



# **GPON OLT WEB USER MANUAL**

**Version V2.4**

**Release Date 2021-8-5**

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# Chapter 1 System Description

## 1.1 Overview

### 1.1.1 OLT Introduction

The Web management user manual is for the OLTs listed in Table 1-1 and Table 1-2. After you have completed installation, connection and commissioning of the equipment, you can start on configuring various services and functions for the equipment.

Table 1-1 V1600G Series OLT interfaces

Products		4 ports GPON OLT	8 ports GPON OLT	16 ports GPON OLT
Chassis	Racks	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box
1G/10G Uplink Port	QTY	6	16	12
	Copper	4*10/100/1000M auto-negotiation	8*10/100/1000M auto-negotiation	8*10/100/1000M auto-negotiation
	SFP (Independent)	2*SFP+ (SFP+ is compatible with 10GE)	6*SFP and 2*SFP+ (SFP+ is compatible with 10GE)	4*SFP+ (SFP+ is compatible with 10GE)
GPON Port	QTY	4	8	16
	Physical Interface	SFP Slots	SFP Slots	SFP Slots
Management Ports		1*10/100BASE-T out-band port (AUX), 1*CONSOLE port		
Management Mode		SNMP, WEB, Telnet and CLI		

Products	4 ports GPON OLT -B	4 ports GPON OLT-B1	8 ports GPON OLT -B	8 ports GPON OLT -B1
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Table 1-2  
V1600G-B  
Series OLT  
interfaces

### 1.1.2 OS

Chassis	Racks	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box
	QTY	4	2	8	4
		2*10/100/10 00M		4*10/100/100 0M	
1G/10G Uplink Port	Copper Products	16 ports auto-negoti ation	8 ports auto-negoti ation	auto-negotia tion	N/A
Chassis	SFP (Indep endent)	1U 19 inch standard box (SFP+ is compatible with 10GE)	2U 19 inch non-standard box (SFP+ is compatible with 10GE)	2*SFP and 2*SFP+ (SFP+ is compatible with 10GE)	2*SFP and 2*SFP+ (SFP+ is compatible with 10GE)
	QTY	8	6		
GPON Port	QTY	4*10/100/10 00M	1*10/100/10 00M	8	8
1G/10G Uplink Port	Physical Interface	SFP Slots auto-negoti ation	SFP Slots auto-negoti ation	SFP Slots	SFP Slots
Management Port		1*10/100BASE-T out-band port (AUX), 1*CONSOLE port	2*SFP and 2*SFP+ (SFP+ is compatible with 10GE)		
Management Mode	SFP (Indep endent)	SNMP, WEB, Telnet and CLI (SFP+ is compatible with 10GE)	2*SFP+ (SFP+ is compatible with 10GE)		
	QTY	16	8		
GPON Port	Physical Interface	SFP Slots	SFP Slots		
Management Ports		1*10/100BASE-T out-band port (AUX), 1*CONSOLE port			
Management Mode		SNMP, WEB, Telnet and CLI			

## Requirement

For OLT management, it supports or requires the following operation system.

Table 1-3 Operation System requirement

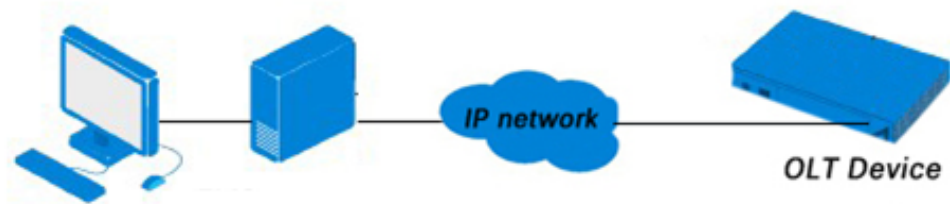
CPU	Memory	DISK	Video Card	Operating System
Frequency above 2GHz	2GB Or above	10GB disk space	65000 color resolving capability 1024*768 and above	Windows2008 Windows XP Windows 7 Windows 8 Windows 10

## 1.2 Connection

Connect the OLT AUX port to IP network. The OLT default management IP is 192.168.8.200.

Please set your PC IP to 192.168.8.X (e.g.192.168.8.123).

AUX



## Chapter 2 OLT Information

### 2.1 Login

Follow the steps to login:

1. Conform “1.2 Connection” to connect;
2. The device default IP address is 192.168.8.200;
3. Open your web browser, type the device IP in address bar;
4. Entry of the username and password will be prompted. Enter the default login User Name and Password. The default username and password is "**admin/Xpon@Olt9417#**".

OLT Web Management Interface

Username

Password

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Figure 2.1-1: Login

### 2.2 Device Information

The OLT ports connection status are shown in the top of the interface, and about the OLT basic information.

#### **OLT Information** □ **Device Information**

This part shows the OLT information such as system name, serial number, hardware version, firmware version, MAC address and system time. The system name can be modified if need.



The screenshot shows the GPON OLT Web User Interface. On the left is a navigation menu with the following items: OLT Information, Device Information (highlighted), OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'Device Information' and contains two sections: 'Device Status' and 'Device Basic Information'.

**Device Status**

This section displays a grid of 24 ports, each with a status icon (a red 'X' in a square) and a label. The ports are arranged in two rows of 12. The top row labels are PON2, PON4, PON6, PON8, PON10, PON12, PON14, PON16, GE2, GE4, GE6, and GE8. The bottom row labels are PON1, PON3, PON5, PON7, PON9, PON11, PON13, PON15, GE1, GE3, GE5, and GE7. The labels for GE9, GE10, GE11, and GE12 are also present but their corresponding status icons are not visible in the image.

**Device Basic Information**

This section contains a table with the following data:

System Name	gpon-olt	Serial Number	
Hardware Version	16 pons gpon olt platform	Software Version	V1.0.2
MAC Address	80:14:A8:C0:D8:A9	Temperature	41°C
System Time	2000 / 1 / 31 23:17:38	Running Time	0 Days 0 Hours 15 Minutes 39 Seconds
CPU Usage	23%	Memory Usage	21%
License limit	2048 ONUs	License Time	Permanent

Below the table are two buttons: 'Submit' and 'Refresh'.

Figure 2.2-1: Device Information



## Chapter 3 OLT Configuration

This section is about the basic service of OLT configuration.

### 3.1 VLAN

OLT equipment switch engine is fully compliant with the IEEE802.1Q VLAN standard and has the following main features:

- ☐ Support Port-based VLAN and IEEE802.1Q VLAN.
- ☐ Support full 4K VLAN group, VID range 1~4095.

All switch ports, including uplink ports and downlink ports, support VLAN partition.

VLAN 1 is the system reserved VLAN, it includes all switch ports which are UNTAG mode.

#### 3.1.1 Create VLAN

##### OLT Configuration ☐ VLAN

In this user interface, you can create new VLAN.

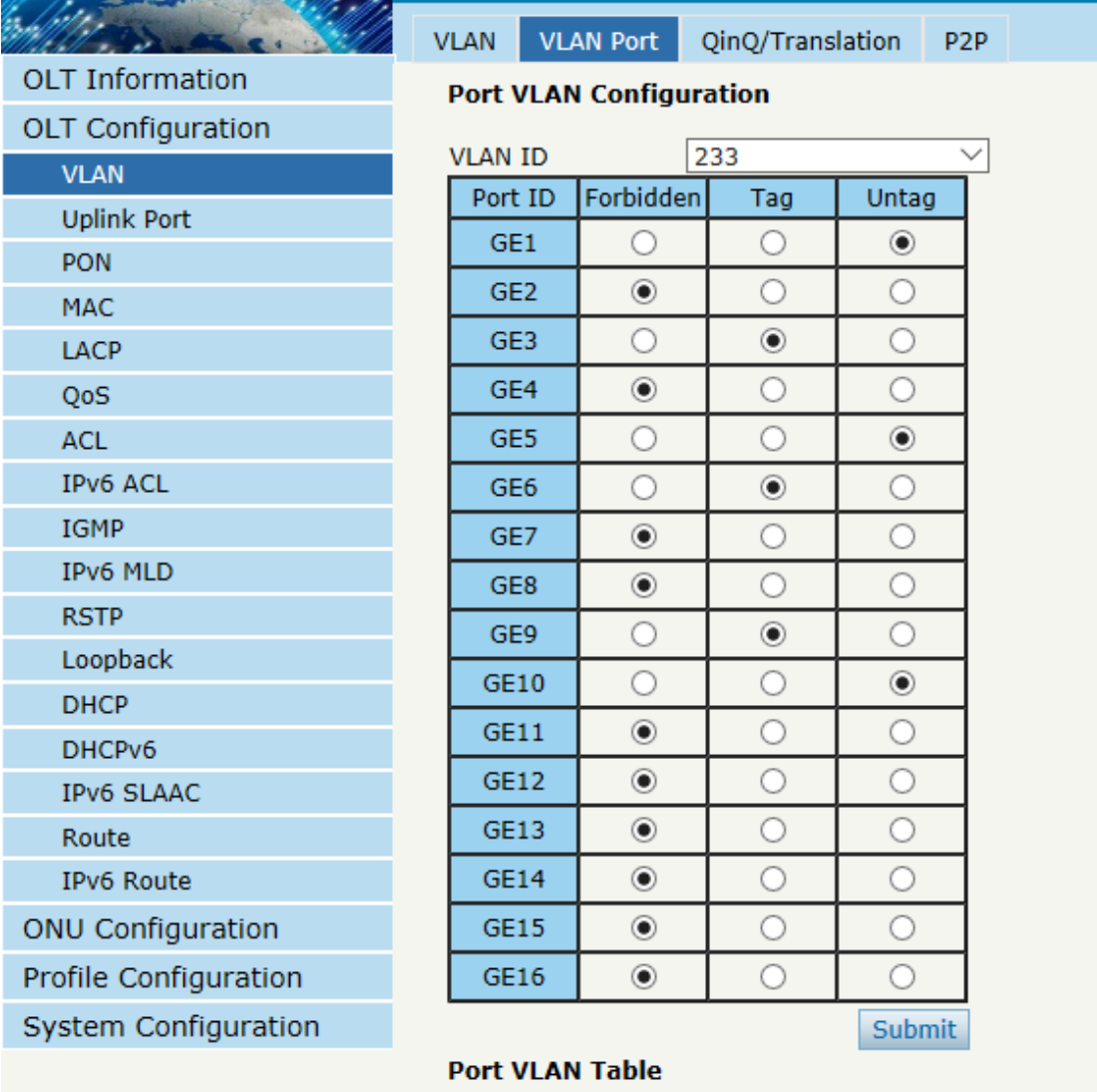
VLAN ID	Description	Edit	Delete
1	default		
10	vlan10		
888	vlan888		
998	vlan998		
999	vlan999		
1688	vlan1688		
3000	vlan3000		
3999	vlan3999		
4000	vlan4000		

Figure 3.1-1: Create New VLAN

### 3.1.2 VLAN Port

#### OLT Configuration □ VLAN □ VALN Port

Assign the ports to the VLANs that have been created. You can choose the tag or untag VLAN mode.



**Port VLAN Configuration**

VLAN ID:

Port ID	Forbidden	Tag	Untag
GE1	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE3	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE4	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE5	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE6	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE7	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE8	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE9	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE10	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE11	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE12	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE13	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE14	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE15	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE16	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Port VLAN Table**

Figure 3.1-2: Add VLAN Port

### 3.1.3 QinQ/Translation

#### OLT Configuration □ VLAN □ QinQ/Translation

In this user interface, VLAN QinQ and VLAN translation can be configured. VLAN QinQ and translation are effective for ingress.

Port ID	Customer VLAN	Customer Cos	Service VLAN	Service Cos	Mode	Delete
GE1	999	any	233	any	VLAN Translation	

Figure 3.1-3: Qinq/Translation Configuration

### 3.1.4 P2P

#### OLT Configuration □ VLAN □ P2P (GPON OLT Series)

The use of P2P enables ONU to communicate with each other under PON ports.

Vlan	Delete
1000	<a href="#">Delete</a>

Figure 3.1-4: V1600G Series P2P Configuration

#### OLT Configuration □ PON □ Configuration (GPON OLT -B Series)

Port ID	Description	Admin Status	Isolate	ONU P2P	Storm(0)	Broadcast
PON1		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0
PON2		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0

Figure 3.1-5: V1600G-B Series P2P Configuration


## 3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

### 3.2.1 Information

#### OLT Configuration ▢ Uplink Port ▢ Information

This user interface displays traffic statistics of uplink ports.

	Information		Configuration												
	OLT Information														
	OLT Configuration														
	VLAN														
	Uplink Port														
	PON														
	MAC														
	LACP														
	QoS														
	ACL														
IPv6 ACL															
IGMP															
IPv6 MLD															
RSTP															
Loopback															
DHCP															
DHCPv6															
IPv6 SLAAC															
Route															
IPv6 Route															
ONU Configuration															
Profile Configuration															
System Configuration															

Traffic Statistics														
<a href="#">Clear Counters</a>		<a href="#">Refresh</a>												
Port ID	Link Status	Speed	Rx Bytes	Rx Packets				Tx Bytes	Tx Packets				Collisions	Errors
				Packets	Unicast	Broadcast	Multicast		Packets	Unicast	Broadcast	Multicast		
GE1	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE2	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE3	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE4	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE5	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE6	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE7	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE8	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE9	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE10	Up	1000M Full	1867309702	5288884	2189914	2559025	539945	1718357518	3336155	2477902	707930	150323	0	0
GE11	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE12	Up	1000M Full	4273288450	30683208	30145371	243944	293893	4521727387	32967058	29956070	2316045	694943	0	0
GE13	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE14	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE15	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE16	Up	1000M Full	200911799	2139662	64490	1943483	131689	140174987	1985620	104141	1257375	624104	0	0

Figure3.2-1: GE Traffic Statistics

### 3.2.2 Configuration

#### OLT Configuration ▢ Uplink Port ▢ Information

This user interface is used to configure port related functions and characteristic parameters of uplink port, such as port attributes, PVID, flow control, rate limit, storm inhibition, port isolation and so on.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

GE2

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information

Configuration

GE Configuration

Submit

Reset

Port ID	Description	Admin Status	Speed	Flow Control	Isolate	PVID	Storm(0/64-1000000fps)			Rate(0/64-1000000kbps)		MAC Limit(0-16384)
							Broadcast	Multicast	Unicast	Ingress	Egress	
GE1		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE2		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE3		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE4		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE5		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE6		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE7		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE8		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE9		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE10		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	3000	512	0	512	0	0	0
GE11		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE12		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	3000	512	0	512	0	0	0
GE13		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE14		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE15		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE16		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	3000	512	0	512	0	0	0

Figure3.2-2: Uplink Ports Configuration

Illustrations of each parameter:


Parameters	Illustration
Port ID	GE port has two types, fiber SFP (GE1 to GE8) and copper (GE9 to GE16).
Description	Descriptions or remarks of port.
Admin Status	Active or inactive status of port. It is Enabled by default.
Speed	Configuring Port Rate.
Flow Control	Enable or disable flow control function of uplink port to control congestion. It is disabled by default.
Isolate	Port isolation with each other.
PVID	Default VLAN ID of the port.
Broadcast	Broadcast storm inhibition.
Multicast	Multicast storm inhibition.
Unknown Unicast	Unknown unicast storm inhibition.
Ingress Rate	Port ingress rate.
Egress Rate	Port egress rate.
MAC limit	Number of MAC address can be learnt in the port.

## 3.3 PON

### 3.3.1 Information

#### OLT Configuration □ PON □ Information

This user interface is used to displays parameters of PON port, such as PON module port current temperature, Voltage, current, transmit power.



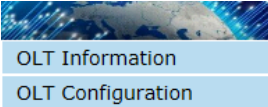
The screenshot shows the PON Information page in the OLT web interface. On the left is a navigation menu with various configuration options. The 'Optical Information' tab is selected, displaying the 'Optical Transceiver' table with data for ports PON1 through PON8.

Port ID	Temperature(Degree)	Voltage(V)	Bias Current(mA)	Transmit Power(dBm)
PON1	0.000	0.000	0.000	0.000
PON2	43.000	3.267	17.432	7.063
PON3	50.270	3.236	14.056	6.002
PON4	51.410	3.269	10.838	3.690
PON5	0.000	0.000	0.000	0.000
PON6	40.805	3.214	14.868	5.202
PON7	0.000	0.000	0.000	0.000
PON8	0.000	0.000	0.000	0.000

Figure3.3-1: PON Information

### 3.3.2 Traffic Statistics

#### OLT Configuration □ PON □ Traffic Statistics



The screenshot shows the Traffic Statistics page in the OLT web interface. The 'Traffic Statistics' tab is selected. Below the navigation menu, there are 'Clear Counters' and 'Refresh' buttons. The main table displays traffic statistics for ports PON1 through PON8, including Rx Packets (Unicast, Broadcast, Multicast), Tx Packets (Unicast, Broadcast, Multicast), Collisions, and Errors.

Interface	Rx Packets			Tx Packets			Collisions	Errors
	Packets	Broadcast	Multicast	Packets	Broadcast	Multicast		
PON1	0	0	0	0	0	0	0	0
PON2	0	0	0	0	0	0	0	0
PON3	0	0	0	0	0	0	0	0
PON4	0	0	0	0	0	0	0	0
PON5	0	0	0	0	0	0	0	0
PON6	0	0	0	0	0	0	0	0
PON7	0	0	0	0	0	0	0	0
PON8	0	0	0	0	0	0	0	0

Figure3.3-2: Traffic Statistics

### 3.3.3 Configuration

#### OLT Configuration □ PON □ Configuration

This user interface is used to configure port status.

Port ID	Admin Status
PON1	<input checked="" type="checkbox"/>
PON2	<input checked="" type="checkbox"/>
PON3	<input checked="" type="checkbox"/>
PON4	<input checked="" type="checkbox"/>
PON5	<input checked="" type="checkbox"/>
PON6	<input checked="" type="checkbox"/>
PON7	<input checked="" type="checkbox"/>
PON8	<input checked="" type="checkbox"/>

Figure3.3-3: PON configuration

For OLT-B Series, this user interface is used to configure rate limit, storm inhibition, port isolation and so on like uplink port.



OLT Information	Optical Information	Traffic Statistics	<b>Configuration</b>	Range	Protection Switch Group
OLT Configuration	<b>PON Configuration</b>				
VLAN	<input type="button" value="Submit"/> <input type="button" value="Refresh"/>				
Uplink Port					
<b>PON</b>					
MAC					
LACP					
QoS					
ACL					
IPv6 ACL					
IGMP					
IPv6 MLD					
STP					
Loopback					
DHCP					
DHCPv6					
IPv6 SLAAC					
IP Route					
IPv6 Route					
ONU Configuration					
Profile Configuration					
System Configuration					

Port ID	Description	Admin Status	Isolate	ONU P2P	Storm(0 64-1000000fps)			Rate(0 64-1000000kbps)	
					Broadcast	Multicast	Unicast	Ingress	Egress
PON1	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON2	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON3	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON4	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON5	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	512	0	512	0	0
PON6	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON7	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0
PON8	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	512	0	512	0	0

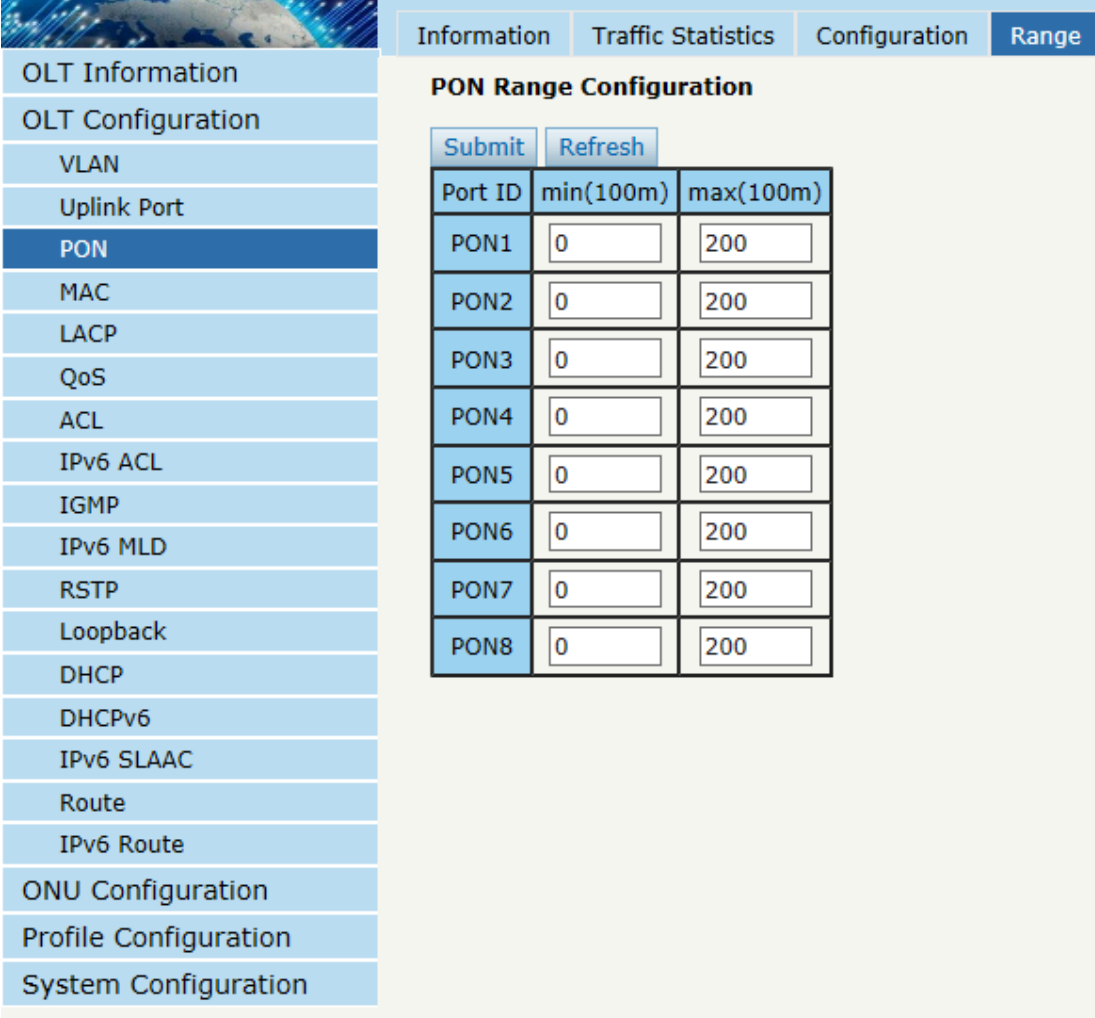
Figure3.3-3-1: OLT-B Series PON configuration

### 3.3.4 Range

#### OLT Configuration □ PON □ Range

When ONU is more than 20km away from OLT, you need to configure PON distance range. The difference between minimum and maximum should not be more than 20km. The unit is 100m.

For example, ONU is 25km away from OLT, the minimum is 50 and the maximum is 250.



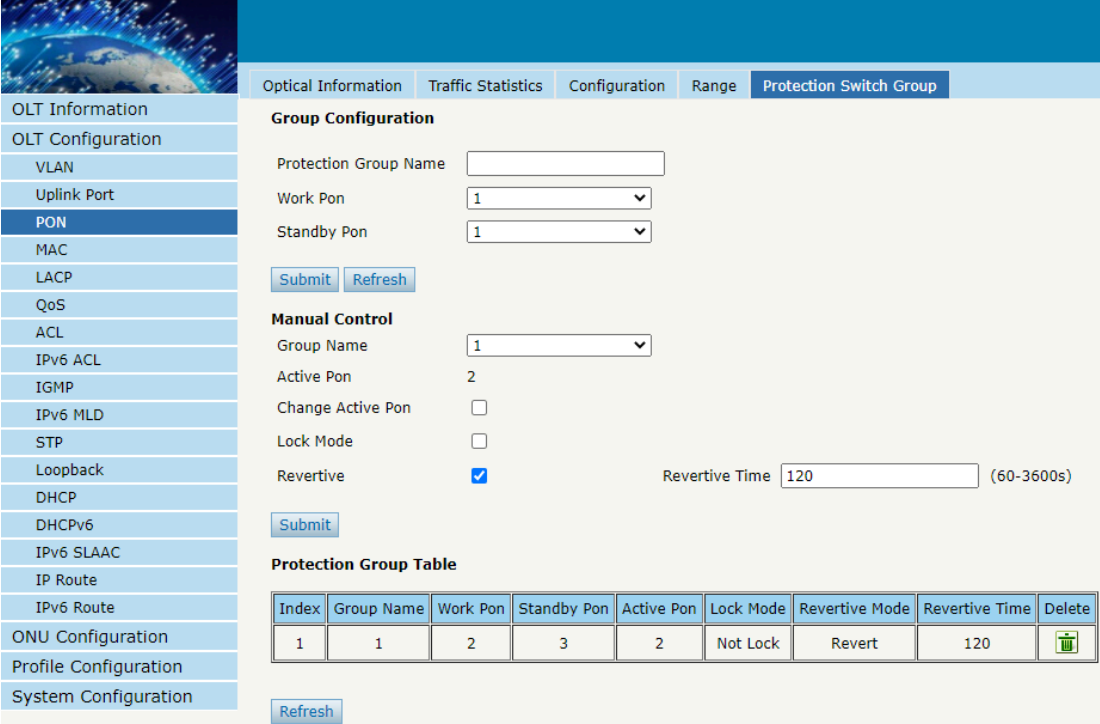
Port ID	min(100m)	max(100m)
PON1	0	200
PON2	0	200
PON3	0	200
PON4	0	200
PON5	0	200
PON6	0	200
PON7	0	200
PON8	0	200

Figure3.3-4: PON Range Configuration

### 3.3.5 Protection Switch Group


#### OLT Configuration □ PON □ Protection Switch Group

This user interface is used to configure PSG parameters base on Type B. You can configure a Work PON and a Standby PON and connect them to a 2: N optical splitter. When the ONU is registered on the work PON, the registration information and PON configuration is synchronized to the Standby Pon. If the Work PON link is faulty, the ONU automatically registers with another PON.



The screenshot displays the 'PON Protection Switch Group Configuration' page in the GPON OLT web interface. The sidebar on the left lists various configuration options, with 'PON' currently selected. The top navigation bar includes tabs for 'Optical Information', 'Traffic Statistics', 'Configuration', 'Range', and 'Protection Switch Group'. The main configuration area is divided into three sections:

- Group Configuration:** Contains fields for 'Protection Group Name' (text input), 'Work Pon' (dropdown menu set to 1), and 'Standby Pon' (dropdown menu set to 1). Below these are 'Submit' and 'Refresh' buttons.
- Manual Control:** Contains a 'Group Name' dropdown menu set to 1, 'Active Pon' set to 2, 'Change Active Pon' (checkbox), 'Lock Mode' (checkbox), and 'Revertive' (checkbox, which is checked). A 'Revertive Time' field is set to 120, with a range of (60-3600s) indicated. A 'Submit' button is located below this section.
- Protection Group Table:** A table displaying the current configuration for the protection group.

Index	Group Name	Work Pon	Standby Pon	Active Pon	Lock Mode	Revertive Mode	Revertive Time	Delete
1	1	2	3	2	Not Lock	Revert	120	

A 'Refresh' button is located at the bottom of the table.

Figure3.3-5: PON Protection Switch Group Configuration

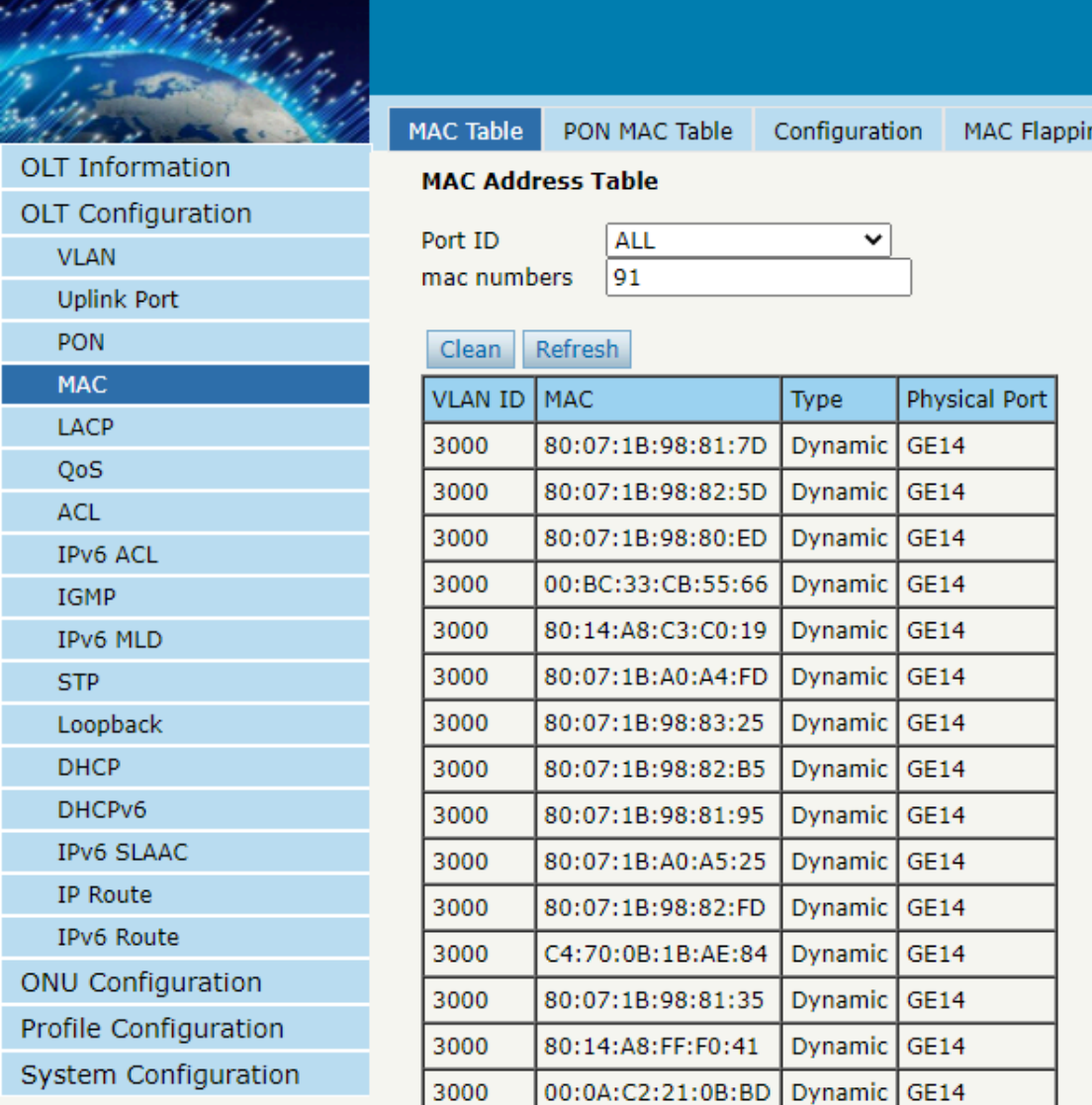
## 3.4 MAC

In this section, you can check MAC address table of OLT, set MAC aging time and add MAC address manually.

### 3.4.1 MAC Table

#### OLT Configuration □ MAC □ MAC Table

This table displays MAC addresses that OLT has learnt at PON ports and GE ports.



**MAC Address Table**

Port ID:

mac numbers:

VLAN ID	MAC	Type	Physical Port
3000	80:07:1B:98:81:7D	Dynamic	GE14
3000	80:07:1B:98:82:5D	Dynamic	GE14
3000	80:07:1B:98:80:ED	Dynamic	GE14
3000	00:BC:33:CB:55:66	Dynamic	GE14
3000	80:14:A8:C3:C0:19	Dynamic	GE14
3000	80:07:1B:A0:A4:FD	Dynamic	GE14
3000	80:07:1B:98:83:25	Dynamic	GE14
3000	80:07:1B:98:82:B5	Dynamic	GE14
3000	80:07:1B:98:81:95	Dynamic	GE14
3000	80:07:1B:A0:A5:25	Dynamic	GE14
3000	80:07:1B:98:82:FD	Dynamic	GE14
3000	C4:70:0B:1B:AE:84	Dynamic	GE14
3000	80:07:1B:98:81:35	Dynamic	GE14
3000	80:14:A8:FF:F0:41	Dynamic	GE14
3000	00:0A:C2:21:0B:BD	Dynamic	GE14

Figure3.4-1: MAC Address Table

### 3.4.2 PON MAC Table

#### OLT Configuration □ MAC □ PON MAC Table

This table displays MAC addresses that OLT has learnt at PON ports.

MAC Table **PON MAC Table** Configuration

**PON MAC Address Table: 0 macs**

Pon ID

Index	VLAN ID	MAC	Type	Pon:Onu	Gemport Index:Id
-------	---------	-----	------	---------	------------------

Figure3.4-2: PON MAC Table

### 3.4.3 Configuration

#### OLT Configuration □ MAC □ Configuration

The default MAC aging time of OLT is 300s, user can change the value between 10~1000000s. Also, user can add MAC address to the OLT manually.

MAC Table	PON MAC Table	Configuration
<b>MAC Aging Configuration</b> Automated Aging: <input type="text" value="Enable"/> Aging Time: <input type="text" value="300"/> (10-1000000s) <input type="button" value="Submit"/>		
<b>Add MAC Address</b> VLAN ID: <input type="text" value="1"/> MAC Address: <input type="text"/> (HH:HH:HH:HH:HH:HH) Type: <input checked="" type="radio"/> Static <input type="radio"/> Dynamic Port ID: <input type="text" value="GE1"/> <input type="button" value="Add"/> <input type="button" value="Delete"/>		

Figure 3.4-1: MAC Configuration

### 3.4.4 MAC Flapping Information

This interface displays information learned on multiple ports for the same MAC if you enable MAC Flapping switch.

MAC Table	PON MAC Table	Configuration	MAC Flapping Information	MAC Flapping Configuration	MAC Flapping Po	
MAC Flapping Information						
MAC Address	VLAN	Source port	Current Port	Begin Time	Last Time	Times
80:07:1B:98:81:4D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:56	2021/07/23 13:26:28	2/0
80:07:1B:98:81:7D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 13:26:28	2/0
80:07:1B:98:81:35	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 13:26:28	2/0
80:07:1B:98:83:7D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 13:26:28	2/0
80:07:1B:98:80:D5	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 11:09:57	1/0
80:07:1B:98:81:15	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 13:26:29	2/0
80:07:1B:98:81:5D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 13:26:29	2/0
80:07:1B:98:82:7D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:57	2021/07/23 11:09:57	1/0
80:07:1B:98:83:0D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:58	2021/07/23 13:26:29	2/0
80:07:1B:98:83:25	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:58	2021/07/23 13:26:30	2/0
80:07:1B:98:81:95	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:58	2021/07/23 13:26:30	2/0
80:07:1B:98:80:E5	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:59	2021/07/23 13:26:30	2/0
80:07:1B:98:82:55	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:59	2021/07/23 13:26:30	2/0
80:07:1B:98:81:3D	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:59	2021/07/23 11:09:59	1/0
80:07:1B:98:81:25	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:59	2021/07/23 13:26:27	2/0
80:07:1B:98:80:FD	3000	GPON 0/1	GE 0/1	2021/07/23 11:09:59	2021/07/23 13:26:30	2/0
80:07:1B:98:82:5D	3000	GPON 0/1	GE 0/1	2021/07/23 11:10:00	2021/07/23 11:10:00	1/0
80:07:1B:98:81:B5	3000	GPON 0/1	GE 0/1	2021/07/23 13:26:27	2021/07/23 13:26:27	1/0
80:07:1B:98:81:05	3000	GPON 0/1	GE 0/1	2021/07/23 13:26:28	2021/07/23 13:26:28	1/0
80:07:1B:98:82:0D	3000	GPON 0/1	GE 0/1	2021/07/23 13:26:28	2021/07/23 13:26:28	1/0

Figure 3.4-4: MAC Flapping Information

### 3.4.5 MAC Flapping Configuration

You can enable MAC Flapping Configuration in this interface.

Figure 3.4-5: MAC Flapping Configuration

### 3.4.6 MAC Flapping Port Configuration

This user interface is used to enable MAC Flapping Configuration for specific port.

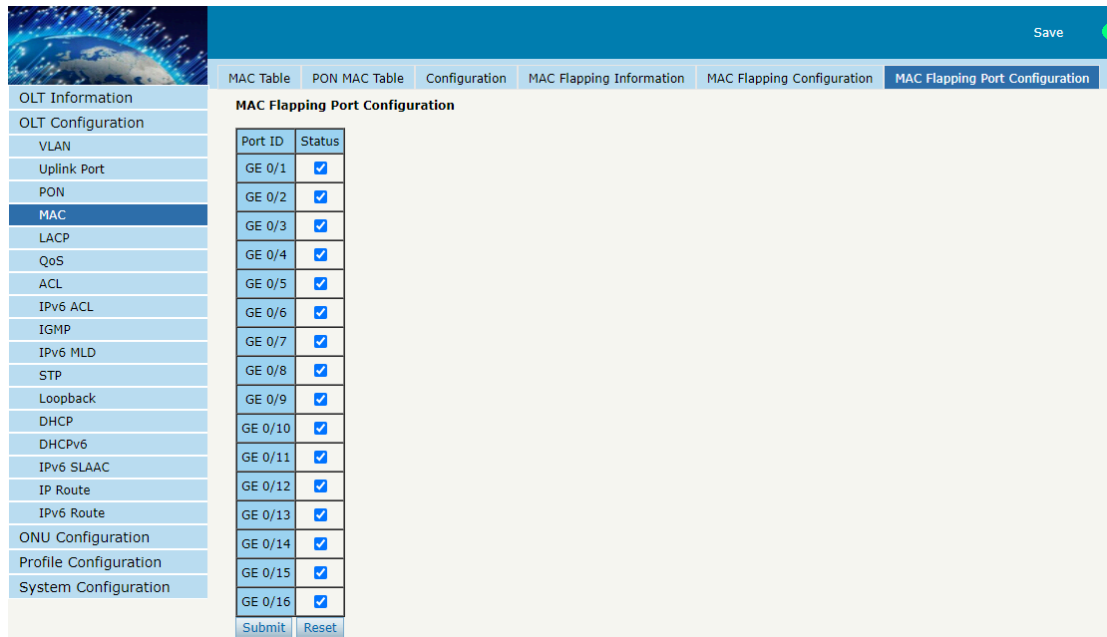


Figure 3.4-6: MAC Flapping Port Configuration

## 3.5 LACP

### 3.5.1 Static LACP

#### OLT Configuration □ LACP □ Static LACP

To assign and configure an uplink physical interface to a channel group, select load balance for LACP function. When a traffic link can't be used suddenly, the traffic link will switch to another link automatically. The group range is from 1 to 4. Each group can add 4 ports maximally. Only GE ports can be added in the channel groups.



**Static LACP**

**Channel Group Configuration**

Channel Group ID:

Load Balance:

Select GE Port: ☐ GE1 ☐ GE2 ☐ GE3 ☐ GE4 ☐ GE5 ☐ GE6 ☒ GE7 ☒ GE8 ☐ GE9 ☐ GE10 ☐ GE11 ☐ GE12 ☐ GE13 ☐ GE14 ☐ GE15 ☐ GE16

**Channel Group Table**

Group ID	Load Balance	Ports	Delete
1	smac	GE7 GE8	

Figure 3.5-1: Create Static LACP

### 3.5.2 Dynamic LACP

#### OLT Configuration □ LACP □ Dynamic LACP

This page displays dynamic LACP information. Only the port which is linkup can be shown in the table. OLT can detect how many devices the uplink ports connected to. If the ports are connected to the same device, they will be in a channel group, otherwise in different channel group.

**Dynamic LACP**

**Dynamic LACP Global Information**

System ID:

**Channel Group Table**

Group ID	Load Balance	Ports
----------	--------------	-------

**Channel Group Port Information**

Channel Group ID:

Actor					Partner				
Port ID	Port Priority	Oper Key	Port Number	Port State	System ID	Port Priority	Oper Key	Port Number	Port State

**Link Aggregation Information**

Port ID	System Priority	Port Priority	Key	Aport	Syn	Col	Dis
---------	-----------------	---------------	-----	-------	-----	-----	-----

Figure 3.5-2: Dynamic LACP Information

## 3.6 QoS

### OLT Configuration □ QOS

When bandwidth is not enough or there is congestion in the network, queue scheduling can make sure high priority data traffic passes through the device firstly. Traffic will map to queues according to their priorities and transmit in the queues.

OLT supports eight queues altogether. Queue scheduling mode includes strict priority (SP), weighted round robin (WRR) and hybrid mode (SP-WRR).

Strict priority scheduling guarantees high priority traffic occupy as much as bandwidth. The lower priority traffics pass though only when there is remaining bandwidth.

QoS Mode	Q0(1-127)	Q1(1-127)	Q2(1-127)	Q3(1-127)	Q4(0-127)	Q5(0-127)	Q6(0-127)	Q7(0-127)
Strict-WRR	1	2	3	10	100	120	127	0

Figure 3.6-1: QOS Configuration

## 3.7 ACL

In order to filter data packages, network equipment need to setup a series of rules for identifying what need to be filtered. Only matched with the rules the data packages can be filtered. ACL can achieve this function. Matched conditions of ACL rules can be source address, destination address, Ethernet type, VLAN, protocol port, and so on. These ACL rules also can be used in other situations, such as classification of stream in QoS. An ACL rule may contain one or several sub-rules, which have different matched conditions.

This device supports the following types of ACL.

### 3.7.1 IP Filter

#### OLT Configuration □ ACL □ IP Filter

The filter is basic on the IP address, including source IP address and destination IP address.

The screenshot displays the 'IP Filter' configuration page. On the left is a sidebar with a tree view containing the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, **ACL**, IPv6 ACL, IGMP, IPv6 MLD, RSTP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, Route, IPv6 Route, ONU Configuration, Profile Configuration, and System Configuration. The 'ACL' item is selected and highlighted in blue.

The main configuration area is titled 'Access List IP Configuration' and includes the following fields:

- Access List ID:** A text input field with a range of (1000-1999).
- Filter Action:** Radio buttons for 'Deny' (selected) and 'Permit'.
- Source IP:** A checkbox, followed by a text input field and a 'Mask' label.
- Source Port:** A checkbox, followed by a text input field and a range of (0-65535).
- Destination IP:** A checkbox, followed by a text input field and a 'Mask' label.
- Destination Port:** A checkbox, followed by a text input field and a range of (0-65535).
- Protocol:** A checkbox, followed by a dropdown menu showing 'TCP' and a range of (0-255).
- DSCP:** A checkbox, followed by a text input field and a range of (0-63).
- Add:** A blue button to add the configuration.

Below the configuration fields is a table titled 'Access Lists Configured' with the following data:

List ID	Source IP	Source Port	Destination IP	Destination Port	Protocol	DSCP	Filter Action	Delete
1000		4/ffff		14/ffff	17/ff	14	Deny	

Figure 3.7-1: IP Filter

### 3.7.2 MAC Filter

#### OLT Configuration □ ACL □ MAC Filter

The filter is basic on the MAC address, including source MAC address and destination MAC address.

**Access List MAC Configuration**

Access List ID:  (2000-2999)

Filter Action: ☒ Deny ☐ Permit

☐ Source MAC:  Mask:  (HH:HH:HH:HH:HH:HH)

☐ Destination MAC:  Mask:  (HH:HH:HH:HH:HH:HH)

☐ VLAN ID:  (1-4094)

☐ VLAN Cos:  (0-7)

☐ Ethernet Type:  (HHHH)

**Access Lists Configured**

List ID	Source MAC	Destination MAC	VLAN ID	Cos	Ethernet Type	Filter Action	Delete
---------	------------	-----------------	---------	-----	---------------	---------------	--------

Figure 3.7-2: MAC Filter

### 3.7.3 IP/MAC Filter

#### OLT Configuration ☐ ACL ☐ IP/MAC Filter

This filter mix the IP address and MAC address, include source MAC address and destination MAC address, source IP address and destination IP address.

**Access List Configuration**

Access List ID:  (5000-5999)

Filter Action: ☒ Deny ☐ Permit

☐ Source MAC:  Mask:  (HH:HH:HH:HH:HH:HH)

☐ Destination MAC:  Mask:  (HH:HH:HH:HH:HH:HH)

☐ VLAN ID:  (1-4094)

☐ VLAN Cos:  (0-7)

☐ Ethernet Type:  (HHHH)

☐ Source IP:  Mask:  (0-255)

☐ Source Port:  (0-65535)

☐ Destination IP:  Mask:  (0-255)

☐ Destination Port:  (0-65535)

☐ Protocol:  (0-255)

☐ DSCP:  (0-63)

**Access Lists Configured**

List ID	Source MAC	Destination MAC	VLAN ID	Cos	Ethernet Type	Source IP	Source Port	Destination IP	Destination Port	Protocol	DSCP	Filter Action	Delete
---------	------------	-----------------	---------	-----	---------------	-----------	-------------	----------------	------------------	----------	------	---------------	--------

Figure 3.7-3: IP/MAC Filter

### 3.7.4 Effect Filter

#### OLT Configuration ☐ ACL ☐ Effect Filter

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

The screenshot displays the 'Effect Filter' configuration page. On the left, a sidebar menu lists various configuration options, with 'ACL' currently selected. The main content area is titled 'Access List Port Configuration'. It features an 'Access List ID' dropdown menu. Below this, the 'Select Port' section contains checkboxes for each port: PON, GE1, GE2, GE3, GE4, GE5, GE6, GE7, GE8, GE9, GE10, GE11, GE12, GE13, GE14, GE15, and GE16. An 'Apply Access List to Port(s)' button is positioned to the right of the port checkboxes. At the bottom, the 'Active Access Lists' section shows a table with two columns: 'Access List ID' and 'Ports'.

Figure 3.7-4: Bind Security Filter

## 3.8 IPv6 ACL

This part is about IPv6 security configuration of OLT. IPv6 ACL can permit or deny data passing or accessing by IPv6 packets.

### 3.8.1 IPv6 Filter

#### OLT Configuration □ IPv6 ACL □ IPv6 Filter

The filter is based on the IPv6 address, including source IPv6 address and destination IPv6 address.

Figure 3.8-1: IPv6 Filter

### 3.8.2 IPv6/MAC Filter

#### OLT Configuration □ IPv6 ACL □ IPv6/MAC Filter

This filter mixes IPv6 address, MAC address and other parameters, including source IPv6 address and destination IPv6 address, source MAC address and destination MAC address, VLAN, Ethernet type, protocol, TCP/UDP port, and so on.

Figure 3.8-2: IPv6/MAC Filter

### 3.8.3 IPv6 Effect Filter

#### OLT Configuration □ IPv6 ACL □ IPv6 Effect Filter

Bind access list to ports so that the ACL rules can take effect. Each access list can be bound to several ports.

The screenshot displays the 'IPv6 Effect Filter' configuration page in the GPON OLT Web User Interface. The left sidebar contains a list of configuration options, with 'IPv6 ACL' highlighted. The main content area is titled 'Access List Port Bind' and includes the following elements:

- Access List ID:** A dropdown menu for selecting an access list.
- Select GE Port:** A row of checkboxes for selecting specific GE ports (GE1 through GE16).
- Select PON Port:** A row of checkboxes for selecting specific PON ports (PON1 through PON8).
- Apply Access List to Port(s):** A button to apply the selected access list to the chosen ports.
- Active Access Lists:** A section with a table header showing 'Access List ID' and 'Ports'.

Figure 3.8-3: Bind IPv6 Security Filter

## 3.9 IGMP

### 3.9.1 Group Member

#### OLT Configuration □ IGMP □ Group Member

When there is a multicast group produced, the group will display in this table.

The screenshot displays the 'IGMP Group Member' configuration page. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IPv6 ACL, **IGMP**, IPv6 MLD, RSTP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, Route, IPv6 Route, ONU Configuration, Profile Configuration, and System Configuration. The 'IGMP' item is highlighted. The main content area has tabs: Group Member (selected), Global, Port, Port User VLAN, Port Mrouter, Mvlan, and Static Group. Below the tabs is the title 'IGMP Group Member' and a 'Refresh' button. A table lists the group members:

Group VLAN ID	IP Address	Port ID	Type	User VLAN ID
233	239.22.2.2	PON1	Static	233

Figure 3.9-1: Group Member

### 3.9.2 Global

#### OLT Configuration □ IGMP □ Global

IGMP basic configuration mainly contains parameters of query packet. When IGMP status is enabled, OLT works at IGMP snooping mode. IGMP snooping is the process of listening to Internet Group Management Protocol (IGMP) network traffic. The feature allows a network switch to "listen in" on the IGMP conversation between hosts and routers. By listening to these conversations, the switch maintains a map of which devices need which IP multicast streams. Multicasts may be filtered from the ports which do not need them and thus controls which ports receive specific multicast traffic. When IGMP status is disabled, OLT works at transparent mode.



	Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
OLT Information							
OLT Configuration							
VLAN							
Uplink Port							
PON							
MAC							
LACP							
QoS							
ACL							
IPv6 ACL							
<b>IGMP</b>							
IPv6 MLD							
RSTP							
Loopback							
DHCP							
DHCPv6							
IPv6 SLAAC							
Route							
IPv6 Route							
ONU Configuration							
Profile Configuration							
System Configuration							

IGMP Configuration	
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 type="radio"/> Disable <input checked="" type="radio"/> Enable
General Query Interval	125 (10-255s)
Query Source IP	1.1.1.1
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 3.9-2: IGMP Global

### 3.9.3 Port

#### OLT Configuration ☐ IGMP ☐ Port

This configuration is used to set the maximum number of multicast groups, filter and fast leave mode.

	Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group																																																																												
OLT Information	<b>IGMP Port Configuration</b>																																																																																		
OLT Configuration	<input type="button" value="Submit"/> <input type="button" value="Reset"/>																																																																																		
VLAN	<table border="1"> <thead> <tr> <th>Port ID</th> <th>Fast Leave</th> <th>Filter</th> <th>Group Limit(0-1024)</th> </tr> </thead> <tbody> <tr><td>GE1</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE2</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE3</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE4</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE5</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE6</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE7</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE8</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE9</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE10</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE11</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE12</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE13</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE14</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE15</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>GE16</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>PON1</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> <tr><td>PON2</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>1024</td></tr> </tbody> </table>							Port ID	Fast Leave	Filter	Group Limit(0-1024)	GE1	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE2	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE3	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE4	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE5	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE6	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE7	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE8	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE9	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE10	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE11	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE12	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE13	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE14	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE15	<input type="checkbox"/>	<input type="checkbox"/>	1024	GE16	<input type="checkbox"/>	<input type="checkbox"/>	1024	PON1	<input type="checkbox"/>	<input type="checkbox"/>	1024	PON2	<input type="checkbox"/>	<input type="checkbox"/>	1024
Port ID	Fast Leave	Filter	Group Limit(0-1024)																																																																																
GE1	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
GE2	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
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GE9	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
GE10	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
GE11	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
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GE15	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
GE16	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
PON1	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
PON2	<input type="checkbox"/>	<input type="checkbox"/>	1024																																																																																
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PON																																																																																			
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LACP																																																																																			
Static LACP																																																																																			
Dynamic LACP																																																																																			
QoS																																																																																			
ACL																																																																																			
IPv6 ACL																																																																																			
IGMP																																																																																			
IPv6 MLD																																																																																			
RSTP																																																																																			
Loopback																																																																																			
DHCP																																																																																			
DHCPv6																																																																																			
IPv6 SLAAC																																																																																			
Route																																																																																			
IPv6 Route																																																																																			
ONU Configuration																																																																																			
Profile Configuration																																																																																			
System Configuration																																																																																			

Figure 3.9-3: IGMP Port

### 3.9.4 Port User VLAN

#### OLT Configuration ☐ IGMP ☐ Port User VLAN

This configuration is used to configure IGMP VLAN for OLT. Generally, PON ports should be configured, and user VLAN and group VLAN are the same. If user VLAN and group VLAN are different, multicast VLAN will be translated.

Port ID	User VLAN ID	Group VLAN ID	Delete
PON1	233	233	

Figure 3.9-4: IGMP Port User VLAN

### 3.9.5 Port Mrouter

#### OLT Configuration □ IGMP □ Port Mrouter

Multicast router port is used to transmit IGMP signal messages. Generally, OLT uplink ports should be set as multicast router ports.

Group Member Global Port Port User VLAN **Port Mrouter** Mvlan Static Group

**Add Multicast Router**

Port ID

Group VLAN ID

**Multicast Router Table**

Port ID	Group VLAN ID	Delete
GE11	233	

Figure 3.9-5: IGMP Port Mroute

### 3.9.6 Mvlan

#### OLT Configuration ☐ IGMP ☐ Mvlan

This configuration is used to configure multicast VLAN and its mode. No Mvlan configuration is required for V1600G-B Series.

IGMP mode	Unknown multicast	Igmp packet
Snooping	drop	trap -to -cpu
Disable(transparent)	forward	forward

	Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
OLT Information							
OLT Configuration							
VLAN							
Uplink Port							
PON							
MAC							
LACP							
QoS							
ACL							
IPv6 ACL							
<b>IGMP</b>							
IPv6 MLD							
RSTP							
Loopback							
DHCP							
DHCPv6							
IPv6 SLAAC							
Route							
IPv6 Route							
ONU Configuration							
Profile Configuration							
System Configuration							

**IP Igmp Mvlan Info**

Multicast vlan	Unknown multicast	Igmp packet
----------------	-------------------	-------------

  
**Add/Modify Mvlan**

Mvlan ID(1~4094)	<input type="text"/>
Unknown multicast	<input type="text" value="drop"/>
Igmp packet	<input type="text" value="trap-to-cpu"/>
<input type="button" value="Add/Modify"/>	

Figure 3.9-6: IGMP MVLAN

### 3.9.7 Static Group

#### OLT Configuration □ IGMP □ Static Group

This configuration is used to bind multicast IP address and VLAN ID.

	Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
OLT Information							
OLT Configuration							
VLAN							
Uplink Port							
PON							
MAC							
LACP							
QoS							
ACL							
IPv6 ACL							
<b>IGMP</b>							
IPv6 MLD							
RSTP							
Loopback							
DHCP							
DHCPv6							
IPv6 SLAAC							
Route							
IPv6 Route							
ONU Configuration							
Profile Configuration							
System Configuration							

**Add Static Group**

Port ID	<input type="text" value="PON1"/>
IP Address	<input type="text"/>
User VLAN ID	<input type="text" value="1"/>
<input type="button" value="Add"/>	

  
**Static Group Table**

Port ID	IP Address	User VLAN ID	Delete
PON1	239.22.2.2	233	<input type="button" value="Delete"/>

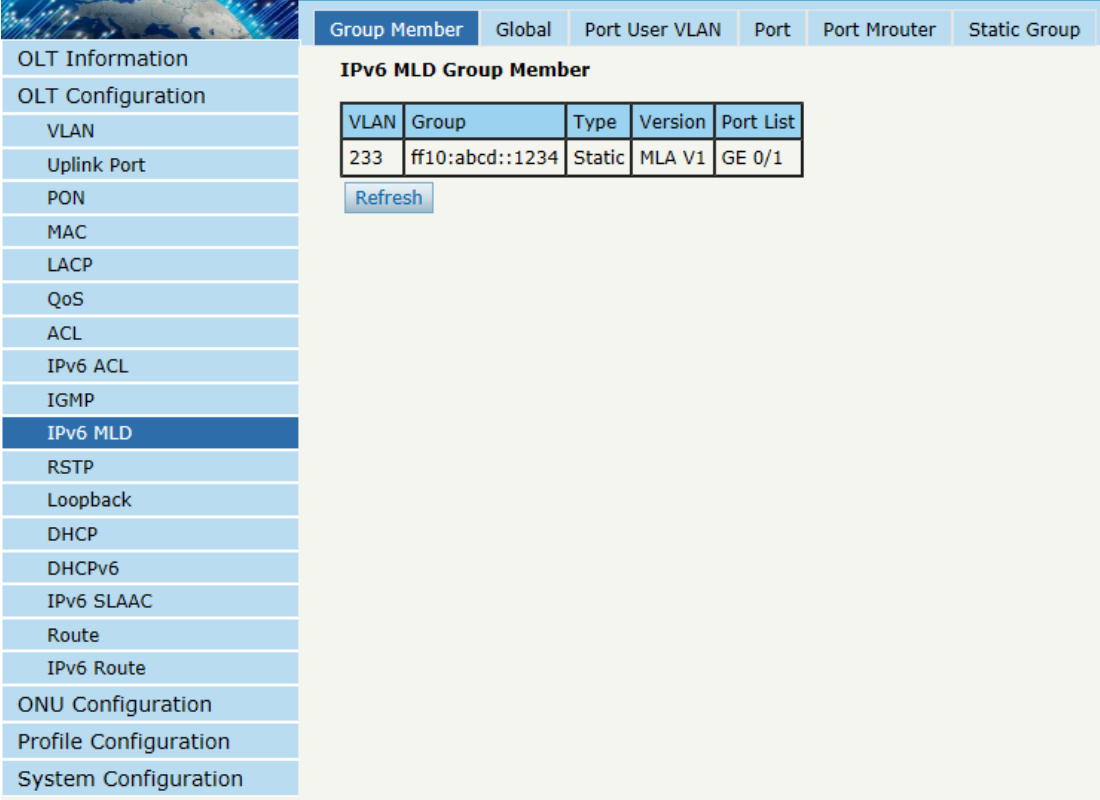
Figure 3.9-7: IGMP Static Group

## 3.10 IPv6 MLD

### 3.10.1 Group Member

#### OLT Configuration ☐ IPv6 MLD ☐ Group Member

This page displays IPv6 multicast group member ports.



The screenshot displays the 'IPv6 MLD Group Member' configuration page. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IPv6 ACL, IGMP, **IPv6 MLD**, RSTP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, Route, IPv6 Route, ONU Configuration, Profile Configuration, and System Configuration. The 'IPv6 MLD' item is highlighted. The main content area has a top navigation bar with tabs: Group Member (selected), Global, Port User VLAN, Port, Port Mrouter, and Static Group. Below the tabs, the title 'IPv6 MLD Group Member' is shown. A table lists the group members:

VLAN	Group	Type	Version	Port List
233	ff10:abcd::1234	Static	MLA V1	GE 0/1

Below the table is a 'Refresh' button.

Figure 3.10-1: IPv6 MLD Group Member

### 3.10.2 Global

#### OLT Configuration ☐ IPv6 MLD ☐ Global

This page is used to enable IPv6 MLD and set IPv6 MLD related parameters.

	Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
OLT Information	<b>IPv6 MLD Configuration</b>  MLD Status: <input type="text" value="Enable"/> MLDv2 Status: <input type="text" value="Disable"/> Query interval: <input type="text" value="125"/> (1-255s) Query response interval: <input type="text" value="10"/> (1-3600s) Robustness variable: <input type="text" value="2"/> (1-3) Last listener query count: <input type="text" value="2"/> (1-7) Last listener query interval: <input type="text" value="1"/> (1-255s) Send general query packet: <input type="radio"/> Disable <input checked="" type="radio"/> Enable General query interval: <input type="text" value="125"/> (10-3600s) Query Source IP: <input type="text" value="fe80::1"/> <input type="button" value="Submit"/> <input type="button" value="Reset"/>					
OLT Configuration						
VLAN						
Uplink Port						
PON						
MAC						
LACP						
QoS						
ACL						
IPv6 ACL						
IGMP						
<b>IPv6 MLD</b>						
RSTP						
Loopback						
DHCP						
DHCPv6						
IPv6 SLAAC						
Route						
IPv6 Route						
ONU Configuration						
Profile Configuration						
System Configuration						

Figure 3.10-2: IPv6 MLD Global

### 3.10.3 Port User VLAN

#### OLT Configuration □ IPv6 MLD □ Port User VLAN

This page is used to configure IGMP VLAN for OLT.

The screenshot shows the 'Port User VLAN' configuration page. The left sidebar lists various configuration options, with 'IPv6 MLD' selected. The main content area has tabs for 'Group Member', 'Global', 'Port User VLAN', 'Port', 'Port Mrouter', and 'Static Group'. The 'Port User VLAN' tab is active, displaying 'User VLAN Configuration' with a 'User VLAN ID' dropdown set to '1' and an 'Add' button. Below this is the 'User VLAN Table' with a table containing one row with 'User VLAN ID' 233 and a 'Delete' button. A 'Refresh' button is also present.

Figure 3.10-3: IPv6 Port User VLAN

### 3.10.4 Port

#### OLT Configuration □ IPv6 MLD □ Port

This page is used to configure group limit value, fast leave for each port.



	Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
OLT Information						
OLT Configuration						
VLAN						
Uplink Port						
PON						
MAC						
LACP						
QoS						
ACL						
IPv6 ACL						
IGMP						
<b>IPv6 MLD</b>						
RSTP						
Loopback						
DHCP						
DHCPv6						
IPv6 SLAAC						
Route						
IPv6 Route						
ONU Configuration						
Profile Configuration						
System Configuration						
	Port ID	Fast Leave	Group Limit(0-256)			
	GE1	<input type="checkbox"/>	256			
	GE2	<input type="checkbox"/>	256			
	GE3	<input type="checkbox"/>	256			
	GE4	<input type="checkbox"/>	256			
	GE5	<input type="checkbox"/>	256			
	GE6	<input type="checkbox"/>	256			
	GE7	<input type="checkbox"/>	256			
	GE8	<input type="checkbox"/>	256			
	GE9	<input type="checkbox"/>	256			
	GE10	<input type="checkbox"/>	256			
	GE11	<input type="checkbox"/>	256			
	GE12	<input type="checkbox"/>	256			
	GE13	<input type="checkbox"/>	256			
	GE14	<input type="checkbox"/>	256			
	GE15	<input type="checkbox"/>	256			
	GE16	<input type="checkbox"/>	256			
	PON1	<input type="checkbox"/>	256			
	PON2	<input type="checkbox"/>	256			
	PON3	<input type="checkbox"/>	256			
	PON4	<input type="checkbox"/>	256			
	PON5	<input type="checkbox"/>	256			
	PON6	<input type="checkbox"/>	256			
	PON7	<input type="checkbox"/>	256			
	PON8	<input type="checkbox"/>	256			
	Submit		Reset			

Figure 3.10-4: IPv6 MLD Port

### 3.10.5 Port Mrouter

**OLT Configuration** ☐ **IPv6 MLD** ☐ **Port Mrouter**

This page is used to set a port as IPv6 multicast router port.

**Group Member**   **Global**   **Port User VLAN**   **Port**   **Port Mrouter**   **Static Group**

**Add Multicast Router**

Port ID:

Group VLAN ID:

**Multicast Router Table**

Port ID	Group VLAN ID	Type	Delete
GE 0/1	233	static	

Figure 3.10-5: IPv6 MLD Port Mrouter

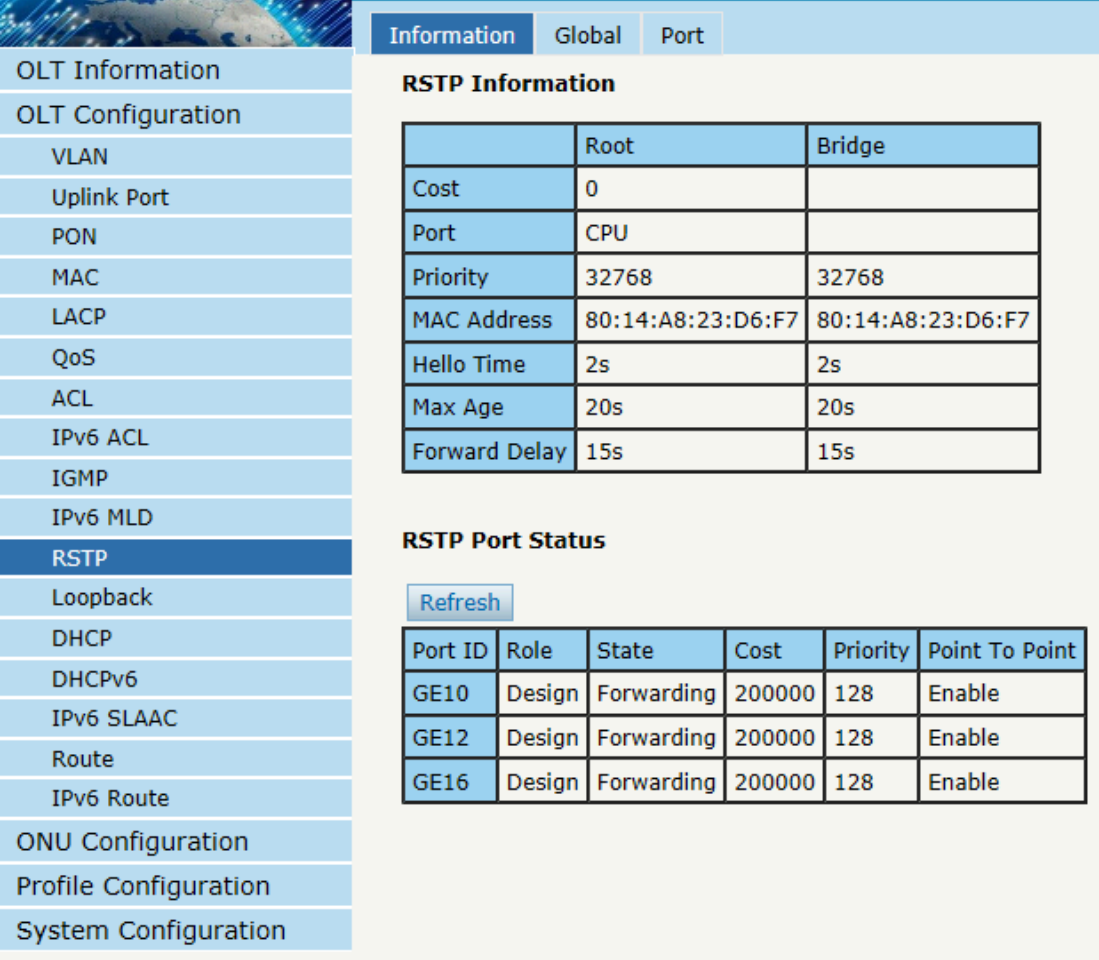
## 3.11 RSTP

Spanning Tree Protocol is layer2 protocol, which is used to eliminate network loop by blocking network redundant links selectively. It has the feature of link backup as well.

### 3.11.1 Information

#### OLT Configuration □ RSTP □ Information

Global information mainly displays RSTP parameters of root bridge device.



**Information** Global Port

**RSTP Information**

	Root	Bridge
Cost	0	
Port	CPU	
Priority	32768	32768
MAC Address	80:14:A8:23:D6:F7	80:14:A8:23:D6:F7
Hello Time	2s	2s
Max Age	20s	20s
Forward Delay	15s	15s

**RSTP Port Status**

[Refresh](#)

Port ID	Role	State	Cost	Priority	Point To Point
GE10	Design	Forwarding	200000	128	Enable
GE12	Design	Forwarding	200000	128	Enable
GE16	Design	Forwarding	200000	128	Enable

Figure 3.11-1: RSTP Information

### 3.11.2 Global

#### OLT Configuration □ RSTP □ Global

This configuration is used to set RSTP parameters of the device, which contains RSTP switch, priority, hello time, max age, forward delay and MAC address.


Information	Global	Port
<b>RSTP Configuration</b>		
RSTP Status	Enable	
Global Priority	32768	(0-61440)
Hello Time	2	(1-10s)
Max Age	20	(6-40s)
Forward Delay	15	(4-30s)
Notice: $2 * (\text{HelloTime} + 1) \leq \text{MaxAge} \leq 2 * (\text{ForwardDelay} - 1)$		
		Submit Reset

Figure 3.11-2: RSTP Global Setup

### 3.11.3 Port

#### OLT Configuration □ RSTP □ Port

This user interface is used to set port RSTP parameters which contain RSTP switch, priority, cost, edge port and p2p port.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

**RSTP**

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information Global **Port**

**RSTP Port Configuration**

Submit Reset

Port ID	Status	Priority (0-255)	Cost (1-200000000)	OperEdge	Point To Point
GE1	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE2	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE3	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE4	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE5	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE6	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE7	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE8	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE9	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE10	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE11	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE12	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE13	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE14	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE15	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GE16	<input checked="" type="checkbox"/>	<input type="text" value="128"/>	<input type="text" value="200000"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 3.11-3: RSTP Port Settings

## 3.12 Loopback

Loopback can detect loop ports and process loop ports.

### 3.12.1 Information

OLT Configuration □ Loopback □ Information

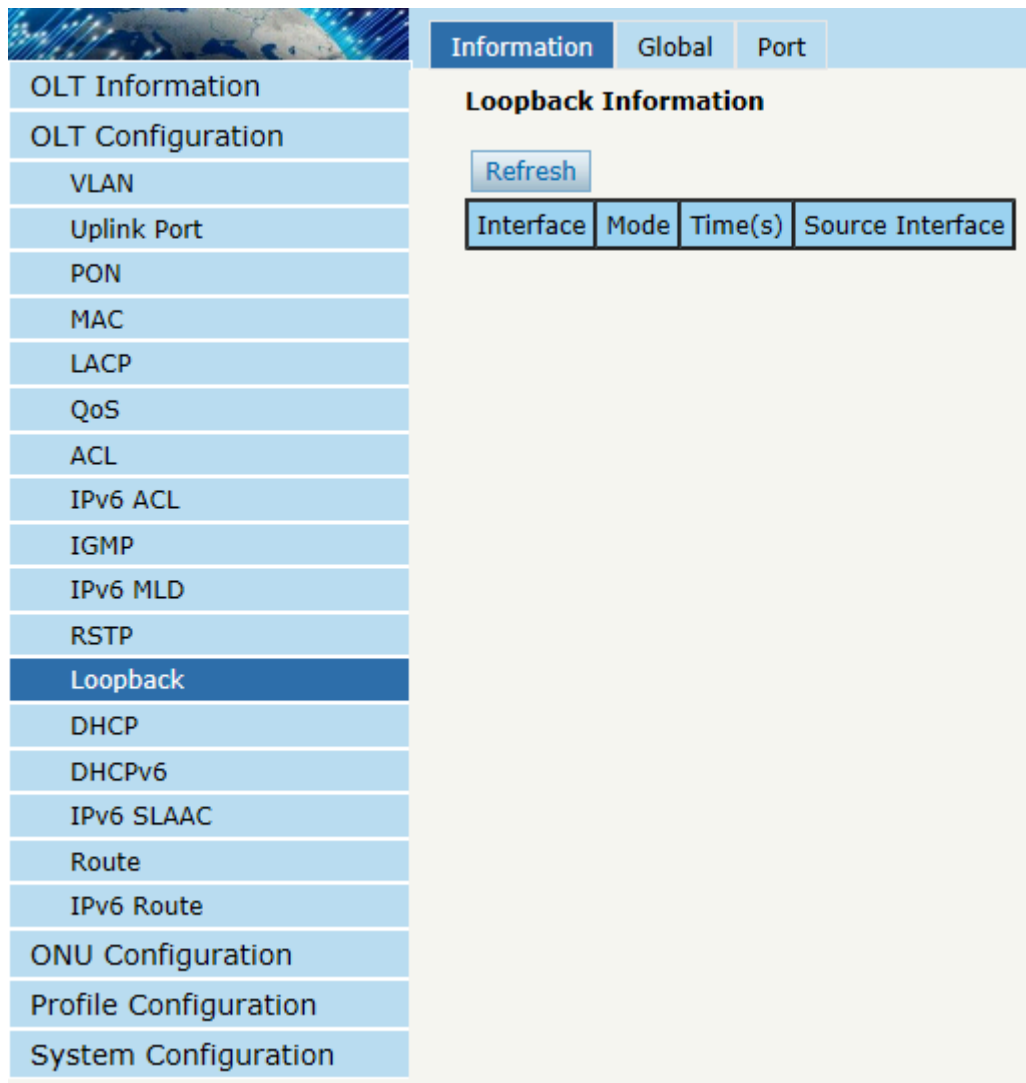


Figure 3.12-1: Loopback Information

### 3.12.2 Global

#### OLT Configuration □ Loopback □ Global

This page is used to enable or disable loopback detect and configure loopback mode, age time.

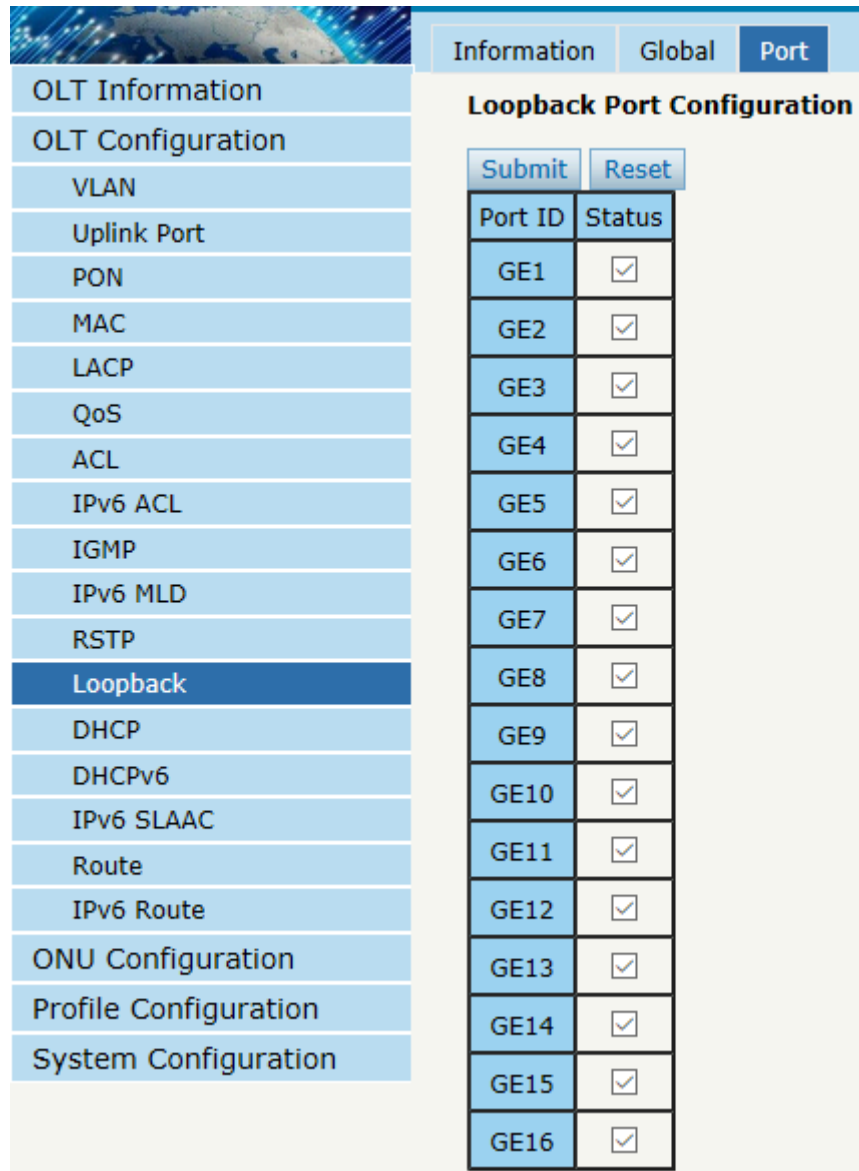
Information	Global	Port
<b>Loopback Configuration</b>		
Status	<input type="text" value="Enable"/>	
Mode	<input type="text" value="auto-recovery"/>	
Age Time	<input type="text" value="60"/>	(30-3600s)
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		

Figure 3.12-2: Loopback Global

### 3.12.3 Port

#### OLT Configuration □ Loopback □ Port

Loopback port configuration is used to specify the port range of loopback function. Loopback will take effect on the port when it is checked.



Information Global <b>Port</b>		
OLT Information OLT Configuration VLAN Uplink Port PON MAC LACP QoS ACL IPv6 ACL IGMP IPv6 MLD RSTP <b>  Loopback</b> DHCP DHCPv6 IPv6 SLAAC Route IPv6 Route ONU Configuration Profile Configuration System Configuration		
<b>Loopback Port Configuration</b>		
Submit Reset		
Port ID	Status	
GE1	<input checked="" type="checkbox"/>	
GE2	<input checked="" type="checkbox"/>	
GE3	<input checked="" type="checkbox"/>	
GE4	<input checked="" type="checkbox"/>	
GE5	<input checked="" type="checkbox"/>	
GE6	<input checked="" type="checkbox"/>	
GE7	<input checked="" type="checkbox"/>	
GE8	<input checked="" type="checkbox"/>	
GE9	<input checked="" type="checkbox"/>	
GE10	<input checked="" type="checkbox"/>	
GE11	<input checked="" type="checkbox"/>	
GE12	<input checked="" type="checkbox"/>	
GE13	<input checked="" type="checkbox"/>	
GE14	<input checked="" type="checkbox"/>	
GE15	<input checked="" type="checkbox"/>	
GE16	<input checked="" type="checkbox"/>	

Figure 3.12-3: Loopback Port

### 3.13 DHCP

OLT can support the following DHCP functions.

- ☐ DHCP Server
- ☐ DHCP Relay
- ☐ DHCP Snooping

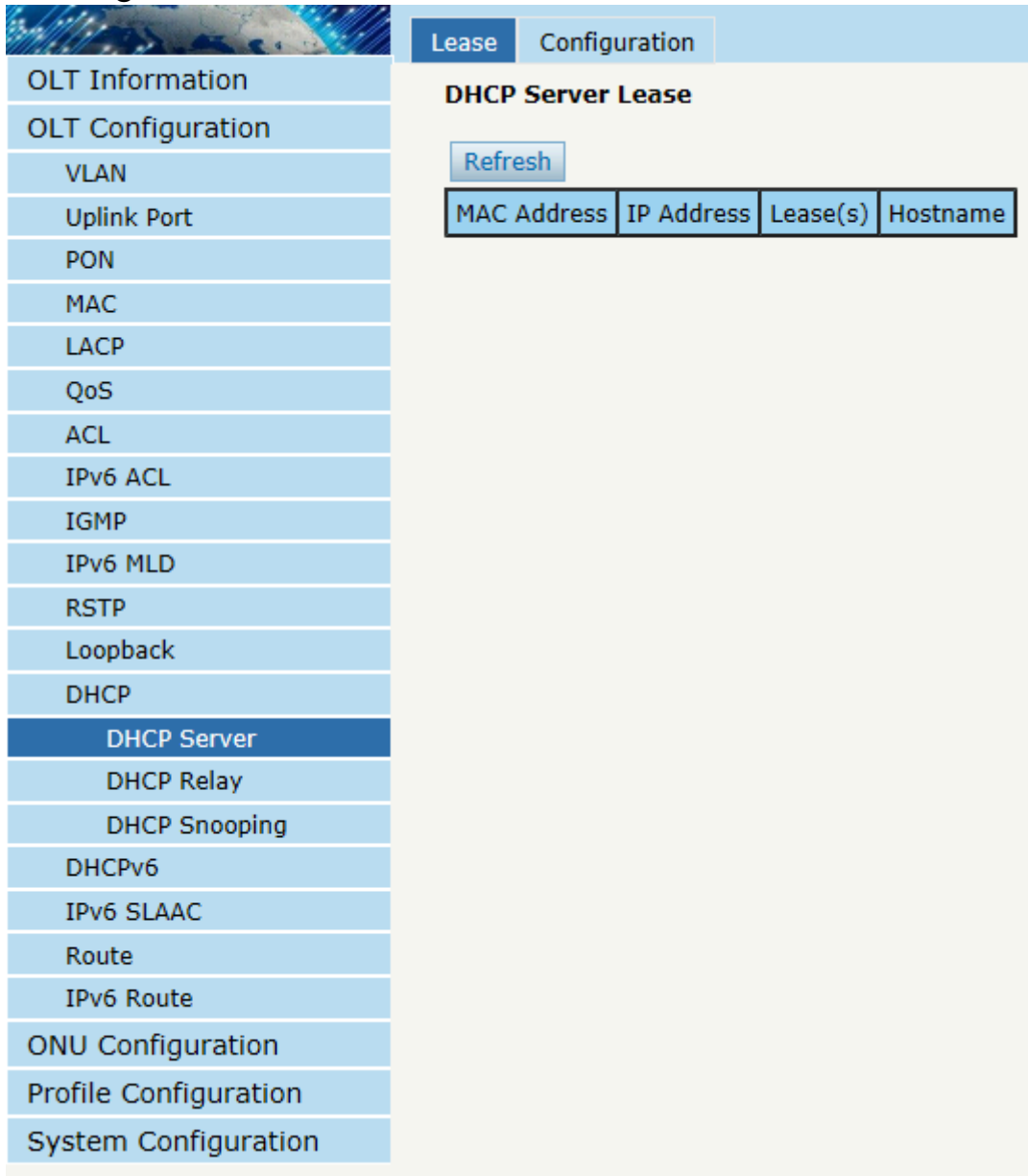


### 3.13.1 DHCP Server

#### 3.13.1.1 DHCP Lease

##### OLT Configuration □ DHCP □ DHCP Server □ Lease

This table displays the MAC addresses, host name and IP addresses, lease time assigned to them.



Lease		Configuration
<b>DHCP Server Lease</b> <a href="#">Refresh</a>		
MAC Address	IP Address	Lease(s)    Hostname

Figure 3.13-1: DHCP Lease

#### 3.13.1.2 DHCP Configuration

##### OLT Configuration □ DHCP □ DHCP Server □ Configuration

Sometimes the devices need dynamic IP addresses, but there is no special DHCP server in network. These configurations can solve the problem. OLT will be a DHCP server in network and assign IP addresses to other devices.

Before enabling DHCP server, you must configure IP address for the VLAN.

Lease		Configuration
<b>DHCP Server Configuration</b>		
DHCP Server	Enable	
VLAN ID	1	
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		
<b>DHCP Server Settings</b>		
Start IP Address	192.168.0.20	
End IP Address	192.168.0.254	
Subnet Mask	0.0.0.0	
Gateway	0.0.0.0	
Static DNS 1	0.0.0.0	
Static DNS 2	0.0.0.0	
Static DNS 3	0.0.0.0	
WINS	0.0.0.0	
Client Lease Time	864000	(60-864000s)
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		

Figure 3.13-2: DHCP Configuration

### 3.13.2 DHCP Relay

#### OLT Configuration □ DHCP □ DHCP Relay

Because the DHCP service exists in one broadcast domain, the server and the client are usually in the same network segment. DHCP relay can solve the issue that DHCP server and client do not exist in the same network segment.

**Configuration**

**Add Relay Server**

Server IP

VLAN ID

**Relay Server Table**

Server IP	VLAN ID	Delete
-----------	---------	--------

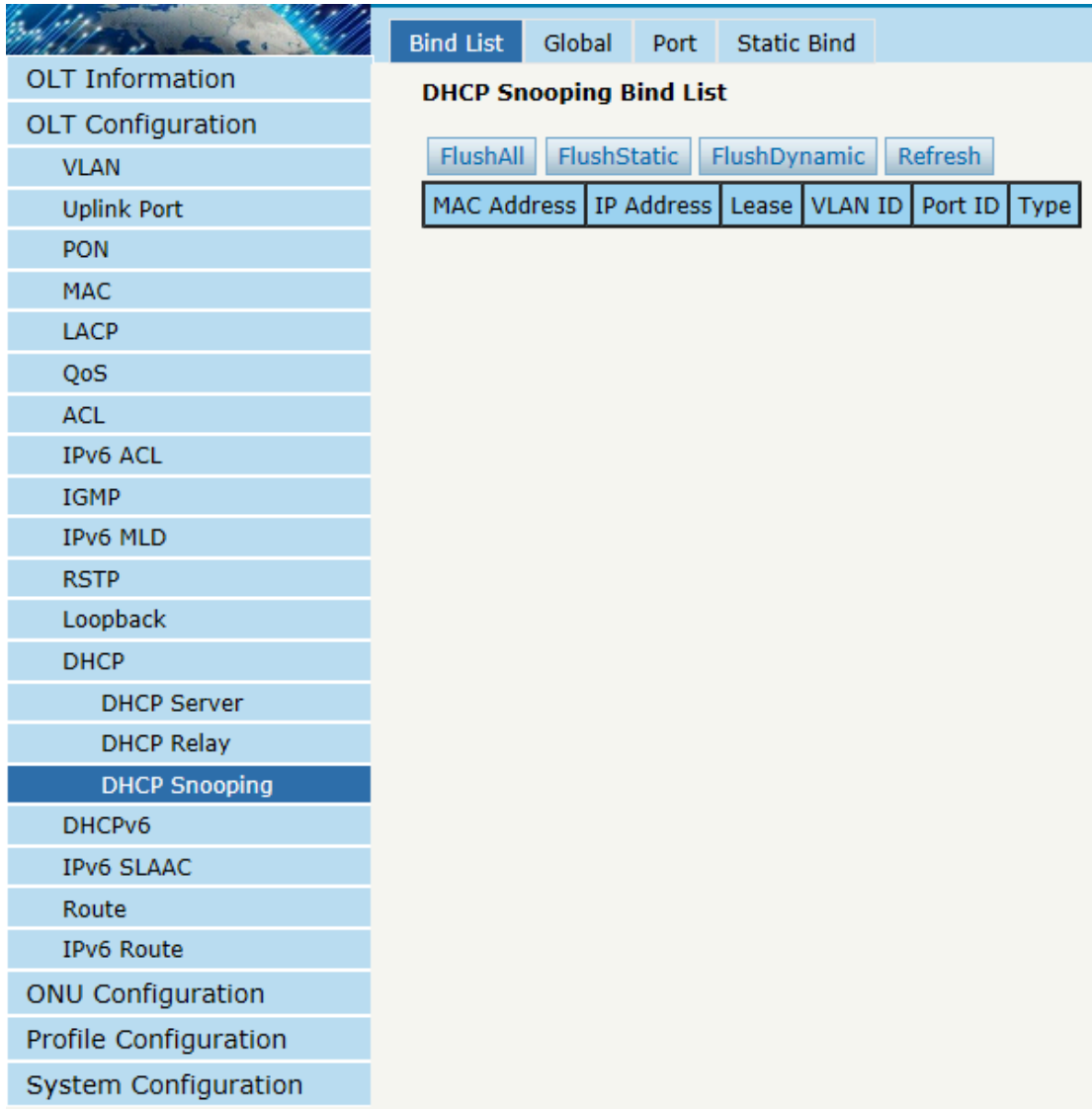
Figure 3.13-3: DHCP Relay Configuration

### 3.13.3 DHCP Snooping

#### 3.13.3.1 Bind List

##### OLT Configuration □ DHCP □ DHCP Snooping □ Bind List

The static bind of the DHCP Snooping will be shown in the table.



The screenshot displays the GPON OLT Web User Interface. On the left is a navigation menu with various configuration options. The main content area is titled 'DHCP Snooping Bind List' and includes several tabs at the top: 'Bind List' (selected), 'Global', 'Port', and 'Static Bind'. Below the tabs are four buttons: 'FlushAll', 'FlushStatic', 'FlushDynamic', and 'Refresh'. A table with six columns is visible: 'MAC Address', 'IP Address', 'Lease', 'VLAN ID', 'Port ID', and 'Type'. The 'DHCP Snooping' option in the left menu is highlighted.

MAC Address	IP Address	Lease	VLAN ID	Port ID	Type
-------------	------------	-------	---------	---------	------

Figure 3.13-4: DHCP Snooping Bind List

### 3.13.3.2 Global

#### OLT Configuration □ DHCP □ DHCP Snooping □ Global

DHCP Snooping is used to prevent the DHCP message attacking and guarantee network to get a correct IP address.

DHCP snooping global configuration mainly contains option 82 settings, DHCP traffic rate limit and snooping VLAN.

Bind List	Global	Port	Static Bind		
<b>DHCP Snooping Configuration</b> DHCP Snooping: <span>Enable</span> <span>Submit</span> <span>Reset</span>					
<b>DHCP Snooping Settings</b> Option82 Control: <input checked="" type="radio"/> Disable <input type="radio"/> Enable Option82 Strategy: <input type="radio"/> Drop <input checked="" type="radio"/> Keep <input type="radio"/> Replace <input type="radio"/> Merge Overspeed Recovery: <input type="radio"/> Disable <input checked="" type="radio"/> Enable Overspeed Recovery Interval: <input type="text" value="30"/> (3-3600s) Binding Delete Time: <input type="text" value="300"/> (1-3600s) <span>Submit</span> <span>Reset</span>					
<b>VLAN ID List</b> <table border="1"> <thead> <tr> <th>List</th> </tr> </thead> <tbody> <tr> <td></td> </tr> </tbody> </table> VLAN ID: <span>1</span> <span>Add</span> <span>Delete</span>				List	
List					

Figure 3.13-5: DHCP Snooping Global

### 3.13.3.3 Port

#### OLT Configuration □ DHCP □ DHCP Snooping □ Port

This user interface is used to configure DHCP snooping parameters of ports which contain port type, option 82 parameters and rate limit.

All the ports are untrust ports by default. Option82 parameters, “Option 82 Circuit ID” and “Option 82 Remote ID”, are effective for untrust ports. “Limit Rate” is the ports’ max speed of receiving DHCP packets.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCP Server

DHCP Relay

**DHCP Snooping**

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Bind List

Global

**Port**

Static Bind

**DHCP Snooping Port Configuration**

Submit Reset

Port ID	Type	Option82 Circuit ID	Option82 Remote ID	Limit Rate(0-4096pps)
GE1	Untrust			0
GE2	Untrust			0
GE3	Untrust			0
GE4	Untrust			0
GE5	Untrust			0
GE6	Untrust			0
GE7	Untrust			0
GE8	Untrust			0
GE9	Untrust			0
GE10	Untrust			0
GE11	Untrust			0
GE12	Untrust			0
GE13	Untrust			0
GE14	Untrust			0
GE15	Untrust			0
GE16	Untrust			0
PON	Untrust			0

Figure 3.13-6: DHCP Snooping Port Setup

### 3.13.3.4 Static Bind

#### OLT Configuration □ DHCP □ DHCP Snooping □ Static Bind

DHCP snooping binding is useful when a host needs a fixed IP address assigned by DHCP server from the specific port.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCP Server

DHCP Relay

**DHCP Snooping**

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Bind List Global Port **Static Bind**

**Add DHCP Snooping Bind**

MAC Address  (HH:HH:HH:HH:HH:HH)

VLAN ID

IP Address

Port ID

Lease  (60-1000000s)

Add

Figure 3.13-7: DHCP Snooping Static Bind

### 3.13.3.5 IP Source Guard

Only GPON OLT-B Series supports this feature.

#### OLT Configuration □ DHCP □ DHCP Snooping □ IP Source Guard

This function is actually based on the DHCP Snooping Bind List to restrict access to the external network. That means that an issue outside the list cannot access the external network.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

Bind List Global Port IP Source Bind **IP Source Guard** Static Bind

**IP Source Guard Configuration**

Port ID

FilterType

Filtered VLAN ID

submit reset

**IP Source Table**

Interface	FilterType	FilterMode	IP Address	MAC Address	Filtered VLAN ID
PON5	MAC	Active	192.168.22.177	B4:F9:49:00:00:09	100

Figure 3.13-8: DHCP Snooping IP Source Guard

### 3.13.3.6 IP Source Bind

Only GPON OLT-B Series supports this feature.

#### OLT Configuration □ DHCP □ DHCP Snooping □ IP Source Bind

If you configure a rule in IP Source Guard, a dynamic rule is displayed in IP Source Bind Table. You can add a static rule manually on this page. It works as described in the previous section.

OLT Information	Bind List	Global	Port	IP Source Bind	IP Source Guard	Static Bind																		
OLT Configuration	IP Source Bind Configuration																							
VLAN	VLAN ID <input type="text"/>																							
Uplink Port	Port ID <input type="text"/>																							
PON	IP Address <input type="text"/> mask <input type="text"/>																							
MAC	MAC Address <input type="text"/> (HH:HH:HH:HH:HH:HH)																							
LACP	<input type="button" value="submit"/> <input type="button" value="reset"/>																							
QoS	IP Source Bind Table																							
ACL	<table border="1"> <thead> <tr> <th>MAC Address</th> <th>IP Address</th> <th>Type</th> <th>VLAN ID</th> <th>Interface</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>B4:F9:49:00:00:09</td> <td>192.168.22.177/32</td> <td>Dynamic</td> <td>100</td> <td>PON5</td> <td></td> </tr> <tr> <td>36:33:33:33:33:B1</td> <td>192.168.77.63/24</td> <td>Static</td> <td>100</td> <td>PON5</td> <td></td> </tr> </tbody> </table>						MAC Address	IP Address	Type	VLAN ID	Interface	Delete	B4:F9:49:00:00:09	192.168.22.177/32	Dynamic	100	PON5		36:33:33:33:33:B1	192.168.77.63/24	Static	100	PON5	
MAC Address	IP Address	Type	VLAN ID	Interface	Delete																			
B4:F9:49:00:00:09	192.168.22.177/32	Dynamic	100	PON5																				
36:33:33:33:33:B1	192.168.77.63/24	Static	100	PON5																				
IPv6 ACL																								
IGMP																								
IPv6 MLD																								
STP																								
Loopback																								
DHCP																								
DHCP Server																								
DHCP Relay																								
DHCP Snooping																								
DHCPv6																								

Figure 3.13-9: DHCP Snooping IP Source Bind

## 3.14 DHCPv6

### 3.14.1 DHCPv6 Server

DHCPv6 is a network protocol that used to configure IPv6 address, IPv6 prefix, DNS, domain and other network parameters for a host which operating on an IPv6 network.

#### 3.14.1.1 DHCPv6 Bind Information

#### OLT Configuration □ DHCPv6 □ DHCPv6 Server □ DHCPv6 Bind Information

DHCPv6 bind information displays IPv6 addresses which have been assigned to hosts.





Figure 3.14-1: DHCPv6 Bind Information

### 3.14.1.2 DHCPv6 Server Enable

#### OLT Configuration □ DHCPv6 □ DHCPv6 Server □ DHCPv6 Server Enable

Select VLAN and fill in DHCPv6 pool name, enable DHCPv6 server, then the VLAN will be added into the table. Before enabled DHCPv6 server, VLAN IPv6 address and server pool are required.

DHCPv6 Bind Information			DHCPv6 Server Enable	Server Pool Configuration
<b>DHCPv6 Server Configuration</b>				
DHCPv6 Server		Disable		
VLAN ID		1		
Pool Name				
		Submit Reset		
<b>DHCPv6 Interface Information</b>				
VLAN ID	Using Pool			
3000	test			
		Refresh		

Figure 3.14-2: DHCPv6 Server

### 3.14.1.3 Server Pool Configuration

#### OLT Configuration □ DHCPv6 □ DHCPv6 Server □ Server Pool Configuration

DHCPv6 pool specifies the range of assigned IPv6 address. Life time, DNS and domain also can be specified here for DHCPv6 client.

**DHCPv6 Server Pool Setting**

Pool Name:

Start IPv6 Address:

End IPv6 Address:

Valid LifeTime:  (60-4294967295)s

Preferred LifeTime:  (60-4294967295)s (Valid lifetime must be large than Preferred lifetime)

DNS Server:

Domain Name:

**DHCPv6 Server Pool**

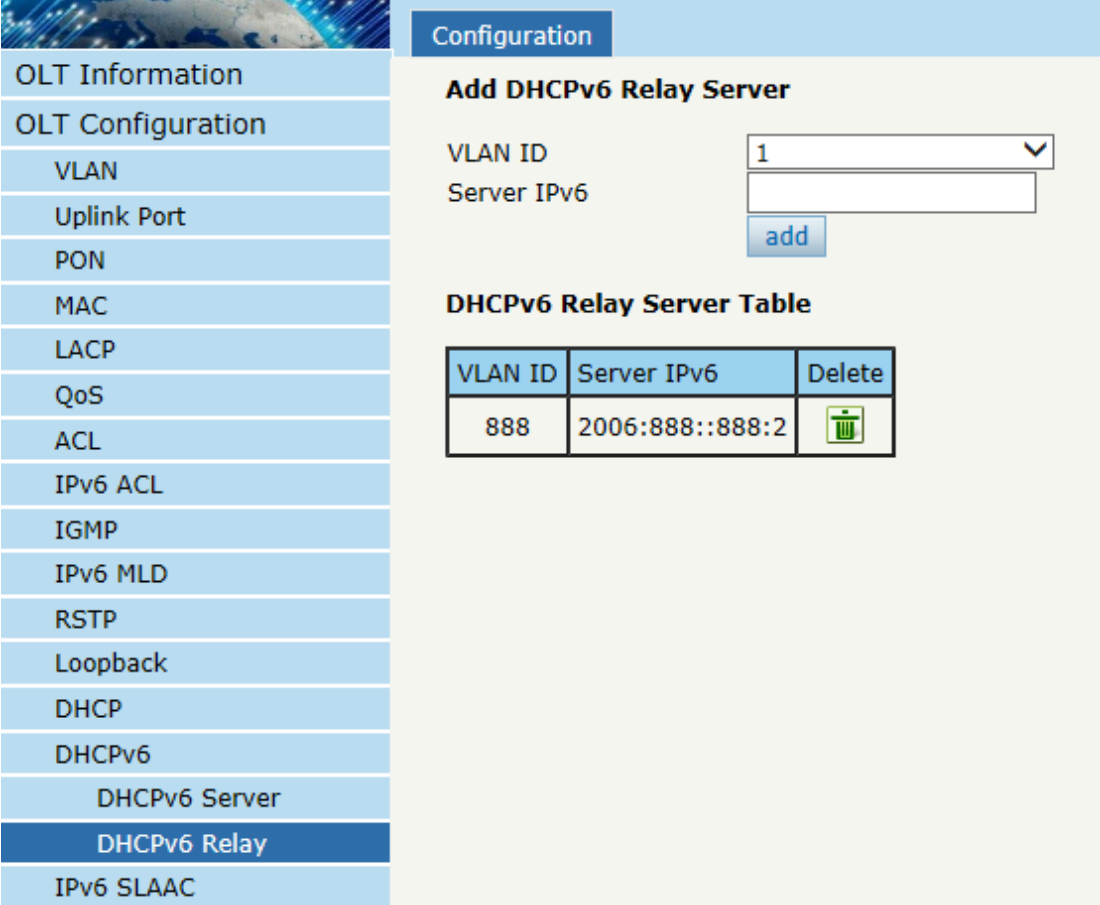
Pool Name	Start IPv6 Address	End IPv6 Address	Valid LifeTime	Preferred LifeTime	DNS Server	Domain Name	Edit	Delete
test	2222:abcd::ef:1111/64	2222:abcd::ef:3333/64	600	500	2222:abcd::ef:1111	test.com		
					2222:abcd::ef:1			

Figure 3.14-3: DHCPv6 Pool

### 3.14.2 DHCPv6 Relay

#### OLT Configuration □ DHCPv6 □ DHCPv6 Relay □ Configuration

During the process of obtaining the IPv6 address/prefix and other network configuration parameters dynamically through the DHCPv6 relay, the DHCPv6 client and the DHCPv6 server are processed in the same way as when the DHCPv6 relay is not processed.



**Configuration**

**Add DHCPv6 Relay Server**

VLAN ID

Server IPv6

**DHCPv6 Relay Server Table**


VLAN ID	Server IPv6	Delete
888	2006:888::888:2	

Figure 3.14-4: DHCPv6 Relay

## 3.15 IPv6 SLAAC

IPv6 network uses the ICMPv6 route discovery protocol. When an IPv6 host connects to the network for the first time, it automatically configures it according to the information got by route discovery/prefix discovery. Route discovery/prefix discovery is that when a host is connected to IPv6 network, it can discover local router and obtain neighbor information, prefix of current network and other configuration parameters from route advertisement (RA) packets.

### 3.15.1 IPv6 SLAAC

#### OLT Configuration □ IPv6 SLAAC □ IPv6 SLAAC

When IPv6 host use SLAAC (Stateless Address AutoConfiguration), OLT will send a route advertisement (RA) packet to it. This page is used to configure parameters of the route advertisement packet.

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000ms)	Suppress RDNSS	M	O	Router Preference	MTU (1280-1500)
3000	<input checked="" type="checkbox"/>	200	600	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEDIUM	1500

Figure 3.15-1: IPv6 SLAAC

### 3.15.2 IPv6 SLAAC Prefix

#### OLT Configuration □ IPv6 SLAAC □ IPv6 SLAAC Prefix

When IPv6 host uses stateless address auto configuration, OLT can provide IPv6 prefix. The host will generate an IPv6 address with the prefix.

VLAN ID	ND Prefix	Valid LifeTime	Preferred LifeTime	Delete
1				

Figure 3.15-2: IPv6 SLAAC Prefix

### 3.15.3 RDNSS

#### OLT Configuration □ IPv6 SLAAC □ RDNSS

OLT will send the route advertisement packet with the DNS parameters

you configured.

The screenshot displays the RDNSS configuration interface. On the left, a navigation menu lists various OLT settings, with 'IPv6 SLAAC' currently selected. The main panel features three tabs: 'IPv6 SLAAC', 'IPv6 SLAAC Prefix', and 'RDNSS'. The 'RDNSS' tab is active, showing the 'RDNSS Configuration' section. This section contains input fields for 'VLAN ID' (set to 1), 'Sequence', 'Lifetime' (set to 600), and 'DNS Server'. A red notice indicates that the lifetime must be at least equal to 3 times the sent RA time. 'Submit' and 'Reset' buttons are provided for saving or clearing the configuration. Below the configuration fields is an 'RDNSS Table' with columns for 'VLAN ID', 'Sequence', 'DNS Server' (repeated three times), 'Lifetime', and 'Delete'. A 'Refresh' button is located below the table.

Figure 3.15-3: RDNSS

## 3.16 Route

### 3.16.1 IP

#### 3.16.1.1 VLAN IP

##### OLT Configuration □ Route □ IP □ VLAN IP

This configuration is used to configure IP address for VLAN. When the VLAN is added to a port, you can access OLT by the IP address from the port.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

**IP**

Static Route

VLAN IP

ARP Proxy

### VLAN IP Configuration

VLAN ID ▼

IP Address ▼

Subnet Mask ▼

Submit

Reset

### VLAN IP Table

VLAN ID	IP Address	Subnet Mask	Delete
3000	192.168.6.182	255.255.255.0	

Figure 3.16-1: VLAN IP

### 3.16.1.2 ARP Proxy

ARP Proxy is a technique by which a device on a given network answers the ARP queries for a network address that is not on that network. The ARP Proxy is aware of the location of the traffic's destination, and offers its own MAC address as (ostensibly final) destination. The "captured" traffic is then typically routed by the Proxy to the intended destination via another interface or via a tunnel.

The process which results in the node responding with its own MAC address to an ARP request for a different IP address for proxying purposes is sometimes referred to as 'publishing'. V1600G-B Series OLT does not support ARP Proxy.

**OLT Configuration □ Route □ IP □ ARP Proxy**

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

**IP**

Static Route

VLAN IP

**ARP Proxy**

ARP Proxy Configuration

VLAN ID

1

ARP Proxy

☒ Disable
 ☐ Enable

Submit

ARP Proxy Table

VLAN ID	ARP Proxy Status
1	disable
2	disable
888	disable
3000	disable
4000	disable

Figure 3.16-2: ARP proxy configuration

### 3.16.2 Static Route


Static route is a form of routing that a router uses a manually-configured routing entry. In many cases, static routes are manually configured by a network administrator. Unlike dynamic routing, static routes are fixed and do not change if the network is changed or reconfigured.

The OLT only supports static route. After configured VLAN IP address, add static routes to make the network on the different network segment communicate with each other.

**OLT Configuration** □ **Route** □ **Static Route**

68 / 145





OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IP

**Static Route**

RIP

Static Route

Add Static Route

Destination IP

Destination Mask

Gateway

Add

Static Route Table


Destination IP	Destination Mask	Gateway	Delete
0.0.0.0	0.0.0.0	192.168.6.1	

Figure 3.16-3: Static Route

### 3.16.3 RIP

RIP (Routing Information Protocol) is a simple internal gateway protocol, which is based on the D-V algorithm and uses hop count to represent metric. The hop count is the number of routers that a datagram must pass through. RIP only support maximum 15 hops; hence it is fit for a small network.

#### 3.16.3.1 RIP Information

**OLT Configuration** □ **Route** □ **RIP** □ **RIP Information**

This page displays RIP information.

	RIP Information	RIP Enable	RIP Route Networking	RIP Redistribute	RIP Interface																								
OLT Information	<div> <div>RIP Route Table</div> <table border="1"> <thead> <tr> <th>Route Type</th> <th>Network</th> <th>Next Hop</th> <th>Metric</th> <th>From</th> <th>Tag</th> <th>Time</th> </tr> </thead> <tbody> <tr><td colspan="7"></td></tr> </tbody> </table> <div>Routing Information Sources</div> <table border="1"> <thead> <tr> <th>Gateway</th> <th>BadPackets</th> <th>BadRoutes</th> <th>Distance</th> <th>Last Update</th> </tr> </thead> <tbody> <tr><td colspan="5"></td></tr> </tbody> </table> <div>refresh</div> </div>					Route Type	Network	Next Hop	Metric	From	Tag	Time								Gateway	BadPackets	BadRoutes	Distance	Last Update					
Route Type						Network	Next Hop	Metric	From	Tag	Time																		
Gateway						BadPackets	BadRoutes	Distance	Last Update																				
OLT Configuration																													
VLAN																													
Uplink Port																													
PON																													
MAC																													
LACP																													
QoS																													
ACL																													
IPv6 ACL																													
IGMP																													
IPv6 MLD																													
RSTP																													
Loopback																													
DHCP																													
DHCPv6																													
IPv6 SLAAC																													
Route																													
IP																													
Static Route																													
<b>RIP</b>																													
OSPF																													

Figure 3.16-4: RIP Information

### 3.16.3.2 RIP Enable

#### OLT Configuration □ Route □ RIP □ RIP Enable

Enable RIP protocol and configure RIP parameters.

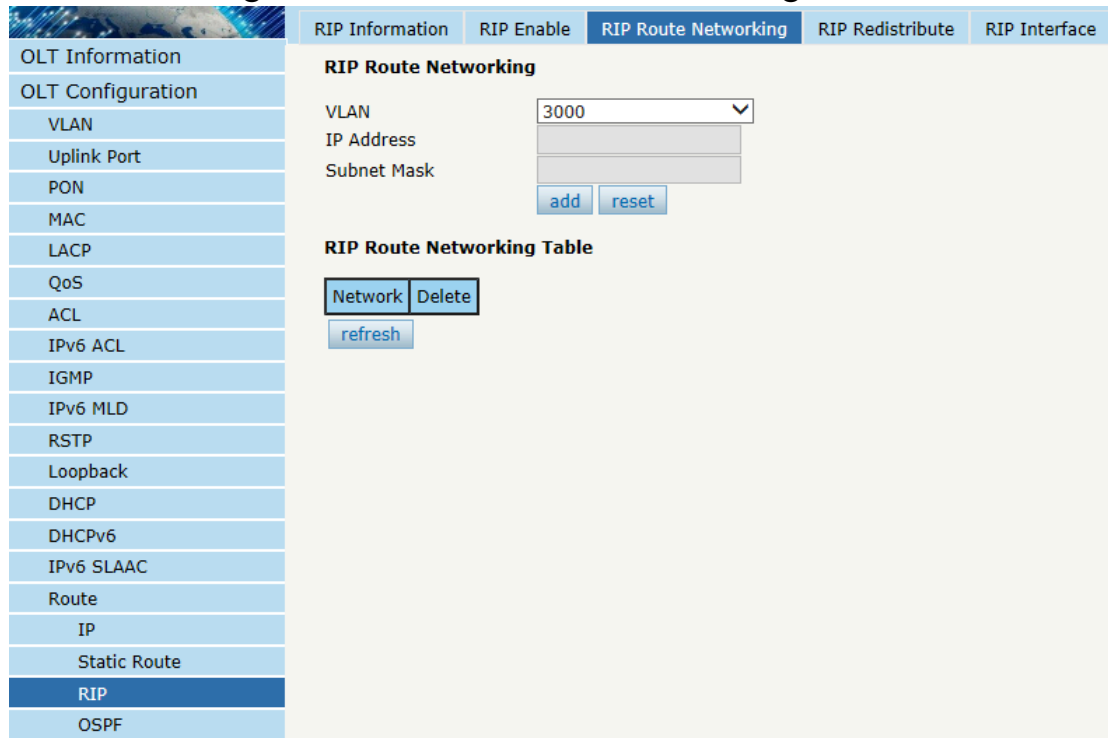
	RIP Information	RIP Enable	RIP Route Networking	RIP Redistribute	RIP Interface
OLT Information	<div> <div>RIP Enable Configuration</div> <div> <div>RIP Route</div> <div>Disable</div> <div>▼</div> </div> <div> <div>RIP Version</div> <div></div> <div>▼</div> </div> <div> <div>Update Time</div> <div>30</div> <div>(5-2147483647s)</div> </div> <div> <div>Timeout Time</div> <div>180</div> <div>(5-2147483647s)</div> </div> <div> <div>Garbage Time</div> <div>120</div> <div>(5-2147483647s)</div> </div> <div> <div>Default Metric</div> <div>1</div> <div>(1-16)</div> </div> <div> <div>Distance</div> <div>120</div> <div>(1-255)</div> </div> <div> <div>submit</div> <div>reset</div> </div> <div>Bases</div> </div>				
OLT Configuration					
VLAN					
Uplink Port					
PON					
MAC					
LACP					
QoS					
ACL					
IPv6 ACL					
IGMP					
IPv6 MLD					
RSTP					
Loopback					
DHCP					
DHCPv6					
IPv6 SLAAC					
Route					
IP					
Static Route					
<b>RIP</b>					
OSPF					

Figure 3.16-5: RIP Enable

### 3.16.3.3 RIP Route Networking

#### OLT Configuration □ Route □ RIP □ RIP Route Networking

This page is used to add RIP route networking. VLAN IP address must be set before adding the VLAN to RIP route networking table.



The screenshot shows the 'RIP Route Networking' configuration page. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, RSTP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, Route, IP, Static Route, **RIP**, and OSPF. The 'RIP' item is highlighted. The main content area has tabs for 'RIP Information', 'RIP Enable', 'RIP Route Networking' (selected), 'RIP Redistribute', and 'RIP Interface'. Under the 'RIP Route Networking' tab, there is a section titled 'RIP Route Networking' with fields for 'VLAN' (set to 3000), 'IP Address', and 'Subnet Mask'. Below these fields are 'add' and 'reset' buttons. Another section titled 'RIP Route Networking Table' contains 'Network' and 'Delete' buttons, and a 'refresh' button below them.

Figure 3.16-6: RIP Route Networking

### 3.16.3.4 RIP Redistribute

#### OLT Configuration □ Route □ RIP □ RIP Redistribute.

This page is used to enable or disable route redistribute and choose redistribute mode.

The screenshot displays the 'RIP Redistribute' configuration page. On the left, a navigation menu lists various OLT configuration options, with 'RIP' currently selected. The main configuration area is divided into five tabs: 'RIP Information', 'RIP Enable', 'RIP Route Networking', 'RIP Redistribute' (the active tab), and 'RIP Interface'. Under the active tab, there are three main sections: 'Default Route Redistribute' with a dropdown set to 'Disable' and 'submit/reset' buttons; 'Redistribute' with a dropdown set to 'Kernel', a metric input field (0-16), and 'add/reset' buttons; and 'Redistribute Table' which contains a table with columns 'Redistribute Type', 'Metric', and 'Delete', and a 'refresh' button below it.

Figure 3.16-7: RIP Redistribute

### 3.16.3.5 RIP Interface

#### OLT Configuration □ Route □ RIP □ RIP Interface

This page is used to configure RIP interface and its authentication type. VLAN IP address must be set before configuring RIP interface. And auth chain should be set on page **Key Chain**, refer to section 3.16.5.

**RIP Interface Configuration**

VLAN:

IP Address:

Subnet Mask:

Send Version:

Recv Version:

Authentication:

**RIP Interface Table**

Interface	Network	Send Version	Recv Version	Authentication
<input type="button" value="refresh"/>				

Figure 3.16-8: RIP Interface

### 3.16.4 OSPF

OSPF (Open Shortest Path First) is an internal gateway protocol based on link state routing protocol. This protocol uses the Dijkstra algorithm to calculate the shortest path to each network, and performs the algorithm to quickly converge to the new loop-free topology when detecting changes in the link (such as link failure).

#### 3.16.4.1 OSPF Information

##### OLT Configuration □ Route □ OSPF □ OSPF Information

This page displays OSPF information, including neighbor information and OSPF routing information.

Figure3.16-9: OSPF Information

### 3.16.4.2 OSPF Enable

#### OLT Configuration ☐ Route ☐ OSPF ☐ OSPF Enable

This page is used to enable OSPF. Fill in route ID and let it blank, enable OSPF. OLT will use the biggest IP address as route ID if it's blank.

	OSPF Information	OSPF Enable	OSPF Route Networking	OSPF Area Type	OSPF Area Summary	OSPF Redistribute	OSPF Interface
OLT Information	<b>OSPF Enable Configuration</b>						
OLT Configuration	OSPF Route <input type="text" value="Enable"/>						
VLAN	Router ID <input type="text" value="192.168.6.182"/>						
Uplink Port	<input type="button" value="submit"/> <input type="button" value="reset"/>						
PON							
MAC							
LACP							
QoS							
ACL							
IPv6 ACL							
IGMP							
IPv6 MLD							
RSTP							
Loopback							
DHCP							
DHCPv6							
IPv6 SLAAC							
Route							
IP							
Static Route							
RIP							
OSPF							

Figure 3.16-10: OSPF Enable

### 3.16.4.3 OSPF Route Networking

#### OLT Configuration ☐ Route ☐ OSPF ☐ OSPF Route Networking

This page is used to configure area number for VLAN where OSPF protocol is operating.

The screenshot shows the 'OSPF Route Networking' configuration page. On the left is a navigation menu with options like OLT Information, VLAN, Uplink Port, and OSPF. The main content area has tabs for OSPF Information, OSPF Enable, OSPF Route Networking (selected), OSPF Area Type, OSPF Area Summary, OSPF Redistribute, and OSPF Interface.

**OSPF Route Networking**

Area:   
 VLAN:   
 IP Address:   
 Subnet Mask:

**OSPF Route Networking Table**

Area	Network	Delete
0.0.0.0	192.168.6.182/24	

Figure 3.16-11: OSPF Route Networking

### 3.16.4.4 OSPF Area Type

#### OLT Configuration □ Route □ OSPF □ OSPF Area Type

This page is used to configure area type. Backbone area will not display on this page.

The screenshot shows the 'OSPF Area Type' configuration page. The navigation menu and tabs are similar to the previous page, but the 'OSPF Area Type' tab is selected.

**OSPF Area Type Configuration**

Area:   
 Area Type:   
 No Summary:

**OSPF Area Type Table**

Area	Type	No Summary	Delete
------	------	------------	--------

Figure 3.16-12: OSPF Area Type

### 3.16.4.5 OSPF Area Summary

#### OLT Configuration □ Route □ OSPF □ OSPF Area Summary

This page is used to configure area IP address summary.

Figure 3.16-13: OSPF Area Summary

### 3.16.4.6 OSPF Redistribute

The router can use route redistribution to broadcast the OSPF routing it learns through another routing protocol so that several routing protocols can cooperate with each other in a network.

#### OLT Configuration □ Route □ OSPF □ OSPF Redistribute

Figure 3.16-14: OSPF Redistribute

### 3.16.4.7 OSPF Interface

#### OLT Configuration □ Route □ OSPF □ OSPF Interface

This page is used to OSPF interface parameters such as cost, time, priority, authentication, and so on.



The screenshot displays the OSPF Interface configuration page. The sidebar on the left lists various configuration options, with 'OSPF' selected at the bottom. The main area is divided into two sections: 'OSPF Interface Configuration' and 'OSPF Interface Table'.

**OSPF Interface Configuration**

VLAN: 3000 [Advance](#)

IP Address:

Subnet Mask:

Authentication: Disable [submit](#) [reset](#)

**OSPF Interface Table**

VLAN	Network	Cost	Priority	Retransmit Interval	Transmit Delay	Hello Interval	Dead Interval	Authentication
3000	192.168.6.182/24	1	1	5	1	10	40	


[refresh](#)

Figure 3.16-15: OSPF Interface

### 3.16.5 Key Chain

Key management is a method of controlling the authentication key used by routing protocols. The authentication key is available for EIGRP and RIP version 2. To manage the authentication key needs a key chain. Each key has its own key identifier, which is stored locally. The combination of the key identifier and the interface associated with the message uniquely identifies the authentication algorithm and MD5 authentication key in use.

**OLT Configuration** ☐ **Route** ☐ **Key Chain**

 OLT Information  
 OLT Configuration  
   VLAN  
   Uplink Port  
   PON  
   MAC  
   LACP  
   QoS  
   ACL  
   IPv6 ACL  
   IGMP  
   IPv6 MLD  
   RSTP  
   Loopback  
   DHCP  
   DHCPv6  
   IPv6 SLAAC  
   Route  
     IP  
       Static Route  
     RIP  
     OSPF  
   **Key Chain**

Key Chain

Add Key Chain

Key Chain

Key ID

Key String

add

reset

Key Chain Table

Key Chain	Key ID	Key String	Edit	Delete
refresh				

Figure 3.16-16: Key Chain

### 3.16.6 Route Table

#### OLT Configuration □ Route □ Route Table

This page displays routing items of OLT.


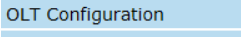
 OLT Information  OLT Configuration VLAN Uplink Port PON MAC LACP QoS ACL IPv6 ACL IGMP IPv6 MLD RSTP Loopback DHCP DHCPv6 IPv6 SLAAC Route IP Static Route RIP OSPF Key Chain Route Table	Route Table																											
	Route Types: K - kernel route, C - connected, S - static, R - RIP, O - OSPF, > - selected route, * - FIB route <b>Route Table</b> <table> <tr> <th>Route Type</th><th>Network</th><th>Distance</th><th>Metric</th><th>Interface</th><th>Time</th></tr> <tr> <td>S&gt;*</td><td>0.0.0.0/0</td><td>1</td><td>0</td><td>via 192.168.6.1, ethv0.3000</td><td></td></tr> <tr> <td>O</td><td>192.168.6.0/24</td><td>110</td><td>1</td><td>directly connected, ethv0.3000</td><td>00:05:57</td></tr> <tr> <td>C&gt;*</td><td>192.168.6.0/24</td><td></td><td></td><td>directly connected, ethv0.3000</td><td></td></tr> </table> <a href="#">refresh</a>					Route Type	Network	Distance	Metric	Interface	Time	S>*	0.0.0.0/0	1	0	via 192.168.6.1, ethv0.3000		O	192.168.6.0/24	110	1	directly connected, ethv0.3000	00:05:57	C>*	192.168.6.0/24			directly connected, ethv0.3000
Route Type	Network	Distance	Metric	Interface	Time																							
S>*	0.0.0.0/0	1	0	via 192.168.6.1, ethv0.3000																								
O	192.168.6.0/24	110	1	directly connected, ethv0.3000	00:05:57																							
C>*	192.168.6.0/24			directly connected, ethv0.3000																								

Figure 3.16-17: Route Table

## 3.17 IPv6 Route

### 3.17.1 IPv6

#### OLT Configuration ☐ IPv6 Route ☐ IPv6 ☐ VLAN IPv6

Configure IPv6 address for VLAN that has been created.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

**IPv6**

IPv6 Static Route

IPv6 Route Table

ONU Configuration

Profile Configuration

System Configuration

VLAN IPv6

### VLAN IPv6 Configuration

VLAN ID

IPv6 Address

Prefixlen

### VLAN IPv6 Table

VLAN ID	IPv6 Address	Prefixlen	Delete
10	fe80::a:8214:a8ff:fe23:d6f7		
	2222:1234::1	64	
888	fe80::378:8214:a8ff:fe23:d6f7		
	2206:abcd:888::888:2	64	
999	fe80::3e7:8214:a8ff:fe23:d6f7		
3000	fe80::bb8:8214:a8ff:fe23:d6f7		
	2206:abcd:ef::30:3	64	
4000	fe80::fa0:8214:a8ff:fe23:d6f7		
	2206:abcd:4000::40:3	64	

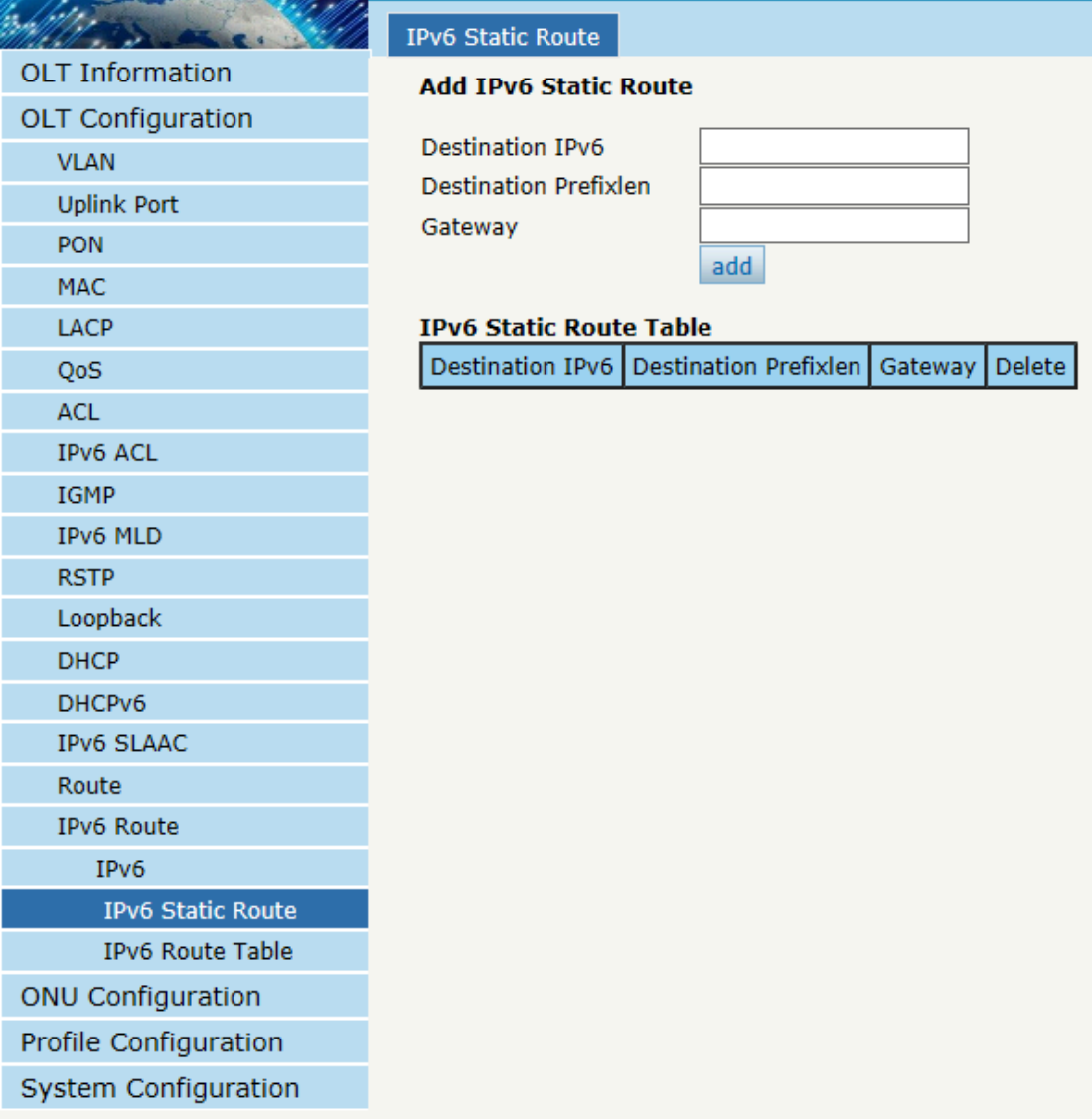
Figure 3.17-1: VLAN IPv6

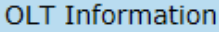
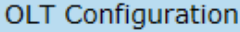

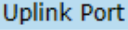





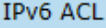

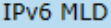

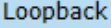


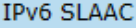

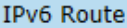

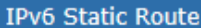
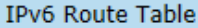
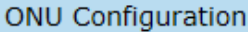
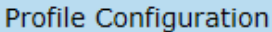
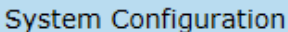
### 3.17.2 IPv6 Static Route

Static route is added manually. It will not change even the situation and network topology has been changed.

**OLT Configuration** □ **IPv6 Route** □ **IPv6 Static Route**

Add IPv6 static route item one by one.



### IPv6 Static Route

#### Add IPv6 Static Route

Destination IPv6

Destination Prefixlen

Gateway

add

#### IPv6 Static Route Table


Destination IPv6	Destination Prefixlen	Gateway	Delete
------------------	-----------------------	---------	--------

Figure 3.17-2: IPv6 Static Route

### 3.17.3 IPv6 Route Table

#### OLT Configuration □ IPv6 Route □ IPv6 Route Table

This table displays all IPv6 route items of the device, including static route and dynamic route.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

IPv6

IPv6 Static Route

IPv6 Route Table

ONU Configuration

Profile Configuration

System Configuration

IPv6 Route Table

Route Types: K - kernel route, C - connected, S - static, R - RIPng, O - OSPFv6, > - selected route, \* - FIB route  
**IPv6 Route Table**

Route Type	Network	Distance	Metric	Interface	Time
C>*	::/1			directly connected, ethv0.10	
C>*	2206:abcd:ef::/64			directly connected, ethv0.3000	
C>*	2206:abcd:888::/64			directly connected, ethv0.888	
C>*	2206:abcd:4000::/64			directly connected, ethv0.4000	
C>*	2222:1234::/64			directly connected, ethv0.10	
K>*	ff00::/8			directly connected, ethv0.888	

Refresh

Figure 3.17-3: IPv6 Route Table

## Chapter 4 ONU Configuration

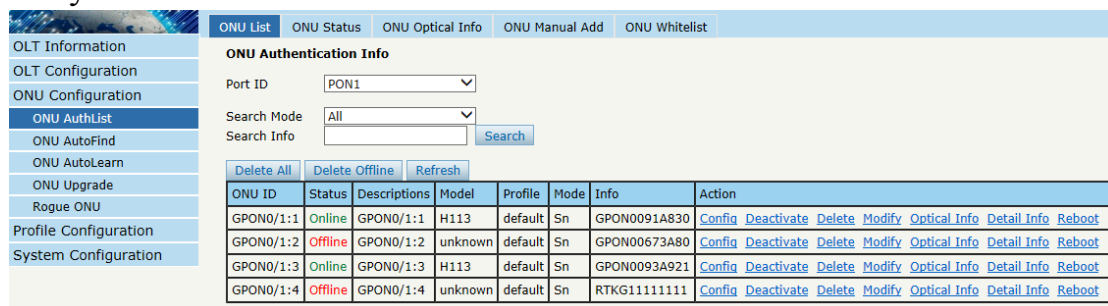
This chapter is about the ONU management by OLT.

### 4.1 ONU AuthList

#### 4.1.1 ONU List

##### ONU Configuration □ ONU AuthList □ ONU List

Select PON port ID, all ONUs will be displayed in this interface. You can check ONU using profile, Registration mode and do some operations to every ONU.



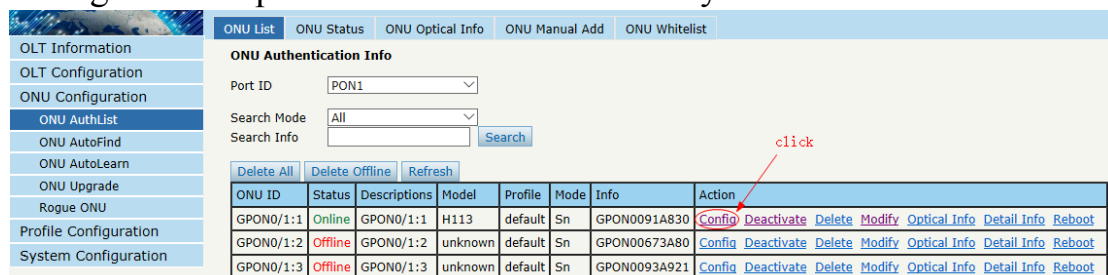
ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Online	GPON0/1:3	H113	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:4	Offline	GPON0/1:4	unknown	default	Sn	RTKG11111111	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4.1-1: ONU List

#### 4.1.1.1 Config

##### ONU Configuration □ ONU AuthList □ ONU List □ Config

Configure ONU parameter information which you selected.



ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4.1-2: Configure ONU

#### 4.1.1.1.1 Tcont

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ Tcont

Create tcont ID and bind DBA profile. Tcont name is optional.

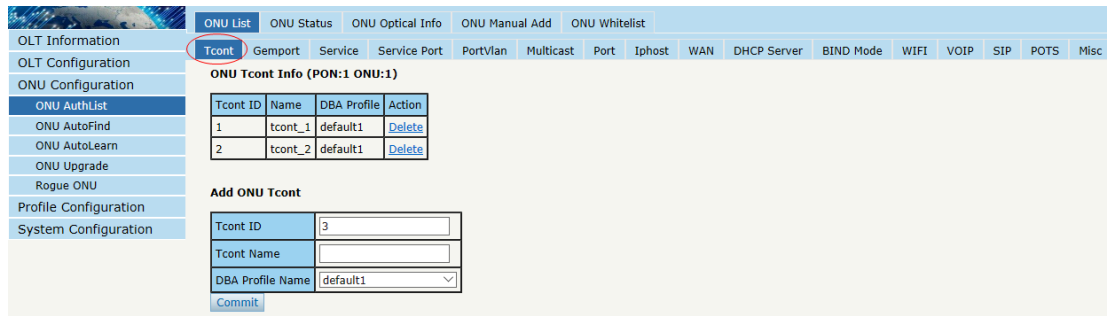


Figure 4.1-3: Create Tcont

#### 4.1.1.1.2 Gempport

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **Gempport**  
Create gempport ID and bind tcont ID.

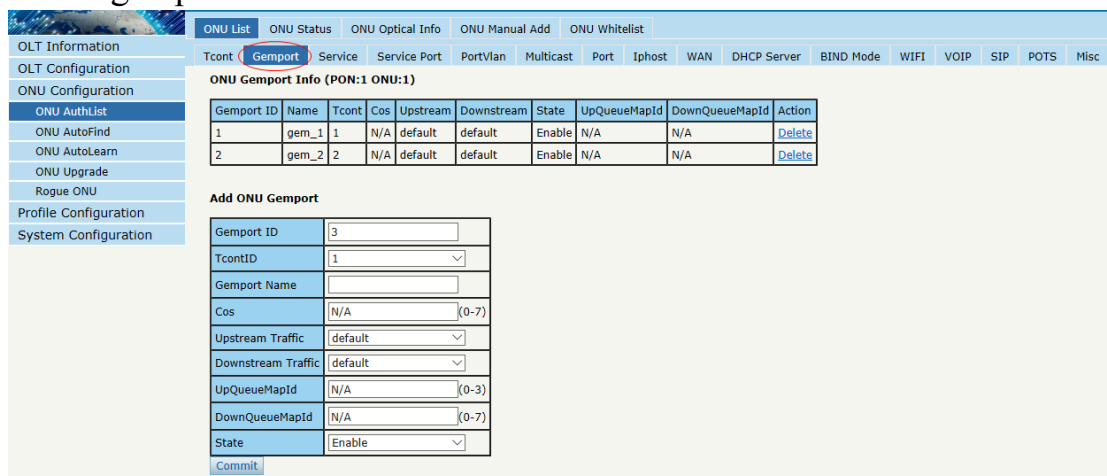


Figure 4.1-4: Create gempport

#### 4.1.1.1.3 Service

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **Service**  
Create a service, set the VLAN and VLAN mode and bind one gempport ID.

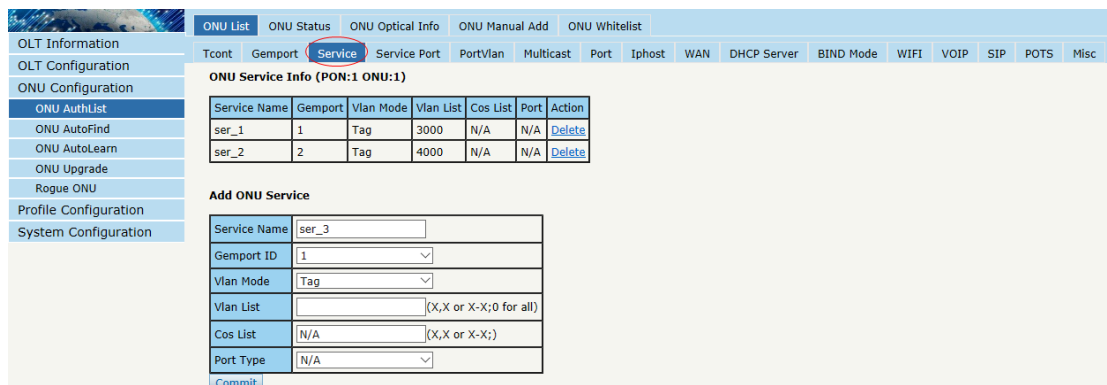


Figure 4.1-5: Create service

#### 4.1.1.1.4 Service Port

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **Service Port**



Create a service port, set the user VLAN and translate VLAN and bind one gemport ID. If don't need VLAN translation, just set translate VLAN the same as user VLAN.

Figure 4.1-6: Create service port

#### 4.1.1.1.5 PortVlan

### ONU Configuration □ ONU AuthList □ ONU List □ Config □ PortVlan

Set the VLAN mode of the ONU's port. For HGU, need to configure veip 1 transparent; for SFU, configure Ethernet port directly.

Figure 4.1-7: Configure port VLAN mode

#### 4.1.1.1.6 Multicast

### ONU Configuration □ ONU AuthList □ ONU List □ Config □ Multicast

Set the Multicast VLAN of ONU and the Multicast VLAN mode of ONU's port.

Figure 4.1-8: Configure multicast VLAN

#### 4.1.1.1.7 Port

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **Port**  
Set attribute of ONU LAN port.

Figure 4.1-9: ONU port attribute

#### 4.1.1.1.8 Iphost

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **Iphost**  
Create Iphost for ONU wan connection. It is used for ONU management.

Figure 4.1-10: Configure IPhost

#### 4.1.1.1.9 WAN

**ONU Configuration** **ONU AuthList** **ONU List** **Config** **WAN**  
ONU WAN connection is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "WAN" can be shown on this page.

Index	Mode	Service Mode	Status	Configuration Information
1	route	tr069	Connected	QOS:disable,Nat:disable, Static IP:192.168.6.179,Mask:255.255.255.0,Gateway:192.168.6.1,DNS Master:202.96.128.85,DNS Slave:8.8.8.8vlan id 3000 pri 0 Bind:lan1 ssid1
2	route	internet	Disconnected	QOS:disable,Nat:enable, Static IP:0.0.0.0,Mask:0.0.0.0,Gateway:0.0.0.0,DNS Master:0.0.0.0,DNS Slave:0.0.0.0vlan id 4000 pri 255 Bind:lan2

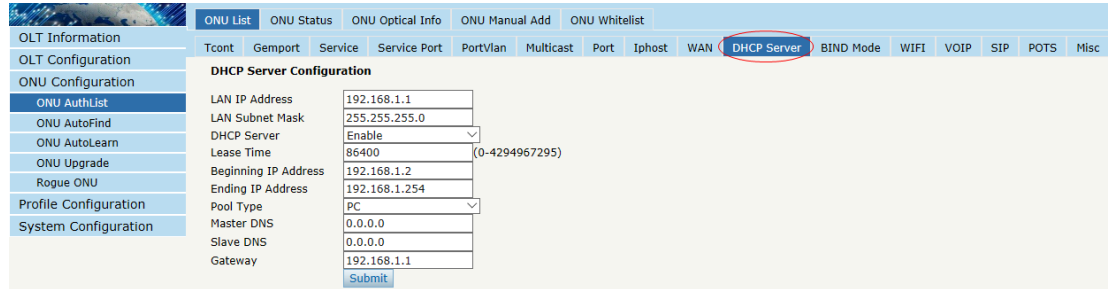
Index	onu running-config	Delete
1	Connect Type:route,Service Mode:internet,Nat:enable, Static IP:192.168.6.179,Mask:255.255.255.0,Gateway:192.168.6.1,DNS Master:202.96.128.85,DNS Slave:8.8.8.8vlan id 3000 pri 0 Bind:lan1 ssid1	

Figure 4.1-11: Configure WAN

#### 4.1.1.1.10 DHCP Server

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ DHCP Server

ONU LAN and DHCP server are configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "DHCP Server" can be shown on this page.



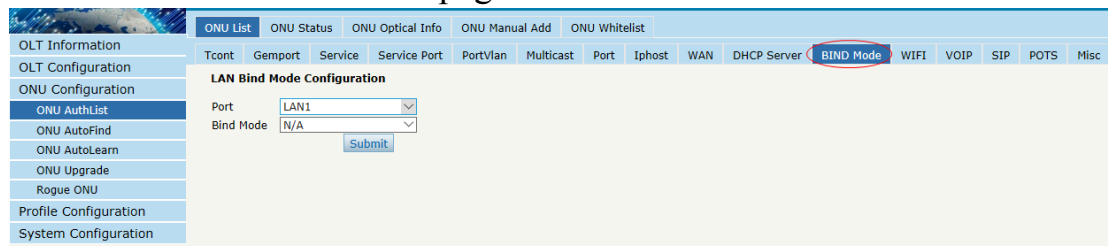
Field	Value
LAN IP Address	192.168.1.1
LAN Subnet Mask	255.255.255.0
DHCP Server	Enable
Lease Time	86400 (0-4294967295)
Beginning IP Address	192.168.1.2
Ending IP Address	192.168.1.254
Pool Type	PC
Master DNS	0.0.0.0
Slave DNS	0.0.0.0
Gateway	192.168.1.1

Figure 4.1-12: ONU DHCP Server

#### 4.1.1.1.11 Bind Mode

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ BIND Mode

ONU LAN bind mode is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "Bind Mode" can be shown on this page.



Field	Value
Port	LAN1
Bind Mode	N/A

Figure 4.1-13: LAN Bind Mode Configuration

#### 4.1.1.1.12 WIFI

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ WIFI

ONU WIFI is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "WIFI" can be shown on this page.

Figure 4.1-14: WIFI Configuration

#### 4.1.1.1.13 VOIP

### ONU Configuration □ ONU AuthList □ ONU List □ Config □ VOIP

This page shows WAN information of VOIP service, including IP address and VLAN. You can also operate VOIP module on this page. When the connected ONU supports VOIP, the option "VOIP" can be shown on this page.

Figure 4.1-15: Voice Wan Information

#### 4.1.1.1.14 SIP

### ONU Configuration □ ONU AuthList □ ONU List □ Config □ SIP

ONU VoIP SIP parameter can be configured on this page, including SIP server, proxy server, digit map and so on. When the connected ONU supports VOIP, the option "SIP" can be shown on this page.

Figure 4.1-16: SIP Parameter

#### 4.1.1.1.15 POTS

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ POTS

ONU VoIP POTS account, password and other VOIP parameters of POTS can be configured on this page; the length of SIP account can't be more than 16 bits. When the connected ONU supports VOIP, the option "POTS" can be shown on this page.

The screenshot shows the POTS Configuration page. The left sidebar contains a navigation menu with options like OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has tabs for Tcont, Gempport, Service, Service Port, PortVlan, Multicast, Port, Iphost, WAN, DHCP Server, BIND Mode, WIFI, VOIP, SIP, POTS, and Misc. The POTS tab is selected. The page displays the following configuration sections:

- VoIP Port:** A dropdown menu showing 'Pots1'.
- POTS Information:** A section with a 'Port Status' dropdown set to 'Inactive'.
- SIP User Parameter Configuration:** A section with radio buttons for 'Account active' (selected 'Disable', 'Enable' is unselected), and input fields for 'User Account', 'User name', and 'User Password'. A 'Submit' button is at the bottom.
- Advanced Parameter Configuration:** A section with dropdown menus for 'VAD' (selected 'Disable'), 'Echo cancel' (selected 'Enable'), 'Input gain(dB)' (set to '0'), 'Output gain(dB)' (set to '0'), and 'Dtmf mode' (selected 'Transparent'). A 'Submit' button is at the bottom.

Figure 4.1-17: POTS Configuration

#### 4.1.1.1.16 Misc

##### ONU Configuration □ ONU AuthList □ ONU List □ Config □ Misc

Misc includes other features of ONU which are configured by private OMCI.

The screenshot shows the Misc Configuration page. The left sidebar is the same as in Figure 4.1-17. The main content area has tabs for Tcont, Gempport, Service, Service Port, PortVlan, Multicast, Port, Iphost, WAN, DHCP Server, BIND Mode, WIFI, VOIP, SIP, POTS, and Misc. The Misc tab is selected. The page displays the following configuration sections:

- Misc Control Operation:** A section with buttons for 'Save configuration' (labeled 'Save'), 'Restore default' (labeled 'Restore'), and checkboxes for 'IGMP configuration' (labeled 'IGMP Enable'), 'STP configuration' (labeled 'STP Enable'), and 'Port isolate' (labeled 'Port isolate Enable'). Each checkbox has a 'Submit' button next to it.
- Speed Limit Configuration:** A section with input fields for 'Upstream limit' (set to '0') and 'DownStream limit' (set to '0'). A 'Submit' button is at the bottom.
- Mac Table Configuration:** A section with input fields for 'mac age time' (set to '0'), 'Pon mac limit' (set to '0'), and 'Lan mac limit' (set to '0'). A 'Submit' button is at the bottom.
- Mac Address Table:** A section with a 'Clean' button.

Figure 4.1-18: Misc Configuration

#### 4.1.1.2 Deactivate

##### ONU Configuration □ ONU AuthList □ ONU List □ Deactivate (Activate)

Deactivate ONU which you selected, the ONU will be disabled and the registration failed. Activate selected ONU, this ONU will register successfully.

**ONU Authentication Info**

Port ID:

Search Mode:

Search Info:

ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4.1-19: Deactivate/Activate ONU

### 4.1.1.3 Delete

#### ONU Configuration ☐ ONU AuthList ☐ ONU List ☐ Delete

Delete ONU which you selected, the ONU will be deleted and the registration failed. All the configurations related this ONU will be deleted as well.

**ONU Authentication Info**

Port ID:

Search Mode:

Search Info:

ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4.1-20: Delete ONU

### 4.1.1.4 Modify

#### ONU Configuration ☐ ONU AuthList ☐ ONU List ☐ Modify

This is used to modify ONU authentication mode.

**ONU Authentication Info**

Port ID:

Search Mode:

Search Info:

ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4.1-21: Modify ONU Authentication mode

#### 4.1.1.5 Optical Info

#### ONU Configuration □ ONU AuthList □ ONU List □ Optical Info

Check the Optical Information of ONU PON module which you selected.

ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

ONU Optical Info	
Interface	pon_0/1
GEM_blocklen	48
Sf threshold	5
Sd threshold	9
Alarm	enable
Alarm disable interval	0
Total T-CONT number	16
Piggyback DBA rpt mode	mode0 only
Whole ONU DBA rpt mode	not support
Rx optical level	-12.286(dBm)
Lower rx optical threshold	ont internal policy
Upper rx optical threshold	ont internal policy
Tx optical level	2.746(dBm)
Lower tx optical threshold	ont internal policy
Upper tx optical threshold	ont internal policy
ONU response time	0
Power feed voltage	3.28(V)
Laser bias current	19.000(mA)
Temperature	40.395(C)
Distance	1(m)

Figure 4.1-22: Optical info of ONU

#### 4.1.1.6 Detail Info

### ONU Configuration □ ONU AuthList □ ONU List □ Detail Info

Check the Detail Info of ONU which you selected.

ONU Authentication Info							
Port ID	PON1						
Search Mode	All						
Search Info	<input type="text"/> <input type="button" value="Search"/>						
<input type="button" value="Delete All"/> <input type="button" value="Delete Offline"/> <input type="button" value="Refresh"/>							
ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Modify</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>



ONU List	ONU Status	ONU Optical Info	ONU Manual Add	ONU Whitelist																																																		
OLT Information	<b>Detail Information</b>																																																					
OLT Configuration	Submit Back																																																					
ONU Configuration	<table border="1"> <tr><td>Description</td><td>GPON0/1:1</td></tr> <tr><td>Main software version</td><td>1.0.08</td></tr> <tr><td>Standby software version</td><td>1.0.06</td></tr> <tr><td>Vendor ID:</td><td>MONU</td></tr> <tr><td>Version:</td><td>STD-ONU</td></tr> <tr><td>SN:</td><td>GPON0091a830</td></tr> <tr><td>Admin status:</td><td>unlock</td></tr> <tr><td>Battery monitor:</td><td>false</td></tr> <tr><td>Security mode:</td><td>aes</td></tr> <tr><td>Product code:</td><td>0</td></tr> <tr><td>Total priority queue num:</td><td>64</td></tr> <tr><td>Total traffic schedule num:</td><td>16</td></tr> <tr><td>Traffic management option:</td><td>priority-rate-controlled</td></tr> <tr><td>Operate status:</td><td>enable</td></tr> <tr><td>Equipment ID:</td><td>MONUH113</td></tr> <tr><td>OMCC Version:</td><td>128</td></tr> <tr><td>Security capability:</td><td>aes</td></tr> <tr><td>Model:</td><td>MONUH113</td></tr> <tr><td>Survival time:</td><td>N/A</td></tr> <tr><td>TotalGemPortNum:</td><td>64</td></tr> <tr><td>SysUpTime:</td><td>14896.00 s</td></tr> <tr><td>Region code:</td><td>N/A</td></tr> <tr><td>Product SN:</td><td>N/A</td></tr> <tr><td>Chip info:</td><td>0</td></tr> </table>				Description	GPON0/1:1	Main software version	1.0.08	Standby software version	1.0.06	Vendor ID:	MONU	Version:	STD-ONU	SN:	GPON0091a830	Admin status:	unlock	Battery monitor:	false	Security mode:	aes	Product code:	0	Total priority queue num:	64	Total traffic schedule num:	16	Traffic management option:	priority-rate-controlled	Operate status:	enable	Equipment ID:	MONUH113	OMCC Version:	128	Security capability:	aes	Model:	MONUH113	Survival time:	N/A	TotalGemPortNum:	64	SysUpTime:	14896.00 s	Region code:	N/A	Product SN:	N/A	Chip info:	0		
Description	GPON0/1:1																																																					
Main software version	1.0.08																																																					
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Version:	STD-ONU																																																					
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Admin status:	unlock																																																					
Battery monitor:	false																																																					
Security mode:	aes																																																					
Product code:	0																																																					
Total priority queue num:	64																																																					
Total traffic schedule num:	16																																																					
Traffic management option:	priority-rate-controlled																																																					
Operate status:	enable																																																					
Equipment ID:	MONUH113																																																					
OMCC Version:	128																																																					
Security capability:	aes																																																					
Model:	MONUH113																																																					
Survival time:	N/A																																																					
TotalGemPortNum:	64																																																					
SysUpTime:	14896.00 s																																																					
Region code:	N/A																																																					
Product SN:	N/A																																																					
Chip info:	0																																																					
ONU AuthList	<b>Device Capability</b>																																																					
ONU AutoFind	<table border="1"> <tr><td>TCONT number:</td><td>16</td></tr> <tr><td>GEM port number:</td><td>64</td></tr> <tr><td>Total priority queue number:</td><td>54</td></tr> <tr><td>up priority queue number:</td><td>30</td></tr> <tr><td>Down priority queue number:</td><td>24</td></tr> <tr><td>Traffic scheduler number:</td><td>16</td></tr> <tr><td>Traffic management option:</td><td>priority&amp;rate controlled</td></tr> <tr><td>Total UNI number:</td><td>5</td></tr> <tr><td>Ethernet UNI number:</td><td>2</td></tr> <tr><td>10GE number:</td><td>0</td></tr> <tr><td>GE number:</td><td>1</td></tr> <tr><td>FE number:</td><td>1</td></tr> <tr><td>CES UNI number:</td><td>0</td></tr> <tr><td>POTS UNI number:</td><td>1</td></tr> <tr><td>Video UNI number:</td><td>0</td></tr> <tr><td>WIFI UNI number:</td><td>1</td></tr> <tr><td>XDSL UNI number:</td><td>0</td></tr> <tr><td>IP host number:</td><td>3</td></tr> <tr><td>IPv6 host number:</td><td>0</td></tr> <tr><td>VEIP number:</td><td>1</td></tr> <tr><td>Operation Id:</td><td>N/A</td></tr> <tr><td>CTC spc version:</td><td>CTC V2.0</td></tr> <tr><td>CUC spc version:</td><td>N/A</td></tr> <tr><td>ONU type:</td><td>HGU</td></tr> <tr><td>Tx power supply control:</td><td>Tx Rx power control independently</td></tr> </table>				TCONT number:	16	GEM port number:	64	Total priority queue number:	54	up priority queue number:	30	Down priority queue number:	24	Traffic scheduler number:	16	Traffic management option:	priority&rate controlled	Total UNI number:	5	Ethernet UNI number:	2	10GE number:	0	GE number:	1	FE number:	1	CES UNI number:	0	POTS UNI number:	1	Video UNI number:	0	WIFI UNI number:	1	XDSL UNI number:	0	IP host number:	3	IPv6 host number:	0	VEIP number:	1	Operation Id:	N/A	CTC spc version:	CTC V2.0	CUC spc version:	N/A	ONU type:	HGU	Tx power supply control:	Tx Rx power control independently
TCONT number:	16																																																					
GEM port number:	64																																																					
Total priority queue number:	54																																																					
up priority queue number:	30																																																					
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Traffic scheduler number:	16																																																					
Traffic management option:	priority&rate controlled																																																					
Total UNI number:	5																																																					
Ethernet UNI number:	2																																																					
10GE number:	0																																																					
GE number:	1																																																					
FE number:	1																																																					
CES UNI number:	0																																																					
POTS UNI number:	1																																																					
Video UNI number:	0																																																					
WIFI UNI number:	1																																																					
XDSL UNI number:	0																																																					
IP host number:	3																																																					
IPv6 host number:	0																																																					
VEIP number:	1																																																					
Operation Id:	N/A																																																					
CTC spc version:	CTC V2.0																																																					
CUC spc version:	N/A																																																					
ONU type:	HGU																																																					
Tx power supply control:	Tx Rx power control independently																																																					
Rogue ONU																																																						
Profile Configuration																																																						
System Configuration																																																						

Figure 4.1-23: Detail info of ONU

#### 4.1.1.7 Reboot

### ONU Configuration □ ONU AuthList □ ONU List □ Reboot

Reboot ONU which you selected.

ONU List	ONU Status	ONU Optical Info	ONU Manual Add	ONU Whitelist																																
OLT Information	<b>ONU Authentication Info</b>																																			
OLT Configuration	Port ID: PON1																																			
ONU Configuration	Search Mode: All																																			
ONU AuthList	Search Info: <input type="text"/> Search																																			
ONU AutoFind	Delete All Delete Offline Refresh																																			
ONU AutoLearn	<table border="1"> <thead> <tr> <th>ONU ID</th> <th>Status</th> <th>Descriptions</th> <th>Model</th> <th>Profile</th> <th>Mode</th> <th>Info</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>GPON0/1:1</td> <td>Online</td> <td>GPON0/1:1</td> <td>H113</td> <td>default</td> <td>Sn</td> <td>GPON0091A830</td> <td>Config Deactivate Delete Modify Optical Info Detail Info <b>Reboot</b></td> </tr> <tr> <td>GPON0/1:2</td> <td>Offline</td> <td>GPON0/1:2</td> <td>unknown</td> <td>default</td> <td>Sn</td> <td>GPON00673A80</td> <td>Config Activate Delete Modify Optical Info Detail Info Reboot</td> </tr> <tr> <td>GPON0/1:3</td> <td>Offline</td> <td>GPON0/1:3</td> <td>unknown</td> <td>default</td> <td>Sn</td> <td>GPON0093A921</td> <td>Config Activate Delete Modify Optical Info Detail Info Reboot</td> </tr> </tbody> </table>				ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action	GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	Config Deactivate Delete Modify Optical Info Detail Info <b>Reboot</b>	GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	GPON00673A80	Config Activate Delete Modify Optical Info Detail Info Reboot	GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	Config Activate Delete Modify Optical Info Detail Info Reboot
ONU ID	Status	Descriptions	Model	Profile	Mode	Info	Action																													
GPON0/1:1	Online	GPON0/1:1	H113	default	Sn	GPON0091A830	Config Deactivate Delete Modify Optical Info Detail Info <b>Reboot</b>																													
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GPON0/1:3	Offline	GPON0/1:3	unknown	default	Sn	GPON0093A921	Config Activate Delete Modify Optical Info Detail Info Reboot																													
ONU Upgrade																																				
Rogue ONU																																				
Profile Configuration																																				
System Configuration																																				

Figure 4.1-24: Reboot ONU

#### 4.1.2 ONU Status

### ONU Configuration □ ONU AuthList □ ONU Status

This page shows the ONU information of the activity. User can check "Last Register Time", "Last Deregister Reason" and "Active Time" of each ONU.

OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

ONU List

ONU Status

ONU Optical Info

ONU Manual Add

ONU Whitelist

ONU Status Info

Port ID

PON1

Refresh

ONU ID	Admin State	OMCC State	Phase State	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
GPON0/1:1	Enable	Enable	working	2019:04:09 6:39:46	2019:04:09 6:28:28	Manual Deactivate	00:19:37
GPON0/1:2	Disable	Disable	Offline	N/A	2019:04:09 6:27:36	Manual Deactivate	17964 06:27:45
GPON0/1:3	Disable	Disable	Offline	2019:04:08 8:28:36	2019:04:09 6:29:24	Manual Deactivate	22:00:49

Figure 4.1-25: ONU Status

### 4.1.3 ONU Optical Info

#### ONU Configuration □ ONU AuthList □ ONU Optical Info

This page displays ONU Rx and Tx power. A batch of ONU optical power information can be shown in a list. Clearly to check the register power when register issue happens.

OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

ONU List

ONU Status

ONU Optical Info

ONU Manual Add

ONU Whitelist

ONU Status Info

Port ID

PON1

ONU Group

ONU 1-64

Refresh

ONU ID	RX Power	TX Power
GPON0/1:1	-12.270(dbm)	2.712(dbm)
GPON0/1:2	N/A	N/A
GPON0/1:3	N/A	N/A

Figure 4.1-26: ONU Optical Info

### 4.1.4 ONU Manual Add

#### ONU Configuration □ ONU AuthList □ ONU Manual Add

You can manually add ONU to a selected PON port. ONU will appear in the ONU list after you added.

OLT Information	ONU List	ONU Status	ONU Optical Info	ONU Manual Add	ONU Whitelist												
OLT Configuration	<b>Add ONU</b> <table> <tr> <td>PON Port</td><td><input type="text" value="PON1"/></td></tr> <tr> <td>ONU ID</td><td><input type="text" value="4"/></td></tr> <tr> <td>Auth Mode</td><td><input type="text" value="Sn"/></td></tr> <tr> <td>ONU Sn</td><td><input type="text"/></td></tr> <tr> <td>ONU Profile</td><td><input type="text" value="default"/></td></tr> <tr> <td colspan="2"><input type="button" value="Submit"/></td></tr> </table>					PON Port	<input type="text" value="PON1"/>	ONU ID	<input type="text" value="4"/>	Auth Mode	<input type="text" value="Sn"/>	ONU Sn	<input type="text"/>	ONU Profile	<input type="text" value="default"/>	<input type="button" value="Submit"/>	
PON Port	<input type="text" value="PON1"/>																
ONU ID	<input type="text" value="4"/>																
Auth Mode	<input type="text" value="Sn"/>																
ONU Sn	<input type="text"/>																
ONU Profile	<input type="text" value="default"/>																
<input type="button" value="Submit"/>																	
ONU Configuration																	
ONU AuthList																	
ONU AutoFind																	
ONU AutoLearn																	
ONU Upgrade																	
Rogue ONU																	
Profile Configuration																	
System Configuration																	

Figure 4.1-27: Add ONU Manually

### 4.1.5 ONU Whitelist

#### ONU Configuration □ ONU AuthList □ ONU Whitelist

You can set up whitelist on this page.

Whitelist can limit illegal ONU to register. Only the GPON SN in the whitelist can register, but only effective for the ONU which has not been added to OLT.

Figure 4.1-28: ONU Whitelist

### 4.1.6 ONU Statistics

#### ONU Configuration □ ONU AuthList □ ONU Statistics

This page displays the information of package count about ONU ports.

ONU ID	Input bytes	Input packets	Output bytes	Output packets
GPON0/1:1	2464274043	821870600	2792561376	801483521

Figure 4.1-29: ONU Statistics

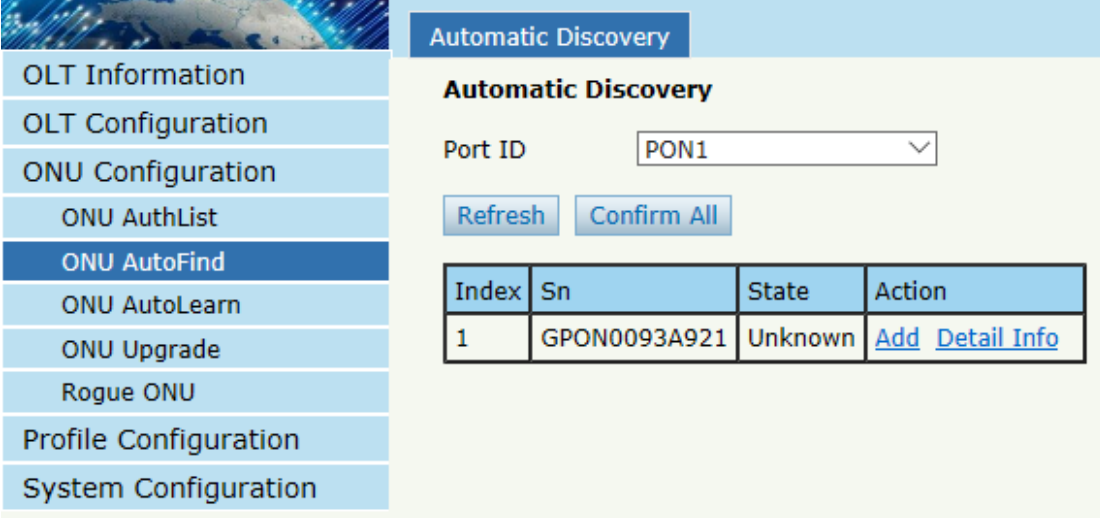
## 4.2 ONU AutoFind

#### ONU Configuration □ ONU AutoFind

After selecting PON port number, all ONUs which are authenticated failed or not authenticated will be displayed in this interface. You can

check the serial number of ONUs.

More information will be shown under the ONU Detail menu.



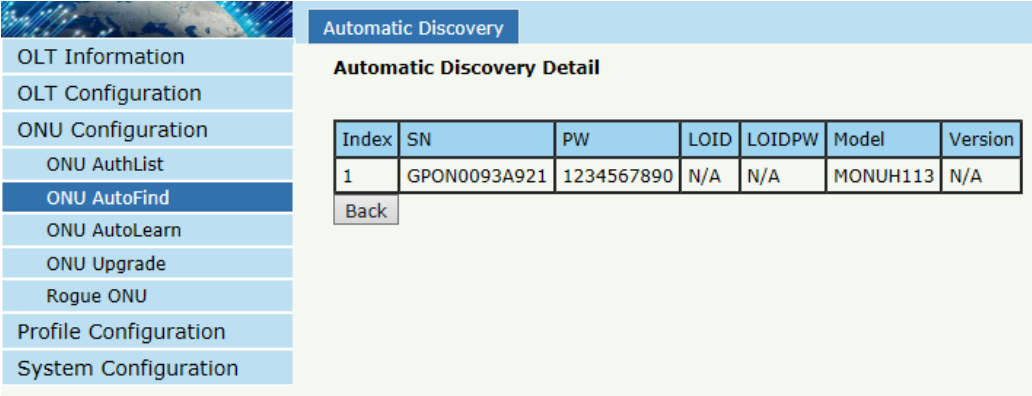
**Automatic Discovery**

Port ID: PON1

[Refresh](#) [Confirm All](#)

Index	Sn	State	Action
1	GPON0093A921	Unknown	<a href="#">Add</a> <a href="#">Detail Info</a>

Figure4.2-1: Automatic Discovery



**Automatic Discovery Detail**

Index	SN	PW	LOID	LOIDPW	Model	Version
1	GPON0093A921	1234567890	N/A	N/A	MONUH113	N/A

[Back](#)

Figure 4.2-2: Detail info

## 4.3 ONU AutoLearn

### 4.3.1 ONU AutoLearn

#### Configuration ☐ AutoLearn ☐ ONU AutoLearn

ONU can be authenticated automatically after enabling PON port automatic learning.

PON ID	Enable	Line profile	Srv profile	Alarm profile	Pri profile	Plug and Play
PON1	Enable	N/A	N/A	N/A	N/A	Enable
PON2	Enable	N/A	N/A	N/A	N/A	Enable
PON3	Enable	N/A	N/A	N/A	N/A	Enable
PON4	Enable	N/A	N/A	N/A	N/A	Enable
PON5	Enable	N/A	N/A	N/A	N/A	Enable
PON6	Enable	N/A	N/A	N/A	N/A	Enable
PON7	Enable	N/A	N/A	N/A	N/A	Enable
PON8	Enable	N/A	N/A	N/A	N/A	Enable

Figure 4.3-1: Automatic learn

### 4.3.2 ONU AutoBind

#### Configuration □ AutoLearn □ ONU AutoBind

Input the Equipment ID and bind the profile you need

*Note: you must create profile first.*

Equipment ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Pri Profile	Action
--------------	-------------	--------------	-----------------	---------------	-------------	--------

Figure 4.3-2: Bind profile

### 4.3.3 ONU AutoDelete

#### Configuration □ AutoLearn □ ONU AutoDelete

After this function is enabled, ONU registrations that are offline but remain offline for a certain period of time will be deleted.

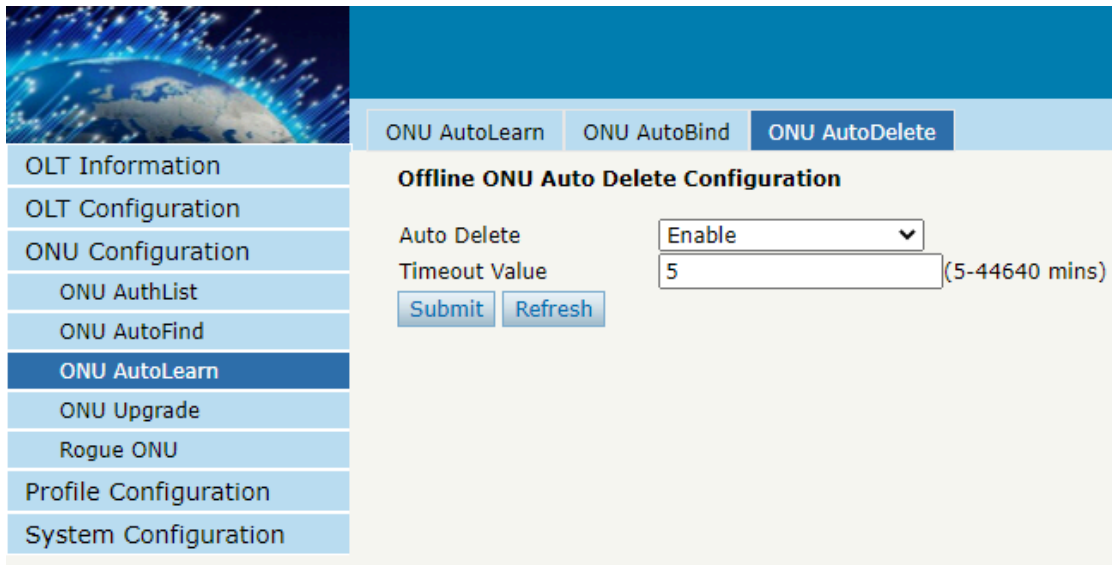


Figure 4.3-3: ONU AutoDelete

## 4.4 ONU Upgrade

ONU firmware can be upgraded by OLT. OLT supports manual upgrade and automatic upgrade.

### 4.4.1 UpLoad Image

#### Configuration □ ONU Upgrade □ ONU Image

Upload ONU firmware image which you need, the image will upload to OLT's RAM.

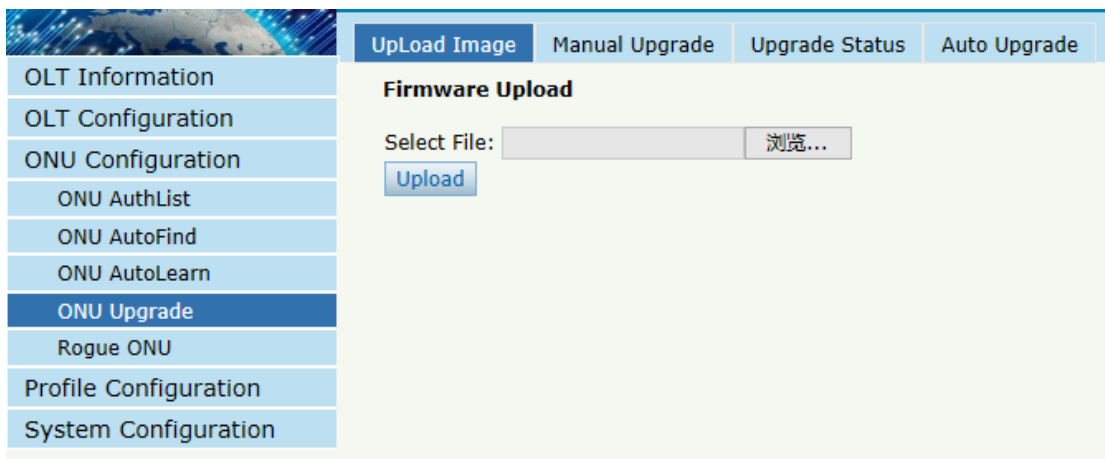


Figure 4.4-1: Upload image

## 4.4.2 Manual Upgrade

### Configuration □ ONU Upgrade □ Manual Upgrade

Select the ONU image and the ONU that need upgrade, click commit button to start upgrading. You can upgrade the ONU under one PON port everytime.

Manual Upgrade			
<b>Select ONU Firmware</b>			
Firmware Name	Select	Action	
<b>Upgrade ONU Firmware</b>			
PON ID	PON1		
ONU ID	1,3,5-8		
Upgrade Mode	Mix		
<a href="#">Commit</a>			

Figure 4.4-2: Manual Upgrade

## 4.4.3 Upgrade Status

### Configuration □ ONU Upgrade □ Upgrade Status

When ONU is upgrading, the upgrading status will be shown on this page.

Upgrade Status			
<b>Upgrade Info</b>			
Selected	PON 0 ONU		Action
File			<a href="#">Abort</a>
<b>Upgrade Progress</b>			
<a href="#">Refresh</a>			
PON	ONU	Action	Status
Process	Fail Reason	Commit Time	

Figure 4.4-3: ONU Upgrade Status

## 4.4.4 Auto Upgrade

### Configuration □ ONU Upgrade □ Auto Upgrade

After uploaded the ONU firmware image, configured automatic upgrade

conditions, once the ONU which has the same equipment ID and different software version come online, they will be upgraded automatically. Each ONU has its own equipment ID, which you can check in ONU detail info. Software version is the firmware image version which has uploaded to the OLT.

Figure 4.4-4: Auto Upgrade

#### 4.4.5 Auto Upgrade Status

##### Configuration □ ONU Upgrade □ Auto Upgrade Status

When ONU is auto upgrading, the upgrading status will be shown on this page.

PON	ONU	Status	Progress	Fail Reason	Action
14	2	running	transferred 12 %	None	<a href="#">Delete</a>
14	6	running	transferred 13 %	None	<a href="#">Delete</a>
14	8	running	transferred 13 %	None	<a href="#">Delete</a>
14	13	running	transferred 12 %	None	<a href="#">Delete</a>

Figure 4.4-5: Auto Upgrade Status



## 4.5 Rogue ONU

### ONU Configuration □ Rogue ONU

After enabled rogue ONU detect, if there is a rogue ONU trying to register, it will appear in the list.

**Rogue ONU configuration**

**Rogue ONU Detect Configuration**

Detect state	Locate state	Auto shutdown	Control mode
disable	N/A	N/A	private

**Change Configuration**

Detect state	Enable ▾
Locate state	Enable ▾
Auto shutdown	Enable ▾
Control mode	private ▾

**Rogue ONU List**

PON	ONU	Keywords	Time	State
-----	-----	----------	------	-------


Figure 4.5-1: Rogue ONU detect

## 4.6 ONU Common Service

Only GPON OLT-B Series supports this feature.

### ONU Configuration □ ONU Common Service

You have more flexibility to create TCONT ID and other items for the specified ONU you select.



OLT Information  
 OLT Configuration  
 ONU Configuration  
   ONU AuthList  
   ONU AutoFind  
   ONU AutoLearn  
   ONU Upgrade  
   Rogue ONU  
   **ONU Common Service**  
 Profile Configuration  
 System Configuration

Tcont

Gempont

Service

Service Port

Port Vlan

**ONU Tcont**

Port ID PON5

Search Mode All

Search Info  Search

**Add ONU Tcont**

ONU List		(X,X or X-X;max 128 onus)
Tcont ID		
Tcont Name		
DBA Profile Name	default1	

Commit
Delete

**ONU Tcont Info**

ONU ID	Info	Descriptions	Tcont ID	Name	DBA Profile	Action
ONU 1	<a href="#">GPON00557080</a>	GPON0/5:1	1	tcont_1	default1	<a href="#">Delete</a>
ONU 2	<a href="#">GPON009f6238</a>	GPON0/5:2	1	tcont_1	default1	<a href="#">Delete</a>
ONU 3	<a href="#">GPON00e52c78</a>	GPON0/5:3	1	tcont_1	default1	<a href="#">Delete</a>
ONU 5	<a href="#">DBC00c01448</a>	GPON0/5:5	1	tcont_1	default1	<a href="#">Delete</a>

Figure 4.6-1: ONU Common Service

## Chapter 5 Profile Configuration

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

### 5.1 ONU Profile

The ONU profile is used for ONU authorization, and each ONU must specify only one ONU profile when authorization. The ONU profile specifies the capability of this ONU.

#### 5.1.1 Information

##### Profile Configuration □ ONU profile □ Information

The table displays ONU profile list. You can also do some operations, such as delete and check details info.

OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

Bind Profile

System Configuration

Information

Add Profile

ONU Profiles

Refresh

Profile ID	Profile Name	Max Tcont	Max GemPort	Max Veip	Action
0	default	255	255	1	<a href="#">Details</a>

Figure 5.1-1: ONU profile list

#### 5.1.2 Add profile

Create a new ONU profile what you need. Generally, ONU has two different modes.

SFU mode (only using bridge mode):

Usually, only need to set correct eth port and POTS port number of ONU,

others can be kept default.

Information		Add Profile
OLT Information		
OLT Configuration		
ONU Configuration		
Profile Configuration		
<b>ONU Profile</b>		
DBA Profile		
Traffic Profile		
Line Profile		
Service Profile		
Alarm Profile		
Pri Profile		
Bind Profile		
System Configuration		

ONU Profile Modify	
<a href="#">Commit</a>	
Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max tcont	8
Max gemport	32
Max eth	1
Max pots	0
Max Iphost	2
Max Ipv6host	0
Max veip	0
Service ability	Disable
Service ability N:1	yes
Service ability 1:M	yes
Service ability 1:P	yes
Wifi mgmt via non OMCI	Disable
Omci send mode	async
Default multicast range	none

Figure 5.1-2: Add SFU profile

HGU mode (with the routing wan connection mode):

For HGU mode, need to set correct eth port and POTS port number and set veip to be 1, keep others default.

Information		Add Profile
OLT Information		
OLT Configuration		
ONU Configuration		
Profile Configuration		
<b>ONU Profile</b>		
DBA Profile		
Traffic Profile		
Line Profile		
Service Profile		
Alarm Profile		
Pri Profile		
Bind Profile		
System Configuration		

ONU Profile Modify	
<a href="#">Commit</a>	
Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max tcont	8
Max gempport	32
Max eth	4
Max pots	2
Max Iphost	2
Max Ipv6host	0
Max veip	1
Service ability	Disable
Service ability N:1	yes
Service ability 1:M	yes
Service ability 1:P	yes
Wifi mgmt via non OMCI	Disable
Omci send mode	async
Default multicast range	none

Figure 5.1-3: Add HGU profile

## 5.2 DBA Profile

DBA is a bandwidth allocation strategy that changes uplink bandwidth assigned to each T-CONT in real time according to the instant service status of each ONU. There are five BW types supported and make sure that fixed <= assured <= max.

### 5.2.1 DBA profiles

#### Profile Configuration □ DBA Profile □ DBA Profiles

The table displays DBA profile list. You can also do some operations,

such as delete and modify.

OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

Bind Profile

System Configuration

DBA Profiles

Add Profile

DBA Profiles

Refresh

Profile ID	Profile Name	Profile Type	Fixed(Kbps)	Assured(Kbps)	Maximum(Kbps)	Action
0	default	1	10000			
511	default1	3		1024	1024000	<a href="#">Delete</a> <a href="#">Modify</a>

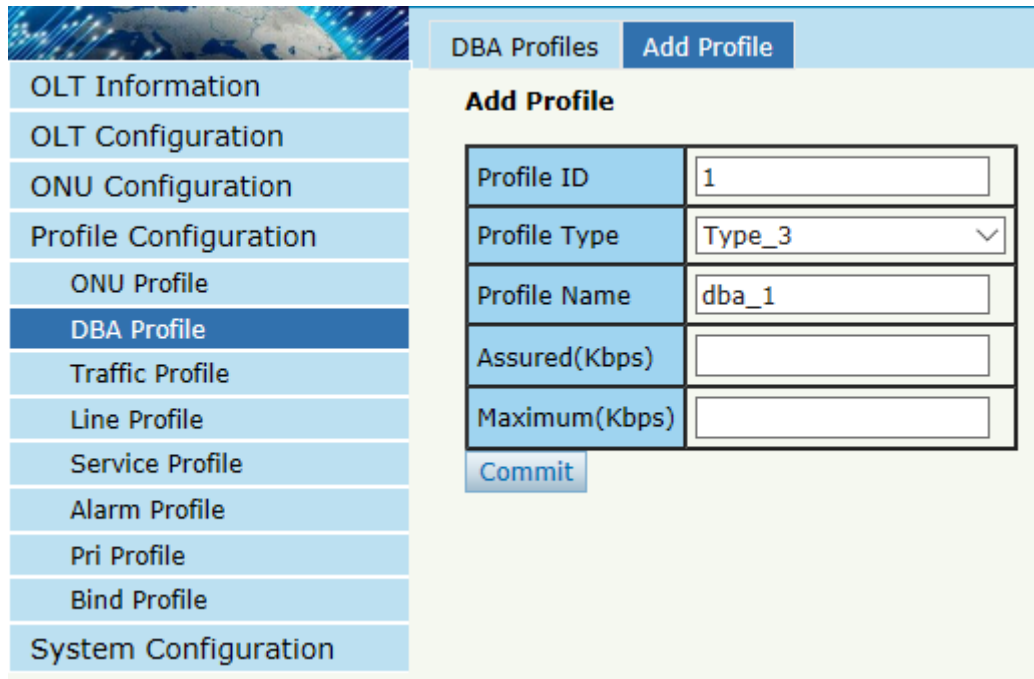
Figure 5.2-1: DBA profile list

## 5.2.2 Add profile

### Profile Configuration □ DBA Profile □ Add profile

There are five types of DBA profile. In general, we use type3.

BW Type	Delay Sensitive	Applicable T-CONT types				
		Type 1	Type 2	Type 3	Type 4	Type 5
Fixed	Yes	X				X
Assured	No		X	X		X
Non-Assured	No			X		X
Best Effort	No				X	X
Max.	No			X	X	X



**DBA Profiles** **Add Profile**

**Add Profile**

Profile ID	1
Profile Type	Type_3
Profile Name	dba_1
Assured(Kbps)	
Maximum(Kbps)	

**Commit**

Figure 5.2-2: Add a DBA profile

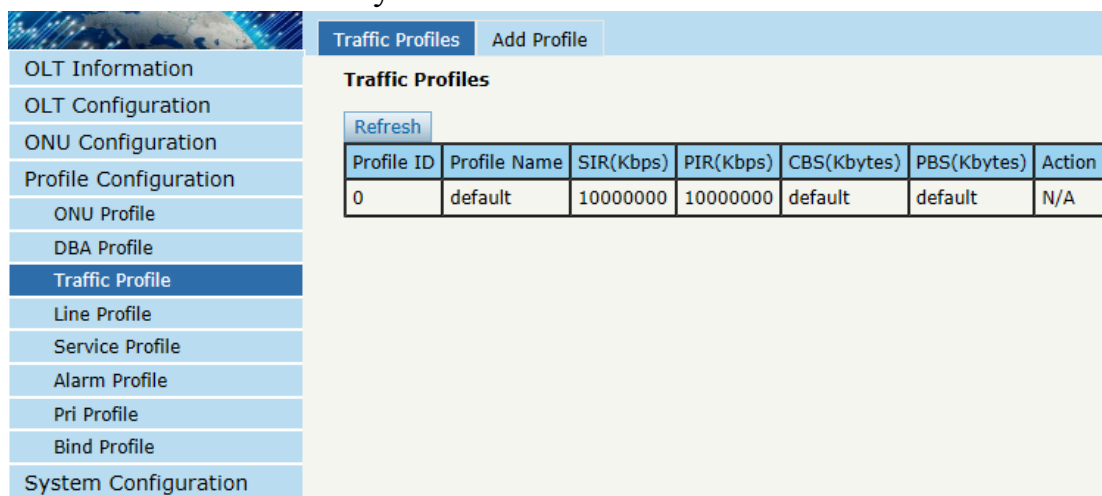
## 5.3 Traffic Profile

Traffic profile is used by gemport to specify the upstream/downstream bandwidth.

### 5.3.1 Traffic profiles

#### Profile Configuration □ Traffic Profile □ Traffic Profiles

The table displays Traffic profile list. You can also do some operation, such as delete and modify.



**Traffic Profiles** **Add Profile**

**Traffic Profiles**

**Refresh**

Profile ID	Profile Name	SIR(Kbps)	PIR(Kbps)	CBS(Kbytes)	PBS(Kbytes)	Action
0	default	10000000	10000000	default	default	N/A

Figure 5.3-1: Traffic Profile list

## 5.3.2 Add profile

### Profile Configuration □ Traffic Profile □ Add Profile

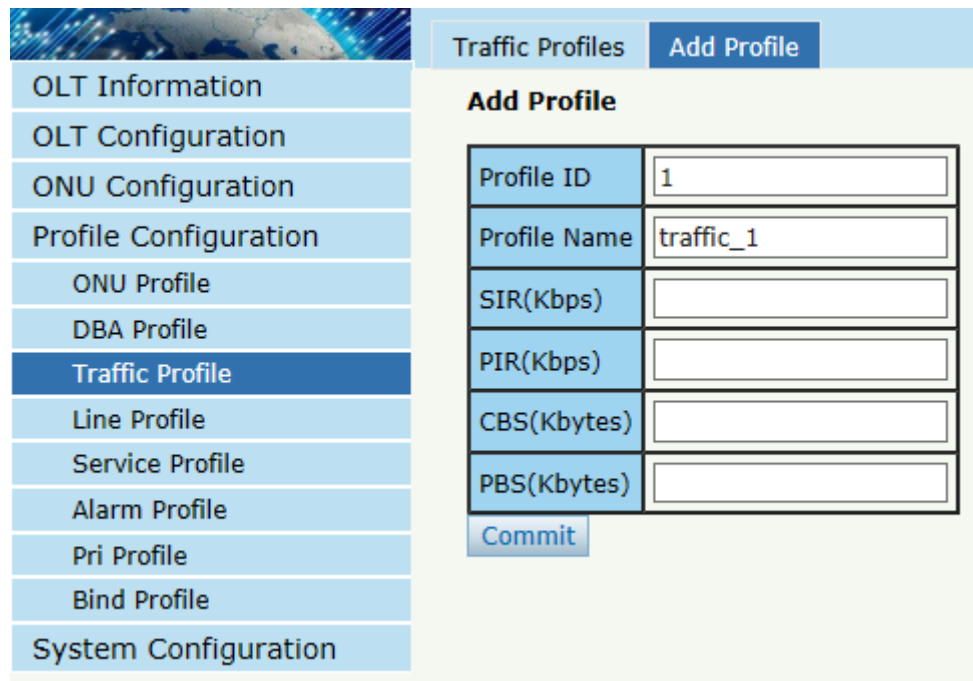
Configure gemport to specify the upstream/downstream bandwidth.

SIR: Committed Information Rate

PIR: Peak Information Rate

CBS: Committed Burst Size

PBS: Peak Burst Size



The screenshot shows the 'Add Profile' form in the GPON OLT Web User Interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Traffic Profile (highlighted), Line Profile, Service Profile, Alarm Profile, Pri Profile, Bind Profile, and System Configuration. The main content area is titled 'Add Profile' and contains a form with the following fields:

Profile ID	1
Profile Name	traffic_1
SIR(Kbps)	
PIR(Kbps)	
CBS(Kbytes)	
PBS(Kbytes)	

Below the form is a 'Commit' button.

Figure 5.3-2: Add a traffic Profile

## 5.4 Line Profile

Line profile is used to configure the ANI side services of ONU such as t-cont, gem-port, service-port, and so on.

### 5.4.1 Line profile

#### Profile Configuration □ Line Profile □ Line Profile

The table displays Line profile list. You can also do some operations, such as delete and modify.



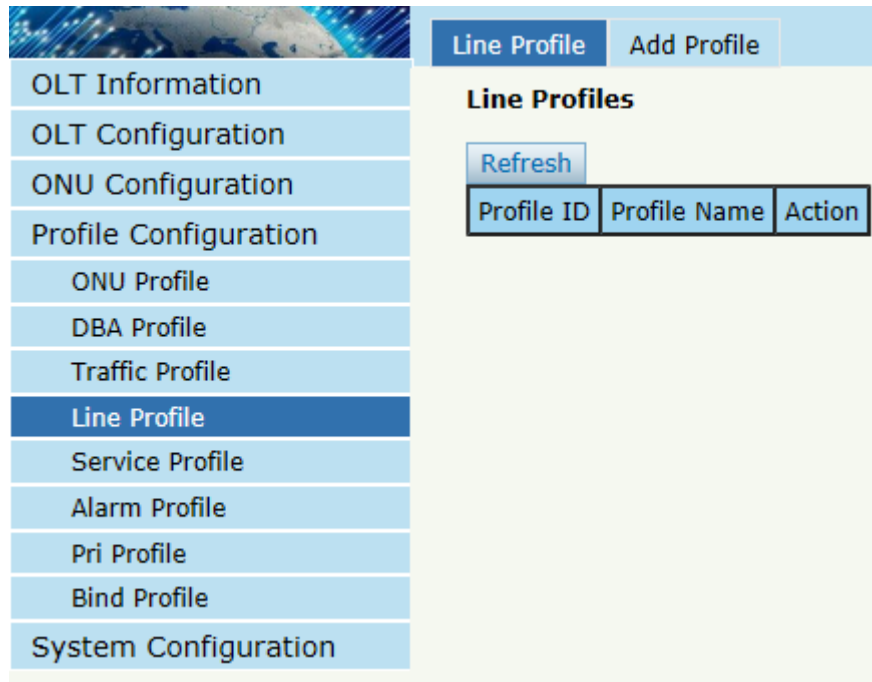


Figure 5.4-1: Line Profile list

## 5.4.2 Add profile

### Profile Configuration □ Line profile □ Add profile

Create a new line profile.

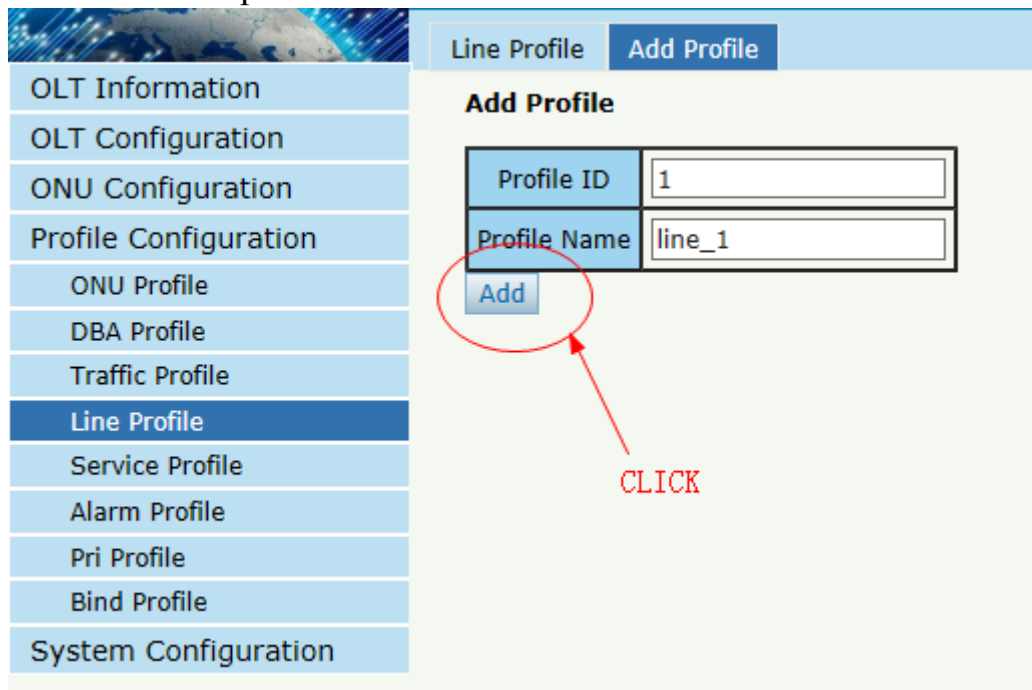


Figure 5.4-2: Add Line Profile

Modify the line profile parameters.

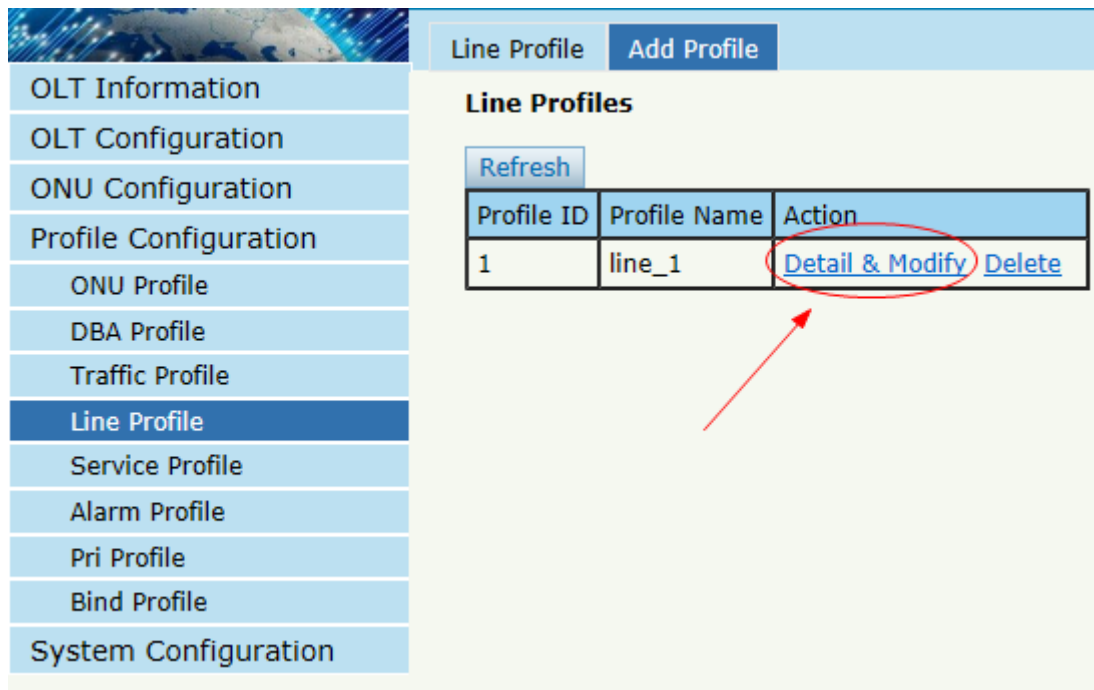


Figure 5.4-3: Modify Line Profile

### 5.4.2.1 Tcont

Add tcont ID and bind DBA profile.

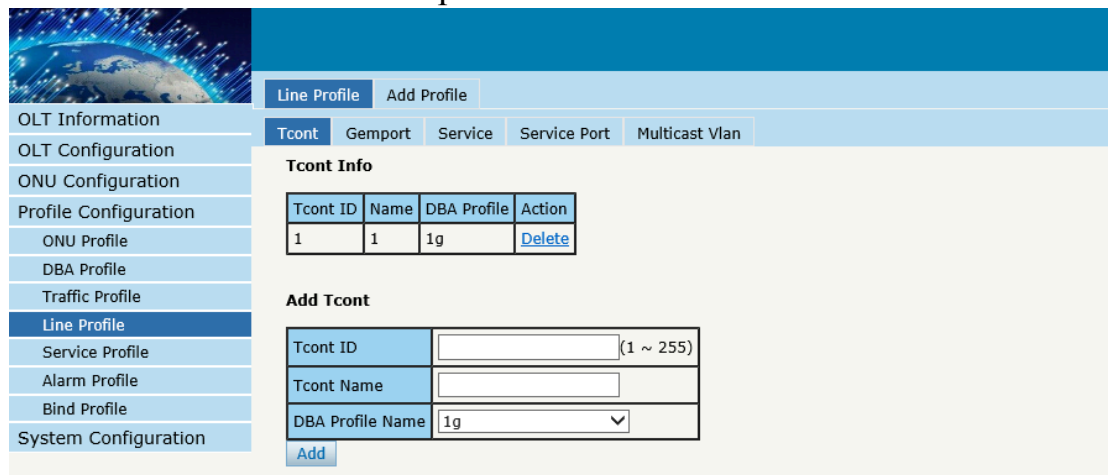



Figure 5.4-4: Add Tcont

### 5.4.2.2 Gemport

Add gemport ID and bind tcont ID.



The screenshot shows the 'Line Profile' configuration page. The left sidebar lists various configuration sections, with 'Line Profile' selected. The main area has tabs for 'Tcont', 'Gemport', 'Service', 'Service Port', and 'Multicast Vlan'. The 'Gemport' tab is active, displaying a table of existing gemports and an 'Add Gemport' form.

**Gemport Info**

Gemport ID	Name	Tcont	Cos	Upstream	Downstream	State	UpQueueMapId	DownQueueMapId	Action
1	default	1	N/A	default	default	Enable	N/A	N/A	<a href="#">Delete</a>

**Add Gemport**


Gemport ID	<input type="text" value=""/>	(1~255)
Tcont ID	<input type="text" value="1"/>	▼
Gemport Name	<input type="text" value="default"/>	
Cos	<input type="text" value="N/A"/>	(0-7)
Upstream Traffic	<input type="text" value="default"/>	▼
Downstream Traffic	<input type="text" value="default"/>	▼
UpQueueMapId	<input type="text" value="N/A"/>	(0-3)
DownQueueMapId	<input type="text" value="N/A"/>	(0-7)
State	<input type="text" value="Enable"/>	▼

[Add](#)

Figure 5.4-5: Add Gemport

### 5.4.2.3 Service

Add service, set the VLAN mode and VLAN ID and bind one gemport ID.



The screenshot shows the 'Service' configuration page. The left sidebar is the same as in Figure 5.4-5, with 'Line Profile' selected. The main area has tabs for 'Tcont', 'Gemport', 'Service', 'Service Port', and 'Multicast Vlan'. The 'Service' tab is active, displaying a table of existing services and an 'Add Service' form.

**Service Info**

Service Name	Gemport	Vlan Mode	Vlan List	Cos List	Port	Action
1	1	Tag	1010	N/A	N/A	<a href="#">Delete</a>

**Add Service**

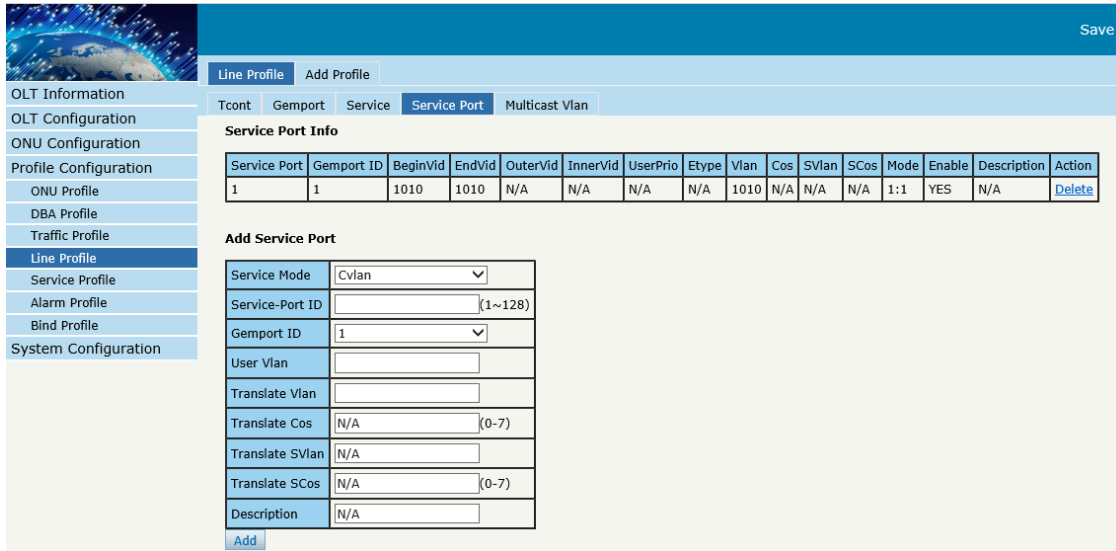
Service Name	<input type="text" value="1"/>
Gemport ID	<input type="text" value="1"/> ▼
Vlan Mode	<input type="text" value="Tag"/> ▼
Vlan List	<input type="text" value="1010"/> (X,X or X-X;0 for all)
Cos List	<input type="text" value="N/A"/> (X,X or X-X;)
Port Type	<input type="text" value="N/A"/> ▼

[Add](#)

Figure 5.4-6: Add Service

### 5.4.2.4 Service Port

Create a service port, set the user VLAN and translate VLAN and bind one gemport ID. If don't need VLAN translation, just set translate VLAN the same as user VLAN.



**Service Port Info**

Service Port	Gemport ID	BeginVid	EndVid	OuterVid	InnerVid	UserPrio	Etype	Vlan	Cos	SVlan	SCos	Mode	Enable	Description	Action
1	1	1010	1010	N/A	N/A	N/A	N/A	1010	N/A	N/A	N/A	1:1	YES	N/A	<a href="#">Delete</a>

**Add Service Port**

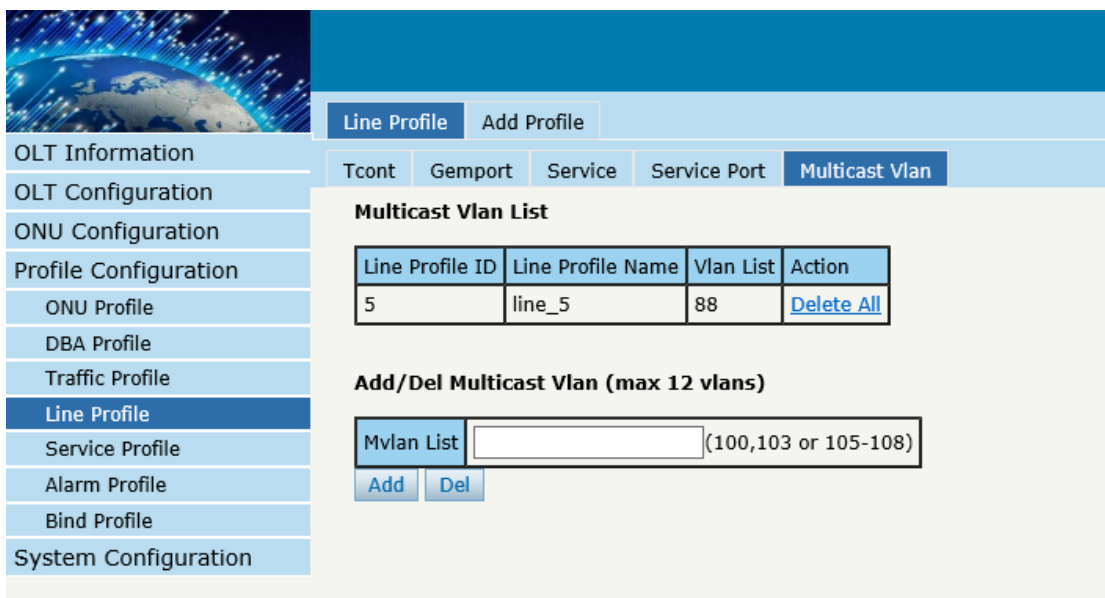
Service Mode	Cvlan
Service-Port ID	(1~128)
Gemport ID	1
User Vlan	
Translate Vlan	
Translate Cos	N/A (0-7)
Translate SVlan	N/A
Translate SCos	N/A (0-7)
Description	N/A

[Add](#)

Figure 5.4-7: Add Service Port

### 5.4.2.5 Multicast Vlan

Set the Multicast VLAN of ONU.



**Multicast Vlan List**

Line Profile ID	Line Profile Name	Vlan List	Action
5	line_5	88	<a href="#">Delete All</a>

**Add/Del Multicast Vlan (max 12 vlans)**

Mvlan List	(100,103 or 105-108)
------------	----------------------

[Add](#) [Del](#)

Figure 5.4-8: Configure Multicast VLAN

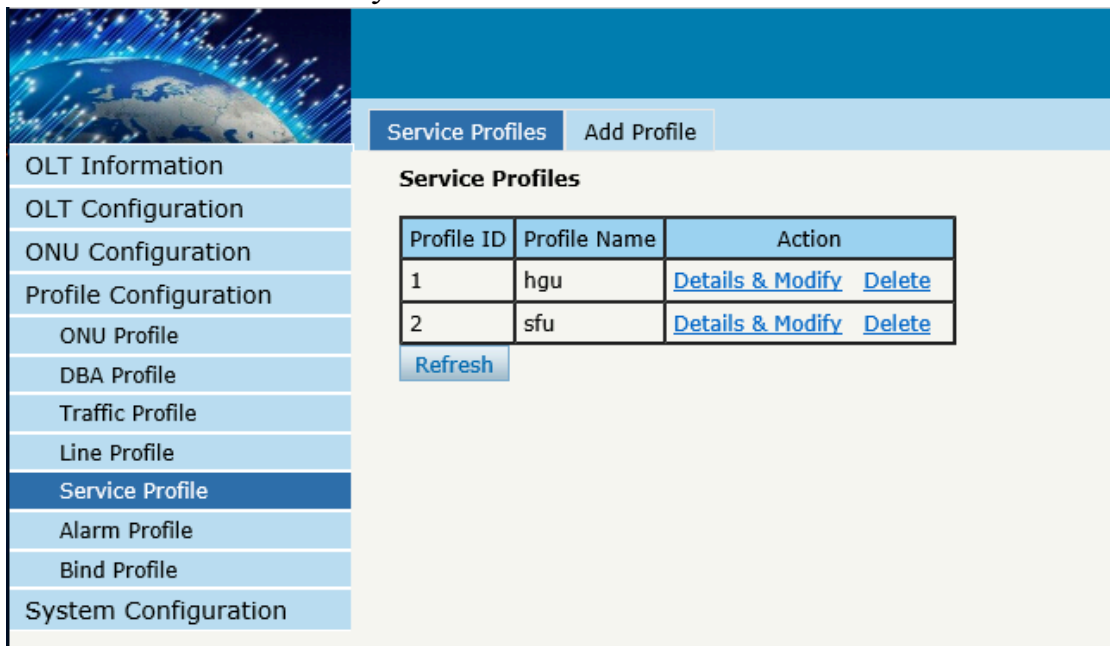
## 5.5 Service Profile

Service profile is used to configure the UNI side services of onu, such as Ethernet port, wifi, veip, and so on.

### 5.5.1 Service profile

#### Profile Configuration □ Service Profile □ Service Profile

The table displays service profile list. You can also do some operations, such as delete and modify.



The screenshot displays the 'Service Profiles' section of the GPON OLT Web User Interface. On the left, a navigation menu lists various configuration options, with 'Service Profile' currently selected. The main area features a table titled 'Service Profiles' containing two entries. Each entry includes a 'Profile ID', a 'Profile Name', and an 'Action' column with links for 'Details & Modify' and 'Delete'. A 'Refresh' button is positioned below the table.

Profile ID	Profile Name	Action
1	hgu	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
2	sfu	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

[Refresh](#)

Figure 5.5-1: Service Profile List

### 5.5.2 Add profile

#### Profile Configuration □ Service Profile □ Add Profile

Add a new service profile.

Service Profiles **Add Profile**

**Add Profile**

Profile ID: 3

Profile Name: srv\_3

**Add**

Figure 5.5-2: Add Service profile

Service Profiles **Add Profile**

**Service Profiles**

Profile ID	Profile Name	Action
1	hgu	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
2	sfu	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
3	srv_3	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

**Refresh**

Figure 5.5-3: Modify Service Profile

### 5.5.2.1 PortVlan

Set the VLAN mode of the ONU's port. For HGU, need to configure veip 1 transparent; for SFU, configure Ethernet port directly.

Service Profiles **Add Profile**

PortVlan **Multicast Vlan Strip** **Iphost Config**

**PortVlan Info(Service Profile:3)**

Port Name	Mode	Vlan	Vlan Pri(tag)	Default Vlan(hybrid)	Default Pri(hybrid)	CVlan(translate)	CVlan Pri(translate)	SVlan(translate)	SVlan Pri(translate)	Action
eth_0/1	Transparent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<a href="#">Delete</a>

**Add PortVlan**

Mode: Transparent

Port Type: Eth

Port ID:

**Commit**

Figure 5.5-4: Port VLAN mode

### 5.5.2.2 Multicast Vlan Strip

Set the multicast VLAN mode of ONU's port.

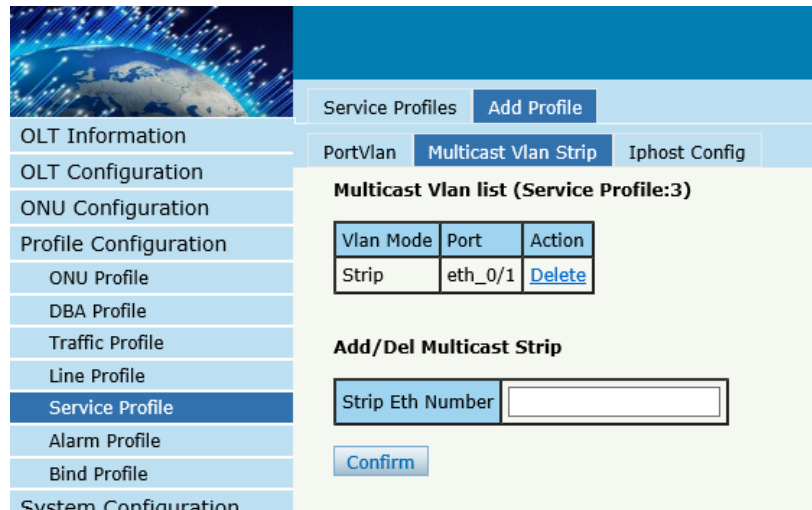


Figure 5.5-5: Port Multicast VLAN Mode

### 5.5.2.3 Iphost Config

Add Iphost for ONU wan connection. IPhost is used for ONU management.

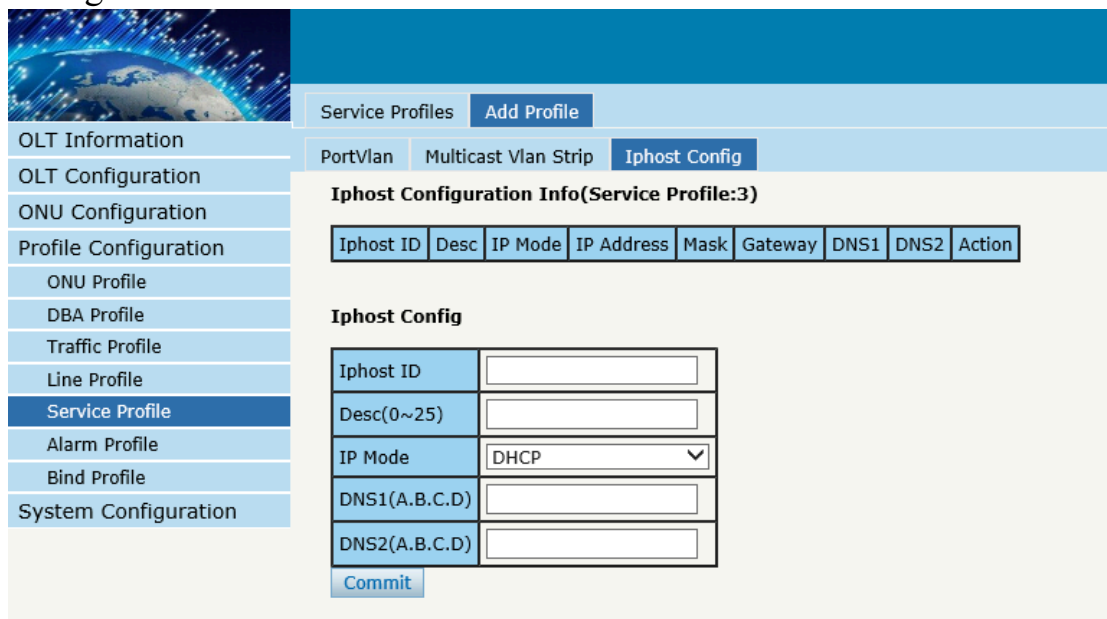


Figure 5.5-6: Add IPhost

## 5.6 Alarm Profile

Alarm profile is used to configure the parameters of ONU alarm.

## 5.6.1 Profile Info

### Profile Configuration □ Alarm Profile □ profile info

The table displays alarm profile list.

OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

Bind Profile

System Configuration

Profile Info

Add Profile

Alarm Profiles

Refresh

Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm_profile_1	enable	-27 ~ -8	1 ~ 5	5 / 9	<a href="#">Delete</a>

Figure 5.6-1: Alarm Profile List

## 5.6.2 Add Profile

### Profile Configuration □ Alarm Profile □ Add profile

Add new alarm profile, set the threshold of alarm generation.


 <ul style="list-style-type: none"> <li>OLT Information</li> <li>OLT Configuration</li> <li>ONU Configuration</li> <li>Profile Configuration</li> <li>  ONU Profile</li> <li>  DBA Profile</li> <li>  Traffic Profile</li> <li>  Line Profile</li> <li>  Service Profile</li> <li><b>  Alarm Profile</b></li> <li>  Pri Profile</li> <li>  Bind Profile</li> <li>System Configuration</li> </ul>	Profile Info	Add Profile
	Create Alarm Profile	
	Alarm Name	<input type="text" value="alarm_profile_2"/>
	Alarm State	<input type="text" value="Enable"/>
	Rx Low Power	<input type="text" value="-27"/> (-27 ~ -8)
	Rx High Power	<input type="text" value="-8"/> (-27 ~ -8)
	Tx Low Power	<input type="text" value="1"/> (1 ~ 5)
	Tx High Power	<input type="text" value="5"/> (1 ~ 5)
	Sf Threshold	<input type="text" value="5"/> (3 ~ 8)
	Sd Threshold	<input type="text" value="9"/> (4 ~ 10)
	<a href="#">Commit</a>	

Figure 5.6-2: Add Alarm Profile

## 5.7 Pri Profile

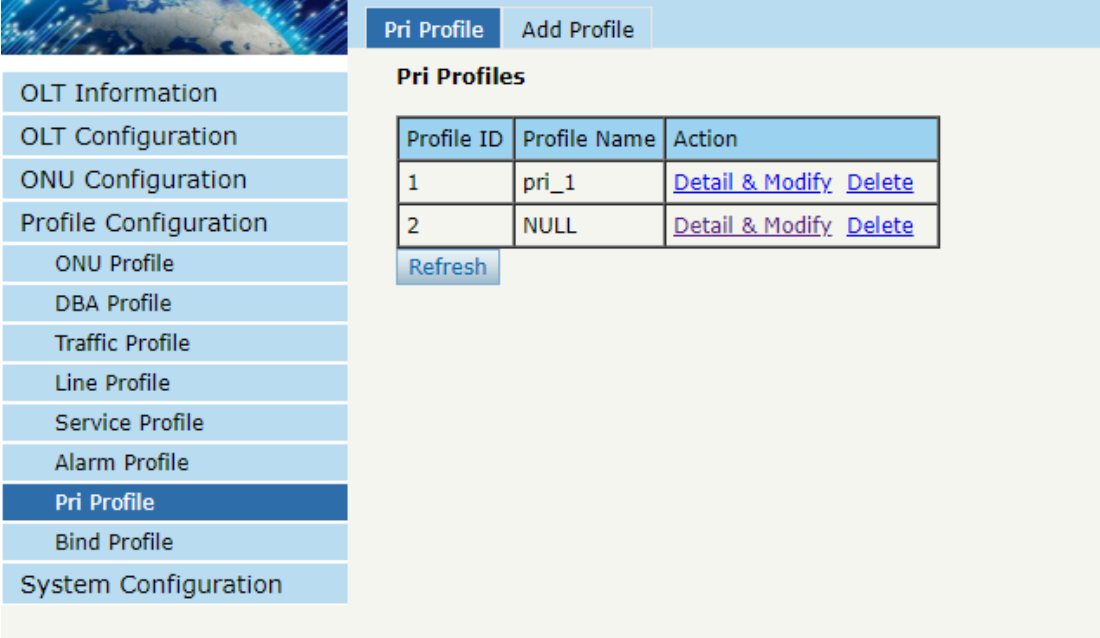
Pri Profile is the profile which the parameters are configured by private OMCI, including WAN, SIP, WIFI, CATV, DHCP Server, and so on.



## 5.7.1 Pri Profile

### Profile Configuration ▢ Pri Profile

The table displays private profile list. You can also do some operations, such as delete and modify.



**Pri Profile**   **Add Profile**

**Pri Profiles**

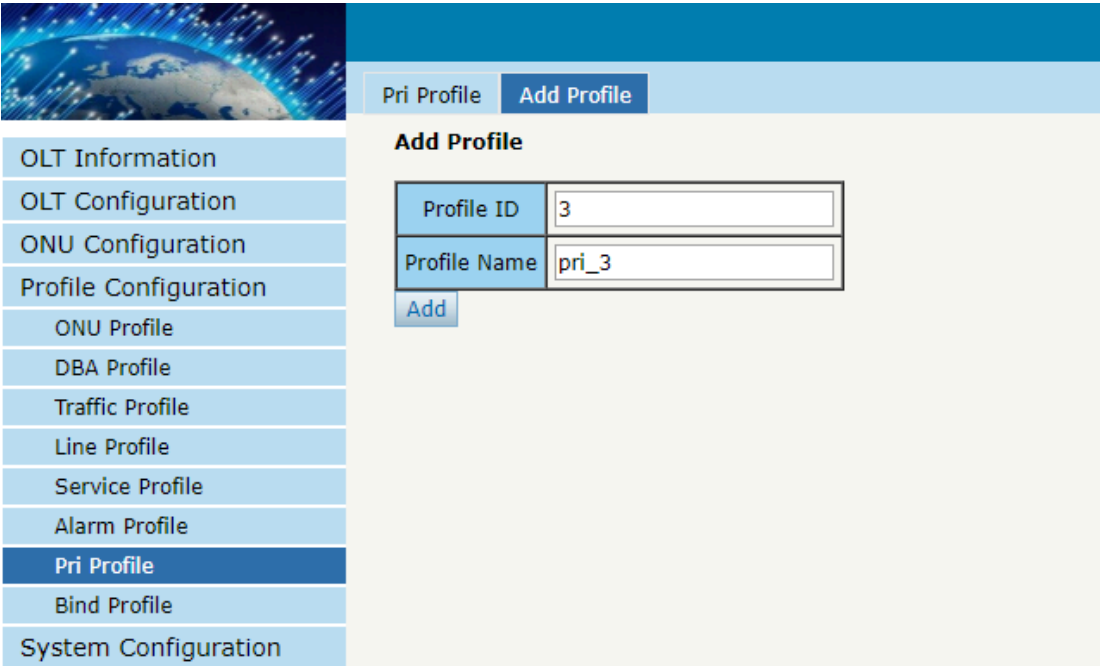
Profile ID	Profile Name	Action
1	pri_1	<a href="#">Detail &amp; Modify</a> <a href="#">Delete</a>
2	NULL	<a href="#">Detail &amp; Modify</a> <a href="#">Delete</a>

[Refresh](#)

Figure 5.7-1: Pri Profile

## 5.7.2 Add Profile

### Profile Configuration ▢ Pri Profile ▢ Add profile



**Pri Profile**   **Add Profile**

**Add Profile**

Profile ID	3
Profile Name	pri_3

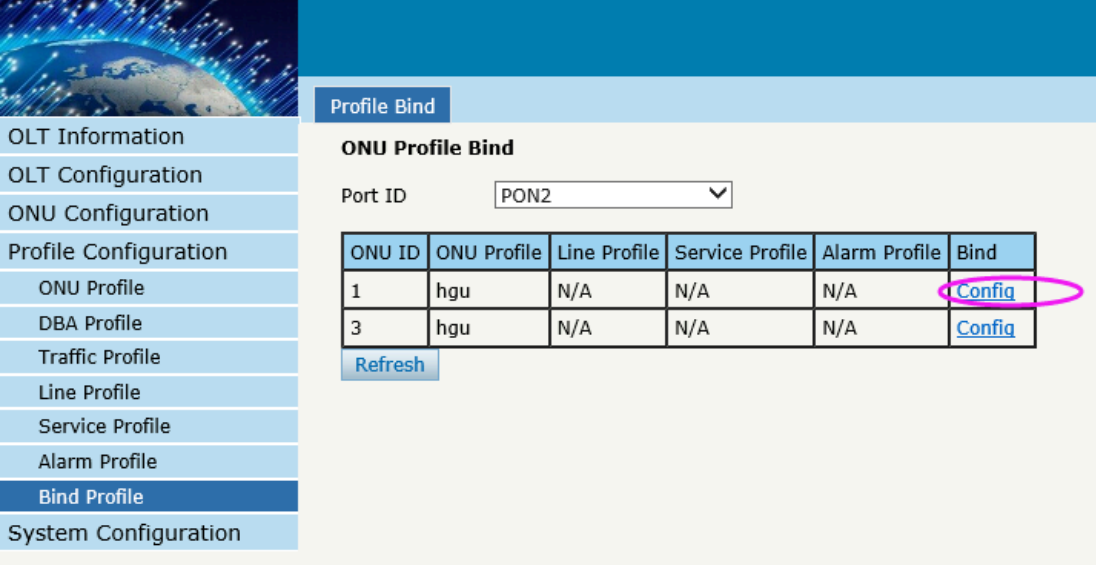
[Add](#)

Figure 5.7-2: Add Private Profile

## 5.8 Bind Profile

After profile is configured, it is necessary to bind it to ONU.

### Profile Configuration ☐ Bind Profile



**Profile Bind**

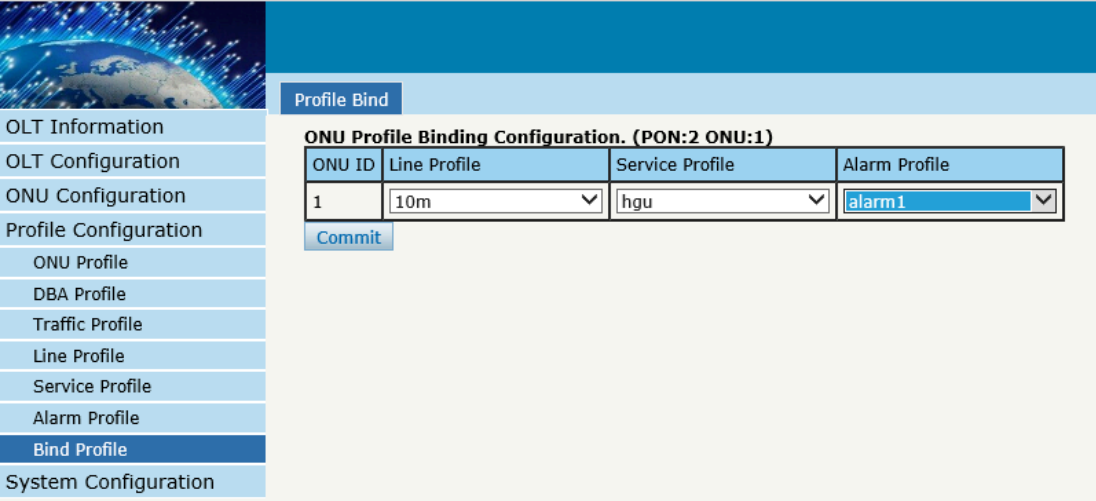
**ONU Profile Bind**

Port ID:

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Bind
1	hgu	N/A	N/A	N/A	<a href="#">Config</a>
3	hgu	N/A	N/A	N/A	<a href="#">Config</a>

[Refresh](#)

Figure 5.8-1: Bind profile



**Profile Bind**

**ONU Profile Binding Configuration. (PON:2 ONU:1)**

ONU ID	Line Profile	Service Profile	Alarm Profile
1	<input type="text" value="10m"/>	<input type="text" value="hgu"/>	<input type="text" value="alarm1"/>

[Commit](#)

Figure 5.8-2: Select Profile

## Chapter 6 System Configuration

This chapter is about the global management of OLT.

### 6.1 System Log

#### 6.1.1 System Log

##### System Configuration □ System Log

This page displays OLT system alarms and events.

OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

System Configuration

System Log

Device Management

User Management

SNMP

AUX IP

DNS

System Time

FAN

Mirror

Login Management

Net Work Security

SSH

System Log

Alarm

Threshold Alarm

Syslog Server

Syslog Server IPv6

Alarm Log Table

Select Counts

200

Alarm Type

ALL

No.1 Page/Total 2 Page 20 Item per page/Total 24 Item

[First](#), [Previous](#), [Next](#), [Last](#)

No.1 [Go!](#) [Clear All](#) [Refresh](#)

No.	Time	Level	Message
1	2019/03/09 08:58:43	warning	OLT Port Updown Uplink-port 0/10 Up
2	2019/03/09 08:58:38	warning	OLT Port Updown Uplink-port 0/10 Down
3	2019/03/09 08:57:09	warning	System Config Save save config by command
4	2019/03/09 08:56:37	warning	OLT Port Updown Uplink-port 0/10 Up
5	2019/03/09 08:56:16	warning	OLT Port Updown Uplink-port 0/10 Down
6	2019/03/09 08:53:16	warning	OLT Port Updown Uplink-port 0/10 Up
7	2019/03/09 08:53:02	warning	OLT Port Updown Uplink-port 0/10 Down
8	2019/03/09 08:52:52	warning	OLT Port Updown Uplink-port 0/10 Up
9	2019/03/09 08:52:49	warning	OLT Port Updown Uplink-port 0/10 Down
10	2019/03/09 08:52:32	warning	OLT Port Updown Uplink-port 0/10 Up
11	2019/03/09 08:52:29	warning	OLT Port Updown Uplink-port 0/10 Down
12	2019/03/09 08:52:21	warning	System Config Save save config by command
13	2019/03/09 08:52:14	warning	OLT Port Updown PON 0/1 ONU 3 sn GPON0093A921 LAN1 LINK DOWN
14	2019/03/09 08:52:14	warning	OLT Port Updown PON 0/1 ONU 3 sn GPON0093A921 LAN2 LINK DOWN
15	2019/03/09 08:52:14	major	ONU Online PON 0/1 ONU 3 sn GPON0093A921
16	2019/03/09 08:52:12	warning	System Config Save save config by command
17	2019/03/09 08:52:06	warning	OLT Port Updown PON 0/1 ONU 1 sn GPON0091A830 LAN1 LINK DOWN
18	2019/03/09 08:52:06	warning	OLT Port Updown PON 0/1 ONU 1 sn GPON0091A830 LAN2 LINK DOWN
19	2019/03/09 08:52:06	major	ONU Online PON 0/1 ONU 1 sn GPON0091A830
20	2019/03/09 08:52:06	warning	OLT Port Updown PON 0/1 Up

Figure 6.1-1: System Log

#### 6.1.2 Alarm

##### System Configuration □ System Log □ Alarm

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

System Log Alarm Threshold Alarm Syslog Server Syslog Server IPv6

**Alarm Configuration**

Submit Reset

Type	Print	Record	Trap	Remote	Type	Print	Record	Trap	Remote
FAN	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
ONU MAC Conflict	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Loid Conflict	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Critical Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ONU Dying Gasp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Link Fault	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Event	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Event Notific	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Reset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Config Save	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Config Erase	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Download File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Upload File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upgrade File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Register	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PON Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Los Recovery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Register	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Discover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU Auth Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Deauth Success	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU PON Rxpower High	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ONU PON Rxpower-low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU PON Txpower High	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ONU PON Txpower Low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU PON Txbias High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU PON Txbias Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>


Figure 6.1-2: Alarm

options	Illustration
Print	Alarm and event show in console and telnet, but not show in syslog, EMS and remote log server.
Record	Alarm and event show in syslog, but not show in console, telnet, EMS and remote log server.
Trap	Alarm and event show in EMS, but not show in console, telnet, syslog and remote log server.
Remote	Alarm and event show in remote log server, but not show in console, telnet, syslog and EMS.

### 6.1.3 Threshold Alarm

**System Configuration** ☐ **System Log** ☐ **Threshold Alarm**

This page is used to configure OLT temperature threshold, CPU-usage threshold and memory- usage threshold, PON optical threshold.



System Log Alarm **Threshold Alarm** Syslog Server Syslog Server IPv6

**Threshold Alarm Configuration**

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

Submit Reset

**PON Optical Alarm Configuration**

Port ID

Type	State	Alarm Threshold	Clear Threshold
Tx Power High (dBm)	<input type="checkbox"/>	0.00	0.00
Tx Power Low (dBm)	<input type="checkbox"/>	0.00	0.00
Tx Bias High (mA)	<input type="checkbox"/>	0.00	0.00
Tx Bias Low (mA)	<input type="checkbox"/>	0.00	0.00
Vcc High (V)	<input type="checkbox"/>	0.00	0.00
Vcc Low (V)	<input type="checkbox"/>	0.00	0.00
Temp High (°C)	<input type="checkbox"/>	0.00	0.00
Temp Low (°C)	<input type="checkbox"/>	0.00	0.00

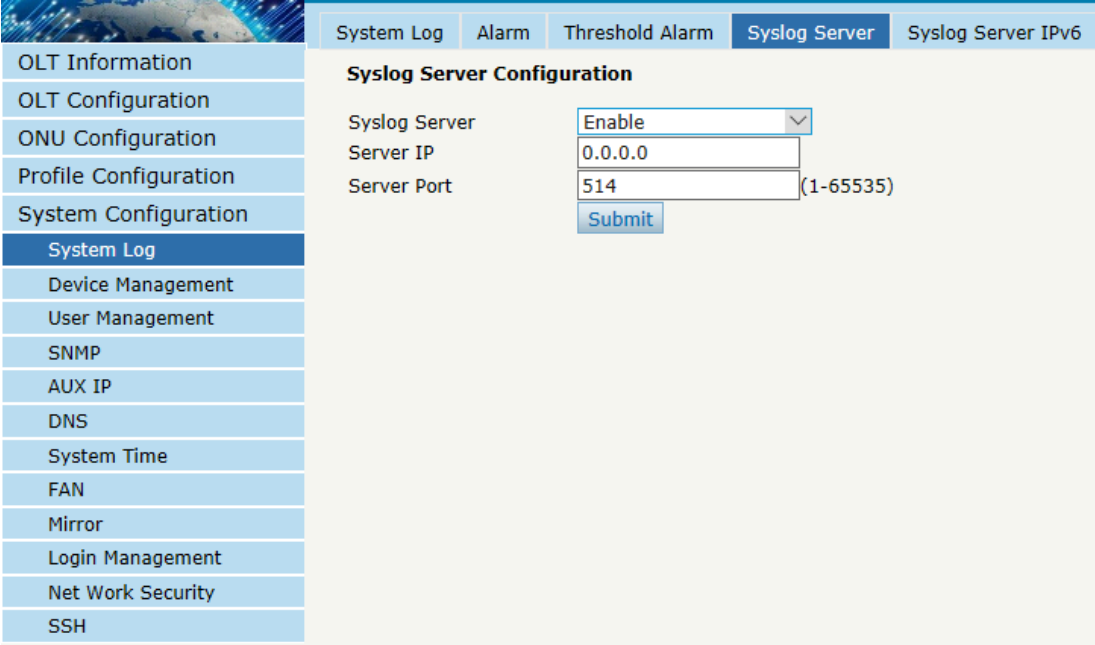
Submit Reset

Figure 6.1-3: Threshold Alarm

## 6.1.4 Syslog Server

**System Configuration** ☐ **System Log** ☐ **Syslog Server**

This page is used to configure remote IPv4 server of OLT system log.



System Log Alarm Threshold Alarm **Syslog Server** Syslog Server IPv6

**Syslog Server Configuration**

Syslog Server

Server IP

Server Port  (1-65535)

Submit

Figure 6.1-4: Syslog Server

## 6.1.5 Syslog Server IPv6

**System Configuration** □ **System Log** □ **Syslog Server IPv6**

This page is used to configure remote IPv6 server of OLT system log.

Syslog Server IPv6 Configuration	
Syslog Server IPv6	Enable
Server IPv6	
Server Port	514 (1-65535)
<input type="button" value="Submit"/>	

Figure 6.1-5: Syslog Server IPv6

## 6.2 Device Management

### 6.2.1 Firmware Upgrade

**System Configuration** □ **Device Management** □ **Firmware Upgrade**

You can upgrade the OLT firmware on this page. OLT will reboot automatically with the new firmware after upgraded.

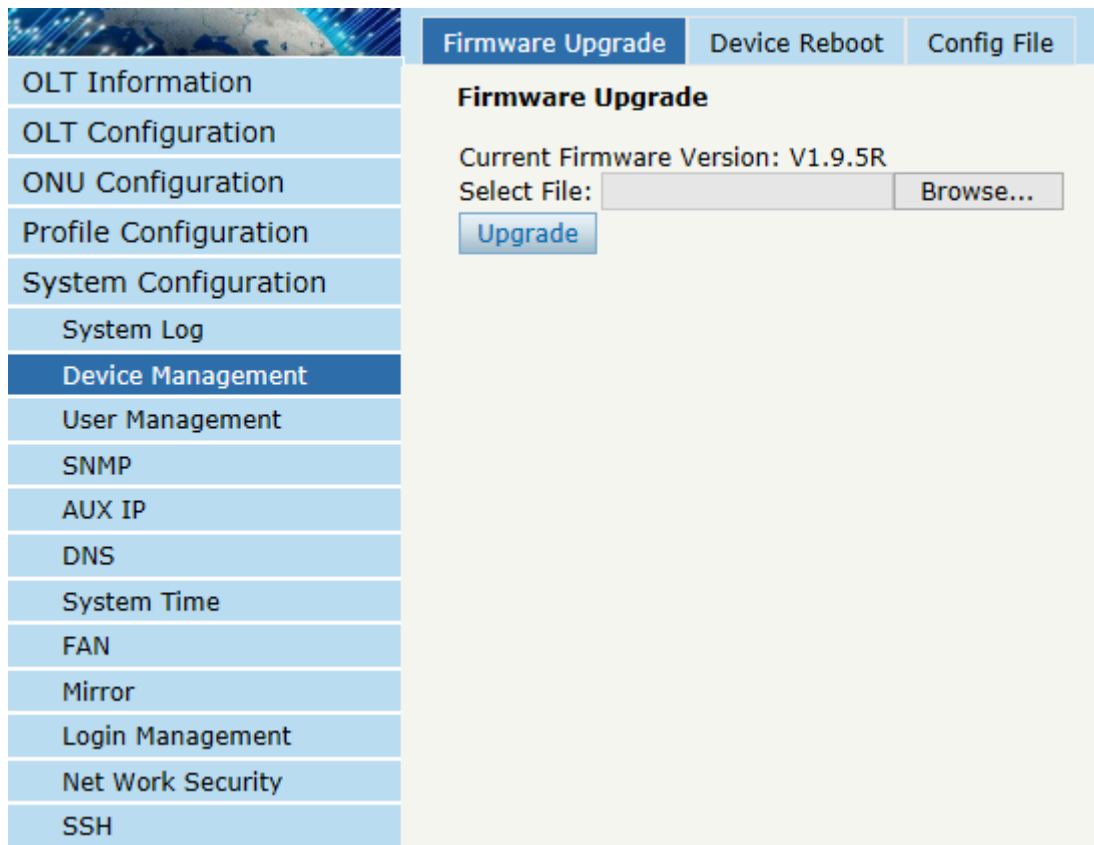


Figure 6.2-1: Firmware Upgrade

## 6.2.2 Device Reboot

### System Configuration □ Device Management □ Device Reboot

You can reboot the entire system on this page. Please do save the configuration before reboot.

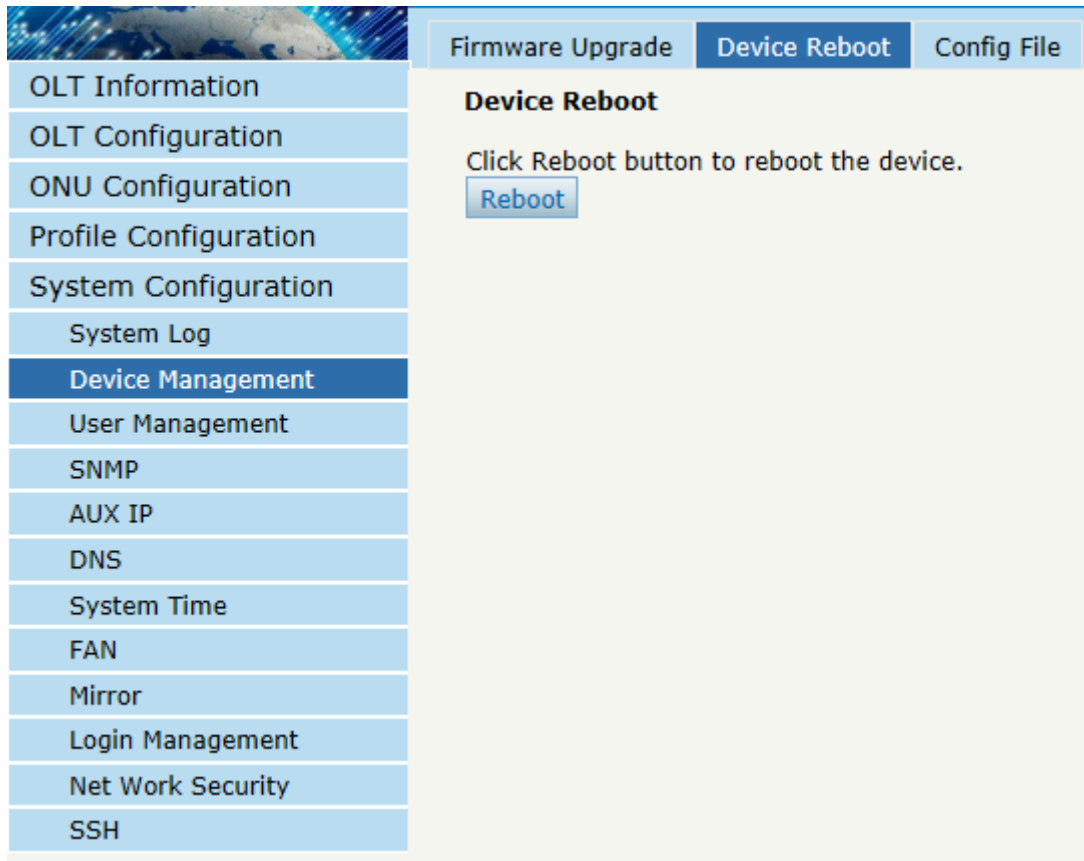


Figure 6.2-2: Device Reboot

### 6.2.3 Config File

#### System Configuration □ Device Management □ Config File

You can backup configuration, restore configuration, restore factory defaults and save configuration on this page.

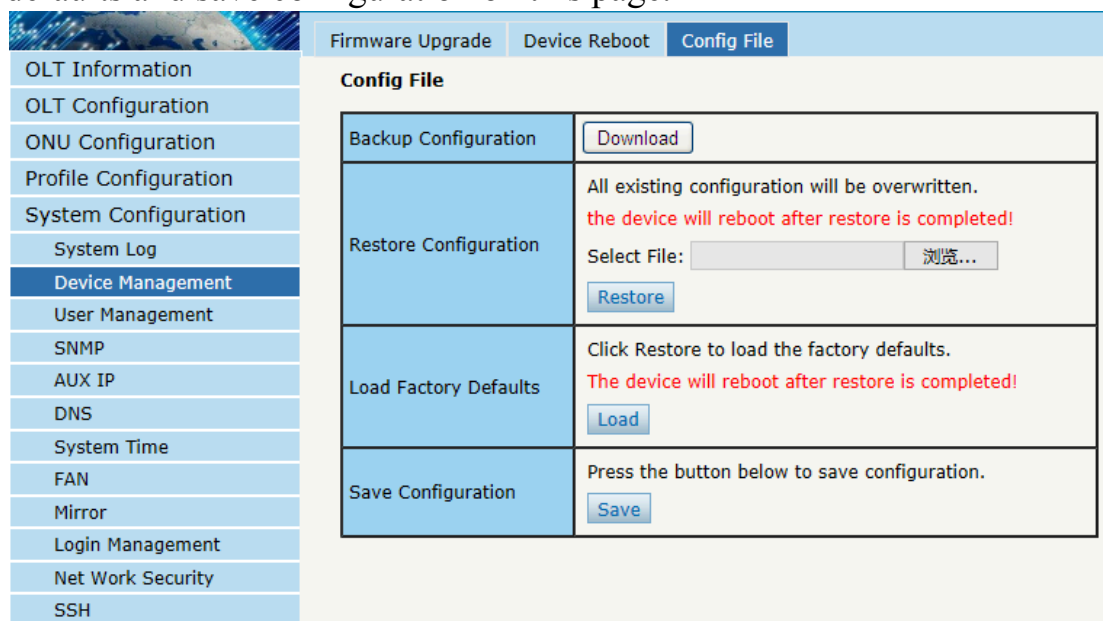




Figure 6.2-3: File Configuration

## 6.3 User Management

### System Configuration □ User management

Two types of user have been defined, Normal and Admin. There are limitations to normal user, and Admin user has no limits to full function of OLT. The default account member is **Admin** level.

User Name	User Role	Edit	Delete
admin	Admin		

Figure6.3-1: User Manage

## 6.4 SNMP

### 6.4.1 SNMP V1/V2

#### System Configuration □ SNMP □ SNMP V1/V2

This page is used to configure SNMP parameters of version 1 and version 2 for OLT management.

**SNMPV1/V2**   **SNMPV3**   **SNMPV3 Trap**

**Add Community**

Community Name

Access Right

**Community Table**

Community Name	Access Right	Delete
public	Read-Only	
private	Read-Write	

**Add Trap**

Host IP

UDP Port  (1-65535)

Community Name

SNMP Version

**Trap Table**


Host IP	UDP Port	SNMP Version	Community Name	Delete
---------	----------	--------------	----------------	--------

Figure6.4-1: SNMP V1/V2

## 6.4.2 SNMP V3

### System Configuration □ SNMP □ SNMP V3

This page is used to configure SNMP parameters of version 3 for OLT management.



OLT Information  
OLT Configuration  
ONU Configuration  
Profile Configuration  
System Configuration  
System Log  
Device Management  
User Management  
**SNMP**  
AUX IP  
DNS  
System Time  
FAN  
Mirror  
Login Management  
Network Security  
SSH  
Diagnose  
Tacacs+  
Radius

SNMPV1/V2 **SNMPV3** SNMPV3 Trap Remote Server

**Add View**

View Name   
 Subtree  (Type:Object Identifier)  
 View Type

**View Table**

View Name	Subtree	View Type	Delete
-----------	---------	-----------	--------

**Add Group**

Group Name   
 Access Level   
 Read View   
 Write View   
 Notify View

**Group Table**

Group Name	Access Level	Read View	Write View	Notify View	Delete
------------	--------------	-----------	------------	-------------	--------

**Add User**

User Name   
 Group Name   
 Auth Type   
 Auth Password   
 Private Type   
 Private Password

**User Table**

User Name	Group Name	Auth Type	Private Type	Delete
-----------	------------	-----------	--------------	--------

Figure6.4-2: SNMP V3

### 6.4.3 SMNP V3 Trap

**System Configuration** □ **SNMP** □ **SNMP V3 Trap**  
 Configure the target host IP address of trap messages.

**SNMPV1/V2** **SNMPV3** **SNMPV3 Trap** Remote Server

**Add Trap**

Host IP

UDP Port  (1-65535)

User Name

User Level

Tag List

Timeout  (1-4000000000)

Retry Count  (1-100)

**Trap Table**

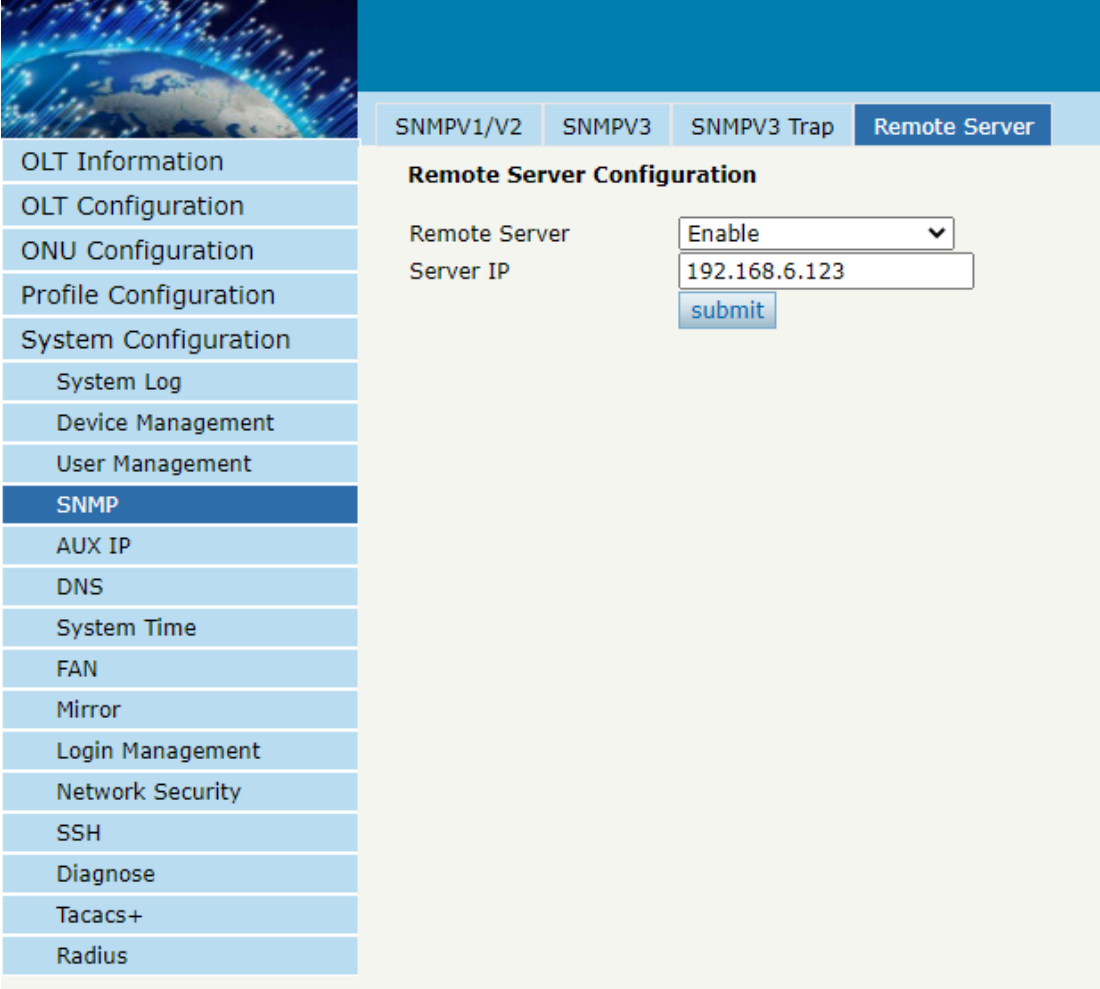
Host IP	UDP Port	Version	User Name	User Level	Tag List	Timeout	Retry Count	Delete
---------	----------	---------	-----------	------------	----------	---------	-------------	--------

Figure 6.4-3: SNMP V3 Trap

## 6.4.4 Remote Server

### System Configuration ☐ SNMP ☐ Remote Server

Configure the IP address of your SNMP network management server.



SNMPV1/V2	SNMPV3	SNMPV3 Trap	Remote Server
<b>Remote Server Configuration</b>			
Remote Server		Enable ▼	
Server IP		192.168.6.123	
		submit	

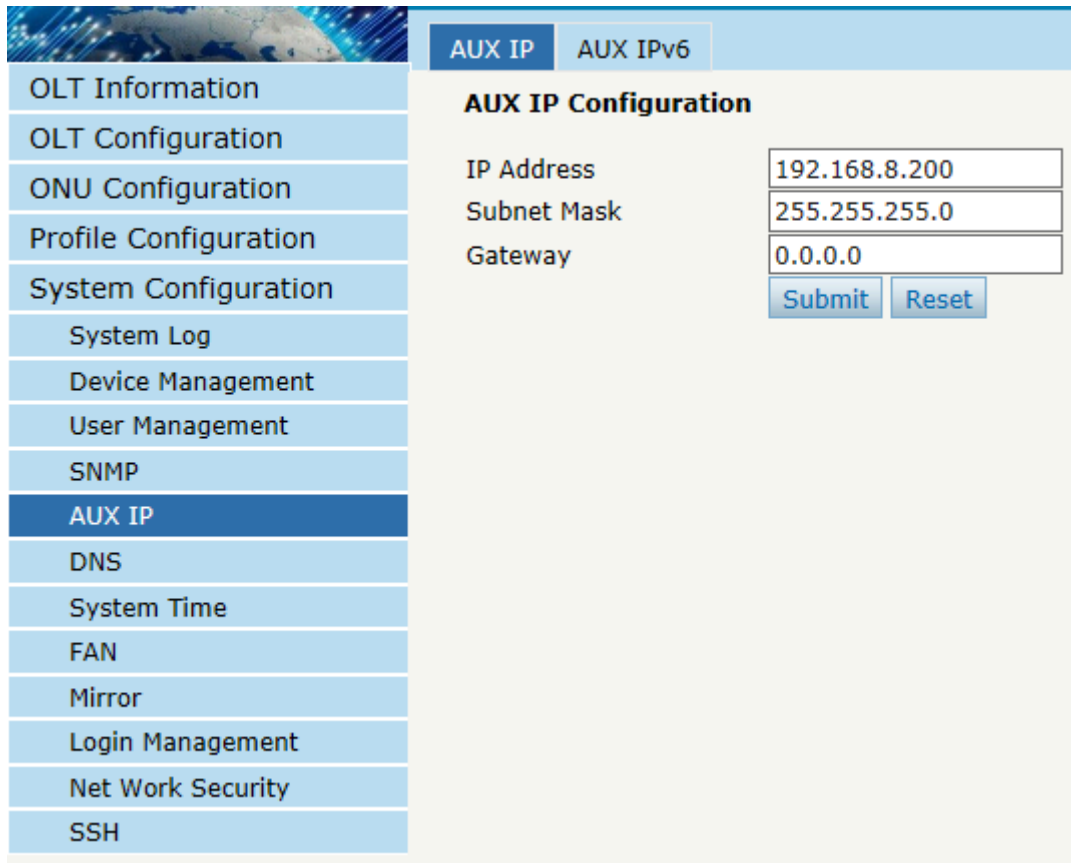
Figure 6.4-4: Remote Server

## 6.5 AUX IP

### 6.5.1 AUX IP

#### System Configuration □ AUX IP □ AUX IP

AUX port is out band management port. The IP address of aux port is out band management IP. Default IPv4 address is 192.168.8.200.



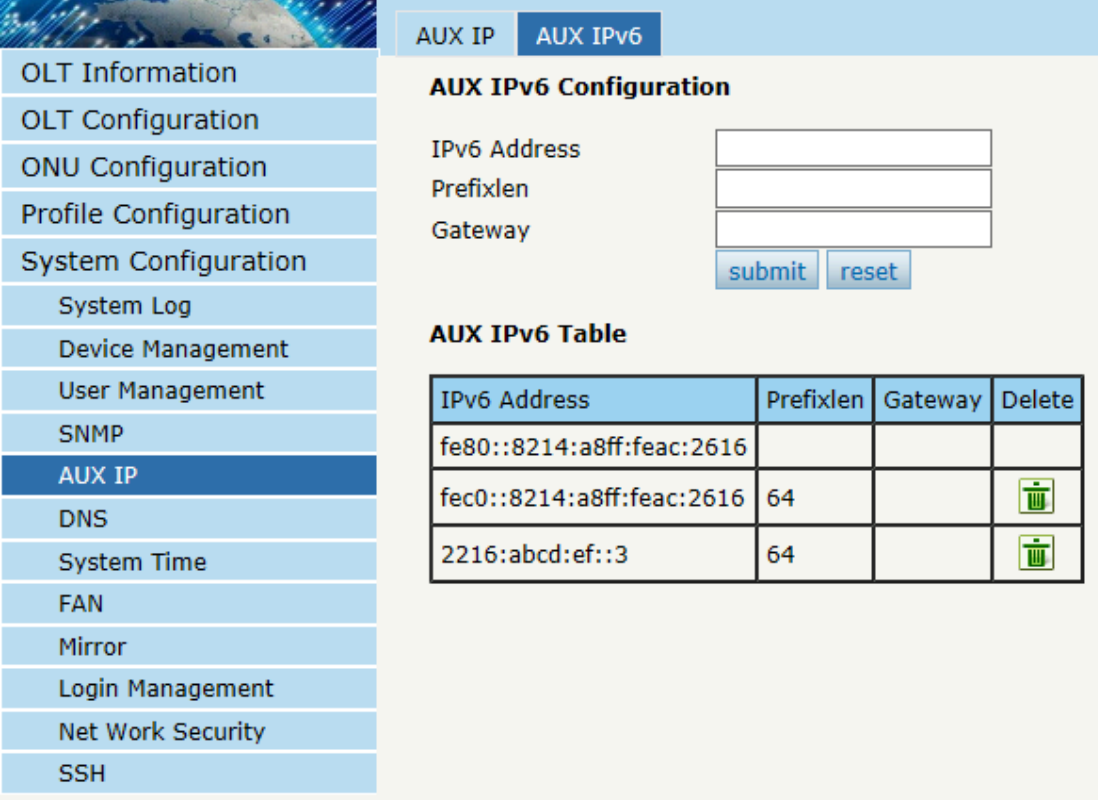
AUX IP Configuration	
IP Address	192.168.8.200
Subnet Mask	255.255.255.0
Gateway	0.0.0.0
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 6.5-1: AUX IP

## 6.5.2 AUX IPv6

### System Configuration □ AUX IP □ AUX IPv6

AUX port is out band management port. The IP address of aux port is out band management IP. By default, there is a link local address.



**AUX IP**

**AUX IPv6**

### AUX IPv6 Configuration

IPv6 Address

Prefixlen

Gateway

### AUX IPv6 Table



IPv6 Address	Prefixlen	Gateway	Delete
fe80::8214:a8ff:feac:2616			
fec0::8214:a8ff:feac:2616	64		
2216:abcd:ef::3	64		

Figure 6.5-2: AUX IPv6

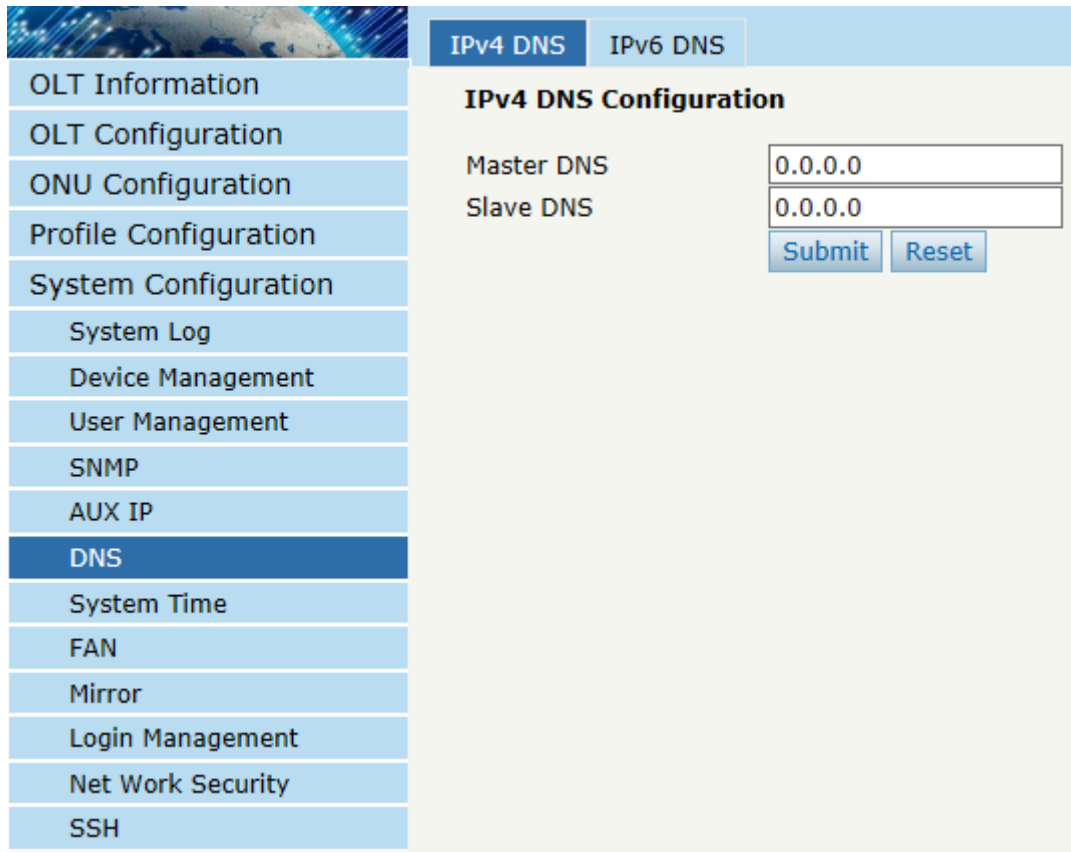
## 6. 6 DNS

DNS is used for domain name resolution. When OLT need to visit a site or a destination by domain, take NTP server for example, DNS is required.

### 6.6.1 IPv4 DNS

**System Configuration** □ **DNS** □ **IPv4 DNS**

This page is used to configure IPv4 DNS.



IPv4 DNS		IPv6 DNS
<b>IPv4 DNS Configuration</b>		
Master DNS	<input type="text" value="0.0.0.0"/>	
Slave DNS	<input type="text" value="0.0.0.0"/>	
	<input type="button" value="Submit"/>	<input type="button" value="Reset"/>


Figure 6.6-1: IPv4 DNS

## 6.6.2 IPv6 DNS

**System Configuration** □ **DNS** □ **IPv6 DNS**

This page is used to configure IPv6 DNS.





The screenshot displays the GPON OLT Web User Interface. On the left is a vertical menu with various system configuration options. The 'DNS' option is currently selected and highlighted in a darker blue. The main content area on the right is titled 'IPv6 DNS Configuration' and features two tabs: 'IPv4 DNS' and 'IPv6 DNS', with the latter being active. Below the tabs, there are two input fields labeled 'Master DNS' and 'Slave DNS'. At the bottom right of this section are two buttons: 'Submit' and 'Reset'.

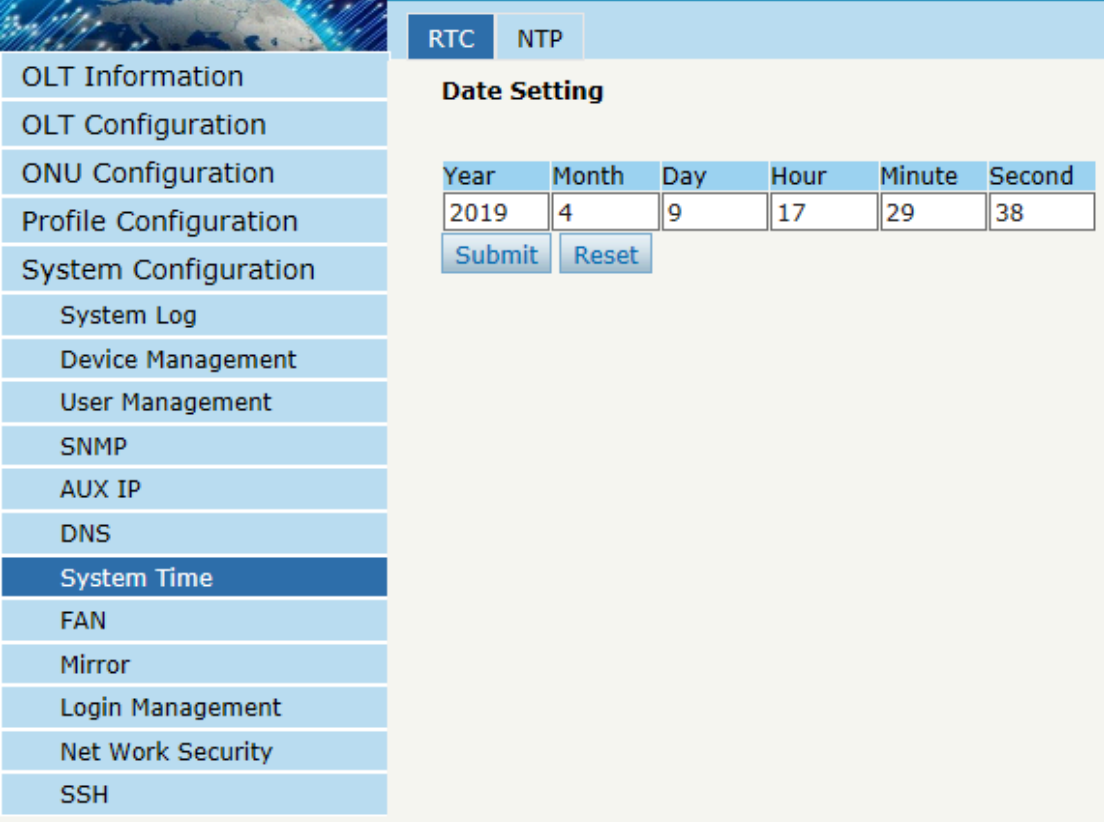
Figure 6.6-2: IPv6 DNS

## 6.7 System Time

### 6.7.1 RTC

#### System Configuration □ System Time □ RTC

This page is used to set OLT system time. RTC stands for Real-Time Clock, it provides clock signal to the system. There is no battery inside OLT, so the time will not be saved after powered off.



Year	Month	Day	Hour	Minute	Second
2019	4	9	17	29	38

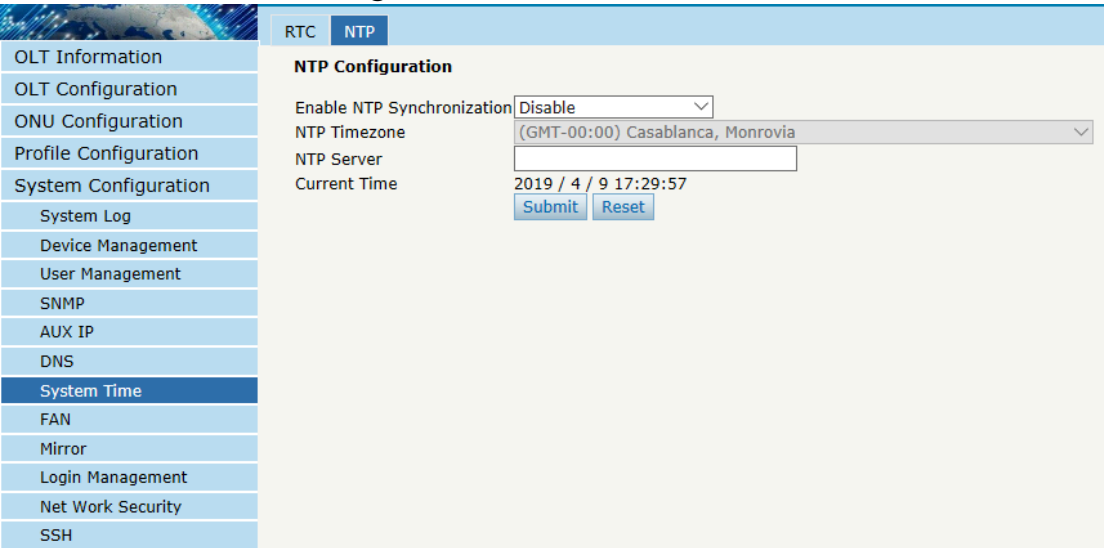
Submit Reset

Figure 6.7-1: RTC Setting

## 6.7.2 NTP

### System Configuration □ System Time □ NTP

This page is used to configure NTP server. OLT will synchronize time with the NTP server at a given time.



RTC NTP

**NTP Configuration**

Enable NTP Synchronization: Disable

NTP Timezone: (GMT-00:00) Casablanca, Monrovia

NTP Server:

Current Time: 2019 / 4 / 9 17:29:57

Submit Reset

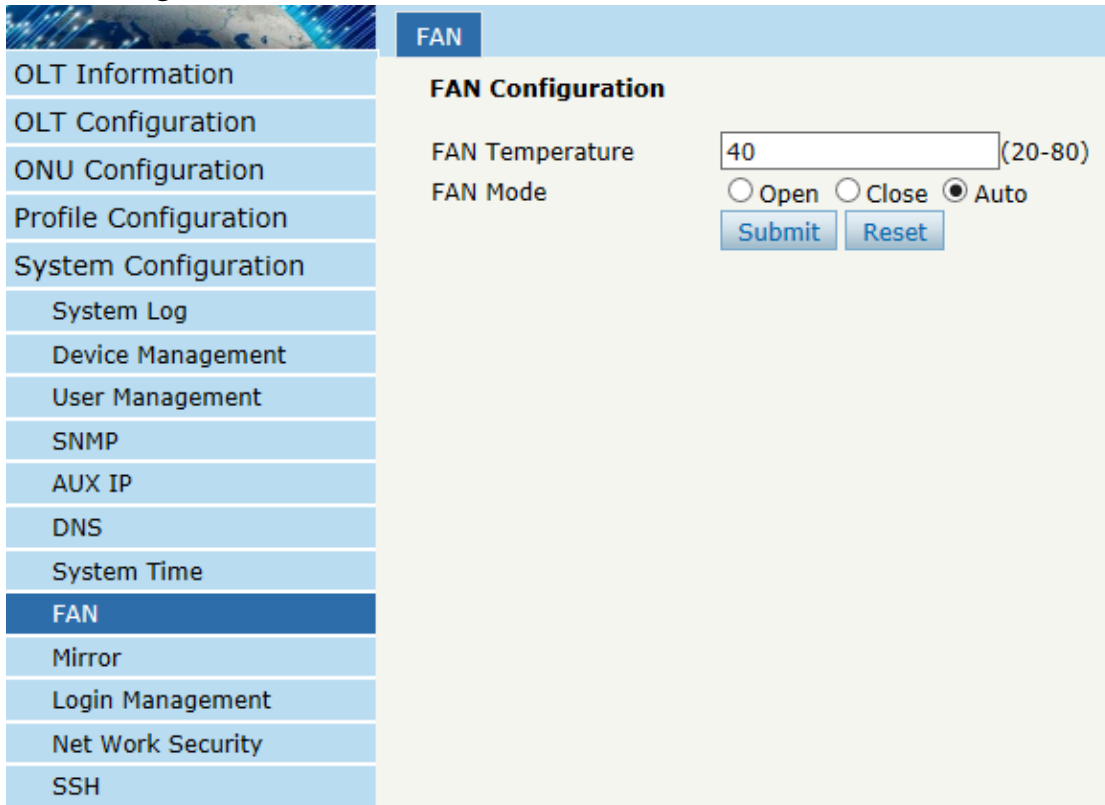
Figure 6.7-2: NTP Configuration

## 6.8 FAN

### System Configuration □ FAN

The fans can be turned on and turned off manually; and also can be turned on and off automatically according to the temperature of OLT main chip.

This configuration will not be saved after reboot.




FAN	
<b>FAN Configuration</b>	
FAN Temperature	<input type="text" value="40"/> (20-80)
FAN Mode	<input type="radio"/> Open <input type="radio"/> Close <input checked="" type="radio"/> Auto
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 6.8-1: FAN Configuration

## 6.9 Mirror

### System Configuration □ Mirror

Port mirror is usually used for troubleshooting. Each monitor session can be set with one destination port and up to 8 source ports.



OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

System Configuration

System Log

Device Management

User Management

SNMP

AUX IP

DNS

System Time

FAN

Mirror

Login Management

Net Work Security

SSH

Mirror

Mirror Configuration

Session ID

1

Destination Port

GE10

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 type="checkbox"/>	Both
GE6	<input type="checkbox"/>	Both
GE7	<input type="checkbox"/>	Both
GE8	<input type="checkbox"/>	Both
GE9	<input type="checkbox"/>	Both
GE10	<input type="checkbox"/>	Both
GE11	<input type="checkbox"/>	Both
GE12	<input type="checkbox"/>	Both
GE13	<input type="checkbox"/>	Both
GE14	<input type="checkbox"/>	Both
GE15	<input type="checkbox"/>	Both
GE16	<input type="checkbox"/>	Both
PON	<input checked="" type="checkbox"/>	Both

Submit

Mirror Table

Session ID	Destination Port	Source Port	Type	Delete
1	GE10	PON	Both	Clean

Figure 6.9-1: Mirror Configuration

## 6.10 Login Management

### 6.10.1 Login Access List

#### System Configuration □ Login Management □ Login Access List

This page is used to configure access rights for management. You can configure access rights for telnet, web, SNMP, SSH according to source IP address.

**Login Access List**   **Service Port**   **Login Timeout**

**Login Access Status**

Login Access Status:

**Login Access List Configuration**

Filter Action: ☒ Deny ☐ Permit

Internet Version:

Protocol:

Source IP:

IP Mask:

**Login Access List**

Filter Action	Internet Version	Protocol	Source IP/Mask	Delete
---------------	------------------	----------	----------------	--------

Figure 6.10-1: Login Access List Configuration

## 6.10.2 Service Port

### System Configuration □ Login Management □ Service Port

This user interface allows you to modify the default remote service port.

**Login Access List**   **Service Port**   **Login Timeout**

**Service Port**

Web Port:  (1-65535)

Telnet Port:  (1-65535)

SSH Port:  (1-65535)

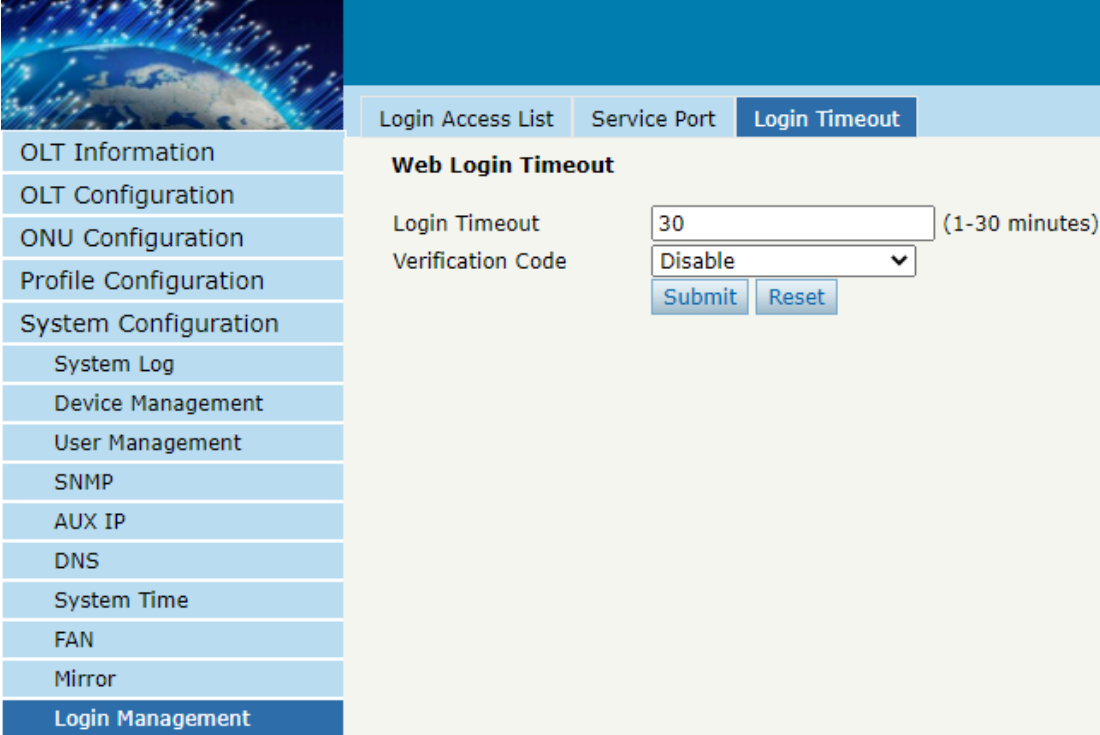
SNMP Port:  (1-65535)

Figure 6.10-2: Service Port Configuration

### 6.10.3 Login Timeout

#### System Configuration □ Login Management □ Login Timeout

This page is used to set web timeout.



Login Access List	Service Port	Login Timeout
<b>Web Login Timeout</b>		
Login Timeout	30	(1-30 minutes)
Verification Code	Disable	
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		

Figure 6.10-3: Login Timeout Configuration

## 6.11 Net Work Security

#### System Configuration □ Net Work Security

This page is used to set up OLT's network security level.

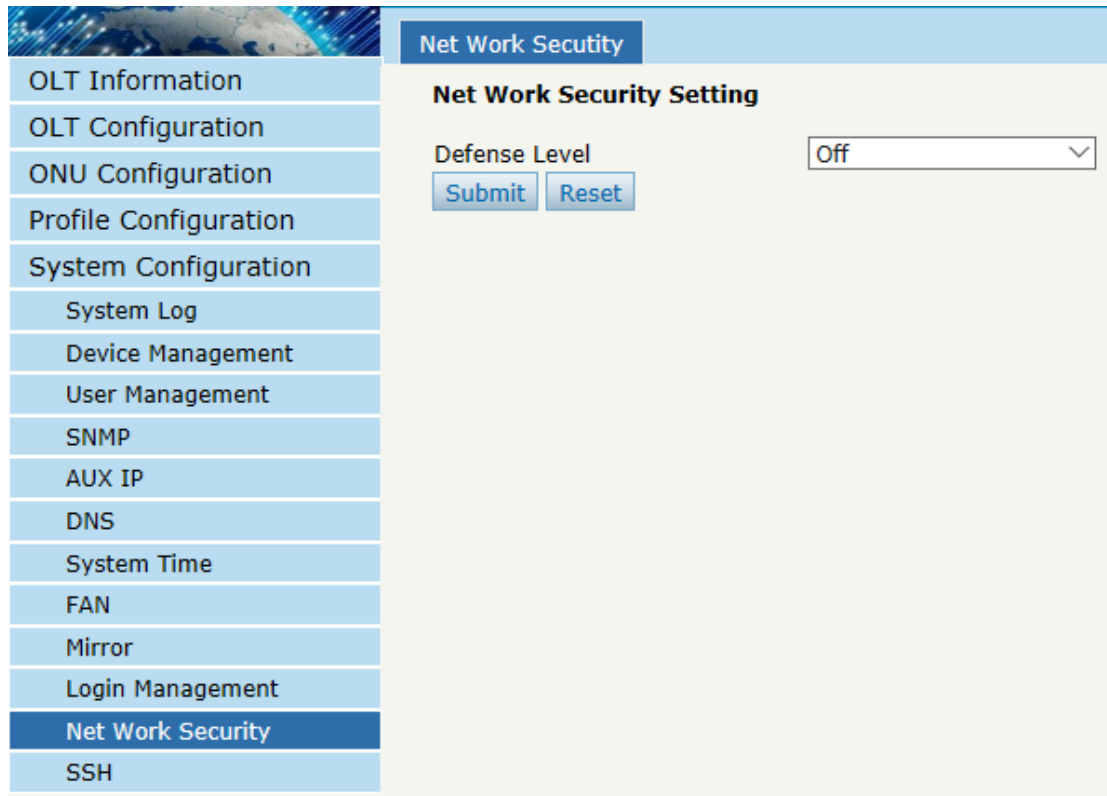


Figure 6.11-1: Net Work Security Setting


## 6.12 SSH

SSH (Secure Shell) is a reliable protocol that provides security for remote login sessions and other network services. The SSH protocol can effectively prevent information leakage during remote management.

### 6.12.1 SSH State

#### System Configuration □ SSH □ SSH State

This page displays current connections that have established by SSH protocol.




Connection	Version	Mode	Encryption	Hmac	State	Username
refresh						

Figure 6.12-1: SSH State

## 6.12.2 SSH Enable

### System Configuration ☐ SSH ☐ SSH Enable

This page is used to configure SSH protocol related parameters.



Key type	Encryption algorithm	Key Data
refresh		

Figure 6.12-1: SSH Global Configuration

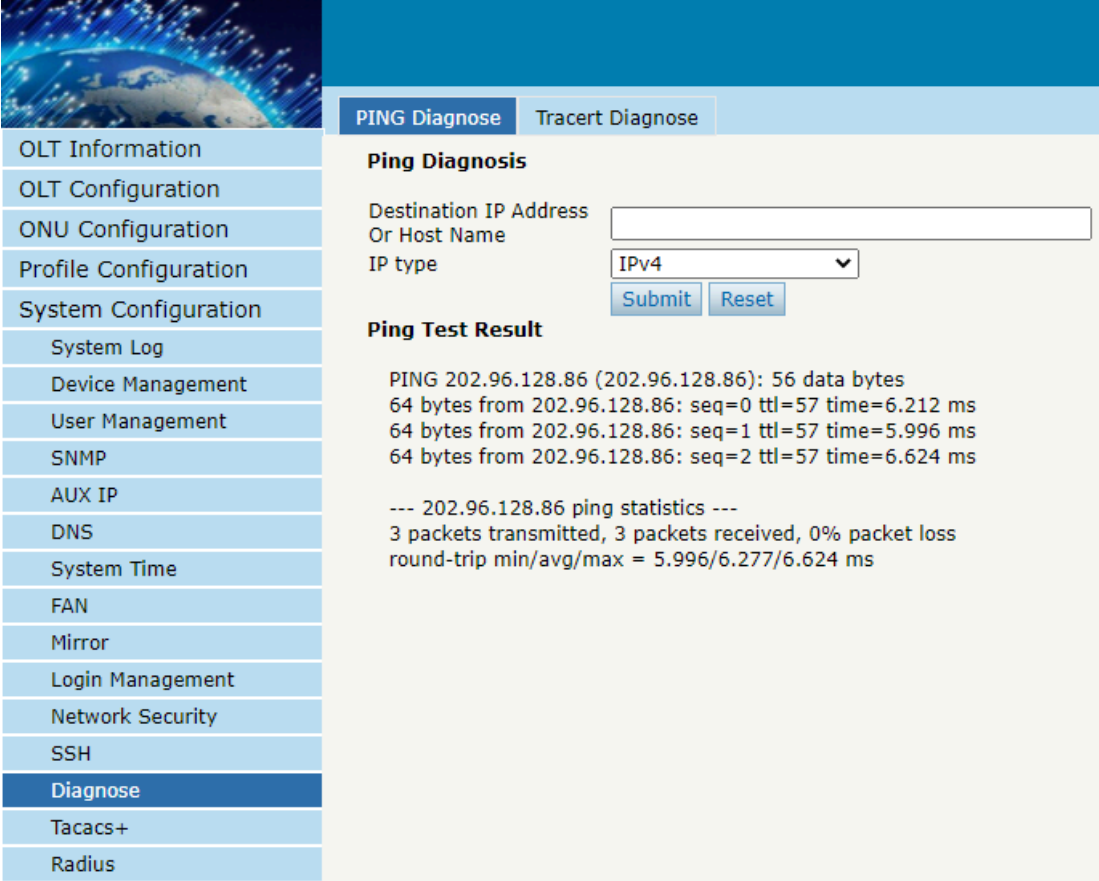


## 6.13 Diagnose

### 6.13.1 Ping Diagnose

**System Configuration** □ **Diagnose** □ **Ping Diagnose**

This interface is used to diagnose network connectivity.



**PING Diagnose**    Tracert Diagnose

**Ping Diagnosis**

Destination IP Address Or Host Name

IP type

**Ping Test Result**

PING 202.96.128.86 (202.96.128.86): 56 data bytes  
 64 bytes from 202.96.128.86: seq=0 ttl=57 time=6.212 ms  
 64 bytes from 202.96.128.86: seq=1 ttl=57 time=5.996 ms  
 64 bytes from 202.96.128.86: seq=2 ttl=57 time=6.624 ms

--- 202.96.128.86 ping statistics ---  
 3 packets transmitted, 3 packets received, 0% packet loss  
 round-trip min/avg/max = 5.996/6.277/6.624 ms

Figure 6.13-1: Ping Diagnose Configuration

### 6.13.2 Tracert Diagnose

**System Configuration** □ **Diagnose** □ **Tracert Diagnose**

This interface is used to track and diagnose routing and forwarding.

**PING Diagnose**    Tracert Diagnose

**Ping Diagnosis**

Destination IP Address Or Host Name

IP type

**Ping Test Result**

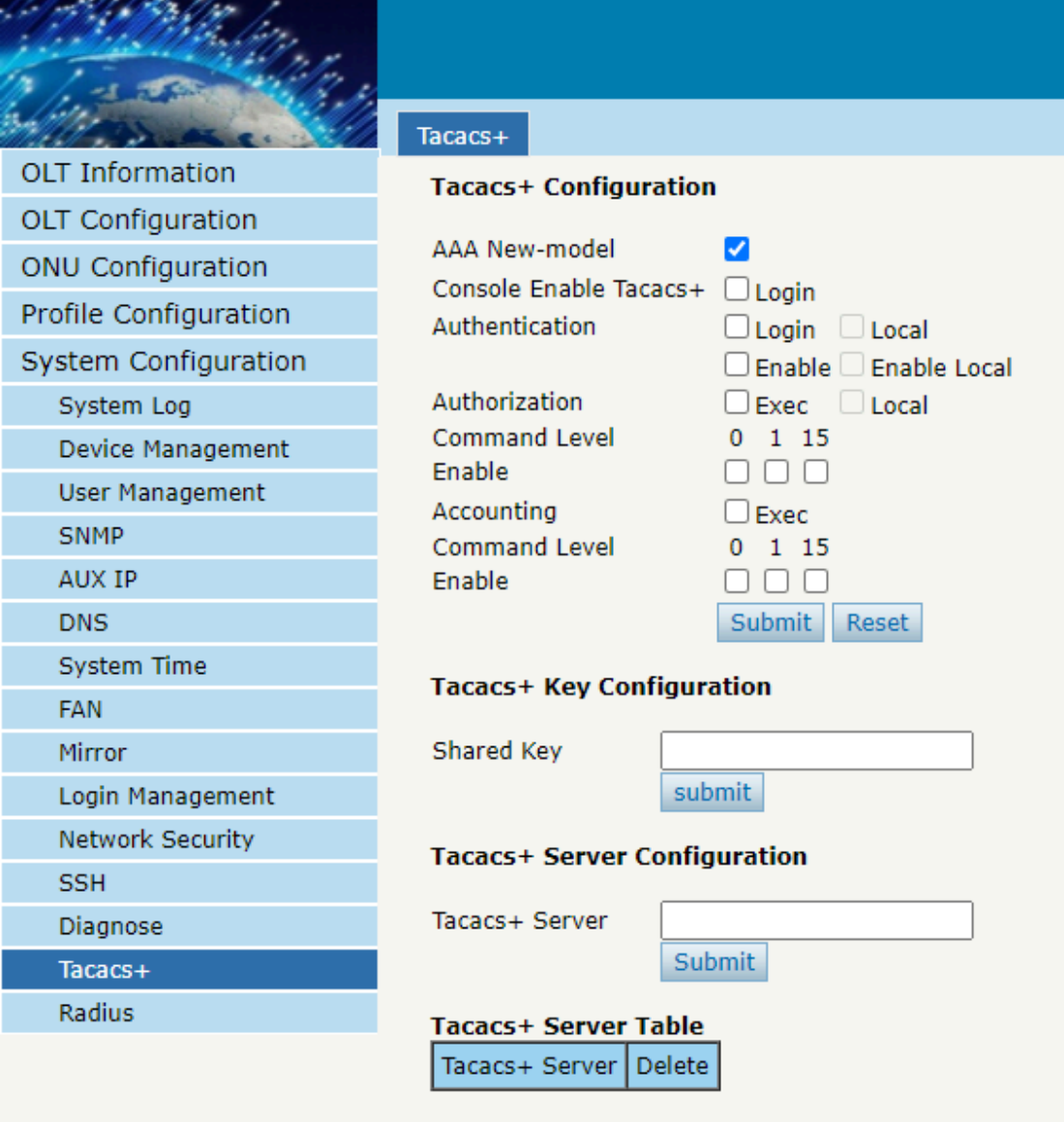
PING 202.96.128.86 (202.96.128.86): 56 data bytes  
 64 bytes from 202.96.128.86: seq=0 ttl=57 time=6.212 ms  
 64 bytes from 202.96.128.86: seq=1 ttl=57 time=5.996 ms  
 64 bytes from 202.96.128.86: seq=2 ttl=57 time=6.624 ms

--- 202.96.128.86 ping statistics ---  
 3 packets transmitted, 3 packets received, 0% packet loss  
 round-trip min/avg/max = 5.996/6.277/6.624 ms

Figure 6.13-2: Tracert Diagnose Configuration

## 6.14 Tacacs+

Tacacs+ is a protocol that provides access control for routers, network access servers, and other interconnected computing devices through one or more centralized servers. Tacacs+ provides independent authentication, authorization, and billing services. This interface allows you to configure the Tacacs+ server IP address and other specific parameters.



**Tacacs+**

**Tacacs+ Configuration**

AAA New-model ☒

Console Enable Tacacs+ ☐ Login

Authentication ☐ Login ☐ Local

☐ Enable ☐ Enable Local

Authorization ☐ Exec ☐ Local

Command Level 0 1 15

Enable ☐ ☐ ☐

Accounting ☐ Exec

Command Level 0 1 15

Enable ☐ ☐ ☐

**Tacacs+ Key Configuration**

Shared Key

**Tacacs+ Server Configuration**

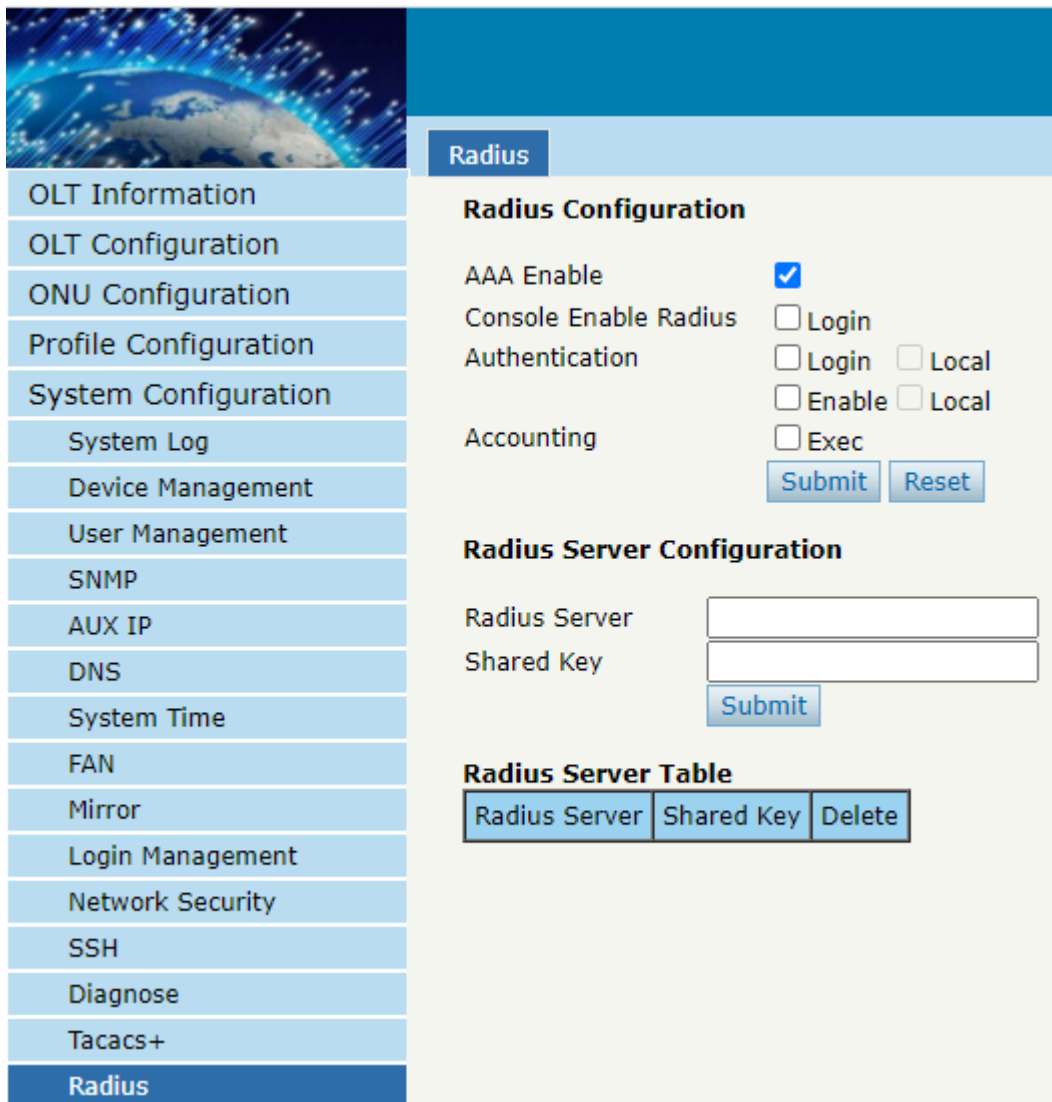
Tacacs+ Server

**Tacacs+ Server Table**

Figure 6.14-1: Tacacs+ Configuration

## 6.15 Radius

Radius is a protocol for authentication, authorization, and accounting information. The Radius server is responsible for receiving the user's connection request, authenticating the user, and then returning all the necessary configuration information to the client to send the service to the user. This interface allows you to configure the Radius server IP address and other parameters.



The screenshot displays the 'Radius' configuration page of a GPON OLT web interface. On the left is a vertical navigation menu with 20 items, including 'OLT Information', 'OLT Configuration', 'ONU Configuration', 'Profile Configuration', 'System Configuration', 'System Log', 'Device Management', 'User Management', 'SNMP', 'AUX IP', 'DNS', 'System Time', 'FAN', 'Mirror', 'Login Management', 'Network Security', 'SSH', 'Diagnose', 'Tacacs+', and 'Radius' (which is highlighted in dark blue). The main content area has a blue header with the word 'Radius'. Below this, the 'Radius Configuration' section contains four settings: 'AAA Enable' (checked), 'Console Enable Radius' (unchecked), 'Authentication' (with 'Login' and 'Local' options, both unchecked), and 'Accounting' (with 'Enable' and 'Local' options, both unchecked, and an 'Exec' option also unchecked). 'Submit' and 'Reset' buttons are at the bottom of this section. The 'Radius Server Configuration' section has two text input fields for 'Radius Server' and 'Shared Key', with a 'Submit' button below them. The 'Radius Server Table' section contains a table with three columns: 'Radius Server', 'Shared Key', and 'Delete'.

Radius Server	Shared Key	Delete
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Figure 6.15-1: Radius Configuration

Tento manuál je dostupný rovněž online na <https://docs.netvia.cz/>

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