





ADSL 2/2+ Router

ADE-3400



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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 (example-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.

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.

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.

Revision

User's Manual for Wired ADSL 2/2+ Router Model: ADE-3400v5 Rev: 1.0 (June. 2011) Part No. EM-ADE3400v5_v1

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1. Introduction

The PLANET Wired ADSL 2/2+ Router, the ADE-3400, provides office and residential users the ideal solution for shari ng a High-Speed ADSL 2/2+ br oadband Internet connection on the 10/100Mbps Fast Ethernet Interface. It can support downstream transmission rates up to 24Mbps and upstream transmission rates up to 3.5Mbps. The product supports PPPoA (RFC 2364 - PPP over ATM Adaptation Layer 5), PPP over Ethernet (RFC 2516), and RFC 1483 encapsulation over ATM (MER, bridged or routed) to establish a connection with ISP.

Via the user-friendly management inte rface, the ADE-3400 can be managed by workstations running standard web browsers. Furthermore, the device provides DHCP server, NAT, Virtual Server, DMZ, access cont rol, IP filter, VPN Pass-Through, and UPnP capability.

The devic e also serves as an Internet fire wall, protecting your network from being accessed by out side users. It provides the natural firewall function (Network Address Translation, NAT). All incoming and outgoing IPs are monitored and filtered by this product. In addition, it can be configured to block internal users from accessing to the Internet.

1.1 Feature

Internet Access Features

Shared Internet Access All users on the LAN can access the Intern et through the ADE-3400 using only 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 devic e provides ADSL 2/2+ modem, and supports all common ADSL connections.

• PPPoE, PPPoA, Direct Connection Support

Various WAN connections are supported by ADE-3400.

Auto-detection of Internet Connection Method

In most si tuations, the device can test your ADSL and Internet connection to determine the connection method used by your ISP.

• Fixed or Dynamic IP Address

On the Internet (WAN port) connection, the device 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 device can translate public IP address to private IP address to allow unrestricted 2-way communication with Ser vers or individual users on the Internet. This provides the most flex ibility to run programs, which could be incompatible in NAT environment.

• Firewall

Supports simple firewall with NAT tec hnology and provides option for blocking access from Internet, like Web, FTP, Telnet, SNMP, and ICMP. It also supports MAC and IP filtering.

• Universal Plug and Play (UPnP)

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

VPN Pass through Support

PCs with VPN (Virtual Private Networking) software are transparently supported - no configuration is required.

RIP1/2 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

• Ethernet Port

The ADE-3400 provides one Ether net port, making it easy to create or extend your LAN.

DHCP Server Support

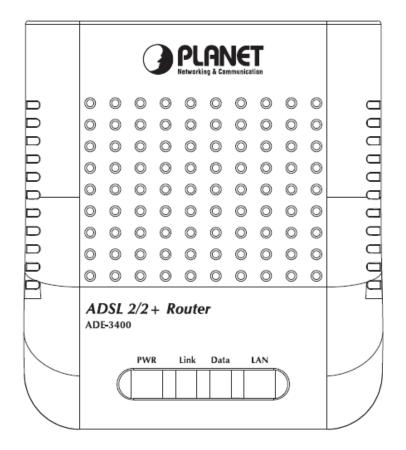
Dynamic **H**ost **C**onfiguration **P**rotocol provides a dynamic IP address to P Cs and other devices upon request. The device can act as a DHCP Ser ver for devices on your local LAN.

1.2 Package Contents

- ADE-3400 Unit x 1
- Power Adapter x 1
- Quick Installation Guide x 1
- User's Manual CD x 1
- RJ-11 cable x 2
- RJ-45 cable x 1
- Splitter x 1

1.3 Physical Details

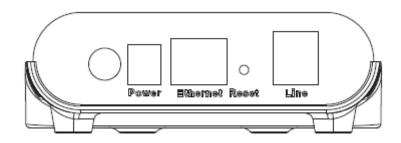
Front Panel of ADE-3400



Front Panel LED definition

LED	State	Description
	ON	When the router is powered on and in ready state.
PWR	Red	The devise is being turned on and booting.
	OFF	When the router is powered off.
Link	ON	Successful connection between ADSL modem and telecom' s network.
	Flashing	Modem is trying to establish a connection to telecom's network.
Data	Flashing	Data is transferred between Router and Internet.
LAN	ON	Link
LAN	Flashing	TX or RX activity.

Rear Panel of ADE-3400



Rear Panel Port and Button Definition

Connector	Description
POWER Button	The power button is for turn on or turns off the router.
Power	Power connector with 5V DC, 1A
	The reset button can restore the defaul t settings of device. To restore
Reset	factory defaults, keep the device powered on and push a paper clip into
	the hole. Press down the button over 5 seconds and then release.
	Router is successfully connected to a device through the Ethernet port.
Ethernet	If the LED is flashing, the Router is actively sending or receiving data
	over that port.
Line	The RJ-11 connector allows data communication between the mode m
Line	and the ADSL network through a twisted-pair phone wire.

2. Installation

This chapter offers information about installing your router. If you are not familiar with the hardware or software parameters presented here, please consult your service provider for the values needed.

2.1 System Requirement

- 1. Personal computer (PC)
- 2. Pentium III 266 MHz processor or higher
- 3. 128 MB RAM minimum
- 4. 20 MB of free disk space minimum
- 5. RJ45 Ethernet Port

2.2 Hardware Installation

Please connect the device to you computer as follow:

- If connecting to the splitter, connect the "Line" splitter to wall jack using one telephone cable
- Use another telephone cable to connect "MODEM" port of the splitter and "LINE" port of the modem. The "Phone" port of the splitter can be use to connect the telephone by a telephone cable.
- Use Ethernet cable to connect "LAN" port of the modem and "LAN" port of your computer.

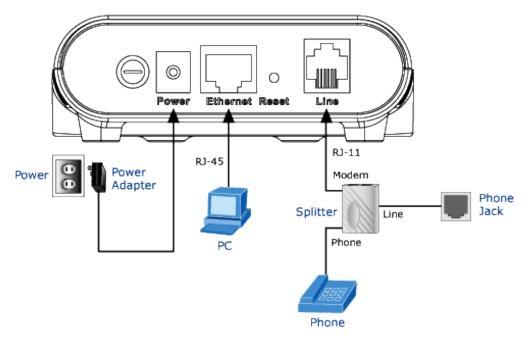


Figure1 ADE-3400 connection diagram

If do not need to connect to the splitter,

- Connect the modem to wall jack with a telephone cable.
- Use Ethernet cable to connect "LAN" portof the modem and network adaptor of your computer.

2.3 Configuring the Network Properties

Configuring PC in Windows XP

- 1. Go to Start / Control Panel (in Classic View). In the Control Panel, double-click on Network Connections
- 2. Double-click Local Area Connection.



3. In the Local Area Connection Status window, click Properties.

🕹 Local Area Con	nection Status	?×
General Support		
Connection		
Status:	Connected	1
Duration:	00:19:32	
Speed:	100.0 Mbps	:
Activity	Sent — 📆 — Received	
Packets:	27 0	
Properties	Disable	se

4. Select Internet Protocol (TCP/IP) and click Properties.

🕹 Local Area Connection Properties 🛛 🔹 💽
General Authentication Advanced
Connect using:
B ASUSTeK/Broadcom 440x 10/100 Integrated Controller
Configure
This connection uses the following items:
 Client for Microsoft Networks File and Printer Sharing for Microsoft Networks QoS Packet Scheduler Internet Protocol (TCP/IP)
Install Uninstall Properties
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
OK Cancel

5. Select the Obtain an IP address automatically and the Obtain DNS server address automatically radio buttons.

6. Click **OK** to finish the configuration.

Internet Protocol (TCP/IP) Prop	oerties 🛛 🕐 🔀
General Alternate Configuration	
You can get IP settings assigned aut this capability. Otherwise, you need t the appropriate IP settings.	
 Obtain an IP address automatic 	ally
Use the following IP address: -	
IP address:	
Subnet mask:	
Default gateway:	
 Obtain DNS server address aut 	omatically
OUse the following DNS server a	ddresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced
	OK Cancel

Configuring PC in Windows 2000

- 1. Go to Start / Settings / Control Panel. In the Control Panel, double-click on Network and Dial-up Connections.
- 2. Double-click Local Area Connection.

Network and Dial-up Connection	s	_ 🗆 ×
File Edit View Favorites Tools	Advanced Help	<u>11</u>
😓 Back 🔹 🔿 👻 🔂 🔞 Search	哈_Folders 🧭 階 🧏 🏹 🕫 🥅 🖽 •	
Address 😰 Network and Dial-up Conne	ections	▼ ∂°⊙
Network and Dial-up Connections	Make New Local Area Connection Connection	
Local Area Connection Type: LAN Connection Status: Enabled ASUSTeK/Broadcom 440x 10/100 Integrated Controller		

- 3. In the Local Area Connection Status window click Properties.
- 4. Select Internet Protocol (TCP/IP) and click Properties.
- 5. Select the Obtain an IP address automatically and the Obtain DNS server address

6. Click **OK** to finish the configuration.

Internet Protocol (TCP/IP) Propert	ies ?×
General	1
You can get IP settings assigned auto this capability. Otherwise, you need to the appropriate IP settings.	
 Obtain an IP address automatic. 	ally
Use the following IP address: —	
IP address:	
Subnet mask:	
Default gateway:	· · · ·
Obtain DNS server address auto	omatically
C Use the following DNS server a	ddresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced
	OK Cancel

Configuring PC in Windows 98/Me

- **1.** Go to **Start / Settings / Control Panel**. In the Control Panel, double-click on **Network** and choose the **Configuration** tab.
- Select TCP/IP → NE2000 Compatible, or the name of your Network Interface Card (NIC) in your PC.

Network
Configuration Identification Access Control
The following network components are installed:
🔜 Microsoft Family Logon 📃
ASUSTEK/Broadcom 440x 10/100 Integrated Controller
TCP/IP -> ASUSTeK/Broadcom 440x 10/100 Integrated
TCP/IP -> ASOSTER/Broadcom 440x T0/T00 Integrated TCP/IP -> Dial-Up Adapter
Add Remove Properties
Primary Network Logon:
Microsoft Family Logon
Eile and Print Sharing
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.
OK Cancel

- 3. Select the Obtain an IP address automatically radio button.
- 4. Then select the DNS Configuration tab.
- 5. Select the **Disable DNS** radio button and click **OK** to finish the configuration.

CP/IP Properties		? ×
Bindings DNS Configuration	│ Advanced Gateway │ WINS 0	NetBIOS
Disable DNS		
<u>H</u> ost:	Domai	in:
DNS Server Sea	rch Order	Add Eemove
Domain Suffix Se	arch Order	Add
		Remove
		OK Cancel

3. Web Configuration Management

This chapter describes how to configure the router by using the W eb-based configuration utility.

3.1 Access the Router

The following is the detailed description of accessing the router for the first time. **Step 1**: Open the Internet Explorer (IE) browser and enter <u>http://192.168.1.1</u>. **Step 2**: In the **Login** page that is displayed, enter the username and password.

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

Connect to 19	2.168.1.1 🛛 🛛 🔀
	GR
∐ser name: Password:	
	Remember my password

If you log i n as a super user , the p age shown in the following fi gure appears. You can check, configure and modify all the settings.

	Wizard	Stat	us	Network	Service	Advance	Admin	Diagr
	System	LAN	WAN	Statistics	ARP Table			
System	1							
	System	Status						
	- Cyclonn	otatao						
	This page shows	s the current sta	atus and some b	asic settings of the de	wice.			
				3				
	System							
	Alias Name		ADE-340	0				
	Uptime(hh:mm	n:ss)	0 22:6:2					
	Software Vers	ion	V3.0.0					
	DSP Version		2918b224					
	DSL							
		tatus						
	Operational St							
	Operational St Upstream Spe							

If you log in as a common user , you can c heck the st atus of t he router, but can not configure the most of the settings.

Note:

In 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, click **save** of **Attention** that appears at the button of the Web page after the configuration.

3.2 Wizard

The **Wizard** page guides fast and accurate configur ation of the Internet connection an d other important parameters. The following sections d escribe these various configuration parameters. Whether you configure these parameters or use the default ones, click **NEXT** to enable your Internet connection.

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 proper ties 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, click Wizard. The page shown in the following figure appears.

PLANET Networking & Communication			ADSL 2/2	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
Wizard	After finishing the access. Step 1: Web Acc Step 2: Time Zon Step 3: WAN Inte Step 4: Configura	count Setup re Setup erface Setup ation Saving Account Setup nt for accessing the Web admin	be online and free to enjoy server of the device.	high-speed Internet			

The following table describes the parameters of this page:

Field	Description
User Name	Choose the user name for accessing the router . You can choose admin or user .
New Password	Enter the password to which you want to change the old password. The p assword can not cont ain space key, %, ", ? or &.
Confirmed Password	Enter the new password again.

After finishing the configuration, click **NEXT**. The p age shown in the following figure appears. In this p age, you can configure t he system time and Network T ime Protocol (NTP) server.

PLANET Networking & Communication			ADSL 2/	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
Wizard	Wizard Step 2: Time J Set up the system NTP Configu State: Server IP: Interval: Time Zone: GMT time:	n time and the Network Tr ration: ② Dia 220.1 Every (GMT	ime Protocol (NTP) server. sable O Enable 30.158.52 1 hours 1) Gambia, Liberia, Morocco an 1228.7 1970	o, England	•		
				Back			

The following table describes the parameters of this page:

Field	Description
State	You can disable or enable NTP function. You have to enable it if you want to configure the parameters of this page.
Server IP	Enter the IP address of the specified time server manually.
Interval	Set the interval that the router obtains the time from the time server. That is, the interval that the router verifies the time with the server.
Time Zone	Choose the time zone in which area you are from the drop down list.
GMT time	It displays the Greenwich Mean Time (GMT).

After finishing the configuration, click **NEXT**. The p age shown in the following figure appears.

PLANET Networking & Communication			ADSL 2/	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	PVC Setting:	wode of WAN interface. VPI: 0 (0-255) : ● LLC/SNAP ○ VC-	VCI: 0 (32-65535)			
	PPP Settings:	User Name:		Password:			
	Default Route:	Enable O Disable					
	DNS Settings:	Obtain DNS Autom Use the following D Primary DNS Server: Secondary DNS Server	DNS server address:	Back Next			

There are five channel modes, the following describes them respectively.

1483 Bridged

In the **Setup WAN Interface** page, enter the correct PVC, set the channel mode to **1483 Bridged**.

PLANET Networking & Communication			ADSL 2/2	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	Set up the channer PVC Setting	I Interface Setup nel mode of WAN interface VPI: 0 (0-255) ION: @ LLC/SNAP O VC Ide: @ 1483 Bridged 0 1483 MER 0 PPPoE 0 PPPoA 0 1483 Routed	VCI: 0 (32-65535)	Back Next			

Click **NEXT**, and the page shown in the following figure appears.

Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnost
	Wizard						Diagnost
Wizard							
vvizaru	Sten 4.Confi	guration Saving					
		garaaton barnig					
	Click "Finish" to	save the settings. Click "E	Back" to make more modific:	ations. Click			
	"Reset" to cance	el the settings.					
	The paramet	ers you set:					
	User Name:	admin					
	User Name: Password:	admin admin					
	User Name: Password:	admin					
	User Name: Password: NTP State: VPI:	admin admin Disable 0					
	User Name: Password: NTP State: VPI:	admin admin Disable					
	User Name: Password: NTP State: VPI:	admin admin Disable 0 35					

If you want to modify the configuration, click **BACK** to return to the pr evious page. If you ensure the configuration is correct, click **FINISH** to take the configuration effect.

1483 MER

In the **Setup WAN Interface** page, enter the correct PVC, set the channel mode to **1483 MER**.

Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	Step 3: WAN Inte	erface Setup					
	Set up the channel me	ode of WAN interface.					
	PVC Setting:	VPI: 0 (0-255	5) VCI: 0 (32-6553	5)			
	Encapsulation:	● LLC/SNAP ◎ V	/C-Mux				
	Channel Mode:	C 1483 Bridged					
		1483 MER					
		O PPPoE					
		O PPPoA					
		© 1483 Routed					
	WAN IP Settings	: Obtain IP addres	ss Automatically				
	-	O Use the following	a serve a serve a construction of the				
		WAN IP Address:					
		Subnet Mask:					
		Gateway:					
	Default Route:	Enable O Disat	ble				
	DNS Settings:	Obtain DNS Auto					
	Divo octanga.		g DNS server address:				
		Primary DNS Server	2				
		Secondary DNS Ser					

The following table describes the parameters of this page:

Field	Description
PVC Settings	 VPI: V irtual Path Identifier (VPI) is the virtual p ath between two points in an ATM network, ranging from 0 to 255. VCI: Virtual Channel Identifier (VCI) is the virtual channel between two points in an ATM network, ranging from 32 to 65535 (0 to 31 is reserved for local management of ATM traffic).
Encapsulation	Select the method of encap sulation provided by your ISP . You can select LLC/SNAP or VC-Mux.
Channel Mode	Select the WAN connection type. You can select 1483 Bridged , 1483 MER , PPP over Ethernet (PPPoE) , PPP over ATM (PPPoA) , or 1483 Routed . In this example, 1483 MER is selected.

Field	Description
Default Route	You can select Enable or Disable.
DNS Settings	 Obtain DNS Automatically : IP address is assigned by the of fice end automatically. You need not to enter the IP address. Use the follow ing DNS server address : If you want to enter the DNS server address manually, select it and enter the IP addresses of primary DNS and secondary DNS.

After finishing the configuration, click **NEXT**. The p age shown in the following figure appears.

PLANET Networking & Communication			ADSL 2/2	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard							
	Step 4:Config	juration Saving					
	Click "Finish" to s "Reset" to cancel		∂ack" to make more modific	ations. Click			
	The paramete	ers you set:					
	User Name:	admin					
	Password:	admin					
	NTP State:	Disable					
	VPI:	0					
	VCI:	35					
	Encapsulation:	LLC/SNAP					
	Channel Mode:	1483 mer					
		Obtain an IP address au					
	DNS Settings:	Obtain DNS Automatica					
			Back	Finish Reset			

PPPoE/PPPoA

In the **Setup WAN Interface** p age, enter the correct PVC, set the channel mode to **PPPoE** or **PPPoA**.

PLANET Retworking & Communication			ADSL 2/	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	Encapsulation Channel Mode	VPI: 0 0-24 VPI: 0 0-24 CONCENTRIANCE ULC/SNAP C CONCENTRIANCE ULC/SNAP C C C C C C C C C C C C C C C C C C C	55) VCI: 35 (32-65535	5)			
	PPP Settings:	User Name:		Password:			
	Default Route:	Enable O Disa	able				
	DNS Settings:	Obtain DNS Au O Use the followin Primary DNS Servi Secondary DNS S	ng DNS server address: er:	Back Next			

The following table describes the parameters of this page:

Field	Description
PVC Settings	 VPI: V irtual Path Identifier (VPI) is the virtual p ath between two points in an ATM network, ranging from 0 to 255. VCI: Virtual Channel I dentifier (VCI) is the virtual channel betwe en two points in an ATM network, ranging from 32 to 65535 (0 to 31 is

Field	Description
	reserved for local management of ATM traffic).
Encapsulation	Select the method of encap sulation provided by your ISP . You can select LLC/SNAP or VC-Mux .
Channel Mode	Select the WAN connection type. You can select 1483 Bridged , 1483 MER , PPP over Ethernet (PPPoE) , PPP over ATM (PPPoA) , or 1483 Routed . In this example, PPPoE is selected.
PPP Settings	Enter the username and password for PPP dial-up, which are provided by your ISP.
Default Route	You can select Enable or Disable.
DNS Settings	 Obtain DNS Automatically : IP address is assigned by the of fice end automatically. You need not to enter the IP address. Use the follow ing DNS server address : If you want to enter the DNS server address manually, select it and enter the IP addresses of primary DNS and secondary DNS.

After finishing the configuration, click **NEXT**. The p age shown in the following figure appears.

			ADSL 2/2	2+ Router			
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	Click "Finish" to : "Reset" to cance The paramete User Name: Password: NTP State: VPI: VCI: Encapsulation: Channel Mode: ppp User Name: ppp Password:	I the settings. admin admin Disable 0 35 LLC/SNAP pppoe test@5600.com		ations. Click Finish Reset			

1483 Routed

In the Setup WAN Interface page, enter the correct PVC, set the channel mode to **1483** Routed.

PLANET Networking & Communication			ADSL 2/2				
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard	Step 3: WAN Inte	erface Setup					
	Set up the channel m	ode of WAN interface.					
	PVC Setting:	VPI: 0 (0-255)	VCI: 35 (32-6553	35)			
	Encapsulation:	. ELC/SNAP © VC	-Mux				
	Channel Mode:	1483 Bridged					
		© 1483 MER					
		1483 Routed					
	WAN IP Settings	: Obtain IP address	Automatically				
		O Use the following	IP address:				
		WAN IP Address:					
		Subnet Mask:					
		Gateway:					
	Default Route:	Enable O Disable	e				
	DNS Settings:	Obtain DNS Autor	matically				
		O Use the following	DNS server address:				
		Primary DNS Server:					
		Secondary DNS Serv	er:				
				Back Next			

The following table describes the parameters of this page:

Field	Description
PVC Settings	 VPI: Virtual Path Identifier (VPI) is the virtual p ath between two points in an ATM network, and its valid value is from 0 to 255. VCI: V irtual Channel Identifier (VCI) is the virtual channel between two point s in an A TM network, ranging from 32 to 65535 (0 to 31 is reserved fo r local management of A TM traffic).
Encapsulation	Select the method of encap sulation provided by your ISP . You can select LLC/SNAP or VC-Mux .
Channel Mode	Select the WAN connection type. You can select 1483 Bridged , 1483 MER , PPP over Ethernet (PPPoE) , PPP over A TM (PPPoA) , or 1483 Routed . In this example, 1483 Routed is selected.
WAN IP Settings	 Obtain an IP address automatically : Obt ain the DNS server assigned by the uplink equipment, such as BAS. Use the follow ing IP address : Enter the st atic IP address provided by your ISP.
Default Route	You can select Enable or Disable.
DNS Settings	 Obtain DNS Automatically : IP address is assigned by the office end automatically . Y ou need not to enter the IP address. Use the following DNS server address: If you want to enter the DNS server address manually , select it and enter the related data.

After finishing the configuration, click **NEXT**. The p age shown in the following figure appears.

PLANET Networking & Communication			ADSL 2/2				
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Wizard						
Wizard		the settings.	Back" to make more modific	ations. Click			
	User Name:	admin					
	Password:	admin					
	NTP State:	Disable					
	VPI: VCI:	0 35					
	Encapsulation:	LLC/SNAP					
	Channel Mode:	1483 router					
	WAN IP Settings	: Obtain an IP address a	utomatically				
	DNS Settings:	Obtain DNS Automatica	ally				
			Back	Finish Reset			

3.3 Status

In the navigation bar, click **Status**. In the **Status** page that is displayed contains **System**, **LAN**, **WAN**, **Statistics** and **ARP Table**.

3.3.1System

Choose **Status** > **System**. The page that is displayed shows the current status and some basic settings of the router , such as, uptim e, sof tware version, up stream speed, downstream speed, and other information.

PLANET Networking & Contribution				ADSL 2/2+ Router							
Status	Wizard	Status	tus Network		Service	Advance	Admin	Diagnostic			
	System	LAN	WAN	Statistics	ARP Table						
System											
	System	ws the current status		sic settings of the devi	ce						
	Alias Name		ADE-3400 0 22:24:12								
	Uptime(hh:m Software Ver	rsion	V3.0.0								
	DSP Version DSL		2918b224	_							
	Operational	Status									
	Upstream Sp										
	Downstream	Speed									

3.3.2 LAN

Choose **Status** > **LAN**. The page that is displayed shows some basic LAN settings of the router. In the **LAN Status** page, you can view the LAN IP address, DHCP server status, MAC address and DHCP client table. If you want to configure the LAN network, refer to the chapter 03.4.1 LAN.

			A	DSL 2/2	?+ Router			
LAN	Wizard		atus	Network	Service	Advance	Admin	Diagnostic
	System	LAN	WAN	Statistics	ARP Table			
LAN								
	This page sh LAN Config IP Address Subnet Mas DHCP Serve MAC Addres DHCP Client Name	sk er ss	tings of the device. 192.168.1.1 265.255.255.0 Enable 00:30:4F;90:30 MAC Add		Expiry(s) Type			

3.3.3 WAN

Choose **Status** > **WAN**. The p age that is displayed sh ows some basic W AN settings of the router. In the **WAN Status** page, you can view basic st atus of WAN, default gateway, DNS server. If you want to configure the WAN network, refer to the chapter 03.4.2 WAN.

PLANET Networking & Communication				ADSL 2/2	+ Router	,			
WAN	Wizard	State	ıs	Network	Service	Ad	vance	Admin	Diagnostic
	System	LAN	WAN	Statistics	ARP Table				
WAN									
	WAN S	tatus							
	This page shi	ows some basic V	/AN settings.						
	Interface VF	PI/VCI Encapsulat	ion Default F	Protocol IP Address	Gateway	Status			
	DNS Servers								

3.3.4 Statistics

Choose Status > Statistics. The Statistics page that is displayed cont ains Traffic Statistic and DSL Statistic.

3.3.4.1 Traffic Statistic

Click **Traffic Statistic** in the left pane, the page shown in the following figure appears. In this page, you can view the statistics of each network interface.

		ADSL 2/2+ Router									
Statistics	Wizard		Status		Network		Service	Advance	6	Admin	Diagnostic
	System	LAN		WAN	Statistic	c s)	ARP Table				
Traffic Statistics											
ADSL Statistics	1010000000			s for transm	ission and recep	tion regardi	ng to				
	Interface	Rx Packet	Rx Error	Rx Drop	Tx Packet	Tx Error	Tx Drop				
	e1	81657	0	0	3430	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				
	Refresh										

3.3.4.2 ADSL Statistic

Click **DSL Statistic** in the left pane, the page shown in the following figure appears. In this page, you can view the ADSL line statistics, downstream rate, up stream rate and other information.

PLANET				ADSL 2/2	?+ Router				
ADSL Statistics	Wizard	Status		Network	Service	Advance	Admin	Diagnostic	
ļ.	System	LAN	WAN	Statistics	ARP Table				
Traffic Statistics ADSL Statistics		tatistics							
	This page sho	ws the ADSL setting	gs of the devi	18.					
	ADSL Line St	atus	ACTIVATING	6)					
	ADSL Mode		-						
	Upstream								
	Downstream								
		ownstream(db)	-						
	Attenuation U		-						
)ownstream(db)	-						
	SNR Margin U	Jpstream(db)							
	Vendor ID		RETK						
	DSP Version		2918b224						
	CRC Errors								
	Upstream BER								
	Downstream		-						
	Up Output Po	wer	-						
	Down Output	Power	-						
	ES		-						
	SES								
	UAS								
	ADSL Retrain	n: Retrai	n Refres	•					

3.3.5 ARP Table

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

				ADSL 2/2+	neonei		AN AN	1.5.155
ARP Table	Wizard	St	tatus	Network	Service	Advance	Admin	Diag
	System	LAN	WAN	Statistics	ARP Table			
	This page show	vs current ARP e	ntries by interrogatir	ig the current protocol data				
	This page show							
	IP /	Address		MAC Address				
	iP / 192	Address 2.168.1.1 2.168.1.2		MAC Address 00:30:4F:90:30:87 00:30:4F:0C:F2:CE				

3.4 Network

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

3.4.1 LAN

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

3.4.1.1 LAN IP

Click LAN IP in the left pane, the page shown in the following figure appears.

In this p age, 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.

			ADSL 2/2	2+ Router			
LAN IP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	LAN	WAN					
LAN IP							
DHCP	LAN Inte	rface Setup					
DHCP Static IP							
		I to configure the LAN inte g for IP addresss, subnet	rface of your ADSL Router. mask, etc	Here you may			
	Interface Name	e: e1					
	IP Address:	192.168.1.1					
	Subnet Mask:	255.255.255.0					
	Secondary	IP					
	IP Address:	0.0.0.0					
	Subnet Mask:	0.0.0.0					
	Apply Change	25					
	LAN Port:	LAN	-				
	Link Speed/Dup	plex Mode: 100	Nbps/Full Duplex -				
	Modify						
	ETHERNET Statu	us Table:					
	Select	Port	Link Mode				
	۲	LAN	100Mbps/Full D	uplex			
	MAC Address						
		Apply Ch	anges				
	New MAC Add	dress:	Add				
	Current Allow	ed MAC Address Tabl					
		MAC Addr		Action			

The following table describes the parameters of 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 us e. This address block is 192.168.1.1- 192.168.255.254.
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.
Link Speed/Duplex Mode	Select the Link S peed/Duplex Mode whic h you need.
ETHERNET Status Table	This table will show the current link mode.
MAC Address Control	If you want to use the MAC address control feature, select it and add the MAC address.
New MAC Address	Add the MAC address which you want can access the router via the LAN port.
Current Allo wed MAC Address Table	This t able will sho w the current allo wed MAC address .

3.4.1.2 DHCP

Dynamic Host Configuration Protocol (D HCP) allows the individual PC to obt ain 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 s erver to DHCP clients. This router can also act as a surrogate DHCP server (DHCP proxy) where it relays IP address assignment from an actual real DHCP server to clients. You can enable or disable DHCP server or DHCP proxy.

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

			ADSL 2/2	+ Router			
DHCP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	LAN V	VAN					
LAN IP							
DHCP	DHCP Mod	de					
DHCP Static IP	Server. (1) Set the DHCP m an IP address pool a hosts on your networ (2) Set the DHCP m your hosts on the D	orde to DHCP Server if y available to hosts on you rk when they request in odde to DHCP Relay if y AN. You can set the IP ICP mode to None, the o ss.	You can set DHCP mode to vou are using this device as a ur LAN. The device assigns IP temet access. ou are using another DHCP si address of the DHCP server. device does not assign IP add Mask: 255 255 255.0	DHCP server. This page I addresses in the pool to erver to assign IP address	ists s to		
	DHCP Mode:	DHCP Ser					
	Interface:	V LAN	V61				
	IP Pool Range:	192.168.1.2	- 192.168.1 , 254	Show Client			
	Default Gateway:	192.168.1.1	1				
	Max Lease Time:	1440	minutes				
	Domain Name:	domain.nar	ne				
	DNS Servers:	192.168.1.1					
	Apply Changes	Reset					
	Set VendorCl	ass IP Range					

The following table describes the parameters of 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 la st 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, th e Active D HCP Client T able appears. It shows IP addresses 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 ret ains 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 obt ained by DHCP from the ISP is used. Y ou must enter host name (system name) on each individual PC. The domain name can be assigned from the router through the DHCP server.
DNS Server	Enter the DNS Server if you know, the default is router's IP.

Click **Show C lient** in the **DHCP Mode** page, the p age 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 A	ddress	MAC Address	Expiry(s)	Туре

The following table describes the parameters and buttons in 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 uni que 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.
Expired (s)	It displays the lease time. The lease time determines the period that the host ret ains 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 V endorClass IP Range in the DHCP Mode p age, the p age s hown in the following figure appears. You can view the IP address assigned to each DHCP client. The following table describes the parameters and buttons in this page:

Device Name:			
Start Address:			
End Address:			
Router Address:			
Option60			
Add Delete	Modify Close]	

Field	Description
Device Name	You can set the device name on this item.
Start Address	The IP address range start address.
End Address	The IP address range end address.
Router Address	Set the router address on this item
Option60	Type the Option60 value.

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

PLANET							
DHCP	Wizard	Status	Network	Service	Advance	Admin	Diagnosti
	LAN	WAN					
LAN IP DHCP	DHCP N	lode					
DHCP Static IP	Server. (1) Set the DHC an IP address p hosts on your n (2) Set the DHC your hosts on t	CP mode to DHCP Server if pool available to hosts on yo setwork when they request CP mode to DHCP Relay if he LAN. You can set the IP e DHCP mode to None, the	e. You can set DHCP mode you are using this device as our LAN. The device assigns internet access. you are using another DHCP address of the DHCP serve device does not assign IP a	s a DHCP server. This page IP addresses in the pool to P server to assign IP addres	lists s to		
	LAN IP Addres	ss: 192 168 1.1 Subnet None	Mask: 255 255 255 0				
	Apply Chan	ges Reset					

In the **DHCP Mode** field, choos e **DHCP Relay**. The p age shown in the following figure appears.

PLANET			ADSL 2/2	2+ Router			
DHCP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	LAN	WAN					
LAN IP DHCP DHCP Static IP	Server. (1) Set the DHC an IP address p hosts on your ne (2) Set the DHC your hosts on th	ed to configure DHCP mode P mode to DHCP Server if ool available to hocks on yy etwork when they request I P mode to DHCP Relay if the LAN. You can set the IP DHCP mode to None, the	you are using this device as sur LAN. The device assigns internet access. you are using another DHCP address of the DHCP serve	to None, DHCP Relay or DH a DHCP server. This page li IP addresses in the pool to server to assign IP address r, ddresses to the hosts when	ists : to		
	LAN IP Address DHCP Mode: Relay Server: Apply Chang	s: 192 168 1 1 Subnet DHCP Re 192 168 2	- Andrew Street				

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

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

3.4.1.3 DHCP Static IP

Click **DHCP Static IP** in the left pane, 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.

PLANET Networking & Communication			ADSL 2/2	+ Router			
DHCP Static IP	Wizard LAN V	Status	Network	Service	Advance	Admin	Diagnostic
LAN IP DHCP DHCP Static IP	DHCP Sta	tic IP Config static IP address and M IP addresses to hos 0.0.0.0 000000000000 Selected Reset	AC address on your LAN. ts on your network when the (ex. 00304Fxxxxxx)				

The following table describes the parameters and buttons of 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 .					
Delete Selected	Select a row in the DHCP Static IP Table , then click it, this row is deleted.					
Reset Click it to reset those parameter.						
DHCP Static IP Table	It shows the assigned IP address based on the MAC address.					

3.4.2 WAN

Choose **Network > WAN**. The **WAN** page that is displayed contains **WAN**, **ATM Setting**, and **ADSL Setting**.

3.4.2.1 WAN

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

WAN	Wizard	Status	Network	Service	Advance	Admin	Diagnos			
	LAN WAN					Contraction of the second				
WAN ATM Setting ADSL Setting	Channel Confi	0	nto multiplo chonnolo ku o	cianing						
	different VPI/VCI in each	The DSL WAN connection can be separated virtually into multiple channels by assigning different VPVC in each Permanent Virtual Circuit (PVC). In each PVC you can also set the connection protocol to be PPP, Dynamic IP, Static IP or Bridge mode.								
	Default Route Selection	🔿 Auto 💿 Specified								
		Encapsulation: ()	LLC OVC-Mux							
	Channel Mode: 1483 Bridged - Enable NAPT:									
	Enable IGMP:									
	PPP Settings:									
	User Name:		sword:							
	Type: Co	ntinuous – Idle	Fime (min):							
	WAN IP Settings:									
			HCP							
	Local IP Address:	Gate	way:							
		Disable © E	nable O Auto							

The following table describes the parameters of 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 655 35 (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 , or 1483 Routed .
Enable NAPT	Select it to enable Network Address Port T ranslation (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, t he access to the Internet fails. Normally, it is enabled.
Enabel IGMP	You can enable or disable Internet Group Management Protocol (IGMP) function.
PPP Settings	
User Name	Enter the correct user name for PPP dial-up, whic h is provided by your ISP.
Password	Enter the correct p assword for PPP dial-up, which is provided by your ISP.
Туре	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 dis connects the PPPoE connection.
WAN IP Settings	
Туре	 You can choose Fixed IP or DHCP. 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

Field	Description
	IP address is assigned by the remote DHCP server.
Local IP Address	Enter the IP address of WAN interface provided by your ISP.
Remote IP Address	Enter the gateway IP address 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 p arameters of this p age, click it to add a new PVC into the Current ATM VC Table .
Modify	Select a P VC in the Current A TM VC T able , and then 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, encap sulation mode, local IP address, remote IP address and other information. The maximum item of this table is eight.
d d	Click it, the PPP Interface-Modify appears. You can modify the PVCs' parameters.

Click click in the **PPPoE** mode, the page shown in the following figure appears. In this page, you can configure parameters of this PPPoE PVC.

PLANET Networking & Communication			ADSL 2/2	+ Router			
WAN	Wizard	Status	Network	Service	Advance	Admin	Diagnosti
	LAN	WAN					
WAN ATM Setting	PPP Interf	face - Modify	/				
ADSL Setting	Protocol: ATM VCC:	PPP0E 0/33					
	Login Name:	test@58	600.com				
	Password:						
	Authentication M	ethod: AUTO	*				
	Connection Type:	: Continu	ous -				
	ldle Time(s):	0					
	Bridge:	🔘 Bridg	ed Ethernet (Transparent Brid	ging)			
			ed PPPoE (Implies Bridged E	themet)			
		Oisab	ole Bridge				
	AC-Name:						
	Service-Name:						
	802.1q:		ole © Enable				
		VLAN ID	(1-4095): 0				
	MTU (1-1500):	1492					
	Static IP:						
	Source Mac addr	ess: 00:E9:0	7:90:36:87 (ex.00:E0:1	36:71:05:02) MAC Clone	7		

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

Field	Description
Protocol	It displays the protocol type used for this W AN
FIOLOCOI	connection.
ATMVCC	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 .
	You can choose Continuous, Connect on Demand, or
Connection Type	Manual.
Idle Time (s)	If choose Connect on Demand, you need to enter the

Field	Description
	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
0	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 0 to 4095.
Apply Changes	Click it to save the settings of this page temporarily.
Return	Click it to return to the Channel Configuration page.
Undo	Click it to refresh this page.

3.4.2.2 ATM Setting

Click **ATM Setting** in the left pane, the page shown in the following figure appears. In this page, you can configure the p arameters of the ATM, including QoS, PCR, CDVT, SCR, and MBS.

PLANET Networking & Communication			ADSL 2/2+ Router					
ATM Setting	Wizard LAN	Status WAN	Network	Service	Advance	Admin	Diagnostic	
WAN ATM Setting ADSL Setting	This page you may ch VPI: PCR: Apply Ch	vcl: cDvT:	the parameters for the A QoS, PCR,CDVT, SCR QoS: UBR SCR: UBR 6144 UBR 6144	and MBS.	MBS			

The following table describes the parameters of 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. Y ou can choose UBR, CBR,						
QUU	rt-VBR, or nrt-VBR.						
	Peak cell rate (PCR) is the maxi mum rate at which cells can be						
PCR	transmitted along a c onnection in the A TM network. It s value						
	ranges from 1 to 65535.						
	Cell delay variation tolerance (CDVT) is the amount of delay						
CDVT	permitted between ATM cells (in microseconds). Its value ranges						
	from 0 to 4294967295.						
	Subtain cell rate (SCR) is the maximum rate that traffic can pass						
SCR	over a PVC without the risk of cellloss. Its value ranges from 0 to						
	65535.						
MBS	Maximum burst size (MBS) is the maximum number of cells that						
WIEG	can be transmitted at the PCR. Its value ranges from 0 to 65535.						

3.4.2.3 ADSL Setting

Click **ADSL Setting** in the left pane, the page shown in the following figure appears. In 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**, **ADSL2+**, **AnnexL**, and **AnnexM**. The router negotiates the modulation modes with the DSLAM.

	WAN TM Settings						
ADSL Setting			Network	Service	Advance	Admin	Diagnostic
WAN ATM Setting ADSL Setting	ADSL	used to configure ADS ulation: G G.Lite Ø G Dm Ø T1.41 Ø ADSL Ø ADSL tion: Ø Enabl otion: Ø Enabl bility: Ø SRA (e e p Enable	<u></u>			

3.5 Service

In the navigation bar, click **Service**. In 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 al phabetic, 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 exampl e, 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, the page shown in the following figure appears.

PLANET Networking & Communication			4	DSL 2/2-	+ Router		
DNS	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
DNS DDNS	This page is	in DNS Automatica DNS Manually 1:	e IP addresses of the	DNS server in the D	NS relay mode.		
	DNS	3:					

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

Field	Description			
Attain DNS Automatically	Select it, the router acc epts 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, 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 st art configuring the p arameters in this page.			

3.5.1.2 DDNS

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

PLANET Networking & Communication			A	DSL 2/2+	- Router			
DDNS	Wizard	Status	Network	Service	Advance	Admin	Diagnostic	
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL		
DNS DDNS	Dynamic DNS Configuration This page is used to configure the Dynamic DNS address from DynDNS.org or TZO. Here you can Add/Remove to configure Dynamic DNS.							
	DDNS provie Host Name: Interface: Enable:		el -					
	DynDns Sett User Name: Password:	ings:						
	TZO Settings Email: Key: Add Re	:						

The following table describes the parameters of this page:

Field	Description
DDNS provider	Choose the DDNS provider name.
Hostname	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. The Firewall page that is displayed contains IP Port Filter, MAC Filter, URL Blocking, Virtual Server, DMZ Setting, and DoS Setting.

3.5.2.1 IP Port Filter

Click **IP Port Filter** in the left p ane, the p age 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.

PLANET Networking & Communication			A	DSL 2/2+	Router				
IP/Port Filter	Wizard	Status	Network	Service	Advance	Admin	Diagnostic		
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL			
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP Anti-DoS	IP/Port Filter 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 • Deny • Permit • Deny • Permit • Deny • Reset								
	Rule Action	n:	● Permit © Deny						
	Protocol:		IP -						
	Direction:		Upstream -						
	Source IP A			Subnet Ma					
		n IP Address:		Subnet Ma		255.255			
	Source Poi	rt:	- L	Destination	n Port:	-			
	Enable: Apply Cha	nges	Reset	Help					
	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, the page shown in the following figure appears. Entries in the table are used to restrict cert ain types of data packets from your local network to Internet through the gateway. These filters are helpful in securing or restricting your local network.

PLANET Networking & Communication			4	DSL 2/2+	- Router		
MAC Filter	Wizard DNS	Status Firewall	Network UPnP	Service IGMP Proxy	Advance TR-069	Admin	Diagnostic
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP Anti-DoS	MAC F Entries in th through the o Outgoing D Incoming D Apply Direction: Action: Source MA Destination	Selection of the second	estrict certain types filters can be helpf eny Allow any Allow tgoing Certain Allow (ex.	of data packets from yo	our local network to Inte ing your local network.	rnet	

3.5.2.3 URL Blocking

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

PLANET Networking & Communication			4	ADSL 2/2-	+ Router		
URL Blocking	Wizard DNS	Status Firewall	Network UPnP	Service	Advance TR-069	Admin	Diagnostic
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting	This page is	king Capability:	e filtered keyword. H	on ere you can add/delete iisable ©Enable	ə filtered keyword.		
NAT EXCLUDE IP Anti-DoS	Keyword: AddKeyw URL Block Select	ing Table:	ted Keyword				

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

Field	Description
URL Blocking Capability	 You can choose Disable or Enable. Select Disable to disable URL blocking function and keyword filtering function. Select En able to bl ock access to the URLs and keywords specified in the URL Blocking Table.
Keyword	Enter the keyword to block.
AddKeyword	Click it to add a keyword to the URL Blocking Table.
Delete Selected Keyword	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 Virtual Server

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

PLANET Networking & Communication			A	DSL 2/2+	- Router		
Virtual Server	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
IP/Port Filter MAC Filter	Virtua	l Server					
URL Blocking Virtual Server		used to configure virt ers on the Internet can		n your LAN through the	edevice.		
IP Address Mapping	Service Typ	e:					
DMZ Setting	Usual S	iervice Name:	AUTH				
NAT EXCLUDE IP	O User-de	efined Service Name:					
Anti-DoS	Protocol:		TCP	-			
	WAN Setting	g:	Interface	-			
	WAN Interfa	Ce:	any	-			
	WAN Port:		113	(ex. 5001:5010)			
	LAN Open F	Port	113				
	LAN IP Add	ress:					
		anges tual Server Forward ne Protocol Local	•	Port WAN IP Address	: WAN Port State /	Action	

The following table describes the parameters of 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. 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 protoc ol that the service type uses. You can choose TCP or UDP .
WAN Setting	You can choose Interface or IP Address.
WAN Interface	Choose the router port that uses 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 s ame network segment with LAN IP address of the router.

3.5.2.5 DMZ Setting

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

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

The following describes how to configure 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 of this page temporarily.

PLANET Networking & Communication			4	DSL 2/2-	+ Router		
DMZ Setting	Wizard DNS	Status Firewall	Network UPnP	Service IGMP Proxy	Advance TR-069	Admin	Diagnostic
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP Anti-DoS	unauthorize devices acc (e-mail) ser Enable	d access to its local ; essible to Internet tra vers and DNS server DMZ IP Address:	private network. Typi affic, such as Web (H	ices without sacrificing cally, the DMZ host co ITTP) servers, FTP se	ontains		

3.5.2.6 NAT EXCLUDE IP

In the p age , you can config some source IP address which use t he purge route mode when access internet through the specified interface .You can set a range of the ip not via the NAT to the internet.

				ADSL 2/2	+ Router			
AT EXCLUDE IP	Wizard	Stat		Network	Service	Advance	Admin	Diagnostic
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP Anti-DoS	In the page when acces interface: IP Range: Apply Cha Reset Current NA1	s internet through the	source IP addi specified interf	IGMP Proxy ess which use the purg ace.	TR-069 e route mode	ACL		

3.5.2.7 DoS Setting

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 **DoS Setting** in the left pane, the page shown in the following figure appears. In this page, you can prevent DoS attacks.

			ADS	L 2/2	+ Router			
Anti-DoS	Wizard	Status	Nets	vork	Service	Advance	Admin	Diagnosti
	DNS F	irewall	UPnP IGN	P Proxy	TR-069	ACL		
IP/Port Filter MAC Filter URL Blocking Virtual Server	Anti-DoS		aracterized by an ex	olicit attempt b	y hackers to prevent	legitimate users of a service from	n using that service.	
P Address Mapping	Enable DoS	Prevention						
DMZ Setting		tem Flood: SYN	100	Packet	/Second			
NAT EXCLUDE IP	Whole Sy	stem Flood: FIN	100	Packet	Second			
Anti-DoS	Whole Sy	atem Flood: UDP	100	Packet	/Second			
	Whole Sys	stem Flood: ICMP	100	Packet	Second			
	Per-Sourc	e IP Flood: SYN	100	Packet	/Second			
	Per Sourc	e IP Flood: FIN	100	Packet	Second			
	Per-Sourc	e IP Flood: UDP	100	Packet	/Second			
	Per-Sourc	e IP Flood: ICMP	100	Packet	Second			
	TCP/UDP	PortScan	Low	Sensitivity				
	ICMP Sm	ırf						
	IP Land							
	IP TearDr	op .						
	PingOfDe.	ıth						
	TCP Scan TCP SynW							
	UDP Bom							
	UDP Echo	Chargen						
	Select All	Clear All						
	Othert 24	Crient Mi		20				

3.5.3 UPNP

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

PLANET				ADSL 2/2	+ Router			
UPnP	Wizard	Sta	itus	Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL		
UPnP		Configurat used to configure U		n acts as a daemon whe	n you enable UPnP.			
	UPnP: WAN Interf	ace:	© Disal	ble Enable				
	Apply Char	iges						

3.5.4 IGMP Proxy

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

PLANET				ADSL 2/2	+ Router			
GMP Proxy	Wizard	Status		Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL		
IGMP Proxy	IGMP proxy ef for its hosts w Enable IGMF Enable IGMF IGMP Proxy: Multicast All Robust Coun Last Membe Query Interv	hen you enable it by dy 2 proxy on WAN interface 2 on LAN interface (dow 1 iowed: tt f Query Count: ral: onse Interval: e Delay:	ssue IGMP host oing the follows: ace (upstream),	messages on beha which connects to a h connects to its ho Enable	router running IGMP.	em discovered through standard	IGMP interfaces. The sys	item acts as a proxy

3.5.5 TR-069

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

TR-069	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	DNS Fire	ewall UPnP	IGMP Proxy	TR-069 ACL			
TR-069							
	TR-069 Co	nfiguration					
			er premises equipment (CPE). auto-configuration server (ACS).				
	ACS:						
	Enable:						
	URL:	http://20.20.20.20:	0090/web/tr069				
	User Name:	hgw					
	Password:	hgw					
	Periodic Inform En	able: O Disable 💿 Ena	ble				
	Periodic Inform Int	erval: 300					
	Connection Reques	st:					
	User Name:	itms					
	Password:	itms					
	Path:	/tr069					
	Port:	7547					

Debug:				
ACS Certificates CPE:	⊙No ○Yes			
Show Message:	Oisable O Enable			
CPE Sends GetRPC:	Oisable O Enable			
Skip MReboot:	Oisable O Enable			
Delay:	🔿 Disable 💿 Enable			
Auto-Execution:	○ Disable			
Certificate Management:	lient	Apply Reset		
Password:	ion			
CPE Certificate:		Browse Upload	Delete	
CA Certificate:		Browse Upload	Delete	

The following table describes the parameters of 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 ch 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 cont acts the ACS to obt ain configuration updates.			
Skip MReboot	Specify whether to send an MReboot event code in the inform message.			
Delay	Specify whether to st art 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**, the page shown in the following figure appears. In 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.

Division In the second second

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

ACL	Wizard	Status	Network	Service	Advance	Admin	Diagnosti
ACL		Firewall			-069 ACL	Admin	Diagnost
ACL	You can specify Entries in this AC Internet network	L table are used to to the Gateway. cess control can be	helpful in securing or	or WAN side. of data packets from you restricting the Gateway			
	LAN ACL Switch	: 0	Enable	Disable	Apply Changes		
	IP Address: Services Allowed I Any Add Reset			(The IP 0.0.0.0 repr	esent any IP)		

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

Field	Description
Direction Select	Select the router inte rface. 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 s egment with the IP address of the specified interface can access the router.
Services Allowed	You can choose the following services from LAN: web, telnet, 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**, the page shown in the following figure appears.

PLANET	ADSL 2/2+ Router								
ACL	Wizard	Status	Network	Service	Advance	Admin	Diagnostic		
ACL	DNS ACL C You can spi Entries in th Internet net Using of suc	Errewall configuratio configuration is ACL table are used work to the Gateway. th access control can select: O LAN 6	UPnP IGMP Pr	roxy TR-069 N side a packets from your local	ACL	Admin	Diagnosti		
	WAN Interfa Services All Web Teine FTP TFTP SNMP PING Add Re: Current AC Select	ce owed: t s <u>set</u>	IP Address/Interface	Service Port	t Action				

The following table describes the parameters and buttons of 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 permit s dat a p ackets from WAN to access the router.
IP Address	Enter the IP address on the W AN. Only the IP address that is in the same network segment with the IP address on the WAN can access the router.
Services Allowed	You can choose the following services from WAN: web , telnet , ftp , tftp , snmp , or ping . You can also choose all the services.
Add	After setting the p arameters, click it to add an entry to the Current ACL Table .
Reset	Click it to refresh this page.

3.6 Advance

In the navi gation bar, click **Advance**. In the **Advance** p age that is displayed cont ains **Bridge Setting**, **Routing**, **QoS**, **SNMP** and **Others**.

3.6.1 Bridge Setting

Choose **Advance** > **Bridge Setting**, the page shown in the following figure appears. This page is us ed to configure t he bridge p arameters. You can change the settings or view some information on the bridge and its attached ports.

		ADSL 2/2+ Router						
Advance	Wizard	Status	Networ	k	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS	SNMP	Others			
Bridge Setting	This page is In this page, attached por	e: 300 Inning Tree: Disa	ttings or view some in (seconds		he bridge and its			

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

Field	Description
Aging Time	If the host is idle for 300 sec onds (default value), its entry is deleted from the bridge table.
802.1d Spanning Tree	You can select Disabled or Enabled . Select Enabled to provide p ath redundancy while prev enting undesir able loop s in y our network.
Show MACs	Click it to show a list of the learned MAC addresses for the bridge.

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

Forwarding	Table	e	
MAC Address	Port	Туре	Aging Time
00:30:4F:00:00:00	0	Static	300
00:30:4F:03:04:05	0	Static	300
00:30:4F:00:00:09	0	Static	300
00:30:4F :0c:f2:ce	1	Dynamic	300
ff:ff:ff:ff:ff:ff	0	Static	300
refresh close)		

3.6.2 Routing

Choose **Advance > Routing**, the page shown in the follo wing figure appears. The p age that is displayed contains **RIP** and **Static Route**.

3.6.2.1 Static Route

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

PLANET ADSL 2/2+ Rou					2+ Rout	outer			
Routing	Wizard	Status	Netwo	ork	Service	Advance	Admin	Diagnostic	
Static Route RIP	1000000000	sk:	routing information.	SNMP Here you can					
	Static Route Select	Table: State Destination	Subnet Mask	Next Hop	Metric	Interface			

The following table describes the parameters and buttons of 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.

Field	Description
Delete Selected	Select a row in the Static Route T able 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**, the page shown in the following figure appears. The t able shows a list of destination routes commonly accessed by your network.

IP Route Table

This table shows a list of destination routes commonly accessed by your network.

Destination	Subnet Mask	Next Hop	Interface
192.168.1.254	255.255.255.255	*	e1
Refresh Close			

3.6.2.2 RIP

Click **RIP** in the left pane, 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.

PLANET Retworking & Communication			A					
RIP	Wizard	Status	s Network		Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS	SNMP	Others			
Static Route RIP	Enable the RIF	sion: n: e	s device as a RIP-er	Apply Chan				

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

Field	Description
RIP	Select Enable , the router communicates with other RIP-enabled devices.
Apply Change	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. Choose RIP1 indicates the router rece ives RIP v1 messages. Choose RIP2 indicates the router rece ives 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 .

Field	Description
	 Choose RIP1 indicates the router broadcast s RIP1 messages only.
	 Choose RIP2 indicates the router multicast s 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.

3.6.3 QoS

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

			AL	DSL 2/	2+ Rout	er		
QoS	Wizard	Status	Networ	k -	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS	SNMP	Others			
IP QoS	according to The proced 1. Enable Q 2. Set traffic 3. Assign the IP QoS:	e table are used to as: the specified policy. ure for configuring qua os. rule. e precedence or add r © Disable © Ena	lity of service (QoS) i narker for different str able	s as follows: ream.	Apply			

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.

			ADSL 2/	/2+ Router			
QoS	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS SNMP	Others		15. I	
IP QoS	according to the The procedure f 1. Enable QoS. 2. Set traffic rule	e specified policy. or configuring quality of e. recedence or add marke Disable Enable Stream bas	•	ng раскес Аррју			
			Beha est Proto Phy Port Prior Preced To	a haraat			
	Add QoS Rule Source IP: Destination IP: Source Port: Protocol: Set Priority: p3 Insert or Mo Add Rule		Source Mask: 255-255 Destination Mask: Destination Port: Physical Port: -				

The following table describes the parameters and buttons of 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 of 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 subnet mask of the source IP address.
Destination IP	The IP address of the destination data packet.
Destination Mask	The subnet 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. Y ou can choose TCP ,
	UDP, or ICMP.
Physical 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.
IP Precedence	You can choose from 0 to 7 define t he priority in the T oS of the IP
	data packet.
	The type of IP ToS for classifying the data package
IP ToS	You can choose Normal Ser vice, Mi nimize Cost, Maximize
	Reliability, Maximize Throughput, or Minimize Delay.
802.1p	You can choose from 0 to 7.
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.

3.6.4 SNMP

Choose **Advance** > **SNMP**, the p age shown in the follo wing figure appears. Y ou can configure the SNMP parameters.

PLANET Retworking & Communication			ADSL	2/2+ Route	er		
SNMP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS SNI	AP Others			
SNMP	This page is us In this page, yo name and so or System Descr System Conta System Name System Locat Trap IP Addre Community N	ed to configure the Sin u can modify the settin n. SIMP ciption set b tion ses lame (Read-only) lame (Read-Write)	ADSL 2/2+ Router ADSL 2/2+ Router ADSL 2/2+ Router ADE-3400 public public	Protocol (SNMP). rap IP address, and commun	ity		

The following table describes the parameters of this page:

Field	Description
Enable SNMP	Select it to enable SNMP function. You need to enable SNMP, and then you can configure the p arameters of this page.
Trap IP Address	Enter the trap IP address. The trap information is sent to the corresponding host.

Community name (read-only)	The network administrators must use this p assword to read the information of this router.
Community name (write-only)	The network administrators must use this p assword to configure the information of the router.

3.6.5 Others

Choose **Advance** > **Others**, the page shown in the following figure appears.

			4	ADSL 2/2	2+ Router	r		
Others	Wizard	Status	N	etwork	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	QoS	SNMP	Others		е.	
Others	Here you can		ous advanced settin ge, that PPPoE(PP	gs.	type will set to			

3.7 Admin

In the navigation bar , click **Admin**. The **Admin** p age that is displayed cont ains **Commit/Reboot**, **Upgrade**, **System Log**, **Password** and **Time Zone**.

3.7.1 Commit/Reboot

Choose **Admin > Commit/Reboot**, the page shown in the follo wing figure appears. You can set the router rese t to the default settings or set the router to commit the current settings.

			ADSL 2,	/2+ Router			
Admin	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Commit/Reboot	Upgrade	System Log Password	Time Zone			
Commit/Reboot	This page is u configuration.	: Save the current c		tory default			

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

Field	Description
Reboot from	 You can choose Save Current Configuration or Factory Default Configuration. Save Curr ent Configuration : Reset to the factory default settings, and then reboot the router. Factory Default Configuration : Save the current settings, and then reboot the router.
Reboot	Click it to reboot the router.

3.7.2 Upgrade

Choose Admin > Upgrade. The Upgrade p age t hat is displayed cont ains Upgrade Firmware and Backup/Restore.



3.7.2.1 Upgrade Firmware

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

PLANET				ADSL 2/2	2+ Router			
Upgrade	Wizard	Sta	atus	Network	Service	Advance	Admin	Diagnostic
	Commit/Reboot	Upgrade	System Log	Password	Time Zone			
Upgrade Firmware Backup/Restore	This page is System will Caution: De Select File	reboot after the fi	the firmware to a ne ile is uploaded.	ading. Otherwise, it n	nay crash the system.			

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

Field	Description
Select File	Click Browse to select the firmware file.
Upload	After selecting the firmware file, click Upload to st arting 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, the page shown in the follo wing figure appears. You can backup the current settings to a file and restore the settings from the file that was saved previously.

				ADSL 2/2	2+ Router			
Backup/Restore	Wizard	Statu	IS	Network	Service	Advance	Admin	Diagnostic
	Commit/Reboot	Upgrade	System Log	Password	Time Zone			
Upgrade Firmware Backup/Restore	Once the rou	ve. You also have the	J can save the con		o a configuration file on			
		ngs from File:			Browse Upload			

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

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 configur ation file of the router, click Upload to st art uploading the configuration file of the router.				

3.7.3 System Log

Choose **Admin > System Log**, the p age shown in the followin g figure appears. In this page, you can enable or disable system log function and view the system log.

PLANET Networking & Communication			ADSL 2	/2+ Router			
System Log	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
2000200	Commit/Reboot	Upgrade	System Log Password	I Time Zone			
System Log	You can set the latest log information of the set of th	sed to show the system he log flag to Error or Nor mation.	titice (or both). Click ">> ", and t Notice:				

3.7.4 Password

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

ADSL 2/2+ Router								
Password	Wizard	Status	Network	Service	Advance	Admin	Diagnostic	
	Commit/Reboot	Upgrade Sy	stem Log Password	Time Zone			1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 -	
Password	This page is us	assword is not allowed. User User d: Delete Reset Table: User ad	guration o access the web server of ADS	SL Router Empty Privilege root user				

The following table describes the parameters of this page:

Field	Description
User Name	You can create your account at this item.
Privilege	Choose the access permission, you can choose User and

Field	Description
	root
Old Password	If you want to change the password, select the account and enter the old password.
New Password	Enter the password to which you want to change the old password.
Confirmed Password	Enter the new password again.
User Account Table	Select it, and you can change the above parameter.

3.7.5 Time Zone

Choose **Admin > Time Zone**, the p age shown in the following figure appears. Y ou can configure the system time manually or get the system time from the time server.

PLANET				ADSL	2/2+	Rout	er			
Time Zone	Wizard	Status		Network		Service		Advance	Admin	Diagnostic
	Commit/Reboot	Upgrade	System Log	Passw	ord	Time Zone				
Time Zone	This page is us	Time Con ed to configure the se u can modify the se	system time and	Network Time			ſΈΡ			
	System Time:	: 1970 year Ja	n + month 5	day 2	hour 35	min 58	sec			
	DayLight :	LocaITIME	-							
	Apply Chan	Recorded Accountered A								
	State:	Disable En	able							
	Primary	220, 130, 158, 52								
	Server: Secondary Server:									
	Interval:	Every 1 h	ours							
	Time Zone:	(GMT) Gambia, L		England			-			
	Local Time:	Mon Jan 5 2:35:58	1970							
	Apply Chan	ges Reset								
	NTP Start:		Get GMT Time	1						

The following table describes the parameters of this page:

Field	Description						
	Set the system time manually.						
NTP Configuration							
State	Select enable or disable NT P function. You need to enable NTP if you want to configure the parameters of NTP.						
Server	Set the primary NTP server manually.						
Server2	Set the secondary NTP server manually.						
Time Zone	Choose the time zone in whic h area you are from the drop down list.						

3.8 Diagnostic

In the navi gation bar, click **Diagnostic**. The **Diagnostic** p age that is displayed cont ains **Ping**, **ATM Loopback**, **ADSL** and **Diagnostic Test**.

3.8.1 Ping

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

PLANET				ADSL 2/2	2+ Router			
Ping	Wizard	Status		Network	Service	Advance	Admin	Diagnost
	Ping	ATM Loopback	ADSL	Diagnostic Test				
Ping	Ping D)iagnostic						
	Host :							
	Run Ping							

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

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

3.8.2 ATM Loopback

Choose **Diagnostic** > **ATM Loopback**. The page shown in the following figure appears. In 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 A TM network.

l Loopback	Wizard	Status	Network	Service	Advance	Admin	Diagnost
	Ping 4	ATM Loopback	ADSL Diagno	tic Test			
ATM Loopback	Connectivity ve VP and VC cor check the conr Flow Type:	rification is supported	Jement - Conn d by the use of the OAM loop is used to perform the VCC	ectivity Verifical	tion		

Click **Run Lookback** to start testing.

3.8.3 ADSL

Choose **Diagnostic** > **ADSL**. The page shown in the followin g figure appears. It is used for ADSL tone diagnostics.

			ADSL 2	2/2+ Router	r		
ADSL	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Ping A	TM Loopback	ADSL Diagnostic	Test			
ADSL							
	Diagnos	tic ADSL					
	Diagnos						
	This page is us	ed to diagnose the A	ADSL tone.				
	Start						
		_	Downstream	Upstream			
	Hlin Scale		Connoticut	opourcain			
	Loop Attenuat						
	Signal Attenua						
	SNR Margin(d Attainable Rat						
	Output Power						
	Tone Number	H.Real H.I	Image SNR QL	N Hlog			
	0						
	2						
	3						

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

3.8.4 Diagnostic Test

Choose **Diagnostic > Diagnostic Test**, the page shown in the following figure appears. In this p age, you can test the DSL connection. You can also view the LAN st atus connection and ADSL connection.

	ET ADSL 2/2+ Router							
Diagnostic Test	Wizard	Status		Network	Service	Advance	Admin	Diagnostic
	Ping	ATM Loopback	ADSL	Diagnostic Test				
Diagnostic Test	The device After selec If a test sh consistent	nostic Test e is capable of testing you ting an interface, click "R nows a fail status, click "R e b Interface: a0 +	un Diagnosti	c Test". The result of each	at the the fail status is			

Click Run Diagnostic Test to start testing.

Appendix A: Glossary

Address mask

A bit mask select bits from an Internet address for subnet addressing. The mask is 32 bits long and selects the network portion of the Internet address and one or more bits of the local portion. Sometimes it called subnet mask.

AAL5

ATM Adaptation Layer - This layer maps higher layer user data into ATM cells, making the data suitable for transport through the ATM network.

ADSL

Asymmetric digital subscriber line

ATM

Asynchronous Transfer Mode - A cell-based data transfer technique in which channel demand determines packet allocation. ATM offers fast packet technology, real time, and demand led switching for efficient use of network resources.

AWG

American Wire Gauge - The measurement of thickness of a wire

Bridge

A device connects two or more physical networks and forward packets between them. Bridges can usually be made to filter packets, that is, to forward only certain traffic. Related devices are repeaters which simply forward electrical signals from one cable to the other and full-fledged routers which make routing decisions based on several criteria.

Broadband

Characteristic of any network multiplexes independent network carriers onto a single cable. Broadband technology allows several networks to coexist on one single cable; traffic from one network does not interfere with traffic from another. Broadcast a packet delivery system where a copy of a given packet is given to all hosts attached to the network. Example: Ethernet.

со

Central Office. Refers to equipment located at a Telco or service provider's office.

CPE

Customer Premises Equipment located in a user's premises

DHCP (Dynamic Host Configuration Protocol)

DHCP is software that automatically assigns IP addresses to client stations logging onto a TCP/IP network. DHCP eliminates having to manually assign permanent IP addresses to every device on your network. DHCP software typically runs in servers and is also found in network devices such as Routers.

DMT

Discrete Multi-Tone frequency signal modulation

Downstream rate

The line rate for return messages or data transfers from the network machine to the user's premises machine.

DSLAM

Digital Subscriber Line Access Multiplex

Dynamic IP Addresses

A dynamic IP address is an IP address that is automatically assigned to a client station (computer, printer, etc.) in a TCP/IP network. Dynamic IP addresses are typically assigned by a DHCP server, which can be a computer on the network or another piece of hardware, such as the Router. A dynamic IP address

may change every time your computer connects to the network.

Encapsulation

The technique layer protocols in which a layer adds header information to the protocol data unit (PDU) from the layer above. As an example, in Internet terminology, a packet would contain a header from the physical layer, followed by a header from the network layer (IP), followed by a header from the transport

layer (TCP), and followed by the application protocol data.

Ethernet

One of the most common local area network (LAN) wiring schemes, Ethernet has a transmission rate of 10 Mbps.

FTP

File Transfer Protocol. The Internet protocol (and program) transfer files between hosts.

Hop count

A measure of distance between two points on the Internet. It is equivalent to the number of gateways that separate the source and destination.

HTML

Hypertext Markup Language - The page-coding language for the World Wide Web.

HTML browser

A browser used to traverse the Internet, such as Netscape or Microsoft Internet Explorer.

http

Hypertext Transfer Protocol - The protocol carry world-wide-web (www) traffic between a www browser computer and the www server being accessed.

ICMP

Internet Control Message Protocol - The protocol handle errors and control messages at the IP layer. ICMP is actually part of the IP protocol.

Internet address

An IP address is assigned in blocks of numbers to user organizations accessing the Internet. These addresses are established by the United States Department of Defense's Network Information Center. Duplicate addresses can cause major problems on the network, but the NIC trusts organizations to use individual addresses responsibly. Each address is a 32-bit address in the form of x.x.x.x where x is an eight- bit number from 0 to 255. There are three classes: A, B and C, depending on how many computers on the site are likely to be connected.

Internet Protocol (IP)

The network layer protocol for the Internet protocol suite

IP address

The 32-bit address assigned to hosts that want to participate in a TCP/IP Internet.

ISP

Internet service provider - A company allows home and corporate users to connect to the Internet.

MAC

Media Access Control Layer - A sub-layer of the Data Link Layer (Layer 2) of the ISO OSI Model responsible for media control.

MIB

Management Information Base - A collection of objects can be accessed via a network management protocol, such as SNMP and CMIP (Common Management Information Protocol).

NAT

Network Address Translation - A proposal for IP address reuse, where the local IP address is mapped to a globally unique address.

NVT

Network Virtual Terminal **PAP** Password Authentication Protocol

PORT

The abstraction used in Internet transport protocols to distinguish among multiple simultaneous connections to a single destination host.

POTS

Plain Old Telephone Service - This is the term describe basic telephone service.

PPP

Point-to-Point-Protocol - The successor to SLIP, PPP provides router-to-router and host-to-network connections over both synchronous and asynchronous circuits.

PPPoE

PPP over Ethernet is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.

Remote server

A network computer allows a user to log on to the network from a distant location.

RFC

Request for Comments - Refers to documents published by the Internet Engineering Task Force (IETF) proposing standard protocols and procedures for the Internet. RFC can be found at www.ietf.org.

Route

The path that network traffic takes from its source to its destination. The route a datagram may follow can include many gateways and many physical networks. In the Internet, each datagram is routed separately.

Router

A system is responsible for making decisions about which of several paths network (or Internet) traffic will follow. To do this, it uses a routing protocol to gain information about the network and algorithms to choose the best route based on several criteria known as "routing metrics".

Routing Table

Information stored within a router that contains network path and status information. It is used to select the most appropriate route to forward information along.

Routing Information Protocol

Routers periodically exchange information with one another so that they can determine minimum distance paths between sources and destinations.

SNMP

Simple Network Management Protocol - The network management protocol of choice for TCP/IP-based Internet.

SOCKET

(1) The Berkeley UNIX mechanism for creating a virtual connection between processes.(2) IBM term for software interfaces that allow two UNIX application programs to talk via TCP/IP protocols.

Spanning-Tree Bridge Protocol (STP)

Spanning-Tree Bridge Protocol (STP) - Part of an IEEE standard. A mechanism for detecting and preventing loops from occurring in a multi-bridged environment. When three or more LAN's segments are connected via bridges, a loop can occur. Because of a bridge forwards all packets that are not recognized as being local, some packets can circulate for long periods of time, eventually degrading system performance. This algorithm ensures only one path connects any pair of stations, selecting one bridge as the 'root' bridge, with the highest priority one as identifier, from which all paths should radiate.

Spoofing

A method of fooling network end stations into believing that keep alive signals have come from and returned to the host. Polls are received and returned locally at either end

Static IP Address

A static IP address is an IP address permanently assigned to computer in a TCP/IP network. Static IP addresses are usually assigned to networked devices that are consistently accessed by multiple users, such as Server PCs, or printers. If you are using your Router to share your cable or DSL Internet connection, contact your ISP to see if they have assigned your home a static IP address. You will need that address during your Router's configuration.

Subnet

For routing purposes, IP networks can be divided into logical subnets by using a subnet mask. Values below those of the mask are valid addresses on the subnet.

ТСР

Transmission Control Protocol - The major transport protocol in the Internet suite of protocols provides reliable, connection-oriented full-duplex streams.

TFTP

Trivial File Transfer Protocol. A simple file transfer protocol (a simplified version of FTP) that is often boot diskless workstations and other network devices such as routers over a network (typically a LAN).

Telnet

The virtual terminal protocol in the Internet suite of protocols - Allows users of one host to log into a remote host and act as normal terminal users of that host.

Transparent bridging

The intelligence necessary to make relaying decisions exists in the bridge itself and is thus transparent to the communicating workstations. It involves frame forwarding, learning workstation addresses, and ensuring no topology loops exist (in conjunction with the Spanning-Tree algorithm).

UDP

User Datagram Protocol - A connectionless transport protocol that runs on top of TCP/IP's IP. UDP, like TCP, uses IP for delivery; however, unlike TCP, UDP provides for exchange of datagram without acknowledgments or guaranteed delivery. Best suited for small, independent requests, such as requesting a MIB value from an SNMP agent, in which first setting up a connection would take more time than sending the data.

UNI signaling

User Network Interface signaling for ATM communications.

Virtual Connection (VC)

A link that seems and behaves like a dedicated point-to-point line or a system that delivers packets in sequence, as happens on an actual point-to-point network. In reality, the data is delivered across a network via the most appropriate route. The sending and receiving devices do not have to be aware of the options and the route is chosen only when a message is sent. There is no pre-arrangement, so each virtual connection exists only for the duration of that one transmission.

WAN

Wide area network - A data communications network that spans any distance and is usually provided by a public carrier (such as a telephone company or service provider).

Important Note

According to Annex3 of the ERC/REC 70-03 publication, the use of Wideband Data Transmission systems has the following National Restrictions:

Frequency range: 2400-2483.5MHz

Country	Restriction	Reason/Remark
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 land has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012
Italy		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 20km from the centre of Ny-Alesund
Russian Federation		Only for indoor applications