

Internet Security Gateway



Version 3.60 March 2003



## Introducing the ZyWALL

The ZyWALL 2 is the ideal secure gateway for all data passing between the Internet and the LAN. By integrating NAT, firewall and VPN capability, ZyXEL's ZyWALL 2 is a complete security solution that protects your Intranet and efficiently manages data traffic on your network. The embedded web configurator is easy to operate and totally independent of the operating system platform you use.

You should have an Internet account already set up and have been given most of the following information.

You	Ir device's WA	N IP Address (if given):	
DN	S Server IP Ad	dress (if given): Primary	_, Secondary
	apsulation:		
0	Ethernet	Service Type:	
		Login Server IP Address:	
		User Name:	Password:
0	PPTP	User Name:	Password:
		Your WAN IP Address:	PPTP Server IP Address:
		Connection ID (if required):	
0	PPPoE	(PPPoE) Service Name:	
		User Name:	Password:

#### Internet Account Information

## **Quick Start Overview**

Hardware Installation
2 Setting Up Your Computer's IP Address
<b>B</b> Configuring Your ZyWALL

# Hardware Installation

### **Rear Panel**



LABEL	DESCRIPTION
1. LAN 10/100M 1-4	Connect a computer to one of these ports with an Ethernet cable. These ports are auto- negotiating (can connect at 10 or 100Mbps) and auto-sensing (automatically adjusts to the type of Ethernet cable you use, straight-through or crossover).
2. WAN 10/100M	Connect your cable/DSL modem to this port with the cable that came with your modem.
3. POWER 12 VDC	Connect the included power adaptor (use only this adapter) to this power socket.
After you've made t	he connections, connect the power cable to a power supply and look at the front panel LEDs.
CON/AUX switch CON/AUX port	Only connect this port if you want to configure the ZyWALL using the SMT via console port see your <i>User's Guide</i> for details.
	Set this switch to the "CON" side to use the <b>CON/AUX</b> port as a console port for local device configuration and management. Connect the 9-pin male end of the console cable to the console port of the ZyWALL and the other end to a serial port (COM1, COM2 or other COM port) on your computer. Your computer should have a terminal emulation communications program (such as HyperTerminal) set to VT100 terminal emulation, no parity, 8 data bits, 1 stop bit, no flow control and 9600 bps port speed.
RESET	You only need to use this button if you've forgotten the ZyWALL's password. It returns the ZyWALL to the factory defaults (password is 1234, LAN IP address 192.168.1.1, terminal emulation settings as described above etc.; see your <i>User's Guide</i> for details).

### The Front Panel LEDs

The **PWR** LED blinks while performing system testing and then stays on if the testing is successful. The **CON/AUX**, **LAN**, and **WAN** LEDs turn on if they are properly connected. Refer to the *User's Guide* for more detailed LED descriptions.



# **2**Setting Up Your Computer's IP Address

Skip this section if your computer is already set up to accept a dynamic IP address. This is the default for most new computers.

The ZyWALL is already set up to assign your computer an IP address. Use this section to set up your computer to receive an IP address or assign it a static IP address in the 192.168.1.2 to 192.168.1.254 range with a subnet mask of 255.255.255.0. This is necessary to ensure that your computer can communicate with your ZyWALL.

Your computer must have an Ethernet card and TCP/IP installed. TCP/IP should already be installed on computers using Windows NT/2000/XP, Macintosh OS 7 and later operating systems.

### Windows 2000/NT/XP

- 1. In Windows XP, click start, Control Panel. In Windows 2000/NT, click Start, Settings, Control Panel.
- 2. In Windows XP, click Network Connections.

In Windows 2000/NT, click Network and Dial-up Connections.

- 3. Right-click Local Area Connection and then click Properties.
- 4. Select Internet Protocol (TCP/IP) (under the General tab in Win XP) and click Properties.

5. The Internet Protocol TCP/IP Properties screen opens (the General tab in Windows XP).

- To have your computer assigned a dynamic IP address, click **Obtain an IP address automatically**.

-To configure a static IP address, click **Use the following IP Address** and fill in the **IP address** (choose one from192.168.1.2 to 192.168.1.254), **Subnet mask** (255.255.255.0), and **Default gateway** (192.168.1.1) fields.

nternet	Protocol (TCP/IP) Proj	perties 🛛 🛛 🛛 🛛
General	Alternate Configuration	
this cap		tomatically if your network supports to ask your network administrator for
() ()	otain an IP address automatic	cally
OU	se the following IP address: -	
IP ad	ldress:	
Subr	net mask:	
Defa	ult gateway:	45 45 54
() OI	otain DNS server address au	tomatically
OU	e the following DNS server a	addresses:
Prefe	erred DNS server:	
Alter	nate DNS server:	
		Advanced
		OK Cancel

- Click Advanced. Remove any previously installed gateways in the IP Settings tab and click OK to go back to the Internet Protocol TCP/IP Properties screen.
- 7. Click **Obtain DNS server address automatically** if you do not know your DNS server IP address(es).

If you know your DNS server IP address(es), click **Use the** following DNS server addresses, and type them in the **Preferred DNS server** and **Alternate DNS server** fields.

If you have more than two DNS servers, click **Advanced**, the **DNS** tab and then configure them using **Add**.

- 8. Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.
- 9. Click **OK** to close the **Local Area Connection Properties** window.

	/INS Option:	•
addresses		
IP address		Subnet mask
DHCP Enabled		
	Add	Edit Remove
efault gateways:		
Gateway		Metric
	Add	Edit Remove
Automatic metric	Add	Edit Remove
	Add	Edit Remove

#### Checking Your Computer's IP Address

- 1. In the computer, click Start, (All) Programs, Accessories and then Command Prompt.
- In the Command Prompt window, type "ipconfig" and then press ENTER. Your computer's IP address must be in the correct range (192.168.1.2 to 192.168.1.254) with subnet mask 255.255.255.0 in order to communicate with the ZyWALL.

Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

# **O**Configuring Your ZyWALL

Choose one of these methods to access and configure the ZyWALL. This *Quick* Start Guide shows you how to use the web configurator wizard only. See your User's Guide for background information on all ZyWALL features and SMT configuration. Click the web configurator online help for screen-specific web help.

- Web Configurator
- SMT (System Management Terminal). Access the SMT via:
  - o Console port using terminal emulation software
  - o LAN or WAN using Telnet

### Accessing Your ZyWALL Via Web Configurator

**Step 1.** Launch your web browser. Enter "192.168.1.1" as the web site address.

Eile	<u>E</u> dit	⊻iew	F <u>a</u> vorites	<u>T</u> ools	Help		_
🖛 В	ack 👻	⇒•	🛛 🖸 🙆		Search	Web site address.	22
Addre	ess 🥃	http://	192.168.1.1/				]

Step 2. The default password ("1234") is already in the password field (in non-readable format). Click Login to proceed to a screen asking you to change your password. Click Reset to revert to the default password in the password field.

Enter Password and click Login.		
Password:	D	efault password.
Login Reset		

**Step 3.** It is highly recommended you change the default password! Enter a new password, retype it to confirm and click **Apply**; alternatively click **Ignore** to proceed to the main menu if you do not want to change the password now.

New Password:	1000A	Char	nge default password.
Retype to Confirm:			

Step 4. You should now see the web configurator MAIN MENU screen.

- > Click WIZARD to begin a series of screens to help you configure your ZyWALL for the first time.
- > Click a link under **SETUP** in the navigation panel to configure that ZyWALL feature.
- Click MAINTENANCE in the navigation panel to see ZyWALL performance statistics, upload firmware and back up, restore or upload a configuration file.
- Click LOGOUT when you have finished a ZyWALL management session. The ZyWALL automatically logs you out if it is left idle for five minutes; press ENTER to display the Login screen again and then log back in. This idle timeout timer is one of the many ZyWALL features that you may edit using the web configurator.

ZVXEL	
TOTAL INTERNET ACCESS SOLUTION	
WIZARD	WIZARD
SETUP <u>SYSTEM</u>	
LAN WAN SUA/NAT	MAIN MENU
STATIC ROUTE FIREWALL CONTENT FILTER VPN/IPSEC	Welcome to the ZyXEL embedded web configurator. Navigation panel
REMOTE MGNT UPNP LOGS	Click Wizard to configure your system for Internet access.
MAINTENANCE	<ul> <li>Otck any link under Setup to configure advanced settings.</li> <li>Click Maintenance to access a range of maintenance menus.</li> </ul>
	• Click Log LOGOUT

Using the Wizard to Configure for Internet Access

**Step 1.** Click **Wizard Setup** in the main menu to display the first wizard screen.

	is optional, but may be helpful in accessing services of your Provider, such as mail and news servers and customer support
Enter a descript computer's nam	ive name for identification purposes. We recommend using you le.
System Name:	
you are having d	n name is often sent automatically by the ISP to the router. If ifficulty accessing ISP services, you may need to enter the nanually in the field below.
	he full address of your ISP's mail server is domain.com, then the Domain Name is in.com

**System Name** is for identification purposes. Enter your computer's "Computer Name".

The **Domain Name** entry is what is propagated to the DHCP clients on the LAN. If you leave this blank, the domain name obtained by DHCP from the ISP is used. Click **Next** to continue.

**Step 2.** The second wizard screen has three variations depending on what encapsulation type you use. Use the information in *Internet Account Information* to fill in fields.

ISP Parameters for Internet Acces		
Encapsulation	Ethernet	<b>•</b>
Service Type	Standard 💌	
User Name	N/A	
Password	N/A	
Login Server IP Address	N/A	

Choose Ethernet when the WAN port is used as a regular Ethernet. Choose from Standard or a RoadRunner version. You'll need User Name, Password and Login Server IP Address for some Roadrunner versions.

Point-to-Point Protocol over Ethernet (**PPPoE**) also functions as a dial-up connection. Therefore you'll also need a username and password and possibly the PPPoE service name. Your ISP will give you all needed information.

Choose **PPTP** if your service provider uses a DSL terminator with PPTP login. The ZyWALL must have a static IP address in this case. You'll also need a login name, associated password, the DSL terminator IP address and possibly a connection ID. Click **Next** to continue.

Step 3. Fill in the fields and click Finish to save and complete the wizard setup.

WIZARD	SETUP	WAN IP Address Assignment Select Get automatically from ISP if
	WAN IP Address Assignment            • Get automatically from ISP (Default)         • Use fixed IP address         IP Address         IP Address         IP Address         IP Address         O0.00         Gateway IP Address         O0.00         Gateway IP Address         O0.00         Get automatically from ISP (Default)         • Use fixed IP Address - DNS Server IP Address         Primary DNS Server         O0.00         Secondary DNS Server         O0.00         WAN MAC Address         • Factory default         • Spoof this computer's MAC Address IP Address         IP Address         IP Subnet IP Address         IP Addres	your ISP did not assign you a fixed IP address. Select <b>Use fixed IP address</b> if the ISP assigned a fixed IP address and then enter your IP address and subnet mask in the next two fields. Enter the gateway IP address in this field (if provided) when you select <b>Use</b> <b>Fixed IP Address</b> . <b>DNS Server Assignment</b> Select <b>Get automatically from ISP</b> if your ISP does not give you DNS server addresses. If you selected the <b>Use fixed IP</b> <b>address – Primary/Secondary DNS</b> <b>Server</b> option, enter the provided DNS addresses in these fields.

#### your ISP does not give you DNS server addresses. If you selected the Use fixed IP address – Primary/Secondary DNS Server option, enter the provided DNS addresses in these fields.

#### WAN MAC Address

Select Factory Default to use the factory assigned default MAC address. Alternatively, select Spoof this Computer's MAC address - IP Address and enter the IP address of the computer on the LAN whose MAC address you are cloning.

#### **Test Your Internet Connection**

Launch your web browser and navigate to www.zyxel.com. You don't need a dial-up program such as Dial Up Networking. Internet access is just the beginning. Refer to the User's Guide for more detailed information on the complete range of ZyWALL features.

## Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you turn on the ZyWALL.	Make sure that you have the correct power adapter connected to the ZyWALL and plugged in to an appropriate power source. Check all cable connections.
	If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.
Cannot access the ZyWALL from the LAN.	Check the cable connection between the ZyWALL and your computer or hub. Refer to the <i>Rear Panel</i> section for details.
	Ping the ZyWALL from a LAN computer. Make sure your computer Ethernet card is installed and functioning properly.
Cannot ping any computer on the LAN.	If the LAN LEDs are off, check the cable connections between the ZyWALL and your LAN computers.
	Verify that the IP address and subnet mask of the ZyWALL and the LAN computers are in the same IP address range.

PROBLEM	CORRECTIVE ACTION
Cannot get a WAN IP address from the ISP.	The WAN IP is provided after the ISP verifies the MAC address, host name or user ID.
	Find out the verification method used by your ISP and configure the corresponding fields.
	If the ISP checks the WAN MAC address, you should clone the MAC address from a LAN computer. Click <b>WAN</b> and then the <b>MAC</b> tab, select <b>Spoof this Computer's MAC address - IP Address</b> and enter the IP address of the computer on the LAN whose MAC address you are cloning.
	If the ISP checks the host name, enter your computer's name (refer to the <i>Wizard Setup</i> section in the <i>User's Guide</i> ) in the <b>System Name</b> field in the first screen of the <b>WIZARD</b> .
	If the ISP checks the user ID, click <b>WAN</b> and then the <b>ISP</b> tab. Check your service type, user name, and password.
Cannot access the Internet.	Check the ZyWALL's connection to the cable/DSL device.
	Check whether your cable/DSL device requires a crossover or straight-through cable.
	Click <b>WAN</b> to verify your settings.