



Firmware Release Note

## **Prestige 653HWI-11**

### **Standard version**

Release 3.40(OA.4)c0

**Date:** Dec 27, 2004  
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# ZyXEL Prestige 653HWI-11 Standard Version Release 3.40(OA.4)C0 Release Note

**Date:** Dec 27, 2004

## **Supported Platforms:**

ZyXEL Prestige 653HWI-11

## **Versions:**

ZyNOS Version : V3.40(OA.4) | 12/27/2004 17:06:11  
Bootbase Version : V1.02 | 10/16/2003 16:45:36

## **Notes:**

The P653HWI-11 is a small-office and home device that will allow a small LAN to access the Internet. By integrating ADSL, WLAN, ISDN, NAT, P653HWI-11 provides the ease of installation and Internet access.

The P653HWI-11 provides an Cardbus wireless card slot 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, a single RJ-11 port for connection to ADSL line, and , a single RJ-45 port for ISDN Internet connection used for Backup line.

The version of Alcatel modem code is 13.9.38

## **Known Issues:**

1. NetCAPI still not support.
2. PKI not support help.
3. BM-DiffServ not support help in French and German
4. **Upgrading firmware from V3.40(OA.2) or V3.40(OA.3) to V3.40(OA.4) need to use firmware upgrade tool to update new firmware. This tool only support change firmware from V3.40(OA.2) or V3.40(OA.3) to V3.40(OA.4), you can't use this tool to upgrade firmware from others version. [See Appendix 1.](#)**

## **Features:**

### **Modification in V3.40(OA.4) | 12/27/2004**

1. Change to FCS version.

### **Modification in V3.40(OA.4)b2 | 12/21/2004**

1. [FEATURE CHANGED]  
Symptom: Change modem code to 13.9.38.

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2. [BUG FIXED]  
Symptom: Using SCEP and 2048 bits key to create a Certificate, it will always Fail.
3. [BUG FIXED]  
Symptom: IPSEC can be established, but the ping fail.
4. [BUG FIXED]  
Symptom: PPPoE passthrough help page do not support in French and German page.
5. [BUG FIXED]  
Symptom: P653HWI after firmware upgrade the VPN can not be establish if one of the VPN end point is P653HWI.
6. [BUG FIXED]  
Symptom: The ACK led doesn't work.

**Modification in V3.40(OA.4)b1 | 12/6/2004**

7. [FEATURE CHANGED]  
Symptom: Support PKI (Certificate).
8. [FEATURE CHANGED]  
Symptom: Support DMZ..
9. [FEATURE CHANGED]  
Symptom: Support BM-DiffServ.
10. [FEATURE CHANGED]  
Symptom: Support Static DHCP.
11. [FEATURE CHANGED]  
Symptom: Support PPPoE pass-through.
12. [FEATURE CHANGED]  
Symptom: Change modem code to 13.9.45.
13. [BUG FIXED]  
Symptom: When turn on the firewall, the SIP pass-through work failed.
14. [BUG FIXED]  
Symptom: eWC will get hang-up when UPnP feature is enabled.  
Condition: 1. Install windows XP service pack 2 in PC  
2. Enable firewall of windows XP and also enable UPnP framework pass through or disable firewall of windows XP.  
3. Login via eWC and enable UPnP in system  
4. The eWC will get hang, but it doesn't happen every time
15. [BUG FIXED]  
Symptom: DNS server can't work after set DNS server in smt3.2 or web LAN page, it need reboot system to let DNS server work.
16. [BUG FIXED]  
Symptom: WEB Server Access configured to WAN only or ALL, it is possible to access the firmware upgrade web page in the router remotely via http without login.
17. [BUG FIXED]  
Symptom: Routing table doesn't update when change different remote IP in memu 11.  
Condition: 1. Set remote IP address as 192.168.2.1 in ENET ENCAP.  
2. Check routing table is right.  
3. Change remote IP address to 192.168.3.1.

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4. Check routing table you will see the old routing entry "192.168.2.1" doesn't remove.

**Modification in V3.40(OA.3) | 10/15/2004**

2. [BUG FIXED]  
Change ROM file. In Web/GUI, Firewall page, Rule Summary, select "WAN to WAN Router", configure the source and destination IP address to "Any".
3. Change to FCS version.

**Modification in V3.40(OA.3)b3 | 10/07/2004**

1. [BUG FIXED]  
Symptom: The router crashed (exception) when a client PC ran a port scan tool.  
Condition: PC ---- P53HWI -11 ---- Internet ---- ZyWALL 70  
Run a port scan AP (BONK) on PC to attack ZyWALL 70.  
parameter (bonk -p 7 -d 10)  
P53HWI-11 will crashed with exception log after few mins (4000+ counts of port scan)
2. [BUG FIXED]  
Symptom: The ADSL loop back test function always failed from eWC/wizard setup/Diagnose.
3. [BUG FIXED]  
Symptom: The system do reboot while we do throughput test in small package.
4. [BUG FIXED]  
Symptom: The PPPoA or PPPoE login name and password will delete while we login to menu 11.2 -Edit IP/BR mode setting or Edit ATM Options field.
5. [BUG FIXED]  
Symptom: QoS criteria violation. Do not comply with the rule: Priority(CBR) > Priority(VBR) > Priority(UBR) .  
Condition: 1. Perform AX4000 bi-direction packet loss test.  
2. Setup 2 PVCs with different QoS schedule priority.
6. [BUG FIXED]  
Symptom: System hangs up if keep pressing "ENTER" key while configuring SMT setting.  
Condition: Keep pressing some character while saving settings to ROM (if ROM file is large)
7. [BUG FIXED]  
Symptom: When multiple stations connected to AP, once the previous one leave, the other stations also disappeared.  
Condition: 1.Use Web to show association list.  
2.When station disconnect the association list still have it's data.  
3.When one station disconnect and then another join the association list will show error list.
8. [BUG FIXED]  
Symptom: 1.If we ping from Lan PC to internet and change Encapsulation to PPPoA or PPPoE will cause ping fail.  
2.If changed PPPoA or PPPoE setting several times like static IP <->

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Dynamic IP , Idle time out <-> Nailed , VC<-> LLC the status will keep in N/A.

Condition: Use web to configure wan page and change encapsulation will cause ping fail.

9. [BUG FIXED]

Symptom: In web content filter keyword blocking page if we key in capital letter that the content filter function can't work.

Condition: 1. Setting content filter restrict keyword "Yahoo" and enable keyword blocking on eWC.

2. Use browser to access "www.yahoo.com" it still can access.

10. [BUG FIXED]

Symptom: Two "Press Enter to confirm or ESC to connel" message in Menu 4.

**Modification in V3.40(OA.3)b2 | 09/1/2004**

4. [FEATURE CHANGED]

Symptom: Support WPA/Dynamic WEP key.

5. [FEATURE CHANGED]

Symptom: Support Wireless Roaming..

6. [FEATURE CHANGED]

Symptom: Support Firewall v2.

7. [FEATURE CHANGED]

Symptom: Support AES & IPSEC NAT traversal.

8. [FEATURE CHANGED]

Symptom: Support SIP pass through NAT & Firewall.

9. [BUG FIXED]

Symptom: Exception occur while End ip smaller then Start ip in SMT menu15.1.

Condition: At NAT full feature use many to one or many to many set End IP smaller than start IP save it in SMT menu . Then DUT exception occur.

10. [BUG FIXED]

Symptom: The help in SMT1 domain name display is wrong "A-z".

11. [BUG FIXED]

Symptom: Use "d d l" to dial, the console display two primary DNS.

Condition: The first DNS should display as "Primary DNS", and the 2nd DNS should display "Secondary DNS".

12. [BUG FIXED]

Symptom: When VPN secure gateway is configured with a domain name it will be resolved wrong IP.

Condition: The name like "www.123.com.tw" will be resolved to "0.123.0.0".

13. [BUG FIXED]

Symptom: Two PVC will work improper manner .

Condition: (1) Create two or more than two PPPOE PVCs in CPE device  
(2) After two PVC connection are established,change the VPI/VCI setting of first PVC on the DSLAM.

(3) The first PVC won't drop the connection (menu 24.1, the status still keep as "UP" and also the IP still keep the same), and the traffic still can go out via CPE device(via PVC2)..

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14. [BUG FIXED]  
Symptom: System will reboot.  
Condition: When we try to login Web GUI using long user name/password.
15. [BUG FIXED]  
Symptom: ARP request from 1st remote node (router mode) , replied it from the 2nd remote node (bridge mode). The problem makes the remote VLAN enabled router confused and the communication will fail.
16. [BUG FIXED]  
Symptom: In Web GUI Advanced Setup >> NAT - Edit SUA/NAT Server Set, type in start port "41", then click "Save" button. Will pop up a window - "End port must greater than Start port". Click "OK" button, the value will be save to device.
17. [BUG FIXED]  
Symptom: DHCP relay does not work if the server resides on WAN side.
18. [BUG FIXED]  
Symptom: Device will reply wrong packet.  
Condition: Device will reply wrong packet under ENET ENCAP + IES1000 combination.
19. [BUG FIXED]  
Symptom: In eWC if we ping a address like:"192.168.1.1 a" the device will ping it for a loop and the eWC can't get response and just like been locked.(the same in CI command and we can stop it just "CTRL+C").
20. [BUG FIXED]  
Symptom: Ping a wrong IP address, the device will get success information.  
Condition: By CLI command to ping a wrong IP address, the device will get success nformation. The wrong IP addresses could be "192.168.1.33aaa", and the IP address will be resolved to "192.168.1.33". Then, the device will get success ping information.
21. [BUG FIXED]  
Symptom: The DHCP Relay function can't work.  
Condition: (1) Set DHCP to Relay in Menu 3.2.  
(2) Set Enet-Encap mode turn off NAT function and disable firewall.  
(3) PC can't get IP.
22. [BUG FIXED]  
Symptom: System will reboot.  
Condition: While three station connect to device and we use CI command "wlan association" to display association list the system will reboot.
23. [BUG FIXED]  
Symptom: Sometime station can't connect to device.  
Condition: If multi wireless station connect to device at same time, sometime some station will can't connect to device.
24. [BUG FIXED]  
Symptom: Clock sync - in 12 hours the clocks goes behind 3 minutes.
25. [BUG FIXED]  
Symptom: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote Users. Send icmp packet with less data than normal so remote

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- interface paddr with data to complete the frame.
26. [BUG FIXED]  
Symptom: Idle time out of ISDN backup fails.
  27. [BUG FIXED]  
Symptom: The system do exception and system reboot several times while we do emulate overnight test .
  28. [BUG FIXED]  
Symptom: Remote management function if we set NAT server and different port with remote management port. when we from WAN to LAN use FTP to login device that it can login but can't list in file.
  29. [BUG FIXED]  
Symptom: In SMT Menu24.11 if we type over 65535 value will have error value
  30. [BUG FIXED]  
Symptom: Content filter schedule function can not work.  
Condition: If it's 14:00 clocks and we set 16:00 ~ 20:00 schedule to block. The content filter still active and will be block keywords web.
  31. [BUG FIXED]  
Symptom: The system do reboot while we do multi class BW management.  
Condition: (1) Set 4 class BW management.  
(2) Use smartflow to test BW management.  
(3) You can see system do reboot while we run BW management.
  32. [BUG FIXED]  
Symptom: Firewall LAN to WAN or WAN to LAN , the "Ipsec\_TRANSPORT/TUNNEL(AH0) in Available service can not move to "Selected Service".
  33. [BUG FIXED]  
Symptom: In eWC ping function fail.  
Condition: In eWC Maintenance/Diagnostic/General ping function , if we key in non IP format string , we also can get successful message.
  34. [BUG FIXED]  
Symptom: BW management WAN enable and run with PPPoE mode ,the PPPoE will drop after 1 min.
  35. [BUG FIXED]  
Symptom: The DNS server doesn't release while we dial to different ISP .  
Condition: (1) Do PPPoE connect and get DNS and IP address.  
(2) Drop PPPoE mode.  
(3) Dial to the other ISP ,the DNS doesn't release
  36. [BUG FIXED]  
Symptom: FTP upload firmware or romfile it will show "HTTP accept error" message in console .
  37. [BUG FIXED]  
Symptom: TFTP upload firmware sometime still fail and show "timer" message in console.
  38. [BUG FIXED]  
Symptom: The WLAN can not sync up again while exception happen.
  39. [BUG FIXED]

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Symptom: Routing table doesn't update when change different remote IP in menu 11 or menu 4.

40. [BUG FIXED]

Symptom: While we set different Negotiation mode in other side in VPN /IKE mode but it still can build in VPN tunnel.

Condition: (1) Set Main mode in menu 27/VPN/IKE/Negotiation mode.  
(2) Set Aggressive in other side.  
(3) Use "ipsec dial 1".  
(4) it still can build VPN tunnel

41. [BUG FIXED]

Symptom: When set VPN key management = Manual the VPN function can not work.

42. [BUG FIXED]

Symptom: When we enable NAT server that we can not ping to the other side.

Condition: (1) Do connect and set NAT server.  
(2) Ping to at the back of the other side.  
(3) You can see the tunnel have build in but can not ping to at the back of the other side .

43. [BUG FIXED]

Symptom: It display "Http access error " while upload rom file via ftp

44. [BUG FIXED]

Symptom: In eWC/wireless/802.1x the "Reauthentication Timer " and "idle timeout value will change to "0" when change Wireless Port Control from No access allowed" to "Authentication required".

Symptom: SMT , eWC login length with Menu 23 change password length not consistent.

Condition: (1) menu 23.1 --> 30 chars  
(2) SMT login --> 31 chars.  
(3) eWC login --> 33 chars.

**Modification in V3.40(OA.3)b1 | 04/26/2004**

1. [FEATURE CHANGED] Modify Modem code to formal version 13.9.45.

2. [BUG FIXED] System have random exception bug .

Symptom: Connect with adsl and isdn line , and adsl line sometime disconnect , running for 2 ~3 day, and system will cause exception.

Condition: modify conn-mgr, conn-mon, network, trapSendd task stacksize for prevent stacksize is exhausted, and system will exception.

**Modification in V3.40(OA.2) | 03/05/2004**

1. [FEATURE CHANGED] Change to FCS version.

**Modification in V3.40(OA.2)b1 | 02/26/2004**

1. [FEATURE CHANGED] Change to use modem code 13.9.38 to fit new adsl chipset

**Modification in V3.40(OA.1) | 12/16/2003**

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1. [BUG FIXED] Modify ISDN dial backup remote node idle timeout default value is 300 seconds..  
Symptom: ISDN dial backup remote node idle timeout default value is 0 seconds , and it is not match smt setting.  
Condition: use Web / WAN /ISDN remote node config , and idle timeout is 0 seconds.
2. [FEATURE CHANGED] Change to FCS version.

**Modification in V3.40(OA.1)b2 | 12/16/2003**

1. [BUG FIXED] Modify web/wizard can't save dynamic wan ip setting after we set isdn backup remote node as a dynamic wan ip.  
Symptom: Use web/wizard to config adsl remote node to dynamic ip is not work fine.  
Condition: Use web to config isdn backup remote node as dynamic ip ,and config wan backup page to isdn backup enable, and config adsl remote node as PPPoA mode / dynamic wan ip , and save action can't work fine.

**Modification in V3.40(OA.1)b1 | 12/12/2003**

1. [BUG FIXED] Ramtest will show 32800K size  
Symptom: while system reboot, ramtest will show 32800K..  
Condition: reboot system ,and wait for system ramtest ok, and system must show 32768K , but show wrong memory size 32800K
2. [FEATURE CHANGED] use AT command atwe to write mac address , and system will auto reboot.
3. [BUG FIXED] atux0,60 to upload merge file is not work.  
Symptom: use atux0,60 to upload bootmodule , romfile , rascode merge file is not work.  
Condition: use atbt1 and atux0,60 to upload merge file , and it will not success.
4. [BUG FIXED] Web page remote management change config will cause system exception.  
Symptom: Web page remote management change config will cause system exception.  
Condition: use IE to login P653HWI, and choice remote management, then change telnet item to LAN only , and press Apply , and system have exception.
5. [BUG FIXED] Web page will show redundant wlan active select item  
Symptom: web page will show redundant wlan active select item  
Condition: web page will show redundant wlan active select item in wlan setting.

**Modification in V3.40(OA.0) | 12/1/2003**

1. [FEATURE CHANGED] Change to FCS version.

**Modification in V3.40(OA.0)b9 | 11/28/2003**

1. [BUG FIXED] Bandwidth management sometimes will cause system exception.  
Symptom: while bandwidth management active, and system sometimes will get null packet , then it will cuase system exception.  
Condition: Enable bandwidth management, and use packet to pass-through P653 for some minutes, and system will reboot.

**Modification in V3.40(OA.0)b8 | 11/25/2003**

1. [BUG FIXED] PNC string not show in menu 21  
Symptom: PNC string not show in menu 21  
Condition: enter menu 21 , and menu show PNC string is wrong..
2. [BUG FIXED] While we do VBR test, MBS value cannot over 255  
Symptom: in menu 11, we can set MBS to over 255, but it is no meaning.  
Condition: in menu 11, we can set MBS to over 255, so we limit MBS field to enter a value not large than 255.
3. [BUG FIXED] VPN can't establish ipsec tunnel while we use PPPoA mode.  
Symptom: in PPPoA mode , ipsec tunnel cann't be establish.  
Condition: change menu 4 to PPPoA mode, and use CI command : ipsec dial 1 to establish ipsec tunnel, and it will cause timeout.
4. [BUG FIXED] Web/Firewall Ipsec\_TRANSPORT/TUNNEL(AH0) items is bad  
Symptom: Web/Firewall Ipsec\_TRANSPORT/TUNNEL(AH0) items can't be selected.  
Condition: Web/Firewall Ipsec\_TRANSPORT/TUNNEL(AH0) items can't be selected and move to right field.
5. [BUG FIXED] ACL rule be added in web many times , and system will have exception.  
Symptom: ACL rule be added in web many times, and system will have exception.  
Condition: ACL rule be added ,and system cannot work fine ,and exception.
6. [FEATURE CHANGE] Extend boottext waiting time to over 3 seconds for TE department to operate at command.

**Modification in V3.40(OA.0)b7 | 11/7/2003**

1. [BUG FIXED] SNMP agent not work fine.  
Symptom: SNMP agent not work fine  
Condition: use MIB browser to get system object id , P653 don't send response packet.
2. [BUG FIXED] The traffic redirect sometimes doesn't work in PPPoE mode.  
Symptom: The traffic redirect sometimes doesn't work in PPPoE mode while adsl line is plug again  
Condition: in menu 4 use PPPoE mode , in menu 2 use ICMP mode , and adsl line link

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- up fine, drop adsl line , and plug adsl line again, traffic will not turn back to adsl line.
3. [BUG FIXED] Menu 11 isdn dial in remote node must fill not null remote ip address.  
Symptom: Menu 11 isdn dial in remote node must fill not null remote ip address  
Condition: in Menu 11 , isdn dail in remote node ,remote ip address can enter 0.0.0.0, and now must enter a not null ip address
  4. [BUG FIXED]in bridge mode , heavy traffic in WLAN will cause system reboot  
Symptom: in bridge mode, WLAN will cause system reboot.  
Condition: in bridge mode , use IP/TV to play movie, and multicast packet will cause WLAN driver to have heavy traffic , and system will reboot.
  5. [BUG FIXED]Modify hwsar address error will cause http and ftp to get some server size  
Symptom: HTTP to connect to yahoo web site , and ftp to win2000 server will fail.  
Condition: use HTTP to connect to yahoo web site will have error message , and use ftp to connect to win2000 server will not display all filename.

**Modification in 3.40(OA.0)b6 | 10/17/2003**

1. [FEATURE ENCHANED] Support New Compression method .
2. [FEATURE CHANGED] Use bootmodule 1.02 and support new hardware with 32Mb SDRAM.
3. [FEATURE ENCHANED] Reduce system memory size from 4Mb to 3Mb.
4. [BUG FIXED] Modify TFTP and Web can't upload f/w  
Symptom: tftp can web upload f/w will not work .  
Condition: after system reboot, system memory will be exhausted during some minutes. So upload f/w will not action correctly(change ftp server task priority , and it will cause common issue to show "HTTP accept error")
5. [BUG FIXED] modify isdn dial backup will not work fine after config menu 2 wan backup setting  
Symptom: ISDN remote node in dial backup mode will not trigger to dial out .  
Condition: Configure ISDN setting in menu 2. Then Configure ISDN remote node in menu 11. Dial backup doesn't work .
6. [BUG FIXED] modify Hwsar VBR not work  
Symptom: Hwsar VBR not work fine  
Condition: use VBR in smt11 to test QoS function.
7. [BUG FIXED] modify smt12 cannot select 10~16 items  
Symptom: smt12 can't select 10~16 items.  
Condition: enter menu 12 , and select 10~16 item.
8. [FEATURE ENCHANED] support bandwidth management.

**Modification in 3.40(OA.0)b5 | 09/26/2003**

1. [FEATURE ENCHANED] ISDN remote node support nail-up connection selection.
2. [FEATURE CHANGED] Boottext stage will turn off all wlan, adsl , isdn LED
3. [FEATURE ENCHANED] add ISP remote node wan ip address in menu 24.1 display, and isdn connect will show 3 stage-Idle, Lcp up, UP for user to read more information about isdn connection.
4. [BUG FIXED] Modify FTP and HTTP task priority equal will have socket accept error.

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Symptom: use ftp to upload f/w ok , console will display “HTTP accept error”.  
Condition: use ftp to upload f/w , and error message will show in console.

**Modification in 3.40(OA.0)b4 | 09/21/2003**

1. [BUG FIXED] System will hang in menu 2.2.2 while user press enter key in short time.  
Symptom: The system sometimes will hang in menu 2.2.2..  
Condition: in menu 2.2.2 and press enter key in short time.
2. [BUG FIXED] WAN backup recovery mechanism have some issue for traffic redirect in PPPoE mode. It sometimes can't back to ADSL line  
Symptom: ICMP backup mode will not recovery to use ADSL line in PPPoE mode.  
Condition: use PPPoE mode to connect ADSL, and drop ADSL line to use ISDN line to connection, and plug ADSL line, recovery mechanism will not active.
3. [FEATURE ENHANCED] Support 10 remote nodes and the last two are for ISDN backup and dial-in management.
4. [BUG FIXED] We can configure NAT field for bridge mode in menu 11. It is one bug.  
Symptom: menu 11.1 switch to bridge mode , and menu 11 still show SUA mode  
Condition: in menu 11.1 , select ip mode , in menu 11.1.3 select SUA mode, and save menu 11 remote node , enter menu 11.1 again, and switch menu 11.1 to bridge mode, and back to menu 11 ,it still show SUA mode.
5. [BUG FIXED] It display "Do you ....." message after saving menu 4. Please remove it.  
Symptom: show redundant message in menu 4 while menu 4 save.  
Condition: change any setting in menu 4 and save.
6. [BUG FIXED] Reset button function doesn't meet PS.  
Symptom: reset button press 1 second will reboot system , but not need to restore default romfile.  
Condition: reset button presses 1 second will just only reboot system.
7. [FEATURE ENHANCED]support SIP pass through.
8. [BUG FIXED] If ReAuthentication set to 10 in 802.1x function . the 802.1x function will fail .  
Symptom: change menu 23.4 ReAuthentication time to 10 seconds.and ReAuthentication will sometimes fail.  
Condition: change minimum value to 60 seconds.
9. [BUG FIXED] When FTP upgrage f/w, it will show redandant message : HTTP socket error.  
Symptom: upgrade rascode by ftp upload, and it will display “HTTP accept fail”  
Condition: change ftp task priority.
10. [BUG FIXED] In web configuration, 802.1x authentication timeout will not check correct range must not be 0  
Symptom: web config it and enter a value is 0  
Condition: change check timeout value in timeout field.

**Modification in 3.40(OA.0)b3 | 09/02/2003**

1. [BUG FIXED] External spec not match with f/w  
Symptom: <1> Host name length does define 63 in ES but now check is 71 <2> Menu 11.1 incoming login length define 45 in ES but now check is 31 and outgoing login/pw id 45/31 in ES but now check is 71 <3> VC mode , VC option for Bridge VPI define 0-255 in ES but now check it can keyin to 0-999 and VCI can keyin to 0 ~ 65535 <4> Menu 24.3.2 Unix syslog loss type setting but EX have define ..  
Condition: External spec V0.1 not match f/w setting.
2. [BUG FIXED] wlan driver sometime not work fine  
Symptom: Sometime WLAN have been ready but WLAN LED does not turn on and use site survey also can not be find this AP. If you power cycle several times about 10 time will have once  
Condition: reboot system , and sometime system wlan will not work fine.
3. [BUG FIXED] syslog cannot display  
Symptom: System log function in menu 24.3.1 can not into and work and into menu 24.8 CI command mode issue " sys log disp" that it always display no log existing  
Condition: CI command "sys log disp" must change to call "sys log err disp" for centralize log, and oam loopback in web will display error CI command message.
4. [BUG FIXED] smt 24.7.1 reboot system cannot enter debug mode  
Symptom: It can auto into debug mode in Menu 24.7.1 and menu 24.7.2  
Condition: enter smt24.7.1 and reboot system , system will not auto wait in debug mode.
5. [BUG FIXED] DDNS just need support dyndns  
Symptom: The SMT support 2 server but we just need support dyndns , so we just change setting  
Condition: smt1.1 will have 2 server choice.
6. [BUG FIXED] redundant IPX filter bug  
Symptom: remove filter type IPX filter rule from menu 21.1.1.1 because we does not support IPX protocol  
Condition: smt21 will have redundant IPX filter selection.
7. [BUG FIXED] generic filter field have wrong range setting  
Symptom: When we set length to 9 in filter/generic filter rule it can press enter but we we save to Rom will change to 6  
Condition: Generic filter setting will have error setting.
8. [BUG FIXED] redundant SMT setting  
Symptom: Accounting server can list in SMT menu but can not into and work.  
Condition: smt menu will show accounting server selection.
9. [BUG FIXED] ATLD command support  
Symptom: ATLD function does not support now  
Condition: atld command not support.
10. [BUG FIXED] OAM loopback fail  
Symptom: The OAM loopback function always fail in Web/Wizard and maintenance/diagnostic.  
Condition: it will show error message and cannot work fine.
11. [BUG FIXED] firmware can't upgrade through web  
Symptom: The firmware upgrade function fail in Web/maintenance/firmware and

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show "server error a file system error was detected on the RomPager server" , We use LAN side to this upgrade function.

Condition: web upgrade f/w function not work fine.

12. [BUG FIXED] ISDN dial backup not work fine  
Symptom: The ISDN WAN backup function can not work in WAN backup function (DSL link and ICMP function both can not be work)  
Condition: ISDN dial backup not work fine..
13. [BUG FIXED] Poor WLAN throughput  
Symptom: The wireless throughput poor than G-1000 , G-1000 Tx : 20Mbps RX : 14.4Mbps but P653HWI-11 Tx 10Mbps and RX 3.2Mbps  
Condition:Low WLAN through..
14. [BUG FIXED] ISDN dial backup not work fine  
Symptom: We do ISDN wan backup function and set to ICMP mode , when we pull out DSL line do this function test and plug in DSL line again , sometime the DSL line can not up again that we must reset device just can  
Condition: No adsl active again.
15. [BUG FIXED] smt4 field setting bug  
Symptom: When we press "Enter" key to "server name" item , the message display " Menu-4 Internet Access Setup" below in menu 4  
Condition: smt4 field display error.
16. [BUG FIXED] firewall default setting bug  
Symptom: Could we follow other mode set IKE default port to fierwall function , if we doesn turn on maybe VPN working have problem  
Condition: default setting in firewall rule is wrong.
17. [BUG FIXED] Smt2 field range error  
Symptom: The Keepalive faile tolerance set to 9 and ICMP timeout set to 9. in WAN backup function  
Condition: Smt2 setting will have error setting range.

**Modification in 3.40(OA.0)b2 | 08/21/2003**

1. [BUG FIXED] Modify smt4 and smt11 dynamic ip address not consistent bug.
2. [BUG FIXED] Modify isdn reset will cause system reboot randomly.
3. [BUG FIXED] Modify smt24.2 set baudrate is 115200 , and use 9600 baudrate to enter any character , system will reboot bug.
4. [BUG FIXED]Modify WLAN card will cause PCI error in 0°C .

**Modification in 3.40(OA.0)b1 | 08/11/2003**

1. [FEATURE ENHANCED] add ISDN for dial backup and smt2.2 , smt11 remote node 8 for ISDN dial out/dial in connection.
2. [FEATURE ENHANCED] add smt14 smt23.2 smt23.4 for 802.1x
3. [FEATURE ENHANCED]add 802.11g Cardbus WLAN card support and WLAN card must use Cardbus interface 802.11g card.
4. [FEATURE ENHANCED]add firewall /VPN feature (VPN can use 10 tunnel and use hardware DES)

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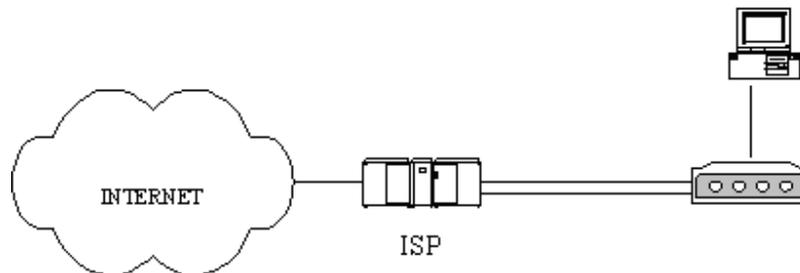
5. [FEATURE ENHANCED] ISDN line can use CI command “device dial 8” for isdn line dial out, and “device drop bri0”, “device drop bri1” for drop isdn B channel.

## Appendix 1: ZyXEL F/W Upgrade Tool

### Network Environment:

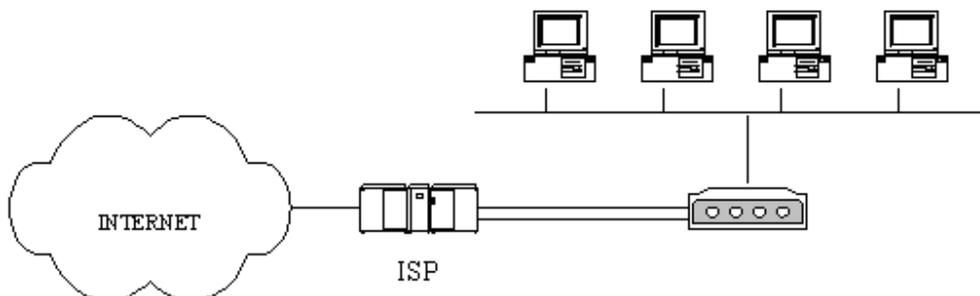
#### 1. Prestige Modem Series

The target network environment is a PC connected to Prestige modem directly. The below figure shows a typical Internet access application. (If there is any IP sharing devices, like router, or switch between PC and Prestige modem, users must connect the PC to Prestige modem directly first before running the program.)



#### 2. Prestige Router Series

The target network environment is a small number of PCs using the Prestige DHCP service for IP address assignment. Following figure shows a typical Internet access application.



### Firmware Upgrade Procedure

1. Change the Router's password to "1234".
2. Change the Router's LAN IP to "192.168.1.1" and make sure that PC can connect to Router.
  - ⇒ If your PC's IP is dynamic assigned by router, please release original IP and renew it from router's DHCP service.
  - ⇒ If your PC's IP is static assigned, please change it and make sure the new IP address at same subnet with router. (Ex: Set PC's IP to 192.168.1.33).
3. Executing the upgrade tool and wait about 6 minutes to wait firmware upgrade procedure finished.
4. If the original password is not "1234", change back to original setting.
5. Restore the original IP setting of router and reboot it if necessary.

## 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="#">WLAN Related Command</a>	<a href="#">IP Related Command</a>
<a href="#">IPSec Related Command</a>	<a href="#">Bridge Related Command</a>	<a href="#">Radius Related Command</a>
<a href="#">8021x Related Command</a>	<a href="#">Firewall Related Command</a>	<a href="#">Bandwidth Management</a>

### System Related Command

[Home](#)

Command			Description
sys			
	adjtime		retrive date and time from Internet
	callhist		
	countrycode	[countrycode]	set country code
	date	[year month date]	set/display date
	domainname		display domain name
	edit	<filename>	edit a text file
	extraphnum		maintain extra phone numbers for outcalls
	add	<set 1-3> <1st phone num> [2nd phone num]	add extra phone numbers
	display		display extra phone numbers
	node	<num>	set all extend phone number to remote node <num>
	remove	<set 1-3>	remove extra phone numbers
	reset		reset flag and mask
	feature		display feature bit
	firmware		display ISDN firmware type
	hostname	[hostname]	display system hostname
	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

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		schedule hour [0-23]	hour time to send the logs
		schedule minute [0-59]	minute time to send the logs
		schedule policy [0:full/1:hourly/2:daily/3:weekly/4:none]	mail schedule policy
		schedule week [0:sun/1:mon/2:tue/3:wed/4:thu/5:fri/6:sat]	weekly time to send the logs
		server [domainName/IP]	mail server to send the logs
		subject [mail subject]	mail subject
	save		save the log setting buffer
	syslog		
		active [0:no/1:yes]	active to enable unix syslog
		display	display syslog setting
		facility [Local ID(1-7)]	log the messages to different files
		server [domainName/IP]	syslog server to send the logs
	stdio	[second]	change terminal timeout value
	time	[hour [min [sec]]]	display/set system time
	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,sds100, 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
	upnp		restore default romfile
	active	[0:no/1:yes]	Activate or deactivate the saved upnp settings
	config	[0:deny/1:permit]	Allow users to make configuration changes. through UPnP
	display		display upnp information

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		firewall	[0:deny/1:pass]	Allow UPnP to pass through Firewall.
		load		Load upnp information
		save		save upnp information
	atsh			display system information
	xmodemmode			display xmodem mode
	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>
		ioctl	<ch_name>
		mac	<ch_name> <mac addr>
		reg	<ch_name>
		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>
		init	<ch_name>
	version		see ethernet device type

WAN Related Command

[Home](#)

		Command		Description
wan	Adsl			
		chandata		ADSL channel data, line rate
		close		Close ADSL line
		linedata		
			near	Show ADSL near end noise margin
			far	Show ADSL far end noise margin
		open		Open ADSL line
		opencmd		Open ADSL line with specific standard
			Glite	
			T1.413	
			Gdmt	
			multimode	
		opmode		Show the operational mode
		rateadap	[on off]	Turn on/off rate adaptive mechanism
		perfdata		Show performance information,CRC,FEC, error seconds..
		reset		Reset ADSL modem, and must reload the modem code again
		Status		ADSL status (ex: up, down or wait for init)
		errorsecond		
			sendes	Send current error second information immediately
		targetnoise	[value]	Adjust target noise offset
	atm			
		test		
	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.
		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

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	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.
filter			
	[incoming   outgoing]	<generic>[set#1][set#2][set#3][set#4]	To set generic filter for wireless channel
version			

IP Related Command

[Home](#)

Command			Description
ip			
	address	[addr]	display host ip address
	alias	<iface>	alias iface
	aliasdis	<0 1>	disable alias
	arp		
	status	<iface>	display ip arp status
	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		

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		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
ping		<hostid>	ping remote host
route			
	status	[if]	display routing table
	add	<dest_addr default>[/<bits>] <gateway> [<metric>]	add route
	addiface	<dest_addr default>[/<bits>] <gateway> [<metric>]	add an entry to the routing table to iface
	addprivate	<dest_addr default>[/<bits>] <gateway> [<metric>]	add private route
	drop	<host addr> [/<bits>]	drop a route
	flush		flush route table
	lookup	<addr>	find a route to the destination
	errent		
		disp	display routing statistic counters
		clear	clear routing statistic counters
status			display ip statistic counters
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

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		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
tftp				
		support		print if tftp is support
		stats		display tftp status
xparent				
		join	<iface1> [<iface2>]	join iface2 to iface1 group
		break	<iface>	break iface to leave ipxparent group
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> v1 compat [on/off]	turn on/off v1 compat 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

IPSec Related Command

[Home](#)

Command			Description	
ipsec				
	debug	<1 0>	turn on/off trace for IPsec debug information	
	route	lan	<on/off>	After a packet is IPsec processed and will be sent to LAN side, this switch is to control if this packet can be applied IPsec again.
			Remark: Command available since 3.50(WA.3)	
		wan	<on/off>	After a packet is IPsec processed and will be sent to WAN side, this switch is to control if this packet can be applied IPsec again.
			Remark: Command available since 3.50(WA.3)	
	show_runtime	sa	display runtime phase 1 and phase 2 SA information	

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		spd		When a dynamic rule accepts a request and a tunnel is established, a runtime SPD is created according to peer local IP address. This command is to show these runtime SPD.
	switch	<on off>		As long as there exists one active IPSec rule, all packets will run into IPSec process to check SPD. This switch is to control if a packet should do this. If it is turned on, even there exists active IPSec rules, packets will not run IPSec process.
	timer	chk_my_ip	<1~3600>	- Adjust timer to check if WAN IP in menu is changed
				- Interval is in seconds
				- Default is 10 seconds
				- 0 is not a valid value
		chk_conn.	<0~255>	- Adjust auto-timer to check if any IPsec connection has no traffic for certain period. If yes, system will disconnect it.
				- Interval is in minutes
				- Default is 2 minutes
				- 0 means never timeout
		update_peer	<0~255>	- Adjust auto-timer to update IPSec rules which use domain name as the secure gateway IP.
				- Interval is in minutes
				- Default is 30 minutes
				- 0 means never update
	updatePeerIp			Remark: Command available since 3.50(WA.3) Force system to update IPSec rules which use domain name as the secure gateway IP right away.
	dial	<rule #>		Remark: Command available since 3.50(WA.3) Initiate IPSec rule <#> from ZyWALL box
	display	<rule #>		Remark: Command available since 3.50(WA.3) Display IPSec rule #
	config	netbios	active <on off>	Set netbios active flag
			group <group index1, group index2...>	Set netbios group
		name	<string>	Set rule name
		active	<Yes   No>	Set active or not
		keepAlive	<Yes  No>	Set keep alive or not
		localIdType	<0:IP   1:DNS   2:Email>	Set local ID type
		localIdContent	<string>	Set local ID content
		myIpAddr	<IP address>	Set my IP address
		peerIdType	<0:IP   1:DNS   2:Email>	Set peer ID type
		peerIdContent	<string>	Set peer ID content
		secureGwAddr	<IP address   Domain name>	Set secure gateway address or domain name
		protocol	<1:ICMP   6:TCP   17:UDP>	Set protocol
		localAddrType	<0:single   1:range   2:subnet>	Set local address type
		localAddrStart	<IP>	Set local start address
		localAddrEndMask	<IP>	Set local end address or mask
		localPortStart	<port>	Set local start port
		localPortEnd	<port>	Set local end port
		remoteAddrType	<0:single   1:range   2:subnet>	Set remote address type
		remoteAddrStart	<IP>	Set remote start address
		remoteAddrEndMask	<IP>	Set remote end address or mask

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	sk		
	rmPortStart	<port>	Set remote start port
	rmPortEnd	<port>	Set remote end port
	antiReplay	<Yes   No>	Set anitreplay or not
	keyManage	<0:IKE   1:Manual>	Set key manage
	ike	negotiationMode <0:Main   1:Aggressive>	Set negotiation mode in phase 1 in IKE
		preShareKey <string>	Set pre shared key in phase 1 in IKE
		p1EncryAlgo <0:DES   1:3DES>	Set encryption algorithm in phase 1 in IKE
		p1AuthAlgo <0:MD5   1:SHA1>	Set authentication algorithm in phase 1 in IKE
		p1SaLifeTime <seconds>	Set sa life time in phase 1 in IKE
		p1KeyGroup <0:DH1   1:DH2>	Set key group in phase 1 in IKE
		activeProtocol <0:AH   1:ESP>	Set active protocol in phase 2 in IKE
		p2EncryAlgo <0:Null   1:DES   2:3DES>	Set encryption algorithm in phase 2 in IKE
		p2AuthAlgo <0:MD5   1:SHA1>	Set authentication algorithm in phase 2 in IKE
		p2SaLifeTime <seconds>	Set sa life time in phase 2 in IKE
		encap <0:Tunnel   1:Transport>	set encapsulation in phase 2 in IKE
		pfs <0:None   1:DH1   2:DH2>	set pfs in phase 2 in IKE
	manual	activeProtocol <0:AH   1:ESP>	Set active protocol in manual
	manual ah	encap <0:Tunnel   1:Transport>	Set encapsulation in ah in manual
		spi <decimal>	Set spi in ah in manual
		authAlgo <0:MD5   1:SHA1>	Set authentication algorithm in ah in manual
		authKey <string>	Set authentication key in ah in manual
	manual esp	encap <0:Tunnel   1:Transport>	Set encapsulation in esp in manual
		spi <decimal>	Set spi in esp in manual
		enryAlgo <0:Null   1:DES   2:3DES>	Set encryption algorithm in esp in manual
		enryKey <string>	Set encryption key in esp in manual
		authAlgo <0:MD5   1:SHA1>	Set authentication algorithm in esp in manual
		authKey < string>	Set authentication key in esp in manual

Bridge Related Command

[Home](#)

Command			Description
bridge			
	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

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
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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

**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

**Bandwidth management Related Command**

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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.
				<marktos xx>	Mark TOS value.
			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.
				<marktos xx>	Mark TOS value.

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			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.
				<marktos xx>		Mark TOS value.
			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.
					<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.
					<marktos xx>	Mark TOS value.
			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.
				<marktos xx>		Mark TOS 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.
					<marktos xx>	Mark TOS value.
			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.

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				<marktos xx>		Mark TOS 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.
					<marktos xx>	Mark TOS value.
			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 new value.
				<marktos xx>		Mark TOS 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 tos <xx> tosmask <xx>		Add a filter for class # in LAN. The filter contains destination address (netmask), destination port, source address (netmask), source port , protocol, tos value and tos mask. 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 tos <xx> tosmask <xx>		Add a filter for class # in WLAN. The filter contains destination address (netmask), destination port, source address (netmask), source port , protocol, tos value and tos mask. 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 tos <xx> tosmask <xx>		Add a filter for class # in WAN. The filter contains destination address (netmask), destination port, source address (netmask), source port , protocol, tos value and tos mask. 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

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			0~07]			
		filter	lan			Show the filters settings of LAN
			wlan			Show the filters settings of WLAN
			mpoa[0 0~07]			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[0 0~07]			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.