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You can read the recommendations in the user guide, the technical guide or the installation guide for ZYXEL ZYWALL USG 300 CLI. You'll find the answers to all your questions on the ZYXEL ZYWALL USG 300 CLI in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

**User manual ZYXEL ZYWALL USG 300 CLI**  
**User guide ZYXEL ZYWALL USG 300 CLI**  
**Operating instructions ZYXEL ZYWALL USG 300 CLI**  
**Instructions for use ZYXEL ZYWALL USG 300 CLI**  
**Instruction manual ZYXEL ZYWALL USG 300 CLI**

## ZyWALL (ZLD)

### **CLI Reference Guide**

Version 2.00  
7/2007  
Edition 1

DEFAULT LOGIN	
LAN Port	1
IP Address	http://192.168.1.1
User Name	admin
Password	1234

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**Manual abstract:**

Read each chapter carefully for detailed information on that menu item. Related Documentation · Supporting Disk Refer to the included CD for support documents. · Quick Start Guide The Quick Start Guide is designed to help you get up and running right away. It contains a detailed easy-to-follow connection diagram, default settings, handy checklists and information on setting up your network and configuring for Internet access. · Configuration Reference Card

See this handy reference card to see what prerequisites are needed to configure a feature and how to use this feature in the ZyWALL. · User's Guide The User's Guide explains how to use the web configurator to configure the ZyWALL. Some features cannot be configured in both the web configurator and CLI. · Web Configurator Online Help Embedded web help for descriptions of individual screens and supplementary information. · ZyXEL Web Site ZyWALL (ZLD)

CLI Reference Guide 3 About This User's Guide Please go to <http://www.zyxel.com>

for product news, firmware, updated documents, and other support materials. User Guide Feedback Help us help you. Send all User Guide-related comments, questions or suggestions for improvement to the following address, or use e-mail instead. Thank you! The Technical Writing Team, ZyXEL

Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, Hsinchu, 300, Taiwan.

E-mail: [techwriters@zyxel.com.tw](mailto:techwriters@zyxel.com.tw) 4 ZyWALL (ZLD) CLI Reference Guide Document Conventions Document Conventions Warnings and Notes These are how warnings and notes are shown in this User's Guide. Warnings tell you about things that could harm you or your device. Notes tell you other important information (for example, other things you may need to configure or helpful tips) or recommendations.

Syntax Conventions · The ZLD-based ZyWALL may be referred to as the "ZyWALL", the "device", the "system" or the "product" in this User's Guide. · Product labels, screen names, field labels and field choices are all in bold font. · A key stroke is denoted by square brackets and uppercase text, for example, [ENTER] means the "enter" or "return" key on your keyboard. · "Enter" means for you to type one or more characters and then press the [ENTER] key.

"Select" or "choose" means for you to use one of the predefined choices. · A right angle bracket ( > ) within a screen name denotes a mouse click. For example, Maintenance > Log > Log Setting means you first click Maintenance in the navigation panel, then the Log sub menu and finally the Log Setting tab to get to that screen. · Units of measurement may denote the "metric" value or the "scientific" value. For example, "k" for kilo may denote "1000" or "1024", "M" for mega may denote "1000000" or "1048576" and so on. · "e."

g.," is a shorthand for "for instance", and "i.e.," means "that is" or "in other words". ZyWALL (ZLD) CLI Reference Guide 5 Document Conventions Icons Used in Figures Figures in this User's Guide may use the following generic icons. The ZyWALL icon is not an exact representation of your device. ZyWALL Computer Notebook computer Server Firewall Telephone Switch Router 6 ZyWALL (ZLD) CLI Reference Guide Safety Warnings Safety Warnings For your safety, be sure to read and follow all warning notices and instructions. · Do NOT use this product near water, for example, in a wet basement or near a swimming pool. · Do NOT expose your device to dampness, dust or corrosive liquids. · Do NOT store things on the device.

· Do NOT install, use, or service this device during a thunderstorm. There is a remote risk of electric shock from lightning. · Connect ONLY suitable accessories to the device. · Do NOT open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or other risks. ONLY qualified service personnel should service or disassemble this device. Please contact your vendor for further information. · Make sure to connect the cables to the correct ports. · Place connecting cables carefully so that no one will step on them or stumble over them. · Always disconnect all cables from this device before servicing or disassembling.

· Use ONLY an appropriate power adaptor or cord for your device. Connect it to the right supply voltage (for example, 110V AC in North America or 230V AC in Europe). · Do NOT allow anything to rest on the power adaptor or cord and do NOT place the product where anyone can walk on the power adaptor or cord. · Do NOT use the device if the power adaptor or cord is damaged as it might cause electrocution. · If the power adaptor or cord is damaged, remove it from the device and the power source. · Do NOT attempt to repair the power adaptor or cord. Contact your local vendor to order a new one. · Do not use the device outside, and make sure all the connections are indoors. There is a remote risk of electric shock from lightning. · CAUTION: RISK OF EXPLOSION IF BATTERY (on the motherboard) IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS. Dispose them at the applicable collection point for the recycling of electrical and electronic equipment. For detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the store where you purchased the product. · Do NOT obstruct the device ventilation slots, as insufficient airflow may harm your device. This product is recyclable. Dispose of it properly. ZyWALL (ZLD) CLI Reference Guide 7 Safety Warnings 8 ZyWALL (ZLD) CLI Reference Guide Contents Overview

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*...le Before you can access the CLI through the web configurator, make sure your computer supports the Java Runtime Environment.*



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.. Type exit What the prompt looks like Router> Router# How you exit it Type exit Type disable Type exit 20 ZyWALL (ZLD) CLI Reference Guide Chapter 1 Command Line Interface See Chapter 23 on page 171 for more information about the user types.

User users can only log in, look at (but not run) the available commands in User mode, and log out. LimitedAdmin users can look at the configuration in the web configurator and CLI, and they can run basic diagnostics in the CLI. Admin users can configure the ZyWALL in the web configurator or CLI. At the time of writing, there is not much difference between User and Privilege mode for admin users. This is reserved for future use. 1.6 Shortcuts and Help 1.6.1 List of Available Commands A list of valid commands can be found by typing ? or [TAB] at the command prompt. To view a list of available commands within a command group, enter <command> ? or <command> [TAB].

Figure 9 Help: Available Commands Example 1 Router> ? apply clear configure copy delete -----[Snip]-----run setenv show traceroute write Router> Figure 10 Help: Available Command Example 2 Router> show ? aaa account address-object ag

-----[Snip]-----username users version vrrp zone Router> show 1.6.2 List of Sub-commands or Required User Input To view detailed help information for a command, enter <command> <sub command> ?. ZyWALL (ZLD) CLI Reference Guide 21 Chapter 1 Command Line Interface Figure 11 Help: Sub-command Information Example Router(config)# ip telnet server ? ; <cr> access-group port \ Router(config)# ip telnet server Figure 12 Help: Required User Input Example Router(config)# ip telnet server port ? <1..65535> Router(config)# ip telnet server port 1.6.3 Entering Partial Commands The CLI does not accept partial or incomplete commands. You may enter a unique part of a command and press [TAB] to have the ZyWALL automatically display the full command. For example, if you enter config and press [TAB], the full command of configure automatically displays.

If you enter a partial command that is not unique and press [TAB], the ZyWALL displays a list of commands that start with the partial command. Figure 13 Non-Unique Partial Command Example Router# c [TAB] clear configure Router# co [TAB] configure copy copy 1.6.4 Entering a ? in a Command Typing a ? (question mark) usually displays help information. However, some commands allow you to input a ?, for example as part of a string.

Press [CTRL+V] on your keyboard to enter a ? without the ZyWALL treating it as a help query. 1.6.5 Command History The ZyWALL keeps a list of commands you have entered for the current CLI session. You can use any commands in the history again by pressing the up ( ) or down ( ) arrow key to scroll through the previously used commands and press [ENTER].

1.6.6 Navigation Press [CTRL]+A to move the cursor to the beginning of the line. Press [CTRL]+E to move the cursor to the end of the line. 22 ZyWALL (ZLD) CLI Reference Guide Chapter 1 Command Line Interface 1.6.7 Erase Current Command Press [CTRL]+U to erase whatever you have currently typed at the prompt (before pressing [ENTER]). 1.7 Input Values You can use the ? or [TAB] to get more information about the next input value that is required for a command. In some cases, the next input value is a string whose length and allowable characters may not be displayed in the screen.

For example, in the following example, the next input value is a string called <description>. Router# configure terminal Router(config)# interface ge1 Router(config-if-ge)# description <description> The following table provides more information about input values like <description>. Table 3 Input-Value Formats for Strings in CLI Commands TAG \* all authentication key # VALUES 1 -LEGAL VALUES \* ALL Used in IPsec SA 32-40 16-20 "0x" or "0X" + 32-40 hexadecimal values alphanumeric or ;|~!@#%&\*()\_+ \{}',./:<>=- Used in MD5 authentication keys for RIP/OSPF and text authentication key for RIP 0-16 alphanumeric or \_ - Used in text authentication keys for OSPF 0-8 certificate name community string connection\_id contact country code custom signature file name description 1-31 0-63 1+ 1-61 0 or 2 0-30 alphanumeric or \_alphanumeric or ;~!@#%&\*()\_+ \{}',.=alphanumeric or .first character: alphanumeric or alphanumeric or \_.: alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%-. alphanumeric alphanumeric or \_-. first character: letter Used in keyword criteria for log entries 1-64 alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%-. Used in other commands 1-61 distinguished name 1-511 alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%alphanumeric, spaces, or .@=, \_ ZyWALL (ZLD) CLI Reference Guide 23 Chapter 1 Command Line Interface Table 3 Input-Value Formats for Strings in CLI Commands (continued) TAG domain name # VALUES LEGAL VALUES Used in content filtering 0+ lower-case letters, numbers, or .

- Used in ip dns server 0-247 alphanumeric or .first character: alphanumeric or - Used in domainname, ip dhcp pool, and ip domain 0-254 email e-mail encryption key file name filter extension fqdn 1-63 1-64 16-64 8-32 0-31 1-256 alphanumeric or \_first character: alphanumeric or alphanumeric or .\_alphanumeric or .\_ "0x" or "0X" + 16-64 hexadecimal values alphanumeric or ;\ ~!@#%&\*()\_+ \{}',./:<>=alphanumeric or \_alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%-. Used in ip dns server 0-252 alphanumeric or .first character: alphanumeric or - Used in ip ddns, time server, device HA, VPN, certificates, and interface ping check 0-254 full file name hostname 0-256 alphanumeric or .first character: alphanumeric or alphanumeric or \_/. - Used in hostname command 0-63 alphanumeric or \_first character: alphanumeric or - Used in other commands 0-252 import configuration file import shell script initial string isp account password isp account username key length license key mac address mail server fqdn name notification message 1-31 1-81 126+ ".conf" 126+ ".zysh" 1-64 0-63 0-30 -25 -alphanumeric or .first character: alphanumeric or alphanumeric or ;~!@#%&\*()\_+ \{}',.=add ".conf" at the end alphanumeric or ;~!@#%&\*()\_+ \{}',.=add ".zysh" at the end alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%-.& alphanumeric or ~!@#%&\*()\_+ \{}',./<.>./ alphanumeric or \_@\$.

/ 512, 768, 1024, 1536, 2048 "S-" + 6 upper-case letters or numbers + "-" + 16 upper-case letters or numbers aa:bb:cc:dd:ee:ff (hexadecimal) lower-case letters, numbers, or -. alphanumeric or \_alphanumeric, spaces, or '()+,/:=?;!\*#@\$\_%-. 24 ZyWALL (ZLD) CLI Reference Guide Chapter 1 Command Line Interface Table 3 Input-Value Formats for Strings in CLI Commands (continued) TAG password: less than 15 chars password: less than 8 chars password # VALUES 1-15 1-8 LEGAL VALUES alphanumeric or ~!@#%&\*()\_+ \{}',./<.>.



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/ alphanumeric or ;/?:@&=+\$\\_-!~\*()%,#\$ Used in user and ip ddns 1-63 alphanumeric or ~!@#%&^&\*()\_+={}\|;:'<>./ Used in e-mail log profile SMTP authentication 1-63 alphanumeric or ~!@#%&^&\*()\_+={}\|;:'<>./ Used in device HA synchronization 1-63 alphanumeric or ~#%&^&\*\_-={};:, Used in registration 6-20 phone number preshared key profile name proto name protocol name quoted string less than 127 chars quoted string less than 63 chars quoted string 1-20 16-64 0-30 1-16 0-30 1-255 1-63 0+ alphanumeric or .@\_ numbers or ,+ "0x" or "0X" + 16-64 hexadecimal values alphanumeric or ;| ~!@#%&^&\*()\_+{\}';,./<>=alphanumeric or \_first character: letters or \_lower-case letters, numbers, or alphanumeric or \_first character: letters or \_alphanumeric, spaces, or ;/?:@&=+\$\\_-!~\*()%, alphanumeric, spaces, or ;/?:@&=+\$\\_-!~\*()% alphanumeric, spaces, or punctuation marks enclosed in double quotation marks (") must put a backslash (\) before double quotation marks that are part of input value itself alphanumeric or \_@\$./ hexadecimal alphanumeric or \_ alphanumeric or ~!@#%&^&\*()\_+={}\|;:'<>./ alphanumeric or \_@ alphanumeric, spaces, or '()+,./:;=?;!\*#@\$\_%hexadecimal -12 through +12 (with or without "+") alphanumeric or '()+,./:;=?;!\*#@\$\_%- service name spi string less than 15 chars string: less than 63 chars string subject system type timezone [-+]hh url 0-63 2-8 1-15 1-63 1+ 1-61 0-2 -1-511 ZyWALL (ZLD) CLI Reference Guide 25 Chapter 1 Command Line Interface Table 3 Input-Value Formats for Strings in CLI Commands (continued) TAG url # VALUES LEGAL VALUES Used in content filtering redirect "http://"+ "https://"+ alphanumeric or ;/?:@&=+\$\\_-!~\*()%, starts with "http://" or "https://" may contain one pound sign (#) Used in other content filtering commands "http://" + alphanumeric or ;/?:@&=+\$\\_-!~\*()%, starts with "http://" may contain one pound sign (#) user name Used in VPN extended authentication 1-31 alphanumeric or \_- Used in other commands 0-30 username user name user@domainname vrrp group name: less than 15 chars week-day sequence, i.e. 1=first,2=second xauth method xauth password mac address 6-20 1+ 1-80 1-15 1 1-31 1-31 0-12 (even number) alphanumeric or \_first character: letters or \_alphanumeric or .@\_registration alphanumeric or \_- logging commands alphanumeric or .@\_alphanumeric or \_1-4 alphanumeric or \_alphanumeric or ;| ~!@#%&^&\*()\_+{\}';,./<>=hexadecimal for example: aa aabbcc aabbccddeeff 1.8 Ethernet Interfaces When you need to specify an Ethernet interface, remember that the number of interfaces available depends on the ZyWALL model. For example, the ZyWALL 1050 has 5 Ethernet interfaces and the ZyWALL USG 300 has 7. 1.9 Saving Configuration Changes Use the write command to save the current configuration to the ZyWALL. Always save the changes before you log out after each management session. All unsaved changes will be lost after the system restarts. 26 ZyWALL (ZLD) CLI Reference Guide Chapter 1 Command Line Interface 1.

10 Logging Out Enter the exit or end command in configure mode to go to privilege mode.. Enter the exit command in user mode or privilege mode to log out of the CLI. ZyWALL (ZLD) CLI Reference Guide 27 Chapter 1 Command Line Interface 28 ZyWALL (ZLD) CLI Reference Guide CHAPTER This chapter describes how to use these two modes. 2 User and Privilege Modes 2.1 User And Privilege Modes This is the mode you are in when you first log into the CLI. (Do not confuse 'user mode' with types of user accounts the ZyWALL uses. See Chapter 23 on page 171 for more information about the user types. 'user' type accounts can only run 'exit' in this mode. However, they may need to log into the device in order to be authenticated for 'user-aware' policies, for example a firewall rule that a particular user is exempt from or a VPN tunnel that only certain people may use.) Type 'enable' to go to 'privilege mode'. No password is required. All commands can be run from here except those marked with an asterisk. Many of these commands are for troubleshooting purposes, for example the htm (hardware test module) and debug commands. Customer support may ask you to run some of these commands and send the results if you need assistance troubleshooting your device. For admin logins, all commands are visible in 'user mode' but not all can be run there. The following table displays which commands can be run in 'user mode'. All commands can be run in 'privilege mode'. The htm and psm commands are for ZyXEL's internal manufacturing process. Table 4 User (U) and Privilege (P) Mode Commands COMMAND apply atse clear configure copy debug (\*) delete details MODE P U/P U/P U/P P U/P P P DESCRIPTION Applies a configuration file. Displays the seed code Clears system or debug logs or DHCP binding. Use 'configure terminal' to enter configuration mode. Copies configuration files. For support personnel only! The device needs to have the debug flag enabled. Deletes configuration files. Performs diagnostic commands. ZyWALL (ZLD) CLI Reference Guide 29 Chapter 2 User and Privilege Modes Table 4 User (U) and Privilege (P) Mode Commands (continued) COMMAND diag diag-info dir disable enable exit htm MODE P P P U/P U/P U/P U/P DESCRIPTION Provided for support personnel to collect internal system information. It is not recommended that you use these. Has the ZyWALL create a new diagnostic file. Lists files in a directory. Goes from privilege mode to user mode Goes from user mode to privilege mode Goes to a previous mode or logs out. Goes to htm (hardware test module) mode. Note: These commands are for ZyXEL's internal manufacturing process. interface U/P Dials or disconnects an interface. Turns on packet tracing. Resolves an IP address to a host name and vice-versa. Performs a packet trace. Pings an IP address or host name. Goes to psm (product support module) mode. no packet-trace U/P nslookup packet-trace ping psm U/P U/P U/P U/P Note: These commands are for ZyXEL's internal manufacturing process. reboot release rename renew run setenv show shutdown traceroute write P P P P U/P U/P P P P Restarts the device. Releases DHCP information from an interface. Renames a configuration file. Renews DHCP information for an interface. Runs a script. Turns stop-on-error on (terminates booting if an error is found in a configuration file) or off (ignores configuration file errors and continues booting). Displays command statistics. See the associated command chapter in this guide. Writes all cached data to disk and stops the system processes. It does not turn off the power. Traces the route to the specified host name or IP address. Saves the current configuration to the ZyWALL. All unsaved changes are lost after the ZyWALL restarts.



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Subsequent chapters in this guide describe the configuration commands. User/privilege mode commands that are also configuration commands (for example, 'show') are described in more detail in the related configuration command chapter. 30 ZyWALL (ZLD) CLI Reference Guide Chapter 2 User and Privilege Modes 2.1.1 Debug Commands Debug commands marked with an asterisk (\*) are not available when the debug flag is on and are for service personnel use only. The debug commands follow a syntax that is Linux-based, so if there is a Linux equivalent, it is displayed in this chapter for your reference. Table 5 Debug Commands COMMAND SYNTAX debug app debug app show l7protocol (\*) debug ca (\*) debug cmdexec [on/off] debug core-file (\*) debug device-ha (\*) debug force-auth (\*) debug gui (\*) debug gui show cgidump (\*) debug hardware (\*) debug idp debug interface ifconfig [interface] debug kernel (\*) debug myzyxel server (\*) DESCRIPTION Application patrol debug command Shows app patrol protocol list Certificate debug commands ZyShell debug commands Display/Flush/Move system core files Device HA debug commands Force authentication debug commands GUI cgi related debug commands Shows gui cgi command buffer Hardware debug commands IDP debug command Shows system interfaces detail Kernel debug commands Myzyxel.

com debug commands cat /proc/sys/net/ipv4/ conf/\*arp\_ignore > ifconfig [interface] > cat /tmp/zysh-cgi.dump > cat /etc/l7\_protocols/ protocol.list LINUX COMMAND EQUIVALENT debug network arpignore (\*) Enable/Display the ignoring of ARP responses for interfaces which don't own the IP address debug no myzyxel server (\*) Set the myZyXEL.com registration/ update server to the official site debug policy-route (\*) debug service-register debug show myzyxel server status debug system dmesg debug system free debug system ip addr debug system ip route get ip\_addr debug system ip route show table {default/local/main/num} debug system ip rule debug system ipcs Policy route debug command Service registration debug command Myzyxel.com debug commands Shows kernel debug messages Shows free and used memory in the system > demsg > free Shows interface IP address information > ip addr Shows IP routing to the specified IP address. Shows IP routing information > ip route Shows IP routing tables Shows system IPC information > ip rule > ipcs ZyWALL (ZLD) CLI Reference Guide 31 Chapter 2 User and Privilege Modes Table 5 Debug Commands (continued) COMMAND SYNTAX DESCRIPTION LINUX COMMAND EQUIVALENT > iptables L t {nat/filter/mangle/vpn/zym ark/vpnid/cfilter} debug system iptables list Shows netfilter information chain {forward/prerouting/postrou ting/input/output/pre\_id} debug system iptables list Shows system netfilter information. table {nat/filter/mangle/vpn/zyma rklvpnid/cfilter} debug system lsmod (\*) debug system ps Shows system kernel modules Shows system process information > lsmod > ps aux > cat /proc/net/ ip\_contrack debug system show contrack Shows system sessions list debug system show cpu status Shows system CPU utilization. debug system show ksyms (\*) Shows kernel symbols debug system show slabinfo debug system tc {class/filter/qdisc} list debug system tcpdump interface debug system vmstat debug update server (\*) Shows kernel cache information Shows system traffic control information Dump traffic on a network Shows system memory statistics Update server debug command > cat /proc/ksyms > cat /proc/slabinfo > tc {class/filter/qdisc} list > tcpdump i interface > vmstat debug zynetpkt {set/show} ZLD internal packet trace debug {desitination/hooknum/protoc command ollenable/priority/source} 32 ZyWALL (ZLD) CLI Reference Guide CHAPTER Table 6 Status Show Commands COMMAND show cpu status show disk show fan-speed show mac show mem status show ram-size DESCRIPTION Displays the CPU utilization. Displays the disk utilization. Displays the current fan speed.

Displays the ZyWALL's MAC address. 3 Status This chapter explains some commands you can use to display information about the ZyWALL's current operational state. You must use the configure terminal command before you can use these commands. Displays what percentage of the ZyWALL's memory is currently being used. Displays the size of the ZyWALL's on-board RAM.

show serial-number Displays the serial number of this ZyWALL. show socket listen Displays the ZyWALL's listening ports show socket open Displays the ports that are open on the ZyWALL. show system uptime Displays how long the ZyWALL has been running since it last restarted or was turned on. show version Displays the ZyWALL's model, firmware and build information. Here are examples of the commands that display the CPU and disk utilization. Router(config)# show cpu status CPU utilization: 0 % CPU utilization for 1 min: 0 % CPU utilization for 5 min: 0 % Router(config)# show disk ; <cr> | Router(config)# show disk No. Disk Size(MB) Usage

```
===== 1 image 67 83% 2 onboard
flash 163 15% ZyWALL (ZLD) CLI Reference Guide 33 Chapter 3 Status Here are examples of the commands that display the fan speed, MAC address,
memory usage, RAM size, and serial number. Router(config)# show fan-speed FAN1(F00)(rpm): limit(hi)=6500, limit(lo)=1400, FAN2(F01)(rpm):
limit(hi)=6500, limit(lo)=1400, FAN3(F02)(rpm): limit(hi)=6500, limit(lo)=1400, FAN4(F03)(rpm): limit(hi)=6500, limit(lo)=1400, Router(config)# show
mac MAC address: 00:13:49:82:18:28-2c Router(config)# show mem status memory usage: 39% Router(config)# show ram-size ram size: 510MB
Router(config)# show serial-number serial number: S060Z12020460 max=6650, max=6809, max=6683, max=6633, min=6642, min=6783, min=6666,
min=6617, avg=6644 avg=6795 avg=6674 avg=6627 Here is an example of the command that displays the listening ports. Router(config)# show socket
listen No. Proto Local_Address Foreign_Address State
===== 1 tcp 0.0.0.0:2601 0.0.0.
```

```
0:0 LISTEN 2 tcp 0.0.0.0:2602 0.0.0.0:0 LISTEN 3 tcp 127.0.0.1:10443 0.
0.0.0:0 LISTEN 4 tcp 0.0.0.
0:2604 0.0.0.0:0 LISTEN 5 tcp 0.0.
0.0:80 0.0.0.0:0 LISTEN 6 tcp 127.0.0.1:8085 0.0.0.

0:0 LISTEN 7 tcp 1.1.1.1:53 0.0.0.0:0 LISTEN 8 tcp 172.23.37.205:53 0.
0.0.0:0 LISTEN 9 tcp 10.0.0.
8:53 0.0.0.0:0 LISTEN 10 tcp 172.23.
37.240:53 0.0.0.0:0 LISTEN 11 tcp 192.168.1.1:53 0.0.0.

0:0 LISTEN 12 tcp 127.0.0.1:53 0.0.0.0:0 LISTEN 13 tcp 0.0.0.0:21 0.
0.0.0:0 LISTEN 14 tcp 0.0.0.
0:22 0.0.0.0:0 LISTEN 15 tcp 127.0.
0.1:953 0.0.0.0:0 LISTEN 16 tcp 0.0.0.0:443 0.0.0.
```

```
0:0 LISTEN 17 tcp 127.0.0.1:1723 0.0.0.0:0 LISTEN 34 ZyWALL (ZLD) CLI Reference Guide Chapter 3 Status Here is an example of the command that
displays the open ports. Router(config)# show socket open No. Proto Local_Address Foreign_Address State
===== 1 tcp 172.23.
37.240:22 172.23.37.
```

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```

10:1179 ESTABLISHED 2 udp 127.
0.0.1:64002 0.0.0.
0:0 3 udp 0.0.0.0:520 0.0.0.0:0 4 udp 0.0.0.0:138 0.
0.0.0:0 5 udp 0.0.0.0:138 0.0.0.0:0 6 udp 0.0.
0.0:138 0.0.0.0:0 7 udp 0.
0.0.0:138 0.0.0.
0:0 8 udp 0.0.0.0:138 0.0.0.0:0 9 udp 0.0.0.0:138 0.
0.0.0:0 10 udp 0.0.0.0:138 0.0.0.0:0 11 udp 0.0.
0.0:32779 0.0.0.0:0 12 udp 192.
168.1.1:4500 0.0.0.
0:0 13 udp 1.1.1.1:4500 0.0.0.0:0 14 udp 10.0.0.8:4500 0.
0.0.0:0 15 udp 172.23.37.205:4500 0.0.0.0:0 16 udp 172.23.
37.240:4500 0.0.0.0:0 17 udp 127.
0.0.1:4500 0.0.0.
0:0 18 udp 127.0.0.1:63000 0.0.0.0:0 19 udp 127.0.0.1:63001 0.
0.0.0:0 20 udp 127.0.0.1:63002 0.0.0.0:0 21 udp 0.0.
0.0:161 0.0.0.0:0 22 udp 127.
0.0.1:63009 0.0.0.
0:0 23 udp 192.168.1.1:1701 0.0.0.0:0 24 udp 1.1.1.1:1701 0.
0.0.0:0 25 udp 10.0.0.8:1701 0.0.0.0:0 26 udp 172.23.
37.205:1701 0.0.0.0:0 27 udp 172.
23.37.240:1701 0.0.0.
0:0 28 udp 127.0.0.1:1701 0.0.0.0:0 29 udp 127.0.0.1:63024 0.
0.0.0:0 30 udp 127.0.0.1:30000 0.0.0.0:0 31 udp 1.1.
1.1:53 0.0.0.0:0 32 udp 172.
23.37.205:53 0.0.0.
0:0 33 udp 10.0.0.8:53 0.0.0.0:0 34 udp 172.23.37.240:53 0.
0.0.0:0 35 udp 192.168.1.1:53 0.0.0.0:0 36 udp 127.0.
0.1:53 0.0.0.0:0 37 udp 0.
0.0.0:67 0.0.0.
0:0 38 udp 127.0.0.1:63046 0.0.0.0:0 39 udp 127.0.0.1:65097 0.
0.0.0:0 40 udp 0.0.0.0:65098 0.0.0.0:0 41 udp 192.168.
1.1:500 0.0.0.0:0 42 udp 1.
1.1.1:500 0.0.0.
0:0 43 udp 10.0.0.8:500 0.0.0.0:0 44 udp 172.23.37.205:500 0.
0.0.0:0 45 udp 172.23.37.240:500 0.0.0.0:0 46 udp 127.0.

```

0.1:500 0.0.0.0:0 ZyWALL (ZLD) CLI Reference Guide 35 Chapter 3 Status Here are examples of the commands that display the system uptime and model, firmware, and build information.

Router(config)# show system uptime system uptime: 13 days, 21:01:17 Router(config)# show version ZyXEL Communications Corp. model : ZyWALL 1050 firmware version: 2.00(XL.0)b3 BM version : 1.08 build date : 2007-03-30 17:42:56 36 ZyWALL (ZLD) CLI Reference Guide CHAPTER 4 Registration This chapter introduces myzyxel.

com and shows you how to register the ZyWALL for IDP/IDP/AppPatrol, anti-virus, and content filtering services using commands. 4.1 myZyXEL.com overview myZyXEL.com is ZyXEL's online services center where you can register your ZyWALL and manage subscription services available for the ZyWALL. You need to create an account before you can register your device and activate the services at myZyXEL.com. You can directly create a myZyXEL.com account, register your ZyWALL and activate a service using the Licensing > Registration screens. Alternatively, go to <http://www.myzyxel.com>

myZyXEL.com with the ZyWALL's serial number and LAN MAC address to register it. Refer to the web site's on-line help for details. To activate a service on a ZyWALL, you need to access myZyXEL.com via that ZyWALL. 4.1.1 Subscription Services Available on the ZyWALL The ZyWALL can use anti-virus, IDP/AppPatrol (Intrusion Detection and Prevention and application patrol), SSL VPN, and content filtering subscription services. The ZyWALL's anti-virus packet scanner uses the signature files on the ZyWALL to detect virus files. , your ZyWALL scans files transmitting through the enabled interfaces into the network.

After the service is activated, the ZyWALL can download the up-to-date signature files from the update server (<http://myupdate.zywall.zyxel.com>). ZyWALL (ZLD) CLI Reference Guide 37 Chapter 4 Registration The IDP and application patrol features use the IDP/AppPatrol signature files on the ZyWALL. IDP detects malicious or suspicious packets and responds immediately. Application patrol conveniently manages the use of various applications on the network. After the service is activated, the ZyWALL can download the up-to-date signature files from the update server (<http://myupdate.zywall.zyxel.com>). SSL VPN tunnels provide secure network access to remote users. You can purchase and enter a license key to have the ZyWALL use more SSL VPN tunnels. The content filter allows or blocks access to web sites. Subscribe to category-based content filtering to block access to categories of web sites based on content. Your ZyWALL accesses an external database that has millions of web sites categorized based on content. You can have the ZyWALL block, block



and/or log access to web sites based on these categories. · You will get automatic e-mail notification of new signature releases from mySecurityZone after you activate the IDP/AppPatrol service. You can also check for new signatures at <http://mysecurity.zyxel>.

com. See the respective chapters for more information about these features. To update the signature file or use a subscription service, you have to register the ZyWALL and activate the corresponding service at myZyXEL.com (through the ZyWALL). 4.2 Registration Commands The following table identifies the values required for many of these commands. Other input values are discussed with the corresponding commands. Table 7 Input Values for General Registration Commands LABEL user\_name password DESCRIPTION The user name of your myZyXEL.com account. You may use six to 20 alphanumeric characters (and the underscore).

Spaces are not allowed. The password for the myZyXEL.com account. You may use six to 20 alphanumeric characters (and the underscore). Spaces are not allowed.

The following table describes the commands available for registration. You must use the configure terminal command to enter the configuration mode before you can use these commands. Table 8 Command Summary: Registration COMMAND device-register checkuser user\_name device-register username user\_name password password [e-mail user@domainname country-code country\_code] DESCRIPTION Checks if the user name exists in the myZyXEL.com database. Registers the device with an existing account or creates a new account and registers the device at one time.

country\_code: see Table 9 on page 40 38 ZyWALL (ZLD) CLI Reference Guide Chapter 4 Registration Table 8 Command Summary: Registration (continued)

COMMAND service-register checkexpire service-register service-type standard licensekey key\_value service-register service-type trial service {all|content-filter|idplav} show device-register status show service-register status {all|contentfilter|idplsslvpnlav} DESCRIPTION Gets information of all service subscriptions from myZyXEL.com and updates the status table. Activates a standard service subscription with the license key. Activates the trial service subscription(s). Displays whether the device is registered and account information. Displays service license information. 4.2.1 Command Examples The following commands allow you to register your device with an existing account or create a new account and register the device at one time, and activate a trial service subscription. Router# configure terminal Router(config)# device-register username alexctsui password 123456 Router(config)# service-register service-type trial service content-filter The following command displays the account information and whether the device is registered.

Router# configure terminal Router(config)# show device-register status username : alexctsui password : 123456 device register status : yes expiration self check : no The following command displays the service registration status and type and how many days remain before the service expires.



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Router# configure terminal Router(config)# show service-register status all Service Status Type Count Expiration

===== IDP Signature Licensed  
Standard N/A 176 Anti-Virus Not Licensed None N/A 0 SSLVPN Not Licensed None 5 N/A Content-Filter Not Licensed None N/A 0 ZyWALL (ZLD) CLI  
Reference Guide 39 Chapter 4 Registration 4.3 Country Code The following table displays the number for each country. Table 9 Country Codes COUNTRY  
CODE 001 003 005 007 009 011 013 015 017 019 021 023 025 027 029 031 033 035 037 039 041 043 045 047 049 051 053 055 057 059 061 063 065 067  
069 COUNTRY NAME Afghanistan Algeria Andorra Anguilla Antigua & Barbuda Armenia Ascension Island Austria Bahamas Bangladesh Belarus Belize  
Bermuda Bolivia Botswana Brazil Brunei Darussalam Burkina Faso Cambodia Canada Cayman Islands Chad China Cocos (Keeling) Islands Comoros  
Congo, Republic of Costa Rica Croatia/Hrvatska Czech Republic Djibouti Dominican Republic Ecuador El Salvador Eritrea Ethiopia COUNTRY CODE 002  
004 006 008 010 012 014 016 018 020 022 024 026 028 030 032 034 036 038 040 042 044 046 048 050 052 054 056 058 060 062 064 066 068 070  
COUNTRY NAME Albania American Samoa Angola Antarctica Argentina Aruba Australia Azerbaijan Bahrain Barbados Belgium Benin Bhutan Bosnia and  
Herzegovina Bouvet Island British Indian Ocean Territory Bulgaria Burundi Cameroon Cape Verde Central African Republic Chile Christmas Island  
Colombia Congo, Democratic Republic of the Cook Islands Cote d'Ivoire Cyprus Denmark Dominica East Timor Egypt Equatorial Guinea Estonia Falkland  
Islands (Malvinas) 40 ZyWALL (ZLD) CLI Reference Guide Chapter 4 Registration Table 9 Country Codes (continued) COUNTRY CODE 071 073 075 077  
079 081 083 085 087 089 091 093 095 097 099 101 103 105 107 109 111 113 115 117 119 121 123 125 127 129 131 133 135 137 139 141 143 145  
COUNTRY NAME Faroe Islands Finland France (Metropolitan) French Polynesia Gabon Georgia Ghana Great Britain Greenland Guadeloupe Guatemala  
Guinea Guyana Heard and McDonald Islands Honduras Hungary India Ireland Italy Japan Jordan Kenya Korea, Republic of Kyrgyzstan Latvia Lesotho  
Liechtenstein Luxembourg Macedonia, Former Yugoslav Republic Malawi Maldives Malta Martinique Mauritius Mexico Moldova, Republic of Mongolia  
Morocco COUNTRY CODE 072 074 076 078 080 082 084 086 088 090 092 094 096 098 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128  
130 132 134 136 138 140 142 144 146 COUNTRY NAME Fiji France French Guiana French Southern Territories Gambia Germany Gibraltar Greece  
Grenada Guam Guernsey Guinea-Bissau Haiti Holy See (City Vatican State) Hong Kong Iceland Indonesia Isle of Man Jamaica Jersey Kazakhstan Kiribati  
Kuwait Lao People's Democratic Republic Lebanon Liberia Lithuania Macau Madagascar Malaysia Mali Marshall Islands Mauritania Mayotte Micronesia,  
Federal State of Monaco Montserrat Mozambique ZyWALL (ZLD) CLI Reference Guide 41 Chapter 4 Registration Table 9 Country Codes (continued)  
COUNTRY CODE 147 149 151 153 155 157 159 161 163 165 167 169 171 173 175 177 179 181 183 185 187 189 191 193 185 197 199 201 203 205 207 209  
211 213 215 217 219 221 COUNTRY NAME Namibia Nepal Netherlands Antilles New Zealand Niger Niue Northern Mariana Islands Not Determined  
Pakistan Panama Paraguay Philippines Poland Puerto Rico Reunion Island Russian Federation Saint Kitts and Nevis Saint Vincent and the Grenadines Sao  
Tome and Principe Senegal Sierra Leone Slovak Republic Solomon Islands South Africa Spain St Pierre and Miquelon Suriname Swaziland Switzerland  
Tajikistan Thailand Tokelau Trinidad and Tobago Turkey Turks and Caicos Islands US Minor Outlying Islands Ukraine United Kingdom COUNTRY CODE  
148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212 214 216 218  
220 222 COUNTRY NAME Nauru Netherlands New Caledonia Nicaragua Nigeria Norfolk Island Norway Oman Palau Papua New Guinea Peru Pitcairn  
Island Portugal Qatar Romania Rwanda Saint Lucia San Marino Saudi Arabia Seychelles Singapore Slovenia Somalia South Georgia and the South  
Sandwich Islands Sri Lanka St. Helena Svalbard and Jan Mayen Islands Sweden Taiwan Tanzania Togo Tonga Tunisia Turkmenistan Tuvalu Uganda United  
Arab Emirates United States 42 ZyWALL (ZLD) CLI Reference Guide Chapter 4 Registration Table 9 Country Codes (continued) COUNTRY CODE 223 225  
227 229 231 233 235 COUNTRY NAME Uruguay Vanuatu Vietnam Virgin Islands (USA) Western Sahara Yemen Zambia COUNTRY CODE 224 226 228 230  
232 234 236 COUNTRY NAME Uzbekistan Venezuela Virgin Islands (British) Wallis And Futuna Islands Western Samoa Yugoslavia Zimbabwe ZyWALL  
(ZLD) CLI Reference Guide 43 Chapter 4 Registration 44 ZyWALL (ZLD) CLI Reference Guide PART II Network Interfaces (47) Trunks (65) Route (69)  
Routing Protocol (75) Zones (79) DDNS (83) Virtual Servers (85) HTTP Redirect (87) ALG (89) 45 46 CHAPTER This chapter shows you how to use  
interface-related commands. 5 Interfaces 5.1 Interface Overview In general, an interface has the following characteristics. . . . . An interface is a logical  
entity through which (layer-3) packets pass. An interface is bound to a physical port or another interface. Many interfaces can share the same physical port.  
An interface is bound to at most one zone. Many interface can belong to the same zone. Layer-3 virtualization (IP alias, for example) is a kind of interface.  
Some characteristics do not apply to some types of interfaces. 5.  
1.1 Types of Interfaces You can create several types of interfaces in the ZyWALL. · Port groups create a hardware connection between physical ports at the  
layer-2 (data link, MAC address) level. · Ethernet interfaces are the foundation for defining other interfaces and network policies. RIP and OSPF are also  
configured in these interfaces.  
· VLAN interfaces receive and send tagged frames. The ZyWALL automatically adds or removes the tags as needed. Each VLAN can only be associated with  
one Ethernet interface. · Bridge interfaces create a software connection between Ethernet or VLAN interfaces at the layer-2 (data link, MAC address) level.  
Unlike port groups, bridge interfaces can take advantage of some security features in the ZyWALL. You can also assign an IP address and subnet mask to the  
bridge. · PPPoE/PPTP interfaces support Point-to-Point Protocols (PPP). ISP accounts are required for PPPoE/PPTP interfaces. · Virtual interfaces provide  
additional routing information in the ZyWALL. There are three types: virtual Ethernet interfaces, virtual VLAN interfaces, and virtual bridge interfaces.  
ZyWALL (ZLD) CLI Reference Guide 47 Chapter 5 Interfaces · The auxiliary interface, along with an external modem, provides an interface the ZyWALL can  
use to dial out.



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This interface can be used as a backup WAN interface, for example. The auxiliary interface controls the DIAL BACKUP port (labeled AUX on some models). Trunks manage load balancing between interfaces. Port groups, trunks, and the auxiliary interface have a lot of characteristics that are specific to each type of interface. These characteristics are listed in the following table and discussed in more detail below. Table 10 Characteristics of Ethernet, VLAN, Bridge, PPPoE/PPTP, and Virtual Interfaces CHARACTERISTICS Name\* IP Address Assignment static IP address DHCP client routing metric Interface Parameters bandwidth restrictions packet size (MTU) traffic prioritization DHCP DHCP server DHCP relay Ping Check Yes Yes Yes Yes Yes Yes Yes Yes No No Yes No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes ETHERNET gex VLAN vlanx BRIDGE brx PPPoE/PPTP pppx VIRTUAL \*\*\* - The format of interface names is strict. Each name consists of 2-4 letters (interface type), followed by a number (x, limited by the maximum number of each type of interface). For example, Ethernet interface names are ge1, ge2, ge3, .. ; VLAN interfaces are vlan0, vlan1, vlan2, ...; and so on.

\*\* - The names of virtual interfaces are derived from the interfaces on which they are created. For example, virtual interfaces created on Ethernet interface ge1 are called ge1:1, ge1:2, and so on. Virtual interfaces created on VLAN interface vlan2 are called vlan2:1, vlan2:2, and so on. You cannot specify the number after the colon(:) in the web configurator; it is a sequential number. You can specify the number after the colon if you use the CLI to set up a virtual Interface Parameters 5.

1.2 Relationships Between Interfaces In the ZyWALL, interfaces are usually created on top of other interfaces. Only Ethernet interfaces are created directly on top of the physical ports (or port groups). The relationships between interfaces are explained in the following table. Table 11 Relationships Between Different Types of Interfaces INTERFACE auxiliary interface port group Ethernet interface VLAN interface REQUIRED PORT / INTERFACE auxiliary port physical port physical port port group Ethernet interface 48 ZyWALL (ZLD) CLI Reference Guide Chapter 5 Interfaces Table 11 Relationships Between Different Types of Interfaces (continued) INTERFACE bridge interface PPPoE/PPTP interface REQUIRED PORT / INTERFACE Ethernet interface\* VLAN interface\* Ethernet interface\* VLAN interface\* bridge interface Ethernet interface\* VLAN interface\* bridge interface Ethernet interface VLAN interface bridge interface PPPoE/PPTP interface auxiliary interface virtual interface (virtual Ethernet interface) (virtual VLAN interface) (virtual bridge interface) trunk \* - You cannot set up a PPPoE/PPTP interface, virtual Ethernet interface or virtual VLAN interface if the underlying interface is a member of a bridge. You also cannot add an Ethernet interface or VLAN interface to a bridge if the member interface has a virtual interface or PPPoE/PPTP interface on top of it.

5.2 Interface Commands Summary The following table identifies the values required for many of these commands. Other input values are discussed with the corresponding commands. Table 12 Input Values for General Interface Commands LABEL interface\_name DESCRIPTION The name of the interface.

Ethernet interface: gex, x = 1 - 5 virtual interface on top of Ethernet interface: gex:y, x = 1 - 5, y = 1 - 4 VLAN interface: vlanx, x = 0 - 31 virtual interface on top of VLAN interface: vlanx:y, x = 0 - 31, y = 1 - 4 bridge interface: brx, x = 0 - 11 virtual interface on top of bridge interface: brx:y, x = 0 - 11, y = 1 - 4 PPPoE/PPTP interface: pppx, x = 0 - 11 The name of the DHCP pool. You may use 1-31 alphanumeric characters, underscores(\_), or dashes (-), but the first character cannot be a number. This value is case-sensitive. Fully-qualified domain name. You may use up to 254 alphanumeric characters, dashes (-), or periods (.), but the first character cannot be a period. profile\_name domain\_name The initial sections introduce commands that are supported by several types of interfaces. The remaining sections then introduce the unique commands for each type of interface. ZyWALL (ZLD) CLI Reference Guide 49 Chapter 5 Interfaces 5.2.

1 Basic Interface Properties and IP Address Commands This table lists basic properties and IP address commands. Table 13 interface Commands: Basic Properties and IP Address Assignment COMMAND show interface {ethernet | vlan | bridge | ppp | auxiliary} status show interface {interface\_name | ethernet | vlan | bridge | ppp | virtual ethernet | virtual vlan | virtual bridge | auxiliary | all} show interface summary all show interface summary all status [no] interface interface\_name DESCRIPTION Displays the connection status of the specified type of interfaces. Displays information about the specified interface, specified type of interfaces, or all interfaces. Displays basic information about the interfaces. Displays the connection status of the interfaces. Creates the specified interface if necessary and enters sub-command mode. The no command deletes the specified interface. Deactivates the specified interface. The no command activates it. Specifies the description for the specified interface.

The no command clears the description. description: You can use alphanumeric and (+)/=:?!\*#@\$\_%- characters, and it can be up to 60 characters long. Makes the specified interface a DHCP client; the DHCP server gives the specified interface its IP address, subnet mask, and gateway. The no command makes the IP address static IP address for the specified interface. (See the next command to set this IP address.) Assigns the specified IP address and subnet mask to the specified interface. The no command clears the IP address and the subnet mask. Adds the specified gateway using the specified interface. The no command removes the gateway. Sets the priority (relative to every gateway on every interface) for the specified gateway.

The lower the number, the higher the priority. [no] shutdown [no] description description [no] ip address dhcp [no] ip address ip subnet\_mask [no] ip gateway ip ip gateway ip metric <0..15> 5.2.1.1 Basic Interface Properties Command Examples The following commands make Ethernet interface ge1 a DHCP client. Router# configure terminal Router(config)# interface ge1 Router(config-if)# ip address dhcp Router(config-if)# exit 50 ZyWALL (ZLD) CLI Reference Guide Chapter 5 Interfaces 5.2.2 Interface Parameter Commands This table lists the commands for interface parameters (summarized in Table 10 on page 48).

Table 14 interface Commands: Interface Parameters COMMAND interface interface\_name [no] upstream <0..1048576> DESCRIPTION Enters sub-command mode. Specifies the upstream bandwidth for the specified interface. The no command sets the upstream bandwidth to 1048576.



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<http://yourpdfguides.com/dref/3685300>



This is reserved for future use. Specifies the downstream bandwidth for the specified interface. The no command sets the downstream bandwidth to 1048576. Specifies the Maximum Transmission Unit, which is the maximum number of bytes in each packet moving through this interface. The ZyWALL divides larger packets into smaller fragments.

The no command resets the MTU to 1500. Applies traffic priority when the interface sends TCP-ACK traffic, traffic for querying the content filter, traffic for resolving domain names, or encrypted traffic for an IPSec or SSL VPN tunnel. It also sets how much bandwidth the traffic can use and can turn on maximize bandwidth usage. Turns off traffic priority settings for when the interface sends the specified type of traffic. [no] downstream <0..1048576> [no] mtu <576..1500> traffic-prioritize {tcp-ack|contentfilter|dnslipsec-vpn|ssl-vpn} bandwidth <0..

1048576> priority <1..7> [maximizebandwidth-usage]; traffic-prioritize {tcp-ack|contentfilter|dnslipsec-vpn|ssl-vpn} deactivate 5.2.3 DHCP Setting Commands This table lists DHCP setting commands. DHCP is based on DHCP pools. Create a DHCP pool if you want to assign a static IP address to a MAC address or if you want to specify the starting IP address and pool size of a range of IP addresses that can be assigned to DHCP clients. There are different commands for each configuration. Afterwards, in either case, you have to bind the DHCP pool to the interface. Table 15 interface Commands: DHCP Settings COMMAND show ip dhcp pool [profile\_name] ip dhcp pool rename profile\_name profile\_name DESCRIPTION Shows information about the specified DHCP pool or about all DHCP pools.

Renames the specified DHCP pool from the first profile\_name to the second profile\_name. ZyWALL (ZLD) CLI Reference Guide 51 Chapter 5 Interfaces Table 15 interface Commands: DHCP Settings (continued) COMMAND [no] ip dhcp pool profile\_name DESCRIPTION Creates a DHCP pool if necessary and enters subcommand mode. You can use the DHCP pool to create a static entry or to set up a range of IP addresses to assign dynamically. If you use the host command, the ZyWALL treats this DHCP pool as a static DHCP entry. If you do not use the host command and use the network command, the ZyWALL treats this DHCP pool as a pool of IP addresses.

If you do not use the host command or the network command, the DHCP pool is not properly configured and cannot be bound to any interface. The no command removes the specified DHCP pool. Shows information about the specified DHCP pool. Use the following commands if you want to create a static DHCP entry. If you do not use the host command, the commands that are not in this section have no effect, but you can still set them. [no] host ip Specifies the static IP address the ZyWALL should assign. Use this command, along with hardware-address, to create a static DHCP entry. show Note: The IP address must be in the same subnet as the interface to which you plan to bind the DHCP pool. When this command is used, the ZyWALL treats this DHCP pool like a static entry, regardless of the network setting. The no command clears this field. [no] hardware-address mac\_address Reserves the DHCP pool for the specified MAC address. Use this command, along with host, to create a static DHCP entry. The no command clears this field. Specifies the MAC address that appears in the DHCP client list. The no command clears this field.

Specifies the host name that appears in the DHCP client list. The no command clears this field. host\_name: You may use 1-31 alphanumeric characters, underscores(\_), or dashes (-), but the first character cannot be a number. This value is case-sensitive. Use the following commands if you want to create a pool of IP addresses. These commands have no effect if you use the host command. You can still set them, however. [no] client-identifier mac\_address [no] client-name host\_name 52 ZyWALL (ZLD) CLI Reference Guide Chapter 5 Interfaces Table 15 interface Commands: DHCP Settings (continued) COMMAND network IP/<1..32> network ip mask no network DESCRIPTION Specifies the IP address and subnet mask of the specified DHCP pool.

The subnet mask can be written in w.x.y.z format or in /<1..

32> format. Note: The DHCP pool must have the same subnet as the interface to which you plan to bind it. The no command clears these fields. [no] default-router ip [no] domain-name domain\_name [no] starting-address ip pool-size <1..

65535> Specifies the default gateway DHCP clients should use. The no command clears this field. Specifies the domain name assigned to DHCP clients. The no command clears this field. Sets the IP start address and maximum pool size of the specified DHCP pool. The final pool size is limited by the subnet mask. Note: You must specify the network number first, and the start address must be in the same subnet. The no command clears the IP start address and maximum pool size. [no] first-dns-server {ip \ interface\_name {1st-dns \ 2nd-dns \ 3rd-dns} Sets the first DNS server to the specified IP address or the specified interface's first, second, or third DNS server. The no command resets the first DNS server setting to its default value.

Sets the second DNS server to the specified IP address or the specified interface's first, second, or third DNS server. The no command resets the second DNS server setting to its default value. Sets the third DNS server to the specified IP address or the specified interface's first, second, or third DNS server. The no command resets the third DNS server setting to its default value. Specifies the first WINS server IP address to assign to the remote users. The no command removes the setting. Sets the lease time to the specified number of days, hours, and minutes or makes the lease time infinite. The no command resets the first DNS server setting to its default value.

Enters sub-command mode. Binds the specified interface to the specified DHCP pool. You have to remove any DHCP relays first. The no command removes the binding. [no] second-dns-server {ip \ interface\_name {1st-dns \ 2nd-dns \ 3rd-dns} [no] third-dns-server {ip \ interface\_name {1st-dns \ 2nd-dns \ 3rd-dns} [no] first-wins-server ip [no] second-wins-server ip [no] lease {<0..

.365> [<0..23> [<0..

59>]] \ infinite} interface interface\_name [no] ip dhcp-pool profile\_name ZyWALL (ZLD) CLI Reference Guide 53 Chapter 5 Interfaces Table 15 interface Commands: DHCP Settings (continued) COMMAND [no] ip helper-address ip DESCRIPTION Creates the specified DHCP relay. You have to remove the DHCP pool first, if the DHCP pool is bound to the specified interface. The no command removes the specified DHCP relay. Releases the TCP/IP configuration of the specified interface. The interface must be a DHCP client. This command is available in privilege mode, not configuration mode.



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