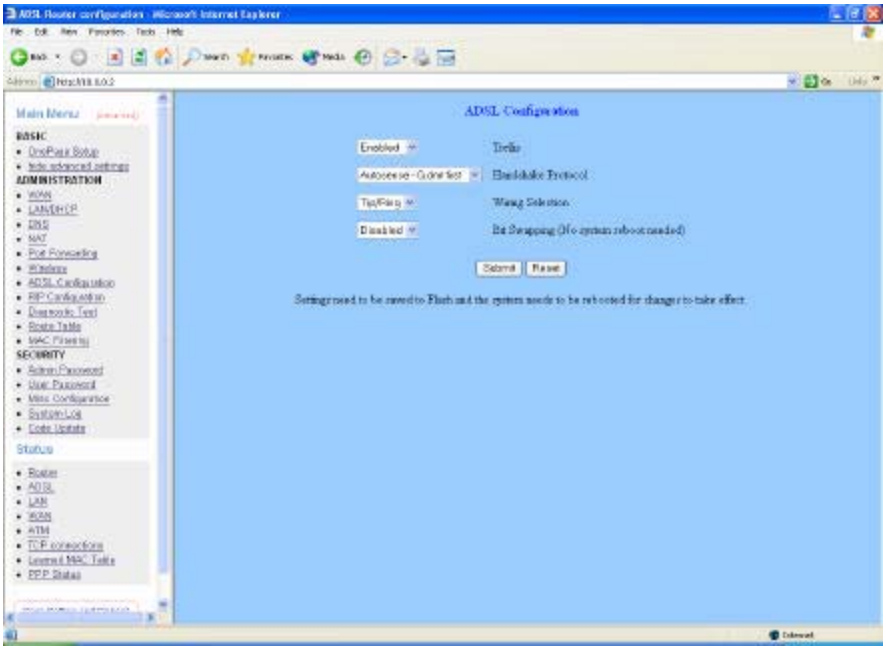
Key Length: You can select the Key Length for encryption, 64 bit or 128 bit.

Key 1~Key 4: The key used to encryption data transmitted in the wireless network.

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

ADSL Configuration

The ADSL Configuration page allows the user to set the configuration for ADSL protocols.



Trellis: This field allows the user to enable or disable the Trellis Code. By default, it is always enabled.

Handshake Protocol: This field allows the user to select the ADSL handshake protocol.

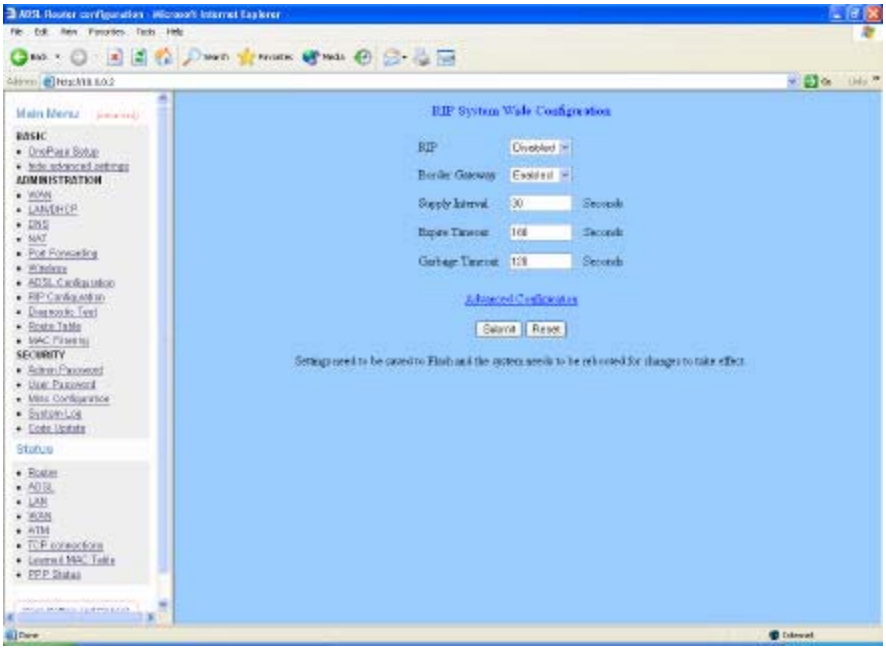
Wiring Selection: This field allows the user to enter the wiring selection for the RJ-11. Tip/Rip is the default for the board without the inner/outer pair relay.

Bit Swapping: This field allows the user to enable or disable the upstream bit swapping.

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

RIP Configuration

The RIP Per Interface Configuration page allows the user to set the configuration for each Interface (PVCs, PPP Sessions, USB and LAN).



Interface: This field allows the user to choose the Interface (PVCs, PPP Sessions, USB and LAN), for the RIP to be configured.

Enable: This field allows the user to Enable (Yes) or Disable (No) the Specified interface for RIP.

Supplier: This field allows the user to select the Supplier Mode (RIP Transmit).

Disabled: The supplier transmit is disabled.

V1 BC: The supplier transmits in RIPv1 Broadcast.

V2 BC: The supplier transmits in RIPv2 Broadcast.

V2 MC: The supplier transmits in RIPv2 Multicast.

Listener: This field allows the user to select the Listener Mode (RIP Receive).

V1: The listener receives the RIPv1 only.

V2: The listener receives the RIPv2 only.

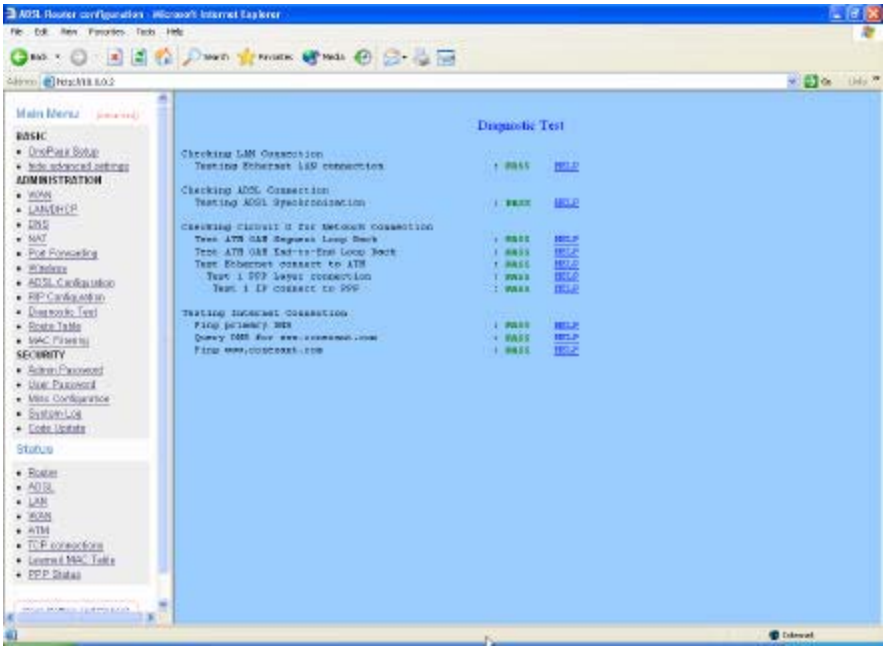
V1+V2: This listener receives the both RIPv1 and RIPv2.

Supplier and Listener are based on section 4.1 "Compatibility Switch" in RFC 1723.

Current RIP Settings: This field displays the each interface's RIP status.

Diagnostic Test

The Diagnostic Test page shows the test results for the physical layer and protocol layer for both LAN and WAN sides.



Testing Ethernet LAN Connection: This test checks the Ethernet LAN interface connection.

Testing ADSL Synchronization: This test checks the ADSL showtime. If this test returns FAIL, all other tests will be skipped.

Test ATM OAM segment Loop Back: This test sends ATM OAM F5 Segment loop-back request cells to the CO. This test will pass if response cell is received. Some service providers might not support this test. If this test fails consistently and the ADSL modem does not seem to be working, make sure the VPI and VCI are configured correctly.

Test ATM OAM End-to-End Loop Back: This test sends ATM OAM F5 End to End loop back request cells to the CO. This test will pass if response cell is received. Some service providers might not support this test. If this test return FAIL consistently and the ADSL modem does not seem to be working, make sure the VPI and VCI are configured correctly.

Test Ethernet Connect to ATM: This test checks the ATM AAL5 module is loaded correctly.

Test PPP Layer Connection: This test checks the PPP authentication.

Test IP Connect to PPP: This test checks a valid IP address assigned from the service provider. Please note that on some ADSL services this test may fail despite the fact that you have connected correctly.

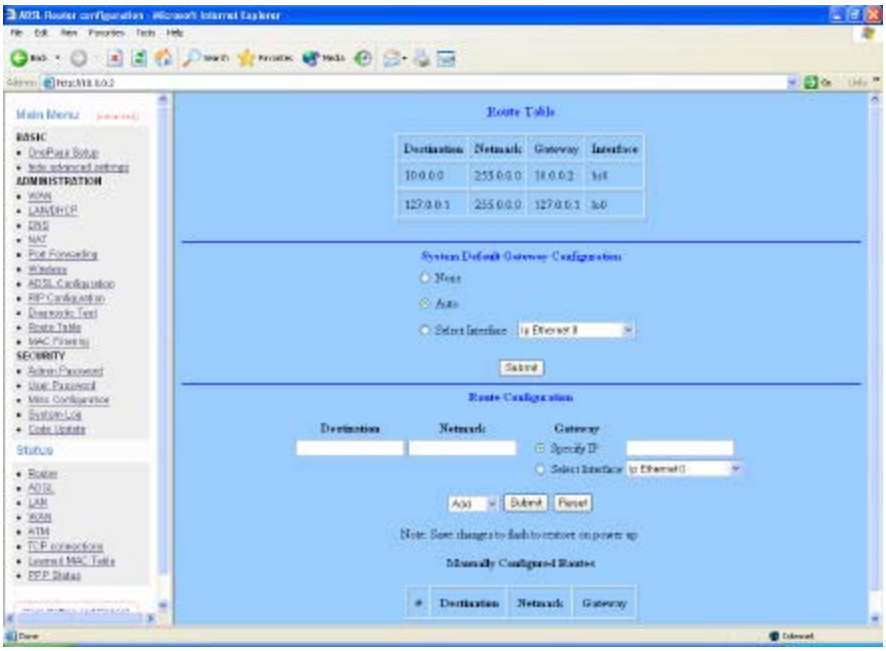
Ping Primary DNS: This test checks the primary DNS can be reached through pin request.

Query DNS for www.conexant.com: This test checks the host name can be resolved to IP address though domain name servers.

Ping www.conexant.com: This test checks the specified host can be reached through pin request.

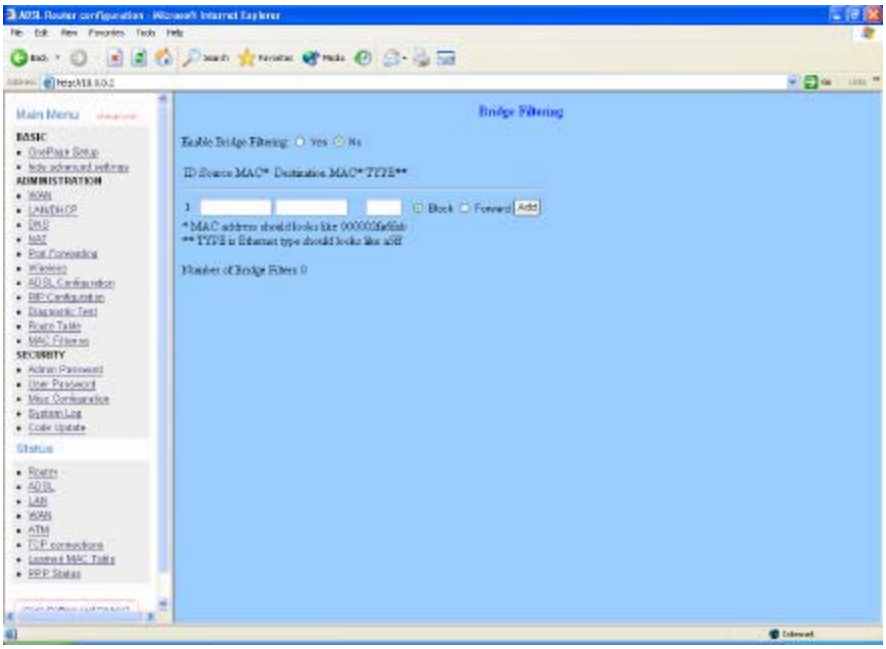
Router Table

The Router Table page displays routing table and allows the user to manually enter the routing entry. The routing table will display the routing status of Destination, Netmask, Gateway and Interface. The interface br0 means the USB interface; lo0 means the loopback interface and ppp1 means the PPP interface. The Gateway is the learned Gateway.



MAC Filtering

The MAC Filtering configuration page allows the user to set the configuration of IP filtering. Enable and Disable MAC Filtering by selecting the "Yes" or "No" radio buttons.



Source MAC: When the bridge filtering is enabled, enter the Source MAC address, select Block and click Add. Then all incoming WAN and LAN Ethernet packets matched with this source MAC address will be filtered out. If the Forward is selected, then the packets will be forwarded to the destination PC.

Destination MAC: When the bridge filtering is enabled, enter the Destination MAC address, select Block and click Add. Then all incoming WAN and LAN Ethernet packets matched with this destination MAC address will be filtered out. If the Forward is selected, then the packets will be forwarded to the destination PC.

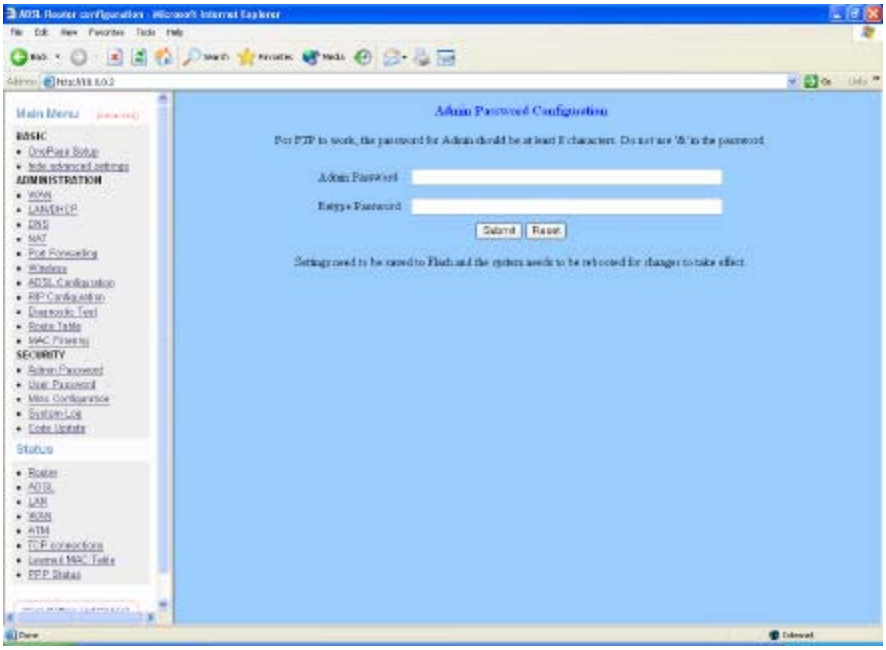
Type: Enter the hexadecimal number for the Ethernet type field in Ethernet_II packets.

SECURITY

Admin Password

The Admin Password Configuration page allows the user to set the password for administrator.

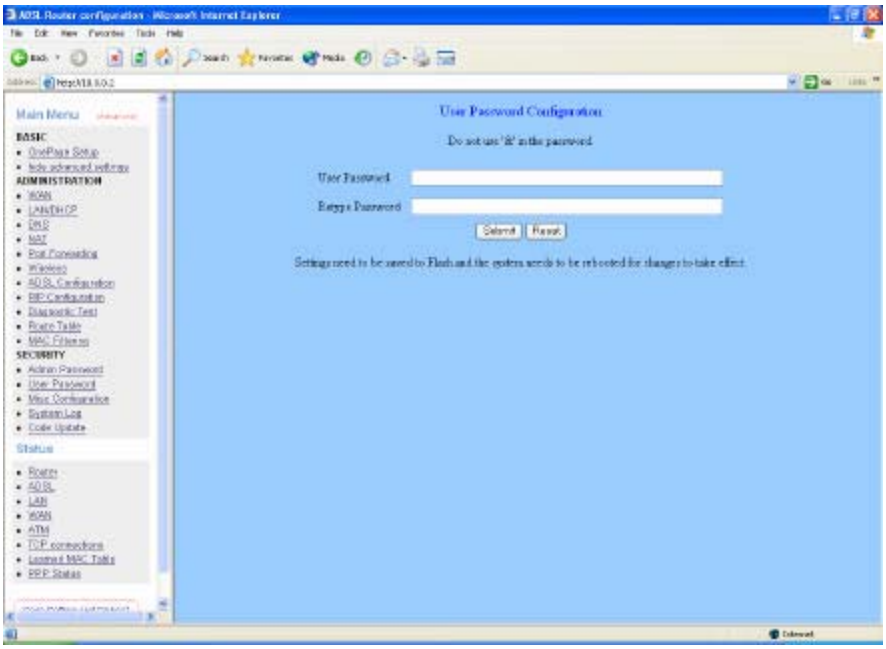
The Admin Password is the same as the FTP password and must be at least 8-characters long for the FTP function to work.



Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

User Password

The User Password Configuration page allows the Admin user to set the password for the general user. When logged in as a general user you can view the basic status of the ADSL Wireless Router but you can' t make critical changes to the unit.



Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

Misc Configuration

The Miscellaneous Configuration allows the user to set all the miscellaneous configurations.

HTTP server access: This field allows the user to configure the Web pages can be accessed from.

ALL: When this field is checked, it allows both WAN and LAN access to the Web pages.

Restricted LAN: This field allows the Web pages access from LAN side.

Restricted WAN Specified IP & Subnet Mask: This field allows the Web access from

WAN side with a specify IP and Subnet Mask.

HTTP server port: This field allows the user to specify the port of the Web access.

FTP server: This field allows the user to Enable or Disable the FTP connection. If you want FTP access from the WAN side you must ensure there are no port forwards for port 21.

TFTP server: This field allows the user to Enable or Disable the TFTP connection.

DMZ: A DMZ (De-Militarized Zone) is added between a protected network and an external network, in order to provide an additional layer of security. When there is a suspected packet coming from WAN, the firewall will forward this packet to the DMZ host.

DMZ Host IP: The IP address of the DMZ host at LAN side.

DHCP Relay: If it is enabled, the DHCP requests from local PCs will forward to the DHCP server runs on the WAN side of a network. To have this function working properly, please disable the NAT to run on router mode only, disable the DHCP server on the LAN port, and make sure the routing table has the correct routing entry.

DHCP Target IP: The DHCP server runs on WAN side.

IGMP Proxy: Here is the global setting for IGMP Proxy. If it is enabled, then the enabled IGMP Proxy on WAN PVCs will be working. Otherwise, no WAN PVC can have IGMP Proxy working on it.

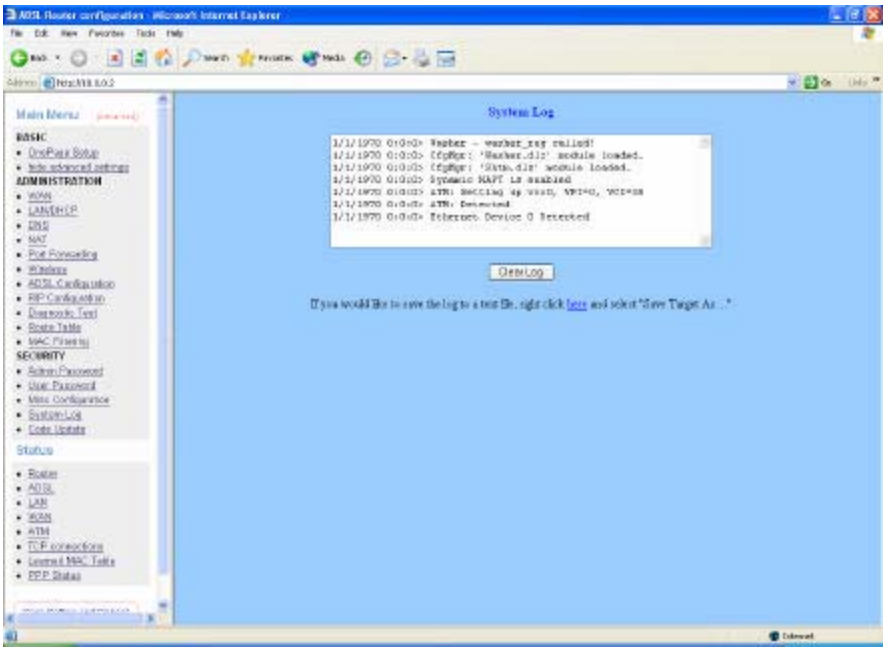
PPP connect on WAN access: If it is enabled, the PPP session will be automatically established when there is packet wants to go out the WAN.

PPP Half Bridge: When the PPP Half Bridge is enabled, only one PC is able to access the Internet and the DHCP server will duplicate the WAN IP address from the ISP to the local client PC. Only the PC with the WAN IP address can access the Internet. This function should only be used if one computer will be allowed to connect to the internet (E.G a Software firewall computer or Proxy server).

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

System Log

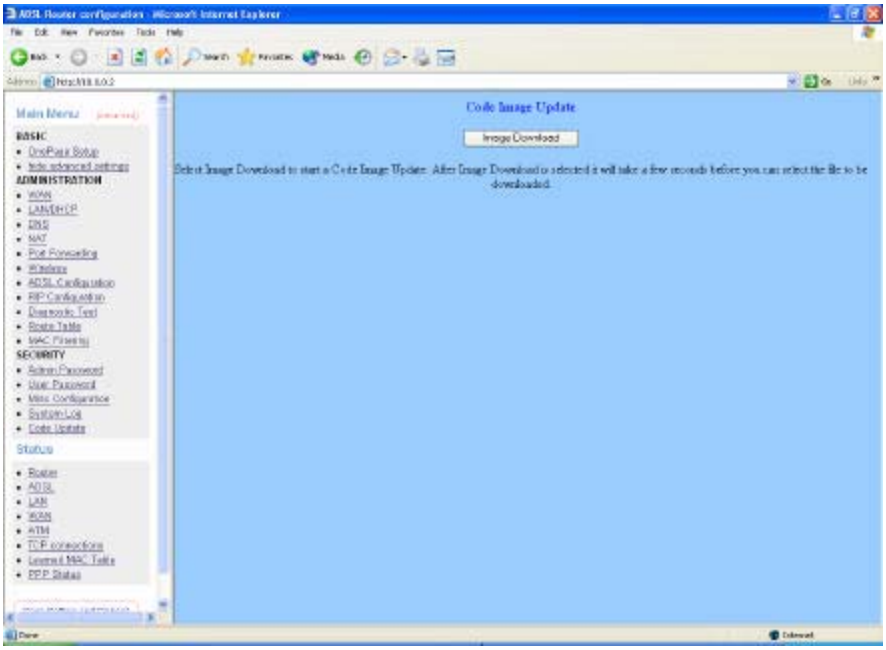
The System Log page shows the events triggered by the system.



To clear the System Log simply click on the **Clear Log** button.

Code Update

The code Update page allows the user to upload new firmware to the ADSL Wireless Router.



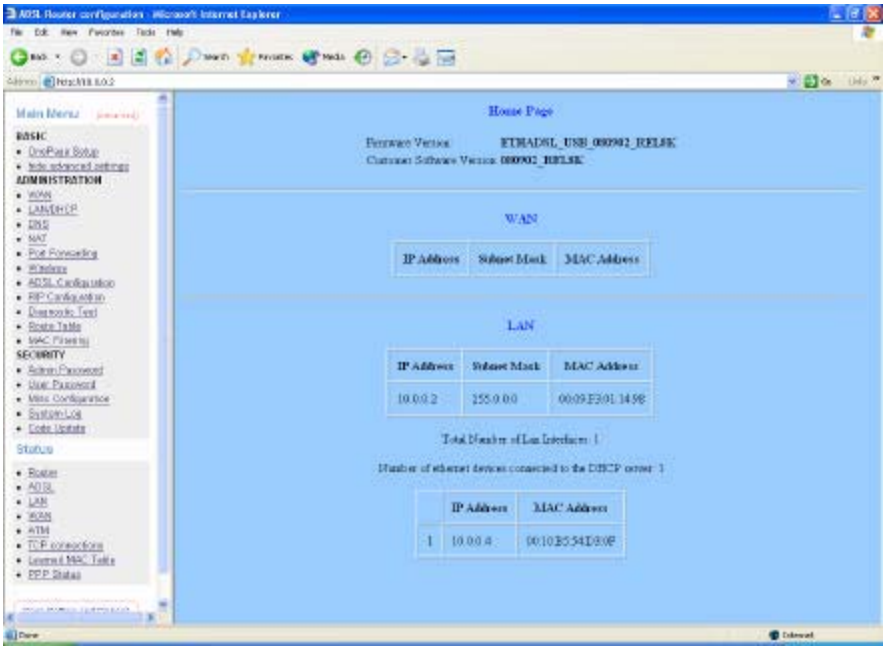
To upload new firmware:

1. Download the latest firmware image from the website.
2. Save the file to your Desktop or other location.
3. Select the Browse button and locate the file saved in step 2.
4. Click on the Update button to start the process.
5. Once the upgrade has been completed the router will need to reboot.

Status

Router

The Router page shows the firmware versions and WAN and LAN interface status.



Firmware Version: This field displays the Firmware Version number.

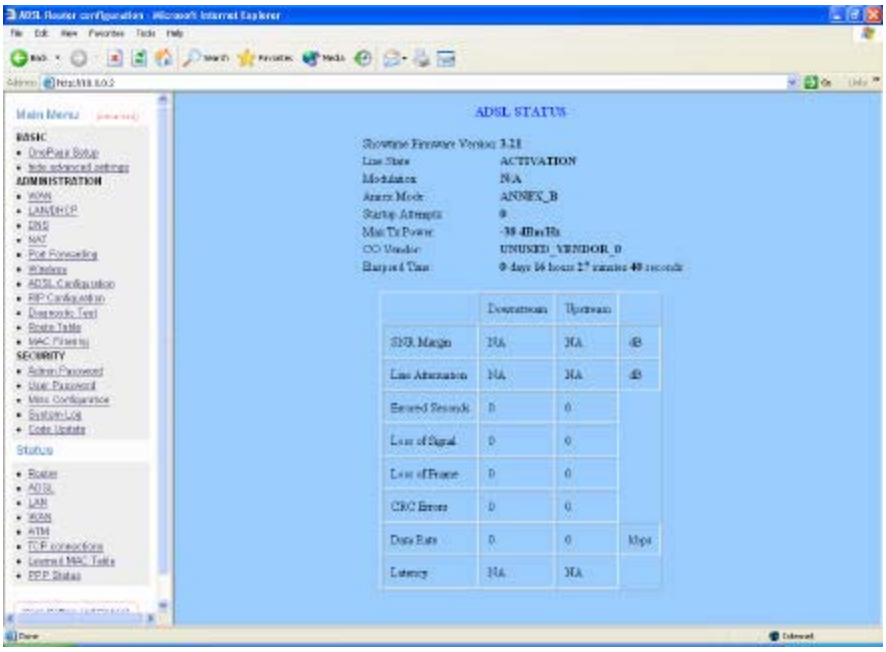
WAN: These fields display the IP Address, Subnet Mask, MAC Address for WAN interface.

LAN: These fields display the IP Address, Subnet Mask, MAC Address for LAN interface.

Number of Ethernet Devices Connected to the DHCP Server: This field display the number of DHCP clients connected to the ADSL Wireless Router.

ADSL

The ADSL Status page shows the ADSL physical layer status.



Showtime Firmware Version: This field displays the ADSL data pump firmware version number.

Line State: This field displays the ADSL connection process and status.

Modulation: This field displays the ADSL modulation status for G.dmt or T1.413.

Annex Mode: This field displays the ADSL Annex modes for Annex A or Annex B.

Startup Attempts: This field displays the ADSL connection attempts after loss of showtime.

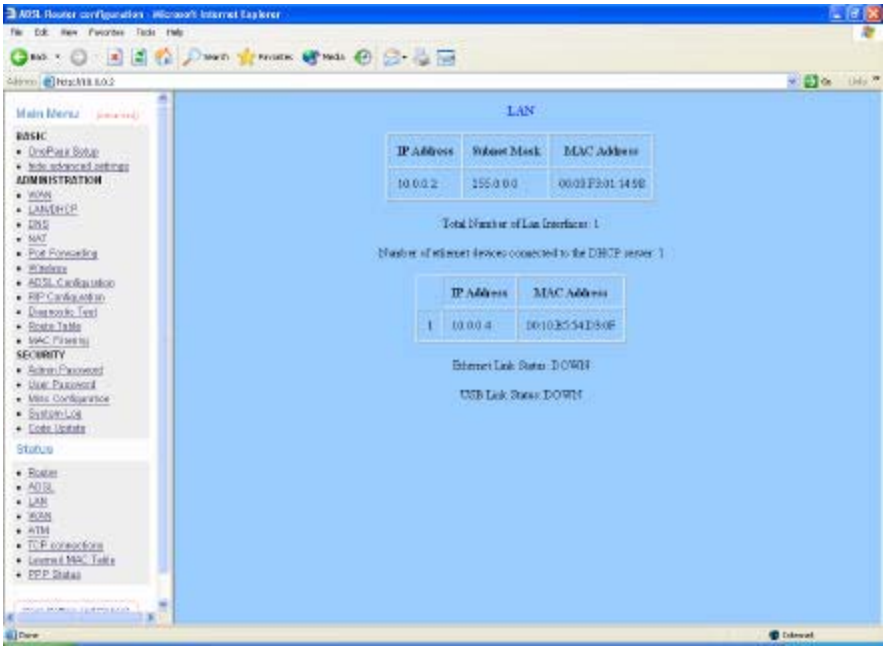
Max Tx Power: This field displays the transmit output power level of the CPE.

Co Vendor: This field displays the Central Office DSLAM vendor name. If available.

Elaspsed Time: This field displays the time of the modem has been in operation.

LAN

The LAN page shows the information and status of LAN port, DHCP client table, Ethernet link and USB link.



LAN: These fields display the IP Address, Subnet Mask and MAC Address for the LAN interface.

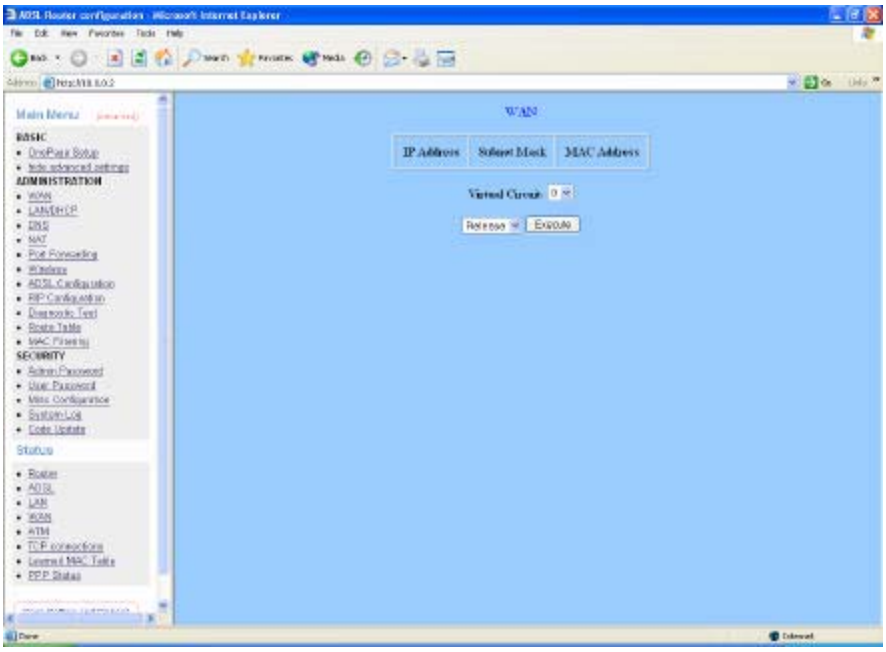
Number of Ethernet Devices Connected to the DHCP Server: These fields display the number of connections to the DHCP server as well as the DHCP client table with the assigned IP addresses and MAC addresses.

Ethernet Link Status: This field displays the link up or down for the Ethernet.

USB Link Status: This field displays the link up or down for the USB.

WAN

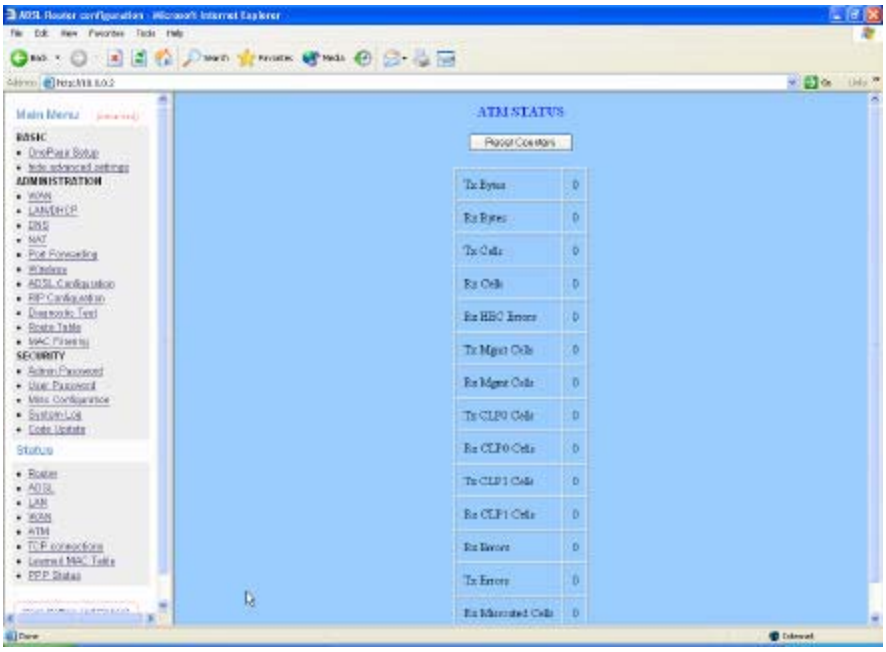
The WAN Status page shows the information and status of WAN PVCs.



WAN: These fields display the IP Address, Subnet Mask and MAC Address for the WAN (ADSL) interface. Use the Virtual Circuit selection to selection different PVC for status display.

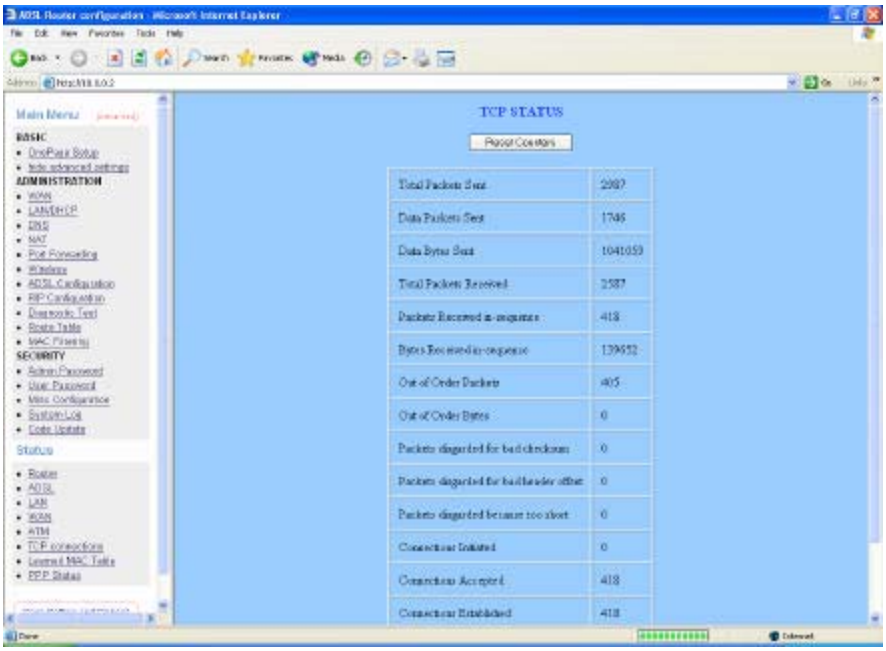
ATM

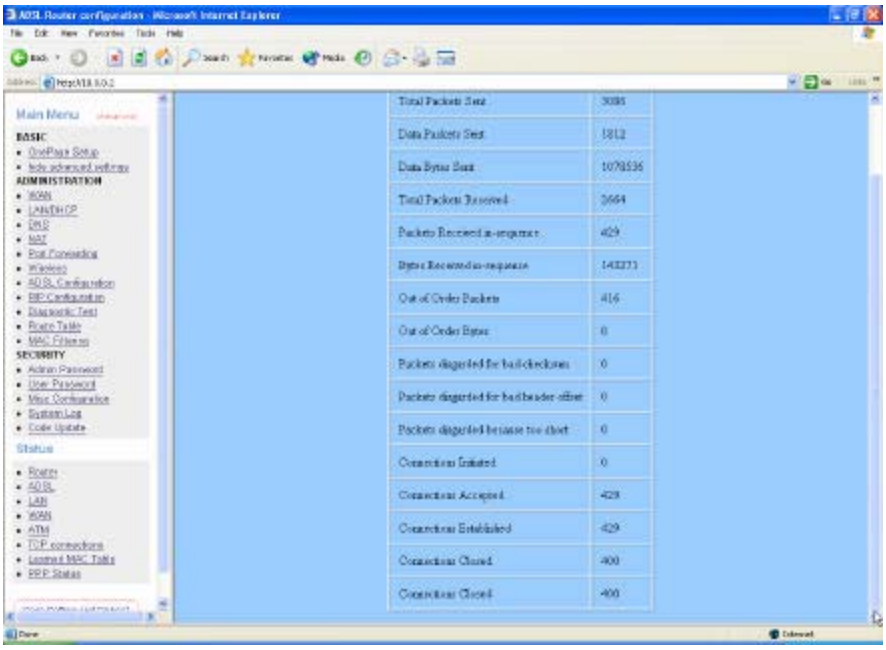
The ATM Status page shows the information of ATM cells.



TCP connections

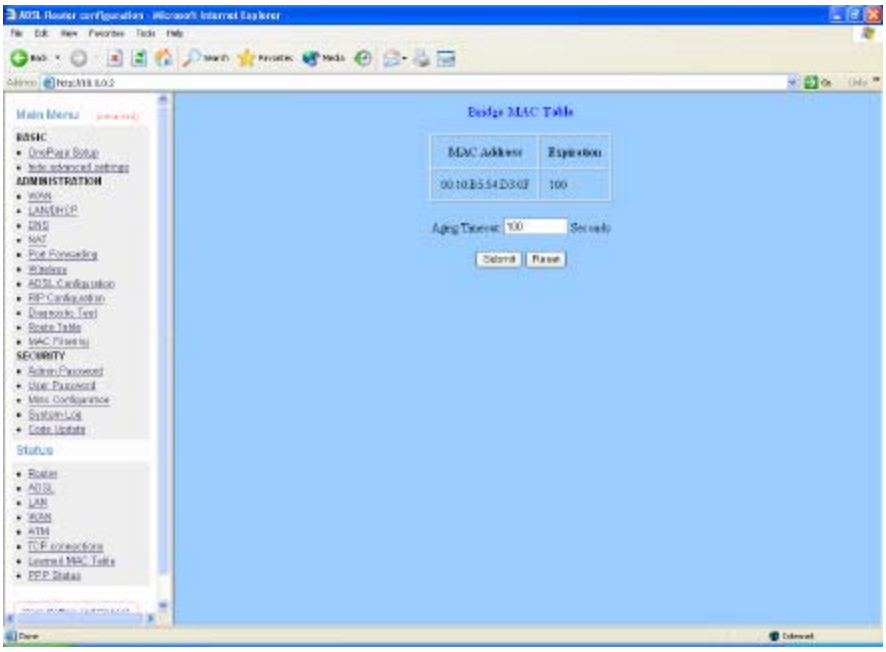
The TCP Status page shows the statistics for all TCP connections.





Learned MAC Table

The Learned MAC Table page shows the current learned Bridge MAC table.

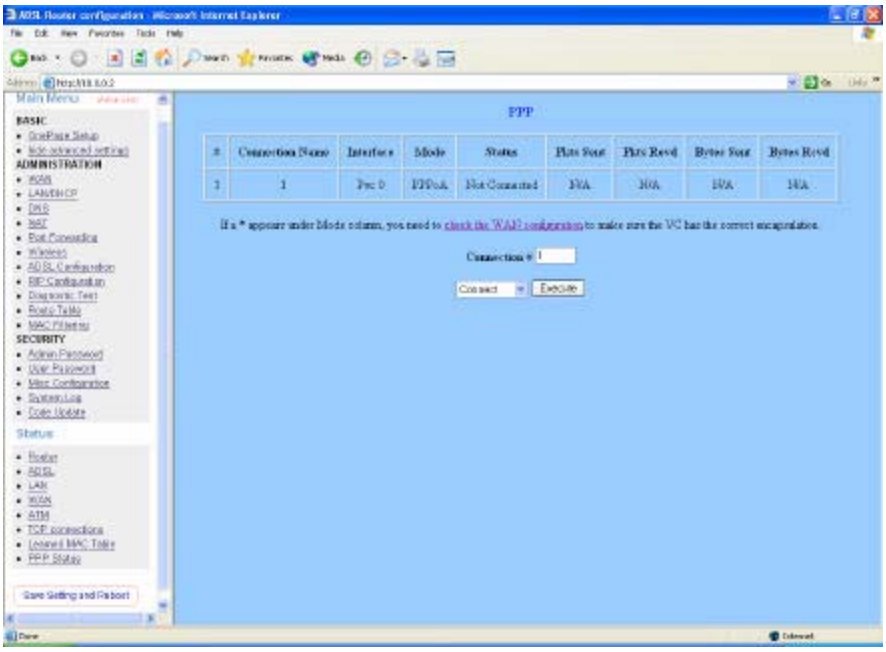


Aging Timeout: This field allows the user to enter the update period for the MAC table.

Note: *Click the* ***Submit*** *button to save the settings in temporary memory. If you changes the configurations.*

PPP Status

The PPP Status page shows the status of PPP for each PPP interface.



PPP: These fields display the following information on each PPP interface:

Connection Name (user defined)
Interface (PVC)
Mode (PPPoE or PPPoA)
Status (Connected or Not Connected)
Packets Sent
Packets Received
Bytes Sent
Bytes Received.

Connect and Disconnect: This field allows the user to manually connect/disconnect the PPP connection for each PPP interface. In another word, each PPP session can be connected and disconnected individually.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.
Prohibition of co-location **This device must not be co-located or operating in conjunction with any other antenna**

or transmitter

Federal Communications Commission (FCC) Requirements, Part 15

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 or more 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.

Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user' s authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

CAUTION: To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

MPE Statement (Safety Information)

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

Safety Information

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use only with supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.