



Firmware Release Note

Prestige 662HW-61

Standard Version

Release 3.40(QR.8)C1

Date:

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ZyXEL Prestige 662HW-61 Standard Version Release 3.40(QR.8)C1 Release Note

Date: Oct 20, 2005

Supported Platforms:

ZyXEL Prestige 662HW-61

Versions:

ZyNOS Version : V3.40(QR.8) | 10/28/2005 9:40:35

Bootbase Version : V1.06 | 04/01/2004 11:22:33

Notes:

The Prestige 662HW-61, is 4th generation of ZyXEL ADSL product family. It is a high performance ADSL/ADSL2/ADSL2+ router for small/medium office to have Internet access and LAN-to-LAN application over the existing copper line. P662HW-61 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 26Mbps (ADSL2+), greater reach, faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a high integrated advanced Firewall, Bandwidth Management and IEEE 802.11g wireless features to meet the demand of high-end market.

P662HW-61 provides an embedded mini-PCI module for 802.11g Wireless LAN connectivity, four single auto-sensing, auto-detection 10/100BASE-T Ethernet ports for connection to the user's local network, and a single RJ-11/RJ-45 port for connection to ADSL/ADSL2/ADSL2+ line.

Known Issues:

1. US Robotics modem is not supported for dial backup.
2. If user wants to register to extend expired date, packet-Scan engine won't send out expired date request until 6th checking with Packet-Scanning server.
3. If device LAN is connected with a switch, and device reboots, then the PC with Any-IP can't connect with device until the ARP entry is clear by PC.
4. WLAN has Beacon failure problem when the channel is in very busy/dirty condition
5. In Web/GUI, the MBM wizard successful page is English only.
6. In Web/GUI, The help page link in GUI->Advanced Setup->Certificates is invalid.
7. The ADSL 2+ throughput can't pass throughput criterion.
8. There is still not support multi-language for Auto-VC hunt HTML on GUI.

Features:

Modifications in V 3.40(QR.8)C1 | 10/28/2005

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1. Change default rom file.

Modifications in V 3.40(QR.8)C0 | 10/20/2005

1. Change to FCS version.

Modifications in V 3.40(QR.8)b2 | 10/14/2005

1. [BUG FIX] SPRID: 050930696
Symptom: DUT will crash when using OTIST with G162.
Condition: Step1.In SMT 23.4,change mode to WPA-PSK.
Step2.Note book(using G162) ping continually.
Step3.In GUI-Wireless Lan-OTIST,press start button,then DUT will crash.
2. [BUG FIX] SPRID: 050930697
Symptom: DUT will crash when FTP Download using multithread.(Downstream Speed=8160kbps)
Condition: DUT will crash when FTP Download using multithread.(Downstream Speed=8160kbps)
3. [FEATURE ENHANCE] Zero configure enhancement on WEB GUI.

Modifications in V 3.40(QR.8)b1 | 09/23/2005

1. [FEATURE ENHANCE] SPRID: 050413487
CONE-NAT support.
2. [FEATURE ENHANCE]
OTIST enhance: reset button support.
3. [FEATURE ENHANCE] SPRID: 050526691
Wireless GUI can choose wireless 4 modes: b, mixed, g, g+.
4. [FEATURE ENHANCE]
SIP ALG can be selected in GUI.
5. [FEATURE ENHANCE]
Change modem code version to V4.2.1.0.
9. [FEATURE ENHANCE]
Change multi-boot version to V2.1
10. [FEATURE ENHANCE]
CAC enhancement: 1). Device can be set exempt host in GUI.
2). Trusted internal device support.
11. [FEATURE ENHANCE]
User can disable Web-redirect function while using CI command: “wan atm webredir” and “wan atm vc save”.
12. [FEATURE ENHANCE] SPRID: 050602106
DNS server IP can be set in SMT3.2 even when DHCP is off.
13. [FEATURE ENHANCE] SPRID: 050609464 & 050609465
Add help pages in GUI for certificates and some new features.
14. [FEATURE ENHANCE]
CNM agent feature enhancement, details to see the document: “ReleaseNote_2.0.2(QR.0).doc”.
15. [BUG FIX] SRPID: 050725052
Symptom: Configure firewall will cause DUT crash

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Condition: Step1 enter GUI->advanced setup->firewall->rule summary, create a rule and apply it.

Step2 enter the rule and delete it.

Step3 click back button in IE column and apply it again, then the DUT will crash.

16. [BUG FIX] SPRID: 050627295

Symptom: While set the DUT LAN "Client IP Pool Starting Address" and "Size of Client IP Pool" which are not match the "IP Subnet Mask", but this can be saved in GUI/Wizard Setup and rom-t. In SMT and GUI/Advanced Setup have no this issue.

Condition: Step1: While set the DUT LAN setting as below: "Client IP Pool Starting Address=192.168.1.4", "Size of Client IP Pool=4", "IP Subnet Mask=255.255.255.248", the DUT will show a prompt in SMT and GUI/Advanced Setup: "Invalid DHCP Size of Client Pool".

Step2: But in GUI/Wizard Setup and rom-t, this configuration will be saved, and LAN PC can get the IP from 192.168.1.4.

17. [BUG FIX] SPRID: 050624100

Symptom: MSN message support have some problem.

Condition: Step1. When disable UPnP function, Windows XP MSN 6.2 can not establish audio transfer with WindesXP or 2000 MSN 6.2.

Step2. When disable UPnP function, Windows XP MSN 6.2 and MSN 7.0 can not establish Whiteboard sharing functions.

18. [BUG FIX] SPRID: 050114925

Symptom: PPPoA will stay idle after plug the dsl line in, The physical link comes up but the PPPoA remains idle. And Nailed up connection being set to yes.

Condition: N/A

19. [BUG FIX] SPRID: 050407129

Symptom: The Left pane of GUI display has some problem.

Condition: Step1 Use LCD14.1', Enter eWC, click any item in the Advanced Setup, then the Left pane of the GUI won't show integrallty, it lost to display the Maintance and Logout item.

Step2 When use LCD17', it won't show such phenomenon.

20. [BUG FIX] SPRID: 050503078

Symptom: Setting Web and SMT does not match.

Condition: on the PC, login the P660R, Using wizard to set the device to Bridge mode:

Mode: Bridge

Encap: RFC 1483

Multiplex: LLC

VPI/VCI: 8/35

Press Save to save the settings.

Then check the SMT that on menu.4 and menu.11, everything looks correct (Route=No, Bridge=Yes). But on menu.1, you will still see that Route=IP and Bridge= No.

21. [BUG FIX] SPRID: 050701043

Symptom: When DUT use static IP and DNS server address in GUI->wizard, DUT will not resolve domain name successfully until reboot it.

Condition: Step1. Go to GUI, configure DUT use static IP and set DNS server, then go to Maintenance->diagnostic, try to resolve domain name, but failed.

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Step2: Reboot DUT, it works fine.

Step3. This may cause TMSS/CAC/DDNS functions don't work for these functions need DUT resolve domain name.

22. [BUG FIX] SPRID: 050923199

Symptom: Mac filter backup can be saved in GUI.

Condition: Step1. Enter Wireless LAN-MAC Filter in GUI. Change some settings.

Step2. Click "back" without saving.

Step3. Enter the Wireless LAN-MAC Filter page again, then find it has already been saved.

23. [BUG FIX] SPRID: 050710524

Symptom: IP policy can't work

Condition: Step1 set IP routing Policy rule in menu 25.

Step2. Go to Menu 3.2 and apply it.

Step3. But the traffic doesn't obey this rule.

24. [BUG FIX] SPRID: 050923200

Symptom: P662HW embedded 4-port switch problem.

Condition: Step1. Connect a PC to port 3 of P662HW. It can obtain an IP address from P662HW DHCP server and you can ping 192.168.1.1.

Step2. Disconnect the PC from port 3 and connect it to port 4 or 2.

Step3. Ping can't reach 192.168.1.1 any more, the ipconfig /renew command can't work.

25. [BUG FIX] SPRID: 050923201

Symptom: Content filtering cannot block keyword.

Condition: Step1. Add keyword "pchome".

2. Enable keyword blocking.

3. Connect to "www.google.com.tw" to search "pchome".

4. Click the first link "www.pchome.com.tw" in the search result page.

5. The access will be blocked.

6. Refresh the page again.

7. The web site "www.pchome.com.tw" can be accessed.

26. [BUG FIX] SPRID: 050923205

Symptom: Filter behavior is wrong.

Condition: Step1. Configure a filter with set 1, rule 1, filter type is TCP/IP, active=yes

Step2. Set the source address as 1.1.1.1, destination address as 2.2.2.2 (let each subnet mask empty).

Step3. Save this filter.

Step4. Configure this filter with source address as 3.3.3.3 and save.

Step5. It will show "filter error // -16 ,invaild IP source addr".

27. [BUG FIX] SPRID: 050923211

Symptom: In Lan→Lan Setup page in GUI or In Wizard Lan page, if type "255.255.248.0" in IP Subnet Mask will show "Subnet Mask error".

Condition: N/A

28. [BUG FIX] SPRID: 050923214

Symptom: This CI command "ip ping www.zyxel.com" works fail.

Condition: Step1. Set PriDNS and SecDNS in smt3.2.

Step2. "ip ping www.zyxel.com" will success.

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Step3. Block the PriDNS. It will use SecDNS to get resolve IP.

Step4. "ip ping www.zyxel.com" will fail. But from PC behind LAN port to ping "www.zyxel.com" will success.

29. [BUG FIX] SPRID:050923217

Symptom: SPI can only keyin 6 characters

Condition: Step1. eWC->VPN->VPN - Summary->VPN - Manual Key: Manual

Step2. SPI can only keyin at most 6 characters

30. [BUG FIX] SPRID: 041210623

Symptom: In GUI, the Button desn't work as it is expected Problem.

Condition: Step1.in GUI,Advanced setup - NAT -SUA only or Full Feature(NAT-Mode page).

Step2. first we click Edit Details.

Step3. click back button of your Browser(IE).

Step4. click Apply button. it should display the NAT-Mode page, but it show Edit details page.

Modifications in V 3.40(QR.7)C0 | 07/06/2005

1. Change to FCS firmware version.

Modifications in V 3.40(QR.7)b1 | 06/17/2005

1. [BUG FIX]

Symptom: After update firmware from qr.5 to qr.6, Antivirus update is error.

Condition: N/A

Modifications in V 3.40(QR.6)C0 | 06/07/2005

1. Change to FCS firmware version.

Modifications in V 3.40(QR.6)b4 | 06/07/2005

1. [BUG FIX] SPRID: 050526689

Symptom: Some words in the help page of configuration still in English when select GUI of French and German language.

Condition: Some words in the help page of configuration still in English when select GUI of French and German language.

2. Change default Rom-file:

Add new rule into VC hunting table: VPI/VCI: 0/38 Encapsulation: PPPOA
Multiplexing: VC

Modifications in V 3.40(QR.6)b3 | 05/18/2005

1. [BUG FIX] SPRID: 050406088

Symptom: VPN tunnel can be built successfully, then LAN PC of P662 can not access with LAN PC of Remote Security Gateway when DUT get Dynamic IP .

Condition: Step1 Set a rule to build a VPN tunnel between P662 and ZyWALL, Both of them get Dynamic IP

Step2 in DUT, input CI command "ipsec dial 1",then VPN tunnel can be built successfully

Step3 but LAN PC of P662 can not access with LAN PC of Remote Security Gateway

Step4 Change DUT and ZyWALL to use static IP, then work fine.

2. [BUG FIX] SPRID: 050407111

Symptom: When select Enet Encap+Dynamic IP or PPPOE +Static IP to access internet,

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the DUT 'route table works improperly.

Condition: Step1 When select Enet Encap+Dynamic IP or PPPOE +Static IP to access internet,, route table only have 3 rules. It lost the rule of access internet via Gateway

Step2 so the traffic won't go out

3. [BUG FIX] SPRID: 050411274

Symptom: Run the throughput test of Router mode, the upstream of traffic test failed .

Condition: Step1 When select rfc1483 route mode to run the throughput test, the DUT won't route LAN traffic to WAN, so the upstream test failed, and the SMT will show us the info of check buffer

Step2 While run downstream test, it is PASS.

4. [BUG FIX] SPRID: 050407123

Symptom: After active Media Bandwidth Management Wizard, the WLAN station will lose the connection of DUT.

Condition: Step1 Active a service of MBM wizard, then WLAN station tries to connect DUT, and failed to get IP.

Step2 Inactive MBM, then WLAN station can connect again.

5. [BUG FIX] SPRID: 050310549

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

Condition: N/A

6. [BUG FIX] SPRID: 041230556 ~ 041230560

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

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

Condition: N/A

7. [BUG FIX] SPRID: 041230568

Symptom: in eWC advanced setup->lan setup the back button can save the configuration and logout.

Condition:N/A

8. [BUG FIX] SPRID: 41222143

Symptom: in menu 24.11, leave the telnet server port default, upload firmware using tftp from lan side pc, it always fails; but if telnet server port is changed to 23, the function works well.

Condition: N/A

9. [BUG FIX] SPRID: 41228406

Symptom: When we get rom-t from LAN side by FTP , and modified it, then put rom-t ,the device won't accept the new rom-t. (Just only use ultraedit modify rom-t, the DUT can accept it, but while use other utilitys--DOS Edit/Word/Notepad/WordPad modify the rom-t, the DUT can not accept it.)

Condition:N/A

10. [BUG FIX] SPRID: 41124036

Symptom: 1.In Menu 24.8 typing "ip ping 192.168.8.1" (the ip address from which you can get response".the default times of ping is three.

2.when the device get response in the first time or the second time.type"ctrl+c".then type the Up key and Enter quickly.the system will crash and reboot.

Condition: N/A

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11. [BUG FIX] SPRID: 41021649

Symptom: PPPoE passthrough function fail(Wireless).

1. Set WAN interface of the device as PPPoE.(Enable PPPoE passthrough function)
2. Ethernet client under LAN side can establish the PPPoE connection.
3. However Wireless Client can not establish the PPPoE connection in the same scenario.

Condition: N/A

12. [BUG FIX] SPRID: 41228407

Symptom: VC hunt can not alloc mbuf again when VC hunt table is more than 8.

Condition: N/A

13. [BUG FIX] SPRID: 050113849

Symptom: Customer report after P662HW-61 upgrade firmware from QR4 to QR5, P2000W are not able to obtain IP dynamically from P662. Where as if static IP is configured on P2000W than connection can be established. Where in QR4 the phone with same setting it works fine. If we use notebook as DHCP.

Condition: N/A

14.[BUG FIX] SPRID: 050325330

Symptom: When DSL-link is down, dial backup funtion works fine if there is no active traffic while P662HW-61 goes for dial backup function. But if there is active traffic from LAN->WAN when DSL-link goes down and P662HW-61 goes for dial backup function -> P660HW-61 reboots.

Condition: Device must be in RFC1483 router mode.

15.[BUG FIX] SPRID: 050404039

Symptom: 1-) create 15 user profile in CAC menu, no need to click "Enable Content Access Control"

2-) restart the device

3-) log on again and enter CAC user profile menu, by default you will see only 10 user

4-) click the link on "If you want to add more user profiles, please click here."

Again you will see 10 user. 5 user seems disappeared.

5-) go to main menu

6-) enter again CAC user profile menu, now you will see 15 user.

Condition: N/A

16.[BUG FIX] (TI WLAN)

Symptom: Using Intel 2100 3B wireless-lan card, STA won't reconnect to AP after pinging from STA to AP for a while.

Condition: N/A

17. [BUG FIX] (TI WLAN)

Symptom: Run emule and FTP bi-direction test for long time under WPA-PSK, STA will disconnect and reconnect to AP.

Condition: N/A

18.[BUG FIX] (TI WLAN)

Symptom: when station reassociation, no handshake procedure starts.

Condition: N/A

19.[BUG FIX] (TI WLAN)

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Symptom: system may exception when issuing "wlan active 0"

Condition: AP is configured as WPA-PSK mode, and one STA can Ping to host A that connects to AP via Ethernet.

After issuing "wlan active 0", AP will exception.

20.[BUG FIX] (TI WLAN)

Symptom: association information is not updated after STA reconnects to AP.

Condition: associate information on "wlan ass" is not updated after STA reconnects to AP.

21.[BUG FIX] (TI WLAN)

Symptom: RTS is not the same as the configured value after system reboots.

Condition: Change RTS value from 2432 to 100 in SMT3.5, then reboot the system.

RTS will be changed back to 2432.

22.[BUG FIX] (TI WLAN)

Symptom: STA can't connect to AP on WPA-PSK after system reboots.

Condition: .STA can't connect to AP on WPA-PSK after system reboots.

If issuing "wlan reset", STA could connect to AP.

23.[BUG FIX] (TI WLAN)

Symptom: system exception when device is rebooting.

Condition:

1. Device is 802.1x, no security and use authentication database "AP local database first, then RADIUS".

2. Use client(G-220) to associate to this AP

3. Use CLI command "sys reboot" to reset system. exception sometimes occurs during the rebooting.

24.[BUG FIX] (TI WLAN)

Symptom: The Group key update sometimes can not work correctly.

Condition:

1. A station connect to the AP.

2. Reconnect the AP again

3. If there is a MicFailure packet is sent from the station, the Group key update can not work correctly.

25.[BUG FIX] (TI WLAN)

Symptom: System sometimes exception when change setting on smt3.5 or 23.4.

Condition: N/A

26.[BUG FIX] (TI WLAN)

Symptom: Static 256-bit WEP can't work.

Condition: N/A

27.[BUG FIX] (TI WLAN)

Symptom: AP is under WPA-PSK, and STA will disconnect when key update or reauthentication.

Condition: N/A

28.[BUG FIX] (TI WLAN)

Symptom: Exception occurs when changing the state from "No Authentication Required" to

"Authentication Required" when it has traffic between lan and wlan.

Condition: N/A

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29. [BUG FIX] (TI WLAN)
Symptom: Static 256-bit WEP and hidden ESSID can't be online changed.
Condition: N/A
- 30.[FETURE ENHANCE]
Supporting rom file back/restore via GUI .
- 31.[FETURE ENHANCE]
Modifying the 'Reset System' button (Maintenance→ diagnostic→General) to 'Restart the Device'.
32. [BUG FIX] SPRID: 050222652
Symptom: Customer reported a NAT issue on P662HW-61 (QR5) and P662HW-63(SC.2).Topology is as following
PC ----- internet ----- P662HW-61(63) ----- DNS server
P662HW-61(63): SUA on, Forward Port 53 to DNS server and Firewall WAN-LAN port 53 allow
1. PC will initiate a DNS query to p662HW-61(63) WAN IP + port 53
 2. P662HW-61(63) will receive the DNS query and forward it to DNS server on LAN side.
 - 3.DNS server will responses to the DNS query and send it to P662HW-61(63)
 4. P662HW-61(63) will reply back to PC, but this traffic will go out via port 10001 or 10002 or any other none 53 port.
- **If DNS query was sent via TCP port 53, then problem does not occur.**

Modifications in V 3.40(QR.6)b2 | 05/04/2005

1. [FEATURE ENHANCE]
PKI certificate support
2. [FEATURE ENHANCE]
4x mode support
3. [FEATURE ENHANCE]
OTIST support
4. [FEATURE ENHANCE]
CAC enhancement (nat session per host)
5. [FEATURE ENHANCE]
Firewall enhancement (blocking text can be modified in CI command)
6. [FEATURE ENHANCE]
ADSL2+ data dump
7. [FEATURE ENHANCE]
CAC enhancement (back door to set up for websites)
8. [FEATURE ENHANCE]
Diffserv support
9. [FEATURE ENHANCE]
VRPT support
10. [FEATURE ENHANCED]
Support Multiboot client V2.
11. [BUG FIX]

SPRID: 050107337

NAT can not work correctly if I change the Server Mapping Set

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Condition :

- Step1: in eWC =>Advanced Setup=>NAT,choose Full Feature and Edit the Rule 1;
- Step2: choose the Type as Server mode,and set the Globle IP as the Wan ip of the DUT;
- Step3: Server Mapping Set choose 2,and Edit Details,and add the Port 2121 forward to the LAN PC "10.0.0.2";
- Step4: using an PC in the Wan to access the ftp(port 2121) server on the LAN PC. This must be successful;
- Step5: then choose the Server Mapping Set 3, and Edit Details to add the Port 23 forward to the LAN PC. then Apply.ftp from the WAN to the LAN also can successful, but telnet from WAN to LAN can not work.

Modifications in V 3.40(QR.5)C0 | 12/2/2004

- 12. [FEATURE CHANGE]
Change to FCS version.

Modifications in V 3.40(QR.5)b2 | 11/29/2004

- 1. [BUG FIX]
Symptom: In “VC auto hunt failed” page, if we change the HTTP port number in smt24.11, and then the “here” hyperlink can’t connect to eWC.
Condition: N/A
- 2. [BUG FIX]
Symptom: If the Web site is blocked by CAC Web control function, then the centralized logs can’t display correct username and URL address in logs.
Condition: N/A
- 3. [FEATURE CHANGE]
Symptom: The default ESSID of wireless is changed to “ZyXEL”
Condition: N/A
- 4. [BUG FIX]
Symptom: In PPPoE mode, if uses the CI command “device drop channel all”, the PPPoE can’t dial up any more.
Condition: N/A
- 5. [BUG FIX]
Symptom: Turn on Anti-Virus to scan HTTP packets, and go to the Web site “http://www.alltime.ru/watch.shtml”, device will get exceptions.
Condition: N/A
Solution: Update the AV engine to 0.18 can fix this bug.
- 6. [BUG FIX]
Symptom: In eWC, the F/W upload page doesn’t have password protection.
Condition: N/A
- 7. [BUG FIX]
Symptom: For SIP pass-through feature, if the SIP client uses an account with IP address like test@172.22.1.17 , then our router will modify the IP address field, and causes the SIP connection failed.
Condition: N/A
Solution: It is not necessary to modify the SIP tag “from”, and “to” field at any time.

Modifications in V 3.40(QR.5)b1 | 11/18/2004

1. [BUG FIX]
Symptom: The Web redirect function can't work if HTTP port number is changed by remote management function.
Condition: N/A
2. [BUG FIX]
Symptom: Device will crash when doing PAP with INode PPPoE server
Condition: If PPPoE server uses PAP and then our device receive a packet PAP ACK or PAP NAK, but it only happens in Inode server.
3. [BUG FIX]
Symptom: When delete SMT4 and the ADSL mode changes to multi mode automatically even we configure it as G.DMT
Condition: N/A
4. [BUG FIX]
Symptom: IPSec Transport mode will be treated as Tunnel mode
Condition: N/A
5. [BUG FIX]
Symptom: The IP Alias is active in rom-t, but it is actually inactive in SMT
Condition: N/A
6. [BUG FIX]
Symptom: DNS server can't work after configuring DNS server in smt3.2 or web LAN page, it need reboot system to let DNS server work.
Condition: N/A
7. [BUG FIX]
Symptom: Routing table doesn't update when change different remote IP in SMT4 and encapsulation is ENET ENCAP.
Condition: N/A
8. [BUG FIX]
Symptom: In Web/GUI firewall rule summary page there is no LAN to WAN ACL set
Condition: N/A
9. [BUG FIX]
Symptom: In Web/GUI, changing the setting of Windows Networking (NetBIOS over TCP/IP) in DMZ setting page will cause system reboot
Condition: N/A
10. [BUG FIX]
Symptom: Customers report that can't build VPN tunnel between 2 devices when using DES/3DES encryption, but after we changing the AES encryption the tunnel is built OK.
Condition: N/A
11. [BUG FIX]
Symptom: In smt3 2, we change nothing but it still save to ROM file
Condition: N/A
12. [BUG FIX]
Symptom: Use ENET ENCAP mode, traffic redirect/Dial backup function can't work

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fine if the destination IP is in the same subnet with WAN IP address.
Condition: N/A

Modifications in V 3.40(QR.4)C0 | 10/01/2004

1. [FEATURE CHANGE]
Symptom: Change to FCS version
Condition: N/A

Modifications in V 3.40(QR.4)b2 | 09/30/2004

1. [BUG FIX]
Symptom: The router gets exception when a client PC runs a port scan tool “bonk”.
Condition: N/A
2. [BUG FIX]
Symptom: User can't login to embedded Web/GUI, if PC uses windows XP and installed service pack 2, and the system UPnP is enabled.
Condition: Only happens when UPnP function is enabled.

Modifications in V 3.40(QR.4)b1 | 09/22/2004

1. [BUG FIX]
Symptom: Enable email Anti-Virus packet scanning function, then system gets exception when doing email stress test.
Condition: N/A
2. [BUG FIX]
Symptom: For Zero-Configuration feature, when VC auto hunt successfully, and the display PPPoE username/password page, but input wrong value, the Web page will be always in testing state.
Condition: N/A

Modifications in V 3.40(QR.2)b6 | 09/16/2004

1. [BUG FIX]
Symptom: Configuring the bandwidth of MBM class by command “bm defaultClassBw 20 (kbps)”, but it doesn't work.
Condition: N/A
2. [BUG FIX]
Symptom: Register and Activate CAC but disable it, and configure some Web categories to block web sites and then uses browser to get on Internet, the system will get exception.
Condition: N/A
3. [BUG FIX]
Symptom: Using Web/GUI to update firmware, the Web page will display error message.
Condition: N/A
4. [BUG FIX]
Symptom: Reset to default ROM file, and after Anti-Virus activated, the first time to

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- update AV engine will get failed, but it only found in PQA's environment.
Condition: N/A
5. [BUG FIX]
Symptom: The Zero-configuration(VC auto-hunting) is not turned on by default.
Condition: N/A
 6. [BUG FIX]
Symptom: Configuring ATUR two remote nodes with PPPoE mode, after two PVC are connected, change the DSLAM first PVC setting with a wrong VPI/VCI. Drop the first PVC in ATUR, and dial it again, the first PVC (PPPoE) still can dial up successfully.
Condition: N/A
 7. [BUG FIX]
Symptom: DNS resolving wrong, if the ping an address from console like "www.123.com", system resolves as 0.123.0.0.
Condition: N/A
 8. [BUG FIX]
Symptom: NetMeeting can't be connected when the connection is from WAN to LAN
Condition: N/A
 9. [BUG FIX]
Symptom: Configure a MAC address and IP address in static DHCP pool, if a PC is requesting IP by DHCP but it is not in the static DHCP pool, the system will assign the IP address which is belong to static DHCP pool.
Condition: N/A
 10. [FEATURE CHANGE]
Symptom: In CAC feature, configure 4 groups name "GROUP1" to "GROUP4" by default.
Condition: N/A
 11. [BUG FIX]
Symptom: In AV feature, the E-Mail scanning will cause our CPU loading to reach to 100% and SMT will hang up for a few seconds.
Condition: Only happens when receiving E-Mail attachments and E-Mail AV scanning is enabled.
 12. [FEATURE ENHANCE]
Symptom: Enhance CI command under "lan" to support DMZ interface, please refer to appendix – CI command list for details.
Condition: N/A
 13. [FEATURE ENHANCE]
Symptom: If WLAN card is not existed, system will change product name automatically to "P662H-61".
Condition: N/A
 14. [BUG FIX]
Symptom: In Web/GUI, change PPPoE pass-through from "No" to "Yes" but the function can't work immediately, but after reboot it can work fine.
Condition: N/A
 15. [BUG FIX]
Symptom: The string "Enter Menu selection number:" display two times in SMT 15.1

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- Condition: N/A
16. [FEATURE CHANGE]
Symptom: In Web/GUI, content filter keyword blocking page if we key in capital letter then the content filter function can't work.
Condition: N/A
Solution: Use case-insensitive type instead of case-sensitive for keyword search.
17. [BUG FIX]
Symptom: When multiple stations connected to AP, once the previous one leave, the other stations also disappeared.
Condition: N/A
18. [BUG FIX]
Symptom: Use CI command "wlan association" to show association list will cause system reboot.
Condition: When 3 stations connect to device if user uses CI command "wlan association" to show association list will cause system reboot
19. [BUG FIX]
Symptom: When Cerberian server stop the service, our request to Cerberian will get "request error", at that time, uses CAC will cause system exception.
Condition: Happens only when Cerberian server stop service, and our request will get "request error".
20. [BUG FIX]
Symptom: In AV feature, the message "scanned by GGreat" message will appear in Email when virus detected
Condition: N/A

Modifications in V 3.40(QR.2)b5 | 08/11/2004

1. [BUG FIX]
Symptom: In Web/GUI, firewall page, the help about the customized services is updated
Condition: N/A
2. [FEATURE CHANGE]
Symptom: In Web/GUI, CAC time scheduling should be "from Midnight to 24:00PM" by default.
Condition: N/A
3. [BUG FIX]
Symptom: In Web/GUI CAC/Web category page, if user clicks "more..." to extend the categories, and then click "basic...", the Web page swapping is very slow.
Condition: N/A
4. [BUG FIX]
Symptom: Enable the CAC, and then reboot device, and then PPPoE connection can't be dialed up by packets.
Condition: N/A
5. [BUG FIX]
Symptom: In CAC feature, when time budget is used up, it should not show "Idle Time

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- out" in small logout windows.
Condition: N/A
6. [BUG FIX]
Symptom: In content filter, the schedule function and trusted user IP don't work
Condition: N/A
 7. [BUG FIX]
Symptom: WEB translation and characters of DHCP relay page has error in French language.
Condition: N/A
 8. [BUG FIX]
Symptom: The French login page is Germany, and the Germany login page is French
Condition: N/A
 9. [BUG FIX]
Symptom: In French windows OS, the CAC budget left timer do not run
Condition: N/A
 10. [BUG FIX]
Symptom: In eWC, the DMZ page, RIP version default should be N/A
Condition: N/A
 11. [BUG FIX]
Symptom: When click "Activation" and "update now" of the anti-virus, system needs to display a warning message that is to warn device needing reboot
Condition: N/A
 12. [BUG FIX]
Symptom: When CAC turn on, the NAT server set (port forwarding) can't work
Condition: N/A
Solution: If CAC is turn on, and LAN server should accept incoming request from external side, if LAN PC is configured in NAT server set.
 13. [BUG FIX]
Symptom: System is configured as PPPoE, after PPPoE is idle timeout, and then start IE to trigger PPPoE, but it will redirect to "enter the username and password" page. It problem also happens when the WAN link switch from dial backup to DSL link.
Condition: N/A
 14. [BUG FIX]
Symptom: Using dial backup, the Web dynamic category block function of CAC do not work, and device sometimes reboot when using IE to get web page
Condition: N/A
 15. [BUG FIX]
Symptom: Reset to default configuration, using Web/GUI connection wizard to setting connection to be PPPoE, after diagnostic is successful, and then starting the IE, it can not get on Internet.
Condition: N/A
 16. [FEATURE ENHANCE]
Symptom: In Web/GUI Anti-Virus, the item "Default action when session overflow" supports multi language.
Condition: N/A
 17. [FEATURE ENHANCE]

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- Symptom: In Web/GUI BW-Mgmt, the help page is updated for dynamic service H.323 and FTP
Condition: N/A
18. [FEATURE ENHANCE]
Symptom: In Web/GUI MBM Wizard, the help and multi language is supported.
Condition: N/A
19. [FEATURE ENHANCE]
Symptom: The redirected Web pages of Zero-Configuration support multi language
Condition: N/A
20. [FEATURE ENHANCE]
Symptom: In Web/GUI, CAC page supports help and support multi language.
Condition: N/A
21. [FEATURE ENHANCE]
Symptom: In Web/GUI, firewall page, the help in customized services support multi-language
Condition: N/A
22. [BUG FIX]
Symptom: In MBM advance, add a class and budget is over than root budget, system will save it anyway with a warning message, if you go to Wizard system will return an error also.
Condition: N/A
23. [BUG FIX]
Symptom: In eWC CAC feature, if admin is login-in, system will allow the PC to connect Internet but if admin is timeout from eWC, the PC still can connect Internet
Condition: N/A
Solution: If Admin is timeout or logout, the PC should redirect to login page.
24. [BUG FIX]
Symptom: The throughput from LAN to WLAN is only 10Mb around when tested by Chariot tool.
Condition: N/A
25. [FEATURE ENHANCE]
Symptom: The AV engine is updated to version 0.13.
Condition: N/A
26. [FEATURE ENHANCE]
Symptom: In logs page, add alert for Anti-Virus feature, that means if virus is detected system can send an email to Admin immediately.
Condition: N/A
27. [FEATURE ENHANCE]
Symptom: Add a command “bm defaultClassBw” to adjust the default bandwidth of class for MBM.
Condition: N/A
28. [BUG FIX]
Symptom: When system receive OAM AIS packet, the data channel will be corrupted and can't be recovered until ADSL drop and connected again.
Condition: N/A

Modifications in V 3.40(QR.2)b4 | 07/16/2004

1. [FEATURE ENHANCE]
Symptom: Support CAC (Content Access Control) feature, please refer to external specification or appendix for details.
Condition: N/A
2. [FEATURE ENHANCE]
Symptom: Support Vantage CNM
Condition: N/A
3. [BUG FIX]
Symptom: If WAN (ISP) provides static IP address, and the VC auto-hunt is active, then the hunting will fail always.
Condition: N/A
Solution: If WAN (ISP) provides static IP address, the VC auto-hunt feature should be turn off in SMT4, SMT11, and connection Wizard.
4. [FEATURE CHANGE]
Symptom: The default ROM file setting of DMZ- RIP should be turned off
Condition: N/A
5. [BUG FIX]
Symptom: In Web/GUI, spelling error in firewall customized port hyperlink, and change to multi language the customized port link will display error.
Condition: N/A
6. [BUG FIX]
Symptom: In Web/GUI, NAT page, click edit details, and change NAT setting to full feature and don't apply it, but it always configured as full feature.
Condition: N/A
7. [BUG FIX]
Symptom: In Anti-Virus page, the activating and update function display successfully but the expire date is still old (1970/01/01).
Condition: N/A
8. [BUG FIX]
Symptom: Turning on Anti-Virus debug flag will cause update function failed
Condition: N/A

Modifications in V 3.40(QR.2)b3 | 07/08/2004

1. [BUG FIX]
Symptom: DMZ can't work fine when promiscuous mode is enabled.
Condition: N/A
2. [BUG FIX]
Symptom: In MBM Wizard, disable active button then go next the device will get exception
Condition: N/A
3. [BUG FIX]
Symptom: In MBM Web/GUI, change the FTP priority in advance setup, and then goes to Wizard, and the priority item doesn't go to "others".

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- Condition: N/A
4. [BUG FIX]
Symptom: In MBM Web/GUI, add a class (for example port 80) in advance and then goes to Wizard, then you can see the XBOX is selected.
Condition: N/A
 5. [BUG FIX]
Symptom: In MBM Web/GUI, add a FTP class in advance setting and delete it then the FTP connection will get problem.
Condition: N/A
 6. [FEATURE ENHANCE]
Symptom: In MBM Wizard finish page, add a button to return to main page.
Condition: N/A
 7. [BUG FIX]
Symptom: Leave the device with default setting for over night and no traffics, the system will get memory leakage
Condition: The default WLAN channel is very busy, and cause Beacon failure
Solution: When WLAN restart, system should use the same memory block that is already allocated.
 8. [BUG FIX]
Symptom: Change MBM bandwidth in advance summary page and then the device gets reboot.
Condition: N/A
 9. [BUG FIX]
Symptom: In MBM advance setting, disable filter in class setting but doesn't work, the traffics are still limited.
Condition: N/A
 10. [BUG FIX]
Symptom: The redirect page of Zero-Configuration has Java script error problem.
Condition: N/A
 11. [FEATURE CHANGE]
Symptom: Change ADSL modem code version to 3.0.9.0
Condition: N/A
 12. [FEATURE CHANGE]
Symptom: In MBM feature, limit the depth to be 1, it means all the class must be just under root.
Condition: N/A

Modifications in V 3.40(QR.2)b2 | 06/28/2004

1. [BUG FIX]
Symptom: In SMT4, and SMT11 the system will limit the usage when VPI is 0 and VCI is 32 or under.
Condition: N/A
2. [BUG FIX]
Symptom: Static route doesn't work fine when turning on Any-IP feature

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- Condition: N/A
3. [BUG FIX]
Symptom: In Web/GUI, if ping an address like "192.168.1.1 a" the device will ping it for a loop and the Web GUI can't get response and just like locked.
Condition: N/A
 4. [BUG FIX]
Symptom: Multiple remote nodes are configured with different QoS (CBR/VBR/UBR) types, but the traffic transmitting rates are all the same. The schedule priority should be CBR > VBR > UBR
Condition: N/A
 5. [BUG FIX]
Symptom: Any-IP doesn't work fine when Any-IP PC uses Windows XP as OS.
Condition: N/A
 6. [BUG FIX]
Symptom: Enable Anti-Virus to scan HTTP packets, and access Web GUI from WAN side, some pages can't display correctly.
Condition: N/A
 7. [BUG FIX]
Symptom: Enable Anti-Virus to scan email, and system will cause exception if the length of filename is over then 64.
Condition: N/A
Solution: Extend the max length of filename to be 255 for Anti-Virus.
 8. [BUG FIX]
Symptom: In Anti-Virus, system will only notify user one time if there are many viruses found on different attachments.
Condition: N/A
 9. [BUG FIX]
Symptom: If SMT4 ISP node is cleared, and doing VC auto-hunt system will get exception
Condition: N/A
 10. [BUG FIX]
Symptom: Device will reply wrong packet when system is configured as ENET ENCAP
Condition: Use IES-1000 as ATUC, and CPE device uses ENET ENCAP and NAT is turn off.
Solution: Only receive packets that destination MAC are to device or it's broadcast/multicast packets
 11. [FEATURE ENHANCE]
Symptom: Support one CLI command to enable/disable SIP ALG. This value will be saved in ROM file
Condition: N/A
 12. [FEATURE ENHANCE]
Symptom: Support Anti-Virus in Web logs page.
Condition: N/A
 13. [FEATURE ENHANCE]

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Symptom: Support Media Bandwidth Management Wizard, and also add dynamic service for FTP, and H.323 in Bandwidth Management.

Condition: N/A

14. [FEATURE ENHANCE]

Symptom: In Web/GUI, add Anti-Virus hyperlink in panel and first page when multi language is chose.

Condition: N/A

15. [FEATURE ENHANCE]

Symptom: In Web/GUI, support multi language help for Zero-Configuration and PPPoE pass-through

Condition: N/A

16. [FEATURE ENHANCE]

Symptom: In Web/GUI, support multi language help for Any-IP item.

Condition: N/A

17. [FEATURE ENHANCE]

Symptom: In Web/GUI Anti-Virus, after “activate” is pressed, device will activate Anti-Virus service and also update expire date automatically.

Condition: N/A

18. [FEATURE CHANGE]

Symptom: VC auto-hunt feature will be turn off after VC/Encapsulation is hunted successfully.

Condition: N/A

Modifications in V 3.40(QR.2)b1 | 06/02/2004

1. [FEATURE ENHANCE]

Symptom: Support DMZ interface, and port based-VLAN

Condition: N/A

2. [FEATURE ENHANCE]

Symptom: NAT traversal for IPSec feature

Condition: N/A

3. [FEATURE ENHANCE]

Symptom: Support Packet Scanning (Anti-Virus) feature, but system only can support FTP, HTTP, E-mail application so far, please refer to external specification for details.

Condition: N/A

Modifications in V 3.40(QR.3)C0 | 06/17/2004

1. [FEATURE CHANGE]

Change to FCS version.

Modifications in V 3.40(QR.3)b1 | 06/16/2004

1. [FEATURE CHANGE]

Symptom: Wireless AP F/W 5.0.8 has bad throughput, change back to AP F/W 5.0.7

Condition: N/A

Modifications in V 3.40(QR.1)C0 | 06/02/2004

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[FEATURE CHANGE]

1. Change to FCS version

Modifications in V 3.40(QR.1)b1 | 05/28/2004

1. [BUG FIX]

Symptom: TI WLAN has connection problem after a period of time (after 6 hrs to 3 days).

Condition: N/A

Solution: Add a watchdog mechanism to constantly monitor WLAN activity in AP, if anomaly is detected, the watchdog will restart WLAN TNETW1130 module to avoid AP dead.

2. [BUG FIX]

Symptom: In Web/GUI, time and date page, after successfully get time from time server, and then manually change the time and save, but the actually time displayed will reduce one hour.

Condition: Happens on Web GUI only.

3. [BUG FIX]

Symptom: If you set right accounting server, password and enable it, and then turn on/off authentication server or accounting server then system possible occurs reset.

Condition: N/A

4. [FEATURE ENHANCE]

Symptom: VC auto-hunt can't hunt "Enet-encap" service

Condition: Only happens on some DHCP server, that the DHCP server will check the MAC address in UDP layer.

5. [FEATURE ENHANCE]

Symptom:

1. Can't enable alert function for Firewall, IPSec, IKE in Centralized log of Web/GUI.

2. Can't enable Centralized logs 802.1x function in centralized log of Web/GUI

Condition: N/A

Solution: Add Web/GUI in Centralized log page.

6. [FEATURE ENHANCE]

Symptom: Change WLAN AP code to 5.0.8, it's for supporting power tuning function, the CI command is "wlan power <1-5>".

Condition: N/A

7. [BUG FIX]

Symptom: VBR can't work fine

Condition: N/A

Modifications in V 3.40(QR.0)C0 | 05/7/2004

1. Change to FCS version

Modifications in V 3.40(QR.0)b6 | 05/6/2004

1. [BUG FIX]

Symptom: In Web GUI, choose French or German language, the Web help of Any-IP is

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not ready in LAN setup and Any IP table.

Condition: N/A

Solution: If user chose French or German language system will still display English help as well.

2. [BUG FIX]

Symptom: In Web GUI, chose French or German language, and the any IP can't be displayed in logs setting page.

3. [BUG FIX]

Symptom: Configure more than 5 entries in VC hunt table, Restart device. VC auto hunt will start. Start the IE, and will see the "Wait..." information. Wait a moment, the IE will show "hunt successfully page"(error) Restart IE, page will show PPPoE need username and password page. Enter the user name and password and click "Apply". IE will re-display the setup page for username and password. SMT shows "dial fail, no interface available"

Condition: N/A

Solution: After hunting is successful, system should see the hunted encapsulation but not the ISP remote node's encapsulation for further reference.

4. [FEATURE ENHANCE]

Symptom: VC auto-hunting doesn't support static IP address, if ISP provides static IP address, system hunting will fail and browser will get fail page

Condition: N/A

Solution:

1. In Web GUI, add a hyperlink in failed page of Zero-Configuration that's to prompt user to login Web Configurator if they have static IP address from ISP
2. In Web GUI Wizard, if the configuration is saved with static IP address, then system will turn off Zero-Configuration (VC auto-hunting) automatically, and if dynamic IP address is chose then system will turn on Zero-Configuration as well
3. In Web GUI, WAN setting page, add an item for Zero-Configuration to turn on/off.
4. In SMT4, SMT11, if user saves remote node as static IP address, system will turn off Zero-Configuration, and vice versa.

Modifications in V 3.40(QR.0)b5 | 05/3/2004

1. [BUG FIX]

Symptom: When change to France or German, the string of media bandwidth management display is EMPTY on Web GUI

Condition: N/A

2. [FEATURE ENHANCE]

Symptom: In Zero-Configuration, when DSL is down, user click home page will get Web redirect to fail page, and after connection is up, click home page again will not work, but open another IE is OK

Condition: N/A

Solution: Add a close button in successful page, this IE will be closed automatically.

3. [BUG FIX]

Symptom: Throughput is only 12M with G100

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Condition: Bandwidth management will impact WLAN throughput even bandwidth management is not active.

4. [BUG FIX]

Symptom: Configure more than 5 entries in VC hunt table, Restart device. VC auto hunt will start. Start the IE, and will see the "Wait..." information. Wait a moment, the IE will show "hunt successfully page"(error) Restart IE, page will show PPPoE need username and password page. Enter the user name and password and click "Apply". IE will re-display the setup page for username and password. SMT shows "dial fail, no interface available".

Condition: N/A

5. [BUG FIX]

Symptom: When we turn on debug flag of zero configuration "wan zero debug 1" and DSL link down, system will get exception

Condition: N/A

Solution: Remove the logs in DSL down.

6. [BUG FIX]

Symptom: Using Apple computer (PowerBook G4) can't get IP address from router by DHCP, disable Any-IP can fix this problem

Condition: It's caused by Any-IP function

7. [BUG FIX]

Symptom: Configured as 802.1x Dynamic WEP key, re-authentication timer is 60sec, after 60 sec, the client can't ping out

Condition: N/A

8. [BUG FIX]

Symptom: Configured as WPA Mixed mode enabled, the client connect with 802.1x Dynamic WEP first, and then switching to WPA client will fail

Condition: N/A

9. [FEATURE ENHANCE]

Symptom: The Web help of Any-IP is ready

Condition: N/A

10. [FEATURE ENHANCE]

Symptom: Boot module is upgraded to 1.06 version, it's to support 32M DRAM

Condition: N/A

11. [FEATURE CHANGE]

Symptom: In centralized log, the schedule to send log is "when log is full".

Condition: N/A

Solution: Change the schedule of send log to be "none".

12. [BUG FIX]

Symptom: In SMT, configured as WPA-PSK, and radius server is not active, then system will return error message.

Condition: N/A

Solution: System should not return error message because WPA-PSK doesn't need Radius server.

13. [BUG FIX]

Symptom: When firewall is turn on, SIP can't pass through

Condition: N/A

Modifications in V 3.40(QR.0)b4 | 04/06/2004

1. [BUG FIX]
Symptom: ADSL is down, LAN PC keeps doing ping to WAN side, and configure Web GUI dial backup page, then system will get exception
Condition: N/A
2. [BUG FIX]
Symptom: In Web GUI, click content filter device will get exception.
Condition: Only happens with corrupted ROM file in content filter.
3. [BUG FIX]
Symptom: In Web GUI static WEP key is enabled, and configure 802.1x Dynamic WEP key, the Wireless client doesn't work, and it can't connect to AP.
Condition: N/A
4. [BUG FIX]
Symptom: Configure PC as Any-IP, when router is doing Auto-Hunting, open IE continuously, system will get exception.
Condition: N/A
5. [BUG FIX]
Symptom: In Zero-Configuration, when DSL is down, user click home page will get Web redirect to fail page, and after connection is up, click home page again will not work, but open another IE is OK.
Condition: N/A

Modifications in V 3.40(QR.0)b3 | 03/31/2004

1. [BUG FIX]
Symptom: Create VPN second rule and dial it will cause exception.
Condition: First rule is working, and create and dial second.
2. [BUG FIX]
Symptom: Run eMule will cause crash after a period time.
Condition: Running eMule over than one night causes exception.
3. [BUG FIX]
Symptom: System is configured as PPPoA and use IE to get Internet will cause exception
Condition: N/A
4. [BUG FIX]
Symptom: In Web/GUI, select another language will cause exception
Condition: N/A
5. [BUG FIX]
Symptom: WLAN hide ESS ID function doesn't work
Condition: N/A
6. [BUG FIX]
Symptom: Device connected with a power on analog modem, and then power on device will cause PPPoE can't dial successfully any more.

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- Condition: The analog modem must power on first, and then power on device.
7. [BUG FIX]
Symptom: The dial backup feature will let analog modem dial and drop over and over, and can't be dialed successfully.
Condition: In SMT2, check mechanism is "ICMP", and input ping address with an un-existed address.
 8. [BUG FIX]
Symptom: Use SNMP browser to set system parameter will cause watchdog timeout.
Condition: N/A
 9. [BUG FIX]
Symptom: Configured as WPA-PSK with mix mode enabled and select RADIUS only, then save, re-enter into SMT 23.4 the authentication database will become "local database only".
Condition: N/A
 10. [BUG FIX]
Symptom: SMT 3.5 static WEP key is enabled, and SMT 23.4 select 802.1x Dynamic WEP key, the Wireless client doesn't work, it can't connect to AP.
Condition: N/A
 11. [BUG FIX]
Symptom: In firewall, LAN to LAN /Router interface doesn't work
Condition: N/A
 12. [BUG FIX]
Symptom: In VPN function, if encryption method selects AES, the rule can't dial successfully.
Condition: N/A
 13. [BUG FIX]
Symptom: In Web GUI, display DMZ in firewall default policy, but system doesn't include DMZ feature
Condition: N/A
 14. [BUG FIX]
Symptom: In Web GUI, dial backup phone number field can't input pause character " , ".
Condition: N/A
 15. [BUG FIX]
Symptom: In Web GUI, when system asks to change password and user presses "apply" directly, system password will be changed to NULL.
Condition: N/A
 16. [BUG FIX]
Symptom: In Zero-Configuration, ADSL is down, and dial backup is up, but Web GUI is still displayed "failed page"
Condition: ADSL is down, but Dial backup is working
 17. [FEATURE ENHANCE]
Symptom: In Web/GUI firewall, the customized port GUI is enhanced.
Condition: N/A
 18. [FEATURE ENHANCE]
Symptom: In Web/GUI, add Any-IP centralized logs, switch on/off in LAN page, and

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current status in maintenance.

Condition: N/A

19. [FEATURE ENHANCE]

Symptom: Support Bandwidth Management in Wireless LAN interface.

Condition: N/A

Modifications in V 3.40(QR.0)b2 | 03/10/2004

1. [FEATURE ENHANCE]

Symptom: Support dial backup

Condition: N/A

2. [FEATURE ENHANCE]

Symptom: Support Zero-Configuration, please refer to ES for details

Condition:

3. [FEATURE ENHANCE]

Symptom: Support Any IP address, please refer to ES for details

Condition:

4. [FEATURE ENHANCE]

Symptom: Support maximum to 20 VPN rules

Condition: N/A

5. [BUG FIX]

Symptom: In debug mode, type “atba5” baud rate doesn’t be changed

Condition: N/A

6. [BUG FIX]

Symptom: In eWC/Dial backup, it needs to input at least one IP address even the check mode is “DSL link”, but SMT doesn’t

Condition: N/A

7. [BUG FIX]

Symptom: In Zero-Configuration feature, the Web GUI display “connection test in progress” page always, and won’t change to PPPoE setup page.

Condition: Only happens in PQA’s Red back server

Appendix 1: Zero-Configuration and VC auto-hunting

The Zero-Configuration feature can hunt the encapsulation and VPI/VCI value, and system will automatically configure itself if the hunting result is successfully and system will response suitable Web pages if it's still hunting or failed or need user to provide information. But this feature has one assumption that system supposes the ADSL line from ISP only provides one kind of service, otherwise the hunting will get confusing and failed.

Whenever system ADSL links up system will send out some probing patterns, system will analyze the packets returned from ISP, and decide which services the ISP may provide.

System sends out a limited number of patterns which is pre-configured in a hunting pool. Each entry of hunting pool must contain the VPI, VCI, and which kinds of hunting patterns you want to send.

Whenever system send out all the probing patterns with specific VPI/VCI, system will wait for 5~10 seconds and get the response from ISP, the reply patterns from ISP will decide which kinds of ADSL services of the line will be. After that, system will save back the correct VPI, VCI and also service (encapsulation) type into profile of WAN interface.

Follows are the CI commands that system provides for VC auto-hunting

| Command | | | Description |
|---------|-----|---|--|
| wan | atm | vchunt | |
| | | Add <remoteNodeIndex> <vpi> <vci> <service bit(hex)> | Add a entry to hunting pool <remote node> : input the remote node index 1-8 <vpi> : vpi value <vci> : vci value <service>: it's a hex value, bit0:PPPoE/VC (1), bit1:PPPoE/LLC (2) , bit2:PPPoA/VC (4), bit3:PPPoA/LLC (8), bit4:Enet/VC (16), bit5 :Enet/LLC (32) For examples: If you need service PPPoE/LLC and Enet/LLC then the service bits will be 2+32 = 34 (decimal) = 22 (hex), you must input 22 Need to perform save after this command |
| | | Remove <removeNodeId> <vpi> <vci> | Input remote node ID and vpi, vci value to remove the specific entry. System will save automatically. |
| | | Active <yes/no> | Enable VC auto hunting featurer |
| | | display | Display the hunt pool |
| | | Clear | Clear the configure buffer |
| | | Save | Save current setting into ROM file |
| | | timer | The waiting time before checking the hunting table result |
| | | Send | Send VC hunt pattern again |
| | | result | Check the result of VC auto hunting |

Appendix 2: Media Bandwidth Management Wizard

Media Bandwidth Management (MBM) is for user to control the QoS for different services but the configurations of MBM is too complicated to end-users. So, we develop MBM Wizard to reduce the loading of user configurations. In current design, we just support 6 services which include XBOX, VoIP(SIP), FTP, Email, eMule, WWW, and follows are the classes design details for each interfaces.

| Service | Classes | Comment |
|-----------|--|---|
| XBOX | Create classes on WAN, LAN, WLAN interface which will need to bind filter on TCP port 3074, and UDP port 3074 | |
| VoIP(SIP) | Create classes on WAN, LAN, WLAN interface which need to bind filter with dynamic ALG for SIP | |
| FTP | Create classes on WAN, LAN, WLAN interface which need to bind a filter with dynamic ALG for FTP. | |
| E-Mail | 1.Create classes on WAN interface which need to bind filter with TCP port 25. 2. Create classes on LAN, WLAN interface which need to bind filter with TCP port 110. | |
| eMule | Create classes on WAN, LAN, WLAN interface which need to bind filter with TCP port 4662 | |
| WWW | Create classes on LAN, WLAN interface which need to bind filter with TCP port 80. | The most of HTTP traffic is coming from downstream directions. So we only create classes in LAN, and WLAN side. |

MBM has a borrow mechanism and now we use it for MBM Wizard. System only assign 10k budget (by default) for each class, for sure it's not enough for usage. System also configures the class that can borrow from parent class(root class), but if there are two or more services online at the same time, the borrow mechanism will depend on the priority that we configured in each class. That means the class with higher priority value will get the parent (root) bandwidth first.

Appendix 3: Anti-Virus (Packet Scan)

Virus is one of the most threats of internet security. They spread rapidly and cause huge damage in the world. For virus against, Anti-virus application becomes a popular resolution. But it usually works on a complicate system with many loopholes (ex, Windows series) which provide more changes for virus infection. The main medium for viruses to spread is network. If we want to defense viruses form network, the simpler and securer network devices would play a key role.

Packet Scan is good for virus against. It re-sites in common network device (Ex ADSL router) and scans each network packet fragment. It can quickly discover and destroy virus before entering user's computer.

In current design, we support FTP, HTP, SMTP, and POP3 network scanning.

Feature

- 1 Support downstream packets scanning for FTP, HTP, and POP3 network protocol.
- 2 Support upstream packets scanning for SMTP network protocol.
- 3 Support automatic and manual online update for scanning engine form GGreat server.
- 4 Providing centralize log and alert while virus detection.
- 5 Support Windows Messages for virus notification. (Win98, WinME, Win2K, WinXp)

Limitation

- 1 Each network protocol FTP, HTP, POP3 and SMTP must use standard port number, FTP is 21, HTP is 80, POP3 is 110 and SMTP is 25.
- 2 Compression file scanning doesn't support (Ex ZIP, RAR).
- 3 Doesn't support multi-session download (flashGet).
- 4 The maximum session number is 300 that can be created simultaneous
- 5 There exists the extension file name limitation.
 - 5.1 Available extension file name is following.
mhtml,mhtml,asp,bat,com,class,cpl,cmd,doc,dot, dll, drv, exe, eml, htm, html, hta, htt, hlp, js, jse, jsp, lnk, nws, obj, ocx, pif, ppt, php, rtf, rar, scr, shtml, swf, vbs, vba, vbe, vxd, xml, xls, xla, wml, zip
- 6 Support following virus types detection.

| The representative virus in recent four years: | | | |
|--|-------------------------|------------------|---------------|
| X1_Virus | LENA_Virus | SW Flash_Virus | Fable_Worm |
| NOTEPAD TROJAN | JASEMIN_Virus | Myparty_Worm | Cult_Worm |
| VIRUS | DESIRE_Virus | MYSYS_Worm | Spybot_Worm |
| ILOVEYOU_Virus | SEEKER.JS | LOTTO_Worm | Kindal_Worm |
| MTX_Virus | DELBIOS.INF | PATCH_Worm | Fizzer_Worm |
| CIH Killer 1.1 | PHP.Alf_Virus | SHARP_Worm | Kwbot_Worm |
| WEIRD_Virus | PHAGE.PALM_Virus | GIBE_Worm | Electron_Worm |
| Plage 2000_Virus | CODEGREEN_Virus | Cervivec_Worm | Hawawi_Worm |
| WORD 97 MACRO | ANTHRAX_Virus | Valentin_Worm | Palyh_Worm |
| VIRUS | PET-TICK_Virus | MyLife_Worm | Oror_Worm |
| EXCEL 97 MACRO | Winmem_Html | Yarner_Worm | GPIX_Virus |
| VIRUS | ADDY.PL_Virus | IFRAME-Mail_Worm | Hawawi_Worm |
| NAVIDAD_Virus | DEAD0H_Virus | BirdSpy_Worm | Sdbot_Worm |
| CREATIVE_Virus | Invictus infector_Virus | Fix2001_Worm | Mumu_Worm |
| JOKE-GHOST_Virus | TRION_Virus | Perrun_Worm | Gaobot_Worm |
| Ghost_Virus | EMBRION_Virus | Simile_W32 | Lolol_Worm |

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| | | | |
|--|--|---|--|
| Hdfill32_Virus EMANUEL_Virus Cabanas PE_Virus HYBRIS_Virus Demiurg_Virus Blebla_Virus Kenston PE_Virus Dark Akuma_Virus Windows Bomb_Virus Back Door Setup_Virus Bymer Wininit_Virus Etymo-Crypt.1308 VBS.ANNA_Virus Explorer Inf PE Cih v1.2x_Virus Winux PE_ELF virus Bad Transmission_Virus CfgWiz32_Virus SIRCAM_W32_Virus EICAR_Virus APOST_Virus MYPICS_Virus 1NFO.A RTF_Virus DOGGIE_Virus INVALID_Virus KETAMINE_Virus STREAM_Virus VAMPIRE_Virus SEX URL_Virus TRINOO_Virus NIMDA_Virus SUBSEVEN_Virus WinCAW_Virus ROACH_Virus UNCENSORED_Virus INTA_Virus ARIS_Virus BUBICA_Virus BUMDOC_Virus CEREBRUS_Virus DOB_Virus GUNMAN_Virus | TROOD_Virus SABIA_Virus BINLADEN_Virus LAZYVX_Virus REDALART_Virus Unknown VBS_Virus JAVAKILLER_Virus SPACES_Virus WINSTART_BAT_Virus SYS602_BAT_Virus PENFOLD_BAT_Virus IKX_Virus Halen_Virus DION_Virus Evil_Virus MARKJ_Virus ALIZEE_Virus LARA.THEME_Virus NACH_Virus LASTWORLD_Virus QUEST_Virus XANAX_Virus PARROT_Virus CICHOSZ_Virus ALMA_Virus EXPLORER_Virus KRIZ_Virus XPUPDATE_BAT_Virus BACKDOOR_WORM_Virus BYTEBAND_Virus VBS_Engine_Virus Pentagone_Worm Weird_Trojan WINLOGON_WORM Scherzo_Worm GOP_Worm Dotnet_Virus Happy Time Klez Series_Virus | GAY_Worm Runouce_Worm Msvxd_Worm Yourpassword_Worm Startme_Html PWsteal Server Scrsvr_Worm Bugbear_Worm Redlof_Worm Rawtocash_Worm Henpeck_Worm Brasil_Worm HAI_Worm Bymer Msi211 Pate_Virus Bride_Worm Cblade_Worm Iraq_Worm DUPATOR Setver_Worm WinHaelp_Worm Recovery_Worm Sobig_Worm Lirva_Worm Cupid_Worm Supova_Worm Handy_Worm Lovegate_Worm Zoek_Worm Holar_Worm Kaiten_Virus WHOG_Virus Sachiel_Worm Ganda_Worm Sysupd_Worm Scchost_Worm Ultimax_Worm Lovelorn_Worm Flood_Worm | Sodabot_Worm Webauto_Worm Redist_Worm Opax_Worm Lorraine_Worm Valla_Virus Klexe_Worm Fortnight_Worm Nebiwo_Worm Deloder_Worm Mimail_Worm Msblast_Worm Welchi_Worm Randex_Worm Swen_Worm Mapson_Worm Trojan_Worm Qint_Worm Dozer_Worm Inmotecd_Worm Gaiil_Worm MSN_Worm Sober_Worm Beagle_Worm Mydoom_Worm DeadHat_Worm Netsky_Worm Femot_Worm Flat_Worm Netav_Worm Serot_Worm Elerad_Virus Paroc_Virus Trilissa_Virus Sasser_Worm Explet_mm Xabot_Worm Protoride_Worm Erkez_Worm |
| Virus infect through by special port: | | | |
| Iraq_Worm—invade through (SMB Server message service) port 445 Msblast_Worm-- Invade through TCP Port 135 and open TCP port 4444 then open UDP port 69 Welchi_Worm --Invade through TCP Port 135. Fizzer_Worm --Open 81 Port to be HTTP Server and open 2018 to 2021 Port to be backdoor. Sasser_Worm—The vulnerability of LSASS in port 445. Bobax_Worm-- The vulnerability of LSASS in port 445. Korgo_Worm-- The vulnerability of LSASS in port 445. CODERED_IIS CodeBlue_IIS | | | |

Appendix 3: Content Access Control (CAC)

Content Access Control (CAC) provides ability to manage each user host for internet access. Through CAC, network administrator can arrange the time schedule of internet access, set up which network service can be used and manage which web site can be browsed for each group user. There are 4 groups and 32 user profiles provided in this system currently, each group provides different internet access rule, there are 3 types of parameters to define the access rule. Time schedule type of parameters that specifies the time interval for internet access, Service type of parameters that specifies which internet services can be provided, such as Telnet, FTP, and HTTP and so on. Web browsing type of parameters that restricts access some categories of web sit. In each user profile, there are 3 parameters, the first is user name, the second is password and the third is group index, each user who wants to access internet must login to device successfully first by entering user name and password through web browser and the group index specifies which group profile is used to define internet access rule

Feature

- 1 Provide 4 groups to define 4 different rules for internet access. Each group contains 3 types of parameter to define the internet access rule.
 - 1.1 Time Schedule: To arrange the internet access time by specifying time interval and time budget.
 - 1.2 Service: Provide the ability to restrict some specific internet service usage.
 - 1.3 Web Browsing: To restricts access some types of web sit. Provide two method.
 - 1.3.1 Pre-defined Web Content Categories: User can define which web categories should be blocked. To classify each web URL, device connects to Cerberian's server that will provide the category of this web URL.
 - 1.3.2 Keyword blocking: User can create a set of keyword. Device will search of those keywords in every web URL. If match, then block is web browsing.
- 2 Provide 32 user profile
- 3 Provide Centralize log.

Limitation

- 1 Content filter will be disabled while CAC enable.
- 2 Any user host that belongs to NAT server set can access internet at will. CAC doesn't take effect for this host.
- 3 Pre-defined Web Content Categories will be disabled automatically if the Cerberian's server connection failure -"request error".

Annex A CI Command List

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

System Related Command

[Home](#)

| Command | | | Description |
|---------|-------------|---|---|
| sys | | | |
| | adjtime | | retrive date and time from Internet |
| | cbuf | | |
| | display | [a f u] | display cbuf a: all f: free u: used |
| | cnt | | cbuf static |
| | | display | display cbuf static |
| | | clear | clear cbuf static |
| | baud | <1..5> | change console speed |
| | callhist | | |
| | display | | display call history |
| | remove | <index> | remove entry from call history |
| | clear | | clear the counters in GUI status menu |
| | countrycode | [countrycode] | set country code |
| | date | [year month date] | set/display date |
| | domainname | | display domain name |
| | edit | <filename> | edit a text file |
| | enhanced | | return OK if commands are supported for PWC purposes |
| | errctl | [level] | set the error control level 0:crash no save,not in debug mode (default) 1:crash no save,in debug mode 2:crash save,not in debug mode 3:crash save,in debug mode |
| | event | | |
| | display | | display tag flags information |
| | trace | | display system event information |
| | | display | display trace event |
| | | clear <num> | clear trace event |
| | extraphnum | | maintain extra phone numbers for outcalls |
| | add | <set 1-3> <1st phone num> [2nd phone num] | add extra phone numbers |
| | display | | display extra phone numbers |
| | node | <num> | set all extend phone number to remote node <num> |
| | remove | <set 1-3> | remove extra phone numbers |
| | reset | | reset flag and mask |
| | feature | | display feature bit |
| | fid | | |

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| | | | | |
|--|-----------|----------|--|---|
| | | display | | display function id list |
| | firmware | | | display ISDN firmware type |
| | hostname | | [hostname] | display system hostname |
| | iface | | | |
| | | disp | [#] | display iface list |
| | isr | | [all used free] | display interrupt service routine |
| | interrupt | | | display interrupt status |
| | logs | | | |
| | | category | | |
| | | | access [0:none/1:log] | record the access control logs |
| | | | attack [0:none/1:log/2:alert/3:both] | record and alert the firewall attack logs |
| | | | display | display the category setting |
| | | | error [0:none/1:log/2:alert/3:both] | record and alert the system error logs |
| | | | ipsec [0:none/1:log] | record the access control logs |
| | | | | |
| | | | mten [0:none/1:log] | record the system maintenance logs |
| | | | upnp [0:none/1:log] | record upnp logs |
| | | | urlblocked [0:none/1:log/2:alert/3:both] | record and alert the web blocked logs |
| | | | urlforward [0:none/1:log] | record web forward logs |
| | | clear | | clear log |
| | | display | | display all logs |
| | | errlog | | |
| | | | clear | display log error |
| | | | disp | clear log error |
| | | | online | turn on/off error log online display |
| | | load | | load the log setting buffer |
| | | mail | | |
| | | | alertAddr [mail address] | send alerts to this mail address |
| | | | display | display mail setting |
| | | | logAddr [mail address] | send logs to this mail address |
| | | | schedule display | display mail schedule |
| | | | schedule hour [0-23] | hour time to send the logs |
| | | | schedule minute [0-59] | minute time to send the logs |
| | | | schedule policy [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 |
| | mbuf | | | |
| | | cnt | | |
| | | | disp | display system mbuf count |
| | | | clear | clear system mbuf count |
| | | link | link | list system mbuf link |
| | | pool | <id> [type] | list system mbuf pool |

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| | | | | |
|--|-----------|-----------|---------------------------------|---|
| | | status | | display system mbuf status |
| | | disp | <address> | display mbuf status |
| | | debug | [on off] | |
| | memory | | <address> <length> | display memory content |
| | memwrite | | <address> <len> [data list ...] | write some data to memory at <address> |
| | memwl | | <address> | write long word to memory at <address> |
| | memrl | | <address> | read long word at <address> |
| | memutil | | | |
| | | usage | | display memory allocate and heap status |
| | | mqueue | <address> <len> | display memory queues |
| | | mcell | mid [f u] | display memory cells by given ID |
| | | msecs | [a f u] | display memory sections |
| | | mtstart | <n-mcell> | start memory test |
| | | mtstop | | stop memory test |
| | | mtalloc | <size> [n-mcell] | allocate memory for testing |
| | | mtfree | <start-idx> [end-idx] | free the test memory |
| | model | | | display server model name |
| | proc | | | |
| | | display | | display all process information |
| | | stack | [tag] | display process's stack by a give TAG |
| | | pstatus | | display process's status by a give TAG |
| | queue | | | |
| | | display | [a f u] [start#] [end#] | display queue by given status and range numbers |
| | | ndisp | [qid] | display a queue by a given number |
| | quit | | | quit CI command mode |
| | reboot | | [code] | reboot system code = 0 cold boot, = 1 immediately boot = 2 bootModule debug mode |
| | reslog | | | |
| | | disp | | display resources trace |
| | | clear | | clear resources trace |
| | stdio | | [second] | change terminal timeout value |
| | time | | [hour [min [sec]]] | display/set system time |
| | timer | | | |
| | | disp | | display timer cell |
| | | trace | [on off] | set/display timer information online |
| | | start | [tmValue] | start a timer |
| | | stop | <ID> | stop a timer |
| | tredisp | | | 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> | <channel name>=enet0,sdsl00, fr0 |

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| | | | |
|----------|----------|---|--|
| | | [none incoming outgoing bothway] | set packet trace direction for a given channel |
| | string | | enable smt trace log |
| | switch | [on off] | turn on/off the packet trace |
| | disp | | display packet trace |
| | udp | | send packet trace to other system |
| | | switch [on off] | set tracepacket upd switch |
| | | addr <addr> | send trace packet to remote udp address |
| | | port <port> | set tracepacket udp port |
| | parse | [[start_idx], end_idx] | parse packet content |
| | brief | | display packet content briefly |
| version | | | display RAS code and driver version |
| view | | <filename> | view a text file |
| wdog | | | |
| | switch | [on off] | set on/off wdog |
| | cnt | [value] | display watchdog counts value: 0-34463 |
| romreset | | | restore default romfile |
| server | | | |
| | access | <telnet ftp web icmp snmp dns> <value> | set server access type |
| | load | | load server information |
| | disp | | display server information |
| | port | <telnet ftp web snmp> <port> | set server port |
| | save | | save server information |
| | secureip | <telnet ftp web icmp snmp dns> <ip> | set server secure ip addr |
| spt | | | |
| | dump | | dump spt raw data |
| | | root | dump spt root data |
| | | rn | dump spt remote node data |
| | | user | dump spt user data |
| | | slot | dump spt slot data |
| | save | | save spt data |
| | size | | display spt record size |
| | clear | | clear spt data |
| cmgr | | | |
| | trace | | |
| | | disp <ch-name> | show the connection trace of this channel |
| | | clear <ch-name> | clear the connection trace of this channel |
| | cnt | <ch-name> | show channel connection related counter |
| socket | | | display system socket information |
| filter | | | |
| | clear | | clear filter statistic counter |
| | disp | | display filter statistic counters |
| | sw | [on off] | set filter status switch |
| | set | <set> | display filter rule |
| | | | |
| | netbios | | |
| | | disp | display netbios filter status |
| | | config <0:LAN to WAN, 1:WAN to LAN, 2:LAN to DMZ, 3:IPSec passthrough, 4:Trigger Dial> <on off> | config netbios filter |
| ddns | | | |
| | debug | <level> | enable/disable ddns service |
| | display | <iface name> | display ddns information |

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| | | | | |
|--|-----|---------|--|--|
| | | restart | <iface name> | restart ddns |
| | | logout | <iface name> | logout ddns |
| | cpu | | | |
| | | display | | display CPU utilization |
| | cac | enable | [on off] | Cac enable switch |
| | | timeout | [value] | Content Access Control idle timeout value |
| | | debug | [on off] | Cac debug switch |
| | | licence | readkeys | Display readkeys |
| | | | writekeys | writekeys [AK][SKU] |
| | | user | load [index] | Load some a user |
| | | | save | Save user setting |
| | | | disp | Display user setting |
| | | | Active [on off] | Let this user active |
| | | | username <name> | Set user name of some a index |
| | | | password <password> | Set password for some a user |
| | | | group <category> | Set user is belong to some a group <1-4> |
| | | | clear <index> | Clear some a user setting by index |
| | | online | status | Display online user info |
| | | | add <usrename> <password> <ipaddr> | Add a user with name ,password and local ip address |
| | | | del <ipaddr> | Delete by ipaddr |
| | | group | load <age category> | Load some a group by age category |
| | | | save | Save some a group |
| | | | name <name> | Set the group name |
| | | | QueryURL <url> <server localcache keyword> | Query from server or local cache or keyword if the RUL is block or forward |
| | | | time display | Display the time schedule |
| | | | time timebudget <weekday 0-6> <timebudget(min)> | Set time budget |
| | | | time unlimit <weekday0-6> <on off> | Unlimit switch |
| | | | time starthour <weekday 0-6> <start hour> | Set start hour |
| | | | time endhour <weekday 0-6> <end hour> | Set end hour |
| | | | keyword enable [on off] | Keyword enable switch |
| | | | keyword display | Display the keyword |
| | | | keyword add <keyword> | Add a keyword |
| | | | keyword del <keyword> | Delete a keyword |
| | | | keyword clearall | Delete all keywords |
| | | | webControl enable [on off] | Web control enable switch |
| | | | webControl display | Display the web control |
| | | | webControl logAndBlock <log block both> | Set the log and block switch |
| | | | webControl category :[block/forward][1-55]/all] | Set web control category |
| | | | webControl cache | Display the cache of web control |
| | | budget | display [index] | Display the budget |
| | | | Load | Load the budget |
| | | | clear | Clear the settings |
| | | | Save <index> | Save settings. |
| | | | updateTimer [value] | Set update time |

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| | | | | | |
|--|--|------------|--------------|----------------------------------|--|
| | | exemptHost | Load <index> | Load some a exempt host | |
| | | | save | Save the exempt host settings | |
| | | | display | Display the exempt host settings | |
| | | | website | Set backdoor web site | |

Exit Command

[Home](#)

| Command | | | Description |
|---------|--|--|---------------|
| exit | | | exit smt menu |

Ethernet Related Command

[Home](#)

| Command | | | Description |
|---------|-----------|---------------------------------|--|
| ether | | | |
| | config | | display LAN configuration information |
| | driver | | |
| | | cnt | |
| | | disp <name> | display ether driver counters |
| | | clear <name> | clear ether driver counters |
| | | iface <ch_name> <num> | send driver iface |
| | | ioctl <ch_name> | Useless in this stage. |
| | | mac <ch_name> <mac_addr> | Set LAN Mac address |
| | | reg <ch_name> | display LAN hardware related registers |
| | | rxmod <ch_name> <mode> | set LAN receive mode. mode: 1: turn off receiving 2: receive only packets of this interface 3: mode 2+ broadcast 5: mode 2 + multicast 6: all packets |
| | | status <ch_name> | see LAN status |
| | | init <ch_name> | initialize LAN |
| | version | | see ethernet device type |
| | pkttest | | |
| | | disp | |
| | | packet <level> | set ether test packet display level |
| | | event <ch> [on/off] | turn on/off ether test event display |
| | | sap [ch_name] | send sap packet |
| | | arp <ch_name> <ip-addr> | send arp packet to ip-addr |
| | | mem <addr> <data> [type] | write memory data in address |
| | test | <ch_id> <test_id> [arg3] [arg4] | do LAN test |
| | pncconfig | <ch_name> | do pnc config |
| | mac | <src_ch> <dest_ch> <ipaddr> | fake mac address |

WAN Related Command

[Home](#)

| Command | | | Description |
|---------|------|----------|---------------------------------|
| wan | Adsl | | |
| | | 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 |

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| | | | | |
|-----|-------|-------------|--|--|
| | | 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 |
| wan | atm | vchunt | | |
| | | | Add <remoteNodeIndex> <vpi> <vci> <service bit(hex)> | Add a entry to hunting pool <remote node> : input the remote node index 1-8 <vpi> : vpi value <vci> : vci value <service>: it's a hex value, bit0:PPPoE/VC (1), bit1:PPPoE/LLC (2) , bit2:PPPoA/VC (4), bit3:PPPoA/LLC (8), bit4:Enet/VC (16), bit5 :Enet/LLC (32) For examples: If you need service PPPoE/LLC and Enet/LLC then the service bits will be 2+32 = 34 (decimal) = 22 (hex), you must input 22 Need to perform save after this command |
| | | | Remove <removeNodeId> <vpi> <vci> | Input remote node ID and vpi, vci value to remove the specific entry. System will save automatically. |
| | | | Active <yesno> | Enable VC auto hunting featurer |
| | | | display | Display the hunt pool |
| | | | Clear | Clear the configure buffer |
| | | | Save | Save current setting into ROM file |
| | | | timer | The waiting time before checking the hunting table result |
| | | | Send | Send VC hunt pattern again |
| | | | result | Check the result of VC auto hunting |
| | | | | |
| | hwsar | disp | | Display hwsar packets incoming/outgoing information |
| | | clear | | Clear hwsar packets information |

WLAN Related Command

[Home](#)

| WLAN Related Command | | | | Description |
|----------------------|-------------|----------|-------|--------------------------------------|
| Wlan | Command | | | |
| | active | [on/off] | [0 1] | Turn on/off wireless lan |
| | association | | | Show association list |
| | load | | | Load WLAN configuration into buffer. |

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

IP Related Command

[Home](#)

| Command | | | Description | |
|---------|--------------|-------------|-----------------------------|-------------------------------|
| ip | | | | |
| | address | [addr] | display host ip address | |
| | loopbackaddr | <IP1> [IP2] | Set loopback address. | |
| | alias | <iface> | alias iface | |
| | aliasdis | <0 1> | disable alias | |
| | arp | | | |
| | | status | <iface> | display ip arp status |
| | | add | <hostid> ether <ether addr> | add arp information |
| | | resolve | <hostid> | resolve ip-addr |
| | | drop | <hostid> [hardware] | drop arp |
| | | flush | | flush arp table |
| | | publish | | add proxy arp |
| | dhcp | | <iface> | |
| | | client | | |
| | | release | | release DHCP client IP |
| | | renew | | renew DHCP client IP |
| | | mode | <server relay none client> | set dhcp mode |
| | | relay | server <serverIP> | set dhcp relay server ip-addr |

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| | | | |
|----------|-----------|--|---|
| | reset | | reset dhcp table |
| | server | | |
| | | probecount <num> | set dhcp probe count |
| | | dnsserver <IP1> [IP2] [IP3] | set dns server ip-addr |
| | | winsserver <winsIP1> [<winsIP2>] | set wins server ip-addr |
| | | gateway <gatewayIP> | set gateway |
| | | hostname <hostname> | set hostname |
| | | initialize | fills in DHCP parameters and initializes (for PWC purposes) |
| | | leasetime <period> | set dhcp leasetime |
| | | netmask <netmask> | set dhcp netmask |
| | | pool <startIP> <numIP> | set dhcp ip pool |
| | | renewaltime <period> | set dhcp renew time |
| | | rebindtime <period> | set dhcp rebind time |
| | | reset | reset dhcp table |
| | | server <serverIP> | set dhcp server ip for relay |
| | | dnsorder [router isp] | set dhcp dns order |
| | status | [option] | show dhcp status |
| | static | | |
| | | delete <num> all | delete static dhcp mac table |
| | | display | display static dhcp mac table |
| | | update <num> <mac> <ip> | update static dhcp mac table |
| dns | | | |
| | query | | |
| | | address <ipaddr> [timeout] | resolve ip-addr to name |
| | | debug <num> | enable dns debug value |
| | | name <hostname> [timeout] | resolve name to ip-addr |
| | | status | display dns query status |
| | | table | display dns query table |
| | server | <primary> [secondary] [third] | set dns server |
| | stats | | |
| | | clear | clear dns statistics |
| | | disp | display dns statistics |
| | table | | display dns table |
| httpd | | | |
| | debug | [on/off] | set http debug flag |
| icmp | | | |
| | echo | [on/off] | set icmp echo response flag |
| | data | <option> | select general data type |
| | status | | display icmp statistic counter |
| | trace | [on/off] | turn on/off trace for debugging |
| | discovery | <iface> [on/off] | set icmp router discovery flag |
| ifconfig | | [iface] [ipaddr] [broadcast <addr> mtu <value> dynamic] | configure network interface |
| ifdrop | | <iface> | chaek if iface is available. |
| ping | | <hostid> | ping remote host |
| pong | | <hostid> [<size> <time-interval>] | pong remote host |
| extping | | <target address> | |
| | | [-t] | Continue to send ECHO REQ until Ctrl-C input |
| | | [-c] | Validate the reply data |
| | | [-d] [Data] | Data pattern. The maximum length of data is 255 characters. |
| | | [-f] | Set DF flag. |
| | | [-l] [Data size] | Datagram size in bytes (with 28 bytes Header). |

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| | | | | |
|--|--------|----------------|--|---|
| | | | [-v] [TOS value] | Specify the value of TOS flag. |
| | | | [-n] [Repeat value] | The number of times to send ECHO_REQ packet. |
| | | | [-w] [Timeout value] | Specify the value of Timeout in seconds. |
| | | | [-o] [IP address/IFace] | To specify one IP address or interface to be the Source IP address. |
| | | | [-p] [Min MTU] [Max MTU] [Interval size] | Sweep range of sizes. |
| | route | | | |
| | | 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 |
| | adjTcp | | <iface> [<mss>] | adjust the TCP mss of iface |
| | udp | | | |
| | | status | | display udp status |
| | rip | | | |
| | | accept | <gateway> | drop an entry from the RIP refuse list |
| | | activate | | enable rip |
| | | merge | [on/off] | set RIP merge flag |
| | | refuse | <gateway> | add an entry to the rip refuse list |
| | | request | <addr> [port] | send rip request to some address and port |
| | | reverse | [on/off] | RIP Poisoned Reverse |
| | | status | | display rip statistic counters |
| | | trace | | enable debug rip trace |
| | | mode | | |
| | | | <iface> in [mode] | set rip in mode |
| | | | <iface> out [mode] | set rip out mode |
| | | dialin_user | [show in out both none] | show dialin user rip direction |
| | tcp | | | |
| | | ceiling | [value] | TCP maximum round trip time |
| | | floor | [value] | TCP minimum rtt |
| | | irtt | [value] | TCP default init rtt |
| | | kick | <tcb> | kick tcb |
| | | limit | [value] | set tcp output window limit |
| | | max-incomplete | [number] | Set the maximum number of TCP incomplete connection. |
| | | mss | [value] | TCP input MSS |
| | | reset | <tcb> | reset tcb |
| | | rtt | <tcb> <value> | set round trip time for tcb |
| | | status | [tcb] [<interval>] | display TCP statistic counters |
| | | syndata | [on/off] | TCP syndata piggyback |
| | | trace | [on/off] | turn on/off trace for debugging |
| | | window | [tcb] | TCP input window size |

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| | | | | |
|--|-----------|------------|--------------------------------------|---|
| | samenet | | <iface1> [<iface2>] | display the ifaces that in the same net |
| | uninet | | <iface> | set the iface to uninet |
| | tftp | | | |
| | | support | | prtn if tfpt is support |
| | | stats | | display tftp status |
| | xparent | | | |
| | | join | <iface1> [<iface2>] | join iface2 to iface1 group |
| | | break | <iface> | break iface to leave ipxparent group |
| | antiprobe | | <0 1> 1:yes 0:no | set ip anti-probe flag |
| | igmp | | | |
| | | debug | [level] | set igmp debug level |
| | | forwardall | [on/off] | turn on/off igmp forward to all interfaces flag |
| | | querier | [on/off] | turn on/off igmp stop query flag |
| | | iface | | |
| | | | <iface> groupm <timeout> | set igmp group timeout |
| | | | <iface> interval <interval> | set igmp query interval |
| | | | <iface> join <group> | join a group on iface |
| | | | <iface> leave <group> | leave a group on iface |
| | | | <iface> query | send query on iface |
| | | | <iface> rsptime [time] | set igmp response time |
| | | | <iface> start | turn on of igmp on iface |
| | | | <iface> stop | turn off of igmp on iface |
| | | | <iface> ttl <threshold> | set ttl threshold |
| | | | <iface> v1compat [on/off] | turn on/off v1compat on iface |
| | | robustness | <num> | set igmp robustness variable |
| | | status | | dump igmp status |
| | pr | | | |
| | | clear | | clear ip pr table counter information |
| | | disp | | dump ip pr table counter information |
| | | switch | | turn on/off ip pr table counter flag |
| | nat | | | |
| | | timeout | | |
| | | | gre [timeout] | set nat gre timeout value |
| | | | iamt [timeout] | set nat iamt timeout value |
| | | | generic [timeout] | set nat generic timeout value |
| | | | reset [timeout] | set nat reset timeout value |
| | | | tcp [timeout] | set nat tcp timeout value |
| | | | tcpother [timeout] | set nat tcp other timeout value |
| | | update | | create nat system information from spSysParam |
| | | iamt | | display nat iamt information |
| | | iface | <iface> | show nat status of an interface |
| | | lookup | <rule set> | display nat lookup rule |
| | | new-lookup | <rule set> | display new nat lookup rule |
| | | loopback | [on/off] | turn on/off nat loopback flag |
| | | reset | <iface> | reset nat table of an iface |
| | | server | | |
| | | | disp | display nat server table |
| | | | load <set id> | load nat server information from ROM |
| | | | save | save nat server information to ROM |
| | | | clear <set id> | clear nat server information |
| | | | edit active <yes no> | set nat server edit active flag |
| | | | edit svrport <start port> [end port] | set nat server server port |
| | | | edit intport <start port> [end port] | set nat server forward port |
| | | | edit remotehost <start ip> [end ip] | set nat server remote host ip |

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| | | | | |
|--|--|------------|-----------------------------|------------------------------------|
| | | | edit leasetime [time] | set nat server lease time |
| | | | edit rulename [name] | set nat server rule name |
| | | | edit forwardip [ip] | set nat server server ip |
| | | | edit protocol [protocol id] | set nat server protocol |
| | | service | | |
| | | | irc [on/off] | turn on/off irc flag |
| | | resetport | | reset all nat server table entries |
| | | incikeport | [on/off] | turn on/off increase ike port flag |

PPP Related Command

[Home](#)

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

Bridge Related Command

[Home](#)

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

Radius Related Command

[Home](#)

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

8021x Related Command

[Home](#)

| Command | | | | Description |
|---------|-------|-------|---------------|------------------------------------|
| 8021x | | | | |
| | debug | level | [debug level] | set ieee802.1x debug message level |

| | | | | |
|--|--|-------|------------|--|
| | | trace | | show all supplications in the supplication table |
| | | user | [username] | show the specified user status in the supplicant table |

Configuration Related Command

[Home](#)

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

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

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

Firewall Related Command

[Home](#)

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

SMT Related command

[Home](#)

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

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

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| | ip route addrom clear [Index #] | Clear Static Route Index | Menu 12.1 |
| | | | |
| | ip nat addrmap map [map#] [set name] | Select NAT address mapping set and set mapping set name, but set name is optional Example: > ip nat addrmap map 1 myset | Menu 15.1 |
| | ip nat addrmap rule [rule#] [insert edit] [type] [local start IP] [local end IP] [global start IP] [global end IP] [server set #] | Set NAT address mapping rule. If the “type” is not “inside-server” then the “type” field will still need a dummy value like “0”. Type is 0 - 4 = one-to-one, many-to-one, many-to-many-overload, many-to-many-non overload, inside-server Example: > ip nat addrmap rule 1 edit 3 192.168.1.10 192.168.1.20 192.168.10.56 192.168.1.56 0 | Menu 15.1 |
| | ip nat addrmap clear [map#] [rule#] | Clear the selected rule of the set | Menu 15.1 |
| | ip nat addrmap freememory | Discard Changes | Menu 15.1 |
| | ip nat addrmap disp | Display nat set information | Menu 15.1 |
| | ip nat addrmap save | Save settings | Menu 15.1 |
| | ip nat server load [set#] | Load the server sets of NAT into buffer | Menu 15.2 |
| | ip nat server disp [1] | “disp 1” means to display the NAT server set in buffer, if parameter “1” is omitted, then it will display all the server sets | Menu 15.2 |
| | ip nat server save | Save the NAT server set buffer into flash | Menu 15.2 |
| | ip nat server clear [set#] | Clear the server set [set#], must use “save” command to let it save into flash | Menu 15.2 |
| | ip nat server edit [rule#] active | Activate the rule [rule#], rule number is 1 to 24, the number 25-36 is for UPNP application | Menu 15.2 |
| | ip nat server edit [rule#] svrport <start port> <end port> | Configure the port range from <start port > to <end port> | Menu 15.2 |
| | ip nat server edit [rule#] remotehost <start IP> <end IP> | Configure the IP address range of remote host (Leave it to be default value if you don’t need this command) | Menu 15.2 |
| | ip nat server edit [rule#] leasetime <seconds> | Configure the lease time (Leave it to be default value if you don’t want this command) | Menu 15.2 |
| | ip nat server edit [rule#] rulename <string> | Configure the name of the rule (Leave it to be default value if you don’t want this command) | Menu 15.2 |
| | ip nat server edit [rule#] forwardip <IP address> | Configure the LAN IP address to be forwarded | Menu 15.2 |
| | ip nat server edit [rule#] protocol <TCP UDP ALL> | Configure the protocol to be used TCP , UDP or ALL (it must be capital) | Menu 15.2 |
| | sys filter set index [set#] [rule#] | Set the index of filter set rule, you may apply this command first before you begin to configure the filter rules | Menu 21 filter sets |
| | sys filter set name [set name] | Set the name of filter set | Menu 21 filter sets |
| | sys filter set type [tcpip generic] | Set the type of filter rule | Menu 21 filter sets |
| | sys filter set enable | Enable the rule | Menu 21 filter sets |
| | sys filter set disable | Disable the rule | Menu 21 filter sets |
| | sys filter set protocol [protocol #] | Set the protocol ID of the rule | Menu 21 filter sets |
| | sys filter set sourceroute [yes no] | Set the sourceroute yes/no | Menu 21 filter sets |
| | sys filter set destip [address] [subnet mask] | Set the destination IP address and subnet mask of the rule | Menu 21 filter sets |
| | sys filter set destport [port#] [compare type = none equal notequal less greater] | Set the destination port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater)) | Menu 21 filter sets |
| | sys filter set srcip [address] [subnet mask] | Set the source IP address and subnet mask | Menu 21 filter sets |
| | sys filter set srport [port#] [compare type = none equal not equal less greater] | Set the source port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater)) | Menu 21 filter sets |
| | sys filter set tcpEstab [yes no] | Set TCP establish option | |

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| sys filter set more [yes no] | Set the more option to yes/no | Menu 21 filter sets |
| sys filter set log [type 0-3= none match notmatch both] | Set the log type (it could be 0-3 =none, match, not match, both) | Menu 21 filter sets |
| sys filter set actmatch[type 0-2 = checknext forward drop] | Set the action for match | Menu 21 filter sets |
| sys filter set actnomatch [type 0-2 = checknext forward drop] | Set the action for not match | Menu 21 filter sets |
| sys filter set offset [#] | Set offset for the generic rule | Menu 21, it's for generic filter |
| sys filter set length [#] | Set the length for generic rule | Menu 21, it's for generic filter |
| sys filter set mask [#] | Set the mask for generic rule | Menu 21, it's for generic filter |
| sys filter set value [(depend on length in hex)] | Set the value for generic rule | Menu 21, it's for generic filter |
| sys filter set clear | Clear the current filter set | Menu 21 |
| sys filter set save | Save the filter set parameters | |
| sys filter set display [set#][rule#] | Display Filter set information. W/o parameter, it will display buffer information. | |
| sys filter set freememory | Discard Changes | |
| | | |
| sys snmp disp | Display SNMP parameters | Menu 22 |
| sys snmp get [community] | Set the community string of get | Menu 22 SNMP |
| sys snmp set [community] | Set the community string of set | Menu 22 SNMP |
| sys snmp trusthost [IP address] | Set the IP address of trusted host | Menu 22 SNMP |
| sys snmp trap community [community] | Set the community string of trap | Menu 22 SNMP |
| sys snmp trap destination [IP address] | Set the destination address of trap | Menu 22 SNMP |
| sys snmp discard | Discard changes | |
| sys snmp clear | Clear Working Buffer | |
| sys snmp save | Set the SNMP parameters | Menu 22 SNMP |
| | | |
| sys password [new password] | Set system password [save immediately] | Menu 23 system password |
| | | |
| sys baud [1-5] | Index 1,2,3 will be 38400,19200, 9600, 57600, 115200 bps [save immediately] | Menu 24.2.2 console speed |
| | | |
| sys server load | Load setting before editing | |
| sys server access [ftp telnet web] [access type] | Set the server access type to be 0: ALL, 1: None, 2:LAN only, 3:WAN only | Menu 24.11 remote management |
| sys server port [ftp telnet web] [port] | Set the server port number | Menu 24.11 remote management |
| sys server secureip[ftp telnet web] [address] | Set the server security IP address | Menu 24.11 remote management |
| sys server disp [1] | Display server settings, [1] means display buffer | |
| sys server save | Save the embedded server (remote management) parameters | |
| | | |
| wlan load | Load system parameters into working buffer | Menu 3.5 for Wireless LAN |
| wlan disp | Display the working buffer | Menu 3.5 for Wireless LAN |
| wlan essid [name] | Set the wireless ESSID | Menu 3.5 for wireless LAN |
| wlan hideessid [on off] | Set to hide ESSID or not | Menu 3.5 for wireless |

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| | | | LAN |
| wlan chid [#=1~11] | Set channel ID 1-11 | | Menu 3.5 for wireless LAN |
| wlan threshold rts [value] | Set the RTS threshold value | | Menu 3.5 for wireless LAN |
| wlan threshold fragment [value] | Set fragment threshold | | Menu 3.5 for wireless LAN |
| wlan wep type [none 64 128] | Set the wep type to be none, 64bit or 128bits | | Menu 3.5 for wireless LAN |
| wlan wep key set [key set#1-4] [key value] | Set wep key value | | Menu 3.5 for wireless LAN |
| wlan wep key default [key set # 1-4] | Set default key set value | | Menu 3.5 for wireless LAN |
| | | | |
| wlan macfilter enable | Enable mac filter | | Menu 3.5.1 for wireless LAN |
| wlan macfilter disable | Disable mac filter | | Menu 3.5.1 for wireless LAN |
| wlan macfilter action [allow deny] | Set the action type of filter | | Menu 3.5.1 for wireless LAN |
| wlan macfilter set [set# 1-12] [mac address] | Set the mac address of filter | | Menu 3.5.1 for wireless LAN |
| wlan clear | Clear Working Buffer | | |
| wlan save | Save wireless MAC filter parameters | | |