DG-GO4200 Series GEPON OLT

User Manual (Web Management)

V1.3

22-4-2019

As our products undergo continuous development the specifications are subject to change without prior notice.

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Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be allowed at all times to ensure the safe use of the equipment.

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Chapter 1 System Description

1.1 OLT Introduction

EPON OLT provides various types of network interface, service interface and maintenance interface to adapt to different networking environments. All the interfaces could comply with the relevant telecommunications standards.

Table 1-1 lists of all OLT interface types.

Type	Interface	Remarks
PON Interface	PON Optical Interface	The point-to-multipoint architecture and the passive fiber transmission mode are used. The downstream rate and upstream rate can reach up to1.25Gbps.
Uplink port interface	Support GE copper interface and optical interface	RJ45 connect the uplink port To Ethernet, or add optical model connecting the optical uplink port to Ethernet.
Maintenance interface	Console port AUX port	Console port is used for local maintenance. AUX port is used for remote maintenance.

1.2 Connection

Manage the OLT via WEB by connecting the OLT AUX port to Ethernet port of PC.

-- The OLT default IP is 192.168.8.100/24

-- Set your PC IP in range of 192.168.8.XXX (e.g. 192.168.8.123)

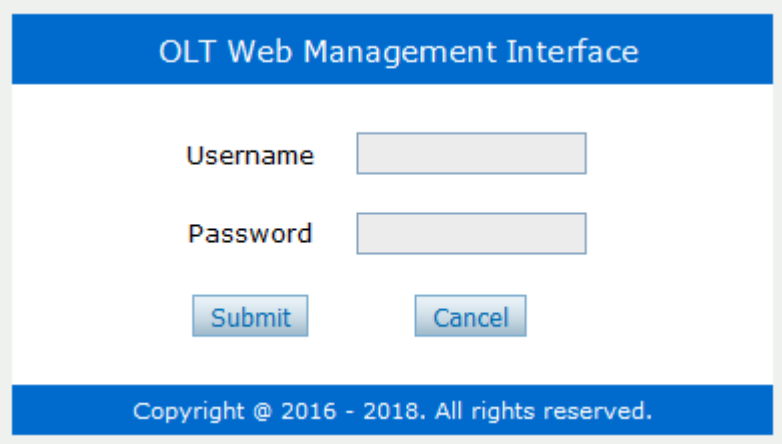
Chapter 2 OLT Information

2.1 LOGIN

-- The OLT default IP is 192.168.8.100/24

-- Set your PC IP in range of 192.168.8.XXX (e.g. 192.168.8.123)

-- Username= admin, Password= admin

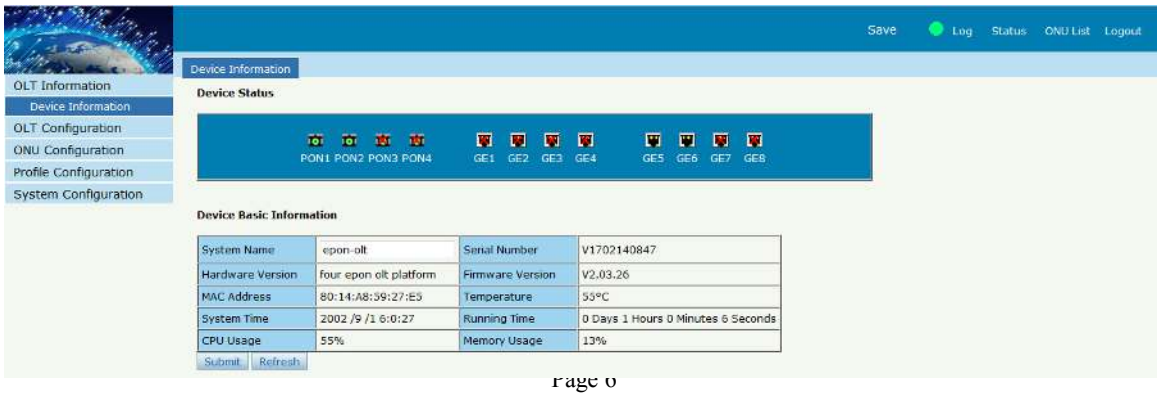


2.2 OLT Information

This part shows the main information and the service status of OLT.

2.2.1 Device Information

It's about the OLT basic information and the real-time information.



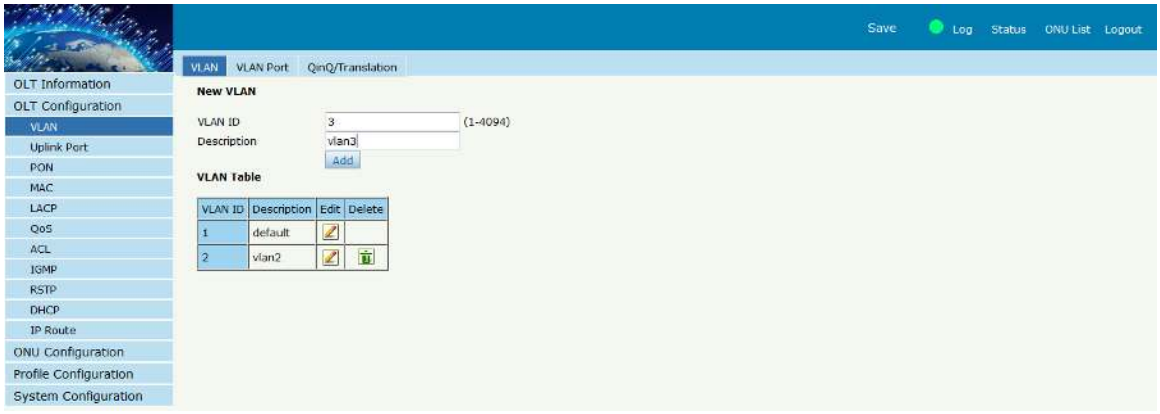
Chapter 3 OLT Configuration

This section allows you to configure the OLT.

3.1 VLAN

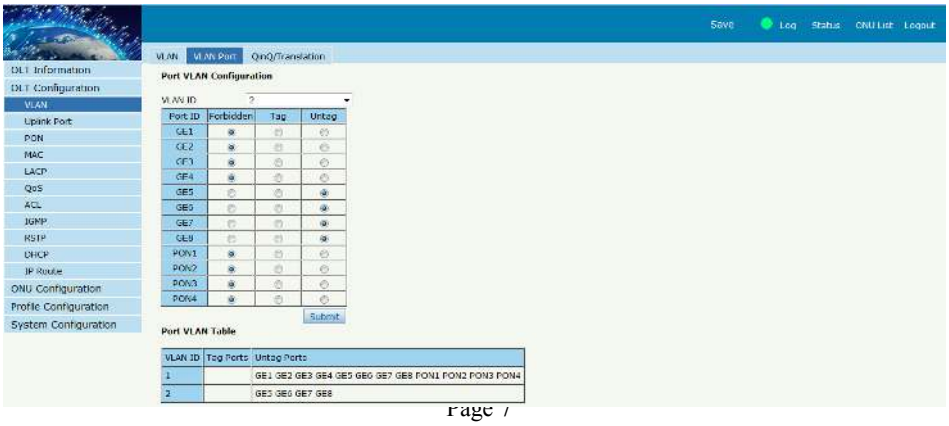
3.1.1 New VLAN

OLT network service is based on VLAN, create a new VLAN if necessary.



3.1.2 VLAN Port

Assign the VLAN to the port you want to connect. You can choose the VLAN mode tag or untag in this page.



3.1.3 Q-in-Q/Translation

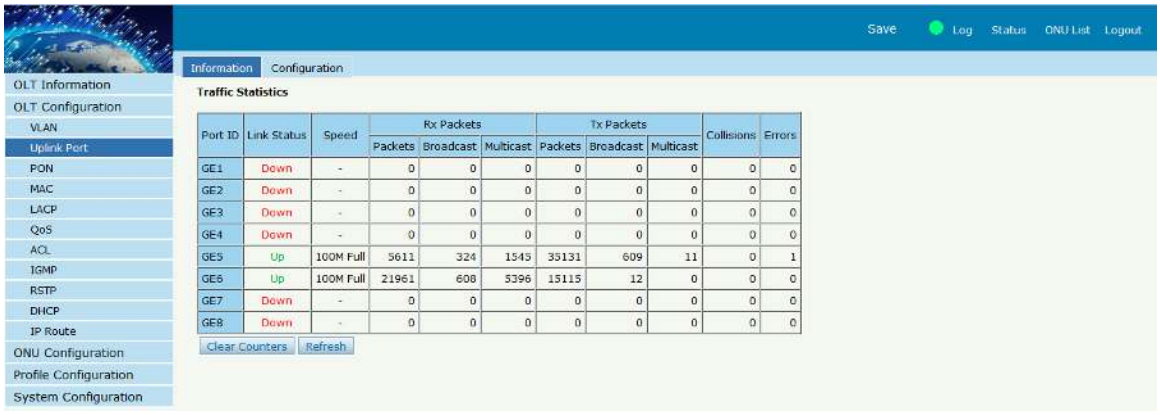
Configure the port mode VLAN as translation or Q-in-Q.

3.2 Uplink Port

View the OLT GE port information and configure the GE port.

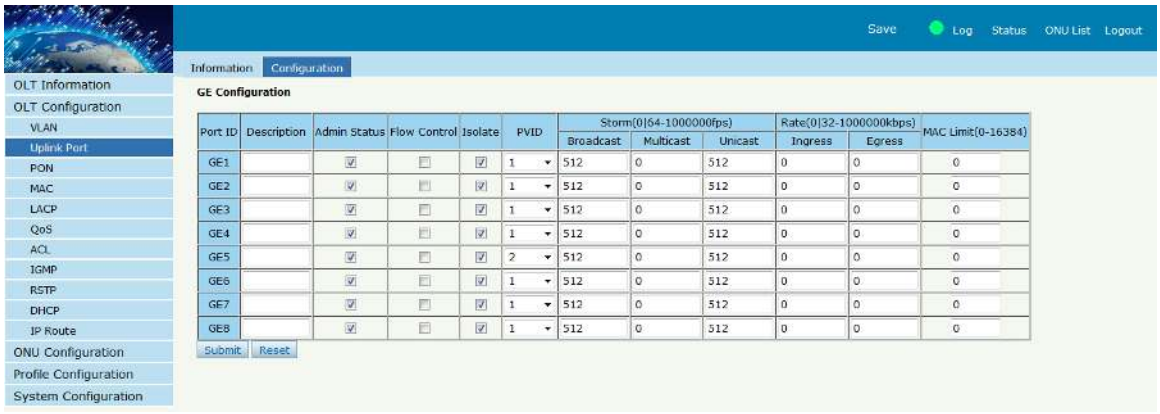
3.2.1 Information

It shows the GE ports link status, speed and packet statistics.



3.2.2 Configuration

Configure the GE ports basic service such as admin status, flow control, isolate, PVID.etc.

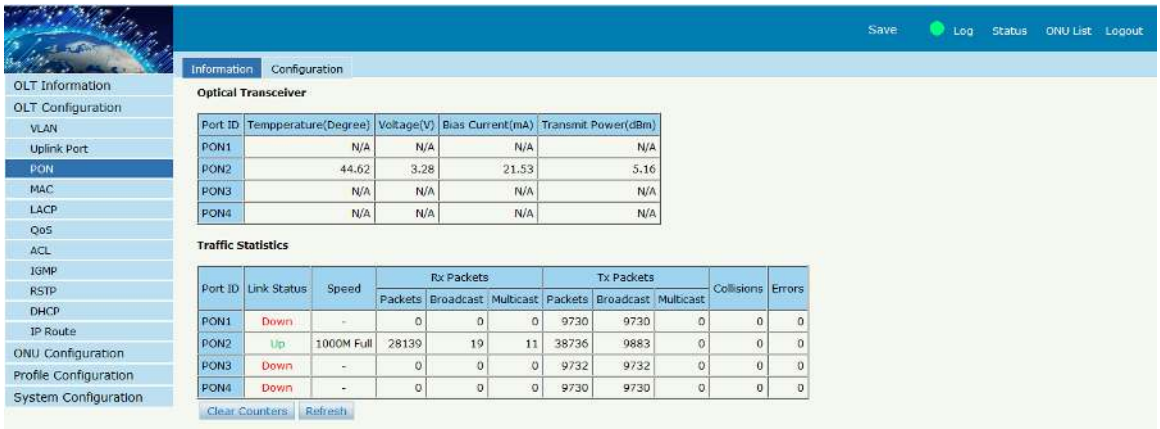


3.3 PON

Shows the PON port information and configure the PON port.

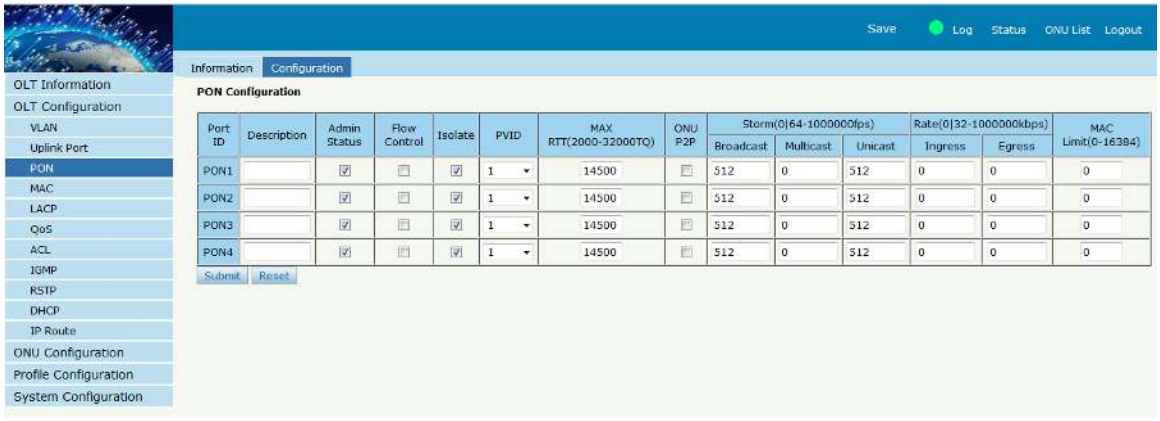
3.3.1 Information

Shows the optical parameters of PON port and traffic statistics.



3.3.2 Configuration

Configure the PON ports basic service such as admin status, flow control, isolate, PVID.etc.

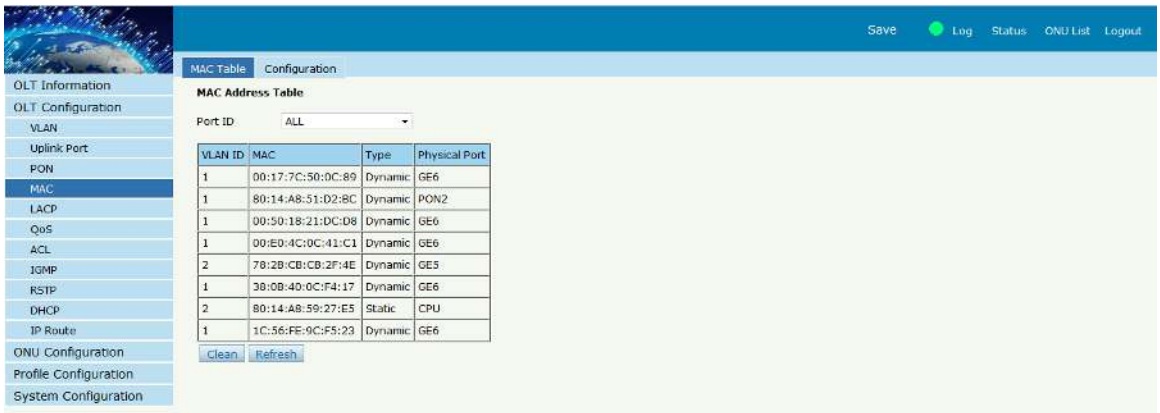


3.4 MAC

Used to display and configure the MAC address table.

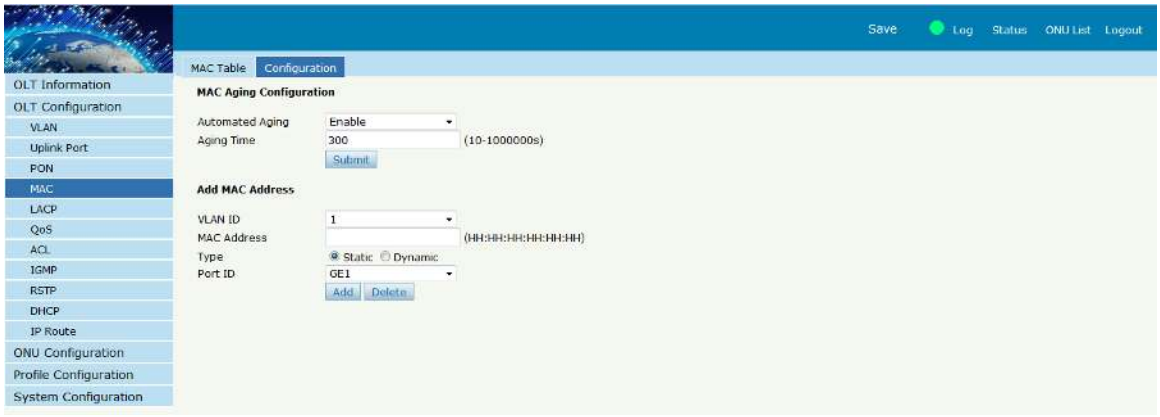
3.4.1 MAC Table

MAC Info is to show the learning MAC address of OLT. All the MAC addresses of all the ports with VLAN can be shown.



3.4.2 Configuration

The MAC aging time is 300s by default. You can add a static MAC manually with VLAN and port.

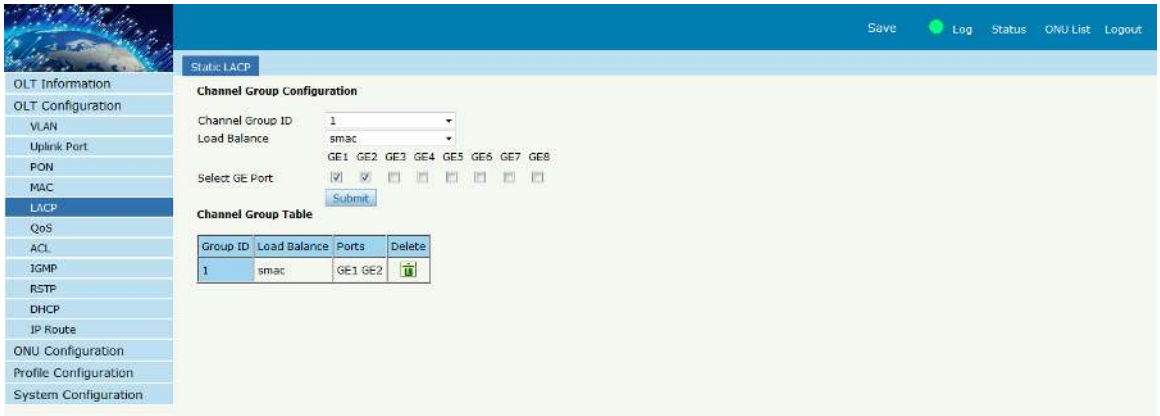


3.5 LACP

Configure Link Aggregation.

3.5.1 Static LACP

4 groups can be created at most. Each group can add 4 ports at most. Only GE ports can be added in the channel groups.



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3.6 QoS

Configure the Quality of Service parameters.

3.6.1 QoS

It can support 3 modes: strict, WRR and strict-WRR.

3.7 ACL

This part is about security of OLT. Configuring the Access List.

3.7.1 IP Filter

It can filter the packets depending upon IP address.

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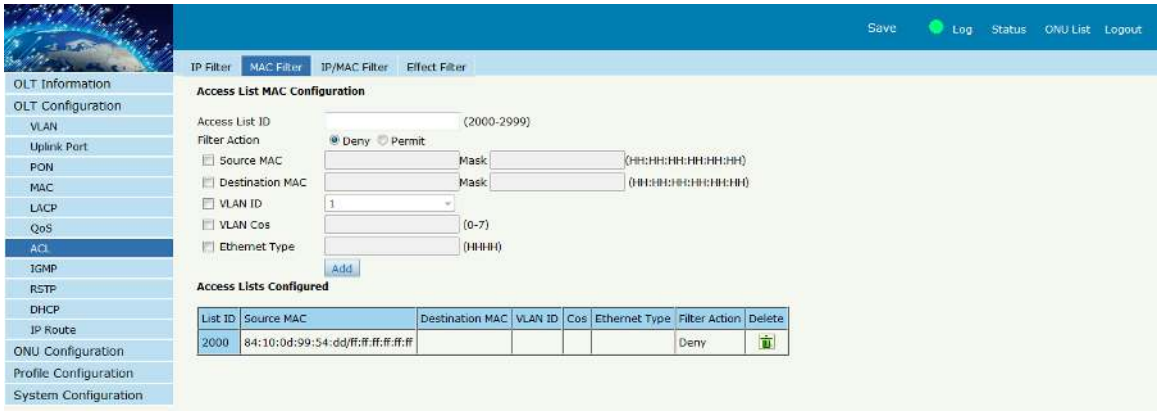
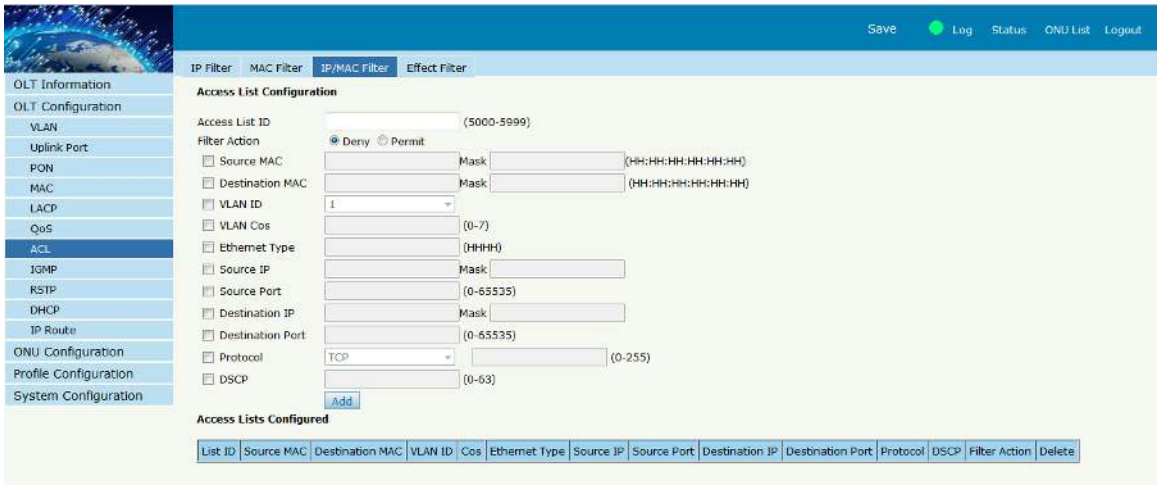
3.7.2 MAC Filter

It can filter the packets depending upon MAC addresses.



3.7.3 IP/MAC Filter

Create extended access list. Can filter packets based on IP, MAC, protocol, etc.



3.7.4 Effect Filter

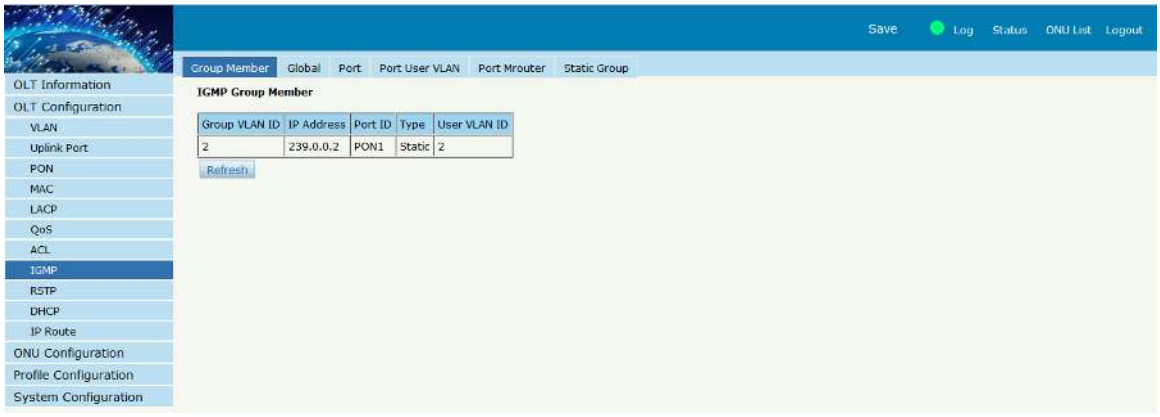
Bind the access list to the ports then it can take effect. Each access list can be bound to several ports.

3.8 IGMP

Configure the multicasting parameters.

3.8.1 Group Member

Shows the status of active IGMP groups.

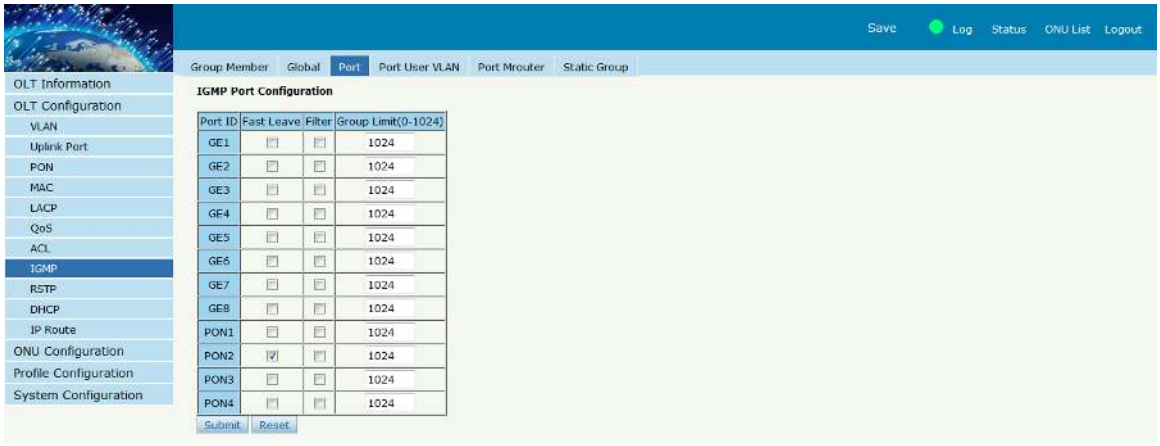


3.8.2 Global

Enable/Disable the IGMP snooping mode.

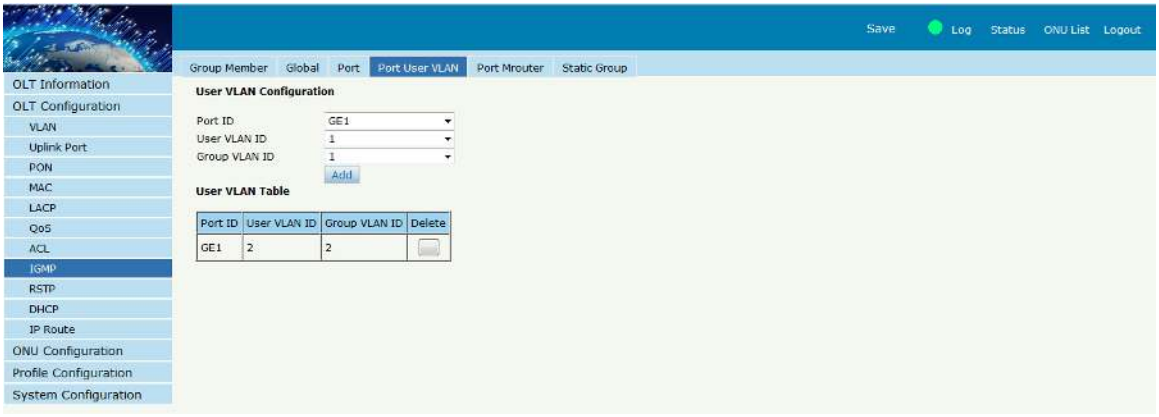
3.8.3 Port

IGMP port configuration is about the max groups number, port fast leave status and filter status.



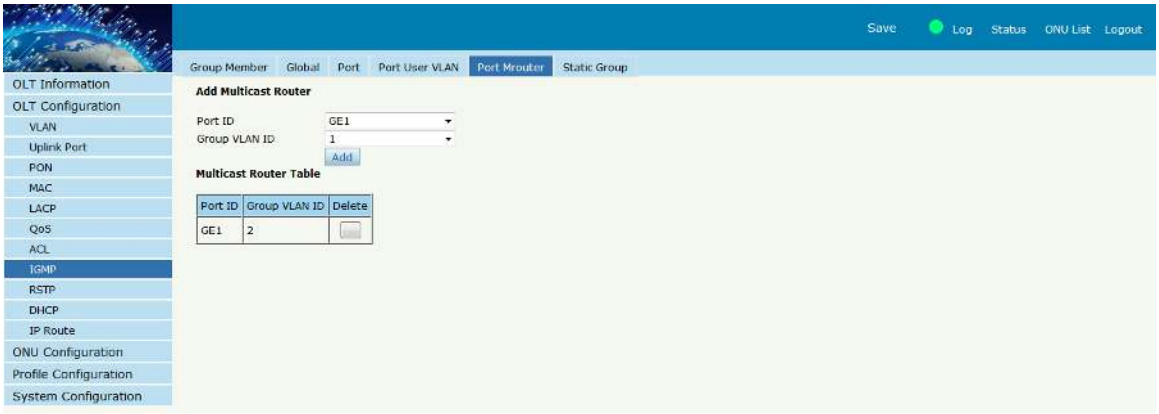
3.8.4 Port User VLAN

IGMP VLAN. Configure the user VLAN and group VLAN.



3.8.5 Port Mrouter

Add a port as the IGMP mrouter port.



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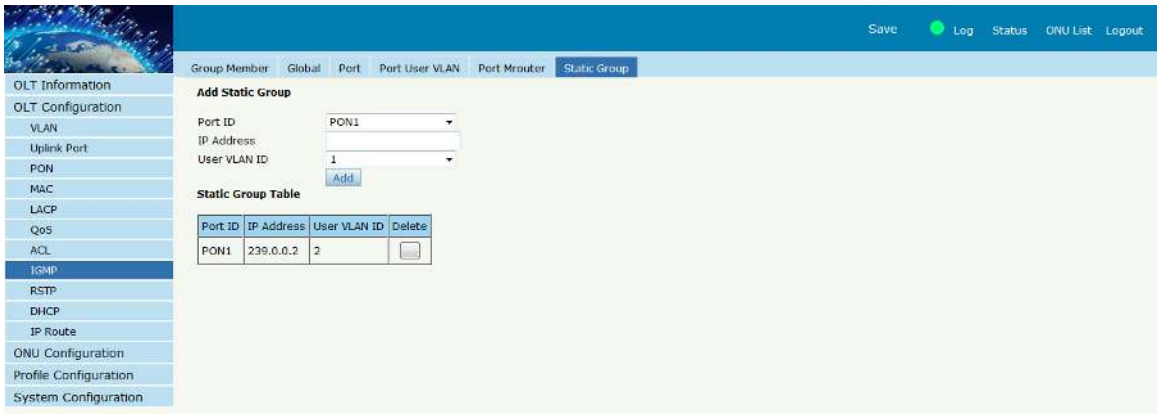
3.8.6 Static Group

Add an IGMP group manually. We always choose the PON port as the group port.



3.9 RSTP

Configure the Rapid Spanning Tree.

3.9.1 Information

The OLT is disabling RSTP by default. When enable the RSTP, the RSTP global information shows the details of root bridge and RSTP port status.

3.9.2 Global

Configure the bridge priority and timers.

3.9.3 Port

Set the RSTP port parameters.

3.10 DHCP

OLT supports 3 services of DHCP: DHCP server, DHCP relay, DHCP Snooping.

3.10.1 DHCP Server

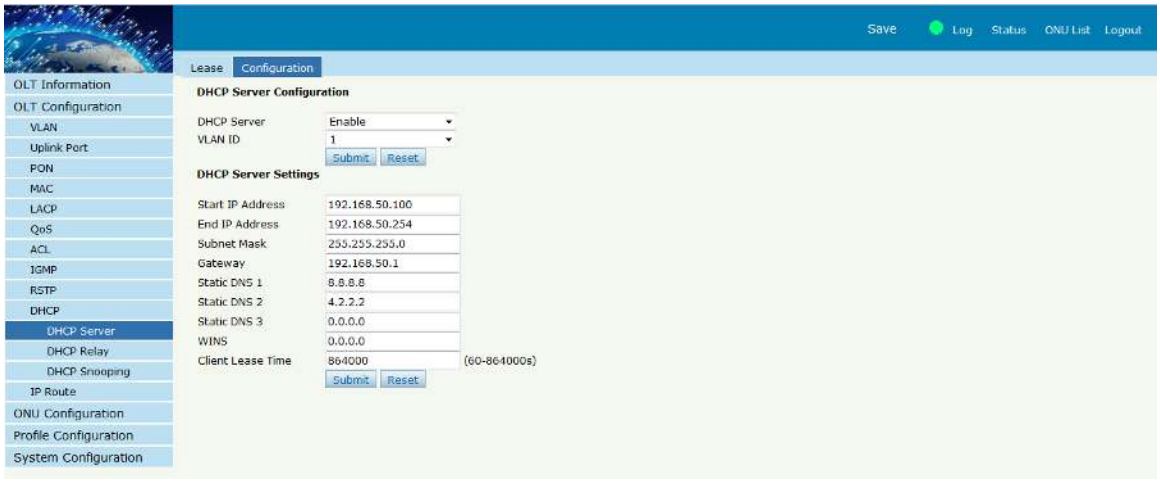
If the OLT enable DHCP server, the connecting devices will obtain an IP address.

3.10.1.1 Lease

Shows the DHCP server lease details.

3.10.1.2 Configuration

Set the DHCP server details.



3.10.2 DHCP Relay

When the DHCP server and the clients are not in the same subnet, DHCP relay can help the clients get the IP address from the server.

3.10.2.1 Configuration

Add the Relay Server IP address.

3.10.3 DHCP Snooping

To prevent the DHCP message attacking and protect your network and to get a useful IP address, use dhcp snooping, it can deny the DHCP offer packets.

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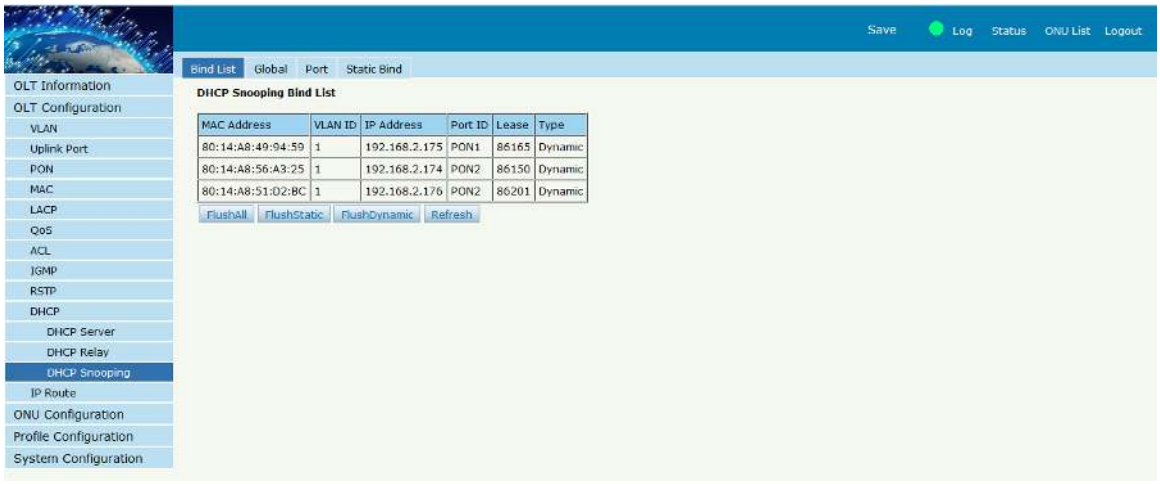
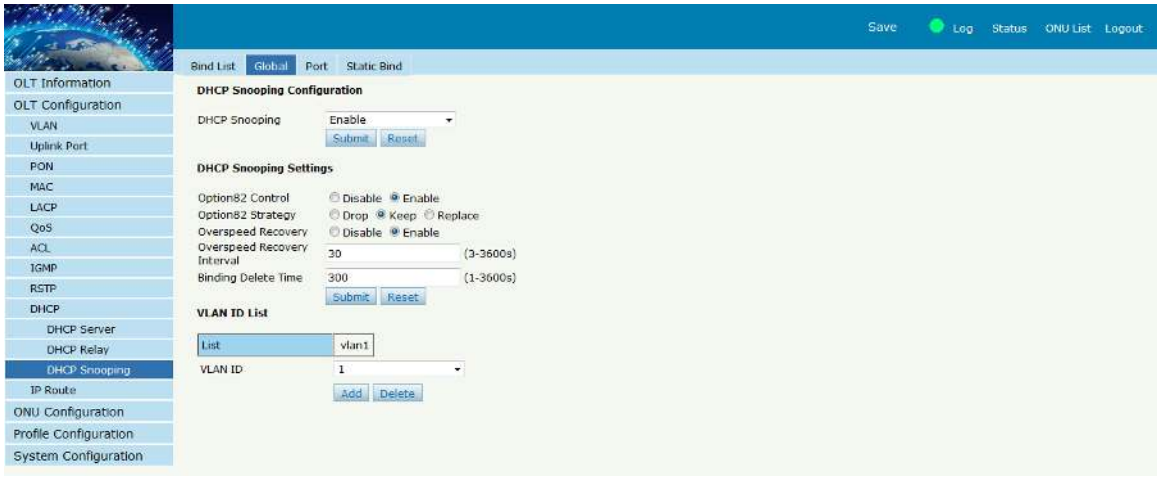
3.10.3.1 Bind List

It shows the DHCP snooping binding table.



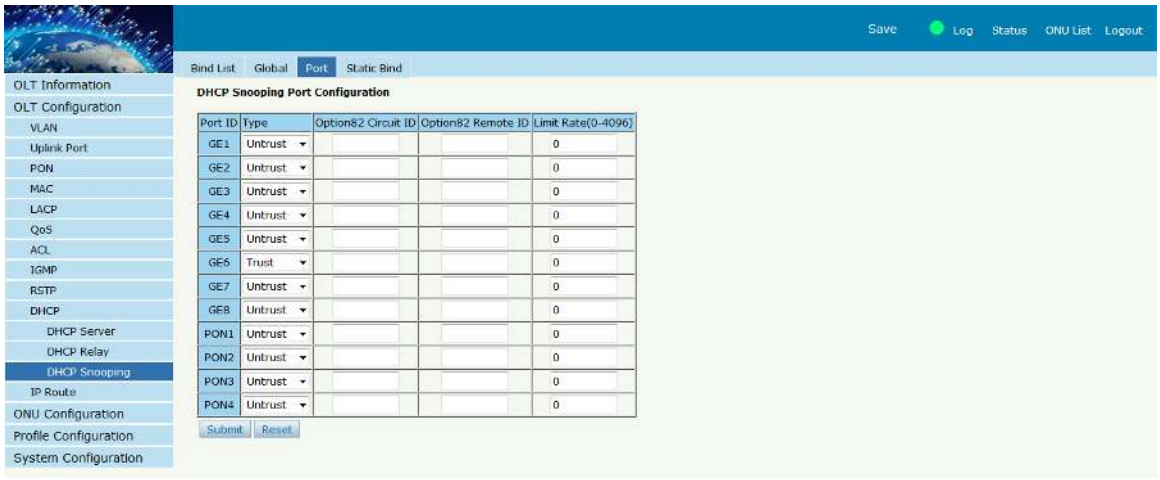
3.10.3.2 Global

Enable/Disable the DHCP snooping and set the parameters for DHCP option82 if required.



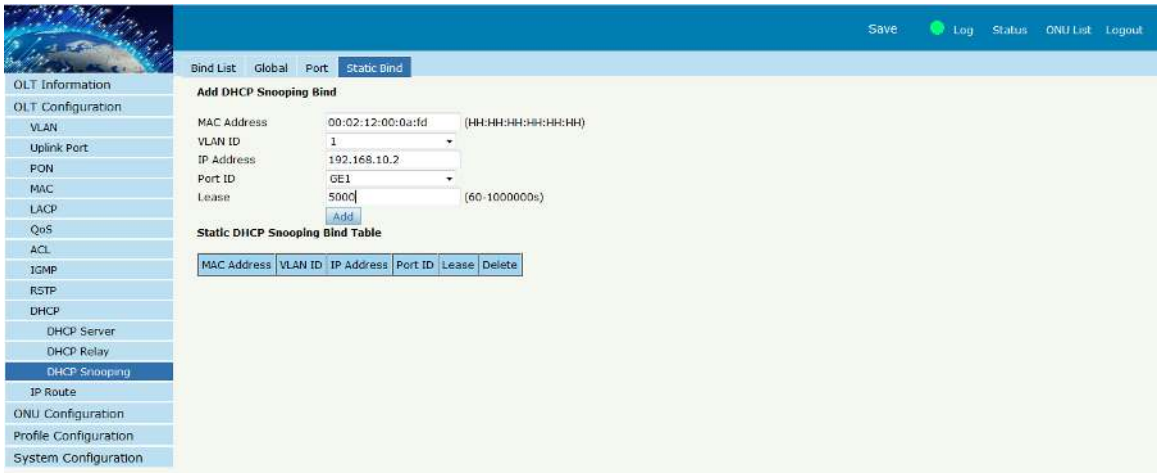
3.10.3.3 Port

Mark the ports ad trusted and untrusted. Ports are untrust by default.



3.10.3.4 Static Bind

Add a static entry in DHCP snooping binding table.

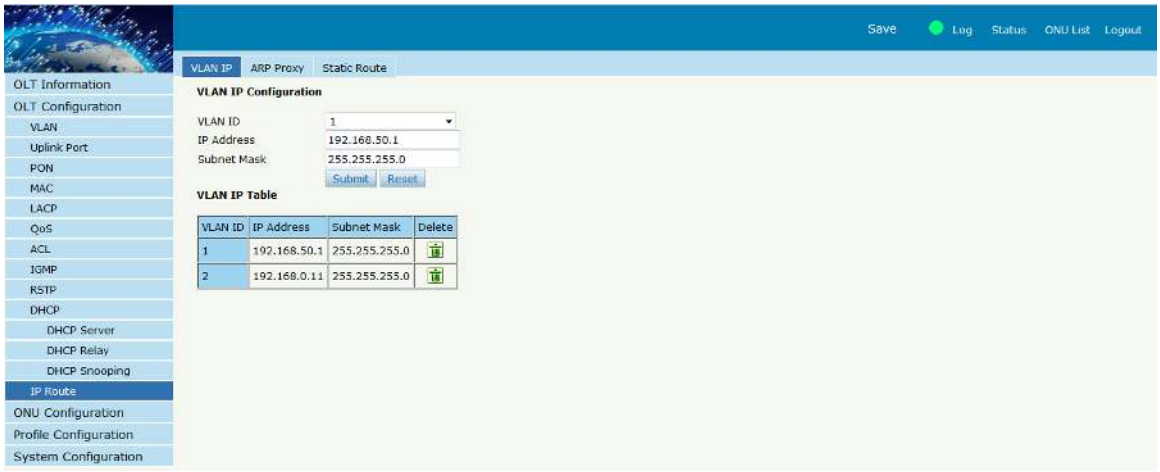


3.11 IP route

OLT supports L3 functions.

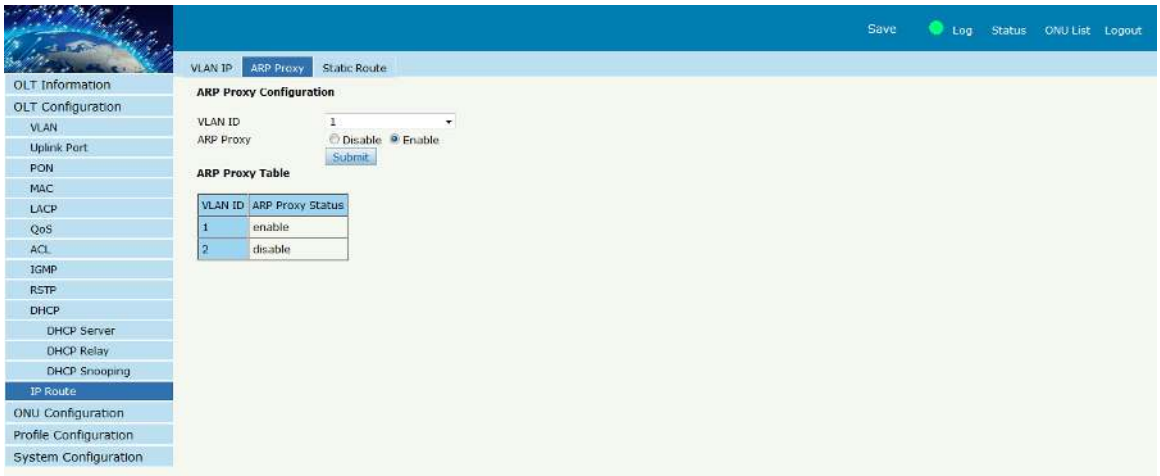
3.11.1 VLAN IP

Set the IP address to the VLAN.



3.11.2 ARP Proxy

As OLT supports L3 Function, it can help the different subnet ARP access. First set the IP address to the particular VLAN



3.11.3 Static Route

Enter the static route.

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Chapter 4 ONU Configuration

This section allows you to configure and manage the ONU from OLT.

4.1 ONU List

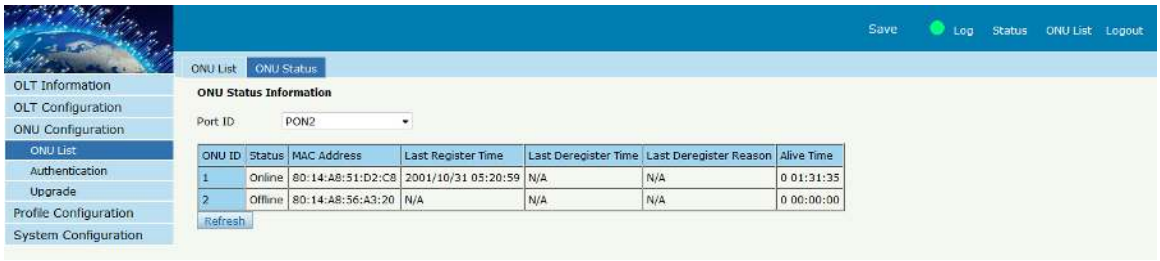
Provides ONU details.

4.1.1 ONU List

Provides authentication information of ONU, and the ONU can also be configured and manage from here. Click on config to configure the ONU. Reset or Deregister ONU.

4.1.2 ONU Status

Provides status information of ONU such as last register time and alive time.



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4.2 Authentication

Configure the authentication parameters for ONU.

4.2.1 Authentication mode

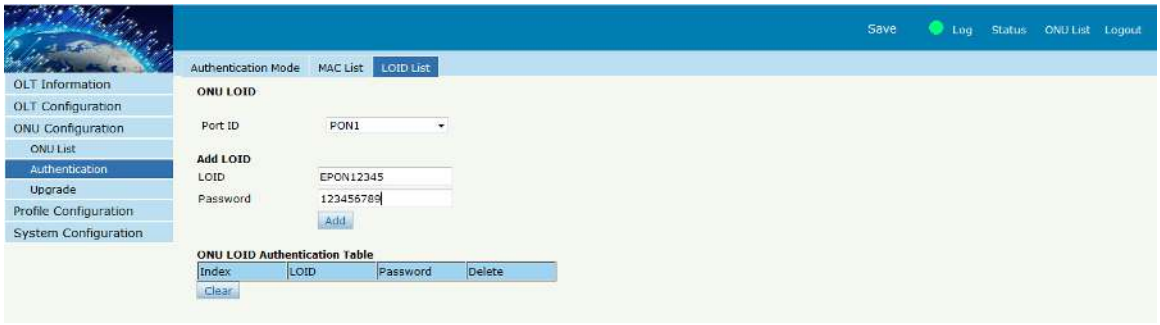
Set the authentication mode for ONU. There are 4 modes of ONU authentication. Disable/MAC/LOID/Hybrid.

4.2.2 MAC List

When the ONU authentication mode is MAC mode, only the white list ONU can register. The black MAC list ONU cannot register whatever the mode.

4.2.3 LOID List

When the authentication mode is Loid, only the Loid list ONU can register. Every ONU must have a unique LOID.

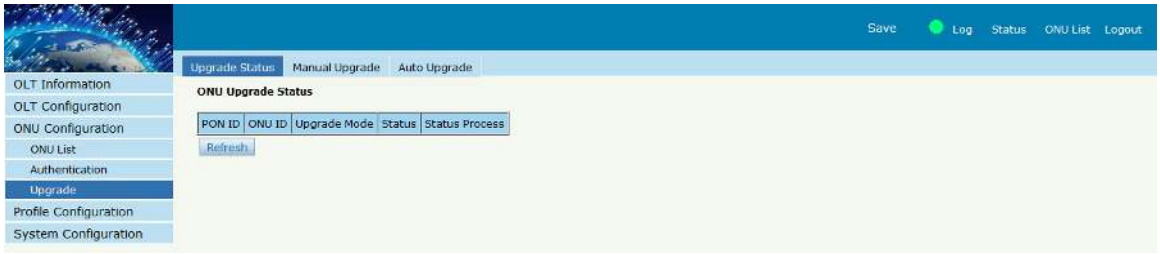


4.3 Upgrade

Upgrade the ONU from OLT.

4.3.1 Upgrade Status

Shows the ONU upgrade status.



4.3.2 Manual Upgrade

Upgrade the ONU from OLT. Enter the ONU ID of the ONU and click on submit and then browse the appropriate file and click on upgrade.

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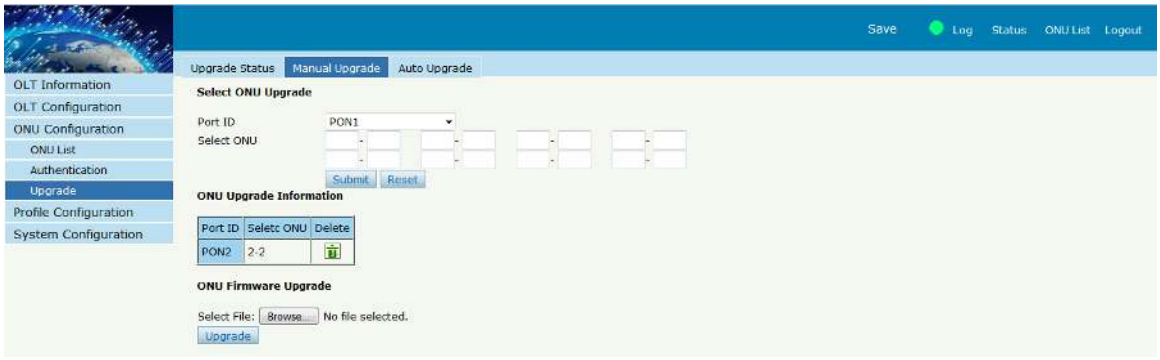
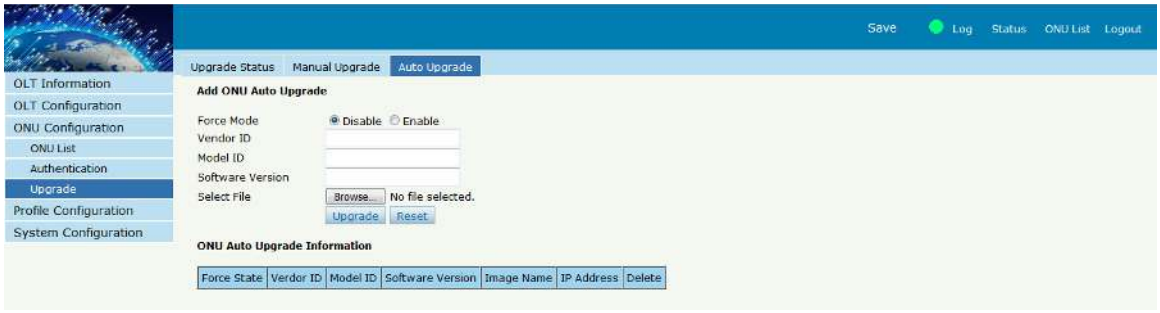


4.3.3 Auto Upgrade

For auto upgrade enter the vendor ID and model no. and then upgrade the ONU.



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Chapter 5 Profile Configuration

This chapter is about the ONU profile configuration. It is made for batch management ONU by OLT.

5.1 DBA Profile

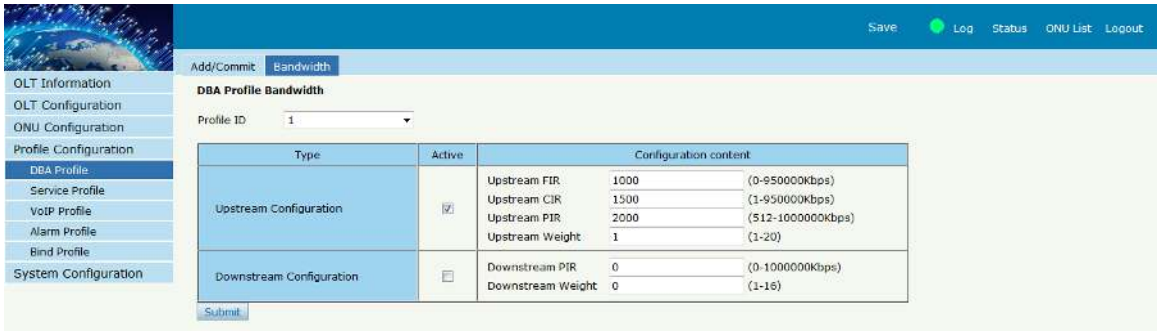
Dynamic Bandwidth Algorithm. The default system will have an id 0 DBA template, this template parameters cannot be modified. All ONU will be bound the template. When the user bind by hands, the new template will take effect.

5.1.1 Add/Commit

Create profile ID for DBA.

5.1.2 Bandwidth

Set the bandwidth parameters in upstream and downstream direction.



5.2 Service Profile

Create a server profile, it can be shown in the table when user select the profile ID. The server profile configuration contain ONU PON configuration, port configuration, multicast configuration...

5.3 VOIP Profile

As the above, create a profile first, and it will be shown in the table when user select the profile ID. The VOIP profile configuration contain ONU VOIP and SIP configuration.

5.4 Alarm Profile

As the above, create a profile first, and it will be shown in the table when user select the profile ID. The alarm profile contains ONU global threshold alarm, PON alarm, port alarm, pots alarm.

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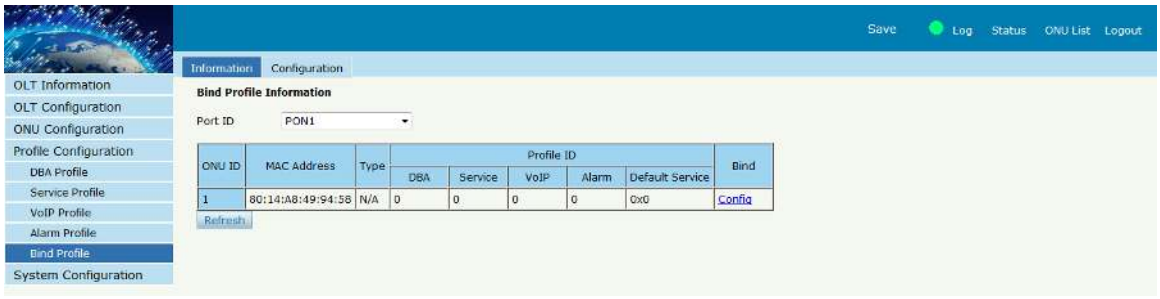
5.5 Bind Profile

The DBA profile, server profile, VoIP profile, alarm profile can be bound to the ONU.

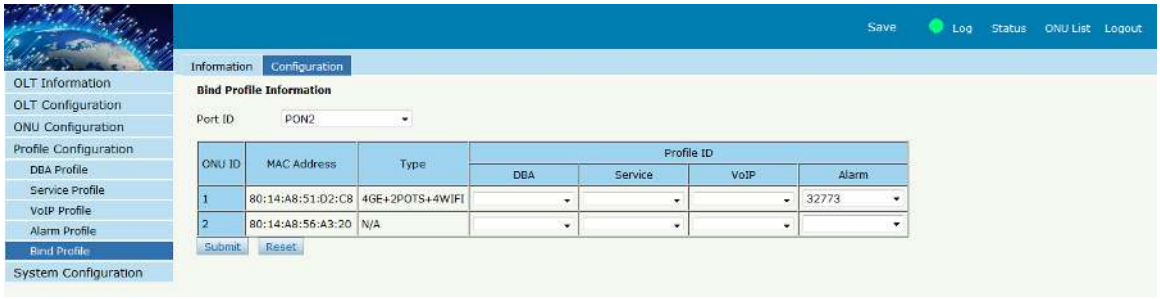
5.5.1 Information

Gives the details of binded profile.



5.5.2 Configuration

Bind the profile to the required ONU.



Chapter 6 System Configuration

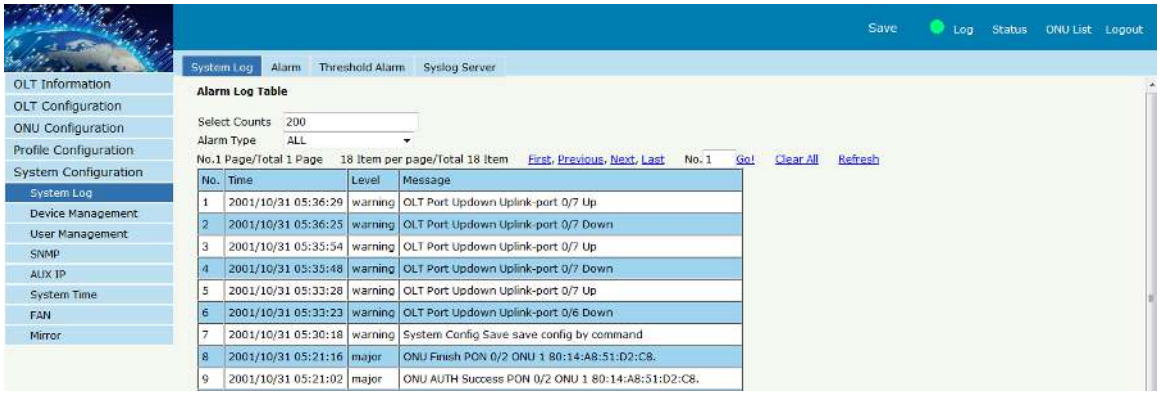
This chapter is about the global management of OLT.

6.1 System Log

Show the alarm configuration list.

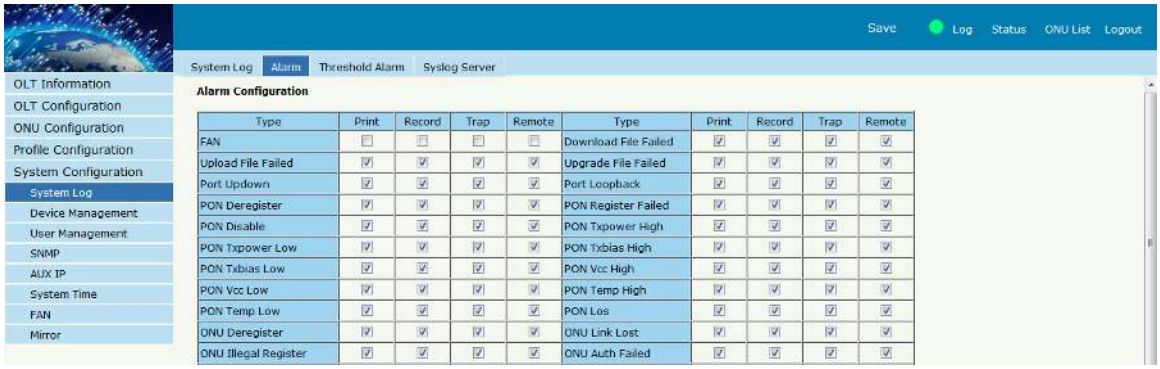
6.1.1 System Log

Shows the system logs generated.



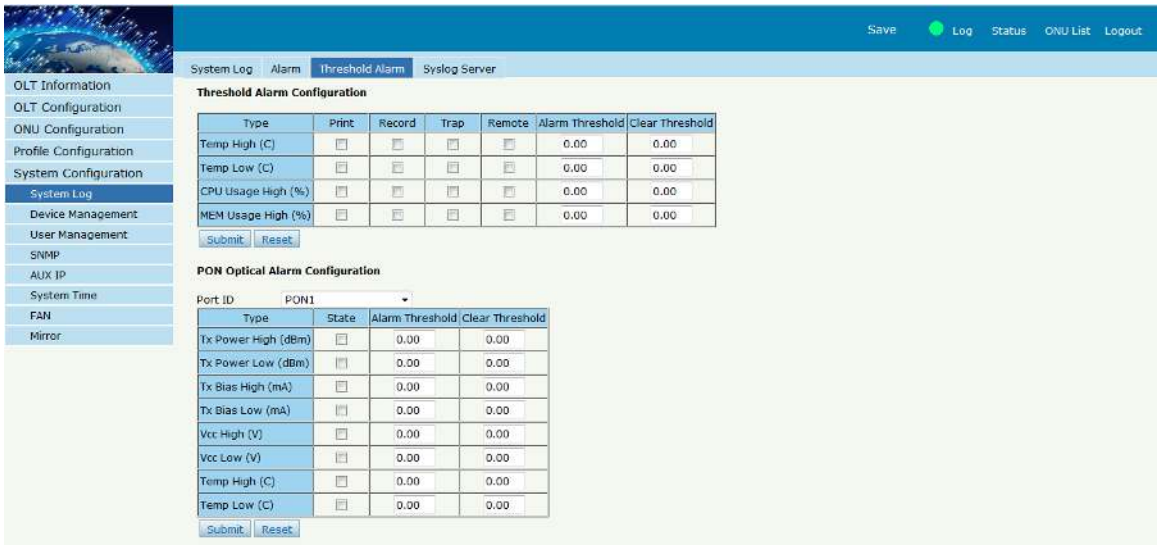
6.1.2 Alarm

It contains all the alarms of OLT. User can choose the different alarms to "**Print**", "**Record**", "**Trap**" and "**Remote**".



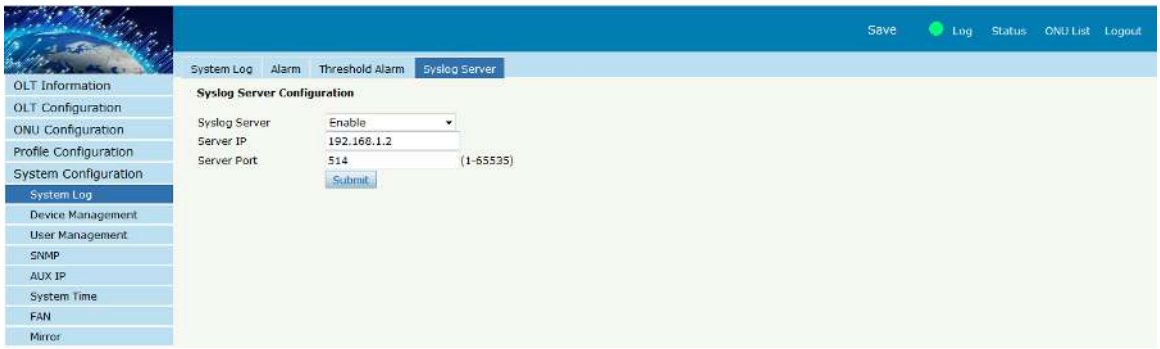
6.1.3 Threshold Alarm

Configure the temperature threshold, cup-usage threshold and memory- usage threshold.



6.1.4 Syslog Server

Configure the server of OLT remote system logs.



6.2 Device Management

It allows OLT management.

6.2.1 Firmware Upgrade

Upgrade the OLT by WEB, do not need TFTP server. After finish upgrading, it will reboot automatically.

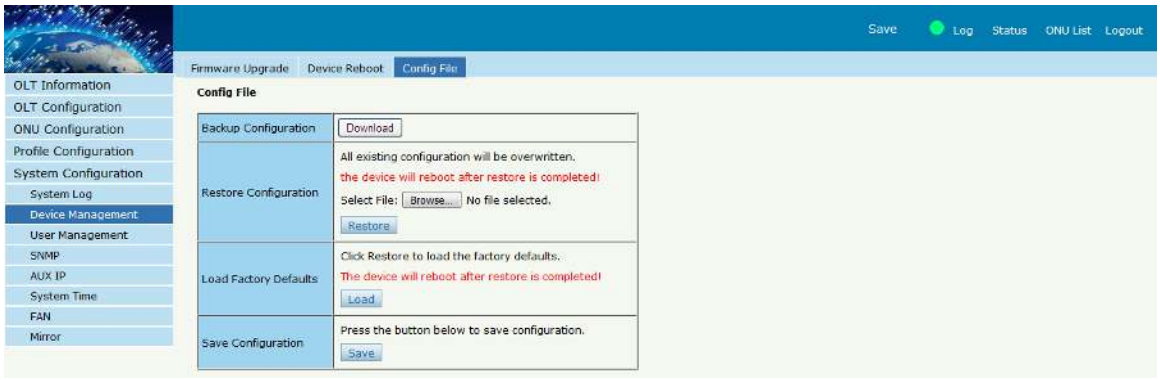
6.2.2 Device Reboot

It will reboot the entire system.(Please save the configuration first)

6.2.3 Config File

It includes backup configuration, restore configuration, factory default

and save configuration.



6.3 User Management

Add/Del the user account.

6.3.1 User Manage

The user can be divided into 2 levels: Normal and Admin. The different of them is the contents. The admin account content will be more abundant. The default account is **Admin** level.

6.4 SNMP

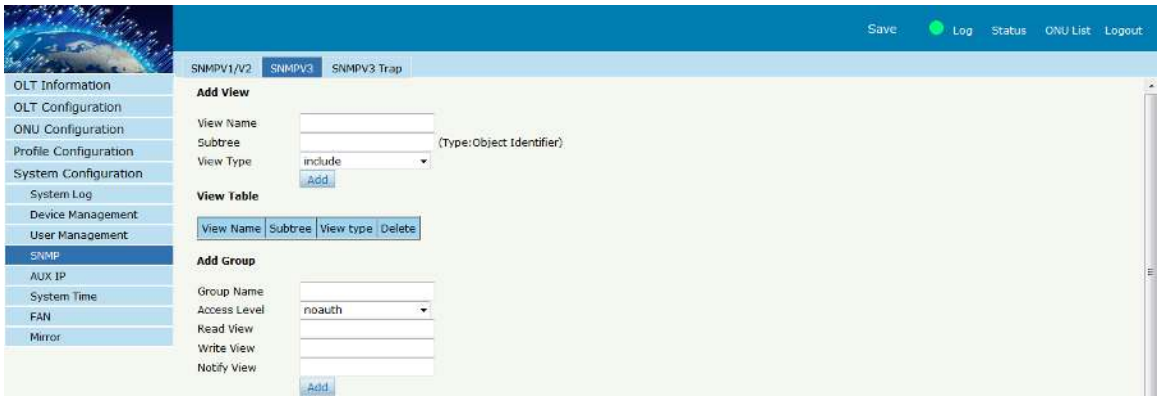
Configure the SNMP (Simple Network Management Protocol) parameters for remote management.

6.4.1 SNMP V1/V2

SNMP is an extensive network management protocol at the moment. The EPON OLT uses the SNMP V2.

6.4.2 SNMP V3

The SNMP V3 is the newer version. Configure the SNMP V3 parameters.



6.4.3 SNMP V3 Trap

Configure or remove the Trap messages of the target host IP address.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

6.5 AUX IP

AUX port is out band management port. Its IP address is out band

management IP. The default IP address is 192.168.8.100. User can change it if need.

6.6 System Time

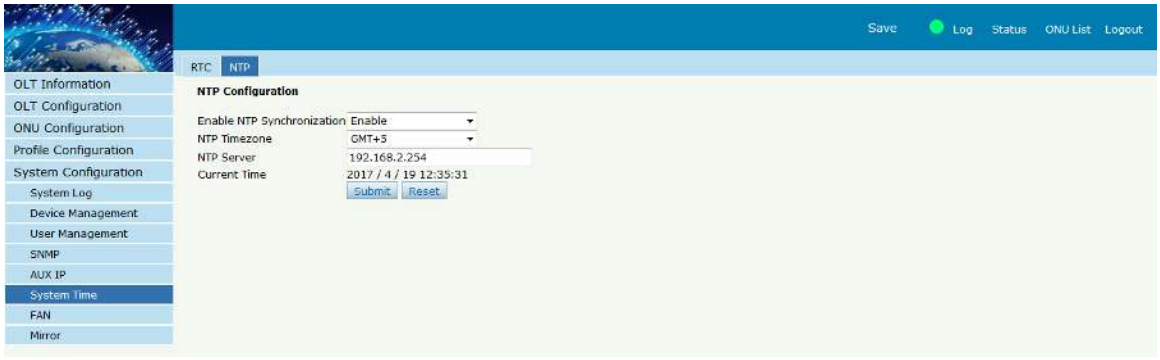
Set the system time.

6.6.1 RTC

The system time is adaptable. The default system time is the OLT release time.

6.6.2 NTP

Set the NTP server details.

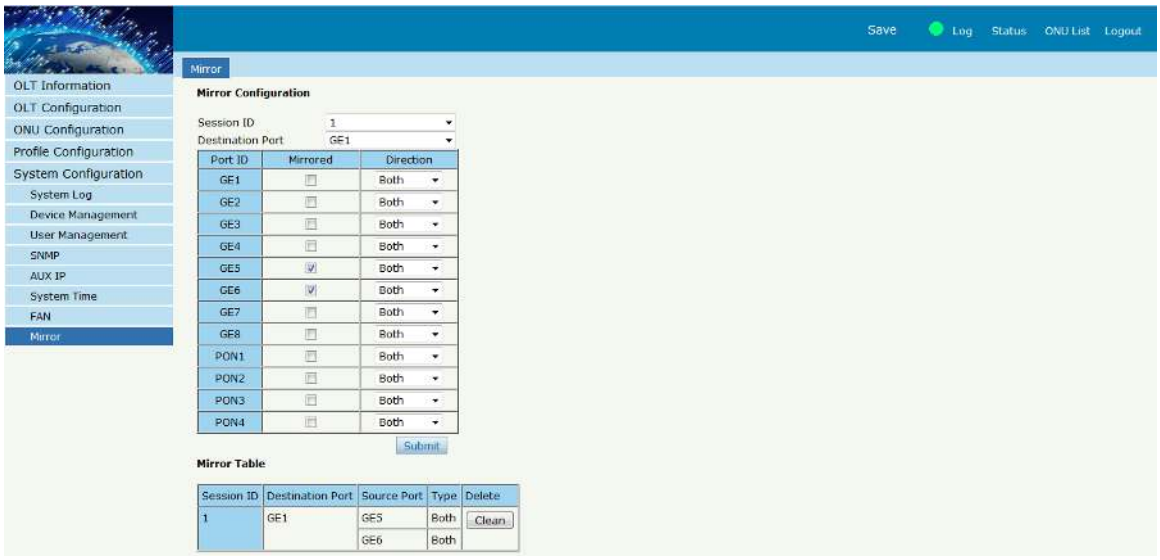


6.7 FAN

The fans can be controlled to turn on/off, or turn on automatically.

6.8 Mirror

It can be created 4 groups at most. One destination port can support 8 source ports at most.



This product comes with standard one year warranty. For further details about warranty policy and Product Registration, please visit support section of www.digisol.com

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