



**Firmware Release Note**

**Prestige 2602HWL-67**

**AOL version**

**Release 3.40(ML1)D0**

**Date:** Sept. 07, 2005

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# **ZyXEL Prestige 2602HWL-67 AOL Version Release 3.40(MI.1)D0 Release Note**

**Date:** Sept. 07, 2005

## **Supported Platforms:**

ZyXEL Prestige 2602HWL-67

## **Versions:**

ZyNOS Version: V3.40(MI.1)D0 | 09/07/2005 15:10:57

Bootbase Version: V1.09 | 07/29/2004 16:00:00

## **Notes:**

The Prestige 2602HWL-67, is 4th generation of ZyXEL ADSL product family. It is a high performance ADSL/ADSL2 router for small/medium office to have Internet access and LAN-to-LAN application over the existing copper line. P2602HWL-67 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2), faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a high integrated 4 port 10/100M auto MDI/MDIX switch, advanced secure Firewall, IEEE 802.11g wireless access, and Voice over IP communication capability for small/medium business or small remote office.

P2602HWL-67 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 line.

The version of modem code is 01.01.08.00.

## **Features:**

**Modifications in V 3.40(MI.1)D0 | 09/07/2005**

1. Change to FCS version.

**Modifications in V 3.40(MI.1)b8 | 08/26/2005**

1. [Bugfix][KA]

Symptom: Change DNS SRV behavior like on ATA, when DNS SRV get fail, DNS A record will be checked.

2. [Bugfix][KA]

Symptom: Using ZyConfig to configure router, the second remote node can't be configured.

**Modifications in V 3.40(MI.1)b7 | 08/22/2005**

1. [Bugfix][KA]

Symptom: Change default rom , enable RTCP.

**Modifications in V 3.40(MI.1)b6 | 08/22/2005**

3. [Bugfix][KA]

Symptom: Change DNS SRV behavior like on ATA, when DNS SRV get fail, DNS A record will be checked.

4. [Bugfix][KA]

Symptom: DATA PPPoE timer issue, Default rom file enable Firewall Antiportscan, add STPGEN/Autoprovision two item to set antiportscan.

Note: SPTGEN/AUTOPROVISION :

/ Menu 22.2.3 Firewall AntiPortScan

220203001 = Firewall AntiPortScan Active <0(No) |1(Yes)> = 1

220203002 = Firewall AntiPortScann Type <0(LAN & WAN)|1(Disable)|2(LAN)|3(WAN)> = 0

5. [Bugfix][050818780]

Symptom: Make VoIP call, the first PPPoE connection will be trigger up even if the first PPPoE connection is in idle state..

**Modifications in V 3.40(MI.1)b5 | 08/16/2005**

1. [Bugfix][KA]

Symptom: [eWC] In SIP Register status page, when SIP register fail, the button show "Return", must change to "Zuruck".

Condition: 1. eWc -> Status -> Systemstatus-> "SIP Register" button

2. when register fail, the button show "return" , must change to "Zuruck"

2. [Bugfix][KA]

Symptom: When Data PPPoE goes to IDLE mode, Voice DNS lost. VoIP SIP can't Registration. logs show "No DNS Server available".

Condition: 1. Configure Data PPPoE on timeout mode.

2. After Data PPPoE change to IDLE mode, use CI command "voice dns".

3.the voice dns lost.

3. [Bugfix][KA]

Symptom: When you click on System restart in the Weg GUI of the Router the Connections to the SIP server [alos PPPoE if possible] should be disconnected.

4. [Bugfix][KA]  
Symptom: Caller ID can't display..
5. [Bugfix][KA]  
Symptom: After Autoprovision download, if SIP server change, SIP must send unregister.

**Modifications in V 3.40(MI.1)b4 | 08/10/2005**

1. [ENHANCEMENT]  
Change default for AOL-Wizard Data PPPoE Connection to nailed-up.

**Modifications in V 3.40(MI.1)b3 | 08/03/2005**

6. [Bugfix]  
Change default rom file SIP domain to "aolphone.aol.de"

**Modifications in V 3.40(MI.1)b2 | 08/03/2005**

1. [ENHANCEMENT]  
Change Auto-Provision filename from "P2602HWL.CFG" to "P2602HWL-MI1.CFG"
2. [FEATURE CHANGE]  
Remove new Daylight Saving.
3. [ENHANCEMENT]  
Support ETSI Spec Standard requirements.
4. [ENHANCEMENT]  
Default rom file change:
  1. " remove # function" should be off (0) by default.
  2. Change TOS values for SIP from 5 to 3.
  3. Change SIP Server from "aolphone.aol.de" to "aolphone2.aol.de"
5. [ENHANCEMENT]  
Support DSN SRV.

**Modifications in V 3.40(MI.1)b1 | 05/18/2005**

1. [FEATURE CHANGE]  
Remove PPPoE pass-through feature .

2. [ENHANCEMENT]  
Add backup romfile, restore romfile feature on WebGUI.
3. [ENHANCEMENT]  
Change Auto-Provision to support new TFTP file format.  
**Note: use a new filename "P2602HWL.CFG" for the TFTP download.**
4. [ENHANCEMENT]  
Support MultiBoot Client Version 2 (Firmware re-download).
5. [ENHANCEMENT]  
Support Daylight Saving as in ZyWALL.  
Note: only support this on WebGUI. SMT 24\_10 not support.

**Modifications in V 3.40(MI.0)b14 | 03/31/2005**

1. [BUG FIXED]  
Symptom: Change SIP 1 default active value from disable to enable.  
**Note: Must update default rom file**

**Modifications in V 3.40(MI.0)b13 | 03/04/2005**

1. [BUG FIXED]  
Symptom: T.38 and FAX relay doesn't work and cause exception randomly.
2. [BUG FIXED]  
Symptom: Enable Syslog function cause DUT occur exceptions randomly.
3. [BUG FIXED]  
Symptom: By setting Multiple PPPoE on wizard and make VoIP call. The call can be established but no sound can be heard.  
Condition: 1. Configure Multiple PPPoE on wizard and make VoIP call..  
2. The callee have ring tone but can not heard any sound.
4. [BUG FIXED]  
Symptom: IDLE timeout warning message in "Others ISP" wizard show english language version.
5. [BUG FIXED]  
Symptom: E-mule test would cause system exception
6. [BUG FIXED]  
Symptom: In SMT, when Wan connected and NAT set full feature, change "Many-to Many Not Overload" to "Many-to Many Overload" several times. The DUT occurred exception.

7. [BUG FIXED]  
Symptom: The DHCP can distribute 10.0.0.0 and the client can get the ip and connect to internet .
8. [BUG FIXED]  
Symptom: menu1 sys name can accept "." and "@" which is out of define
9. [BUG FIXED]  
Symptom: in menu25 the ip routing policy name can accept the character out of define. such as "@" and "."
10. [BUG FIXED]  
Symptom: Using CI command to quick ping internet address would cause exception.  
Condition: 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
11. [BUG FIXED]  
Symptom: eWC timeout but it can save change .  
Condition: 1. longin eWC and into remote management.  
2. To change telnet port 23 to 23023 and wait eWC timeout(3 minutes)  
3. Apply it and login again.  
4. The remote management telnet port have changed from 23 to 23023.
12. [BUG FIXED]  
Symptom: Static DHCP have problem.  
Condition: 1. In SMT menu24.8 use ci comment "ip dhcp ....."add a static ip 192.168.1.33 to pc1 ,while the ip is used by lan pc2.  
2. pc2 releases the ip while pc1 can't get the ip 192.168.1.33.
13. [BUG FIXED]  
Symptom: PSTN Fallback does not work as specified.  
Condition: 1. Configure \*76# as Prefix.  
2. Type \*76#Phonenumber  
3. Phone gets busy signal. Prefix does work.  
4. If you type \*76# and press call and wait for dialtone. Then type phonenumber -> call is established
14. [BUG FIXED]  
Symptom: PSTN Fallback does not work under Load.  
Condition: 1. configure P2602 with Phone A VOIP and Phone B PSTN over Backup Line

2. configure Phone C PSTN, start down/upload to max. bandwidth
3. Phone C calls Phone B several times.
4. Phone B does not ring. After this PSTN Fallback \*11# does not work anymore after several tries. VOIP over Phone A is still working, but with delay due to max. bandwidth. After cancelling all download, both functions do not work anymore until reboot of the router.

15. [BUG FIXED]

Symptom: Telephone volume can not change while calling, partly unlocalized error

message appears.

Condition: 1. Establish a voip call. While the call goes to the web gui and change to "Erweiterte Einrichtung" -> "Telefon"  
2. The error message is mistaken.

16. [BUG FIXED]

Symptom: PSTN incoming can not display Caller ID.

17. [BUG FIXED]

Symptom: If changed PPPoA or PPPoE setting several times like static IP <-> Dynamic IP, Idle time out <-> Nailed, VC<-> LLC the status will keep in N/A.

18. [BUG FIXED]

Symptom: Wrong speed display in Windows UPnP status window.

19. [BUG FIXED]

Symptom: The wireless would hang up when to do overnight test.

20. [ENHANCEMENT]

Different ring tone for SIP1, SIP2 and PSTN

21. [ENHANCEMENT]

Different dial tone for PSTN and VoIP

22. [ENHANCEMENT]

To disable voip remote node channel if SIP1 and SIP2 are not active.

23. [ENHANCEMENT]

The QoS is bad, While downloading or uploading the VoIP Quality gets bad

**Modifications in V 3.40(MI.0)b11 | 01/14/2005**



1. [BUG FIXED]  
Symptom: FTP into device, type "dir" or "ls" will cause device exception.
2. [BUG FIXED]  
Symptom: Using e-mule to test and the system sometimes would cause exception.
3. [BUG FIXED]  
Symptom: Router does not work as DSL Modem.  
Condition: 1. Setting device from router to bridge mode on eWC.  
2. Connect a PC behind of device and use PPPoE software connect to internet.
4. [BUG FIXED]  
Symptom: Dialtone problem.  
Condition: Configure Phone (A) VoIP over IAD and take receiver. But the tone is standard tone.
5. [ENHANCEMENT]  
Support nw firewall and NAT feature.

**Modifications in V 3.40(MI.0)b10 | 01/03/2005**

1. [BUG FIXED]  
Symptom: Enter special url will cause device crash.  
Condition: 1. Form LAN site, enter  
[- 2. \[BUG FIXED\]  
Symptom: When get rom-t from LAN side by FTP, and modify it, then put rom-t, the  
  
DUT will show not enough memory.
- 3. \[BUG FIXED\]  
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.  
Condition: When we get rom-t from lan side by FTP , and modified it, then put](http://192.168.1.1/Forms/rpAuth_1?ZyXEL%20ZyWALL%20Series<script>top.location.pathname=%20)

rom-t, the device won't accept the new rom-t. (Use ultraedit modify rom-t, the DUT can accept it, but while use other utilities modify the rom-t, the DUT can not accept it.)

4. [BUG FIXED]

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

9.

Condition: Step1 In menu 24.8 adds 10 VC hunt rules and the tenth rule is valid.

Step2 VC hunt can not alloc mbuf again when VC hunt table is more than 9.

5. [BUG FIXED]

Symptom: lppr will not be active.

Condition: we have set IPPR rule in menu 25 and apply it in menu 3-2 then reboot device.

6. [BUG FIXED]

Symptom: Packets loss occurs in Multi-PVC Bridging.

7. [BUG FIXED]

Symptom: Telnet and FTP form MAC OS fail, if DHCP enable.

Condition: If DHCP is opened in MAC OS, the Telnet and FTP will issue DNS request to gateway anyway even if the destination is already an IP address. In our system with WEB Redirect enable, if the WAN doesn't link up then it will replay any DNS request by fake IP address "207.69.188.186". So the Telnet and FTP will try to connect that fake IP address and fail.

8. [BUG FIXED]

Symptom: Set PPPoA encapsulation and enable nail-up. After changing user-name several times, the connection can't be dialed-up

Condition: 1. During the saving process of remote node, the remote node will be dropped and inactive. Then, it will be open and active again.

2. There is a periodical timer to process the nail-up task, the inactive period will affect the task process. For example, the remote node is sometimes active in the beginning of the task process. But, the remote node is inactive after a few moment. This will mess up the state of the task.

9. [BUG FIXED]

Symptom: Continuously operating "Enter SMT24.4 -> press [ESC] -> Enter SMT24.4

-> press [ESC]" will make device crash.

10. [BUG FIXED]

Symptom: Callee side fail to hang-up Peer to Peer VoIP call.

11. [BUG FIXED]

Symptom: PPPoE reconnect for VoIP does not send SIP register request

12. [BUG FIXED]

Symptom: DUT should not sent out syslog message if the domain name of syslog

server is not resolvable.

Condition: 1. Set syslog or mail server as abc.def.com.  
2. DUT will send DNS query only once.

13. [BUG FIXED]

Symptom: DUT fails to get configuration file again if auto provision server set as domain name.

Condition: 1. Set auto provision server as domain name in P2602HWL.txt  
2. DUT download the file from TFTP server  
3. Wait until auto pro timer fires.

14. [BUG FIXED]

Symptom: no printer on LAN useable from WLAN

**Modifications in V 3.40(MI.0)b9 | 12/06/2004**

24. [BUG FIXED]

Symptom: The ZyXEL WLAN products don't accept the default value 00:00:00:00:00:00 as a valid MAC Address. 00:00:00:00:00:00 should be always filtered out when the MAC filtering function is active!

25. [ENHANCEMENT]

Use Radiobox instead of Checkbox in Web frontend.

26. [BUG FIXED]

Symptom: PPPoE disconnect for VoIP not working

Condition: 1. Using CI command to setting PPPoE drop time.  
2. The SIP server can not receive any unregistered message when to excuse the PPPoE drop.

27. [BUG FIXED]

Symptom: Incoming ring from PSTN stops sometimes

Condition: the phone sometimes can not hear the ring tone when make call incoming from PSTN to device.

28. [BUG FIXED]

Symptom: NAT SIP ALG issue.

Condition: The IAD rewrite of a SIP message would cause error when the public IP address is shorter than the LAN IP address of the SIP device. (Ex: P2000W). It will leave the last (difference in length of the IP addresses) digits of the LAN IP-address in the message.

29. [BUG FIXED]

Symptom: PPPoE will link up & down when there is no traffic

30. [BUG FIXED]

Symptom: interop with broadsoft will cause exception.

31. [BUG FIXED]

Symptom: WEB Server Access configured to WAN only or ALL, it is possible to access the firmware upgrade web page in the router remotely via http without log in.

Condition: It can access the URL : [http://\[Router\\_IP\\_Address\]/rpFWUpload.html](http://[Router_IP_Address]/rpFWUpload.html) without login.

**Note : This solution will cause a regression bug "F/W upgrade can not work in IE 5.0.3315" and firewall need to disable.**

32. [BUG FIXED]

Symptom: If user selects "IP Alias 1" from "No" to "Yes" but doesn't change other settings and save to flash. Then the SMT display in "IP Alias 1" filed is not consistent with SPTGEN (rom-t).

33. [BUG FIXED]

Symptom: Use "d c d all" to cancel connection then the connection cannot be triggered anymore.

Condition: In PPPoE mode if use "d c d all" to drop all connection then the connection can't be triggered anymore no matter by LAN-to-WAN traffic or by manually until reboot the device.

34. [BUG FIXED]

Symptom: Device will crash when doing PAP with INode PPPoE server.

Condition: If PPPOE server use Password Authentication Protocol and then our device receive a packet PAP ACK or PAP NAK.

35. [BUG FIXED]

Symptom: PPPoE passthrough function fail in Wireless.

Condition: PPPoE passthrough function can't work from wireless LAN.

36. [BUG FIXED]

Symptom: The IAD would send the Syslog messages for SIP registrations successfully with the Level Emergency!

Condition: 1. SMT menu 24.3.2 need to setting PC address.  
2. To install "kiwi syslog daemon" on PC and to capture system log from device.

37. [BUG FIXED]

Symptom: When doing peer to peer call, device will send request to outbound proxy instead of peer directly if outbound proxy is set.

38. [BUG FIXED]

Symptom: The range of autopro retry expired time is mismatched between SMT (120~65535) and SPTGEN (180~65535)

39. [BUG FIXED]

Symptom: In smt 3.2, when we change nothing but it still save to romfile.

Condition: we change nothing in smt menu 3-2 and it still save to rom.

40. [BUG FIXED]

Symptom: Ippr will not be active.

Condition: we have set IPPR rule in menu 25 and apply it in menu 3-2 ,and then reboot device.

41. [BUG FIXED]

Symptom: Watch dog cause system reboot.

Condition: When CPU loading is always 100% in 3 minutes even we can still perform traffic transmit.

42. [BUG FIXED]

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

Condition: 1. Set remote IP address as 192.168.2.1 in ENET ENCAP.  
2. Check routing table is right.  
3. Change remote IP address to 192.168.3.1.  
4. Check routing table you will see the old routing entry "192.168.2.1" doesn't remove.

43. [BUG FIXED]

Symptom: CPU loading will reach to 100% easily and impact system performance.

Condition: Under heavy traffic in downstream and without quick bridge enable.

44. [BUG FIXED]

Symptom: Wan backup help is wrong.

Condition: If the backup type is "DSL Link", it still ask user to fill in a wan IP.

45. [BUG FIXED]

Symptom: WAN Backup page doesn't support dial backup but help page has dial backup help.

46. [BUG FIXED]

Symptom: Issue "wan oos 1" will cause system exception.

Condition: 1. Issue "wan oos" will have some remind message.

2. Issue "wan oos 1" will cause system exception.

3. This command is just for debug flag turn on.

47. [BUG FIXED]

Symptom: Use smartbits to test downstream throughput, the throughput is poor in small packet(64 bytes).

Condition: 1. Set router in quick bridge.

2. Use smartApplication to test throughput.

3. The throughput is about 3.52%.

48. [BUG FIXED]

Symptom: DNS server can't work after set DNS server in smt3.2 or web LAN page, it need reboot system to let DNS server work.

49. [BUG FIXED]

Symptom: The IP Alias is active in rom-t, but it is actually inactive in SMT.

Condition: IP Alias is configured and inactive in SMT. After getting the rom-t from the device, the IP alias in the rom-t will be active.

50. [BUG FIXED]

Symptom: After pressing the back button in the page of NAT - Address Mapping rules, the error message will occur.

Condition: GUI → Advanced Setup → NAT → Select Full Feature and press Edit Details → press the back button in the page of Address Mapping Rules and error message will appear.

51. [BUG FIXED]

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

Condition: 1. Setting content filter restricte keyword and enable keyword blocking on eWC.

2. To setting content filter schedule on eWC.

3. Using seach engine like "google" to search keyword.

4. Sometimes could link restricted keyword's website.

52. [BUG FIXED]

Symptom: When Off Hook at first ting, users hear Caller-ID sound. Caller-ID can't display on phone 1.

53. [BUG FIXED]

Symptom: RTP port range on WEB show inconsistency with TFTP auto-provision and SPTGEN.

54. [BUG FIXED]

Symptom: IAD occur exception after setting RTP from port to 1024 and initiate VoIP call.

Condition: 1. Setting RTP start port is 1024.

2. Save then to make call.

3. The device will exception when on-hook the phone.

55. [ENHANCEMENT]

Record the time of ADSL line is disconnect and when ADSL line is connect then restart SGMP State Machine and call the function, adslLineInterruptionInfo , to send the recorded times to the Centrolize Log.

56. [ENHANCEMENT]

**(1) Support to configure flash max/min time and dialing short/long interval in sptgen and auto-provision.**

**(2) Support to configure 8 bits for TOS.**

**(3) Change acceptable range of session timer, min-se and dial interval.**

57. [ENHANCEMENT]

Add interop\_asterisk support

58. [ENHANCEMENT]

**1. Change SIP server port and register server port start range from 1024 to 1**

**2. Change local SIP port and RTP port start range from 1024 to 1025**

59. [ENHANCEMENT]

Change Voice - SIP Settings -> Advanced Settings to Voice - SIP Settings -> Advanced Settings on eWC.

60. [ENHANCEMENT]

Add CI command to display items in auto-provision database

61. [ENHANCEMENT]

Support auto-provision key word display, So you can use CI command “voice autopro dbdisplay” to show key word.

62. [ENHANCEMENT]

Support TFTP server address in domain name format.

**Modifications in V 3.40(MI.0)b8 | 10/01/2004**

1. [BUG FIXED]

Symptom: Upnp can not work fine on WIN XP PC (only Service Pack 2)

Condition: 1. To active Upnp all checkbox on eWC, then press apply.  
2. then press apply to save, it is can get the next page without any problem.  
3. After a while the PC can not access the eWC

2. [BUG FIXED]

Symptom: Packets sent to one PVC(Enet encap) from WAN will be replied to another PVC(RFC1483 bridge)

Condition: Device is configured as 2 PVCs. The first is Enet Encap, and the other is RFC1483 bridge. The packets,e.g. ARP, which have to be sent to the 1st PVC, will be sent to the 2nd PVC. The problem makes the remote VLAN enabled router confused and the communication will fail.

3. [BUG FIXED]

Symptom: On Win2000 using IE6.0, click VoIP Register/Unregister button all the time, that will show stranger button.

4. [BUG FIXED]

Symptom: If we ping from Lan PC to internet and change Encapsulation to PPPoA or PPPoE will cause ping fail.

5. [BUG FIXED]

Symptom: If changed PPPoA or PPPoE setting several times like static IP <-> Dynamic IP , Idle time out <-> Nailed, VC<-> LLC the status will keep in N/A.

6. [BUG FIXED]

Symptom: CI command "ppp lcp echotime" does not work

Condition: Set lcp echo time interval using "ppp lcp echotime".

7. [BUG FIXED]

Symptom: Use CI command "wlan association" to show association list will cause system reboot.

Condition: When 3 station connection to device if Use CI command "wlan association" to show association list will cause system reboot.

8. [BUG FIXED]

Symptom: When multiple stations connected to AP, once the previous one leave, the other stations also disappeared.

Condition: 1.Use Web to show association list.

2.When station disconnect the association list still have it's data.

3.When one statin disconnect and then another join the association list will show error list.

9. [BUG FIXED]

Symptom: There are two same strings appearing in SMT 15.1



Condition: "Enter Menu selection number:" appears duplicately in SMT 15.1.

10. [BUG FIXED]

Symptom: In Web/GUI, if we switch PPPoE pass-through from off to on, it can't work immediately until reboot device it work

Condition: Only happens in Web/GUI, SMT is fine.

11. [BUG FIXED]

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

Condition: 1. Setting content filter restricte keyword and enable keyword blocking on eWC.

2. To setting content filter schedule on eWC.

3. Using seach engine like "google" to search keyword.

4. Sometimes could link restricted keyword's website.

12. [BUG FIXED]

Symptom: Callee side can't terminate VoIP call on IAD.

Condition: 1. Setting: P2602(Caller) <--> LAN <--> P2602(Callee), set domain(ex: pqa.lab) different from proxy address.

2. Initiate Call from Caller side.

3. Answer call on Callee side.(Voice is OK)

4. Hang up on Callee. Caller can't hear Busy tone. PS: If the call was terminate on Caller side, then it's OK

13. [BUG FIXED]

Symptom: The session timer will be conflict with the call-holding.

Condition: Use the call-hold/ call-unhold from the caller and callee twice. And wait for the session timer is triggerred. The call will be dropped when the session timer is triggerred.

14. [BUG FIXED]

Symptom: When doing peer to peer call, device will send request to outbound proxy instead of peer directly if outbound proxy is set.

15. [BUG FIXED]

Symptom: VAD cause a click sound when entering silence mode, cut off the first word back from silence mode, and the generated idle noise is too quiet.

Condition: Modify VAD setting to Adjust buffer during silence to avoid cut off, and set idle noise generated from SID packets to elimate the click sound and to avoid the ilde noise too quiet.

16. [BUG FIXED]

Symptom: interop with broadsoft will cause exception.

Condition: copy data to a new memory to avoid that this data be free twice.

17. [BUG FIXED]

Symptom: Device can't distinguish if an incoming call is from proxy or non-proxy (peer to peer).

Condition: 1. User get an incoming call which is non-proxy from the peer.

2. User hang up the call but the BYE request is cast to proxy server instead of peer.

18. [BUG FIXED]

Symptom: Auto-Provision can not pass through firewall.

Condition: Auto-Provision can not work from wan port when firewall has been enable.

19. [ENHANCEMENT]

Support the call-hold method by "c=0.0.0.0" (RFC2543) and "a=sendonly" (RFC3261)

20. [ENHANCEMENT]

Support SPTGEN for VoIP.

21. [ENHANCEMENT]

Support outbound proxy keep-alive.

22. [ENHANCEMENT]

Add SAR debug level to dump OAM raw data for trace purpose.

23. [ENHANCEMENT]

Support outbound proxy.

**Modifications in V 3.40(MI.0)b7 | 09/13/2004**

1. [ENHANCEMENT]

Change language from English to Germany

2. [ENHANCEMENT]

Support INVITE/CANCEL/BYE with 401 responses

**Modifications in V 3.40(MI.0)b6 | 09/08/2004**

1. [BUG FIXED]

Symptom: when set 4 bridge node and 4 route node (8 route node), start AX4000 test will exception.

2. [BUG FIXED]

Symptom: PSTN incoming caller ID display can not work.

3. [BUG FIXED]

Symptom: Register authentication fails to some servers (ex: Asterisk SIP)

server).

Condition: Register authentication fails if the server is doing authentication with 407 response and "Proxy-Authenticate" header.

**Modifications in V 3.40(MI.0)b5 | 09/02/2004**

1. [BUG FIXED]

Symptom: The firewall -> Default Policy page would show unnecessary string on eWC.

2. [BUG FIXED]

Symptom: When both VAD and firewall are enabled, can't hear voice from NetCentrex server unless some noise is made.

Condition: 1. Enable VAD and firewall on P2602HWL.

2. Register to NetCentrex server.

3. Press "091", "093" or let peer press "\*\*\*" after call is established; can't hear voice from server if no noise is made.

3. [BUG FIXED]

Symptom: Device answer a PSTN call, and then VoIP call causes system exception.

Condition: 1. Answer a PSTN call.

2. Hang-up the call.

3. Receive a VoIP call.

4. [BUG FIXED]

Symptom: Multiple PPPOE PVC will work improper manner

Condition: 1. Create two or more than two PPPOE PVCs in CPE device

2. After two PVC connection are established, change the VPI/VCI setting of first PVC on the DSLAM.

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

5. [BUG FIXED]

Symptom: When vc auto hunt is activating, if user goes to Wizard and configure the correct VPI/VCI values, and then the vc auto hunt will stop, but start IE can't go on Internet at first time

6. [BUG FIXED]

Symptom: Ping a wrong IP address, the device will get success information.

Condition: When pinging an address (IP or domain name), device will resolve this address first to see if it's a valid IP, then do a dns query to see if it's a valid domain name. During the resolve function, the dot '.' and slash '/' character will be changed to '\0', and then changed back. So, if directly returning error before the characters are changed back, the original address is changed, and the dns query of this changed address will fail. For example,

"www.google.com.tw" will be "www" after resolving, and the dns query of "www" will fail.

7. [BUG FIXED]

Symptom: When performing stress test using Chariot, the console display “Can't alloc mbuf in copyMsdu function”message. And a memory leakage will accompany this error.

Condition: When AP gets an broadcast packet from WLAN interface, it would like to make a copy of the received packet in order to broadcast it over WLAN interface. The AP will allocate an MSDU descriptor to specify the packet, then an mbuf to copy the data of the received packet. This error message is due to failure to allocate the mbuf. At the same time, the previous- allocated MSDU descriptor has not been freed, so that a memory leakage occurs.

8. [BUG FIXED]

Symptom: Exception occurs when DUT1's compression type change to “G.729 > G.711”, DUT1 dial to DUT2, DUT2 off hook and on hook immediately.

9. [BUG FIXED]

Symptom: Help page didn't have DTMF description.

10. [BUG FIXED]

Symptom: DTMF default setting should be SIP Info.

11. [BUG FIXED]

Symptom: VLAN ID show on help page is from 1 to 4095, but should be from 0 to 4095.

12. [BUG FIXED]

Symptom: when set 4 bridge node and 4 route node (8 route node), start AX4000 test will exception

13. [BUG FIXED]

Symptom: Exception occurs after setting SIP number to "127" character.

14. [BUG FIXED]

Symptom: life line can't work some times.

**Modifications in V 3.40(MI.0)b4 | 08/16/2004**

1. [BUG FIXED]

Symptom: IAD occur exception randomly and frequently with Timer.c error when we are using VoIP call or configure VoIP setting on eWC.

2. [BUG FIXED]

Symptom: VoIP call drop after 3 minutes.

- Condition: 1. IAD <-->DSLAM <--> IAD.  
2. Initiate dual channel VoIP call.  
3. Run for overnight test
3. [BUG FIXED]  
Symptom: WAN Backup - traffic redirect doesn't work and cause continuous exception.
4. [BUG FIXED]  
Symptom: Disable/Enable Firewall sometimes would cause system reboot.  
Condition: 1. system would cause system reboot when enable/disable firewall several times on eWC.
5. [BUG FIXED]  
Symptom: IAD appear unstable during measurement voice quality by Radcom voice quality testing equipment.  
Condition: 1. Measure VoIP quality by Radcom.  
2. After measurement, sometimes IAD can't make VoIP call anymore until reboot IAD
6. [BUG FIXED]  
Symptom: Online configuration for Phone function(etc..Outgoing SIP selection) on eWC doesn't work.
7. [BUG FIXED]  
Symptom: Set IAD in PPPoE mode with NAT Full feature mode enabled. Modify NAT Full-feature rule and Add one One to One entry, sometimes IAD reboot with exception
8. [BUG FIXED]  
Symptom: If PC is with windows XP, the AnyIP feature sometimes doesn't work  
Condition: Only happens on Windows XP PC.
9. [BUG FIXED]  
Symptom: To selection data of radio button can be saved when Apply button is done.
10. [BUG FIXED]  
Symptom: Router will reboot when issue "wan atm debug on".
11. [BUG FIXED]  
Symptom: Any IP feature will impact static route
12. [BUG FIXED]With CID supported Phone, sometimes the Phone Call can't be picked up when Phone is Ringing. After Pickup Phone Call, the PHONE LED on IAD is still blinking.

13. [BUG FIXED]

Symptom: [Phone Book] Add two speed dial entries with MAX characters in SIP number and name field. The first entry's name field will include and overlap with second entry's name.

14. [BUG FIXED]

Symptom: [Phone Book] Fill in MAX characters in name field and Add the entry. Then edit the entry and check "Name" field. The last character will show one more "space" character

15. [BUG FIXED]

Symptom: [Phone Book] Fill in MAX characters in SIP number, name and input non-proxy IP. Then edit the entry. Problem: The "Non-proxy IP" will show in "Name" field.

16. [BUG FIXED]

Symptom: After restart IAD and the time setting become default value

17. [BUG FIXED]

Symptom: Configure IAD to use PPPoE+Static IP on eWC. The Static IP's Default gateway will become "0.0.0.0" on System Status page.

Condition: setting PPPoE mode and static IP on eWC. Then the system status would show "0.0.0.0" on Default gateway.

18. [BUG FIXED]

Symptom: When upload wrong romfile twice from SMT, DUT has show upload ras code than DUT will fail to boot up.

19. [BUG FIXED]

Symptom: Using MAC OS-X to login IAD will fail. Environment: MAC OS-X IE5.2 version.

20. [BUG FIXED]

Symptom: log schedule setting have some error.

Condition: Set Log schedule setting to "When Log is Full" and press Apply. The "Day for sending log" will become "Sunday".

21. [BUG FIXED]

Symptom: In eWC, Advanced Setup -> Logs -> Log Settings, Send Log ="When Log is Full", should be default to "None".

22. [BUG FIXED]

Symptom: IAD show unknown "Error, RTP connection can't close" in RTP log even not make any VoIP call.

Condition: 1. Don't make any call.

2. Change IP of device.
  3. "Error, RTP connection cannot close" is shown in centralized log.
23. [BUG FIXED]  
Symptom: echo cancellation can not work.  
Condition: Echo Cancellation seems doesn't work after Turn ON/OFF. Setting default Speaking/Listening Volume.
24. [BUG FIXED]  
Symptom: CERT SIP test fail
25. [BUG FIXED]  
Symptom: Disable SIP 1 account and register SIP 1 account on eWC. Then enable SIP 1 account again. SIP 1 will not be able to register unless reboot ATA.  
Condition: 1. Configure 2 sip accounts on device and let both SIP accounts registered.  
2. Disable SIP 1 account and register SIP 1 account.  
3. Enable SIP 1 account again. SIP 1 account can't register now. Root cause: Can't find match ccmPortId in sipCCMConvert table.
26. [BUG FIXED]  
Symptom: It will cause system memory weak, when do fax action with media-change.  
Condition: Primary invite tx be delete, so callee became Client from Server.
27. [BUG FIXED]  
Symptom: On line config RTP port can not work.  
Condition: 1. Configure RTP port range as 40000~60000.  
2. Change RTP port range to 50000~60000.  
3. Make a call then you'll find that the RTP port allocated is still in the range of 40000~60000.
28. [BUG FIXED]  
Symptom: SIP Info show incorrect information on eWC.  
Condition: 1. Default ROM file.  
2. Change SIP account 1 and input MAX character in SIP number and SIP server.  
3. The SIP account on Maintenance page will show  
SIP\_number@SIP\_ServerChangeMe@192.168.1.33
29. [BUG FIXED]  
Symptom: IAD sometimes doesn't generate Busy tone when receiving 4xx response from  
proxy server.
30. [BUG FIXED]  
Symptom: Change Codec to "G.711 -> G.729" and Apply. Enter Advance Setting again, the

Codec will become "G.711 Only".

Condition: 1. Enter Advance Setting to setting codec from any type to G.711 -> G.729 and

Apply on eWC.

2. To check the Advance page on eWC again.
3. it will show G.711 Only.

31. [BUG FIXED]

Symptom: Volume Control function doesn't work. G.711/G.729 codec volume always keep in

2.0/2.7 dB.

32. [BUG FIXED]

Symptom: Online Configuration VAD function doesn't work with G.711 Codec.

Condition: 1. Change IAD to G.711 Only Codec.

2. Enable / Disable VAD function in Phone page.
3. Monitor "Comfort Noise" packet by using Ethereal.
4. The Enable/Disable VAD function will work after reboot.

33. [BUG FIXED]

Symptom: Disable SIP account 1 then register or unregister SIP account 2 will failed by using

"Register/Unregister" button on eWC..

Condition: 1. Configure both SIP accounts as active.

2. Change the first sip account from active to inactive.
3. Can't do register/unregister on the second SIP account.

34. [BUG FIXED]

Symptom: Exception occur when open "Show Statistics" Page on eWC and Make VoIP Call.

Condition: 1. IAD1-> IAD2.

2. Initiate VoIP Call.
3. Click "Show Statistics" Page on eWC.
4. Wait few seconds for statistics refresh, IAD will occur exception.

35. [BUG FIXED]

Symptom: Exception occur when at CI command mode use IP DNS query.

Condition: 1. system boot-up and into CI command mode

2. key in "ip dns query address 168.95.1.1" when ADSL not link up yet.
3. the system would cause exception.

36. [BUG FIXED]

Symptom: The router incorrectly leasing static DHCP address to the wrong computers.

Condition: 1. Go to Advanced Setup>LAN>Static DHCP and configure the first rule with the MAC address of workstation 1 and the IP Address of 192.168.1.33.



2. Attach workstation 2 to the router. It will pull the 192.168.1.33 address which is incorrect.
  3. Attach Workstation 1 to the router. It will fail to pull an IP address from the router.
37. [BUG FIXED]  
Symptom: IAD show "User-ID can't be empty" during click register button on WEB when PPPoE connection is IDLE.
38. [BUG FIXED]  
Symptom: DNS query constantly send out every 5 secs when FQDN name was used in SIP server setting
39. [BUG FIXED]  
Symptom: Exception occur when NAT set to Full feature and build a many to many no overload rule.  
Condition: 1. Configuration SMT menu 4 SUA or None or Full feature.  
2. Configuration SMT menu 15.1 many to many no overload  
3. To change menu 4 and menu 15 several times and system would cause exception.
40. [BUG FIXED]  
Symptom: PSTN call was disconnected when IAD bootup.  
to many no overload rule.  
Condition: 1. Power Off ATA.  
2. Initiate call to PSTN.  
3. Power On ATA.  
4. When IAD boot up, PSTN call was disconnected.
41. [BUG FIXED]  
Symptom: Incoming PSTN call CID display doesn't work.
42. [BUG FIXED]  
Symptom: Unplug IAD's DSL line during VoIP call, IAD occur exception.
43. [BUG FIXED]  
Symptom: After disconnect DSL line on calle side during ringing. Callee side LED will continuous flashing and ringing unless reboot on IAD on Callee side.  
Condition: Setup: Phone A -> IAD(1) <--> WAN <--> IAD(2) -> Phone B  
1. Phone A initiate VoIP call to Phone B.  
2. Detach DSL line on Phone B.  
3. IAD(2)'s LED will continue flashing and Phone B will continue ringing until reboot IAD(2).
44. [BUG FIXED]

Symptom: eWC shows incorrect warnings message "User ID can't be empty" when click SIP registration on non-active SIP account in maintenance page.

45. [BUG FIXED]

Symptom: IAD doesn't turn on "End of Event" in last DTMF RTP payload(RFC2833).By RFC2833, the last DTMF event in RTP payload should turn on "End of Event" bit.

46. [BUG FIXED]

Symptom: Configure "RTP From Port" in SIP advance setting to less than "49152" on eWC, The "RTP To Port" will become "49152"( default:50000). Configure "RTP To Port" to less than "49152", the codec setting will become empty.

47. [BUG FIXED]

Symptom: IAD should not send out dial tone when VoIP service is not ready to use.  
(For example: After upgrade F/W, registration fail or SIP or account not set ..etc)Expect: When IAD's VoIP service is not available, IAD FXS should relay to FXO when phone is off-hook.

48. [BUG FIXED]

Symptom: PSTN relay lock in one of FXS port

Condition: 1. Phone A(PSTN) -> IAD -> Phone B,C

2. Calling from Phone A to Phone B,C through PSTN and Phone B,C to Phone A serveral times. One of FXS port PHONE LED will keep light on even both Phone B,C is on-hook.

3. After this, only the PHONE light on port can dial out to PSTN.

49. [BUG FIXED]

Symptom: PSTN call fail with overnight test

Condition: 1. Phone A,B -> IAD(1) <-> LAN <-> IAD(2) -> Phone C,D

2. Initiate PSTN call from Phone A to Phone C

2. Initiate VoIP call from Phone B to Phone D.

3. PSTN call drop off after overnight test

50. [BUG FIXED]

Symptom :Daytime protocol doesn't work on eWC.

Condition: 1. setting current time on eWC.

2. then system on/off to restart.

2. To display the current and it would show default time 0.

51. [BUG FIXED]

Symptom: After disconnect DSL line on calle side during ringing. Callee side LED will continuous flashing and ringing unless reboot on IAD on Callee side.

Condition: Setup: Phone A -> IAD(1) <-> WAN <-> IAD(2) -> Phone B

1. Phone A initiate VoIP call to Phone B.

2. Detach DSL line on Phone B.

3. IAD(2)'s LED will continue flashing and Phone B will continue ringing until reboot IAD(2).

52. [BUG FIXED]

Symptom: IAD should play out DTMF tone after receive "SIP INFO" packet.

53. [ENHANCEMENT]

Suggest to change default Volume setting to -1

54. [ENHANCEMENT]

CI command to enable/disable SIP ALG

55. [ENHANCEMENT]

Add help page for speed dial on eWC, Remove T2 timer show in Help Page, Change VLAN ID show from 1~4024 to 0~4095 in help page

56. [ENHANCEMENT]

SPTGEN support WLAN Enable/Disable, and WPA, 802.1x setting

57. [ENHANCEMENT]

Add CENTRALIZE LOG for VOIP

58. [ENHANCEMENT]

[Help page]

1. T2 timer show in Help Page.
2. No DTMF function description in help page.
3. VLAN ID show 1~4024 in help page.
4. No VAD function description in help page.

59. [ENHANCEMENT]

No speed dial function explanation on eWC -> Voice.Voice Function

60. [ENHANCEMENT]

Make sure your device is connected to a telephone jack using the included phone wire. Otherwise contact your ISP.

61. [ENHANCEMENT]

When set to PPPoE + IDLE timeout, IAD show warning message.

**Modifications in V 3.40(MI.0)b3 | 07/12/2004**

1. [BUG FIXED]

Symptom: Expiration Duration set as 1, register never success. The start range should not be 1.

Condition: Modify Expiration Duration setting Min. is 2

2. [BUG FIXED]  
Symptom: Caller ID still send out even disable on eWC.  
Condition: Disable caller ID send from eWC and callee still can show caller ID on phone.
3. [BUG FIXED]  
Symptom: When IAD is boot up and DSL link is not ready, IAD always show SIP account register failed.  
Condition: system bootup and IAD always show SIP account register failed when DSL link in not ready.
4. [BUG FIXED]  
Symptom: When DSL link is down, VoIP LED is still show on  
Condition: 1. Register SIP -> Success.  
2. Unplug DSL link.  
3. VoIP LED is still show on but eWC show SIP register failed.
5. [BUG FIXED]  
Symptom: RTP/SIP ToS range incorrectly limited to "0~5" on CI command.  
Condition: the RTP/SIP TOS range would show 0 ~ 5 from CI command.
6. [BUG FIXED]  
Symptom: Add two speed dial entries with MAX characters in SIP number and name field. The first entry's name field will include and overlap with second entry's name
7. [BUG FIXED]  
Symptom: Edit a "use proxy" speed dial entry, the entry will show as "non-proxy" type.
8. [BUG FIXED]  
Symptom: Fill in MAX characters in name field and Add the entry. Then edit the entry and check "Name" field. The last character will show one more "space" character.
9. [BUG FIXED]  
Symptom: Fill in MAX characters in SIP number, name and input non-proxy IP. Then edit the entry.
10. [BUG FIXED]  
Symptom: Fill in MAX characters in SIP number, name and input non-proxy IP in entry "#10". The entry will can't be deleted unless press "Clear Phone Book" button.
11. [BUG FIXED]  
Symptom: Online configuration for Phone function(etc..Outgoing SIP selection) on eWC doesn't work.  
Condition: 1. configuration phone function on eWC.  
2. it can not work before system reboot.

12. [BUG FIXED]

Symptom: VoIP call drop after 3 minutes.

Condition: 1. IAD <-->DSLAM <--> IAD

2. Initiate dual channel VoIP call.

3. Run for overnight test

13. [BUG FIXED]

Symptom: Configure local / register server / proxy server port to below "1024", the SIP number or Server address field will changed to value "1024"

14. [BUG FIXED]

Symptom: SIP number should allow "alpha" character : a~z,','\_','-'.  
'

15. [BUG FIXED]

Symptom: When SIP account is not activated, press "register" button on eWC. eWC show "User-ID can't be empty".

16. [BUG FIXED]

Symptom: IAD doesn't generate Busy tone in off-hook scenario.

Condition: 1. Make IAD both Phone Off-hook

2. Initiate VoIP call to IAD.

3. Caller doesn't generate Busy Tone

17. [BUG FIXED]

Symptom: Add customized port rule in Firewall cause exception.

Condition: 1. To add customized port rule in Firewall on eWC.

2. To save it would cause exception.

18. [BUG FIXED]

Symptom: setting NAT rule would cause system exception.

Condition: 1. Add one "Many to One" rule in Menu 15.1.1.

2. Set the start is 192.168.1.33, and end is 192.168.1.1. Save the rule.

19. [BUG FIXED]

Symptom: In eWC, WAN dial backup, if Backup type select "DSL Link", click save, it will show error message that need enter check IP.

20. [BUG FIXED]

Symptom: In eWC, Advanced Setup -> Logs -> Log Settings, Send Log ="When Log is Full", should be default to "None".

21. [BUG FIXED]

Symptom: FXS port lock after keep pressing on-off hook on Phone repeatedly

22. [BUG FIXED]

Symptom: Phone LED sometimes not sync with FXS's action. After On-hook Phone, sometimes IAD Phone's LED still show light on for few seconds

23. [BUG FIXED]

Symptom: WAN Backup - traffic redirect doesn't work and cause continuous exception.

24. [BUG FIXED]

Symptom: One of FXS port sending ringing for 1~2 times only

Condition: Phone A,B -> IAD(1) -> WAN -> IAD(2) -> Phone C,D

1. IAD(1) initiate VoIP call by using SIP 1, Phone D will ring for only 1~2 times. Phone C will continue ringing.
2. IAD(2) initiate VoIP call by using SIP 2, Phone C will ring for only 1~2 times. Phone D will continue ringing.

25. [BUG FIXED]

Symptom: phone1 and phone2 can not match with SIP1 and SIP2

Condition: IAD use inverse SIP account send out SIP signaling packet. Set Phone 1 mapping to SIP Account 1 and Phone 2 mapping to SIP Account 2.

Result: Phone 1 use SIP Account 2 to send out SIP INVITE.

26. [BUG FIXED]

Symptom: Online configuration doesn't work in SIP advance setting / QoS / Phone setting.

- Condition:
1. To change SIP advance setting / QoS / Phone setting.
  2. New setting can not work, need to system reset.

27. [BUG FIXED]

Symptom: Unplug IAD's DSL line during VoIP call, IAD occur exception.

Condition: 1. To do VoIP call and conversation.

2. Unplug IAD's DSL line and system would cause exception.

28. [BUG FIXED]

Symptom: IAD1 set G.711 only, IAD2 set G.729 only. IAD1 can make call with IAD2 using G.711.

29. [BUG FIXED]

Symptom: Wireless WEP 64 key should not treat "0123456789" as HEX value on eWC. Only key start as "0x" can be treated as HEX value

- Condition:
1. input wireless Lan setting and select "WEP Encryption" is 64-bit WEP on eWc.
  2. key-in 0123456789 and to apply it.
  3. it can access as HEX value.

30. [BUG FIXED]

Symptom: SMT show wrong noise margin value

Condition: 1. using CI command to show ADSL noise margin.

2. sometimes the value is wrong.

31. [BUG FIXED]

Symptom: caller would cause system exception when it send info to callee.

Condition: when caller send out info to callee, it will cause exception.

32. [ENHANCEMENT]

Change valid RTP port range as 40000 ~ 65535

33. [ENHANCEMENT]

Add centralized for for VoIP.

34. [ENHANCEMENT]

change SIP number's Max characters from 31 to 96.

35. [ENHANCEMENT]

SIP number allow "alpha" character : a~z, '.', '\_', '-'

36. [ENHANCEMENT]

Change QoS->VLAN tagging value limited from 0~4024 to 0~4095.

37. [ENHANCEMENT]

Voice -> SIP setting, Authentication User-ID should allow blank User-ID and change length from 20 to 96.

38. [ENHANCEMENT]

Add Country option in VOIP->Common group

39. [ENHANCEMENT]

Support privacy call (including RFC3325 and call draft). Add CI command let RFC3325 and call draft adjustable

40. [ENHANCEMENT]

Add Ring Timeout Timer = 180 seconds. Ring timer would fire once ringing. If timeout then terminate itself and send 486(Request Terminated) out to terminate the caller.

41. [ENHANCEMENT]

Don't care SIP Packet when all headers are un-known.

42. [ENHANCEMENT]

Can't interoperate with telia softphone through telia sip server which support TCP & UDP.

43. [ENHANCEMENT]

Change volume control by SLIC to DSP. The range will change to -14 to 14 from -1 to

1. In eWC, -1 means -14 and 1 means 14
44. [ENHANCEMENT]  
Play out DTMF tone after receive "SIP INFO" packet.
45. [ENHANCEMENT]  
Support different TOS setting in RTP and SIP packet. Now only CI command supported. eWC will setup both to the same setting
46. [ENHANCEMENT]  
Support RemovePound: Press '#' when inputting dial digit number will make device to make call immediately.
47. [ENHANCEMENT]  
Add DTMF Type setup field in VOIP->Advanced on web page.
48. [ENHANCEMENT]  
Add Phone Book->Speed Dial page for speed dial and non/force proxy call.

**Modifications in V 3.40(MI.0)b2 | 06/10/2004**

1. [BUG FIXED]  
Symptom: Enable Firewall cause VoIP call randomly failed. Disable Firewall then make VoIP call is OK.  
Condition: 1. system boot-up and enable firewall to VoIP call is OK.  
2. After several minute, to make VoIP call is fail.
2. [BUG FIXED]  
Symptom: Using Wizard to configure SIP account 1 then to register would fail on eWC.  
Condition: Configure SIP account 1 by using Wizard on eWC, registration always failed with "User ID can't be empty". Configure SIP account 2 then registration for both account is OK.
3. [BUG FIXED]  
Symptom: SIP setting need to support FQDN format address on eWC.  
Condition: SIP number setting should also can input "a~z" or "#!\$%^&" character. Some VoIP service provider need to use character in SIP URL
4. [BUG FIXED]  
Symptom: caller would cause system exception when it send info to callee.  
Condition: when caller send out info to callee, it will cause exception.
5. [BUG FIXED]  
Symptom: life-line can not work from office outside to make a call to device.



Condition: Make a call from office outside to Lifeline FXO port but can't hear Ringing signal. Off hook and make call again, can hear Ringing signal.

6. [BUG FIXED]  
Symptom: Wrong DTFM signaling bits is carried in INFO packets. Only 1~6 work correct.
7. [BUG FIXED]  
Symptom: T2 timer doesn't work in SIP advance setting/QoS/Phone setting.
8. [ENHANCEMENT]  
Enhance SIP Onhold/Unhold feature
  1. Set destination IP in RTP table as 0.0.0.0 when receiving SIP onhold request, and set back to non-zero IP when receiving SIP unhold request.
  2. Free RTP packets if the destination IP is zero
9. [ENHANCEMENT]  
Add protect mechanism to check the Dlg be free or not when Tx state change to TERMINATED state.
10. [ENHANCEMENT]  
Add Active option to VOIP->SIP Setting page.

**Modifications in V 3.40(MI.0)b1 | 06/04/2004**

1. Create this project for AOL version.

## Annex A CI Command List

Command Class List Table		
<a href="#">System Related Command</a>	<a href="#">Exit Command</a>	<a href="#">Ethernet Related Command</a>
<a href="#">WAN Related Command</a>	<a href="#">WLAN Related Command</a>	<a href="#">IP Related Command</a>
<a href="#">IPSec Related Command</a>	<a href="#">PPP Related Command</a>	<a href="#">Bridge Related Command</a>
<a href="#">Radius Related Command</a>	<a href="#">8021x Related Command</a>	<a href="#">Firewall Related Command</a>
<a href="#">Configuration Related Command</a>	<a href="#">SMT Related Command</a>	

### System Related Command

[Home](#)

Command				Description
sys				
	adjtime			retrive date and time from Internet
	cbuf			
		display	[a f u]	display cbuf a: all f: free u: used
		cnt		cbuf static
			display	display cbuf static
			clear	clear cbuf static
	baud		<1..5>	change console speed
	callhist			
		display		display call history
		remove	<index>	remove entry from call history
	clear			clear the counters in GUI status menu
	countrycode		[countrycode]	set country code
	date		[year month date]	set/display date
	domainname			display domain name
	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			
		display		display function id list
	firmware			display ISDN firmware type
	hostname		[hostname]	display system hostname
	iface			

		disp	[#]	display iface list
	isr		[all used free]	display interrupt service routine
	interrupt			display interrupt status
	log			
		category		
			access [0:none/1:log]	record the access control logs
			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
		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
	trcdisp			monitor packets
	trclog			
		switch	[on off]	set system trace log
		online	[on off]	set on/off trace log online
		level	[level]	set trace level of trace log #:1-10
		type	<bitmap>	set trace type of trace log
		disp		display trace log
		clear		clear trace
		call		display call event
		encapmask	[mask]	set/display tracelog encapsulation mask
	trcpacket			
		create	<entry> <size>	create packet trace buffer
		destroy		packet trace related commands
		channel	<name> [none incoming outgoing bothway]	<channel name>=enet0,sdsl00, fr0 set packet trace direction for a given channel
		string		enable smt trace log
		switch	[on off]	turn on/off the packet trace
		disp		display packet trace

		udp		send packet trace to other system
			switch [on/off]	set tracepacket upd switch
			addr <addr>	send trace packet to remote udp address
			port <port>	set tracepacket udp port
		parse	[[start_idx], end_idx]	parse packet content
		brief		display packet content briefly
	version			display RAS code and driver version
	view		<filename>	view a text file
	wdog			
		switch	[on/off]	set on/off wdog
		cnt	[value]	display watchdog counts value: 0-34463
	romreset			restore default romfile
	server			
		access	<telnet ftp web icmp snmp dns> <value>	set server access type
		load		load server information
		disp		display server information
		port	<telnet ftp web snmp> <port>	set server port
		save		save server information
		secureip	<telnet ftp web icmp snmp dns> <ip>	set server secure ip addr
	spt			
		dump		dump spt raw data
			root	dump spt root data
			rn	dump spt remote node data
			user	dump spt user data
			slot	dump spt slot data
		save		save spt data
		size		display spt record size
		clear		clear spt data
	cmgr			
		trace		
			disp <ch-name>	show the connection trace of this channel
			clear <ch-name>	clear the connection trace of this channel
		cnt	<ch-name>	show channel connection related counter
	socket			display system socket information
	filter			
		clear		clear filter statistic counter
		disp		display filter statistic counters
		sw	[on/off]	set filter status switch
		set	<set>	display filter rule
		netbios		
			disp	display netbios filter status
			config <0:LAN to WAN, 1:WAN to LAN, 2:LAN to DMZ, 3:IPSec passthrough, 4:Trigger Dial> <on/off>	config netbios filter
	ddns			
		debug	<level>	enable/disable ddns service
		display	<iface name>	display ddns information
		restart	<iface name>	restart ddns
		logout	<iface name>	logout ddns
	cpu			
		display		display CPU utilization

## Exit Command

[Home](#)

Command				Description
exit				exit smt menu

## Ethernet Related Command

[Home](#)

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

## WAN Related Command

[Home](#)

Command				Description
wan	adsl	bert		ADSL ber
		chandata		ADSL channel data, line rate
		close		Close ADSL line
		coding		ADSL standard current
		ctrlleint		ADSL CTRLLE response command
		defbitmap		ADSL defect bitmap status
		dyinggasp		Send ADSL dyinggasp
		fwav		Test the ADSL F/W available ping
		fwdl		Download modem code, but must reset first
		linedata		
			near	Show ADSL near end noise margin
			far	Show ADSL far end noise margin

		open		Open ADSL line
		opencmd		Open ADSL line with specific standard
		opmode		Show the operational mode
		perfdata		Show performance information,CRC,FEC, error seconds..
		rdata	[start] [length]	Read DSP CTRL registers 512 bytes
		reset		Reset ADSL modem, and must reload the modem code again
		selftest		
			long	ADSL long loop test
			short	ADSL short loop test
		status		ADSL status (ex: up, down or wait for init)
		version		ADSL version information
		vendorid		ADSL vendor information
		utopia		Show ADSL utopia information
		cellcnt		Show ADSL cell counter
		display		
			shutdown	Show the counter of rate adaptive mechanism happening
			rateup	Show real status that rate adaptive mechanism happened
		rateadap	[on/off]	Turn on/off rate adaptive mechanism
		dumpcondition	[on/off]	Turn on/off online debug information of rate adaptive mechanism
		sampletime	[mins]	Tune the sample time of rate adaptive mechanism
		noisegt	[dB]	if noise margin is 3db greater than before, and rate is worse than before, then system will do “L1 shutdown RA3”, default is 3db
		noisemargin	[dB]	if noise margin is greater than this value, and rate is worse than before, then system will do “L1 shutdown RA3”, default is 8db
		persisttime	[time]	when the adaptive condition is matched system will continue to monitor the time period “persisttime” before doing “L1 shutdown RA3”, default is 30 seconds
		timeinterval	[mins]	when “L1 shutdown RA3” is done twice, and still can’t reach the max rate which system recorded, it will delay a time period that the period base time is “timeinterval” before starting again. The time-based default is 2 hrs
		defectcheck	[on/off]	Turn on/off detect table checking, default is on
		txgain	[value]	Set the CTRL register (0xc3), the value is from 0xfa to 0x06
		targetnoise	[value]	Set the CTRL register (0xc4), the value is from 0xfa to 0x06
		maxtonelimit	[value]	Set the CTRL register (0xc5), the value is from 0xfa to 0x06
		rxgain	[value]	Set the CTRL register (0xc6), the value is from 0xfa to 0x06
		txoutputpwr	[value]	Set the CTRL register (0xc7), the value is from 0xfa to 0x06
		rxoutputpwr	[value]	Set the CTRL register (0xc8), the value is from 0xfa to 0x06
		maxoutputpwr	[value]	Set the CTRL register (0xc9), the value is from

				0xfa to 0x06
		errorsecond		
			sendes	Send current error second information immediately
		dygasprecover		
		dygasprecover	level [value]	By default is 100, after receiving 100 dying gasp system will reboot
		dygasprecover	active [on/off]	Turn on/off this mechanism
		rsploss	[1 0]	Turn on means to response signal loss of CTRL-E immediately, default is off
	atm	test	[fix rand period oam loopback]	Generate ATM traffic
	hwsar	disp		Display hwsar packets incoming/outgoing information
		clear		Clear hwsar packets information

## WLAN Related Command

[Home](#)

Command				Description
Wlan				
	active	[on/off]	[0 1]	Turn on/off wireless lan
	association			Show association list
	load			Load WLAN configuration into buffer.
	Display			Display WLAN configuration data.
	chid			Configure channel ID
	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.
	filter			
		[incoming   outgoing]	<generic>[set#1][set#2][set#3][set#4]	To set generic filter for wireless channel

## IP Related Command

[Home](#)

Command				Description
ip				
	address		[addr]	display host ip address
	loopbackaddr		<IP1> [IP2]	Set loopback address.
	alias		<iface>	alias iface
	aliasdis		<0 1>	disable alias
	arp			



		status	<iface>	display ip arp status
		add	<hostid> ether <ether addr>	add arp information
		resolve	<hostid>	resolve ip-addr
		drop	<hostid> [hardware]	drop arp
		flush		flush arp table
		publish		add proxy arp
	dhcp		<iface>	
		client		
			release	release DHCP client IP
			renew	renew DHCP client IP
		mode	<server relay none client>	set dhcp mode
		relay	server <serverIP>	set dhcp relay server ip-addr
		reset		reset dhcp table
		server		
			probecount <num>	set dhcp probe count
			dnsserver <IP1> [IP2] [IP3]	set dns server ip-addr
			winsserver <winsIP1> [<winsIP2>]	set wins server ip-addr
			gateway <gatewayIP>	set gateway
			hostname <hostname>	set hostname
			initialize	fills in DHCP parameters and initializes (for PWC purposes)
			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
	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
	samenet		<iface1> [<iface2>]	display the ifaces that in the same net
	uninet		<iface>	set the iface to uninnet

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

			edit forwardip [ip]	set nat server server ip
			edit protocol [protocol id]	set nat server protocol
		service		
			irc [on off]	turn on/off irc flag
		resetport		reset all nat server table entries
		incikeport	[on off]	turn on/off increase ike port flag

## IPSec Related Command

[Home](#)

Command				Description
ipsec				
	debug	<1 0>		turn on/off trace for IPsec debug information
	route	lan	<on off>	After a packet is IPsec processed and will be sent to LAN side, this switch is to control if this packet can be applied IPsec again.
				Remark: Command available since 3.50(WA.3)
		wan	<on off>	After a packet is IPsec processed and will be sent to WAN side, this switch is to control if this packet can be applied IPsec again.
				Remark: Command available since 3.50(WA.3)
	show_runtime	sa		display runtime phase 1 and phase 2 SA information
		spd		When a dynamic rule accepts a request and a tunnel is established, a runtime SPD is created according to peer local IP address. This command is to show these runtime SPD.
	switch	<on off>		As long as there exists one active IPsec rule, all packets will run into IPsec process to check SPD. This switch is to control if a packet should do this. If it is turned on, even there exists active IPsec rules, packets will not run IPsec process.
	timer	chk_my_ip	<1~3600>	- Adjust timer to check if WAN IP in menu is changed
				- Interval is in seconds
				- Default is 10 seconds
				- 0 is not a valid value
		chk_conn.	<0~255>	- Adjust auto-timer to check if any IPsec connection has no traffic for certain period. If yes, system will disconnect it.
				- Interval is in minutes
				- Default is 2 minutes
				- 0 means never timeout
		update_peer	<0~255>	- Adjust auto-timer to update IPsec rules which use domain name as the secure gateway IP.
				- Interval is in minutes
				- Default is 30 minutes
				- 0 means never update
				Remark: Command available since 3.50(WA.3)
	updatePeerIp			Force system to update IPsec rules which use domain name as the secure gateway IP right away.
				Remark: Command available since 3.50(WA.3)
	dial	<rule #>		Initiate IPsec rule <#> from ZyWALL box
				Remark: Command available since 3.50(WA.3)

	display	<rule #>		Display IPSec rule #
	config	netbios	active <on off>	Set netbios active flag
			group <group index1, group index2...>	Set netbios group
		name	<string>	Set rule name
		active	<Yes   No>	Set active or not
		keepAlive	<Yes  No>	Set keep alive or not
		lcIdType	<0:IP   1:DNS   2:Email>	Set local ID type
		lcIdContent	<string>	Set local ID content
		myIpAddr	<IP address>	Set my IP address
		peerIdType	<0:IP   1:DNS   2:Email>	Set peer ID type
		peerIdContent	<string>	Set peer ID content
		secureGwAddr	<IP address   Domain name>	Set secure gateway address or domain name
		protocol	<1:ICMP   6:TCP   17:UDP>	Set protocol
		lcAddrType	<0:single   1:range   2:subnet>	Set local address type
		lcAddrStart	<IP>	Set local start address
		lcAddrEndMask	<IP>	Set local end address or mask
		lcPortStart	<port>	Set local start port
		lcPortEnd	<port>	Set local end port
		rmAddrType	<0:single   1:range   2:subnet>	Set remote address type
		rmAddrStart	<IP>	Set remote start address
		rmAddrEndMask	<IP>	Set remote end address or mask
		rmPortStart	<port>	Set remote start port
		rmPortEnd	<port>	Set remote end port
		antiReplay	<Yes   No>	Set anitreply or not
		keyManage	<0:IKE   1:Manual>	Set key manage
		ike	negotiationMode <0:Main   1:Aggressive>	Set negotiation mode in phase 1 in IKE
			preShareKey <string>	Set pre shared key in phase 1 in IKE
			p1EncryAlgo <0:DES   1:3DES>	Set encryption algorithm in phase 1 in IKE
			p1AuthAlgo <0:MD5   1:SHA1>	Set authentication algorithm in phase 1 in IKE
			p1SaLifeTime <seconds>	Set sa life time in phase 1 in IKE
			p1KeyGroup <0:DH1   1:DH2>	Set key group in phase 1 in IKE
			activeProtocol <0:AH   1:ESP>	Set active protocol in phase 2 in IKE
			p2EncryAlgo <0:Null   1:DES   2:3DES>	Set encryption algorithm in phase 2 in IKE
			p2AuthAlgo <0:MD5   1:SHA1>	Set authentication algorithm in phase 2 in IKE
			p2SaLifeTime <seconds>	Set sa life time in phase 2 in IKE
			encap <0:Tunnel   1:Transport>	set encapsulation in phase 2 in IKE
			pfs <0:None   1:DH1   2:DH2>	set pfs in phase 2 in IKE
		manual	activeProtocol <0:AH   1:ESP>	Set active protocol in manual
		manual ah	encap <0:Tunnel   1:Transport>	Set encapsulation in ah in manual
			spi <decimal>	Set spi in ah in manual
			authAlgo <0:MD5   1:SHA1>	Set authentication algorithm in ah in manual
			authKey <string>	Set authentication key in ah in manual
		manual esp	encap <0:Tunnel   1:Transport>	Set encapsulation in esp in manual
			spi <decimal>	Set spi in esp in manual
			encryAlgo <0:Null   1:DES   2:3DES>	Set encryption algorithm in esp in manual
			encryKey <string>	Set encryption key in esp in manual
			authAlgo <0:MD5   1:SHA1>	Set authentication algorithm in esp in manual
			authKey < string>	Set authentication key in esp in manual

## 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 promiscious 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		Activate or deactivate the saved firewall settings

		<yes no>			
retrieve	firewall				Retrieve current saved firewall settings
save	firewall				Save the current firewall settings
display	firewall				Displays all the firewall settings
		set <set#>			Display current entries of a set configuration; including timeout values, name, default-permit, and number of rules in the set.
		set <set#>	rule <rule#>		Display current entries of a rule in a set.
		attack			Display all the attack alert settings in PNC
		e-mail			Display all the e-mail settings in PNC
		?			Display all the available sub commands
		e-mail	mail-server <mail server IP>		Edit the mail server IP to send the alert
			return-addr <e-mail address>		Edit the mail address for returning an email alert
			e-mail-to <e-mail address>		Edit the mail address to send the alert
			policy <full   hourly  daily   weekly>		Edit email schedule when log is full or per hour, day, week.
			day <sunday   monday   tuesday   wednesday   thursday   friday   saturday>		Edit the day to send the log when the email policy is set to Weekly
			hour <0~23>		Edit the hour to send the log when the email policy is set to daily or weekly
			minute <0~59>		Edit the minute to send to log when the email policy is set to daily or weekly
			Subject <mail subject>		Edit the email subject
		attack	send-alert <yes no>		Activate or deactivate the firewall DoS attacks notification emails
			block <yes no>		Yes: Block the traffic when exceeds the tcp-max-incomplete threshold
					No: Delete the oldest half-open session when exceeds the tcp-max-incomplete threshold
			block-minute <0~255>		Only valid when sets 'Block' to yes. The unit is minute
			minute-high <0~255>		The threshold to start to delete the old half-opened sessions to minute-low
			minute-low <0~255>		The threshold to stop deleting the old half-opened session
			max-incomplete- high <0~255>		The threshold to start to delete the old half-opened sessions to max-incomplete-low
			max-incomplete- low <0~255>		The threshold to stop deleting the half-opened session
			tcp-max-incompl ete <0~255>		The threshold to start executing the block field
		set <set#>	name <desired name>		Edit the name for a set
			default-permit <forward block>		Edit whether a packet is dropped or allowed when it does not match the default set
			icmp-timeout <seconds>		Edit the timeout for an idle ICMP session before it is terminated

			udp-idle-timeout <seconds>		Edit the timeout for an idle UDP session before it is terminated
			connection-timeout <seconds>		Edit the wait time for the SYN TCP sessions before it is terminated
			fin-wait-timeout <seconds>		Edit the wait time for FIN in concluding a TCP session before it is terminated
			tcp-idle-timeout <seconds>		Edit the timeout for an idle TCP session before it is terminated
			pnc <yes/no>		PNC is allowed when 'yes' is set even there is a rule to block PNC
			log <yes/no>		Switch on/off sending the log for matching the default permit
			rule <rule#>	permit <forward block>	Edit whether a packet is dropped or allowed when it matches this rule
				active <yes/no>	Edit whether a rule is enabled or not
				protocol <0~255>	Edit the protocol number for a rule. 1=ICMP, 6=TCP, 17=UDP...
				log <none match not-match both>	Sending a log for a rule when the packet none matches not match both the rule
				alert <yes/no>	Activate or deactivate the notification when a DoS attack occurs or there is a violation of any alert settings. In case of such instances, the function will send an email to the SMTP destination address and log an alert.
				srcaddr-single <ip address>	Select and edit a source address of a packet which complies to this rule
				srcaddr-subnet <ip address> <subnet mask>	Select and edit a source address and subnet mask if a packet which complies to this rule.
				srcaddr-range <start ip address> <end ip address>	Select and edit a source address range of a packet which complies to this rule.
				destaddr-single <ip address>	Select and edit a destination address of a packet which complies to this rule
				destaddr-subnet <ip address> <subnet mask>	Select and edit a destination address and subnet mask if a packet which complies to this rule.
				destaddr-range <start ip address> <end ip address>	Select and edit a destination address range of a packet which complies to this rule.
				tcp destport-single <port#>	Select and edit the destination port of a packet which comply to this rule. For non-consecutive port numbers, the user may repeat this command line to enter the multiple port numbers.
				tcp destport-range <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] 1: Select main LAN Interface 2: Select IP Alias 1 3: Select IP Alias 2	Select a LAN interface to edit	Menu 3.2
	lan active [on off]	Turn on or off on IP Alias Interface	Menu 3.2.1
	lan ipaddr [address] [subnet mask]	Set LAN IP address and subnet mask Example: > lan ipaddr 192.168.1.1 255.255.255.0	Menu 3.2
	lan rip [none in out both] [rip1 rip2b rip2m]	Set LAN IP RIP mode and RIP version, if you choose none in the first parameter, the second parameter is also necessary	Menu 3.2
	lan multicast [none igmpv1 igmpv2]	Set LAN IP multicast mode	Menu 3.2
	lan filter [incoming outgoing] [tcpip generic] [set#1] [set#2] [set#3] [set#4]	Set LAN filter to be incoming/outgoing or protocol /device and the filter set could be 1-12, 0 means empty Example: Lan filter incoming tcpip 1 0 0 0	Menu 3.1
	lan dhcp mode [server relay none]	Set DHCP mode to be “server”, “relay”, “none”	Menu 3.2
	lan dhcp server dnsserver [pri dns] [sec dns]	Set primary and secondary LAN DNS server	Menu 3.2
	lan dhcp server pool [start-address] [num]	Set DHCP start address and pool size	Menu 3.2
	lan dhcp server gateway [IP address]	Set DHCP gateway	Menu 3.2
	lan dhcp server netmask [subnet mask]	Set DHCP subnet mask	Menu 3.2
	lan dhcp server leasetime [second]	Set DHCP lease time	Menu 3.2
	lan dhcp server renewalttime [second]	Set DHCP renew time	Menu 3.2
	lan dhcp server rebindtime [second]	Set DHCP rebind time	Menu 3.2
	lan dhcp relay server [IP address]	Set IP address of DHCP relay server	Menu 3.2
	lan display	Display LAN or IP alias parameters	Display Menu 3
	lan clear	Clear the Working Buffer	
	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 pppoe enet]	Set the wan protocol	Menu 11.1
	wan node mux [vc llc]	Set the wan multiplex	Menu 11.1
	wan node ppp authen [chap pap both]	Set PPP authentication type	Menu 11.1
	wan node ppp username [name]	Set PPP username	Menu 11.1
	wan node ppp password [password]	Set PPP password	Menu 11.1
	wan node service [name]	Set PPPoE service name	Menu 11.1
	wan node bridge [on off]	Set the wan bridge mode	Menu 11.1
	wan node routeip [on off]	Set the wan IP routing mode	Menu 11.1
	wan node callsch [set1#][set2#][set3#][set4#]	Set call schedule set, set number 0 means empty	Menu 11.1
	wan node nailedup [on off]	Set nailed up connection on/off	Menu 11.1
	wan node vpi [num]	Set the wan vpi. Range : 0~255	Menu 11.6
	wan node vci [num]	Set the wan vci. Range : 32~65535	Menu 11.6
	wan node qos[ubr cbr]	Set the wan QOS type to be UBR or CBR	Menu 11.6
	wan node pcr [num]	Set the wan PCR value	Menu 11.6
	wan node scr [num]	Set the wan SCR value	Menu 11.6
	wan node mbs [num]	Set the wan MBS value	Menu 11.6
	wan node wanip [static dynamic] [address]	Set the wan IP address	Menu 11.3
	wan node remoteip [address] [subnet mask]	Set the remote gateway IP address and subnet mask	Menu 11.3
	wan node nat [off   sua   full] [address mapping #]	Set type wan NAT mode to be off or SUA or Full feature	Menu 11.3
	wan node rip [none in out both] [rip1 rip2b rip2m]	Set the wan RIP mode and RIP version	Menu 11.3
	wan node multicast [none igmpv1 igmpv2]	Set the wan IP multicast mode	Menu 11.3
	wan node filter [incoming outgoing] [tcpip generic] [set #1] [set #2] [set #3] [set #4]	Set WAN filter, incoming or outgoing can be specified, and filter set can be 1-12, value 0 means empty	Menu 11.5
	wan node save	Save the related parameters of WAN node	
	wan node display	Display WAN profile configuration in buffer	Display Menu 11
	ip route addrom index [Rule #]	Select a Static Route index 1-16 to edit	Menu 12.1
	ip route addrom name [Name]	Set Rule Name	Menu 12.1
	ip route addrom active [on off]	Set Active or Inactive Flag	Menu 12.1
	ip route addrom set [dest address/ mask bits] [gateway] [metric]	Set IP static route Example: > ip ro addrom set 192.168.1.33/24 192.168.1.1 2	Menu 12.1
	ip route addrom private [yes no]	Set Private Flag	Menu 12.1
	ip route addrom disp	Display both working buffer and Editing Entry	Menu 12.1
	ip route addrom freememory	Discard all changes	Menu 12.1
	ip route addrom save	Save edited settings	Menu 12.1
	ip route addrom clear [Index #]	Clear Static Route Index	Menu 12.1
	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,	Menu 15.1

		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	
	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 srcport [port#] [compare type = none equal not equal less greater]	Set the source port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater) )	Menu 21 filter sets
	sys filter set tcpEstab [yes/no]	Set TCP establish option	
	sys filter set more [yes/no]	Set the more option to yes/no	Menu 21 filter sets
	sys filter set log [type 0-3= none   match  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 12,3 will be 38400,19200, 9600, 57600, 115200 bps [save immediately]	Menu 24.2.2 console speed
	sys server load	Load setting before editing	
	sys server access [ftp telnet web] [access type]	Set the server access type to be 0: ALL, 1: None, 2:LAN only, 3:WAN only	Menu 24.11 remote management
	sys server port [ftp telnet web] [port]	Set the server port number	Menu 24.11 remote management
	sys server secureip[ftp telnet web] [address]	Set the server security IP address	Menu 24.11 remote management
	sys server disp [1]	Display server settings, [1] means display buffer	
	sys server save	Save the embedded server (remote management) parameters	
	wlan load	Load system parameters into working buffer	Menu 3.5 for Wireless LAN
	wlan disp	Display the working buffer	Menu 3.5 for Wireless LAN
	wlan essid [name]	Set the wireless ESSID	Menu 3.5 for wireless LAN
	wlan hideessid [on off]	Set to hide ESSID or not	Menu 3.5 for wireless LAN
	wlan chid [#=1~13]	Set channel ID 1-13	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	

## **Internal Information:**

### **Known Issues:**

1. G100+Funk are un-workable in WPA + WEP situation. This is a common bug for all wireless product.
2. Change RTS/CTS =100, Fragment=256, enable WPA/TKIP. Use FTP client to do large file download, client will re-authentication and loss link every 5~6 minutes.
3. VoIP call sounds interrupt time by time when wireless is enabled in channel 6.
4. PPPoA online configuration failed.
5. IP Alias with ICMP can not work.
6. Fax will fail if the CODEC is not G.711.
7. Whit Alcatel test AX4000 have cell loss.
8. The E-mule test would cause system exception.
9. SPR no: 50808263  
Set ACL rule from menu 15.1.1 , the device like hang  
Step1: Edit ACL rule in menu 15.1.1  
Step2: If we don't set server  
Step3: It have remind message " Saving to Rom , Please wait , can not find server table"  
Step4: Always keep in this status  
Step5: The DUT like hang , if your press "Enter" key many time , the DUT also like hang.
10. SPR no: 050809298  
If we do ping function from DOS mode then change Encapsulation to PPPoA or PPPoE that you can see the connection can't connect
11. SPR no: 050818780  
Disable AOL Phone in wizard and active it in advance setting will cause the second voice PPPoE can't be dial up.
12. SPR no: 050818783  
Sometimes there is no RTP (voice) can be heard, when we off-hook phone during phone is ringing.
13. SPR no: 050818735  
Change Encapsulation on the page of wizard setup and the page of wan advanced setup, the LAN PC can't connect internet.
14. SPR no: 050819815  
On the Wizard setup, to change NAT to None or Full feature can't success. In the NAT of advance setting show SUA ONLY.
15. SPR no: 050819816  
"Schedule" function can't work on PPPoA link.
16. SPR no: 050819817  
When SUA Server work, the disable anti Probing on WAN can't work.
17. SPR no: 050819849  
If we do not turn on the UPNP, then the video and audio of MSN function can not work.
18. SPR no: 050819872  
Immediate dial doesn't work.

19. SPR no: 050819873

DUT randomly reboot daily.DUT occurs exception randomly (3~4 times/day)

## **Modifications:**

### **Modifications in V 3.40(MI.1)b7 | 08/23/2005**

NONE

### **Modifications in V 3.40(MI.1)b6 | 08/22/2005**

NONE

### **Modifications in V 3.40(MI.1)b5 | 08/16/2005**

1. [BUG FIX][ 050804188]

Symptom: The 1483 mode and PPPoA static IP mode can't be save after run wizard function (2 remote node issue)

Step1: Run Wizard setup from eWC

Step2: Change ISP setting to 1483 mode of PPPoA static IP mode

Step3: They can't be save and display " Duplicate IP LAN addr" error message.

### **Modifications in V 3.40(MI.1)b4 | 08/10/2005**

2. [BUG FIX][ 050809298]

Symptom: When we ping router -l 0 from DOS mode , the console will reply icmp send error debug message.

3. [BUG FIX][ 050809273]

Symptom: Register SIP2 account, SIP1 account will be unregister.

1. Click "APPLY" in SIP2 account on GUI.

2. SIP1 account will be unregistered.

4. [BUG FIX][ 050809272]

Symptom: Off-hook phone after DUT boot up, DUT play out "SI~SI" sound.

1. Boot up DUT.

2. Off-hook phone, we can hear "SI~SI" sound.

3. The symptom only happen after DUT boot up.

5. [BUG FIX][ 050809271]

Symptom: DUT occur exception when register to non-AOL sip account.

1. Register to PQA LAB SIP server.

2. DUT occur exception after reboot DUT.

6. [BUG FIX][ 050804188]

Symptom: The 1483 mode and PPPoA static IP mode can't be save after run wizard function (2 remote node issue)

Step1: Run Wizard setup from eWC

Step2: Change ISP setting to 1483 mode of PPPoA static IP mode



Step3: They can't be save and display " Duplicate IP LAN addr" error message.

7. [BUG FIX][ KA]

Symptom: Data/Time occur reset when Calls on PSTN-Fallback line .

Calls on PSTN-Fallback line should have no effect on Date & Time settings

**Modifications in V 3.40(MI.1)b3 | 08/03/2005**

none

**Modifications in V 3.40(MI.1)b2 | 08/03/2005**

1. [BUG FIX][ 050317928 ]

Symptom: Continuous VoIP call make DUT occur memory leak.

After make 50 VoIP call, DUT occur memory leak and occur exception randomly..

2. [BUG FIX][ 050317927]

Symptom: Long Term VoIP call failed.

DUT occur exception randomly in PQA LAB environment.

Please reference to exception log..

**Modifications in V 3.40(MI.1)b1 | 05/17/2005**

3. [BUG FIX][ 050317917]

Symptom: Default WAN-to-WAN firewall rule didn't show "any" wording.

The default show "empty" from and to destination.

4. [BUG FIX] [050317922]

Symptom: If the Lifeline (Relay to PSTN) Number is similar callee site SIP Number. when user dial callee site SIP Number, it will call PSTN. It is the same too when user use speed dial to dial callee site.

Condition: 1. Lifeline Number: 3229.

2. callee site SIP Number:32291.

3. Speed dial : #01:32291@192.168.11.126

4. use Speed dial #1 , IAD make call to lifeline.

5. [BUG FIX] [050317923]

Symptom: Dial \*11#1, phone will hang up.

6. [BUG FIX] [050317928]

Symptom: Continuous VoIP call make DUT occur memory leak.After make 50 VoIP call, DUT occur memory leak and occur exception randomly.

7. [BUG FIX] [050317927]

Symptom: long term VoIP call failed.

8. [BUG FIX] [050317921]  
Symptom: When users do wireless WPA, 802.1X and WPA-PSk, sometimes the DUT occurred exception.
9. [BUG FIX] [050407140]  
Symptom: Change SIP1/SIP2/LifeLine Phone ring tone sound on eWc and APPLY. The default Country code setting will changed from " Germany" to "USA"..
10. [BUG FIX] [050407139]  
Symptom: in Firewall setting page on eWc, switch from WAN-to-WAN to WAN-to-LAN serveral times,the page will change to rule edit page.
11. [BUG FIX] [050407913]  
Symptom: By using Multiple PPPoE function, SIP/RTP/RTCP voice traffic will go to wrong route..  
Condition:
  1. AOL account: RTCP -> Data connection. SIP/RTP -> Voice connection.
  2. Non-AOL account: RX -> Voice connection TX -> Data connection.
  3. Data will go through Voice PPPoE connection. Due to Voice PPPoE has SUA=None setting, data send out with private LAN IP.
12. [BUG FIX] [050407916]  
Symptom: Device reply SNMP packet too slowly. After sending SNMP packet to device, user can't enter DUT's console temporarily.
13. [BUG FIX] [050407918]  
Symptom: SNMP Trap packet still show "public" community even the community string was changed in SMT 22.
14. [BUG FIX] [050407925]  
Symptom: When setup "Remote Management" page, logout icon will be changed english.
15. [BUG FIX] [050317919]  
Symptom: PPPoE + Nail up + ICMP WAN backup function failed.

**Modifications in V 3.40(MI.0)b14 | 03/31/2005**

None

## **Modifications in V 3.40(MI.0)b13 | 03/04/2005**

1. [BUG FIXED]  
Symptom: No DHCP anymore when router switch from routing to bridge and back to routing.  
Condition: 1. Setup the IAD 2602 in routing modus and made sure all function are working. After that setup the iad to modem (bridge) modem. Check also that modem mode is working (dial in via AOL 9.0 over dsl for example). Switch back from modem (bridge mode) to Routing mode and restart device and pc.
2. [BUG FIXED]  
Symptom: AOL 9.0 Live Video Chat can not work. (The PC need use winXP)
3. [BUG FIXED]  
Symptom: Cut off text when enter no user name and/or pw in the AOL wizard setup.
4. [BUG FIXED]  
Symptom: After pressing "\*\*\*" there is a dialtone plyed form the AOL server. While this tone is present, no DTMF tone can be detected.
5. [ENHANCEMENT]  
Support new Zyxel MAC OUI.
6. [ENHANCEMENT]  
Remove CI command "ATFE" and "ATDC".
7. [ENHANCEMENT]  
The DHCP is turn on when device is running as dsl modem (bridge mode) for AOL request

## **Modifications in V 3.40(MI.0)b11 | 01/14/2005**

1. [BUG FIXED]  
Symptom: To run the wirzard for other ISP and to test the diagnose, it would pops up the logged out message box.  
Condition: If you run the wirzard for other ISP than AOL during the countdown there pops up the message box that the user is logged off. But the user still can work.
2. [ENHANCEMENT]  
Support voip help page in German language

## **Modifications in V 3.40(MI.0)b10 | 01/03/2005**

### **1. [BUG FIXED]**

Symptom: ESSID "wireless" is hidden after running "AOL Wizard Setup"

Condition: 1. Reset device to factory default then to Run the "AOL Wizard Setup".

2. After that go to the web gui -> Wireless LAN -> Wireless.

3. The ESSID have been to change to hidden.

### **2. [ENHANCEMENT]**

Symptom: Part of the test summary page made no sense when AOL Phone is not used.

Condition: 1. Run the "AOL Setup Wizard" Setup the AOL account and klick the option "does not use aol phone".

2. In the last summary page you get the testresult "Verbindung zum AOLPhone Server" ungültig.

### **3. [BUG FIXED]**

Symptom: AOL phone not useable with other ISP than AOL.

Condition: made a setup with the wirzead for ISP other than AOL. After that they set manually the settings for SIP on the VoIP settings on the webinterface.

After that they found that the IAD could not resolve the DNS name for the aolphone.aol.de if running with one PPPoE session. If they put in there the IP instead of the name everything was fine.

## **Modifications in V 3.40(MI.0)b9 | 12/06/2004**

### **1. [BUG FIXED]**

Symptom: TFTP Provisioning does not work

Condition: 1. reset Router to Factory defaults- Login - start AOL Wizard.

2. No TFTP Request is send. ( On Server or Firewall Request).

### **2. [ENHANCEMENT]**

Add AOL name and password check.

### **3. [ENHANCEMENT]**

Add passwords input twice to double check.

### **4. [ENHANCEMENT]**

If there is no way to setup a PPPoE session with the prefix "aolp/" for VoIP then use the

PPPoE session that is used for the data channel.

5. [ENHANCEMENT]

If 2nd SIP channel configured with an non AOL account then use data PPPoE channel

6. [BUG FIXED]

Symptom: When user change port number in menu 24.11, the web redirect function cannot work properly.

Condition: The port 8080 has been reserved for internal use. So, the SMT menu 24.11 can not to save when key-in 8080 port.

7. [BUG FIXED]

Symptom: Interop with some of the server (telephonica, sylantra...and etc.) Call would fail due to non-proxy checking mechanism.

Condition: Move the non-proxy checking temporarily.

**Modifications in V 3.40(MI.0)b8 | 10/01/2004**

1. [BUG FIXED]

Symptom: When delete smt 4 the mode change to Multi mode (default is G.DMT mode)

Condition: 1. Set operation mode as G.DMT.  
2. Delete smt 4.  
3. In smt 24.2.1 it will show Multi mode.

2. [BUG FIXED]

Symptom: Users hear echo during conversation.

Condition: 1. Lower down the SLIC volume.  
2. Adjust SLIC impendence.  
3. Modify DSP EC settings.

**Modifications in V 3.40(MI.0)b7 | 09/13/2004**

1. [ENHANCEMENT]

Add MULTIPLE\_PPPOE feature

2. [ENHANCEMENT]

Support AOL 9.0 video chat

3. [ENHANCEMENT]

Support 24 hour PPPoE auto-disconnect.

4. [ENHANCEMENT]

Removed VC auto-hunt feature (Include web-redirect, anylp, zeroconfiguration

and vc-hunt)

### **Modifications in V 3.40(MI.0)b5 | 09/02/2004**

1. [BUG FIXED]  
Symptom: Use G.711A to make a call on the same device from SIP1 to SIP2 causes exception.  
Condition: 1. Set both SIP1 and SIP2 profile to use G.711A.  
2. Make a call from SIP1 to SIP2.  
3. Answer the Call.
2. [BUG FIXED]  
Symptom: CERT test would cause system exception.
3. [ENHANCEMENT]  
Add Auto-Provision feature.
4. [ENHANCEMENT]  
Update modem code to 1.1.0.8

### **Modifications in V 3.40(MI.0)b4 | 08/16/2004**

1. [BUG FIXED]  
Symptom: Voice quality is too low.  
Condition: G.711 MOS: 3.1, G.729 MOS: 2.76
2. [BUG FIXED]  
Symptom : TI WLAN autorestart workaround will cause memory full.
3. [BUG FIXED]  
Symptom: Remove SMT4 ISP node, and doing VC auto-hunt, system will get exception.
4. [BUG FIXED]  
Symptom: G.729 default Insertation loss is too high and can't control by Volume Control function. Default Speaking/Listening Volume is 0.  
Condition: 1. Measured -12 dB in Radcom.  
2. Set to G.711 and the result is +2.8db.  
The TX/RX Gain test result is different on G.711 and G.729 even the Volume setting is same.
5. [BUG FIXED]  
Symptom: Wireless RTS/CTS set as 0~3 doesn't work

6. [BUG FIXED]  
Symptom: IAD carry incorrect ptime in SDP payload.  
Condition: Set VIF size other than 20ms since the default ptime is set to 20ms.
7. [BUG FIXED]  
Symptom: IAD should play out DTMF tone after receive "SIP INFO" packet.
8. [BUG FIXED]  
Symptom : IAD's GOS(grade of loss) is 19.23%. 273 call success in 338 VoIP call. Most of the fail reason is no dial tone or busy tone.
9. [ENHANCEMENT]  
Use FindIPfromDNSEntry() function in checkWanReady() to let DNS query not so frequently (originally if domain name is filled in server address field then DNS query will be generated every 5 seconds) . Lookup DNS query table firstly, if ttl expired or domain name not found then do original DNS query action.
10. [ENHANCEMENT]  
Support RFC2833 Like SIP INFO
11. [ENHANCEMENT]  
When SAR resending OAM AIS, the original vpi/vci of original data channel could be changed and cause the subsequent packets to be discarded for the improper vpi/vci in ATM header
12. [ENHANCEMENT]  
Add Country code support
13. [ENHANCEMENT]  
Don't try to get destination address if there's no SDP in inviteTx
14. [ENHANCEMENT]  
Support PRACK (RFC 3262)
15. [ENHANCEMENT]  
update bootbase to version 1.09 to support VoIP can still make conversation through Lifeline even IAD booted up.

### **Modifications in V 3.40(MI.0)b3 | 07/12/2004**

1. [BUG FIXED]  
Symptom: Select G.711 in web can't adjust A\_law or U\_law.  
Condition: If select G.711 in web then A\_law or u\_law selection is adjusted by country code set by "Voice Config common countrycode" CI command.
2. [BUG FIXED]

Symptom: IAD show "VC5402 init error" in console when IAD was restarted during VoIP communication..

Condition: 1. IAD <--> LAN <--> IAD.

2. Initiate VoIP call

3. Restart IAD through eWC.

4. IAD sometimes generate noise sound when "VC5402 init error" shown.

5. IAD needs to be restarted again in order to recover.

3. [BUG FIXED]

Symptom: Voice quality is too low.

Condition: 1. G.711 MOS: 3.1

2. G.729 MOS: 2.76

4. [BUG FIXED]

Symptom: TI WLAN autorestart workaround will cause memory full.

Condition: It should use the same memory block when WLAN reset

5. [ENHANCEMENT]

Add zeroconfiguration, anyip, web-redirect and vc-auto hunt feature.

**Modifications in V 3.40(MI.0)b2 | 06/10/2004**

1. [BUG FIXED]

Symptom: It will cause exception when caller receive 302 move temporarily.

Condition: 1. Using ProLab or other SIP server to create a new agent account.

2. Setting this account to redirect callee.

3. caller to Make VoIP call to this new agent and it would cause system exception.

2. [ENHANCEMENT]

Support sending/receiving media change request feature.

3. [ENHANCEMENT]

Support Caller ID from Lifeline. (ETST standard, First Ring, FSK)

**Modifications in V 3.40(MI.0)b1 | 06/04/2004**

1. Create this project for AOL version.

**Manufactory Data in Bootbase**

ZyNOS Version	: V3.40(MI.1)D0   09/07/2005 15:10:57
Bootbase Version	: V1.09   07/29/2004 16:00:00
Vendor Name	: ZyXEL Communications Corp.
Product Model	: Prestige 2602HWL-67



ZyNOS Code Model	: P2602HWL-67
HTP Code Model	: HTP_P2602 V0.05
ZyNOS ROM address	: b0020000
System Type	: 7
MAC Address	: 001349000001
Default Country Code	: FF
Boot Module Debug Flag	: 01
RomFile Version	: 2B
RomFile Checksum	: f287
ZyNOS Checksum	: 2b90
Core Checksum	: 3e6d
SNMP MIB level & OID	: 060102030405060708091011121314151617181920
Main Feature Bits	: C0
Other Feature Bits	:
	9D 03 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
	00 00 00 00 00 00 00 00 00-01 41 13 00 00 00

Notes:

- Debug Flag should be 0 after production. In our default release will be 1. Because in the manufacture process will need it to set the MAC address.
- MAC address will be change by production process. Only the fist 3 octets will be correct. The last 3 octets will depend on the production process.
- Country code value will be change by production process. It will depend on the shipping country.

### **3. Default ROM File Value Setting**

- **Menu 1: General Setup**

```
Menu 1 - General Setup

System Name= ?
Location=
Contact Person's Name=
Domain Name=
Edit Dynamic DNS= No

Route IP= Yes
Bridge= No

Press ENTER to Confirm or ESC to Cancel:
```

- **Menu 2 - Wan Backup Setup**

```
Menu 2 - Wan Backup Setup

Check Mechanism = DSL Link
Check WAN IP Address1 = 0.0.0.0
Check WAN IP Address2 = 0.0.0.0
Check WAN IP Address3 = 0.0.0.0
  KeepAlive Fail Tolerance = 0
  Recovery Interval(sec) = 0
  ICMP Timeout(sec) = 0
  Traffic Redirect = No

Press ENTER to Confirm or ESC to Cancel:
```

- **Menu 2.1 - Advanced Dial Backup Setup**

```
Menu 2.1 - Traffic Redirect Setup

Active= No
Configuration:
  Backup Gateway IP Address= 0.0.0.0
  Metric= 15

Press ENTER to Confirm or ESC to Cancel:
```

- **Menu 3: LAN Setup**

```
Menu 3 - LAN Setup

1. LAN Port Filter Setup
2. TCP/IP and DHCP Setup

5. Wireless LAN Setup

Press ENTER to Confirm or ESC to Cancel:
```

- **Menu 3.1: LAN Port Filter Setup**

Menu 3.1 - LAN Port Filter Setup

Input Filter Sets:  
  protocol filters=  
  device filters=  
Output Filter Sets:  
  protocol filters=  
  device filters=

Press ENTER to Confirm or ESC to Cancel:

· Menu 3.2 TCP/IP and DHCP Setup

Menu 3.2 - TCP/IP and DHCP Ethernet Setup

DHCP Setup  
  DHCP= Server  
  Client IP Pool Starting Address= 192.168.1.33  
  Size of Client IP Pool= 32  
  Primary DNS Server= 0.0.0.0  
  Secondary DNS Server= 0.0.0.0  
  Remote DHCP Server= N/A  
TCP/IP Setup:  
  IP Address= 192.168.1.1  
  IP Subnet Mask= 255.255.255.0  
  RIP Direction= **None**  
  Version= **N/A**  
  Multicast= **None**  
  IP Policies=  
  Edit IP Alias= No

Press ENTER to Confirm or ESC to Cancel:

· Menu 3.5 Wireless LAN Setup

Menu 3.5- Wireless LAN Setup

ESSID= **Wireless**  
Hide ESSID= No  
Channel ID= **CH06 2437MHz**  
RTS Threshold= 2432  
Frag. Threshold= 2432  
WEP= Disable  
  Default Key= N/A  
  Key1= N/A  
  Key2= N/A  
  Key3= N/A  
  Key4= N/A  
Edit MAC Address Filter= No

Press ENTER to Confirm or ESC to Cancel:

· Menu 3.5.1 WLAN MAC Address Filter

```
Menu 3.5.1 - WLAN MAC Address Filter

Active= No
Filter Action= Allowed Association
-----
1= 00:00:00:00:00:00 13= 00:00:00:00:00:00 25= 00:00:00:00:00:00
2= 00:00:00:00:00:00 14= 00:00:00:00:00:00 26= 00:00:00:00:00:00
3= 00:00:00:00:00:00 15= 00:00:00:00:00:00 27= 00:00:00:00:00:00
4= 00:00:00:00:00:00 16= 00:00:00:00:00:00 28= 00:00:00:00:00:00
5= 00:00:00:00:00:00 17= 00:00:00:00:00:00 29= 00:00:00:00:00:00
6= 00:00:00:00:00:00 18= 00:00:00:00:00:00 30= 00:00:00:00:00:00
7= 00:00:00:00:00:00 19= 00:00:00:00:00:00 31= 00:00:00:00:00:00
8= 00:00:00:00:00:00 20= 00:00:00:00:00:00 32= 00:00:00:00:00:00
9= 00:00:00:00:00:00 21= 00:00:00:00:00:00
10= 00:00:00:00:00:00 22= 00:00:00:00:00:00
11= 00:00:00:00:00:00 23= 00:00:00:00:00:00
12= 00:00:00:00:00:00 24= 00:00:00:00:00:00
-----
Enter here to CONFIRM or ESC to CANCEL:
```

• **Menu 4 Internet Access Setup**

```
Menu 4 - Internet Access Setup

ISP's Name= MyISP
Encapsulation= PPPoE
Multiplexing= LLC-based
VPI #= 1
VCI #= 32
ATM QoS Type= UBR
Peak Cell Rate (PCR)= 0
Sustain Cell Rate (SCR)= 0
Maximum Burst Size (MBS)= 0
My Login=
My Password= *****
Idle Timeout (sec)= 0
IP Address Assignment= Dynamic
IP Address= N/A
Network Address Translation= SUA Only
Address Mapping Set= N/A

Press ENTER to Confirm or ESC to Cancel:
```

• **Menu 11 Remote Node Setup**

```
Menu 11 - Remote Node Setup

1. MyISP (ISP, SUA)
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Enter Node # to Edit:
```

• **Menu 11.1 Remote Node Profile**

```
Menu 11.1 - Remote Node Profile
```

```
Rem Node Name= MyISP          Route= IP
Active= Yes                   Bridge= No

Encapsulation= PPPoE          Edit IP/Bridge= No
Multiplexing= LLC-based       Edit ATM Options= No
Service Name=                 Edit Advance Options= No
Incoming:                     Telco Option:
  Rem Login=                   Allocated Budget(min)= 0
  Rem Password= *****       Period(hr)= 0
Outgoing:                     Schedule Sets=
  My Login=                    Nailed-Up Connection= YES
  My Password= *****        Session Options:
  Authen= CHAP/PAP             Edit Filter Sets= No
                                Idle Timeout(sec)= N/A
```

Press ENTER to Confirm or ESC to Cancel:

• Menu 11.3 Remote Node Network Layer Options

Menu 11.3 - Remote Node Network Layer Options

```
IP Options:                   Bridge Options:
IP Address Assignment = Dynamic Ethernet Addr Timeout(min)= N/A
Rem IP Addr = 0.0.0.0
Rem Subnet Mask= 0.0.0.0
My WAN Addr= N/A
NAT= SUA Only
  Address Mapping Set= N/A
Metric= 2
Private= No
RIP Direction= None
  Version= RIP-1
Multicast= None
IP Policies=
```

Enter here to CONFIRM or ESC to CANCEL:

• Menu 11.5 Remote Node Filter

Menu 11.5 - Remote Node Filter

```
Input Filter Sets:
  protocol filters=
  device filters=
Output Filter Sets:
  protocol filters= 1
  device filters=
Call Filter Sets:
  protocol filters= 1
  device filters=
```

Enter here to CONFIRM or ESC to CANCEL:

• Menu 11.6 Remote Node ATM Layer Options

Menu 11.6 - Remote Node ATM Layer Options  
VPI/VCI (LLC-Multiplexing or PPP-Encapsulation)

```
VPI #= 1
VCI #= 32
ATM QoS Type= UBR
Peak Cell Rate (PCR)= 0
Sustain Cell Rate (SCR)= 0
Maximum Burst Size (MBS)= 0
```

Enter here to CONFIRM or ESC to CANCEL:

• **Menu 12 Static Route Setup**

Menu 12 - Static Route Setup

- 1. IP Static Route
- 3. Bridge Static Route

Enter selection number:

• **Menu 12.1 IP Static Route Setup**

Menu 12.1 - IP Static Route Setup

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_
- 11. \_\_\_\_\_
- 12. \_\_\_\_\_
- 13. \_\_\_\_\_
- 14. \_\_\_\_\_
- 15. \_\_\_\_\_
- 16. \_\_\_\_\_

Enter selection number:

• **Menu 12.1.1 Edit IP Static Route**

Menu 12.1.1 - Edit IP Static Route

Route #: 1  
Route Name= ?  
Active= No  
Destination IP Address= ?  
IP Subnet Mask= ?  
Gateway IP Address= ?  
Metric= 2  
Private= No

Press ENTER to Confirm or ESC to Cancel:

• **Menu 12.3 Bridge Static Route Setup**

Menu 12.3 - Bridge Static Route Setup

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

Enter selection number:

• **Menu 12.3.1 - Edit Bridge Static Route**

Menu 12.3.1 - Edit Bridge Static Route

```
Route #: 1
Route Name= ?
Active= No
Ether Address= ?
IP Address=
Gateway Node= 1

Press ENTER to Confirm or ESC to Cancel:
```

• **Menu 15 - NAT Setup**

```
Menu 15 - NAT Setup

1. Address Mapping Sets
2. NAT Server Sets

Press ENTER to Confirm or ESC to Cancel:
```

• **Menu 15.1 - Address Mapping Sets**

```
Menu 15.1 - Address Mapping Sets

1.
2.
3.
4.
5.
6.
7.
8.
255. SUA (read only)

Press ENTER to Confirm or ESC to Cancel:
```

• **Menu 15.1.1 – Address Mapping Rules**

```
Menu 15.1.1 - Address Mapping Rules

Set Name= ?

Idx  Local Start IP  Local End IP  Global Start IP  Global End IP  Type
-----
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Action= None          Select Rule= N/A

Press ENTER to Confirm or ESC to Cancel:
```

• **Menu 15.2 – NAT Server Sets**

```
Menu 15.2 - NAT Server Sets

1. Server Set 1 (Used for SUA Only)
```

- 2. Server Set 2
- 3. Server Set 3
- 4. Server Set 4
- 5. Server Set 5
- 6. Server Set 6
- 7. Server Set 7
- 8. Server Set 8
- 9. Server Set 9
- 10. Server Set 10

Press ENTER to Confirm or ESC to Cancel:

· **Menu 15.2.1 –NAT Server Setup (Used for SUA Only)**

Menu 15.2.1 - NAT Server Setup

Rule	Start Port No.	End Port No.	IP Address
1.	Default	Default	0.0.0.0
2.	0	0	0.0.0.0
3.	0	0	0.0.0.0
4.	0	0	0.0.0.0
5.	0	0	0.0.0.0
6.	0	0	0.0.0.0
7.	0	0	0.0.0.0
8.	0	0	0.0.0.0
9.	0	0	0.0.0.0
10.	0	0	0.0.0.0
11.	0	0	0.0.0.0
12.	0	0	0.0.0.0

Press ENTER to Confirm or ESC to Cancel:

· **Menu 21.1 Filter Set Configuration**

Menu 21.1 - Filter Set Configuration

Filter Set #	Comments	Filter Set #	Comments
1	NetBIOS_WAN	7	
2	NetBIOS_LAN	8	
3		9	
4	IGMP	10	
5		11	WebSet1
6		12	WebSet2

Enter Filter Set Number to Configure= 0

Edit Comments= N/A

Press ENTER to Confirm or ESC to Cancel:



**ZyXEL Confidential**

· Menu 21.1.1.1 - Filter Rules Summary (NetBIOS\_WAN)

Menu 21.1.1.1 - Filter Rules Summary				
#	A	Type	Filter Rules	M m n
1	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=137	N D N
2	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=138	N D N
3	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=139	N D N
4	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=137	N D N
5	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=138	N D N
6	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=139	N D F
Enter Filter Rule Number (1-6) to Configure:				

· Menu 21.1.2 - Filter Rules Summary (NetBIOS\_LAN)

Menu 21.1.2 - Filter Rules Summary				
#	A	Type	Filter Rules	M m n
1	Y	IP	Pr=17, SA=0.0.0.0, SP=137, DA=0.0.0.0, DP=53	N D F
2	N			
3	N			
4	N			
5	N			
6	N			
Enter Filter Rule Number (1-6) to Configure:				

· Menu 21.1.4 - Filter Rules Summary (IGMP)

Menu 21.1.4 - Filter Rules Summary				
#	A	Type	Filter Rules	M m n
1	Y	Gen	Off=0, Len=3, Mask=ffffff, Value=01005e	N D F
2	N			
3	N			
4	N			
5	N			
6	N			
Enter Filter Rule Number (1-6) to Configure:				

· Menu 21.1.11 - Filter Rules Summary (WebSet1)

Menu 21.1.11 - Filter Rules Summary				
#	A	Type	Filter Rules	M m n
1	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=161	N D N

2	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=162	N	D	F
3	N					
4	N					
5	N					
6	N					

Enter Filter Rule Number (1-6) to Configure:

· **Menu 21.1.12 - Filter Rules Summary (WebSet2)**

Menu 21.1.12 - Filter Rules Summary						
#	A	Type	Filter Rules	M	m	n
1	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=23	N	D	N
2	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=21	N	D	N
3	Y	IP	Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=69	N	D	N
4	Y	IP	Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=80	N	D	N
5	N					
6	N					

Enter Filter Rule Number (1-6) to Configure:

· **Menu 21.2 - Firewall Setup**

Menu 21.2 - Firewall Setup	
The firewall protects against Denial of Service (DoS) attacks when it is active. The default Policy sets	
1. allow all sessions originating from the LAN to the WAN and	
2. deny all sessions originating from the WAN to the LAN	
You may define additional Policy rules or modify existing ones but please exercise extreme caution in doing so	
Active: <b>Yes</b>	
LAN-to-WAN Set Name: ACL Default Set	
WAN-to-LAN Set Name: ACL Default Set	
Please configure the Firewall function through Web Configurator	
Press ENTER to Confirm or ESC to Cancel:	

· **Menu 22 - SNMP Configuration:**

Menu 22 - SNMP Configuration	
SNMP:	
Get Community= public	
Set Community= public	
Trusted Host= 0.0.0.0	

```
Trap:
  Community= public
  Destination= 0.0.0.0

Press ENTER to Confirm or ESC to Cancel:
```

- Menu 23 - System Security:

```
Menu 23 - System Security

1. Change Password
2. RADIUS Server

4. IEEE802.1x

Enter Menu Selection Number:
```

- Menu 23 - System Security- Change Password

```
Menu 23.1 - System Security - Change Password

Old Password= ?
New Password= ?
Retype to confirm= ?

Enter here to CONFIRM or ESC to CANCEL:
```

- Menu 23 - System Security -RADIUS Server

```
Menu 23.2 - System Security - RADIUS Server

Authentication Server:
  Active= No
  Server Address= 0.0.0.0
  Port #= 1812
  Shared Secret= *****

Accounting Server:
  Active= No
  Server Address= 0.0.0.0
  Port #= 1813
  Shared Secret= *****

Enter Menu Selection Number:
```

- Menu 23 - System Security - IEEE802.1x

```
Menu 23.4 - System Security - IEEE802.1x

Wireless Port Control= No Authentication Required
ReAuthentication Timer (in second)= N/A
Idle Timeout (in second)= N/A

Key Management Protocol= N/A
Dynamic WEP Key Exchange= N/A
PSK= N/A
WPA Mixed Mode= N/A
Data Privacy for Broadcast/Multicast packets= N/A
WPA Broadcast/Multicast Key Update Timer= N/A

Authentication Databases= N/A
```

Enter Menu Selection Number:

• **Menu 24.2.1: System Maintenance –Information**

Menu 24.2.1 - System Maintenance - Information

Name:  
Routing: IP  
ZyNOS F/W Version: V3.40(MI.1)D0 | 09/07/2005  
ADSL Chipset Vendor: TI AR7 01.01.08.00  
Standard: ADSL\_G.dmt

LAN  
Ethernet Address: 00:a0:c5:00:00:01  
IP Address: 192.168.1.1  
IP Mask: 255.255.255.0  
DHCP: Server

Press ENTER to Confirm or ESC to Cancel:

• **Menu 24.2.2: System Maintenance – Change Console Port Speed**

Menu 24.2.2 - System Maintenance - Change Console Port Speed

Console Port Speed: 9600

Press ENTER to Confirm or ESC to Cancel:

• **Menu 24.3.2: System Maintenance – UNIX Syslog**

Menu 24.3.2 - System Maintenance - UNIX Syslog

UNIX Syslog:  
Active= No  
Syslog IP Address= 0.0.0.0  
Log Facility= Local 1

Press ENTER to Confirm or ESC to Cancel:

• **Menu 24.10: System Maintenance – Time and Date Setting**

Menu 24.10 - System Maintenance - Time and Date Setting

Use Time Server when Bootup= NTP (RFC-1305)  
Time Server Address= ntp.ccs.aol.de

Current Time: 00 : 12 : 48  
New Time (hh:mm:ss): 00 : 12 : 46

Current Date: 2000 - 01 - 01  
New Date (yyyy-mm-dd): 2000 - 01 - 01

Time Zone= GMT+0100

Daylight Saving= No  
Start Date (mm-dd): 03 - 01  
End Date (mm-dd): 10 - 01

Press ENTER to Confirm or ESC to Cancel:

- Menu 24.11: System Maintenance – Remote Management Control

Menu 24.11 - Remote Management Control	
TELNET Server:	
Server Port = 23	Server Access = LAN only
Secured Client IP = 0.0.0.0	
FTP Server:	
Server Port = 21	Server Access = LAN only
Secured Client IP = 0.0.0.0	
Web Server:	
Server Port = 80	Server Access = LAN only
Secured Client IP = 0.0.0.0	
Press ENTER to Confirm or ESC to Cancel:	

- Menu 25: IP Routing Policy Setup

Menu 25 - IP Routing Policy Setup			
Policy Set #	Name	Policy Set #	Name
-----	-----	-----	-----
1	_____	7	_____
2	_____	8	_____
3	_____	9	_____
4	_____	10	_____
5	_____	11	_____
6	_____	12	_____
Enter Policy Set Number to Configure= 0			
Edit Name= N/A			
Press ENTER to Confirm or ESC to Cancel:			

- Menu 26: Schedule Setup

Menu 26 - Schedule Setup			
Schedule Set #	Name	Schedule Set #	Name
-----	-----	-----	-----
1	_____	7	_____
2	_____	8	_____
3	_____	9	_____
4	_____	10	_____
5	_____	11	_____
6	_____	12	_____

Enter Schedule Set Number to Configure= 0

Edit Name= N/A

Press ENTER to Confirm or ESC to Cancel:

- ras > sys view autoexec.net  
sys errctl 0  
sys trcl level 5  
sys trcl type 1180  
sys trcp cr 64 96  
sys trcl sw off  
sys trcp sw off  
ip tcp mss 512  
ip tcp limit 2  
ip tcp irtt 65000  
ip tcp window 2  
ip tcp ceiling 6000  
ip rip activate  
ip rip merge on  
ppp ipcp compress off  
sys wdog sw on  
ip icmp discovery enif0 off  
bridge mode 1  
sys quick enable  
wan adsl rate off  
wan adsl errorsecond shutdown 30
- ras > wlan filter outgoing generic 4
- ras > wan adsl opencmd gdmr
- ras > sys firewall ignore triangle all on
- ras> wlan active 1

**Multiple PPPoE design note:**

1. First configuration for multiple pppoe must be done through WEB Wizard. After that, user can use SMT to fine tune the settings.
2. First PPPoE is always used for data connection.
3. If an AOL SIP account is configured, all VoIP related traffic should be transmitted to/received from 2nd PPPoE. Other wise, there is no special treat for VoIP traffic and it should be directed to 1st PPPoE. The *VoIP traffic* here refers to SIP messages, RTP packets, DNS queries for SIP server address, DNS queries for TFTP auto-provisioning server address, DNS queries for NTP server address and TFTP protocol stack.
4. If AOL SIP account is configured, the DNS queries for SIP server, DNS server and NTP server should use the primary/secondary DNS server given by 2nd PPPoE channel.
5. Two MAC addresses are reserved for P2602HWL-AOL. *MAC address* is taken by data pppoe and *MAC address + 1* is taken by voice pppoe.
6. It is desired that IAD should drop VoIP PPPoE(2nd PPPoE) connection automatically every 24 hours. If the drop time is 4:00 AM today, the next drop time will be 3:59 AM tomorrow, and then 3: 58, 3: 57,..... for the following days. After 2 months later, when the drop time comes to 3: 00 AM, we should go back to 4: 00 AM in next day. Please use "voice poedrop 04 00 03 00 00 01" to do the configuration.
7. IAD should un-register SIP account before it tries to drop the PPPoE connection.