



**Firmware Release Note**

**ZyAIR B-2000**

**Release 3.50(HB.2)C0**

<b>Date:</b>	<b>September 25, 2003</b>
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# **ZyXEL ZyAIR B-2000 Standard Version release 3.50(HB.2)C0 Release Note**

**Date:** September 25, 2003

## **Supported Platforms:**

ZyXEL ZyAIR B-2000

## **Versions:**

ZyNOS F/W Version : V3.50(HB.2) | 09/25/2003 14:03:37

BootBase : V2.10 | 03/22/2002 14:38:58

## **Notes:**

1. When Authentication Server (SMT Menu 23.2) is active, the ZyAIR will authenticate wireless users through external authentication server. Otherwise the ZyAIR authenticate wireless users through user profile (SMT Menu 14).
2. If Authentication Control (SMT Menu 24.4) value is "Auto", ZyAIR will enable user authentication method, a wireless user must use 802.1x client software to login the ZyAIR before accessing network service. If Authentication Control value is "Force Authorized", ZyAIR will allow all wireless users to access network service. If Authentication Control value is "Force Unauthorized", ZyAIR will not allow wireless user to access network service.

## **Known Issues:**

1. When WAN is disable, DHCP still sends DHCP broadcast packets. This issue needs more time to debug and test. It is not fixed at this released version.
2. WEB configuration for SUA/NAT default server IP (DMZ) will not function well. Please configure DMZ through SMT15.2.
3. Early firmware version has problem in downloading firmware from WEB. Please try ftp while you encounter this problem.

## **CI Command List**

## Features:

### Modifications in V3.50(HB.2)C0 | 09/25/2003

1. Release FCS version 3.50(HB.0)C0.
2. [FEATURE CHANGED] Change copyright message “Copyright (c) 1994 - 2003 ZyXEL Communications Corp.”.

### Modifications in V3.50(HB.2)b1 | 09/23/2003

1. [BUG FIXED]  
Symptom: LAN PC and Wireless PC can not ping each other.  
Condition: Configure WAN setting through WEB, then clear both LAN and wireless PCs' arp tables, then they can not ping each other.

### Modifications in V3.50(HB.1)C0 | 05/30/2003

1. [FEATURE CHANGED] Default Wireless Channel is CH06.

### Modifications in V3.50(HB.1)b1 | 03/21/2003

1. [FEATURE ENHANCED] Support udp check point.

### Modifications in V3.50(HB.0)C0 | 10/21/2002

1. Release FCS version 3.50(HB.0)C0.

### Modifications in V3.50(HB.0)b6 | 10/04/2002

1. [FEATURE CHANGED] In order to support some WLAN card, that doesn't support shared key authentication, B-2000 supports both open system and shared key authentication no matter WEP is enabled or not.
2. [BUG FIXED]  
Symptom: Windows XP shows UPnP data rate only 1M.  
Condition: This symptom is observed when B-2000 UPnP is enable, the data rate is only 1M.
3. [BUG FIXED]  
Symptom: Windows XP deassociates from AP and associates to AP again. 802.1x authentication will not function well.  
Condition: This symptom is observed when authenticated XP user remove wireless card and plug it into station again, 802.1x authentication will not function properly.

### Modifications in V3.50(HB.0)b5 | 09/30/2002

1. [FEATURE CHANGED] Enable MANY\_ONE\_TO\_ONE.
2. [FEATURE CHANGED] Change SMT 24-11 Access policy from ALL to LAN only for all server configuration.
3. [FEATURE CHANGED] The behavior of WLAN activity LED is changed.
4. [FEATURE CHANGED] Change the term “Firmware upgrade” to “Firmware upload” in Web GUI.
5. [FEATURE CHANGED] Change string “Write to EEPROM Success” to “Verify EEPROM OK” when EEPROM is verified OK.
6. [FEATURE EHHANCED] Add log message for 802.1x.
7. [FEATURE EHHANCED] Add EAP-TLS and EAP-TTLS passthrough.
8. [FEATURE EHHANCED] Update sptgen.c to support ftp download and upload RomFile for 802.1x and IAPP RomFile configuration.

9. [FEATURE ENHANCED] Implement CI command "wlan diagnose" to support WLAN card self-diagnostics.
10. [BUG FIXED]  
Symptom: Memory alloc error.  
Condition: Too many MAC addresses recorded in the bridge table will cause memory alloc error.
11. [BUG FIXED]  
Symptom: The RomFile version will be increased by one after reboot.  
Condition: This symptom is observed when user reboot the device.
12. [BUG FIXED]  
Symptom: sys mrd atsh shows wrong RomFile version.  
Condition: This symptom is observed when user types sys mrd atsh at CI command mode.
13. [BUG FIXED]  
Symptom: HTP loopback test fail during manufacture with empty EERPOM.  
Condition: This symptom is observed when EEPROM is empty and run HTP loopback test.
14. [BUG FIXED]  
Symptom: ether driver status enet0 and ether driver status enet1 commands show wrong MAC address.  
Condition: This symptom is observed when user types the above two CI commands.
15. [FEATURE EHHANCED] Revise 802.1x timer function interface in order to support multi-platform.

#### **Modifications in V3.50(HB.0)b4 | 09/05/2002**

1. [BUG FIXED]  
Symptom: Windows XP UPnP will display "P314 Plus" as model name.  
Condition: This symptom is observed when user use Windows XP and the ZyAIR B-2000 UPnP is turn on.
2. [BUG FIXED]  
Symptom: Change settings in Advance|WAN|IP and save it, the web message shows wrong warning message.  
Condition: This symptom is observed when user changes WAN IP through WEB.
3. [BUG FIXED]  
Symptom: After LAN IP changed, reserved SUA server for Roadrunner does not take effect until reboot system.  
Condition: This symptom is observed when user configure LAN IP through SMT3.2 or WEB, reserved SUA server does not changed.
4. [BUG FIXED]  
Symptom: UPnP NAT traversal does not work.  
Condition: This symptom is observed when user runs Windows XP MSN Messenger.
5. [FEATURE EHHANCED] Add embedded web help menu for 802.1x, RADIUS and Roaming.
6. [FEATURE CHANGED] Support WLAN external loopback test in HTP. In order to support this loopback test, a Wireless AP with ESS ID = "loopback" as a fixture is required.
7. [BUG FIXED]  
Symptom: Turn on WEP on AP and station, supplicant can not be authenticated and authorized.  
Condition: This symptom is observed when we turn on WEP on both AP and station, supplicant can not be authenticated and authorized.
8. [BUG FIXED]  
Symptom: Default DNS will not function probably.  
Condition: This symptom is observed when the default DNS server has been changed but the ZyAIR default DNS server does not change to new DNS server. Add CI command for user to configure DNS IP.

**Modification in 3.50(HB.0)b3 | 8/12/2002**

1. [NEW FEATURE] Support 802.11f.
2. [FEATURE CHANGED] Change SMT Menu 23.2 field label string “Key” to “Shared Secret”
3. [FEATURE CHANGED] The default value of RADIUS authentication server and accounting server ports are changed to 1812 and 1813 respectively
4. [BUG FIXED]  
Symptom: Revise 802.1x SPT related data structure in order to follow SPT specification
5. [BUG FIXED]  
Symptom: 802.1x drop unauthenticated user packets, the system will reboot (data abort)  
Condition: If an unauthenticated user access ZyAIR, 802.1x will drop all packets come from the user except 802.1x packets. Then 802.1x will access string from the table in which the string is not defined

**Modification in 3.50(HB.0)b2 | 7/25/2002**

1. [FEATURE CHANGED] Change SMT Menu 23.4 Authentication Control default value to Force Authorized (The original default value is Auto)
2. [FEATURE EHHANCED] Delete supplicant's data if supplicant logoff
3. [FEATURE EHHANCED] Send Radius Accounting Stop message to Radius accounting server when SMT 23.4 Authentication Control value has been changed from Auto to other value

**Modification in 3.50(HB.0)b1 | 7/23/2002**

1. First release for C3 baseline firmware

## CI Command List

Command Class List Table		
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<a href="#">Wireless LAN Related Command</a>	<a href="#">IP Related Command</a>	<a href="#">Bridge Related Command</a>
<a href="#">802.1x Related Command</a>		

## System Related Command

[Home](#)

Command				Description
sys				
	Adjtime			retrive date and time from Internet
	Callhist			
		display		display call history
		remove	<index>	remove entry from call history
	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
	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
	systemname		[system name]	Change system name
	time		[hour [min [sec]]]	display/set system time
	Trcdisp	parse, brief, disp		monitor packets
	Trclog			
	trepacket			
	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
	Filter			
		netbios		
	roadrunner			
		debug	<level>	enable/disable roadrunner service 0: disable <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

## 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				
	association			display association list
	chid		[channel id]	set channel
	ssid		[ess id]	set ESS ID
	version			display WLAN version information
	diagnose			check wireless card

## 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 client 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> groupmtm <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

## 802.1x Related Command

[Home](#)

Command				Description
8021x				
	radius	authentication	Show	show current radius authentication server configuration
		accounting	Show	show current radius accounting server configuration
	debug	Reauth	<0:off 1:on>	set IEEE802.1x reauthentication method
		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