



Firmware Release Note

Prestige 653HWI-11

Standard version

Release 3.40(OA.4)c0

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| 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.

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 cancel" 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 than 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 1" 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

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 brower 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.

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 presss 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 firewall function , if we doesn't 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 failure 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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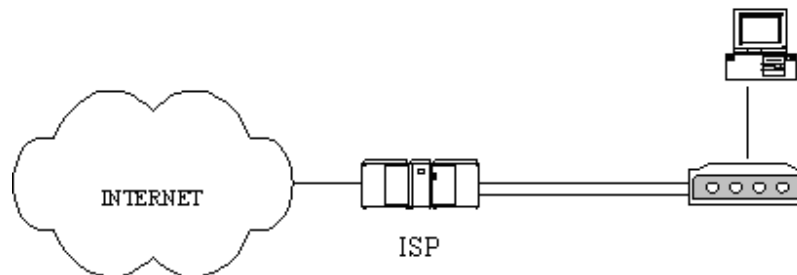
5. [FEATURE ENHANCED] ISDN line can use CI command “device dial 8” for isdn line dial out, and “device drop bri0”, “device drop bri1” for drop isdn B channel.

Appendix 1: ZyXEL F/W Upgrade Tool

Network Environment:

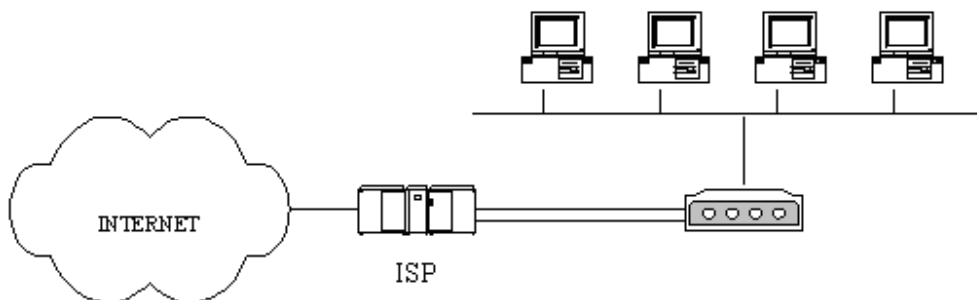
1. Prestige Modem Series

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 | | |
|--|--|--|
| System Related Command | Exit Command | Ethernet Related Command |
| WAN Related Command | WLAN Related Command | IP Related Command |
| IPSec Related Command | Bridge Related Command | Radius Related Command |
| 8021x Related Command | Firewall Related Command | Bandwidth Management |

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:non e] | mail schedule policy |
| | | | schedule week [0:sun/1:mon/2:tue/3:wed/4:thu/5:fri/6: sat] | weekly time to send the logs |
| | | | server [domainName/IP] | mail server to send the logs |
| | | | subject [mail subject] | mail subject |
| | | save | | save the log setting buffer |
| | | syslog | | |
| | | | active [0:no/1:yes] | active to enable unix syslog |
| | | | display | display syslog setting |
| | | | facility [Local ID(1-7)] | log the messages to different files |
| | | | server [domainName/IP] | syslog server to send the logs |
| | 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,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 |
| | 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> | 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 |

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 |
| | | errcnt | | |
| | | | 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 |

| | | | | |
|---------|--|----------------|-----------------------------|--|
| | | 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 | | prtn 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> 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 |

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 minuets - 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 |
| | | keyAlive | <Yes No> | Set keep alive or not |
| | | lcIdType | <0:IP 1:DNS 2:Email> | Set local ID type |
| | | lcIdContent | <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 |
| | | lcAddrType | <0:single 1:range 2:subnet> | Set local address type |
| | | lcAddrStart | <IP> | Set local start address |
| | | lcAddrEndMask | <IP> | Set local end address or mask |
| | | lcPortStart | <port> | Set local start port |
| | | lcPortEnd | <port> | Set local end port |
| | | rmAddrType | <0:single 1:range 2:subnet> | Set remote address type |
| | | rmAddrStart | <IP> | Set remote start address |
| | | rmAddrEndMask | <IP> | Set remote end address or mask |

| | | | | |
|--|--|-------------|---|--|
| | | 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 |
| | | | eneryAlgo <0:Null 1:DES 2:3DES> | Set encryption algorithm in esp in manual |
| | | | eneryKey <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

[Home](#)

| 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. |

| | | | | | | |
|--|-------|-------------|---------|-----------------|-----------------|--|
| | | | 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. |

| | | | | | | |
|--|--------|-------------|-------------|--|-----------------|---|
| | | | | <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[0 | | | 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. |