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Firmware Release Note

Prestige 653HWI-13

Standard version

Release 3.40(OZ.3)C0

Date:
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ZyXEL Prestige 653HWI-13 Standard Version Release 3.40(OZ.3)C0 Release Note

Date: Jan 3, 2005

Supported Platforms:

ZyXEL Prestige 653HWI-13

Versions:

ZyNOS F/W Version : V3.40(OZ.3) | 1/3/2005 10:28:12

BootBase : V1.02 | 10/16/2003 16:45:36

Notes:

The P653HWI-13 is a small-office and home device that will allow a small LAN to access the Internet. By integrating ADSL, WLAN, ISDN, NAT, P652HWI-13 provides the ease of installation and Internet access.

The P653HWI-13 provides an Cardbus wireless card slot for 802.11g Wireless LAN connectivity, four single auto-sensing, auto-detection 10/100BASE-T Ethernet ports for connection to the user's local network, a single RJ-11 port for connection to ADSL line, and , a single RJ-45 port for ISDN Internet connection used for Backup line.

The version of Alcatel modem code is 13.9.38

Known Issues:

1. NetCAPI still not support.
2. PKI not support help.
3. BM-DiffServ not support help in French and German
4. **Upgrading firmware from V3.40(OZ.1) or V3.40(OZ.2) to V3.40(OZ.3) need to use firmware upgrade tool to update new firmware. This tool only support change firmware from V3.40(OZ.1) or V3.40(OZ.2) to V3.40(OZ.3), you can't use this tool to upgrade firmware from others version. [See Appendix 1.](#)**

Features:

Modification in 3.40(OZ.3) | 1/3/2005

1. [FEATURE CHANGED] Change to FCS version

Modification in V3.40(OZ.3)b1 | 12/27/2004

1. [FEATURE CHANGED]
Symptom: Support PKI (Certificate).

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2. [FEATURE CHANGED]
Symptom: Support DMZ..
3. [FEATURE CHANGED]
Symptom: Support BM-DiffServ.
4. [FEATURE CHANGED]
Symptom: Support Static DHCP.
5. [FEATURE CHANGED]
Symptom: Support PPPoE pass-through.
6. [BUG FIXED]
Symptom: P653HWI after firmware upgrade the VPN can not be establish if one of the VPN end point is P653HWI.
7. [BUG FIXED]
Symptom: When turn on the firewall, the SIP pass-through work failed.
8. [BUG FIXED]
Symptom: eWC will get hang-up when UPnP feature is enabled.
Condition: 1. Install windows XP service pack 2 in PC
2. Enable firewall of windows XP and also enable UPnP framework pass through or disable firewall of windows XP.
3. Login via eWC and enable UPnP in system
4. The eWC will get hang, but it doesn't happen every time
9. [BUG FIXED]
Symptom: DNS server can't work after set DNS server in smt3.2 or web LAN page, it need reboot system to let DNS server work.
10. [BUG FIXED]
Symptom: WEB Server Access configured to WAN only or ALL, it is possible to access the firmware upgrade web page in the router remotely via http without login.
11. [BUG FIXED]
Symptom: Routing table doesn't update when change different remote IP in memu 11.
Condition: 1. Set remote IP address as 192.168.2.1 in ENET ENCAP.
2. Check routing table is right.
3. Change remote IP address to 192.168.3.1.
4. Check routing table you will see the old routing entry "192.168.2.1" doesn't remove.
12. [BUG FIXED]
Symptom: The ACK led doesn't work.

Modification in 3.40(OZ.2) | 11/15/2004

2. [FEATURE CHANGED] Change to FCS version

Modification in 3.40(OZ.2)b1 | 11/08/2004

1. [FEATURE CHANGED]
Symptom: Support WPA/Dynamic WEP key.
2. [FEATURE CHANGED]
Symptom: Support Wireless Roaming..
3. [FEATURE CHANGED]

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4. Symptom: Support Firewall v2.
[FEATURE CHANGED]
Symptom: Support AES & IPSEC NAT traversal.
5. [FEATURE CHANGED]
Symptom: Support SIP pass through NAT.
6. [BUG FIXED]
Symptom: eWC will get hang-up when UPnP feature is enabled.
Condition: 1. Install windows XP service pack 2 in PC
2. Enable firewall of windows XP and also enable UPnP framework pass through or disable firewall of windows XP.
3. Login via eWC and enable UPnP in system
4. The eWC will get hang, but it doesn't happen every time
7. [BUG FIXED]
Symptom: The router crashed (exception) when a client PC ran a port scan tool.
Condition: PC ---- P53HWI -13 ---- Internet ---- ZyWALL 70
Run a port scan AP (BONK) on PC to attack ZyWALL 70.
parameter (bonk -p 7 -d 10)
P53HWI-13 will crashed with exception log after few mins (4000+ counts of port scan)
8. [BUG FIXED]
Symptom: Exception occur while End ip smaller then Start ip in SMT menu15.1.
Condition: At NAT full feature use many to one or many to many set End IP smaller than start IP save it in SMT menu . Then DUT exception occur.
9. [BUG FIXED]
Symptom: The help in SMT1 domain name display is wrong "A-z".
10. [BUG FIXED]
Symptom: Use "d d 1" to dial, the console display two primary DNS.
Condition: The first DNS should display as "Primary DNS", and the 2nd DNS should display "Secondary DNS".
11. [BUG FIXED]
Symptom: Two PVC will work improper manner .
Condition: (1) Create two or more than two PPPOE PVCs in CPE device
(2) After two PVC connection are established, change the VPI/VCI setting of first PVC on the DSLAM.
(3) The first PVC won't drop the connection (menu 24.1, the status still keep as "UP" and also the IP still keep the same), and the traffic still can go out via CPE device(via PVC2)..
12. [BUG FIXED]
Symptom: The PPPoA or PPPoE login name and password will delete while we login to menu 11.2 -Edit IP/BR mode setting or Edit ATM Options field.
13. [BUG FIXED]
Symptom: System will reboot.
Condition: When we try to login Web GUI using long user name/password.
14. [BUG FIXED]
Symptom: ARP request from 1st remote node (router mode) , replied it from the 2nd remote node (bridge mode). The problem makes the remote VLAN

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enabled router confused and the communication will fail.

15. [BUG FIXED]
Symptom: In Web GUI Advanced Setup >> NAT - Edit SUA/NAT Server Set, type in start port "41", then click "Save" button. Will pop up a window - "End port must greater than Start port". Click "OK" button, the value will be save to device.
16. [BUG FIXED]
Symptom: DHCP relay does not work if the server resides on WAN side.
17. [BUG FIXED]
Symptom: Device will reply wrong packet.
Condition: Device will reply wrong packet under ENET ENCAP + IES1000 combination.
18. [BUG FIXED]
Symptom: In eWC if we ping a address like:"192.168.1.1 a" the device will ping it for a loop and the eWC can't get response and just like been locked.(the same in CI command and we can stop it just "CTRL+C").
19. [BUG FIXED]
Symptom: Ping a wrong IP address, the device will get success information.
Condition: By CLI command to ping a wrong IP address, the device will get success nformation. The wrong IP addresses could be "192.168.1.33aaa", and the IP address will be resolved to "192.168.1.33". Then, the device will get success ping information.
20. [BUG FIXED]
Symptom: The DHCP Relay function can't work.
Condition: (1) Set DHCP to Relay in Menu 3.2.
(2) Set Enet-Encap mode turn off NAT function and disable firewall.
(3) PC can't get IP.
21. [BUG FIXED]
Symptom: When multiple stations connected to AP, once the previous one leave, the other stations also disappeared.
Condition: 1.Use Web to show association list.
2.When station disconnect the association list still have it's data.
3.When one station disconnect and then another join the association list will show error list.
22. [BUG FIXED]
Symptom: System will reboot.
Condition: While three station connect to device and we use CI command "wlan association" to display association list the system will reboot.
23. [BUG FIXED]
Symptom: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote Users. Send icmp packet with less data than normal so remote interface pad with data to complete the frame.
24. [BUG FIXED]
Symptom: The system do exception and system reboot several times while we do emule overnight test .
25. [BUG FIXED]

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Symptom: Issue "wan oos 1" will cause system exception.

Condition: 1. Issue "wan oos" will have some remind message.

2. Issue "wan oos 1" will cause system exception.

3. This command is just for debug flag turn on.

26. [BUG FIXED]

Symptom: In SMT Menu24.11 if we type over 65535 value will have error value

27. [BUG FIXED]

Symptom: DNS server can't work after set DNS server in smt3.2 or web LAN page, it need reboot system to let DNS server work.

28. [BUG FIXED]

Symptom: Content filter schedule function can not work.

Condition: If it's 14:00 clocks and we set 16:00 ~ 20:00 schedule to block. The content filter still active and will be block keywords web.

Modification in 3.40(OZ.1) | 02/27/2004

3. [FEATURE CHANGED] Change to FCS version

Modification in 3.40(OZ.1)b1 | 02/26/2004

1. [FEATURE CHANGED] Change to use modem code 13.9.38 to fit new adsl chipset

Modification in 3.40(OZ.0) | 12/25/2003

1. [FEATURE CHANGED] Change to FCS version

2. [BUG FIXED] remove menu 11 ISDN remote node caller id and call back selection.

Symptom: ISDN remote node will show caller id and call back selection

Condition: enter ISDN remote node , and caller id and call back selection will be showed.

Modification in 3.40(OZ.0)b7 | 12/18/2003

1. [BUG FIXED] Modify ISDN dial backup remote node idle timeout default value is 300 seconds..

Symptom: ISDN dial backup remote node idle timeout default value is 0 seconds , and it is not match smt setting.

Condition: use Web / WAN /ISDN remote node config , and idle timeout is 0 seconds.

2. [BUG FIXED] Modify web/wizard can't save dynamic wan ip setting after we set isdn backup remote node as a dynamic wan ip.

Symptom: Use web/wizard to config adsl remote node to dynamic ip is not work fine.

Condition: Use web to config isdn backup remote node as dynamic ip ,and config wan backup page to isdn backup enable, and config adsl remote node as PPPoA mode / dynamic wan ip , and save action can't work fine.

Modification in 3.40(OZ.0)b6 | 12/8/2003

1. [BUG FIXED] Ramtest will show 32800K size

Symptom: while system reboot, ramtest will show 32800K..

Condition: reboot system ,and wait for system ramtest ok, and system must show 32768K , but show wrong memory size 32800K

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2. [FEATURE CHANGED] use AT command atwe to write mac address , and system will auto reboot.
3. [BUG FIXED] atux0,60 to upload merge file is not work.
Symptom: use atux0,60 to upload bootmodule , romfile , rascodes merge file is not work.
Condition: use atbt1 and atux0,60 to upload merge file , and it will not success.

Modification in 3.40(OZ.0)b5 | 12/1/2003

4. [BUG FIXED] Bandwidth management sometimes will cause system exception.
Symptom: while bandwidth management active, and system sometimes will get null packet , then it will cause system exception.
Condition: Enable bandwidth management, and use packet to pass-through P653 for some minutes, and system will reboot.

Modification in 3.40(OZ.0)b4 | 11/26/2003

1. [BUG FIXED] PNC string not show in menu 21
Symptom: PNC string not show in menu 21
Condition: enter menu 21 , and menu show PNC string is wrong..
2. [BUG FIXED] While we do VBR test, MBS value cannot over 255
Symptom: in menu 11, we can set MBS to over 255, but it is no meaning.
Condition: in menu 11, we can set MBS to over 255, so we limit MBS field to enter a value not large than 255.
3. [BUG FIXED] VPN can't establish ipsec tunnel while we use PPPoA mode.
Symptom: in PPPoA mode , ipsec tunnel can't be establish.
Condition: change menu 4 to PPPoA mode, and use CI command : ipsec dial 1 to establish ipsec tunnel, and it will cause timeout.
4. [BUG FIXED] Web/Firewall Ipsec_TRANSPORT/TUNNEL(AH0) items is bad
Symptom: Web/Firewall Ipsec_TRANSPORT/TUNNEL(AH0) items can't be selected.
Condition: Web/Firewall Ipsec_TRANSPORT/TUNNEL(AH0) items can't be selected and move to right field.
5. [BUG FIXED] ACL rule be added in web many times , and system will have exception.
Symptom: ACL rule be added in web many times, and system will have exception.
Condition: ACL rule be added ,and system cannot work fine ,and exception.
[FEATURE CHANGE] Extend boottext waiting time to over 3 seconds for TE department to operate at command.

Modification in 3.40(OZ.0)b3 | 10/22/2003

1. [FEATURE ENCHANGED] Support New Compression method .
2. [FEATURE CHANGED] Use bootmodule 1.02 and support new hardware with 32Mb SDRAM.
3. [FEATURE ENCHANGED] Reduce system memory size from 4Mb to 3Mb.
4. [FEATURE ENCHANGED] support bandwidth management.

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Modification in 3.40(OZ.0)b2 | 10/07/2003

1. [FEATURE CHANGED]This f/w is only release for PQA and TE test. And this f/w use 10 remote node and new compression method.

Modification in 3.40(OZ.0)b1 | 08/26/2003

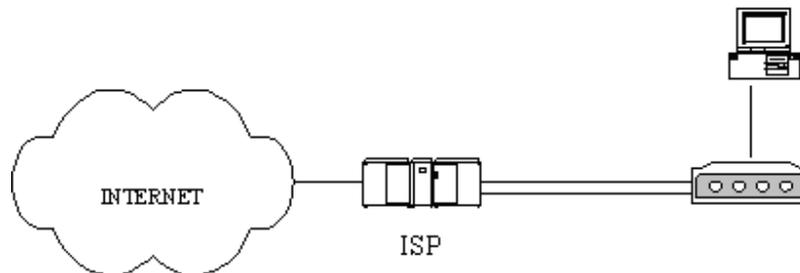
1. [FEATURE CHANGED]This f/w is only release for PQA and TE to test P653HWI-13 hardware.

Appendix 1: ZyXEL F/W Upgrade Tool

Network Environment:

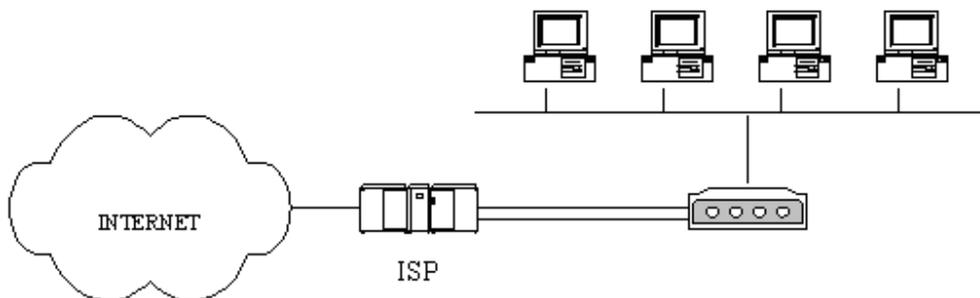
1. Prestige Modem Series

The target network environment is a PC connected to Prestige modem directly. The below figure shows a typical Internet access application. (If there is any IP sharing devices, like router, or switch between PC and Prestige modem, users must connect the PC to Prestige modem directly first before running the program.)



2. Prestige Router Series

The target network environment is a small number of PCs using the Prestige DHCP service for IP address assignment. Following figure shows a typical Internet access application.



Firmware Upgrade Procedure

1. Change the Router's password to "1234".
2. Change the Router's LAN IP to "192.168.1.1" and make sure that PC can connect to Router.
 - ⇒ If your PC's IP is dynamic assigned by router, please release original IP and renew it from router's DHCP service.
 - ⇒ If your PC's IP is static assigned, please change it and make sure the new IP address at same subnet with router. (Ex: Set PC's IP to 192.168.1.33).
3. Executing the upgrade tool and wait about 6 minutes to wait firmware upgrade procedure finished.
4. If the original password is not "1234", change back to original setting.
5. Restore the original IP setting of router and reboot it if necessary.

CI Command List

Command Class List Table		
System Related Command	Exit Command	Ethernet Related Command
WAN Related Command	WLAN Related Command	IP Related Command
IPSec Related Command	Bridge Related Command	Radius Related Command
8021x Related Command	Firewall Related Command	Bandwidth Management

System Related Command

[Home](#)

Command			Description
sys			
	adjtime		retrive date and time from Internet
	callhist		
	countrycode	[countrycode]	set country code
	date	[year month date]	set/display date
	domainname		display domain name
	edit	<filename>	edit a text file
	extraphnum		maintain extra phone numbers for outcalls
	add	<set 1-3> <1st phone num> [2nd phone num]	add extra phone numbers
	display		display extra phone numbers
	node	<num>	set all extend phone number to remote node <num>
	remove	<set 1-3>	remove extra phone numbers
	reset		reset flag and mask
	feature		display feature bit
	firmware		display ISDN firmware type
	hostname	[hostname]	display system hostname
	logs		
	category		
		access [0:none/1:log]	record the access control logs
		attack [0:none/1:log/2:alert/3:both]	record and alert the firewall attack logs
		display	display the category setting
		error [0:none/1:log/2:alert/3:both]	record and alert the system error logs
		ipsec [0:none/1:log]	record the access control logs
		mten [0:none/1:log]	record the system maintenance logs
		upnp [0:none/1:log]	record upnp logs
		urlblocked [0:none/1:log/2:alert/3:both]	record and alert the web blocked logs
		urlforward [0:none/1:log]	record web forward logs
	clear		clear log
	display		display all logs
	errlog		
		clear	display log error
		disp	clear log error
		online	turn on/off error log online display
	load		load the log setting buffer
	mail		
		alertAddr [mail address]	send alerts to this mail address
		display	display mail setting
		logAddr [mail address]	send logs to this mail address

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			schedule display	display mail schedule
			schedule hour [0-23]	hour time to send the logs
			schedule minute [0-59]	minute time to send the logs
			schedule policy [0:full/1:hourly/2:daily/3:weekly/4:none]	mail schedule policy
			schedule week [0:sun/1:mon/2:tue/3:wed/4:thu/5:fri/6:sat]	weekly time to send the logs
			server [domainName/IP]	mail server to send the logs
			subject [mail subject]	mail subject
		save		save the log setting buffer
		syslog		
			active [0:no/1:yes]	active to enable unix syslog
			display	display syslog setting
			facility [Local ID(1-7)]	log the messages to different files
			server [domainName/IP]	syslog server to send the logs
	stdio		[second]	change terminal timeout value
	time		[hour [min [sec]]]	display/set system time
	trcdisp			monitor packets
	trclog			
		switch	[on off]	set system trace log
		online	[on off]	set on/off trace log online
		level	[level]	set trace level of trace log #: 1-10
		type	<bitmap>	set trace type of trace log
		disp		display trace log
		clear		clear trace
		call		display call event
		encapmask	[mask]	set/display tracelog encapsulation mask
	trcpacket			
		create	<entry> <size>	create packet trace buffer
		destroy		packet trace related commands
		channel	<name> [none incoming outgoing bothway]	<channel name>=enet0,sds100, fr0 set packet trace direction for a given channel
		string		enable smt trace log
		switch	[on off]	turn on/off the packet trace
		disp		display packet trace
		udp		send packet trace to other system
			switch [on off]	set tracepacket upd switch
			addr <addr>	send trace packet to remote udp address
			port <port>	set tracepacket udp port
		parse	[[start_idx], end_idx]	parse packet content
		brief		display packet content briefly
	version			display RAS code and driver version
	view		<filename>	view a text file
	wdog			
		switch	[on off]	set on/off wdog
		cnt	[value]	display watchdog counts value: 0-34463
	romreset			restore default romfile
	upnp			restore default romfile
		active	[0:no/1:yes]	Activate or deactivate the saved upnp settings
		config	[0:deny/1:permit]	Allow users to make configuration changes. through UPnP

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		display		display upnp information
		firewall	[0:deny/1:pass]	Allow UPnP to pass through Firewall.
		load		Load upnp information
		save		save upnp information
	atsh			display system information
	xmodemmode			display xmodem mode
	socket			display system socket information
	filter			
		clear		clear filter statistic counter
		disp		display filter statistic counters
		sw	[on off]	set filter status switch
		set	<set>	display filter rule
		netbios		
			disp	display netbios filter status
			config <0:LAN to WAN, 1:WAN to LAN, 2:LAN to DMZ, 3:IPSec passthrough, 4:Trigger Dial> <on off>	config netbios filter
	ddns			
		debug	<level>	enable/disable ddns service
		display	<iface name>	display ddns information
		restart	<iface name>	restart ddns
		logout	<iface name>	logout ddns
	cpu			
		display		display CPU utilization

Exit Command

[Home](#)

Command			Description
exit			exit smt menu

Ethernet Related Command

[Home](#)

Command			Description
ether			
	config		display LAN configuration information
	driver		
		cnt	
		disp <name>	display ether driver counters
		clear <name>	clear ether driver counters
		iface <ch_name> <num>	send driver iface
		ioctl <ch_name>	Useless in this stage.
		mac <ch_name> <mac addr>	Set LAN Mac address
		reg <ch_name>	display LAN hardware related registers
		rxmod <ch_name> <mode>	set LAN receive mode. mode: 1: turn off receiving 2: receive only packets of this interface 3: mode 2+ broadcast 5: mode 2 + multicast 6: all packets
		status <ch_name>	see LAN status
		init <ch_name>	initialize LAN

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version			see ethernet device type
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WAN Related Command

[Home](#)

wan		Command		Description
	Adsl	chandata		ADSL channel data, line rate
		close		Close ADSL line
		linedata		
			near	Show ADSL near end noise margin
			far	Show ADSL far end noise margin
		open		Open ADSL line
		opencmd		Open ADSL line with specific standard
			Glite	
			T1.413	
			Gdmt	
			multimode	
		opmode		Show the operational mode
		rateadap	[on off]	Turn on/off rate adaptive mechanism
		perfdata		Show performance information,CRC,FEC, error seconds..
		reset		Reset ADSL modem, and must reload the modem code again
		Status		ADSL status (ex: up, down or wait for init)
		errorsecond		
			sendes	Send current error second information immediately
		targetnoise	[value]	Adjust target noise offset
	atm			
		test		
	hwsar	disp		Display hwsar packets incoming/outgoing information
		clear		Clear hwsar packets information

WLAN Related Command

[Home](#)

Wlan		Command		Description
	active	[on off]	[0 1]	Turn on/off wireless lan
	association			Show association list
	load			Load WLAN configuration into buffer.
	Display			Display WLAN configuration data.
	chid			Configure channel ID
	ssid			Configure ESSID
	hiddenssid		[on/off]	Enable/Disable hidden SSID
	threshold			
		rts	<RTS threshold value>	Set threshold rts value
		Fragment	<Fragment threshold value>	Set threshold fragmentation value
	wep			
		type	<none 64 128 256>	Set WEP key to 64, 128 or 256 bits.
		Key	Set <set> <value>	Set WEP key value per set
		Key	Default <set>	Set WEP default key set
	macfilter			
		Enable		Enable macfilter

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	Disable		Disable macfilter
	Action	<allow deny>	When action match, allow or deny this mac
	Set	<Set#> <MAC Address>	Set mac address by set
Clear			Clear all WLAN configuration data.
Save			Save WLAN configuration working buffer to Rom file.
filter			
	[incoming outgoing]	<generic>[set#1][set#2][set#3][set#4]	To set generic filter for wireless channel
version			

IP Related Command

[Home](#)

Command		Description
ip		
	address	[addr]
	alias	<iface>
	aliasdis	<0 1>
	arp	
	status	<iface>
	add	<hostid> ether <ether addr>
	resolve	<hostid>
	drop	<hostid> [hardware]
	flush	
	publish	
	dhcp	<iface>
	client	
		release
		renew
	mode	<server relay none client>
	relay	server <serverIP>
	reset	
	server	
		probecount <num>
		dnsserver <IP1> [IP2] [IP3]
		winsserver <winsIP1> [<winsIP2>]
		gateway <gatewayIP>
		hostname <hostname>
		initialize
		leasetime <period>
		netmask <netmask>
		pool <startIP> <numIP>
		renewaltime <period>
		rebindtime <period>
		reset
		server <serverIP>
		dnsorder [router isp]
	status	[option]
	static	
		delete <num> all
		display
		update <num> <mac> <ip>
	dns	

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	query			
		address <ipaddr> [timeout]		resolve ip-addr to name
		debug <num>		enable dns debug value
		name <hostname> [timeout]		resolve name to ip-addr
		status		display dns query status
		table		display dns query table
	server	<primary> [secondary] [third]		set dns server
	stats			
		clear		clear dns statistics
		disp		display dns statistics
	table			display dns table
httpd				
	debug	[on/off]		set http debug flag
icmp				
	echo	[on/off]		set icmp echo response flag
	data	<option>		select general data type
	status			display icmp statistic counter
	trace	[on/off]		turn on/off trace for debugging
	discovery	<iface> [on/off]		set icmp router discovery flag
ifconfig		[iface] [ipaddr] [broadcast <addr> mtu <value> dynamic]		configure network interface
ping		<hostid>		ping remote host
route				
	status	[if]		display routing table
	add	<dest_addr default>[/<bits>] <gateway> [<metric>]		add route
	addiface	<dest_addr default>[/<bits>] <gateway> [<metric>]		add an entry to the routing table to iface
	addprivate	<dest_addr default>[/<bits>] <gateway> [<metric>]		add private route
	drop	<host addr> [/<bits>]		drop a route
	flush			flush route table
	lookup	<addr>		find a route to the destination
	errent			
		disp		display routing statistic counters
		clear		clear routing statistic counters
status				display ip statistic counters
udp				
	status			display udp status
rip				
	accept	<gateway>		drop an entry from the RIP refuse list
	activate			enable rip
	merge	[on/off]		set RIP merge flag
	refuse	<gateway>		add an entry to the rip refuse list
	request	<addr> [port]		send rip request to some address and port
	reverse	[on/off]		RIP Poisoned Reverse
	status			display rip statistic counters
	trace			enable debug rip trace
	mode			
		<iface> in [mode]		set rip in mode
		<iface> out [mode]		set rip out mode
	dialin_user	[show in out both none]		show dialin user rip direction
tcp				
	ceiling	[value]		TCP maximum round trip time

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		floor	[value]	TCP minimum rtt
		irtt	[value]	TCP default init rtt
		kick	<tcb>	kick tcb
		limit	[value]	set tcp output window limit
		max-incomplete	[number]	Set the maximum number of TCP incomplete connection.
		mss	[value]	TCP input MSS
		reset	<tcb>	reset tcb
		rtt	<tcb> <value>	set round trip time for tcb
		status	[tcb] [<interval>]	display TCP statistic counters
		syndata	[on/off]	TCP syndata piggyback
		trace	[on/off]	turn on/off trace for debugging
		window	[tcb]	TCP input window size
tftp				
		support		prtn if tftp is support
		stats		display tftp status
xparent				
		join	<iface1> [<iface2>]	join iface2 to iface1 group
		break	<iface>	break iface to leave ipxparent group
igmp				
		debug	[level]	set igmp debug level
		forwardall	[on/off]	turn on/off igmp forward to all interfaces flag
		querier	[on/off]	turn on/off igmp stop query flag
		iface		
			<iface> grouptm <timeout>	set igmp group timeout
			<iface> interval <interval>	set igmp query interval
			<iface> join <group>	join a group on iface
			<iface> leave <group>	leave a group on iface
			<iface> query	send query on iface
			<iface> rsptime [time]	set igmp response time
			<iface> start	turn on of igmp on iface
			<iface> stop	turn off of igmp on iface
			<iface> ttl <threshold>	set ttl threshold
			<iface> v1 compat [on/off]	turn on/off v1 compat on iface
		robustness	<num>	set igmp robustness variable
		status		dump igmp status
pr				
		clear		clear ip pr table counter information
		disp		dump ip pr table counter information
		switch		turn on/off ip pr table counter flag

IPSec Related Command

[Home](#)

Command			Description
ipsec	debug	<1 0>	turn on/off trace for IPsec debug information
	route	lan	<on/off>
			After a packet is IPsec processed and will be sent to LAN side, this switch is to control if this packet can be applied IPsec again.
			Remark: Command available since 3.50(WA.3)
		wan	<on/off>
			After a packet is IPsec processed and will be sent to WAN side, this switch is to control if this packet can be applied IPsec again.
			Remark: Command available since 3.50(WA.3)
	show_runtime	sa	display runtime phase 1 and phase 2 SA

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				information
		spd		When a dynamic rule accepts a request and a tunnel is established, a runtime SPD is created according to peer local IP address. This command is to show these runtime SPD.
	switch	<on off>		As long as there exists one active IPSec rule, all packets will run into IPSec process to check SPD. This switch is to control if a packet should do this. If it is turned on, even there exists active IPSec rules, packets will not run IPSec process.
	timer	chk_my_ip	<1~3600>	- Adjust timer to check if WAN IP in menu is changed - Interval is in seconds - Default is 10 seconds - 0 is not a valid value
		chk_conn.	<0~255>	- Adjust auto-timer to check if any IPsec connection has no traffic for certain period. If yes, system will disconnect it. - Interval is in minutes - Default is 2 minuets - 0 means never timeout
		update_peer	<0~255>	- Adjust auto-timer to update IPSec rules which use domain name as the secure gateway IP. - Interval is in minutes - Default is 30 minutes - 0 means never update
	updatePeerIp			Remark: Command available since 3.50(WA.3) Force system to update IPSec rules which use domain name as the secure gateway IP right away.
	dial	<rule #>		Remark: Command available since 3.50(WA.3) Initiate IPSec rule <#> from ZyWALL box
	display	<rule #>		Remark: Command available since 3.50(WA.3) Display IPSec rule #
	config	netbios	active <on off>	Set netbios active flag
			group <group index1, group index2...>	Set netbios group
		name	<string>	Set rule name
		active	<Yes No>	Set active or not
		keyAlive	<Yes No>	Set keep alive or not
		lcIdType	<0:IP 1:DNS 2:Email>	Set local ID type
		lcIdContent	<string>	Set local ID content
		myIpAddr	<IP address>	Set my IP address
		peerIdType	<0:IP 1:DNS 2:Email>	Set peer ID type
		peerIdContent	<string>	Set peer ID content
		secureGwAddr	<IP address Domain name>	Set secure gateway address or domain name
		protocol	<1:ICMP 6:TCP 17:UDP>	Set protocol
		lcAddrType	<0:single 1:range 2:subnet>	Set local address type
		lcAddrStart	<IP>	Set local start address
		lcAddrEndMask	<IP>	Set local end address or mask
		lcPortStart	<port>	Set local start port
		lcPortEnd	<port>	Set local end port
		rmAddrType	<0:single 1:range 2:subnet>	Set remote address type
		rmAddrStart	<IP>	Set remote start address

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	rmAddrEndMask	<IP>	Set remote end address or mask
	rmPortStart	<port>	Set remote start port
	rmPortEnd	<port>	Set remote end port
	antiReplay	<Yes No>	Set antireplay or not
	keyManage	<0:IKE 1:Manual>	Set key manage
	ike	negotiationMode <0:Main 1:Aggressive>	Set negotiation mode in phase 1 in IKE
		preShareKey <string>	Set pre shared key in phase 1 in IKE
		p1EncryAlgo <0:DES 1:3DES>	Set encryption algorithm in phase 1 in IKE
		p1AuthAlgo <0:MD5 1:SHA1>	Set authentication algorithm in phase 1 in IKE
		p1SaLifeTime <seconds>	Set sa life time in phase 1 in IKE
		p1KeyGroup <0:DH1 1:DH2>	Set key group in phase 1 in IKE
		activeProtocol <0:AH 1:ESP>	Set active protocol in phase 2 in IKE
		p2EncryAlgo <0:Null 1:DES 2:3DES>	Set encryption algorithm in phase 2 in IKE
		p2AuthAlgo <0:MD5 1:SHA1>	Set authentication algorithm in phase 2 in IKE
		p2SaLifeTime <seconds>	Set sa life time in phase 2 in IKE
		encap <0:Tunnel 1:Transport>	set encapsulation in phase 2 in IKE
		pfs <0:None 1:DH1 2:DH2>	set pfs in phase 2 in IKE
	manual	activeProtocol <0:AH 1:ESP>	Set active protocol in manual
	manual ah	encap <0:Tunnel 1:Transport>	Set encapsulation in ah in manual
		spi <decimal>	Set spi in ah in manual
		authAlgo <0:MD5 1:SHA1>	Set authentication algorithm in ah in manual
		authKey <string>	Set authentication key in ah in manual
	manual esp	encap <0:Tunnel 1:Transport>	Set encapsulation in esp in manual
		spi <decimal>	Set spi in esp in manual
		encryAlgo <0:Null 1:DES 2:3DES>	Set encryption algorithm in esp in manual
		encryKey <string>	Set encryption key in esp in manual
		authAlgo <0:MD5 1:SHA1>	Set authentication algorithm in esp in manual
		authKey < string>	Set authentication key in esp in manual

Bridge Related Command

[Home](#)

Command			Description
bridge			
	cnt		related to bridge routing statistic table
		disp	display bridge route counter
		clear	clear bridge route counter
	stat		related to bridge packet statistic table
		disp	display bridge route packet counter
		clear	clear bridge route packet counter

Radius Related Command

[Home](#)

Command			Description
radius			
	auth		show current radius authentication server configuration
	acco		show current radius accounting server configuration

8021x Related Command

[Home](#)

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Command				Description
8021x				
	debug	level	[debug level]	set ieee802.1x debug message level
		trace		show all supplications in the supplication table
		user	[username]	show the specified user status in the supplicant table

Firewall Related Command

[Home](#)

Command				Description
sys				
	firewall			
		acl		
			disp	Display specific ACL set # rule #, or all ACLs.
		active	<yes no>	Active firewall or deactivate firewall
		cnt		
			disp	Display firewall log type and count.
			clear	Clear firewall log count.
		pktdump		Dump the 64 bytes of dropped packet by firewall
		update		Update firewall
		dynamicrule		
		teprst		
			rst	Set TCP reset sending on/off.
			rst113	Set TCP reset sending for port 113 on/off.
			display	Display TCP reset sending setting.
		icmp		
		dos		
			smtp	Set SMTP DoS defender on/off
			display	Display SMTP DoS defender setting.
			ignore	Set if firewall ignore DoS in lan/wan/dmz/wlan
		ignore		
			triangle	Set if firewall ignore triangle route in lan/wan/dmz/wlan

Bandwidth management Related Command

[Home](#)

Command					Description
bm					
	interface	lan	enable	<bandwidth xxx>	Enable bandwidth management in LAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>	Enable work-conserving feature.
				<marktos xx>	Mark TOS value.
			disable		Disable bandwidth management in LAN
		wlan	enable	<bandwidth xxx>	Enable bandwidth management in WLAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>	Enable work-conserving feature.

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				<marktos xx>		Mark TOS value.
			disable			Disable bandwidth management in WLAN
		mpoa[00~07]	enable	<bandwidth xxx>		Enable bandwidth management in WAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>		Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>		Enable work-conserving feature.
				<marktos xx>		Mark TOS value.
			disable			Disable bandwidth management in WAN
	class	lan	add #	bandwidth xxx	<name xxx>	Add a class with bandwidth xxx bps in LAN. The name is for users' information.
					<priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.
					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
					<marktos xx>	Mark TOS value.
			mod #	<bandwidth xxx>		Modify the parameters of the class in LAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.
				<marktos xx>		Mark TOS value.
			del #			Delete the class # and its filter and all its children class and their filters in LAN.
		wlan	add #	bandwidth xxx	<name xxx>	Add a class with bandwidth xxx bps in WLAN. The name is for users' information.
					<priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.
					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
					<marktos xx>	Mark TOS value.
			mod #	<bandwidth xxx>		Modify the parameters of the class in WLAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a

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						new value.
				<marktos xx>		Mark TOS value.
			del #			Delete the class # and its filter and all its children class and their filters in WLAN.
		mpoa[00~07]	add #	bandwidth xxx	<name xxx>	Add a class with bandwidth xxx bps in WAN. The name is for users' information.
					<priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.
					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
					<marktos xx>	Mark TOS value.
			mod #	<bandwidth xxx>		Modify the parameters of the class in WAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.
				<marktos xx>		Mark TOS value.
			del #			Delete the class # and its filter and all its children class and their filters in WAN.
	filter	lan	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol tos <xx> tosmask <xx>		Add a filter for class # in LAN. The filter contains destination address (netmask), destination port, source address (netmask), source port, protocol, tos value and tos mask. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in LAN.
		wlan	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol tos <xx> tosmask <xx>		Add a filter for class # in WLAN. The filter contains destination address (netmask), destination port, source address (netmask), source port, protocol, tos value and tos mask. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in WLAN.
		mpoa[00~07]	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol tos <xx> tosmask <xx>		Add a filter for class # in WAN. The filter contains destination address (netmask), destination port, source address (netmask), source port, protocol, tos value and tos mask. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in WAN.
	show	interface	lan			Show the interface settings of LAN
			wlan			Show the interface settings of WLAN
			mpoa[00~07]			Show the interface settings of WAN
		class	lan			Show the classes settings of LAN
			wlan			Show the classes settings of WLAN

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			mpoa[0 0~07]			Show the classes settings of WAN
		filter	lan			Show the filters settings of LAN
			wlan			Show the filters settings of WLAN
			mpoa[0 0~07]			Show the filters settings of WAN
		statistics	lan			Show the statistics of the classes in LAN
			wlan			Show the statistics of the classes in WLAN
			mpoa[0 0~07]			Show the statistics of the classes in WAN
	monitor	lan	<#>			Monitor the bandwidth of class # in LAN. If the class is not specific, all the classes in LAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
		wlan	<#>			Monitor the bandwidth of class # in WLAN. If the class is not specific, all the classes in WLAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
		mpoa[00~ 07]	<#>			Monitor the bandwidth of class # in WAN. If the class is not specific, all the classes in WAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
	config	save				Save the configuration.
		load				Load the configuration.
		clear				Clear the configuration.