



DIGISOL



DG-GO4200 Series GEPON OLT

User Manual (Web Management)

V1.3

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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 to 1.25Gbps. |
| 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.

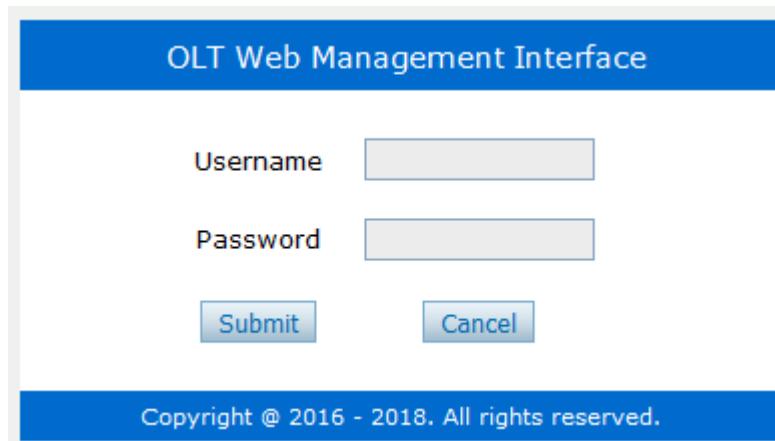
-- The OLT default IP is 192.168.8.100/24

-- 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.

The image shows the "Device Information" screen of the OLT Web Management Interface. The left sidebar contains navigation links: "OLT Information", "Device Information" (which is currently selected), "OLT Configuration", "ONU Configuration", "Profile Configuration", and "System Configuration". The main content area has tabs for "Device Information" and "Device Status". The "Device Status" tab is active, showing a grid of icons representing various ports and their status. Below this is a table titled "Device Basic Information" containing the following data:

| System Name | epon-olt | Serial Number | V1702140847 |
|------------------|------------------------|------------------|------------------------------------|
| Hardware Version | Four epon olt platform | Firmware Version | V2.03.26 |
| MAC Address | 80:14:A8:59:27:E5 | Temperature | 55°C |
| System Time | 2002 /9 /1 0:0:27 | Running Time | 0 Days 1 Hours 0 Minutes 6 Seconds |
| CPU Usage | 55% | Memory Usage | 13% |

At the bottom of the screen are "Save", "Log", "Status", "ONU List", and "Logout" buttons.

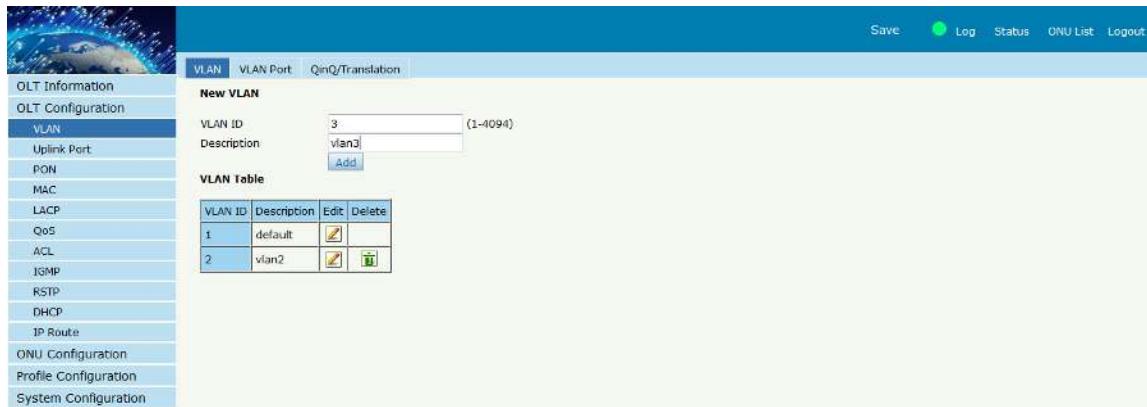
Chapter 3 OLT Configuration

This section allows you to configure the OLT.

3.1 VLAN

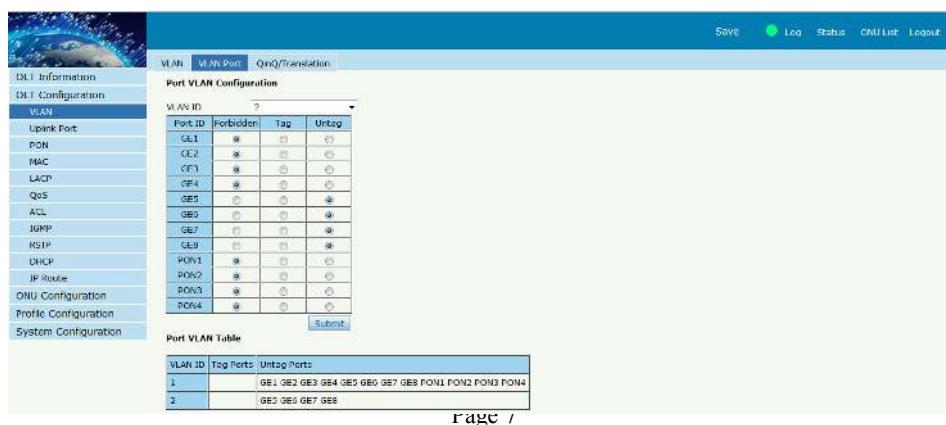
3.1.1 New VLAN

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



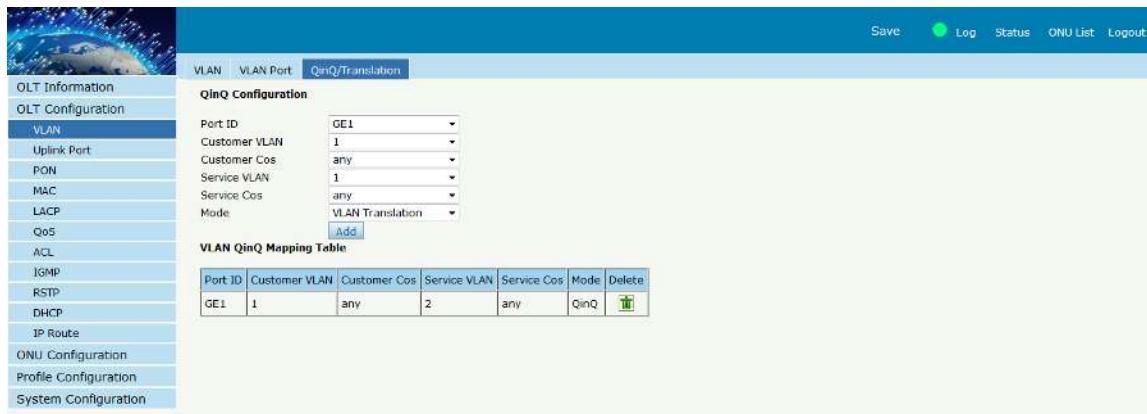
3.1.2 VLAN Port

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.



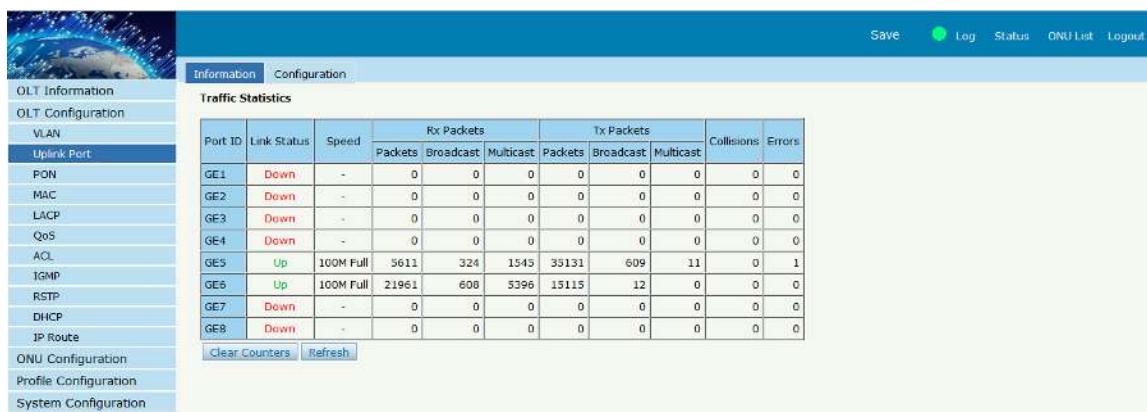
| Port ID | Customer VLAN | Customer Cos | Service VLAN | Service Cos | Mode | Delete |
|---------|---------------|--------------|--------------|-------------|------|--------|
| GE1 | 1 | any | 2 | any | QinQ | |

3.2 Uplink Port

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

3.2.1 Information

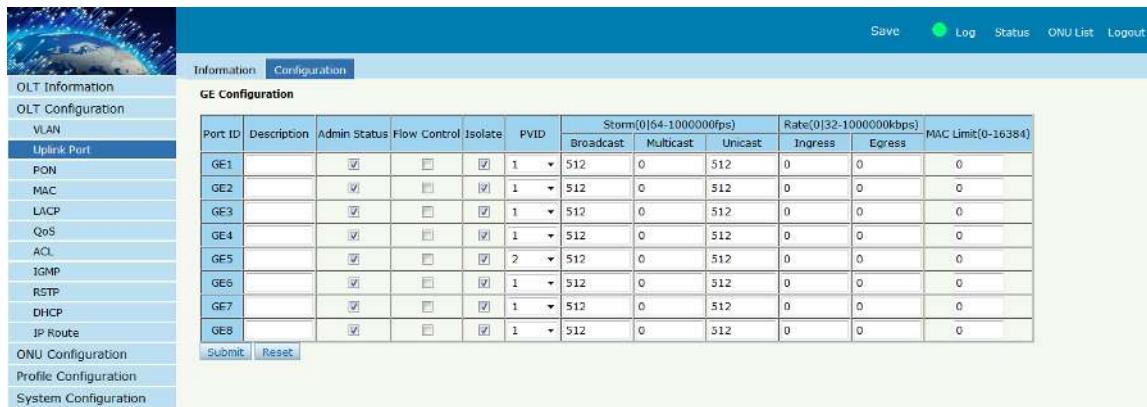
It shows the GE ports link status, speed and packet statistics.



| Port ID | Link Status | Speed | Rx Packets | | | Tx Packets | | | Collisions | Errors |
|---------|-------------|-----------|------------|-----------|-----------|------------|-----------|-----------|------------|--------|
| | | | Packets | Broadcast | Multicast | Packets | Broadcast | Multicast | | |
| GE1 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GE2 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GE3 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GE4 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GE5 | Up | 100M Full | 5611 | 324 | 1545 | 35131 | 609 | 11 | 0 | 1 |
| GE6 | Up | 100M Full | 21961 | 608 | 5396 | 15115 | 12 | 0 | 0 | 0 |
| GE7 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GE8 | Down | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

3.2.2 Configuration

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



GE Configuration

| Port ID | Description | Admin Status | Flow Control | Isolate | PVID | Storm(0 64-1000000fps) | | | Rate(0 32-1000000kbps) | | MAC Limit(0-16384) |
|---------|-------------|-------------------------------------|--------------------------|-------------------------------------|------|------------------------|-----------|---------|------------------------|--------|--------------------|
| | | | | | | Broadcast | Multicast | Unicast | Ingress | Egress | |
| GE1 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE2 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE3 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE4 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE5 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE6 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE7 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |
| GE8 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 512 | 0 | 512 | 0 | 0 |

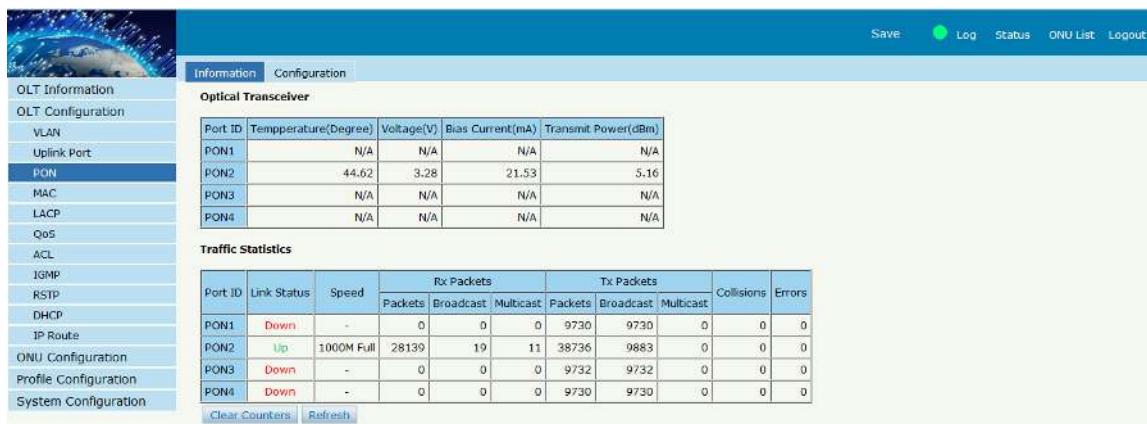
Buttons: Save, Log, Status, ONU List, Logout, Submit, Reset.

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.



Optical Transceiver

| Port ID | Temperature(Degree) | Voltage(V) | Bias Current(mA) | Transmit Power(dBm) |
|---------|---------------------|------------|------------------|---------------------|
| PON1 | N/A | N/A | N/A | N/A |
| PON2 | 44.62 | 3.28 | 21.53 | 5.16 |
| PON3 | N/A | N/A | N/A | N/A |
| PON4 | N/A | N/A | N/A | N/A |

Traffic Statistics

| Port ID | Link Status | Speed | Rx Packets | | | Tx Packets | | | Collisions | Errors |
|---------|-------------|------------|------------|-----------|-----------|------------|-----------|-----------|------------|--------|
| | | | Packets | Broadcast | Multicast | Packets | Broadcast | Multicast | | |
| PON1 | Down | - | 0 | 0 | 0 | 9730 | 9730 | 0 | 0 | 0 |
| PON2 | Up | 1000M Full | 28139 | 19 | 11 | 38736 | 9883 | 0 | 0 | 0 |
| PON3 | Down | - | 0 | 0 | 0 | 9732 | 9732 | 0 | 0 | 0 |
| PON4 | Down | - | 0 | 0 | 0 | 9730 | 9730 | 0 | 0 | 0 |

Buttons: Clear Counters, Refresh.

3.3.2 Configuration

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



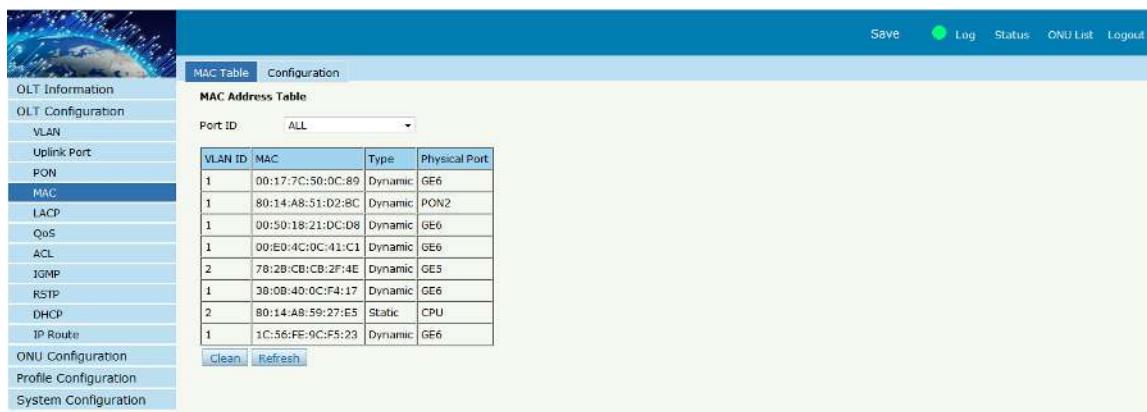
| Port ID | Description | Admin Status | Flow Control | Isolate | PVID | MAX RTT(2000-32000TQ) | ONU P2P | Storm(0)64-1000000fps) | | | Rate(0)32-1000000kbps) | | MAC Limit(0-16384) | |
|---------|-------------|-------------------------------------|--------------------------|-------------------------------------|------|-----------------------|---------|--------------------------|-----------|---------|------------------------|--------|--------------------|---|
| | | | | | | | | Broadcast | Multicast | Unicast | Ingress | Egress | | |
| PON1 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 14500 | <input type="checkbox"/> | 512 | 0 | 512 | 0 | 0 | 0 |
| PON2 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 14500 | <input type="checkbox"/> | 512 | 0 | 512 | 0 | 0 | 0 |
| PON3 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 14500 | <input type="checkbox"/> | 512 | 0 | 512 | 0 | 0 | 0 |
| PON4 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | ▼ | 14500 | <input type="checkbox"/> | 512 | 0 | 512 | 0 | 0 | 0 |

3.4 MAC

Used to display and configure the MAC address table.

3.4.1 MAC Table

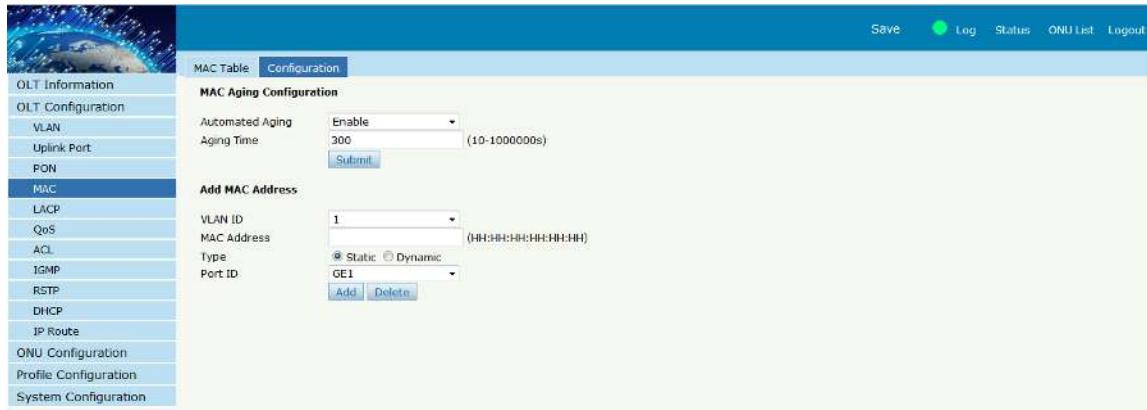
MAC Info is to show the learning MAC address of OLT. All the MAC addresses of all the ports with VLAN can be shown.



| Port ID | ALL | VLAN ID | MAC | Type | Physical Port |
|---------|-----|---------|-------------------|---------|---------------|
| | | 1 | 00:17:7C:50:0C:89 | Dynamic | GE6 |
| | | 1 | 80:14:A8:51:D2:8C | Dynamic | PON2 |
| | | 1 | 00:50:18:21:DC:D8 | Dynamic | GE6 |
| | | 1 | 00:E0:4C:0C:41:C1 | Dynamic | GE6 |
| | | 2 | 78:2B:CB:CB:2F:4E | Dynamic | GE5 |
| | | 1 | 3B:0B:40:0C:F4:17 | Dynamic | GE6 |
| | | 2 | 80:14:AB:59:27:E5 | Static | CPU |
| | | 1 | 1C:56:FF:9C:F5:23 | Dynamic | GE6 |

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.



| Group ID | Load Balance | Ports | Delete |
|----------|--------------|---------|--------|
| 1 | smac | GE1 GE2 | |

3.6 QoS

Configure the Quality of Service parameters.

3.6.1 QoS

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

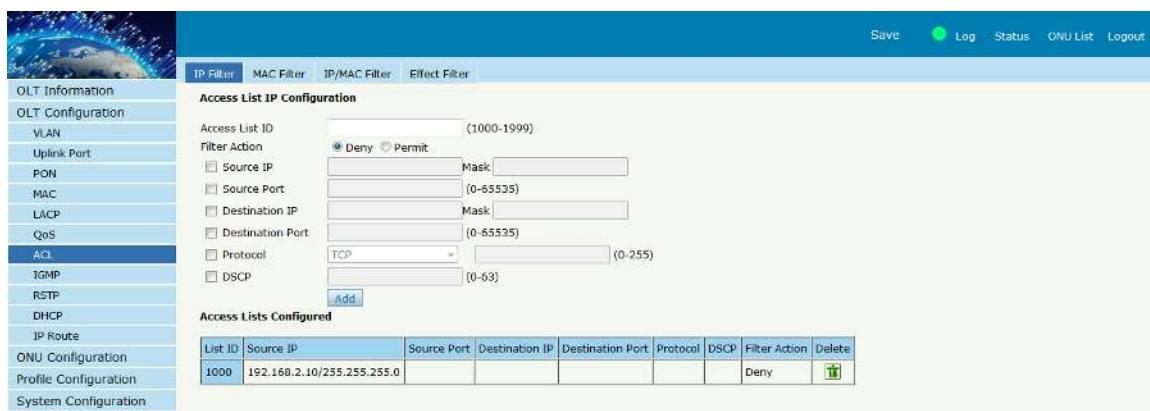


3.7 ACL

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

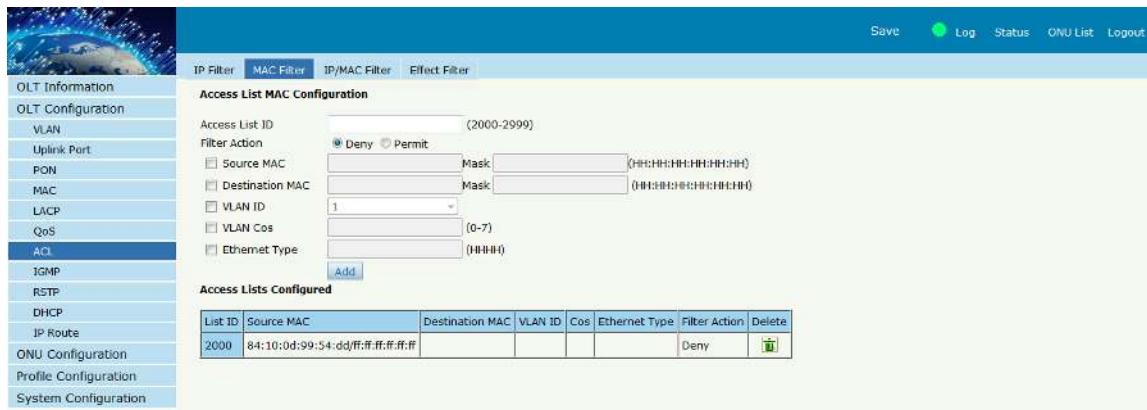
3.7.1 IP Filter

It can filter the packets depending upon IP address.



3.7.2 MAC Filter

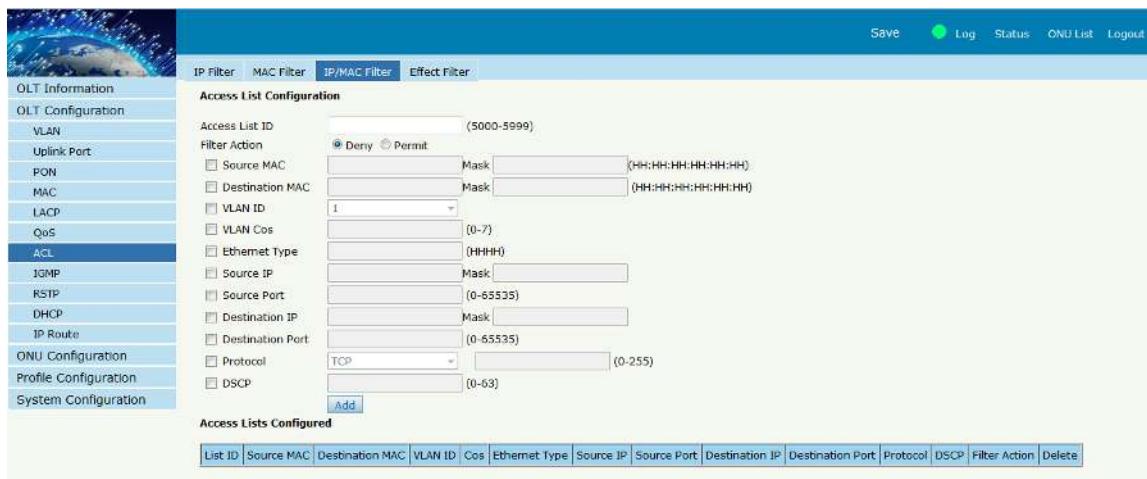
It can filter the packets depending upon MAC addresses.



| List ID | Source MAC | Destination MAC | VLAN ID | Cos | Ethernet Type | Filter Action | Delete |
|---------|-------------------------------------|-----------------|---------|-----|---------------|---------------|--------|
| 2000 | 84:10:0d:99:54:dd/ff:ff:ff:ff:ff:ff | | | | | Deny | |

3.7.3 IP/MAC Filter

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



| List ID | Source MAC | Destination MAC | VLAN ID | Cos | Ethernet Type | Source IP | Source Port | Destination IP | Destination Port | Protocol | DSRP | Filter Action | Delete |
|---------|------------|-----------------|---------|-----|---------------|-----------|-------------|----------------|------------------|----------|------|---------------|--------|
| | | | | | | | | | | TCP | | (0-255) | |

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.

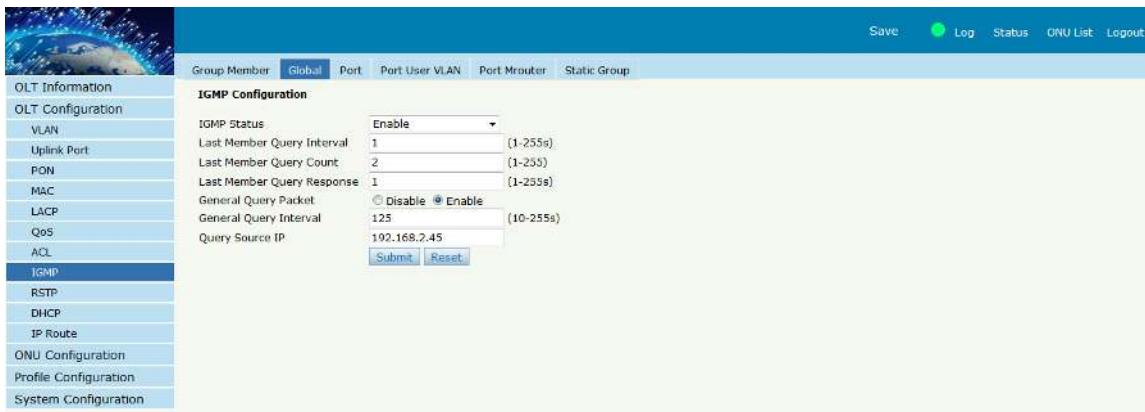
3.8.1 Group Member

Shows the status of active IGMP groups.



3.8.2 Global

Enable/Disable the IGMP snooping mode.



| IGMP Status | Enable |
|----------------------------|---|
| Last Member Query Interval | 1 [1-255s] |
| Last Member Query Count | 2 [1-255] |
| Last Member Query Response | 1 [1-255s] |
| General Query Packet | <input checked="" type="radio"/> Enable |
| General Query Interval | 125 [10-255s] |
| Query Source IP | 192.168.2.45 |

3.8.3 Port

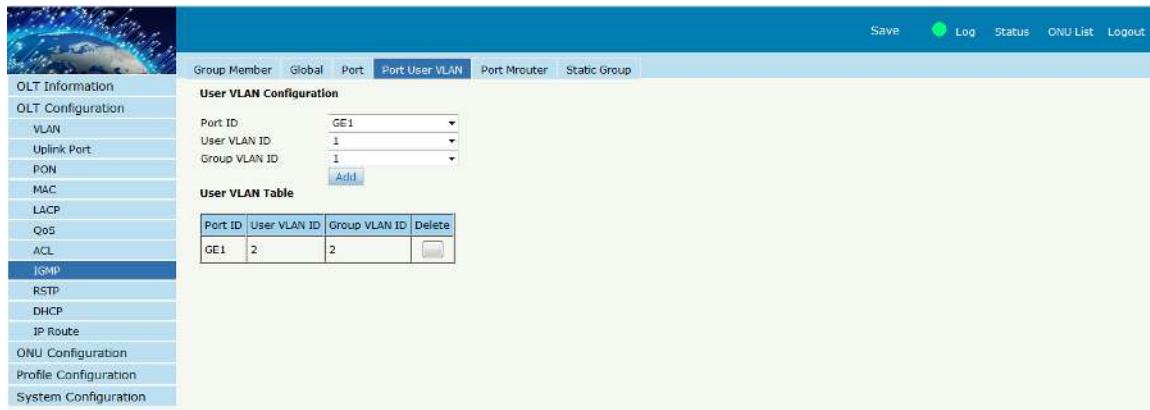
IGMP port configuration is about the max groups number, port fast leave status and filter status.



| Port ID | Fast Leave Filter | Group Limit(0-1024) |
|---------|-------------------------------------|---------------------|
| GE1 | <input checked="" type="checkbox"/> | 1024 |
| GE2 | <input type="checkbox"/> | 1024 |
| GE3 | <input checked="" type="checkbox"/> | 1024 |
| GE4 | <input type="checkbox"/> | 1024 |
| GE5 | <input checked="" type="checkbox"/> | 1024 |
| GE6 | <input type="checkbox"/> | 1024 |
| GE7 | <input checked="" type="checkbox"/> | 1024 |
| GE8 | <input type="checkbox"/> | 1024 |
| PON1 | <input type="checkbox"/> | 1024 |
| PON2 | <input checked="" type="checkbox"/> | 1024 |
| PON3 | <input type="checkbox"/> | 1024 |
| PON4 | <input type="checkbox"/> | 1024 |

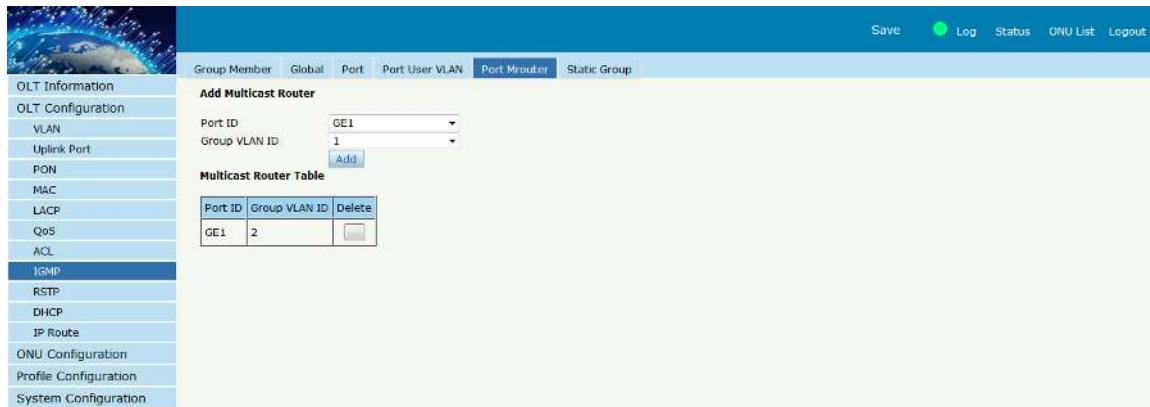
3.8.4 Port User VLAN

IGMP VLAN. Configure the user VLAN and group VLAN.



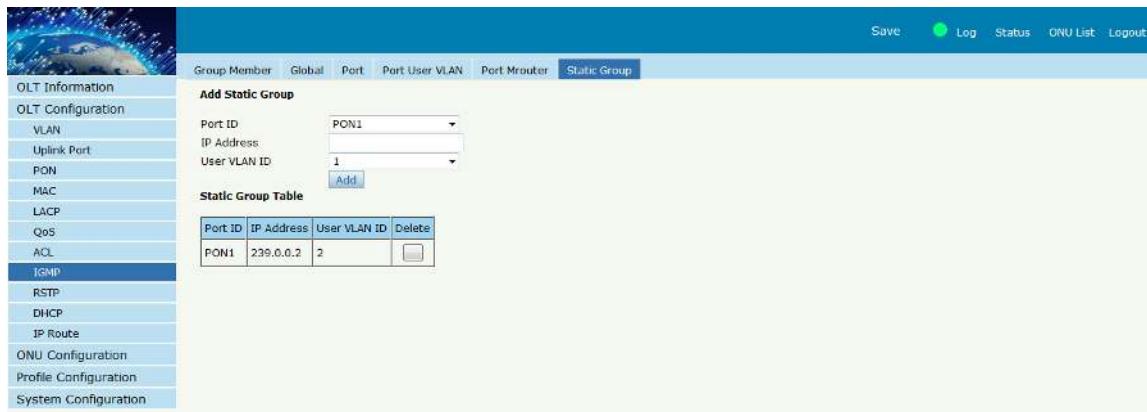
3.8.5 Port Mrouter

Add a port as the IGMP mrouter port.



3.8.6 Static Group

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



| Port ID | IP Address | User VLAN ID | Delete |
|---------|------------|--------------|---------------------------------------|
| PON1 | 239.0.0.2 | 2 | <input type="button" value="Delete"/> |

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.



| | Root | Bridge |
|---------------|-------------------|-------------------|
| Cost | 200000 | |
| Port | GE7 | |
| Priority | 32768 | 32768 |
| MAC Address | 00:03:0F:60:8F:65 | 80:14:A8:59:27:E5 |
| Hello Time | 2s | 2s |
| Max Age | 20s | 20s |
| Forward Delay | 15s | 15s |

| Port ID | Role | State | Cost | Priority | Point To Point |
|---------|----------|------------|--------|----------|----------------|
| GE5 | Design | Forwarding | 200000 | 128 | Enable |
| GE6 | Design | Learning | 200000 | 128 | Enable |
| GE7 | Root | Forwarding | 200000 | 128 | Enable |
| GE8 | Alternat | Discarding | 200000 | 128 | Enable |

1800-209-3444 (Toll Free)

helpdesk@digisol.com sales@digisol.com www.digisol.com

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

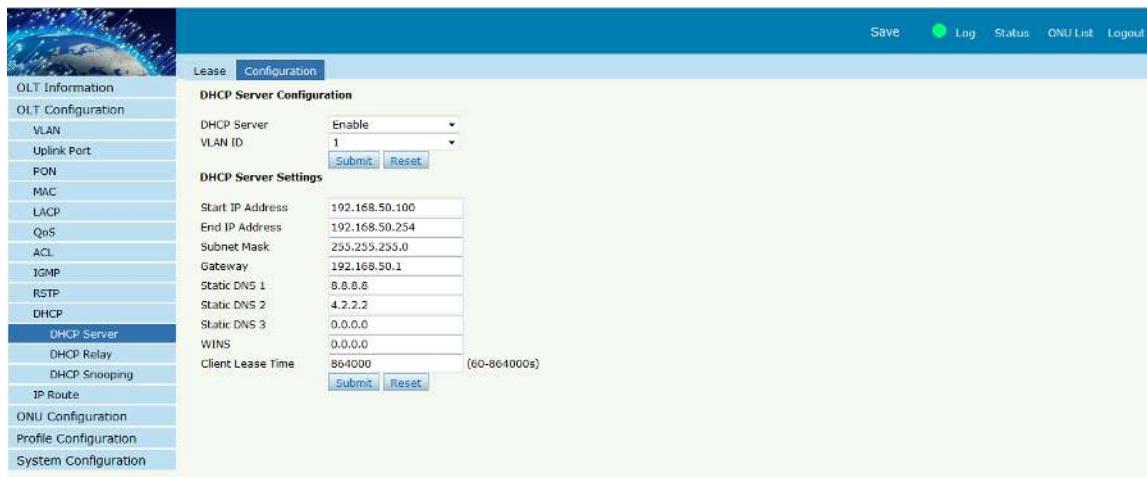
Shows the DHCP server lease details.



| IP Address | MAC address | Expires Time |
|----------------|-------------------|--------------|
| 192.168.50.100 | 00:14:A8:56:A3:25 | 863993 |
| 192.168.50.101 | 80:14:A8:51:D2:BC | 863993 |

3.10.1.2 Configuration

Set the DHCP server details.



DHCP Server Configuration

| | |
|-----------------------------|------------------------|
| DHCP Server | Enable |
| VLAN ID | 1 |
| DHCP Server Settings | |
| Start IP Address | 192.168.50.100 |
| End IP Address | 192.168.50.254 |
| Subnet Mask | 255.255.255.0 |
| Gateway | 192.168.50.1 |
| Static DNS 1 | 8.8.8.8 |
| Static DNS 2 | 4.2.2.2 |
| Static DNS 3 | 0.0.0.0 |
| WINS | 0.0.0.0 |
| Client Lease Time | 864000 (60-864000s) |

Buttons: Save, Log, Status, ONU List, Logout

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.



Add Relay Server

| | |
|-----------|---------------|
| Server IP | 192.168.2.125 |
| VLAN ID | 1 |

Relay Server Table

| Server IP | VLAN ID | Delete |
|---------------|---------|--------|
| 192.168.2.125 | 1 | |

Buttons: Save, Log, Status, ONU List, Logout

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.

3.10.3.1 Bind List

It shows the DHCP snooping binding table.



| MAC Address | VLAN ID | IP Address | Port ID | Lease | Type |
|-------------------|---------|---------------|---------|-------|---------|
| 80:14:A8:49:94:59 | 1 | 192.168.2.175 | PON1 | 86165 | Dynamic |
| 80:14:A8:56:A3:25 | 1 | 192.168.2.174 | PON2 | 86150 | Dynamic |
| 80:14:A8:51:02:BC | 1 | 192.168.2.176 | PON2 | 86201 | Dynamic |

3.10.3.2 Global

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



DHCP Snooping Configuration

DHCP Snooping: Enable Disable Reset

DHCP Snooping Settings

Option82 Control: Disable Enable
 Option82 Strategy: Drop Keep Replace
 Overspeed Recovery: Disable Enable
 Overspeed Recovery Interval: 30 (3-3600s)
 Binding Delete Time: 300 (1-3600s) Submit Reset

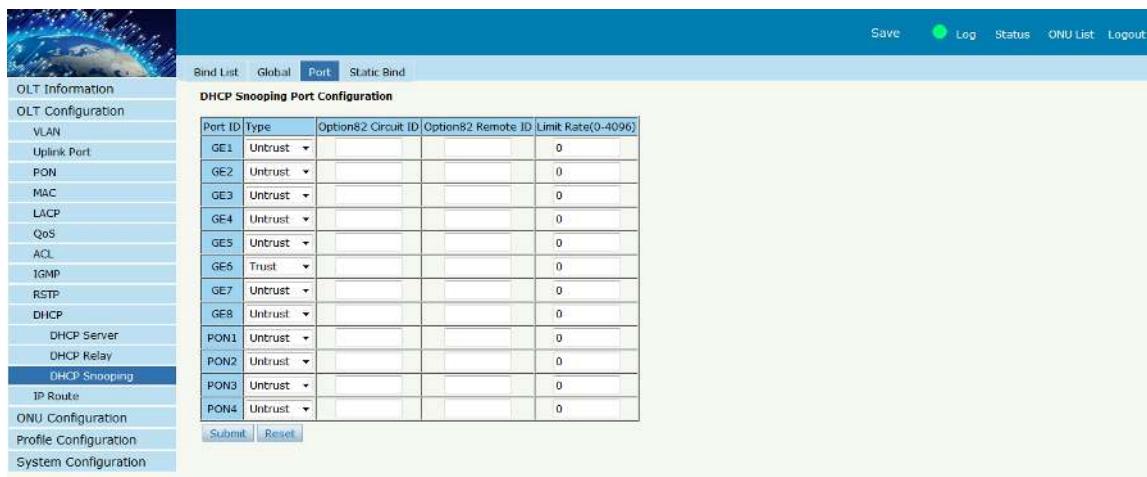
VLAN ID List

| List | VLAN ID |
|-------|---------|
| vlan1 | 1 |

Add

3.10.3.3 Port

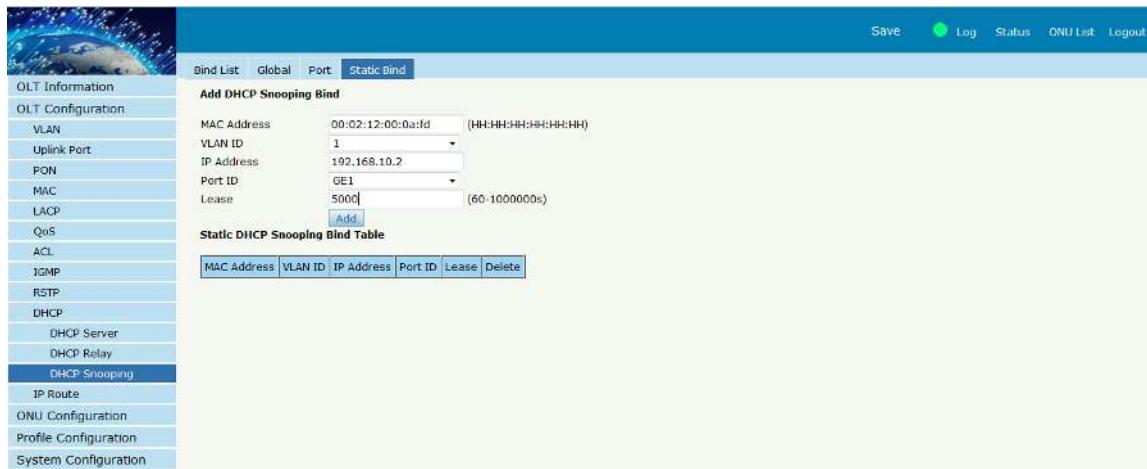
Mark the ports ad trusted and untrusted. Ports are untrust by default.



| Port ID | Type | Option82 Circuit ID | Option82 Remote ID | Limit Rate(0-4096) |
|---------|---------|---------------------|--------------------|--------------------|
| GE1 | Untrust | | | 0 |
| GE2 | Untrust | | | 0 |
| GE3 | Untrust | | | 0 |
| GE4 | Untrust | | | 0 |
| GE5 | Untrust | | | 0 |
| GE6 | Trust | | | 0 |
| GE7 | Untrust | | | 0 |
| GE8 | Untrust | | | 0 |
| PON1 | Untrust | | | 0 |
| PON2 | Untrust | | | 0 |
| PON3 | Untrust | | | 0 |
| PON4 | Untrust | | | 0 |

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.

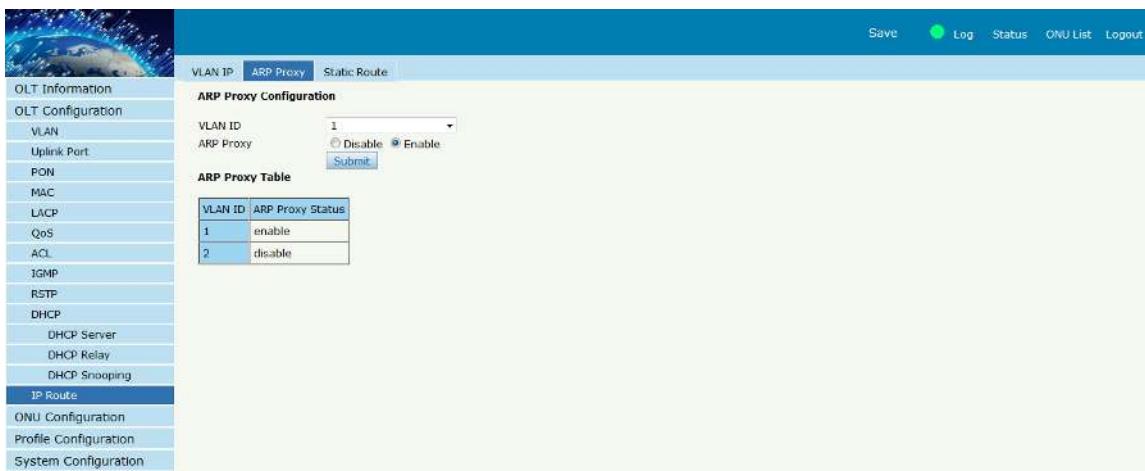


VLAN IP Configuration

| VLAN ID | IP Address | Subnet Mask | Delete |
|---------|--------------|---------------|----------|
| 1 | 192.168.50.1 | 255.255.255.0 | [Delete] |
| 2 | 192.168.0.11 | 255.255.255.0 | [Delete] |

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



ARP Proxy Configuration

| VLAN ID | ARP Proxy Status |
|---------|------------------|
| 1 | enable |
| 2 | disable |

3.11.3 Static Route

Enter the static route.



Add Static Route

| Destination IP | Destination Mask | Gateway |
|----------------|------------------|--------------|
| 192.168.5.0 | 255.255.252.0 | 192.168.2.30 |

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

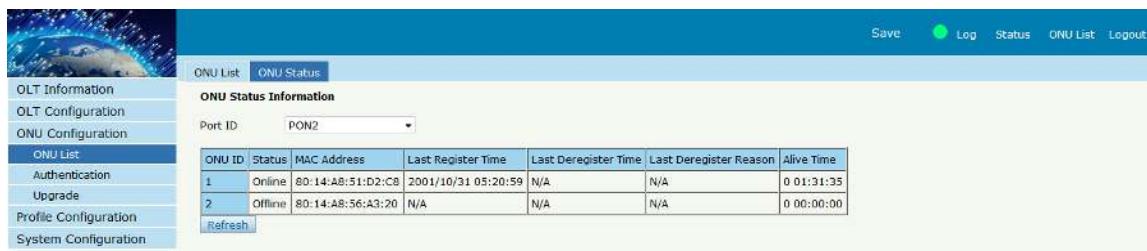
Provides authentication information of ONU, and the ONU can also be configured and managed from here. Click on config to configure the ONU. Reset or Deregister ONU.



| ONU ID | Status | MAC Address | Description | RTT | Type | Auth Flag | Exchange | Auth Mode | Loid/pwd | Action |
|--------|---------|-------------------|-------------|-----|-----------------|-----------|----------|-----------|----------|--|
| 1 | Online | 80:14:A8:51:D2:C8 | N/A | 53 | 4GE+2POTS+4WIFI | Auth | Idle | None | N/A | Config Profile Deregister Reset Unauth |
| 2 | Offline | 80:14:A8:56:A3:20 | N/A | 0 | N/A | Unauth | Idle | None | N/A | Profile Unauth |

4.1.2 ONU Status

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



| ONU ID | Status | MAC Address | Last Register Time | Last Deregister Time | Last Deregister Reason | Alive Time |
|--------|---------|-------------------|---------------------|----------------------|------------------------|------------|
| 1 | Online | 80:14:A8:51:D2:C8 | 2001/10/31 05:20:59 | N/A | N/A | 0 01:31:35 |
| 2 | Offline | 80:14:A8:56:A3:20 | N/A | N/A | N/A | 0 00:00:00 |

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.



| Port ID | Authentication Mode |
|---------|---------------------|
| PON1 | Disable |
| PON2 | MAC |
| PON3 | LOID |
| PON4 | 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.



| Index | MAC | Delete |
|-------|-------------------|----------|
| | 00:10:21:ed:34:fe | [Delete] |

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.

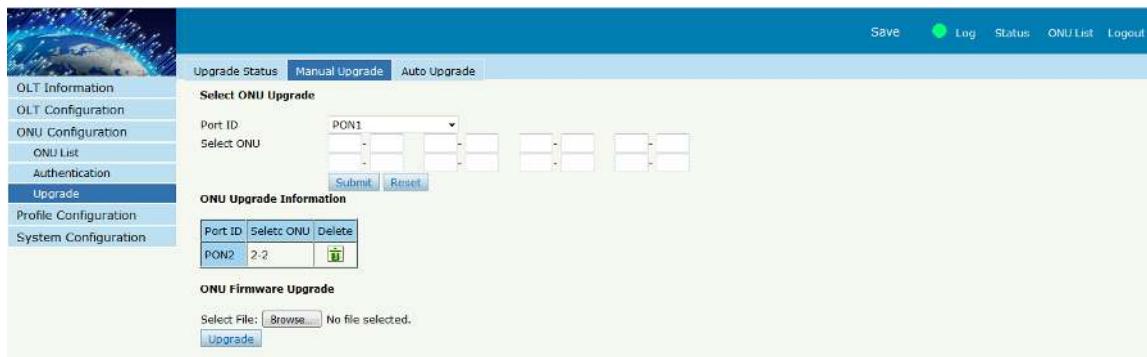
4.3.1 Upgrade Status

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.



ONU Upgrade Information

| Port ID | Select ONU | Delete |
|---------|------------|--------|
| PON2 | 2-2 | |

ONU Firmware Upgrade

Select File: No file selected.

4.3.3 Auto Upgrade

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



Add ONU Auto Upgrade

Force Mode: Disable Enable

Vendor ID:

Model ID:

Software Version:

Select File: No file selected.

ONU Auto Upgrade Information

| Force State | Verder ID | Model ID | Software Version | Image Name | IP Address | Delete |
|-------------|-----------|----------|------------------|------------|------------|--------|
|-------------|-----------|----------|------------------|------------|------------|--------|

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.



| Key | Value |
|----------|---|
| Upstream | FIR : 1000 CIR : 1500 PIR : 2000 WEIGHT : 1 |

5.1.2 Bandwidth

Set the bandwidth parameters in upstream and downstream direction.



| Type | Active | Configuration content | | |
|--------------------------|-------------------------------------|-----------------------|------|-------------------|
| Upstream Configuration | <input checked="" type="checkbox"/> | Upstream FIR | 1000 | (0-950000Kbps) |
| | | Upstream CIR | 1500 | (1-950000Kbps) |
| | | Upstream PIR | 2000 | (512-1000000Kbps) |
| | | Upstream Weight | 1 | (1-20) |
| Downstream Configuration | <input type="checkbox"/> | Downstream PIR | 0 | (0-1000000Kbps) |
| | | Downstream Weight | 0 | (1-16) |

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...



| Key | Value |
|------------------|------------------------|
| Ports Count | 1 |
| Global Parameter | Port All |
| Port1 | VLAN mode: transparent |

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.



| Key | value |
|-----|-------|
| | |

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.



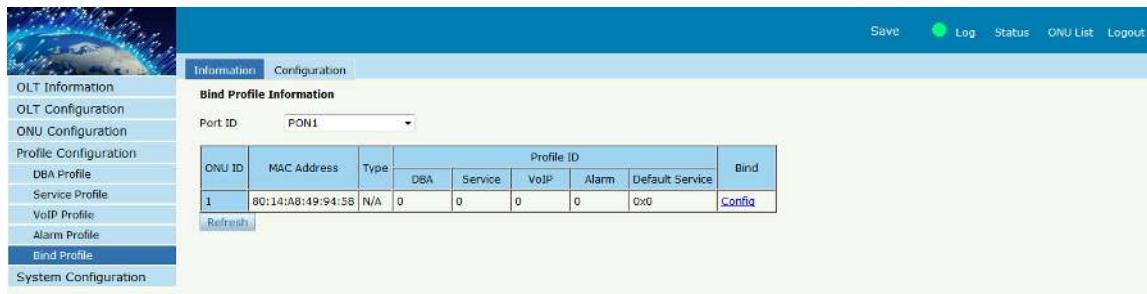
| Key | value |
|------------|----------------------------------|
| ONU Alarm | |
| PON Alarm | |
| Port Alarm | Port1:Port Loopback State:enable |
| POTS Alarm | |

5.5 Bind Profile

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

5.5.1 Information

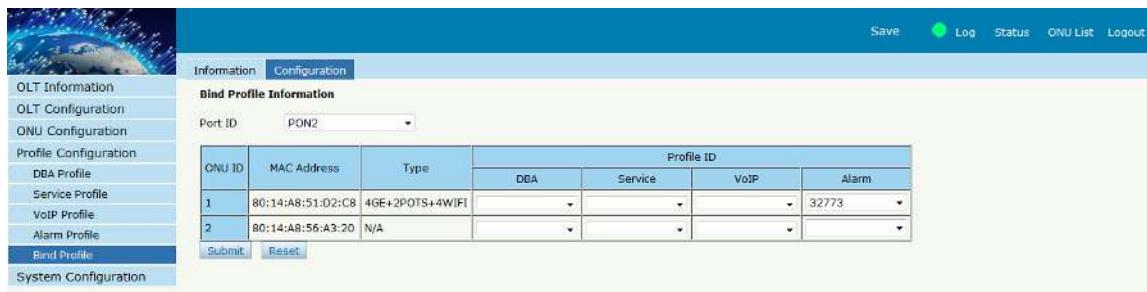
Gives the details of binded profile.



| ONU ID | MAC Address | Type | Profile ID | | | | Bind |
|--------|-------------------|------|------------|---------|------|-------|------------------------|
| | | | DBA | Service | VoIP | Alarm | |
| 1 | 80:14:A8:49:94:58 | N/A | 0 | 0 | 0 | 0x0 | Config |

5.5.2 Configuration

Bind the profile to the required ONU.



| ONU ID | MAC Address | Type | Profile ID | | | |
|--------|-------------------|-----------------|------------|---------|------|---------|
| | | | DBA | Service | VoIP | Alarm |
| 1 | 80:14:A8:51:D2:C8 | 4GE+2POTS+4WIFI | ▼ | ▼ | ▼ | 32773 ▼ |
| 2 | 80:14:A8:56:A3:20 | N/A | ▼ | ▼ | ▼ | ▼ |

Chapter 6 System Configuration

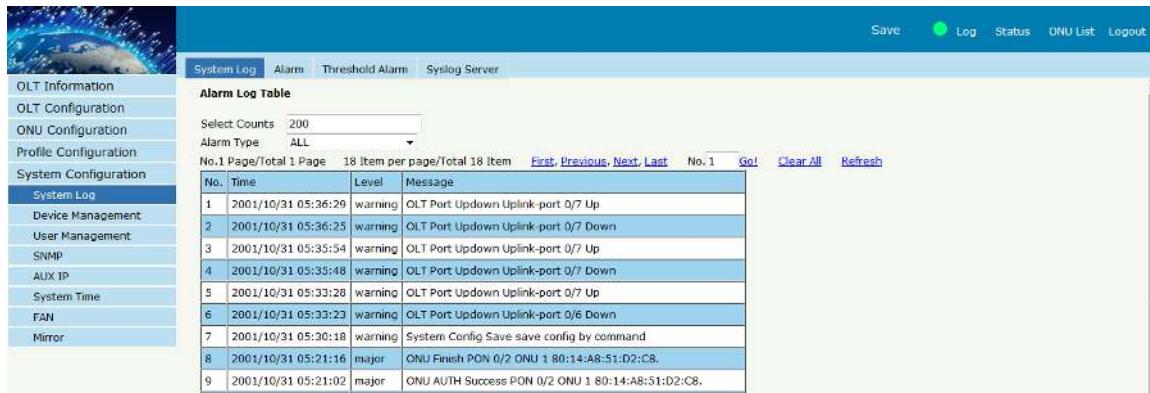
This chapter is about the global management of OLT.

6.1 System Log

Show the alarm configuration list.

6.1.1 System Log

Shows the system logs generated.



The screenshot shows the 'System Log' tab selected in the navigation bar. The main area displays an 'Alarm Log Table' with the following columns: No., Time, Level, and Message. The table contains 9 entries of system log messages, mostly 'warning' level, related to port up/down events and configuration saves. The interface includes a sidebar with various management links and a top bar with save, log, status, and other navigation buttons.

| No. | Time | Level | Message |
|-----|---------------------|---------|---|
| 1 | 2001/10/31 05:36:29 | warning | OLT Port Updown Uplink-port 0/7 Up |
| 2 | 2001/10/31 05:36:25 | warning | OLT Port Updown Uplink-port 0/7 Down |
| 3 | 2001/10/31 05:35:54 | warning | OLT Port Updown Uplink-port 0/7 Up |
| 4 | 2001/10/31 05:35:48 | warning | OLT Port Updown Uplink-port 0/7 Down |
| 5 | 2001/10/31 05:33:28 | warning | OLT Port Updown Uplink-port 0/7 Up |
| 6 | 2001/10/31 05:33:23 | warning | OLT Port Updown Uplink-port 0/6 Down |
| 7 | 2001/10/31 05:30:18 | warning | System Config Save config by command |
| 8 | 2001/10/31 05:21:16 | major | ONU Finish PON 0/2 ONU 1 80:14:A8:51:D2:C8; |
| 9 | 2001/10/31 05:21:02 | major | ONU AUTH Success PON 0/2 ONU 1 80:14:A8:51:D2:C8; |

6.1.2 Alarm

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

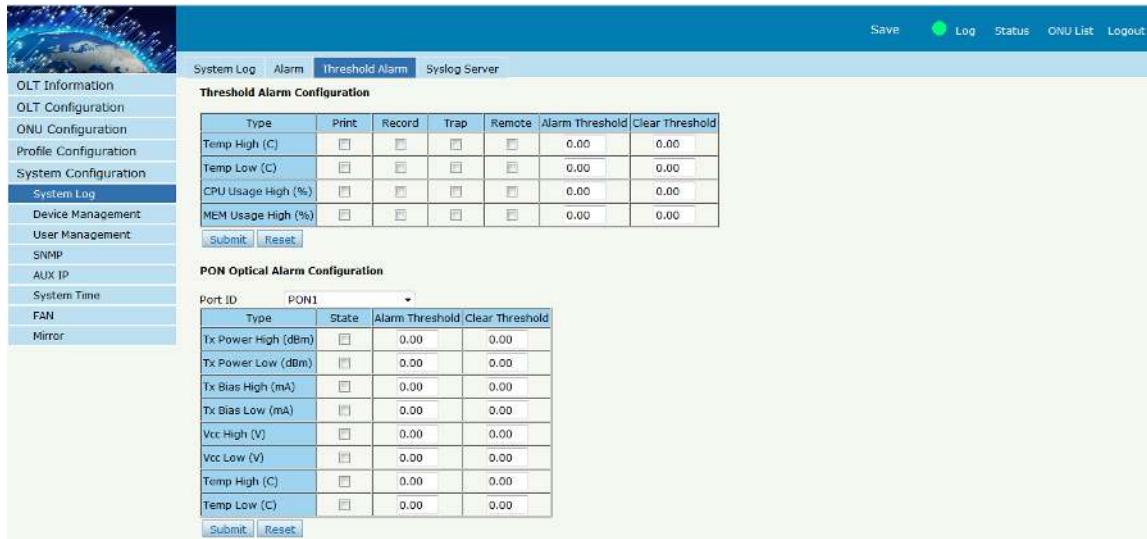


The screenshot shows the 'Alarm' tab selected in the navigation bar. The main area displays an 'Alarm Configuration' table with columns for Type, Print, Record, Trap, and Remote. The table lists various alarm types such as FAN, Upload File Failed, Port Updown, etc., each with its corresponding checkboxes for the four actions. The interface includes a sidebar with various management links and a top bar with save, log, status, and other navigation buttons.

| Type | Print | Record | Trap | Remote | Type | Print | Record | Trap | Remote |
|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| FAN | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Download File Failed | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Upload File Failed | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Upgrade File Failed | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Port Updown | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Port Loopback | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Deregister | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Register Failed | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Disable | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Txpower High | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Txpower Low | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Txbias High | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Txbias Low | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Vcc High | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Vcc Low | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Temp High | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PON Temp Low | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | PON Los | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ONU Deregister | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | ONU Link Lost | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ONU Illegal Register | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | ONU Auth Failed | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

6.1.3 Threshold Alarm

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

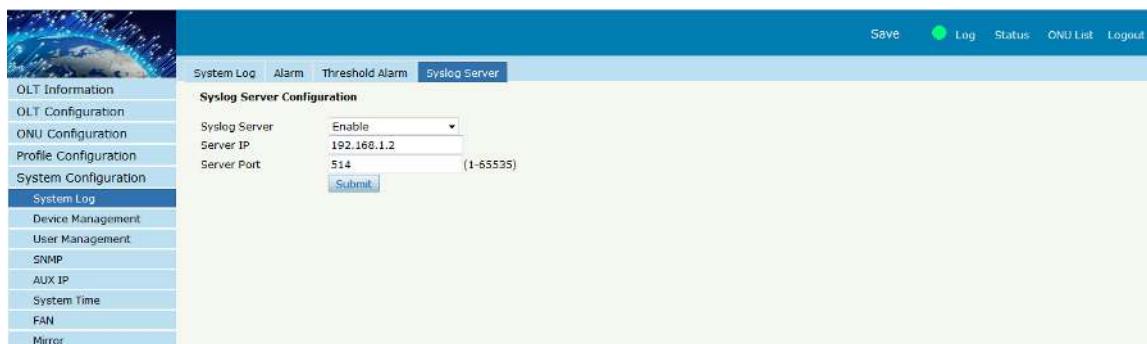


| Type | Print | Record | Trap | Remote | Alarm Threshold | Clear Threshold |
|--------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-----------------|-----------------|
| Temp High (C) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 | 0.00 |
| Temp Low (C) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 | 0.00 |
| CPU Usage High (%) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 | 0.00 |
| MEM Usage High (%) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 | 0.00 |

| Port ID | PON1 | Type | State | Alarm Threshold | Clear Threshold |
|---------|------|---------------------|-------------------------------------|-----------------|-----------------|
| | | Tx Power High (dBm) | <input type="checkbox"/> | 0.00 | 0.00 |
| | | Tx Power Low (dBm) | <input checked="" type="checkbox"/> | 0.00 | 0.00 |
| | | Tx Bias High (mA) | <input type="checkbox"/> | 0.00 | 0.00 |
| | | Tx Bias Low (mA) | <input checked="" type="checkbox"/> | 0.00 | 0.00 |
| | | Vcc High (V) | <input type="checkbox"/> | 0.00 | 0.00 |
| | | Vcc Low (V) | <input checked="" type="checkbox"/> | 0.00 | 0.00 |
| | | Temp High (C) | <input type="checkbox"/> | 0.00 | 0.00 |
| | | Temp Low (C) | <input checked="" type="checkbox"/> | 0.00 | 0.00 |

6.1.4 Syslog Server

Configure the server of OLT remote system logs.



| | |
|---------------|---------------|
| Syslog Server | Enable |
| Server IP | 192.168.1.2 |
| Server Port | 514 (1-65535) |

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.



Config File

Backup Configuration

All existing configuration will be overwritten.
the device will reboot after restore is completed!

Select File: No file selected.

Restore Configuration

Load Factory Defaults

Click Restore to load the factory defaults.
The device will reboot after restore is completed!

Save Configuration

Press the button below to 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.



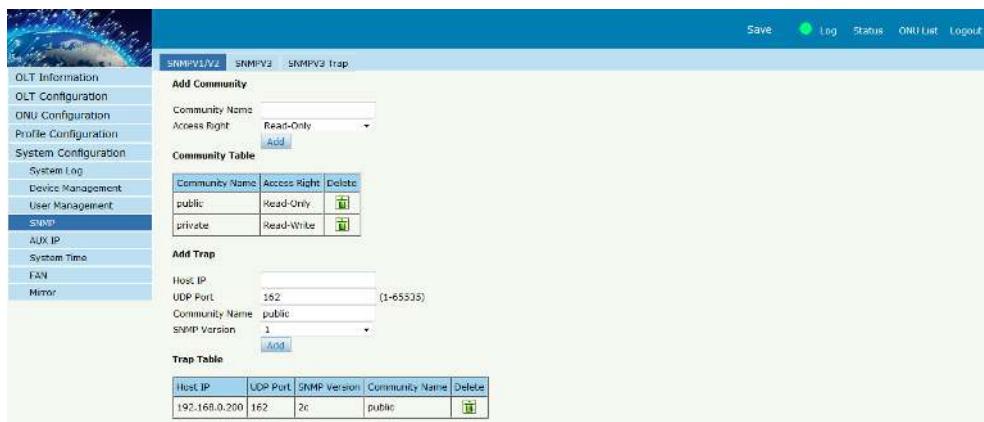
| User Name | User Role | Edit | Delete |
|-----------|-----------|------|--------|
| admin | Admin | | |
| abcd | Normal | | |

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.



Add Community

| Community Name | Access Right | Delete |
|----------------|--------------|----------|
| public | Read-Only | [Delete] |
| private | Read-Write | [Delete] |

Trap Table

| Host IP | UDP Port | SNMP Version | Community Name | Delete |
|---------------|----------|--------------|----------------|----------|
| 192.168.0.200 | 162 | 2c | public | [Delete] |

6.4.2 SNMP V3

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



Add View

| View Name | Subtree | (Type: Object Identifier) |
|-----------|---------|---------------------------|
| | | [Add] |

View Table

| View Name | Subtree | View type | Delete |
|-----------|---------|-----------|--------|
| | | | |

Add Group

| Group Name | Access Level |
|------------|--------------|
| noauth | |

6.4.3 SNMP V3 Trap

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



Add Trap

| Host IP | UDP Port | User Name | User Level | Tag List | Timeout | Retry Count |
|---------|----------|-----------|------------|----------|---------|-------------|
| | 162 | | noauth | trap | | |

Trap Table

| Host IP | UDP Port | Version | User Name | User Level | Tag List | Timeout | Retry Count | Delete |
|---------|----------|---------|-----------|------------|----------|---------|-------------|--------|
| | | | | | | | | |

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.

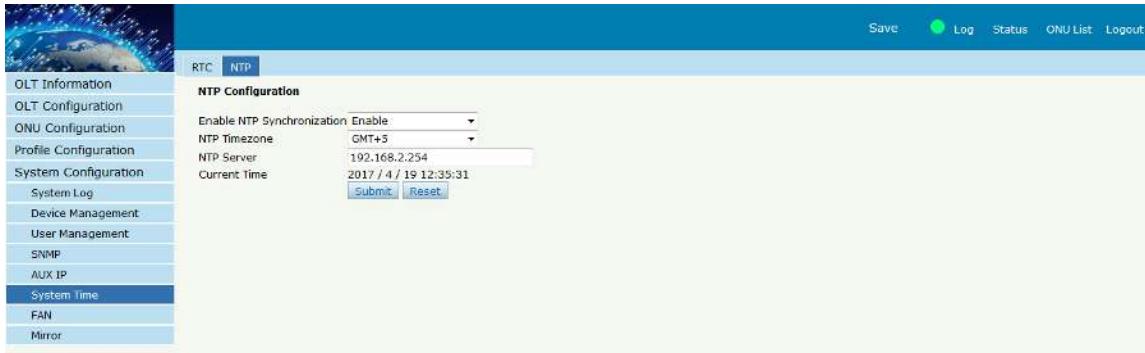
6.6.1 RTC

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



6.6.2 NTP

Set the NTP server details.



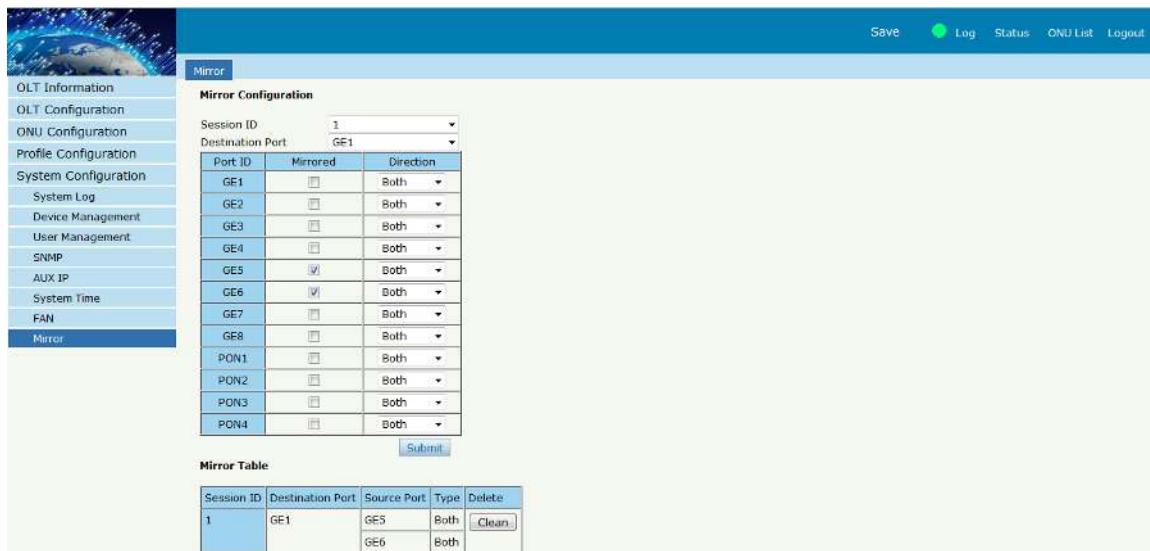
6.7 FAN

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.



| Port ID | Mirrored | Direction |
|---------|-------------------------------------|-----------|
| GE1 | <input type="checkbox"/> | Both |
| GE2 | <input type="checkbox"/> | Both |
| GE3 | <input type="checkbox"/> | Both |
| GE4 | <input type="checkbox"/> | Both |
| GE5 | <input checked="" type="checkbox"/> | Both |
| GE6 | <input checked="" type="checkbox"/> | Both |
| GE7 | <input type="checkbox"/> | Both |
| GE8 | <input type="checkbox"/> | Both |
| PON1 | <input type="checkbox"/> | Both |
| PON2 | <input type="checkbox"/> | Both |
| PON3 | <input type="checkbox"/> | Both |
| PON4 | <input type="checkbox"/> | Both |

| Session ID | Destination Port | Source Port | Type | Delete |
|------------|------------------|-------------|------|--------|
| 1 | GE1 | GE5 | Both | Clean |
| | | GE6 | Both | |

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