fZyXEL VES-1124 V3.50(LP.3)C0

Release Note/Manual Supplement

Date: Feb. 6, 2007

This document describes the features in the VES-1124 product for its 3.50(LP.3)C0 release.

Support Platforms:

ZyXEL VES-1124 V3.50(LP.3)C0 supports models: ZyXEL VES-1124

Version:

ZyNOS Version: V3.50(LP.3) | 02/06/2007 15:09:44
BootBase Version: V1.02(VES-1124) | 01/26/2005 16:16:38

Known Issue:

1. Ethernet AC101 PHY are not compatible with specific PHY.
2. Cannot generate pause frame when multiple vdsl ports send packets to uplink port.
3. Bandwidth control works only when Flow control enabled.
4. When GVRP enable, leave timer and leave all timer should be increased when lots of dynamic VLAN join.
5. Per port PVID setting is limited in set range(1-255, 256-511,…, 3840-4094). If port 1 is set PVID in one of the set range, the other ports PVID also should be set to the same set range.
6. Keep pressing port test button before accomplish port test will cause system reboot.
7. Remote Ethernet Speed Setting sometimes cannot work, user must reset VDSL again to make it working.

Bug Fix V3.50(LP.3)C0:

1. Add atwz command in bootext to allow change 6 bytes mac address.

Bug Fix V3.50(LP.2)C0:

1. Remote Ethernet Speed Setting of CLI cannot work .

Bug Fix V3.50(LP.2)b0:

1. Firmware upgrade fail when repeat upload firmware by web. Failure rate is about 30%.

Bug Fix V3.50(LP.1):

1. Process Port Test before VDSL link up will cause system crash.
2. Mirror function cannot work correctly when mirrored port is port 25 and port 26.

Bug Fix V3.50(LP.1)b3:

1. Gray out the edit box of Management VID in port based VLAN mode.
2. Gray out the edit box of VID in Static MAC Forwarding page for port based VLAN mode.
3. Remove one garbage string in port based VLAN table that is in last row and last column.
4. Fix bug that pause timer may overflow problem.

5. Add workaround when READY BIT no response.
6. Fix bug that remote PHY invalid setting may cause traffic hang lock.
7. Change LED light on to blinking when packet into device.

Bug Fix V3.50(LP.1)b2:

1. Port test in Diagnostic menu will fail in port based vlan mode.

Bug Fix V3.50(LP.1)b1:

1. Packet from CPU will flood to other ports in port based vlan.
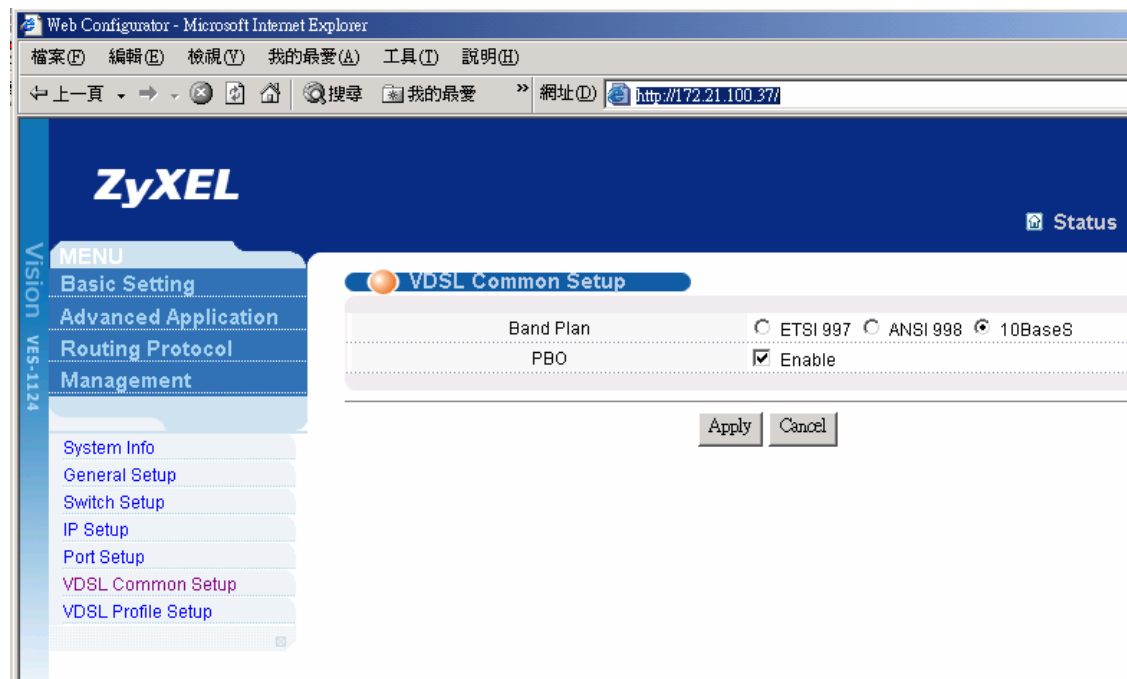2. VDSL CPE Ethernet link down will not flush arp table.

Bug Fix V3.50(LP.0):

1. FTP cannot work correctly.
2. MIB display error.
3. Help Page binding problem.

Features:

1. VDSL Common Setup
Providing mechanisms for setting VDSL system-wide parameters, including band plans of ETSI 997, ANSI 998, 10BaseS, and Power Back Off (PBO) enable/disable.

2. VDSL Profile Management:
The profile management is used for creating/modifying/deleting VDSL profiles used by each ports for different VDSL parameters. Currently we provide maximum 24 profiles for all system. One of the profiles named "DEFVAL" is the default profile of the system and can not be deleted. Any changes of the profiles will cause the VDSL port retrain.

3. VDSL Port Profile Assignment

In the Port Setup page, the user can assign which profile to be used for each port.
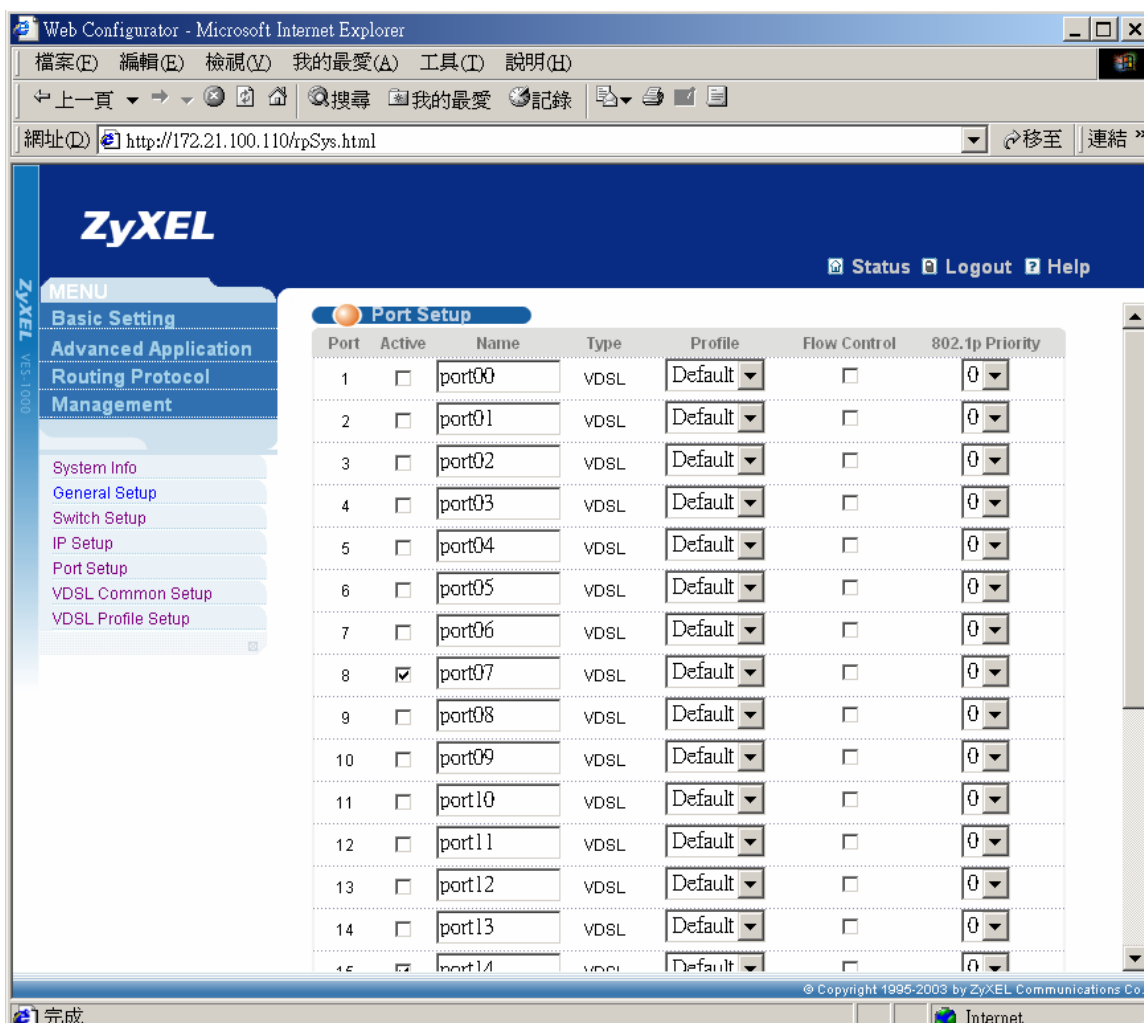
Firmware Upgrade:

The VES-1124 uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade VES-1124. The upgrade procedure is as follows:

Upgrade VES-1124 FW:

```
C:\> ftp <VES-1124 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350LP1C0.bin ras
ftp> bye
```

```
Where
   •      User name : just press <Enter>
   •      Password : the management password, 1234 by default
```

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- 350LP1C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in VES-1124

Configuration Upgrade:

The VES-1124 uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade VES-1124. The upgrade procedure is as follows:

Upgrade VLC1124A configuration:

```
C:\> ftp <VES-1124 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350LP1C0.rom rom-0
ftp> bye
```

```
Where
```
- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350LP1C0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in VES-1124

Commands Table:

● Partial VDSL Profile and VDSL Port commands are not fully supported

sys

snmp	GetCommunity	[<community>]			Set or view community of GetRequest.
	SetCommunity	[<community>]			Set or view community of SettRequest.
	TrustedHost	[<hsot>]			Set or view trusted host.
	trapCommunity	[<community>]			Set or view community of Trap
	trapDest	[<destination>]			Set or view trap server.
	disp				View snmp setting.
cluster	active	<name>			Active cluster
	inactive	<name>			Inactive cluster
	add	<MAC addr>	<password>		Add a member into cluster
	remove	<MAC addr>			Remove a member from cluster.
	ShowMemeber				Show member list
	showCan				Show candidate list

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		didate status					Show cluster status
config	save						Save configuration

Switch commands: The following commands are under "**sys switch** "

garp	status						show garp timer status
	timer	<join timer(ms)>	<leave timer(ms)>	<leave all timer<ms>			set garp timer <join timer> <leave timer> <leave all timer>
gvrp	status						show gvrp status
	enable						enable gvrp function
	disable						disable gvrp function
qos	defpri	<port>	[<0..7>]				set the default ingress User Priority for this port <port>.
	map	<0..7>	[<queue>]				User Priority to Traffic Class mapping.
vlan1q	port	status	<port>				show port <port> VLAN information.
		defaultVID	<port>	<VID>			set defaultVID<VID> of this port<port>.
		accept	<port>	<all|tagged>			set acceptFrameType of this port.
		gvrp	<port>	<enable|disable>			Enable/disable the gvrp function of this port <port>.
	svlan	cpu	<VLAN ID>				Set VLAN ID of cpu.
		setentry	<name>	<VID>	<port>	<adctl>	<<tagctl> set static entry.<VID>
		delentry	<VID>				delete static entry<VID>
		active	<VID>				active the static entry with <VID>
		inactive	<VID>				inactive the static entry with <VID>
		list					show the static entry table.
	vlan	list	<all|vid|start_vid end_vid>				Show vlan1q current table.
driver	count	disp					Show the switch NDIS level counters(CPU interface)
		clear					Clear the switch NDIS level counters(CPU interface)
rstp							Please reference to 802.1w
	bridge						
		enable					Enable RSTP
		disable					Disable RSTP
		priority	<priority>				System Priority
		maxAge	<max age>				Max age timer

	helloTime	<hello time>		Hello timer
	forwardDelat	<forward delay time>		Forward delay time
	version	<STP:0|RSTP:2>		Operation Mode
port				
	enable	<Port_NO>		Enable this port under RSTP protocol
	disable	<Port_NO>		Disable this port under RSTP protocol
	pathCost	<Port_NO>		Cost of this path
	priority	<Port_NO>		Priority
	edgePort	<Port_NO>		If this port is an edge port
	p2pLink	<Port_NO>		Whether the Port concerned can only be connected to exactly one other Bridge or can be connected to two or more Bridges
	mcheck	<Port_NO>		802.1w chapter 17.18.10

lacp				Please reference to 802.3ad
	agg			Display aggregation information
	port			
		enable	<Port_NO>	
		disable	<Port_NO>	
		status	<Port_NO>	
		actorAdm		Actor means local side
			activity	[Port_NO [0:passive|1:active]]
			display	[Port_NO]
			key	[Port_NO [Key]]
			priority	[Port_NO [Priority]]
			timeout	[Port_NO [0:long_timeout|1:short_timeout]]
		status		
		keymgnt	[on|off]	
		sysPriority	<priority>	

dot1x				Please reference to 802.1x
	enable			Enable dot1x
	disable			Disable dot1x
	status			Show dot1x global status
	port			
		enable	<Port_NO>	Enable this port
		disable	<Port_NO>	Disable this port
		reauth	<Port_NO> <on|off>	Re-authentication

		reauthPeriod	<Port_NO>	<value>	Re-authentication period
		status	<Port_NO>		Port status
	set				
		auth	<profile | radius>		Set authentication method
		portcontrol	<port-no>	<auto |auth | unauth>	Set port authentication status
	radius				
		server	<IP>		Server IP
		secret	<secret>		Secret key
		port	<port>		Server port
		show			Display server setting (Won't be saved in flash)
	profile				
		add	<username>	<passwd>	Add a user profile
		delete	<idx>		Delete a user profile
		list			List profile setting
class					Class setting
	display				display run-time status
	l2set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid> Set src/dest port/MAC combination
	del	<class id>			Delete this class
bmstorm					Broadcast Storm Control
	disable				Clear current run-time settings
	type	<type>			Broadcast/Multicast/Both
	basis	<type>			Pkt/Byte
	display	[index]			Display ports setting
	interval	[value]			Set/display monitor interval
	set	<port>	<dhreshold>	<direction>	Threshold:# of pkt can be passed in the interval Direction:ingress/egress
	del	<index>			Disable on this port
mac	static				Static MAC setting
		disable			Clear current run-time settings
		display	[port]		display run-time status
		set	<port>	<MAC Addr.> <vid>	Set static MAC of the port
		del	<port>	<MAC Addr.> <vid>	Delete static MAC of the port
filter					MAC filter setting
	disable				Clear current run-time settings
	display				display run-time status
	set	<src	<src MAC>	<dest	<dest MAC> Set src/dest port/MAC

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	port>	<src vid>	port>	<dest vid>	combination (Use "*" as "don't-care" in each field)
mirror					Mirror setting
	disable				Clear current run-time settings
	display				display run-time status
	set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid>	Set src/dest port/MAC combination for mirror settings (Use "*" as "don't-care" in each field)
		<input|output|both>			
	port	<port>			What port mirror to
bw					Bandwidth Control setting
	disable				Clear current run-time settings
	display				display run-time status
	set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid> <Max BW>	Set src/dest port/MAC combination (Use "*" as "don't-care" in each field)
trunk					Trunking setting
	disable				Clear current run-time settings
	display				display run-time status
	set	<group>	<# ports>		Set trunking group
	del	<group>			del trunking group
monitor	Set				Set voltage, temperature
	Status				Show Monitor status
Ip	dhcp	<Iface>	mode	<none | client>	Change DHCP mode for interface <Iface>
			status		Show DHCP status
			client	release	Release the IP address
				renew	Renew the IP address.

● Following commands are not fully supported

Profile commands: The following commands are under "**vdsl profile** "

list		List profile
create	<profile name>	Create a new profile with default setting

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delete	<profile name>				Delete a profile
apply	<profile name>	<port number | all>			Apply current profile setting to other port
display	<profile name>				Display setting of current profile
set	<profile name>	name	<profile name>		Set the profile name of current profile
		uspayloadrate	max		Set the max upstream payloadrate
			min		Set the min upstream payloadrate
		dspayloadrate	max		Set the max downstream payloadrate
			min		Set the min downstream payloadrate
		rate-adaption	fix		Set rate-adaption mode to fixed mode
			adaption		Set rate-adaption mode to adaption mode
		snr	max		Set value of max snr
			min		Set value of min snr
			upstream	target	Set value of upstream target snr
			downstream	target	Set value of downstream target snr
		compatible-mode	adsl		Set to adsl compatible-mode
			pots		Set to pots compatible-mode
		usinterdelay			Set value of upstream interleave delay
		dsinterdelay			Set value of downstream interleave delay
		rfi	disable		Set rfi to disable
			standard	annex_f	Set rfi to annex f standard
				etsi	Set rfi to etsi standard
				t1e1	Set rfi to t1e1 standard
vdsl	Port	<port number | all>	enable		Set the port to line enable
			disable		Set the port to line disable
			retrain		Re-train operation for the port
			Re-provision		Re-provision for the port
			reset		Reset for the port
			remote-reset		Remote-reset CPE for the port
		<port number>	remote-test		Send EOC loopback packet for the remote test
			config	Display	Display config setting
			status	Display	Display current status for the port
			counter	Clear	Clear counter for the port
vdsl	bandplan				Set bandplan for vdsl system configuration
	Pbo	Enable			Set PBO to enable
		Disable			Set PBO to disable

MIB support:

The following is the private vdsl related MIB currently supported by VLC-1124A:
- accessSwitchVdslLineTable
- accessSwitchVdslVtuoPhysTable
- accessSwitchVdslVturPhysTable
- accessSwitchVdslVtuoInventoryTable
- accessSwitchVdslVturInventoryTable
- accessSwitchVdslVtuoIntervalTable
- accessSwitchVdslVturIntervalTable
- accessSwitchVdslLineConfProfileTable
- accessSwitchVturDevTable
- accessSwitchVturConfTable
- accessSwitchVturStateTable
- accessSwitchVdslVtuoPhyMCMTable
- accessSwitchVdslVturPhyMCMTable

Test Items:

1. VDSL profile create/modify/delete, and assign the profile to the specific VDSL port.
2. VDSL port retrain.
3. Load factory default.
4. IP Setting