ZyXEL

Firmware Release Note

ZyAIR G-2000PLUS v2

Release 3.60(AAF.0)C0

Date: **May 09, 2006**
Author: **Watties Lin**

ZyXEL ZyAIR G-2000PLUS v2 Standard Version release 3.60(AAF.0)C0 Release Note

Date: May 09, 2006

Supported Platforms:

ZyXEL ZyAIR G-2000PLUS v2

Versions:

ZyNOS Version: V3.60(AAF.0) | 05/09/2006 17:38:00
BootBase : V1.05 | 04/20/2004 10:36:26

Notes:

1. If Wireless Port Control (SMT Menu 23.4) is “Authentication Required”, G-2000PLUS v2 will enable 802.1x/WPA/WPA-PSK user authentication mechanism, a wireless user must associate G-2000PLUS v2 successfully before accessing network service. If Wireless Port Control is “No Authentication Required”, G-2000PLUS v2 will allow all wireless users to access network service. If Wireless Port Control is “No Access Allowed”, G-2000PLUS v2 will not allow wireless user to access network service.
2. If the Key Management Protocol is “WPA/WPA2”, then you have to configure RADIUS server and the Authentication Databases will be “RADIUS only”.
3. G-2000PLUS v2 supports external and internal RADIUS server, both of them use the same setting page (SMT Menu 23.2). The internal RADIUS server use EAP-PEAP/MS-CHAP-V2 to authenticate the client. If internal RADIUS server is desired, the server address is “127.0.0.1”, and shared secret is “don’t care”. “Don’t care” means whatever user key in, if server address is “127.0.0.1”, G-2000PLUS v2 will use default shared secret “1234”. But leave blank is exception.
4. The Local User Database does not support key generation for 802.1x dynamic web key and WPA pairwise/group key.
5. As a wireless client roams from one wireless AP to another, it must perform a full 802.1X authentication with each wireless AP. WPA2 allows the wireless client and the wireless AP to cache the results of a full 802.1X authentication so that if a client roams back to a wireless AP with which it has previously authenticated, the wireless client needs to perform only the 4-way handshake and determine new pairwise transient keys. In the Association Request frame, the wireless client includes a PMK identifier that was determined during the initial authentication and stored with both the wireless client and wireless AP's PMK cache entries. PMK cache entries are stored for a finite amount of time, as configured on the wireless client and the wireless AP. So wireless client may reconnect to AP with error user name or password.

Known Issues:

CI Command List

Features:

Modification in 3.60(AAF.0)C0 | 05/09/2006

1. [FEATURE CHANGED]
   Convert to FCS version.

Modification in 3.60(AAF.0)b4 | 05/03/2006

1. [BUG FIXED]
   Symptom: Wireless Power Saving issue.
   Condition: When wireless station (G-162, Intel 2200BG or Conexant-3890) power saving enable, and connect to G-2000plus v2 with no security mode, nothing to do (no ping no FTP no...), more than 20 minutes, the wireless station can't ping to DUT.
   SPRID: 60424865
2. [BUG FIXED]
   Symptom: Port change to check SNMP service works with Access setting (LAN & WAN / Disable / LAN / WAN) works failed.
   Condition: 1) Encapsulation is Ethernet, and disables Firewall.
   2) Remote MGMT/ SNMP service access = all.
   3) LAN & WAN host access G-2000plus v2 via SNMP port 161 successful.
   4) Change port 161 to 1610.
   5) LAN & WAN host access G-2000plus v2 via port 1610 failed.
   SPRID: 60425015
3. [BUG FIXED]
   Symptom: Spoof Mac addresses issue.
   Condition: In wizard, whether you use Ethernet/PPPoE/PPTP to make IP address, if you choose ”spoof Mac address”, the device will exception.
   SPRID: 60425978
4. [BUG FIXED]
   Symptom: Local database user account can pass the authentication when using RADIUS only.
   Condition: 1) In eWC->Advanced->Wireless: choose security as “802.1X+NO WEP” and authentication database as “RADIUS only”.
   2) In eWC->Advanced->AUTH. Server->Trusted User: add one active user “1234”.
   3) Wireless STA can use “1234” to pass the authentication.
   SPRID: 060310888
5. [BUG FIXED]
   Symptom: WPA2-PSK (WPA2) mixed mode with WPA-PSK (WPA) station issue. If G-2000plus v2 configure with WPA2-PSK (WPA2) mixed mode, and the station which configure with WPA2-PSK (WPA2) connect to device first, then the other station that configure with WPA-PSK (WPA) will not connection any more.
   Condition: 1) Load default first.
   2) Configure device with WPA2-PSK (WPA2) mixed mode, and STA1 (Intel 2200BG) configure with WPA2-PSK (WPA2) and connect to device first, then STA2 (Conexant wireless card) configure with WPA-PSK (WPA) try to connect with device, but STA2 always can't connect.

SPRID: 60428284

6. [FEATURE ENHANCED]
   Extend share secrets of authentication and accounting from length 31 to 128.
   SPRID: 60426109
7. [FEATURE ENHANCED]
   Add a rule of default server (0.0.0.0) in address mapping.
   SPRID: 60427229

Modification in 3.60(AAF.0)b3 | 04/20/2006

1. [BUG FIXED]
   Symptom: System crash when user telnet in and modify configuration.
   Condition: Copy a long character string (ex: 12345678901234567890123456789012), telnet to G-2000plus v2, then paste the string in any item (Ex System name or domain name), system will crash.
   SPRID: 60414066
2. [BUG FIXED]
   Symptom: Conexant chipset wireless client (Mixed mode) can't associate to G-2000plus v2 (802.11b only mode).
   Condition: In eWC->Advanced->Wireless: change 802.11 mode to 802.11b only, Setting Conexant STA 802.11 mode as b/g mixed mode, then STA can't associate to G-2000plus v2.
   SPRID: 60418320
3. [BUG FIXED]
   Symptom: Report function doesn't work.
   Condition: In eWC->Advanced->LOGS->Reports: press "Start Collection" to monitor "Web Site Hits", "LAN IP Address", and "Protocol/Port". Press "Refresh" to update the information, but nothing appears.
   SPRID: 60418347

Modification in 3.60(AAF.0)b2 | 04/07/2006

1. [BUG FIXED]
   Symptom: Mass 64 bytes packets will cause switch interrupt fail and doesn't receive packets.
   Condition: 1) Configure G-2000plus v2: NAT on, Firewall off, Quick Route 0x9bf2, Flow Control off.
   2) Configure LAN to WAN performance test for SmartBits.
   3) Under 64 bytes packets, Rx interrupt fail, and doesn't receive packets.
   SPRID: 060307557
2. [BUG FIXED]
   Symptom: WAN MAC Address Spoof failed.
   Condition: In eWC->Advanced->WAN->MAC: when choose "Spoof this computer's MAC Address - IP Address" and press applies, an error messages"Can not get the WAN MAC Address" occurred.
   SPRID: 060307559
3. [BUG FIXED]
   Symptom: ZyAIR G-100 can't associate with G-2000plus v2 when 802.11 mode is set to 802.11b only.
   Condition: 1)In eWC->Advanced->wireless: choose "802.11 mode" as "802.11b only".
   2) Because preamble setting doesn't match, some STA like "ZyAIR G-100" can't associate successfully.
   SPRID: 060309804
4. [BUG FIXED]
   Symptom: Local database user account can pass the authentication when using RADIUS only.
   Condition: 1) In eWC->Advanced->Wireless: choose security as "802.1X+NO WEP" and authentication database as "RADIUS only".

2) In eWC->Advanced->AUTH. Server->Trusted User: add one active user “1234”.
3) Wireless STA can use “1234” to pass the authentication.
SPRID: 060310888

5. [BUG FIXED]
Symptom: system reboot many times after overnight stress test. (16 STAs run FTP+HTTP data transmission)
Condition: The below two test cases can reproduce this issue.
1) Let 16 wireless clients associate to DUT at the same time, run the FTP and HTTP data transmission between eSTA and all wireless clients. After overnight test, DUT reboot many times.
2).DUT reboot when run WLAN throughput test for 64 WEP\128 WEP and WPA-PSK\WPA2-PSK.
SPRID: 060311932
6. [BUG FIXED]
Symptom: STA using wrong password and CA can still pass the WPA2 authentication once STA passed the WPA2 authentication before.
Condition: STA using wrong password and CA can still pass the WPA2 authentication once STA passed the WPA2 authentication before.
SPRID: 060313945
7. [FEATURE CHANGED]
-USA(255), Taiwan(238), Philippine(216), India(214), Brazil(208) use 11 channels.
-Not Used(223, 251, 210), Morocco(239), Slovak(228), Slovenia(215), European CTR21(212), ZyXEL(000) use 13 channels.
-Others (include Japan 234) use 13 channels.

Modification in 3.60(AAF.0)b1 | 02/22/2006

1. First firmware release

CI Command List

Command Class List Table		
System Related Command	Exit Command	Ethernet Related Command
Wireless LAN Related Command	IP Related Command	Bridge Related Command
Radius Related Command	802.1x Related Command	Certificates
Radserv		

System Related Command Home

Command				Description
sys				
	Callhist			
		display		display call history
		remove	<index>	remove entry from call history
	countrycode		[countrycode]	set country code
	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
	Logs			
		Clear		clear log error
		Display		display log error
		Syslog		
			active [0:no/1:yes]	
			display <FacilityNo>	set/display syslog type flag
			facility [Local ID(1-7)]	set syslog facility
			server [domainName/IP]	set syslog server IP address
	Rn			
		load	<entry no.>	load remote node information
		disp	<entry no.>(0:working buffer)	display remote node information
		nat	<none|sua|full_feature>	config remote node nat
		nailup	<no|yes>	config remote node nailup
		save	[entry no.]	save remote node information
	Stdio		[second]	change terminal timeout value
	Trcdisp	parse, brief, disp		monitor packets
	Trclog			
	Trcpacket			
	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
	Filter			
		netbios		
	roadrunner			
		debug	<level>	enable/disable roadrunner service 0: diable <default> 1: enable
		display	<iface name>	display roadrunner information iface-name: enif0, wanif0
		restart	<iface name>	restart roadrunner
	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
	Firewall			
		acl		
			disp	Display specific ACL set # rule #, or all ACLs.
			delete	Delete specific ACL set # rule #.
		active	<yes|no>	Active firewall or deactivate firewall
		clear		Clear firewall log
		cnt		
			disp	Display firewall log type and count.
			clear	Clear firewall log count.
		debug		Set firewall debug level.

		tosctrl		
			destination	Display TOS destination hash
			incomplete	Display TOS incomplete List.
		dynamicrule		
			display	Display firewall dynamic rules
		tcprst		
			rst	Set TCP reset sending on/off.
			rst113	Set TCP reset sending for port 113 on/off.
			display	Display TCP reset sending setting.
		dos		
			smtp	Set SMTP DoS defender on/off
			display	Display SMTP DoS defender setting.
			ignore	Set if firewall ignore DoS in lan/wan/dmz/wlan
		ignore		
			dos	Set if firewall ignore DoS in lan/wan/dmz/wlan
			triangle	Set if firewall ignore triangle route in lan/wan/dmz/wlan

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
		ioctl	<ch_name>	Useless in this stage.
		status	<ch_name>	see LAN status
	version			see ethernet device type
	edit			
		load	<ether no.>	load ether data from spt
		save		save ether data to spt

Wireless LAN Related Command Home

Command				Description
wlan				
	active		[on|off]	set on/off wlan
	association			display association list
	breathLED		[0|1]	Turn off/on breath LED
	chid		[channel id]	set channel
	chgmod		<0: B+G, 1: B only, 3: G only>	
	essid		[ess id]	set ESS ID
	hideessid		<on, off>	
	intrabssblock		<0: Disable, 1: Enable>	
	preamble		<0: Dynamic, 1: Long>	
	removeSTA		<MAC ADDRESS>	Remove STA
	reset			Reset WLAN
	version			display WLAN version information

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		
		server	<primary> [secondary] [third]	set dns server
		stats		
		default		set default DNS server
	httpd			
	icmp			
		status		display icmp statistic counter
		discovery	<iface> [on|off]	set icmp router discovery flag
	ifconfig		[iface] [ipaddr] [broadcast <addr> |mtu <value>|dynamic]	configure network interface
	ping		<hostid>	ping 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
	status			display ip statistic counters
	udp			
		status		display udp status
	rip			
	tcp			
		status	[tcb] [<interval>]	display TCP statistic counters
	telnet		<host> [port]	execute telnet clinet command
	tftp			
	traceroute		<host> [ttl] [wait] [queries]	send probes to trace route of a remote host
	xparent			
		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

Radius Related Command Home

Command				Description
Radius				
	auth			show current radius authentication server configuration
	acct			show current radius accounting server configuration

802.1x Related Command Home

Command				Description
8021x				
	debug	Level	[debug level]	set ieee802.1x debug message level
		Trace		show all supplications in the supplication table
		User	[username]	show the specified user status in the supplicant table

Certificates Related Command Home

Command				Description
certificates				
	my_cert	create	Self-signed	
			request	
			Scep_enroll	
			Cmp_enroll	
		import		Import certificate.
		export	<name>	Export certificate.
		view	<name>	View certificate content.
		verify	<name> [timeout]	Verify certificate path.
		delete	<name>	Delete the specific certificate.
		list		List all my certificate.
		rename	<old name> <new name>	Rename the certificate.
		def_self_signed		Show the default self signed certificate name.
		replace_factory		Replace certificate to factory default.
	ca-trusted	Import	<name>	Import trust CA certificate.
		Export	<name>	Export trust CA certificate
		view	<name>	View trust CA certificate content
		Verify	<name> [timeout]	Verify trust CA certificate path.
		Delete	<name>	Delete the specific trust CA certificate.
		List		List all trust CA certificate.
		Rename	<old name> <new name>	Rename the trust CA certificate.
		Crl_issuer	<name> [on|off]	Check the crl of trust CA.
	Cert_manage	Reinit		Reinitialize the certificate manager.

	r			
	Debug_tools	Cm_reset		Reset the certificate manager.

Radserv Related Command Home

Command				Description
radserv				
	Time_out		<value(ms)>	Set radius server authenticate time out.
	authenticator	Set	<entry_no active [ip secret]>	Set trust AP.
		remove	<entry_no>	Remove trust AP.
		list		List trust AP.
	enable		<1|0>	Enable | disable internal RADIUS server.

Internal Information:

Known Issues:

1. Received more frames than were sent in SmartBits test.

Features:

Modification in 3.60(AAF.0)C0 | 05/09/2006

1. [FEATURE CHANGED]
   Convert to FCS version.

Modification in 3.60(AAF.0)b4 | 05/03/2006

All changes are listed in external part.

Modification in 3.60(AAF.0)b3 | 04/20/2006

1. [FEATURE ENHANCED]
   Update ZD1212b wireless driver to v3.1.0.0 date 2006/04/20.

Modification in 3.60(AAF.0)b2 | 04/07/2006

2. [FEATURE ENHANCED]
   Change quick route configuration from 0x8bf2 to 0x9bf2 to support PPPOE of WAN encapsulation and firewall on.
3. [FEATURE ENHANCED]
   Update ZD1212b wireless driver to v3.1.0.0 date 2006/04/06.
   The main purpose is to support ZD1212B + AL2230S RF.
   Details please see driver release note “ZD1212x_ReleaseNote_ZyXEL_CSM.doc”.

Modification in 3.60(AAF.0)b1 | 02/22/2006

1. First firmware release

2. Manufactory Data in Bootbase

ZyNOS Version	: V3.60(AAF.0) | 05/09/2006 17:38:00
Bootbase Version	: V1.05 | 04/20/2004 10:36:26
Vendor Name	: ZyXEL
Product Model	: G-2000PLUS v2
ZyNOS Code Model	: RAS G2000PLUSv2
HTP Code Model	: HTP_G2000PLUSv2
ZyNOS ROM address	: bfc20000
System Type	: 8
MAC Address	: 001349000001
Default Country Code	: FF
Boot Module Debug Flag	: 01
RomFile Version	: 5C
RomFile Checksum	: 73eb
ZyNOS Checksum	: e678
Core Checksum	: ef17

SNMP MIB level & OID	: 060102030405060708091011121314151617181920
Main Feature Bits	: C0
Other Feature Bits	:
	9F DF 00 00 00 00 00 00-00 00 00 00 00 00 00 00
	00 00 00 00 00 00 00 00-00 00 13 00 00 00

Notes:

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

3. Default ROM File Value Setting

- Menu 1 – General Setup

```
                Menu 1 - General Setup

          System Name= G-2000PLUSv2
          Domain Name=



          First System DNS Server= From ISP
            IP Address= N/A
          Second System DNS Server= From ISP
            IP Address= N/A
          Third System DNS Server= From ISP
            IP Address= N/A
          Edit Dynamic DNS= No




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

- Menu 1.1 – Configure Dynamic DNS

```
              Menu 1.1 - Configure Dynamic DNS

    Service Provider= WWW.DynDNS.ORG
    Active= No
    DDNS Type= DynamicDNS
    Host Name 1=
    Host Name 2=
    Host Name 3=
    Username=
    Password= ********
    Enable Wildcard Option= No
    Enable Off Line Option= N/A
    IP Address Update Policy:
      DDNS Server Auto Detect IP Address= No
      Use Specified IP Address= No
      Use IP Address= N/A


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

- Menu 2 – WAN Setup

```
                   Menu 2 - WAN Setup

              MAC Address:
                Assigned By= Factory default
                IP Address= N/A




          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 Ethernet Setup

```
                Menu 3.2 - TCP/IP and DHCP Ethernet Setup


    DHCP= Server                        TCP/IP Setup:
    Client IP Pool:
      Starting Address= 192.168.1.33    IP Address= 192.168.1.1
      Size of Client IP Pool= 32        IP Subnet Mask= 255.255.255.0
    First DNS Server= From ISP          RIP Direction= Both
      IP Address= N/A                     Version= RIP-1
    Second DNS Server= From ISP         Multicast= None
      IP Address= N/A                   Edit IP Alias= No
    Third DNS Server= From ISP
      IP Address= N/A
    DHCP Server Address= N/A

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

- Menu 3.2.1 – IP Alias Setup

```
                     Menu 3.2.1 - IP Alias Setup

                IP Alias 1= No
                  IP Address= N/A
                  IP Subnet Mask= N/A
                  RIP Direction= N/A
                    Version= N/A
                  Incoming protocol filters= N/A
                  Outgoing protocol filters= N/A
                IP Alias 2= No
                  IP Address= N/A
                  IP Subnet Mask= N/A
                  RIP Direction= N/A
                    Version= N/A
                  Incoming protocol filters= N/A
                  Outgoing protocol filters= N/A

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

- Menu 3.5 – Wireless LAN Setup

```
                    Menu 3.5 - Wireless LAN Setup

   ESSID= ZyXEL
   Hide ESSID= No
   Channel ID= CH06 2437MHz             Edit MAC Address Filter= No
   RTS Threshold= 2432                  Edit Roaming Configuration= No
   Frag. Threshold= 2432                Breathing LED= Yes
   WEP Encryption= Disable              Preamble= N/A
```

```
     Default Key= N/A                    802.11 Mode= Mixed
     Key1= N/A
     Key2= N/A                          Block Intra-BSS Traffic= No
     Key3= N/A
     Key4= N/A
     Authen. Method= N/A


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

- Menu 3.5.1 – WLAN MAC Address Filter

```
                 Menu 3.5.1 - WLAN MAC Address Filter

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

- Menu 3.5.2 –Roaming Configuration

```
                 Menu 3.5.2 - Roaming Configuration

                Active= No
                Port #= N/A

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

- Menu 4 - Internet Access Setup

```
                    Menu 4 - Internet Access Setup

                ISP's Name= ChangeMe
                Encapsulation= Ethernet
                  Service Type= Standard
                  My Login= N/A
                  My Password= N/A
                  Retype to Confirm= N/A
                  Login Server= N/A
                  Relogin Every (min)=  N/A
                IP Address Assignment= Dynamic
                  IP Address= N/A
                  IP Subnet Mask= N/A
                  Gateway IP Address= N/A
                Network Address Translation= SUA Only

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

- Menu 11.1 - Remote Node Profile

```
                    Menu 11.1 - Remote Node Profile

    Rem Node Name= ChangeMe           Route= IP
    Active= Yes
                                  Apply Alias= None
    Encapsulation= Ethernet           Edit IP= No
    Service Type= Standard            Session Options:
    Service Name= N/A                  Edit Filter Sets= No
    Outgoing:
      My Login= N/A
      My Password= N/A
      Retype to Confirm= N/A
      Server= N/A
      Relogin Every (min)=  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 Address Assignment= Dynamic
                IP Address= N/A
                IP Subnet Mask= N/A
                Gateway IP Addr= N/A

                Network Address Translation= SUA Only
                Metric= 1
                Private= N/A
                RIP Direction= None
                  Version= N/A
                Multicast= None

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

- Menu 11.5 – Remote Node Filter

```
                     Menu 11.5 - Remote Node Filter

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

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

- Menu 12 – IP Static Route Setup

```
                     Menu 12 - IP Static Route Setup

                1. _________
                2. _________
                3. _________
                4. _________
                5. _________
                6. _________
                7. _________

                          Enter selection number:
```

- Menu 14 – Dial-in User Setup

```
                    Menu 14 - Dial-in User Setup

   1. _________      9. _________     17. _________     25. _________
   2. _________     10. _________     18. _________     26. _________
   3. _________     11. _________     19. _________     27. _________
   4. _________     12. _________     20. _________     28. _________
   5. _________     13. _________     21. _________     29. _________
   6. _________     14. _________     22. _________     30. _________
   7. _________     15. _________     23. _________     31. _________
   8. _________     16. _________     24. _________     32. _________

                    Enter Menu Selection Number:
```

- Menu 15.1.1 – Address Mapping Rules

```
         Menu 15.1.1 - Address Mapping Rules

 Set Name= DEFAULT

Idx  Local Start IP   Local End IP    Global Start IP  Global End IP    Type
---  ---------------  ---------------  ---------------  ---------------  ------
 1.                                     0.0.0.0                          Server
 2.
 3.
 4.
 5.
 6.
 7.
 8.
 9.
10.

                Action= None        Select Rule= N/A

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

- Menu 15.1.1 – Address Mapping Rules

```
         Menu 15.1.1 - Address Mapping Rules

 Set Name= SUA

Idx  Local Start IP   Local End IP    Global Start IP  Global End IP    Type
---  ---------------  ---------------  ---------------  ---------------  ------
 1.  0.0.0.0         255.255.255.255  0.0.0.0                           M-1
 2.                                     0.0.0.0                          Server
 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 –Port Forwarding Setup

```
                    Menu 15.2 - NAT Server Setup


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

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

- Menu 15.3 –Trigger Port Setup

```
                    Menu 15.3 - Trigger Port Setup

                              Incoming              Trigger
     Rule      Name       Start Port   End Port   Start Port   End Port
    ------------------------------------------------------------------------
      1.                      0          0          0          0
      2.                      0          0          0          0
      3.                      0          0          0          0
      4.                      0          0          0          0
      5.                      0          0          0          0
      6.                      0          0          0          0
      7.                      0          0          0          0
      8.                      0          0          0          0
      9.                      0          0          0          0
     10.                      0          0          0          0
     11.                      0          0          0          0
     12.                      0          0          0          0

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

- Menu 21.1 – Filter Set Configuration

```
                  Menu 21.1 - Filter Set Configuration

    Filter                          Filter
    Set #       Comments             Set #       Comments
    ------  -----------------          ------  -----------------
      1     _________________            7     _________________
      2     _________________            8     _________________
      3     _________________            9     _________________
      4     _________________           10     _________________
      5     _________________           11     _________________
      6     _________________           12     _________________
```

```
                Enter Filter Set Number to Configure= 0

                Edit Comments= N/A

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

- Menu 21.2 – Firewall Setup

```
                    Menu 21.2 - Firewall Setup

     The firewall protects against Denial of Service (DoS) attacks when
     it is active.

     Your network is vulnerable to attacks when the firewall is turned off.

     Refer to the User's Guide for details about the firewall default
     policies.

     You may define additional Policy rules or modify existing ones but
     please exercise extreme caution in doing so.

        Active: Yes

         You can use the Web Configurator to configure the firewall.


                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 23.1 – System Security – Change Password

```
               Menu 23.1 - System Security - Change Password

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


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

- Menu 23.2 – System Security – RADIUS Server

```
                Menu 23.2 - System Security - RADIUS Server
```

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

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




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

- Menu 23.4 – System Security – IEEE802.1X

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

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


     Key Management Protocol= N/A

     PSK = N/A
     WPA Compatible= N/A

     WPA Broadcast/Multicast Key Update Timer= N/A

     Authentication Databases= N/A



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

- Menu 24.2.2 – System Maintenance - Change Console Port Speed

```
        Menu 24.2.2 - System Maintenance - Change Console Port Speed

                Console Port Speed: 9600


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

- Menu 24.3.2 – System Maintenance – UNIX Syslog

```
              Menu 24.3.2 - System Maintenance - UNIX Syslog

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


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

- Menu 24.10 – System Maintenance – Time and Date Setting

```
          Menu 24.10 - System Maintenance - Time and Date Setting

        Time Protocol= NTP (RFC-1305)
        Time Server Address= 192.43.244.18

        Current Time:                    02 : 08 : 35
        New Time (hh:mm:ss):              N/A  N/A  N/A

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

        Time Zone= GMT

        Daylight Saving= No
     Start Date (mm-nth-week-hr):       Jan. - 1st  - Sun.(02)  - 00
     End Date (mm-nth-week-hr):         Jan. - 1st  - Sun.(02)  - 00


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

- Menu 24.11 – Remote Management Control

```
                  Menu 24.11 - Remote Management Control

    TELNET Server:    Port = 23         Access = LAN only
                      Secured Client IP = 0.0.0.0

    FTP Server:       Port = 21         Access = LAN only
                      Secured Client IP = 0.0.0.0

    Web Server:       Port = 80         Access = LAN only
                      Secured Client IP = 0.0.0.0

    SNMP Service:     Port = 161        Access = LAN only
                      Secured Client IP = 0.0.0.0

    DNS Service:      Port = 53         Access = LAN only
                      Secured Client IP = 0.0.0.0

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

- Menu 26 – Schedule Setup

```
                        Menu 26 - Schedule Setup

    Schedule                          Schedule
    Set #         Name                Set #         Name
    ------  -----------------           ------  -----------------
      1     ________________              7     ________________
      2     ________________              8     ________________
      3     ________________              9     ________________
      4     ________________             10     ________________
      5     ________________             11     ________________
      6     ________________             12     ________________


                Enter Schedule Set Number to Configure= 0
```

```
                Edit Name= N/A

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

ras> sys view autoexec.net
ether driver qroute 9bf2
sys wdog cnt 600
ip adjmss 0
sys errctl 0
sys trcl level 5
sys trcl type 1180
sys trcl sw on
sys trcp cr 96 128
ip tcp limit 2
ip tcp irtt 65000
ip tcp ceiling 6000
ip tcp mss 1024
ip tcp window 4
ip rip activate
ip rip merge on
ppp ipcp com off
ip icmp disc enif0 off
bridge mode 1
sys mbuf debug off
sys wdog sw on