

ZyXEL VLC1124A V3.50(LQ.2)

Release Note/Manual Supplement

Date: Jan. 26, 2005

This document describes the features in the VLC1124A product for its 3.50(LQ.2) release.

Support Platforms:

ZyXEL VLC1124A V3.50(LQ.2) supports models: ZyXEL VLC1124A

Version:

ZyNOS Version: V3.50(LQ.2) | 12/07/2004 17:22:29

BootBase Version: V1.04(VLC1124A) | 01/26/2005 16:32:12

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. Some MIB browser will keep original community setting. MIB browser should be restart when changing community setting.
7. Default rate adaptive setting change from fixed mode to rate adaptive decrease mode.
8. Keep pressing port test button before accomplish port test will cause system reboot.
9. Before VDSL link up, VDSL LED will light on/off many times. In this state, vdsl is waiting for connecting to target rate.

Bug Fix V3.50(LQ.2):

1. Standard Release for VLC1124A

Bug Fix V3.50(LQ.2)b3:

1. Warm Start / Cold Start Trap cannot be sent out in DHCP mode.

Bug Fix V3.50(LQ.2)b2:

1. System name shows "VES-1124" after loading default setting.
2. User cannot access DUT after executing Port Test in port isolation setting of port_based VLAN mode.
3. Some VID field shows zero in MAC table in port_based VLAN mode.
4. Default Gateway setting cannot work.
5. It should rename to "Priority" from "802.1P Priority" in port setup page. Due to switch chip did not tag 802.1P priority value to packets.

Bug Fix V3.50(LQ.2)b1:

1. Process Port Test before VDSL link up will cause system crash.
2. Gray out the edit box of Management VID in port based VLAN mode.
3. Gray out the edit box of VID in Static MAC Forwarding page for port based VLAN mode.
1. Remove one garbage string in port based VLAN table that is in last row and last column.
2. Fix bug that pause timer may overflow problem.
3. Add workaround when READY BIT no response.
4. Fix bug that remote PHY invalid setting may cause traffic hang lock.
5. Packet from CPU will flood to other ports in port based vlan.
6. VDSL CPE Ethernet link down will not flush arp table.

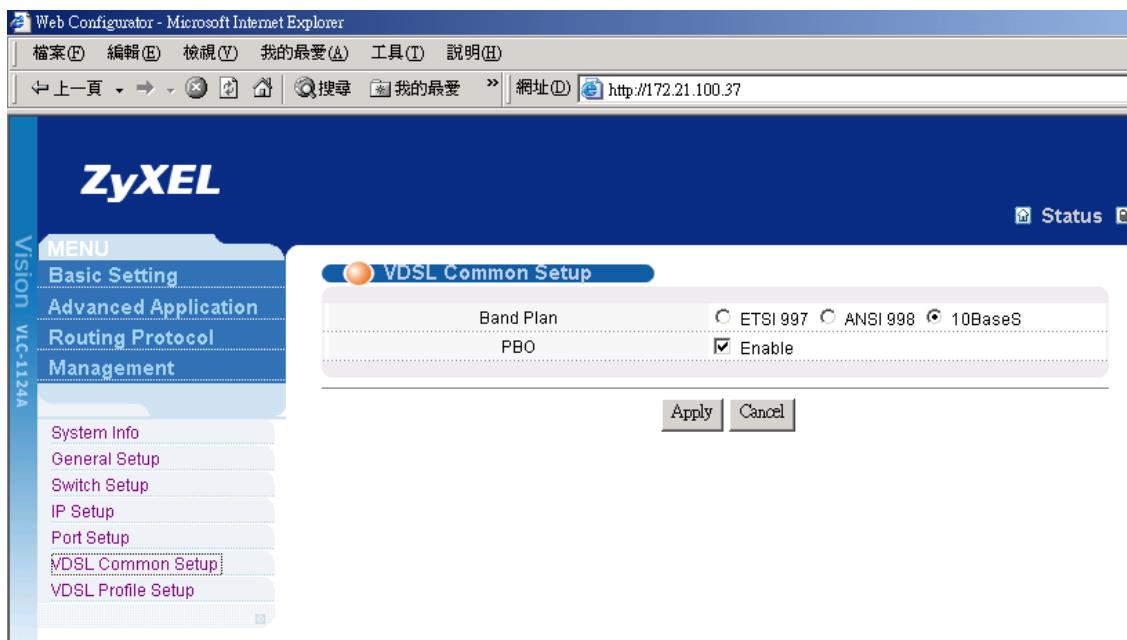
Bug Fix V3.50(LQ.1):

1. HELP page link lost.
2. MIB counter display error.

Features:

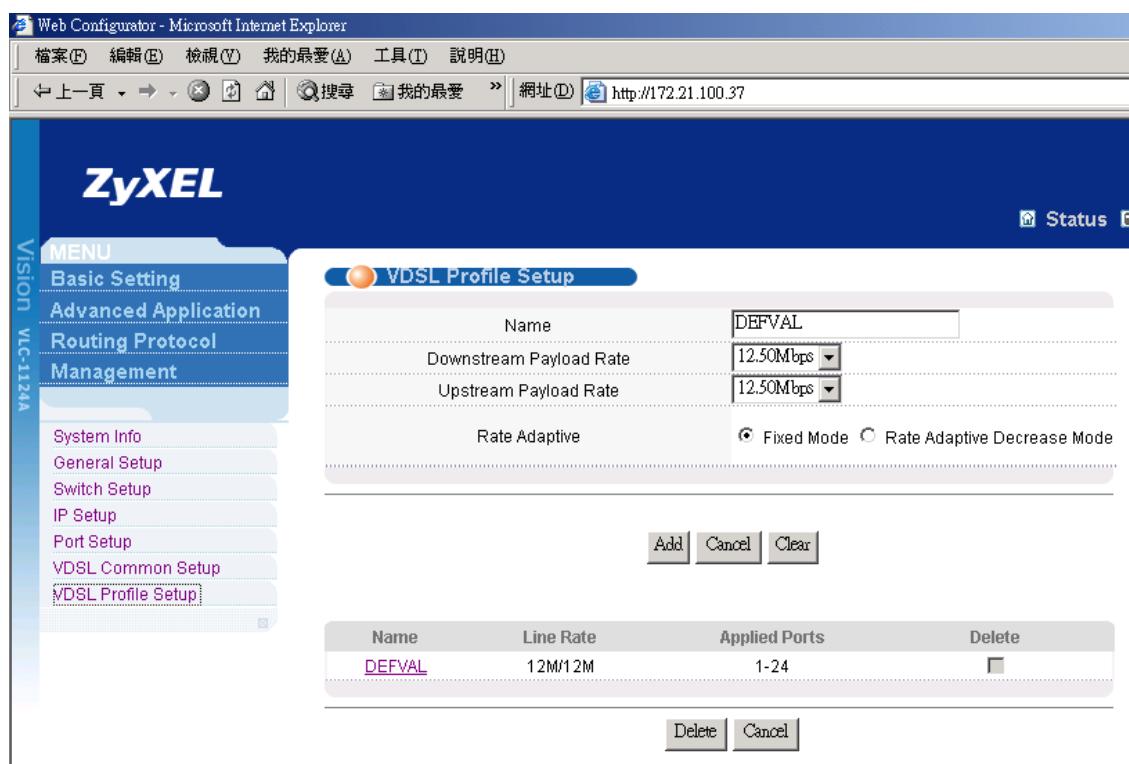
1. VDSL Common Setup

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



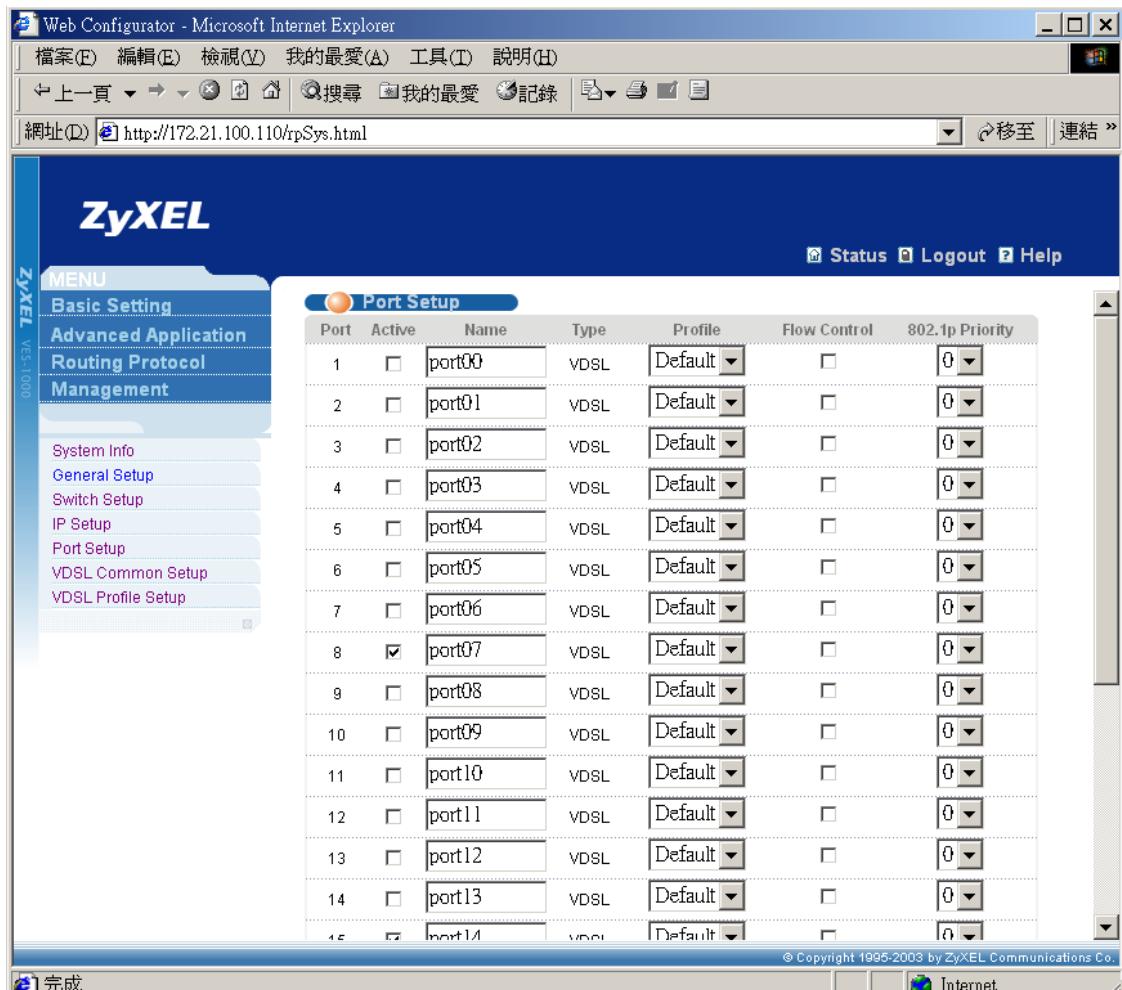
2. VDSL Profile Management:

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 VLC1124A 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 VLC1124A. The upgrade procedure is as follows:

Upgrade VLC1124A FW:

```
C:\> ftp <VLC1124A IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350LQ2C0.bin ras
ftp> bye
```

Where

- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350LQ2C0.bin : the name of firmware file you want to upgrade

- ras : the internal firmware name in VLC1124A

Configuration Upgrade:

The VLC1124A 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 VLC1124A . The upgrade procedure is as follows:

Upgrade VLC1124A configuration:

```
C:\> ftp <VLC1124A IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350LQ2C0.rom rom-0
ftp> bye
```

Where

- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350LQ2C0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in VLC1124A

Commands Table:

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

sys	snmp	GetCom [<community> munity] setComm [<community> unity] trustedHo [<hsot>] st trapCom [<community> munity] trapDest [<destination>]	Set or view community of GetRequest. Set or view community of SettRequest. Set or view trusted host. Set or view community of Trap Set or view trap server.
cluster	disp active <name> inactive <name> add <MAC addr> <password> remove <MAC addr> showMe meber showCan didate status	View snmp setting. Active cluster Inactive cluster Add a member into cluster Remove a member from cluster. Show member list Show candidate list 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.
vlan1 port q status <port>	show port <port> VLAN information.
defaultVI <port> <VID>	set defaultVID<VID> of this port<port>.
D accept <port> <all tagged>	set acceptFrameType of this port.
gvrp <port> <enable dis able>	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>>	<<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>
vlan list	show the static entry table.
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 bridge	Please reference to 802.1w
enable	Enable RSTP
disable	Disable RSTP
priority <priority>	System Priority
maxAge <max age>	Max age timer
helloTim <hello time>	Hello timer
e	

	forwardD <forward delay elat 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		
agg		Please reference to 802.3ad
port		Display aggregation information
	enable <Port_NO>	
	disable <Port_NO>	
	status <Port_NO>	
	actorAd m	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		
keymngt	[on off]	
sysPriorit	<priority>	
y		
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>	Re-authentication
	reauthPer <Port_NO>	Re-authentication period
	iod	
	<on off>	
	<value>	

set	status	<Port_NO>		Port status
	auth	<profile radius>		Set authentication method
	portcontr ol	<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	display			Class setting
l2set	<src port>	<src MAC>	<dest port>	display run-time status
		<src vid>		Set src/dest port/MAC combination
del	<class id>			Delete this class
bmsto rm	disable			Broadcast Storm Control
	type	<type>		Clear current run-time settings
	basis	<type>		Broadcast/Multicast/Both
	display	[index]		Pkt/Byte
	interval	[value]		Display ports setting
	set	<port>	<dhreshold>	Set/display monitor interval
			<direction>	Threshold:# of pkt can be passed in the interval
	del	<index>		Direction:ingress/egress
				Disable on this port
mac static	enable			Static MAC setting
	display	[port]		Clear current run-time settings
	set	<port>	<MAC Addr.>	display run-time status
			<vid>	Set static MAC of the port
	del	<port>	<MAC Addr.>	Delete static MAC of the port
			<vid>	
filter	enable			MAC filter setting
	display			Clear current run-time settings
	set	<src port>	<src MAC>	display run-time status
			<src vid>	Set src/dest port/MAC 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>			
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
monit	Set				Set voltage, temperature
or					
	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
delete	<profile name>			Delete a profile
apply	<profile name>	<port number		Apply current profile setting to

		all>			
display	<profile name>				other port
set	<profile name>	name	<profile name>		Display setting of current profile
					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 VLC1124A:

- 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