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Firmware Release Note

Prestige 660R-61C

Standard version

Release 3.40(UH.3)C0

| | |
|----------------|---------------------|
| Date: | Aug 10, 2005 |
| Author: | Garis |

ZyXEL Prestige 660R-61C Standard Version

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Release Note

Date: Aug 10, 2005

Supported Platforms:

ZyXEL Prestige 660R-61C

Versions:

ZyNOS Version : V3.40(UH.3) | 8/10/2005 9:03:59
Bootbase Version : V1.05 | 02/27/2003 02:00:00

Notes:

The Prestige 660R-61C, is 4th generation of Zyxel ADSL product family. It is a high performance ADSL/ADSL2/ADSL2+ router for small/medium office to have Internet access and LAN-to-LAN application over the existing copper line. P660R-61C takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 26Mbps (ADSL2+), greater reach, faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a rich features router to meet the demand of next generation ADSL market.

P660R-61C provides one auto-detection 10/100BASE-T Ethernet port for connection to the user's local network, and a single RJ-11/RJ-45 port for connection to ADSL/ADSL2/ADSL2+ line.

The version of TI AR7 modem code is [04.01.02.00](#).

Known Issues:

1. CLI command list is not finished.
2. Currently, QoS of VBR function can't work fine. This issue is TI chipset known issue.
3. Saw shaped throughput plot is observed from AX4000 traffic analyzer when doing FTP test.
4. Only Windows messenger 4.7 is supported. Windows messenger 5.0 has some issue.
5. Use ENET ENCAP mode, Traffic Redirect function does not work.
6. AX4000 OAM F4 loopback test can't pass.
7. the ADSL2+ throughput and Loop & Reach test are failed

Features:

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Modification in 3.40(UH.3)C0 | 8/10/2005

1. change to FCS
2. enable vcAutoHunt in default romfile

Modification in 3.40(UH.3)b3 | 8/2/2005

1. [BUGFIXED]
SPRID: 050801006
Symptom: Whiteboard(WAN to LAN) can't work well when UPNP is enable.
Condition: Whiteboard(WAN to LAN) can't work well in all of the following conditions.
 - 1.OS is based on WinXP;
 - 2.enable UPNP and "Allow users to make configuration changes through UPnP" in GUI-UPNP;
 - 3.make sure that wan should be first to ask for whiteboard;
 - 4.MSN6.2-MSN6.2;MSN7.0-MSN6.2;MSN6.2-MSN7.0;MSN7.0-MSN7.0.
2. [BUGFIXED]
SPRID: 050801007
Symptom: In SMT if the backup type is selected "DSL Link", then check wan IP still need to be fill in a valid value in one of them at least, but not remain all to be 0.0.0.0, otherwise the Wan-Backup can't save.
Condition: In SMT if the backup type is selected "DSL Link", then check wan IP still need to be fill in a valid value in one of them at least, but not remain all to be 0.0.0.0, otherwise the Wan-Backup can't save.
3. [BUGFIXED]
SPRID:
Symptom: In eWC WAN Setup, after we change "bridge" or "routing" mode to the other, in SMT-1 status of "Bridge" and "Route IP" can not keep synchro.
But in Wizard Setup do not have this problem.
Condition: N/A

Modification in 3.40(UH.3)b2 | 7/25/2005

- 1.[BUGFIXED]
SPRID: 050704154
Symptom: In GUI, The WAN Backup functions need at least one none-zero Check WAN IP.
Condition: step1 in GUI, The WAN Backup functions need at least one none-zero Check WAN IP
step2 while in SMT these isn't this limit.
- 2.[BUGFIXED]
SPRID: 050712599
Symptom: lan can't ping wan when change encapsulation
Condition: 1.lan ping wan 192.168.8.2 continusly.
2.In SMT Menu4,change encapsulation to PPPoE,lan can ping wan.
3.change encapsulation to ENETCAP or RFC1483,lan PC can't ping wan.

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3. [Feature Update]
Support multiboot V2.1
4. [BUGFIXED]
SPRID: 050701062
Symptom: When DUT use static IP and set DNS server address in GUI->wizard, DUT won't resolve domain name successfully until reboot
Condition: Step1 Go to GUI, configure DUT use static IP and set DNS server, then go to Maintenance->Diagnostic, try to resolve domain name, but failed
Step2 Reboot DUT, it works fine
Step2 This many cause TMSS/AV/CAC/DDNS functions doesn't work for these functions need DUT resolve domain name
5. change modem code to ADSL 2+ 4.1.2

Modification in 3.40(UH.3)b1 | 06/27/2005

- 1 change modem code to ADSL 2+ 4.0.2.0
- 2[BUGFIXED]
SPRID: 050628388
Symptom: then redirect to the page of Test Frame ceaselessly
Condition:
When popup the page of change username and password in zero configurations, input the inaccurate username and password,
- 3 [Feature Enhancement]
ftp malloc. When we put Ras from Ftp bu e memory is not enough, we borrow some mbuf
- 4[BUGFIXED]
SPRID: 050628390
Symptom: Bridge performance is poor.
Solution: Remove unnecessary memory movement in bpdud_handling() function.
- 5[FEATURE ENHANCEMENT] (MULTICAST)
Symptom: While injecting multicast traffic from WAN to LAN in bridge mode, CPU loading is heavier than injecting unicast traffic.
- 6 [BUG FIXED]
SPRID: 050628391
Symptom: the connection can't be dialed-up
Condition: Set PPPoA encapsulation and enable nail-up. After changing user-name several times.
- 7 [ENHANCEMENT] (MSN Messenger Passthrough)
Modify to support MSN Messenger 6.2 & 7.0 passthrough.
- 8 [Feature Enhancement]
New nat porting

Modification in 3.40(UH.2)C0 | 05/09/2005

- 1 change to FCS

Modification in 3.40(UH.2)b1 | 04/18/2005

- 1 [BUG FIXED]
Symptom: VC auto hunt can not work

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Condition: N/A

2 change modem code to ADSL 2+ 3.2.6

3 [Feature change]

adsl CI command change format as request

4 support multi boot server V2

5 change HTP for ADSL 2+

6 long term solution change default MAC 00:13:49:00:00:01.

7 [BUG FIXED]

Symptom: When we get rom-t from lan side by FTP , and modified it, then put rom-t ,the device will show not enough memory.

Condition:N/A.

8[BUG FIXED]

Symptom: Setting in eWC/WAN will change vchunt active to inactive.

Condition: step1 active vchunt in menu 24.8 and save

step2 enter eWC/WAN to do some change, for example, change VPI/VCI 0/33 to 0/34

step3 enter SMT menu 24.8 to check VC hunt status, you will find it have been inactive.

9 [BUG FIXED]

Symptom: TFTP cannot work when telnet port change.

Condition: step1 enter menu 24.11 to change Telnet port

step2 telnet DUT use the changed port

step3 you will find TFTP "cannot work.

10[BUG FIXED]

Symptom: In LAN side pc, type "http://192.168.1.1/zCfgTestFail.html" as the url, a error dialogue is prompted. So as "http://192.168.1.1/zCfgFinish.html" and "http://192.168.1.1/zCfgWaitTestFrame.html".

Condition:N/A.

11 [BUG FIXED]

Symptom: Connect DUT to lan port of zywall via IES, the wan port of zywall connect to internet; DUT get ip address and dns server from zywall lan dhcp server; when primary dns server is unreachable, secondary dns server doesn't work either.

Condition: N/A.

12[BUG FIXED]

Symptom: In menu 24.2.1,show Standard :Multi-Mode,but in eWC Maintenance->System Status,Standard :ADSL_G.dmt .

Condition: N/A.

13[BUGFIXED]

Symptom: it,but failed to login eWC when input 31 characters

Condition: When set 31 characters password on eWC,DUT will accept.

14[BUGFIXED]

Symptom: The IP routing Policy don't work properly

Condition:N/A

15[BUGFIXED]

Symptom: the device will hang or reboot

Condition: if a link request is given in IE can hang/reboot the ZyXEL-device.

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http://192.168.1.1/Forms/rpAuth_1?ZyXEL%20ZyWALL%20Series<script>top.location.pathname=%20""</script>

16[BUGFIXED]

Symptom: the device won't accept the new rom-t. (Just only use ultraedit modify rom-t, the DUT can accept it, but while use other utilitys--DOS Edit/Word/Notepad/WordPad modify the rom-t, the DUT can not accept it.)

Condition: When we get rom-t from LAN side by FTP, and modified it, then put rom-t
17 [BUG FIXED]

Symptom: using wordpad edit the rom-t file, the PPPoE password will be changed unexpected.

Condition: (1) In SMT menu4, set encapsulation to PPPoE mode and make sure the DUT can dial up.

(2) Get rom-t and use wordpad to edit it, change the sysname to "hehe" and save.

(3) upload the edited file to the DUT, and the DUT can't dial up PPPoE password is changed to correct one. (use notepad and UltraEdit have no problem)

18[BUG FIXED]

SPRID:050301058, 050310508

Symptom: In smt21.1 IP filter, IP=*. *.*. *, mask=255.255.255.0, it can save... the correct mask is 255.255.255.255. or IP=*. *.*. 0, mask=255.255.255.0

Condition: N/A

19[BUGFIXED]

SPRID: 050310549

symptom: we can not set device ip 0.0.0.0 in SMT, but we can set it in eWC
condition: N/A

20 [Feature Change]

We can not delete menu 4.

21[BUG FIXED]

Symptom: Special URL will cause system crash.

Condition: 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.

22[BUGFIXED]

SPRID:050329394, 050307379

Symptom: When 2 PCs visit eWC of DUT, the priority have some problem

Condition: Step1 The first PC visit the eWC of DUT, and keep login status

Step2 Then the second PC temp to access the eWC of DUT, and show the page of

password entry Step3 Clicking login make the first PC logout automatically, although the second PC also can not login eWC

23[BUG FIXED]

SPRID:050107337

Symptom: in eWC NAT can not work correctly if I change the Server Mapping Set.

Condition:

Step1: in eWC =>Advanced Setup=>NAT, choose Full Feature and Edit the Rule 1;

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Step2: choose the Type as Server mode, and set the Global IP as the WAN IP of the DUT;
Step3: Server Mapping Set choose 2, and Edit Details, and add the Port 2121 forward to the LAN PC "10.0.0.2";

Step3: using an PC in the WAN to access the ftp(port 2121) server on the LAN PC. This must be successful;

Step4: then choose the Server Mapping Set 3, and Edit Details to add the Port 23 forward to the LAN PC. then Apply.

ftp from the WAN to the LAN also can be successful, but telnet from WAN to LAN can not work.

Then reboot the DUT, the Server Mapping Set 3 can work, but the details show the error information.

24[BUGFIXED]

Symptom: ping can not continue

Condition: if you set enet encap, and then ping an IP to WAN, and then pull off WAN, pull on it again.

25[BUG FIXED]

Symptom: Device will Crash

Condition: In SMT, IP ping and Ctrl+c repeat quickly

26[BUG FIXED]

Symptom: device will crash

Condition: we ftp to device and then change to http in IE browser

27[Bug FIXED]

SPRID: 041028829

Symptom: You can not modify firewall rule, NAT - address mapping rule does not show in the appropriate / exact column

Condition: if using other web browsers like Mozilla 1.7.5.

28[BUG FIXED]

Symptom: when remote node change from ENET ENCAP with static IP to ENET ENCAP dynamic or PPPoE, the static routing entry added before will still exist.

Condition: N/A

29[Feature Update]

In Web redirect page, we note customer that PPPoE username and Password is wrong with RED colour

30[Bug Fixed]

Symptom: it will come out an warning "Subnet Mask Format Error!!!".

Condition: When you access the Prestige through Web GUI, if you try to change the LAN subnet mask to 255.255.248.0

31[BUG Fixed]

Symptom: Change to bridge mode from GUI Wizard, the SMT menu1 do not change to bridge and LAN PC can't get IP

Condition:

Step1 enter GUI wizard change route mode to bridge mode

Step2 enter SMT menu1 Route IP= Yes; Bridge= No(it don't change)

Step3 reboot DUT the LAN PC can not get IP and can not get out via DUT

Modification in 3.40(UH.1)C0 | 11/23/2004

1. Change to FCS version.

Modification in 3.40(UH.1)b1 | 11/16/2004

1. [BUG FIXED]
Symptom :Using MultiBootSrv upload firmware, when it finish, system will auto reboot.
Condition: N/A
2. Delete UART External loopback test in HTP.

Modification in 3.40(UH.0)C0 | 10/26/2004

1. Change to FCS version.

Modification in 3.40(UH.0)b2 | 10/20/2004

1. [BUG FIXED]
Symptom: When set PPPoE pass-through,can't ping device LAN IP address.
Condition: When we set PPPoE pass-through in Menu 11.8, the LAN side PC can dymanic get the IP address, but can not get reply from ping the LAN IP address.
2. [BUG FIXED]
Symptom: Use bridge mode, PC can't get reply from ping 192.168.1.1.
Condition: Use bridge mode,RFC 1483,open DHCP,the LAN side PC can not get reply from ping 192.168.1.1.
3. [BUG FIXED]
Symptom: Save DNS server in menu 3.2,if we don't reset, it can't work.
Condition: We save DNS server in menu 3.2 after reset default rom file and if we don't reset system and issue "ip ping www.hinet.net" that it can not be work and it must reboot.
4. [BUG FIXED]
Symptom: ping traffic is blocked from the WAN also block LAN to WAN.
Condition: When we enable "ping traffic is blocked from the WAN " function that it will also block LAN->WAN.
5. [BUG FIXED]
Symptom: ZyXEL Prestige Router Discloses Portions of Memory Content.
Condition: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote Users. send icmp packet with less data than normal so remote interface padd , ping -l 0 router.
6. [BUG FIXED]
Symptom&Condition: When set Nail up=Yes,schdule set from force down to force on,the PPPoE can not up unless reboot.
7. [BUG FIXED]
Symptom: eWC will hang when UPNP feature of our device is enabled.
Condition:(1) install windows xp service packet 2 in PC
(2)enable firewall of windows xp and also enable UPNP framework pass through or disable firewall of windows XP.
(3) login in P660HW via eWC and enable UPNP, eWC will not be able to

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access.

(4)the bug doesn't occur every time, but most time it will occur.

8. [BUG FIXED]

Symptom:. SIP pass through can't work.

Condition: The SIP ALG do not process the "SIP INFO" message. And some of the fields in SIP message do not be transferred by ALG.

9. [BUG FIXED]

Symptom :Bug fix incompletely: in eWC, Advanced Setup >> NAT Edit Address Mapping Rule, click "Edit Details". Information will be save.

Condition: N/A

10. [BUG FIXED]

Symptom: Menu 15.1 the info "Enter Menu selection number" is showed duplicate .

Condition : Menu 15.1 the info "Enter Menu selection number" is showed duplicate .

11. [BUG FIXED]

Symptom: Using DoS tool "Bonk.exe", do DoS attack from LAN to WAN, device get exception or Hang.

Condition : Device crashed (exception) or hang when a client PC ran a port scan tool.
PC ---- P660HW-61 ---- Internet ---- ZyWALL 70,Ran a port scan AP (BONK) on PC to attack ZyWALL 70.parameter(bonk <IP> -p 7 -d 10).
P660HW-61 will crashed with exception log after few mins (4000+ counts of port scan).

Modification in 3.40(UH.0)b1 | 9/30/2004

1. Create this project.

Annex A CI Command List

| Command Class List Table | | |
|--|------------------------------------|--|
| System Related Command | Exit Command | Ethernet Related Command |
| WAN Related Command | IP Related Command | PPP Related Command |
| Bridge Related Command | | |

System Related Command

[Home](#)

| Command | | | | Description |
|---------|-------------|---------|-------------------|---------------------------------------|
| sys | | | | |
| | adjtime | | | retrive date and time from Internet |
| | cbuf | | | |
| | | display | [a/f/u] | display cbuf a: all f: free u: used |
| | | cnt | | cbuf static |
| | | | Display | display cbuf static |
| | | | Clear | clear cbuf static |
| | baud | | <1..5> | change console speed |
| | callhist | | | |
| | | display | | display call history |
| | | remove | <index> | remove entry from call history |
| | clear | | | clear the counters in GUI status menu |
| | countrycode | | [countrycode] | set country code |
| | date | | [year month date] | set/display date |

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| | | | | |
|--|------------|----------|---|---|
| | 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 | | | |
| | | disp | [#] | display iface list |
| | isr | | [all used free] | display interrupt service routine |
| | interrupt | | | display interrupt status |
| | log | | | |
| | | category | | |
| | | | access [0:none/1:log] | record the access control logs |
| | | | Display | display the category setting |
| | | | error [0:none/1:log/2:alert/3:both] | record and alert the system error 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 |
| | 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 |

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| | | | | |
|--|-----------|-----------|--|--|
| | 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 |
| | trelog | | | |
| | | 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 |
| | | 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 |

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| | | | | |
|--|--------|---------|---|--|
| | 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 | | | |

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|--|-----------|------|---------------------------------|--------------------------------------|
| | | disp | | |
| | | | packet <level> | set ether test packet display level |
| | | | event <ch> [on off] | turn on/off ether test event display |
| | | sap | [ch_name] | send sap packet |
| | | arp | <ch_name> <ip-addr> | send arp packet to ip-addr |
| | | mem | <addr> <data> [type] | write memory data in address |
| | test | | <ch_id> <test_id> [arg3] [arg4] | do LAN test |
| | pncconfig | | <ch_name> | do pnc config |
| | mac | | <src_ch> <dest_ch> <ipaddr> | fake mac address |

WAN Related Command

[Home](#)

| Command | | | | Description |
|---------|------|---------------|------------------|--|
| wan | adsl | bert | | ADSL ber |
| | | chandata | | ADSL channel data, line rate |
| | | close | | Close ADSL line |
| | | coding | | ADSL standard current |
| | | ctrleint | | ADSL 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 “persisttime” before doing “L1 shutdown RA3”, default is 30 seconds |
| | | timeinterval | [mins] | when “L1 shutdown RA3” is done twice, and still can’t reach the max rate which system recorded, it will delay a time period that the period base time is “timeinterval” before starting again. The time-based default is 2 hrs |
| | | defectcheck | [on/off] | Turn on/off detect table checking, default is on |
| | | txgain | [value] | Set the CTRL register (0xc3), the value is from 0xfa to 0x06 |
| | | targetnoise | [value] | Set the CTRL register (0xc4), the value is from 0xfa to 0x06 |
| | | maxtonelimit | [value] | Set the CTRL register (0xc5), the value is from 0xfa to 0x06 |
| | | rxgain | [value] | Set the CTRL register (0xc6), the value is from 0xfa to 0x06 |
| | | txoutputpwr | [value] | Set the CTRL register (0xc7), the value is from 0xfa to 0x06 |
| | | rxoutputpwr | [value] | Set the CTRL register (0xc8), the value is from 0xfa to 0x06 |
| | | maxoutputpwr | [value] | Set the CTRL register (0xc9), the value is from 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 |
| | loopbackaddr | | <IP1> [IP2] | Set loopback address. |
| | alias | | <iface> | alias iface |
| | aliasdis | | <0 1> | disable alias |
| | arp | | | |
| | | status | <iface> | display ip arp status |
| | | add | <hostid> ether <ether addr> | add arp information |
| | | resolve | <hostid> | resolve ip-addr |
| | | drop | <hostid> [hardware] | drop arp |
| | | flush | | flush arp table |

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|--|----------|-----------|--|---|
| | | publish | | add proxy arp |
| | dhcp | | <iface> | |
| | | client | | |
| | | | release | release DHCP client IP |
| | | | Renew | renew DHCP client IP |
| | | mode | <server relay none client> | set dhcp mode |
| | | relay | server <serverIP> | set dhcp relay server ip-addr |
| | | reset | | reset dhcp table |
| | | server | | |
| | | | probecount <num> | set dhcp probe count |
| | | | dnsserver <IP1> [IP2] [IP3] | set dns server ip-addr |
| | | | winsserver <winsIP1> [<winsIP2>] | set wins server ip-addr |
| | | | gateway <gatewayIP> | set gateway |
| | | | hostname <hostname> | set hostname |
| | | | initialize | fills in DHCP parameters and initializes (for PWC purposes) |
| | | | leasetime <period> | set dhcp leasetime |
| | | | netmask <netmask> | set dhcp netmask |
| | | | pool <startIP> <numIP> | set dhcp ip pool |
| | | | renewaltime <period> | set dhcp renew time |
| | | | rebindtime <period> | set dhcp rebind time |
| | | | reset | reset dhcp table |
| | | | server <serverIP> | set dhcp server ip for relay |
| | | | dnsorder [router isp] | set dhcp dns order |
| | | status | [option] | show dhcp status |
| | | static | | |
| | | | delete <num> all | delete static dhcp mac table |
| | | | display | display static dhcp mac table |
| | | | update <num> <mac> <ip> | update static dhcp mac table |
| | dns | | | |
| | | query | | |
| | | | address <ipaddr> [timeout] | resolve ip-addr to name |
| | | | debug <num> | enable dns debug value |
| | | | name <hostname> [timeout] | resolve name to ip-addr |
| | | | status | display dns query status |
| | | | table | display dns query table |
| | | server | <primary> [secondary] [third] | set dns server |
| | | stats | | |
| | | | clear | clear dns statistics |
| | | | disp | display dns statistics |
| | | table | | display dns table |
| | httpd | | | |
| | | debug | [on off] | set http debug flag |
| | icmp | | | |
| | | echo | [on off] | set icmp echo response flag |
| | | data | <option> | select general data type |
| | | status | | display icmp statistic counter |
| | | trace | [on off] | turn on/off trace for debugging |
| | | discovery | <iface> [on off] | set icmp router discovery flag |
| | ifconfig | | [iface] [ipaddr] [broadcast <addr> [mtu <value> dynamic] | configure network interface |
| | ifdrop | | <iface> | check if iface is available. |
| | ping | | <hostid> | ping remote host |

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|--|---------|----------------|---|--|
| | pong | | <hostid> [<size> <time-interval>] | pong remote host |
| | route | | | |
| | | status | [if] | display routing table |
| | | add | <dest_addr default>[/<bits> <gateway> [<metric>] | add route |
| | | addiface | <dest_addr default>[/<bits> <gateway> [<metric>] | add an entry to the routing table to iface |
| | | addprivate | <dest_addr default>[/<bits> <gateway> [<metric>] | add private route |
| | | drop | <host addr> [/<bits>] | drop a route |
| | | flush | | flush route table |
| | | lookup | <addr> | find a route to the destination |
| | | errcnt | | |
| | | | disp | display routing statistic counters |
| | | | clear | clear routing statistic counters |
| | status | | | display ip statistic counters |
| | adjTcp | | <iface> [<mss>] | adjust the TCP mss of iface |
| | udp | | | |
| | | status | | display udp status |
| | rip | | | |
| | | 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 uninnet |
| | tftp | | | |
| | | support | | prtn if tfpt is support |
| | | stats | | display tftp status |
| | xparent | | | |
| | | join | <iface1> [<iface2>] | join iface2 to iface1 group |

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|-----------|------------|--------------------------------------|---|
| | 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 |
| 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 |

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|--|--|------------|----------|------------------------------------|
| | | incikeport | [on off] | turn on/off increase ike port flag |
|--|--|------------|----------|------------------------------------|

PPP Related Command

[Home](#)

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

Bridge Related Command

[Home](#)

| Command | | | | Description |
|---------|------|---------|------------------------|---|
| bridge | | | | |
| | mode | | <1/0> (enable/disable) | turn on/off (1/0) LAN promiscious 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 |
| | | disp | | display bridge route packet counter |
| | | clear | | clear bridge route packet counter |
| | Disp | | | display bridge source table |