ZyXEL

Firmware Release Note

ZyXEL Prestige 650R-11

Release 3.40(ES.2)C0

Date: August 19, 2002

Author: Chi-Wen Chen

ZyXEL Prestige 650R-11 Standard Version release 3.40(ES.2)C0 Release Note

Date: Aug 19, 2002

Supported Platforms:

ZyXEL Prestige 650R-11

Versions:

ZyNOS F/W Version: V3.40(ES.2) | 8/19/2002 9:54:11
Bootbase Version: V1.05 | 7/29/2002 11:53:18

Notes:

1. The Prestige 650 is a compact ADSL over POTS router that can be used for small-office or home-user and allows a small LAN to access the Internet through ADSL connection over the existing copper line.

    - Support Multi-Mode standard (ANSI T1.413, Issue 2; G.dmt(G.992.1); G.lite(G992.2)).
    - One auto-sensing 10/100M Ethernet interface
    - support Multi-protocol over AAL5 (RFC1483)
    - Support PPP over ATM AAL5 (RFC 2364)
    - Support PPP over Ethernet (RFC2516)
    - Support up to 8 PVCs
    - IP routing and bridging modes
    - Multi-NAT for Multi Global IP address Internet Access
    - DHCP Client, Sever and Relay
    - RIP I/ RIP II supported.
    - IGMP
    - IP alias
    - IP Policy Routing
    - ICMP Router Discovery
    - TFTP/FTP server for firmware upgrade
    - F4/F5 OAM
    - Call Scheduling for PPPoE
    - Support Web Configurator

2. For PPPoE, system must turn off the PPP VJ header compression. The command is as following: "ppp ipcp compress off", this command is already added into "autoexec.net"

3. Alcatel modem code version is 3.8.163 now.

Known Issues:

None

Features:

Modification in V3.40(ES.2) | 8/19/2002
1.   [FEATURE CHANGED] Change name for formal Release.

Modification in V3.40(ES.2)b2 | 2002/8/8
1.   [FEATURE ENHANCED] Add "Nail-Up" and "Password" configuration by sptgen
2.   [FEATURE ENHANCED] Enlarge PPPoE username length to 70 chars
     Note: So this version need to upgrade new rom-file
3.   [FEATURE CHANGED] Change "PPP" to "PPPoA" at smt4/smt11/web
4.   [FEATURE CHANGED] Change the rom-file setting for Switzerland version.
5.   [BUG FIXED] Fix the configuration length about PPPoE idle timeout at web wizard

Modification in V3.40(ES.2)b1 | 2002/7/25
1.   [FEATURE ENHANCED] Add "ADJUST_GAIN" commands to tune ADSL txGain and Target Noise.
2.   [FEATURE ENHANCED] Add "wan adsl rsploss" ci-command
3.   [FEATURE ENHANCED] Change the showing model name at smt main from "Prestige 650" to "Prestige 650R-11.
4.   [BUG FIXED] Fix the ERROR PACKET trad parse for PPPoE packet.
5.   [BUG FIXED] Fix the exception caused by the adsl line plug in and plug out.
6.   [BUG FIXED] Fix dyingGasp occurred before loading modem code would cause system reboot.
7.   [BUG FIXED] Fix the mbuf->flags would be impacted by hwsar vc number.
8.   [BUG FIXED] Fix the smt save quickly would casue the system hang-up.
9.   [BUG FIXED] Fix the atm discard packet would casue the exception.

Modification in V3.40(ES.0) | 2002/6/17
1.   [FEATURE CHANGED] Change name for formal release.

Modification in V3.40(ES.0)b17 | 2002/6/12
1.   [BUG FIXED] Fix ppp channel setting serval times by changing static and dynamic would cause system could not ping out.
2.   [BUG FIXED] Fix oam F4 / F5 loopback test would be failure when debug flag is turned off.

Modification in V3.40(ES.0)b16 | 2002/6/7
1.   [BUG FIXED] Fix the ip checksum error if the options existed in ip header.
2.   [BUG FIXED] Fix the system hangup if the icmp echo requtest pass through our router in which the port translation setting in serverSet Table was from 1 to 2000.
3.   [BUG FIXED] Fix the system hangup due to press left button in smt submenu 24.2 / 24.3 / 24.4 / 12 / 12.1 / 12.3.
4.   [BUG FIXED] Fix the CPU Bus timeout if OAM packet pass through our router in which there is no such VC.
5.   [BUG FIXED] Fix the channel drop fail and ring up fail problem at smt4/ smt11 (connection magnment)
6.   [BUG FIXED] Fix the security webpage filter link list problem.

Modification in V3.40(ES.0)b15 | 2002/5/28
1.   [FEATURE ENHANCED] Enlarge the adsl download modem code timing from 100ms to 200ms (HTP)
2.   [FEATURE ENHANCED] Change rom-file setting for new structure.
3.   [BUG FIXED] Fix the web-page cause the line drop if the setting is as before.
4.   [BUG FIXED] Fix the NetBIOS packet incoming from Wan would cause our router exception.
5.   [BUG FIXED] Fix the enet-encap could not bind wanip if the dsl line drop and link again.

Modification in V3.40(ES.0)b14 | 2002/5/17
1.   [FEATURE ENHANCED] Change Bootbase to 1.04 version
2.   [FEATURE ENHANCED] Merge SNMP trap v2

3. [FEATURE ENHANCED] Merge the new exception handler.
4. [BUG FIXED] Fix the DSL Active light is sparkling when no traffic pass through.
5. [BUG FIXED] Fix the exception when typing "sys iface disp wanif0 4" (after wanif0 had created)
6. [BUG FIXED] Fix the exception when new mac address pass through after the following setting steps: bridge is not set at smt1 and change bridge to router at smt11.
7. [BUG FIXED] Fix the exception if change the encap from PPP to 1483.
8. [BUG FIXED] Fix the PPP always idle if packet trigger before DSL line is up.
9. [BUG FIXED] Fix the default setting is lost when we clear the remoteNode by typing space at smt.
10. [BUG FIXED] Fix the username would be "?" if enter IP/Bridge option in smt11_0l

Modification in V3.40(ES.0)b13 | 2002/4/29
1. [FEATURE ENHANCED] Add protection for null pointer to aovid exception.
2. [BUG FIXED] Modify the default dhcp pool number at Web from 4 to 32.

Modification in V3.40(ES.0)b12 | 2002/4/22
1. [BUG FIXED] Modify system reboot: telnet will sometimes let system reboot(exception occur.)
2. [BUG FIXED] Common Bug fixed(porting from IP department by slchiang): add system sometimes will point to null point , new rascode will to detect pointer is null or not.

Modification in V3.40(ES.0)b11 | 2002/4/12
1. [FEATURE ENHANCED] Unify the ADSL driver API for Web, Smt and ci-command.
2. [FEATURE ENHANCED] Add DyingGasp Recovery mechanism
3. [FEATURE CHANGED] Modify the console task priority.
4. [FEATURE ENHANCED] Add setting protection for MBS, Idle-timeout at smt4 / smt11. (0~65535)
5. [FEATURE ENHANCED] Support PPP packet trigger [Note: Now PPP bcp mode would not support]
6. [FEATURE ENHANCED] Add call filter at smt11.5 when the encap was packet trigger (PPPoE / PPP)
7. [FEATURE ENHANCED] Modify the default DHCP ip pool to 32, and change the name of smt3.1 / smt 3.2
8. [FEATURE ENHANCED] Enlarge the Queue number to 128, the tftp memory allocation size and the NatSessions (256 ->1024)
9. [FEATURE ENHANCED] Upgrade romPager(Web Engine) from 3.0 to 4.0
10. [BUG FIXED] Fix the larger packet ping failure from the Wan side at PPPoE encap.
11. [BUG FIXED] Fix the time couldn't be update from time server when the router reset or from the Lan side.
12. [BUG FIXED] Fix the wanIp would not be changed when changing the wanip from static to dynamic.
13. [BUG FIXED] Fix the system hang-up if pressing any key when loading ADSL modem code.
14. [BUG FIXED] Fix the enet-Encap setting would be failure by smt11_0l (not smt4)

Modification in V3.40(ES.0)b10 | 2002/2/5
1. [FEATURE ENHANCED] Support Dynamic DNS, it can be configured from SMT 1.1
2. [FEATURE ENHANCED] Support Remote Management, it can be configured from SMT 24.11
3. [FEATURE CHANGED] Alcatel modem code is upgraded to 3.8.163
4. [BUG FIXED] In Web system status, the subnet mask of remote IP address is wrong
5. [BUG FIXED] In Web "Show Statistics" display error in IE5

Modification in V3.40(ES.0)b9 | 2001/12/17
1. [BUG FIXED] Configured 4 remote nodes, when ADSL line is link down, some remote nodes are not really closed, after line links up.
2. [BUG FIXED] Configured 4 remote nodes, when ADSL line is link down, some remote nodes are not really closed,

after line links up again, some remote nodes can't work

Modification in V3.40(ES.0)b8 | 2001/12/4
1. [BUG FIXED] System hangs-up when configured in bridge mode.
2. [BUG FIXED] System hangs-up when PPPoE mode is triggerred.
3. [BUG FIXED] WAN iface will increase when system is configurring SMT4 - PPPoE or PPP again and again.

Modification in V3.40(ES.0)b7 | 2001/11/20
1. [FEATURE ENHANCED] support reset button to restore default ROM file.
2. [BUG FIXED] Using MIB browser to get all MIB will make system hang
3. [BUG FIXED] System can't support 1k-Xmodem to upload F/W through Procomm Plus
4. [BUG FIXED] System hang-up, when configuring remote nodes
5. [BUG FIXED] In testing Upstream stress test to 4 remote nodes, 4 remote nodes receive different packet counts
6. [BUG FIXED] In Web/GUI, system can't display DSL modem version
7. [BUG FIXED] Configure LAN port to100Mbps but it is treated as 10Mbps

Modification in V3.40(ES.0)b6 | 2001/11/8
1. [FEATURE ENHANCEMENT] supports MIB-II.
2. [BUG FIXED] Change UBR to CBR, system will fail to ping.
3. [BUG FIXED] System will hang when using SNMP browser.
4. [Modem code] The modem code version name should be Alcatel 3.8.124
5. [BUG FIXED] system log can not be cleared
6. [BUG FIXED] Buget allocation can only be used when encapsulation is "PPPoE"

Modification in V3.40(ES.0)b5 | 2001/10/26
1. [FEATURE ENHANCED] Supports Embedded Web Configurator.
2. [FEATURE ENHANCED] Supports Uart using internal clock, but the baud rate only supports max to 38400bps
3. [FEATURE ENHANCED] change default VPI/VCI to 8/35.

Modification in V3.40(ES.0)b4
1. [FEATURE ENHANCED] Modify BOOTBASE and also BOOTEXT to support MX flash

Modification in V3.40(ES.0)b3
1. [FEATURE ENHANCED] In ATMRX.C ATM RX ISR, when receives error packets should free receive Rx count
2. [BUG FIXED] In SMT 3.2, DHCP item can't be saved.
3. [BUG FIXED] In SMT 11, the subnet mask of Remote IP address can't be saved.
4. [BUG FIXED] Throughput test by Smart Application will fail when test duration is 60 seconds or more

Internal Information:

1. Modification.

Modification in V3.40(ES.2)b2 | 2002/8/8
1. [FEATURE ENHANCED] Add "Code Checksum" at atsh

Modification in V3.40(ES.2)b1 | 2002/7/25
1. [FEATURE ENHANCED] Add "atld" AT-command.

Modification in V3.40(ES.0)b17 | 2002/6/12
1. [BUG FIXED] Add hidden protection for sptgen.

Modification in V3.40(ES.0)b15 | 2002/5/28
1. [FEATURE ENHANCED] Add ci-command "sys spt hidden <node>" to avoid user enter this remotenode to config
2. [FEATURE ENHANCED] Add "ATDC" for at-command.

Modification in V3.40(ES.0)b14 | 2002/5/17
1. [FEATURE ENHANCED] Merge the code with P650H / P650HW
2. [FEATURE ENHANCED] Use the Rom_controller when engineer debug flag is close to avoid the NULL pointer exception problem.
3. [FEATURE ENHANCED] Add "pragma pack(1) / pragma pack() " bewteen PACKED definition.
4. [FEATURE ENHANCED] Change ethernet driver to follow P650H.

Modification in V3.40(ES.0)b13 | 2002/4/29
1. [FEATURE ENHANCED] Add the sptgen feature.

Modification in V3.40(ES.0)b11 | 2002/4/12
1. [FEATURE ENHANCED] Add the ci-command " wan adsl dumplog" for Alcatel interoperability testing. (Please use baudrate: 38400)
2. [FEATURE ENHANCED] Add vendor and hwVerRange check
3. [FEATURE ENHANCED] Add checksum protection for TFTP/FTP/Uart.

Modification in V3.40(ES.0)b10 | 2002/2/5
1. [FEATURE ENHANCED] Add a command "wan adsl rate off " into autoexec.net which is to avoid link up/down too frequently
2. [BUG FIXED] One spelling error in the text display of command "sys romreset"

Modification in V3.40(ES.0)b6 | 2001/11/8
1. [FEATURE ENHANCED] merge the codes with ZyNOS 3.40 trunk.

Modification in V3.40(ES.0)b5 | 2001/10/26
1. [FEATURE ENHANCED] Modify CI Command "ether driver config [0|1=auto|normal] [0|1=10|100] [0|1=HD|FD] <ch-name>"

Modification in V3.40(ES.0)b4
1. [FEATURE ENHANCED] One CI command is added "ether driver config [0|1=normal|auto] [0|1=10|100] [0|1=HD|FD] <ch-name>" for configuring 10/100M ethernet manually, default is automatically sensing.

2. Manufactory Data in Bootbase

ZyNOS Version	: V3.40(ES.2) | 8/19/2002 9:54:11
Bootbase Version	: V1.05 | 7/29/2002 11:53:18
Vendor Name	: ZyXEL Communications Corp.
Product Model	: Prestige 650R-11
ZyNOS Code Model	: P650 ATU-R
HTP Code Model	: HTP_P650 V 0.01
ZyNOS ROM address	: bfc08000
System Type	: 6
MAC Address	: 00A0C5xxxxxx
Default Country Code	: FF
Boot Module Debug Flag	: xx
RomFile Version	: xx
RomFile Checksum	: d04e
ZyNOS Checksum	: 93c6
Core Checksum	: e60b
SNMP MIB level & OID	: 060102030405060708091011121314151617181920
Main Feature Bits	: 86
Other Feature Bits	:

```
        77 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
        00 00 00 00 00 00 00 00-00 40 13 00 00 00
```

3. Default ROM File Value Setting

- Menu 1: General Setup

```
                    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 1.1: Configure Dynamic DNS

```
                    Menu 1.1 – Configure Dynamic DNS

         Menu 1.1 – Configure Dynamic DNS

   Service Provider= WWW.DynDNS.ORG
   Active= Yes
   Host=
   EMAIL=
```

```
USER=
Password= ********
Enable Wildcard= No

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

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 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= Both
               Version= RIP-2B
             Multicast= None
             IP Policies=
             Edit IP Alias= No




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

- Menu 4 Internet Access Setup

```
                   Menu 4 - Internet Access Setup

           ISP's Name= ChangeMe
           Encapsulation= ENET ENCAP
           Multiplexing= LLC-based
           VPI #= 8
           VCI #= 35
           ATM QoS Type= UBR
             Peak Cell Rate (PCR)= 0
             Sustain Cell Rate (SCR)= 0
             Maximum Burst Size (MBS)= 0
           My Login= N/A
           My Password=N/A
           ENET ENCAP Gateway= N/A
           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. ChangeMe (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= ChangeMe            Route= IP
    Active= Yes                        Bridge= No

    Encapsulation= ENET ENCAP          Edit IP/Bridge= No
    Multiplexing= LLC-based            Edit ATM Options= No
    Service Name= N/A                  Telco Option:
    Incoming:                            Allocated Budget(min)= N/A
      Rem Login= N/A                     Period(hr)= N/A
      Rem Password= N/A                  Schedule Sets= N/A
    Outgoing:                            Nailed-Up Connection= N/A
      My Login= N/A
      My Password= N/A                 Session Options:
      Authen= N/A                        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 11.6 Remote Node ATM Layer Options

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

                          VPI #= 8
                          VCI #= 35
                          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 11.5 Remote Node Filter

```
                       Menu 11.5 - Remote Node Filter

                  Input Filter Sets:
                    protocol filters= 12, 11
                       device filters=
                  Output Filter Sets:
                    protocol filters=
                       device filters=

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

- 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 (Used for SUA Only)


            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 Filter Set Configuration

```
                    Menu 21 - Filter Set Configuration

     Filter                          Filter
     Set #       Comments            Set #        Comments
     ------  -----------------       ------  -----------------
      1      NetBIOS_WAN               7      _____
      2      NetBIOS_LAN               8      _____
      3      TELNET_WAN                9      _____
      4      PPPoE                    10      _____
      5      FTP_WAN                  11      WebSet1
      6      _____         12      WebSet2


                    Enter Filter Set Number to Configure= 0

                    Edit Comments= N/A

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

- Menu 21.1 Filter Rules Summary (for NetBIOS_WAN)

```
                       Menu 21.1 - 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 21.1.1 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                        Menu 21.1.1 - TCP/IP Filter Rule

                 Filter #: 1,1
                 Filter Type= TCP/IP Filter Rule
                 Active= Yes
                 IP Protocol= 6     IP Source Route= No
                 Destination: IP Addr= 0.0.0.0
                              IP Mask= 0.0.0.0
                              Port #= 137
                              Port # Comp= Equal
                      Source: IP Addr= 0.0.0.0
                              IP Mask= 0.0.0.0
                              Port #=
                              Port # Comp= None
                 TCP Estab= No
                 More= No           Log= None
                 Action Matched= Drop
                 Action Not Matched= Check Next Rule


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

- Menu 21.1.2 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                        Menu 21.1.2 - TCP/IP Filter Rule

                 Filter #: 1,2
                 Filter Type= TCP/IP Filter Rule
                 Active= Yes
                 IP Protocol= 6     IP Source Route= No
                 Destination: IP Addr= 0.0.0.0
                              IP Mask= 0.0.0.0
                              Port #= 138
                              Port # Comp= Equal
                      Source: IP Addr= 0.0.0.0
                              IP Mask= 0.0.0.0
                              Port #=
                              Port # Comp= None
                 TCP Estab= No
                 More= No           Log= None
                 Action Matched= Drop
                 Action Not Matched= Check Next Rule


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

- Menu 21.1.3 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                  Menu 21.1.3 - TCP/IP Filter Rule

        Filter #: 1,3
        Filter Type= TCP/IP Filter Rule
        Active= Yes
        IP Protocol= 6     IP Source Route= No
        Destination: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #= 139
                     Port # Comp= Equal
            Source: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #=
                     Port # Comp= None
        TCP Estab= No
        More= No          Log= None
        Action Matched= Drop
        Action Not Matched= Check Next Rule

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

- Menu 21.1.4 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                  Menu 21.1.4 - TCP/IP Filter Rule

        Filter #: 1,4
        Filter Type= TCP/IP Filter Rule
        Active= Yes
        IP Protocol= 17    IP Source Route= No
        Destination: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #= 137
                     Port # Comp= Equal
            Source: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #=
                     Port # Comp= None
        TCP Estab= N/A
        More= No          Log= None
        Action Matched= Drop
        Action Not Matched= Check Next Rule

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

- Menu 21.1.5 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                  Menu 21.1.5 - TCP/IP Filter Rule

        Filter #: 1,5
        Filter Type= TCP/IP Filter Rule
        Active= Yes
        IP Protocol= 17    IP Source Route= No
        Destination: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #= 138
                     Port # Comp= Equal
            Source: IP Addr= 0.0.0.0
                     IP Mask= 0.0.0.0
                     Port #=
                     Port # Comp= None
        TCP Estab= N/A
        More= No          Log= None
        Action Matched= Drop
        Action Not Matched= Check Next Rule

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

- Menu 21.1.6 TCP/IP Filter Rule (for NetBIOS_WAN)

```
                    Menu 21.1.6 - TCP/IP Filter Rule

          Filter #: 1,6
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 17    IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 139
                       Port # Comp= Equal
              Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #=
                       Port # Comp= None
          TCP Estab= N/A
          More= No           Log= None
          Action Matched= Drop
          Action Not Matched= Forward


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

- Menu 21.2 Filter Rules Summary (for NetBIOS_LAN)

```
                    Menu 21.2 - 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 21.2.1 TCP/IP Filter Rule (for NetBIOS_LAN)

```
                    Menu 21.2.1 - TCP/IP Filter Rule

          Filter #: 2,1
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 17    IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 53
                       Port # Comp= Equal
              Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 137
                       Port # Comp= Equal
          TCP Estab= N/A
          More= No           Log= None
          Action Matched= Drop
          Action Not Matched= Forward


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

- Menu 21.3 Filter Rules Summary (for TELNET_WAN)

```
                        Menu 21.3 - 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 F
 2 N
 3 N
 4 N
 5 N
 6 N
```

- Menu 21.3.1 TCP/IP Filter Rule (for TELNET_WAN)

```
                         Menu 21.3.1 - TCP/IP Filter Rule

                Filter #: 3,1
                Filter Type= TCP/IP Filter Rule
                Active= Yes
                IP Protocol= 6     IP Source Route= No
                Destination: IP Addr= 0.0.0.0
                             IP Mask= 0.0.0.0
                             Port #= 23
                             Port # Comp= Equal
                     Source: IP Addr= 0.0.0.0
                             IP Mask= 0.0.0.0
                             Port #=
                             Port # Comp= None
                TCP Estab= No
                More= No             Log= None
                Action Matched= Drop
                Action Not Matched= Forward

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

- Menu 21.4 Filter Rules Summary (for PPPoE)

```
                        Menu 21.4 - Filter Rules Summary

 # A Type                     Filter Rules                              M m n
 - - ---- ------------------------------------------------------------- - - -
 1 Y Gen  Off=12, Len=2, Mask=ffff, Value=8863                         N F N
 2 Y Gen  Off=12, Len=2, Mask=ffff, Value=8864                         N F D
 3 N
 4 N
 5 N
 6 N

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

- Menu 21.4.1 Generic Filter Rule (for PPPoE)

```
                         Menu 21.4.1 - Generic Filter Rule

                Filter #: 4,1
                Filter Type= Generic Filter Rule
                Active= Yes
                Offset= 12
                Length= 2
                Mask= ffff
                Value= 8863
                More= No             Log= None
                Action Matched= Forward
                Action Not Matched= Check Next Rule

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

- Menu 21.4.2 Generic Filter Rule (for PPPoE)

```
                    Menu 21.4.2 - Generic Filter Rule

              Filter #: 4,2
              Filter Type= Generic Filter Rule
              Active= Yes
              Offset= 12
              Length= 2
              Mask= ffff
              Value= 8864
              More= No            Log= None
              Action Matched= Forward
              Action Not Matched= Drop




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

- Menu 21.5 Filter Rules Summary (for FTP_WAN)

```
                    Menu 21.5 - 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=21                      N D F
 2 N
 3 N
 4 N
 5 N
 6 N
```

- Menu 21.5.1 TCP/IP Filter Rule (for FTP_WAN)

```
                    Menu 21.5.1 - TCP/IP Filter Rule

              Filter #: 5,1
              Filter Type= TCP/IP Filter Rule
              Active= Yes
              IP Protocol= 6     IP Source Route= No
              Destination: IP Addr= 0.0.0.0
                           IP Mask= 0.0.0.0
                           Port #= 21
                           Port # Comp= Equal
                   Source: IP Addr= 0.0.0.0
                           IP Mask= 0.0.0.0
                           Port #=
                           Port # Comp= None
              TCP Estab= No
              More= No            Log= None
              Action Matched= Drop
              Action Not Matched= Forward




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

- Menu 21.11 Filter Rules Summary (for WebSet1)

```
                    Menu 21.12 - 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
```

- Menu 21.11.1 TCP/IP Filter Rule (for WebSet1)

```
                    Menu 21.11.1 - TCP/IP Filter Rule

                    Filter #: 11,1
                    Filter Type= TCP/IP Filter Rule
                    Active= Yes
                    IP Protocol= 17     IP Source Route= No
                    Destination: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #= 161
                                 Port # Comp= Equal
                         Source: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #=
                                 Port # Comp= None
                    TCP Estab= No
                    More= No          Log= None
                    Action Matched= Drop
                    Action Not Matched= Check Next Rule

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

- Menu 21.11.2 TCP/IP Filter Rule (for WebSet1)

```
                    Menu 21.11.2 - TCP/IP Filter Rule

                    Filter #: 11,2
                    Filter Type= TCP/IP Filter Rule
                    Active= Yes
                    IP Protocol= 17     IP Source Route= No
                    Destination: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #= 162
                                 Port # Comp= Equal
                         Source: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #=
                                 Port # Comp= None
                    TCP Estab= N/a
                    More= No          Log= None
                    Action Matched= Drop
                    Action Not Matched= Forward

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

- Menu 21.12 Filter Rules Summary (for WebSet2)

```
                   Menu 21.12 - 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
```

- Menu 21.12.1 TCP/IP Filter Rule (for WebSet)

```
                    Menu 21.12.1 - TCP/IP Filter Rule

                    Filter #: 12,1
                    Filter Type= TCP/IP Filter Rule
                    Active= Yes
                    IP Protocol= 6     IP Source Route= No
                    Destination: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #= 23
                                 Port # Comp= Equal
                         Source: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #=
                                 Port # Comp= None
                    TCP Estab= No
                    More= No          Log= None
                    Action Matched= Drop
                    Action Not Matched= Check Next Rule

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

- Menu 21.12.2 TCP/IP Filter Rule (for WebSet))

```
                    Menu 21.12.2 - TCP/IP Filter Rule

                    Menu 21.12.1 - TCP/IP Filter Rule

                    Filter #: 12,1
                    Filter Type= TCP/IP Filter Rule
                    Active= Yes
                    IP Protocol= 6     IP Source Route= No
                    Destination: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #= 21
                                 Port # Comp= Equal
                         Source: IP Addr= 0.0.0.0
                                 IP Mask= 0.0.0.0
                                 Port #=
                                 Port # Comp= None
                    TCP Estab= No
                    More= No          Log= None
                    Action Matched= Drop
                    Action Not Matched= Check Next Rule

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

- Menu 21.12.3 TCP/IP Filter Rule (for WebSet))

```
                    Menu 21.12.3 - TCP/IP Filter Rule

          Menu 21.12.3 - TCP/IP Filter Rule

          Filter #: 12,3
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 17     IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 69
                       Port # Comp= Equal
               Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #=
                       Port # Comp= None
          TCP Estab= No
          More= No            Log= None
          Action Matched= Drop
          Action Not Matched= Check Next Rule

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

- Menu 21.12.4 TCP/IP Filter Rule (for WebSet))

```
                    Menu 21.12.4 - TCP/IP Filter Rule

          Menu 21.12.4 - TCP/IP Filter Rule

          Filter #: 12,4
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 6    IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 80
                       Port # Comp= Equal
               Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #=
                       Port # Comp= None
          TCP Estab= N/A
          More= No            Log= None
          Action Matched= Drop
          Action Not Matched= Check Next Rule

          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 Password:

```
                         Menu 23 - System Password

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



                 Enter here 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: System Maintenance – UNIX Syslog

```
                 Menu 24.3.2 - System Maintenance - UNIX Syslog

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

                   Types:
                     CDR= No
                     Packet triggered= No
                     Filter log= No
                     PPP log= No



                   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= None
           Time Server Address= N/A

           Current Time:                     06 : 14 : 33
           New Time (hh:mm:ss):              06 : 14 : 33

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

           Time Zone= GMT

           Daylight Saving= No
           Start Date (mm-dd):                  01 - 00
           End Date (mm-dd):                    01 - 00




                   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 = ALL
       Secured Client IP = 0.0.0.0

     FTP Server:
       Server Port = 21                  Server Access = ALL
       Secured Client IP = 0.0.0.0

     Web Server:
       Server Port = 80                  Server Access = ALL
       Secured Client IP = 0.0.0.0




                    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
  ip icmp discovery enif0 off
  ppp ipcp compress off
  sys wdog sw on
  sys quick enable
  wan adsl rate off
  ```