# ZyXEL VES-1124 V3.50(LP.0)

# Release Note/Manual Supplement

**Date: Jun. 10, 2004**

This document describes the features in the VES-1124 product for its 3.50(LP.0) release.

## *Support Platforms:*

ZyXEL VES-1124 V3.50(LP.0) supports models: ZyXEL VES-1124

## *Version:*

ZyNOS Version: V3.50(LP.0) | 06/10/2004 15:24:13
BootBase Version: V1.01(VES-1124) | 05/27/2004 17:20:55

## *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. Remote loop back test works only in remote LAN link up.

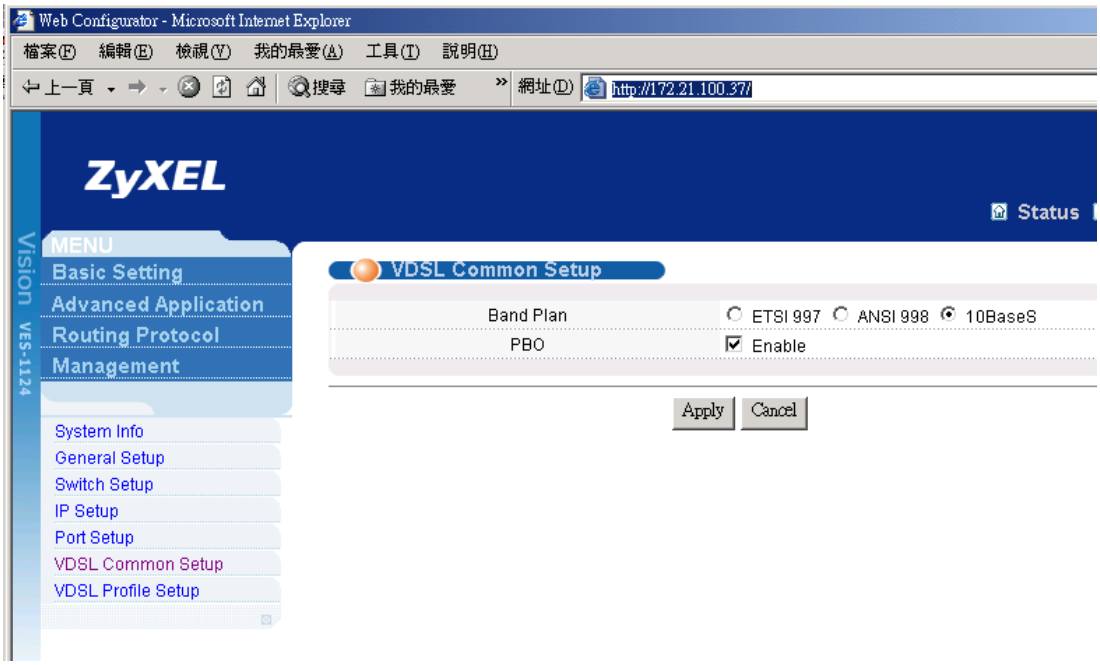
## *Bug Fix:*

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

## *Features:*

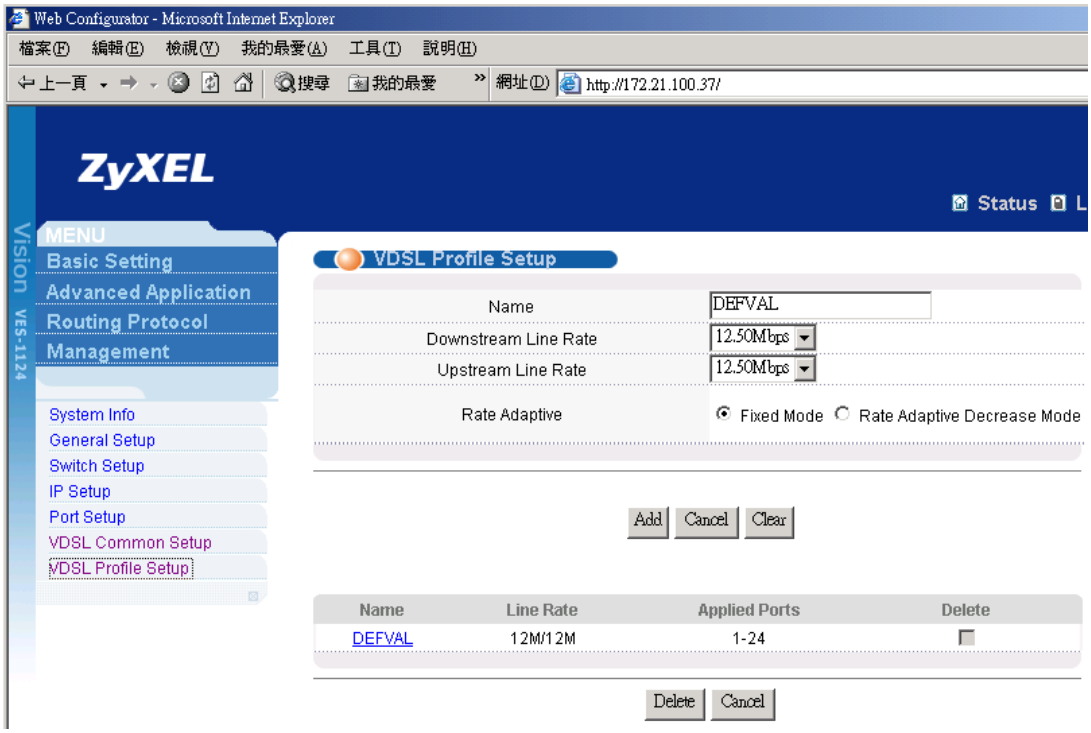
**1. VDSL Common Setup**

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



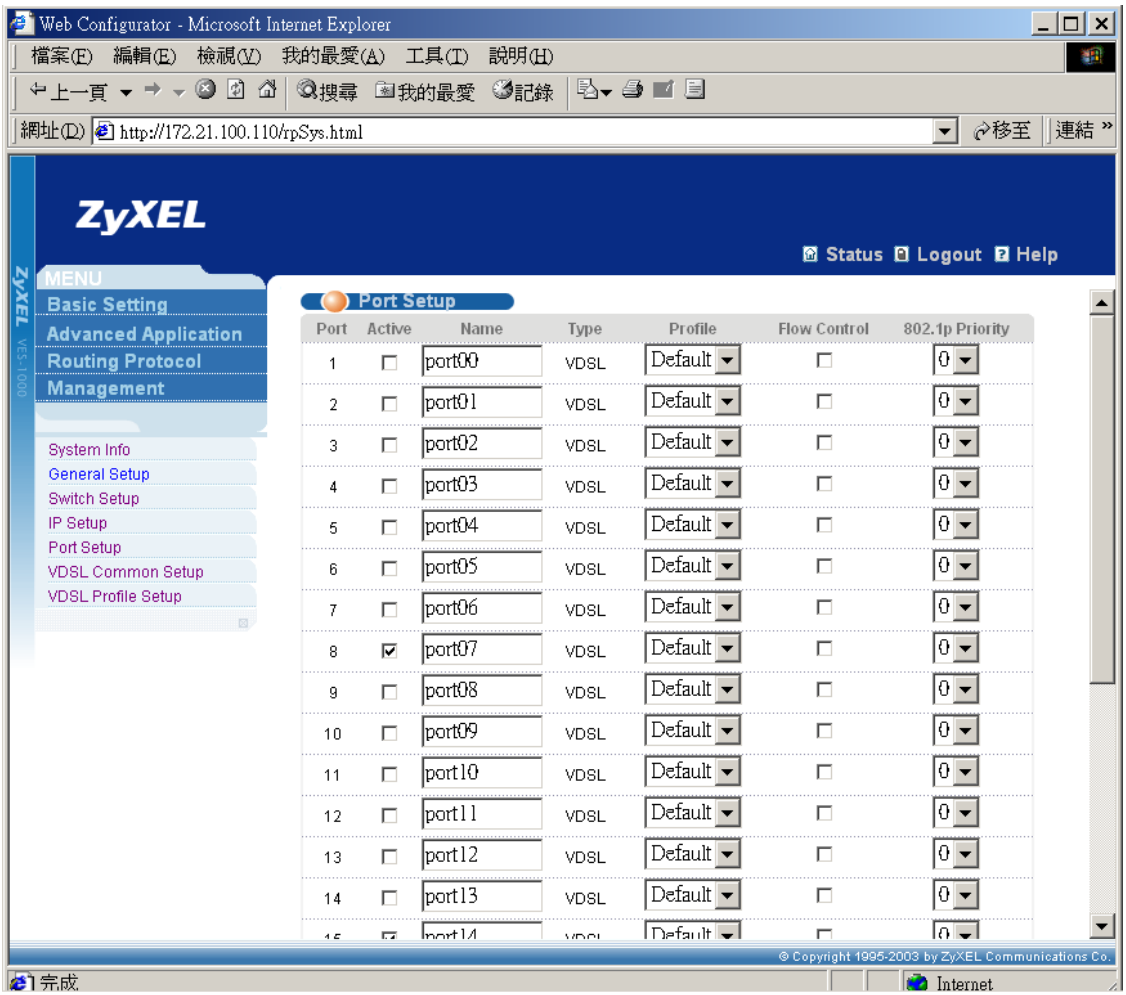

**2. VDSL Profile Management**:

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 350LP0.bin ras
ftp> bye


Where
```

- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350LP0.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 350LP0.rom rom-0
ftp> bye
```

Where

- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350LP0.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. |
| | ShowMe | | | Show member list |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | meber | | | | | | |
| | | showCandidate | | | | | | Show candidate list |
| | | 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 |
| | profile | | | | | (Won't be saved in flash) |
| | | 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<br>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 port> | <src MAC> <src vid> | <dest port> | <dest MAC> <dest 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\|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 |
| 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