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**Firmware Release Note**

**P791R**

**Standard version**

**Release 3.40(BT.4)C0**

|                |                     |
|----------------|---------------------|
| <b>Date:</b>   | <b>Sep 09, 2005</b> |
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# **ZyXEL P791R Standard Version release 3.40(BT.4)C0 Release Note**

**Date:** Sep 09, 2005

## **Supported Platforms:**

ZyXEL P791R

## **Versions:**

ZyNOS Version: V3.40(BT.4) | 9/09/2005 11:45:57

Bootbase Version: V1.14 | 11/10/2003 20:56:40

## **Notes:**

Support Globlespan modem code A.423.

## **Known Issues:**

1. Update the wrong configuration file(Word,Rom-t or Excel)from manu 24.6 will cause device exception.

## **Features:**

### **Modifications in V 3.40(BT.4)C0 | 9/09/2005**

1. Change to FCS version.

### **Modifications in V 3.40(BT.4)b2 | 9/02/2005**

1. [BUG FIXED] 050802062  
Symptom& Condition: Keyin"http://192.168.1.1/rpFWUpload.html" in IE, can login in Firmware page without user name and password, then user can do romreset and upload new firmware.
2. [BUG FIXED] 050802064  
Symptom: Traffic redirect function cannot work properly at ENET-ENCAP with static setting.  
Condition: In menu 4 when using ENET ENCAP encapsulation and set static address. In menu 2, we set a traffic redirect function, it could not work properly.
3. [BUG FIXED] 050802066  
Symptom: The GUI\Wizard Setup can save the no match IP .  
Condition: While set the DUT LAN "Client IP Pool Starting Address" and "Size of Client IP Pool" which are not match the "IP Subnet Mask", but this can be saved in GUI\Wizard Setup and rom-t. In SMT and GUI\Advanced Setup have no this issue.

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4. [BUG FIXED] 050802067  
Symptom: if we change remote IP address or gateway in menu 4 or menu11, the previous routing entry still keep. it can see in CI command:ip route status.  
Condition: In menu4 or menu11,Configure Enet Encap=static IP, then change to PPPoE dynamic, in menu24.8, check the route table, the Enet Encap entry still existed.unless you restart the DUT .
5. [BUG FIXED] 050804173  
Symptom: After save DNS server, In CI command: ip ping www.hinet.net, it can not be work and it must reboot.  
Condition: We save DNS server in menu 3.2 after reset default rom file and if we don't reset system and issue "ip ping www.hinet.net" that it can not be work and it must reboot .
6. [BUG FIXED] 050804178  
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.
7. [BUG FIXED] 050804179  
Symptom& Condition: enter eWC NAT, click the edit detail of full feature will apply full feature
8. [BUG FIXED] 050804181  
Symptom& Condition: While delete menu4, then go to GUI to change NAT mode and then apply in GUI,then go to SMT menu 24.1will cause crash.
9. [BUG FIXED] 050804182  
Symptom: PPPOE nailed-up work have problem  
Condition: Step1 use PPPOE and nailed-it up; Step2 in SMT menu 26.1 set a schedule start time 00:03 and duration time is 00:02 and force down; Step3 in menu11.1 schedule set =1, now time is 00:02 when time is 00:03 then PPPOE turn down, but time is 00:05 the PPPOE can not turn up, then in menu 24.8 command "d d 1" still can not turn up .

**Modifications in V 3.40(BT.4)b1 | 7/27/2005**

1. [BUG FIXED] Modify SMT and GUI setting in dial backup is ADSL link mode, and user don't need to enter WAN IP address.
2. [BUG FIXED] Modify DHCP DNS proxy sometimes will cause system exception bug.

**Modifications in V 3.40(BT.3) | 6/21/2005**

1. [FEATURE CHANGED] Change to FCS version.

**Modifications in V 3.40(BT.3)b2 | 6/15/2005**

1. [FEATURE CHANGED] Support new modem code A.423.
2. [FEATURE CHANGED] Change this f/w to support old hardware with old AFE and new hardware with new AFE.

**Modifications in V 3.40(BT.3)b1 | 03/22/2005**

1. [FEATURE CHANGED] Support new modem code R3.0.1
2. [FEATURE CHANGED] Support new MAC, atwz , sys atwz command
3. [FEATURE CHANGED] Change hw version to 1 , and this f/w only support 3.40(BT.3)b1 new hardware with new bootbase (after we change AFE), and this f/w can't work on old P791R.

**Modifications in V 3.40(BT.2)C0 | 06/21/2004**

2. Change to FCS version.

**Modifications in V 3.40(BT.2)b6 | 06/17/2004**

1. [BUG FIXED]  
Symptom: RIP-2M can't work fine.  
Condition: When using ENET ENCAP encapsulation and RIP version is RIP-2M.

**Modifications in V 3.40(BT.2)b5 | 06/16/2004**

1. [BUG FIXED]  
Symptom: upstream rate is wrong when setting PCR value.  
Condition: When line rate = 512kbps and PCR = 943, upstream rate can only reach about 26KB/s.
2. [BUG FIXED]  
Symptom: In eWC, cannot fill special character (like",") in Advanced setup\ WAN\ WAN backup\Dial Backup

**Modifications in V 3.40(BT.2)b4 | 06/09/2004**

1. [FEATURE ENHANCED]  
SNMP issue:  
(1) Support both SNMPv1 and SNMPv2 of TRAP on our ras.  
(2) Support CLI command for SNMP(including TRAP version)  
(3) Wrong value of IFSPEED on SNMP
2. [BUG FIXED]  
Symptom: system will occur exception when uploading F/W by FTP  
Condition: After wan is link-up, system will occur exception when uploading F/W by FTP.
3. [BUG FIXED]  
Symptom: PPP connection fail under continuous ICMP packets  
Condition: Two P791R are back-to-back connected and continuous ICMP packets are sent between two P791R. During the client of P791R is rebooting, these continuous ICMP packets will cause the PPP connection fail.
4. [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 reply from device 2.
5. [BUG FIXED]  
Symptom: Error ARP reply under 2 remote nodes. One is routing mode, and the other

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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.

6. [BUG FIXED]

Symptom: arp table could not age out. And ping failed

Condition: PCs have same ip address as one of arp tables and different mac address

7. [FEATURE ENHANCED]

(1) Enhance the CI command: xdsl param to show the power scale information

(2) Save the CI command: "xdsl param 3" value (Tx power scale) into flash

8. [BUG FIXED]

Symptom: ping non IP format string, will get successful response.

Condition: ping non IP format string was be translated to ping 0.0.0.0 that will get successful response. in some test environment.

9. [BUG FIXED]

Symptom: Web: when the length of Ping Address exceeds 16 will cause exception

Condition: Under eWC\Maintenance\Diagnostic\General, to ping one non IP format string (like fre.wfewfr.wfeefe.eewd) and system will get exception.

10. [BUG FIXED]

Symptom: qlm error or traffic is blocked

Condition: qlm error bug:

1) Setup 2 remote node, node 1 is RFC-1483 bridge mode. Node 2 is routing mode with PPPoE nailed-up. Actuality,

2) Node 2 just there and do nothing.

3) Heavy traffic through our device will cause qlm error.

11. [BUG FIXED]

Symptom: ZyXEL Prestige Router Discloses Portions of Memory Contents to Remote Users

Condition: When ping zero size packet to router, router will reply the content in some portion of memory.

**Modifications in V 3.40(BT.2)b3 | 11/10/2003**

1. [BUG FIXED]

Symptom: Dial-Backup Fails.

Condition: After enable Dial-Backup in Menu 2 and Menu 11.12, the Dial-Backup mechanism still can't work fine.

2. [BUG FIXED]

Symptom: The system can't be boot up when connecting some particular modem.

Condition: The system will be forced into debug mode when connecting some particular modem(e.g. USB). This is because the device sends message to modem via CON/AUX port, then the modem responds with the same message. These responding message will cause the system to enter debug mode.

**Modifications in V 3.40(BT.2)b2 | 9/24/2003**

1. [FEATURE CHANGED]

Enlarge IP routing table size from 128 to 256.

2. [FEATURE ENHANCED]

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TE request to add/modify 4 CI commands for new producing flow.

- a) sys romreset <1:reboot|0:no reboot> /\* if you choose "0",system will put default ROM into ROM debug area only \*/
  - b) sys atsh /\* add Flash and DRAM size \*/
  - c) sys atwe <mac address> <country code> <debug flag> <feature bits> <1:reboot|0:no reboot>
  - d) sys stdio 0 [seconds]
3. [FEATURE ENHANCED]  
TE request to add one CI command (aux htptest) for new producing flow to test the hardware test of AUX.
4. [BUG FIXED]  
Symptom : 2PCs transmits data in LAN will cause system crash.  
Condition : Use 10M half-duplex hub in single LAN port device. One PC transmits data to another PC via hub will cause system crash.
5. [BUG FIXED]  
Symptom: Sometimes PPPoE fails to dial up after DSL line is unplugged and then plugged.  
Condition: (1) After DSL line is unplugged and then plugged 8 times, no packets would be transmitted or received.  
(2) After changing the VPI/VCI setting eight times under PPPoE encap, no packets would be transmitted or received.
6. [BUG FIXED]  
Symptom: backup recovery interval should be not larger than 65535.  
Condition: Device accepts setting which are larger than 65535 for "backup recovery interval."
7. [FEATURE ENHANCED]  
Add one CI command "ip adjmss [<mss>]", This CI command is used to adjust TCP mss value.
8. [BUG FIXED]  
Symptom: NAT pass-through didn't work well.  
Condition: NAT pass-through didn't work well while applied on "Callcomm" and "Vood Residential Gateway" applications.

**Modifications in V 3.40(BT.2)b1 | 7/14/2003**

1. [FEATURE ENHANCED] WAN Backup
  - e) Support WAN backup feature. (Traffic Redirect and Dial Backup)
  - f) Modify SMT menu 2 (WAN Setup)
  - g) Add WAN backup eWC. Enhance traffic redirect and dial backup feature.

**Modifications in V 3.40(BT.1)C0 | 6/13/2003**

1. Change FCS version.

**Modifications in V 3.40(BT.1)b1 | 6/12/2003**

1. [FEATURE CHANGED] Modify the diagnostic items after wizard setup.
2. [BUG FIXED]  
Symptom: The back button does not work in wizard page.  
Condition: The back button does not work in wizard page.

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3. [BUG FIXED]  
Symptom: "Reset DSL line" button does not work in the diagnostic page.  
Condition: "Reset DSL line" button does not work in the diagnostic page.
4. [BUG FIXED]  
Symptom: Can't configure dial backup parameters in AUX mode.  
Condition: When console port switch to AUX mode, users can't configure dial backup parameters via Telnet function.

**Modifications in V 3.40(BT.0)C0 | 5/23/2003**

1. Change FCS version.

**Modifications in V 3.40(BT.0)b2 | 5/20/2003**

1. [FEATURE CHANGED]  
Support dial backup feature. Modify SMT menu 2 and the last remote node in SMT menu 11 for dial backup.
2. [FEATURE CHANGED]  
Enhance web help pages.
3. [FEATURE CHANGED]  
Modify "Rate Enable" into "Rate Adaption" in the wizard page.
4. [FEATURE CHANGED]  
Change the blinking frequency for LAN Led.
5. [BUG FIXED]  
Symptom: When the system enable routing and bridge in menu 1 and enable bridge in menu 11, the system will discard the packets in the downstream direction.  
Condition: When the system enable routing and bridge in menu 1 and enable bridge in menu 11, the system will discard the packets in the downstream direction.

**Modifications in V 3.40(BT.0)b1 | 4/18/2003**

1. [FEATURE CHANGED]  
Support Globespan modem code R1.5.

**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="#">IP Related Command</a> | <a href="#">Bridge Related Command</a>   |
| <a href="#">XDSL Related Command</a>   |                                    |  |

| System Related Command |          |         |         | <a href="#">Home</a>                |
|------------------------|----------|---------|---------|-------------------------------------|
| Command                |          |         |         | Description                         |
| sys                    |          |         |         |                                     |
|                        | adjtime  |         |         | retrive date and time from Internet |
|                        | atsh     |         |         | display MRD field                   |
|                        | callhist |         |         |                                     |
|                        |          | display |         | display call history                |
|                        |          | remove  | <index> | remove entry from call history      |

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|  |             |                    |   |  |
|--|-------------|--------------------|---|--|
|  | countrycode |                    | [countrycode]                             | set country code                                 |
|  | date        |                    | [year month date]                         | set/display date                                 |
|  | domainname  |                    |   | display domain name                              |
|  | edit        |                    | <filename>                                | edit a text file                                 |
|  | extraphnum  |                    |   | maintain extra phone numbers for outcalls        |
|  |             | add                | <set 1-3> <1st phone num> [2nd phone num] | add extra phone numbers                          |
|  |             | display            |   | display extra phone numbers                      |
|  |             | node               | <num>                                     | set all extend phone number to remote node <num> |
|  |             | remove             | <set 1-3>                                 | remove extra phone numbers                       |
|  |             | reset              |   | reset flag and mask                              |
|  | feature     |                    |   | display feature bit                              |
|  | hostname    |                    | [hostname]                                | display system hostname                          |
|  | log         |                    |   |  |
|  |             | clear              |   | clear log error                                  |
|  |             | disp               |   | display log error                                |
|  |             | online             | [on off]                                  | turn on/off error log online display             |
|  | stdio       |                    | [second]                                  | change terminal timeout value                    |
|  | time        |                    | [hour [min [sec]]]                        | display/set system time                          |
|  | trcdisp     | parse, brief, disp |   | monitor packets                                  |
|  | syslog      |                    |   |  |
|  |             | server             | [destIP]                                  | set syslog server IP address                     |
|  |             | facility           | <FacilityNo>                              | set syslog facility                              |
|  |             | type               | [type]                                    | set/display syslog type flag                     |
|  |             | mode               | [on off]                                  | set syslog mode                                  |
|  | 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                          |
|  | socket      |                    |   | display system socket information                |
|  | 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                          |
|  | xmodemmode  | [crc checksum]     |   | select xmodem mode                               |

**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         |



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|  |         |        |   |   |
|--|---------|--------|---|---|
|  |         | Status | <ch_name>   | see LAN status  |
|  |         | config | [0 1=auto normal] [0 1=10 100]<br>[0 1=HD FD] <ch-name> | Configure LAN Settings Auto/Normal, 100/10 Mbps, Half/Full Duplex |
|  | version |        |   | see ethernet device type  |

## WAN Related Command

[Home](#)

| Command |       |         |                                | Description  |
|---------|-------|---------|--------------------------------|--|
| Wan     | atm   | test    | [fix rand period oam loopback] | Generate ATM traffic   |
|         | hwsar | Disp    |                                | Display hwsar packets incoming/outgoing information                                    |
|         |       | Clear   |                                | Clear hwsar packets information  |
|         |       | Sendoam |                                | Send OAM packets: <vpi> <vci> <f5><br><end-to-end> <type:0(AIS) 1(RDI)<br>2(LoopBack)> |

## IP Related Command

[Home](#)

| Command |          |            |   | Description                                |
|---------|----------|------------|---|--|
| ip      |          |            |   |  |
|         | address  |            | [addr]  | display host ip address                    |
|         | alias    |            | <iface>   | alias iface                                |
|         | aliasdis |            | <0 1>   | disable alias                              |
|         | arp      |            |   |  |
|         |          | status     | <iface>   | display ip arp status                      |
|         | dhcp     |            | <iface>   |  |
|         |          | client     |   |  |
|         |          |            | release   | release DHCP client IP                     |
|         |          |            | renew   | renew DHCP client IP                       |
|         |          | status     | [option]  | show dhcp status                           |
|         | dns      |            |   |  |
|         |          | query      |   |  |
|         |          | stats      |   |  |
|         |          |            | clear   | clear dns statistics                       |
|         |          |            | disp  | display dns statistics                     |
|         | icmp     |            |   |  |
|         |          | status     |   | display icmp statistic counter             |
|         |          | discovery  | <iface> [on off]  | set icmp router discovery flag             |
|         | ifconfig |            | [iface] [ipaddr] [broadcast <addr><br>[mtu <value> dynamic] | configure network interface                |
|         | ping     |            | <hostid>  | ping remote host                           |
|         | route    |            |   |  |
|         |          | status     | [if]  | display routing table                      |
|         |          | add        | <dest_addr default>[/<bits><br><gateway> [<metric>]         | add route                                  |
|         |          | addiface   | <dest_addr default>[/<bits><br><gateway> [<metric>]         | add an entry to the routing table to iface |
|         |          | addprivate | <dest_addr default>[/<bits><br><gateway> [<metric>]         | add private route                          |
|         |          | drop       | <host addr> [/<bits>]                                       | drop a route                               |
|         | status   |            |   | display ip statistic counters              |
|         | udp      |            |   |  |
|         |          | status     |   | display udp status                         |
|         | tcp      |            |   |  |
|         |          | status     | [tcb] [<interval>]  | display TCP statistic counters             |
|         | xparent  |            |   |  |

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|  |      |            |                             |   |
|--|------|------------|-----------------------------|---|
|  |      | join       | <iface1> [<iface2>]         | join iface2 to iface1 group                     |
|  |      | break      | <iface>                     | break iface to leave ipxparent group            |
|  | igmp |            |                             |   |
|  |      | debug      | [level]                     | set igmp debug level                            |
|  |      | forwardall | [on/off]                    | turn on/off igmp forward to all interfaces flag |
|  |      | querier    | [on/off]                    | turn on/off igmp stop query flag                |
|  |      | iface      |                             |   |
|  |      |            | <iface> grouptm <timeout>   | set igmp group timeout                          |
|  |      |            | <iface> interval <interval> | set igmp query interval                         |
|  |      |            | <iface> join <group>        | join a group on iface                           |
|  |      |            | <iface> leave <group>       | leave a group on iface                          |
|  |      |            | <iface> query               | send query on iface                             |
|  |      |            | <iface> rsptime [time]      | set igmp response time                          |
|  |      |            | <iface> start               | turn on of igmp on iface                        |
|  |      |            | <iface> stop                | turn off of igmp on iface                       |
|  |      |            | <iface> ttl <threshold>     | set ttl threshold                               |
|  |      |            | <iface> v1compat [on/off]   | turn on/off v1compat on iface                   |
|  |      | robustness | <num>                       | set igmp robustness variable                    |
|  |      | status     |                             | dump igmp status                                |

Bridge Related Command

[Home](#)

| Command |      |       |  | Description                               |
|---------|------|-------|--|---|
| bridge  |      |       |  |   |
|         | cnt  |       |  | related to bridge routing statistic table |
|         |      | disp  |  | display bridge route counter              |
|         |      | clear |  | clear bridge route counter                |
|         | stat |       |  | related to bridge packet statistic table  |
|         |      | disp  |  | display bridge route packet counter       |
|         |      | clear |  | clear bridge route packet counter         |

XDSL Related Command

[Home](#)

| Command |         |       |  | Description                              |
|---------|---------|-------|--|--|
| xdsl    |         |       |  |  |
|         | state   |       |  | display XDSL status about physical layer |
|         | restart |       |  | restart XDSL driver                      |
|         | cnt     | disp  |  | display xsdl error counter               |
|         |         | clear |  | clear xsdl error counter                 |

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