ZyXEL Prestige 304 Standard Version
V3.50(CO.0)C0
Release Note

Date: October 23, 2001

Supported Platforms:

ZyXEL Prestige 304

Features:

Modification in V3.50 (CO.0)C0 10/23/2001
1. [BUG FIXED] If we upload the different ras code to router, it will be successful but system crash.

Modification in V3.50 (CO.0)b6 10/09/2001
1. Remove Multi-NAT.

Modification in V3.50 (CO.0)b5 09/27/2001
1. Update help files.
2. Wording "Content Filter" to "Parental Control".
3. Bug: ADVANCED | WAN | MAC: enable "Spoof this computer MAC address ..". then you can get a new wan MAC, bout it is different from computer MAC address.. Fixed.

Modification in V3.50 (CO.0)b4 09/24/2001
1. Bug: ADVANCED | WAN | MAC: enable "Spoof this computer MAC address …". then you can get a new wan MAC, bout it is different from computer MAC address.. Fixed.
2. Bug: ADVANCED | WAN | MAC: enable "Spoof this computer MAC address …". then you power off> on P304 and configure it again, you will see it enable "Factory default". In fact, it enable "Spoof this computer MAC address …"..Fixed.
3. In static route entry page, the default metric value equal 2.
4. In WAN page, the default metric value equal 2.

Modification in V3.50 (CO.0)b3 09/20/2001
1. Update Wizard & Wan help files for PPTP pages.
2. Bug: Restore romfile fail. Fixed.
3. Bug: Content Filter Log/Alert mail header show "Netgear". Fixed.

Modification in V3.50 (CO.0)b2 09/19/2001
1. Update GUI & help files.
2. At the login screen, gives focus to the password field.

Modification in V3.50 (CO.0)b1 09/13/2001
1. First release.

Appendix:

Appendix 1 SUA Support Table

The required settings of Menu 15 for some applications are listed in the following table.

SUA Support Table

Traffic Type	Application Version	Required Settings in Menu 15 Port/IP	
		Outgoing Connection	**Incoming Connection**
HTTP	Netscape, IE	None	80/client IP
FTP	Windows FTP, Cuteftp	None	21/client IP
TELNET	Windows Telnet, Neterm	None	23/client IP (and remove Telnet filter in WAN port)
POP3	Eudora	None	110/clinet IP
SMTP	Eudora	None	25/client IP
IRC	mIRC,Microsoft Chat	None for Chat. DCC support: MIRC < 5.31	None
PPTP	Windows PPTP	None	1723/client IP
ICQ	ICQ 99a	None for Chat. For file transfer, we must enable ICQ-preference-connections-firewall and set the firewall time out to 80 seconds in firewall setting.	Default/client IP
Cu-SeeMe	Cornell 1.1	None	7648/client IP
	White Pine 3.1.2	7648/client IP & 24032/client IP	Default/client IP
	White Pine 4.0 (CuSeeMe Pro)	7648/client IP & 24032/client IP	Default/client IP
NetMeeting	Microsoft NetMeeting 2.1 & 2.11	None	1720/client IP 1503/client IP
Cisco IP/TV	Cisco IP/TV 2.0.0	Default/client IP	
RealPlayer	RealPlayer G2	None	
VDOLive		None	
Quake	Quake1.06	None	Default/client IP
QuakeII	QuakeII2.30	None	Default/client IP
QuakeIII	QuakeIII1.05beta	None	

StartCraft		6112/client IP	
Quick Time	Quick Time 4.0	None	
IPSEC (ESP)		None (only one client)	Default
MSNP	Microsoft Messenger service V3.0	6901/client IP	6901/client IP

Appendix 2 ICQ problems

What is ICQ?

ICQ stands for 'I seek you'. It's originally developed by Mirabils, an Israeli software company. Then it's bought by America On-Line. ICQ is an Internet messaging tool. You can use ICQ to send messages to your friends, and see if he/she is online. Every ICQ user has one ID called UIN in ICQ. It's an identifier for ICQ.

How ICQ works?

When you launch ICQ, it will try to logon a server which is operated by AOL by the UIN. After the logon is completed, ICQ will try to ask server if any selected UIN is logon too. This process is done periodically, so you will know your friend is online when he launch his ICQ client. To ensure the link, ICQ will send a keep-alive packet periodically to inform the server the user is still here, and send current status if there is anything changed. The default time of keep-alive packet is 120 seconds. And all client/server communication are through UDP port 4000. Whenever a user-to-user communication is requested, there is a TCP session established. The port is negotiated by the client/server session.

How to make ICQ work with SUA?

As described above, ICQ will communicate with server with port 4000 and send keep-alive packets to inform server it's online. The keep -alive packet is sent every 120 seconds. The default SUA UDP session timeout in Prestige is 90 seconds. It will cause problem because the keep-alive will be sent to different port translation due to session timeout. To fix it, you need to specify your ICQ client to shorten its keep-alive timer. It's in the connection tab under firewall setting. Set the keep -alive timer to 80 seconds to ensure the session is not timeout in Prestige. Because the user-to-user communication is negotiated by the first connection, set the ICQ connection behind the firewall. It will inform ICQ to perform operation friendly with firewall such as SUA in Prestige.

I have done the above setting, but it doesn't work perfectly. Why?

As ICQ is a proprietary protocol, it's not published. As we know, there are many versions of ICQ protocols and some of them are encrypted during communication. With some experiment, we suspect the ICQ doesn't work reliably with different keep -alive timer other than default value. The new SUA will prolong the session timeout period to 180 seconds to cover the default time of ICQ. So the keep-alive timer is not necessary to be altered later. However, the connection is still set to behind firewall because we do not know how to alter the packet at this time. We will try our best to find out the protocol details in ICQ in the future. It's not easy job since the protocol is encrypted and may be changed in the future. We can not promise any firm date on that support.

Appendix 3 Added FTP firmware uploading support

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We build in an FTP server in ROUTER. You can use FTP client to upload the RAS code or configuration file.

Requirement:

You must have FTP client and you must have the ability to connect to the ROUTER.

You must have the upgrade firmware - the RAS code or Configuration file.

You must rename the filename of RAS code to "ras" and configuration file to "rom -0".

Connect IP : The ROUTER's LAN IP from LAN or WAN IP from WAN.

Username : ROUTER

Password : <ROUTER Telenet Password>

Procedure:

Open your FTP client to connect to ROUTER. After you login to ROUTER, you will see two list files - the "rom-0" and "ras". You can upload and d ownload the RAS code or configuration file.

notes:

The upload file should be the same filename in the ROUTER listing according to RAS code or configuration file. **The upload file is binary file.**

Appendix 4 PPP over Ethernet (PPPoE)

What is PPPoE?

    Point-to-Point Protocol over Ethernet is an IETF Draft standard that specifies how to connect multiple hosts at a remote site through common customer premises equipment (CPE). It facilitates the interaction of a host with a broadband modem (xDSL, cable, wireless, etc.), to achieve access to the growing number of high-speed data networks, via a familiar "dial-up networking" user interface. PPPoE provides a major advantage for service providers by maximizing integration with - and minimizing disruption of - service providers' existing dial network infrastructures. PPPoE supports a broad range of existing applications and service including authentication, accounting, secure access and configuration management.

PPPoE Protocol Overview.
- PPPoE has two distinct stages.
  - Discovery State
  - PPP Session State
- Discovery stage
  - ETHER_TYPE field in Ethernet frame is set to 0x8863.
  - Stateless client-server protocol
  - Required whenever a client wishes to establish a PPP connection.
  - The host can discover all Access Concentrators and then select one.
  - Use peer MAC address and PPPoE session ID to identify the unique PPPoE session.
  - Four steps of Discovery stage.
    - The host broadcasting an Initiation packet.
    - One or more Access Concentrators sending Offer packets.
    - The host sending a unicast Session Request packet.
    - The selected Access Concentrator sending a Confirmation packet.

- PPP Session stage.
  - PPP data is sent as in any other PPP encapsulation.
  - Maximum-Receive-Uint (MRU) must be less than 1492.
  - All Ethernet packets are unicast.
  - ETHER_TYPE field in Ethernet frame is set to 0x8864.

How can I make PPPoE work on router.

    a.You must enter Service Name for PPPoE discover stage.(SMT Menu 4 or SMT Menu 11.1)
    b.You must configure User Name and Password for PPP session stage.(SMT Menu 4 or SMT Menu 11.1)

Appendix 5 Remote Management Setup CI command

- "sys server load" to copy spt data to working buffer.
- "sys server save" to save working buffer.
- "sys server disp [0|1]" to display the configuration. 0:spt data. 1:working buffer.
- "sys server port <telnet|ftp|web> <port>" to configure the server port.
- "sys server secure <telnet|ftp|web|icmp> <IP address>" to configure the secure client IP address.
- "sys server access <telnet|ftp|web|icmp> <0:ALL|1:disable|2:LAN only|3:WAN only>" to configure.