ZyXEL

Firmware Release Note

Prestige 660R-61

Standard version

Release 3.40(QG.7)C0

Date: Oct 08, 2005

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ZyXEL Prestige 660R-61 Standard Version Release 3.40(QG.7)C0 Release Note

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Supported Platforms:

ZyXEL Prestige 660R-61

Versions:

ZyNOS Version   : V3.40(QG.7) | 10/08/2005 09:52:03
Bootbase Version   : V1.05 | 02/27/2003 02:00:00

Notes:

The Prestige 660R-61/63, is 4th generation of Zyxel ADSL product family. It is a high performance ADSL/ADSL2/ADSL2+ router for small/medium office to have Internet access and LAN-to-LAN application over the existing copper line. P660R-31/63 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 26Mbps (ADSL2+), greater reach, faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a rich features router to meet the demand of next generation ADSL market.

P660R-61/63 provides one auto-detection 10/100BASE-T Ethernet port for connection to the user's local network, and a single RJ-11/RJ-45 port for connection to ADSL/ADSL2/ADSL2+ line.

The version of TI AR7 modem code is 04.02.01.00

Known Issues:

1. CLI command list is not finished.
2. Currently, QoS of VBR function can't work fine. This issue is TI chipset known issue.
3. Saw shaped throughput plot is observed from AX4000 traffic analyzer when doing FTP test.

Features:
Modification in 3.40(QG.7)C0 | 10/08/2005
1.change to FCS

Modification in 3.40(QG.7)b2 | 9/27/2005

1. [BUG FIX]
   SPRID: 050922969
   Symptom: menu24.2.1 and GUI always display multimode when set with CI
             command "wan adsl opencmd adsl2+(adsl,glite,gdmt,t1.413)"
   Condition: 1.Menu 24.8 set with CI command "wan adsl opencmd adsl2+"
               2.Menu 24.2.1 and GUI always display"multimode"
               3.adsl, glite,gdmt,t1.413 have the same problem
2. [BUG FIX]
   SPRID: 050922972
   Symptom: set adsl2+ and the line is up,but set with CI command "wan adsl opmode",
            the result is error
   Condition: 1.Menu 24.8 set with CI command "wan adsl opencmd adsl2+".
               2.Menu 24.8 set with CI command "wan adsl opmode", display "error",
               not "adsl2+" when the line is up
3. [BUG FIX]
   SPRID: 050928464
   Symptom: the P660R-61 could not passthrough the VLAN tagging packets .
   Condition: N/A

Modification in 3.40(QG.7)b1 | 9/12/2005
1. Create based on P660R-63 340(QH1)C0
2. [Feature Enhancement]
    Add a CI command to disable or enable WebRedirect, "wan atm vc webredir" and you
    can use "wan atm vc save" to save it
    You can use "wan atm vc dis" to check status
3. [Feature Enhancement]
    Enhancement for zero configuration
    (1)add a page zCfgTryAgain.html to info user that ADSL line doesn't sync up.
    (2)update the backgroud of web redirect pages and update some words.
    (3)If internet access successes, web redirect will be disabled.
4. [BUG FIX]
    SPRID: 050913481
    Symptom: While WAN encapsulation is set to ENET ENCAP and dynamic IP address
              is used, if WAN IP is changed, NAT session will not be reset, it will cause
              internet access fail.
    Condition: (1)Set DUT WAN encapsultion to ENET ENCAP and dynamic IP address,
              after get IP address from DHCP server on WAN side, internet access can
              be successful.
              (2)Edit the static DHCP pool of DHCP server on WAN side to allocate
              another IP address to DUT, and pull out ADSL line for a moment and
              insert it to ensure IP re-allocation.
              (3)After get new IP, internet access will be fail.
5. [BUG FIX]
    SPRID: 050913482
    Symptom: The router will enter wrong state with some PPP servers.
    Condition: Some specific PPP server will let our PPP dial mechansim hang.

6. [BUG FIX]
  SPRID: 050913483
  Symptom: The "Connection testing" page will not change to " Connection testing Fail"
        page If there are no corrcet PVC in hunting table
  Condition: If there are no corrcet PVC in hunting table then getHuntState() function
        never return AUTO_HUNT_FAIL.
7. [BUG FIX]
  SPRID: 050913484
  Symptom: If we set dhcp start ip address to a wrong range, we can't access wan side.
  Condition: Set dhcp ip address to conflict with router lan ip address, and we can't access
        wan side
8. [BUG FIX]
  SPRID: 050913485
  Symptom: Whiteboard(WAN to LAN) can't work well when UPNP is enable.
  Condition: Whiteboard(WAN to LAN) can't work well in all of the following
        conditions.
          1.OS is based on WinXP;
          2.enable UPNP and "Allow users to make configuration changes through
           UPnP " in GUI-UPNP;
          3.make sure that wan should be first to ask for whiteboard;
          4.MSN6.2-MSN6.2;MSN7.0-MSN6.2;MSN6.2-MSN7.0; MSN7.0-MSN7.0.
9. [BUG FIX]
  SPRID: 050704180
  Symptom: In GUI, The WAN Backup functions need at least one none-zero Check
        WAN IP
  Condition: ICMP mode this is right,but in DSL Link mode this is wrong.
10. [BUG FIX]
  SPRID: 050913486
  Symptom: lan can't ping wan when change encapsulation
  Condition: 1.lan ping wan 192.168.8.2 continusly.
          2.In SMT Menu4,change encapsulation to PPPoE,lan can ping wan.
          3.change encapsulation to ENETCAP or RFC1483,lan PC can't ping wan.
11. [BUG FIX]
  SPRID: 050913488
  Symptom: Traffic redirect work have problem.
  Condition: Step1 Use ENEP ENCAP, in DUT and device in menu 3.2 turn off RIP
      Step2 In DUT menu2.1 set backup gateway is 192.168.1.5 and in device 3.2 LAN
          ip set 192.168.1.5
      Step3 from LAN pc ping wan pc 192.168.8.11 -t (same subnet as wan ip) it is
          ok ,then pull off DUT wan line, the traffic go out from device, but when
          plug into the DUT wan line, then the traffic can not go out, pc reboot is ok
          but use ENET ENCAP ping outside ip such as 202.96.209.5 is ok, and
          use PPPOE ping inside ip such as 192.168.8.1 is also ok).
12. [BUG FIX]
  SPRID: 050701063
  Symptom: When DUT use static IP and set DNS server address in GUI->wizard, DUT

won't resolve domain name successfully until reboot
  Condition: Step1 Go to GUI, configure DUT use static IP and set DNS server, then go to
          Maintenance->Diagnostic, try to resolve domain name, but failed
      Step2 Reboot DUT, it works fine
      Step3 This many cause TMSS/AV/CAC/DDNS functions doesn't work for these
          functions need DUT resolve domain name
13. [BUG FIX]
    SPRID: 050818803
    Symptom: Chariot test fail
    Condition:1.Use such topology as below, and PC1 communicate with PC2 through
            NAT:PC1(Endpiont1)----P660R-61/P660HW-61----IES1000----BRAS---
            -PC2(Endpoint2)
        2. Start up Chariot console on PC1, add 10 pairs from PC1 to PC2, each use
            different internet application script, like FTPget.scr, FTPput.scr, DNS.scr,
            and so on.
        3. Run Chariot console on PC1, let 10 pairs begin to communicate.
        4. After a period of time, 5~10 minutes, one of these ten pairs will go down.
14. [BUG FIX]
    SPRID: 050914542
    Symptom: PPPoA idle time issue
    Condition: 1. PPPoA and LAN PC ping WAN PC continuously
          2. Reboot device, it can not connection to the remote node.
15. [BUG FIX]
    SPRID: 050914543
    Symptom: PPPoA idle time issue
    Condition: 1.PPPoA and choose nail-up yes
          2. In SMT-4 or SMT-11 change between two right accounts, device can not
            connection to remote node.

16. [Feature Enhancement]
     Throughput enhancement for TI platform
17. [Feature Enhancement]
     Support MultiBoot v2.1

18. Update to datapump 4.2.1

Modification in 3.40(QG.6)C0 | 03/09/2005
1.change to FCS

Modification in 3.40(QG.6)b1 | 2/21/2005
1. change modem code to 3.2.6.0

Modification in 3.40(QG.5)C0 | 2/21/2005
1.change to FCS

Modification in 3.40(QG.5)b3 | 2/16/2005
1.[BUG FIXED]
Symptom: enter GUI then will be crashed
Condition: step1 enter the SMT
       step2 waitting for the wan line link up,in lan pc ie enter"ftp://192.168.1.1" then show "access refuse"
       step3 in lan pc ie enter "http://192.168.1.1" then the DUT will be crashed
2.[BUG FIXED]
Symptom: set nat will show some abnormity
       step1 in SMT 15.1.1 set a address mapping rule use one to one
       step2 set the local ip is 66.6.6.6 and global ip is 33.3.3.3
       step3 save it then will show "[-6103] bad entry number"

Modification in 3.40(QG.5)b2 | 1/27/2005
1.[BUG FIXED]
Symptom: in GUI set nat server mapping set 2 then it go to server set 1 in SMT menu15.2
Condition: step1 in GUI nat set->full feature->rule ->type server
       step2 set grobal ip 192.168.8.60(DUT wan ip)
       step3 edit server mapping set 2 port21 to 25 ip 192.168.1.33(lan pc ip)
       step4 save it, it can not work in SMT menu 15.2, the setting has changed to "server set 1 "
2. [Feature Enhancement]
   Merge new MAC OUI long term solution to change MAC OUI from 00A0C5 to 001349

Modification in 3.40(QG.5)b1 | 1/14/2005
1. [BUG FIXED]
    Symptom: ping can not continue
    Condition: if you set enet encap, and then ping a ip to wan , and then pull off wan, pull on it again .

2.[BUG FIXED]
    Symptom:DUT show not enough memory
    Condition: 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: VC hunt can not alloc mbuf again
   Condition: VC hunt can not alloc mbuf again when VC hunt table is more than 8.
4. [BUG FIXED]
   Symptom: 1.In Menu 24.8 typing "ip ping 192.168.8.1" (the ip address from which you can get response".the default times of ping is three.
   2.when the device get response in the first time or the second time.type"ctrl+c".then type the Up key and Enter quickly.the system will crash and reboot
5. [BUG FIXED]
   Symptom: Step1 Visit DUT eWC from Lan,Type the URL in the IE Address Bar "http://IP/rpFWUpload.html"
Step2 Then you can reset the rom file to default without password

Step3 Visit DUT eWC from Wan,Type the URL in the IE Address Bar "http://IP/rpFWUpload.html"

Step4 Then you can reset the rom file to default without password

Step5 The Same conditons happened in most models,only the URL which inputed is different,you can access the menu "Maintenance"to find out the correct URL

6.[BUG FIXED]

Symptom: IN GUI,Advanced setup-NAT

for examole:

1,Edit Details of SUA Only.,in item 3,input "23 23 1.1.1.1",in item 10 input "21 21 2.2.2.2"

2,in item 4,input "'space' 'space' 3.3.3.3",click Save,it got an error page.

3,then edit details of SUA Only again.first you may find the item number has changed.

4.when you input some item agian, after click Save and then check it.you will find some item is missing.

7.[BUG FIXED]

Symptom: Second DNS not work

Condition: connect DUT to lan port of zywall via IES, the wan port of zywall connect to internet; DUT get ip address and dns server from zywall lan dhcp server; when primary dns server is unreachable, secondary dns server doesn't work either.

8.[BUG FIXED]

Symptom:tftp not work when change telnet port

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

9.[BUG FIXED]

Symptom: Enter special url will cause device crash.

Condition:

1. Form LAN site, enter http://192.168.1.1/Forms/rpAuth_1?ZyXEL%20ZyWALL%20Series<script>top.location.pathname=%20""</script> on browser, the device will crash.

10.[BUG FIXED]

Sysptom: 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. (Use ultraedit modify rom-t, the DUT can accept it, but while use other utilitys modify the rom-t, the DUT can not accept it.)

Condition: N/A.

11. [BUG FIXED]

Symptom: [CSO report] Receive ARP request from 1st remote node(router mode) , replied it from the 2nd remote node (bridge mode). The problem makes the remote VLAN enabled router coufused and the communication will fail.

12.[BUG FIXED]

Symptom: using wordpad edit the rom-t file, the PPPoE password will be changed unexpected.

Condition: (1)In SMT menu4, set encapsulation to PPPoE mode and make sure the DUT can dial up.

(2) Get rom-t and use wordpad to edit it, change the sysname to "hehe" and save.

(3) upload the edited file to the DUT, and the DUT can't dial up PPPoE password is changed to correct one.(use notepad and UltraEdit have no problem)

13. [BUG FIXED]
Symptom: Some web pages show error message.
Condition: When you try to access the page as http://10.0.0.1:2033/zCfgTestFail.html, a error dialogue is prompted, the same symptom will be shown on web page "zCfgFinish.html" and "zCfgWaitTestFrame.html".

14.[BUG FIXED]
symptom: if DNS server of SMT3.2 is set to zero, DNS server get from WAN will be flushed.
Condition: (1)dial up using PPPoE, DNS server will be get from PPPoE server
         (2)set DNS server of smt 3.2 to zero, and save.
       (3)issue C/I command "ip dns st d", you can see that DNS server IP address
          become Zero.

15. [BUG FIXED]
sympton:
if we change remode IP address or gateway in smt4 ro smt11, the previous routing entry still keep. it can see in CI command: ip route status.

16. [BUG FIXED]
Symptom: DSL link backup also need at least one wan IP address to check.

   Condition: In menu 2 or wan backup in eWC, choose "DSL link" and configure, the device will require you to input at least one "wan address" to check.

17.[BUG FIXED]
Symptom: in eWC NAT can not work correctly if I change the Server Mapping Set
Condition: NAT can not work correctly if I change the Server Mapping Set
   Step1: in eWC=>Advanced Setup=>NAT,choose FULL Feature and Edit the Rule 1;
   Step2: choose the type as server mode, and set the Globle IP as the WAN ip of the DUT;
   Step3: Server Mapping Set choose 2, and Edit Details, and add the port 2121 forward to the LAN PC "10.0.0.2";
   Step4: using an PC in the WAN to access the ftp(port 2121) server on the LAN PC. This must be successful;
   Step5:   then choose the Server Mapping Set3, and edit Details to add the port 23 forward to the LAN PC then Apply, ftp from the WAN to the LAN also can successful, but telnet from WAN to LAN can not work.

18[BUG FIXED]
Symptom: "Vchunt send" after vchunt successful will lead DUT crash
Condition: step1: set some wrong setting in menu4, like Enet Encap 0/35
          Step2: enter 24.8 to add vchunt rule(like PPPoE 0/33) and vchunt send
          Step3: enter 24.8 after vchunt successful and "wan atm vchunt send" again, and

Enter several times
　　　　　Step4: leave 24.8 use "e", and enter again, you will find DUT crash

19.[Feature Enhancement]
　　Change modem code to 3.2.5.0

Modification in 3.40(QG.4)C0 | 11/23/2004
1 change to FCS
Modification in 3.40(QG.4) b2 | 11/16/2004
1.　[BUG FIXED]
　　　Symptom: Configure DNS server in SMT 3.2, it can take effect only after reboot the
　　　　　　　device.
　　　Condition: Reset default romfile, Configure DNS server in menu 3.2 and save, then
　　　　　　　do "ip ping www.hinet.net", it can not work. But it will be OK after we
　　　　　　　reboot the device.

2.　[BUG FIXED]
　　　Symptom: PPPoE cannot up when exchange "forced down"to "forced on" or "Enable
　　　　　　　dial-on damand".
　　　Condition: In menu11 nailed-up set "yes", when action exchange from "forced down"
　　　　　　　to "forced on" or to "enable dial-on demand" in menu 26, PPPoE can not
　　　　　　　link up unless you reboot the device.

3.　[BUG FIXED]
　　　Symptom& Condition : When we enable "ping traffic is blocked from the WAN "
　　　　　　　function that it will also block the ping traffic from LAN->WAN

4.　[BUG FIXED]
　　　Symptom: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote
　　　　　　　Users .
　　　Condition: When send icmp packet with less data than normal, remote interface pad
　　　　　　　with data to complete the frame memory contents.

5.　[BUG FIXED]
　　　Symptom: In eWC If we do ping function from DOS mode then change Encapsulation
　　　　　　　to PPPoA or PPPoE that you can see the connection can't connect.
　　　Condition: N/A

6.　[BUG FIXED]
　　　Symptom and Condition: the bonk attack will cause the device exception.

7.　[BUG FIXED]
　　　Symptom: WE delete menu4 the system do reboot while VC hunt function enable,
　　　　　　　system reboot.
　　　Condition: Delete SMT>> menu 4, then configure menu11, when connecting to

DSLAM with VC hunt function enable, system will reboot.
8. [BUG FIXED]
   Symptom: the LAN side PC can dymanic get the IP address, but can not get reply from ping the LAN IP address
   Condition:When we set PPPoE pass-through in Menu 11.8.
9. [BUG FIXED]
   Symptom: CPU loading will reach to 100% easily with multiple PVCs in bridge mode.
   Condition: Under heavy downstream traffic with multiple PVCs in bridge mode.

10. [BUG FIXED]
   Symptom: the Content filter function can not work
   Condition: if we key in capital letter . Such as "yahoo" is keyed as "Yahoo""
11. [BUG FIXED]
   Symptom :Traffic redirect can't work properly
   Condition: In Dsl link mode when We set Enet encap mode.
12. [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

13. [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.

14 . [BUG FIXED]
   Symptom: Sometime the status keep in N/A and can't dial again in PPPoA or PPPoE mode
   Condition: while we changed PPPoA or PPPoE setting several times like statin IP <-> Dynamic IP , Idle time out <-> Nailed , VC<-> LLC . --> The device must reboot just can work again
15．[BUG FIXED]
   Symptom: device will crash
   Condtion: if PPPOE server use Password Authentication Protocol and then our device receive a packet PAP ACK or PAP NAK which data field is NULL..
16. [Feature Enhancement]
   Delete UART External loopback
   Modify LED status just as request
   1. normal -> SYS LED blinking per 1 second.
   2. unusual -> SYS LED always bright.
   (Always not to display UART External Loopback test item)
 Modification in 3.40(QG.4)b1 | 10/21/2004
1. Change modem code from 3.0.9 to 3.1.3.

Modification in 3.40(QG.3) C0 | 9/30/2004
1. Change to FCS.

Modification in 3.40(QG.3) b1 | 9/25/2004
1. [FEATURE ENHANCED] Add zero configuration support.
2. [BUG FIXED]
   Symptom: eWC will hang when UPNP feature of our device is enabled.
   Condition:(1) install windows xp service packet 2 in PC
   (2)enable firewall of windows xp and also enable UPNP framework pass
   through or disable firewall of windows XP.
   (3) login in P660HW via eWC and enable UPNP, eWC will not be able to
   access.
   (4)the bug doesn't occur every time, but most time it will occur.
3. [BUG FIXED]
   Symptom:. SIP pass through can't work.
   Condition: The SIP ALG do not process the "SIP INFO" message. And some of the
   fields in SIP message do not be transferred by ALG.
4. [BUG FIXED]
   Symptom :Bug fix incompletely: in eWC, Advanced Setup >> NAT Edit Address
   Mapping Rule, click "Edit Details". Information will be save.
   Condition: N/A
5. [BUG FIXED]
   Symptom :rom-d can't work.
   Condition: Upload the rom-d by ftp, it will fail.
6. [BUG FIXED]
   Symptom& Condition : Menu 15.1 the info "Enter Menu selection number" is showed
   duplicate .

Modification in 3.40(QG.2) C0| 9/13/2004
1. Change default romfile for OBM.

Modification in 3.40(QG.2) D0| 9/13/2004
1. Change to FCS version.

Modification in 3.40(QG.2) b3 | 9/3/2004
1. [BUG FIXED]
   Symptom: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote
   Users.
   Condition: Send icmp packet with less data than normal so remote interface padd , ping
   -l 0 router .
2. [BUG FIXED]
   Symptom: Ping "192.168.10.11AAAAAAA" will success as ping 192.168.10.11 .
   Condition: In SMT Menu 24.8 or eWC do ping a host like"192.168.10.11AAAAAAA",
   it will success as ping 192.168.10.11.
3. [BUG FIXED]
   Symptom & Condition: Advanced Setup >> NAT Edit Address Mapping Rule,
   click "Edit Details". Information will be save.
4. [BUG FIXED]
   Symptom: Index of menu1 Domain Name display error.

Condition: Index of menu1 Domain Name display error：1. it should be A-Z instead of A-z. 2. and the symbol of ","cannot work.

5. [BUG FIXED]
Symptom: Exception occur while End ip smaller then Start ip in SMT menu , save it DUT will reboot..
Condition: At NAT full feature use many to one or many to many. set End IP smaller than start IP save it in SMT menu . Then DUT exception occur. Ex : Start IP set to 192.168.1.33. End IP set to 192.168.1.5.

6. [BUG FIXED]
Symptom: DNS resolve error.
Condition: DNS resolve the www.123.com as 0.123.0.0 , In Menu 24.8 issue www.123.com will as 0.123.0.0 .

7. [BUG FIXED]
Symptom& Condition: Device will hang when change NAT configuration in SMT menu 4, when performing change from SUA to Full feature if press "Enter" fast.

8. [BUG FIXED]
Symptom: Two PVC will work improper manner
Condition: After two PVCs are established, change one vpi/vci on the DSLAM.

9. [BUG FIXED]
Symptom& Condition:CLI cmd "device dial 1" will display two line of primary dns.

10. [BUG FIXED]
Symptom& Condition: We delete Menu4 the mode change to Multi mode while default set to G.DMT or other.

Modification in 3.40(QG.2) b2 | 8/4/2004
1. [BUG FIXED]
Symptom & Condition: Login via eWC GUI with long password, device will reboot.
2. [BUG FIXED]
Symptom & Condition: WAN backup online help page has error.
3. [BUG FIXED]
Symptom & Condition: When setup 4 PVC, sometimes system will reboot.
4. [BUG FIXED]
Symptom& Condition: The eWC will hung while we do ping like "192.168.1.1 a" in eWC/Maintenance/Diagnostic".
5. [BUG FIXED]
Symptom& Condition: VCI value 32 can't be setup in remote node setup.
6. [BUG FIXED]
Symptom& Condition: PPPoE pass-through doesn't work.
7. [BUG FIXED]
Symptom: Time and Date display error
Condition: Synchronize system clock with Time Server, then config new time "12:22:22", click apply button, then the time show "11:22:22".It reduce one hour..

Modification in 3.40(QG.2) b1 | 6/25/2004
1. [BUG FIXED]
Symptom: device will reply wrong packet

Condition: One PC and two devices with ENET ENCAP are connected to IES1000. After PC ping device 1 and power-off device 1, PC pinging device 1 again will get

2. [BUG FIXED]
Symptom: Error ARP reply under 2 remote nodes. One is routing mode, and the other is bridge mode.
Condition: Device is set 2 remote nodes. The 1st remote node is routing mode, and the 2nd is bridge mode. When device receives ARP request from the 1st remote node, it will reply it from 2nd remote node. This problem makes the remote VLAN enabled router confused and the communication will fail.

3. [BUG FIXED]
Symptom & Condition: VCI value 32 can't be setup in remote node setup.

4. [BUG FIXED]
Symptom: QoS criteria violation. Do not comply with the rule: Priority(CBR) > Priority(VBR) > Priority(UBR)
Condition: When being loaded traffic beyond line rate, the remote node traffic configured in CBR does not maintain its rate which is achievable. Rather, CBR traffic could be worse than VBR traffic.

5. [BUG FIXED]
Symptom: System will reboot when SIP debug switch is on.
Condition: When SIP debug switch is on, send Camera/Voice from WAN to LAN, system will reboot.

6. [FEATURE ENHANCED]
Change modem code to 03.00.09.00.

Modification in 3.40(QG.1) D0| 5/4/2004
1. Change default rom file settings from routing mode to bridge mode.

Modification in 3.40(QG.1) C0| 4/2/2004
1. Change to FCS version.

Modification in 3.40(QG.1)b1 | 3/31/2004
1. [BUG FIXED]
Symptom: Enable UPNP feature, SIP service can't work fine.
Condition: 1). Enable UPNP feature on Prestige, 2). Using SIP service on Windows Messenger, 3). SIP client can't login to SIP server.

Modification in 3.40(QG.0)C0 | 3/16/2004
1. Change to FCS version.

Modification in 3.40(QG.0)b3 | 3/3/2004
1. [BUG FIXED]
Symptom: Can't login SIP server.
Condition: Testing SIP pass through feature, we can't login SIP server.
2. [BUG FIXED]
Symptom: To delete SMT 15.1.1 Address Mapping Rules item would cause system exception.

Condition: (1). Create any NAT mapping rule in the 15.1.1. (2). Delete the NAT mapping rule created in 1. (3). system exception occurs.

Modification in 3.40(QG.0)b2 | 2/23/2004
1. [BUG FIXED]
   Symptom: OAM loop-back test fail with AX4000 DSLAM.
2. [BUG FIXED]
   Symptom: SIP pass-through can't work fine.

Modification in 3.40(QG.0)b1 | 2/5/2004
1. Create this project.

Annex A CI Command List

Command Class List Table		
System Related Command	Exit Command	Ethernet Related Command
WAN Related Command	IP Related Command	PPP Related Command
Bridge Related Command		

System Related Command   Home

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

		display			display extra phone numbers
		node	<num>		set all extend phone number to remote node <num>
		remove	<set 1-3>		remove extra phone numbers
		reset			reset flag and mask
	feature				display feature bit
	fid				
		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
			display		display the category setting
			error [0:none/1:log/2:alert/3:both]		record and alert the system error 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	config netbios filter

			passthrough, 4:Trigger Dial> <on|off>	
	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

		ctrleint		ADSL CTRLE 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 CTRLE 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 CTRLE register (0xc3), the value is from 0xfa to 0x06
		targetnoise	[value]	Set the CTRLE register (0xc4), the value is from 0xfa to 0x06
		maxtonelimit	[value]	Set the CTRLE register (0xc5), the value is from

					0xfa to 0x06
		rxgain	[value]		Set the CTRLE register (0xc6), the value is from 0xfa to 0x06
		txoutputpwr	[value]		Set the CTRLE register (0xc7), the value is from 0xfa to 0x06
		rxoutputpwr	[value]		Set the CTRLE register (0xc8), the value is from 0xfa to 0x06
		maxoutputpwr	[value]		Set the CTRLE 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 CTRLE 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

IP Related Command

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 dicp 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
		errcnt		
			disp	display routing statistic counters
			clear	clear routing statistic counters
	status			display ip statistic counters
	adjTcp		<iface> [<mss>]	adjust the TCP mss of iface
	udp			

		status		display udp status
	rip			
		accept	<gateway>	drop an entry from the RIP refuse list
		activate		enable rip
		merge	[on|off]	set RIP merge flag
		refuse	<gateway>	add an entry to the rip refuse list
		request	<addr> [port]	send rip request to some address and port
		reverse	[on|off]	RIP Poisoned Reverse
		status		display rip statistic counters
		trace		enable debug rip trace
		mode		
			<iface> in [mode]	set rip in mode
			<iface> out [mode]	set rip out mode
		dialin_user	[show|in|out|both|none]	show dialin user rip direction
	tcp			
		ceiling	[value]	TCP maximum round trip time
		floor	[value]	TCP minimum rtt
		irtt	[value]	TCP default init rtt
		kick	<tcb>	kick tcb
		limit	[value]	set tcp output window limit
		max-incomplete	[number]	Set the maximum number of TCP incomplete connection.
		mss	[value]	TCP input MSS
		reset	<tcb>	reset tcb
		rtt	<tcb> <value>	set round trip time for tcb
		status	[tcb] [<interval>]	display TCP statistic counters
		syndata	[on|off]	TCP syndata piggyback
		trace	[on|off]	turn on/off trace for debugging
		window	[tcb]	TCP input window size
	samenet		<iface1> [<iface2>]	display the ifaces that in the same net
	uninet		<iface>	set the iface to uninet
	tftp			
		support		pritn if tfpt is support
		stats		display tftp status
	xparent			
		join	<iface1> [<iface2>]	join iface2 to iface1 group
		break	<iface>	break iface to leave ipxparent group
	antiprobe		<0|1> 1:yes 0:no	set ip anti-probe flag
	igmp			
		debug	[level]	set igmp debug level
		forwardall	[on|off]	turn on/off igmp forward to all interfaces flag
		querier	[on|off]	turn on/off igmp stop query flag
		iface		
			<iface> 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

PPP Related Command

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

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