



Firmware Release Note

P-2302HWL-P1

Standard Version

Release 3.60(AJB.0)C0

Date: August 9, 2006
Author: Chun Hsing Chien

ZyXEL P-2302HWL-P1 Standard Version

Release 3.60(AJB.0)C0

Release Note

Date: August 9, 2006

Supported Platforms:

ZyXEL P-2302HWL-P1

Versions:

ZyNOS Version: V3.60(AJB.0) | 08/09/2006 15:44:28

Bootbase Version: V1.03 | 04/10/2006 11:52:50

Notes:

1. Bootbase version V1.03.
2. Support Trunking. (DTMF Mode=SIP_INFO and Compression Type codec=G.729)
3. Support Do Not Disturb.
4. Support Bandwidth Management.
5. Support 802.11BG mode.
6. Support Multiboot 2.3
7. Enable quick route by default.

Features:

Modification in V 3.60(AJB.0) | 08/09/2006

1. Change to FCS version.

Modification in V 3.60(AJB.0)b8 | 08/04/2006

[Bug Fix]

2. [SPR: 060713764] Sometimes DUT can not receive alerting tone when hop off with Auto Attendant.
3. [SPR: 060713765] Sometimes DUT can not receive alerting tone when hop on with Auto Attendant and DUT will reboot abnormally.
4. [SPR: 060728931] UPnP device name is incorrect.

Modification in V 3.60(AJB.0)b7 | 07/26/2006

[Bug Fix]

1. [SPR: 060711581] Wizard spoof WAN MAC address problem.
2. [SPR: 060712677] Failure rate is too high when test Continuous VoIP call with G.711 Codec by using SIP1 account with data traffic.
3. [SPR: 060718151] Can't enable "Maximize bandwidth usage" of Bandwidth MGMT on WAN interface.
4. [SPR: 060718153] Don't Modify and disable service at Wizard .
5. [SPR: 060718155] Using BM Wizard to create subclass and delete, the default class

quantity will not increase.

6. [SPR: 0607181601] Sometimes occur to lose DTMF key in Taiwan's phone.

Modification in V 3.60(AJB.0)b6 | 07/07/2006

[Bug Fix]

1. [SPR: 060413901] DUT hang up frequently during FW testing.
2. [SPR: 060503168] IGMP-V2 don't work correctly
3. [SPR: 060313996] Voice quality is very poor with G.729 and G.711 Codec when sending heavy traffic on LAN port.
4. [SPR: 060413890] Packets can not send and receive after Long VoIP conversation.
5. [SPR: 060413858] SmartBit throughput test got failure.
6. [SPR: 060314078] When DUT power on, PSTN phone will be dropped.
7. [SPR: 060502043] Trigger port can't work rule2 ~ rule12.
8. Remove Help Icon temporarily since there P2302HWL does not support Web Help at this moment.

Modification in V 3.60(AJB.0)b5 | 04/27/2006

[Bug Fix]

9. [SPR: 060310918] Remove Preamble configuration in GUI.
10. [SPR: 060313994] Load default configuration from e/WC, Wireless security="Static WEP" and passphrase=1, then you will see the channel change to ch1.
11. [SPR: 060313996] The "passphrase" and "generate button" are not grayed when security mode is WEP Encryption to 256bit.
12. [SPR: 060411652] The picture of Internet Detection don't display in Wizard.
13. [SPR: 060411647] Wireless Security item "802.1x" should be removed in GUI.
14. [SPR: 060412804] After doing Blind Transfer, DUT-A generate dial tone with noise in background.
15. [SPR: 060412739] Exception will happen while we change the wireless setting from WPA-PSK to WPA.
16. [SPR: 060412674] The LED of "Internet" doesn't meet the PS definition.
17. [SPR: 060413892] Don't make call after unplug DUT WAN cable during ringing on VoIP call
18. [SPR: 060413856] In debug mode: ATBR failed to restore to default setting. It needs to re-upload the RAS code.
19. [SPR: 060413899] Disable CallerID, DUT can not terminate a VoIP call.
20. [SPR: 060413903] DUT work as bridge during initial boot up process.
21. [SPR: 060413904] DUT maintain only one STUN setting in SIP1, change any setting on SIP1's STUN setting will affect SIP2's stun setting.
22. [SPR: 060310898] On PPPoE connection mode to configure First DNS server from ISP to none and Second DNS server from none to ISP, all traffic can't go out.
23. Turn on watch dog timer by default.
24. DUT can not work properly when entering a flash key during a PSTN call.

Modification in V 3.60(AJB.0)b4 | 04/10/2006

[Bug Fix]

25. [SPR: 060310913] OTIST function can not work properly.
26. [SPR: 060309829] IGMP-v1 does not work.

ZyXEL Confidential

- 27. [SPR: 060309830] IGMP-v2 does not work.
- 28. [SPR: 060328365] WAN don't get IP address from DHCP server when enable Spoof WAN MAC address
- 29. Remove 802.11a function in GUI.
- 30. Extend ROM file to 112 Kbytes. (Please update bootbase.bin and restore to default setting)
- 31. [SPR:060314080]DTMF lost on PSTN call.

Modification in V 3.60(AJB.0)b3 | 03/30/2006

[Bug Fix]

- 32. [SPR: 060310913] OTIST function can not work properly.
- 33. [SPR: 060309829] IGMP-v1 does not work.
- 34. [SPR: 060309830] IGMP-v2 does not work.
- 35. [SPR: 060328365] WAN don't get IP address from DHCP server when enable Spoof WAN MAC address

Modification in V 3.60(AJB.0)b2 | 03/26/2006

[Bug Fix]

- 36. [SPR: 060308696] Can not get the WAN MAC Address
- 37. [SPR: 060308702] Step1: Edit Web/Go Wizard setup/Apply/Connection Wizard
Step2: WAN MAC address/Choose "Spoof this computer's MAC address"/IP address =192.168.1.33/Next/Apply. Message : Can not get the WAN MAC Address
- 38. [SPR: 060309826] Bandwidth Management can't work.
- 39. [SPR: 060309827] SNMP can't work on GUI.
- 40. [SPR: 060310910]The default "setup key" of OTIST is "01234567" , not null
- 41. [SPR: 060310912]From the wizard, configure wireless security mode =auto and enable OTIST function and setup key="01234567", after all process finished , the OTIST count down page only show 1 sec. In general, it counts down from 180 sec.
- 42. [SPR: 060310913]From the wizard, configure wireless security mode =auto ,enable OTIST function and setup key="01234567",after OTIST count down page ,all process finished, configure wireless setting from Network/wireless , it will show the message" Auto Security in process ,but I think the OTIST function doesn't work well
- 43. [SPR: 060310916]Can't keep the 802.11a mode after device reboot.
- 44. [SPR: 060310917]Channel change cause to wireless mode change.
- 45. [SPR: 060310919]Ethernet PC can't ping to DUT.
- 46. [SPR: 060313985]"Reset" button can't work in GUI.
- 47. [SPR: 060313990]Ethernet PC can't ping to DUT.
- 48. [SPR: 060313997]Load default first, from e/WC, Network/Wireless, configure wireless security=WPA ,802.1X or WPA2 ,one wireless station connect to DUT,when configure any setting ,device exception.
- 49. [SPR: 060313003]802.11a mode can't work well.
- 50. [SPR: 060314056]802.11a and 802.11g all can't pass PQA criteria .
- 51. [SPR: 060314074]Voice quality is very poor with G.711 codec on Phone 1.
- 52. [SPR: 060314075]DTMF lost with SIP INFO mode on codec is G.729 and G.711.
- 53. [SPR: 060314077]DUT can't display CLID from PSTN CO simulator.
- 54. [SPR: 060314079]DUT can't receive FAX through G.729 codec.

ZyXEL Confidential

- 55. [SPR: 060314080]DTMF lost on PSTN call.
- 56. [SPR: 060314081]DUT receive two kinds of busy tone when dial own PSTN number and disable Trunking.
- 57. [SPR: 060314083]DUT don't generate secondary dial tone when DUT-A press FLASH after DUT-A and DUT-B are in conversation.
- 58. [SPR: 060314084] "hop on" with Auto Attendant can not work correctly.
- 59. [SPR: 060314085] "hop off" with Auto Attendant can not work correctly.
- 60. [SPR: 060309829] IGMP-v1 does not work.
- 61. [SPR: 060309830] IGMP-v2 does not work.

Modification in V 3.60(AJB.0)b1 | 03/03/2006

First release for P2302HWL-P1 Standard Version

Annex A CI Command List

Command Class List Table		
System Related Command	Exit Command	Device Related Command
Ethernet Related Command	POE Related Command	PPTP Related Command
Configuration Related Command	IP Related Command	ppp
dsp	voice	

System Related Command

[Home](#)

Command				Description
sys				
	adjtime			retrive date and time from Internet
	callhist			
		display		display call history
		remove	<index>	remove entry from call history
	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> <1 st phone num> [2 nd 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
	hostname		[hostname]	display system hostname
	logs			

ZyXEL Confidential

		category		
			access [0:none/1:log/2:alert/3:both]	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/2:alert/3:both]	record the access control logs
			ike [0:none/1:log/2:alert/3:both]	record the access control logs
			javablocked [0:none/1:log]	record the java etc. blocked 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	[access attack error ipsec ike javablocked mten urlblocked urlforward]	display all logs or specify category 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

ZyXEL Confidential

			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
	log			
		clear		clear log error
		disp		display log error
		online	[on/off]	turn on/off error log online display
		resolve		Resolve mail server and syslog server address
	mbuf			
		link	link	list system mbuf link
		pool	<id> [type]	list system mbuf pool
		status		display system mbuf status
		disp	<address>	display mbuf status
		cnt		
			disp	display system mbuf count
			clear	clear system mbuf count
		debug	[on/off]	

ZyXEL Confidential

	pwderrtm		[minute]	Set or display the password error blocking timeout value.
	rn			
		load	<entry no.>	load remote node information
		disp	<entry no.>(0:working buffer)	display remote node information
		nat	<none sua full_feature>	config remote node nat
		nailup	<no yes>	config remote node nailup
		mtu	<value>	set remote node mtu
		save	[entry no.]	save remote node information
	smt			not support in this product
	stdio		[minute]	change terminal timeout value
	time		[hour [min [sec]]]	display/set system time
	trcdisp			monitor packets
	trclog			
	trcpacket			
	syslog			
		server	[destIP]	set syslog server IP address
		facility	<FacilityNo>	set syslog facility
		type	[type]	set/display syslog type flag
		mode	[on off]	set syslog mode
	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			

ZyXEL Confidential

		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
	fwnotify			
		load		load fwnotify entry from spt
		save		save fwnotify entry to spt
		url	<url>	set fwnotify url
		days	<days>	set fwnotify days
		active	<flag>	turn on/off fwnotify flag
		disp		display firmware notify information
		check		check firmware notify event
		debug	<flag>	turn on/off firmware notify debug flag
	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			
		netbios		
	roadrunner			
		debug	<level>	enable/disable roadrunner service 0: diable <default> 1: enable

ZyXEL Confidential

		display	<iface name>	display roadrunner information iface-name: enif0, wanif0
		restart	<iface name>	restart roadrunner
	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
	filter			
		netbios		
	upnp			
		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
		display		display upnp information
		firewall	[0:deny/1:pass]	Allow UPnP to pass through Firewall.
		load		save upnp information
		save		save upnp information

Exit Command

[Home](#)

Command				Description
exit				exit smt menu

Ethernet Related Command

[Home](#)

Command				Description
ether				
	config			display LAN configuration information

ZyXEL Confidential

	driver			
		cnt		
			disp <name>	display ether driver counters
		ioctl	<ch_name>	Useless in this stage.
		status	<ch_name>	see LAN status
	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
	debug			
		disp	<ch_name>	display ethernet debug infomation
		level	<ch_name> <level>	set the ethernet debug level level 0: disable debug log level 1:enable debug log (default)
	edit			
		load	<ether no.>	load ether data from spt
		mtu	<value>	set ether data mtu
		accessblock	<0:disable 1:enable>	block internet access
		save		save ether data to spt

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

ZyXEL Confidential

		ctrlint		ADSL CTRL 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
		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 ersisttime_ before doing 1 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

ZyXEL Confidential

				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 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 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

IP Related Command

[Home](#)

Command				Description
ip				
	address		[addr]	display host ip address
	alias		<iface>	alias iface
	aliasdis		<0 1>	disable alias
	arp			
		status	<iface>	display ip arp status
	dhcp		<iface>	
		client		
			release	release DHCP client IP
			renew	renew DHCP client IP
		status	[option]	show dhcp status
	dns			
		query		

ZyXEL Confidential

		server	<primary> [secondary] [third]	set dns server
		stats		
			clear	clear dns statistics
			disp	display dns statistics
	httpd			
	icmp			
		status		display icmp statistic counter
		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
	smtp			
	status			display ip statistic counters
	stroute			
		display	[rule # buf]	display rule index or detail message in rule.
		load	<rule #>	load static route rule in buffer
		save		save rule from buffer to spt.
		config		
			name <site name>	set name for static route.
			destination <dest addr>[/<bits>]	set static route destination address and gateway.

ZyXEL Confidential

			<gateway> [<metric>]	
			mask <IP subnet mask>	set static route subnet mask.
			gateway <IP address>	set static route gateway address.
			metric <metric #>	set static route metric number.
			private <yes no>	set private mode.
			active <yes no>	set static route rule enable or disable.
	traceroute		<host> [ttl] [wait] [queries]	send probes to trace route of a remote host
	xparent			
		join	<iface1> [<iface2>]	join iface2 to iface1 group
		break	<iface>	break iface to leave ipxparent group
	ave			anti-virus enforce
	urlfilter			
		reginfo		
			display	display urlfilter registration information
			name	set urlfilter registration name
			eMail <size>	set urlfilter registration email addr
			country <size>	set urlfilter registration country
			clearAll	clear urlfilter register information
		category		
			display	display urlfilter category
			webFeature [block/nonblock] [activex/java/cookei/webproxy]	block or unblock webfeature
			logAndBlock [log/logAndBlock]	set log only or log and block
			blockCategory [block/nonblock] [all/type(1-14)]	block or unblock type
			timeOfDay [always/hh:mm] [hh:mm]	set block time
			clearAll	clear all category information
		listUpdate		

ZyXEL Confidential

			display	display listupdate status
			actionFlags [yes/no]	set listupdate or not
			scheduleFlag [pending]	set schedule flag
			dayFlag [pending]	set day flag
			time [pending]	set time
			clearAll	clear all listupdate information
		exemptZone		
			display	display exemptzone information
			actionFlags [type(1-3)][enable/disable]	set action flags
			add [ip1] [ip2]	add exempt range
			delete [ip1] [ip2]	delete exempt range
			clearAll	clear exemptzone information
		customize		
			display	display customize action flags
			logFlags [type(1-3)][enable/disable]	set log flags
			add [string] [trust/untrust/keyword]	add url string
			delete [string] [trust/untrust/keyword]	delete url string
			clearAll	clear all information
		logDisplay		display cyber log
		ftplist		update cyber list data
		listServerIP	<ipaddr>	set list server ip
		listServerName	<name>	set list server name
	tredir			
		failcount	<count>	set tredir failcount
		partner	<ipaddr>	set tredir partner
		target	<ipaddr>	set tredir target

ZyXEL Confidential

		timeout	<timeout>	set tredir timeout
		checktime	<period>	set tredir checktime
		active	<on off>	set tredir active
		save		save tredir information
		disp		display tredir information
		debug	<value>	set tredir debug value
	nat			
		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
			edit clear	clear one rule in the set
		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
	igmp			

ZyXEL Confidential

		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> v1compat [on off]	turn on/off v1compat on iface
		robustness	<num>	set igmp robustness variable
		status		dump igmp status
	stun			
		status		Display the STUN Client ON/OFF
		display		Display the Stun Clinet information
		debug	0:disable 1:keep line 2:nat type 4:nat lifetime 8: status 255: all	
		send	1: shared request 2: binding request	Select send 1.TCP(no support) or 2.UDP packets
		keepline	1:enable 0:disable	ON/OFF STUN keepline
		t4		RD debug use
		t5		RD debug use
	pr			

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

Configuration Related Command

[Home](#)

Command					Description
config					The parameters of config are listed below.
edit	firewall	active <yes no>			Activate or deactivate the saved firewall settings
retrieve	firewall				Retrieve current saved firewall settings
save	firewall				Save the current firewall settings
display	firewall				Displays all the firewall settings
		set <set#>			Display current entries of a set configuration; including timeout values, name, default-permit, and number of rules in the set.
		set <set#>	rule <rule#>		Display current entries of a rule in a set.
		attack			Display all the attack alert settings in PNC
		e-mail			Display all the e-mail settings in PNC
		?			Display all the available sub commands
		e-mail	mail-server <mail server IP>		Edit the mail server IP to send the alert
			return-addr <e-mail address>		Edit the mail address for returning an email alert
			e-mail-to <e-mail address>		Edit the mail address to send the alert
			policy <full hourly daily weekly>		Edit email schedule when log is full or per hour, day, week.
			day <sunday monday tuesday wednesday thursday friday		Edit the day to send the log when the email policy is set to Weekly

			saturday>		
			hour <0~23>		Edit the hour to send the log when the email policy is set to daily or weekly
			minute <0~59>		Edit the minute to send to log when the email policy is set to daily or weekly
			Subject <mail subject>		Edit the email subject
		attack	send-alert <yes no>		Activate or deactivate the firewall DoS attacks notification emails
			block <yes no>		Yes: Block the traffic when exceeds the tcp-max-incomplete threshold
					No: Delete the oldest half-open session when exceeds the tcp-max-incomplete threshold
			block-minute <0~255>		Only valid when sets 'Block' to yes. The unit is minute
			minute-high <0~255>		The threshold to start to delete the old half-opened sessions to minute-low
			minute-low <0~255>		The threshold to stop deleting the old half-opened session
			max-incomplete-high <0~255>		The threshold to start to delete the old half-opened sessions to max-incomplete-low
			max-incomplete-low <0~255>		The threshold to stop deleting the half-opened session
			tcp-max-incomplete <0~255>		The threshold to start executing the block field
		set <set#>	name <desired name>		Edit the name for a set
			default-permit <forward block>		Edit whether a packet is dropped or allowed when it does not match the default set
			icmp-timeout <seconds>		Edit the timeout for an idle ICMP session before it is terminated
			udp-idle-timeout <seconds>		Edit the timeout for an idle UDP session before it is terminated
			connection-timeout <seconds>		Edit the wait time for the SYN TCP sessions before it is terminated
			fin-wait-timeout <seconds>		Edit the wait time for FIN in concluding a TCP session before it is terminated
			tcp-idle-timeout		Edit the timeout for an idle TCP session before it

			<seconds>		is terminated
			pnc <yes no>		PNC is allowed when 'yes' is set even there is a rule to block PNC
			log <yes no>		Switch on/off sending the log for matching the default permit
			rule <rule#>	permit <forward block>	Edit whether a packet is dropped or allowed when it matches this rule
				active <yes no>	Edit whether a rule is enabled or not
				protocol <0~255>	Edit the protocol number for a rule. 1=ICMP, 6=TCP, 17=UDP...
				log <none match not-match both>	Sending a log for a rule when the packet none matches not match both the rule
				alert <yes no>	Activate or deactivate the notification when a DoS attack occurs or there is a violation of any alert settings. In case of such instances, the function will send an email to the SMTP destination address and log an alert.
				srcaddr-single <ip address>	Select and edit a source address of a packet which complies to this rule
				srcaddr-subnet <ip address> <subnet mask>	Select and edit a source address and subnet mask if a packet which complies to this rule.
				srcaddr-range <start ip address> <end ip address>	Select and edit a source address range of a packet which complies to this rule.
				destaddr-single <ip address>	Select and edit a destination address of a packet which complies to this rule
				destaddr-subnet <ip address> <subnet mask>	Select and edit a destination address and subnet mask if a packet which complies to this rule.
				destaddr-range <start ip address> <end ip address>	Select and edit a destination address range of a packet which complies to this rule.
				tcp destport-single <port#>	Select and edit the destination port of a packet which comply to this rule. For non-consecutive port numbers, the user may repeat this command line to enter the multiple port numbers.
				tcp destport-range <start port#> <end port#>	Select and edit a destination port range of a packet which comply to this rule.
				udp destport-single <port#>	Select and edit the destination port of a packet which comply to this rule. For non-consecutive port numbers, users may repeat this command line to enter the multiple port numbers.

ZyXEL Confidential

				udp destport-range <start port#> <end port#>	Select and edit a destination port range of a packet which comply to this rule.
				desport-custom <desired custom port name>	Type in the desired custom port name
delete	firewall	e-mail			Remove all email alert settings
		attack			Reset all alert settings to defaults
		set <set#>			Remove a specified set from the firewall configuration
		set <set#>	rule <rule#>		Remove a specified rule in a set from the firewall configuration
insert	firewall	e-mail			Insert email alert settings
		attack			Insert attack alert settings
		set <set#>			Insert a specified rule set to the firewall configuration
		set <set#>	rule <rule#>		Insert a specified rule in a set to the firewall configuration
cli					Display the choices of command list.
debug	<1 0>				Turn on/off trace for firewall debug information.

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		

ZyXEL Confidential

			triangle	Set if firewall ignore triangle route in lan/wan/dmz/wlan

Dsp Related Command

[Home](#)

Command				Description
dsp				
phonetest			1 or 0	
ringtest			[ID] [Item]	
slic_dump			[tcid:0/1]	
spylevel			0: General Info 1: Entering Function 2: Normal and Expected Event 3: Minor Unexpected Event 4: Major Unexpected Event 5: Fatal Error 6: Turn off Spy	Set spy level
companding			1: A Law 2: Mu Law 3: Linear	Set current companding
tonetest			[ID] [Number]	
toneadjust				
	cadence		cadence <0:Continuous 2> [On Time (ms)] [Off Time (ms)]	
	coeff		coeff <coeff 1> [coeff 2]	
	level		level <Amp>	
	dumpCfg			
	test		test [ID]	
initstatus				Display the DSP initstatus
dspi			show [<image_id> <level>]	
dim				
	opt		<opt_value>	Set a DSP Option
	ver			Display DSP version information
	stats		<dsp> [clear] <dsp> <chan> [clear]	Display/Clear Dsp Stats Display/Clear Channel Stats
	dump		<dsp> <offset (hex)> <length (decimal - words)>	
	silence		<tcid>	

ZyXEL Confidential

	cfg			Dim Config info
	pcm_trace		<tcid> <on> [on_count] [off_count] <tcid> <off>	Turn on PCM sample trace Turn off PCM sample trace
	poll_stats			Dim poll period stats
	set_poll		<msecs>	Set the DIM poll period manually
	gsync		<tcid> <msecs>	Send grant sync to DSP
	set_voice_poll		<on off>	Enable/disable voice pkt polling
fxs				
	reg		<tcid> <regnum> [<regval>]	Display/Set direct register
	ireg		<tcid> <regnum> [<regval>]	Display/Set indirect register
	power			Display Power up status
	calib			Display Calibration status
fxop				SI3050 ProSLIC Commands
cc			<command>	
	aer			
	all			Display all of cc command
	assoc		<tcid> <dsp> <chan>	
	bisil		<tcid> <on off> <thresh> <det_time>	Clear channel mode
	cid_gen		<tcid><call_waiting(on off)><sdmf mdmf euro><calling_number(1-24)><calling_name(1-15)>	Close channel
	cid_detect		<tcid><CIDMod(nal jp eu)><call_waiting(on off)>	
	cid_deact		<tcid>	
	clear		<tcid>	Set coding rate
	close		<tcid>	
	companding		<tcid> <alaw mulaw linear default>	
	connect		<tcid_in> <0=pcm, 1=packet> <tcid_out> <0=pcm, 1=packet>	
	digitm			Download dsp image
	digitr			Display profiles
	disconnect		<tcid_in> <0=pcm, 1=packet> <tcid_out> <0=pcm, 1=packet>	Get dsp version
	disassoc		<tcid>	
	dnld		<dsp> <image_id>	

ZyXEL Confidential

	dp		[voice #] <prof#>	Display profiles
	dspver		<dsp>	
	ec		<tcid> <on off> [nlp_on nlp_off][nlp_agr <-32768 to 32767>]	Encryption control
			[send_cng_force send_cng_def][cn_adapt cn_fix] [noise_lev <noise(dB)>]	encryption_key_def
			[cn_config <0 to 32767>] [4w_on 4w_off] [rst_coeff keep_coeff]	stat_req_error
			[ec_upd ec_frz][au_on au_off][srch_on srch_frz][mips_on mips_off]	Fax mode
			[nlp_norm_on nlp_norm_off][tail_len <tail_len_value(ms)>]	stat_req_fax
			[cfg_bits <hex (default 0x0040)>]	Mute the channel
	ec_coeff		<tcid> <filter:0=background,1=foreground,2=search filter><start idx [0,N-1]> <no_coeffs>	
	ecdbg		<tcid> <clear:0=no,1=yes>	
	encr_ctrl		<tcid> <setup mac_off> <params>	
	encr_key		<tcid> <rc4 mmh> <tx rx> <key_str>	
	errstat		<tcid> <clear:0=no,1=yes>	Read dsp memory
	faxm		<tcid>	
	faxstat		<tcid> <clear:0=no,1=yes>	
	faxcallstat		<tcid> <clear:0=no,1=yes>	
	gain_ctrl		<tcid> <tx_dig na> <rx_dig na> <tx_analog na> <rx_analog na> <rx_s>	
	idle		<tcid>	
	jcld_generate		<tcid> <calling_number>	
	lev		<tcid> <clear:0=no,1=yes>	
	lpcm		<tcid> <0=off, 1=on>	
	lrx		<tcid> <0=off, 1=on>	
	ltx		<tcid> <0=off, 1=on>	
	marks_gain		<#marks: 0-1023> <gain: 0 .. -63 dBm>	
	mfr2		<tcid> <fwd bck off>	
	modemm		<tcid> <dir: 0=org, 1=ans>	
	modemr_stat		<tcid> <clear:0=no,1=yes>	

ZyXEL Confidential

	modemstat		<tcid>	
	mute		<tcid> <on off>	
	open			
	parse		<tcid>	
	pattern_gen		<tcid> <on off> <pattern (0xhhhh)>	
	pcm_pat		<tcid> <0=off,1=on> <pattern: cust t1 e1> <det_time> <cust_pat>	
	pcm_samp		<tcid> <0=off, 1=on>	
	pktmsg		<0=off,1=on>	
	read_mem		<dsp><0=data,1=prog><32-bit-address> <length in words, 1-49>	
	reconfig		<tcid><rx_timeslot><tx_timeslot><rep_tcid> <dup_tx_tslot>	
	req_gains		<tcid>	
	resample		<tcid> <on off>	
	rtp_ctrl		<tcid> <code(1:Config Host routing)> <rtp_pload_type (0-127,128:Route none,129:Route all except voice,dtmf,sid>	tone_off
	rxtx		<tcid> <clear:0=no,1=yes>	
	send_rtp_msg		<tcid><eventspace(1or2)><0xbitmap><duration_offset><init_repeat_#><init_repeat_interval><keep_alive_interval>	Set vad
	show_tcid		<tcid>	
	svpd		<tcid> <on off (frame_loss_conceal)> <nom_delay[msec]> <max_delay[msec]> <min_delay[msec]> <0 1 2 (adapt playout ctrl: 0=disable,1=adj dur. silence, 2=adj now)>	
	sync		<tcid> <time, [0.5ms]>	
	test_hpi_mem		<dsp> <word offset> <word size>	
	tone			
	toff		<tcid>	
	ton		<tcid> <# tones> <freq1> <amp1> [freq2] [amp2] [freq3] [amp3] [freq4] [amp4] Note: Number of freq, amp to be entered depends on # tones	
	vad		<tcid> <0=off, 1=on>	
	ver			
	vmwi_gen		<tcid> <sdmf mdmf euro> <on off> <send on hook:0=no,1=yes>	

ZyXEL Confidential

	vmwi_deact		<tcid>	
	voice		<tcid>	
	vpstat		<tcid>	
	xconn		<tcid1> <tcid2> <0=off,1=on> <delay (0-2000ms)> <random loss (0-100%)>	

Voice Related Command

[Home](#)

Command					Description
voice					
config					
	rtp				
		index		<index>	Select RTP index.
		sortingbuffer		<index> <0:0ms 1:10ms 2:20ms>	Disable or enable receive sorting buffer(default 10 ms)
		rtcpinterval		<index> <ms>	Change the RTCP transmission interval(default 0)
		packetsize		<index>g711<0:10ms 1:20ms 2:30ms> g729<0:10ms 1:20ms 2:30ms>	Change the transmit packetized period(default 20ms)
		save		<index>	Save the configured value
		display		<index>	Display the configured value.
		dumpCfg			Display working buffer value.
		free			Free working buffer.
	pstn				
		index		<index>	Select the PSTN index
		phonebook		<index> <0~32 digits/blank>	Signaling the phone number
		prefixcode		<index> <1:enable 0:disable>	Disable or enable the prefix code
		active		<index> <1:active 0:in-active>	Disable or enable the speed dial
		save		<index>	Save the configured value
		display			Display the configured value.
		dumpCfg		<index>	Display working buffer value.
		free			Free working buffer.
	signal				
		index		<index>	Select SIP index.
		active		<index> <0:off 1:on>	Active/in-active this setting.
		register		<index> <auto enter exit>	Change the registrar type
		registertimeout		<index> <second>	Setup registration timeout value. (default 3600 sec)
		registerresendtime		<index> <second>	Setup registration resend timeout value.
		sessiontimerActive		<index> <0:off 1:on>	Active/in-active sessiontimer
		sessiontimeout		<index> <30-3600 second>	Setup session timeout value(default 300 sec)
		minse		<index> <20-1800 second>	Setup minimum session timeout value.
		retransmitT2		<index> <4 8 16 32sec>	Not support yet
		serveraddress		<index> <ip address>	Signaling server address
		serverport		<index> <1024-65535>	Signaling server port (default 5060)
		registeraddress		<index> <ip address>	Signaling register address
		registerport		<index> <1024-65535>	Signaling register port(default 5060)
		userid		<index> <0-96 chars>	Signaling SIP user-id
		password		<index> <0-96 chars>	Signaling SIP password
		urltype		<index> <sip tel>	SIP URL type
		port		<index> <1024-65535>	Signaling port
		phonenumber		<index> <0-32 chars>	Signaling phone number
		domain		<index> <1-128 chars>	Setup domain of SIP service

ZyXEL Confidential

		dtmf		<index> <rfc2833 pcm sipinfo rfc2833like>	Setup DTMF key type.
		pri_compression		<index> <0:G711mu 8:G711A 18:G729>	Change the primary compression type
		sec_compression		<index> <0:G711mu 8:G711A 18:G729>	Change the secondary compression type
		portrange		<index> <start port> <end port> (40000~65535)	RTP/RTCP port range setting
		transport		<index> <udp tcp>	Setup SIP transport type.
		callerid		<index> <disable enable>	Disable or enable the caller id feature for VoIP.
		auto redialpstn		<index> <disable enable>	Disable or enable the auto redial
		phoneselect		<index><phone port 0:All><0:No 1:Yes>	Setup incoming call mapping to phone port.
		vlantag		<index> <disable enable>	Enable/disable VLAN Tag in VoIP packet.
		tpid_vlantag		<index> <TPID value (4 Byte)>	Setup VLAN Tag - TPID.
		vid_vlantag		<index> <VID value (3 Byte)>	Setup VLAN Tag - VID.
		priority_vlantag		<index> <TCI value (0-7)>	Setup VLAN Tag - TCI.
		diffservrtp		<index> <0-7>	Setup DiffServRtp for QoS.
		diffservsip		<index> <0-7>	Setup DiffServSip for QoS.
		mwiaactive		<index> <0:off 1:on>	Disable or enable the voice message
		mwitimeout		<index> <minute>	Setup mwi expiration time
		rfc3325		<index><1: privacy call using RFC3325, 0: privacy call using draft-01>	Disable or enable the rfc3325
		prack		<index> <0:off 1:on>	Active/in-active prack message
		fakesipactive		<index> <0:off 1:on>	Active/in-active FAKE WAN IP service.
		fakesipservaddr		<index> <ip address>	Setup FAKE WAN IP service IP Address
		fakesipservport		<index> <port>	Setup FAKE WAN IP service port
		outboundactive		<index> <0:off 1:on>	Active/in-active Outbound proxy service.
		outboundaddr		<index> <ip address>	Setup Outbound proxy service. IP Address
		outboundport		<index> <port>	Setup Outbound proxy service. port
		outboundkaactive		<index> <0:off 1:on>	Active/in-active Outbound proxy service keep alive
		outboundkaintvl		<index> <second>	Setup Outbound proxy service keep alive Interval
		stunactive		<index> <0:off 1:on>	Active/in-active STUN service.
		stunservaddr		<index> <ip address>	Setup STUN server IP Address.
		stunservport		<index> <port>	Setup STUN server port number.
		ringbackactive		<index> <0:off 1:on>	Disable or enable early media
		ringbacktone		<index> <tone>	Select early media tone
		musiconholdactive		<index> <0:off 1:on>	Disable or enable music on hold
		musiconholdtone		<index> <tone>	Select music on hold tone
		callfwd		<index> <1-2>	Select call forward table
		mixermode		<index><0: Local / 1: Remote>	Select 3-way conference mixermode
		transafterconf		<index><0:off 1:on>	ON/OFF transfer conference
		rfc3263		<index> <0:off 1:on>	Disable or enable the rfc3263
		featuresenable		<index> <0~1>	ON/OFF feature bits
		Save		<index>	Save the configured value
		display		<index>	Display the configured value.
		dumpCfg			Display working buffer value.
		Free			Free working buffer.
		t38Protocol		<index><0:UDPTL 1:RTP>	select T.38 data transport protocol
		t38RateMgmt		<index><0:localTCF 1:transferredTCF>	select T.38 data rate management method
		t38HsPktRate		<index><10~80>ms	setup T.38 high speed packet rate

ZyXEL Confidential

	t38HsRedun		<index><0~3>	setup T.38 high speed redundancy
	t38LsRedun		<index><0~8>	setup T.38 low speed redundancy
	t38T30Ecm		<index><0:disable 1:enable>	enable\disable T.39 ECM
	t38MaxRate		<index><rate>	set T.38 data transmission rate
dsp				
	index		<index>	Select DSP index.
	echocancellation		<index> <enable disable>	Disable or enable the echo cancellation
	jittersize		<index> <0~90>ms	Change the jitter buffer size for DSP
	start		<index> <loop ground>	Change the pots type.
	vad		<index> <enable disable>	Disable or enable the VAD
	dialtype		<index> <pstn tone pulse>	Change the dialing type
	dialtonetype		<index> <ntt:pdt>	Change the dial tone type
	dialshortinterval		<index> <0~256 sec>	Change the short dialing interval . If the digital interval is smaller than dialshortinterval , the device will call the phone number, No matter whether you have pressing finishing or not
	diallonginterval		<index> <0~256 sec>	Change the long dialing interval , if the first digital time over diallonginterval The device will send busy tone
	flashmaxinterval		<index> <0~65535 msec>	Setup flash key max interval, If press flash key interval < fxoflashmax ,device will neglect the flash key and hang up.
	flashmininterval		<index> <0~65535 msec>	Setup flash key min interval. If press flash key interval < flashmininterval ,device will neglect the flash key.
	inputvolume		<index> <-14~14>	Change the input volume gain
	outputvolume		<index> <-14~14>	Change the output volume gain
	receivetonetype		<index> <ir sir>	Change the receive tone type.
	sipselect		<index><phone port 0:All><0:No 1:Yes> >	Select SIP index and Disable or enable the SIP
	callwaitingtime		<index> <0~128 sec>	Setup call waiting time
	cidtype		<index><0:During Ring 1: Prior Ring>	Call ID display moment
	cidpayload		<index><0:FSK 1:DTMF>	Setup DTMF payload type
	cidfskstartinterval		<index> <0~65535 msec>	Setup FSK start interval. This commands actually generate extra 200ms delay. ex: set to 0 ms -> 200ms set to 200ms -> 400 ms
	ciddtmfstartinterval		<index> <0~65535 msec>	Setup DTMF start interval. This commands actually generate extra 200ms delay. ex: set to 0 ms -> 200ms set to 200ms -> 400 ms
	cidringtimeout		<index> <0~65535 msec>	Setup call id ring time out. This commands actually generate extra 200ms delay. ex: set to 0 ms -> 200ms set to 200ms -> 400 ms
	featuresenable		<index> <0~7>	ON/OFF feature
	save		<index>	Save the configured value
	display		<index>	Display the configured value.
	dumpCfg			Display working buffer value.
	free			Free working buffer.
phbook				
	index		<index>	Select phone book index.
	active		<index> <1:active 0:inactive>	Active/in-active this setting.
	orignum		<index> <0~32 digits>	Setup phone number for this index of phone book.

ZyXEL Confidential

		forcesipuri		<index> <1-128 chars>	Setup force SIP URI.
		speednum		<index> <0~32 digits>	Setup speed dial number.
		name		<index> <name>	Setup the name for the description.
		type		<index> <0:Proxy 1:NonProxy>	Select Proxy or Non-Proxy type.
		save		<index> Please select the Phone Book index to configure: 1 ~ 10	Save the configured value
		display		<index>	Display the configured value.
		dumpCfg		<index>	Display working buffer value.
		free		<index> <1:active 0:inactive>	Free working buffer.
	common				
		index		<index>	Select common index
		save		<index>	Save the configured value.
		ivrsyspermit		<index><0:not permit ivrsys change, 1:permit ivrsys change>	Play ivr sys data
		specialFlag		<index><special flag h:for help>	bit 0 --> 0: sent rtp after send out 200OK / 1:sent rtp after receive ACK! bit 1 --> 0: respons 200 OK when recieve NOTIFY / 2:follow RFC3265!
		ivrlanguage		<index><0~2>	Setup ivr language
		pstnfallback		<index><0: Disable PSTN Fallback / 1: Enable PSTN Fallback>	Active/in-active PSTN Fallback Func.
		sipfallback		<index><0: Disable SIP Fallback / 1: Enable SIP Fallback>	Active/in-active SIP Fallback Func.
		dialmethod		<index><0: European [<RR>+Number] / 1: USA [<RR>]	Select dialmethod
		removepound		<index> <0:not removed 1:removed pound>	On/OFF the removed pound
		countrycode		<index><CountryCode h:for help>	Setup CountryCode
		webdisable		<index><0~1>	Disable or enable the web
		display		<index>	Display the configured value.
		dumpCfg		<index>	Display working buffer value.
	trunk				
		index		1	
		enable		1 <disable:0 enable:1>	set the trunking enable or disable
		autoattAuthEable		1 <disable:0 enable:1>	set the authentication enable or disable
		autoattAuthpw		1 <password>	set auto attendant password
		autoattTimeout		1 <0~10 sec>	set the diallongInterval after connecting AA
		dialingInterval		1 <0~5 sec>	set the dialshortInterval after connecting AA
		save		1	
		display		1	
		phonebook	index	1	Trunking table
			pattern	1 <no><pattern>	
			outaccountname	1 <no><accountname>	
			delete	1 <no>	
			clear	1	
			save	1	
			display	1	
		outAuthaccount	index	1	Request off trunk account table

ZyXEL Confidential

			name	1 <no> <accountname>	
			peerip	1 <no> <peerIP>	
			peerport	1 <no> <peerPort>	
			username	1 <no><username>	
			password	1 <no><password>	
			delete	1 <no>	
			clear	1	
			save	1	
			display	1	
		inAuthaccount	index	1	Allow off trunk account table
			username	1 <no><username>	
			password	1 <no><password>	
			delete	1	
			clear	1	
			save	1	
			display	1	
	autopro				
		index		<index>	Select autopro index.
		active		<index> <0:off 1:on>	Active/in-active autopro.
		servaddr		<index> <ip address>	Setup autopro server IP address
		timeout		<index> <second>	Setup timeout
		retry		<index> <second>	Setup retry time
		protocol		<index> <0:TFTP 1:HTTP 2:HTTPS>	Setup autopro protocol
		method		<index> <0:Common 1:Bluewin>	Select the autopro method
		save		<index>	Save the configured value.
		display		<index>	Display the configured value.
		dumpCfg		<index>	Display working buffer value.
	fxo				
		index		<index>	Select fxo index
		fxolongdial		<index> <Long dial interval(ms)>	Setting DSP first digital to second digital interval time.
		dtmfpausedur		<index> <Short dial interval(ms)>	Setting DSP send each digital interval time.

ZyXEL Confidential

		dtmfdigitdur		<index> <DTMF Duration(ms)>	DSP sending DTMF duration time through FXO. Setup to 0 will be 500ms
		fxoflashmin		<index> <Flash Min Interval(ms)>	Setup fxo flash key min interval. If press flash key interval < fxoflashmin ,device will neglect the flash key.
		fxoflashmax		<index> <Flash Max Interval(ms)>	Setup fxo flash key max interval, If press flash key interval < fxoflashmax ,device will neglect the flash key and hang up.
		fxolifestable		<index> <LifeLine Stable Interval(ms)>	Setup LifeLine stable interval
		fxophselect		<index> <phone port 0:All><0:No 1:Yes>	Select fxo mapping phone
		save		<index>	Save the configured value.
		display			Display the configured value.
		dumpCfg			Display working buffer value.
	forward				
		index		<index>	Select forward index
		unconditional		<index> <phone number>	Setup unconditional call forward number
		busy		<index> <phone number>	Setup busy tone call forward number
		noanswer		<index> <phone number>	Setup noanswer call forward number
		noanstime		<index> <second>	Setup no answer time
		table		<index> <entry_id> <caller> <dest> <type 0:unconditional 1:busy 2:noanswer 3:block 4: accept>	Setup the rule table for call forward.
		clear		<index> <entry uncond busy noans all > <entry_id for entry>	Clear the call forward rule
		save		<index>	Save the configured value.
		display			Display the configured value.
		free			Free working buffer.
	version				Show the VOIP version
fsm					
	status			<phone ccm convert rtp ua>	Display the status of fsm.
	convert			<reset disp >	Display convert information or reset convert.
	debug			<phone ccm sip ua tx rtp all>	Turn on debug message.
sip					
	tl			<0 1 2 3 ... 7>	SIP debug trace level 0:None 1: All 2: Tx 3:Rx 4: TXRx 5: State 6: Error 7: Warning
	siginit				Init SIP SIG task

ZyXEL Confidential

	sipinit				Init SIP protocol stack
	sipterm				Delete SIP protocol stack
	sigmakecall			type in phone num	Make Call
	sigbusy			Response Busy Call	Response Busy Call
	sigringback			Response Ring	Response Ring
	sigreg			<index>	Register to SIP server
	sigunreg			<index>	Unregister Sip server.
	regstatus			<index>	Show register's information.
	sigok			pick up a call	pick up a call
	sigbye			drop or cancel a call	drop or cancel a call
	sipclose				Close the SIP
	username				
	proxy			[0:off]1:on]	Use SIP proxy
	contact			<LAN Addr:0 Remote Node# WAN Addr:1-2>	
	ackbranch			<on: the Ack bring branch ID, off: the Ack didn't bring branch ID>	Setup bring branch ID.
	rfc3262			<1: turn on RFC3262, 0: turn off RFC3262>	Disable or enable the rfc3262
	rfc3325			<1: privacy call using RFC3325, 0: privacy call using draft-01>	Disable or enable the rfc3325
	keepalive			<index>	STUN debug command.
	checkwan			<index>	Display WAN IP/Port for SIP.
	change media			<index> <RTP addr> <RTP port>	RD debug command.
	siglistdump			<index>	RD debug command.
	dl				Set up SIP trace level
	sigmwi			<index>	Send SUBSCRIBE packet
	sigunmwi			<index>	Send UNSUBSCRIBE packet
	disconnect			<index> or 'all'	Disconnect call.
	txmaxsize				Setup the max tx number
rtp					
	bye	[port]	[sessionid]		
	connect			port[0-3] destIp destPort srcPort PT	
	add			port[0-3] destIp destPort srcPort PT	
	table				Display all the current active RTP session

ZyXEL Confidential

	usage				Display all the used port
	rxtime			<msec>	Setup RX time
	txtime			<msec>	Setup TX time
	dtmf			digit# 1 = 1 digit# 2 = 2 digit# 3 = 3	
	statistics			<index>	Show the statistics
	linktime			<index>	Show the RTP linktime
autopro					
	active				Active/in-active autopro.
	startnow				Start autopro now
	terminate				Terminate autopro.
	itemdisplay				Display all parameter setting value.
	size				Adjust size of buffer (autoPro.data) which store incoming data from tftp server. .
	start				Start autopro
	status				Show current status of auto provision.
	showdata				Show content of buffer (autoPro.data) which store incoming data from tftp server.
	debug			<0:off 1:on>	on/off debug messages of auto-provision.
	httpdebug			<0:off 1:on>	ON/OFF Autopro httpdebug mode
dialplan					
	clear				Clear dial plan in memory
	dial			dial <phone number>	Simulate dialing digits for dial plan parsing
	load				Load dial plan from flash and overwrite dial plan in memory
	save				Save dial plan to flash
	set			set <all dial plans>	Setup dial plan rule
	show				Show dial plan in detail
	switch				ON/OFF dial plan
	debug				ON/OFF dialplan debug mode
donotdisturb					
	active			<index><enable disable> <0:config 1:all>	enable DnD by config or all / disable DnD
	config			<index><sip1 sip2 lifeline> 1:on 0:off>	config phone silencing ringing from which incoming
	timer			<index> <0~24 hours>	set active timer which starts when you enable DnD
	display			<index>	display DnD configuration
logTest					RD debug command.
tebasic					For TE use only.

ZyXEL Confidential