



**Firmware Release Note**

**P-660R-D1**

**Standard version**

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

|                |                     |
|----------------|---------------------|
| <b>Date:</b>   | <b>Aug 22, 2006</b> |
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# **ZyXEL P-660R-D1 Standard Version Release 3.40(AGE.2)C0 Release Note**

**Date:** Aug 22, 2006

## **Supported Platforms:**

ZyXEL P-660R-D1

## **Versions:**

ZyNOS Version : V3.40(AGE.2) | 08/22/2006 13:11:26

Bootbase Version : V1.06 | 1/20/2006 15:48:00

## **Notes:**

The P-660R-D1 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. P-660R-D1 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 24Mbps (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.

P-660R-D1 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 06.00.04.00

## **Known Issues:**

1. Saw shaped throughput plot is observed from AX4000 traffic analyzer when doing FTP test.
2. Routing table doesn't update when we change different remote IP .(ENET ENCAP).
3. Traffic Redirect CAN function correctly, but CANNOT function effectively. That is to say, algorithm of traffic redirect functionality is correct, but switch time from ADSL to the BACKUP or vice versa might take as long as three minutes.
4. There is a Upgrade tool, if you can not upgrade F/W from 3.40(AGE.0) to 3.40(AGE.1) via FTP or Web/GUI, you can use this tool to complete it.

## **Features:**

**Modification in 3.40(AGE.2)C0 | 08/22/2006**

1. Change to FCS.

**Modification in 3.40(AGE.2)b3 | 08/02/2006**

1. [BUG FIX] SPRID: 060801021

Symptom: HW do 802.3u test fail, the ethernet output voltage is lower than the standart.

Condition: HW do 802.3u test fail.

2. [BUG FIX] SPRID: 060801023

Problem Symptom: In GUI->WAN ,Set two or more remote node, and use same encapsulation,different VPI/VCI,set static IP. Then delete one rule and set the same setting in other remote node. Lan PC or device ping the gateway, the device will crash.

Problem Condition:

Step1:GUI->WAN set two remote node,and use same encapsulation,different VPI/VCI, and set static IP. Lan PC ping remote node 2 gateway successfully.

Setp2: Delete the remote node 2, and set the same setting in other rule, such as remote node 5. Lan PC ping remote node 5 gateway, the device will crash.

3. [BUG FIX] SPRID: 060801024

Problem Symptom: An administrator log in the device for configuration, if another LAN or WAN PC also tries to enter 192.168.1.1, the administrator which have logged in will not be allowed to configure the device until it log in again and it shows "The object on the P662HW-D3 is protected" in the web page.

Problem Condition: An administrator log in the device for configuration, if another LAN or WAN PC also tries to enter 192.168.1.1, the administrator which have logged in will not be allowed to configure the device until it log in again and it shows "The object on the P662HW-D3 is protected" in the web page.

4. [BUG FIX] SPRID: 060801025

Problem Symptom: In GUI->Maintenance->Diagnostic->DSL Line, click the button "Reset ADSL Line" , it will show LAN Information.

Problem Condition: Step1.Longin GUI, in Maintenance->Diagnostic->DSL Line page, click the button "Reset ADSL Line".Step2. It will show LAN information, like this: LAN Information, IP Address:192.168.1.1, IP Subnet Mask: 255.255.255.0

5. [BUG FIX] SPRID: 060801026

Problem Symptom: Enable UPnP and save, later device will crash

Problem Condition: setup1:Keep wan line off, in IE type a URL like www.google.com, device will redirect to http://192.168.1.1/zCfgTryAgain.html

setup2:In GUI>Advanced>UPnP, enable UPnP, and save. Later device will crash.

6. [BUG FIX] SPRID: 060801027

Problem Symptom: When load rom-0 from lan side use tftp, device will crash.

Problem Condition: When load rom-0 from lan side use tftp, device will crash.

**Modification in 3.40(AGE.2)b2 | 06/23/2006**

1. [BUG FIX]

SPRID: 060607442

Symptom: Device set RFC1483 bridge, PC can't get IP until reboot device.

condition: Device set RFC1483 bridge, PC can't get IP until reboot device.

2. [BUG FIX]

SPRID: 060608549

Symptom: use user log on device, then logout it, it will show "The object on the P660R-D1 is protected"

condition: use user log on device, then logout it, it will show "The object on the P660R-D1 is protected"

3. [BUG FIX]

SPRID: 060608559

Symptom: In GUI, Lan dhcp client table show a invalid ip address.

condition: step1: GUI->status->lan->client list, ip address show 104.32.62.61

step2: GUI->LAN->client list, ip address show 104.32.62.61

4. [BUG FIX]

SPRID: 060609662

Symptom: press reset button about 5 sec can rom rest, it can't meet spec.

condition: press reset button about 5 sec can rom rest, it can't meet spec.

5. [BUG FIX]

SPRID: 060609603

Symptom: Wan /more connections/ NAT edit lead to crash.

condition: Step1. Restore default setting.

Step2. Enter WAN/More Connections, edit one of the connections, then enter NAT SUA Only edit. After you apply it, It shows Address Mapping rule to edit, when you apply it, the device will crash.

Or if you choose Back, then edit the connection again, it will enter Address Mapping rule edit directly.

6. [BUG FIX]

SPRID: 060608504

Symptom: active Windows Networking(NetBIOS over TCP/IP) in GUI/ advanced/ LAN/ IP Page, it can't save

condition: step1. login advanced, in network->LAN->IP page, click "advanced setup" button, in the following page, active Windows Networking(NetBIOS over TCP/IP), allow between LAN to WAN, then click "apply" .

step2. go to the page again, the set can't save, the Windows Networking(NetBIOS over TCP/IP) is still inactive.

7. [BUG FIX]

SPRID: 060608557

Symptom: Tcpiip filter applied in lan side can't be removed correctly.

condition: Step2 When apply the filter in lan side using CI command like "lan filter incoming tcip 1 0 0 0", it shows error information, and using "lan filter incoming tcip 1" can apply the filter successfully.

Step3 When you want to remove the filter in lan side, you can't use "lan filter incoming tcip 0 0 0 0", and you must use CI command like "lan filter incoming tcip 2" to set to another rule.

8. [BUG FIX]

SPRID: 060608560

Symptom: Bridge RFC1483 can't be set correctly in GUI->Wizard Setup->Internet

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Setup

condition: Step1 Enter Wizard Setup and start Internet/Wireless Setup.

Step2 When DSL Auto detected fails, select Bridge RFC1483 mode and apply it. It will still show this configuration page.

Step3 Enter Advance Setup and the configuration have been saved successfully.

9. [BUG FIX]

SPRID: 060609606

Symptom: CI Command "ip nat server clear [set#]" can not work

condition: step1: In SMT or GUI add several server

step2: In SMT, use CI Command "ip nat server clear 1(SUA's default server is set 1)" and "ip nat server save", it can not clear.

10. [BUG FIX]

SPRID: 060609639

Symptom: release note known issue need update.

condition: release note known issue need update.

11. [ENHANCEMENT CHANGE]

Update copyright information to :

Copyright (c) 1994 - 2006 ZyXEL Communications Corp.

12. [ENHANCEMENT CHANGE]

Update the sentence in GUI "Maintenance > Tools > Configuration":

Change "Prestige" to "router"

13. [ENHANCEMENT CHANGE]

Update the help pages in GUI.

14. [ENHANCEMENT CHANGE]

Change default romfile by add vpi/vci in vcautohunt table.

**Modification in 3.40(AGE.2)b1 | 06/05/2006**

1. use New GUI

2. remove SMT

3. [ENHANCEMENT ]

add half bridge.

4. [ENHANCEMENT ]

change modem code to 6.0.4.0

5. [FEATURE CHANGE]

Port forwarding configuration set by UPNP will not be saved to romfile.

**Modification in 3.40(AGE.1)C0 | 02/27/2006**

1. Change to FCS

2. Change default romfile.

**Modification in 3.40(AGE.1)b3 | 02/22/2006**

1. [BUG FIX]

SPRID: 060222003

Symptom: set a filter, when apply it use CI command in WAN, it must fill 4 parameter, but apply it in LAN it need not to fill 4 parameter, it can be save when it have only 1 parameter.

condition: set a filter, when apply it use CI command in WAN, it must fill 4 parameter, but apply it in LAN it need not to fill 4 parameter, it can be save when it have only 1 parameter.

2. [BUG FIX]

SPRID: 060222004

Symptom: when do chamber test DSL will link down and then up in one second .

condition: when do chamber test DSL will link down and then up in one second .

3. [BUG FIX]

SPRID: 060124210

Symptom: run FTP file download about 1 hours, the device will reboot.

condition: run FTP file download about 1 hours, the device will reboot. use Acaltel UD adsl2+, sync up rate: up 1179kbps, down 23458kbps. file download rate: 2105kB/s

**Modification in 3.40(AGE.1)b2 | 01/11/2006**

1. [BUG FIX]

SPRID: 060111445

Symptom: set a schedule, when apply it use CI command "wan node callsch"

it must fill 4 parameter, that is to say, you must type like

this "wan node callsch 1 0 0 0", but not like "wan node callsch 1".

condition: set a schedule, when apply it use CI command "wan node callsch"

it must fill 4 parameter, that is to say, you must type like

this "wan node callsch 1 0 0 0", but not like "wan node callsch 1".

2. [BUG FIX]

SPRID: 060111447

Symptom: Set NAT rule, the DUT will crash. set 10 rules in menu 15.1.1, then set rules one by one in menu 15.1.2, when you set the 9th rule, DUT will crash

Condition: N/A

3. [BUG FIX]

SPRID: 060111455

Symptom: Prestige can not be managed from WAN side in RFC1483 bridge mode.

Condition: N/A

4. [BUG FIX]

SPRID: 060105234

Symptom: Turn on vc hunt debug flag when DUT is hunting, DUT will show the debug information continually. And after a while, DUT will crash.

Condition: 1. Turn on vc hunt debug flag when DUT is hunting, DUT will show the debug information continually. And after a while, DUT will crash.

2. The phenomenon will happen sometimes.

5. [BUG FIX]

SPRID: 060105237

Symptom: In GUI, NAT Full Feature can not work normally.

Condition: In GUI, NAT Full Feature, "one-to-one", "many-to-one", "many-to-many overload", "server", correct rules can't be saved.

6. [BUG FIX]

SPRID: 060105238

Symptom: Release note has a mistake.

Condition: The release note show [Feature Change]:Change modem code to 5.0.5.0.  
But the correct modem code is 5.1.3.0.

**7.[ENHANCEMENT CHANGE]**

Add Multi-boot V2.3

**Modification in 3.40(AGE.1)b1 | 12/26/2005**

**1. [BUG FIX]**

SPRID: 051227463

Symptom: Upload wrong romfile by SMT Restore Configuration may cause device crash.

Condition: If the upload romfile is text format or wrong content binary image, after restore from

SMT 24.6, the device may crash.

**2. [BUG FIX]**

SPRID: 051227464

Symptom: Change the LAN IP or subnet mask,IE can't access device.

Condition: 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.

**3. [BUG FIX]**

SPRID: 051227465

Symptom: CI command "sys stdio" does not follow the spec.

Condition: Enter "sys stdio 4 30", it will set the timeout to 30 seconds.

**4. [BUG FIX]**

SPRID: 051227466

Symptom: In "many to many no overload" mode, IGA and ILA does not match , but it can save in EWC.

Condition: Step 1: In the SMT menu 15.1.1, edit one rule, choose the type "many to many no

overload", if the number of local IP is not equal to the number of global IP, there is

error information "IGA and ILA does not match" and the setting can't be saved.

Step 2: In the GUI setting, if the number of local IP is not equal to the number of

global IP, there is no error, and in the SMT menu 15 the setting has been saved.

**5. [BUG FIX]**

SPRID: 051227467

Symptom: The "Connection testing" page will change to "connction testing fail" Page for only one brower.

condition: 1.If there are no correct PVC in hunting table.

2.Page will return to "Auto\_Hunt\_Fail".

3.If there are two or more browers,only one page will display

"Auto\_Hunt\_Fail",the other pages will also display

"Connection testing".

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6. [BUG FIX]

SPRID: 051227468

symptom:device will be crash

condition: 1.set default romfile

2.in vc hunt table have vpi/vci=0/33

3.turn on vc hunt debug flag

7. [BUG FIX]

SPRID: 051227469

Symptom: SMT24.2.1 always show Multi-mode and GUI always show Multi-mode when change

dsl standard to others(for example:adsl2,adsl2+)

Condition:

1. Set operation mode as ADSL2 use "wan adsl opencmd adsl2.

2. In smt 24.2.1 it will show Multi-mode.

3. when sync up GUI still show Multi-mode

8. [BUG FIXED]

SPRID: 051227470

Symptom: eWC time out but can reset DUT to the factory default.

Condition: Step1 enter eWC->maintenance->firmware

Step2 enter SMT menu 24.8 CI command"sys reboot"

Step3 after DUT startup click the reset button in eWC then can reset DUT to the factory default

9. [BUG FIX]

SPRID: 051227471

Symptom: eWC timeout but telnet port still can save change.

Condition: step1.eWC in remote management.

step2.change telnet port 23 to 23023 and wait time out.

step3.apply it.

step4 turn on login face and login step5.in remote management the telnet port have changed from 23 to 23023.

10. [BUG FIX]

SPRID: 051227473

Symptom: choose PPPoA encapsulation to sync up,when need to retype username and password

the IE url show "ZCfGPPPoE.html" webpage

Condition:choose PPPoA encapsulation to sync up,when need to retype username and password

the IE url show "ZCfGPPPoE.html" webpage

11.[BUG FIX]

SPRID: 051227474

Symptom: Chariot testing fail if simultaneously select multiple Chariot script.

Condition: Topology: EndPoint1--660R--DSLAM--BRAS--Endpoint2

Selecting all 10 internet standard scripts(\netiq\chariot\script



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\internet\) run at

the same time for a long continuous time, error with the number 0245 in Chariot

will occur and it will stop the test.

12. [BUG FIX]

SPRID: 051227475

Symptom: It can't escape SMT24.1

Condition: When performing vc-hunt process

13. [ENHANCEMENT CHANGE] (Quick Route update)

update to qroute.c(1.3),according to PM and TE ,remove debug information.

14. [FEATURE CHANGED]

Symptom: Change modem code to 5.1.3.0.

**Modification in 3.40(AGE.0)C0 | 12/02/2005**

1.Change to FCS.

**Modification in 3.40(AGE.0)b4 | 11/10/2005**

1. [BUG FIX]

SPRID: 051108425

Symptom: In SMT menu 4 and menu3.5 the ISP's name and ESSID can not accept special characters such as #\$\$%^, but in eWC can accept it, they are not accordant.

Condition: In SMT menu 4 and menu3.5 the ISP's name and ESSID can not accept special characters such as #\$\$%^, but in eWC can accept it, they are not accordant.

2. [BUG FIX]

SPRID: 051101010

Symptom: When reset default romfile,set Encapsulation=RFC1483 or EAET Encap+LLC+Static IP, In CI command,ping 192.168.8.1,It Can not ping 192.168.8.1,if ping many times,DUT will crash.

Condition: step1:In menu 24.8 to reset default romfile.

step2:set Encapsulation=RFC1483 or EAET Encap+LLC+static IP.

step3:In CI Command,Edit "ip ping 192.168.8.1".it can not ping.

step4:if ping many times,DUT will crash.

But set Encapsulation=PPPOA or PPPoE,it can ping successully,this time,change Encapsulation=RFC1483,it can ping successully.

3. [BUG FIX]

SPRID: 051102108

Symptom: Multiboot can not support Upload the F/W to DUT with SMT debug mode.

Condition: step1:PC connect to DUT LAN side, and set the PC as a random static IP.

step2:Open MultiBootSrv.exe in PC. Click "BootBase File", and click "Browse", set the path of F/W bm file. Click "ROM File", and click "Browse", set the path of F/W rom file. Click "RAS File" , and click "Browse", set the path of F/W bin file. Click "Enable engineer debug".

step3:Click "Start", then reboot DUT, the upload F/W will in process in SMT debug mode,The F/W upload can not't success through MultiBootSrv.exe.

4. [Feature Enhancement]  
Add reset button test Function
5. [Feature Enhancement]  
Add quick route

**Modification in 3.40(AGE.0)b3 | 10/27/2005**

1. [Feature Enhancement]  
TI Throughput Enhance

**Modification in 3.40(AGE.0)b2 | 10/11/2005**

1. [BUG FIX]  
SPRID: 050921873  
Symptom: The cell rate can't be limited by the setting of ATM QoS  
Condition: Step1: The DUT and AX/4000 run under route mode. in menu4, set PCR=1000, SCR=500, MBS=500  
Step2: ATM QoS Type=UBR/VBR/CBR, refer to the AX/4000 test result, the cell rate of the three type are almost the same and are larger than 1000 cell/s.  
Step3: The DUT and AX/4000 run under bridge mode. in menu4, set PCR=1000, SCR=500, MBS=500  
Step4: when ATM QoS Type=UBR /CBR, refer to the AX/4000 test result, the cell rate of the two type are almost the same and are larger than 1000 cell/s. And when ATM QoS Type=VBR, the cell rate is half of which when ATM QoS Type=CBR, but larger than 500.
2. [BUG FIX]  
SPRID: 050921864  
Symptom: When we enable "ping traffic is blocked from the WAN" function that it will also block LAN->WAN  
Condition: When we enable "ping traffic is blocked from the WAN" function that it will also block LAN->WAN
3. [BUG FIX]  
SPRID: 050915640  
Symptom: The DSL LED Flash at 1 Hz with a 50% duty cycle during all training course ;it can't meet the PS.  
Condition: 1.Power on and connect the DSLAM.  
2.Measure the frequency with oscilloscope when training course.
4. [BUG FIX]  
SPRID: 050921869  
Symptom: While set the DUT LAN "Client IP Pool Starting Address" and "Size of Client IP Pool" which are not match the "IP Subnet Mask", but this can be saved in GUI\Wizard Setup and rom-t. In SMT and GUI\Advanced Setup have no this issue.  
Condition: While set the DUT LAN "Client IP Pool Starting Address" and "Size of

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Client IP Pool” which are not match the “IP Subnet Mask”, but this can be saved in GUI\Wizard Setup and rom-t. In SMT and GUI\Advanced Setup have no this issue.

5. [Feature Enhancement]

Ftp malloc

6. [Feature Enhancement]

TI Enhance

7. [BUG FIX]

SPRID: 051012013

Symptom: subnet mask error

Condition: Procedure to reproduce the problem

1. Log into the device via WEB GUI

2. Config Static WAN IP Address

3. Enter subnet mask ”255.255.248.0”

Then it will pop up a message shows “subnet mask error”. However, “255.255.248.0” is a valid subnet

**Modification in 3.40(AGE.0)b1 | 09/13/2005**

1. Create this project. For more details, please refer to P-660R-D1 external specification.

**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="#">IP Related Command</a> | <a href="#">PPP 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                   |

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|  |            |          |                                           |                                                                                                                                                                             |
|--|------------|----------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | edit       |          | <filename>                                | edit a text file                                                                                                                                                            |
|  | enhanced   |          |                                           | return OK if commands are supported for PWC purposes                                                                                                                        |
|  | errctl     |          | [level]                                   | set the error control level<br>0:crash no save,not in debug mode (default)<br>1:crash no save,in debug mode<br>2:crash save,not in debug mode<br>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                           | mail schedule policy                                                                                                                                                        |

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|  |          |         |                                                              |                                                                                           |
|--|----------|---------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------|
|  |          |         | [0:full/1:hourly/2:daily/3:weekly/4:none]                    |                                                                                           |
|  |          |         | schedule week<br>[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<br>code = 0 cold boot,<br>= 1 immediately boot<br>= 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                                                                   |

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|  |           |           |                                            |                                                                                    |
|--|-----------|-----------|--------------------------------------------|------------------------------------------------------------------------------------|
|  | 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><br>[none incoming outgoing bothway] | <channel name>=enet0,sdsl00, fr0<br>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><br><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.<br>mode: 1: turn off receiving<br>2: receive only packets of this interface<br>3: mode 2+ broadcast<br>5: mode 2 + multicast<br>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                                                                                                                                  |

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



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|  |       |                |                                |                                                                                                                                                                                                                                |
|--|-------|----------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |       | persisttime    | [time]                         | when the adaptive condition is matched system will continue to monitor the time period persisttime_ 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 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                                                                                                                                                                                                |
|  | tr069 | load           |                                | load TR069 setting before configure                                                                                                                                                                                            |
|  |       | active         | [1 0]                          | Enable/Disable TR069 feature                                                                                                                                                                                                   |
|  |       | acsUrl         | string                         | The URL of ACS                                                                                                                                                                                                                 |
|  |       | periodicEnable | [1 0]                          | Enable/Disable periodically inform method call                                                                                                                                                                                 |
|  |       | informInterval | [value]                        | Set periodic inform method call interval                                                                                                                                                                                       |
|  |       | informTime     | [value]                        | Set an absolute time for each day to send an inform method call                                                                                                                                                                |
|  |       | reset          |                                | Reset TR069                                                                                                                                                                                                                    |
|  |       | debug          | [on/off]                       | Enable/Disable TR069 debug mode                                                                                                                                                                                                |
|  |       | username       | string                         | The username used to authenticate the CPE when making a connection to the ACS using the TR-069                                                                                                                                 |
|  |       | password       | string                         | The password used to authenticate the CPE when making a connection to the ACS using the TR-069                                                                                                                                 |
|  |       | requsername    | string                         | The username used to authenticate an ACS making a Connection Request to the CPE                                                                                                                                                |
|  |       | reqpassword    | string                         | The password used to authenticate an ACS                                                                                                                                                                                       |

|  |  |  |  |                                        |
|--|--|--|--|----------------------------------------|
|  |  |  |  | making a Connection Request to the CPE |
|--|--|--|--|----------------------------------------|

## IP Related Command

[Home](#)

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

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|  |          |                |                                                             |                                            |
|--|----------|----------------|-------------------------------------------------------------|--------------------------------------------|
|  |          |                | 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><br>[mtu <value>]dynamic] | configure network interface                |
|  | ifdrop   |                | <iface>                                                     | chaek if iface is available.               |
|  | ping     |                | <hostid>                                                    | ping remote host                           |
|  | pong     |                | <hostid> [<size> <time-interval>]                           | pong remote host                           |
|  | route    |                |                                                             |                                            |
|  |          | status         | [if]                                                        | display routing table                      |
|  |          | add            | <dest_addr default>[/<bits><br><gateway> [<metric>]         | add route                                  |
|  |          | addiface       | <dest_addr default>[/<bits><br><gateway> [<metric>]         | add an entry to the routing table to iface |
|  |          | addprivate     | <dest_addr default>[/<bits><br><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   |

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|  |           |            |                             |                                                 |
|--|-----------|------------|-----------------------------|-------------------------------------------------|
|  |           |            |                             | connection.                                     |
|  |           | mss        | [value]                     | TCP input MSS                                   |
|  |           | reset      | <tcb>                       | reset tcb                                       |
|  |           | rtt        | <tcb> <value>               | set round trip time for tcb                     |
|  |           | status     | [tcb] [<interval>]          | display TCP statistic counters                  |
|  |           | syndata    | [on/off]                    | TCP syndata piggyback                           |
|  |           | trace      | [on/off]                    | turn on/off trace for debugging                 |
|  |           | window     | [tcb]                       | TCP input window size                           |
|  | samenet   |            | <iface1> [<iface2>]         | display the ifaces that in the same net         |
|  | uninet    |            | <iface>                     | set the iface to uninet                         |
|  | tftp      |            |                             |                                                 |
|  |           | support    |                             | prtn if 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                                |
|  | 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     |                             |                                                 |

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

PPP Related Command

[Home](#)

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

Bridge Related Command

[Home](#)

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