

VMG8924-B10A Standard Version

Firmware Release Note

V1.00(AAKL.4)b2

Date: Mar, 27, 2014

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Reviewer:

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Revision History

Date	Release	Author	Description
2013/04/29	1.0	Wood Huang	FW release for V1.00(AAKL.0)b1
2013/05/10	1.0	Wood Huang	FW release for V1.00(AAKL.0)b2
2013/05/29	1.0	Wood Huang	FW release for V1.00(AAKL.0)C0
2013/07/30	2.0	Wood Huang	FW release for V1.00(AAKL.1)b1
2013/08/20	2.1	Wood Huang	FW release for V1.00(AAKL.1)b2
2013/10/16	3.0	Wood Huang	FW release for V1.00(AAKL.2)b1
2013/11/27	4.0	Wood Huang	FW release for V1.00(AAKL.3)b1
2014/01/02	5.0	Cj Lai	FW release for V1.00(AAKL.3)b2
2014/02/14	6.0	Cj Lai	FW release for V1.00(AAKL.3)b3
2014/03/10	7.0	Cj Lai	FW release for V1.00(AAKL.3)C0
2014/03/10	8.0	Cj Lai	FW release for V1.00(AAKL.4)b1
2014/03/27	9.0	Cj Lai	FW release for V1.00(AAKL.4)b2



ZyXEL VMG8924-B10A V1.00(AAKL.4)b2 **Release Note**

Date: Mar. 27, 2014

Supported Platforms:

ZyXEL VMG8924-B10A & VMG8324-B10A

Versions:

Bootbase version: V1.63 | 02/12/2014 16:10:07

Firmware version: V1.00(AAKL.4)b2

Kernel version: 2.6.30

DSL mode code version: A2pv6F039i

DSL driver version: d24e

WLAN code version: 6.30 RC163.23

Voice code version: 4.12L.06 May 11 2012 11:58:17 IPTK 8.2.2



Notes:

- QoS Monitor will show only if QoS software Queue is used.
 Qos software queue is created if rate limit or WFQ is configured.
- 2. 802.11ac is supported with 4360 WLAN adaptor (VMG8924-B10A model).
- 3. WPS lock down: 10 failures in 300 seconds.



Features list:

Feature	Additional Information
VDSL	 G.993.1 VDSL Annex A G.993.2 VDSL2 Annex A, band plan 997, 998 Support VDSL profiles: 8a/b/c/d, 12a/b and 17a Maximum data rate (DS/US): 100Mbps/60Mbps G.994.1 (G.hs) Handshake Rate adaption SRA (Seamless Rate Adaption) UPBO (Upstream power back-off) VDSL OAM communication channels INP: Up to 16 symbols PTM mode Dying Gasp G.Vector support G.INP Support
ADSL	 G.992.1(G.dmt) Annex A compliant G.992.2(G.lite), Annex A compliant ANSI T1.413 compliant G.992.3(ADSL2), Annex A compliant G.992.5(ADSL2+) Annex A compliant I.432 ATM physical layer compliant Reach-Extended ADSL (RE ADSL), SRA (Seamless Rate Adaptation) ADSL physical connection ATM AAL5 (ATM Adaptation Layer type 5) Support multi-protocol over AAL5 (RFC2684/1483) PPP over ATM AAL5 (RFC2364) Support VC-based and LLC-based multiplexing ATM traffic shaping (CBR, VBR-rt/nrt, UBR) I.610 F4/F5 OAM Auto-detect VDSL2 or ADSL2/2+ Support ADSL PTM mode G.INP Support
Bridge/Router	 IEEE 802.1D transparent bridge & basic spanning tree Dynamic learning for up to 2014 MAC address PPPoE (RFC 2516) PPPoA (RFC 2364) DHCP client/server/relay with DHCP option 60/61/125 DNS Proxy Dynamic DNS (DynDNS, Freedns, zoneedit, noip and GnuDIP) RIP I/ RIP II supported UPnP - IGD (Universal Plug and Play for the Internet Gateway



•	
	Device)
	Interface Grouping
	Static/Policy Route
	Additional Subnet: IP Alias/Public LAN
	STB Vendor ID
	5th Ethernet Port
	• LAN VLAN
	Adjustable MTU size (max 1518 byte)
	MAC Encapsulation Routing / IPoE
	Qos classification route
	DHCP Conditional Serving
	DNS Route
	Wake on LAN
	Auto reserve LAN client IPv4 address
	VLAN Auto Hunt
	Option 125 enhancement on DHCP server for TR111 part 1
USB	• USB 1.1/2.0
005	FTP File sharing
	Support USB disk/USB flash
	 Supported File system :FAT16, FAT32, EXT2/EXT3. (Phase2:
	NTFS)
	Support 3G dongle
	Support 3G dongle Support DLNA
	Support DENA Support Print Server
	Support Fill Server Support SAMBA
NAT	Support 3G budget control
NAI	NAT Full care NAT
	Full cone NAT At least 4000 NAT assistant assis
	At least 4096 NAT sessions supported At least 4096 NAT sessions supported
	Virtual Server (port forwarding)
	Port Triggering
	NAT ALGs
	- FTP
	- TFTP
	- RTSP
	- SIP
	- H.323
	- PTP
	IPSec VPN Pass Through
	• DMZ
	Multi-to-Multi NAT (phase2)
	PPPoE Pass Through
	NAT loopback
	Limit session per host



Firewall & Security 802.1x Authentication (EAP-TLS) PAP/CHAP MS-CHAP v1 and v2 Stateful Packet Inspection Parental control: Protocol Packet Filter/URL keyword blocking, Scheduled filtering policy based on time of day. ACL Rule support: (32 ACL rules) Selected Source/Destination Device Source/Destination IP Source/Destination Port (Any/Single/Range) Type (TCP/UDP/ICMP/Others) Protocol number (only for Others Type) Selected Predefined Service TCP Flag/Mask Policy (Accept/Drop/Reject) Rate Limit Schedule Rule Four directions: WAN to Router, LAN to Router, WAN to LAN, LAN to WAN **DoS Protection** Port Scan **ICMP Flooding** TCP Syn Flooding IP Snoofing Ping of Death Land Attack **ICMP Redirect Attack** Smurf Attack Zero Length IP **UDP** Flooding **ICMP** Redirect Attack Report and logs via SysLog, GUI, email daemon. Service control: trust domain or IP addresses list for service control. Wireless LAN IEEE 802.11 2.0n Compliance, backward compatible with 11b/g **Auto Channel Selection WMM WPS WDS**

Multi SSID: Up to 4

32 MAC Filter

WEP Data Encryption 64/128bit

WPA/WPA-PSK with TKIP & AES security type WPA2/WPA2-PSK with TKIP & AES security type

IEEE 802.1x (EAP-MD5, TLS and TTLS)



	Client connection : A minimum of 32 clients simultaneously
	connect to the AP
	Adjustable WLAN output power(via CLI , xml)
	Hidden SSID support
	Generate default unique ESSID by serial number (show on CPE)
	back label)
	Generate default unique wireless KEY by MAC (show on CPE)
	back label)
	Separate QoS configuration for each SSID
	Channel Scan (Channel Status)
	Wireless Scheduling for power off/on
	WPS 2.0 certificate
	Isolation (Guest WLAN) WD0 AB BNA (WD0 Incl. Inc.)
	WPS AP PIN attack prevent mechanism (WPS lock down)
Voice Features	SIP (Section Initiating Protocol, RFC 3261) version 2
	• Codec: G711 a/µ (64K) (Fullrate feature), G.726 G.722
	G.168 echo cancellation (8ms ~ 16ms) Caylor adam detection and page through
	Fax/modem detection and pass-through Vaice Active Detector (VAD)
	Voice Active Detector (VAD) Silones Suppression
	Silence Suppression Comfort Noise Congretion (CNC)
	Comfort Noise Generation (CNG)Dynamic Jitter Buffer.
	DTMF Detection and Generation
	DTMF relay by In-Band and Out-of-Band (RFC 2833, SIP INFO)
	SIP account (URL type included)
	 On hook, off hook and flash detection.
	Dialing Type: Tone
	 Ring cadence frequency can be tuned by firmware by country.
	Tip/ring polarity reversal
	Ringing Voltage: min 45V RMS at 5 REN (FXS)
	Caller ID (FSK.DTMF)
	Country Code(default support: USA, BELGIUM, DENMARK,
	FINLAND, NETHERLAND, NORWAY, PORTUGAL, SPAIN,
	SWEDEN, SWITZERLAND, GERMANY, Australia, Ireland)
	Call Forwarding (No condition, Busy, No answer)
	Call Transferring (Blind, ConsultOnHold, Attendant)
	Call Hold / Call Retrieve
	Three Way Conference
	Abbreviated Dialing (Speed Dial)
	Phone Book
	Internal Call
	Early Media
	Anonymous Call
	Call Waiting
	Call Accept Cantagana DCB land minor
	Conference-DSP local mixer Second Coll
	Second Call IVP (Interactive Voice Response)
	IVR (Interactive Voice Response) Flock Timer

Flash Hook Timer



	 Message Waiting Indicator (RFC 3842) T.38 Fax Relay Transparent Fax rely over G.711 Polarity Reverse Last Number Redial Flexible dial plan (RFC3525 section 7.1.14) Call return Immediate Dial SRTP Music On Hold
QoS	Support flexible Packet Classification by:
ųos	 Support flexible Packet Classification by: From Interface TCP / UDP Port Range ETH TYPE (IP/ARP/PPPoE/802.1Q) Source MAC Address Source MAC Mask Destination MAC Address Destination MAC Mask Source IP Address/ Mask Destination IP Address/ Mask
	- Predefine Service
	 IP Protocol (TCP, UDP, ICMP, IGMP, User Defined) DHCP option 60/77
	 Packet Length 6-bit DiffServ Code Point (DSCP, RFC 2474) 802.1P 3-bit Class of Service (CoS) 802.1Q 12-bit VLAN ID
	- TCP ACK
	- DHCP option 61/125
	 Packet Modification Support SAME and MARK DSCP field Support SAME, MARK, REMOVE, and tag-in-tag(ADD) to 802.1Q VLAN Tag
	- Support tag auto translation(AUTO) between DSCP
	and 802.1P Class of Service
	 Default Queue(phase II) Service default priority (ACK, LCP, IGMP, DNS, RIP,ARPetc) Traffic Shaping: Rate Limitation for specify remote node.
	 Auto Priority Mapping(the tag can be automatically translated between DSCP and 802.1P Class of Service)



	Queue Management
	- Drop Tail
	- Rate Limit
	- Queueing and Scheduling
	Strict Priority Queueing
	Weighted Fair Queueing
	Counters and statistics for QoS and traffic
	Default L2/L3 tagging and queueing setting of each outgoing
	interface
Management	Web/HTTP: 3 level log-in
	- Administrator: Access to all pages
	- Support: Allow ISP for maintenance and diagnostics
	- User: View settings/statistics and update FW.
	Login Privilege
	CLI (Command Line Interpreter) via SSH or Telnet Command Line Interpreter Via SSH Command Line Co
	Firmware upgrade via Web/TFTP/FTP/TR069 RPC method Toyt based configuration (XML based)
	 Text based configuration (XML based) Configuration backup/update/restore default via Web
	Configuration backup/apadic/restore default via vves Configurable access control for remote management (Interface)
	and / port number)
	Trust Domain (support trust domain list)
	NTP (Internet Time automatically synchronize)
	DSL Forum TR-069, TR-098
	DSL Forum TR-064
	DSL Forum TR-111 ONLAR
	SNMP v1, v2 Pom D support/out yml config file via ftp to device flesh on feeten.
	 Rom-D support(put xml config file via ftp to device flash as factory default config)
	TR069 SerialNumber parameter MUST be device serial number in
	back label.
	GUI: Brick type
	Configurable connection request port for TR069.
	Support multi-language
	UPnP port forwarding rules on page TRACE
	TR098 captive portal Configuration files by Lagia a rigid and
	Configuration filter by login privilegesCustomized startup-script
Bootloader	Customized startup-script NAND boot
Bootioudoi	Model ID check mechanism
	Skip check when Multiboot or Expressboot upgrade
	Engineer Debug Flag control for bootloader and MRD change
	Firmware checksum
	Romfile checksum



	MultiBoot
	AT Command
Diagnostic	• 802.1ag CFM
Capabilities	• Log
	xDSL Statistics
	Ping/TraceRoute/NSlookup
	OAM Ping
	Remote packet trace function
IGMP	• IGMP v1, v2, v3
	IGMP Proxy
	IGMP Snooping
	Support fast leave
Triple Play	Support dynamic configurations to create Multiple WAN interfaces.
	Single WAN with NO tag for ADSL/Ether/VDSL WAN.
	Multiple PVC support for ADSL WAN
	Multiple VLAN support for Ethernet/VDSL WAN
Power	CPU clock divider when Idle
Management	Wait instruction when Idle
Managomone	DRAM Self Refresh
	Ethernet/DSL/WLAN/LED Auto Power Down
	Support CoC4.0
IPv6	15.0 1/2 (0.15.4.14.5.0)
	 IPv6 multicast (MLDv1, MLDv2) IPv6 syslog
	, -
	IPv6 diagnostic: ping6/traceroute6 IPv6 diagnostic: ping6/traceroute6 IPv6 diagnostic: ping6/traceroute6 IPv6 diagnostic: ping6/traceroute6
	 RFC 6204 conformance test: pass "MUST" items IPv6 LAN Auto PD selection
	IPv6 LAN address selection(SLAAC/DHCPv6/Both) IPv6 LAN address selection(SLAAC/DHCPv6/Both)
	DNS(RA/DHCPv6/Both)
	Support IPv6 DNS & DNS option PNO and a second at the AVID of PNO and a second s
	- DNS scenario when get both IPv4/IPv6 DNS server from ISP
	- DNS cache must handle A-record and AAAA-record
	independently
	- DNS query can send by following scenario
	IPv4 DNS Server First
	IPv6 DNS Server First
	IPv4 DNS Server Only
	IPv6 DNS Server Only
	Multiple Wan can all support IPv6/IPv4
	Support IPv6 internet LED display
	Web GUI enhancement
	Cnnection status page WAN/LAN IPv6 address
	HW accelerator support IPv6 (IPv6 multicast)
	DualStack/6RD/DS-Lite
I	Configurable IA_NA/IA_PD. Default both enable but can accept
	Configurable IA_IVA/IA_I D. Default both enable but can accept



•	RFC2827 (IP Source Address Spoofing) (IPv4/v6)

Modifications in V1.00(AAKL.4)b2

[FEATURE ENHANCED]

1. Upgrade the modem code to A2pv6F039i.

[FEATURE MODIFIED]

- 1. Change WiFi country code setting to EU/60. And make sure all DFS solution has been implemented.(Check WiFi country code by CLI command : wlctl country)
- 2. [ITS: #140105131]: Fixed, After configure PPP connection then CPE no response to ACS issue and response statuse change to 1.
- 3. Change the behavior(ACS upload rom-d without change the current setting).

[BUG FIX]

- 1. PPPoA max MTU should be 1500.
- 2. Include [India TATA] Device is taking very long time to login using HTTPS.
- 3. [ITS: #140202892] Fixed Change the admin passwd to quick1234 will be error.(FTP upgrade the config file command as: put D:\(FILE NAME).conf)
- 4. USB LEDs will lit when no USB devices plugged in under specific condition
- 5. LAN hosts can receive each other's Internet traffic
- 6. GUI MTU size should be automatically adjusted to 1492 when selecting PPPoE mode.
- 7. WAN host can dowwnload DUT config file by HTTP with no authentication.

Modifications in V1.00(AAKL.4)b1

[FEATURE ENHANCED]

2. Upgrade the m to 6.30 RC163.23.

[FEATURE MODIFIED]

- 1. [ITS: #140204368] :Reset button :1-9 sec : no action. After 10 sec: system back to factory default and reboot.
- 2. Remove the strong passwords. Change the admin password unnecessary alpha character +



number character.

[BUG FIX]

- 1. [ITS: #140105131]: Fixed, After configure PPP connection then CPE no response to ACS issue
- 2. [ITS: #140201830,#140200332]: Fixed, upload config (clear text passwd) from TR069 or Web Gui or FTP then the admin passwd or ppp passwd or TR069 passwd will be error issue.
- 3. [ITS:#140202892]: Change the admin passwd to quick1234 will be error.
- 4. CHT attack issue, Block DNS query from WAN side no matter firewall is enabled or not.
- 5. [ITS:# 140206075]: LAN IPV6 Address will over cross the field in status and routing table page.
- 6. [ITS:# 140206073]: [Thailand] PPPoE's username on Wizard page will display "(null)", even if already connected up.
- 7. [ITS:#140210218]: When 3G WAN is up, internet LED is off. Reason: 3G Internet LED not support WAN_IP_CONN. Solution: let 3G Internet LED support WAN_IP_CONN.
- 8. [ITS:#140201871]: [Thailand] IPSec VPN menu still exists (Use flag to control).
- 9. [ITS:#140102232] : Problem page error (408 Request Timeout).
- 10. [ITS:#]: Wireless Guest SSID and Home Guest no internet access.

Modifications in V1.00(AAKL.3)C0

3. Base the V1.00(AAKL.3)b3 to Release V1.00(AAKL.3)C0

4.

Modifications in V1.00(AAKL.3)b3

[FEATURE ENHANCED]

5. Parental Control: (1) Add more access-periods (Max. 3). (2) Apply same PCP to several clients (Max. 5).

[FEATURE MODIFIED]

In original design, press the reset button more than 25sec to erase ROM-D.
 Change design to disable the erase rom-d function in CFE via HW reset button.
 And also upgrade cfe version to V1.63.



2. Sideband description on 2.4G GUI.

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[BUG FIX]

- 1. ITS: 140200569, The root cause is disable the Ethernet WAN and then enable it. The speed will keep fix 100M. (1)When we fix 1000M on Ethernet wan and then disable it. Make sure Ethernet WAN link down. (2) Enable Ethernet WAN, it will fix on 100M. After reboot, Ethernet WAN can back to 1000M.
- 2. ITS: 140103717, No IPv6 traffic LAN to WAN when v6 firewall are disabled.
- 3. ITS: 140104452, FTP upload can't work in Linux environment. Condition: (1)using linux command "ftp 192.168.1.1" to connect with CPE ftp server.(2)use command "put ras.bin" to upload FW to CPE(3)CPE without accept any FW data package. Expectation:(1)When use put command to upload image, the CPE should receive data packages.(2)Then use command "bye" to start upload FW process.
- 4. Fixed: (1)Go to "Network Setting > QoS > Class Setup" webpage by IE browser, you can see the Edit and Delete icons are misplaced.(2)Go to "Network Setting > QoS > Policer Setup" webpage by IE browser, you can see the background are cut.(3)Go to "Connection Status > Status" webpage by IE browser, in "Registration Status" section, you can see the "UnRegister" button lose right-side line.
- 5. [UK] Interface group leaks: If interface group is setting at LAN1 then LAN2~4 packet should be not sent to LAN1 port.

Modifications in V1.00(AAKL.3)b2

[FEATURE ENHANCED]

- 6. Support ACL to select IPv6 LAN device. (not support static IPv6).
- 7. Description: consider Support Trust domain for IPv6. Condition: when set trust domain IP, it is set as ACCPET for INPUT chain of iptables, but we don't consider about IPv6.
- 8. Support Concurrent WAN for routing and bridge mode with same PVI/VCI.
- 9. Support "Mode Switch" 3G module as VMG1312-B10A with Fwid:AAJZ0C0
- 10. Support characters: "@", "-", ":" in SIP Account field let CPE to apply.

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[FEATURE MODIFIED]

- 1. Interface group behavior, WiFi/WAN disabled & enable still keep in original group. (1)Create a new Interface group with WiFi interface.(2)Disable WiFi interface, then enable. (3)The interface will restore to default group.
- 2. Replace CPE All 'MitraStar' string to 'ZyXEL'.



3.

[BUG FIX]

- 1. ITS:131104543, 131100434 (1) IGMP flooding when igmp snooping mode is standard ,(2) IPTV can not work in igmp proxy but VLC player can do it.
- 2. ITS: 131100747, Symptom: WAN PC can ping to CPS's LAN interface with bridge WAN.(1)Setup CPE WAN to bridge mode.(2)Setup WAN PC's address in the same subnet(3)WAN PC ping CPE's LAN interface, then get ping response.
- 3. ITS: 130804413 Symptom: [DHCPv6c] DHCPv6 renew does not work like it should.(1)only enable IA_NA, after dhcp6c send renew and get reply, it resend solicit.(2)enable both IA_NA and IA_PD, dhcp6c send renew and get reply, it send release repeatedly
- 4. Symptom: (IOP issue) Ping & TraceRoute in Diagnostic can't work on Goole Chrome only.(1)use Google Chrome, login WebGUI, click status, but it doesn't show anything.(2)use Google Chrome, click Diagnostic page, get into ping and traceroute, it doesn't work.
- 5. ITS: 131104896, Description: DHCPv6 Requested Option code: DNS recursive name server (23) has repeat for 2 times. Symptom: there are 2 option 23 in one DHCPv6 request packet.
- 6. ITS: 130903252, Description: press WAN IP release on Web GUI, DHCPv4 client won't send "DHCP RELEASE" to DHCP server .Symptom: press WAN IP release on Web GUI, DHCPv4 client won't send "DHCP RELEASE" to DHCP server.(1)enter GUI status page.(2)click "release" button for "IPv4 Address" in "WAN information" column.(3)capture packet from packet sniffer tool, dhcpc doesn't send RELEASE packet to DHCP server.
- 7. Symptom: Wrong string in Wireless webpage. Go to "Network Setting > Wireless > General" webpage, in "More Secure" field, click more, you can see the wrong typo "Encyption", should be "Encryption".
- 8. SPRID: 131024357, After add one bridge wan and one route wan with the same VLAN id, DUT will repeat reboot.
- 9. SPRID: 131022286, Plug USB flash drive to CPE, after reboot CPE, USB flash drive sometimes is undetectable by CPE.
- 10. VPN Monitor Wording. "Connecting" change to 'Connected' and "Disconnecting" change to 'Disconnect'.

11.

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Modifications in V1.00(AAKL.3)b1

- 1. Base on V1.00(AAKL.2)b1 to release V1.00(AAKL.3)b1
- 2. [FEATURE ENHANCEMENT] Add some CLI commands. (pppoectl, firewall, wlanctl, route, lan, dmz and passwd)
- 3. [FEATURE ENHANCEMENT] The CLI LAN config command need to support generate DHCP subnet IP automatically.
- 4. [FEATURE ENHANCEMENT] Block it from CLI with web GUI if DMZ IP same LAN IP.
- 5. [BUG FIX] [ITS 131101298] If MGMT and DMZ work in same time then MGMT will fail
- 6. [BUG FIX] [ITS 131002333] GUI can't display log information with specified category.
- 7. [BUG FIX] [ITS 131002949] Can't disconnect VPN from USG remote site.
- 8. [BUG FIX][ITS 131018118] If use ATSN to change SN and use lowercase, when use ATSH to check, SN will display lowercase.
- 9. [Bug Fix][SPRID 131018077] "Bootbase Version" are different between "Debug mode" and "CLI command".
- 10. [BUG FIX][SPRID 131018114] WPS process bar display issue.
- 11. [BUG FIX][SPRID 131018117] User can't find the radio button of Enable in WPS page. (IE6/7/8)
- 12. [BUG FIX][SPRID 131021199, 131106389] After upload the configuration to device, one of Dynamic DNS setting is lost.
- 13. [BUG FIX][SPRID 131021206] Fix default value from Mitrastar to ZyXEL in data-model.
- 14. [BUG FIX][SPRID 131022288, 131022267] Enable or disable "Immediate Dial Enable" function on anyone "SIP Service Provider", it will also enable or disable "Immediate Dial Enable" function" to all "SIP Service Provider" at the same time.
- 15. [BUG FIX][SPRID 131024393] Enable "File Sharing Services" function and add a user account. Then reboot CPE, CPE happen repeat reboot.
- 16. [BUG FIX][TR069] Tr069 will not enable in some conditions. if WAN is plug-in after CPE boot up, tr069 will not be enabled
- 17. [BUG FIX][TR069] When Connect with ACS server, the tr69c will crash.
- 18. [BUG FIX][TR069] Fix memory overwrite problem.
- 19. [BUG FIX][TR069] Fix wrong comparison statement
- 20. [BUG FIX][TR069] F ix incorrect fprintf argument



- 21. [BUG FIX][TR069] Cannot set Multi_WAN.
- 22. [BUG FIX][TR069] After download file, some parameter values are always zero.

These parameters are:

Internet Gateway Device. Download Diagnostics. Test Bytes Recived

InternetGatewayDevice.DownloadDiagnostics.TotalBytesRecived

 $Internet Gateway Device. Download Diagnostics. X_5067F0_Result. 1. Test Bytes Recived Annual Control of the C$

 $Internet Gateway Device. Download Diagnostics. X_5067F0_Throughput$

InternetGatewayDevice.DownloadDiagnostics.X_5067F0_TotalBytesRecivedUnderFullLoading

- 23. [BUG FIX][SPRID 131018118] If use ATSN to change SN and use lowercase, when use ATSH to check, SN will display lowercase.
- 24. [BUG FIX] add PHHONE1 and PHONE2 on/off when enter cmd -> sys ledctl all 1/0.
- 25. [FEATURE ENHANCEMENT] Support IPSec log in GUI.
- 26. [FEATURE ENHANCEMENT][SPRID 131018119] TE command "sys btt 1", the output can show on telnet
- 27. [BUG FIX][ITS 131004175]Use long length FW id to upgrade FW, CPE will crash in first boot up.
- 28. [BUG FIX][SPRID 131025508] Bandwidth of Wireless Network Setup on Wireless page should be modified.
- 29. [BUG FIX][ITS 130804887] The default of "Deny Ping Response" is disabled, but user can't ping CPE from WAN over IPv6 network.
- 30. [BUG FIX][ITS 130903720] CPE Crash When Have IPTV Traffic in ADSL ATM Mode.
- 31. [BUG FIX][ITS 131000700] IOP issue between BCM63168 GPHY/BCM53124S Ethernet port and Genexis FiberXport.
- 32. [FEATURE ENHANCEMENT][ITS 130700725] VOIP over IPv6.

Modifications in V1.00(AAKL.2)b1

- 33. Base on V1.00(AAKL.1)b2 to release V1.00(AAKL.2)b1
- 34. [FEATURE ENHANCEMENT] Always try to reconnect PPPoE even authentication fail
- 35. [Bug Fix] Open web status page fail when ppp connection fail.
- 36. [FEATURE ENHANCEMENT] Support concurrent VDSL wan. (One bridge wan and one route wan with the same VLAN id.)
- 37. [FEATURE ENHANCEMENT] Serial number format change. Ex:

VMG 8324-B10A

sys-serial-no: "S130Y11021794 8324 100AAKL0b2"

VMG 8924-B10A



- sys-serial-no: "S130Y11021794 8924 100AAKL0b2"
- 38. [Bug Fix] When setup DNS6 from ISP, GUI can't display DNS value.

Condition:

- A. Go to Home Network Setting/Home Networking/LAN Setup page.
- B. Enable IPv6 and select IPv6 DNS Value server to "From ISP".
- C. Connect with WAN and re-flash LAN.
- D. DNS IP address still empty.
- 39. [Feature Change] Dual stack enable as default on all WAN connection.
- 40. [Feature Change] DHCP option 43 enable as default on all WAN connection.
- 41. [Feature Change] By default, use static supervisor password as for EU generic.
- 42. [Bug Fix][ITS 130804887] The default of "Deny Ping Response" is disabled, but user can't ping CPE from WAN.
- 43. [FEATURE ENHANCEMENT] Support wireless STA connect/disconnect to AP log information.
- 44. [Bug Fix] Remove UPS information from GUI.
- 45. [FEATURE ENHANCEMENT] Add more wireless information for the lan device about SSID, Link quality, Connect type.
- 46. [Bug Fix] When Connect with ACS server, the tr69c will crash.

Condition:

- A. Enable tr69 and connect with ACS.
- B. In console side, we can find tr69c core trace message.

Modifications in V1.00(AAKL.1)b2

- 47. Base on V1.00(AAKL.1)b1 to release V1.00(AAKL.1)b2
- 48. [Bug Fix][ITS 130701418] The ACL rule will disappear from GUI when the firewall is disabled. And then enable the firewall, the ACL will return in GUI
- 49. [Bug Fix][ITS 130800697] DSL uptime counter display error.
- 50. [FEATURE ENHANCEMENT][ITS 130605250] Add separate firewall IPv4 and IPv6 control Flag.
- 51. [FEATURE ENHANCEMENT][ITS 130800636] Enable ADSL over PTM as factory default setting.
- 52. [FEATURE ENHANCEMENT][ITS 130702735] Add more wireless information for the LAN device about SSID, Link quality, Connect type.

Modifications in V1.00(AAKL.1)b1

53. Base on V1.00(AAKL.0)C0 to release V1.00(AAKL.1)b1



- 54. [Bug Fix][SPRID 121217134] Add a new interface group that select LAN interface and none WAN interface can create successfully.
- 55. [Bug Fix][SPRID 121217135] There are redundant wireless LAN interfaces on interface group page.
- 56. [Bug Fix][SPRID121218221] WLAN LED will not off, when WLAN configure disable From GUI and HW button.
- 57. [Bug Fix][SPRID 130225373] In the Wake on LAN page, the IP address column is redundant.
- 58. [Bug Fix][SPRID 130227535] Use tftp client tool to put FW to device >> Failed.
- 59. [Bug Fix][SPRID 130227537] Rate Limit of WAN configuration can't work again, when user modify "Rate Limit".
- 60. [Bug Fix][SPRID 130412337] LAN PC connect to DUT and will get IP address randomly.
- 61. [Bug Fix][SPRID 130415493] Wireless's LED behavior is not correct.
- 62. [Bug Fix][SPRID 130416648] LAN PC play the MLD video, after 2-3 minutes, DUT will reboot.
- 63. [Bug Fix][SPRID 130417754] When change security to WEP in 802.11n mode, GUI pop out message issue.
- 64. [Bug Fix][SPRID 130419060] Press HW WPS button, then disable WPS from GUI, 5G LED still flash (orange).
- 65. [FEATURE MODIFICATION][DHCP] Support DHCP Options 61 on WAN side.
- 66. [FEATURE MODIFICATION][WEB REDIRECT] Using DUT index page to replace troubleshooting pages.
- 67. [FEATURE MODIFICATION][ITS 130500999] Fixed MAC feature. Use parameter MacIndex to control the MAC allocated to wan interface.
- 68. [FEATURE MODIFICATION][ITS 130503361] Allow each wan interface has independent static DNS servers.
- 69. [FEATURE MODIFICATION][ITS 130602748] Add VOIP tone setting for Austria.
- 70. [FEATURE MODIFICATION][VLAN] Support VLAN Mux on ATM PVC.
- 71. [FEATURE MODIFICATION][ITS 130603320] Support clean ROM-D via ftp.
- 72. [FEATURE MODIFICATION][ITS 130405196] Show Internet connection up only when default gateway interface get IP. Enabled if (InternetGatewayDevice.X_5067F0_CustomizationFlag.X_5067F0_Parameter1 & 0x00000001) = 1
- 73. [Bug Fix][ITS 130504207] V6 auto renew dhcp6c won't renew when receive more than one reply message.



- 74. [Bug Fix][ITS 130401093] Dhcp6c will re-init if reveive more than one reply message.
- 75. [Bug Fix] LAN PC can't ping to WAN (IPv6) when firewall is disabled.
- 76. [FEATURE MODIFICATION][ITS 130502491] In Maintenance->Time page, Daylight Saving setting, Order field. Change Fifth to Last.
- 77. [FEATURE MODIFICATION][ITS 130503411] Enhance the status page loading speed.
- 78. [FEATURE MODIFICATION][ITS 130503755] Change the serial number format shown on COE
 - Original: "SerialNumber"
 - Change to: "SerialNumber ModelName FirmwareVersion"
- 79. [FEATURE MODIFICATION][COUNTRYCODE] Close 11ac DFS band for US (FF) & EU(E1) region.
- 80. [Bug Fix][SPRID 130301048] MAX NAT session per host can't be limited.
- 81. [Bug Fix][SPRID 130227536] Use ADSL WAN to play IGMP >> Lag.
- 82. [Bug Fix][SPRID 130220040] Passphrase type couldn't be set.
- 83. [Bug Fix][SPRID 121219374] Wireless can't pass the PQA criteria, please check the attached file.
- 84. [Bug Fix][SPRID 121015894] Port trigger can't work when set port range.

Modifications in V1.00(AAKL.0)C0

85. Base on 1.00(AAKL.0)b2 to release V1.00(AAKL.0)C0

Modifications in V1.00(AAKL.0)b2

- 86. Base on 1.00(AAGW.0)b5 to release V1.00(AAKL.0)b2
- 87. Change Vendor Name to "ZyXEL Communications Corp.".
- 88. [BUG FIX] [SPRID 130415450]Diagnostic can't "Ping/TraceRoute/Nslookup" ipv6 domain address.
- 89. [BUG FIX] [SPRID 130416621] After DUT use .w to upgrade FW, user can't use account (zyuser/admin) to login FTP.
- 90. [BUG FIX] [SPRID 130415473]5th Ehternet Port can't work
- 91. [BUG FIX] [SPRID 130412360][Power Management]Wireless 5G LED didn't OFF by power management.
- 92. [BUG FIX] [SPRID 130415492] [Remote MGMT] Type "sys atsh " via ssh response error.



- 93. [BUG FIX] [SPRID 130412361] [3G]LAN PC still can't access Internet after 3G connect up when DUT has 2 WAN connections.
- 94. [BUG FIX] [SPRID 130416649] [GUI] The information about 2.4G and 5G are not correct in the Connection Status page(Interface Status).
- 95. [BUG FIX] [SPRID 130415453] When system Log of Category select "DHCP Server", GUI (Log) can't show any about DHCP Server information.
- 96. [BUG FIX] [SPRID 130415451] Diagnostic Address set ";" + "sh command" >> Diagnostic can do sh mode active.
- 97. [BUG FIX] [SPRID 130422139] DUT can't get Provision Code from DHCP option 43.
- 98. [BUG FIX] [RD Internal][ADSL] Rate Limit of WAN configuration can't work again, when user modify "Rate Limit"
- 99. [BUG FIX] [RD Internal] (Power Management) LED behavior is wrong after reboot when DUT enabled power management.
- 100. [BUG FIX] [RD Internal] there are two "Host Name" fields in USB Service > File Sharing for Google Chrome and Firefox.
- 101. [FEATURE ENHANCEMENT] Support tr69 to update romd.
- 102. [FEATURE MODIFICATION] [RD Internal] modify timer of reset to default button to trigger in CFE from 20s to 10s.
- 103. [FEATURE MODIFICATION] modify default config, set WLAN 2.4G default bandwidth to 40MHz.
- 104. [FEATURE MODIFICATION] [HW][WLAN] update 5G SROM for CPK issue.
- 105. [FEATURE MODIFICATION] [HW][WLAN] update 2.4G and 5G con-current regulatory power table limitation for CE/FCC to EU/60 and Q1/60.
- 106. [FEATURE MODIFICATION][RD Internal] WLAN auto generate SSID for 5G to ZyXELXXXXXX_5G (XXXXXXX is the last 6 mac address).
- 107. [BUG FIX] [SPRID 121214980] VDSL bridge throughput can't pass PQA criteria (Run 64 to 1518 continuous).

Modifications in V1.00(AAKL.0)b1

- 108. Base on 1.00(AAGW.0)b4 to release V1.00(AAKL.0)b1
- 109. Change Vendor Name to "ZyXEL Communications Corp.".

Default Settings in V1.00(AAKL.4)b2

Please refer to V100AAKL4b1.rom for more detail. It can be viewed by text editor.



Recommend to use XML parser to get well organization result.

- 1. Username and password:
 - (1) admin/1234
 - (2) zyuser/1234
- 2. GUI configuration: http://192.168.1.1/
- 3. How to enter sh mode: enter sh in main menu.



Public Domain Software Announcements

The following public domain software are used in this firmware release:

- MIPS Linux kernel, version 2.6.30
 http://www.linux-mips.org or http://kernel.org
- Bridge-Utils
 http://bridge.sourceforge.net
- BusyBox 1.0.0 toolset
 http://www.busybox.net/
- Dproxy: dproxy-nexgen http://dproxy.sourceforge.net
- ebtables 2.0.6
 http://ebtables.sourceforge.net
- bftpd 1.0.24
 http://www.bftpd.org/
- iproute2 iproute2-2.4.7-now-ss020116-try.tar.gz
 http://www.linuxgrill.com/anonymous/iproute2
- iptables-1.3.8 http://www.netfilter.org
- udhcp 0.9.6
 http://udhcp.busybox.net/
- zebra 0.93ahttp://www.zebra.org/
- ppp 2.4.1

 $\underline{http://www.roaringpenguin.com/pppoe}$

- Ssh server: dropbear v0.46
 http://matt.ucc.asn.au/dropbear/dropbear.html
- openssl: openSSL library v0.9.7f
 http://www.openssl.org
- Dnsmasq: 2.48

http://www.thekelleys.org.uk/dnsmasq/

- Ssmtp: 2.62 GPLv2 http://packages.debian.org/lenny/ssmtp
- Dhcpv6
 http://sourceforge.net/projects/wide-dhcpv6/