



Firmware Release Note

## ZyAIR G-3000H

Release 3.50(AAC.0)C0

**Date:** July 13, 2005  
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### **ZyXEL ZyAIR G-3000H Standard Version release 3.50(AAC.0)C0 Release Note**

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**Supported Platforms:**  
ZyXEL ZyAIR G-3000H

#### **Versions:**

ZyNOS Version : V3.50(AAC.0) | 07/13/2005 11:36:53  
Bootbase Version : V1.03 | 05/25/2005 16:49:07

## **Notes:**

1. ZyAIR G-3000H is a country dependent product. Please setup correct country code before shipping.
2. uAP code version is 1.2.8.0

## **Known Issues:**

1. WinXP supplicant doesn't work when it configures as 802.1x authentication with static WEP key.
2. WPA interoperability issue : When centrino station configure as WPA (or WPA-PSK) mode and data encryption field set as WEP, it can not work with G-3000H under WPA (or WPA-PSK) mode and using WEP as group key. In this case, user must configure the data encryption field as TKIP then stations will automatic switch the group key cipher as WEP after it received the WPA information element from G-3000H.
3. Online help in eWC is not ready.
4. WDS links will be broken temporarily with heavy traffics.

## **CI Command List:**

### **Features:**

#### **Modification in 3.50(AAC.0)C0 | 13/07/2005**

1. [FEATURE CHANGE]  
Modify to FCS version.

#### **Modification in 3.50(AAC.0)b1 | 25/05/2005**

1. First release for C3 firmware

## Appendix 1 : 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="#">Wireless LAN Related Command</a>	<a href="#">IP Related Command</a>	<a href="#">Bridge Related Command</a>
<a href="#">802.1x Related Command</a>	<a href="#">Vantage Related Command</a>	

### System Related Command

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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	
	trcpacket	
	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		
	cpu			
		display		display CPU utilization

#### Exit Command

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Command			Description
exit			exit smt menu

#### Ethernet Related Command

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Command			Description
ether			
	config		display LAN configuration information
	driver		
		cnt	
			disp <name>
		ioctl	<ch_name>
		status	<ch_name>
	version		see ethernet device type
	edit		
		load	<ether no.>
		save	save ether data to spt

#### Wireless LAN Related Command

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Command			Description
Wlan			
	active		[on/off]
	association		display association list
	chid		[channel id]
	diagnose		self-diagnostics
	essid		[ess id]
	scan		scan wireless channels
	version		display WLAN version information

#### IP Related Command

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Command			Description
ip			
	address		[addr]
	arp		
		status	<iface>
	dhcp		<iface>
		client	
			release
			renew
		status	[option]
	dns		
		query	
		stats	
	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

#### Bridge Related Command

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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

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Command			Description
radius			
	showRunInfo		Show server running information.
	auth	show	show current radius authentication server configuration
		addAuthServer	Add an authentication server.
		delAuthServer	Delete an authentication server.
	acct	show	show current radius accounting server configuration
		addAcctServer	Add an accounting server.
		delAcctServer	Delete an accounting server.
8021x	debug	reauth	<0:off 1:on>
		level	[debug level]
		trace	show all supplications in the supplication table
		user	[username]
			show the specified user status in the supplicant table

Vantage Related Command

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Command			Description
cnm	active	[0/1]	Display or set the CNM features to enable or disable . 0: disable 1: enable CNM features and communicate through WAN interface.
	sgid		Display sgid which is the unique ID of the device in Vantage.
	managerIP	[addr]	Display or set the IP of Vantage server/COMServer which manage this device. [addr] specifies the IP of the Vantage serve/COMServer.
	debug	[0/1]	Display or set the way of outputting CNM debug messages. 0: disable debug messages. 1: output the debug messages to console and can accept SGMP inquire message only after the device is registered to Vantage server.
	reset		Reset the state machine of SGMP and return to the state of SGMP_STATE_UNKNOWN. Device will re-register to Vantage server if CNM is active.
	encrykey	[string]	Display or set encryption key. [string] specifies the encryption key. to be set. Key length can not less than 8 alphanumeric characters long, if ecrymode is DES. Key length can not less than 24 alphanumeric characters long, if ecrymode is 3DES.
	encrymode	[0/1/2]	Display or set the encryption mode for SGMP messages. [0:NONE /1:DES/2:3DES] specifies the encryption mode to be set.
	keepalive		Display the time(second) to report agent keepalive 0: disable. Set the time(second) to report agent keepalive; the valid range : 10 ~ 2147483647
	version		Display the Vantage agent version.

## Appendix 2: Backup RADIUS Server

ZyAIR devices support at most 5/2 (eWC/CI command) backup radius servers and accounting servers setting. ZyAIR devices use the first radius server setting as the default configuration. Figure shows the backup radius server concept. There are two radius servers can be reached by ZyAIR device. If supplicant issue an authentication request to ZyAIR device and trying to authenticate with radius server, ZyAIR device will keep trying forward this request to radius server 1. If ZyAIR device keep trying for 3 times and radius server still doesn't response the request then ZyAIR device will auto switch the authentication request packet to radius server 2. The trying time interval is depending on the supplicant re-try interval.

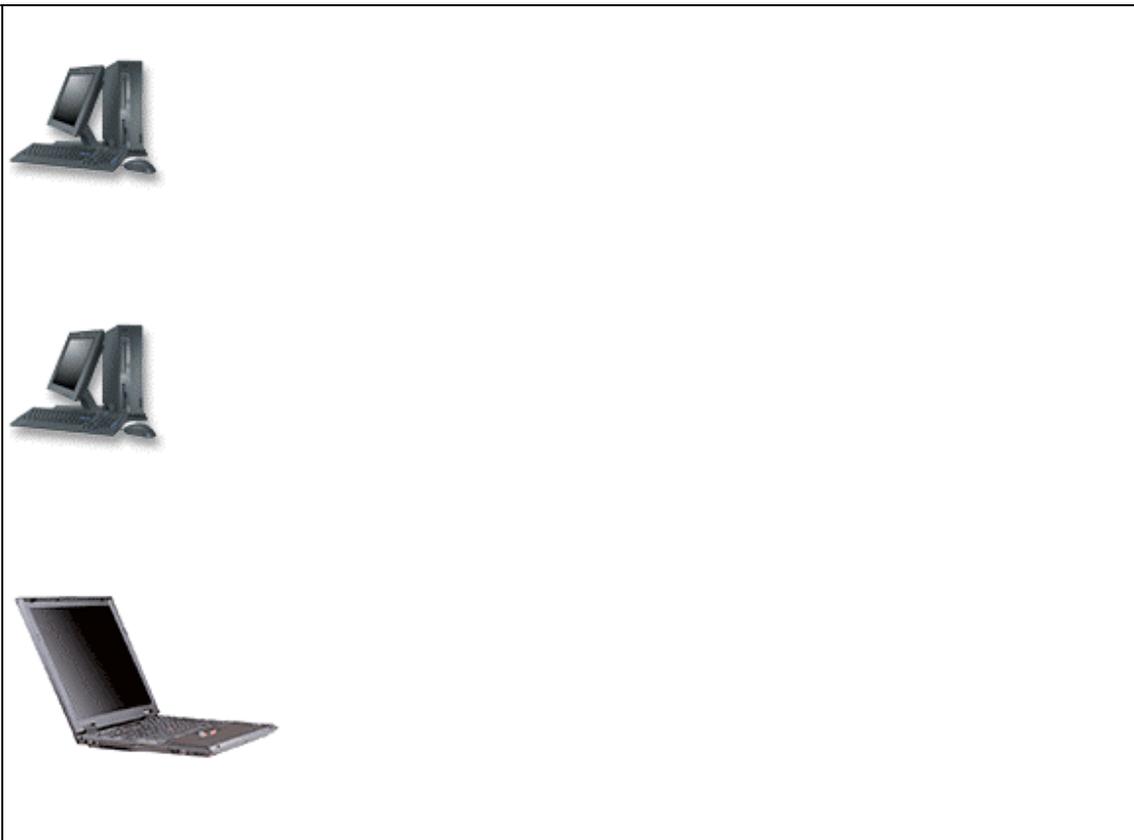
Supplicant

X

Radius server 1

Radius server 2

ZyAIR device



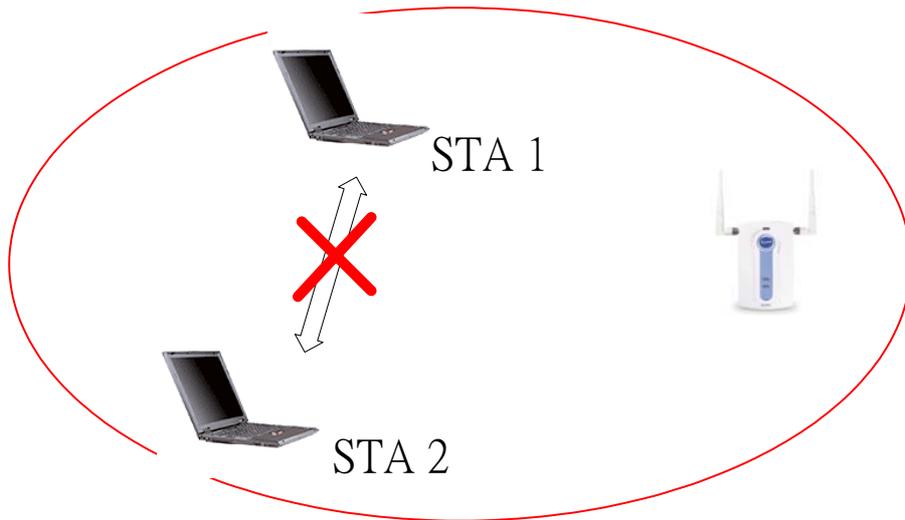






### Appendix 3: Blocking Intra-BSS traffic

For performance and security issues, G-1000P supports Blocking Intra-BSS Traffic feature. In public access WLAN, the users are not necessary to receive others' traffic. Therefore, Blocking Intra-BSS Traffic feature make AP not to forward STAs' traffic in a BSS area. This feature raises the security and performance obviously.



#### Appendix 4: Configurable Output Power

G-1000P provides configurable power to adjust AP's output power dynamically. This feature makes operator could limit AP's signal range and reduce the signal interference. On the other hand, it also strengthens the network security because the wireless signal will not leak out the undesired place.

