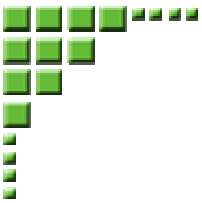
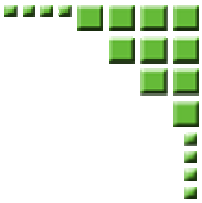



User Manual

PEAB-DSL-RTMD-4

ADSL MODEM ROUTER 4 PORTS SWITCH

Version 1.0

July.2005

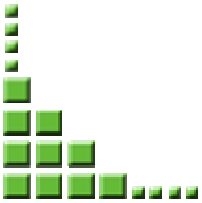
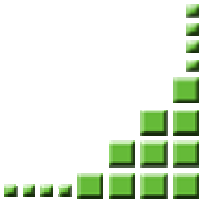



Table of Contents

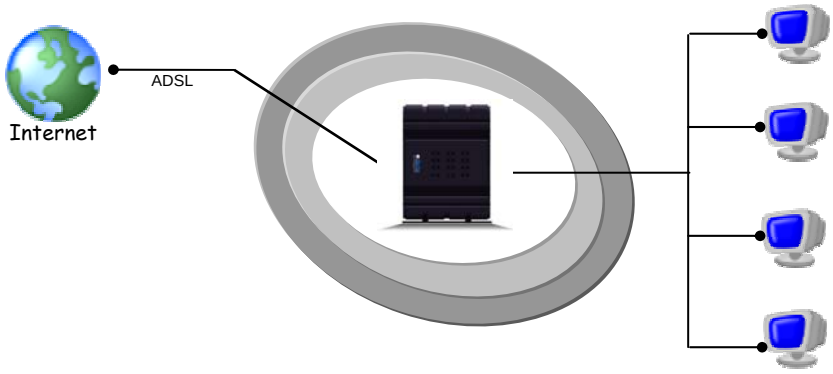
Specification

ADSL 2/2+ 4 Port Router

Line Connection	RJ-11(2 wires), RJ-45 (4 port)
ADSL Features	DMT modulation and demodulation Tone detection for low power mode ATM SAR performed in software driver ITU 992.1 (G.dmt) Annex A, B, C ITU 992.2 (G.lite) ITU 992.3 ADSL2 (G.dmt.bis) ITU 992.4 ADSL2 (G.lite.bis) ITU 992.5 ADSL2+ ANSI T1.413 Issue 2
Full-rate adaptive modem	Maximum downstream rate of 24 Mbps (ADSL2+) 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 Features	Four RJ-45 connectors for 10/100 Mbps Ethernet LAN connection, DMZ function can be set up between them Complies with IEEE 802.3u specification Supports IEEE 802.3x Flow control in Full Duplex mode
Certification	CE,LVD
OS	WIN 98SE ; WIN 2000；WIN ME；WIN XP
System Requirement	PII-266 + 32M RAM
Power	External AC Power Input: 90~120V or 200~240V, 50/60Hz Output: 12VAC/800mA
LED Indication	Power, LAN1, LAN2, LAN3, LAN4, ADSL Link/Act

PCB SIZE	134mm×96.5mm
Software Upgrade	Upgrade by Ethernet Port

Application Diagram

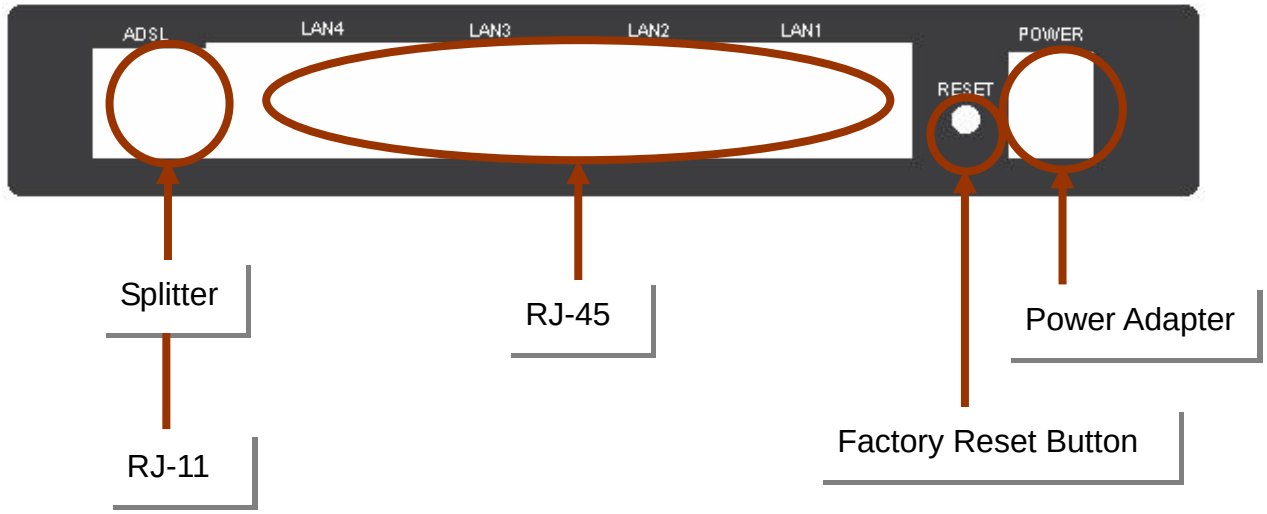


Package Contents

-  ADSL 2/2+ 4 Port Router
-  CD-ROM containing Manual and QIG
-  Ethernet Cable (CAT5 UTP Straight-Through)
-  Telephone Cable (RJ11)
-  Power Adapter (12VAC 800mA)
-  Quick Installation Guide
-  Splitter

Hardware Connecting

ADSL2/2+ 4-PORT ROUTER



Splitter

RJ-11

RJ-45

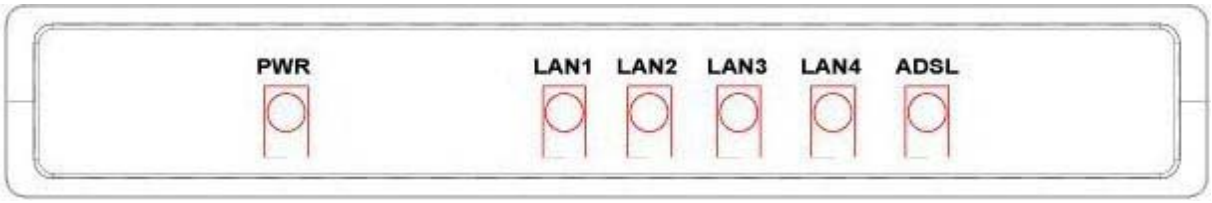
Factory Reset Button

Power Adapter

LED Indicators

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

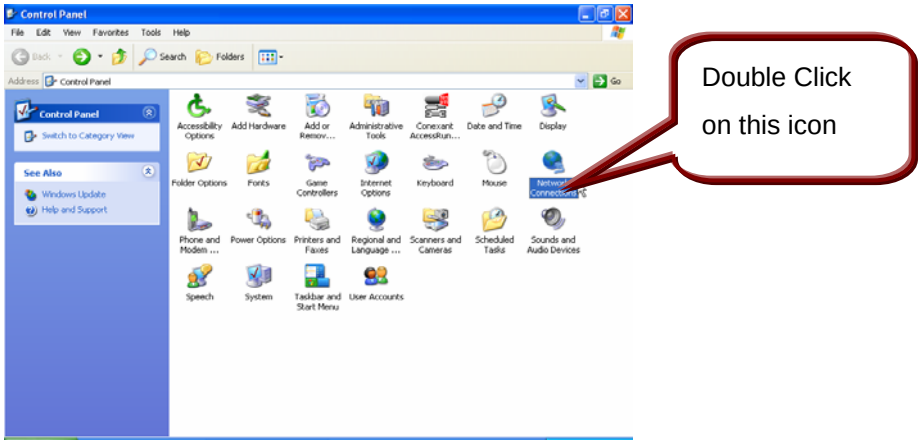
ADSL2/2+ 4 Port Router



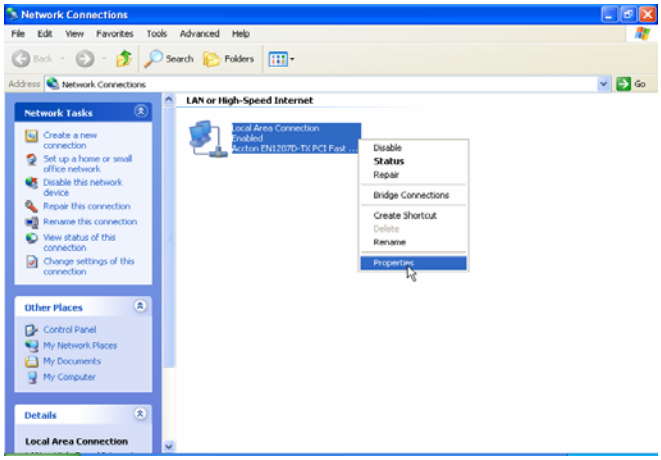
Label	Meaning	Status	Indicates
PWR	Power	On	Power is on
		Off	Power is off
LAN 1/ LAN 2/ LAN 3/ LAN 4	LAN Link	Flashing	Flashes when data is being sent or received on the LAN connection.
		On	Indicates a link to your LAN or Network card is active.
		Off	Indicates no link to LAN
ADSL	Link	Link	A valid ADSL connection.

General Setting

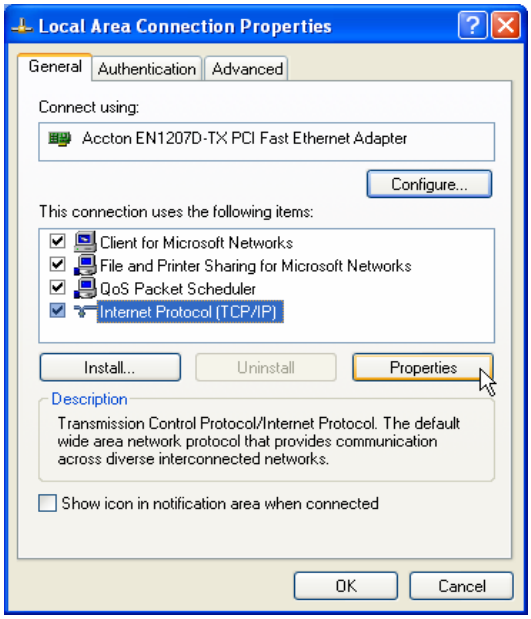
1. Move your cursor as following sequence ***Start \ Settings \ Control Panel*** and click ***Control Panel***. Then double-click on the ***Network Connections***



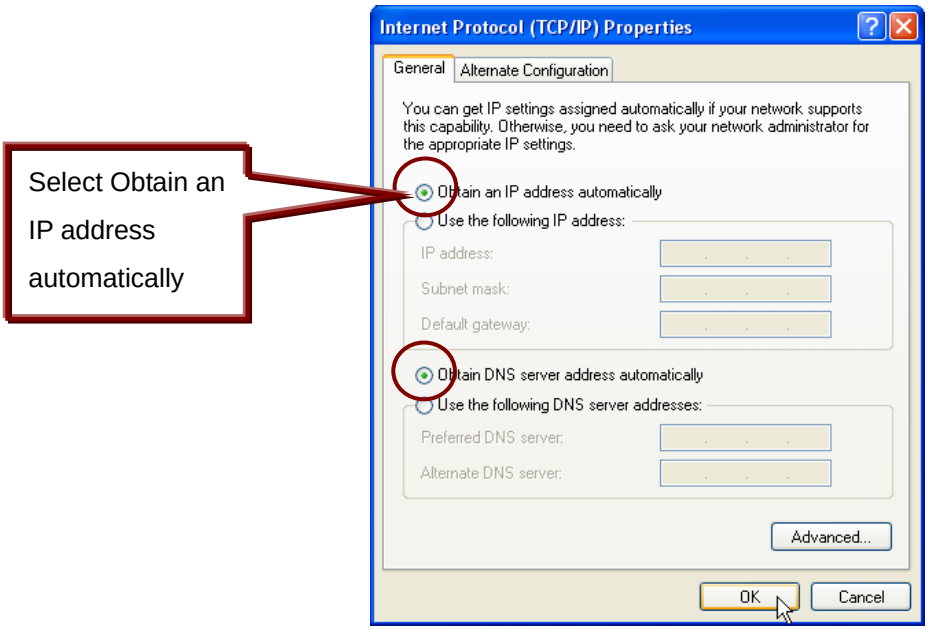
2. In the ***LAN or High-Speed Internet*** window, right-click on icon corresponding to your network interface card (NIC) and select ***Properties***.(This icon may be labeled Local Area Connection).



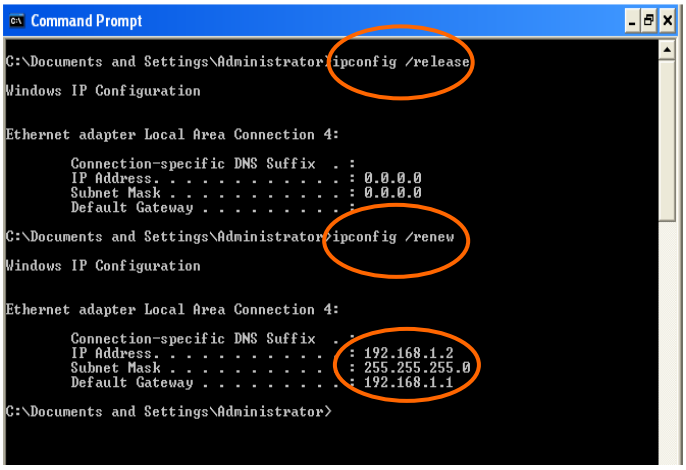
3. In the ***General*** Tab of the ***Local Area Connection Properties*** menu. Highlight ***Internet Protocol (TCP/IP)*** under “This connection uses the following items.” by click on it once. Click on the ***Properties*** button.



4. 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.

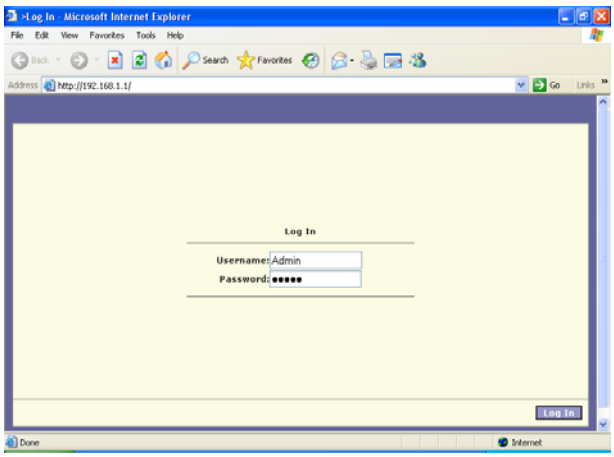


5. Release IP & Renew IP, then Check Default Gateway: ***192.168.1.1***.

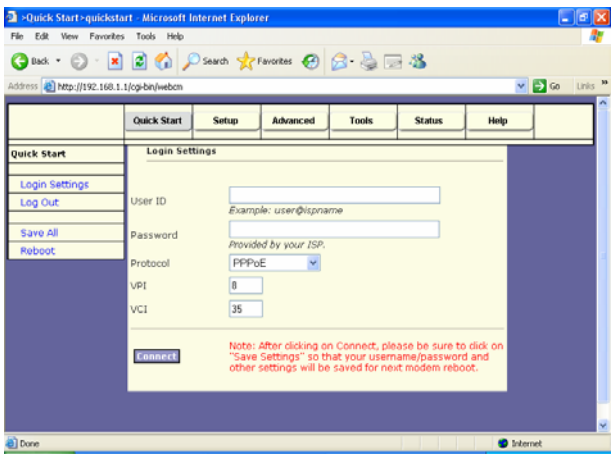


6. Launch your PC web browser and enter the URL: ***http://192.168.1.1***

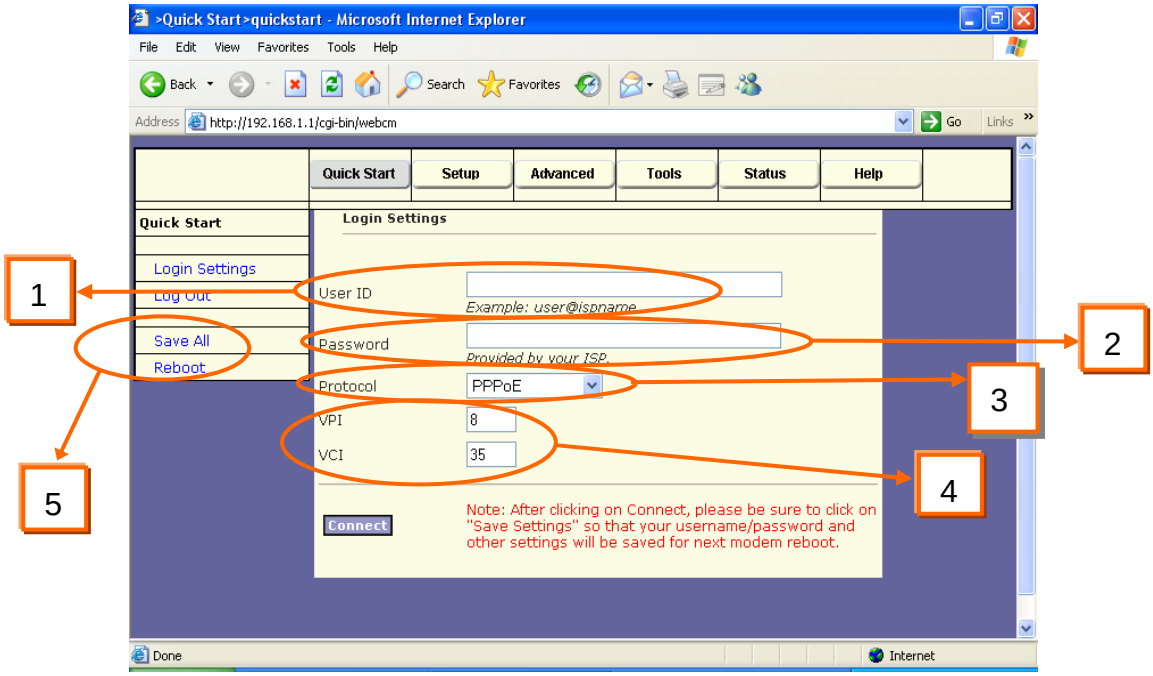
7. In the ***User name/Password*** prompt, please type in ***Admin/Admin*** as default.



8. After Login procedure the ***Quick Start*** page will appear.



9. Please follow the steps to setting your machine, after setup procedure. You can enjoy the internet immediately.



1. Enter the **User ID**.
2. Enter the **Password**.
3. Select **Protocol** from the list.
4. Enter the **VPI/VCI** Value.
5. Click **Save All** and **Reboot**.

Advanced Setup

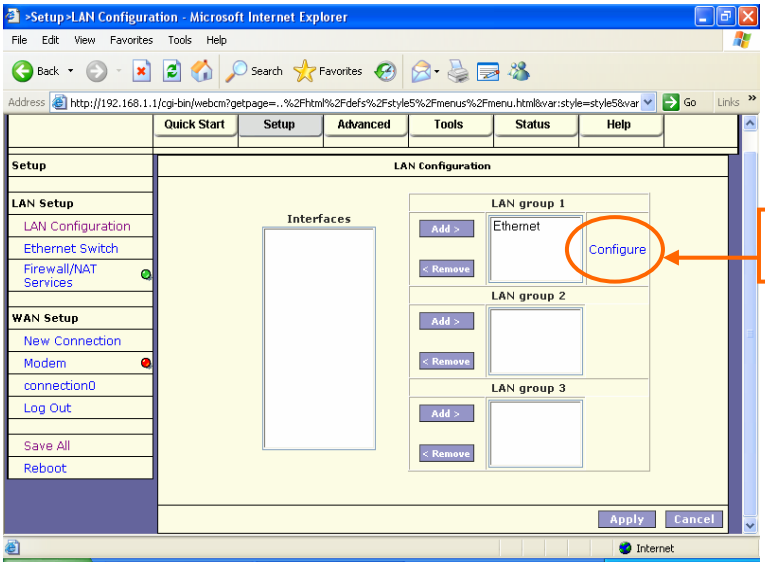
Setup

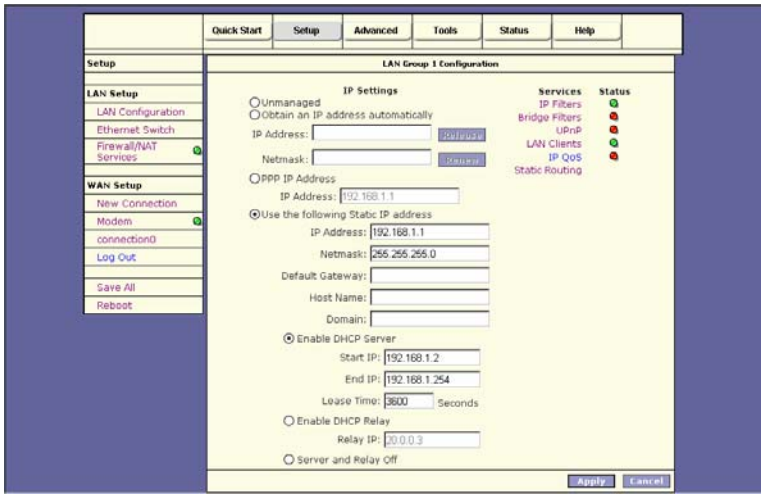
The Setup section allows you to create new connections, edit existing connections, and configure other basic settings.

LAN Setup

LAN Configuration

The following is displayed LAN Setup.





IP Address: Private IP address for connecting to a local private network (Default: 192.168.1.1).

Netmask: Netmask for the local private network (Default: 255.255.255.0).

Default Gateway: This field is optional. Enter in the IP address of the router on your network.

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

Domain Name: www.dynsns.org will provide you with a Domain Name. Enter this name in the “Domain Name” field.

Enable DHCP Server: Enable or Disable DHCP Server.

Start IP: Sets the start IP address of the IP address pool.

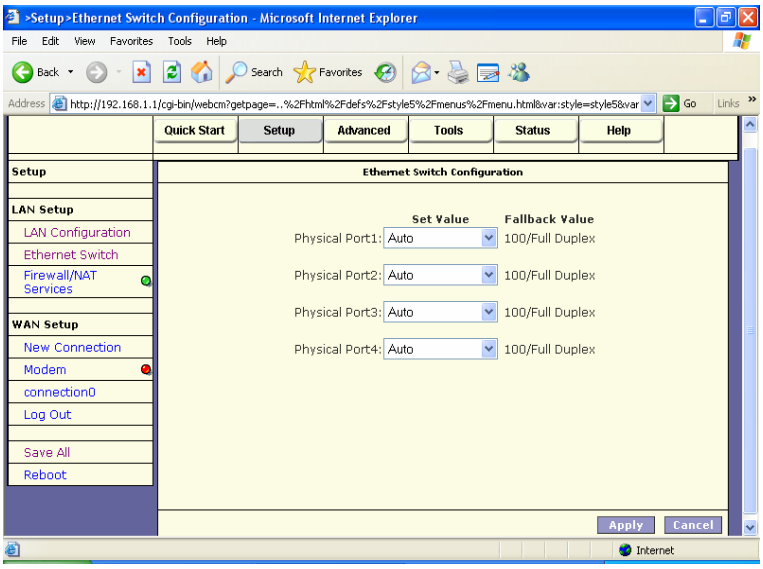
End IP: Sets the end IP address of the IP address pool.

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.

Apply: Click Apply to save the changes.

Ethernet Switch

This Ethernet Switch Configuration page allows you to set value for data transfer;



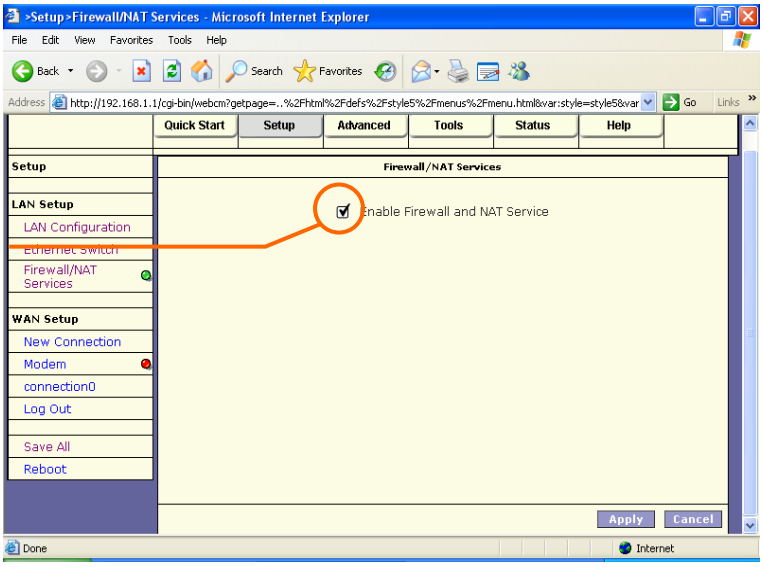
Physical Port: There are five kinds of mode for data transfer (Auto)(10/Half Duplex)(10/Full Duplex)(100/Half Duplex)(100/Full Duplex).

Apply: Click Apply to save the changes.

Firewall/NAT Services

This page allow you Enable or Disable Firewall and NAT Service

Click here to Enable or Disable this function.

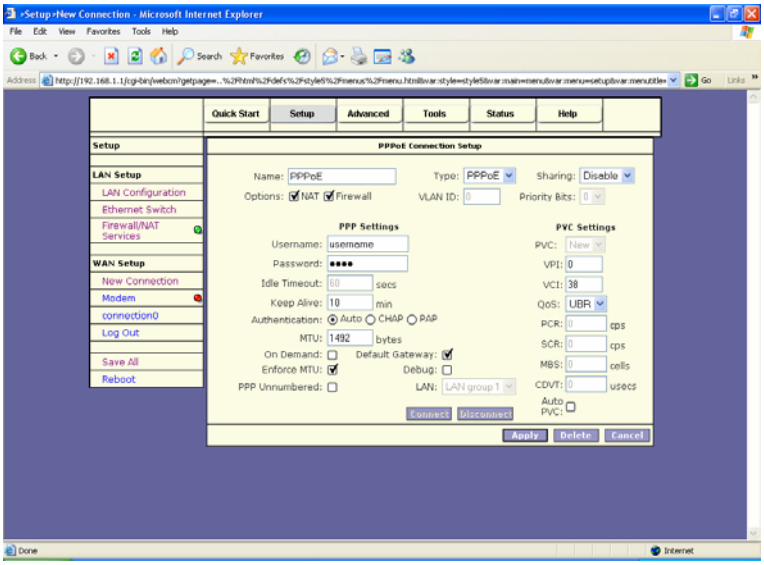


Apply: Click Apply to save the changes.

WAN Setup

New Connection

When working with wide area connections, the first thing you must do is to have the handle of the connection. Once you have the handle for a Connection you must define the PVC and protocol settings for it.



Name: Enter the name of your ISP. This information is for identification purposes only.

Type: There six kinds of method (PPPoE/ PPPoA/ Static/ DHCP/ Bridge/ CLIP).

PPP Settings

Encapsulation: Select you encapsulation type. (Supplied by your ISP).

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

Idle Timeout: Idle timeout means the router will disconnect after being idle for a preset amount of time. The default is 60 seconds. If you set the time to 0, the ISDN connection will remain always connected to the ISP.

Keep Alive: If mode is LCP, This is the Keep Alive timer. If a reply to the LCP echo is not received in this amount if time, the connection is dropped. The Default is 10.

Authentication: Set the required authentication protocol. (Auto/ CHAP/ PAP)

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.

PVC Settings

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 = **0**.

QoS: Quality of Service type. Select CBR (Continuous Bit Rate) to specify fixed

(always-on) bandwidth for voice or data traffic. Select UBR (Unspecified Bit Rate) for applications that are non-time sensitive, such as e-mail. Select VBR (Variable Bit Rate) for burst traffic and bandwidth sharing with other applications.

PCR: Divide the DSL line rate (bps) by 424 (the size of an ATM cell) to find the Peak Cell Rate (PCR). This is the maximum rate at which the sender can send cells.

SCR: The Sustain Cell Rate (SCR) sets the average cell rate (long-term) that can be transmitted.

Static Settings

Encapsulation: Select you encapsulation type. (Supplied by your ISP).

IP Address: Private IP address for connecting to a local private network (Default: 192.168.1.1).

Netmask: Netmask for the local private network (Default: 255.255.255.0).

Default Gateway: This field is optional. Enter in the IP address of the router on your network.

DNS: Sets the IP address of the DNS server.

Mode: Bridged and Routed

DHCP Settings

Encapsulation: Select you encapsulation type. (Supplied by your ISP).

IP Address: Private IP address for connecting to a local private network (Default: 192.168.1.1).

Bridge Settings

Encapsulation: Select you encapsulation type. (Supplied by your ISP).

CLIP Settings

IP Address: Private IP address for connecting to a local private network (Default: 192.168.1.1).

Netmask: Netmask for the local private network (Default: 255.255.255.0).

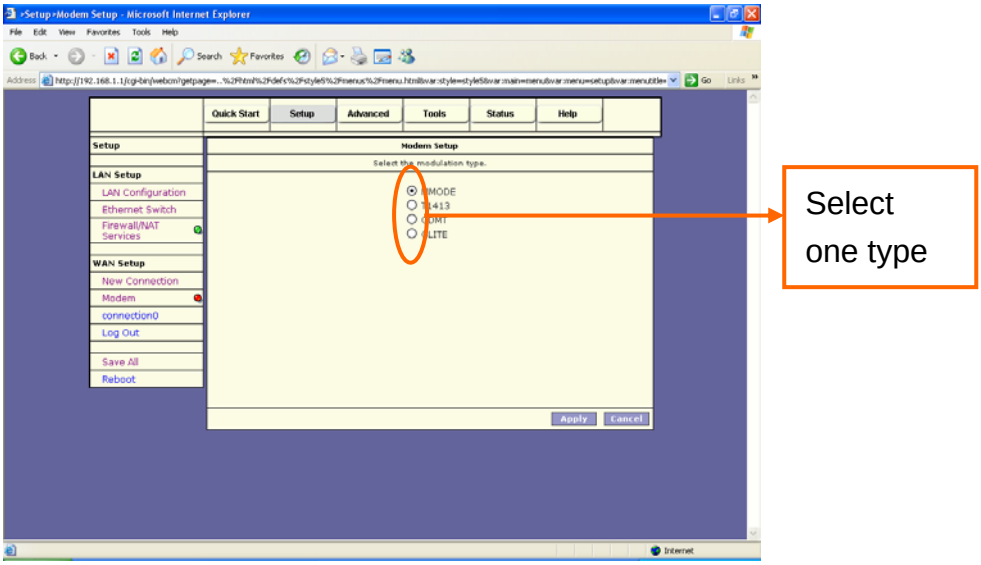
ARP Server: Translating an IP address to an ATM address.

Default Gateway: This field is optional. Enter in the IP address of the router on your network.

Apply: Click Apply to save the changes.

Modem

This page allow you Select ADSL Transmission Type.



T1413: Full-Rate (ANSI T1.413 Issue 2) with line rate support of up to 8 Mbps downstream and 832 Kbps upstream.

GDMT: Full-Rate (G.dmt, G992.1) with line rate support of up to 8 Mbps downstream and 832 Kbps upstream.

GLITE: G.lite (G.992.2) with line rate support of up to 1.5 Mbps downstream and 512 Kbps upstream.

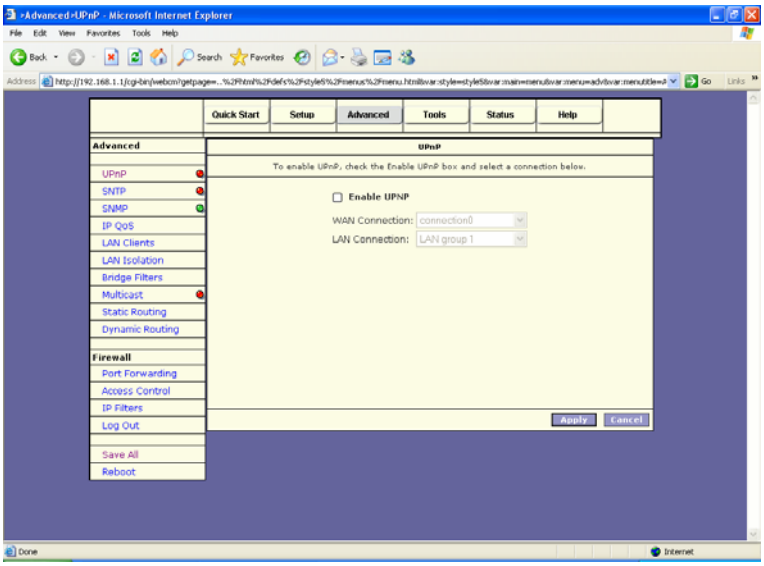
MMODE: Support Multi-Mode standard (ANSI T1.413 Issue 2; G.dmt(G.992.1); G.lite(G.992.2)).

Apply: Click Apply to save the changes.

ADVANCED

UPnP

Universal Plug and Play (UPnP) is a distributed, open networking standard that uses TCP/IP for simple peer-to –peer network connectivity between devices a UPnP device can dynamically join a network, obtain and IP address, convey is capabilities and learn about other devices on the network. In turn, a device can leave a network smoothly and automatically when it is no longer in use.

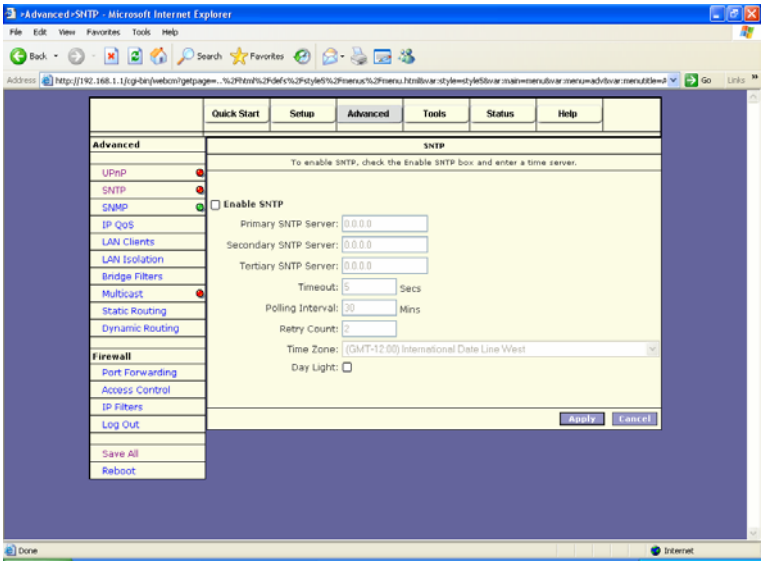


Enable UPNP: Enable the UPnP.

Apply: Click Apply to save the changes.

SNTP

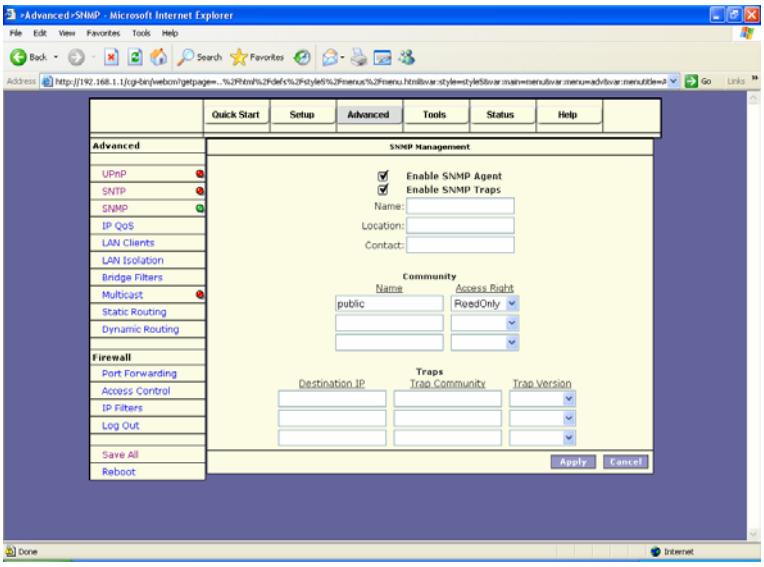
The Router keeps time by connecting to a Simple Network Time Protocol (SNTP) server. This allows the Router to synchronize the system clock to the global Internet. The synchronized clock in the Router is used to record the security log and control client filtering.



Primary SNTP Server: Enter the SNTP Server address. Default is 0.0.0.0.
Secondary SNTP Server: Enter the SNTP Server address. Default is 0.0.0.0.
Tertiary SNTP Server: Enter the SNTP Server address. Default is 0.0.0.0.
Timeout: Timeout (secs) for response to SNTP request.
Polling Interval: Time interval (min) between two successful SNTP requests.
Retry Count: Max. no of failed sntp requests to a server.
Time Zone: Time zone of the location.
Day Light: Daylight savings feature enabled (1) or disabled (0). Default disabled.
Apply: Click Apply to save the changes.

SNMP

The Simple Network Management Protocol (SNMP) let a network administrator monitor on a network by retrieving settings on remote network devices. Network administrator typically runs an SNMP management station program such as MIB browser on a local host to obtain information from an SNMP agent such as the router you use now.



Name: Enter information about the system name in the system contact field.

Location: Enter information about the system contact person in the system contact field.

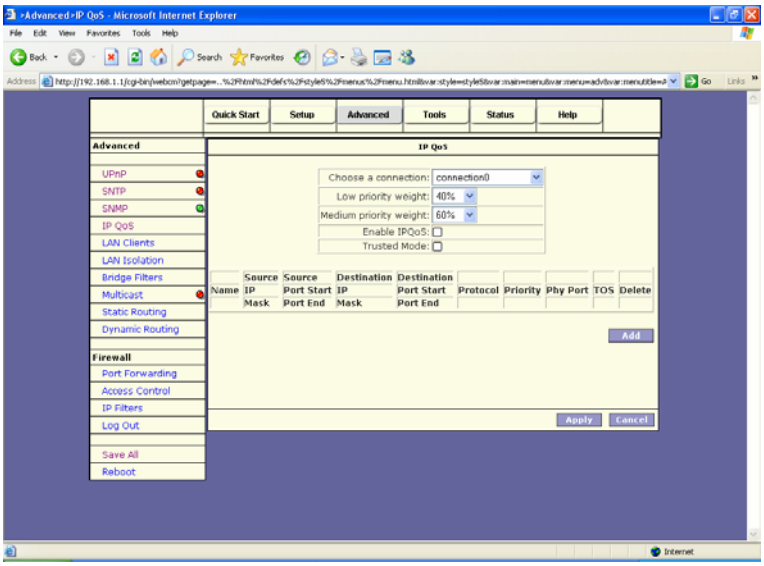
Contact: Enter information about the system contact person in the system contact field.

Vendor OID: The enterprise OID to which the system belongs to.

Apply: Click Apply to save the changes.

IP QoS

The NSP will honor the ToS bits of an IP Packet if the user set by an application. If the ToS bits are set, the NSP will assign the IP packets to one of three queues associated with a Wide Area Network Interface.



Choose a connection: Select a connection.

Low priority weight: Set the weight for Low priority queue.

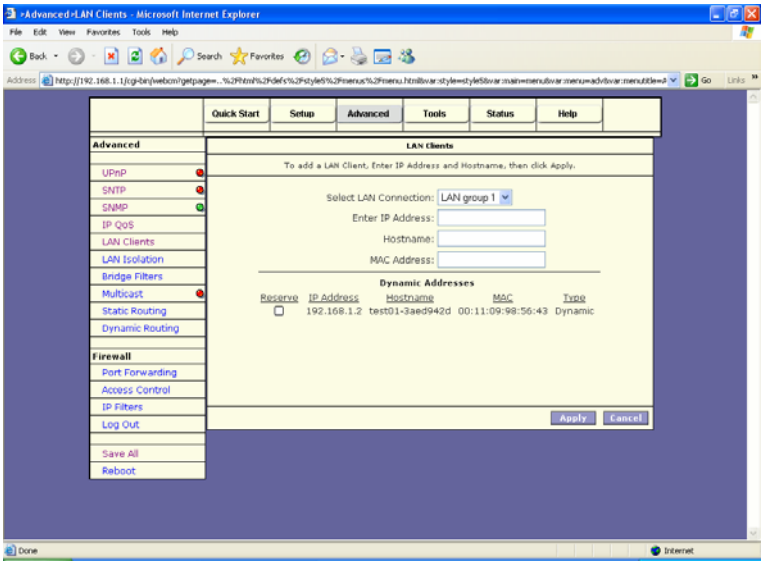
Medium priority weight: Set the weight for Medium priority queue.

Enable IPQoS: IP QoS Enabled or disabled.

Apply: Click Apply to save the changes.

LAN Clients

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



New IP Address: Enter the IP Address.

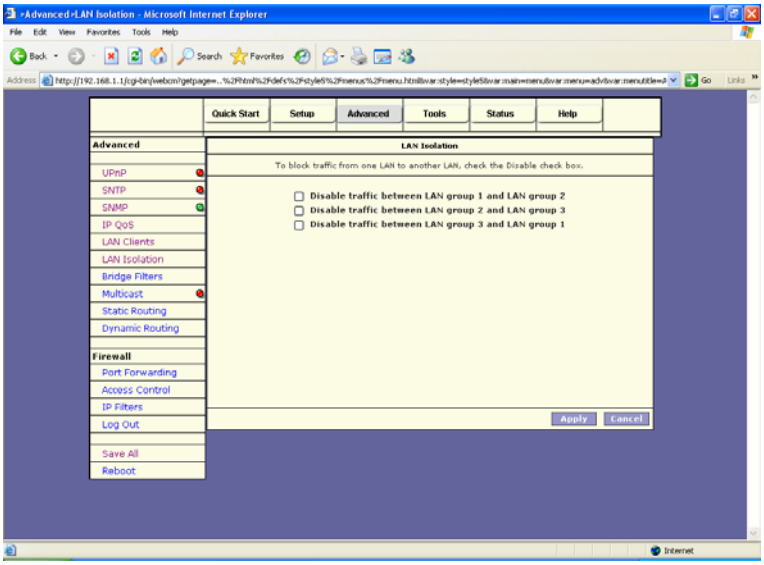
Hostname: Enter the Hostname.

MAC Address: Enter the MAC Address.

Apply: Click Apply to save the changes.

LAN Isolation

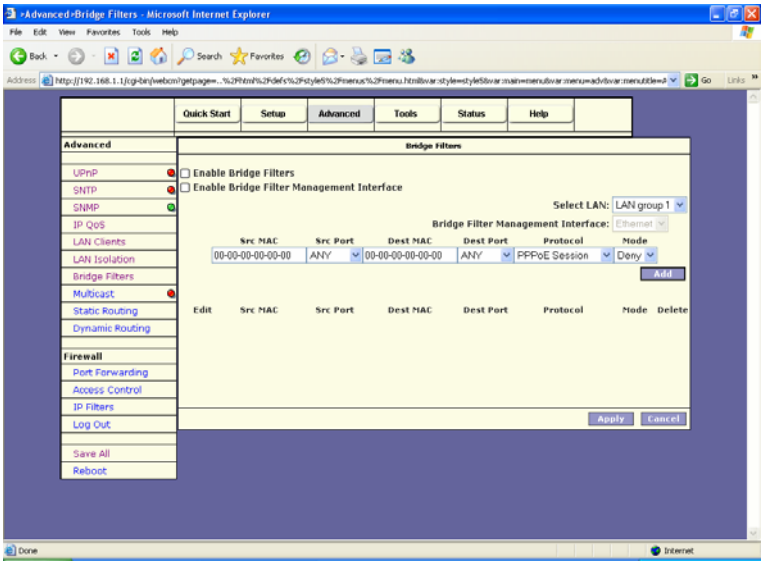
The LAN Isolation page allows you to block traffic from one LAN to another LAN.



Apply: Click Apply to save the changes.

Bridge Filters

The bridge filtering page allows users to set the configuration of IP filtering.



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.

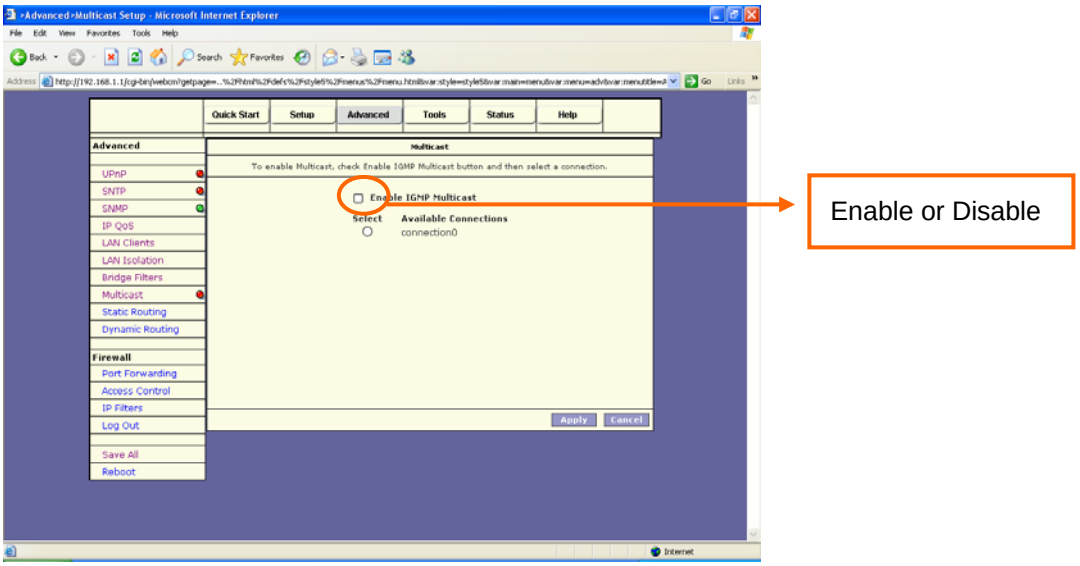
Destination MAC: When the bridge filtering is enabled, enter the Destination MAC address, select **Block** and click **Add.** Then all incoming WAN and LAN Ethernet packets matched with this destination MAC address will be filtered out. If the **Forward** is selected, then the packets will be forwarded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

Type: Enter the hexadecimal number for the Ethernet type field in Ethernet_II packets. For example, 0800 is for IP protocol.

Apply: Click Apply to save the changes.

Multicast

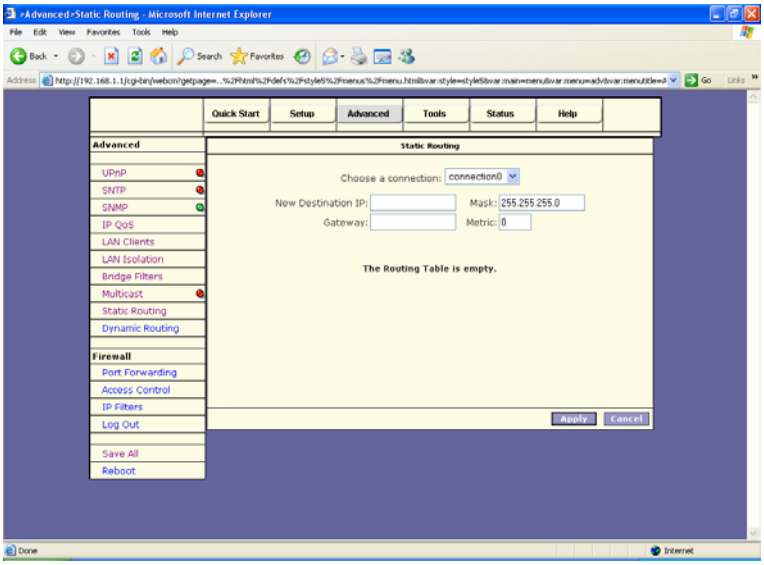
The NSP is capable of proxying for applications that are using multicast IP for accessing Video content. This application needs to be run when NAT is enabled.



Apply: Click Apply to save the changes.

Static Routing

The following queries manage the RIP routing application and static routing entries for the NSP. The RIP application supports both version 1 and 2.



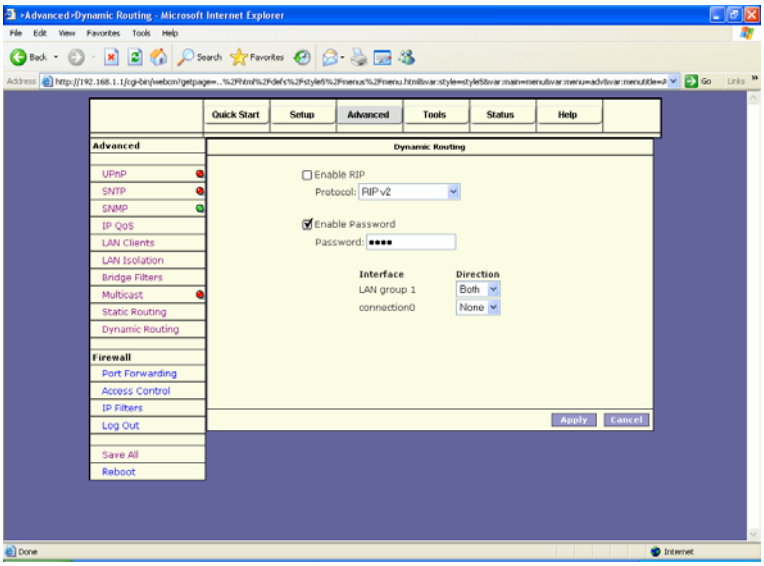
New Destination IP: Enter the New Destination IP.

Gateway: Enter the IP Address of the Gateway.

Apply: Click Apply to save the changes.

Dynamic Routing

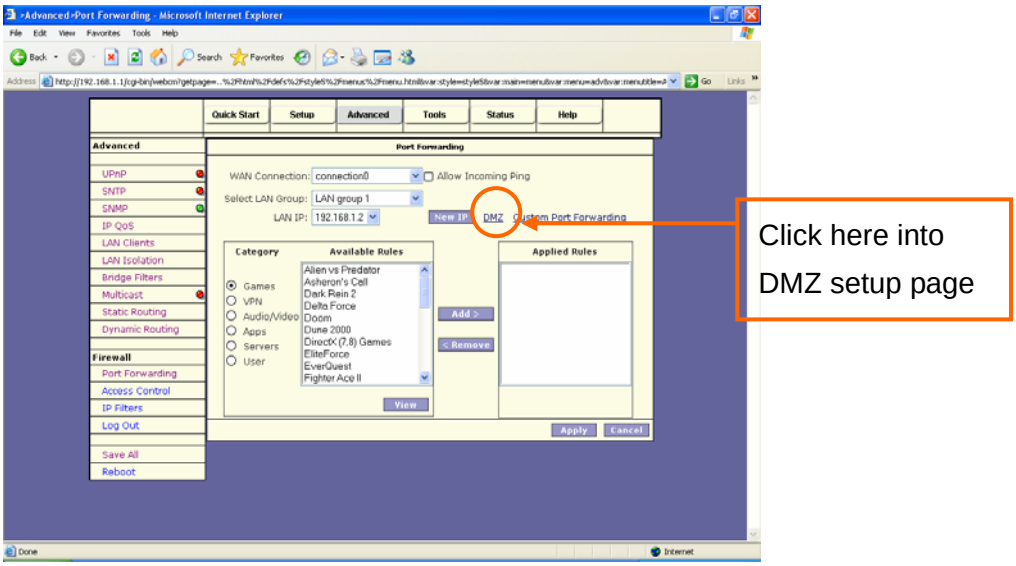
The following queries manage the RIP routing application and static routing entries for the NSP. The RIP application supports both version 1 and 2.



Apply: Click Apply to save the changes.

Port Forwarding

The Port Forwarding page allows the user define a port forwarding rule without using the firewall policy database definitions and apply it to the connection.

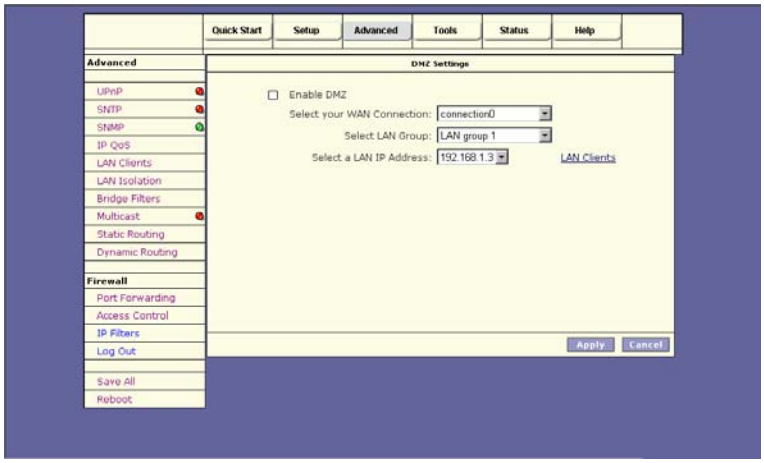


Choose a connection: You can choose a connection to do this.
LAN IP: type your LAN IP. For example 192.168.1.2.

Apply: Click Apply to save the changes.

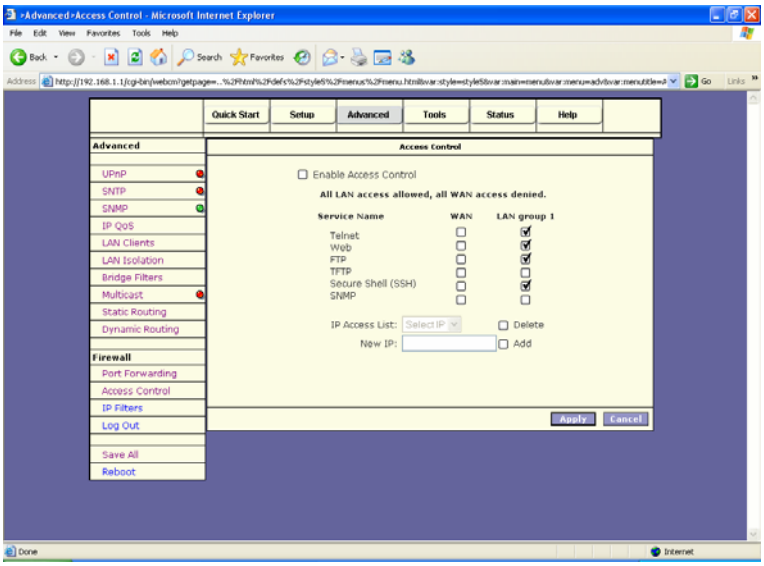
DMZ

This DMZ Settings page allows you Enable or Disable this function.



Access Control

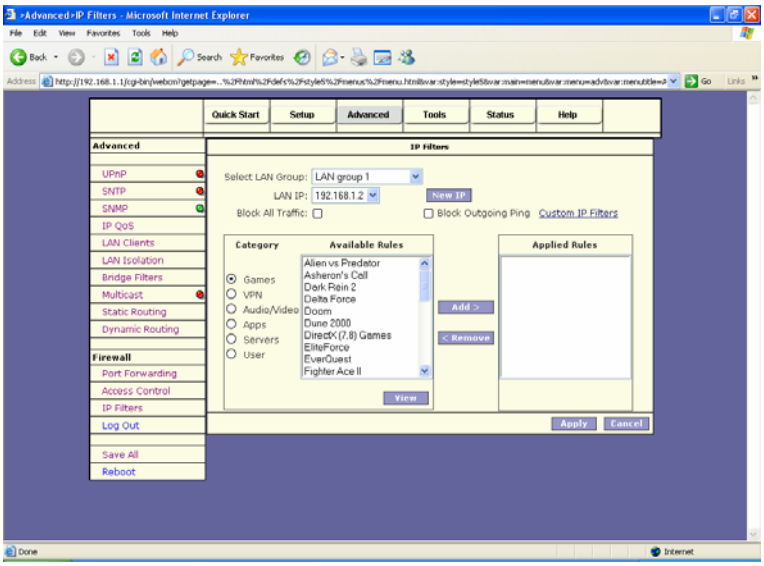
Access Control allows users to define the outgoing traffic permitted or denied access through the WAN interface.



Apply: Click Apply to save the changes.

IP Filter

The IP Filter function helps protect your local network against attack from outside. It also provides a method of restricting users on the local network from accessing the Internet. Additionally, it can filter out specific packets to trigger the router to place an outgoing connection.



LAN IP: Select your LAN IP. For example 192.168.1.2.

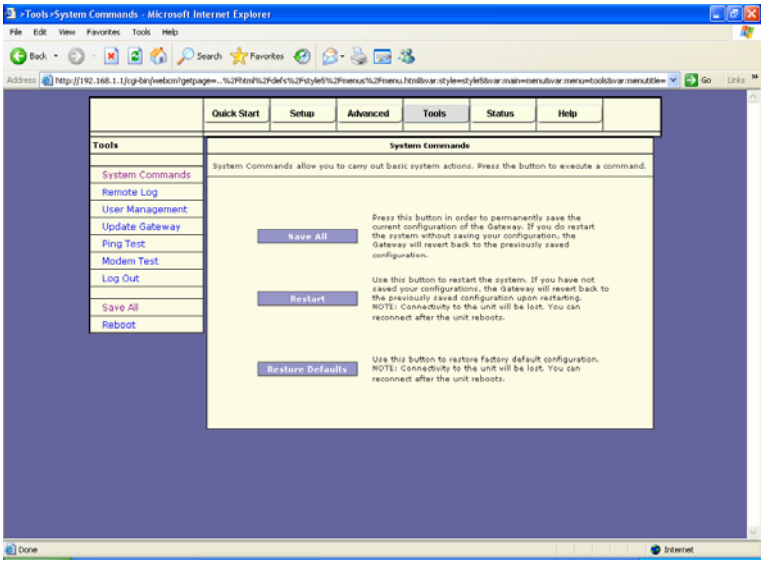
Apply: Click Apply to save the changes.

TOOLS

The Tools section allows you to save the configuration, restart the gateway, update the gateway firmware, setup user and remote log information and run Ping and Modem tests.

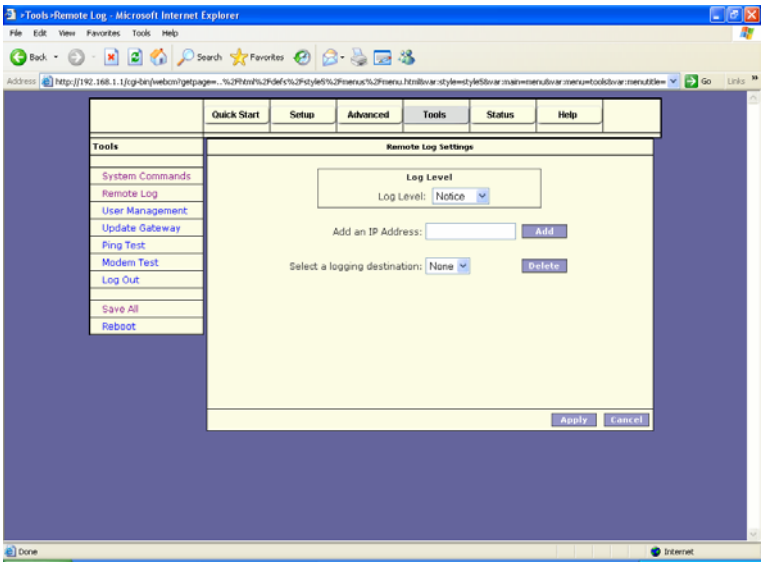
System Commands

System Commands allow you to carry out basic system actions, Press the button to execute a command.



Remote Log

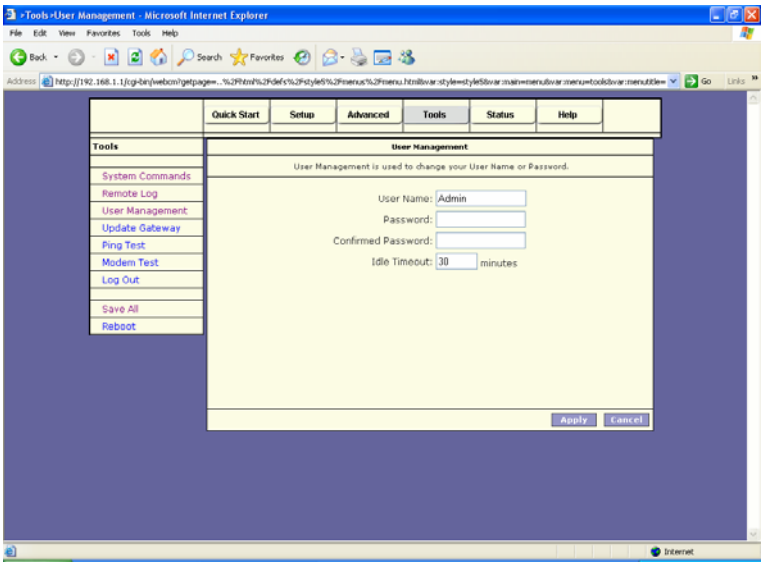
The Router Table page displays routing table and allows the user to manually enter the routing entry. The routing table will display the routing status of Destination, Netmask, Gateway and Interface. The interface br0 means the USB interface; lo0 means the loopback interface and ppp1 means the PPP interface.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



Apply: Click Apply to save the changes.

User Management

User Management is used to change your User Name or Password.



User Name: Default is ‘Admin’.

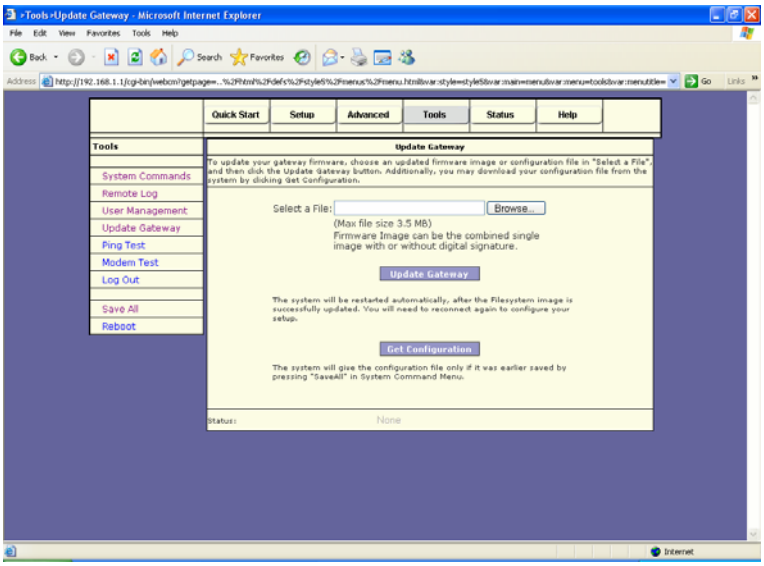
Password: Default is ‘Admin’.

Apply: Click Apply to save the changes.

Update Gateway

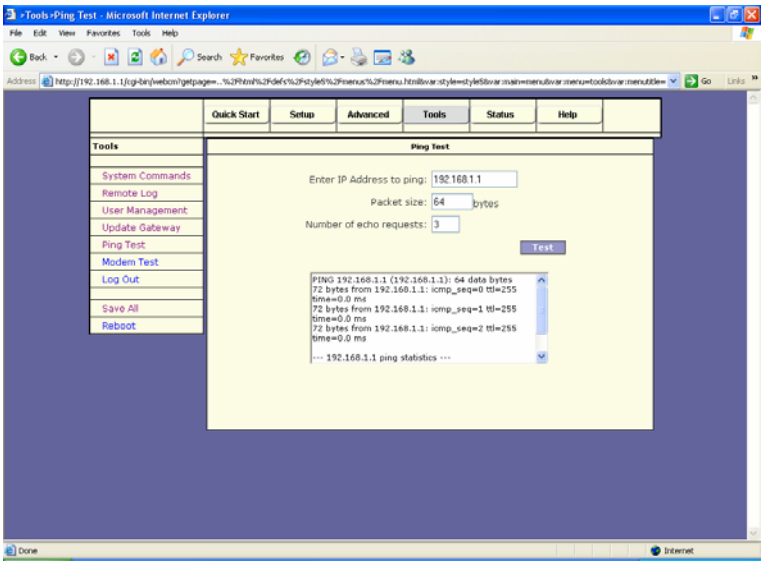
To update your gateway firmware, choose an update image (Kernel/ File system) or configuration file In Select a File, and then click the Update Gateway button.

Additionally, you may download your configuration file from the system by clicking Get Configuration.



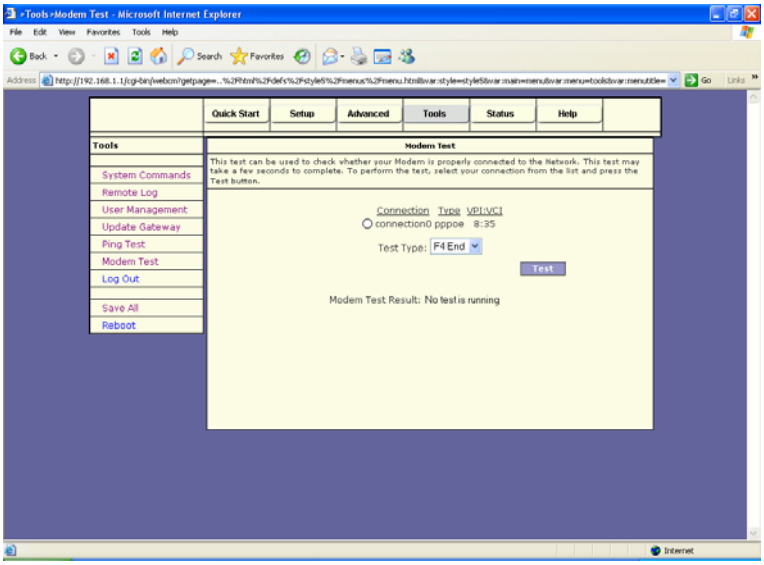
Ping Test

Packet INternet Groper is protocol that sends out ICMP echo requests to test whether or not a remote host is reachable.



Modem Test

This test can be used to check whether your Modem is properly connected to the Network. This test may take a few seconds to complete. To perform the test, select your connection from the list and press the Test button.

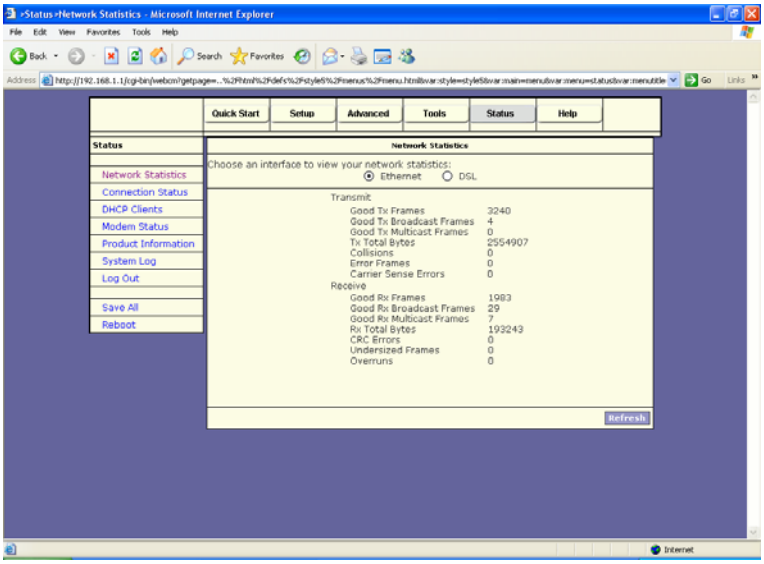


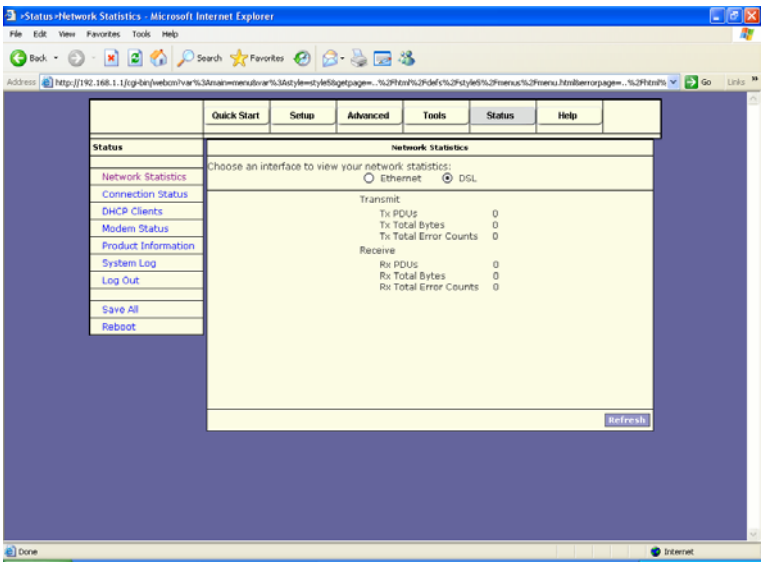
STATUS

The Status section allows you to view the Status/Statistics of different connections and interfaces.

Network Statistics

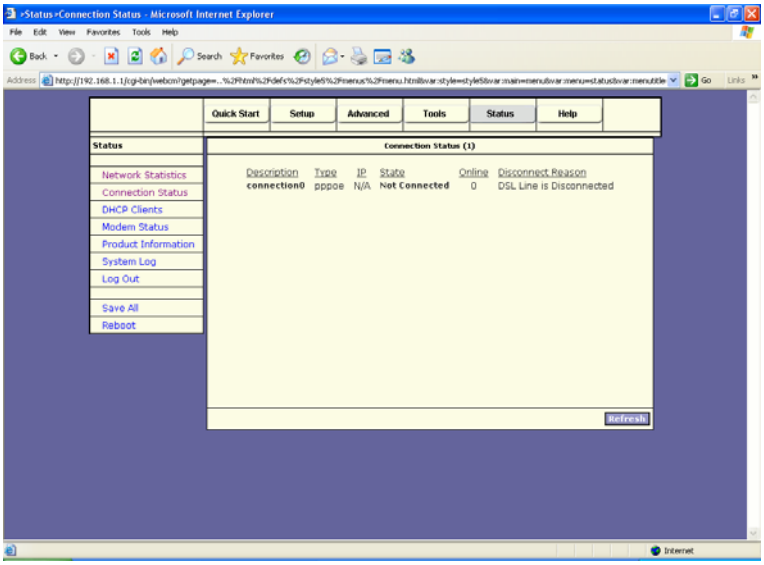
The Ethernet Network Statistics page shows the statistics for the Ethernet connection.
The DSL Network Statistics page shows the statistics for the DSL connection.
The Wireless Network Statistics page shows the statistics for the Wireless connection.





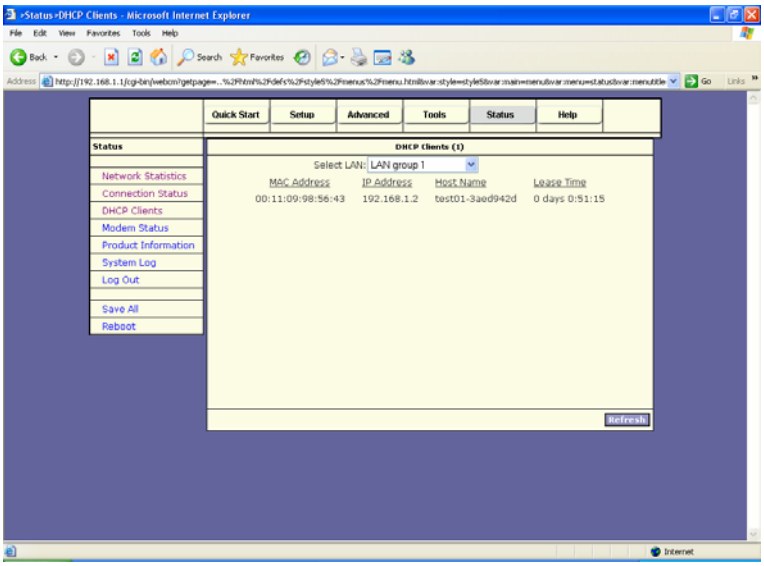
Connection Status

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



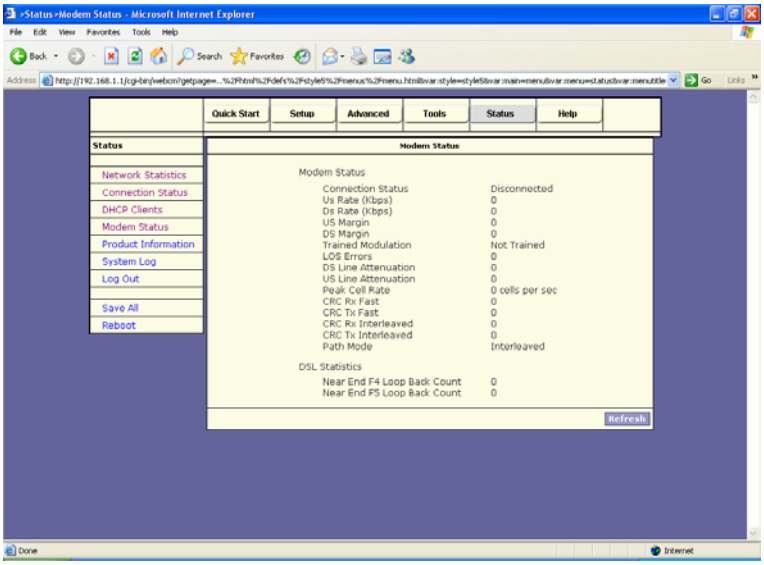
DHCP Clients

The DHCP Clients page shows the MAC Address, IP Address, Host Name and Lease Time.



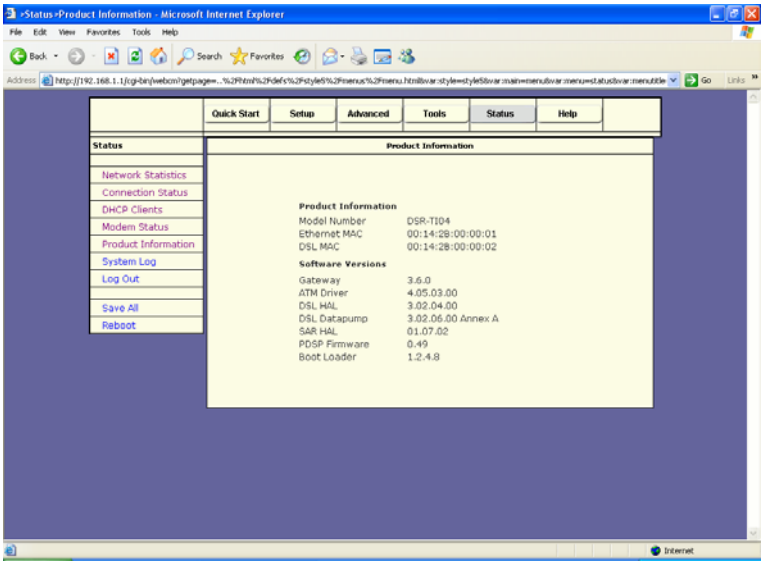
Modem Status

The Modem Status page shows the modem status and DSL statistics.



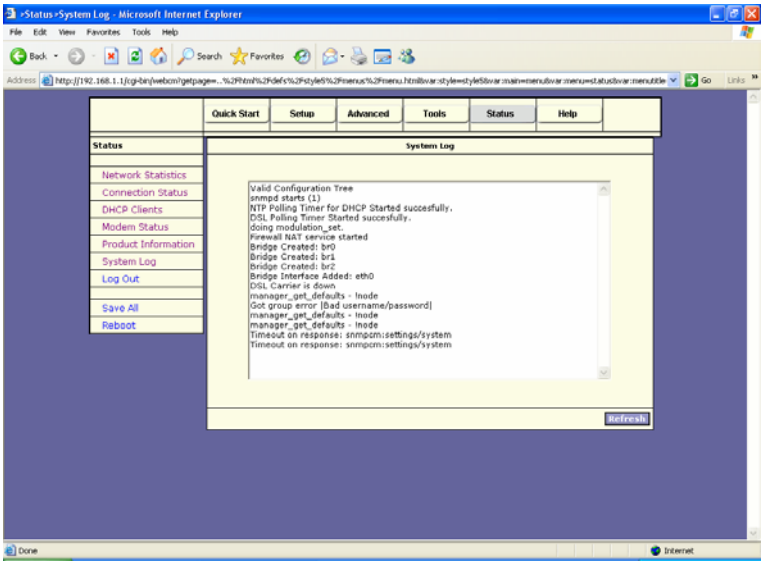
Product Information

The Product Information page shows the product information and software versions.



System Log

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

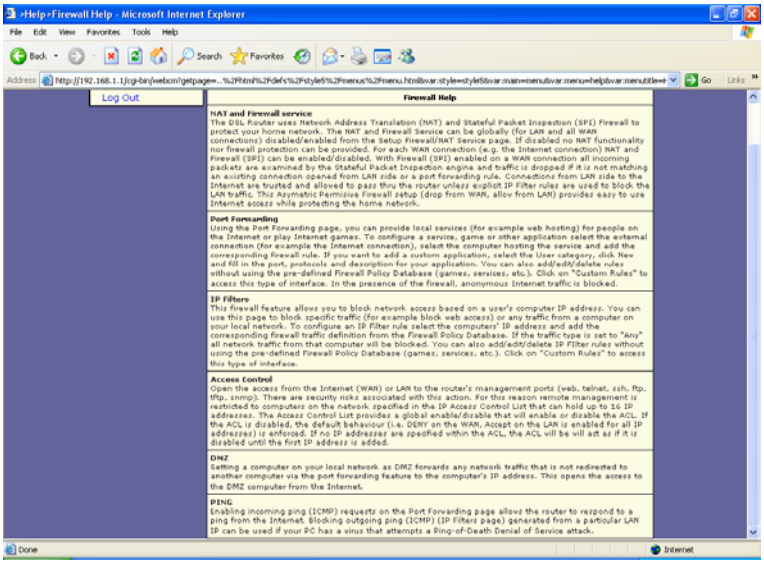


HELP

This section takes you to different Help Sections for Firewall, Bridge Filters, LAN Clients and PPP Connection.

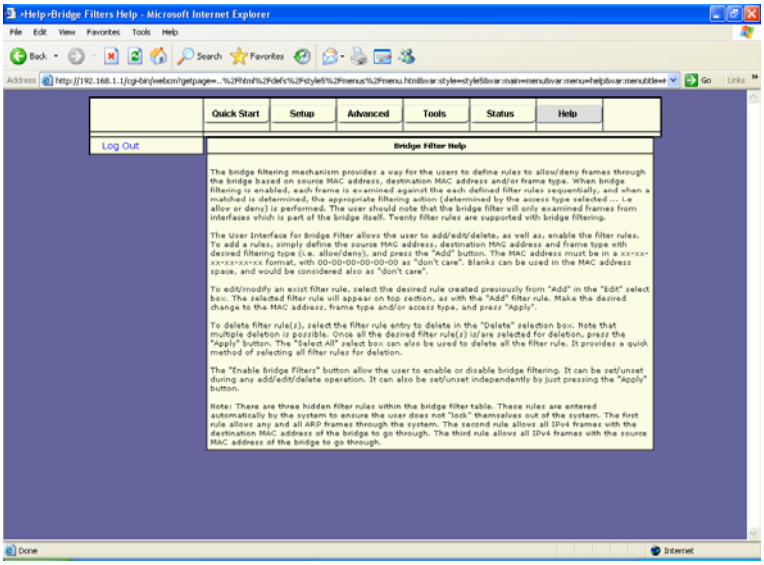
Firewall Help

Help for Port Forwarding, Access Control, and Advanced Security.



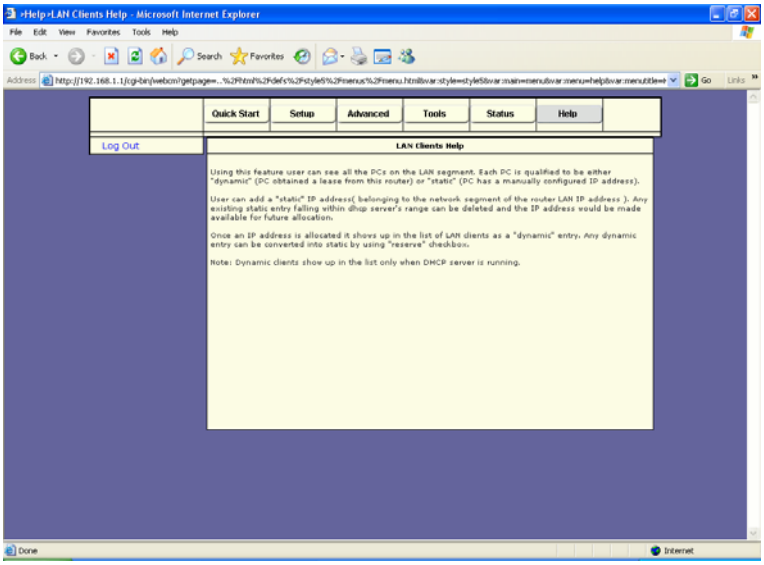
Bridge Filter Help

Help section for Bridge Filters.



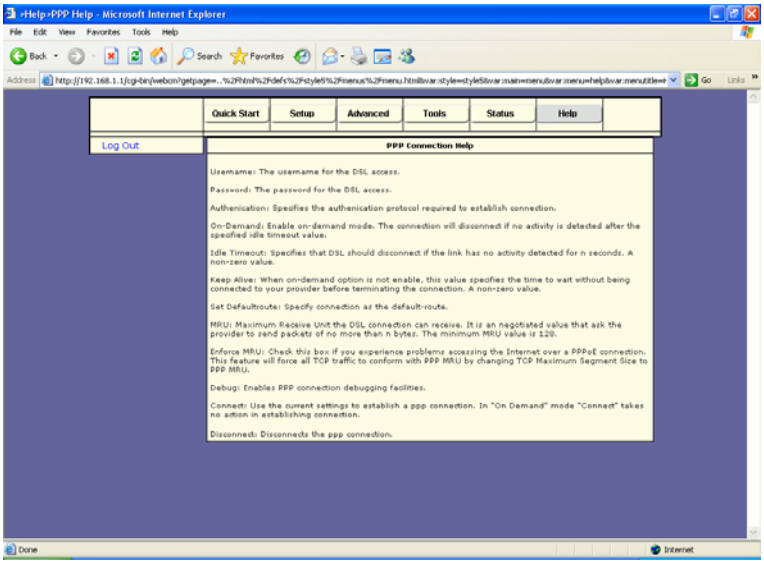
LAN Clients

Help section for LAN Clients.



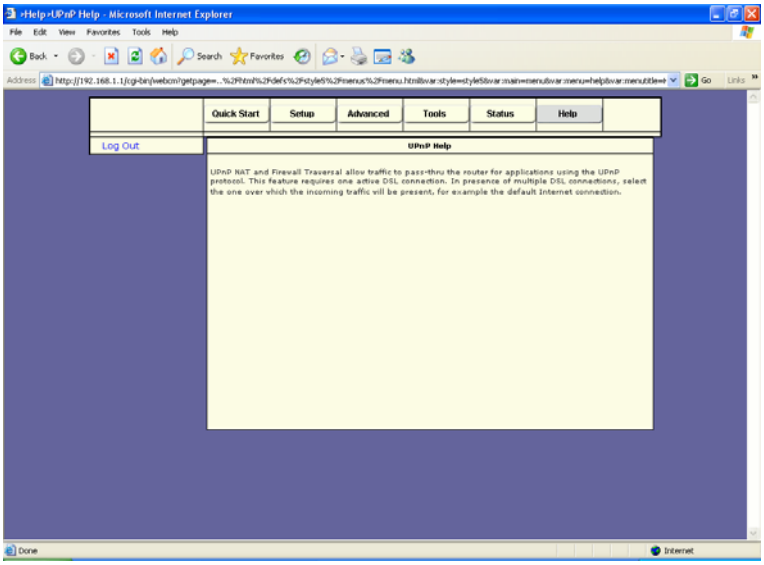
PPP Connection

Help for establishing a PPP Connection.



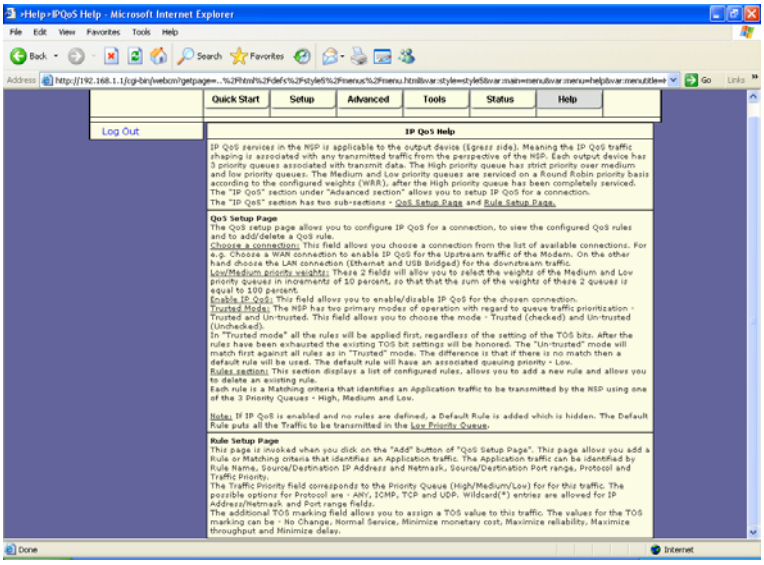
UPnP Help

Help pages for UPnP.



IP QoS Help

Help section for IP QoS.



Appendix

Country	ISP	PVC
Australia	All Internet providers	VPI:8
		VCI:35
Belgium		VPI:0
		VCI:33
Canada	Telus	VPI:0
		VCI:35
Danmark	Cybercity	VPI:8
		VCI:35
	Tiscali	VPI:8
		VCI:35
Deutschland	1 & 1 Internet DSL	VPI:1
		VCI:32
	AOL DSL	VPI:1
		VCI:32
	Arcor DSL	VPI:8
		VCI:35
	Freenet DSL	VPI:1
		VCI:32
	Fireline networks	VPI:1
		VCI:32
	GMX Internet	VPI:1
		VCI:32
	Hansenet	VPI:8
		VCI:35
	Netcologne	VPI:8
		VCI:35
	Schlund	VPI:1
		VCI:35
	Snafu ADSL	VPI:1
		VCI:32
	Tiscali	VPI:1
		VCI:32
	T-online	VPI:1
		VCI:32
	Anderer Anbieter	VPI:1
		VCI:32

Country	ISP	PVC
France	Wannadoo	VPI:8
		VCI:35
	Tiscali	VPI:8
		VCI:35
ISRAEL	KPN PPPoE LLC	VPI:8
		VCI:48
Italian	Telecom Italia	VPI:8
		VCI:35
	Rest oil presente	VPI:8
		VCI:35
Netherlands	KPN PPPoA VC-MuX	VPI:8
		VCI:48
	BBeyond Bridge LLC	VPI:0
		VCI:33
	BBeyond PPPoA VC-MuX	VPI:0
		VCI:35
New Zealand	New Zealand Telecom	VPI:0
		VCI:100
Portugal	Todos os apresentador	VPI:0
		VCI:35
Spanish	Albura	VPI:1
		VCI:32
	Colt Teeccom	VPI:0
		VCI:35
	Earth	VPI:8
		VCI:32
Spanish	Eresmas	VPI:8
		VCI:35
	Jazztel	VPI:8
		VCI:35
	Ola Internet	VPI:8
		VCI:35
	Retevision	VPI:0
		VCI:35
	Terra	VPI:8
		VCI:32
	Tiscali	VPI:1
		VCI:32
	Telefornica	VPI:8
		VCI:32
	Telepac	VPI:8
		VCI:35
	Uni2	VPI:1
		VCI:33
	Ya.com	VPI:8
		VCI:32
	Wanadoo	VPI:8
		VCI:32

Country	ISP	PVC
Suomi	Island ssimi	VPI:0
		VCI:35
	Landssimi	VPI:8
		VCI:48
	Vortex	VPI:8
		VCI:48
Switserland	Alle anbieter	VPI:1
		VCI:32
Sverige	Skanova	VPI:8
		VCI:35
Taiwan	Hinet	VPI:0
		VCI:33
	Seednet	VPI:0
		VCI:33
United Arab Emirates	Etisalat Classical IP Single User	VPI:8
		VCI:35
	Etisalat Classical IP for Business	VPI:8
		VCI:35
United Kingdom	British Telecom	VPI:0
		VCI:38