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Firmware Release Note

P-660HW-D1

Standard version

Release 3.40(AGL.1)C0

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ZyXEL P-660HW-D1 Standard Version Release 3.40(AGL.1)C0 Release Note

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Supported Platforms:

ZyXEL P-660HW-D1

Versions:

ZyNOS Version : V3.40(AGL.1) | 03/17/2006 12:00:00

Bootbase Version : V1.06 | 1/20/2006 9:44:11

Notes:

The P-660HW-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-660HW-D1 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 26Mbps (ADSL2+), greater reach, faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a high integrated advanced Firewall, Bandwidth Management and IEEE 802.11g wireless features to meet the demand of high-end market.

P-660HW-D1 provides an embedded mini-PCI module for 802.11g Wireless LAN connectivity, four single auto-sensing, auto-detection 10/100BASE-T Ethernet ports for connection to the user's local network, and a single RJ-11/RJ-45 port for connection to ADSL/ADSL2/ADSL2+ line.

ADSL data pump version: TI AR7 05.01.03.00

Features:

Modifications in V 3.40(AGL.1) C0 | 03/17/2006

1. change to FCS version

Modifications in V 3.40(AGL.1) b1 | 03/15/2006

1. Update help pages
 - 1) Maintenance > System > General
 - 2) Network > Wireless LAN > OTIST
 - 3) Security > Firewall
 - 4) Advanced > BW MGMT
 - 5) Advanced > Remote MGNT > ICMP
 - 6) Status

Modifications in V 3.40(AGL.0) C0 | 03/13/2006

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1 . change to FCS version

Modifications in V 3.40(AGL.0) b5 | 03/06/2006

1. [FEATURE CHANGE]
 - 1). Default password for normal user: user. Default password for admin user: 1234.
web login page password default : user
 - 2). remove the wizard set up from normal user level and remove change password function for normal user so that normal user can directly view the status page.
2. change default romfile : Default password for normal user: user. Default password for admin user: 1234.

Modifications in V 3.40(AGL.0) b4 | 03/05/2006

1. [BUG FIX] SPRID: 060302271
Problem Symptom: [Regression]Throughput bridge mode downstream ADSL(packet length: 64,128) and ADSL2+ (packet length: 64,128,256,512) can't meet PQA's criterion
Problem Condition: Throughput bridge mode downstream ADSL(packet length: 64,128) and ADSL2+ (packet length: 64,128,256,512) can't meet PQA's criterion.
2. [BUG FIX] SPRID: 060303431
Problem Symptom: Can not get current time from Time server
Problem Condition: step1. Reset default romfile. step2. Config the WAN, set the time server and select the Time Zone is (GMT=08:00) Beijing, Chongqing, Hong Kong, Urumqi, then click "Apply". DUT can get current time and date. step3. Select Manual, change New Time and New Date, then click "Apply". step4. Set the time server, this time it can get current date from time server, but can't get current time.
3. [BUG FIX] SPRID: 060302268
Problem Symptom: [Regression]In GUI-> Maintenance-> Diagnostic->DSL Line page, click "Capture All Logs", the windows which would be show the info will be disappear.
Problem Condition: In GUI-> Maintenance-> Diagnostic->DSL Line page, click "Capture All Logs", the windows which would be show the info will be disappear.
4. [BUG FIX] SPRID: 060301193
Problem Symptom: [Regression]Click the "apply" in wizard wireless page, the DUT will crash..
Problem Condition: step1. Reset default romfile. step2. In GUI-> Wizard->>wireless, click "next", "next", then click "apply", the DUT will crash.
5. [BUG FIX] SPRID: 060228275
Problem Symptom: [Regression]Set Secure Client IP, it can't work
Problem Condition: step1. In GUI/ Advanced/ Remote MGMT/ WWW, set Secure Client IP = 192.168.1.33.step2. Use one PC which IP is not 192.168.1.33, it can still login GUI.step3. The FTP, TELNET have the same issue.
6. [BUG FIX] SPRID: 060302270
Problem Symptom: Disable the Wireless function, after period of times, LAN PC with fixed IP ping LAN IP, only the first several ICMP reply packets can be received, then will show "Request timed out".
Problem Condition: step1. Use default setting, but disable the Wireless function. step2.

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Using a LAN PC with fix IP (EX: 192.168.1.50) ping the DUT LAN IP (192.168.1.1), and the ping traffic can be handled properly at this moment. step3. Stop the ping traffic running from 192.168.1.50 to 192.168.1.1, and just leave the DUT powered on. step4. After about 20 hours, start again the ping traffic from LAN PC to the DUT, will found only the first several ICMP reply packets can be received, then will show “Request timed out”, so others can not received.

7. [BUG FIX] SPRID: 060303429
Problem Symptom: [Regression]Bridge mode packet loss (packet size: 64) can't meet PQA's criterion.
Problem Condition: Bridge mode packet loss (packet size: 64) can't meet PQA's criterion.
8. [BUG FIX] SPRID: 060301196
Problem Symptom: Change the Qos type to VBR-RT, the LAN to WAN can't work correctly.
Problem Condition: step1. Config DUT, the LAN PC can ping WAN PC; the LAN to WAN can work correctly. step2. Change the Qos type to VBR-RT, the LAN PC can't ping WAN PC, the LAN to WAN can not work correctly. step3. Then change the Qos type to others type (ex.CBR), the LAN to WAN still can not work correctly; but if reboot the DUT, it can work correctly. step4. The DUT works at bridge mode, it has the same issue.
9. Change default romfile:turn off PPPoE Passthrough
10. Samsung flash support.

Modifications in V 3.40(AGL.0) b3 | 02/24/2006

1. [BUG FIX] SPRID: 051227526
Problem 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”.
Problem 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: 051228627
Problem Symptom: in GUI, the Qos have CBR, UBR,VBR-nRT, VBR-RT, but the CI command it only have CBR, UBR.
Problem Condition: in GUI, the Qos have CBR, UBR,VBR-nRT, VBR-RT, but the CI command it only have CBR, UBR.
3. [BUG FIX] SPRID: 060109394
Problem Symptom: (bug fixed not complete)Click the “exit” button it have different result
Problem Condition: Step1.in wizard or advanced, select “go to wizard set up”, then click the “exit” button, it pop up a message “are you sure you want to close the windows?”, select no, then the page won't change.
Setp2.but if you select “view device status” or “change password” in wizard, or select “go to advanced setup” in advanced, then do the same setting with step1, the page will go to the corresponding page.

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step3.login with user password have no this issue, but login with admin password this issue is still exist.

4. [BUG FIX] SPRID: 060111543
Problem Symptom: In GUI- > Advanced- > Remote MGMT- > SNMP, no matter choose Disable, LAN, or WAN, MIB Browser can run both on LAN and WAN.
Problem Condition: In GUI- > Advanced- > Remote MGMT- > SNMP, no matter choose Disable, LAN, or WAN, MIB Browser can run both on LAN and WAN.
5. [BUG FIX] SPRID: 060111544
Problem Symptom: When DUT use static IP and set DNS server address in GUI-> wizard, LAN PC won't resolve domain name.
Problem Condition: Step1. Login with user password, configure DUT use static IP and set DNS server in wizard setup page.
Step2. in LAN PC try to resolve domain name, but failed.
6. [BUG FIX] SPRID: 060112659
Problem Symptom: Whiteboard can't work well when UPNP is enabling.
Problem Condition: Step1.firewall is enabling. Step2.Enable UPNP, WAN first ask for whiteboard, the whiteboard can't work. Step3.Enable UPNP and "allow users to make configuration changes through UPnP", the Whiteboard can't work from LAN to WAN, or WAN to LAN.
7. [BUG FIX] SPRID: 060113744
Problem Symptom: The word "dasable" in CI command "wan callsch action" was spelled wrong
Problem Condition: Issue CI command "wan callsch action", it show [0:force on| 1:force down| 2:enable dial-on-command | 3:dasable dial-on command], the word "dasable" was spelled wrong, it should be "disable".
8. [BUG FIX] SPRID: 060113703
Problem Symptom: in the status page, the word "secondes" was spelled wrong.
Problem Condition: login in with user password or with admin password, in the status page, the Refresh Interval item, the word "secondes" was spelled wrong, it should be "seconds".
9. [BUG FIX] SPRID: 060113745
Problem 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.
Problem 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.
10. [BUG FIX] SPRID: 060113746
Problem Symptom: It will show "the flags is: 0x00000007" when save the IP

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policyrouting configuration use CI command.

Problem Condition: It will show “the flags is: 0x00000007” when save the IP policyrouting configuration use CI command.

11. [BUG FIX] SPRID: 060116808
Problem Symptom: Issue CI command “sys stdio 0”, then issue CI command “exit”, the DUT will hang
Problem Condition: Issue CI command “sys stdio 0”, then issue CI command “exit”, the DUT will hang
12. [BUG FIX] SPRID: 060116809
Problem Symptom: Type 29 characters, and then click “Generate”, the DUT will crash.
Problem Condition: Step1. login GUI->Wireless LAN page, select the Security mode = Static WEP, in Passphrase, type 29 characters, then click the “Generate” .
Step2. the DUT will crash.
13. [BUG FIX] SPRID: 060116810
Problem Symptom: In the status page, the “-Content filter” should remove to right a little.
Problem Condition: Login with admin password, in the status page, the “-Content filter” should remove to right a little.
14. [BUG FIX] SPRID: 060117849
Problem Symptom: Change the LAN IP address from 192.168.1.1 to 192.168.1.3, after the LAN PC get new ip address, in LAN PC the default gateway is still 192.168.1.1
Problem Condition: Step1. Login in GUI->LAN page, change the LAN IP address from 192.168.1.1 to 192.168.1.3.
Step2. in LAN PC, issue DOS command “ipconfig/release” and “ipconfig/renew”, after the LAN PC get new IP address, the default gateway is still 192.168.1.1, but not 192.168.1.3.
15. [BUG FIX] SPRID: 060120078
Problem Symptom: Can't upload or backup ras cord and rom file via TFTP.
Problem Condition: Can't upload or backup ras cord and rom file via TFTP.
16. [BUG FIX] SPRID: 060119040
Problem Symptom: When tripleplay is enable, LAN to WAN can't work correctly.
Problem Condition: Step1. Setup remote node 1, the LAN PC can ping WAN PC, LAN to WAN can work correctly. Step2. Enable the tripleplay, LAN PC can't ping WAN PC, LAN to WAN can not work correctly. Step3. The DUT works bridge mode, it has the same issue.
17. [BUG FIX] SPRID: 060120083
Problem Symptom: you can't access the wizard setup page if you have access it one time
Problem Condition: you can't access the wizard setup page if you have access it one time, you can reproduce as follow steps: step1. reset default romfilestep2. login wizard,

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click "INTERNET/WIRELESS SETUP ", it will Auto detecting ISP, then access the wizard setup page setp3. click "back"button to return the page, click the "INTERNET/WIRELESS SETUP" again, after it auto detecting ISP, it will show connection test successful page, and you can't access the wizard set up page.

18. [BUG FIX] SPRID: 051230713
Problem Symptom: help page issue
Problem Condition: 1. Wizard->change password, hale page is not right, it same with the advanced->maintenance->system' s help page.
2. Advanced->Network->WAN->Internet Access Setup, help page is not right.
3. Advanced->Network->WAN->WAN Backup, can' t get the help page.
4. Advanced->Maintenance->tools->configuration can' t get the help page.
5. Advanced->Bandwidth MGMT, all the help page is blank.
6. Advanced->Dynamic DNS, can' t get the hlep page.
19. [BUG FIX] SPRID: 060120082
Problem Symptom: help page issue
Problem Condition: the detail information see in in attachment in SPR system.
20. [BUG FIX] SPRID: 060223101
Symptom: Add static DHCP client has some problems.
Condition: Go to "Network > LAN > Client List" in eWC, add 10 static DHCP clients in table. Add more than 11th clients, system will always erase 1st one without warning message.
21. [BUG FIX] SPRID: 060223102
Symptom: In eWC, there is no "IP Subnet Mask" in Static Route display page.
Condition: We can configure "IP Subnet Mask" in "Static Route" page, but in display page, system doesn't display this item.
22. [BUG FIX] SPRID: 060223103
Symptom: "SMTP Authentication" related configuration is gone after clicked "Apply" button.
Condition: "SMTP Authentication" related configuration is gone after clicked "Apply" step1. Go to "Maintenance > Logs > Log Settings" in eWC, configure Email and "SMTP Authentication" related configuration (check "SMTP Authentication" and enter username/password), finally, click "Apply" button.
step2. Refresh this page, found "SMTP Authentication" related configuration is empty.
step3. Try to fill in the same configuration and click "Apply" button again, system displays "ERROR: INTERNAL ERROR".
23. [BUG FIX] SPRID: 060223104
Symptom: IOP issue with Firefox web browser.
Condition: When using Firefox web browser to configure DUT, there are many pages with some errors and weird display, please correct. For example, while select PPPoA in WAN page, there is no "username/password".

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24. [BUG FIX] SPRID: 060223106
Exception: We config system name = 30 characters via SMT and use WPA in wireless security. If the wireless client try to associate to Router via WPA, then Router exception
25. [BUG FIX] SPRID: 060223107
symptom: Firefox web browser Ver.1.0.6 issue.
Condition:
1. When using Firefox web browser to setup the Network > WAN. If we select the PPPoE or PPPoA encapsulation, but the browser will not flash to the relate setting page.
2. Also, when click the Advanced Setup, it does not work.
3. Also, the Firewall page is not good ...
26. [BUG FIX] SPRID: 060223112
Symptom: eWC, SMT and CI command inconsistency with Remote Management.
Condition: eWC, SMT and CI command inconsistency with Remote Management.
1. In eWC, there are WWW, Telnet, FTP, SNMP, DNS and ICMP selections.
2. In SMT, only Web, Telnet and FTP selections.
3. In CI command (sys server disp), only Web, Telnet, FTP and ICMP selections.
Please sync up.
27. [BUG FIX] SPRID: 060223113
Symptom: DHCP Client List display has serious problem.
Condition: Two PC connect DUT and get IP
1. Check "Reserve", the same record will have two.
2. Click "Modify" to change IP to "192.168.1.666" and click "Apply" button, system displays uncorrect message, "ERROR: HTML Item value can't be empty192.168.1.666".
3. Besides, if want to "Modify", need to click twice "edit hyperlink".
28. [BUG FIX] SPRID: 060112651
Symptom: The RIP via IP alias 1 and IP alias 2 can not works correctly..
Condition: Step1.in GUI, config the IP alias 1 and IP alias 2, set the RIP direction = Both or In only, the RIP Version = RIP-1, RIP-2B or RIP-2M. Step2.in LAN PC use tool generate RIP packet, the DUT can't receive the RIP packet. Step3.use CI commands setup, have the same issue.
29. [BUG FIX] SPRID: 060118958
Symptom: If you enable the Pop-up blocker, it will close the GUI when the GUI page is being changing.
Condition: step1. Install blocker in your PC, such as yahoo assistant, enable Pop-up blocker. step2. Login in GUI, click some button if the GUI page will be change (such as login with admin password, then click "go to advanced setup"), it will close the GUI.
30. [BUG FIX] SPRID: 060117850
Symptom: Run ftp file transfer, after several hours, it will stop.

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Condition: Step1. Link the DUT to Alcatel UD DSLAM, the DSL mode is ADSL2+Step2. Run ftp file transfer, after several hours, it will stop, when it stop, the LAN PC can't ping to the WAN PC's IP address (the ftp server).

31. [BUG FIX] SPRID: 060222092
Symptom: DUT will crash when issue CI command "sys server disp".
Condition: 1. Reset default romfile2. Issue CI command "sys server disp", the DUT will crash.
32. [BUG FIX] SPRID: 060110441
Symptom: (bug fixed not complete) help page issue.
Condition: 1. Advanced->Network->WAN->Internet Access Setup, help page is not right. 2. Advanced->Maintenance->tools->configuration can't get the help page.
33. [BUG FIX] SPRID: 060224160
Symptom: DNS page in Remote Management seems useless.
Condition: DNS page in Remote Management seems useless
step1. In eWC, go to "Advanced > Remote MGNT > DNS" to configure, "Access Status: LAN" and click "Apply" button.
step 2. One PC at WAN side, configure DNS as DUT's WAN IP.
step 3. Let PC ask DUT DNS, for example, ping tw.yahoo.com.
step 4. No matter what configuration, DUT still reply DNS, seems the DNS page doesn't work.
34. [BUG FIX] SPRID: 060224161
Symptom: SMTP send log mail schedule issue.
Condition:step1. GUI, Maintenance > Logs > Log Settings page
step2. The log Schedule function does not work.
step3. It always send log mail immediately when a log is create.
35. [BUG FIX] SPRID: 060224162
Symptom: Block intraBSS: We load the default setting, then config static WEP128 environment. We prepare three wireless client(Centirno-G/G-162/B-220) to associate Router/AP and ping each other. If we change the 802.11mode of the page "wireless advanced setup" from "Mixed" to "802.11g", then three wireless clients can not ping each other.(But the three wireless client still can ping Router/AP)
36. [BUG FIX] SPRID: 060224165
Symptom:When client is Intel Centrino 2100 3b, it can not connect to AP.When client is Intel Centrino 2200 BG, it can not connect to AP at WPA/WPA2 mode.

Condition: When client is Intel Centrino 2100 3b, it can not connect to AP.When client is Intel Centrino 2200 BG, it can not connect to AP at WPA/WPA2 mode.
37. [BUG FIX] SPRID: 051223420

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Symptom: in the page with form, do some setting in the modify page, then return the page, some times it have changed. nearly all of the page with forms have this issue. Condition: in the page with form, do some setting in the modify page, then return the page, some times it have changed. nearly all of the page with forms have this issue. one of the way to reproduce the issue as follow: step1. in static routing page, modify rule #1, apply you set. step2. back to the static routing page, some times the one of the other rules(ex. rule#6) will be remove to the right, or omit the remove button .

38. [FEATURE UPDATE]

In new GUI remove “remote node” option , move it into “wan” and rename as “more connections”, First remove node in “more connections” can’t be config. Change MBM monitor display information.

39. [FEATURE UPDATE]

Support Multiboot 2.3

40. [FEATURE UPDATE]

Add CI command for supporting TE requirement on WLAN TI1350A NVS downloading

41. [FEATURE UPDATE]

provided CLI command to enter Sniffer Mode

42. [FEATURE ENHANCE]

According to country code support wlan channel

43. [FEATURE ENHANCE]

Support EAP-SIM in 802.1x

44. [FEATURE ENHANCE]

Provide CLI command to match the ZyXEL transmit output power at TI 1350A.

45. update datapump to 5.1.3.0

46. change default romfile , NAT session pert host is 512

Modifications in V 3.40(AGL.0) b2 | 01/07/2006

1. [BUG FIX] SPRID: 051230737

Problem Symptom: LED display can’t meet spec

Problem Condition: INTERNET LED display can’t meet spec, when DUT attempted to become IP connected and failed, the INTERNET LED should red, but it fail.

2. [BUG FIX] SPRID: 051230738

Problem Symptom: wizard setup bridge mode, it can’t work

Problem Condition: step1. login in wizard, in wizard config page, set bridge mode, encapsulation = 1483, keyin correct VPI, VCI, then static set the correct ip in LAN PC. step2. LAN PC should ping WAN PC successful, but it fail.

3. [BUG FIX] SPRID: 051230739

Problem Symptom: WLAN Static WEP only can generate 10 characters

Problem Condition: step1. login GUI->Wireless LAN page, select the Security mode = Static WEP, in Passphase, type 13 characters, then click the “Generate”.

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step2. it only can generate 10 characters using only the number 0-9 and the letters “a-f” or “A-F”. but it should be 26 characters.

4. [BUG FIX] SPRID: 051230740

Problem Symptom: active the LAN and WLAN bandwidth, the WLAN can't use the FTP and the WWW.

Problem Condition: step1. in bandwidth MGMT page, active the LAN and WLAN bandwidth.

step2. the WLAN can't use the FTP and the WWW.

step3. if you active the bandwidth MGMT in wizard, it have the same issue.

5. [BUG FIX] SPRID: 051230715

Problem Symptom: [common bug] When 2 PCs visit eWC of DUT, the priority have some problem

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

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

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

6. [BUG FIX] SPRID: 051230704

Problem Symptom: ATM QoS Test -PCR/SCR/MBS check have problem(both router and bridge mode)

Problem Condition: step1. setup the Qos type = CBR, PCR = 1000, SCR = 500, MBS = 500.

step2. use ax/4000 test, the result can't match the setting value.

step3. setup the Qos type = UBR/VBR-nRT/ VBR-RT, the result can't match the setting value, and all of the test result is same. (the detail test result is in attachment)

7. [BUG FIX] SPRID: 051230716

Problem Symptom: [common bug] In GUI, The WAN Backup functions need at least one none-zero Check WAN IP

Problem Condition: In GUI, The WAN Backup functions need at least one none-zero Check WAN IP

8. [BUG FIX] SPRID: 051228626

Problem Symptom: setup a rule of ip policyrouting, there is no CI command to apply it in LAN

Problem Condition: setup a rule of ip policyrouting, there is no CI command to apply it in LAN

9. [BUG FIX] SPRID: 051228628

Problem Symptom: use CI command setup multi node, if they have the same VPI, then the second node can't save the configuration

Problem Condition: step1. use CI command setup node 1, select bridge mode.

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step2. use CI command setup node 2, enable it, select bridge mode, set the VPI with same the node 1(the VCI is different).
step3. when you save the configuration, it can't save.

10. [BUG FIX] SPRID: 051227525

Problem Symptom: DUT will show display the debug information"action2=1" or "action2=3" ceaselessly when schedule is used

Problem Condition: Step1 use PPPOA and nailed-it up
Step2 set a schedule start time 00:03 and duration time is 00:02 and force down
Step3 in menu1.1 schedule set =1, now time is 00:02 when time is 00:03 then PPPOA turn down. now SMT will show display the debug information"action2=1" ceaselessly
Step4. if the schedule action is set to disable dial-on-demand, it will show "action2=3".
Step5. use the pppoe have the same issue.

11. [BUG FIX] SPRID: 051229694

Problem Symptom: When tripleplay is enable all function with LAN side can't work correctly.

Problem Condition: 1. When tripleplay function is enable.
2. Change the DHCP to "Server" and the Client IP Pool Starting address=192.168.1.33.The LAN PC can't get the IP from DUT.
3. Change the DUT to Bridge mode, it can't work.
4. Change the tripleplay function to disable in CI command, the LAN PC can get the IP from DUT now, and the Bridge mode can work normally.
5. So generally, when tripleplay is enable, all function with LAN side can't work correctly.

12. [BUG FIX] SPRID: 051230703

Problem Symptom: select the multicast type in GUI LAN, it can't match with the CI command "lan disp".

Problem Condition: step1. login into GUI, in LAN page select the multicast = IGMP-v1, and apply it.
step2. issue CI command "lan disp", it show the multicast = None, and the DUT work according the type which showed in CI command.
step3. if you select the the multicast = IGMP-v2, in GUI LAN, in fact the multicast = IGMP-v1; select multicast = None, in fact the multicast = IGMP-v2.

13. [BUG FIX] SPRID: 051223415

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

Problem 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.

14. [BUG FIX] SPRID: 051227524

Problem Symptom: change the 802.11 mode to 802.11g only, but both client-G and

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client-B can connect to the AP.

Problem Condition: step1. 802.11g mode default is mixed mode, both client_B and client_G can connect to AP.

step2. change 802.11g mode to 802.11g only, but this time both client_B and client_G can connect to AP.

step3. change 802.11g mode to mixed mode, this time only client_G can connect to AP, if reboot the DUT, it also only client_G can connect to AP.

step4. change 802.11g mode to 802.11g only, this time both client_B and client_G can connect to AP.

15. [BUG FIX] SPRID: 051227523

Problem Symptom: in GUI->advanced->remote node, if you first select bridge mode, then can't select RFC 1483

Problem Condition: step1. login in GUI->advanced->remote node, in the detail config page, select bridge mode, then select encapsulation = 1483. step2. it show encapsulation = pppoa, but not RFC 1483.

16. [BUG FIX] SPRID: 051228631

Problem Symptom: in GUI->advanced->wan, select multicast = IGMP-v2, apply it, then go back the page, it show multicast = IGMP-v1.

Problem Condition: in GUI->advanced->wan, select multicast = IGMP-v2, apply it, then go back the page, it show multicast = IGMP-v1.

17. [BUG FIX] SPRID: 051228632

Problem Symptom: click the hypelink "Go to advanced setup page" in wizard, it can't go to the advanced setup page.

Problem Condition: step1. login to wizard with user password. step2. config the "BANDWIDTH MANAGEMENT SETUP", in the following page, it show hypelink "Go to advanced setup page", click it, it can't go to the advanced page, but go to the view device status page.

18. [BUG FIX] SPRID: 051221217

Problem Symptom: you can't access the wizard setup page if you have access it one time

Problem Condition: you can't access the wizard setup page if you have access it one time, you can reproduce as follow steps:
step1. reset default romfile
step2. login wizard, click "INTERNET/WIRELESS SETUP", it will Auto detecting ISP, then access the wizard setup page.
step3. click "bake" button to return the page, click the "INTERNET/WIRELESS SETUP" again, after it auto detecting ISP, it will show connection test successful page, and you can't access the wizard set up page.

19. [BUG FIX] SPRID: 051221230

Problem Symptom: in remote node, if you change the encapsulation mode, it will change to inactive

Problem Condition: step1. login advanced->network->remote node, set one node, and

active it
step2. change the encapsulation mode, the node will change inactive

20. [BUG FIX] SPRID: 051222319

Problem Symptom: when you config the advanced->maintenance->system->general page, you can't change Wizard password via GUI/Login page

Problem Condition: step1. reset the default romfile.
step2. login with admin user password, and config the system name in advanced->maintenance->system->general page, then logout.
step3. login with wizard password, you can't change wizard password via GUI/Login page.

step4. you config the other items(domain name, administrator inactivity timer or password) in the page, it has the same issue.

21. [BUG FIX] SPRID: 051220164

Problem Symptom: Click the "exit" button it have different result

Problem Condition: Step1.in wizard or advanced, select "go to wizard set up", then click the "exit" button, it pop up a message "are you sure you want to close the windows?", select no, then the page won't change.
Setp2.but if you select "view device status" or "change password" in wizard, or select "go to advanced setup" in advanced, then do the same setting with step1, the page will go to the corresponding page.

22. [BUG FIX] SPRID: 051221229

Problem Symptom: click "modify" button, the local ip and global ip of a full feature rule will be cleared

Problem Condition: step1. set a full feature rule in GUI->advanced->network->NAT->address mapping.
step2. click "modify" button, in the following page the local ip and global ip will be cleared, (if the type of the full feature rule is server, the global ip will be cleared and the server mapping set will be always change to 2)
step3. if you click "apply", it only save the type of the full feature but no local ip and global ip; if you click "cancel", the configuration of the rule can be show.

23. [BUG FIX] SPRID: 051221226

Problem Symptom: wizard setup page when you set wrong range vpi/vci, you can't access the wizard setup page

Problem Condition: step1.login wizard, in "ISP Parameters for internet Access" page, set up wrong range vpi or vci.
step2.click "next" button, it will show a page with error message "the vpi value must position between 0~ 255" or "the vci value must position between 32~65535", and there is no button to back or exit the page.
step3. when you login the wizard again, you can't access the wizard setup page.

24. [BUG FIX] SPRID: 051221225

Problem Symptom: wizard setup page, when you select static ip, it show ip address,

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static ip address and gateway ip adress, but no subnet mask.

Problem Condition: setp1.login wizard, in “ISP Parameters for internet Access” page, select encapsulation = enet encap step2.click “next” button, then select static ip, it show ip address, static ip address and gateway ip address, but no subnet mask. in fact the static ip address is the subnet mask.

25. [BUG FIX] SPRID: 051221216

Problem Symptom: static routing rule #2~ rule #16 can’t work if you click the “apply” button

Problem Condition: step1. GUI->advanced->static routing, in rule #2 and rule #16 set one rule and active it step2. click “apply” button, then refresh the page, go to GUI->advanced->static routing, the rule will change inactive, rule #1 will change active, although you don’t set the rule #1. and the setting rule can’t work. step3. But if you don’t click the“apply”button and don’t refresh the page, it can work correctly.

Modifications in V 3.40(AGL.0) b1 | 12/15/2005

1 Create this project for P-660HW-D1 standard version

Annex A CI Command List

Command Class List Table		
System Related Command	Exit Command	Ethernet Related Command
WAN Related Command	WLAN Related Command	IP Related Command
PPP Related Command	Bridge Related Command	Radius Related Command
8021x Related Command	Firewall Related Command	Configuration Related Command
SMT Related Command		

System Related Command

[Home](#)

Command			Description
sys			
	adjtime		retrive date and time from Internet
	cbuf		
	display	[a f u]	display cbuf a: all f: free u: used
	cnt		cbuf static
		display	display cbuf static
		clear	clear cbuf static
	baud	<1..5>	change console speed
	callhist		
	display		display call history
	remove	<index>	remove entry from call history
	clear		clear the counters in GUI status menu
	countrycode	[countrycode]	set country code
	date	[year month date]	set/display date
	domainname		display domain name
	edit	<filename>	edit a text file
	enhanced		return OK if commands are supported for PWC purposes

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	errctl		[level]	set the error control level 0:crash no save,not in debug mode (default) 1:crash no save,in debug mode 2:crash save,not in debug mode 3:crash save,in debug mode
	event			
		display		display tag flags information
		trace		display system event information
			display	display trace event
			clear <num>	clear trace event
	extraphnum			maintain extra phone numbers for outcalls
		add	<set 1-3> <1st phone num> [2nd phone num]	add extra phone numbers
		display		display extra phone numbers
		node	<num>	set all extend phone number to remote node <num>
		remove	<set 1-3>	remove extra phone numbers
		reset		reset flag and mask
	feature			display feature bit
	fid			
		display		display function id list
	firmware			display ISDN firmware type
	hostname		[hostname]	display system hostname
	iface			
		disp	[#]	display iface list
	isr		[all used free]	display interrupt service routine
	interrupt			display interrupt status
	logs			
		category		
			access [0:none/1:log]	record the access control logs
			attack [0:none/1:log/2:alert/3:both]	record and alert the firewall attack logs
			display	display the category setting
			error [0:none/1:log/2:alert/3:both]	record and alert the system error logs
			ipsec [0:none/1:log]	record the access control logs
			mten [0:none/1:log]	record the system maintenance logs
			upnp [0:none/1:log]	record upnp logs
			urlblocked [0:none/1:log/2:alert/3:both]	record and alert the web blocked logs
			urlforward [0:none/1:log]	record web forward logs
		clear		clear log
		display		display all logs
		errlog		
			clear	display log error
			disp	clear log error
			online	turn on/off error log online display
		load		load the log setting buffer
		mail		
			alertAddr [mail address]	send alerts to this mail address
			display	display mail setting
			logAddr [mail address]	send logs to this mail address
			schedule display	display mail schedule
			schedule hour [0-23]	hour time to send the logs
			schedule minute [0-59]	minute time to send the logs
			schedule policy	mail schedule policy

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			[0:full/1:hourly/2:daily/3:weekly/4:non e]	
			schedule week [0:sun/1:mon/2:tue/3:wed/4:thu/5:fri/6:sat]	weekly time to send the logs
			server [domainName/IP]	mail server to send the logs
			subject [mail subject]	mail subject
		save		save the log setting buffer
		syslog		
			active [0:no/1:yes]	active to enable unix syslog
			display	display syslog setting
			facility [Local ID(1-7)]	log the messages to different files
			server [domainName/IP]	syslog server to send the logs
	mbuf			
		cnt		
			disp	display system mbuf count
			clear	clear system mbuf count
		link	link	list system mbuf link
		pool	<id> [type]	list system mbuf pool
		status		display system mbuf status
		disp	<address>	display mbuf status
		debug	[on off]	
	memory		<address> <length>	display memory content
	memwrite		<address> <len> [data list ...]	write some data to memory at <address>
	memwl		<address>	write long word to memory at <address>
	memrl		<address>	read long word at <address>
	memutil			
		usage		display memory allocate and heap status
		mqueue	<address> <len>	display memory queues
		mcell	mid [f u]	display memory cells by given ID
		msecs	[a f u]	display memory sections
		mtstart	<n-mcell>	start memory test
		mtstop		stop memory test
		mtalloc	<size> [n-mcell]	allocate memory for testing
		mtfree	<start-idx> [end-idx]	free the test memory
	model			display server model name
	proc			
		display		display all process information
		stack	[tag]	display process's stack by a give TAG
		pstatus		display process's status by a give TAG
	queue			
		display	[a f u] [start#] [end#]	display queue by given status and range numbers
		ndisp	[qid]	display a queue by a given number
	quit			quit CI command mode
	reboot		[code]	reboot system code = 0 cold boot, = 1 immediately boot = 2 bootModule debug mode
	reslog			
		disp		display resources trace
		clear		clear resources trace
	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> [none incoming outgoing bothway]	<channel name>=enet0,sdsl00, fr0 set packet trace direction for a given channel
		string		enable smt trace log
		switch	[on/off]	turn on/off the packet trace
		disp		display packet trace
		udp		send packet trace to other system
			switch [on/off]	set tracepacket upd switch
			addr <addr>	send trace packet to remote udp address
			port <port>	set tracepacket udp port
		parse	[[start_idx], end_idx]	parse packet content
		brief		display packet content briefly
	version			display RAS code and driver version
	view		<filename>	view a text file
	wdog			
		switch	[on/off]	set on/off wdog
		cnt	[value]	display watchdog counts value: 0-34463
	romreset			restore default romfile
	server			
		access	<telnet ftp web icmp snmp dns> <value>	set server access type
		load		load server information
		disp		display server information
		port	<telnet ftp web snmp> <port>	set server port
		save		save server information
		secureip	<telnet ftp web icmp snmp dns> <ip>	set server secure ip addr
	spt			
		dump		dump spt raw data
			root	dump spt root data
			rn	dump spt remote node data
			user	dump spt user data
			slot	dump spt slot data
		save		save spt data
		size		display spt record size
		clear		clear spt data
	cmgr			
		trace		

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			disp <ch-name>	show the connection trace of this channel
			clear <ch-name>	clear the connection trace of this channel
		cnt	<ch-name>	show channel connection related counter
	socket			display system socket information
	filter			
		clear		clear filter statistic counter
		disp		display filter statistic counters
		sw	[on off]	set filter status switch
		set	<set>	display filter rule
		netbios		
			disp	display netbios filter status
			config <0:LAN to WAN, 1:WAN to LAN, 2:LAN to DMZ, 3:IPSec passthrough, 4:Trigger Dial> <on off>	config netbios filter
	ddns			
		debug	<level>	enable/disable ddns service
		display	<iface name>	display ddns information
		restart	<iface name>	restart ddns
		logout	<iface name>	logout ddns
	cpu			
		display		display CPU utilization

Exit Command

[Home](#)

Command				Description
exit				exit smt menu

Ethernet Related Command

[Home](#)

Command				Description
ether				
	config			display LAN configuration information
	driver			
		cnt		
			disp <name>	display ether driver counters
			clear <name>	clear ether driver counters
		iface	<ch_name> <num>	send driver iface
		ioctl	<ch_name>	Useless in this stage.
		mac	<ch_name> <mac addr>	Set LAN Mac address
		reg	<ch_name>	display LAN hardware related registers
		rxmod	<ch_name> <mode>	set LAN receive mode. mode: 1: turn off receiving 2: receive only packets of this interface 3: mode 2+ broadcast 5: mode 2 + multicast 6: all packets
		status	<ch_name>	see LAN status
		init	<ch_name>	initialize LAN
	version			see ethernet device type
	pkttest			
		disp		
			packet <level>	set ether test packet display level

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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
		ctrl McInt	ADSL CTRL E 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 E 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
		dumcondition [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 “L1 shutdown RA3”, default is 30 seconds
		timeinterval	[mins]	when “L1 shutdown RA3” is done twice, and still can’t reach the max rate which system recorded, it will delay a time period that the period base time is “timeinterval” before starting again. The time-based default is 2 hrs
		defectcheck	[on/off]	Turn on/off detect table checking, default is on
		txgain	[value]	Set the CTRL register (0xc3), the value is from 0xfa to 0x06
		targetnoise	[value]	Set the CTRL register (0xc4), the value is from 0xfa to 0x06
		maxtonelimit	[value]	Set the CTRL register (0xc5), the value is from 0xfa to 0x06
		rxgain	[value]	Set the CTRL register (0xc6), the value is from 0xfa to 0x06
		txoutputpwr	[value]	Set the CTRL register (0xc7), the value is from 0xfa to 0x06
		rxoutputpwr	[value]	Set the CTRL register (0xc8), the value is from 0xfa to 0x06
		maxoutputpwr	[value]	Set the CTRL register (0xc9), the value is from 0xfa to 0x06
		errorsecond		
			sendes	Send current error second information immediately
		dygasprecover		
		dygasprecover	level [value]	By default is 100, after receiving 100 dying gasp system will reboot
		dygasprecover	active [on/off]	Turn on/off this mechanism
		rsploss	[1 0]	Turn on means to response signal loss of CTRL immediately, default is off
	atm	test	[fix rand period oam loopback]	Generate ATM traffic
	hwsar	disp		Display hwsar packets incoming/outgoing information
		clear		Clear hwsar packets information

WLAN Related Command

[Home](#)

Command				Description
Wlan				
	active	[on/off]	[0 1]	Turn on/off wireless lan
	association			Show association list
	load			Load WLAN configuration into buffer.
	Display			Display WLAN configuration data.
	chid			Configure channel ID
	ssid			Configure ESSID
	hiddenssid		[on/off]	Enable/Disable hidden SSID
	threshold			
		rts	<RTS threshold value>	Set threshold rts value
		Fragment	<Fragment threshold value>	Set threshold fragmentation value
	wep			
		type	<none 64 128 256>	Set WEP key to 64, 128 or 256 bits.

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	Key	Set <set> <value>	Set WEP key value per set
	Key	Default <set>	Set WEP default key set
macfilter			
	Enable		Enable macfilter
	Disable		Disable macfilter
	Action	<allow deny>	When action match, allow or deny this mac
	Set	<Set#> <MAC Address>	Set mac address by set
Clear			Clear all WLAN configuration data.
Save			Save WLAN configuration working buffer to Rom file.
Power		[1:19dbm, 2:18dbm, 3:16dbm, 4:15dbm, 5:14dbm]	Change TX power level.
reset			Reset WLAN
filter			
	[incoming outgoing]	<generic>[set#1][set#2][set#3][set#4]	To set generic filter for wireless channel
fldisp			Display wireless filter setting
1130cmd			Internal usage.
	restart stat		Show WLAN restart statistics
	chg_dot11mode		Set WLAN state to mix mode, B only or G only
	show_rxDesc		Show number of Rx host descriptors
	acxstat		Show acx run time statistics

IP Related Command

[Home](#)

Command			Description
ip			
	address	[addr]	display host ip address
	loopbackaddr	<IP1> [IP2]	Set loopback address.
	alias	<iface>	alias iface
	aliasdis	<0 1>	disable alias
	arp		
	status	<iface>	display ip arp status
	add	<hostid> ether <ether addr>	add arp information
	resolve	<hostid>	resolve ip-addr
	drop	<hostid> [hardware]	drop arp
	flush		flush arp table
	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)

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			leasetime <period>	set dhcp leasetime
			netmask <netmask>	set dhcp netmask
			pool <startIP> <numIP>	set dhcp ip pool
			renewaltime <period>	set dhcp renew time
			rebindtime <period>	set dhcp rebind time
			reset	reset dhcp table
			server <serverIP>	set dhcp server ip for relay
			dnsorder [router isp]	set dhcp dns order
		status	[option]	show dhcp status
		static		
			delete <num> all	delete static dhcp mac table
			display	display static dhcp mac table
			update <num> <mac> <ip>	update static dhcp mac table
	dns			
		query		
			address <ipaddr> [timeout]	resolve ip-addr to name
			debug <num>	enable dns debug value
			name <hostname> [timeout]	resolve name to ip-addr
			status	display dns query status
			table	display dns query table
		server	<primary> [secondary] [third]	set dns server
		stats		
			clear	clear dns statistics
			disp	display dns statistics
		table		display dns table
	httpd			
		debug	[on/off]	set http debug flag
	icmp			
		echo	[on/off]	set icmp echo response flag
		data	<option>	select general data type
		status		display icmp statistic counter
		trace	[on/off]	turn on/off trace for debugging
		discovery	<iface> [on/off]	set icmp router discovery flag
	ifconfig		[iface] [ipaddr] [broadcast <addr> mtu <value> dynamic]	configure network interface
	ifdrop		<iface>	chaek if iface is available.
	ping		<hostid>	ping remote host
	pong		<hostid> [<size> <time-interval>]	pong remote host
	extping		<target address>	
			[-t]	Continue to send ECHO_REQ until Ctrl-C input
			[-c]	Validate the reply data
			[-d] [Data]	Data pattern. The maximum length of data is 255 characters.
			[-f]	Set DF flag.
			[-l] [Data size]	Datagram size in bytes (with 28 bytes Header).
			[-v] [TOS value]	Specify the value of TOS flag.
			[-n] [Repeat value]	The number of times to send ECHO_REQ packet.
			[-w] [Timeout value]	Specify the value of Timeout in seconds.
			[-o] [IP address/IFace]	To specify one IP address or interface to be the Source IP address.
			[-p] [Min MTU] [Max MTU] [Interval size]	Sweep range of sizes.
	route			

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	status	[if]	display routing table
	add	<dest_addr default>[/<bits> <gateway> [<metric>]	add route
	addiface	<dest_addr default>[/<bits> <gateway> [<metric>]	add an entry to the routing table to iface
	addprivate	<dest_addr default>[/<bits> <gateway> [<metric>]	add private route
	drop	<host addr> [/<bits>]	drop a route
	flush		flush route table
	lookup	<addr>	find a route to the destination
	errcnt		
		disp	display routing statistic counters
		clear	clear routing statistic counters
status			display ip statistic counters
adjTcp		<iface> [<mss>]	adjust the TCP mss of iface
udp			
	status		display udp status
rip			
	accept	<gateway>	drop an entry from the RIP refuse list
	activate		enable rip
	merge	[on/off]	set RIP merge flag
	refuse	<gateway>	add an entry to the rip refuse list
	request	<addr> [port]	send rip request to some address and port
	reverse	[on/off]	RIP Poisoned Reverse
	status		display rip statistic counters
	trace		enable debug rip trace
	mode		
		<iface> in [mode]	set rip in mode
		<iface> out [mode]	set rip out mode
	dialin_user	[show in out both none]	show dialin user rip direction
tcp			
	ceiling	[value]	TCP maximum round trip time
	floor	[value]	TCP minimum rtt
	irtt	[value]	TCP default init rtt
	kick	<tcb>	kick tcb
	limit	[value]	set tcp output window limit
	max-incomplete	[number]	Set the maximum number of TCP incomplete connection.
	mss	[value]	TCP input MSS
	reset	<tcb>	reset tcb
	rtt	<tcb> <value>	set round trip time for tcb
	status	[tcb] [<interval>]	display TCP statistic counters
	syndata	[on/off]	TCP syndata piggyback
	trace	[on/off]	turn on/off trace for debugging
	window	[tcb]	TCP input window size
samenet		<iface1> [<iface2>]	display the ifaces that in the same net
uninet		<iface>	set the iface to 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

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	anyip			
		status		display that if any ip work now
		enable	[yes no]	enable/disable anyop feature
		display		display all any ip entry
		restrict	[yes no]	restrict the connection between any ip client
		flush		delete all any ip entry
		save		Save any ip enable status to rom
	igmp			
		debug	[level]	set igmp debug level
		forwardall	[on off]	turn on/off igmp forward to all interfaces flag
		querier	[on off]	turn on/off igmp stop query flag
		iface		
			<iface> grouptm <timeout>	set igmp group timeout
			<iface> interval <interval>	set igmp query interval
			<iface> join <group>	join a group on iface
			<iface> leave <group>	leave a group on iface
			<iface> query	send query on iface
			<iface> rsptime [time]	set igmp response time
			<iface> start	turn on of igmp on iface
			<iface> stop	turn off of igmp on iface
			<iface> ttl <threshold>	set ttl threshold
			<iface> v1compat [on off]	turn on/off v1compat on iface
		robustness	<num>	set igmp robustness variable
		status		dump igmp status
	pr			
		clear		clear ip pr table counter information
		disp		dump ip pr table counter information
		switch		turn on/off ip pr table counter flag
	nat			
		timeout		
			gre [timeout]	set nat gre timeout value
			iamt [timeout]	set nat iamt timeout value
			generic [timeout]	set nat generic timeout value
			reset [timeout]	set nat reset timeout value
			tcp [timeout]	set nat tcp timeout value
			tcpother [timeout]	set nat tcp other timeout value
		update		create nat system information from spSysParam
		iamt		display nat iamt information
		iface	<iface>	show nat status of an interface
		lookup	<rule set>	display nat lookup rule
		new-lookup	<rule set>	display new nat lookup rule
		loopback	[on off]	turn on/off nat loopback flag
		reset	<iface>	reset nat table of an iface
		server		
			disp	display nat server table
			load <set id>	load nat server information from ROM
			save	save nat server information to ROM
			clear <set id>	clear nat server information
			edit active <yes no>	set nat server edit active flag
			edit svrport <start port> [end port]	set nat server server port
			edit intport <start port> [end port]	set nat server forward port
			edit remotehost <start ip> [end ip]	set nat server remote host ip
			edit leasetime [time]	set nat server lease time
			edit rulename [name]	set nat server rule name

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			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
			sip active <1/0> (enable/disable)	Enable/disable SIP ALG
		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

Radius Related Command

[Home](#)

Command				Description
radius				
	auth			show current radius authentication server configuration
	acco			show current radius accounting server configuration

8021x Related Command

[Home](#)

Command				Description
8021x				
	debug	level	[debug level]	set ieee802.1x debug message level
		trace		show all supplications in the supplication table

		user	[username]	show the specified user status in the supplicant table
--	--	------	------------	--

Configuration Related Command

[Home](#)

Command				Description
config				The parameters of config are listed below.
edit	firewall	active <yes no>		Activate or deactivate the saved firewall settings
retrieve	firewall			Retrieve current saved firewall settings
save	firewall			Save the current firewall settings
display	firewall			Displays all the firewall settings
		set <set#>		Display current entries of a set configuration; including timeout values, name, default-permit, and number of rules in the set.
		set <set#>	rule <rule#>	Display current entries of a rule in a set.
		attack		Display all the attack alert settings in PNC
		e-mail		Display all the e-mail settings in PNC
		?		Display all the available sub commands
		e-mail	mail-server <mail server IP>	Edit the mail server IP to send the alert
			return-addr <e-mail address>	Edit the mail address for returning an email alert
			e-mail-to <e-mail address>	Edit the mail address to send the alert
			policy <full hourly daily weekly>	Edit email schedule when log is full or per hour, day, week.
			day <sunday monday tuesday wednesday thursday friday saturday>	Edit the day to send the log when the email policy is set to Weekly
			hour <0~23>	Edit the hour to send the log when the email policy is set to daily or weekly
			minute <0~59>	Edit the minute to send to log when the email policy is set to daily or weekly
			Subject <mail subject>	Edit the email subject
		attack	send-alert <yes no>	Activate or deactivate the firewall DoS attacks notification emails
			block <yes no>	Yes: Block the traffic when exceeds the tcp-max-incomplete threshold
				No: Delete the oldest half-open session when exceeds the tcp-max-incomplete threshold
			block-minute <0~255>	Only valid when sets 'Block' to yes. The unit is minute
			minute-high <0~255>	The threshold to start to delete the old half-opened sessions to minute-low
			minute-low <0~255>	The threshold to stop deleting the old half-opened session
			max-incomplete- high <0~255>	The threshold to start to delete the old half-opened sessions to max-incomplete-low
			max-incomplete-	The threshold to stop deleting the half-opened

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

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				<start port#> <end port#>	which comply to this rule.
				udp destport-single <port#>	Select and edit the destination port of a packet which comply to this rule. For non-consecutive port numbers, users may repeat this command line to enter the multiple port numbers.
				udp destport-range <start port#> <end port#>	Select and edit a destination port range of a packet which comply to this rule.
				desport-custom <desired custom port name>	Type in the desired custom port name
delete	firewall	e-mail			Remove all email alert settings
		attack			Reset all alert settings to defaults
		set <set#>			Remove a specified set from the firewall configuration
		set <set#>	rule <rule#>		Remove a specified rule in a set from the firewall configuration
insert	firewall	e-mail			Insert email alert settings
		attack			Insert attack alert settings
		set <set#>			Insert a specified rule set to the firewall configuration
		set <set#>	rule <rule#>		Insert a specified rule in a set to the firewall configuration
cli					Display the choices of command list.

Firewall Related Command

[Home](#)

Command				Description
sys	firewall			
		acl		
			disp	Display specific ACL set # rule #, or all ACLs.
		active	<yes no>	Active firewall or deactivate firewall
		cnt		
			disp	Display firewall log type and count.
			clear	Clear firewall log count.
		pktdump		Dump the 64 bytes of dropped packet by firewall
		update		Update firewall
		dynamicrule		
		teprst		
			rst	Set TCP reset sending on/off.
			rst113	Set TCP reset sending for port 113 on/off.
			display	Display TCP reset sending setting.
		icmp		
		dos		
			smtp	Set SMTP DoS defender on/off
			display	Display SMTP DoS defender setting.
			ignore	Set if firewall ignore DoS in lan/wan/dmz/wlan
		ignore		
			triangle	Set if firewall ignore triangle route in lan/wan/dmz/wlan

SMT Related command

[Home](#)

No	Command	Description	Comment
	sys bridge [on off]	Set system bridge on/off	Menu 1
	sys routeip [on off]	Set system IP routing on/off	Menu 1
	sys hostname [hostname]	Set system name	Menu 1
	sys display	Display hostname, routing/bridge mode information in menu 1	Display Menu 1
	sys default	Load All Default Settings Except LAN and DHCP.	
	sys save	Save all the parameters which will include menu1, menu 3.2 LAN, menu 4 or menu 11 WAN, menu 12 static route, menu 15 NAT server set, menu 21 filter sets, menu 22 SNMP, menu 24.11 remote management and 3.5 Wireless LAN	
	wan backup mechanism [dsl icmp]	Set wan backup mechanism to DSL link or ICMP	Menu 2
	wan backup addr [index] [IP addr]	Set wan ip address <index>	Menu 2
	wan backup tolerance [number]	Set keepalive fail tolerance	Menu 2
	wan backup recovery [interval(sec)]	Set recovery interval	Menu 2
	wan backup timeout [number]	Set ICMP timeout	Menu 2
	wan backup save	Save wan backup related parameters	Menu 2
	wan backup display	Display wan backup configurations	Menu 2
	wan tredir active [on off]	Set traffic redirect on/off	Menu 2.1
	wan tredir ip [IP addr]	Set traffic redirect gateway IP address	Menu 2.1
	wan tredir metric [number]	Set traffic redirect metric	Menu 2.1
	wan tredir save	Save traffic redirect related parameters ** Have to apply "wan backup save" command thereafter	Menu 2.1
	wan tredir display	Display traffic redirect configurations	Menu 2.1
	lan index [1 2 3] 1: Select main LAN Interface 2: Select IP Alias 1 3: Select IP Alias 2	Select a LAN interface to edit	Menu 3.2
	lan active [on off]	Turn on or off on IP Alias Interface	Menu 3.2.1
	lan ipaddr [address] [subnet mask]	Set LAN IP address and subnet mask Example: > lan ipaddr 192.168.1.1 255.255.255.0	Menu 3.2
	lan rip [none in out both] [rip1 rip2b rip2m]	Set LAN IP RIP mode and RIP version, if you choose none in the first parameter, the second parameter is also necessary	Menu 3.2
	lan multicast [none igmpv1 igmpv2]	Set LAN IP multicast mode	Menu 3.2
	lan filter [incoming outgoing] [tcpip generic] [set#1] [set#2] [set#3] [set#4]	Set LAN filter to be incoming/outgoing or protocol /device and the filter set could be 1-12, 0 means empty Example: Lan filter incoming tcpip 1 0 0 0	Menu 3.1
	lan dhcp mode [server relay none]	Set DHCP mode to be "server", "relay", "none"	Menu 3.2
	lan dhcp server dnsserver [pri dns] [sec dns]	Set primary and secondary LAN DNS server	Menu 3.2
	lan dhcp server pool [start-address] [num]	Set DHCP start address and pool size	Menu 3.2
	lan dhcp server gateway [IP address]	Set DHCP gateway	Menu 3.2
	lan dhcp server netmask [subnet mask]	Set DHCP subnet mask	Menu 3.2
	lan dhcp server leasetime [second]	Set DHCP lease time	Menu 3.2
	lan dhcp server renewalttime [second]	Set DHCP renew time	Menu 3.2
	lan dhcp server rebindtime [second]	Set DHCP rebind time	Menu 3.2
	lan dhcp relay server [IP address]	Set IP address of DHCP relay server	Menu 3.2
	lan display	Display LAN or IP alias parameters	Display Menu 3
	lan clear	Clear the Working Buffer	

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	lan save	Save LAN related parameters	
	wan node index [1-8]	Set the node pointer to specific wan profile. If you want to set WAN profile, please use this command first, system will use the index number for pointing to specific PVC (remote node), and for consequent commands reference, if index = 1 means it's ISP node	Menu 11.1
	wan node clear	Clear the parameters of the temporary WAN profile	Menu 11.1
	wan node ispname [ISP name]	Enable the name of wan node	Menu 11.1
	wan node enable	Enable the wan profile	Menu 11.1
	wan node disable	Disable the wan profile	Menu 11.1
	wan node encap [1483 pppoa pppoe enet]	Set the wan protocol	Menu 11.1
	wan node mux [vc llc]	Set the wan multiplex	Menu 11.1
	wan node ppp authen [chap pap both]	Set PPP authentication type	Menu 11.1
	wan node ppp username [name]	Set PPP username	Menu 11.1
	wan node ppp password [password]	Set PPP password	Menu 11.1
	wan node service [name]	Set PPPoE service name	Menu 11.1
	wan node bridge [on/off]	Set the wan bridge mode	Menu 11.1
	wan node routeip [on/off]	Set the wan IP routing mode	Menu 11.1
	wan node callsch [set1#][set2#][set3#][set4#]	Set call schedule set, set number 0 means empty	Menu 11.1
	wan node nailedup [on/off]	Set nailed up connection on/off	Menu 11.1
	wan node vpi [num]	Set the wan vpi. Range : 0~255	Menu 11.6
	wan node vci [num]	Set the wan vci. Range : 32~65535	Menu 11.6
	wan node qos[ubr cbr]	Set the wan QOS type to be UBR or CBR	Menu 11.6
	wan node pcr [num]	Set the wan PCR value	Menu 11.6
	wan node scr [num]	Set the wan SCR value	Menu 11.6
	wan node mbs [num]	Set the wan MBS value	Menu 11.6
	wan node wanip [static dynamic] [address]	Set the wan IP address	Menu 11.3
	wan node remoteip [address] [subnet mask]	Set the remote gateway IP address and subnet mask	Menu 11.3
	wan node nat [off sua full] [address mapping #]	Set type wan NAT mode to be off or SUA or Full feature	Menu 11.3
	wan node rip [none in out both] [rip1 rip2b rip2m]	Set the wan RIP mode and RIP version	Menu 11.3
	wan node multicast [none igmpv1 igmpv2]	Set the wan IP multicast mode	Menu 11.3
	wan node filter [incoming outgoing] [tcpip generic] [set #1] [set #2] [set #3] [set #4]	Set WAN filter, incoming or outgoing can be specified, and filter set can be 1-12, value 0 means empty	Menu 11.5
	wan node save	Save the related parameters of WAN node	
	wan node display	Display WAN profile configuration in buffer	Display Menu 11
	ip route addrom index [Rule #]	Select a Static Route index 1-16 to edit	Menu 12.1
	ip route addrom name [Name]	Set Rule Name	Menu 12.1
	ip route addrom active [on/off]	Set Active or Inactive Flag	Menu 12.1
	ip route addrom set [dest address/ mask bits] [gateway] [metric]	Set IP static route Example: > ip ro addrom set 192.168.1.33/24 192.168.1.1 2	Menu 12.1
	ip route addrom private [yes/no]	Set Private Flag	Menu 12.1
	ip route addrom disp	Display both working buffer and Editing Entry	Menu 12.1
	ip route addrom freememory	Discard all changes	Menu 12.1
	ip route addrom save	Save edited settings	Menu 12.1
	ip route addrom clear [Index #]	Clear Static Route Index	Menu 12.1

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ip nat addrmap map [map#] [set name]	Select NAT address mapping set and set mapping set name, but set name is optional Example: > ip nat addrmap map 1 myset	Menu 15.1
ip nat addrmap rule [rule#] [insert edit] [type] [local start IP] [local end IP] [global start IP] [global end IP] [server set #]	Set NAT address mapping rule. If the “type” is not “inside-server” then the “type” field will still need a dummy value like “0”. Type is 0 - 4 = one-to-one, many-to-one, many-to-many-overload, many-to-many-non overload, inside-server Example: > ip nat addrmap rule 1 edit 3 192.168.1.10 192.168.1.20 192.168.10.56 192.168.1.56 0	Menu 15.1
ip nat addrmap clear [map#] [rule#]	Clear the selected rule of the set	Menu 15.1
ip nat addrmap freememory	Discard Changes	Menu 15.1
ip nat addrmap disp	Display nat set information	Menu 15.1
ip nat addrmap save	Save settings	Menu 15.1
ip nat server load [set#]	Load the server sets of NAT into buffer	Menu 15.2
ip nat server disp [1]	“disp 1” means to display the NAT server set in buffer, if parameter “1” is omitted, then it will display all the server sets	Menu 15.2
ip nat server save	Save the NAT server set buffer into flash	Menu 15.2
ip nat server clear [set#]	Clear the server set [set#], must use “save” command to let it save into flash	Menu 15.2
ip nat server edit [rule#] active	Activate the rule [rule#], rule number is 1 to 24, the number 25-36 is for UPNP application	Menu 15.2
ip nat server edit [rule#] svrport <start port> <end port>	Configure the port range from <start port > to <end port>	Menu 15.2
ip nat server edit [rule#] remotehost <start IP> <end IP>	Configure the IP address range of remote host (Leave it to be default value if you don’t need this command)	Menu 15.2
ip nat server edit [rule#] leasetime <seconds>	Configure the lease time (Leave it to be default value if you don’t want this command)	Menu 15.2
ip nat server edit [rule#] rulename <string>	Configure the name of the rule (Leave it to be default value if you don’t want this command)	Menu 15.2
ip nat server edit [rule#] forwardip <IP address>	Configure the LAN IP address to be forwarded	Menu 15.2
ip nat server edit [rule#] protocol <TCP UDP ALL>	Configure the protocol to be used TCP , UDP or ALL (it must be capital)	Menu 15.2
sys filter set index [set#] [rule#]	Set the index of filter set rule, you may apply this command first before you begin to configure the filter rules	Menu 21 filter sets
sys filter set name [set name]	Set the name of filter set	Menu 21 filter sets
sys filter set type [tcpip generic]	Set the type of filter rule	Menu 21 filter sets
sys filter set enable	Enable the rule	Menu 21 filter sets
sys filter set disable	Disable the rule	Menu 21 filter sets
sys filter set protocol [protocol #]	Set the protocol ID of the rule	Menu 21 filter sets
sys filter set sourceroute [yes/no]	Set the sourceroute yes/no	Menu 21 filter sets
sys filter set destip [address] [subnet mask]	Set the destination IP address and subnet mask of the rule	Menu 21 filter sets
sys filter set destport [port#] [compare type = none equal notequal less greater]	Set the destination port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater))	Menu 21 filter sets
sys filter set srcip [address] [subnet mask]	Set the source IP address and subnet mask	Menu 21 filter sets
sys filter set srport [port#] [compare type = none equal not equal less greater]	Set the source port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater))	Menu 21 filter sets
sys filter set tcpEstab [yes/no]	Set TCP establish option	
sys filter set more [yes/no]	Set the more option to yes/no	Menu 21 filter sets
sys filter set log [type 0-3= none match]	Set the log type (it could be 0-3 =none, match, not match,	Menu 21 filter sets

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	notmatch both]	both)	
	sys filter set actmatch[type 0-2 = checknext forward drop]	Set the action for match	Menu 21 filter sets
	sys filter set actnomatch [type 0-2 = checknext forward drop]	Set the action for not match	Menu 21 filter sets
	sys filter set offset [#]	Set offset for the generic rule	Menu 21, it's for generic filter
	sys filter set length [#]	Set the length for generic rule	Menu 21, it's for generic filter
	sys filter set mask [#]	Set the mask for generic rule	Menu 21, it's for generic filter
	sys filter set value [(depend on length in hex)]	Set the value for generic rule	Menu 21, it's for generic filter
	sys filter set clear	Clear the current filter set	Menu 21
	sys filter set save	Save the filter set parameters	
	sys filter set display [set#][rule#]	Display Filter set information. W/o parameter, it will display buffer information.	
	sys filter set freememory	Discard Changes	
	sys snmp disp	Display SNMP parameters	Menu 22
	sys snmp get [community]	Set the community string of get	Menu 22 SNMP
	sys snmp set [community]	Set the community string of set	Menu 22 SNMP
	sys snmp trusthost [IP address]	Set the IP address of trusted host	Menu 22 SNMP
	sys snmp trap community [community]	Set the community string of trap	Menu 22 SNMP
	sys snmp trap destination [IP address]	Set the destination address of trap	Menu 22 SNMP
	sys snmp discard	Discard changes	
	sys snmp clear	Clear Working Buffer	
	sys snmp save	Set the SNMP parameters	Menu 22 SNMP
	sys password [new password]	Set system password [save immediately]	Menu 23 system password
	sys baud [1-5]	Index 1,2,3 will be 38400,19200, 9600, 57600, 115200 bps [save immediately]	Menu 24.2.2 console speed
	sys server load	Load setting before editing	
	sys server access [ftp telnet web] [access type]	Set the server access type to be 0: ALL, 1: None, 2:LAN only, 3:WAN only	Menu 24.11 remote management
	sys server port [ftp telnet web] [port]	Set the server port number	Menu 24.11 remote management
	sys server secureip[ftp telnet web] [address]	Set the server security IP address	Menu 24.11 remote management
	sys server disp [1]	Display server settings, [1] means display buffer	
	sys server save	Save the embedded server (remote management) parameters	
	wlan load	Load system parameters into working buffer	Menu 3.5 for Wireless LAN
	wlan disp	Display the working buffer	Menu 3.5 for Wireless LAN
	wlan essid [name]	Set the wireless ESSID	Menu 3.5 for wireless LAN
	wlan hideessid [on off]	Set to hide ESSID or not	Menu 3.5 for wireless LAN
	wlan chid [#=1~11]	Set channel ID 1-11	Menu 3.5 for wireless

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			LAN
wlan threshold rts [value]	Set the RTS threshold value		Menu 3.5 for wireless LAN
wlan threshold fragment [value]	Set fragment threshold		Menu 3.5 for wireless LAN
wlan wep type [none 64 128]	Set the wep type to be none, 64bit or 128bits		Menu 3.5 for wireless LAN
wlan wep key set [key set#1-4] [key value]	Set wep key value		Menu 3.5 for wireless LAN
wlan wep key default [key set # 1-4]	Set default key set value		Menu 3.5 for wireless LAN
wlan macfilter enable	Enable mac filter		Menu 3.5.1 for wireless LAN
wlan macfilter disable	Disable mac filter		Menu 3.5.1 for wireless LAN
wlan macfilter action [allow deny]	Set the action type of filter		Menu 3.5.1 for wireless LAN
wlan macfilter set [set# 1-12] [mac address]	Set the mac address of filter		Menu 3.5.1 for wireless LAN
wlan clear	Clear Working Buffer		
wlan save	Save wireless MAC filter parameters		

Bandwidth Management

Command					Description
bm					
	interface	lan	enable	<bandwidth xxx>	Enable bandwidth management in LAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>	Enable work-conserving feature.
			disable		Disable bandwidth management in LAN
		wlan	enable	<bandwidth xxx>	Enable bandwidth management in WLAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>	Enable work-conserving feature.
			disable		Disable bandwidth management in WLAN
		mpoa[00~07]	enable	<bandwidth xxx>	Enable bandwidth management in WAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.
				<wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.
				<efficient>	Enable work-conserving feature.
			disable		Disable bandwidth management in WAN
	class	lan	add #	bandwidth xxx	<name xxx> Add a class with bandwidth xxx bps in LAN. The name is for users' information.
					<priority x> Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.

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					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
			mod #	<bandwidth xxx>		Modify the parameters of the class in LAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.
			del #			Delete the class # and its filter and all its children class and their filters in LAN.
		wlan	add #	bandwidth xxx	<name xxx>	Add a class with bandwidth xxx bps in WLAN. The name is for users' information.
					<priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.
					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
			mod #	<bandwidth xxx>		Modify the parameters of the class in WLAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.
			del #			Delete the class # and its filter and all its children class and their filters in WLAN.
		mpoa[00~07]	add #	bandwidth xxx	<name xxx>	Add a class with bandwidth xxx bps in WAN. The name is for users' information.
					<priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.
					<borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.
			mod #	<bandwidth xxx>		Modify the parameters of the class in WAN. The bandwidth is unchanged if the user doesn't set a new value.
				<name xxx>		Set the class' name.
				<priority x>		Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.
				<borrow on off>		The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a

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						new value.
			del #			Delete the class # and its filter and all its children class and their filters in WAN.
	filter	lan	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol		Add a filter for class # in LAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in LAN.
		wlan	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol		Add a filter for class # in WLAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in WLAN.
		mpoa[00~07]	add #	Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol		Add a filter for class # in WAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.
			del #			Delete a filter which belongs to class # in WAN.
	show	interface	lan			Show the interface settings of LAN
			wlan			Show the interface settings of WLAN
			mpoa[00~07]			Show the interface settings of WAN
		class	lan			Show the classes settings of LAN
			wlan			Show the classes settings of WLAN
			mpoa[00~07]			Show the classes settings of WAN
		filter	lan			Show the filters settings of LAN
			wlan			Show the filters settings of WLAN
			mpoa[00~07]			Show the filters settings of WAN
		statistics	lan			Show the statistics of the classes in LAN
			wlan			Show the statistics of the classes in WLAN
			mpoa[00~07]			Show the statistics of the classes in WAN
	monitor	lan	<#>			Monitor the bandwidth of class # in LAN. If the class is not specific, all the classes in LAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
		wlan	<#>			Monitor the bandwidth of class # in WLAN. If the class is not specific, all the classes in WLAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
		mpoa[00~07]	<#>			Monitor the bandwidth of class # in WAN. If the class is not specific, all the classes in WAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.
	config	save				Save the configuration.
		load				Load the configuration.
		clear				Clear the configuration.

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