

ZyXEL Confidential



Firmware Release Note

Prestige 652HW-33

Standard version

Release 3.40(NL.3)C0

Date: March 23, 2004
Author: Brian Chung

ZyXEL Prestige 652HW-33 Standard Version Release 3.40(INL.3)C0 Release Note

Date: March 23, 2004

Supported Platforms:

ZyXEL Prestige 652HW-33

Versions:

ZyNOS F/W Version : V3.40(NL.3) | 3/23/2004 8:43:44

BootBase : V1.14 | 10/27/2003 10:05:54

Notes:

The P652HW-33 is a small-office and home device that will allow a small LAN to access the Internet. By integrating ADSL, WLAN, NAT, P652HW-33 provides the ease of installation and Internet access.

The P652HW-33 provides an PCMCIA wireless card slot for 802.11b Wireless LAN connectivity, four single auto-sensing, auto-detection 10/100BASE-T Ethernet ports for connection to the user's local network, and a single RJ-11 port for connection to ADSL line.

The version of Alcatel modem code is 4.9.10

Known Issues:

1. Upgrading firmware from V3.40(NL.1) to V3.40(NL.2) without loading default ROM file needs to set Menu 1 Bridge to Yes and reboot in order to make communication between WLAN and LAN.
2. **Upgrading firmware from V3.40(NL.2) to V3.40(NL.3) need to use firmware upgrade tool to update new firmware. This tool only support change firmware from V3.40(NL.2) to V3.40(NL.3), you can't use this tool to upgrade firmware from others version. [See Appendix 1.](#)**
3. The Switch needs 5 minutes to refresh it's bridge table. Therefore, if LAN connection switch to another port will not work for 5 minutes.
4. When enable the UPnP feature, Video, Audio, and whiteboard function do not work on Windows Messenger 4.7 or later version.

CI Command List:

Features:

Modification in 3.40(NL.3)C0 | 03/23/2004

1. Change to FCS version.

Modification in 3.40(NL.3)b1 | 03/16/2004

1. [ENHANCEMENT]
Symptom: Support WLAN WPA/Dynamic WEP key function for B-120 wireless card.
2. [ENHANCEMENT]
Symptom: Support Vantage function.
3. [ENHANCEMENT]
Symptom: Support enhanced wan backup mechanism.
Condition: Nailed-up function of Dial backup node is no longer controlled by ISP node.
4. [FEATURE ENHANCE] Add Large ROM-File. Need to update bootbase.
5. [FEATURE ENHANCE] New Firewall Add Port Based VLAN, DMZ and extra Firewall rules.
6. [FEATURE ENHANCE] Add NAT traversal.
7. [FEATURE CHANGED] PPPoE will never dis-connect even if the internal host is shut down.
8. [FEATURE ENHANCEMENT] Add CI command "wlan active 1/0".
9. [FEATURE CHANGED] Change France and Singapore WLAN channel range to 1-13.

Modification in 3.40(NL.2)C1 | 10/22/2003

1. [BUG FIX] Set Menu1 Bridge=Yes in default ROM file.

Modification in 3.40(NL.2)b1 | 09/01/2003

1. [BUG FIX] Fix IPsec exception when using PPPoA.
2. [BUG FIX] Fix VPN can't ping after the VPN tunnel created and PFS turned on.

Modification in 3.40(NL.1)b2 | 07/07/2003

1. [BUG FIX] SMT menu 24.1 will display wrong if DSL line is plugged and then unplugged.

Modification in 3.40(NL.1)b1 | 07/07/2003

1. [BUG FIX] PPPoE pass through can't work when WLAN card is inserted.
2. [BUG FIX] PPPoE connection acts abnormally with Linux PPPoE server.
3. [BUG FIX] Bandwidth management cause PCMCIA hang-up.

Modification in 3.40(NL.0)b5 | 06/25/2003

1. [BUG FIX] WLAN can't send packets.
2. [FEATURE ENHANCE] Update Web Help Pages: NAT, WAN, Dial-Backup, Wizard, and Firmware Upload.
3. [FEATURE ENHANCE] Extend Password to 72 Characters.

Modification in 3.40(NL.0)b4 | 06/20/2003

1. [FEATURE ENHANCE] Add Bandwidth Management
2. [BUG FIX] Can't play XBox Live via NAT router.
3. [BUG FIXED] IPsec bug
Symptom: After phase 2 rekey, dynamic rule cannot pass traffic anymore.
Condition: 1) Set secure gateway of a rule to 0.0.0.0, it becomes a dynamic rule and only can be responder. Trigger the tunnel by inbound request from the peer.
- 2) After the phase 2 rekey, traffic cannot pass this tunnel anymore.
4. [BUG FIXED] IPsec bug
Symptom: When "keep alive" flag turns on, disconnection in SA monitor didn't work correctly.
Condition: 1) Turn on keep alive flag.
2) Use SA monitor to disconnect the tunnel.
3) The tunnel will not be disconnected properly. There will be still tunnels showed on SA monitor.
5. [BUG FIXED] Dial Backup bug
Symptom: Nailed-up function for Dial backup node can't work.
Condition: Dial backup node can set nailed-up feature but can't really work.
6. [BUG FIXED] Polycom camera pass through
Symptom: If the traffic for Polycom camera pass our router, the router would be reboot.
Condition: Polycom camera is implemented by H.323. So our router would do nat for this device.

Modification in 3.40(NL.0)b3 | 05/27/2003

1. [BUG FIX] PPPoE Client can't work if the first remote node is in bridge mode and smt menu1 routing set to yes.
2. [BUG FIX] smt menu11 select bridge should not affect the submenu 11.2 SUA selection.
3. [FEATURE ENHANCE] Add CI commands by TE request. "sys romreset <1:reboot|2:no reboot>", "sys atsh", "sys atwe <mac address> <country code> <debug flag> <feature bits> < 1:reboot|0:no reboot>", and "sys stdio 0 [seconds]".
4. [FEATURE ENHANCE] Change "sys smt on/off" from internal usage to hide.
5. [FEATURE ENHANCE] Enhance the CI command "sys proc stack" & "sys proc disp" to show the maximum stack usage for THREADX.
6. [BUG FIX] In Web GUI, Port speed select is not consistent with the dial backup advance GUI.
7. [FEATURE CHANGE] Modify WLAN default channel to CH06.

Modification in 3.40(NL.0)b2 | 05/20/2003

1. [FEATURE CHANGE] Modify Boot base product string from "P652HW-33" to "P652H/HW-33".
2. [FEATURE ENHANCE] Add SPTGen for MAC Filter, RADIUS, and IEEE802.1X.
3. [FEATURE ENHANCE] Enlarge FTP allocated buffer.
4. [FEATURE ENHANCE] Add Multi Language Web GUI.

ZyXEL Confidential

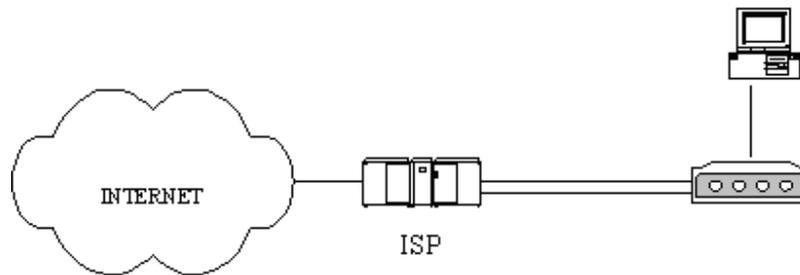
5. [BUG FIX] Web GUI “wan.html” shows error if PPPoE pass through is selected “Yes”.

Appendix 1: ZyXEL F/W Upgrade Tool

Network Environment:

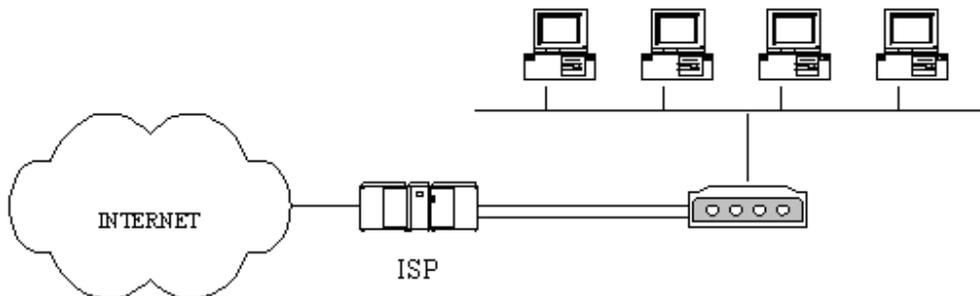
1. Prestige Modem Series

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.

Annex A 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	PPP Related Command	Bridge Related Command
Radius Related Command	8021x Related Command	Firewall Related Command
Vantage Related Command		

System Related Command

[Home](#)

Command			Description
sys			
	adjtime		retrive date and time from Internet
	cbuf		
	display	[a f u]	display cbuf a: all f: free u: used
	cnt		cbuf static
		display	display cbuf static
		clear	clear cbuf static
	baud	<1..5>	change console speed
	callhist		
	display		display call history
	remove	<index>	remove entry from call history
	clear		clear the counters in GUI status menu
	countrycode	[countrycode]	set country code
	date	[year month date]	set/display date
	domainname		display domain name
	edit	<filename>	edit a text file
	enhanced		return OK if commands are supported for PWC purposes
	errctl	[level]	set the error control level 0:crash no save,not in debug mode (default) 1:crash no save,in debug mode 2:crash save,not in debug mode 3:crash save,in debug mode
	event		
	display		display tag flags information
	trace		display system event information
		display	display trace event
		clear <num>	clear trace event
	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
	fid		
	display		display function id list
	firmware		display ISDN firmware type
	hostname	[hostname]	display system hostname
	iface		

ZyXEL Confidential

	disp	[#]	display iface list
isr		[all used free]	display interrupt service routine
interrupt			display interrupt status
log			
	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
		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
mbuf			
	cnt		
		disp	display system mbuf count
		clear	clear system mbuf count
	link	link	list system mbuf link
	pool	<id> [type]	list system mbuf pool
	status		display system mbuf status
	disp	<address>	display mbuf status
	debug	[on off]	
memory		<address> <length>	display memory content

ZyXEL Confidential

	memwrite		<address> <len> [data list ...]	write some data to memory at <address>
	memwl		<address>	write long word to memory at <address>
	memrl		<address>	read long word at <address>
	memutil			
		usage		display memory allocate and heap status
		mqueue	<address> <len>	display memory queues
		mcell	mid [f u]	display memory cells by given ID
		msecs	[a f u]	display memory sections
		mtstart	<n-mcell>	start memory test
		mtstop		stop memory test
		mtalloc	<size> [n-mcell]	allocate memory for testing
		mtfree	<start-idx> [end-idx]	free the test memory
	model			display server model name
	proc			
		display		display all process information
		stack	[tag]	display process's stack by a give TAG
		pstatus		display process's status by a give TAG
	queue			
		display	[a f u] [start#] [end#]	display queue by given status and range numbers
		ndisp	[qid]	display a queue by a given number
	quit			quit CI command mode
	reboot		[code]	reboot system code = 0 cold boot, = 1 immediately boot = 2 bootModule debug mode
	reslog			
		disp		display resources trace
		clear		clear resources trace
	stdio		[second]	change terminal timeout value
	time		[hour [min [sec]]]	display/set system time
	timer			
		disp		display timer cell
		trace	[on off]	set/display timer information online
		start	[tmValue]	start a timer
		stop	<ID>	stop a timer
	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

ZyXEL Confidential

	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
server			
	access	<telnet ftp web icmp snmp dns> <value>	set server access type
	load		load server information
	disp		display server information
	port	<telnet ftp web snmp> <port>	set server port
	save		save server information
	secureip	<telnet ftp web icmp snmp dns> <ip>	set server secure ip addr
spt			
	dump		dump spt raw data
		root	dump spt root data
		rn	dump spt remote node data
		user	dump spt user data
		slot	dump spt slot data
	save		save spt data
	size		display spt record size
	clear		clear spt data
cmgr			
	trace		
		disp <ch-name>	show the connection trace of this channel
		clear <ch-name>	clear the connection trace of this channel
	cnt	<ch-name>	show channel connection related counter
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
	version		see ethernet device type
	pkttest		
		disp	
		packet <level>	set ether test packet display level
		event <ch> [on/off]	turn on/off ether test event display
		sap [ch_name]	send sap packet
		arp <ch_name> <ip-addr>	send arp packet to ip-addr
		mem <addr> <data> [type]	write memory data in address
	test	<ch_id> <test_id> [arg3] [arg4]	do LAN test
	pncconfig	<ch_name>	do pnc config
	mac	<src_ch> <dest_ch> <ipaddr>	fake mac address

WAN Related Command

[Home](#)

Command			Description
wan	adsl	bert	ADSL ber
		chandata	ADSL channel data, line rate
		close	Close ADSL line
		coding	ADSL standard current
		ctrleint	ADSL CTRLLE response command
		defbitmap	ADSL defect bitmap status
		dyinggasp	Send ADSL dyinggasp
		fwav	Test the ADSL F/W available ping
		fwdl	Download modem code, but must reset first
		linedata	
		near	Show ADSL near end noise margin
		far	Show ADSL far end noise margin

ZyXEL Confidential

		open		Open ADSL line
		opencmd		Open ADSL line with specific standard
		opmode		Show the operational mode
		perfdata		Show performance information,CRC,FEC, error seconds..
		rdata	[start] [length]	Read DSP CTRL registers 512 bytes
		reset		Reset ADSL modem, and must reload the modem code again
		selftest		
			long	ADSL long loop test
			short	ADSL short loop test
		status		ADSL status (ex: up, down or wait for init)
		version		ADSL version information
		vendorid		ADSL vendor information
		utopia		Show ADSL utopia information
		cellcnt		Show ADSL cell counter
		display		
			shutdown	Show the counter of rate adaptive mechanism happening
			rateup	Show real status that rate adaptive mechanism happened
		rateadap	[on off]	Turn on/off rate adaptive mechanism
		dumpcondition	[on off]	Turn on/off online debug information of rate adaptive mechanism
		sampletime	[mins]	Tune the sample time of rate adaptive mechanism
		noisegt	[dB]	if noise margin is 3db greater than before, and rate is worse than before, then system will do “L1 shutdown RA3”, default is 3db
		noisemargin	[dB]	if noise margin is greater than this value, and rate is worse than before, then system will do “L1 shutdown RA3”, default is 8db
		persisttime	[time]	when the adaptive condition is matched system will continue to monitor the time period “persisttime” before doing “L1 shutdown RA3”, default is 30 seconds
		timeinterval	[mins]	when “L1 shutdown RA3” is done twice, and still can’t reach the max rate which system recorded, it will delay a time period that the period base time is”timeinterval” before starting again. The time-based default is 2 hrs
		defectcheck	[on off]	Turn on/off detect table checking, default is on
		txgain	[value]	Set the CTRL register (0xc3), the value is from 0xfa to 0x06
		targetnoise	[value]	Set the CTRL register (0xc4), the value is from 0xfa to 0x06
		maxtonelimit	[value]	Set the CTRL register (0xc5), the value is from 0xfa to 0x06
		rxgain	[value]	Set the CTRL register (0xc6), the value is from 0xfa to 0x06
		txoutputpwr	[value]	Set the CTRL register (0xc7), the value is from 0xfa to 0x06
		rxoutputpwr	[value]	Set the CTRL register (0xc8), the value is from 0xfa to 0x06
		maxoutputpwr	[value]	Set the CTRL register (0xc9), the value is from

ZyXEL Confidential

				0xfa to 0x06
		errorsecond		
			sendes	Send current error second information immediately
		dygasprecover		
		dygasprecover	level [value]	By default is 100, after receiving 100 dying gasp system will reboot
		dygasprecover	active [on/off]	Turn on/off this mechanism
		rsploss	[1 0]	Turn on means to response signal loss of CTRL E immediately, default is off
	atm	test	[fix rand period oam loopback]	Generate ATM traffic
	hwsar	disp		Display hwsar packets incoming/outgoing information
		clear		Clear hwsar packets information

WLAN Related Command

[Home](#)

Command			Description
wlan			
	version		Show WLAN AP F/W version

IP Related Command

[Home](#)

Command			Description
ip			
	address	[addr]	display host ip address
	loopbackaddr	<IP1> [IP2]	Set loopback address.
	alias	<iface>	alias iface
	aliasdis	<0 1>	disable alias
	arp		
	status	<iface>	display ip arp status
	add	<hostid> ether <ether addr>	add arp information
	resolve	<hostid>	resolve ip-addr
	drop	<hostid> [hardware]	drop arp
	flush		flush arp table
	publish		add proxy arp
	dhcp	<iface>	
	client		
		release	release DHCP client IP
		renew	renew DHCP client IP
	mode	<server relay none client>	set dhcp mode
	relay	server <serverIP>	set dhcp relay server ip-addr
	reset		reset dhcp table
	server		
		probecount <num>	set dhcp probe count
		dnsserver <IP1> [IP2] [IP3]	set dns server ip-addr
		winsserver <winsIP1> [<winsIP2>]	set wins server ip-addr
		gateway <gatewayIP>	set gateway
		hostname <hostname>	set hostname
		initialize	fills in DHCP parameters and initializes (for PWC purposes)
		leasetime <period>	set dhcp leasetime
		netmask <netmask>	set dhcp netmask
		pool <startIP> <numIP>	set dhcp ip pool

ZyXEL Confidential

		renewaltime <period>	set dhcp renew time
		rebindtime <period>	set dhcp rebind time
		reset	reset dhcp table
		server <serverIP>	set dhcp server ip for relay
		dnsorder [router isp]	set dhcp dns order
	status	[option]	show dhcp status
	static		
		delete <num> all	delete static dhcp mac table
		display	display static dhcp mac table
		update <num> <mac> <ip>	update static dhcp mac table
dns			
	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
ifdrop		<iface>	chaek if iface is available.
ping		<hostid>	ping remote host
pong		<hostid> [<size> <time-interval>]	pong 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
	errcnt		
		disp	display routing statistic counters
		clear	clear routing statistic counters
status			display ip statistic counters
adjTcp		<iface> [<mss>]	adjust the TCP mss of iface
udp			
	status		display udp status
rip			

ZyXEL Confidential

		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
		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
	samenet		<iface1> [<iface2>]	display the ifaces that in the same net
	uninet		<iface>	set the iface to uninet
	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
	antiprobe		<0 1> 1:yes 0:no	set ip anti-probe flag
	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			

ZyXEL Confidential

		clear		clear ip pr table counter information
		disp		dump ip pr table counter information
		switch		turn on/off ip pr table counter flag
	nat			
		timeout		
			gre [timeout]	set nat gre timeout value
			iamt [timeout]	set nat iamt timeout value
			generic [timeout]	set nat generic timeout value
			reset [timeout]	set nat reset timeout value
			tcp [timeout]	set nat tcp timeout value
			tcpother [timeout]	set nat tcp other timeout value
		update		create nat system information from spSysParam
		iamt		display nat iamt information
		iface	<iface>	show nat status of an interface
		lookup	<rule set>	display nat lookup rule
		new-lookup	<rule set>	display new nat lookup rule
		loopback	[on/off]	turn on/off nat loopback flag
		reset	<iface>	reset nat table of an iface
		server		
			disp	display nat server table
			load <set id>	load nat server information from ROM
			save	save nat server information to ROM
			clear <set id>	clear nat server information
			edit active <yes/no>	set nat server edit active flag
			edit svrport <start port> [end port]	set nat server server port
			edit intport <start port> [end port]	set nat server forward port
			edit remotehost <start ip> [end ip]	set nat server remote host ip
			edit leasetime [time]	set nat server lease time
			edit rulename [name]	set nat server rule name
			edit forwardip [ip]	set nat server server ip
			edit protocol [protocol id]	set nat server protocol
		service		
			irc [on/off]	turn on/off irc flag
		resetport		reset all nat server table entries
		incikeport	[on/off]	turn on/off increase ike port 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 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

ZyXEL Confidential

				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 minutes
				- 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
		rmAddrEndMask	<IP>	Set remote end address or mask
		rmPortStart	<port>	Set remote start port
		rmPortEnd	<port>	Set remote end port

ZyXEL Confidential

		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

PPP Related Command

[Home](#)

Command			Description
ppp			
	autotrigger		
		on	<remoteNodeIndex> turn on packet trigger, default is enable
		off	<remoteNodeIndex> turn off packet trigger
		status	show autotrigger status
	retry		<interval> adjust PPP retrial interval

Bridge Related Command

[Home](#)

Command			Description
bridge			
	mode		<1/0> (enable/disable) turn on/off (1/0) LAN promiscuous mode
	blt		related to bridge local table
		disp	<channel> display blt data
		reset	<channel> reset blt data
		traffic	display local LAN traffic table
		monitor	[on off] turn on/off traffice monotor. Default is off.
		time	<sec> set blt re-init interval
	brt		related to bridge route table
		disp	[id] display brt data
		reset	[id] reset brt data
	cnt		related to bridge routing statistic table
		disp	display bridge route counter

ZyXEL Confidential

		clear		clear bridge route counter
	stat			related to bridge packet statistic table
		disp		display bridge route packet counter
		clear		clear bridge route packet counter
	disp			display bridge source table

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](#)

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		
		tcprst		
			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

Vantage Related Command

[Home](#)

Command				Description
---------	--	--	--	-------------

ZyXEL Confidential

cnm	active	[0/1/2]		Display or set the CNM features to enable or disable . 0: disable 1: enable CNM features and communicate through WAN interface. 2: enable CNM features and communicate through WAN/LAN interfaces.
	sgid			Display sgid which is the unique ID of the device in Vantage.
	managerIP	[addr]		Display or set the IP of Vantage server/COMServer which manage this device. [addr] specifies the IP of the Vantage serve/COMServer.
	debug	[0/1/2/3<addr>/4<addr>]		Display or set the way of outputting CNM debug messages. 0: disable debug messages. 1: output the debug messages to console and can accept SGMP inquire message only after the device is registered to Vantage server. 2: output the debug message to console and accept SGMP inquire message even if the device is not registered to Vantage server. 3: output the debug messages to console and a remote server to log debug messages. 4: output the debug messages to a remote log server only and no console output.
	reset			Reset the state machine of SGMP and return to the state of SGMP_STATE_UNKNOWN. Device will re-register to Vantage server if CNM is active.
	encrykey	[string]		Display or set encryption key. [string] specifies the encryption key. to be set. Key length can not less than 8 alphanumeric characters long, if ecrymode is DES. Key length can not less than 24 alphanumeric characters long, if ecrymode is 3DES.
	encrymode	[0/1/2]		Display or set the encryption mode for SGMP messages. [0:NONE /1:DES/2:3DES] specifies the encryption mode to be set.