# **CHAPTER 3**

# **Internet Access Setup**

# 3.1 Introduction

In the **Quick Setup** group, you can configure the router to access the Internet with different modes (e.g. PPPoE, PPTP or Dynamic/Static IP).



For most users, Internet access is the primary application. The router supports the Ethernet WAN interface for Internet access. The following sections will explain more details of various broadband access setup. When you click **Internet Access Setup** within the **Quick Setup** group, the following setup page will appear.

Three modes are available for Internet Access, that is, PPPoE, PPTP, and Static/Dynamic IP.



**PPPoE:** This is used for most DSL modem users. All local users can share one PPPoE connection to access the Internet.

PPTP: Some DSL service providers supply a special DSL modem (e.g. Alcatel's

#### Internet Access Setup

DSL modem). This kind of modem only supports the PPTP tunnel to access the Internet. In these cases, you should create a PPTP tunnel that carries a PPP session and terminates on the DSL modem. Once the tunnel has been established, this kind of DSL modem will forward the PPP session to the ISP. As long as the PPP session is connected, all the local users will be able to share this PPP session to access to the Internet.

Static or Dynamic IP: On this page you configure the WAN interface to use a static (fixed) IP or dynamic (DHCP client) IP address. Most cable users will use the dynamic IP address mode to get a globally reachable IP address from the cable head-end system.Before you connect a broadband access device, e.g. a DSL/Cable modem, to the router, you need to know what kind of Internet access is provided by your ISP. The following sections deal with four widely-used broadband access services. They are PPPoE Client, PPTP Client, Static IP for DSL, and Dynamic IP (DHCP Client) for Cable. In most cases, you will get a DSL or Cable modem from the broadband access service provider. The router is connected behind the broadband device (i.e. DSL/Cable modem) and works as a NAT or IP router for broadband connections.

# **3.2** Configuration

#### 3.2.1 Using PPPoE with a DSL Modem

Click **Internet Access Setup > PPPoE** to enter the setup page.

PPPoE Setup PPPoE Link O Enable O Disable ISP Access Setun	PPP/MP Setup PPP Authentication	PAP or CHAP
ISP Name	Idle Timeout IP Address Assignn	180 second(s) nent Method (IPCP)
Vsername Password Scheduler (1-15)	Fixed IP Fixed IP Address	O Yes O No (Dynamic IP
=>,,,,	WAN physical type Auto negotiation	

# **PPPoE** Setup

**PPPoE Link:** Check **Enable** to enable the PPPoE client protocol on the WAN interface.

## **ISP** Access Setup

**ISP Name:** Enter the ISP name.

Username: Enter the ISP supplied username.

**Password:** Enter the ISP supplied password.

**Scheduler** (1-15): Enter the index of schedule profile to control the Internet access by time plan.

#### **PPP/MP** Setup

PPP Authentication: Select PAP or CHAP for widest compatibility.

**Always On:** Check to force the Internet access is always online, and you will see the **Idle Timeout** field will be blocked for input.

**Idle Timeout:** Idle timeout means the router will disconnect after being idle for a preset amount of time. The default is 180 seconds. If you set the time to 0, the PPP session will not terminate itself.

#### IP Address Assignment Method (IPCP)

**Fixed IP:** Check **No (Dynamic IP)** unless your ISP has provided you with a static IP address.

**Fixed IP Address:** If your ISP has provided you with a static IP address enter it here.

Click OK.

### 3.2.2 Using PPTP with a DSL Modem

Click **Internet Access Setup** > **PPTP** to enter the setup page. The following setup page is just for example. The exact settings should be provided by your DSL service povider.

PPTP Setup PPTP Link   PPTP Link   PTP Server 10.0.0.138  ISP Access Setup ISP Name User Name User Name Password Scheduler (1-15) =>,,,,	PPP Setup PPP Authentication Always On Idle Timeout Fixed IP Fixed IP Address LAN2/WAN IP Netw O Obtain an IP add Specify an IP add IP Address	PAP or CHAP    180 second(s)  Yes  No (Dynamic IP)  vork Settings ress automatically dress  10.0.0.150
63,72 733 9,00 a 50	Subnet Mask WAN physical type Auto negotiation	255.0.0

# **PPTP Setup**

**PPTP Link:** Check **Enable** to enable a PPTP client to establish a tunnel to a DSL modem on the WAN interface.

**PPTP Server IP Address:** Specify the IP address of the PPTP-enabled DSL modem. Refer to the user manual of the PPTP-enabled DSL modem.

## **ISP** Access Setup

**ISP Name:** Enter the ISP name.

Username: Enter the ISP supplied username.

**Password:** Enter the ISP supplied password.

**Scheduler (1-15):** Enter the index of schedule profile to control the Internet access by time plan.

# **PPP/MP** Setup

**PPP Authentication:** Select PAP or CHAP for widest compatibility.

**Always On:** Check to force the Internet access is always online, and you will see the Idle Timeout field will be blocked for input.

**Idle Timeout:** Idle timeout means the router will disconnect after being idle for a preset amount of time. The default is 180 seconds. If you set the time to 0, the PPP session will not terminate itself.

#### IP Address Assignment Method (IPCP)

**Fixed IP:** Check No (Dynamic IP) unless your ISP has provided you with a static IP address.

**Fixed IP Address:** If your ISP has provided you with a static IP address enter it here.

#### WAN IP Network Settings

**Obtain an IP address automatically:** Set the WAN interface as a DHCP client that will ask for the IP network settings from the DHCP server or PPTP-enabled DSL modem.

Specify an IP address: If you are not sure whether there are any DHCP services on the LAN2/WAN interface, you can manually assign an IP address to the interface. Note that the IP Address and Subnet Mask should be assigned within the same network as the PPTP-enabled DSL modem. Click **OK**.

#### 3.2.3 Using a Static IP or multiple Static IPs with a DSL/Cable Modem

In this application, you receive a fixed public IP address or a public subnet (ie. Multiple public IP addresses) from your DSL or Cable ISP. In most cases, a Cable ISP will provide a fixed public IP, while a DSL ISP will provide a public subnet. If you have a public subnet, you could choose an IP address or many IP address to assign to the WAN interface. Click **Internet Access Setup > Static or Dynamic IP** to enter the setup page.

#### Internet Access Setup

ess Control	WAN IP Network Sett	ings
adband Access 💿 Enable 🔿 Disable	🔘 Obtain an IP addr	ess automatically
	Router Name	*
p WAN Connection	Domain Name	*
Enable PING to keep alive	<ul> <li>* : Required for some ISPs</li> <li>Obefault MAC Address</li> <li>Specify a MAC Address</li> </ul>	
NG to the IP 0.0.0.0		
NG Interval 0 minute(s)	MAC Address:	laress
N physical type	00 · 50 · 7F	: 63 · 11 · 03
o negotiation 🖌	Specify an IP add	ress WAN IP Alias
	_ IP Address	172.16.2.84
Protocol	Subnet Mask	255.255.255.0
Enable RIP	Gateway IP Address	172.16.2.5
Copyright (o) 2004, Dr 偸 > Ouick Setup > Internet Access Setup Static or Dynamic IP (DHCP Client)	OK ayTek Corp. All Rights Reserved.	4
Copyright (c) 2004, Dr The second se	OK ayTek Corp. All Rights Reserved WAN IP Network Settin	gs
Copyright (c) 2004, Dr The second se	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres	gs ss automatically
Copyright (o) 2004, Dr The second se	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name	ç⇒ gs ss automatically ∦
Copyright (o) 2004, Dr Copyright (o) 2004, Dr Copyright (o) 2004, Dr Static or Dynamic IP (DHCP Client) Access Control Broadband Access   Enable O Disable Keep WAN Connection Enable PING to keep alive	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name Domain Name * : Required for some I	gs ss automatically * SPs
Copyright (c) 2004, Dr Copyright (c) 2004, Dr Static or Dynamic IP (DHCP Client) Access Control Broadband Access   Enable O Disable Keep WAN Connection Enable PING to keep alive PING to the IP 0.0.0	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name Domain Name * : Required for some I O Default MAC Addres	gs ss automatically * SPS s
Copyright (e) 2004, Dr Copyright (e) 2004, Dr Copyri	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name Domain Name * : Required for some I O Default MAC Addres C Specify a MAC Addr MAC Address:	gs ss automatically * SPs s s ress
Copyright (e) 2004, Dr Copyright (e) 2004, Dr Copyri	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name Domain Name * : Required for some I O Default MAC Address O Specify a MAC Addre MAC Address: 00 . 50 . 7F	gs         ss automatically         *         SPs         ss         ess         : 63         : 63
Copyright (c) 2004, Dr Copyright (c) 2004, Dr Copyri	OK ayTek Corp. All Rights Reserved WAN IP Network Settin O Obtain an IP addres Router Name Domain Name * : Required for some I O Default MAC Address O Specify a MAC Addr MAC Address: 00.50.7F • Specify an IP addre	gs ss automatically * SPS ss ess : 63 · 11 · 03 ss WAN IP Alias
Copyright (c) 2004, Dr Copyright (c) 2004, Dr Static or Dynamic IP (DHCP Client) Access Control Broadband Access   Enable © Disable Keep WAN Connection Enable PING to keep alive PING to the IP 0.0.0.0 PING Interval 0 minute(s) WAN physical type Auto negotiation	OK  ayTek Corp. All Rights Reserved  WAN IP Network Settin  Obtain an IP addres Router Name Domain Name * : Required for some I Obfault MAC Address: D0.60.7F Specify a MAC Addr IP Address	gs ss automatically * SPS ss ess : 63 · 11 · 03 ss WAN IP Alias 172.16.2.84
Copyright (c) 2004, Dr Copyright (c) 2004, Dr Static or Dynamic IP (DHCP Client) Access Control Broadband Access  Enable  Disable Keep WAN Connection Enable PING to keep alive PING to the IP 0.0.0.0 PING Interval 0 minute(s) WAN physical type Auto negotiation  RIP Protocol	OK  ayTek Corp. All Rights Reserved  WAN IP Network Settin  Obtain an IP addres Router Name Domain Name * : Required for some I Obfault MAC Addres Specify a MAC Addres IP Address Subnet Mask	GS ss automatically * SPS ss ess : 63 · 11 · 03 ss WAN IP Alias 172.16.2.84 255.255.0

### Access Control

**Broadband Access:** Select **Enable** to turn on the broadband access capability.

#### Keep WAN Connection

**Enable PING to keep alive:** Check to enable PING to keep alive function. Normally, this function is for Dynamic IP environment. Here will ignore the settings.

## **RIP** Protocol

**Enable RIP:** Check to turn RIP packets exchange on WAN interface. For most Internet access, you don't need to check the option.

# WAN IP Network Settings

**Specify an IP address:** As we are using a static IP, you have to select the option to specify an IP Address, Subnet Mask, and Gateway IP Address.

Click OK.

If you have multiple public IPs to assign on the WAN interface. Click **WAN IP Alias**, the following windows will be pop-up. You can assign additional IPs on the page, and click **OK**.

ndex	Enable	Aux. WAN IP	Join NAT IP Pool
1.	v	192.168.100.60	v
2.			
З.			
4.			
5.			
6.			
7.			
8.			

#### 3.2.4 Using a Dynamic IP (DHCP Client) with a DSL/Cable Modem

This application is mostly used by Cable ISPs. Click **Internet Access Setup > Static or Dynamic IP** to enter the setup page.

#### Internet Access Setup

Access Control	WAN IP Network Settings	
Broadband Access 💿 Enable 🔘 Disable	O Obtain an IP address automatically	
Keen WAN Connection	Router Name *	
Enable PING to keep alive	* : Required for some ISPs	
PING to the IP 168 95 1 1	Default MAC Address	
PING Interval 3 minute(s)	<ul> <li>Specify a MAC Address</li> <li>MAC Address:</li> </ul>	
WAN physical tupo	00 · 50 · 7F : 63 · 11 · 03	
	Specify an IP address     WAN IP Alias	
	IP Address 0.0.0.0	
RIP Protocol	Subnet Mask 0.0.0.0	
Enable RIP	Gateway IP Address	

#### Access Control

**Broadband Access:** Select **Enable** to turn on the broadband access capability.

#### Keep WAN Connection

**Enable PING to keep alive:** Check to enable PING to keep alive function. Normally, this function is for Dynamic IP environment. If you need to enable the function, assign a public IP address in the PING to the IP and a timer in the PING Interval.

#### **RIP** Protocol

**Enable RIP:** Check to turn RIP packets exchange on WAN interface. For most Internet access, you don't need to check the option.

### WAN IP Network Settings

**Obtain an IP address automatically:** The option must be enabled.

**Router Name:** Depending on your Cable ISP this option may or may not be left blank. Some ISPs require this name for access authentication. **Domain Name:** Depending on your Cable ISP this field may or may not be left blank.

**Default MAC Address & Specify a MAC Address:** These two options  $\frac{8}{8}$ 

are mutually exclusive. Some Cable ISPs use a specific MAC address for access authentication. In such cases you need to check the **Specify a MAC Address box** and enter the MAC address in the MAC Address fields. Click **OK** and restart the router to allow the settings to take affect.