

User's Manual

802.11n Wireless ADSL 2/2+ Router

▶ **ADN-4101**



Copyright

Copyright © 2013 by PLANET Technology Corp. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of PLANET.

PLANET makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not PLANET, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, PLANET reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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:

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

FCC Caution

To assure continued compliance, use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this Device must accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity (R&TTE). The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) as of April 8, 2000.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

WEEE Regulation



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Revision

User's Manual for 802.11n Wireless ADSL 2/2+ Router
Model: ADN-4101
Rev: 2.0 (July. 2013)
Part No. EM-ADN4101_v2

National restrictions

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below:

Country	Restriction	Reason/remark
Bulgaria	None	General authorization required for outdoor use and public service.
France	Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012.
Italy	None	If used outside of own premises, general authorization is required.
Luxembourg	None	General authorization required for network and service supply (not for spectrum)
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund.
Russian Federation	None	Only for indoor applications

EC Declaration of Conformity

English	Hereby, PLANET Technology Corporation declares that this 802.11n Wireless ADSL 2/2+ Router is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	Lietuviškai	Šiuo PLANET Technology Corporation , skelbia, kad 802.11n Wireless ADSL 2/2+ Router tenkina visus svarbiausius 1999/5/EC direktyvos reikalavimus ir kitas svarbias nuostatas.
Česky	Společnost PLANET Technology Corporation , tímto prohlašuje, že tato 802.11n Wireless ADSL 2/2+ Router splňuje základní požadavky a další příslušná ustanovení směrnice 1999/5/EC.	Magyar	A gyártó PLANET Technology Corporation , kijelenti, hogy ez a 802.11n Wireless ADSL 2/2+ Router megfelel az 1999/5/EK irányelv alapkövetelményeinek és a kapcsolódó rendelkezéseknek.
Dansk	PLANET Technology Corporation , erklærer herved, at følgende udstyr 802.11n Wireless ADSL 2/2+ Router overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF	Malti	Hawnhekk, PLANET Technology Corporation , jiddikjara li dan 802.11n Wireless ADSL 2/2+ Router jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Direttiva 1999/5/EC
Deutsch	Hiermit erklärt PLANET Technology Corporation , dass sich dieses Gerät 802.11n Wireless ADSL 2/2+ Router in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW)	Nederlands	Hierbij verklaart, PLANET Technology Corporation , dat 802.11n Wireless ADSL 2/2+ Router in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Eesti keeles	Käesolevaga kinnitab PLANET Technology Corporation , et see 802.11n Wireless ADSL 2/2+ Router vastab Euroopa Nõukogu direktiivi 1999/5/EC põhinõuetele ja muudele olulistele tingimustele.	Polski	Niniejszym firma PLANET Technology Corporation , oświadcza, że 802.11n Wireless ADSL 2/2+ Router spełnia wszystkie istotne wymogi i klauzule zawarte w dokumencie „Directive 1999/5/EC”.
Ελληνικά	<i>ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ, PLANET Technology Corporation, ΑΦΑΩΝΕΙ ΟΤΙ ΑΥΤΟ 802.11n Wireless ADSL 2/2+ Router ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΞΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ</i>	Português	PLANET Technology Corporation , declara que este 802.11n Wireless ADSL 2/2+ Router está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Español	Por medio de la presente, PLANET Technology Corporation , declara que 802.11n Wireless ADSL 2/2+ Router cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE	Slovensky	Výrobca PLANET Technology Corporation , týmto deklaruje, že táto 802.11n Wireless ADSL 2/2+ Router je v súlade so základnými požiadavkami a ďalšími relevantnými predpismi smernice 1999/5/EC.
Français	Par la présente, PLANET Technology Corporation , déclare que les appareils du 802.11n Wireless ADSL 2/2+ Router sont conformes aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	Slovensko	PLANET Technology Corporation , s tem potrjuje, da je ta 802.11n Wireless ADSL 2/2+ Router skladen/a z osnovnimi zahtevami in ustreznimi določili Direktive 1999/5/EC.
Italiano	Con la presente, PLANET Technology Corporation , dichiara che questo 802.11n Wireless ADSL 2/2+ Router è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	Suomi	PLANET Technology Corporation , vakuuttaa täten että 802.11n Wireless ADSL 2/2+ Router tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Latviski	Ar šo PLANET Technology Corporation , apliecina, ka šī 802.11n Wireless ADSL 2/2+ Router atbilst Direktīvas 1999/5/EK pamatprasībām un citiem atbilstošiem noteikumiem.	Svenska	Härmed intygar, PLANET Technology Corporation , att denna 802.11n Wireless ADSL 2/2+ Router står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

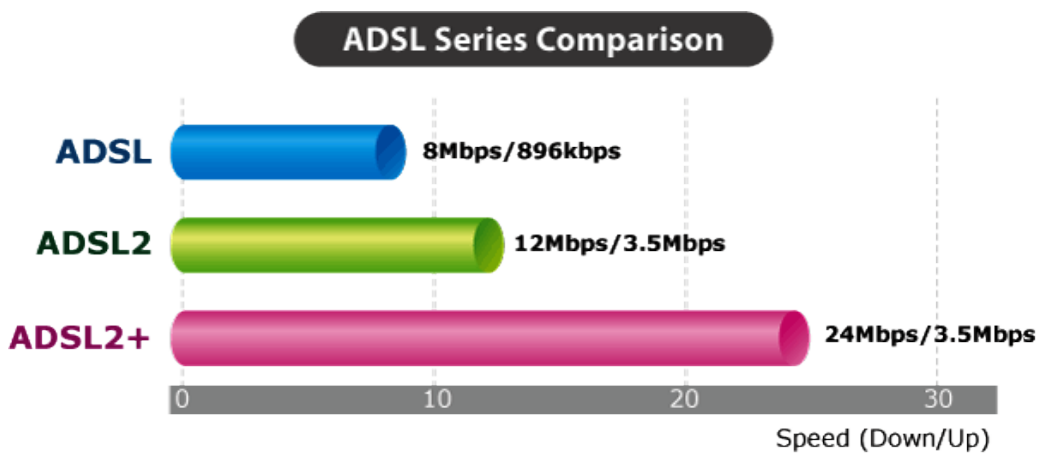
Contents

Chapter 1. Overview.....	2
1.1 Application.....	3
1.2 System Requirements	5
1.3 Features	6
1.4 Specifications	8
Chapter 2. Hardware Installation.....	11
Chapter 3. Web Configuration	12
3.1 Accessing the Router	12
3.2 Wizard	13
3.3 Status	20
3.3.1 Device Information	20
3.3.2 LAN	21
3.3.3 WLAN	21
3.3.4 WAN	22
3.3.5 Port Mapping	22
3.3.6 Statistics	23
3.3.7 ARP Table.....	24
3.4 Network	24
3.4.1 LAN.....	24
3.4.2 WAN	29
3.4.3 WLAN	34
3.5 Service	41
3.5.1 DNS	41
3.5.2 Firewall	42
3.5.3 UPNP.....	46
3.5.4 IGMP Proxy	46
3.5.5 TR-069	47
3.5.6 ACL	48
3.6 Advanced	49
3.6.1 Routing	49
3.6.2 NAT.....	51
3.6.3 Port Mapping.....	55
3.6.4 IP QoS	56
3.6.5 SNMP	57
3.6.6 Parent Control	57
3.6.7 Schedules Reboot.....	58
3.6.8 Others	59
3.7 Admin	60
3.7.1 Commit/Reboot.....	60
3.7.2 Update	60
3.7.3 Log	62
3.7.4 Password.....	62
3.7.5 Time.....	63
3.8 Diagnostic	63
3.8.1 Ping	63
3.8.2 Traceroute.....	64
3.8.3 OAM Loopback	64
3.8.4 ADSL Statistics.....	65
3.8.5 Diag-Test.....	65
Chapter 4. Q&A.....	66

Chapter 1. Overview

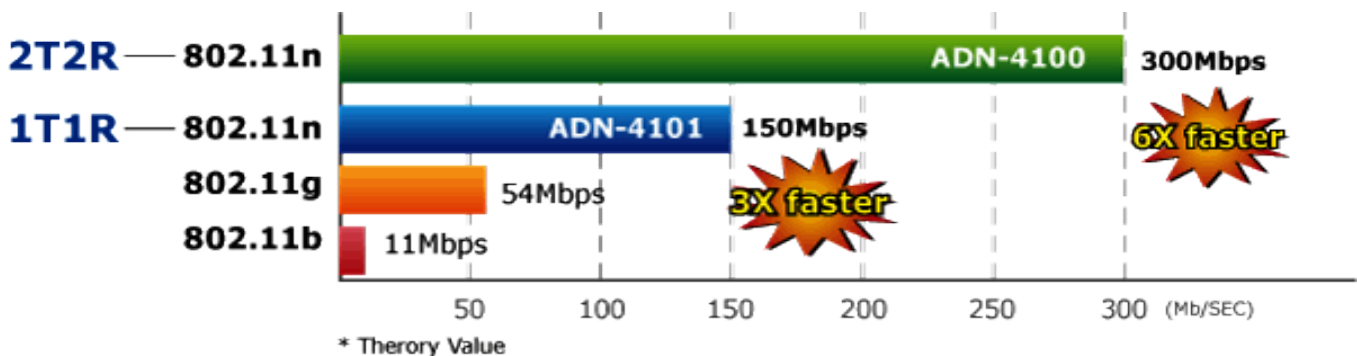
Improved Networking Function for Future IP Compatibility

PLANET ADN-4101 is a Wireless ADSL 2/2+ Router compliant with 802.11n and features 1T1R MIMO antenna technology. The ADN-4101 is the ideal solution for office and residential users to share a high-speed ADSL 2/2+ broadband Internet connection and four-10/100Mbps Fast Ethernet backbone. It can support transmission rates up to 24Mbps downstream and 3.5Mbps upstream with ADSL 2+ support. Through integration with single chipset to reduce boot time, the ADN-4101 offers more performance to users. The ADN-4101 supports PPPoA (RFC 2364 - PPP over ATM Adaptation Layer 5), RFC 2684 encapsulation over ATM (bridged or routed), PPP over Ethernet (RFC 2516), and IPoA (RFC1483) to establish a connection with ISP.



High-Speed 802.11n Wireless Type

With built-in IEEE 802.11b/g and 802.11n wireless network capabilities, the ADN-4101 allows any computer and wireless-enabled network device connecting it without additional cabling. New 802.11n wireless capability gives you the highest speed of wireless experience ever. With a compatible wireless card installed in your PC, any file can be transferred and the highest speed can be up to 150Mbps. The radio coverage is also doubled than before, which offers the high speed wireless connection even in a wide space of your office or house.



One-touch Secure Wireless Connection

To secure the wireless communication, the ADN-4101 features the most up-to-date encryptions, WEP, WPA-PSK and WPA2-PSK. The ADN-4101 also supports WPS configuration with PBC/PIN type for users to easily connect to a secure wireless network with no need of complicated settings.

Powerful Firewall and Complete Access Control Functions

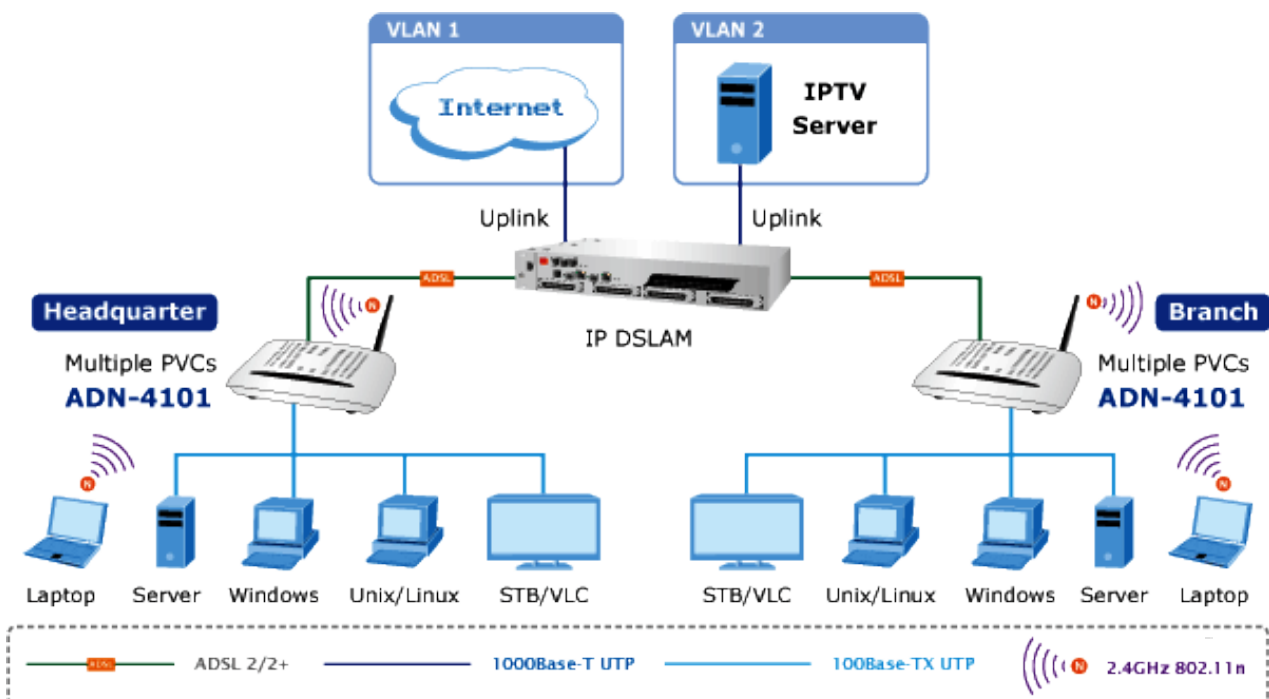
The ADN-4101 has user-friendly management interfaces so it can be managed by workstations running standard web browsers. It provides DHCP server, NAT, Virtual Server, DMZ, Access Control, IP Filter, DDNS, and UPnP capability. The ADN-4101 also serves as an Internet firewall to protect your network from being accessed by unauthorized users. It offers the natural firewall function. All the incoming and outgoing IPs can be monitored and filtered. For the advanced application, it even can block internal users accessing to the Internet services.

1.1 Application

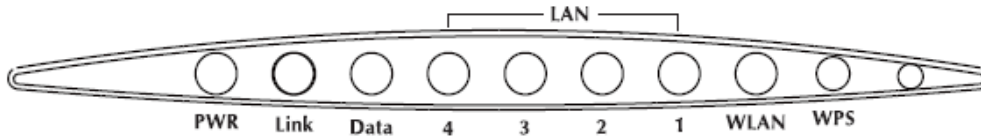
Wired/Wireless Internet Connection

The ADN-4101 is a perfect solution for a small group of PCs connecting to a high-speed broadband Internet connection. Multi-users can access to the Internet simultaneously. With built-in 802.11n capability, the ADN-4101 enables the mobile users to access Internet with high speed of up to 150Mbps.

The ADN-4101 also incorporates a 4-port 10/100Base-TX switching hub, which makes it easy to create or extend your LAN and prevent attacks from the internet.



Front Panel



The following table describes the LEDs of the device.

LED	Color	Status	Description
PWR	Green	Off	The power is off.
		On	The device is powered on and the initialization is normal.
Link	Green	Slow Blinks	No signal is detected.
		Fast Blinks	The device is handshaking with the physical layer of the office.
		On	The device is connected to the physical layer of the office.
Data	Green	Off	The device is in the bridge mode.
		Blinks	Internet data is being transmitted in the routing mode.
		On	The Internet connection is normal in the routing mode (for example, PPP dial-up is successful), and no Internet data is being transmitted.
	Red	On	The Internet connection fails after successful synchronization in the routing mode (for example, PPP dial-up failed).
LAN1~4	Green	Off	The Ethernet interface is disconnected.
		Blinks	Data is being transmitted through the LAN interface, or the Internet data is being transmitted in the bridge mode.
		On	The LAN connection is established and activated.
WLAN	Green	Off	The LAN connection is not activated.
		Blinks	Data is being transmitted through the WLAN interface.
		On	The WLAN connection is activated.
WPS	Green	Off	The WLAN connection is not activated.
		Blinks	WPS is activated and the device is waiting for negotiation with the clients.

Rear Panel

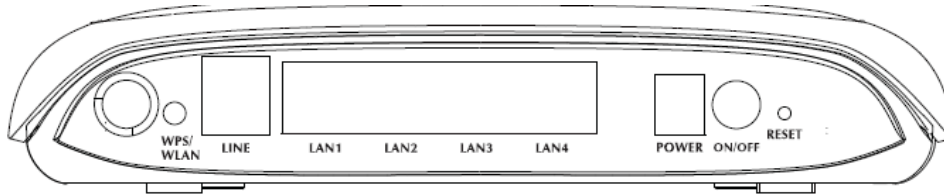


Figure 1 Rear panel

The following table describes the interfaces and buttons of the device.

Interface/Button	Description
WPS/ WLAN	Press the button and hold it for 1 second to enable WLAN. Press the button and hold it for 3 or more than 3 seconds to initialize WPS negotiation.
LINE	RJ-11 interface, for connecting the interface of the telephone set through the telephone cable.
LAN1, LAN2, LAN3, LAN4	RJ-45 interface, for connecting the Ethernet interface of a computer or an Ethernet device.
POWER	Power interface, for connecting the interface of the power adapter (12V DC, 0.8A).
ON/OFF	Power switch, power on or off the device.
RESET	Restore to factory defaults. To restore factory defaults, keep the device powered; push a paper clip into the hole to press the button for over 3 seconds and then release.

1.2 System Requirements

Make sure first that you have prepared these following items to guarantee the router can work normally.

- Services subscriptions.
- An 10/100Mbps Ethernet card installed on your PC.
- Hub or Switch. (Attached to several PCs through one of Ethernet interfaces on the device).
- Operating system: Windows Vista, Windows 7, Windows 98SE, Windows 2000, Windows ME, or Windows XP.
- Internet Explorer V5.0 or higher, or Netscape V4.0 or higher, or firefox 1.5 or higher.

1.3 Features

The device supports the following features:

Internet Access Features

- ◆ **Internet Access Shared**

All users in the LAN can access the Internet through the ADN-4101 by just a single external IP Address. The local (invalid) IP Addresses are hidden from external sources. This process is called NAT (Network Address Translation).

- ◆ **Built-in ADSL 2/2+ Modem**

The ADN-4101 provides ADSL 2/2+ modem service and supports all common ADSL connections.

- ◆ **PPPoE, PPPoA, Direct Connection Support**

Various WAN connections are supported by the ADN-4101.

- ◆ **Fixed or Dynamic IP Address**

On the Internet (WAN port) connection, the ADN-4101 supports both Dynamic IP Address (IP Address is allocated on connection) and Fixed IP Address.

Advanced Internet Functions

- ◆ **Virtual Servers**

This feature allows Internet users to access Internet servers on your LAN. The required setup is quick and easy.

- ◆ **DMZ Support**

The ADN-4101 can translate public IP addresses into private IP address and allow unrestricted 2-way communication with servers or individual users on the Internet. This provides the most flexibility to run programs which could be incompatible in NAT environment.

- ◆ **Firewall**

The ADN-4101 supports simple firewall with NAT technology and provides options for access control from Internet like Telnet, FTP, TFTP, HTTP, SNMP, and ICMP services. It also supports IP/ MAC/ Application/ URL filtering.

- ◆ **Universal Plug and Play (UPnP)**

UPnP allows automatically discovering and configuration of the Broadband Router. UPnP is supported by Windows ME, XP, or later.

- ◆ **Dynamic DNS Support**

The ADN-4101 supports Planet Dynamic DNS that it's free for customer.

- ◆ **Based on the Virtual Servers feature, the ADN-4101 allows users to connect a server to the LAN by using a Domain Name even if you have a dynamic IP address.**

- ◆ **RIP Routing**

It supports RIPv1/2 routing protocol for routing capability.

◆ **Simple Network Management Protocol (SNMP)**

It is an easy way to remotely manage the router via SNMP.

LAN Features

◆ **4-port Switch**

The ADN-4101 incorporates a 4-port 10/100Base-TX switching hub, making it easy to create or extend your LAN.

◆ **DHCP Server Support**

Dynamic Host Configuration Protocol provides a dynamic IP address to PCs and other devices upon request. The ADN-4101 can act as a DHCP Server for devices on your local LAN and WLAN.

Wireless Features

◆ **Supports IEEE 802.11b, g and 802.11n Wireless Standard**

The 802.11n standard provides backward compatibility with the 802.11b and 802.11g standard, so 802.11b, 802.11g, and 802.11n compliant devices can be used simultaneously.

◆ **802.11n Technology**

The ADN-4101 complies with IEEE 802.11n wireless technology standard and provides data rate up to 150Mbps. It provides farther coverage, less dead spaces and higher throughput.

◆ **WEP Support**

WEP (Wired Equivalent Privacy) is included. Key sizes of 64 bit and 128 bit are supported.

◆ **WPS Push Button Control**

The ADN-4101 supports WPS (Wi-Fi Protected Setup) for users to easily connect to wireless network without configuring the security.

◆ **WPA-PSK Support**

WPA-PSK_TKIP and WPA-PSK_AES encryptions are supported.

◆ **Wireless MAC Access Control**

The Wireless Access Control feature can check the MAC address (hardware address) of wireless stations to ensure that only trusted wireless stations can access your LAN.

1.4 Specifications

Model		ADN-4101A
Hardware		
Standard		<p>Compliant with ADSL Standard</p> <ul style="list-style-type: none"> - Full-rate ANSI T1.413 Issue 2 - G.dmt (ITU G.992.1) - G.lite (ITU G.992.2) - G.hs,Multimode (ITU G.994.1) <p>Capable of ADSL2 Standard</p> <ul style="list-style-type: none"> - G.dmt.bis (ITU G.992.3) <p>Capable of ADSL2+ Standard</p> <ul style="list-style-type: none"> - G.dmt.bisplus (ITU G.992.5) - Reach Extended ADSL (RE ADSL) <p>Supports Annex A, B, M, L</p>
Protocol		<p>RFC 2364 - PPP over ATM (LLC/VCMUX)</p> <p>RFC 2516 - PPP over Ethernet (LLC/VCMUX)</p> <p>RFC 1483 - Classic IP over ATM (LLC/VCMUX)</p> <p>RFC 2684 - Bridged IP over ATM (LLC/VCMUX)</p> <p>RFC 2684 - Routed IP over ATM (LLC/VCMUX)</p>
AAL and ATM Support		<p>Supports up to 8 PVCs</p> <p>ATM Forum UNI 3.1/4.0 PVC</p> <p>VC and LLC Multiplexing</p> <p>Integrated ATM AAL5 support(UBR,CBR,VBR-rt, and VBR-nrt)</p> <p>0~255 VPI plus 1~65535 VCI address range</p> <p>OAM F4 & F5 Segment end-to-end loop-back, AIS, and RDI OAM cells</p>
Ports	LAN	4 x Ethernet (10/100Mbps, Auto-Negotiation, Auto MDI/MDI-X)
	WLAN	1 x 802.11b/g/n Access Point with one 2dBi dipole antenna
	WAN	1 x RJ-11
LED Indicators		PWR, Link, Data, LAN 1~4, WLAN, WPS
Button		WLAN, Reset, WPS, Power
Max. Concurrent Sessions		2048
Wireless Standard		IEEE 802.11b, g and 802.11n
Wireless Frequency		2.4 to 2.4835GHz (Industrial Scientific Medical Band)
Wireless Channels		Maximum 14 channels, depending on regulatory authorities
Wireless Data Encryption		64 bit / 128 bit WEP, WPA-PSK / WPA2-PSK, and WPS PBC
Wireless Data Rate		<p>Maximum up to 150 Mbps</p> <p>IEEE 802.11b: 1/2/5.5/11Mbps</p> <p>IEEE 802.11g: 6/9/12/18/24/36/48/54Mbps</p> <p>IEEE 802.11n: 14/29/43/58/87/116/130/144Mbps in 20MHz</p> <p>30/60/90/120/150Mbps in 40MHz</p>

RF Modulation	IEEE 802.11b mode: DSSS (CCK,QPSK,BPSK) IEEE 802.11g mode: OFDM (BPSK,QPSK,16QAM,64QAM) HT20 and HT40: 64 QAM, 16QAM, QPSK, BPSK
Transmit Power	11b: 16.5dBm ± 1.5dBm 11g: 14dBm ± 1.5dBm 11n HT20M:13dbm± 1.5dBm 11n HT40M: 13dbm± 1.5dBm
Receiver Sensitivity	802.11b: <-80dBm 802.11g: <-68dBm 802.11n HT20M: <-64dbm 802.11N HT40M: <-61dbm
Software	
Protocols/Features	NAT supports multimedia applications NAT, Static Routing, and RIPv1/2 Transparent Bridging Dynamic Domain Name System (DDNS) SNTP DNS relay and IGMP proxy DMZ and Virtual Server Quality of Service (QoS) for Traffic Prioritization TR-069 Ready UPnP
Security	PPP over PAP (Password Authentication Protocol, RFC1334) PPP over CHAP (Challenge Authentication Protocol, RFC1994) DoS Protection Access Control ACL (Access Control) IP/MAC /Application/URL Filter Stateful Packet Inspection (SPI) Firewall Password protection for system management
Management	Web-based configuration Embedded Telnet server for remote and local management Firmware upgraded and configuration data upload/download via WEB SNMP v1/v2c MIB supported Support DHCP Server/Client/Relay Built-in diagnostic tool TR-069
Environment Specifications	
Dimensions (W x D x H)	176 x 124 x 35 mm (W x D x H)

Power	12V DC, 0.8A
Temperature and Humidity	Operating temperature: 0 ~ 50 degrees C Storage temperature: -10 ~ 70 degrees C Humidity: 10 ~ 95% non-condensing
Emission	FCC, CE

Chapter 2. Hardware Installation

- Step 1** Connect the **LINE** interface of the device and the **Modem** interface of the splitter with a telephone cable. Connect the phone set to the **Phone** interface of the splitter through a telephone cable. Connect the input cable to the **Line** interface of the splitter.

The splitter has three interfaces:

- **Line:** Connect to a wall phone interface (RJ-11 jack).
- **Modem:** Connect to the **LINE** interface of the device.
- **Phone:** Connect to a telephone set.

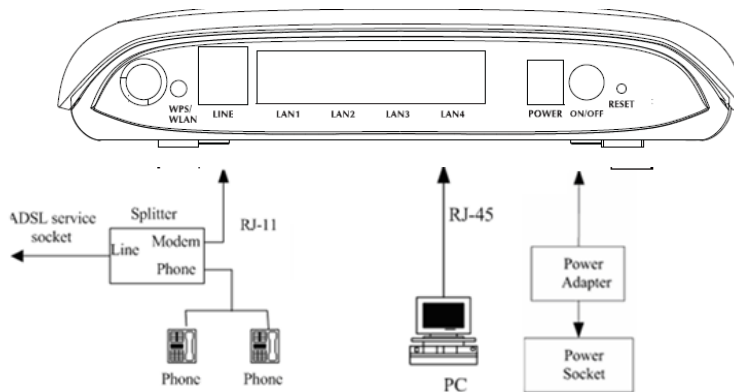
- Step 2** Connect the **LAN** interface of the device to the network card of the PC through an Ethernet cable (MDI/MDIX).



Use the twisted-pair cable to connect the hub or switch.

- Step 3** Insert one end of the power adapter to the wall outlet and connect the other end to the **POWER** interface of the device.

The following figure shows the application diagram for the connection of the router, PC, splitter and the telephone sets.



Chapter 3. Web Configuration

This chapter describes how to configure the device by using the Web-based configuration utility.

3.1 Accessing the Router

The following describes how to access the device for the first time in details.

Step 1 Open the Internet Explorer (IE) browser and enter **http://192.168.1.1** in the address bar.

Step 2 On the **Login** page that is displayed, enter the username and password, and then click **OK**.

- The username and password of the super user are **admin** and **admin**.



Connect to 192.168.1.1

The server 192.168.1.1 at ADN-4101 requires a username and password.

Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).

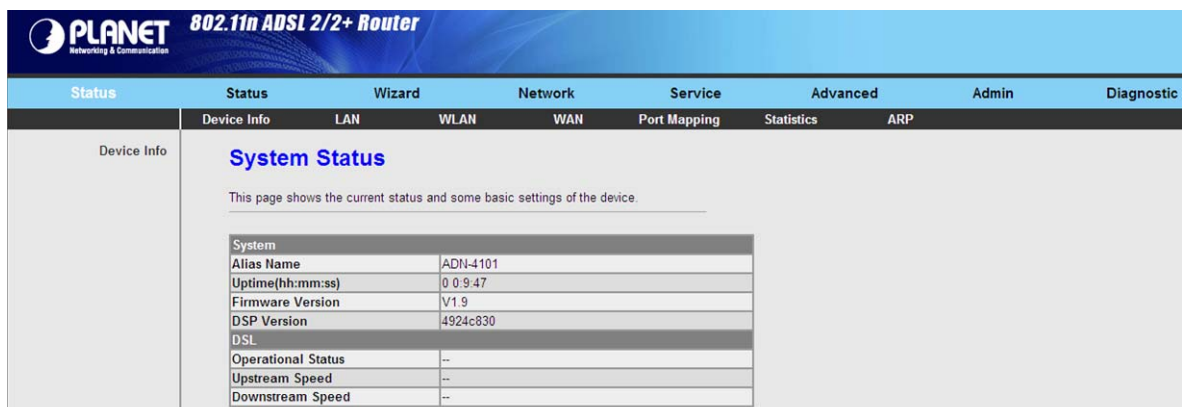
User name:

Password:


Remember my password

OK Cancel

After logging in, the page shown in the following figure appears. You can check, configure and modify all the settings.



System	
Alias Name	ADN-4101
Uptime(hh:mm:ss)	0 0:9:47
Firmware Version	V1.9
DSP Version	4924c830
DSL	
Operational Status	--
Upstream Speed	--
Downstream Speed	--

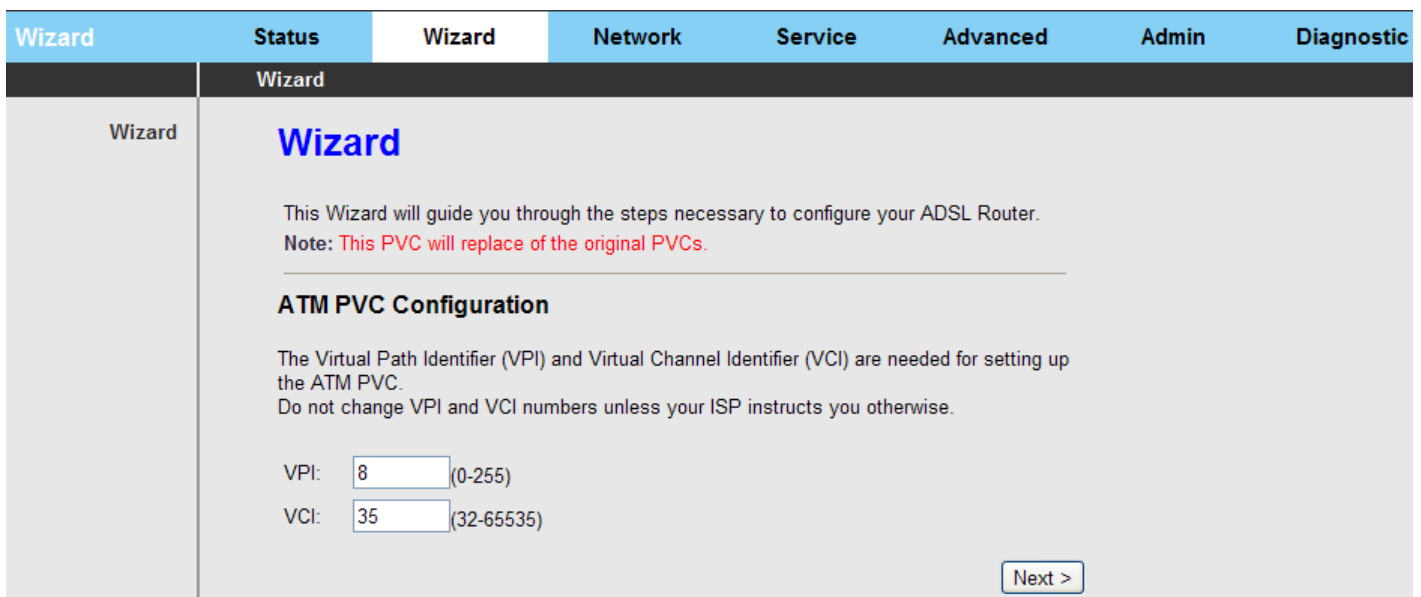


On the Web configuration page, you can click **Apply Changes** to save the settings temporarily. If you want to save the settings of this page permanently, clicks save of **Attention** that appears at the bottom of the Web page after the configuration.

3.2 Wizard

When subscribing to a broadband service, you should be aware of the method by which you are connected to the Internet. Your physical WAN device can be either PPP, ADSL, or both. The technical information about the properties of your Internet connection is provided by your Internet Service Provider (ISP). For example, your ISP should inform you whether you are connected to the Internet using a static or dynamic IP address, and the protocol that you use to communicate on the Internet.

In the navigation bar, choose **Wizard**. The page shown in the following figure appears. The **Wizard** page guides fast and accurate configuration of the Internet connection and other important parameters. The following sections describe these various configuration parameters. Whether you configure these parameters or use the default ones, click **NEXT** to enable your Internet connection.



The screenshot shows a web interface with a navigation bar at the top containing: Wizard, Status, Wizard, Network, Service, Advanced, Admin, and Diagnostic. The 'Wizard' tab is selected. Below the navigation bar, the page title is 'Wizard'. The main content area contains the following text:

Wizard

This Wizard will guide you through the steps necessary to configure your ADSL Router.
Note: This PVC will replace of the original PVCs.

ATM PVC Configuration

The Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) are needed for setting up the ATM PVC.
 Do not change VPI and VCI numbers unless your ISP instructs you otherwise.

VPI: (0-255)
 VCI: (32-65535)

[Next >](#)

The following table describes the parameters on this page:

Field	Description
VPI	Virtual path identifier (VPI) is the virtual path between two points in an ATM network. Its valid value is in the range of 0 to 255. Enter the correct VPI provided by your ISP. By default, VPI is set to 0 .
VCI	Virtual channel identifier (VCI) is the virtual channel between two points in an ATM network. Its valid value is in the range of 32 to 65535. (0 to 31 is reserved for local management of ATM traffic) Enter the correct VCI provided by your ISP. By default, VCI is set to 35 .

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard	<p>Wizard</p> <p>Connection Type</p> <p>Select the type of network protocol and encapsulation mode over the ATM PVC that your ISP has instructed you to use.</p> <p>WAN Connection Type: <input type="radio"/> PPP over ATM(PPPoA) <input type="radio"/> PPP over Ethernet(PPPoE) <input type="radio"/> 1483 MER <input type="radio"/> 1483 Routed <input checked="" type="radio"/> 1483 Bridged</p> <p>Encapsulation Mode: <input type="text" value="LLC/SNAP"/></p> <p style="text-align: right;"> <input style="border: 1px solid #ccc;" type="button" value=" < Back "/> <input style="border: 1px solid #ccc;" type="button" value=" Next > "/> </p>						

There are five WAN connection types: **PPP over ATM (PPPoA)**, **PPP over Ethernet (PPPoE)**, **1483 MER**, **1483 Routed**, and **1483 Bridged**. The following describes them respectively.

PPPoE/PPPoA

On the **Connection Type** page, set the WAN connection type to **PPP over Ethernet (PPPoE)**, and the encapsulation mode to **LLC/SNAP**.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard	<p>Wizard</p> <p>Connection Type</p> <p>Select the type of network protocol and encapsulation mode over the ATM PVC that your ISP has instructed you to use.</p> <p>WAN Connection Type: <input type="radio"/> PPP over ATM(PPPoA) <input checked="" type="radio"/> PPP over Ethernet(PPPoE) <input type="radio"/> 1483 MER <input type="radio"/> 1483 Routed <input type="radio"/> 1483 Bridged</p> <p>Encapsulation Mode: <input type="text" value="LLC/SNAP"/></p> <p style="text-align: right;"> <input style="border: 1px solid #ccc;" type="button" value=" < Back "/> <input style="border: 1px solid #ccc;" type="button" value=" Next > "/> </p>						

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<h3 style="text-align: center;">WAN IP Settings</h3> <p>Enter information provided to you by your ISP to configure the WAN IP settings.</p> <p> <input checked="" type="radio"/> Obtain an IP address automatically <input type="radio"/> Use the following IP address: </p> <p>WAN IP Address: <input type="text"/></p> <p><input checked="" type="checkbox"/> Enable NAT</p> <p style="text-align: right;"> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" < Back "/> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" Next > "/> </p>						

The following table describes the parameters on this page:

Field	Description
Obtain an IP address automatically	Select it, the DHCP assigns the IP address for PPPoE connection.
Use the following IP address	When selecting it, you need to enter the IP address for PPPoE connection, which is provided by your ISP.
Enable NAT	Select the checkbox to enable network address translation (NAT). If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is required to enable NAT.

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<h3 style="text-align: center;">PPP Username and Password</h3> <p>PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.</p> <p> PPP Username: <input type="text"/> PPP Password: <input type="text"/> </p> <p> PPP Connection Type: <input checked="" type="radio"/> Continuous <input type="radio"/> Connect on Demand Idle Time: <input type="text" value="20"/> <input type="radio"/> Manual </p> <p style="text-align: right;"> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" < Back "/> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" Next > "/> </p>						

The following table describes the parameters on this page:

Field	Description
PPP Username	Enter the username for PPPoE dial-up, which is provided by your ISP.
PPP Password	Enter the password for PPPoE dial-up, which is provided by your ISP.
PPP Connection Type	<p>You can select Continuous, Connect on Demand, or Manual.</p> <ul style="list-style-type: none"> ● Continuous: After dial-up is successful, PPPoE connection is always on-line, no matter whether the data is being transmitted or not. It is recommended to select it. ● Connect on Demand: After dial-up is successful, within the preset idle time, no data is being transmitted, and the router automatically disconnects the PPPoE connection. In this case, you need to enter the idle time. ● Manual: Select it, you need to dial up and disconnect the connection manually.

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<p>LAN Interface Setup</p> <p>This page is used to configure the LAN interface of your ADSL router.</p> <p>LAN IP: <input type="text" value="192.168.1.1"/></p> <p>LAN Netmask: <input type="text" value="255.255.255.0"/></p> <p><input type="checkbox"/> Enable Secondary IP</p> <p>DHCP Server</p> <p>Set and configure the Dynamic Host Protocol mode for your device.</p> <p><input checked="" type="checkbox"/> Enable DHCP Server</p> <p>Start IP: <input type="text" value="192.168.1.2"/></p> <p>End IP: <input type="text" value="192.168.1.254"/></p> <p>Max Lease Time: <input type="text" value="1"/> Day <input type="text" value="0"/> Hour <input type="text" value="0"/> Min</p> <p style="text-align: right;"> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" < Back "/> <input style="border: 1px solid black; padding: 2px 10px;" type="button" value=" Next > "/> </p>						

The following table describes the parameters on this page:


Field	Description
LAN Interface Setup	
LAN IP	Enter the IP address of LAN interface. Its valid value is in the range of 192.168.1.1 to 192.168.255.254 . The default IP address is 192.168.1.1 .
LAN Netmask	Enter the subnet mask of LAN interface. Its valid value is in the range of 255.255.0.0 to 255.255.255.254 .
Enable Secondary IP	Select the checkbox to enable the secondary LAN IP. The two LAN IP addresses must be in the different network.
DHCP Server	
Enable DHCP Server	Select the checkbox to enable DHCP server.
Start IP	Enter the start IP address that the DHCP sever assigns.
End IP	Enter the end IP address that the DHCP server assigns.
Max Lease Time	The lease time determines the period that the PCs retain the assigned IP

Field	Description
	addresses before the IP addresses change.

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic																										
Wizard																																	
Wizard	<p>Fast Configure - Summary</p> <p>Click "Finish" to save the settings. Click "Back" to make more modifications. Click "Reset" to cancel the settings.</p> <p>The parameters you set:</p> <p>WAN Setup:</p> <table border="1"> <tr><td>VPI:</td><td>8</td></tr> <tr><td>VCI:</td><td>35</td></tr> <tr><td>Encapsulation:</td><td>LLC/SNAP</td></tr> <tr><td>Connection Type</td><td>pppoe Continuous</td></tr> <tr><td>NAPT:</td><td>Enable</td></tr> <tr><td>WAN IP:</td><td>auto assigned</td></tr> <tr><td>Reserved Gateway:</td><td>auto assigned</td></tr> <tr><td>DNS Server:</td><td>auto assigned</td></tr> </table> <p>LAN Setup:</p> <table border="1"> <tr><td>LAN IP:</td><td>192.168.1.1 / 255.255.255.0</td></tr> <tr><td>Secondary IP:</td><td>0.0.0.0 / 0.0.0.0</td></tr> <tr><td>DNS Server:</td><td>Enable</td></tr> <tr><td>DHCP IP Range</td><td>192.168.1.2 ~ 192.168.1.254</td></tr> <tr><td>DHCP Lease Time</td><td>1 Day 0 Hour 0 Min</td></tr> </table> <p style="text-align: right;"> <input type="button" value=" < Back"/> <input type="button" value=" Finish"/> <input type="button" value=" Reset"/> </p>							VPI:	8	VCI:	35	Encapsulation:	LLC/SNAP	Connection Type	pppoe Continuous	NAPT:	Enable	WAN IP:	auto assigned	Reserved Gateway:	auto assigned	DNS Server:	auto assigned	LAN IP:	192.168.1.1 / 255.255.255.0	Secondary IP:	0.0.0.0 / 0.0.0.0	DNS Server:	Enable	DHCP IP Range	192.168.1.2 ~ 192.168.1.254	DHCP Lease Time	1 Day 0 Hour 0 Min
VPI:	8																																
VCI:	35																																
Encapsulation:	LLC/SNAP																																
Connection Type	pppoe Continuous																																
NAPT:	Enable																																
WAN IP:	auto assigned																																
Reserved Gateway:	auto assigned																																
DNS Server:	auto assigned																																
LAN IP:	192.168.1.1 / 255.255.255.0																																
Secondary IP:	0.0.0.0 / 0.0.0.0																																
DNS Server:	Enable																																
DHCP IP Range	192.168.1.2 ~ 192.168.1.254																																
DHCP Lease Time	1 Day 0 Hour 0 Min																																

- Click **BACK** to modify the settings.
- Click **FINISH** to save the settings.
- Click **RESET** to cancel the settings.



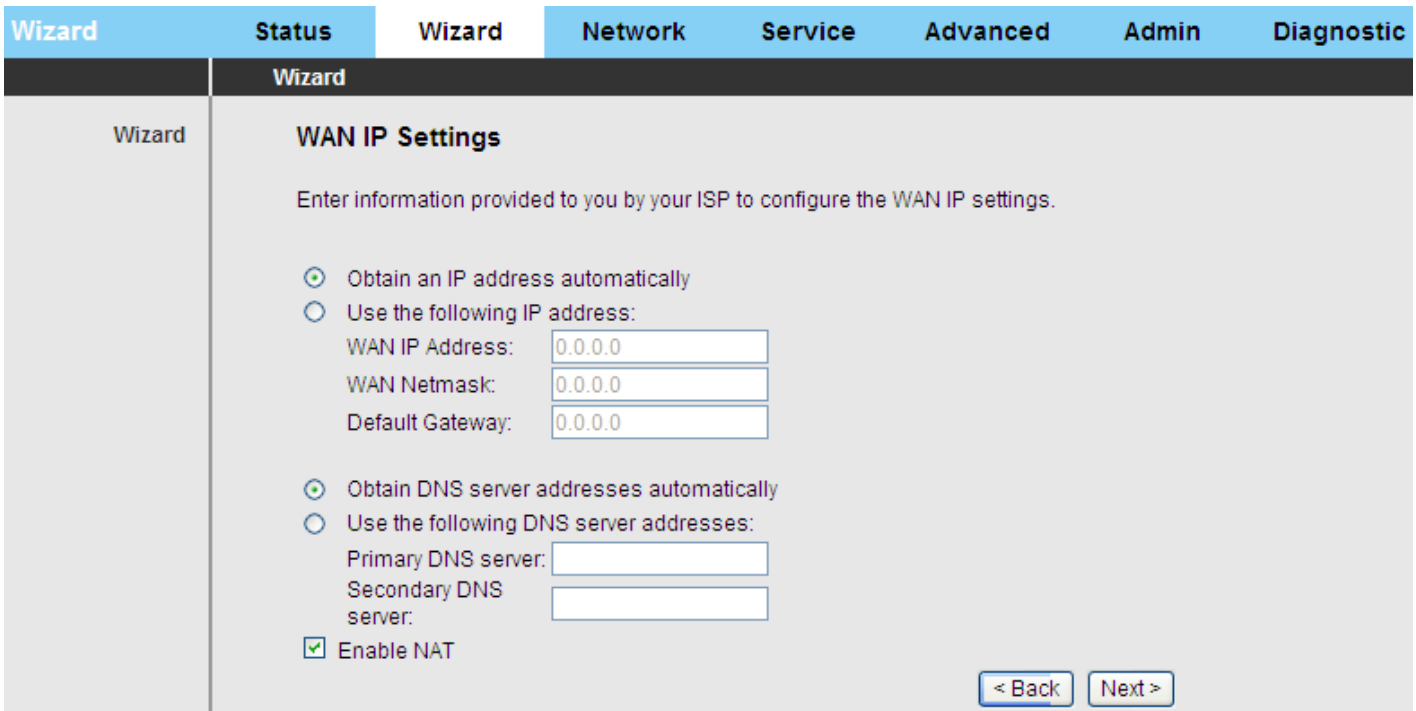
If the WAN connection type is set to **PPPoA**, the parameters of the WAN connection type are the same as that of **PPPoE**. For the parameters on these pages, refer to the parameter description of **PPPoE**.

1483 MER/1483 Routed

On the **Connection Type** page, set the WAN connection type to **1483 MER**, and the encapsulation mode to **LLC/SNAP**.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<p>Connection Type</p> <p>Select the type of network protocol and encapsulation mode over the ATM PVC that your ISP has instructed you to use.</p> <p>WAN Connection Type:</p> <p> <input type="radio"/> PPP over ATM(PPPoA) <input type="radio"/> PPP over Ethernet(PPPoE) <input checked="" type="radio"/> 1483 MER <input type="radio"/> 1483 Routed <input type="radio"/> 1483 Bridged </p> <p>Encapsulation Mode: <input type="text" value="LLC/SNAP"/></p> <p style="text-align: right;"> <input type="button" value=" < Back"/> <input type="button" value=" Next >"/> </p>						

After setting, click **Next** and the page as shown in the following figure appears.




The screenshot shows the 'WAN IP Settings' page. It has a navigation bar at the top with tabs: Wizard, Status, Wizard, Network, Service, Advanced, Admin, Diagnostic. The main content area is titled 'WAN IP Settings' and contains the following text: 'Enter information provided to you by your ISP to configure the WAN IP settings.' There are two radio button options: 'Obtain an IP address automatically' (selected) and 'Use the following IP address:'. Below the second option are three input fields: 'WAN IP Address: 0.0.0.0', 'WAN Netmask: 0.0.0.0', and 'Default Gateway: 0.0.0.0'. There are also two radio button options for DNS: 'Obtain DNS server addresses automatically' (selected) and 'Use the following DNS server addresses:'. Below the second option are two input fields: 'Primary DNS server:' and 'Secondary DNS server:'. At the bottom left, there is a checked checkbox for 'Enable NAT'. At the bottom right, there are two buttons: '< Back' and 'Next >'. A 'Wizard' sidebar is visible on the left side of the page.

The following table describes the parameters on this page:

Field	Description
Obtain an IP address automatically	Select it, DHCP automatically assigns the IP address for WAN connection.
Use the following IP address	When selecting it, you need to manually enter the IP address, subnet mask, and default gateway for WAN connection, which are provided by your ISP.
Obtain DNS server addresses automatically	Select it, DHCP automatically assigns DNS server address.
Use the following DNS server addresses	Select it, you need to manually enter the primary DNS server address and secondary DNS server address.
Enable NAT	Select it to enable network address translation (NAT). If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is required to enable NAT.

For subsequent configuration, refer to the description in the above section **PPPoE/PPPoA**.



If the WAN connection type is set to **1483 Routed**, the parameters of the WAN connection type are the same as that of **1483 MER**. For the parameters on these pages, refer to the parameter description of **1483 MER**.

1483 Bridged

On the **Connection Type** page, set the WAN connection type to **1483 Bridged**, and the encapsulation mode to **LLC/SNAP**.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<h3>Connection Type</h3> <p>Select the type of network protocol and encapsulation mode over the ATM PVC that your ISP has instructed you to use.</p> <p>WAN Connection Type:</p> <p> <input type="radio"/> PPP over ATM(PPPoA) <input type="radio"/> PPP over Ethernet(PPPoE) <input type="radio"/> 1483 MER <input type="radio"/> 1483 Routed <input checked="" type="radio"/> 1483 Bridged </p> <p>Encapsulation Mode: <input type="text" value="LLC/SNAP"/></p> <p style="text-align: right;"> <input style="border: 1px solid black;" type="button" value=" < Back "/> <input style="border: 1px solid black;" type="button" value=" Next > "/> </p>						

After setting, click **Next** and the page as shown in the following figure appears.

Wizard	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
Wizard							
Wizard	<h3>LAN Interface Setup</h3> <p>This page is used to configure the LAN interface of your ADSL router.</p> <p>LAN IP: <input type="text" value="192.168.1.1"/></p> <p>LAN Netmask: <input type="text" value="255.255.255.0"/></p> <p><input type="checkbox"/> Enable Secondary IP</p> <p>DHCP Server</p> <p>Set and configure the Dynamic Host Protocol mode for your device.</p> <p><input checked="" type="checkbox"/> Enable DHCP Server</p> <p>Start IP: <input type="text" value="192.168.1.2"/></p> <p>End IP: <input type="text" value="192.168.1.254"/></p> <p>Max Lease Time: <input type="text" value="1"/> Day <input type="text" value="0"/> Hour <input type="text" value="0"/> Min</p> <p style="text-align: right;"> <input style="border: 1px solid black;" type="button" value=" < Back "/> <input style="border: 1px solid black;" type="button" value=" Next > "/> </p>						

The following table describes the parameters on this page:

Field	Description
LAN Interface Setup	
LAN IP	Enter the IP address of LAN interface. Its valid value is in the range of 192.168.1.1 to 192.168.255.254 . The default IP address is 192.168.1.1 .
LAN Netmask	Enter the subnet mask of LAN interface. Its valid value is in the range of 255.255.0.0 to 255.255.255.254 .
Enable Secondary IP	Select the checkbox to enable the secondary LAN IP. The two LAN IP addresses must be in the different network.
DHCP Server	
Enable DHCP Server	Select the checkbox to enable DHCP server.
Start IP	Enter the start IP address that the DHCP sever assigns.
End IP	Enter the end IP address that the DHCP server assigns.
Max Lease Time	The lease time determines the period that the PCs retain the assigned IP addresses before the IP addresses change.

For subsequent configuration, refer to the description in the above section **PPPoE/PPPoA**.



You may configure at most eight ATM VCs, add an ATM VC, and go to 249277528.0
3.3.4 3.4.2.1 WAN.

3.3 Status

In the navigation bar, choose **Status**. On the **Status** page that is displayed contains: **Device Info**, **LAN**, **WLAN**, **WAN**, **Port Mapping**, **Statistics**, and **ARP**.

3.3.1 Device Information

Choose **Status > Device Info** and the page displayed shows the current status and some basic settings of the router, such as software version, DSP version, uptime, upstream speed, and downstream speed.

Status	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic																		
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP																		
Device Info	<div style="text-align: center;"> <h2 style="color: #00AEEF;">System Status</h2> <p style="color: #666;">This page shows the current status and some basic settings of the device.</p> <hr/> <table border="1" style="width: 100%; border-collapse: collapse; background-color: #eee;"> <thead> <tr style="background-color: #333; color: white;"> <th colspan="2">System</th> </tr> </thead> <tbody> <tr> <td>Alias Name</td> <td>ADN-4101</td> </tr> <tr> <td>Uptime(hh:mm:ss)</td> <td>0 0:48:29</td> </tr> <tr> <td>Firmware Version</td> <td>V1.9</td> </tr> <tr> <td>DSP Version</td> <td>4924c830</td> </tr> <tr style="background-color: #333; color: white;"> <th colspan="2">DSL</th> </tr> <tr> <td>Operational Status</td> <td>--</td> </tr> <tr> <td>Upstream Speed</td> <td>--</td> </tr> <tr> <td>Downstream Speed</td> <td>--</td> </tr> </tbody> </table> </div>							System		Alias Name	ADN-4101	Uptime(hh:mm:ss)	0 0:48:29	Firmware Version	V1.9	DSP Version	4924c830	DSL		Operational Status	--	Upstream Speed	--	Downstream Speed	--
System																									
Alias Name	ADN-4101																								
Uptime(hh:mm:ss)	0 0:48:29																								
Firmware Version	V1.9																								
DSP Version	4924c830																								
DSL																									
Operational Status	--																								
Upstream Speed	--																								
Downstream Speed	--																								

3.3.2 LAN

Choose **Status** > **LAN** and the page displayed shows some basic LAN settings of the router. On this page, you can view the LAN IP address, DHCP server status, MAC address, and DHCP client table.

LAN	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic															
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP															
LAN	<h2>LAN Status</h2> <p>This page shows basic LAN settings of the device.</p> <table border="1"> <thead> <tr> <th colspan="2">LAN Configuration</th> </tr> </thead> <tbody> <tr> <td>IP Address</td> <td>192.168.1.1</td> </tr> <tr> <td>Subnet Mask</td> <td>255.255.255.0</td> </tr> <tr> <td>DHCP Server</td> <td>Enable</td> </tr> <tr> <td>MAC Address</td> <td>00:30:4F:56:78:60</td> </tr> </tbody> </table> <p>DHCP Client Table</p> <table border="1"> <thead> <tr> <th>Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expiry(s)</th> <th>Type</th> </tr> </thead> <tbody> </tbody> </table>							LAN Configuration		IP Address	192.168.1.1	Subnet Mask	255.255.255.0	DHCP Server	Enable	MAC Address	00:30:4F:56:78:60	Name	IP Address	MAC Address	Expiry(s)	Type
LAN Configuration																						
IP Address	192.168.1.1																					
Subnet Mask	255.255.255.0																					
DHCP Server	Enable																					
MAC Address	00:30:4F:56:78:60																					
Name	IP Address	MAC Address	Expiry(s)	Type																		

3.3.3 WLAN

Choose **Status** > **WLAN** and the page displayed shows some basic settings of wireless LAN (WLAN).

WLAN	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic																																				
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP																																				
WLAN	<h2>WLAN Status</h2> <p>This page shows some basic settings of wireless LAN (WLAN).</p> <table border="1"> <thead> <tr> <th colspan="2">Wireless Configuration</th> </tr> </thead> <tbody> <tr> <td>Wireless</td> <td>Enabled</td> </tr> <tr> <td>Band</td> <td>2.4 GHz (B+G+N)</td> </tr> <tr> <td>Mode</td> <td>AP</td> </tr> <tr> <td>Broadcast</td> <td>Enabled</td> </tr> <tr> <th colspan="2">Root</th> </tr> <tr> <td>Status</td> <td>Enabled</td> </tr> <tr> <td>SSID</td> <td>ADN-4101_new</td> </tr> <tr> <td>Authentication Mode</td> <td>Auto</td> </tr> <tr> <td>Encryption Mode</td> <td>WPA2 Mixed</td> </tr> <tr> <th colspan="2">VAP0</th> </tr> <tr> <td>Status</td> <td>Disabled</td> </tr> <tr> <th colspan="2">VAP1</th> </tr> <tr> <td>Status</td> <td>Disabled</td> </tr> <tr> <th colspan="2">VAP2</th> </tr> <tr> <td>Status</td> <td>Disabled</td> </tr> <tr> <th colspan="2">VAP3</th> </tr> <tr> <td>Status</td> <td>Disabled</td> </tr> </tbody> </table>							Wireless Configuration		Wireless	Enabled	Band	2.4 GHz (B+G+N)	Mode	AP	Broadcast	Enabled	Root		Status	Enabled	SSID	ADN-4101_new	Authentication Mode	Auto	Encryption Mode	WPA2 Mixed	VAP0		Status	Disabled	VAP1		Status	Disabled	VAP2		Status	Disabled	VAP3		Status	Disabled
Wireless Configuration																																											
Wireless	Enabled																																										
Band	2.4 GHz (B+G+N)																																										
Mode	AP																																										
Broadcast	Enabled																																										
Root																																											
Status	Enabled																																										
SSID	ADN-4101_new																																										
Authentication Mode	Auto																																										
Encryption Mode	WPA2 Mixed																																										
VAP0																																											
Status	Disabled																																										
VAP1																																											
Status	Disabled																																										
VAP2																																											
Status	Disabled																																										
VAP3																																											
Status	Disabled																																										

3.3.4 WAN

Choose **Status > WAN** and the page displayed shows some basic WAN settings of the router. On this page, you can view basic status of WAN and DNS server. If you want to configure the WAN network, refer to chapter 0.1373892 3.3.4 3.4.2.1 WAN.

WAN	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP

WAN Status

This page shows some basic WAN settings.

Interface	VPI/VCI	Encapsulation	Default Route	Protocol	IP Address	Gateway	Status
a0	8/35	LLC	Off	br1483	0.0.0.0	0.0.0.0	down
DNS Servers		168.95.1.1					

3.3.5 Port Mapping

Choose **Status > Port Mapping**. On this page, you can view the mapping relation and the status of port mapping.

Port Mapping	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP

Port Mapping

This page shows the mapping relation and the status of port mapping.

Status: Disabled

Mapping Relation

Select	Interfaces	Status
Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,a0	Enabled
Group1		--
Group2		--
Group3		--
Group4		--

3.3.6 Statistics

Choose **Status > Statistics**. The **Statistics** page that is displayed contains **Statistics** and **ADSL Statistics**.

3.3.6.1 Statistics

Click **Statistics** in the left pane and the page shown in the following figure appears. On this page, you can view the statistics of each network port.

Statistics	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic																																																																																																																														
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP																																																																																																																														
Statistics	Statistics																																																																																																																																				
ADSL Statistics	<p>This page shows the packet statistics for transmission and reception regarding to network interface.</p> <table border="1"> <thead> <tr> <th>Interface</th> <th>Rx Packet</th> <th>Rx Error</th> <th>Rx Drop</th> <th>Tx Packet</th> <th>Tx Error</th> <th>Tx Drop</th> </tr> </thead> <tbody> <tr><td>e1</td><td>878</td><td>0</td><td>0</td><td>1221</td><td>0</td><td>0</td></tr> <tr><td>a0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a4</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a6</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a7</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w1</td><td>82841</td><td>0</td><td>0</td><td>7932</td><td>0</td><td>36060</td></tr> <tr><td>w2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w4</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w6</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w7</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w8</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>							Interface	Rx Packet	Rx Error	Rx Drop	Tx Packet	Tx Error	Tx Drop	e1	878	0	0	1221	0	0	a0	0	0	0	0	0	0	a1	0	0	0	0	0	0	a2	0	0	0	0	0	0	a3	0	0	0	0	0	0	a4	0	0	0	0	0	0	a5	0	0	0	0	0	0	a6	0	0	0	0	0	0	a7	0	0	0	0	0	0	w1	82841	0	0	7932	0	36060	w2	0	0	0	0	0	0	w3	0	0	0	0	0	0	w4	0	0	0	0	0	0	w5	0	0	0	0	0	0	w6	0	0	0	0	0	0	w7	0	0	0	0	0	0	w8	0	0	0	0	0	0
Interface	Rx Packet	Rx Error	Rx Drop	Tx Packet	Tx Error	Tx Drop																																																																																																																															
e1	878	0	0	1221	0	0																																																																																																																															
a0	0	0	0	0	0	0																																																																																																																															
a1	0	0	0	0	0	0																																																																																																																															
a2	0	0	0	0	0	0																																																																																																																															
a3	0	0	0	0	0	0																																																																																																																															
a4	0	0	0	0	0	0																																																																																																																															
a5	0	0	0	0	0	0																																																																																																																															
a6	0	0	0	0	0	0																																																																																																																															
a7	0	0	0	0	0	0																																																																																																																															
w1	82841	0	0	7932	0	36060																																																																																																																															
w2	0	0	0	0	0	0																																																																																																																															
w3	0	0	0	0	0	0																																																																																																																															
w4	0	0	0	0	0	0																																																																																																																															
w5	0	0	0	0	0	0																																																																																																																															
w6	0	0	0	0	0	0																																																																																																																															
w7	0	0	0	0	0	0																																																																																																																															
w8	0	0	0	0	0	0																																																																																																																															

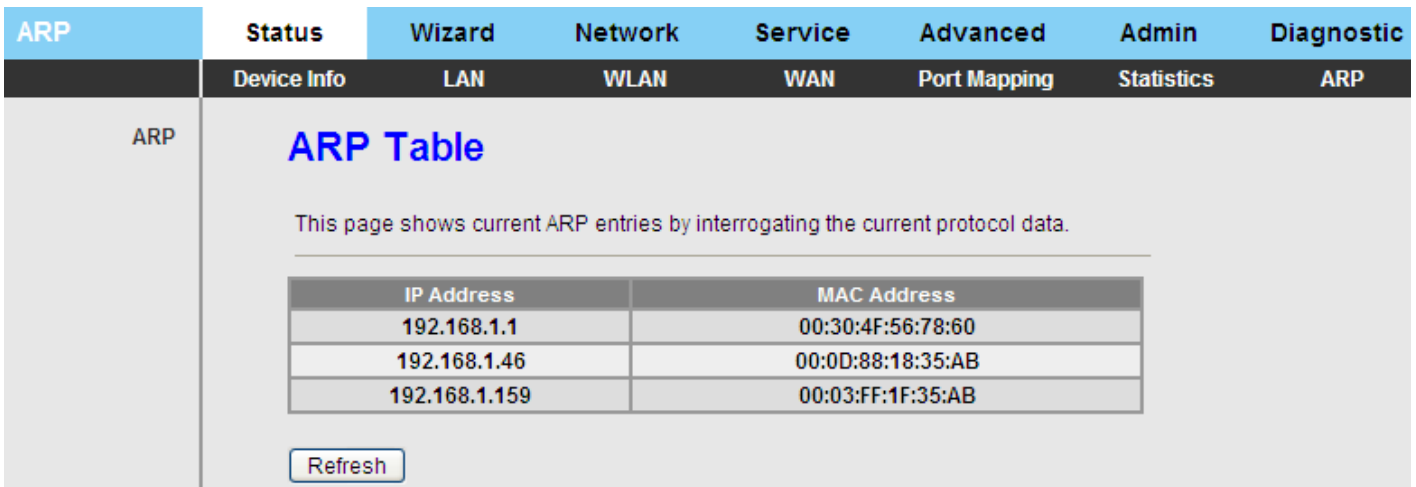
3.3.6.2 ADSL Statistics

Click **ADSL Statistics** in the left pane and the page shown in the following figure appears. On this page, you can view the ADSL line status, upstream rate, downstream rate and other information.

ADSL Statistics	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic																																										
	Device Info	LAN	WLAN	WAN	Port Mapping	Statistics	ARP																																										
Statistics	ADSL Configuration																																																
ADSL Statistics	<p>This page shows the setting of the ADSL Router.</p> <table border="1"> <tbody> <tr><td>ADSL Line Status</td><td>ACTIVATING.</td></tr> <tr><td>ADSL Mode</td><td>--</td></tr> <tr><td>Up Stream</td><td>--</td></tr> <tr><td>Down Stream</td><td>--</td></tr> <tr><td>Attenuation Down Stream(db)</td><td>--</td></tr> <tr><td>Attenuation Up Stream(db)</td><td>--</td></tr> <tr><td>SNR Margin Down Stream(db)</td><td>--</td></tr> <tr><td>SNR Margin Up Stream(db)</td><td>--</td></tr> <tr><td>Attainable Down Rate</td><td>--</td></tr> <tr><td>Attainable Up Rate</td><td>--</td></tr> <tr><td>Vendor ID</td><td>RETK</td></tr> <tr><td>Firmware Version</td><td>4924c830</td></tr> <tr><td>CRC Errors</td><td>--</td></tr> <tr><td>Up Stream BER</td><td>--</td></tr> <tr><td>Down Stream BER</td><td>--</td></tr> <tr><td>Up Output Power</td><td>--</td></tr> <tr><td>Down Output Power</td><td>--</td></tr> <tr><td>Down Stream ES</td><td>--</td></tr> <tr><td>Up Stream ES</td><td>--</td></tr> <tr><td>Down Stream SES</td><td>--</td></tr> <tr><td>Up Stream SES</td><td>--</td></tr> </tbody> </table>							ADSL Line Status	ACTIVATING.	ADSL Mode	--	Up Stream	--	Down Stream	--	Attenuation Down Stream(db)	--	Attenuation Up Stream(db)	--	SNR Margin Down Stream(db)	--	SNR Margin Up Stream(db)	--	Attainable Down Rate	--	Attainable Up Rate	--	Vendor ID	RETK	Firmware Version	4924c830	CRC Errors	--	Up Stream BER	--	Down Stream BER	--	Up Output Power	--	Down Output Power	--	Down Stream ES	--	Up Stream ES	--	Down Stream SES	--	Up Stream SES	--
ADSL Line Status	ACTIVATING.																																																
ADSL Mode	--																																																
Up Stream	--																																																
Down Stream	--																																																
Attenuation Down Stream(db)	--																																																
Attenuation Up Stream(db)	--																																																
SNR Margin Down Stream(db)	--																																																
SNR Margin Up Stream(db)	--																																																
Attainable Down Rate	--																																																
Attainable Up Rate	--																																																
Vendor ID	RETK																																																
Firmware Version	4924c830																																																
CRC Errors	--																																																
Up Stream BER	--																																																
Down Stream BER	--																																																
Up Output Power	--																																																
Down Output Power	--																																																
Down Stream ES	--																																																
Up Stream ES	--																																																
Down Stream SES	--																																																
Up Stream SES	--																																																

3.3.7 ARP Table

Choose **Status > ARP**. On the **ARP Table** page, you can view the table that shows a list of learned MAC addresses.



IP Address	MAC Address
192.168.1.1	00:30:4F:56:78:60
192.168.1.46	00:0D:88:18:35:AB
192.168.1.159	00:03:FF:1F:35:AB

Refresh

3.4 Network

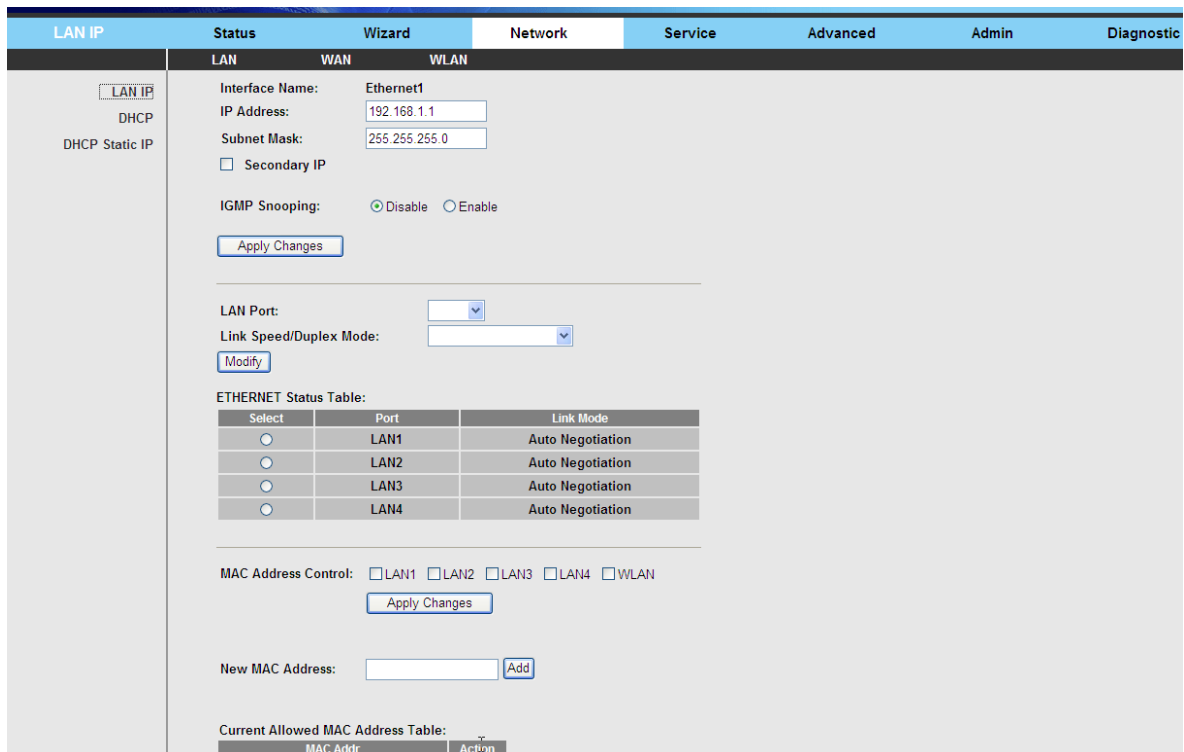
In the navigation bar, click **Network**. The **Network** page that is displayed contains **LAN**, **WAN**, and **WLAN**.

3.4.1 LAN

Choose **Network > LAN**. The **LAN** page that is displayed contains **LAN IP**, **DHCP** and **DHCP Static IP**.

3.4.1.1 LAN IP

Click **LAN IP** in the left pane and the page shown in the following figure appears. On this page, you can change IP address of the router. The default IP address is **192.168.1.1**, which is the private IP address of the router.



Interface Name: Ethernet1

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Secondary IP

IGMP Snooping: Disable Enable

Apply Changes

LAN Port: [Dropdown]

Link Speed/Duplex Mode: [Dropdown]

Modify

ETHERNET Status Table:

Select	Port	Link Mode
<input type="radio"/>	LAN1	Auto Negotiation
<input type="radio"/>	LAN2	Auto Negotiation
<input type="radio"/>	LAN3	Auto Negotiation
<input type="radio"/>	LAN4	Auto Negotiation

MAC Address Control: LAN1 LAN2 LAN3 LAN4 WLAN

Apply Changes

New MAC Address: [Text] Add

Current Allowed MAC Address Table:

MAC Addr	Action
----------	--------

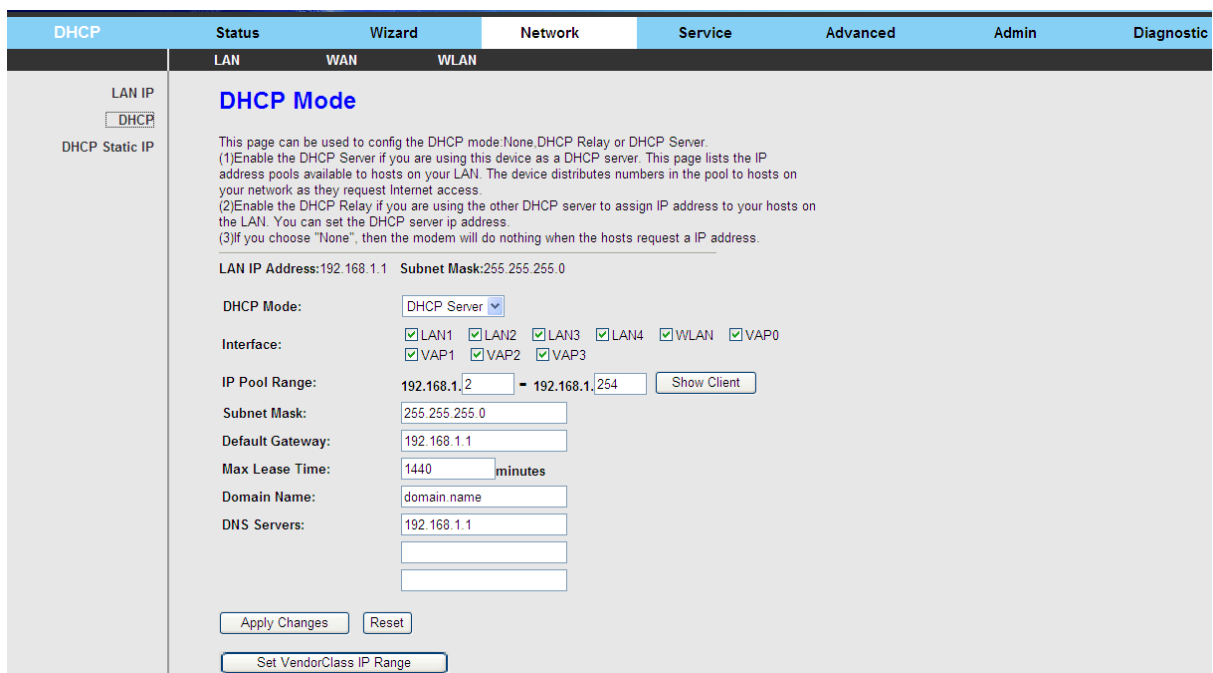
The following table describes the parameters on this page:

Field	Description
IP Address	Enter the IP address of LAN interface. It is recommended to use an address from a block that is reserved for private use. This address block is 192.168.1.1-192.168.1.254 .
Subnet Mask	Enter the subnet mask of LAN interface. The range of subnet mask is from 255.255.0.0-255.255.255.254 .
Secondary IP	Select it to enable the secondary LAN IP address. The two LAN IP addresses must be in the different network.
LAN Port	You can choose the LAN interface you want to configure.
Link Speed/Duplex Mode	You can select the following modes from the drop-downlist: 100Mbps/FullDuplex, 100Mbps/Half Duplex, 10Mbps/FullDuplex, 10Mbps/Half Duplex, Auto Negotiation.
MAC Address Control	It is the access control based on MAC address. When selecting it, the host whose MAC address is listed in the Current Allowed MAC Address Table can access the modem.
Add	Enter MAC address, and then click it to add a new MAC address.

3.4.1.2 DHCP

Dynamic Host Configuration Protocol (DHCP) allows the individual PC to obtain the TCP/IP configuration from the centralized DHCP server. You can configure this router as a DHCP server or disable it. The DHCP server can assign IP address, IP default gateway, and DNS server to DHCP clients. This router can also act as a surrogate DHCP server (DHCP Relay) where it relays IP address assignment from an actual real DHCP server to clients. You can enable or disable DHCP server.

Click **DHCP** in the left pane and the page shown in the following figure appears.



The following table describes the parameters on this page:

Field	Description
DHCP Mode	If set to DHCP Server , the router can assign IP addresses, IP default gateway and DNS Servers to the host in Windows95, Windows NT and other operation systems that support the DHCP client.
IP Pool Range	It specifies the first and the last IP address in the IP address pool. The router assigns IP address that is in the IP pool range to the host.
Show Client	Click it, the Active DHCP Client Table appears. It shows IP addresses

Field	Description
	assigned to clients.
Default Gateway	Enter the default gateway of the IP address pool.
Max Lease Time	The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.
Domain Name	Enter the domain name if you know. If you leave this blank, the domain name obtained by DHCP from the ISP is used. You must enter host name (system name) on each individual PC. The domain name can be assigned from the router through the DHCP server.
DNS Servers	You can configure the DNS server IP addresses for DNS Relay.
Set Vendor Class IP Range	Click it, the Device IP Range Table page appears. You can configure the IP address range based on the device type.

Click **Show Client** on the **DHCP Mode** page and the page shown in the following figure appears. You can view the IP address assigned to each DHCP client.

Active DHCP Client Table

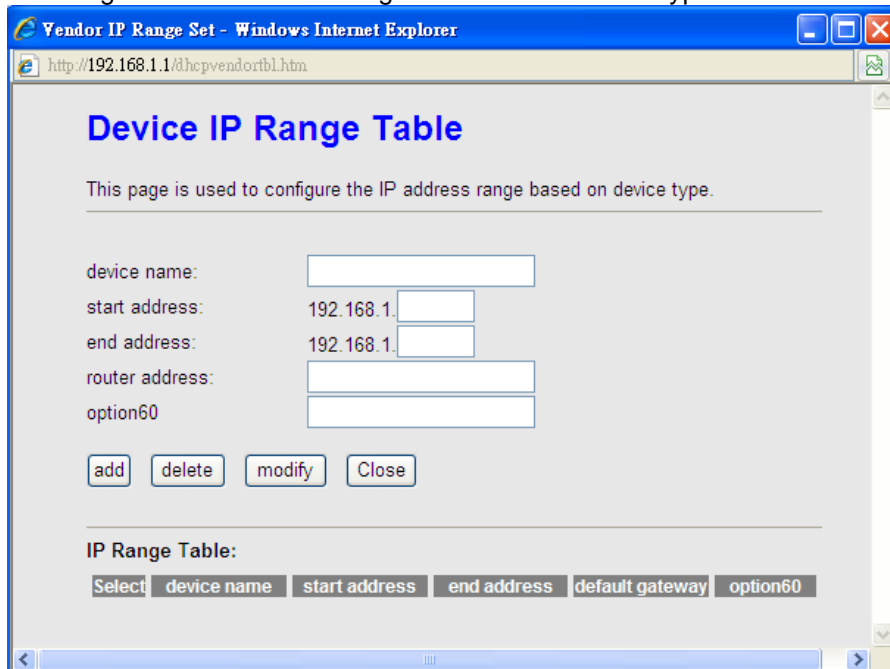
This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.

Name	IP Address	MAC Address	Expiry(s)	Type
ENM-ANTHONY	192.168.1.46	00:0d:88:18:35:ab	In 0 days 23:59:52	Automatic

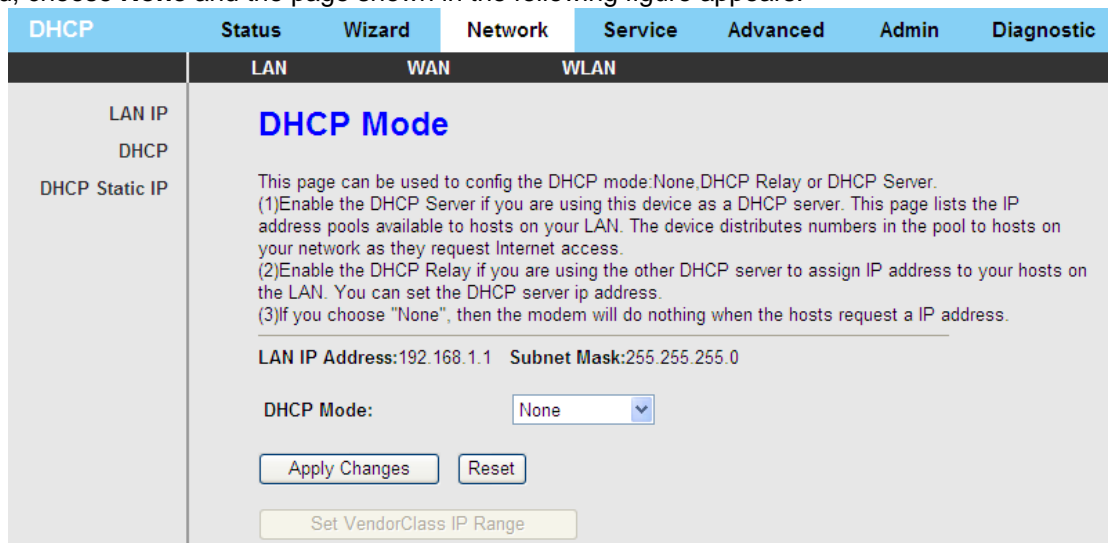
The following table describes the parameters and buttons on this page:

Field	Description
IP Address	It displays the IP address assigned to the DHCP client from the router.
MAC Address	It displays the MAC address of the DHCP client. Each Ethernet device has a unique MAC address. The MAC address is assigned at the factory and it consists of six pairs of hexadecimal character, for example, 00-A0-C5-00-02-12.
Expiry (s)	It displays the lease time. The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.
Refresh	Click it to refresh this page.
Close	Click it to close this page.

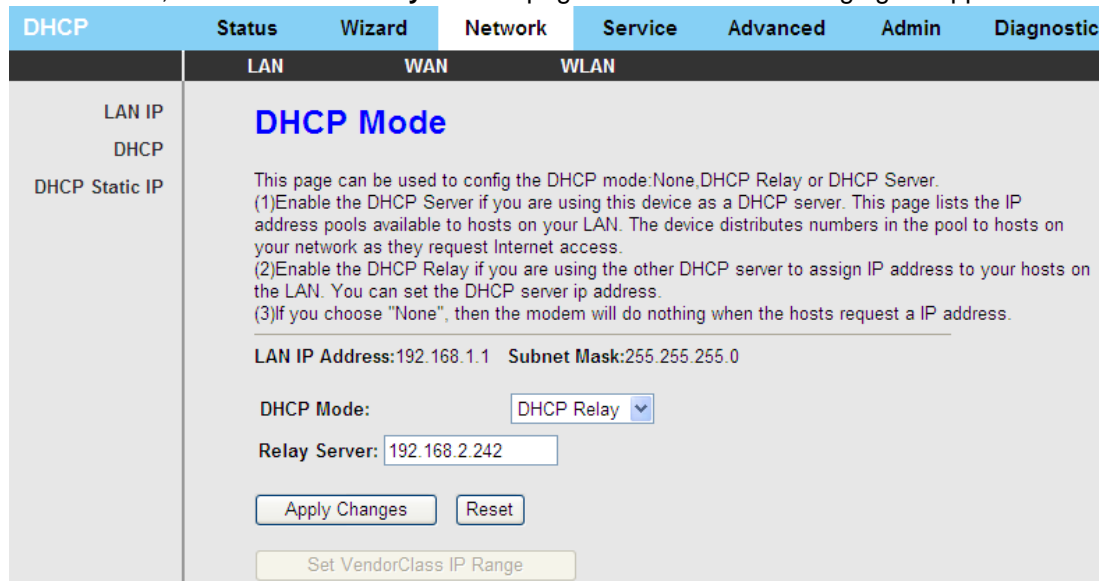
Click **Set Vendor Class IP Range** on the **DHCP Mode** page and the page as shown in the following figure appears. On this page, you can configure the IP address range based on the device type.



In the **DHCP Mode** field, choose **None** and the page shown in the following figure appears.



In the **DHCP Mode** field, choose **DHCP Relay** and the page shown in the following figure appears.

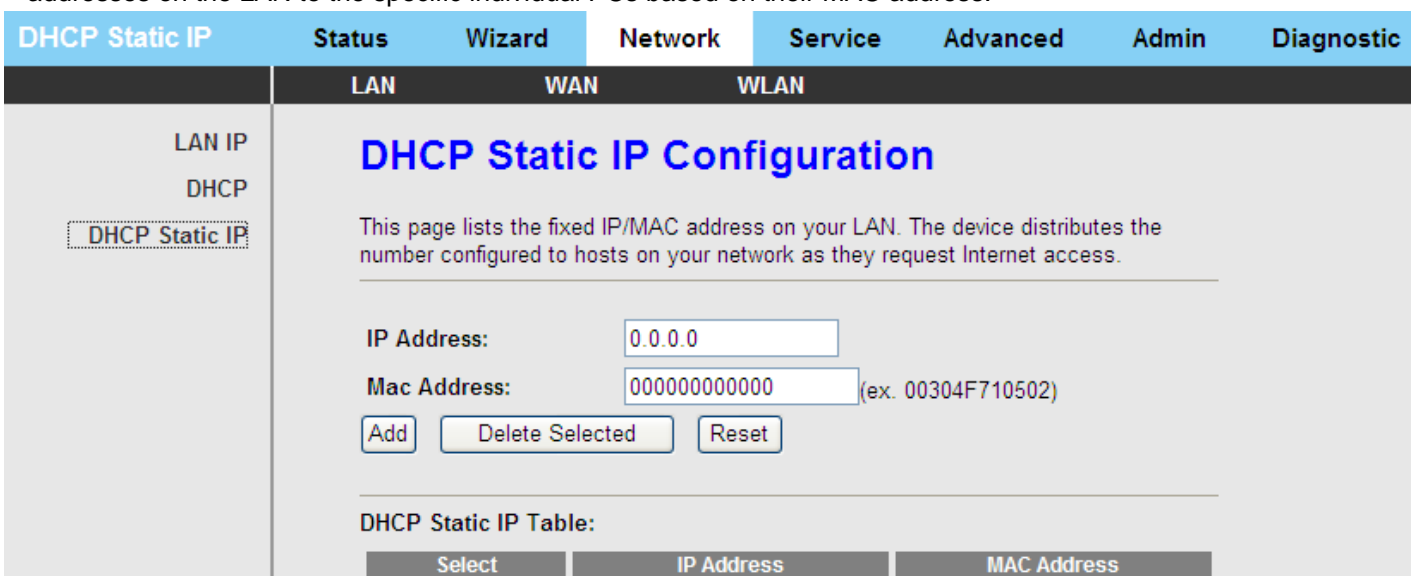


The following table describes the parameters and buttons on this page:

Field	Description
DHCP Mode	If set to DHCP Relay , the router acts a surrogate DHCP Server and relays the DHCP requests and responses between the remote server and the client.
Relay Server	Enter the DHCP server address provided by your ISP.
Apply Changes	Click it to save the settings of this page.
Reset	Click it to refresh this page.

3.4.1.3 DHCP Static IP

Click **DHCP Static IP** in the left pane and the page shown in the following figure appears. You can assign the IP addresses on the LAN to the specific individual PCs based on their MAC address.



The following table describes the parameters and buttons on this page:

Field	Description
IP Address	Enter the specified IP address in the IP pool range, which is assigned to the host.
MAC Address	Enter the MAC address of a host on the LAN.
Add	After entering the IP address and MAC address, click it. A row will be added in the DHCP Static IP Table .

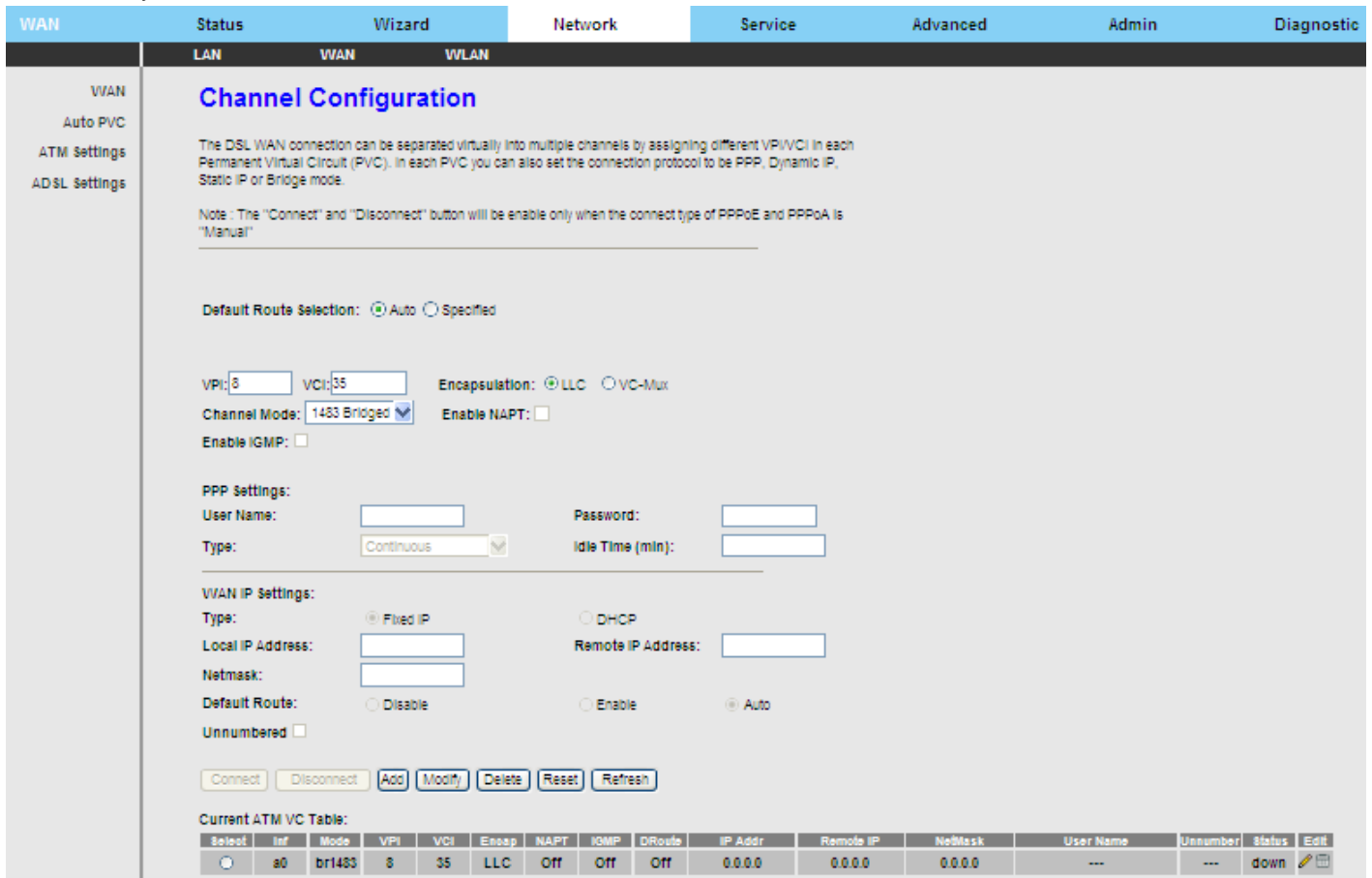
Field	Description
Delete Selected	Select a row in the DHCP Static IP Table , then click it, this row is deleted.
Reset	Click it to refresh this page.
DHCP Static IP Table	It shows the assigned IP address based on the MAC address.

3.4.2 WAN

Choose **Network > WAN** and the **WAN** page that is displayed contains **WAN, Auto PVC, ATM Settings** and **ADSL Settings**.

3.4.2.1 WAN

Click **WAN** in the left pane and the page shown in the following figure appears. On this page, you can configure WAN interface of your router.




The screenshot displays the 'Channel Configuration' page for the WAN interface. It includes a left sidebar with navigation options like 'WAN', 'Auto PVC', 'ATM Settings', and 'ADSL Settings'. The main content area contains several configuration sections: 'Default Route Selection' (Auto/Specified), 'VPI/VCI' (8/35), 'Encapsulation' (LLC/VC-Mux), 'Channel Mode' (1483 Bridged), 'Enable NAPT' (checkbox), 'Enable IGMP' (checkbox), 'PPP Settings' (User Name, Password, Type, Idle Time), and 'WAN IP Settings' (Type: Fixed IP/DHCP, Local/Remote IP Address, Netmask, Default Route, Unnumbered). At the bottom, there are 'Connect', 'Disconnect', 'Add', 'Modify', 'Delete', 'Reset', and 'Refresh' buttons, followed by a table titled 'Current ATM VC Table'.

Select	Inf	Mode	VPI	VCI	Encap	NAPT	IGMP	DRoute	IP Addr	Remote IP	NetMask	User Name	Unnumber	Status	Edit
<input type="checkbox"/>	a0	br1483	8	35	LLC	Off	Off	Off	0.0.0.0	0.0.0.0	0.0.0.0	---	---	down	

The following table describes the parameters on this page:

Field	Description
Default Route Selection	You can select Auto or Specified .
VPI	The virtual path between two points in an ATM network, ranging from 0 to 255.
VCI	The virtual channel between two points in an ATM network, ranging from 32 to 65535 (1 to 31 are reserved for known protocols)
Encapsulation	You can choose LLC and VC-Mux .
Channel Mode	You can choose 1483 Bridged , 1483 MER , PPPoE , PPPoA , 1483 Routed or IPoA .
Enable NAPT	Select it to enable Network Address Port Translation (NAPT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Enable IGMP	You can enable or disable Internet Group Management Protocol

Field	Description
	(IGMP) function.
PPP Settings	
User Name	Enter the correct user name for PPP dial-up, which is provided by your ISP.
Password	Enter the correct password for PPP dial-up, which is provided by your ISP.
Type	You can choose Continuous , Connect on Demand , or Manual .
Idle Time (min)	If set the type to Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the user continuously, the router automatically disconnects the PPPoE connection.
WAN IP Settings	
Type	You can choose Fixed IP or DHCP . <ul style="list-style-type: none"> ● If select Fixed IP, you should enter the local IP address, remote IP address and subnet mask. ● If select DHCP, the router is a DHCP client, the WAN IP address is assigned by the remote DHCP server.
Local IP Address	Enter the IP address of WAN interface provided by your ISP.
Netmask	Enter the subnet mask of the local IP address.
Unnumbered	Select this checkbox to enable IP unnumbered function.
Add	After configuring the parameters of this page, click it to add new PVC into the Current ATM VC Table .
Modify	Select PVC in the Current ATM VC Table , and modify the parameters of this PVC. After finishing, click it to apply the settings of this PVC.
Current ATM VC Table	This table shows the existed PVCs. It shows the interface name, channel mode, VPI/VCI, encapsulation mode, local IP address, remote IP address and other information. The maximum item of this table is eight.

After adding a PPPoE ATM VC to the table, click  in the **PPPoE** mode and the page shown in the following figure appears. On this page, you can configure parameters of this PPPoE PVC.

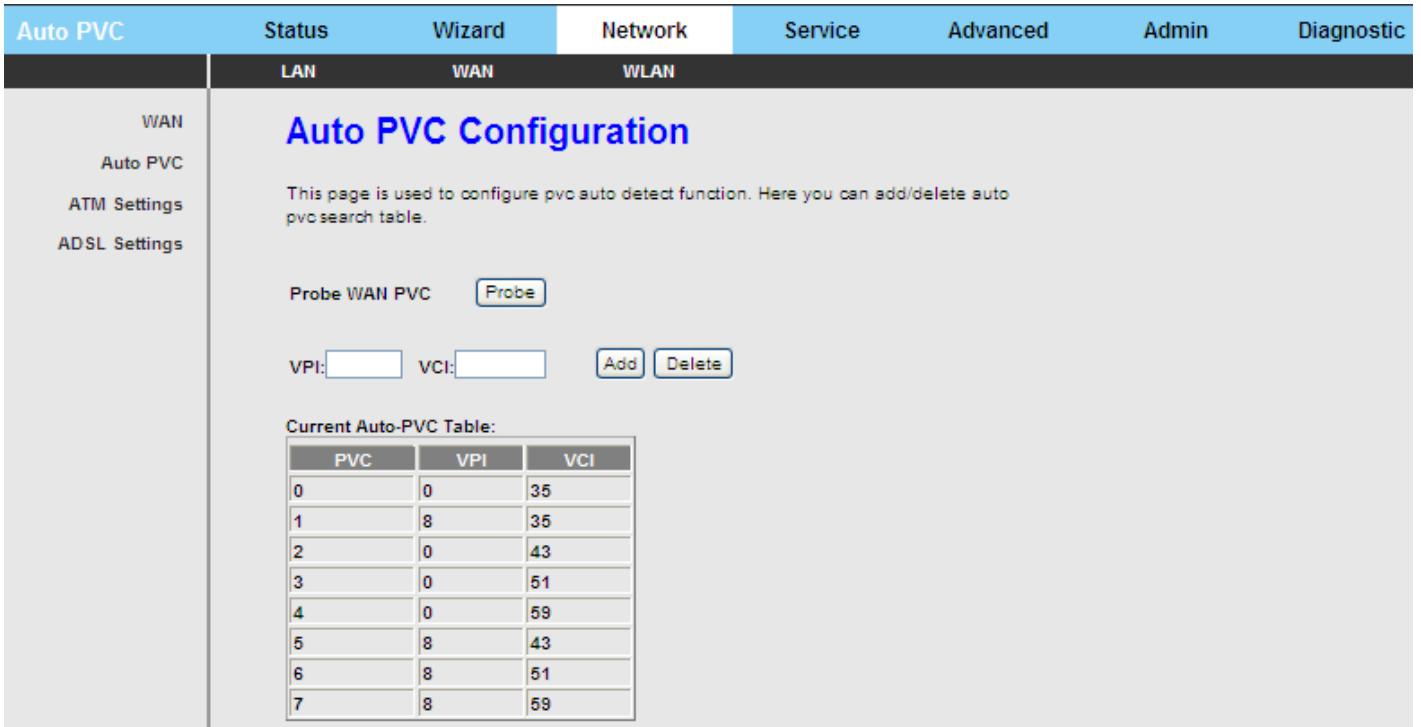
WAN	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	LAN	WAN	WLAN				
WAN Auto PVC ATM Settings ADSL Settings	<h2 style="text-align: center;">PPP Interface - Modify</h2> <p> Protocol: PPPoE ATM VCC: 8/35 Login Name: <input type="text" value="pppoe01"/> Password: <input type="password" value="*****"/> Authentication Method: <input type="text" value="Auto"/> Connection Type: <input type="text" value="Continuous"/> Idle Time (s): <input type="text" value="0"/> Bridge: <input type="radio"/> Bridged Ethernet (Transparent Bridging) <input type="radio"/> Bridged PPPoE (implies Bridged Ethernet) <input checked="" type="radio"/> Disable Bridge </p> <p> AC-Name: <input type="text"/> Service-Name: <input type="text"/> 802.1q: <input checked="" type="radio"/> Disable <input type="radio"/> Enable VLAN ID(1-4095): <input type="text" value="0"/> </p> <p> MTU (576-1492): <input type="text" value="1400"/> Static IP: <input type="text"/> Source Mac address: <input type="text" value="00:30:4F:56:78:60"/> (ex:00:30:4F:71:05:02) <input type="button" value="MACCLONE"/> </p> <p style="text-align: center;"> <input type="button" value="Apply Changes"/> <input type="button" value="Return"/> <input type="button" value="Reset"/> </p>						

The following table describes the parameters and buttons on this page:

Field	Description
Protocol	It displays the protocol type used for this WAN connection.
ATM VCC	The ATM virtual circuit connection assigned for this PPP interface (VPI/VCI).
Login Name	The user name provided by your ISP.
Password	The password provided by your ISP.
Authentication Method	You can choose AUTO , CHAP , or PAP .
Connection Type	You can choose Continuous , Connect on Demand , or Manual .
Idle Time (s)	If choose Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the user continuously, the router automatically disconnects the PPPoE connection.
Bridge	You can select Bridged Ethernet , Bridged PPPoE , or Disable Bridge .
AC-Name	The accessed equipment type.
Service-Name	The service name.
802.1q	You can select Disable or Enable . After enable it, you need to enter the VLAN ID. The value ranges from 1 to 4095.
Apply Changes	Click it to save the settings of this page temporarily.
Return	Click it to return to the Channel Configuration page.
Reset	Click it to refresh this page.
Source Mac address	The MAC address you want to clone.
MAC Clone	Click it to enable the MAC Clone function with the MAC address that is configured.

3.4.2.2 Auto PVC

Click **Auto PVC** in the left pane and the page shown in the following figure appears. On this page, you can get PVC automatically through detecting function, and add or delete the PVC that you do not want.



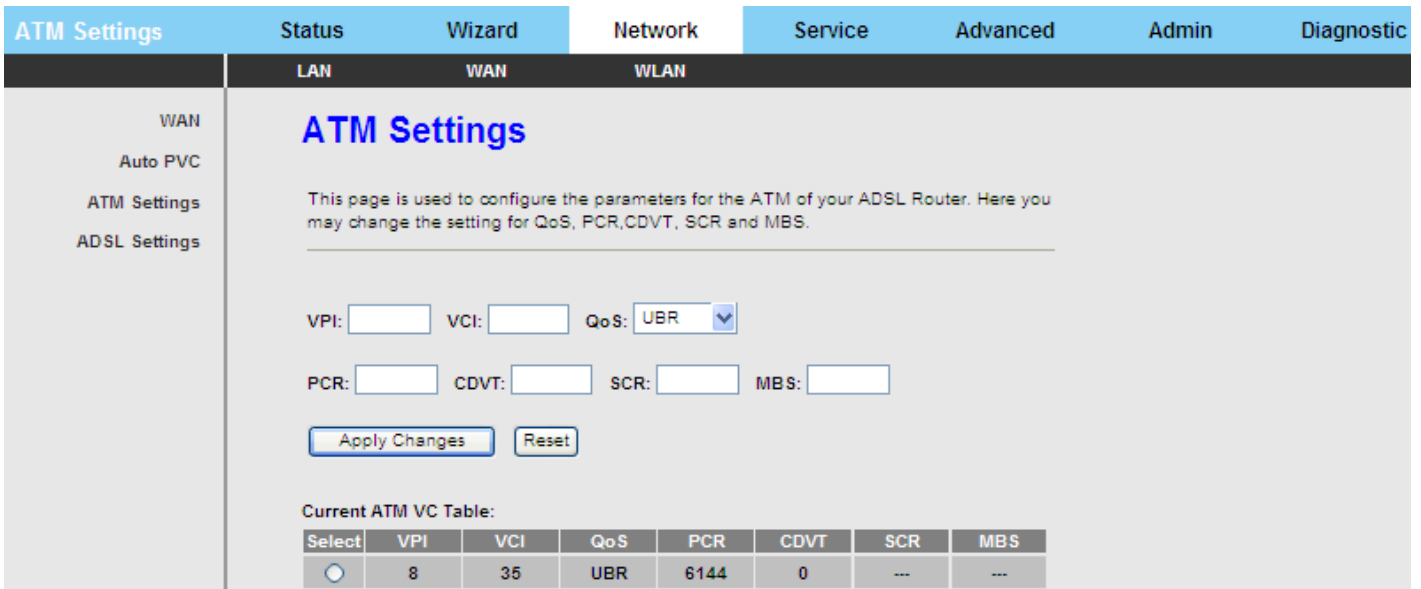
The screenshot shows the 'Auto PVC Configuration' page. The left sidebar has 'Auto PVC' selected. The top navigation bar includes 'Auto PVC', 'Status', 'Wizard', 'Network', 'Service', 'Advanced', 'Admin', and 'Diagnostic'. Below this, there are sub-tabs for 'LAN', 'WAN', and 'WLAN'. The main content area is titled 'Auto PVC Configuration' and contains the following elements:

- A description: "This page is used to configure pvc auto detect function. Here you can add/delete auto pvc search table."
- A 'Probe WAN PVC' section with a 'Probe' button.
- Input fields for 'VPI:' and 'VCI:' with 'Add' and 'Delete' buttons.
- A table titled 'Current Auto-PVC Table':

PVC	VPI	VCI
0	0	35
1	8	35
2	0	43
3	0	51
4	0	59
5	8	43
6	8	51
7	8	59

3.4.2.3 ATM Settings

Click **ATM Settings** in the left pane and the page shown in the following figure appears. On this page, you can configure the parameters of the ATM, including QoS, PCR, CDVT, SCR and MBS.



The screenshot shows the 'ATM Settings' page. The left sidebar has 'ATM Settings' selected. The top navigation bar includes 'ATM Settings', 'Status', 'Wizard', 'Network', 'Service', 'Advanced', 'Admin', and 'Diagnostic'. Below this, there are sub-tabs for 'LAN', 'WAN', and 'WLAN'. The main content area is titled 'ATM Settings' and contains the following elements:

- A description: "This page is used to configure the parameters for the ATM of your ADSL Router. Here you may change the setting for QoS, PCR, CDVT, SCR and MBS."
- Input fields for 'VPI:', 'VCI:', and 'QoS:' (with a dropdown menu showing 'UBR').
- Input fields for 'PCR:', 'CDVT:', 'SCR:', and 'MBS:'.
- 'Apply Changes' and 'Reset' buttons.
- A table titled 'Current ATM VC Table':

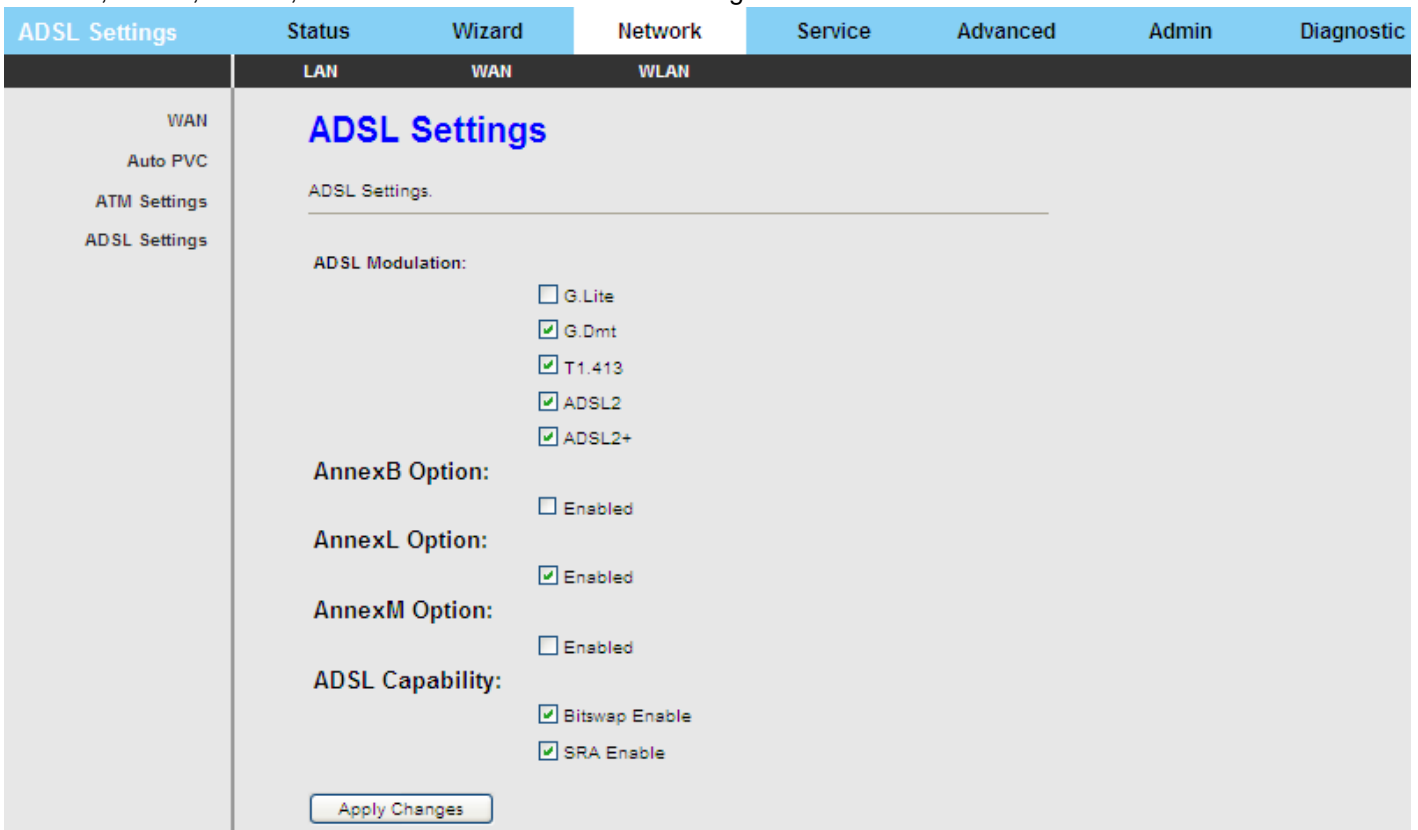
Select	VPI	VCI	QoS	PCR	CDVT	SCR	MBS
<input checked="" type="radio"/>	8	35	UBR	6144	0	---	---

The following table describes the parameters on this page:

Field	Description
VPI	The virtual path identifier of the ATM PVC.
VCI	The virtual channel identifier of the ATM PVC.
QoS	The QoS category of the PVC. You can choose UBR , CBR , rt-VBR , or nrt-VBR .
PCR	Peak cell rate (PCR) is the maximum rate at which cells can be transmitted along a connection in the ATM network. Its value ranges from 1 to 65535.
CDVT	Cell delay variation tolerance (CDVT) is the amount of delay permitted between ATM cells (in microseconds). Its value ranges from 0 to 4294967295.
SCR	Sustained cell rate (SCR) is the maximum rate that traffic can pass over PVC without the risk of cell loss. Its value ranges from 0 to 65535.
MBS	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at the PCR. Its value ranges from 0 to 65535.

3.4.2.4 ADSL Settings

Click **ADSL Settings** in the left pane and the page shown in the following figure appears. On this page, you can select the DSL modulation. Mostly, you need to remain this factory default settings. The router supports these modulations: **G.Lite**, **G.Dmt**, **T1.413**, **ADSL2** and **ADSL2+**. The router negotiates the modulation modes with the DSLAM.



The screenshot shows the ADSL Settings page. The top navigation bar includes tabs for ADSL Settings, Status, Wizard, Network, Service, Advanced, Admin, and Diagnostic. Below this is a sub-navigation bar with tabs for LAN, WAN, and WLAN. The main content area is titled "ADSL Settings" and contains the following sections:

- ADSL Modulation:**
 - G.Lite
 - G.Dmt
 - T1.413
 - ADSL2
 - ADSL2+
- AnnexB Option:**
 - Enabled
- AnnexL Option:**
 - Enabled
- AnnexM Option:**
 - Enabled
- ADSL Capability:**
 - Bitswap Enable
 - SRA Enable

An "Apply Changes" button is located at the bottom of the page.

3.4.3 WLAN

Choose **Network > WLAN**. The **WLAN** page that is displayed contains **Basic, Security, Access Control List, MBSSID, Advanced, WPS, WDS, and WDS Security**.

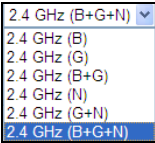
3.4.3.1 Basic

Choose **WLAN > Basic** and the following page appears. On this page, you can configure the parameters for wireless LAN clients that may connect to the modem.



The screenshot shows the 'Wireless Basic Settings' page. On the left is a navigation menu with options: Basic, Security, Access Control List, MBSSID, Advanced, WPS, WDS, and WDS Security. The main content area has tabs for LAN, WAN, and WLAN. Under the WLAN tab, the title is 'Wireless Basic Settings'. Below the title is a description: 'This page is used to configure the parameters for your wireless network.' There is a checkbox for 'Disable Wireless LAN Interface' which is unchecked. Below that are several configuration fields: 'Band' (2.4 GHz (B+G+N)), 'Mode' (AP), 'SSID' (ADN-4101), 'Channel Width' (40MHz), 'Control Sideband' (Upper), 'Channel Number' (Auto) with 'Current Channel: 1' displayed next to it, 'Radio Power (Percent)' (100%), and an 'Associated Clients' button labeled 'Show Active Clients'. At the bottom is an 'Apply Changes' button.

The following table describes the parameters on this page:

Field	Description
Band	Choose the working mode of the modem. You can choose from drop-down list. 
Mode	Choose the network model of the modem, which varies according to the software. By default, the network model of the modem is AP .
SSID	The service set identification (SSID) is a unique name to identify the modem in the wireless LAN. Wireless stations associating to the modem must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the modem.
Channel Number	A channel is the radio frequency used by 802.11b/g wireless devices. There are 14 channels (from 1 to 14) available depending on the geographical area. You may have a choice of channels (for your region) and you should use a different channel from an adjacent AP to reduce the interference. Interference and degrading performance occurs when radio signal from different APs overlap. Choose a channel from the drop-down list box.
Radio Power	You can choose the transmission power of the radio signal. The default one is 100% . It is recommended to choose the default value 100% .
Show Active Clients	Click it to view the information of the wireless clients that are connected to the modem.

Field	Description
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

3.4.3.2 Security

Choose **WLAN> Security** and the following page appears.



Security Status Wizard Network Service Advanced Admin Diagnostic

LAN WAN WLAN

Basic
Security
Access Control List
MBSSID
Advanced
WPS
WDS
WDS Security

Wireless Security Setup

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID TYPE: Root VAP0 VAP1 VAP2 VAP3

Encryption: WPA2 Mixed

Use 802.1x Authentication WEP 64bits WEP 128bits

WPA Authentication Mode: Enterprise (RADIUS) Personal (Pre-Shared Key)

Pre-Shared Key Format: Passphrase

Pre-Shared Key: *****

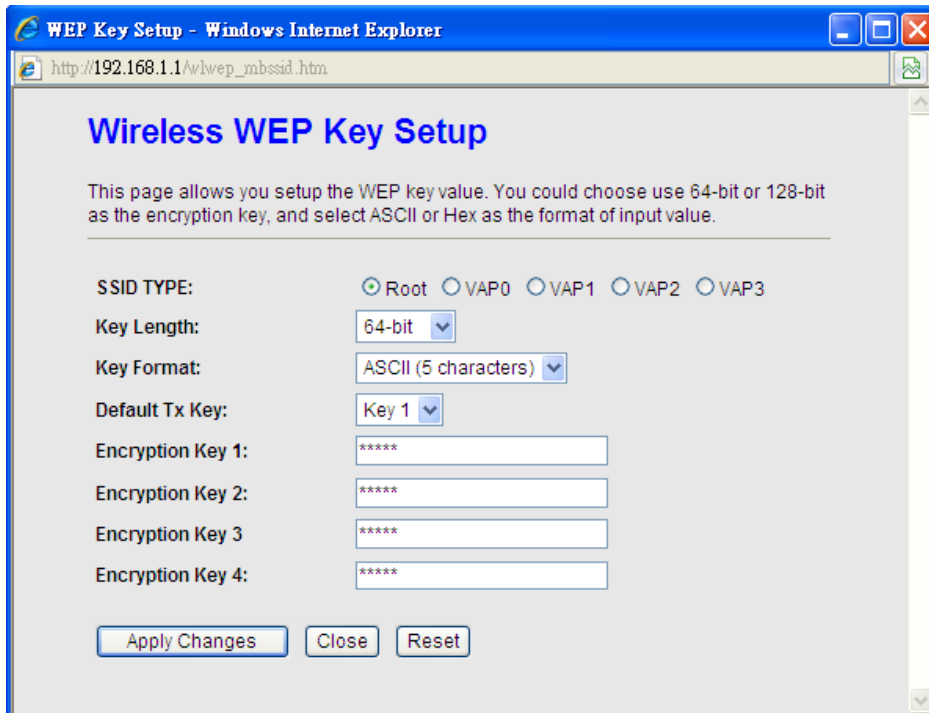
Authentication RADIUS Server: Port 1812 IP address 0.0.0.0
Password

Note: When encryption WEP is selected, you must set WEP key value.

The following table describes the parameters on this page:

Field	Description
Encryption	Configure the wireless encryption mode. You can choose None , WEP , WPA (TKIP) , WPA (AES) , WPA2 (AES) , WPA2 (TKIP) or WPA2 Mixed . <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the modem through WPA or WPA2. Key differences between WPA and WEP are user authentication and improved data encryption.
Set WEP Key	It is available when you set the encryption mode to WEP . Click it, the Wireless WEP Key Setup page appears.
WPA Authentication Mode	<ul style="list-style-type: none"> ● Select Personal (Pre-Shared Key), enter the pre-shared key in the Pre-Shared Key field. ● Select Enterprise (RADIUS), and enter the port, IP address, and password of the Radius server. You need to enter the username and password provided by the Radius server when the wireless client connects the modem. If the encryption is set to WEP , the modem uses 802.1 X authentication, which is Radius authentication.

Set the encryption mode to **WEP** and click **Set WEP Key** and the following page appears.



3.4.3.3 Access Control List

Choose **WLAN > Access Control List** and the following page appears. On this page, you can configure the access control of the wireless clients.



Choose **Allow Listed** as the access control mode to enable white list function. Only the devices whose MAC addresses are listed in the **Current Access Control List** can access the modem.

Choose **Deny Listed** as the access control mode to enable black list function. The devices whose MAC addresses are listed in the **Current Access Control List** are denied to access the modem.

3.4.3.4 MBSSID

Choose **Wireless > MBSSID** and the following page appears. On this page, you can configure the multi-SSID of the wireless clients.




The screenshot shows the 'Wireless Multiple BSSID Setup' page. The left sidebar has a menu with 'MBSSID' selected. The main content area has a title 'Wireless Multiple BSSID Setup' and a description: 'This page allows you to set virtual access points(VAP). Here you can enable/disable virtual AP, and set its SSID and authentication type. click "Apply Changes" to take it effect.' Below this, there are two sections for VAP0 and VAP1. Each section has an 'Enable VAP' checkbox, an 'SSID' text field (with 'VAP0' and 'VAP1' entered respectively), and three radio button options: 'Broadcast SSID' (Enable/Disable), 'Relay Blocking' (Enable/Disable), and 'Authentication Type' (Open System, Shared Key, Auto).

It supports four virtual access points (VAPs). It is a unique name to identify the modem in the wireless LAN. Wireless stations associating to the modem must have the same name. Enter a descriptive name that is used when the wireless client connecting to the modem.

3.4.3.5 Advanced

Choose **WLAN > Advanced** and the following page appears. On this page, you can configure the wireless advanced parameters. It is recommended to use the default parameters.

 The parameters in the **Advanced** are modified by the professional personnel. It is recommended to keep the default values

Advanced	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	LAN	WAN	WLAN				
Basic	Wireless Advanced Settings						
Security	These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.						
Access Control List							
MBS SID							
Advanced							
WPS	Authentication Type: <input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> Auto						
WDS	Fragment Threshold: <input type="text" value="2346"/> (256-2346)						
WDS Security	RTS Threshold: <input type="text" value="2347"/> (0-2347)						
	Beacon Interval: <input type="text" value="100"/> (20-1024 ms)						
	DTIM Interval: <input type="text" value="1"/> (1-255)						
	Data Rate: <input type="text" value="Auto"/>						
	Preamble Type: <input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble						
	Broadcast SSID: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled						
	Relay Blocking: <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled						
	Ethernet to Wireless Blocking: <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled						
	Wifi Multicast to Unicast: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled						
	Aggregation: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled						
	Short GI: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled						
	<input type="button" value="Apply Changes"/>						

The following table describes the parameters on this page:

Field	Description
Authentication	Select the modem operating in the open system or encryption authentication. You can choose Open System , Shared Key , or Auto . <ul style="list-style-type: none"> ● In the open system, the wireless client can directly connect to the device ● In the encryption authentication, the wireless client connects to the modem through the shared key.
Data Rate	Choose the transmission rate of the wireless data. You can choose Auto , 1 M , 2 M , 5.5 M , 11 M , 6 M , 9 M , 12 M , 18 M , 24 M , 36 M , 48 M , 54M , MSC0 ~ MSC7 .
PreambleType	<ul style="list-style-type: none"> ● Long Preamble: It means this card always use long preamble. ● Short Preamble: It means this card can support short preamble capability.
Broadcast SSID	Select whether the modem broadcasts SSID or not. You can select Enable or Disable . <ul style="list-style-type: none"> ● Select Enable, the wireless client searches the modem through broadcasting SSID. ● Select Disable to hide SSID, the wireless clients can not find the SSID.
Relay Blocking	Wireless isolation. Select Enable , the wireless clients that are connected to the modem can not intercommunication.
Ethernet to Wireless Blocking	Whether the wireless network can communicate with the Ethernet network or not.
Wifi Multicast to Unicast	Enable it to using unicast to transmit multicast packet
Aggregation	It is applied when the destination end of all MPDU are for one STA.
Short GI	It is not recommended to enable GI in obvious environment of Multi-path effect.
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

3.4.3.6 WPS

Choose **WLAN > WPS** and the following page appears.

WPS	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic						
	LAN	WAN	WLAN										
<ul style="list-style-type: none"> Basic Security Access Control List MBSSID Advanced WPS WDS WDS Security 	<h2 style="text-align: center;">Wi-Fi Protected Setup</h2> <p>This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.</p> <p><input type="checkbox"/> Disable WPS</p> <p>WPS Status: <input checked="" type="radio"/> Configured <input type="radio"/> UnConfigured</p> <p>Self-PIN Number: <input type="text" value="04120261"/> <input type="button" value="Regenerate PIN"/></p> <p>Push Button Configuration: <input type="button" value="Start PBC"/></p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p> <p>Current Key Info:</p> <table border="1"> <thead> <tr> <th>Authentication</th> <th>Encryption</th> <th>Key</th> </tr> </thead> <tbody> <tr> <td>WPA2-Mixed PSK</td> <td>TKIP+AES</td> <td>84117341</td> </tr> </tbody> </table> <p>Client PIN Number: <input type="text"/> <input type="button" value="Start PIN"/></p>							Authentication	Encryption	Key	WPA2-Mixed PSK	TKIP+AES	84117341
Authentication	Encryption	Key											
WPA2-Mixed PSK	TKIP+AES	84117341											

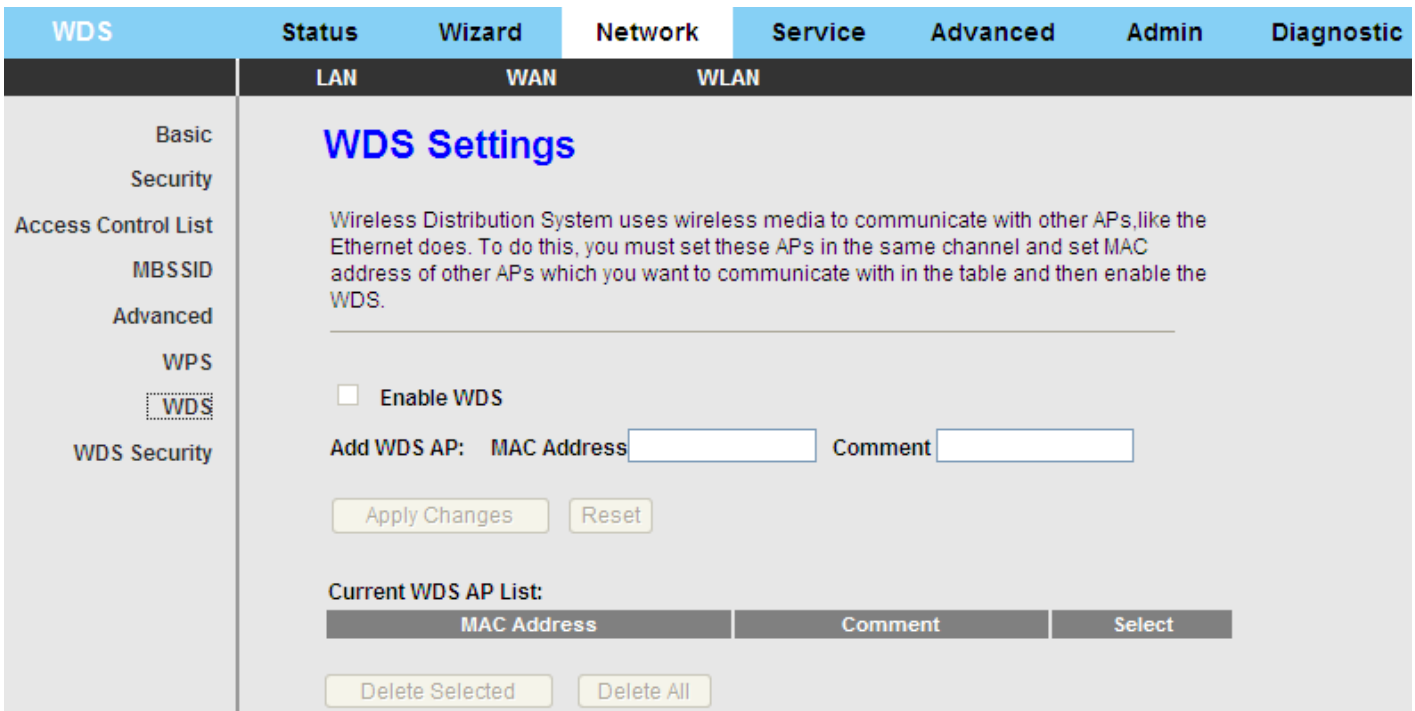
There are two ways for the wireless client to establish connection with the modem through WPS. Click **Regenerate PIN** to generate a new PIN, and then click **Start PBC**, in the wireless client tool, enter the PIN which is generated by the modem, start connection. The client will automatically establish the connection with the modem through the encryption mode, and you need not to enter the key. The other way is the wireless client generates PIN. In the above figure, enter PIN of the wireless client in the **Client PIN Number** field, then click **Start PIN** to establish the connection.



The wireless client establishes the connection with the modem through WPS negotiation. The wireless client must support WPS.

3.4.3.7 WDS

Choose **WLAN > WDS** and the following page appears. On this page you can enable wireless distribution system (WDS) so that the router can communicate with another AP.



The following table describes the parameters on this page:

Field	Description
MAC Address	Wireless MAC address of the AP to be connected
Comment	Add comment for the WDS AP

3.4.3.8 WDS Security

Choose **WLAN > WDS Security** and the following page appears. On this page, you can set up wireless security for WDS.



The following table describes the parameters on this page:

Field	Description
Encryption	Choose a WDS encryption algorithm from None, WEP, TKIP or AES.
Pre-shared Key	Enter an encryption key.

3.5 Service

In the navigation bar, click **Service**. On the **Service** page that is displayed contains **DNS**, **Firewall**, **UPNP**, **IGMP Proxy**, **TR-069** and **ACL**.

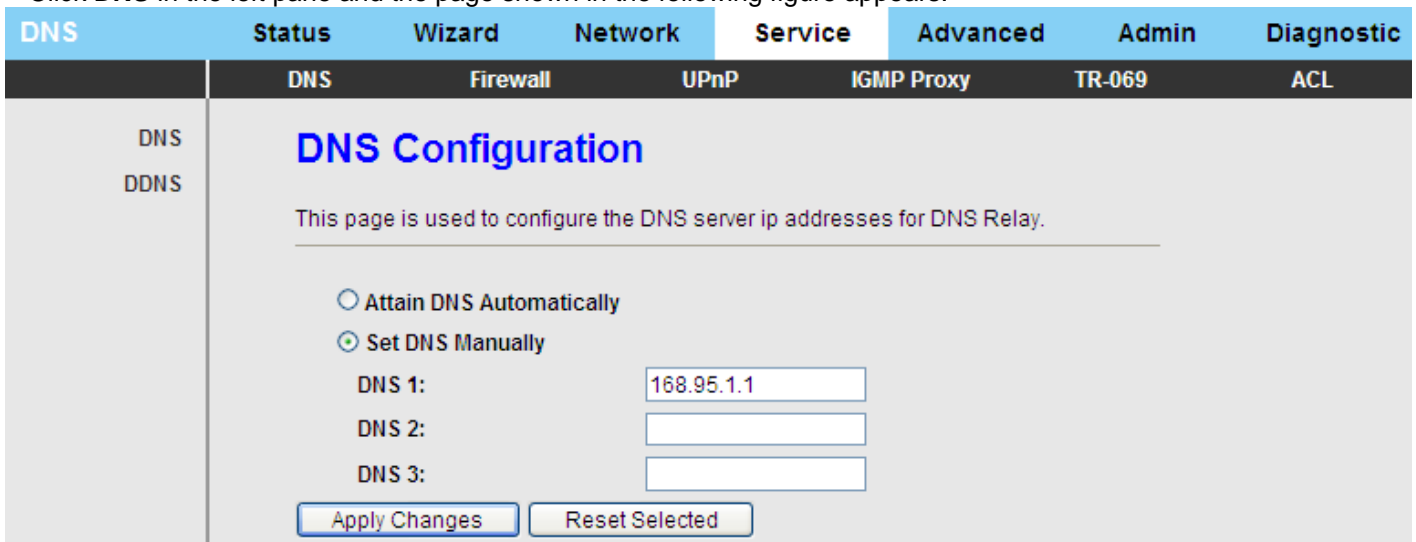
3.5.1 DNS

Domain Name System (DNS) is an Internet service that translates the domain name into IP address. Because the domain name is alphabetic, it is easier to remember. The Internet, however, is based on IP addresses. Every time you use a domain name, DNS translates the name into the corresponding IP address. For example, the domain name www.example.com might be translated to 198.105.232.4. The DNS has its own network. If one DNS server does not know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

Choose **Service** > **DNS**. The **DNS** page that is displayed contains **DNS** and **DDNS**.

3.5.1.1 DNS

Click **DNS** in the left pane and the page shown in the following figure appears.

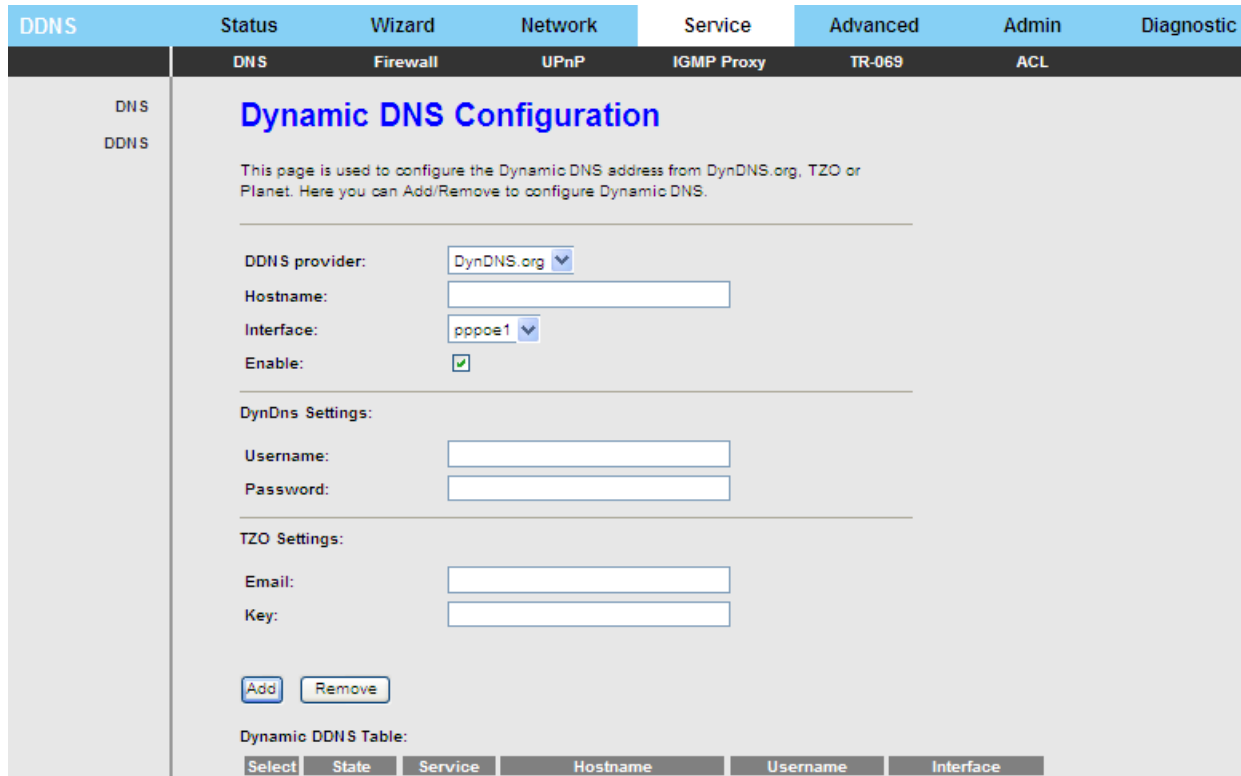


The following table describes the parameters and buttons on this page:

Field	Description
Attain DNS Automatically	Select it, the router accepts the first received DNS assignment from one of the PPPoA, PPPoE or MER enabled PVC(s) during the connection establishment.
Set DNS Manually	Select it and enter the IP addresses of the primary and secondary DNS server.
Apply Changes	Click it to save the settings of this page.
Reset Selected	Click it to start configuring the parameters on this page.

3.5.1.2 DDNS

Click **DDNS** in the left pane and the page shown in the following figure appears. This page is used to configure the dynamic DNS address from DynDNS.org, TZO or Planet. You can add or remove to configure dynamic DNS. The Planet DDNS is free for customer.



The following table describes the parameters on this page:

Field	Description
DDNS provider	Choose the DDNS provider name. You can choose DynDNS.org , TZO or Planet .
Host Name	The DDNS identifier.
Interface	The WAN interface of the router.
Enable	Enable or disable DDNS function.
Username	The name provided by DDNS provider.
Password	The password provided by DDNS provider.
Email	The email provided by DDNS provider.
Key	The key provided by DDNS provider.

3.5.2 Firewall

Choose **Service > Firewall** and the **Firewall** page that is displayed contains **IP/Port Filter**, **MAC Filter**, **URL Filter**, **Anti-DoS** and **Software Forbidden**.

3.5.2.1 IP/Port Filter

Click **IP/Port Filter** in the left pane and the page shown in the following figure appears. Entries in the table are used to restrict certain types of data packets through the gateway. These filters are helpful in securing or restricting your local network.

Firewall	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	

IP/Port Filtering

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Outgoing Default Action: Permit Deny
 Incoming Default Action: Permit Deny

Rule Action: Permit Deny
 Protocol:
 Direction:
 Source IP Address: Mask Address:
 Dest IP Address: Mask Address:
 SPort: - DPort: -
 Enable:

Current Filter Table:

Rule:	Protocol	Source IP/Mask	SPort	Dest IP/Mask	DPort	State	Direction	Action

3.5.2.2 MAC Filter

Click **MAC Filter** in the left pane and the page shown in the following figure appears. Entries in the table are used to restrict certain types of data packets from your local network to Internet through the gateway. These filters are helpful in securing or restricting your local network.

MAC Filter	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	

MAC Filtering

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Outgoing Default Policy Deny Allow
 Incoming Default Policy Deny Allow

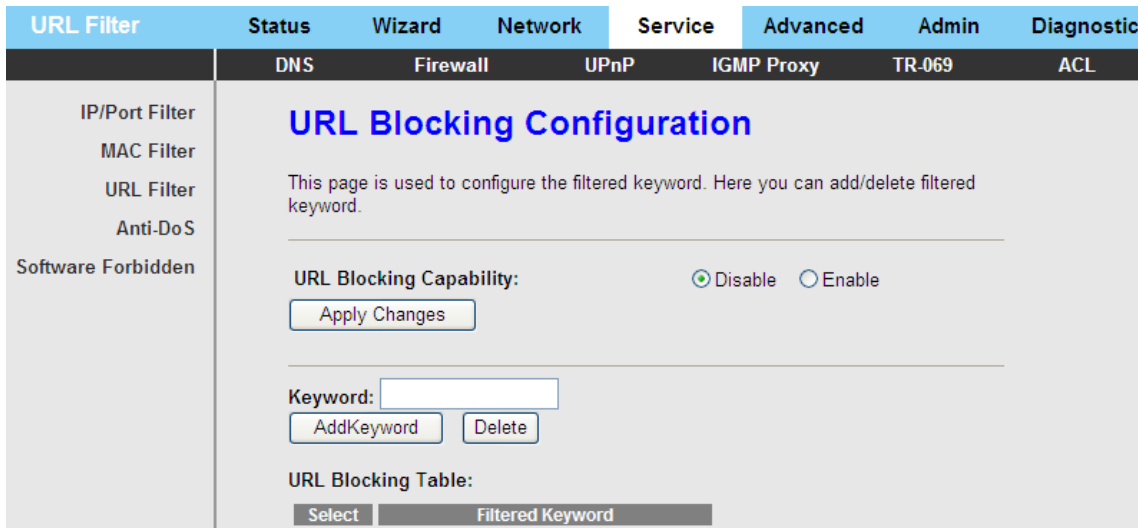
Direction:
 Action: Deny Allow
 Source MAC: (ex: 00304F710502)
 Destination MAC: (ex: 00304F710502)

Current MAC Filter Table:

Select	Direction	Source MAC	Destination MAC	Action

3.5.2.3 URL Filter

Click **URL Filter** in the left pane and the page shown in the following figure appears. This page is used to block a fully qualified domain name, such as tw.yahoo.com and filtered keyword. You can add or delete FQDN and filtered keyword.



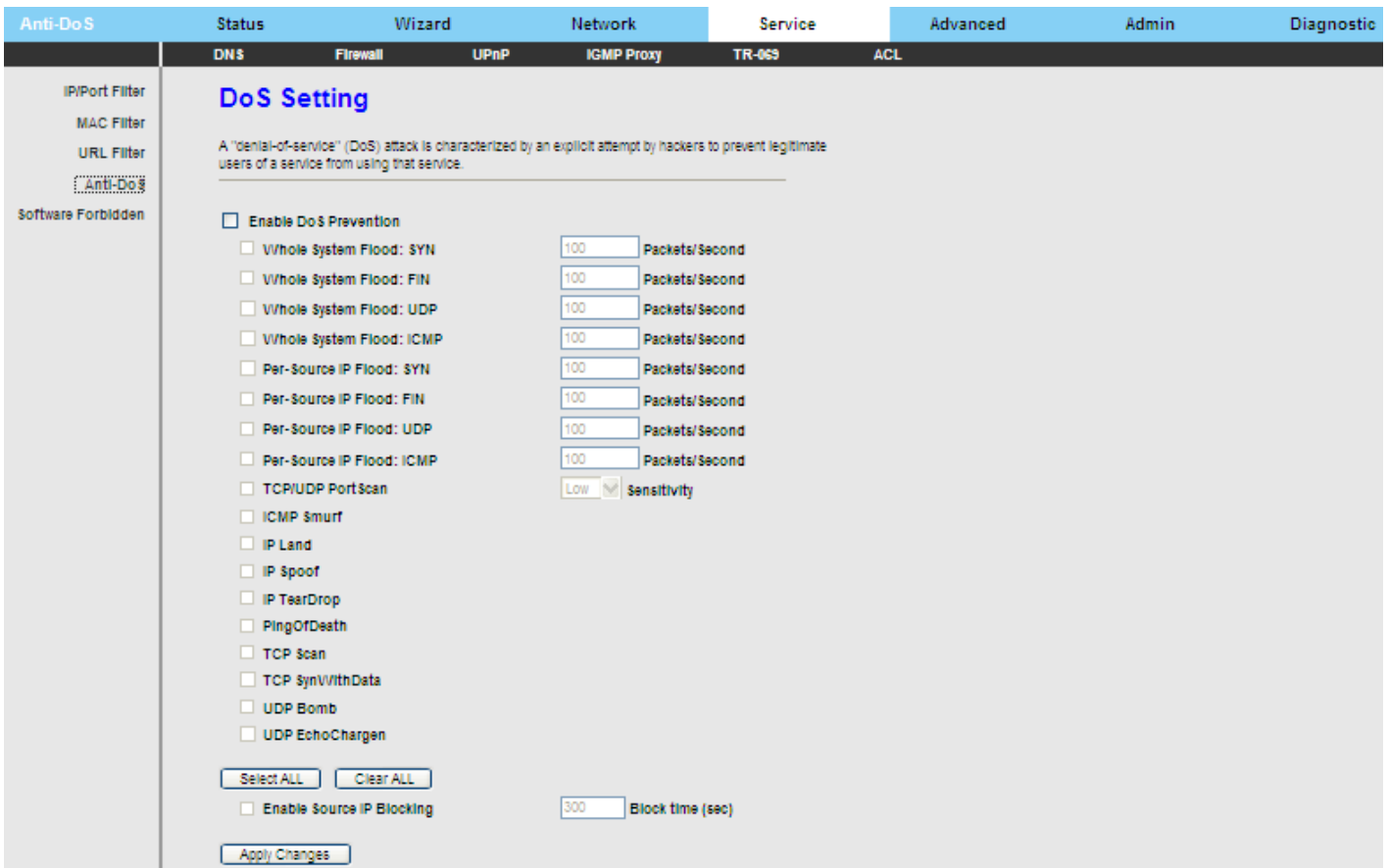
The following table describes the parameters and buttons on this page:

Field	Description
URL Blocking Capability	You can choose Disable or Enable . <ul style="list-style-type: none"> ● Select Disable to disable URL/KEYWORD blocking function and keyword filtering function. ● Select Enable to block access to the URLs and keywords specified in the URL Blocking Table.
Keyword	Enter the keyword to block.
Add Keyword	Click it to add a URL/keyword to the URL Blocking Table .
Delete	Select a row in the URL Blocking Table and click it to delete the row.
URL Blocking Table	A list of the URL (s) to which access is blocked.

3.5.2.4 Anti-DoS


Denial-of-Service Attack (DoS attack) is a type of attack on a network that is designed to bring the network to its knees by flooding it with useless traffic.

Click **Anti-DoS** in the left pane and the page shown in the following figure appears. On this page, you can prevent DoS attacks.



3.5.2.5 Software Forbidden

Click **Software Forbidden** in the left pane and the page shown in the following figure appears. This interface realizes application control. Select an application from the drop-down list to prohibit the application from accessing network resources.



The following table describes the parameters and buttons on this page:

Field	Description
Current Forbidden Software List	A list of currently forbidden applications for accessing the network.
Add Forbidden Software	Select an application to be forbidden from accessing the network.

3.5.3 UPnP

Choose **Service** > **UPnP** and the page shown in the following figure appears. This page is used to configure UPnP. The system acts as a daemon after you enable it.

UPnP	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
UPnP	<h2>UPnP Configuration</h2> <p>This page is used to configure UPnP. The system acts as a daemon when you enable UPnP.</p> <p>UPnP: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>WAN Interface: <input type="text" value=""/> <input type="button" value="v"/></p> <p><input type="button" value="Apply Changes"/></p>						

3.5.4 IGMP Proxy

Choose **Service** > **IGMP Proxy** and the page shown in the following figure appears. IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces. The system acts as a proxy for its hosts after you enable it.

IGMP Proxy	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
IGMP Proxy	<h2>IGMP Proxy Configuration</h2> <p>IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces. The system acts as a proxy for its hosts when you enable it by doing the follows:</p> <ul style="list-style-type: none"> . Enable IGMP proxy on WAN interface (upstream), which connects to a router running IGMP. . Enable IGMP on LAN interface (downstream), which connects to its hosts. <hr/> <p>IGMP Proxy: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Multicast Allowed: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Robust Count: <input type="text" value="2"/></p> <p>Last Member Query Count: <input type="text" value="2"/></p> <p>Query Interval: <input type="text" value="60"/> (seconds)</p> <p>Query Response Interval: <input type="text" value="100"/> (*100ms)</p> <p>Group Leave Delay: <input type="text" value="2000"/> (ms)</p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p>						

3.5.5 TR-069

Choose **Service > TR-069** and the page shown in the following page appears. On this page, you can configure the TR-069 CPE.

TR-069	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	

TR-069 Configuration

This page is used to configure the TR-069 CPE. Here you may change the setting for the ACS's parameters.

ACS:

Enable:

URL:

User Name:

Password:

Periodic Inform Enable: Disable Enable

Periodic Inform Interval: seconds

Connection Request:

User Name:

Password:

Path:

Port:

Debug:

ACS Certificates CPE: No Yes

Show Message: Disable Enable

CPE Sends GetRPC: Disable Enable

Skip MReboot: Disable Enable

Delay: Disable Enable


Auto-Execution: Disable Enable

The following table describes the parameters on this page:

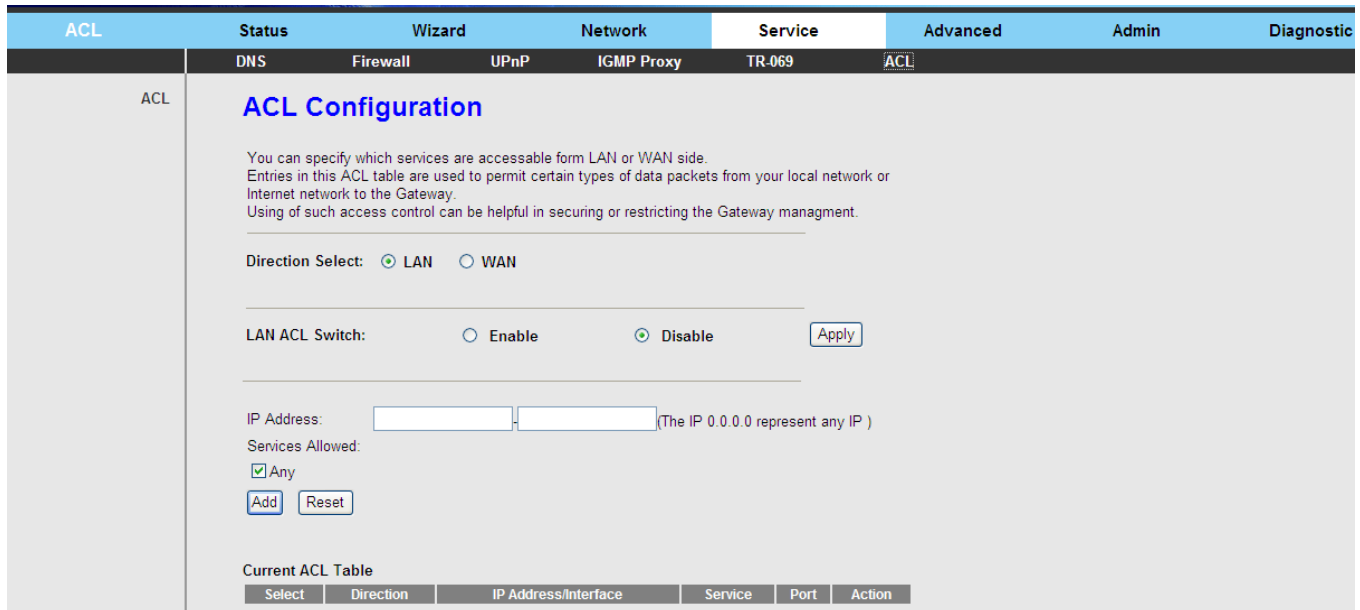
Field	Description
ACS	
URL	The URL of the auto-configuration server to connect to.
User Name	The user name for logging in to the ACS.
Password	The password for logging in to the ACS.
Periodic Inform Enable	Select Enable to periodically connect to the ACS to check whether the configuration updates.
Periodic Inform Interval	Specify the amount of time between connections to ACS.
Connection Request	
User Name	The connection username provided by TR-069 service.
Password	The connection password provided by TR-069 service.
Debug	
Show Message	Select Enable to display ACS SOAP messages on the serial console.
CPE sends GetRPC	Select Enable , the router contacts the ACS to obtain configuration updates.
Skip MReboot	Specify whether to send an MReboot event code in the inform message.
Delay	Specify whether to start the TR-069 program after a short delay.
Auto-Execution	Specify whether to automatically start the TR-069 after the router is powered on.

3.5.6 ACL

Choose **Service** > **ACL** and the page shown in the following figure appears. On this page, you can permit the data packets from LAN or WAN to access the router. You can configure the IP address for Access Control List (ACL). If ACL is enabled, only the effective IP address in the ACL can access the router.



If you select **Enable** in ACL capability, ensure that your host IP address is in ACL list before it takes effect.



The following table describes the parameters and buttons on this page:

Field	Description
Direction Select	Select the router interface. You can select LAN or WAN . In this example, LAN is selected.
LAN ACL Switch	Select it to enable or disable ACL function.
IP Address	Enter the IP address of the specified interface. Only the IP address that is in the same network segment with the IP address of the specified interface can access the router.
Services Allowed	You can choose the following services from LAN: Web , Telnet , SSH , FTP , TFTP , SNMP , or PING . You can also choose all the services.
Add	After setting the parameters, click it to add an entry to the Current ACL Table .
Reset	Click it to refresh this page.

Set direction of the data packets to **WAN** and the page shown in the following figure appears.

ACL	Status	Wizard	Network	Service	Advanced	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	

ACL Configuration

You can specify which services are accessible from LAN or WAN side. Entries in this ACL table are used to permit certain types of data packets from your local network or Internet network to the Gateway. Using of such access control can be helpful in securing or restricting the Gateway management.

Direction Select: LAN WAN

WAN Setting:

WAN Interface:

Services Allowed:

web
 telnet
 ssh
 ftp
 tftp
 snmp
 ping

Current ACL Table

Select	Direction	IP Address/Interface	Service	Port	Action

The following table describes the parameters and buttons on this page:

Field	Description
Direction Select	Select the router interface. You can select LAN or WAN . In this example, WAN is selected.
WAN Setting	You can choose Interface or IP Address .
WAN Interface	Choose the interface that permits data packets from WAN to access the router.
Services Allowed	You can choose the following services from WAN: Web, Telnet, SSH, FTP, TFTP, SNMP or PING . You can also choose all the services.
Add	After setting the parameters, click it to add an entry to the Current ACL Table .
Reset	Click it to refresh this page.

3.6 Advanced

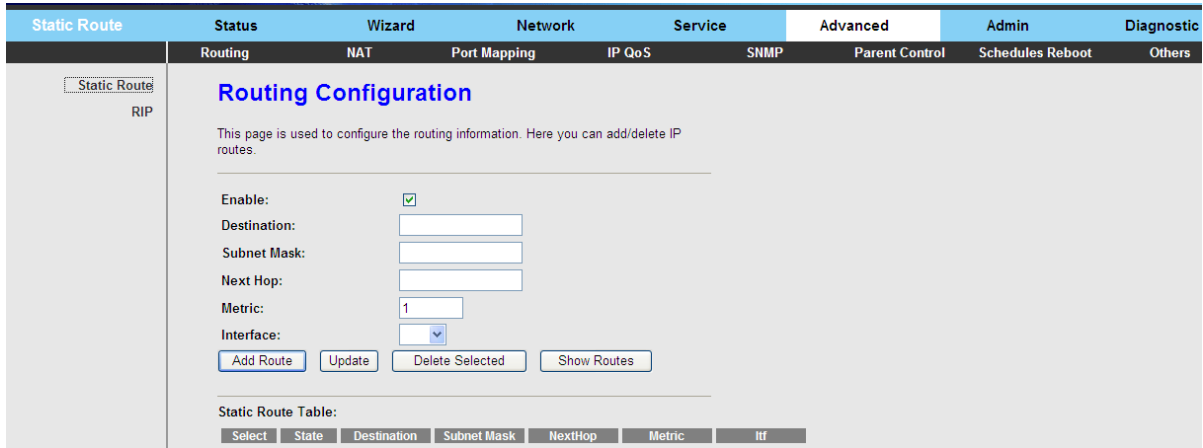
In the navigation bar, click **Advanced**. On the **Advanced** page that is displayed contains **Routing, NAT, Port Mapping, IP QoS, SNMP, Parent Control, Schedules Reboot, and Others**.

3.6.1 Routing

Choose **Advance > Routing**. This page contains **Static Route** and **RIP**.

3.6.1.1 Static Route

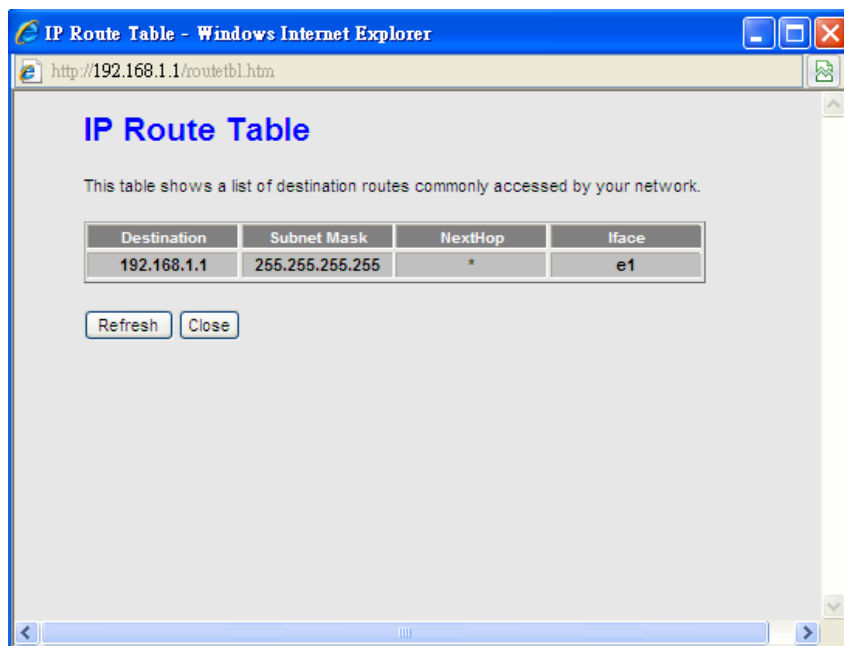
Click **Static Route** in the left pane and the page shown in the following figure appears. This page is used to configure the routing information. You can add or delete IP routes.



The following table describes the parameters and buttons on this page:

Field	Description
Enable	Select it to use static IP routes.
Destination	Enter the IP address of the destination device.
Subnet Mask	Enter the subnet mask of the destination device.
Next Hop	Enter the IP address of the next hop in the IP route to the destination device.
Metric	The metric cost for the destination.
Interface	The interface for the specified route.
Add Route	Click it to add the new static route to the Static Route Table .
Update	Select a row in the Static Route Table and modify the parameters. Then click it to save the settings temporarily.
Delete Selected	Select a row in the Static Route Table and click it to delete the row.
Show Routes	Click it, the IP Route Table appears. You can view a list of destination routes commonly accessed by your network.
Static Route Table	A list of the previously configured static IP routes.

Click **Show Routes** and the page shown in the following figure appears. The table shows a list of destination routes commonly accessed by your network.



3.6.1.2 RIP

Click **RIP** in the left pane and the page shown in the following figure appears. If you are using this device as a RIP-enabled router to communicate with others using Routing Information Protocol (RIP), enable RIP. This page is used to select the interfaces on your devices that use RIP, and the version of the protocol used.

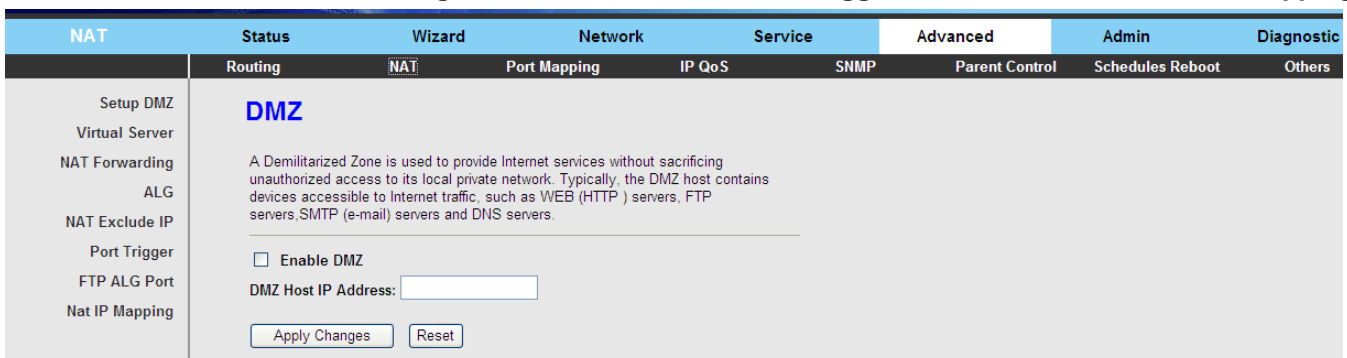


The following table describes the parameters and buttons on this page:

Field	Description
RIP	You can select OFF or ON . In this example, OFF is selected.
Apply	Click it to save the settings of this page.
Interface	Choose the router interface that uses RIP.
Receive Version	Choose the interface version that receives RIP messages. You can choose RIP1 , RIP2 , or Both . <ul style="list-style-type: none"> ● Choose RIP1, indicates the router receives RIP v1 messages. ● Choose RIP2, indicates the router receives RIP v2 messages. ● Choose Both, indicates the router receives RIP v1 and RIP v2 messages.
Send Version	The working mode for sending RIP messages. You can choose RIP1 or RIP2 . <ul style="list-style-type: none"> ● Choose RIP1 indicates the router broadcasts RIP1 messages only. ● Choose RIP2 indicates the router multicasts RIP2 messages only.
Add	Click it to add the RIP interface to the Rip Config List .
Delete	Select a row in the Rip Config List and click it to delete the row.

3.6.2 NAT

Choose **Advanced** > **NAT** and the page shown in the following figure appears. The page displayed contains **Setup DMZ**, **Virtual Server**, **NAT Forwarding**, **ALG**, **NAT Exclude IP**, **Port Trigger**, **FTP ALG Port**, and **NAT IP Mapping**.



3.6.2.1 Setup DMZ

Demilitarized Zone (DMZ) is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.

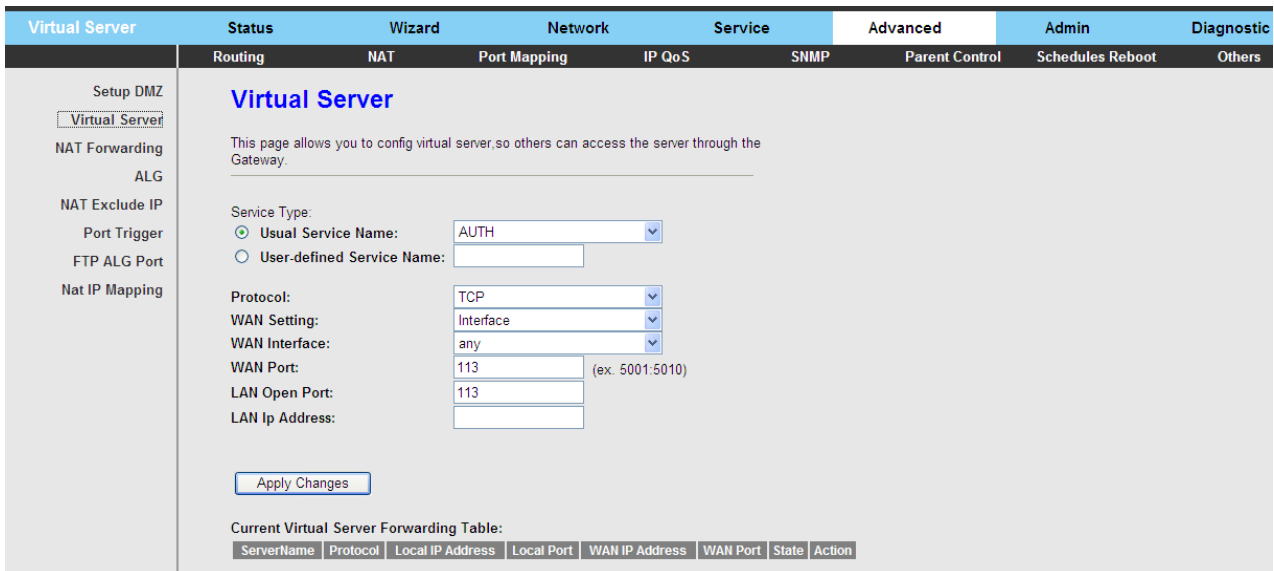
Click **DMZ** in the left pane and the page shown in the following figure appears.

The following describes how to configure manual DMZ.

- Step 1** Select **Enable DMZ** to enable this function.
- Step 2** Enter an IP address of the DMZ host.
- Step 3** Click **Apply Changes** to save the settings on this page temporarily.

3.6.2.2 Virtual Server

Click **Virtual Server** in the left pane and the page shown in the following figure appears.



The screenshot shows the 'Virtual Server' configuration page. The left sidebar contains a tree view with 'Virtual Server' selected. The main content area has a title 'Virtual Server' and a description: 'This page allows you to config virtual server,so others can access the server through the Gateway.' Below this, there are several configuration fields:

- Service Type:** Radio buttons for 'Usual' (selected) and 'User-defined'. 'Usual Service Name' is set to 'AUTH'.
- Protocol:** Dropdown menu set to 'TCP'.
- WAN Setting:** Dropdown menu set to 'Interface'.
- WAN Interface:** Dropdown menu set to 'any'.
- WAN Port:** Text input set to '113' (with example '(ex: 5001:5010)').
- LAN Open Port:** Text input set to '113'.
- LAN Ip Address:** Empty text input field.

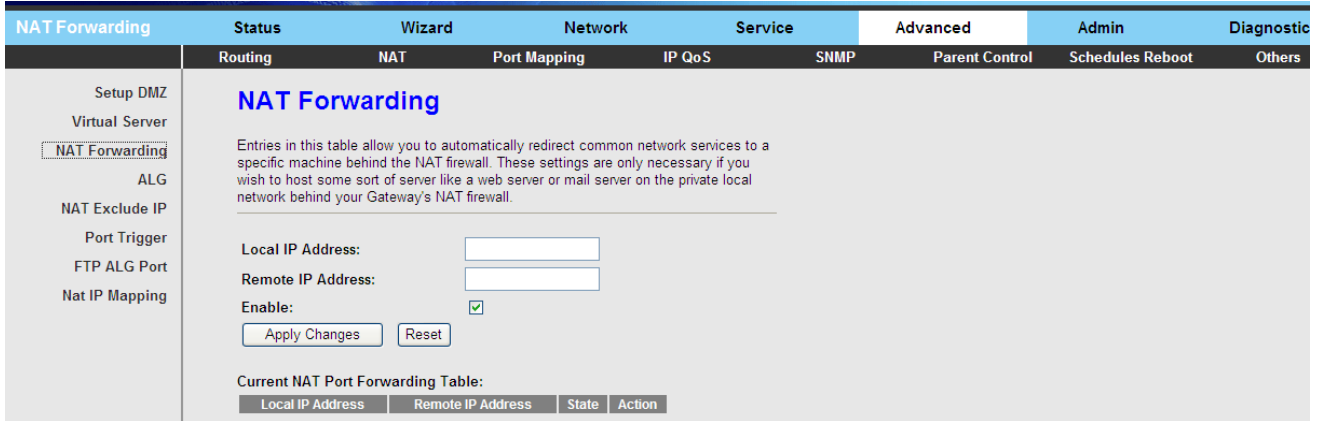
An 'Apply Changes' button is located below the fields. At the bottom, there is a section for 'Current Virtual Server Forwarding Table' with a table header: ServerName, Protocol, Local IP Address, Local Port, WAN IP Address, WAN Port, State, Action.

The following table describes the parameters on this page.

Field	Description
Service Type	You can select the common service type, for example, AUTH , DNS or FTP . You can also define a service name. <ul style="list-style-type: none"> ● If you select Usual Service Name, the corresponding parameter has the default settings. ● If you select User-defined Service Name, you need to enter the corresponding parameters.
Protocol	Choose the transport layer protocol that the service type uses. You can choose TCP or UDP .
WAN Setting	You can choose Interface or IP Address .
WAN Interface	Choose the WAN interface that will apply virtual server.
WAN Port	Choose the access port on the WAN.
LAN Open Port	Enter the port number of the specified service type.
LAN IP Address	Enter the IP address of the virtual server. It is in the same network segment with LAN IP address of the router.

3.6.2.3 NAT Forwarding

Click **NAT Forwarding** in the left pane and the page shown in the following figure appears. Under 1483MER or 1483Routed mode, if NAPT (Network Address Port Translation) is enabled, the **Local IP Address** is configured as 192.168.1.3 and the **Remote IP Address** is configured as 202.32.0.2, the PC with the LAN IP 192.168.1.3 will use 202.32.0.2 when it is connected to the Internet via the router without NAPT control.

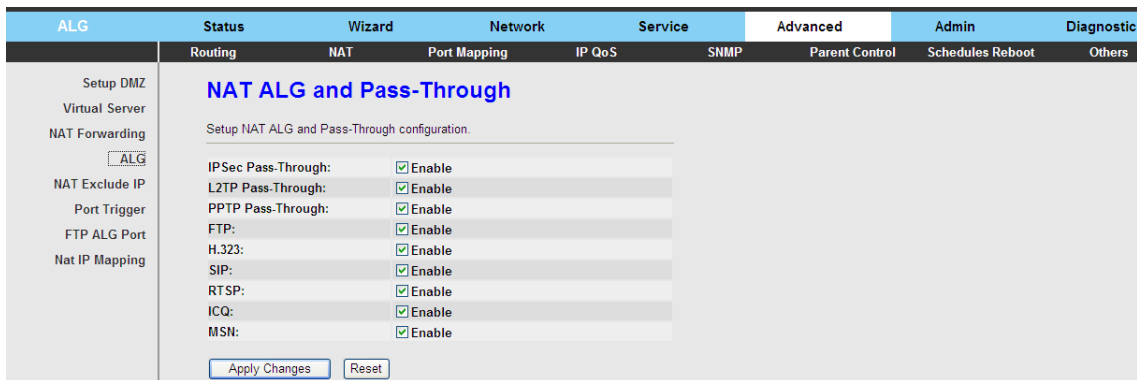


The following table describes the parameters and buttons on this page:

Field	Description
Local IP Address	Input a local IP address.
Remote IP Address	Input a remote IP address
Enable	Enable the current configured rule.
Apply Changes	Submit the configurations.
Reset	Cancel the modification and reconfigure the settings.
Current NAT Port Forwarding Table	Current configuration rule list.

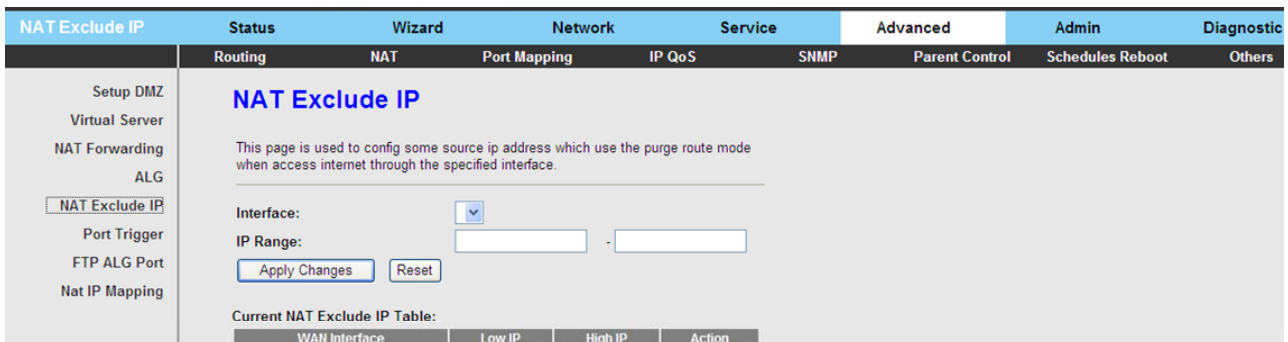
3.6.2.4 ALG

Click **ALG** in the left pane and the page shown in the following figure appears. Choose the NAT ALG and Pass-through options, and then click **Apply Changes**.



3.6.2.5 NAT Exclude IP

Click **NAT Exclude IP** in the left pane and the page shown in the following figure appears. On the page, you can configure some source IP addresses which use the purge route mode when accessing internet through the specified interface.



3.6.2.6 Port Trigger

Click **Port Trigger** in the left pane and the page shown in the following figure appears.

Nat Port Trigger

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Nat Port Trigger: Enable Disable

Apply Changes

Application Type:

Usual Application Name: Select One

User-defined Application Name:

S	Start Match	End Match	PortTrigger	Protocol	Start Relate	End Relate	PortOpen	Protocol	Nat Type
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing
				UDP				UDP	outgoing

Apply Changes

Current Port Trigger Table:

ServerName	Trigger Protocol	Direction	Match Port	Open Protocol	Relate Port	Action

Click the **Usual Application Name** drop-down menu to choose the application you want to set up for port triggering. When you have chosen an application the default Trigger settings will populate the table below.

If the application you want to set up isn't listed, click the **User-defined Application Name** radio button and type in a name for the trigger in the Custom application field. Configure the **Start Match Port**, **End Match Port**, **Trigger Protocol**, **Start Relate Port**, **End Relate Port**, **Open Protocol** and **Nat type** settings for the port trigger you want to configure.

When you have finished, click the **Apply changes** button.

3.6.2.7 FTP ALG Port

Click **FTP ALG Port** in the left pane and the page shown in the following figure appears. The common port for FTP connection is port 21, and a common ALG monitors the TCP port 21 to ensure NAT pass-through of FTP. By enabling this function, when the FTPserver connection port is not a port 21, the FTP ALG module will be informed to monitor other TCP ports to ensure NAT pass-through of FTP.

FTP ALG Configuration

This page is used to configure FTP Server ALG and FTP Client ALG ports .

FTP ALG Port:

Add Dest Ports Delete Selected DestPort

FTP ALG Ports Table:

Select	Ports
<input checked="" type="radio"/>	21

The following table describes the parameters and buttons on this page:

Field	Description
FTP ALG port	Set an FTP ALG port.
Add Dest Ports	Add a port configuration.
Delete Selected DestPort	Delete a selected port configuration from the list.

3.6.2.8 NAT IP Mapping

NAT is short for Network Address Translation. The Network Address Translation Settings window allows you to share one WAN IP address for multiple computers on your LAN.

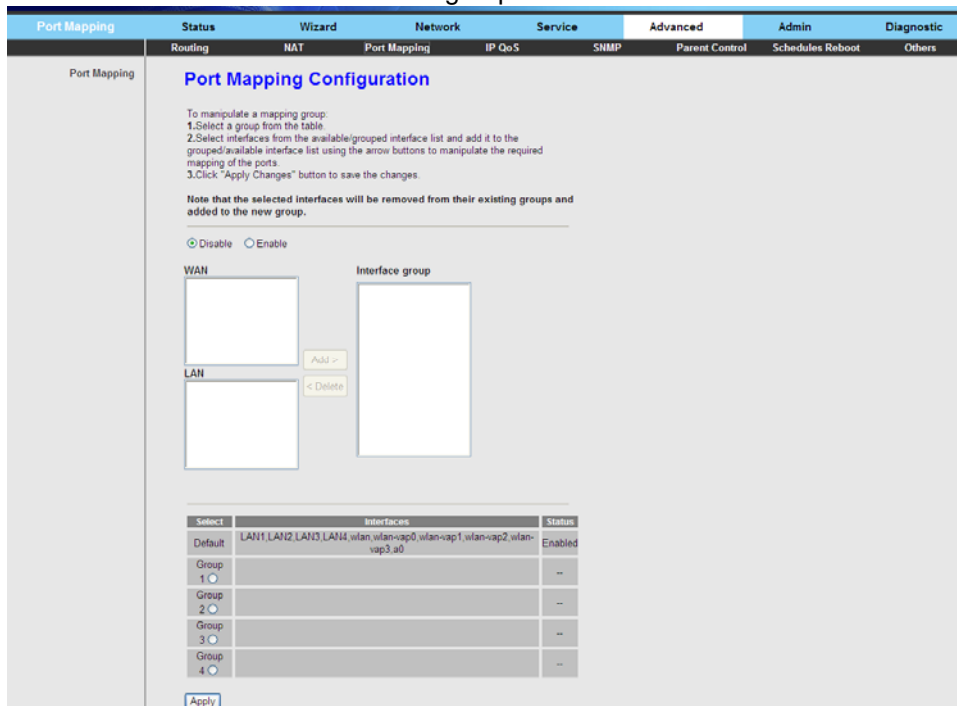
Click **NAT IP Mapping** in the left pane and the page shown in the following figure appears. Entries in this table allow you to configure one IP pool for specified source IP address from LAN, so one packet whose source IP is in range of the specified address will select one IP address from the pool for NAT.



The screenshot shows the 'NAT IP Mapping' configuration page. The left sidebar contains a navigation menu with 'NAT IP Mapping' selected. The main content area is titled 'NAT IP Mapping' and includes a description: 'Entries in this table allow you to config one IP pool for specified source ip address from lan,so one packet which's source ip is in range of the specified address will select one IP address from pool for NAT.' Below this, there are input fields for 'Type' (set to 'One-to-One'), 'Local Start IP', 'Local End IP', 'Global Start IP', and 'Global End IP'. There are 'Apply Changes' and 'Reset' buttons. At the bottom, there is a 'Current NAT IP MAPPING Table' with columns for 'Local Start IP', 'Local End IP', 'Global Start IP', 'Global End IP', and 'Action'. Below the table are 'Delete Selected' and 'Delete All' buttons.

3.6.3 Port Mapping

Choose **Advance > Port Mapping** and the page shown in the following figure appears. On this page, you can bind the WAN interface and the LAN interface to the same group.



The screenshot shows the 'Port Mapping Configuration' page. The left sidebar has 'Port Mapping' selected. The main content area is titled 'Port Mapping Configuration' and includes instructions: 'To manipulate a mapping group: 1.Select a group from the table. 2.Select interfaces from the available/grouped interface list and add it to the grouped/available interface list using the arrow buttons to manipulate the required mapping of the ports. 3.Click "Apply Changes" button to save the changes.' Below this, there are radio buttons for 'Disable' and 'Enable'. There are two columns: 'WAN' and 'Interface group'. Below these are 'Add >' and '< Delete' buttons. At the bottom, there is a table with columns 'Select', 'Interfaces', and 'Status'. The table contains the following data:

Select	Interfaces	Status
Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,usb	Enabled
Group 1		--
Group 2		--
Group 3		--
Group 4		--

There is an 'Apply' button at the bottom of the page.

The procedure for manipulating a mapping group is as follows:

Step 1 Select **Enable** to enable this function.

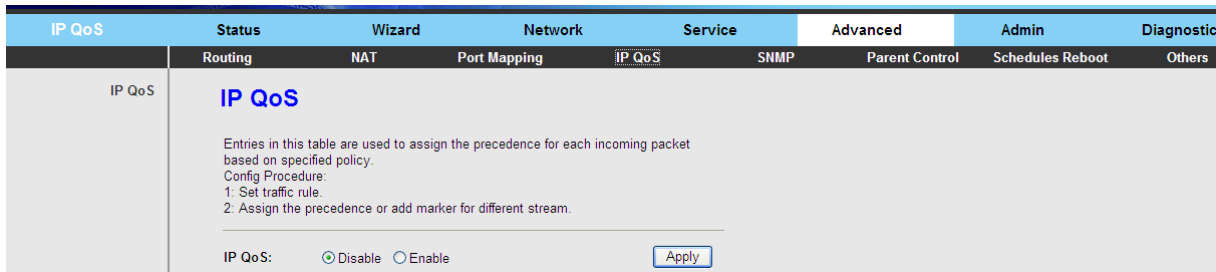
Step 2 Select a group from the table.

Step 3 Select interfaces from the WAN and LAN interface list and add them to the grouped interface list using the arrow buttons to manipulate the required mapping of the ports.

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

3.6.4 IP QoS

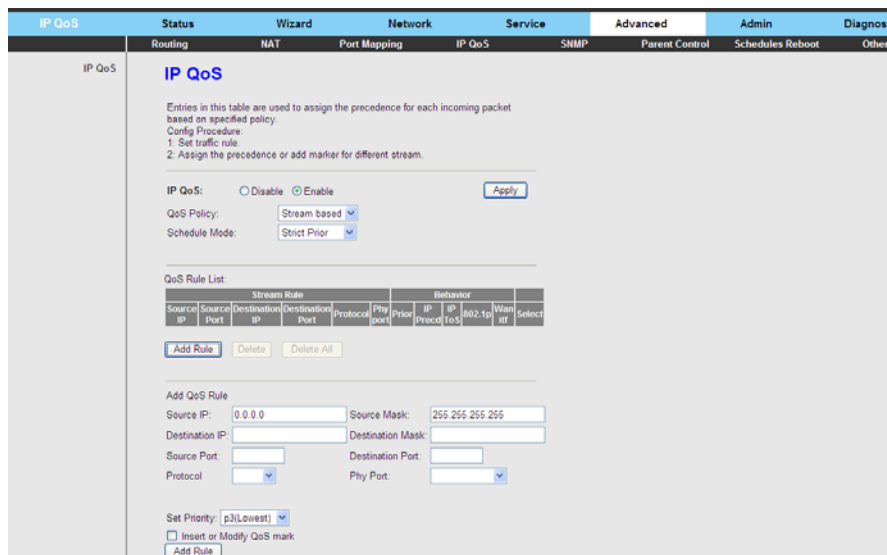
Choose **Advance > IP QoS** and the page shown in the following figure appears. Entries on the **QoS Rule List** are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, source IP address, destination IP address and other information.



Step 1 Enable IP QoS and click **Apply** to enable IP QoS function.

Step 2 Click **add rule** to add a new IP QoS rule.

The page shown in the following figure appears.

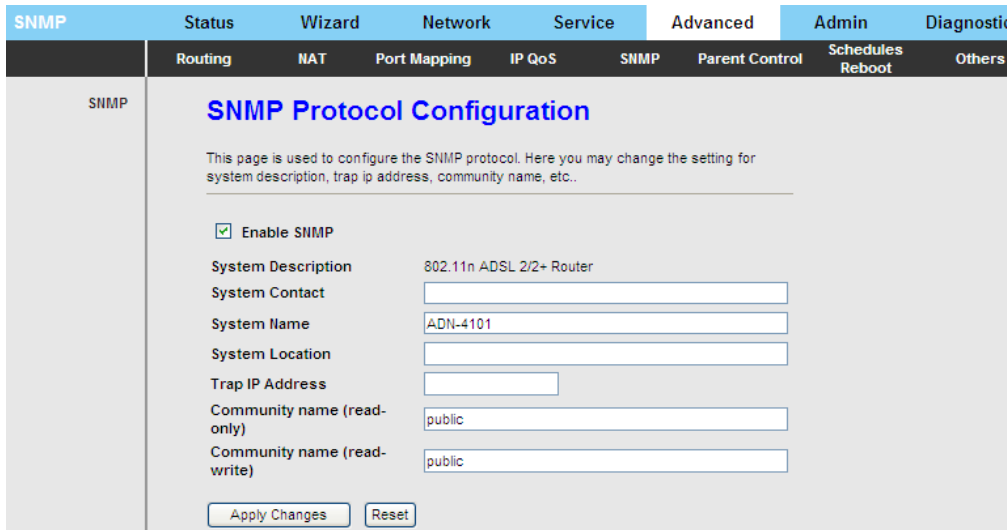


The following table describes the parameters and buttons on this page:

Field	Description
IP QoS	Select to enable or disable IP QoS function. You need to enable IP QoS if you want to configure the parameters on this page.
QoS Policy	You can choose stream based , 802.1p based , or DSCP based .
Schedule Mode	You can choose strict prior or WFQ (4:3:2:1) .
Source IP	The IP address of the source data packet.
Source Mask	The subnets mask of the source IP address.
Destination IP	The IP address of the destination data packet.
Destination Mask	The subnets mask of the destination IP address.
Source Port	The port of the source data packet.
Destination Port	The port of the destination data packet.
Protocol	The protocol responds to the IP QoS rules. You can choose TCP , UDP , or ICMP .
Phy Port	The LAN interface responds to the IP QoS rules.
Set priority	The priority of the IP QoS rules. P0 is the highest priority and P3 is the lowest.
Delete	Select a row in the QoS rule list and click it to delete the row.
Delete all	Select all the rows in the QoS rule list and click it to delete the rows.

3.6.5 SNMP

Choose **Advance > SNMP** and click **Enable SNMP**, and the page shown in the following figure appears. You can configure the SNMP parameters.

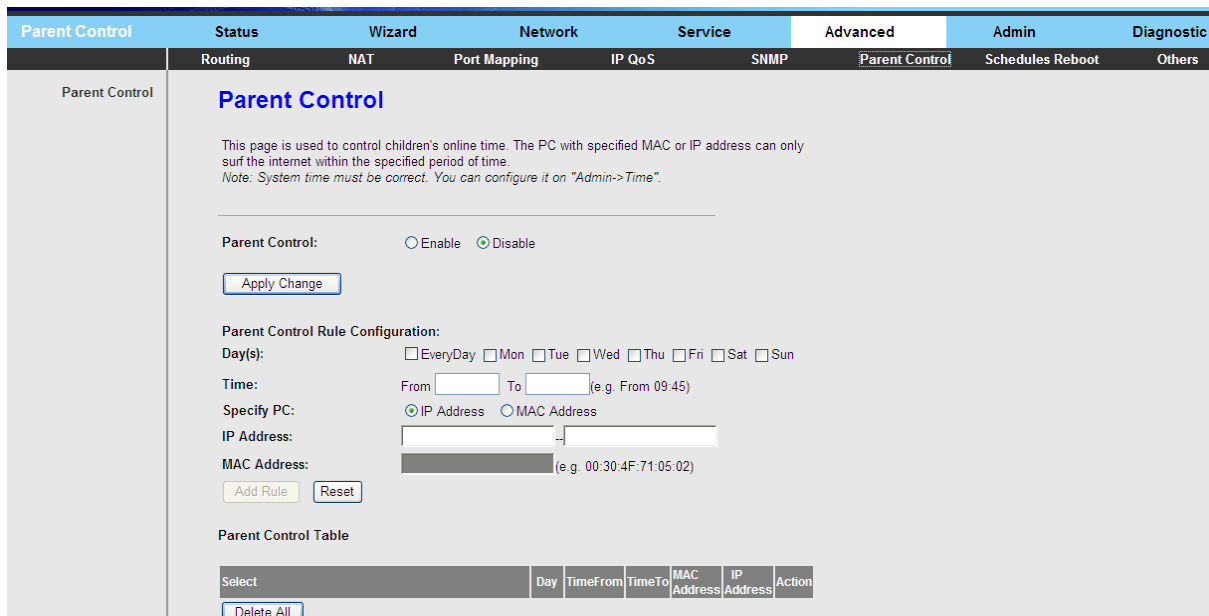


The following table describes the parameters on this page:

Field	Description
Enable SNMP	Select it to enable SNMP function. You need to enable SNMP, and then you can configure the parameters on this page.
Trap IP Address	Enter the trap IP address. The trap information is sent to the corresponding host.
Community (Read-only) Name	The network administrators must use this password to read the information of this router.
Community (Read-Write) Name	The network administrators must use this password to configure the information of the router.

3.6.6 Parent Control

Choose **Advance > Parent Control** and the page shown in the following figure appears. This page is used to control children's online time. The PC with specified MAC or IP address can only surf the internet within the specified period of time

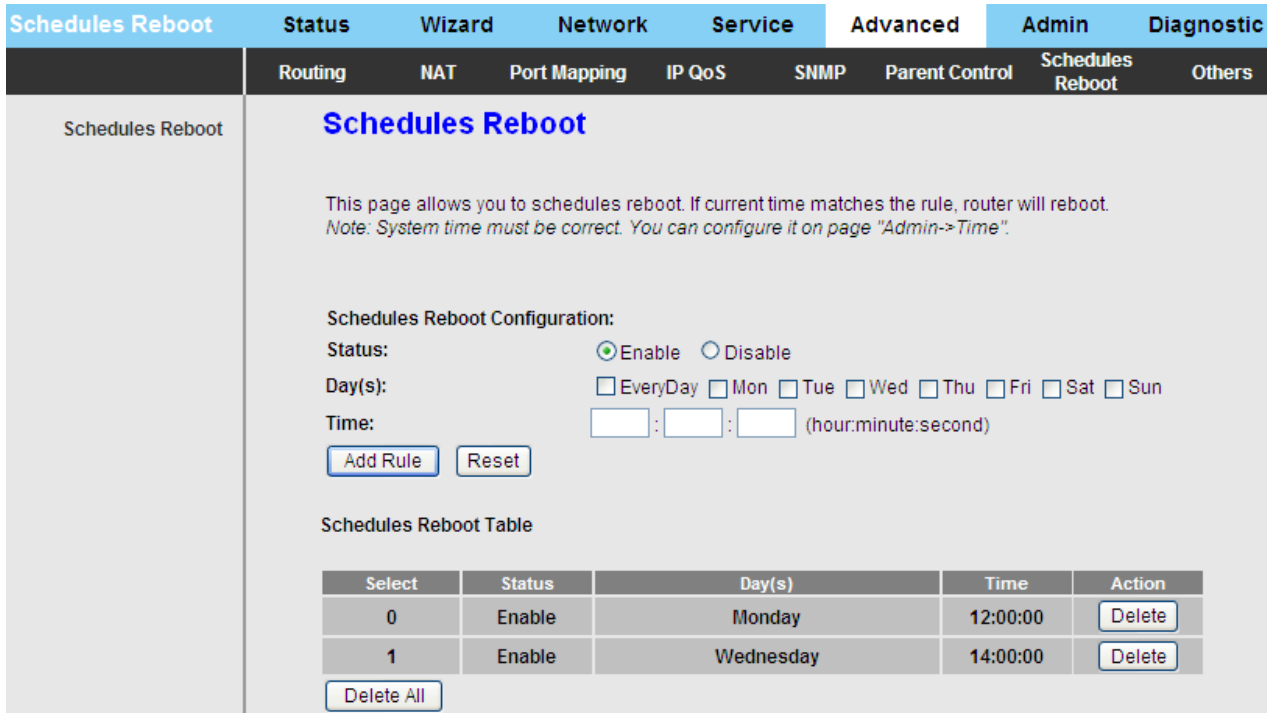


The following table describes the parameters on this page:

Field	Description
Parent Control	Select it to enable Parent Control function. You need to enable Parent Control, and then you can configure the parameters on this page. Parent Control is used to control children's online time. If enabled, the PC with specified MAC or IP address can only surf the internet within the specified period of time.
Day(s)	Select one or more days you want to control
Time	The specified period of time you want to control
Specify PC	Select IP or MAC
IP Address	The IP Address of the PC you want to control
MAC Address	The MAC Address of the PC you want to control
Add Rule	Add the Parent Control rule
Reset	reset the page
Parent Control Table	Show Parent Control rules
Delete All	Delete all Parent Control rules

3.6.7 Schedules Reboot

Choose **Advance > Schedules Reboot** and the page shown in the following figure appears. This page allows you to schedules reboot. If current time matches the rule, router will reboot.



Schedules Reboot

This page allows you to schedules reboot. If current time matches the rule, router will reboot.
Note: System time must be correct. You can configure it on page "Admin->Time".

Schedules Reboot Configuration:

Status: Enable Disable

Day(s): EveryDay Mon Tue Wed Thu Fri Sat Sun

Time: : : (hour:minute:second)

Schedules Reboot Table

Select	Status	Day(s)	Time	Action
0	Enable	Monday	12:00:00	<input type="button" value="Delete"/>
1	Enable	Wednesday	14:00:00	<input type="button" value="Delete"/>

The following table describes the parameters on this page:

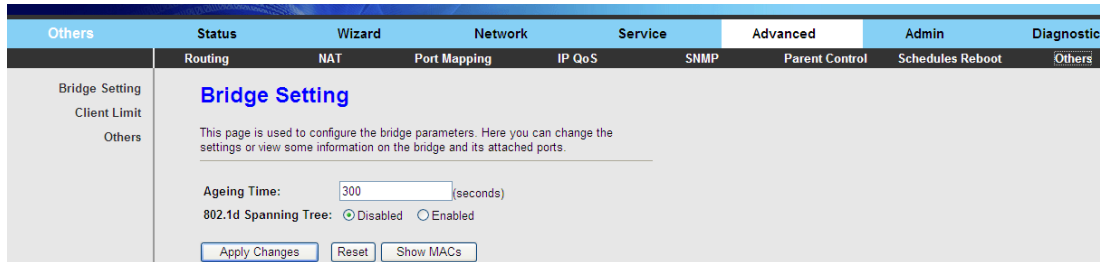
Field	Description
Status	Select it to enable or disable the Schedules Reboot rule. If enabled and current time matches the rule, router will reboot.
Day(s)	Select one or more days you want to control
Time	The specified period of time you want to control
Add Rule	Add the Schedules Reboot rule
Reset	reset the page
Schedules Reboot Table	Show Schedules Reboot rules
Delete All	Delete all Schedules Reboot rules

3.6.8 Others

Choose **Advance > Others** and the page shown in the following figure appears. The page displayed contains **Bridge Setting**, **Client Limit**, and **Others**.

3.6.8.1 Bridge Setting

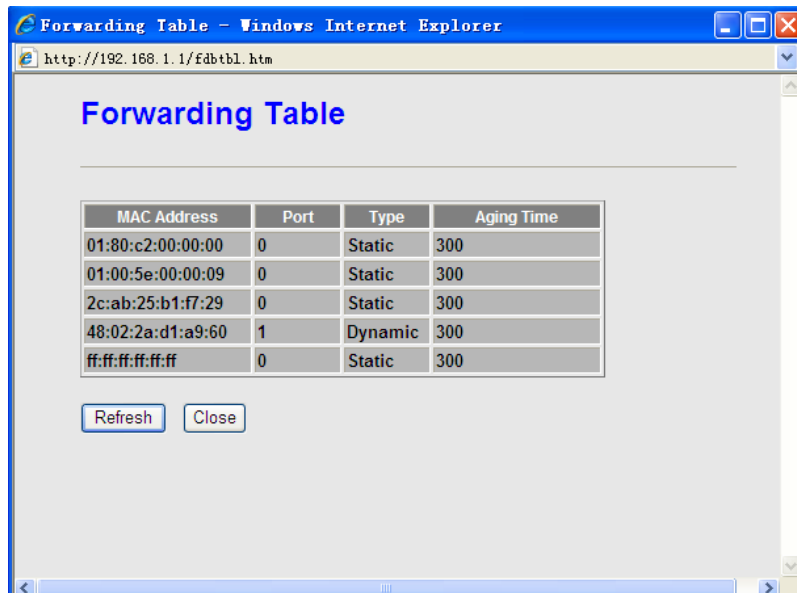
Choose **Advance > Others > Bridge Setting** and the page shown in the following figure appears. This page is used to configure the bridge parameters. You can change the settings or view some information on the bridge and its attached ports.



The following table describes the parameters and button on this page:

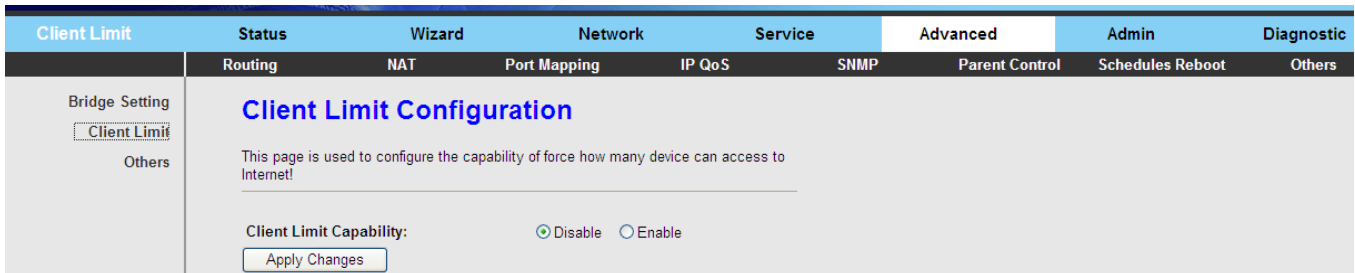
Field	Description
Aging Time	If the host is idle for 300 seconds (default value), its entry is deleted from the bridge table.
802.1d Spanning Tree	You can select Disable or Enable . Select Enable to provide path redundancy while preventing undesirable loops in your network.
Show MACs	Click it to show a list of the learned MAC addresses for the bridge.

Click **Show MACs** and the page shown in the following figure appears. This table shows a list of learned MAC addresses for this bridge.



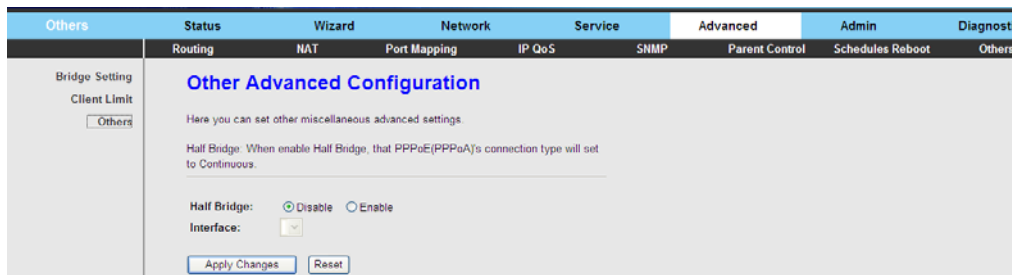
3.6.8.2 Client Limit

Choose **Advance > Others > Client Limit** and the page shown in the following figure appears. This page is used to configure the capability of forcing how many devices can access to the Internet.



3.6.8.3 Others

Choose **Others** in the left pane and the page shown in the following figure appears. You can enable half bridge so that the PPPoE or PPPoA connection will set to Continuous.

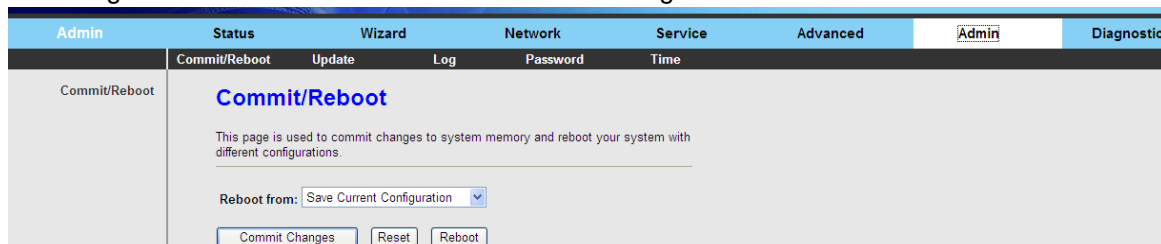


3.7 Admin

In the navigation bar, click **Admin**. The **Admin** page displayed contains **Commit/Reboot**, **Update**, **Log**, **Password**, and **Time**.

3.7.1 Commit/Reboot

Choose **Admin > Commit/Reboot** and the page shown in the following figure appears. You can set the router reset to the default settings or set the router to commit the current settings.



The following table describes the parameters and button on this page:

Field	Description
Reboot from	You can choose Save current configuration or Factory default configuration . <ul style="list-style-type: none"> ● Save current configuration: Save the current settings, and then reboot the router. ● Factory default configuration: Reset to the factory default settings and then reboot the router.
Reboot	Click it to reboot the router.

3.7.2 Update

Choose **Admin > Update**. The **Update** page displayed contains **Upgrade Firmware** and **Backup/Restore**.

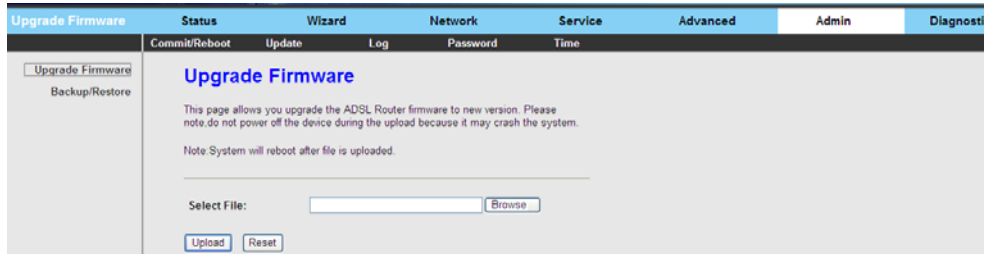


Caution:

Do not turn off the router or press the Reset button while the procedure is in progress.

3.7.2.1 Upgrade Firmware

Click **Upgrade Firmware** in the left pane and the page shown in the following figure appears. On this page, you can upgrade the firmware of the router.

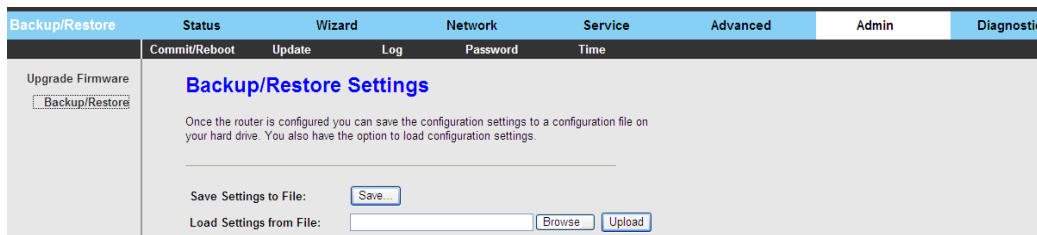


The following table describes the parameters and button on this page:

Field	Description
Select File	Click Browse to select the firmware file.
Upload	After selecting the firmware file, click Upload to starting upgrading the firmware file.
Reset	Click it to starting selecting the firmware file.

3.7.2.2 Backup/Restore

Click **Backup/Restore** in the left pane and the page shown in the following figure appears. You can back up the current settings to a file and restore the settings from the file that was saved previously.



The following table describes the parameters and button on this page:

Field	Description
Save Settings to File	Click it, and select the path. Then you can save the configuration file of the router.
Load Settings from File	Click Browse to select the configuration file.
Upload	After selecting the configuration file of the router, click Upload to start uploading the configuration file of the router.

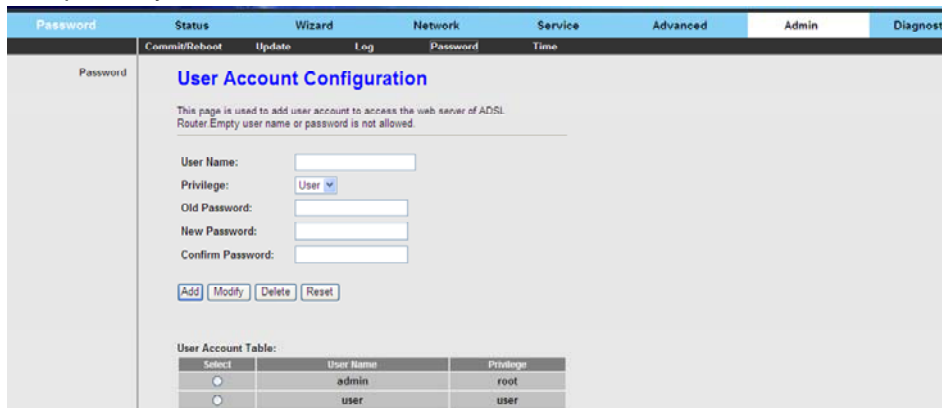
3.7.3 Log

Choose **Admin > Log** and the page shown in the following figure appears. On this page, you can enable or disable system log function and view the system log.



3.7.4 Password

Choose **Admin > Password** and the page shown in the following figure appears. By default, the user name and password of the administrator are **admin** and **admin** respectively. The user name and password of the common user are **user** and **user** respectively.

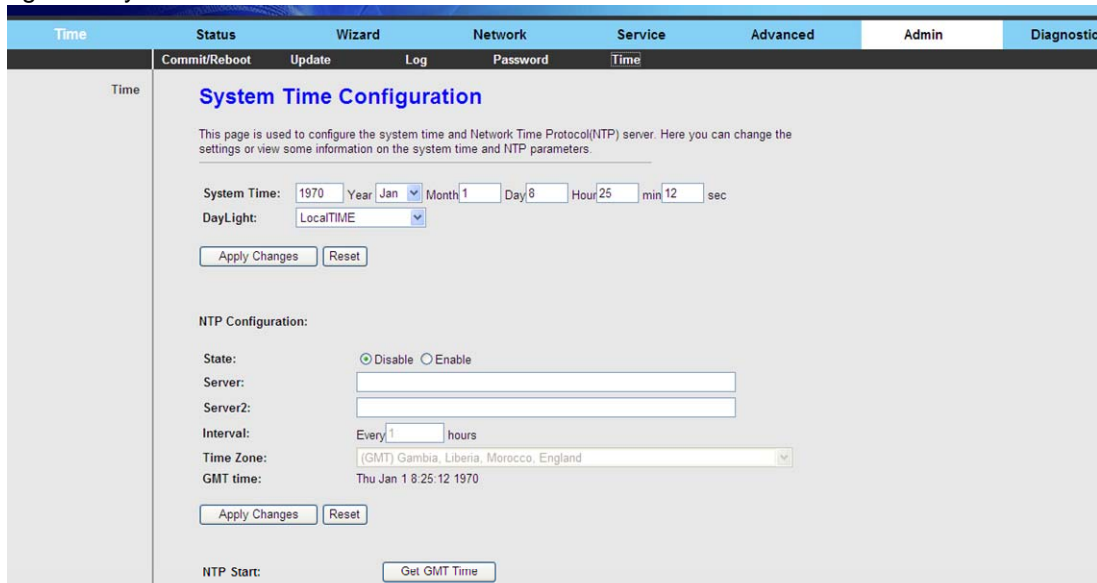


The following table describes the parameters on this page:

Field	Description
User Name	Choose the user name for accessing the router. You can choose admin or user .
Privilege	Choose the privilege for the account.
Old Password	Enter the old password
New Password	Enter the password to which you want to change the old password.
Confirm Password	Enter the new password again.

3.7.5 Time

Choose **Admin > Time** and the page shown in the following figure appears. You can configure the system time manually or get the system time from the time server.



The following table describes the parameters on this page:

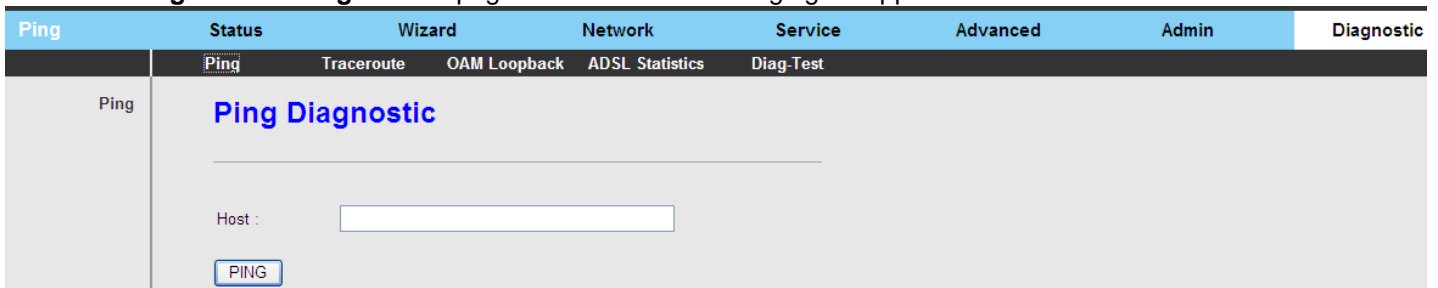
Field	Description
System Time	Set the system time manually.
NTP Configuration	
State	Select enable or disable NTP function. You need to enable NTP if you want to configure the parameters of NTP.
Server	Set the primary NTP server manually.
Server 2	Set the secondary NTP server manually.
Time Zone	Choose the time zone in which area you are from the drop down list.

3.8 Diagnostic

In the navigation bar, click **Diagnostic**. The **Diagnostic** page displayed contains **Ping, Traceroute, OAM Loopback, ADSL Statistics** and **Diag-Test**.

3.8.1 Ping

Choose **Diagnostic > Ping** and the page shown in the following figure appears.

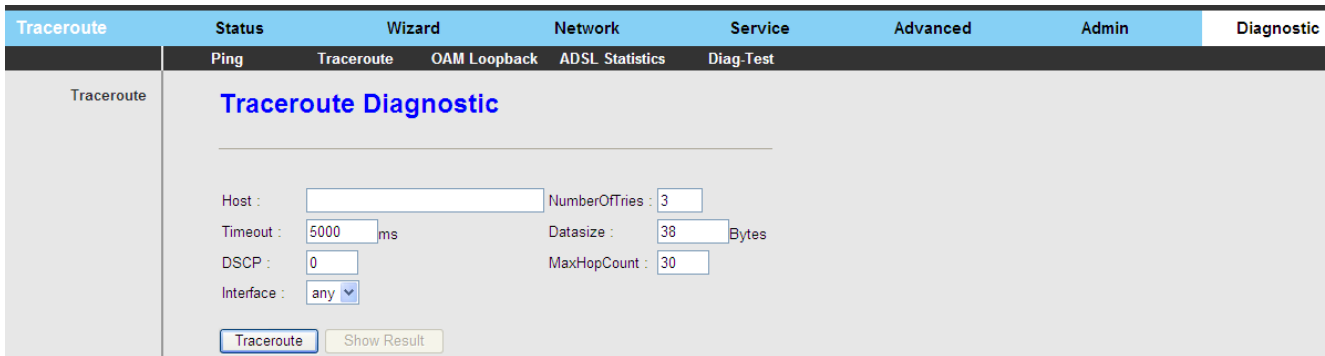


The following table describes the parameter and button on this page:

Field	Description
Host	Enter the valid IP address or domain name.
Ping	Click it to start to Ping.

3.8.2 Traceroute

Choose **Diagnostic** > **Traceroute** and the following page appears. By Traceroute Diagnostic, you can track the route path through the information which is from your computer to the Internet other side host.



The following table describes the parameters and buttons on this page.

Field	Description
Host	Enter the destination host address for diagnosis.
NumberOfTries	Number of repetitions.
Timeout	Put in the timeout value.
Datasize	Packet size.
DSCP	Differentiated Services Code Point, You should set a value between 0-63.
MaxHopCount	Maximum number of routes.
Interface	Select the interface.
Traceroute	Click start traceroute.

3.8.3 OAM Loopback

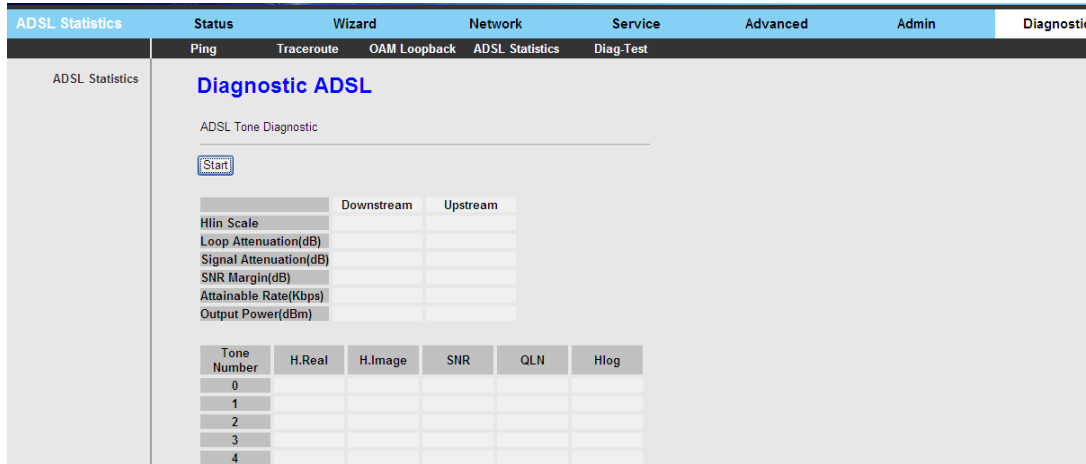
Choose **Diagnostic** > **OAM Loopback** and the page shown in the following figure appears. On this page, you can use VCC loopback function to check the connectivity of the VCC. The ATM loopback test is useful for troubleshooting problems with the DSLAM and ATM network.



Click **Go!** to start testing.

3.8.4 ADSL Statistics

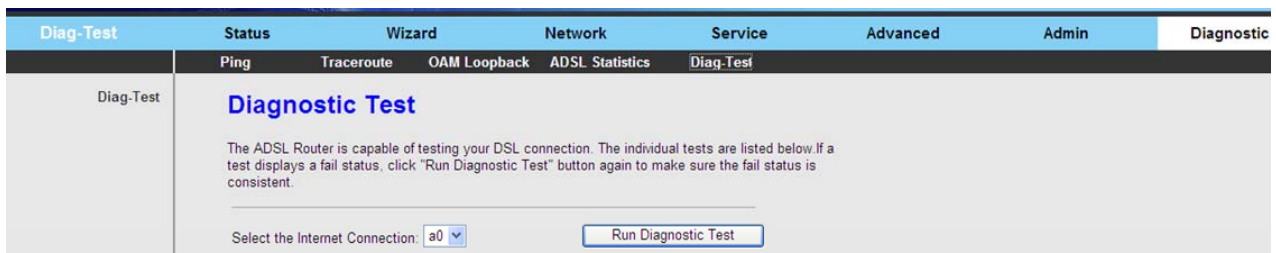
Choose **Diagnostic** > **ADSL Statistics** and the page shown in the following figure appears. It is used for ADSL tone diagnostics.



Click **Start** to start ADSL tone diagnostics.

3.8.5 Diag-Test

Choose **Diagnostic** > **Diag-Test** and the page shown in the following figure appears. On this page, you can test the DSL connection. You can also view the LAN status connection and ADSL connection.



Click **Run Diagnostic Test** to start testing.

Chapter 4. Q&A

Question	Answer
Why are all the indicators off?	<ul style="list-style-type: none"> ● Check the connection between the power adapter and the power socket. ● Check whether the power switch is turned on.
Why is the LAN indicator not on?	<p>Check the following:</p> <ul style="list-style-type: none"> ● The connection between the device and the PC, the hub, or the switch ● The running status of the computer, hub, or switch ● The cables connecting the device and other devices. Use a cross-over cable to connect the device to a computer. Use a straight-through cable to connect the device to a hub or a switch,
Why is the Link indicator not on?	Check the connection between the Line interface of the device and the socket.
Why does the Internet access fail when the Link indicator is on?	<p>Ensure that the following information is entered correctly.</p> <ul style="list-style-type: none"> ● VPI and VCI ● User name and password
Why does the web configuration page of the device fail to be accessed?	<p>Choose Start > Run from the desktop. Enter Ping 192.168.1.1 (the default IP address of the device) in the DOS window.</p> <p>If the web configuration page still cannot be accessed, check the following configurations.</p> <ul style="list-style-type: none"> ● The type of network cable ● The connection between the device and the computer ● The TCP/IP properties of the network card of the computer
How to restore the default configuration after incorrect configuration?	<p>Keep the device powered on and press the Reset button for 3 seconds, then the device automatically reboots and is restored to the factory default configuration.</p> <p>The default configurations of the device are as follows:</p> <ul style="list-style-type: none"> ● IP address: 192.168.1.1 ● Subnet mask: 255.255.255.0. ● For a super user, use admin for both user name and password.

EC Declaration of Conformity

For the following equipment:

*Type of Product : 802.11n Wireless ADSL 2/2+ 4-Port Router (Annex A/B)
*Model Number : ADN-4101A / ADN-4101B
* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 10F, No. 96, Minquan Rd., Xindian Dist.,
New Taipei City 231, Taiwan, R.O.C.

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2004/108/EC,).

For the evaluation regarding the Electromagnetic Compatibility, the following standards were applied:

EN 300 328 V1.7.1	(2006-10)
EN 301 489-1 V1.8.1	(2008-04)
EN 301 489-17 V2.1.1	(2009-05)
EN 55022	(2006 + A1: 2007, Class B)
EN 61000-3-2	(2006 + A1: 2009 + A2: 2009)
EN 61000-3-3	(2008)
EN 61000-4-2	(2009)
EN 61000-4-3	(2006 + A1: 2008)
EN 61000-4-4	(2004)
EN 61000-4-5	(2006)
EN 61000-4-6	(2009)
EN 61000-4-11	(2004)
EN 60950-1	(2006 + A11: 2009)
EN 50385	(2002)

Responsible for marking this declaration if the:

Manufacturer Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **10F, No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan, R.O.C.**


Person responsible for making this declaration

Name, Surname : Jonas Yang

Position / Title : Product Manager

Taiwan
Place

26th, Aug., 2011
Date


Legal Signature

PLANET TECHNOLOGY CORPORATION

EC Declaration of Conformity

English	Hereby, PLANET Technology Corporation , declares that this Product Wi-Fi is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	Lietuviškai	Šiuo PLANET Technology Corporation , skelbia, kad Product Wi-Fi tenkina visus svarbiausius 1999/5/EC direktyvos reikalavimus ir kitas svarbias nuostatas.
Česky	Společnost PLANET Technology Corporation , tímto prohlašuje, že tato Product Wi-Fi splňuje základní požadavky a další příslušná ustanovení směrnice 1999/5/EC.	Magyar	A gyártó PLANET Technology Corporation , kijelenti, hogy ez a Product Wi-Fi megfelel az 1999/5/EK irányelv alapkövetelményeinek és a kapcsolódó rendelkezéseknek.
Dansk	PLANET Technology Corporation , erklærer herved, at følgende udstyr Product Wi-Fi overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF	Malti	Hawnhekk, PLANET Technology Corporation , jiddikjara li dan Product Wi-Fi jikkonforma mal-ħtiġijiet essenzjali u ma providementi oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC
Deutsch	Hiermit erklärt PLANET Technology Corporation , dass sich dieses Gerät Product Wi-Fi in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)	Nederlands	Hierbij verklaart, PLANET Technology Corporation , dat Product Wi-Fi in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Eesti keeles	Käesolevaga kinnitab PLANET Technology Corporation , et see Product Wi-Fi vastab Euroopa Nõukogu direktiivi 1999/5/EC põhinõuetele ja muudele olulistele tingimustele.	Polski	Niniejszym firma PLANET Technology Corporation , oświadcza, że Product Wi-Fi spełnia wszystkie istotne wymogi i klauzule zawarte w dokumencie „Directive 1999/5/EC”.
Ελληνικά	<i>ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ, PLANET Technology Corporation, ΔΗΛΩΝΕΙ ΟΤΙ ΑΥΤΟ Product Wi-Fi ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ</i>	Português	PLANET Technology Corporation , declara que este Product Wi-Fi está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Español	Por medio de la presente, PLANET Technology Corporation , declara que Product Wi-Fi cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE	Slovensky	Výrobca PLANET Technology Corporation , týmto deklaruje, že táto Product Wi-Fi je v súlade so základnými požiadavkami a ďalšími relevantnými predpismi smernice 1999/5/EC.
Français	Par la présente, PLANET Technology Corporation , déclare que les appareils du Product Wi-Fi sont conformes aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	Slovensko	PLANET Technology Corporation , s tem potrjuje, da je ta Product Wi-Fi skladen/a z osnovnimi zahtevami in ustreznimi določili Direktive 1999/5/EC.
Italiano	Con la presente, PLANET Technology Corporation , dichiara che questo Product Wi-Fi è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	Suomi	PLANET Technology Corporation , vakuuttaa täten että Product Wi-Fi tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Latviski	Ar šo PLANET Technology Corporation , apliecina, ka šī Product Wi-Fi atbilst Direktīvas 1999/5/EK pamatprasībām un citiem atbilstošiem noteikumiem.	Svenska	Härmed intygar, PLANET Technology Corporation , att denna Product Wi-Fi står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

PLANET TECHNOLOGY CORPORATION