



**Firmware Release Note**

## **Prestige 310 Standard Version**

**Release 3.50(M.02)o0**

**Date:**  
**Author:**

**Oct 16, 2002**  
**Gilbert Cheng**

# **ZyXEL Prestige 310**

## **Version 3.50(M.02)00**

### **Release Note**

---

**Date:** Oct 16, 2002

## **Supported Platforms:**

---

ZyXEL Prestige 310, 314

## **Versions:**

---

ZyNOS Version : V3.50(M.02) | 10/16/2002 23:12:49  
Bootbase Version : V2.10 | 03/22/2002 14:38:58

## **Features:**

---

### **Modification in V3.50(M.02)00 | 10/16/2002**

- 1.[ENHANCEMENT] Add protection mechanism to prevent from wrong firmware model uploaded..

### **Modification in V3.50(M.01)00 | 08/29/2002**

#### 1.[BUG FIX]

Symptom: P310 WAN side ARP table sometimes cannot be updated successfully .

Condition: The user configures the P310 with a static WAN IP address and a default WAN gateway.

When replacing one router with another, but keeping the same IP address, system does not update its ARP table with the new MAC address for the gateway accordingly.

- 2.[ENHANCEMENT] Add two C/I commands : "ppp lcp echo time" and "ppp lcp echo retry" to control echo timer and retry counts. Set one of them to 0 will disable echo request.

- 3.[FEATURE CHANGE] Default ROM file. Remove the "SNMP\_WAN" filter set from SMT menu 11.5 and SMT menu 21

#### 4.[BUG FIX]

Symptom: SMT menu 15.3 configure fail.

Condition: After configuring the "Trigger Port" in SMT menu 15.3, the system cannot return back to parent menu 15.

#### 5.[BUGFIX]

Symptom: The router send error SNMP trap when it start up.

Condition: When issue " sys reboot", the router send a coldstart trap. (It should be warmstart, not coldstart.)

#### 6. [BUGFIX]

Symptom:The IP address which is bound in SNMP Trap sometimes is not correct.

Condition:When the PC receive the router's trap, the user will find that the IP address of the trap is always the router's LAN ip address, no matter this trap packet is issue from the router's WAN or LAN.It should be with related interface's IP address, not always LAN's IP.

#### 7.[BUGFIX]

Symptom:SMT menu 24.11 configure SNMP remote management port fail.

Condition:When the user change embedded SNMP service port in SMT menu 24.11, the router will store this configuration.

#### 8.[BUG FIX]

Symptom: The user cannot connect the embedded server of the router any more.

Condition: When the router receives the TCP packets with both SYN and ACK bits set, the Corresponding remote management service is no longer available.

9. [ENHANCEMENT] Add protection mechanism to prevent from wrong firmware model uploaded..

10. [BUG FIX]

Symptom: The embedded DHCP client of the prestige may be not get a WAN IP address from the DHCP server..

Condition:Our prestige request a WAN IP address just once. When the DHCP server is in busy state, the prestige may not be get a assigned WAN IP address.

11. [BUG FIX]Fragment packets with DF can't pass the NAT issue.

## Appendix 1 SUA Support Table

The required settings of Menu 15 for some applications are listed in the following table.

**SUA Support Table**

Traffic Type	Application Version	Required Settings in Menu 15 Port/IP	
		Outgoing Connection	Incoming Connection
HTTP	Netscape, IE	None	80/client IP
FTP	Windows FTP, Cuteftp	None	21/client IP
TELNET	Windows Telnet, Neterm	None	23/client IP (and remove Telnet filter in WAN port)
POP3	Eudora	None	110/client IP
SMTP	Eudora	None	25/client IP
IRC	mIRC, Microsoft Chat	None for Chat. DCC support: MIRC < 5.31	None
PPTP	Windows PPTP	None	1723/client IP
ICQ	ICQ 99a	None for Chat. For file transfer, we must enable ICQ-preference-connections-fi rewall and set the firewall time out to 80 seconds in firewall setting.	Default/client IP
Cu-SeeMe	Cornell 1.1	None	7648/client IP
	White Pine 3.1.2	7648/client IP & 24032/client IP	Default/client IP
	White Pine 4.0 (CuSeeMe Pro )	7648/client IP & 24032/client IP	Default/client IP
NetMeeting	Microsoft NetMeeting 2.1 & 2.11	None	1720/client IP 1503/client IP
Cisco IP/TV	Cisco IP/TV 2.0.0	Default/client IP	
RealPlayer	RealPlayer G2	None	
VDOLive		None	
Quake	Quake1.06	None	Default/client IP
QuakeII	QuakeII2.30	None	Default/client IP
QuakeIII	QuakeIII1.05beta	None	
StartCraft		6112/client IP	
Quick Time	Quick Time 4.0	None	
IPSEC (ESP)		None (only one client)	Default
MSNP	Microsoft Messenger service V3.0	6901/client IP	6901/client IP

## Appendix 2 Traffic Redirect

1. This feature is used to detect if the Prestige connect with the ISP. This feature doesn't guarantee the connection between the ISP and Internet. Once the prestige detect the connection is disconnect, it will forward the traffic to another device. Here is SMT menu 11.6.

Menu 11.1 - Remote Node Profile

Rem Node Name= A	Route= IP
Active= Yes	
Encapsulation= Ethernet	Edit IP= No
Service Type= Standard	Session Options:
Service Name= N/A	Edit Filter Sets= No
Outgoing:	
My Login= N/A	Edit Traffic Redirect= <u>YES</u>
My Password= N/A	
Server IP= N/A	

Press ENTER to Confirm or ESC to Cancel:

Press "YES" to enter Menu 11.6

Menu 11.6 - Traffic Redirect Setup

Active = No

Configuration:

Backup Gateway IP Address = 0.0.0.0

Check WAN IP Address = 0.0.0.0

Fail Tolerance = 0

Check Connection Every: 0

Timeout = 0

Press ENTER to Confirm or ESC to Cancel:

### 2. SMT 11.6

- (1) Configure "Active" to "YES" if you want to execute this feature.
- (2) "Partner IP" is the IP address of the gateway that when the connection is break, the traffic forward destination. It is stored ad IP address format.
- (3) "Check Target IP" is the ping target IP address. In Ethernet encapsulation type, we use ping function to check if the connection is break. Please setup a stable machine and not too far from you.
- (4) "Fail Tolerance" is the fail number. For example, if we set this value in 3. When prestige checks connection and fails 3 times, it will determine the connection is break and forward traffic to the partner.
- (5) "Check Time" is periodic check connection time. It is second base. For example, if you set this value into 5, the prestige will check connection every 5 second.
- (6) "Timeout" is the timeout value of ping function, also second base. If you set this value in 10, the prestige will determine the connection is break when the prestige doesn't receive ping echo message.

### 3. CI commands

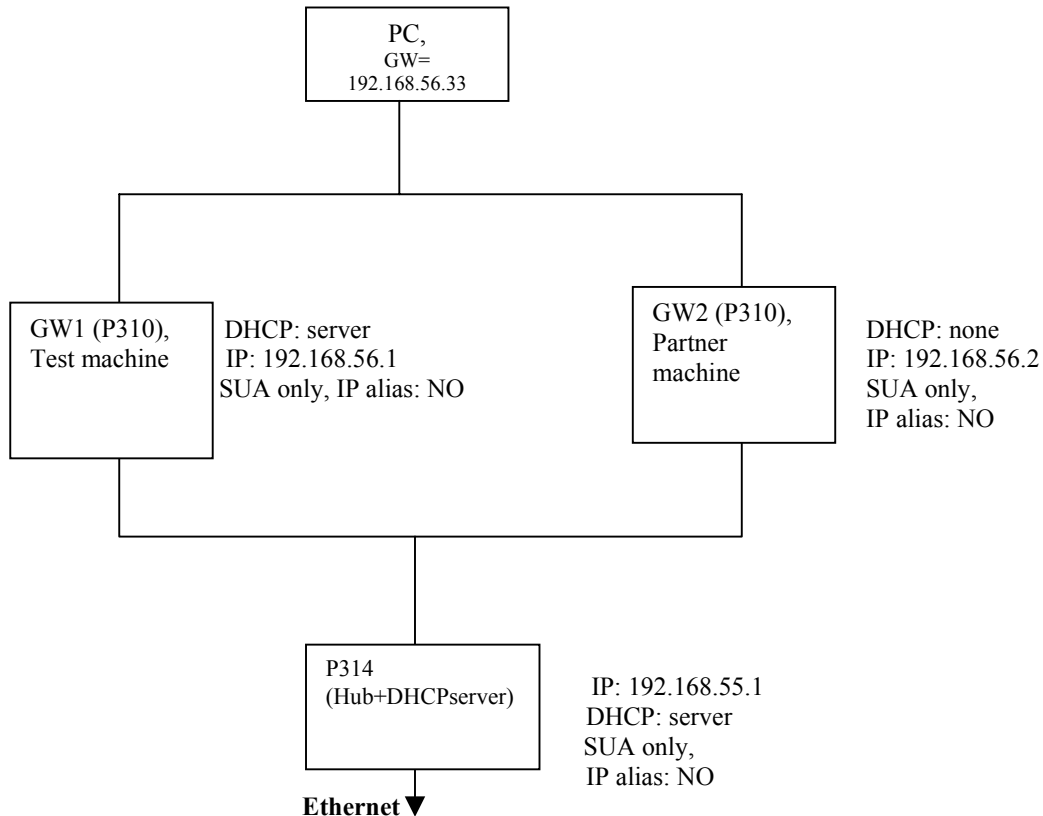
There are several CI commands corresponding SMT setup, they are in "ip inctr" set

- (1) "active" + "on" or "off" to enable or disable this feature
- (2) "partner" + IP address to setup partner Gateway IP.

- (3) “target” + IP address to setup target IP.
- (4) “failcount” + integer number to setup fail number.
- (5) “checktime” + integer number to setup periodic checking time.
- (6) “timeout” + integer number to setup timeout value.
- (7) “disp” to show system value and run time value.
- (8) “save” will save the configuration by CI command.

#### 4. Test Environment

Following is my testing environment.



#### 6. Note

- (1). Turn off “RIP” in SMT3.2 is recommended.
- (2). When you configure the “Active” to be “YES”, and Encapsulation type is PPPOE or PPTP, traffic redirect will enable “Nail-UP” function in SMT11.1
- (3). A useful WINDOWS commands “tracert” can be used to verify the packet routing.
- (4). “Check WAN IP Address” field is optional, if you leave this field as “0.0.0.0”, the P310 will use Gateway address to check when the Encapsulation type is Ethernet, or the P310 will check channel state to check link status when Encapsulation type is PPPOE or PPTP.

#### 7. Test Plan

- (1) Functional testing:
  - <1> Test if traffic redirect function detect the disconnect link correctly.
  - <2> Test if traffic redirect function forward the traffic to the backup gateway when the link is break.
  - <3> Test if traffic redirect function forward the traffic via P310 WAN port when the link is come back.

<NOTE> 1. You must test all of the 3 Encapsulation type (Ethernet, PPPOE, PPTP),

2. When testing check link status, you must simulate the disconnection between P310 and ISP, not only unplug the P310's WAN cable.

(2) Stability testing:

- <1> Long time test: Disconnect the WAN for a long period time, and check the LAN and WAN port status, does them receive packets normally.
- <2> Repeat connect and disconnect the WAN link, I mean disconnect the WAN, waiting until the P310 redirect the traffic to the backup gateway, and connect the WAN, waiting until the traffic is forwarded in normal route, and disconnect .....Check if the LAN and WAN port receive packets normally.

(3) Configuration testing:

Test if the SPT is saved regularly.

## Annex A CI Command List

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

### 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> <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
	hostname		[hostname]	display system hostname
	log			
		clear		clear log error
		disp		display log error
		online	[on/off]	turn on/off error log online display
	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
		save	[entry no.]	save remote node information
	stdio		[second]	change terminal timeout value
	time		[hour [min [sec]]]	display/set system time
	trcdisp	parse, brief, disp		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
	socket			display system socket information
	roadrunner			
		debug	<level>	enable/disable roadrunner service 0: disable <default> 1: enable
		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

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
		ioctl	<ch name>	Useless in this stage.
		status	<ch name>	see LAN status
	version			see ethernet device type

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		

		stats		
	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
	status			display ip statistic counters
	udp			
		status		display udp status
	rip			
	tcp			
		status	[tcb] [<interval>	display TCP statistic counters
	tftp			
	xparent			
		join	<iface1> [<iface2>]	join iface2 to iface1 group
		break	<iface>	break iface to leave ipxparent group
	tredir			
		failcount	<count>	set tredir failcount
		partner	<ipaddr>	set tredir partner
		target	<ipaddr>	set tredir target
		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
	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

