



**Firmware Release Note**

**Prestige P660RU-T3/T7  
Standard Version**

**Release 3.40(UM.2) C0**

<b>Date:</b>	<b>April. 26, 2005</b>
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# **ZyXEL Prestige 660RU-T3/T7 Standard Version**

## **Release 3.40(UM.2) C0**

### **Release Note**

**Date:** April 26, 2005

#### **Supported Platforms:**

ZyXEL Prestige 660RU-T3/T7

#### **Versions:**

ZyNOS Version: V3.40(UM.2) | 04/22/2005 20:18:33

Bootbase Version: V1.03 | 04/26/2005 15:20:30

#### **Notes:**

P660R/RU-T1/T3/T7 is next generation of ZyXEL P623R series with higher speed of ADSL2, ADSL2+ technology, speed up to 12Mbps (ADSL2) and 24 Mbps (ADSL2+). With dual interface of USB and Ethernet, P660R/RU-61/63/67 offers the flexible way to access the Internet.

#### **Features:**

##### **Modification in V3.40(UM.2) | 04/26/2005**

1. Change to FCS firmware version.

##### **Modification in V3.40(UM.2)b2 | 04/15/2005**

1. [FEATURE CHANGE]  
Symptom: Remove SYS\_MBUF\_DEBUG to get throughput improvement.
2. [Bug Fix]  
Symptom: ADSL loop test of rate 512/7216 with IES 1000 can't sync up

##### **Modification in V3.40(UM.2)b1 | 04/13/2005**

3. [FEATURE CHANGE]  
Symptom: Add Mbuf\_Cache size for throughput improvement,
4. [FEATURE CHANGE]  
Symptom: Add FTP\_MALLOC.
5. [Bug Fix]  
Symptom: VC-hunt causes sys exception.
6. [Bug Fix]  
Symptom: The UPnP shows wrong link speed on WinXP PC.
7. [Bug Fix]  
Symptom: Dialing messages shows up on console during VC-Hunt with PPPOE and PPPOA
8. [Bug Fix]

Symptom: If we unplug ADSL line right after the ADSL just entered "wait for init state" than ADSL will hold on this state and doesn't switch to down state, the CPU loading is about 20% at the same time.

9. [Bug Fix]  
Symptom: Attainable downstream rate is 0 in ADSL2/ ADSL2+ mode, but it's normal in ADSL1 mode.
10. [Bug Fix]  
Symptom: ADSL enters training state automatically after device start up for about 20 minutes.
11. [Bug Fix]  
Symptom: ADSL sync up mode reset to default (ADSL2+) while sync up again.

**Modification in V3.40(UM.1) 03/21/2005**

1. Change to FCS firmware version.

**Modification in V3.40(UM.1)b3 | 03/18/2005**

1. [FEATURE CHANGE]  
Symptom: Support Multiboot client V2

**Modification in V3.40(UM.1)b2 | 03/07/2005**

1. [FEATURE CHANGE]  
Symptom: Add Mbuf\_Cache to improve the throughput.
2. [FEATURE CHANGE]  
Symptom: Change default to remove the CI command "wan ghs set annex b" in autoexec.net.
3. [Bug Fix]  
Symptom: ATM Priority (UBR vs. CBR) scenario not correct.
4. [Bug Fix]  
Symptom: In web wizard - LAN page. Change LAN IP for 192.168.1.1 to 192.168.181.1, the PC gets IP from the device but can't use IE to access device.
5. [Bug Fix]  
Symptom: NAT\_RuleList page display error in Mozilla.
6. [Bug Fix]  
Symptom: In Lan page if type "255.255.248.0" in IP Subnet Mask will show "Subnet Mask error".
7. [Bug Fix]  
Symptom: Attainable downstream rate is 0 in ADSL2/ ADSL2+ mode, but it's normal in ADSL1 mode.

**Modification in V3.40(UM.0)b4 | 01/24/2005**

8. [[FEATURE CHANGE]  
Symptom: Merge the long term solution for New MAC\_OUI.

**Modification in V3.40(UM.0)b3 | 12/23/2004**

1. [FEATURE CHANGE]  
Symptom: Change default ROM file to disable UPNP.
2. [FEATURE CHANGE]  
Symptom: Change the messages display format in CI Command "wan adsl chandata" while the link up mode is ADSL2 and ADSL2+.

**Modification in V3.40(UM.0)b1 | 12/02/2004**

1. Create this project.

## **Internal Information:**

1. Support ADSL2+ by TrendChip modem code DMT FwVer: 3.1.0.4\_B\_TC, HwVer: T14F7\_0.0
2. Support Multiboot client V2.

## **Known Issues:**

1. Ethernet and USB interfaces stop while ADSL is initializing.
2. If UPNP is disabled than MSN messenger whiteboard doesn't work behind NAT.
3. The TR-067 Loop test failure.
4. If there are two or more PVCs with CBR or VBR QOS type and the total PCR requirement exceed the line rate then the bandwidth distribution between those PVCs is unpredictable.
5. Setup two PVCs with 1483 bridge, each PVC with 500Kbps upstream and 10Mbps downstream traffic. If packet size is 1500 The CPU loading is 88%. The CPU loading is 100% if packet size is 1024.
6. The VBR property of TrendChip is different form the others.
7. The value of MBS can't be too large. Ex 10000.
8. F/W upgrade in eWC can not work with IE 5.0.3315.
9. MAC OS can't login the WEBGUI through IE 5.2.
10. In MAC OS 10.1, USB interface can't be detected after unplug USB cable.
11. In MAC OS 10.1, MAC PC will crash if USB cable was unplugged during data exchanging between MAC PC and device by USB interface.
12. When we do the ETSI-101388 test with ALC1224-73, the downstream will have CRC error and ADSL will retrain.
13. ADSL2+ throughput is much poorer than TI platform.

## **Modifications:**

### **Modification in V3.40(UM.2) | 04/26/2005**

1. [BUG FIXED]  
Symptom: In BootBase, the DRAM post can't reach the DRAM size while console speed is 9600. Updated BootBase version 1.03 to fix this issue

### **Modification in V3.40(UM.1)b1 | 02/21/2005**

1. [BUG FIXED]  
Symptom: Loop and reach test failed between ACT and GHS.
2. [BUG FIXED]  
Symptom: Performance of ADSL2/ADSL2+ is poor than that of GDMT
3. [BUG FIXED]  
Symptom: Training time will be longer (80 second) on some loop conditions if FA, FB, FC, or FD noise is injected.
4. [BUG FIXED]  
Symptom: Input the CI command "wan atm vc result" while DSL do not sync up, the system will hang up.

### **Modification in V3.40(UM.0)C0 | 02/03/2005**

1. Change to FCS firmware version.

### **Modification in V3.40(UM.0)b4 | 01/24/2005**

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5. [BUG FIXED]  
Symptom: in MAC 10.2 and DHCP open. Can't connect to device by Telnet and FTP.
6. [BUG FIXED]  
Symptom: VC hunt causes system reboot, if the right hunting information in 10<sup>th</sup> entry of VC hunt Table and VC hunt debug open.
7. [BUG FIXED]  
Symptom: VC hunt has finished successful but connection fail page is redirected by WEB.
8. [BUG FIXED]  
Symptom: Login device by FTP and enter ls or dir, then system reboot.
9. [BUG FIXED]  
Symptom: When we get ROM-t from LAN side by FTP, and modified it by WordPad, then put ROM -t, the device won't accept the new ROM-t.
10. [BUG FIXED]  
Symptom: When get ROM-t from LAN side by FTP, and modify it, then put ROM-t, the DUT will show not enough memory.
11. [BUG FIXED]  
Symptom: When we get ROM-t from LAN side by FTP, and modified it, then put ROM -t , the device won't accept the new ROM-t.
12. [BUG FIXED]  
Symptom: VC hunt can not allocate MBUF again when VC hunt table is more than 9.
13. [BUG FIXED]  
Symptom: When user changes port number to 8080 in menu 24.11, it can not work properly.
14. [BUG FIXED]  
Symptom: The VC hunt has problem, the test is not finished, but the web display the test is failed.
15. [BUG FIXED]  
Symptom: If User change the Remote management Web Server port, then in the VC hunt Fail page, the "here" link do not work.
16. [BUG FIXED]  
Symptom:                      Form                      LAN                      site,                      enter  
http://192.168.1.1/Forms/rpAuth\_1?ZyXEL%20ZyWALL%  
20Series<script>top.location.pathname=%20""</script> on browser, the device will  
crash.

**Modification in V3.40(UM.0)b3 | 12/23/2004**

1. [BUG FIXED]  
Symptom: ADSL can't sync up.

**Modification in V3.40(UM.0)b2 | 12/15/2004**

1. [BUG FIXED]  
Symptom: To change the modem code to version 3.0.11.3\_B\_TC for passing PQA ADSL2+ test criteria against Centillium based IES
2. [BUG FIXED]  
Symptom: The VC hunt always Fail.
3. [BUG FIXED]

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Symptom: Change description in eWC/Security/Ping from "Ping traffic is blocked from the WAN" to "Ping traffic is blocked from the WAN/LAN".

4. [BUG FIXED]

Symptom: Packets routing form WAN to LAN are duplicate.

5. [BUG FIXED]

Symptom: IP source address is translated to zero by NAT, if destination IP address is multicast group.

6. [BUG FIXED]

Symptom: When upgrade firmware or throughput testing, DUT will display error message such as "free out ret = 0xFFFF".

7. [BUG FIXED]

Symptom: Debug flags can't be turned on/of through the firmware downloads mechanism in Bootext (MultiBoot)

**Modification in V3.40(UM.0)b1 | 12/02/2004**

1. Create this project.

## Annex A CI Command List

Command Class List Table		
<a href="#">System Related Command</a>	<a href="#">Exit Command</a>	<a href="#">Ethernet Related Command</a>
<a href="#">WAN Related Command</a>	<a href="#">USB Related Command</a>	<a href="#">IP Related Command</a>
<a href="#">Bridge Related Command</a>		

### 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			

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		disp	[#]	display iface list
	isr		[all used free]	display interrupt service routine
	interrupt			display interrupt status
	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
			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:non e]	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

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	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,sdsl00, 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

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		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			
		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	

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			adsl2	
			adsl2plus	
		opmode		Show the operational mode
		rateadapt	[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
wan	atm	vchunt		
			Add <remoteNodeIndex> <vpi> <vci> <service bit(hex)>	Add a entry to hunting pool <remote node> : input the remote node index 1-8 <vpi> : vpi value <vci> : vci value <service>: it's a hex value, bit0:PPPoE/VC (1), bit1:PPPoE/LLC (2) , bit2:PPPoA/VC (4), bit3:PPPoA/LLC (8), bit4:Enet/VC (16), bit5 :Enet/LLC (32) For examples: If you need service PPPoE/LLC and Enet/LLC then the service bits will be 2+32 = 34 (decimal) = 22 (hex), you must input 22  Need to perform save after this command
			Remove <removeNodeId> <vpi> <vci>	Input remote node ID and vpi, vci value to remove the specific entry. System will save automatically.
			Active <yes no>	Enable VC auto hunting featurer
			display	Display the hunt pool
			Clear	Clear the configure buffer
			Save	Save current setting into ROM file
			timer	The waiting time before checking the hunting table result
			Send	Send VC hunt pattern again
			result	Check the result of VC auto hunting
	hwsar	disp		Display hwsar packets incoming/outgoing information
		clear		Clear hwsar packets information
	Zero	Status		Display status of Zero configuration
		On		Turn on Zero configuration
		Off		Turn off Zero configuration
		Flags	<disable (1:zeroCfh / 2:auto-hunt / 4:password / 7:all)>	
		debug	1:enable / 0:disable	Display debug messages

USB Related Command

[Home](#)

Command			Description
usb			

	dump	descp		Display Tx/Rx descriptors
		reg		Display registers
		cnt		Display driver's counters
	debug	[on off]		Turn on/off debug messages
	dbg	[dbgflag]		Set Debug flags
	Lpbk	[on off]		Turn on/off loopback mode.

## 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>
		add	<hostid> ether <ether addr>
		resolve	<hostid>
		drop	<hostid> [hardware]
		flush	
		publish	
	dhcp	<iface>	
		client	
		release	release DHCP client IP
		renew	renew DHCP client IP
		mode	<server relay none client>
		relay	server <serverIP>
		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
		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]
		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

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		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
extping		<target address>	
		[-t]	Continue to send ECHO_REQ until Ctrl-C input
		[-c]	Validate the reply data
		[-d] [Data]	Data pattern. The maximum length of data is 255 characters.
		[-f]	Set DF flag.
		[-l] [Data size]	Datagram size in bytes (with 28 bytes Header).
		[-v] [TOS value]	Specify the value of TOS flag.
		[-n] [Repeat value]	The number of times to send ECHO_REQ packet.
		[-w] [Timeout value]	Specify the value of Timeout in seconds.
		[-o] [IP address/IFace]	To specify one IP address or interface to be the Source IP address.
		[-p] [Min MTU] [Max MTU] [Interval size]	Sweep range of sizes.
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
adjTcp		<iface> [<mss>]	adjust the TCP mss of iface
udp			
	status		display udp status

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	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
		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		pritrn if tfpt 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> v1compat [on off]	turn on/off v1compat on iface
		robustness	<num>	set igmp robustness variable
		status		dump igmp status

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	pr			
		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

## 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
		clear		clear bridge route counter
	stat			related to bridge packet statistic table

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		disp		display bridge route packet counter
		clear		clear bridge route packet counter
	disp			display bridge source table