

Internet Security Gateway

Quick Start Guide

Version 3.62 February 2004



Introducing the ZyWALL

The ZyWALL 30W is the ideal secure gateway for all data passing between the Internet and the LAN. By integrating NAT, firewall, VPN capability and wireless LAN, ZyXEL's ZyWALL 30W 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.

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

Υοι	ır device's WAI	N IP Address (if given):	
DN	S Server IP Ad	dress (if given): Primary	_, Secondary
Enc	apsulation:	(choose one below)	
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

1 Hardware Installation

1.1 Rear Panel



1

LABEL	DESCRIPTION
1. LAN 10/100M	Connect a computer to this port with an Ethernet cable. This port is auto-negotiating (can connect at 10 or 100Mbps) and auto-sensing (automatically adjusts to straight-through or crossover Ethernet cable).
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 adaptor) to this power socket.
After you've made	the 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 or set up a backup WAN connection; see your <i>User's Guide</i> for details.
	Set this switch to the "CON" side to use the CON/AUX 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.
	Set this switch to the "AUX" side to use the CON/AUX port as an auxiliary dial-up WAN connection. Use the included CON/AUX converter, with the console cable to connect the CON/AUX port to your modem or TA.
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).
WIRELESS LAN	Do not insert or remove a WLAN card with the ZyWALL turned on.
	Turn off the ZyWALL before inserting or removing an 11 Mbps 802.11b-compliant wireless LAN PCMCIA card (to avoid damage). Use the PCMCIA card release button to remove a PCMCIA card from the slot.
	Slide the 64-pin connector end of the PCMCIA wireless LAN card into the slot as shown next.
	Do not force, bend or twist the wireless LAN card.



1.2 The Front Panel LEDs

The **PWR** LED turns on when you connect the power. The **SYS** LED blinks while performing system testing and then stays on if the testing is successful. The **CON/AUX**, **LAN**, **WAN** and **WLAN** LEDs turn on if they are properly connected. Refer to the following table for detailed LED descriptions.

ZyXEL	PWR SYS	10M 100M LAN	10m 100m con/aux wlan — wan —	ZyWALL INTERNET SECURITY GATEWAY

LED	COLOR	STATUS	MEANING
PWR	Green	On	The ZyWALL is turned on.
		Off	The ZyWALL is turned off.
SYS	Green	Off	The ZyWALL is not ready or failed.
		On	The ZyWALL is ready and running.
		Flashing	The ZyWALL is rebooting.
	Red	On	The power to the ZyWALL is too low.

LED	COLOR	STATUS	MEANING
WLAN	Green	Off	The wireless LAN is not ready, or has failed.
		On	The wireless LAN is OK.
		Flashing	The wireless LAN is sending or receiving packets.
LAN 10M	Green Off The 10M LAN is not connected		The 10M LAN is not connected.
		On	The ZyWALL is connected to a 10M LAN.
		Flashing	The 10M LAN is sending or receiving packets.
LAN 100M	Orange	Off	The 100M LAN is not connected.
		On	The ZyWALL is connected to a 100Mbps LAN.
		Flashing	The 100M LAN is sending or receiving packets.
WAN 10M	Green	Off	The 10M WAN link is not ready, or has failed.
		On	The 10M WAN link is OK.
		Flashing	The 10M WAN link is sending or receiving packets.
WAN 100M	Orange	Off	The 100M WAN link is not ready, or has failed.
		On	The 100M WAN link is OK.
		Flashing	The 100M WAN link is sending or receiving packets.
CON/AUX	Green	Off	The CON/AUX link is not ready, or has failed.
		On	The CON/AUX switch is set to CON and the CON/AUX port is connected to a management computer.
	Orange	Off	The CON/AUX link is not ready, or has failed.
		On	The CON/AUX switch is set to AUX and the CON/AUX port has an Internet connection through a dial-up modem.
		Flashing	The CON/AUX switch is set to AUX and the CON/AUX port is sending or receiving data through a dial-up modem.

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.

2.1 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) Properties
General	Alternate Configuration
this cap	an get IP settings assigned automatically if your network supports pability. Otherwise, you need to ask your network administrator for propriate IP settings.
<u>ا</u> (Ibtain an IP address automatically
OU	se the following IP address:
IP ac	ddress:
Subr	net mask:
Defa	ault gateway:
<u>ی</u> ا	btain DNS server address automatically
OU	se the following DNS server addresses:
Prefe	erred DNS server:
Alter	mate 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.

Settings	DNS	WINS Options	
IP ad	ldress		Subnet mask
DHCF	PEnabled		
		Add	Edit Remove
Default	gateways:		
Gate			Metric
Gate		Add	Metric

2.2 Checking Your Computer's IP Address

- 1. In the computer, click Start, (All) Programs, Accessories and then Command Prompt.
- 2. 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.

3 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, WLAN or WAN using Telnet

3.1 Accessing Your ZyWALL Via Web Configurator

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

Eile	Edit	⊻iew	F <u>a</u> vorites	<u>T</u> ools	Help		_
🖛 Ba	ack 👻	⇒ •	8 🖸 🖉	3 Q:	Search	Web site address.	22
A <u>d</u> dre	ss 🥃	http://	192.168.1.1	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:		Chan	Change default password.	
Retype to Confirm:				
Ap	olv Ignore			

- 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 ADVANCED 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.

3.2 Using the Wizard to Configure for Internet Access

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

General Setup:
This information is optional, but may be helpful in accessing services of your
Internet Service Provider, such as mail and news servers and customer support web pages.
Enter a descriptive name for identification purposes. We recommend using your computer's name.
System Name:
The ISP's domain name is often sent automatically by the ISP to the router. If you are having difficulty accessing ISP services, you may need to enter the Domain
Name manually in the field below.
Domain Name:

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 the fields.

ISP Parameters for Internet Acces	s
Encapsulation	Ethernet
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.

WAN IP Address Assignment		
Get automatically from ISP (Defailed)	ult)	
Use fixed IP address		
My WAN IP Address		0.0.0.0
My WAN IP Subnet Mask		0.0.0.0
Gateway IP Address		0.0.0.0
System DNS Servers		
First DNS Server	From ISP 💌	0.0.0.0
Second DNS Server	None 💽	0.0.0.0
Third DNS Server	None 💽	0.0.0.0
WAN MAC Address		
Factory Default		
Spoof this Computer's MAC Address	ess - IP Address	192.168.1.33

WAN IP Address Assignment Select Get automatically from ISP if your ISP did not assign you a fixed IP address. Select Use fixed IP address 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 Use Fixed IP Address.

System DNS Servers

Select **From ISP** if your ISP dynamically assigns DNS server information (and the ZyWALL's WAN IP address). The field to the right displays the (read-only) DNS server IP address that the ISP assigns. Select **User-Defined** if you have the IP address of a DNS server. Enter the DNS server's IP address in the field to the right.

Select **None** if you do not want to configure DNS servers. If you do not configure a system DNS server, you must use IP addresses when configuring VPN, DDNS and the time server.

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.

3.3 Test Your Internet Connection

Launch your web browser and navigate to <u>www.zyxel.com</u>. 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.

4 Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you turn on the ZyWALL.	Make sure that you have the correct power adaptor 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 10/100M 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.
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 WAN and then the MAC tab, 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.
	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 System Name field in the first screen of the WIZARD .
	If the ISP checks the user ID, click WAN and then the ISP 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 WAN to verify your settings.