

XG(S)-PON OLT WEB USER MANUAL

Version V1.0

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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.

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 V3600G1 Series OLT interfaces

Product		8 ports XG(S)PON OLT
Chassis	Racks	1U 19 inch standard box
1G/10G/25G/40G/ 50G/100G Uplink Port	QTY	7
	Speed	4*1G/10G/25G 2*40G/50G/100G 1*1G auto-negotiation
	Type(Independent)	1*RJ45 and 6*SFP+ (SFP+ is compatible with 10GE/25GE/40GE/50GE/100GE)

GPON Port	QTY	8
	Physical Interface	8*XG(S)-PON
Management Ports		1*10/100/1000BASE-T out-band port(AUX), 1*CONSOLE port, 1*USB2.0, 1*Type-C USB console, 1*Micro-SD
Management Mode		SNMP, WEB, and CLI(Console/Telnet/SSH)

1.1.2 OS Requirement

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

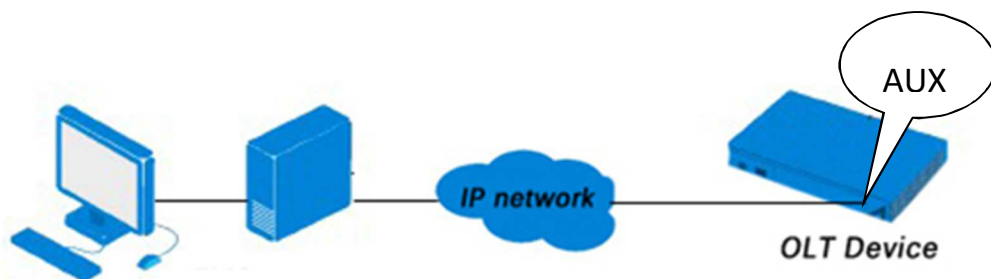
Table 1-2 Operation System requirement

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).



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 web browser, type the device IP in address bar;
4. Entry of the username and password will be prompted. Enter the default login Username and Password. The username and password are "admin" and "Xpon@Olt9417#" by default.

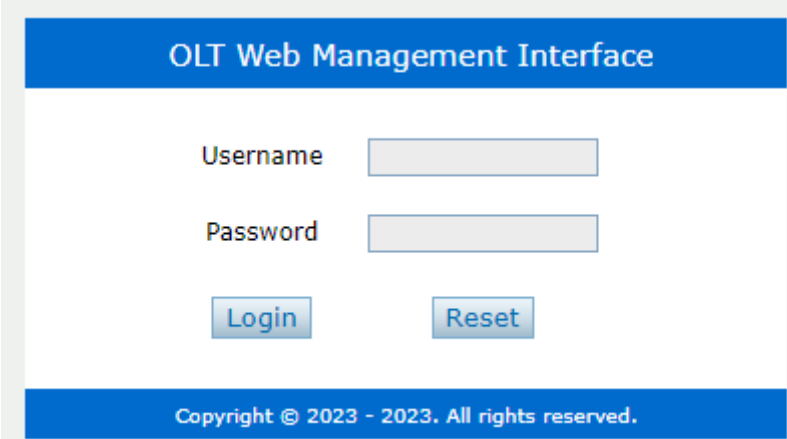
The image shows a web browser window displaying the 'OLT Web Management Interface' login page. The page has a blue header bar with the title 'OLT Web Management Interface'. Below the header, there are two input fields: 'Username' and 'Password'. Below the 'Password' field, there are two buttons: 'Login' and 'Reset'. At the bottom of the page, there is a blue footer bar with the text 'Copyright © 2023 - 2023. All rights reserved.'

Figure 2-1: Login

2.2 Device Information

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

Click **OLT Information**→**Device Information** to get the 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.

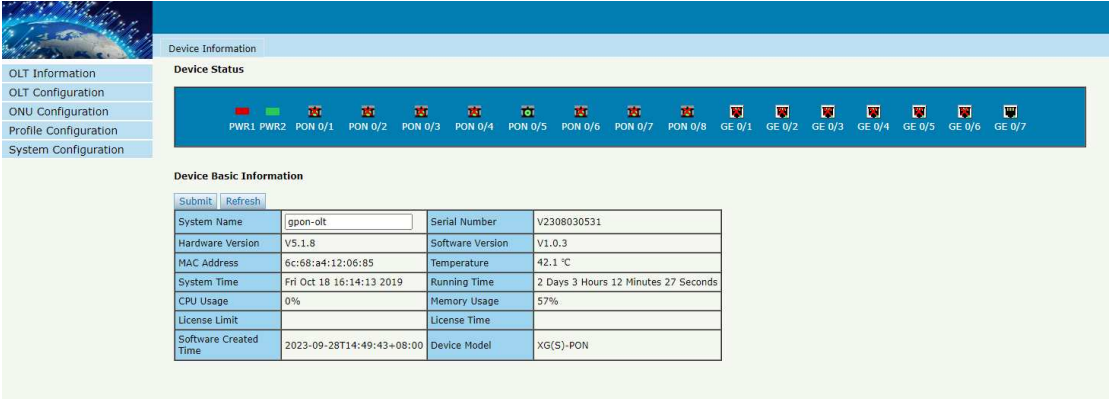


Figure 2-2: Device Information

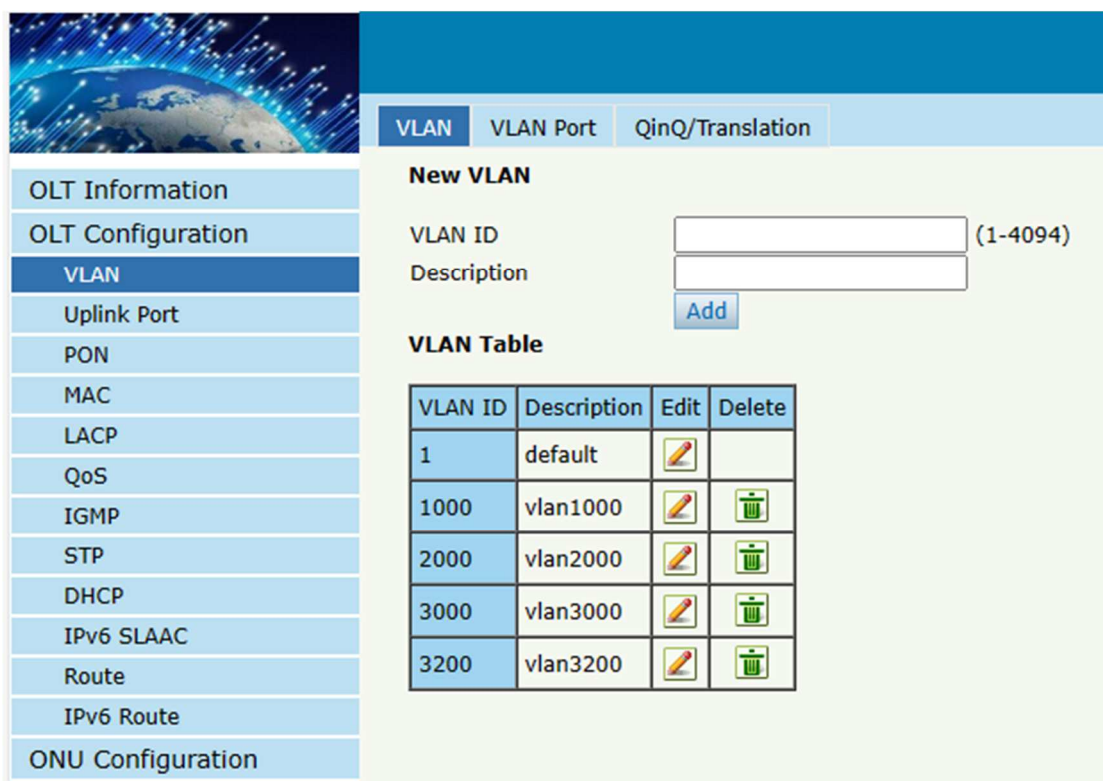
Chapter 3 OLT Configuration

This section is about the basic service configuration of OLT.

3.1 VLAN

3.1.1 New VLAN

Click **OLT Configuration**→**VLAN** to create new VLAN. Input VLAN ID with a range, such as 2-8, all VLAN in the range will be created.



The screenshot displays the OLT Configuration interface. On the left is a sidebar with a menu of configuration options: OLT Information, OLT Configuration, VLAN (selected), Uplink Port, PON, MAC, LACP, QoS, IGMP, STP, DHCP, IPv6 SLAAC, Route, IPv6 Route, and ONU Configuration. The main content area is titled 'New VLAN' and includes a 'VLAN ID' input field with a range '(1-4094)' and a 'Description' input field. Below these fields is an 'Add' button. A 'VLAN Table' is also present, showing a list of VLANs with columns for VLAN ID, Description, Edit, and Delete.

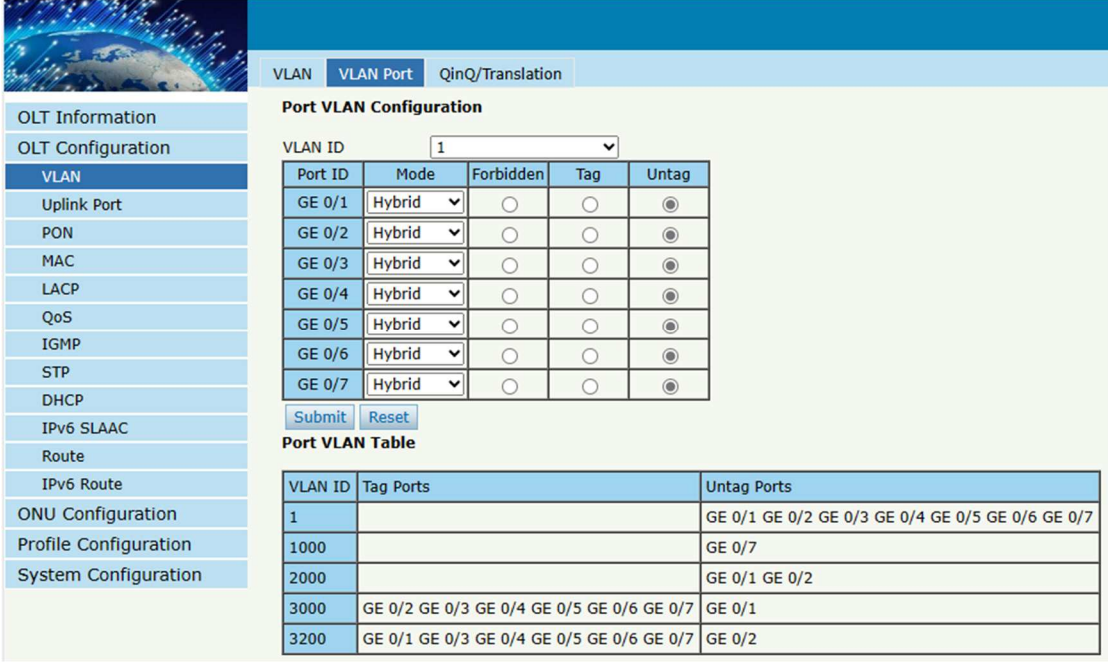
VLAN ID	Description	Edit	Delete
1	default		
1000	vlan1000		
2000	vlan2000		
3000	vlan3000		
3200	vlan3200		

Figure 3.1-1: Create New VLAN

3.1.2 VLAN Port

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

Click **OLT Configuration→VLAN→VLAN Port** to configure VLAN ports, as shown in Figure 3.1-2.



Port VLAN Configuration

VLAN ID: 1

Port ID	Mode	Forbidden	Tag	Untag
GE 0/1	Hybrid	☐	☐	☒
GE 0/2	Hybrid	☐	☐	☒
GE 0/3	Hybrid	☐	☐	☒
GE 0/4	Hybrid	☐	☐	☒
GE 0/5	Hybrid	☐	☐	☒
GE 0/6	Hybrid	☐	☐	☒
GE 0/7	Hybrid	☐	☐	☒

[Submit](#) [Reset](#)

Port VLAN Table

VLAN ID	Tag Ports	Untag Ports
1		GE 0/1 GE 0/2 GE 0/3 GE 0/4 GE 0/5 GE 0/6 GE 0/7
1000		GE 0/7
2000		GE 0/1 GE 0/2
3000	GE 0/2 GE 0/3 GE 0/4 GE 0/5 GE 0/6 GE 0/7	GE 0/1
3200	GE 0/1 GE 0/3 GE 0/4 GE 0/5 GE 0/6 GE 0/7	GE 0/2

Figure 3.1-2: Add VLAN Port

3.1.3 QinQ/Translation

To configure the port mode VLAN translation or double VLAN tag, click **OLT Configuration→VLAN→QinQ/Translation**, as shown in Figure 3.1-3.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

VLAN

VLAN Port

QinQ/Translation

QinQ Configuration

Port ID

GE 0/1

Mode

VLAN Translation

Customer VLAN

1

Customer Cos

any

Service VLAN

1

Service Cos

any

Add

VLAN QinQ Mapping Table

Port ID	Mode	Customer VLAN	Customer Cos	Service VLAN	Service Cos	Delete
---------	------	---------------	--------------	--------------	-------------	--------

Figure 3.1-3: QinQ/Translation Configuration

3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

3.2.1 Information

Click **OLT Configuration→Uplink Port→Information** to check uplink information, as shown in Figure 3.2-1.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information

Configuration

Optical Information

Traffic Statistics

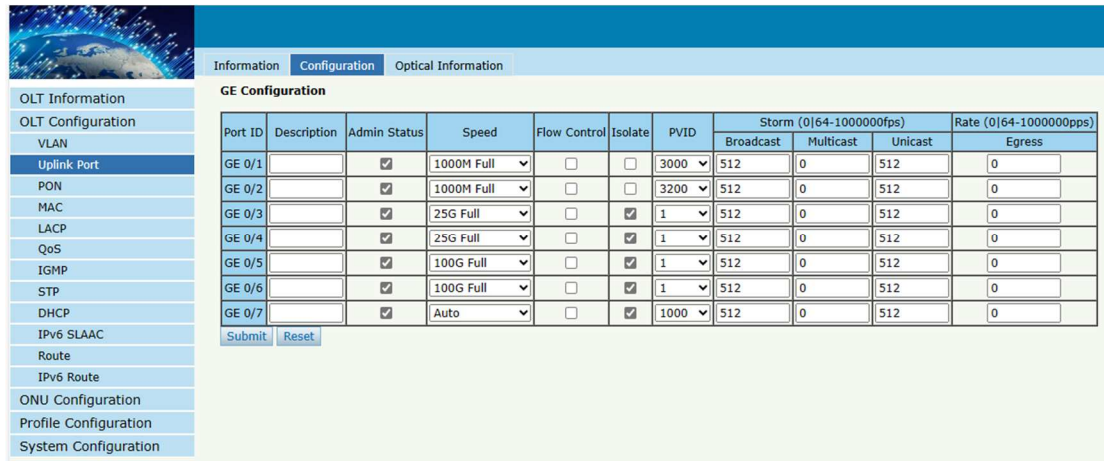
Clear Counters Refresh

Port ID	Link Status	Speed	Rx Bytes	Rx Packets				Tx Bytes	Tx Packets				Collisions	CRC Errors
				Packets	Unicast	Broadcast	Multicast		Packets	Unicast	Broadcast	Multicast		
GE 0/1	down	1000Mb/s	18864	190	0	164	26	27433439	216439	209719	6317	403	0	0
GE 0/2	up	1000Mb/s	456786661746	3568645792	1784322809	0	1784322897	430167842203	3469142567	3468973461	164911	4195	0	2
GE 0/3	down	25Gb/s	0	0	0	0	0	0	0	0	0	0	0	0
GE 0/4	down	25Gb/s	0	0	0	0	0	0	0	0	0	0	0	0
GE 0/5	down	100Gb/s	0	0	0	0	0	0	0	0	0	0	0	0
GE 0/6	down	100Gb/s	0	0	0	0	0	0	0	0	0	0	0	0
GE 0/7	up	1000Mb/s	52349467831	332874861	324292135	577595	7989672	11364869661	88424420	88325431	95732	3257	0	0

Figure3.2-1: GE Traffic Statistics

3.2.2 Configuration

The GE ports basic configuration can be set. Click **OLT Configuration** → **Uplink Port** → **Configuration** to configure uplink ports, as shown in Figure 3.2-2.



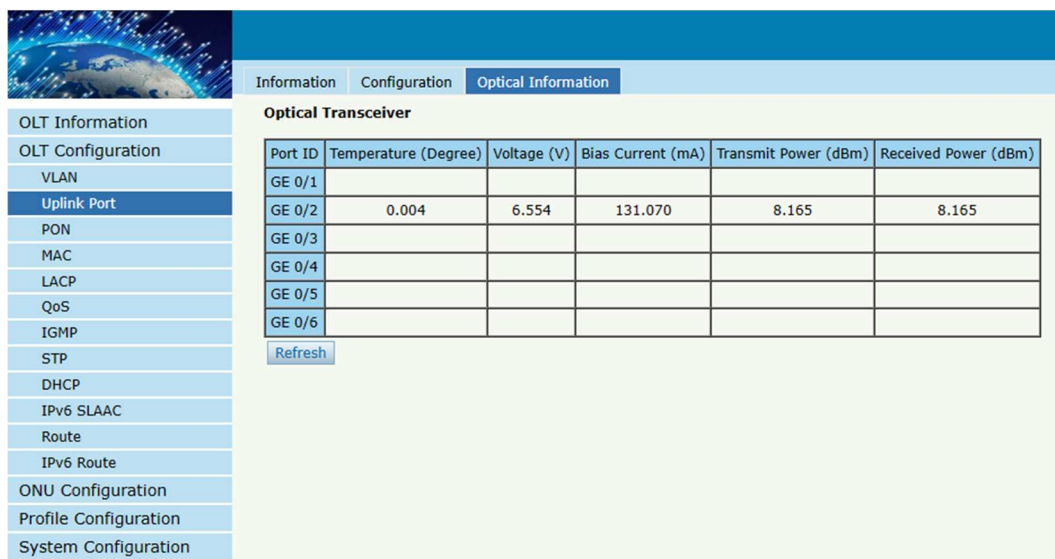
Port ID	Description	Admin Status	Speed	Flow Control	Isolate	PVID	Storm (0 64-1000000fps)			Rate (0 64-1000000pps)
							Broadcast	Multicast	Unicast	Egress
GE 0/1		☒	1000M Full	☐	☐	3000	512	0	512	0
GE 0/2		☒	1000M Full	☐	☐	3200	512	0	512	0
GE 0/3		☒	25G Full	☐	☒	1	512	0	512	0
GE 0/4		☒	25G Full	☐	☒	1	512	0	512	0
GE 0/5		☒	100G Full	☐	☒	1	512	0	512	0
GE 0/6		☒	100G Full	☐	☒	1	512	0	512	0
GE 0/7		☒	Auto	☐	☒	1000	512	0	512	0

Submit Reset

Figure3.2-2: Uplink Ports Configuration

3.2.3 Optical Information

Click **OLT Configuration** → **Uplink Port** → **Optical Information** to check optical information, as shown in Figure 3.2-3.



Port ID	Temperature (Degree)	Voltage (V)	Bias Current (mA)	Transmit Power (dBm)	Received Power (dBm)
GE 0/1					
GE 0/2	0.004	6.554	131.070	8.165	8.165
GE 0/3					
GE 0/4					
GE 0/5					
GE 0/6					

Refresh

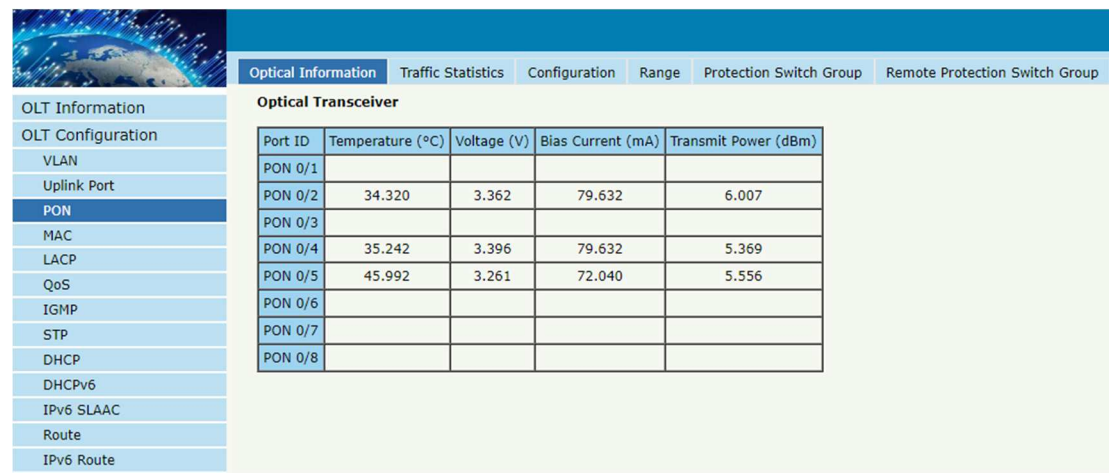
Figure3.2-3: Optical Information

3.3 PON

3.3.1 Information

The OLT PON ports information can be shown here, about the PON ports current temperature, Voltage, current and transmit power.

Click **OLT Configuration**→**PON**→**Optical Information** to check PON ports information, as shown in Figure 3.3-1.



The screenshot shows a web interface for OLT configuration. On the left is a sidebar menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON (highlighted), MAC, LACP, QoS, IGMP, STP, DHCP, DHCPv6, IPv6 SLAAC, Route, and IPv6 Route. The main area has tabs: Optical Information (selected), Traffic Statistics, Configuration, Range, Protection Switch Group, and Remote Protection Switch Group. Below the tabs is a table titled 'Optical Transceiver' with columns: Port ID, Temperature (°C), Voltage (V), Bias Current (mA), and Transmit Power (dBm). The table contains data for ports PON 0/1 through PON 0/8.

Port ID	Temperature (°C)	Voltage (V)	Bias Current (mA)	Transmit Power (dBm)
PON 0/1				
PON 0/2	34.320	3.362	79.632	6.007
PON 0/3				
PON 0/4	35.242	3.396	79.632	5.369
PON 0/5	45.992	3.261	72.040	5.556
PON 0/6				
PON 0/7				
PON 0/8				

Figure3.3-1: PON Optical Information

3.3.2 Traffic Statistics

The OLT PON ports information can be shown here, about the statistics on the traffic of received and sent packets .

Click **OLT Configuration**→**PON**→**Traffic Statistics** to check PON ports information, as shown in Figure 3.3-2.

	Optical Information	Traffic Statistics	Configuration	Range	Protection Switch Group	Remote Protection Switch Group
OLT Information	Traffic Statistics					
OLT Configuration	Clear Counters Refresh					
VLAN						
Uplink Port						
PON						
MAC						
LACP						
QoS						
IGMP						
STP						
DHCP						
DHCPv6						
IPv6 SLAAC						
Route						
IPv6 Route						
IPv6						

Interface	Rx Packets					Tx Packets				
	Packets	Unicast	Broadcast	Multicast	Errors	Packets	Unicast	Broadcast	Multicast	Errors
PON 0/1	0	0	0	0	0	500375859	28291788	389028236	83055835	0
PON 0/2	0	0	0	0	0	3474272	85183	2801902	587187	0
PON 0/3	0	0	0	0	0	3474272	85183	2801902	587187	0
PON 0/4	0	0	0	0	0	3474272	85183	2801902	587187	0
PON 0/5	44764007577	44764001265	1798	4510	0	45043642364	22446846353	59576815	22537219196	0
PON 0/6	0	0	0	0	0	3474272	85183	2801902	375097	0
PON 0/7	0	0	0	0	0	1074497163	75598464	725723241	273175458	0
PON 0/8	0	0	0	0	0	1367252819	99222984	949334450	318695385	0

Figure3.3-2:Traffic Statistics Information

3.3.3 Configuration

The PON ports basic configuration can be set.

Click **OLT Configuration→PON→Configuration** to configure PON ports, as shown in Figure 3.3-3.

	Optical Information	Traffic Statistics	Configuration	Range	Protection Switch Group	Remote Protection Switch Group
OLT Information	PON Configuration					
OLT Configuration	Submit Refresh					
VLAN						
Uplink Port						
PON						
MAC						
LACP						
QoS						
IGMP						
STP						
DHCP						
DHCPv6						
IPv6 SLAAC						
Route						
IPv6 Route						
IPv6						
IPv6 Static Route						

Port ID	Description	Admin Status	Isolate	ONU P2P	Storm (0 64-1000000pps)			Rate (0 64-1000000pps)
					Broadcast	Multicast	Unicast	Egress
PON 0/1		☒	☐	☒	512	0	512	0
PON 0/2		☒	☐	☒	512	0	512	0
PON 0/3		☒	☐	☒	512	0	512	0
PON 0/4		☒	☐	☒	512	0	512	0
PON 0/5		☒	☐	☒	512	0	512	0
PON 0/6		☒	☐	☒	512	0	512	0
PON 0/7		☒	☐	☒	512	0	512	0
PON 0/8		☒	☐	☒	512	0	512	0

Figure3.3-3: PON configuration

3.3.4 Range

Click **OLT Configuration→PON→Range** to configure the shortest and

longest distance ray registration under the PON port . (Notice: Difference between Maximum and Minimum Range can't exceed 20KM in GPON and 40KM in XGPON!)

Optical Information Traffic Statistics Configuration **Range** Protection Switch Group Remote Protection Switch Group

PON Range Configuration

Submit Refresh

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

Notice: Difference between Maximum and Minimum Range cant exceed 20KM in GPON and 40KM in XGPON!

Figure3.3-4:Range Configuration

3.3.5 Protection Switch Group

OLT Configuration→PON→Protection Switch Group

This web 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.

Figure3.3-5: PON Protection Switch Group Configuration

3.3.6 Remote Protection Switch Group

OLT Configuration→PON→Remote Protection Switch Group

The configuration page is similar to the Protection Switch Group, except that it works between the pon ports of two OLTs for backup.

Figure3.3-6: Remote PON Protection Switch Group Configuration

3.4 MAC

3.4.1 MAC Table

All the MAC addresses learnt by OLT can be shown.

Select **OLT Configuration**→**MAC**→**MAC Table**, as shown in Figure 3.4-1.

VLAN ID	MAC	Type	Physical Port
3000	6C:68:A4:20:69:7D	Dynamic	PON 0/1:45
3000	6C:68:A4:20:68:BD	Dynamic	PON 0/1:18
3200	00:10:94:00:BB:06	Dynamic	GE 0/2
3200	00:10:94:00:BB:01	Dynamic	GE 0/2
3000	6C:68:A4:20:68:0D	Dynamic	PON 0/1:39
3000	6C:68:A4:20:69:5D	Dynamic	PON 0/1:6
3000	6C:68:A4:20:6D:DD	Dynamic	PON 0/1:35
3200	00:10:94:00:BB:04	Dynamic	GE 0/2
3000	6C:68:A4:20:6C:4D	Dynamic	PON 0/1:42
1	6C:68:A4:12:06:85	Static	CPU

Figure3.4-1: MAC Address Table

3.4.2 Configuration

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

Select **OLT Configuration**→**MAC**→**Configuration**, as shown in Figure 3.4-2.

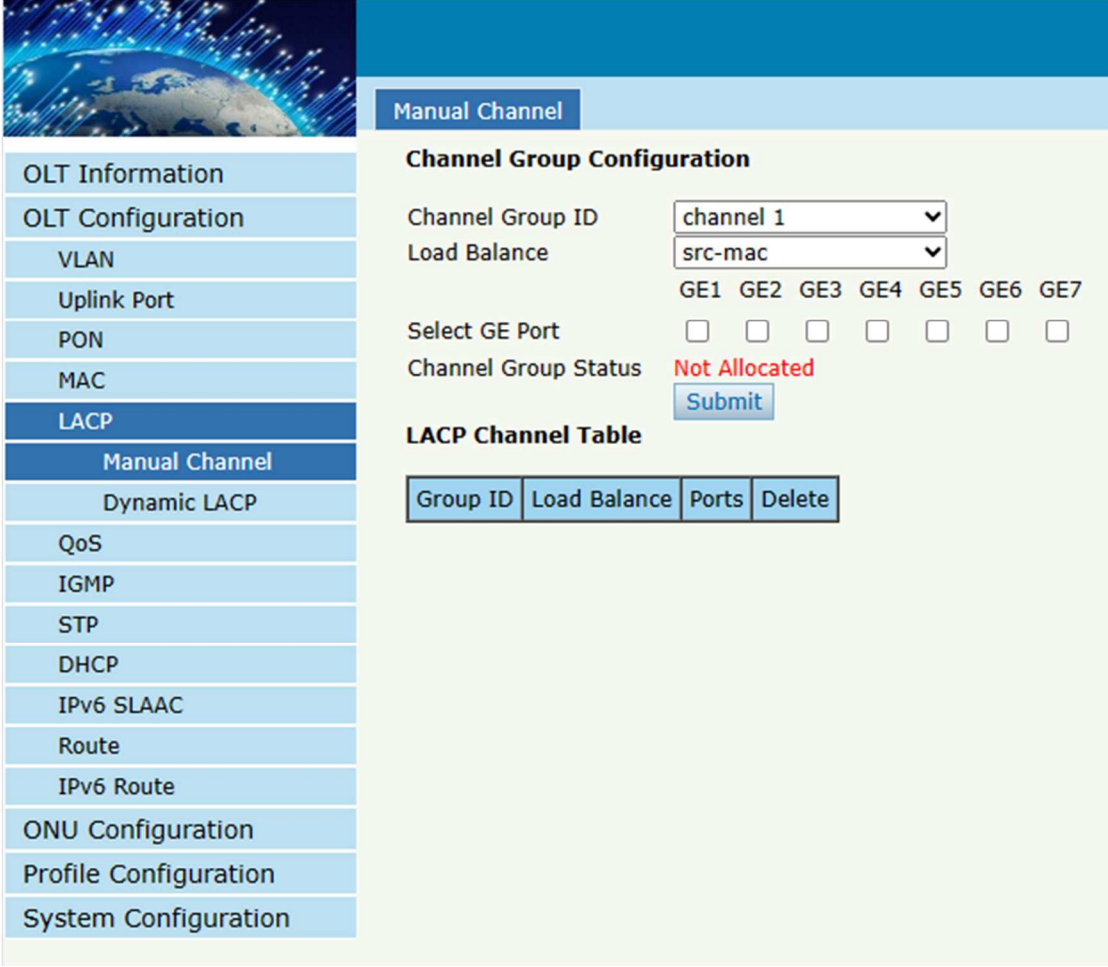
The screenshot displays the MAC Configuration interface. On the left, a navigation menu lists various configuration options, with 'MAC' currently selected. The main content area features two tabs: 'MAC Table' and 'Configuration'. The 'Configuration' tab is active, showing the 'MAC Aging Configuration' section. In this section, 'Automated Aging' is set to 'Enable' and 'Aging Time' is set to '300'. A 'Submit' button is located below these settings. Below the aging configuration is the 'Add MAC Address' section, which includes fields for 'VLAN ID' (set to '1'), 'MAC Address' (an empty field with a placeholder '(HH:HH:HH:HH:HH:HH)'), and 'Port ID' (set to 'GE 0/1'). 'Add' and 'Delete' buttons are positioned at the bottom of this section.

Figure 3.4-2: MAC Configuration

3.5 LACP

3.5.1 Static LACP

Select **OLT Configuration**→**LACP**→**Manual Channel** to assign and configure an uplink physical interface to an Ether Channel. When a traffic link can't be used suddenly, this 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.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Manual Channel

Dynamic LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Manual Channel

Channel Group Configuration

Channel Group ID

channel 1

Load Balance

src-mac

GE1

GE2

GE3

GE4

GE5

GE6

GE7

Select GE Port

☐
☐
☐
☐
☐
☐
☐

Channel Group Status

Not Allocated

Submit

LACP Channel Table

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

Figure 3.5-1: Create Manual Channel

3.5.2 Dynamic LACP

3.5.2.1 Information

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.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Manual Channel

Dynamic LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information Configuration Port

LACP Channel Global Information

System ID 0x8000, 6c68.a412.0685

LACP Channel Table

Group ID Load Balance Ports

LACP Channel Port Information

Channel Group ID channel 1

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.
A - Device is in active mode. P - Device is in passive mode.
I - Stand-alone.

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

3.5.2.2 Configuration

This page is used to configure device priority and load balance mode. OLT will distribute traffic to the ports which are in the same channel group averagely by load balance mode.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Manual Channel

Dynamic LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information Configuration Port

Dynamic LACP Global Configuration

System Priority 32768 (0-65535)

Submit Reset

Channel Group Configuration

Channel Group ID channel 1

Load Balance

Submit Reset

Figure 3.5-3: Dynamic LACP Configuration

3.5.2.3 Port

This page is used to configure port parameters for dynamic LACP. Only the port which LACP status is checked can become a LACP member port.

Port ID	LACP Status	Channel Group ID	Mode	Timeout	Port Priority(0-65535)
GE1	☐	channel 1	Active	Long	32768
GE2	☐	channel 1	Active	Long	32768
GE3	☐	channel 1	Active	Long	32768
GE4	☐	channel 1	Active	Long	32768
GE5	☐	channel 1	Active	Long	32768
GE6	☐	channel 1	Active	Long	32768
GE7	☐	channel 1	Active	Long	32768

Submit Reset

Figure 3.5-4: Dynamic LACP Port Configuration

3.6 QoS

The EPON OLT supports layer 2 802.1p and layer 3 DSCP QoS. Frames can be placed in different queues and serviced via Strict Priority (SP), Weighted Round Robin (WRR) and SP+WRR. Select **OLT Configuration** → **QoS** to set QoS configuration, as shown in Figure 3.6.

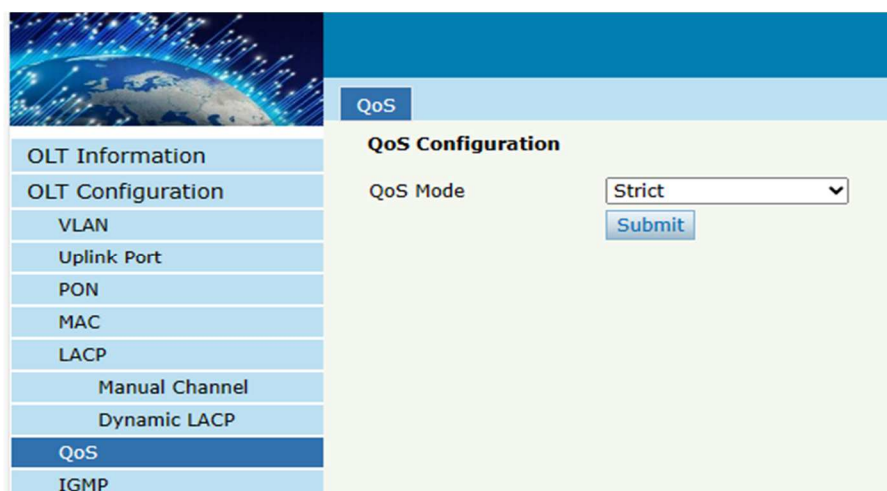


Figure 3.6: QoS Configuration

3.7 IGMP

3.7.1 Group Member

Show about the group member in the list.

Select **OLT Configuration**→**IGMP**→**Group Member** to display group member, as shown in Figure 3.7-1.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

IGMP

STP

Group Member

Global

Port

Port User VLAN

Port Mrouter

Static Group

IGMP Group Member

Refresh

Group VLAN ID	IP Address	Port ID	Type	User VLAN ID
3000	225.0.1.6	PON1	dynamic	3000
3000	225.0.1.3	PON1	dynamic	3000
3000	225.0.1.2	PON1	dynamic	3000
3000	225.0.1.1	PON1	dynamic	3000
3000	225.0.1.8	PON1	dynamic	3000
3000	225.0.1.4	PON1	dynamic	3000

Figure 3.7-1: IGMP Group Member

3.7.2 Global

To enable the IGMP snooping mode, click **OLT Configuration** → **IGMP** → **Global**.



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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

IGMP Configuration

IGMP Status

Enable

Member Port Timeout

260

(10-3600s)

Query Response Time

10

(1-25s)

Last Member Query Interval

3

(1-255s)

Last Member Query Count

2

(1-255)

Last Member Query Response

1

(1-25s)

General Query Packet

☐ Disable
 ☒ Enable

General Query Interval

10

(10-255s)

Query Source IP

1.1.1.1

Submit

Reset

Figure 3.7-2: IGMP Global

3.7.3 Port

Click **OLT Configuration**→**IGMP**→**Port**. To set group limit value, enable/disable fast leave.



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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

IGMP

STP

DHCP

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Port Configuration

Submit

Reset

Port ID	Fast Leave	Group Limit (0-32000)
GE1	☐	32000
GE2	☐	32000
GE3	☐	32000
GE4	☐	32000
GE5	☐	32000
GE6	☐	32000
GE7	☐	32000
PON1	☐	32000
PON2	☐	32000
PON3	☐	32000
PON4	☐	32000
PON5	☐	32000
PON6	☐	32000
PON7	☐	32000
PON8	☐	32000

Figure 3.7-3: IGMP Port Configuration

3.7.4 Port User VLAN

Click **OLT Configuration**→**IGMP**→**Port User VLAN** to configure the user VLAN and group VLAN.

Port ID	User VLAN ID	Group VLAN ID	Delete
GE1	3200	3200	
GE1	2000	2000	

Figure 3.7-4: IGMP Port User VLAN

3.7.5 Port Mrouter

To add a port to the IGMP multicast routing group, click **OLT Configuration**→**IGMP**→**Port Mrouter**, as shown in Figure 3.7-5.

Port ID	Group VLAN ID	Delete
GE4	1000	
GE4	3200	

Figure 3.7-5: IGMP Port Mrouter

3.7.6 Static Group

Add an IGMP group manually. Always choose the PON port as the group

port. Click **OLT Configuration→IGMP→Static Group**, as shown in Figure 3.7-6.

Figure 3.7-6: IGMP Static Group

3.8 STP

3.8.1 Information

The OLT is disabling RSTP by default. When enable the RSTP, the RSTP global information and port information can be shown by click **OLT Configuration→RSTP→Information**. See Figure 3.8-1.

RSTP Information

	Root	Bridge
Cost	0	
Port	GE0	
Priority	32768	32768
MAC Address	80:14:A8:23:D6:F9	80:14:A8:23:D6:F9
Hello Time	2s	2s
Max Age	20s	20s
Forward Delay	15s	15s

RSTP Port Status

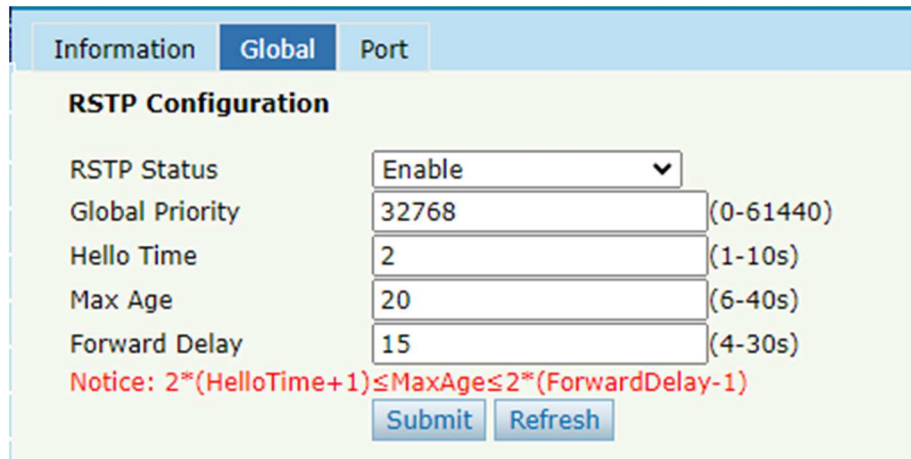
Port ID	Role	State	Cost	Priority	Point To Point
GE1	Design	Forwarding	200000	128	Enable
GE2	Design	Forwarding	200000	128	Enable
GE3	Design	Forwarding	200000	128	Enable
GE4	Design	Forwarding	200000	128	Enable

[Refresh](#)

Figure 3.8-1: RSTP Information

3.8.2 Global

Enable the RSTP, click **OLT Configuration**→**RSTP**→**Global** to enable.



The screenshot shows the 'RSTP Configuration' page with the 'Global' tab selected. It contains several input fields for configuring RSTP globally. The 'RSTP Status' is set to 'Enable'. The 'Global Priority' is 32768. The 'Hello Time' is 2 seconds. The 'Max Age' is 20 seconds. The 'Forward Delay' is 15 seconds. A notice at the bottom states: $2 * (\text{HelloTime} + 1) \leq \text{MaxAge} \leq 2 * (\text{ForwardDelay} - 1)$. There are 'Submit' and 'Refresh' buttons at the bottom right.

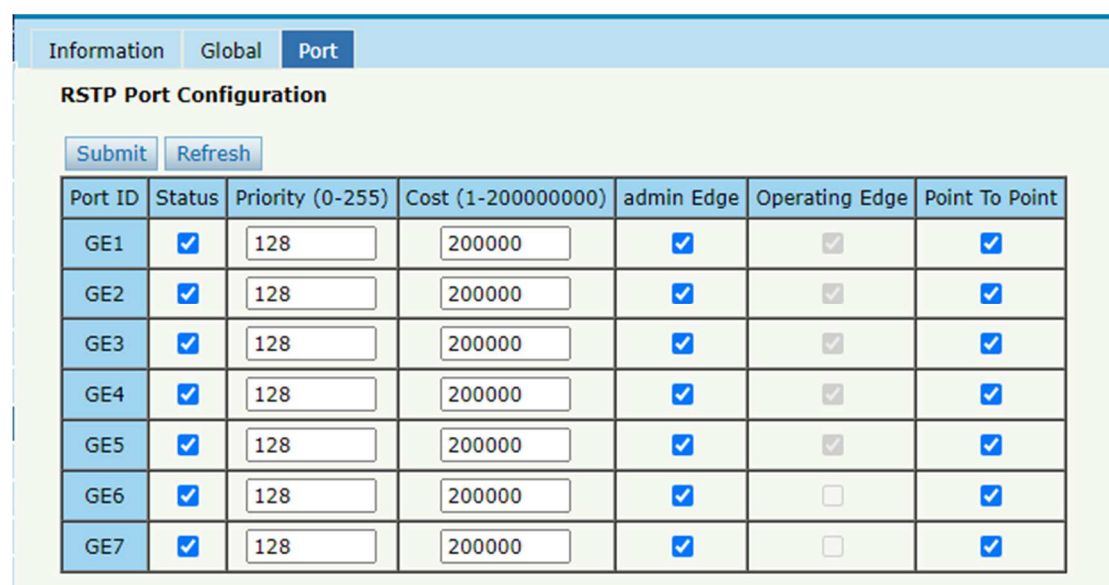
Parameter	Value	Range
RSTP Status	Enable	
Global Priority	32768	(0-61440)
Hello Time	2	(1-10s)
Max Age	20	(6-40s)
Forward Delay	15	(4-30s)

Notice: $2 * (\text{HelloTime} + 1) \leq \text{MaxAge} \leq 2 * (\text{ForwardDelay} - 1)$

Figure 3.8-2: RSTP Global Setup

3.8.3 Port

The RSTP ports parameter can be set by selecting **OLT Configuration** → **RSTP** → **Port**.



The screenshot shows the 'RSTP Port Configuration' page with the 'Port' tab selected. It displays a table for configuring RSTP parameters for various ports. The table has columns for Port ID, Status, Priority (0-255), Cost (1-200000000), admin Edge, Operating Edge, and Point To Point. There are 'Submit' and 'Refresh' buttons at the top left of the table.

Port ID	Status	Priority (0-255)	Cost (1-200000000)	admin Edge	Operating Edge	Point To Point
GE1	☒	128	200000	☒	☒	☒
GE2	☒	128	200000	☒	☒	☒
GE3	☒	128	200000	☒	☒	☒
GE4	☒	128	200000	☒	☒	☒
GE5	☒	128	200000	☒	☒	☒
GE6	☒	128	200000	☒	☐	☒
GE7	☒	128	200000	☒	☐	☒

Figure 3.8-3: RSTP Port Setting

3.9 DHCP

3.9.1 DHCP Server

3.9.1.1 DHCP Lease

Click **OLT Configuration** → **DHCP** → **DHCP Server** → **Lease**, the DHCP Server Lease will be shown as Figure 3.9-1.

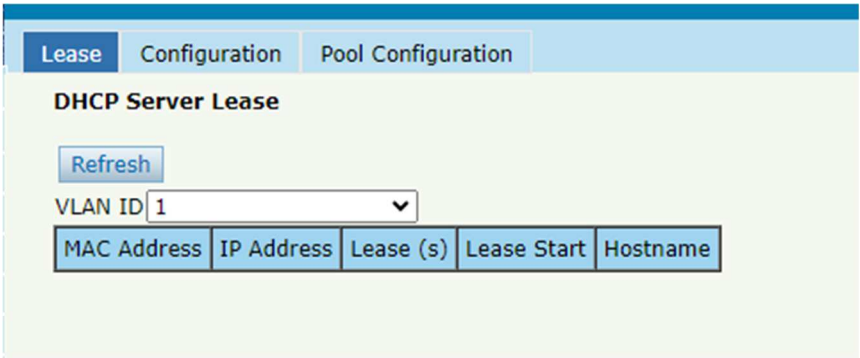


Figure 3.9-1: DHCP Lease

3.9.1.2 DHCP Configuration

When enable OLT DHCP server, the connecting devices will obtain an IP address. Click **OLT Configuration** → **DHCP** → **DHCP Server** → **Configuration** to configure the DHCP Server, shown as Figure 3.9-2.

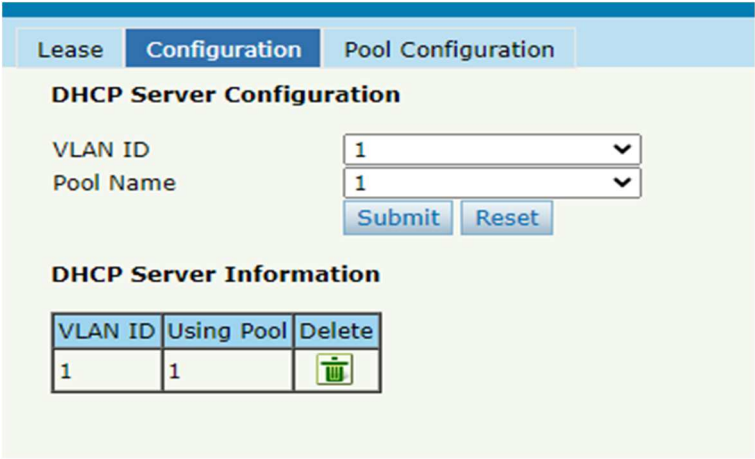


Figure 3.9-2: DHCP Configuration

3.9.1.3 DHCP Pool Configuration

Click **OLT Configuration → DHCP → DHCP Server → Pool Configuration** to configure the DHCP address pool.

The screenshot shows the 'Pool Configuration' tab in the DHCP Server settings. The 'DHCP Server Settings' section includes fields for Pool Name, Subnet (192.168.6.0), Subnet Mask (255.255.255.0), Start IP Address (192.168.6.67), End IP Address (192.168.6.254), Gateway (192.168.6.1), Static DNS 1 (202.96.128.86), Static DNS 2 (114.114.114.114), Static DNS 3 (8.8.8.8), WINS (0.0.0.0), and Client Lease Time (864000). Below the form are 'Submit' and 'Reset' buttons. The 'DHCP Server Pool Information' section contains a table with the following data:

Pool Name	Start IP Address	End IP Address	Subnet	Subnet Mask	Gateway	Static DNS 1	Static DNS 2	Static DNS 3	WINS	Client Lease Time	Edit	Delete
1	192.168.6.67	192.168.6.254	192.168.6.0	255.255.255.0	192.168.6.1	202.96.128.86	114.114.114.114	8.8.8.8	0.0.0.0	864000		

Figure 3.9-3: DHCP Configuration

3.9.2 DHCP Relay

When the DHCP server and the clients are not in the same subnet, DHCP relay can help the clients get the IP address from the server. IP address network segment of the relay server should be the same as the DHCP server.

Click **OLT Configuration → DHCP → DHCP Relay → Configuration** to configure DHCP relay server.

The screenshot shows the 'Configuration' tab in the DHCP Relay settings. The 'Add Relay Server' section includes a 'VLAN ID' dropdown menu (set to 1) and a 'Server IP' text input field, with an 'Add' button below. The 'Relay Server Table' section contains a table with the following columns: Server IP, VLAN ID, and Delete.

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

Figure 3.9-4: DHCP Relay Configuration

3.10 DHCPv6

3.10.1 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.

3.10.1.1 DHCPv6 Bind Information

OLT Configuration → DHCPv6 → DHCPv6 Server → DHCPv6 Bind Information

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



Figure 3.10-1: DHCPv6 Bind Information

3.10.1.2 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 Server Configuration

VLAN ID: 1
Pool Name:
☐ Preference Value (0-255)
Rapid Commit: ☒ On ☐ Off
[Submit](#) [Reset](#)

DHCPv6 DUID Configuration

DUID Type: Ilt
Enterprise Number: (1-2147483647)
Identifier: (0-32 chars)
[Submit](#) [Reset](#)

DHCPv6 DUID Table

DUID Type : Ilt
DUID : 00:01:00:01:25:9e:28:5e:fb:51:ba:9d:58

DHCPv6 Interface Information

VLAN ID	Using Pool	Preference Value	Rapid Commit	Delete
---------	------------	------------------	--------------	--------

[Refresh](#)

Figure 3.10-2: DHCPv6 Server

3.10.1.3 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: test
Start IPv6 Address: 2020::3333 / 64
End IPv6 Address: 2020::4444 / 64
Valid LifeTime: 172800 (60-4294967295)s
Preferred LifeTime: 86400 (60-4294967295)s (Valid lifetime must be larger or equal than Preferred lifetime)
DNS Server: 1111::2222
Domain Name: test.com
[Submit](#) [Reset](#)

DHCPv6 Server Pool

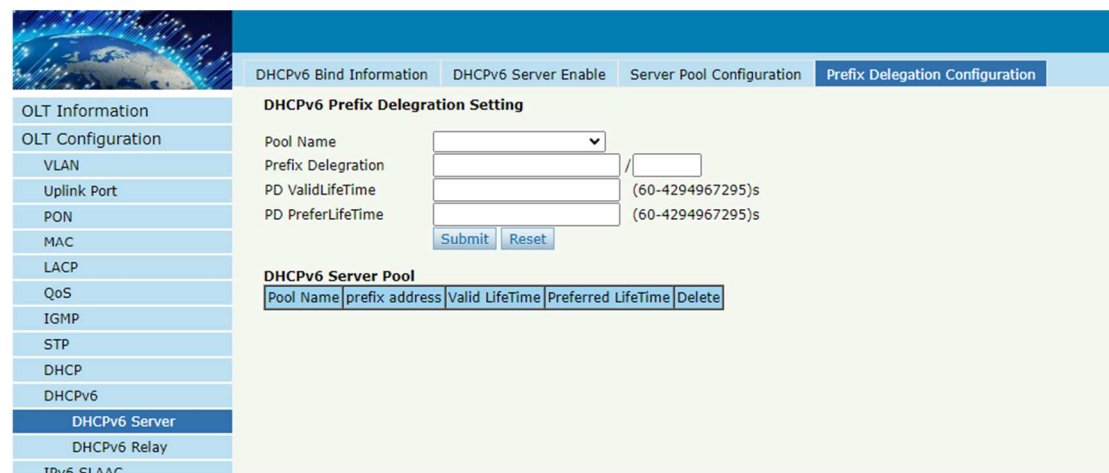
Pool Name	Start IPv6 Address	End IPv6 Address	Valid LifeTime	Preferred LifeTime	DNS Server	Domain Name	Edit	Delete
-----------	--------------------	------------------	----------------	--------------------	------------	-------------	------	--------

Figure 3.10-3: DHCPv6 Pool

3.10.1.4 Prefix Delegation Setting

OLT Configuration → DHCPv6 → DHCPv6 Server → Prefix Delegation Setting

This page is used to configure the PD prefix proxy.



The screenshot shows the OLT configuration interface. On the left is a sidebar menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, IGMP, STP, DHCP, DHCPv6, DHCPv6 Server (selected), DHCPv6 Relay, and IPv6 SLAAC. The main content area has four tabs: DHCPv6 Bind Information, DHCPv6 Server Enable, Server Pool Configuration, and Prefix Delegation Configuration (active). Under the active tab, the 'DHCPv6 Prefix Delegation Setting' section contains fields for Pool Name (a dropdown), Prefix Delegation (a text input), PD ValidLifeTime (a text input with '(60-4294967295)s' as a hint), and PD PreferLifeTime (a text input with '(60-4294967295)s' as a hint). Below these fields are 'Submit' and 'Reset' buttons. The 'DHCPv6 Server Pool' section below contains a table with columns: Pool Name, prefix address, Valid LifeTime, Preferred LifeTime, and Delete.

Figure 3.10-4: Prefix Delegation

3.10.2 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.

Figure 3.10-5: DHCPv6 Relay

3.11 IPv6 SLAAC

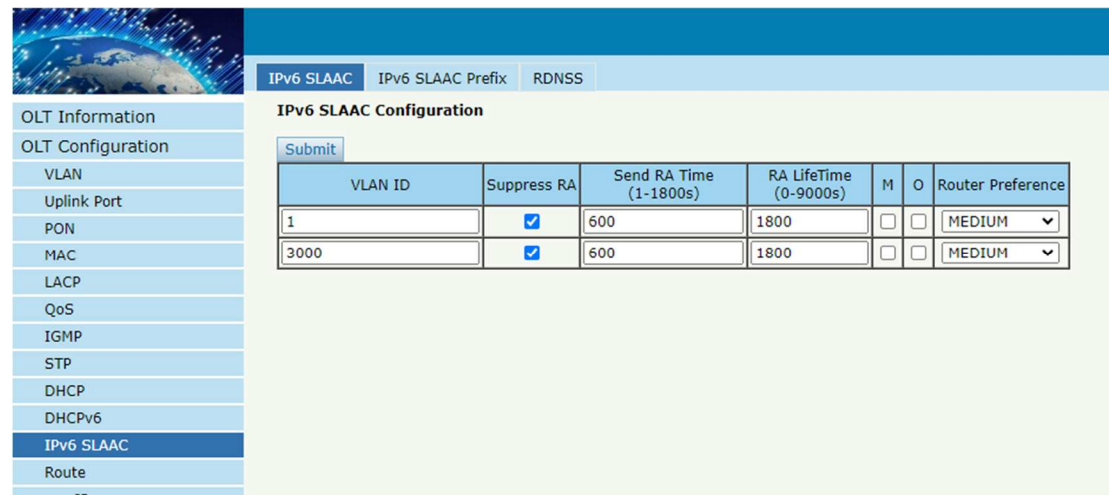
IPv6 network uses the ICMPv6 route discovery protocol. When an IPv6 host connects to the network for the first time, it automatically configures it according to the information got by route discovery/prefix discovery. Route discovery/prefix discovery is that when a host is connected to IPv6 network,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

3.11.1 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.

Click **OLT Configuration** → **IPv6 SLAAC** → **IPv6 SLAAC** to configure RA parameters.



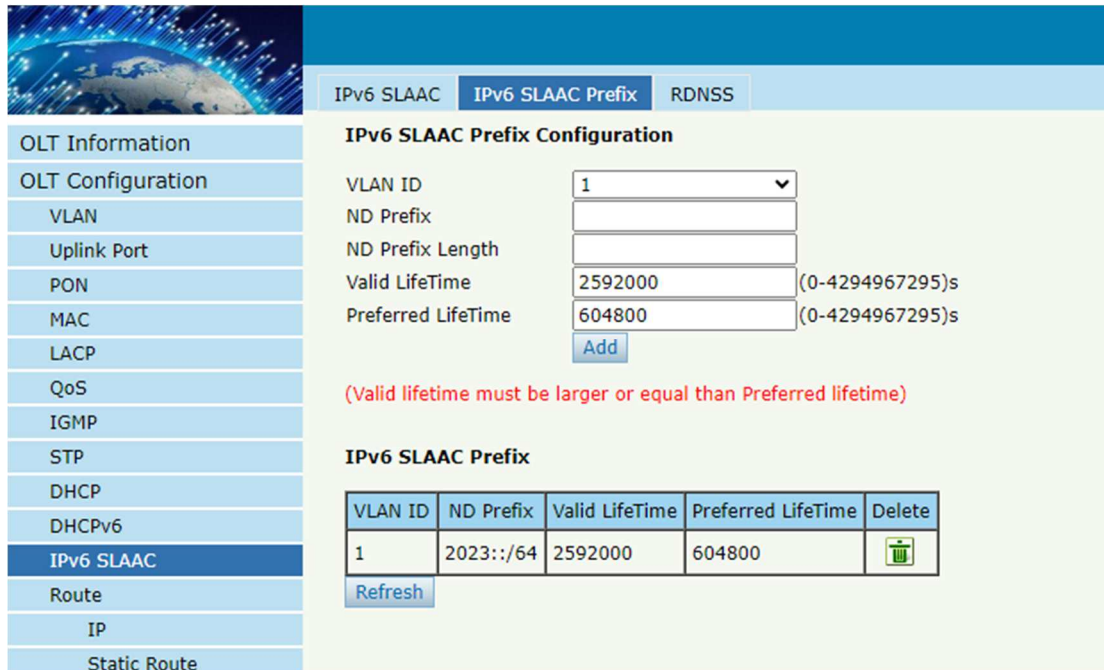
VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	M	O	Router Preference
1	☒	600	1800	☐	☐	MEDIUM
3000	☒	600	1800	☐	☐	MEDIUM

Figure 3.11-1: IPv6 SLAAC

3.11.2 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.

Click **OLT Configuration** → **IPv6 SLAAC** → **IPv6 SLAAC Prefix** to configure SLAAC prefix.



The interface shows a sidebar with navigation options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, IGMP, STP, DHCP, DHCPv6, **IPv6 SLAAC**, Route, IP, and Static Route. The main content area has tabs for IPv6 SLAAC, **IPv6 SLAAC Prefix**, and RDNSS. Under the 'IPv6 SLAAC Prefix Configuration' section, there are input fields for VLAN ID (set to 1), ND Prefix, ND Prefix Length, Valid LifeTime (2592000), and Preferred LifeTime (604800). A red note states: '(Valid lifetime must be larger or equal than Preferred lifetime)'. Below this is a table titled 'IPv6 SLAAC Prefix' with columns: VLAN ID, ND Prefix, Valid LifeTime, Preferred LifeTime, and Delete. The table contains one entry for VLAN 1 with ND Prefix 2023::/64. A 'Refresh' button is at the bottom left of the table.

VLAN ID	ND Prefix	Valid LifeTime	Preferred LifeTime	Delete
1	2023::/64	2592000	604800	

Figure 3.11-2: IPv6 SLAAC Prefix

3.11.3 RDNSS

OLT will send the route advertisement packet with the DNS parameters you configured.



The interface shows the same sidebar as Figure 3.11-2. The main content area has tabs for IPv6 SLAAC, IPv6 SLAAC Prefix, and **RDNSS**. Under the 'RDNSS Configuration' section, there are input fields for VLAN ID (set to 1), DNS Server, and Lifetime (600). A 'Submit' button is below the Lifetime field. Below this is a table titled 'RDNSS Table' with columns: VLAN ID, DNS Server, Lifetime, and Delete. The table contains one entry for VLAN 1 with DNS Server 2023::1111. A 'Refresh' button is at the bottom left of the table.

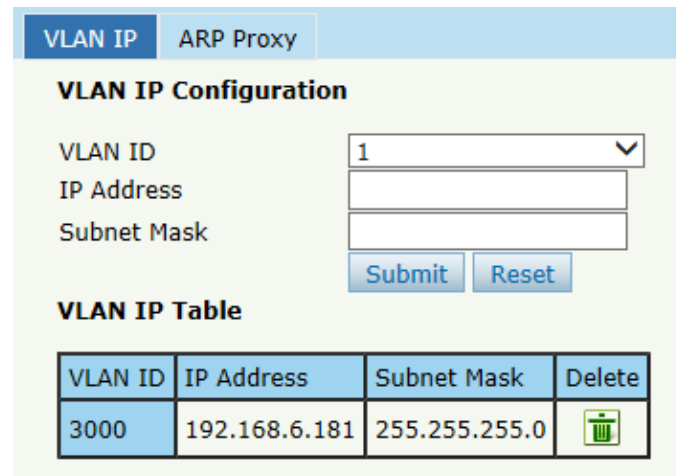
VLAN ID	DNS Server	Lifetime	Delete
1	2023::1111	600	

Figure 3.11-3: RDNSS

3.12 Route

3.12.1 IP

Select an existing VLAN and set an IP address for this VLAN, as shown in Figure 3.12-1.



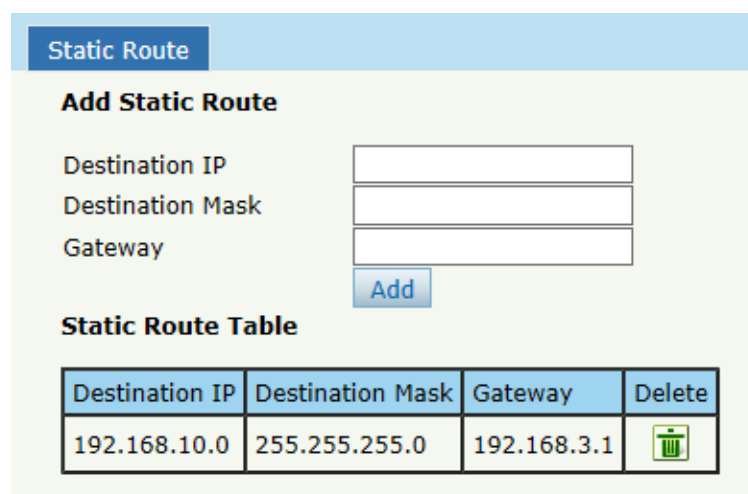
The interface shows two tabs: 'VLAN IP' (selected) and 'ARP Proxy'. Under 'VLAN IP Configuration', there are three input fields: 'VLAN ID' (a dropdown menu showing '1'), 'IP Address' (an empty text box), and 'Subnet Mask' (an empty text box). Below these fields are 'Submit' and 'Reset' buttons. Under 'VLAN IP Table', there is a table with the following data:

VLAN ID	IP Address	Subnet Mask	Delete
3000	192.168.6.181	255.255.255.0	

Figure 3.12-1: VLAN IP

3.12.2 Static Route

OLT supports static route L3 function. Click **Static Route** to configure, as shown in Figure 3.12-2.



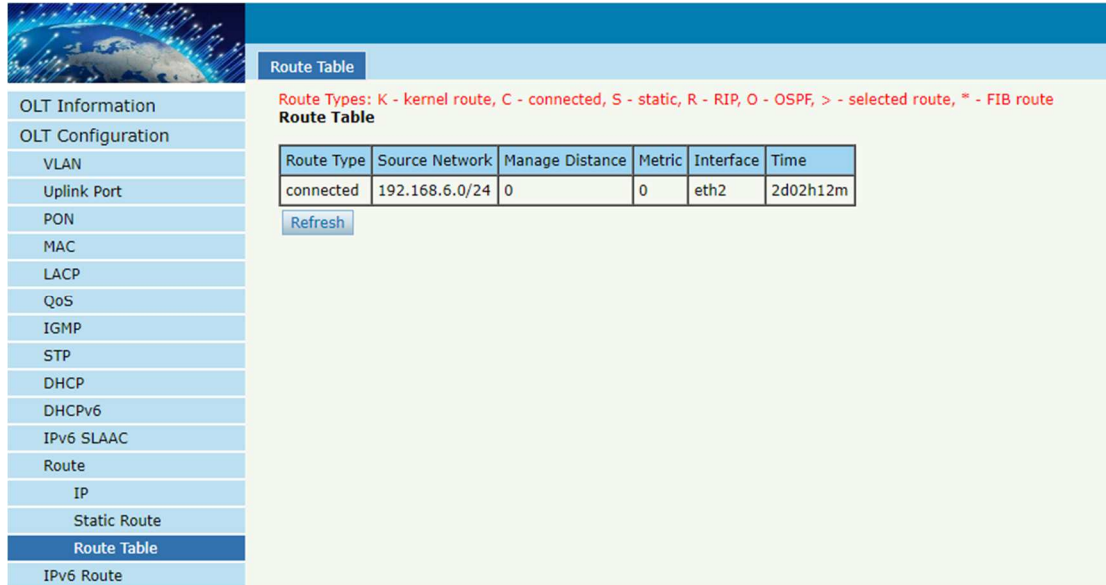
The interface shows a 'Static Route' tab. Under 'Add Static Route', there are three input fields: 'Destination IP' (empty), 'Destination Mask' (empty), and 'Gateway' (empty). Below these fields is an 'Add' button. Under 'Static Route Table', there is a table with the following data:

Destination IP	Destination Mask	Gateway	Delete
192.168.10.0	255.255.255.0	192.168.3.1	

Figure 3.12-2: Static Route

3.12.3 Route Table

This page displays routing items of OLT.



Route Type	Source Network	Manage Distance	Metric	Interface	Time
connected	192.168.6.0/24	0	0	eth2	2d02h12m

Refresh

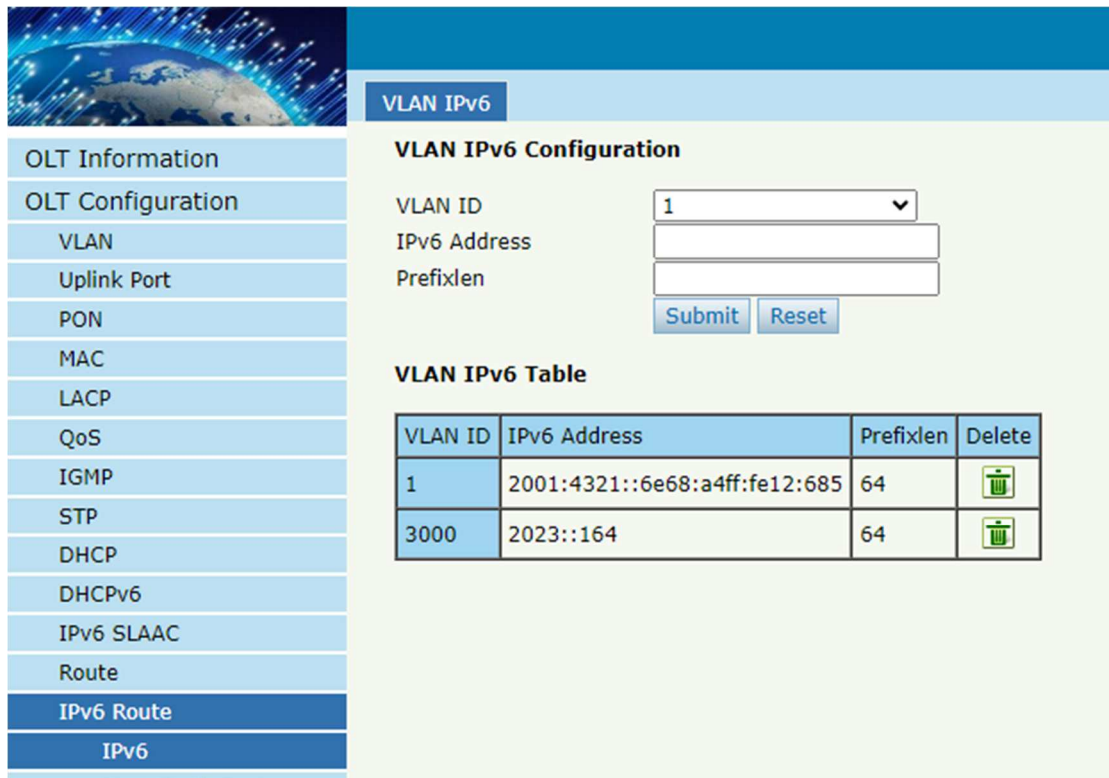
Figure 3.12-3: Route Table

3.13 IPv6 Route

3.13.1 IPv6

Configure IPv6 address for VLAN that has been created.

Click **OLT Configuration** → **IPv6 Route** → **IPv6** → **VLAN IPv6**, select an existing VLAN and set an IPv6 address for it. The IPv6 address can be used for inband management.



The interface shows a sidebar with navigation options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, IGMP, STP, DHCP, DHCPv6, IPv6 SLAAC, Route, IPv6 Route, and IPv6. The main content area is titled 'VLAN IPv6' and contains two sections: 'VLAN IPv6 Configuration' and 'VLAN IPv6 Table'.

VLAN IPv6 Configuration

VLAN ID:

IPv6 Address:

Prefixlen:

VLAN IPv6 Table

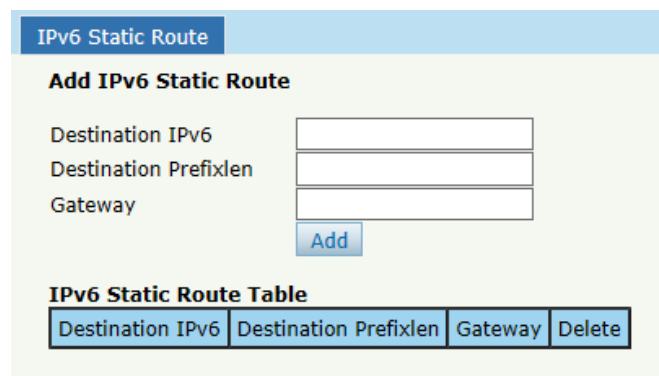
VLAN ID	IPv6 Address	Prefixlen	Delete
1	2001:4321::6e68:a4ff:fe12:685	64	
3000	2023::164	64	

Figure 3.13-1: VLAN IPv6

3.13.2 IPv6 Static Route

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

Click **OLT Configuration → IPv6 Route → IPv6 Static Route**, and add IPv6 static route item one by one.



The interface shows a sidebar with navigation options: IPv6 Static Route. The main content area is titled 'IPv6 Static Route' and contains two sections: 'Add IPv6 Static Route' and 'IPv6 Static Route Table'.

Add IPv6 Static Route

Destination IPv6:

Destination Prefixlen:

Gateway:

IPv6 Static Route Table

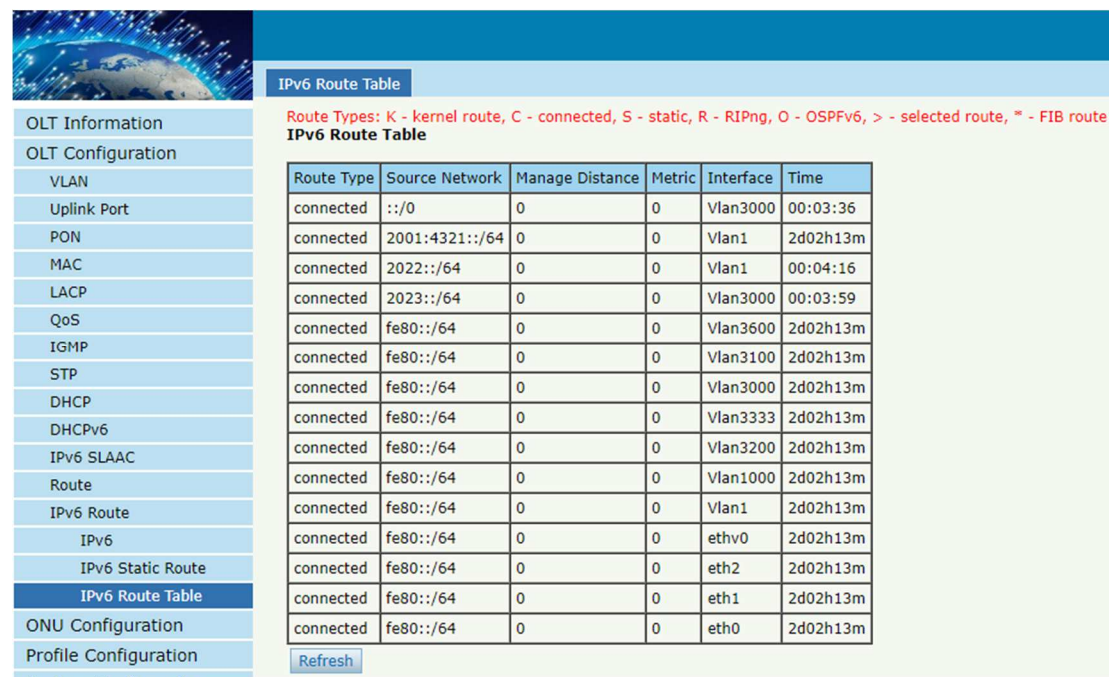
Destination IPv6	Destination Prefixlen	Gateway	Delete
------------------	-----------------------	---------	--------

Figure 3.13-2: IPv6 Static Route

3.13.3 IPv6 Route Table

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

Click **OLT Configuration** → **IPv6 Route** → **IPv6 Route Table** to display all IPv6 route items.



Route Type	Source Network	Manage Distance	Metric	Interface	Time
connected	::/0	0	0	Vlan3000	00:03:36
connected	2001:4321::/64	0	0	Vlan1	2d02h13m
connected	2022::/64	0	0	Vlan1	00:04:16
connected	2023::/64	0	0	Vlan3000	00:03:59
connected	fe80::/64	0	0	Vlan3600	2d02h13m
connected	fe80::/64	0	0	Vlan3100	2d02h13m
connected	fe80::/64	0	0	Vlan3000	2d02h13m
connected	fe80::/64	0	0	Vlan3333	2d02h13m
connected	fe80::/64	0	0	Vlan3200	2d02h13m
connected	fe80::/64	0	0	Vlan1000	2d02h13m
connected	fe80::/64	0	0	Vlan1	2d02h13m
connected	fe80::/64	0	0	ethv0	2d02h13m
connected	fe80::/64	0	0	eth2	2d02h13m
connected	fe80::/64	0	0	eth1	2d02h13m
connected	fe80::/64	0	0	eth0	2d02h13m

Figure 3.13-3: IPv6 Route Table

Chapter 4 ONU Configuration

This chapter is about the ONU management by OLT.

4.1 ONU AuthList

This page shows about the ONU authentication list, search the ONU by SN.

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, shown as Figure 4.1-1.

SaveLogStatusONU

ONU-listONU StatusONU Optical InformationONU Version InformationONU Manual AddONU AllowlistONU Statistics

OLT Information
OLT Configuration
ONU Configuration
 ONU AuthList
 ONU AutoFind
 ONU AutoLearn
 ONU Upgrade
 Rogue ONU
Profile Configuration
System Configuration

ONU Authentication Information

Port IDPON 1

Search ModeAll

Search Info

ONU Count64/76

Search

Delete AllDelete OfflineRefresh

ONU ID	Status	Description	Model	Profile	Mode	UpStream Rate	Info	Action
GPON0/1:1	Online	GPON0/1:1	H465	default	sn	2.5/10Gbps	GPON00206853	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:2	Online	GPON0/1:2	H465	default	sn	2.5/10Gbps	GPON002067a3	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:3	Online	GPON0/1:3	H465	default	sn	2.5/10Gbps	GPON00206753	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:4	Online	GPON0/1:4	H465	default	sn	2.5/10Gbps	GPON00206e53	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:5	Online	GPON0/1:5	H465	default	sn	2.5/10Gbps	GPON00206d93	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:6	Online	GPON0/1:6	H465	default	sn	2.5/10Gbps	GPON00206dd3	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:7	Online	GPON0/1:7	H465	default	sn	2.5/10Gbps	GPON00206d23	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:8	Online	GPON0/1:8	H465	default	sn	2.5/10Gbps	GPON00206e33	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:9	Online	GPON0/1:9	H465	default	sn	2.5/10Gbps	GPON00206ab3	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:10	Online	GPON0/1:10	H465	default	sn	2.5/10Gbps	GPON00206a43	ConfigDeactivateDeleteOptical InfoDetail InfoReboot
GPON0/1:11	Online	GPON0/1:11	H465	default	sn	2.5/10Gbps	GPON00206733	ConfigDeactivateDeleteOptical InfoDetail InfoReboot

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, shown as Figure 4.1-2.

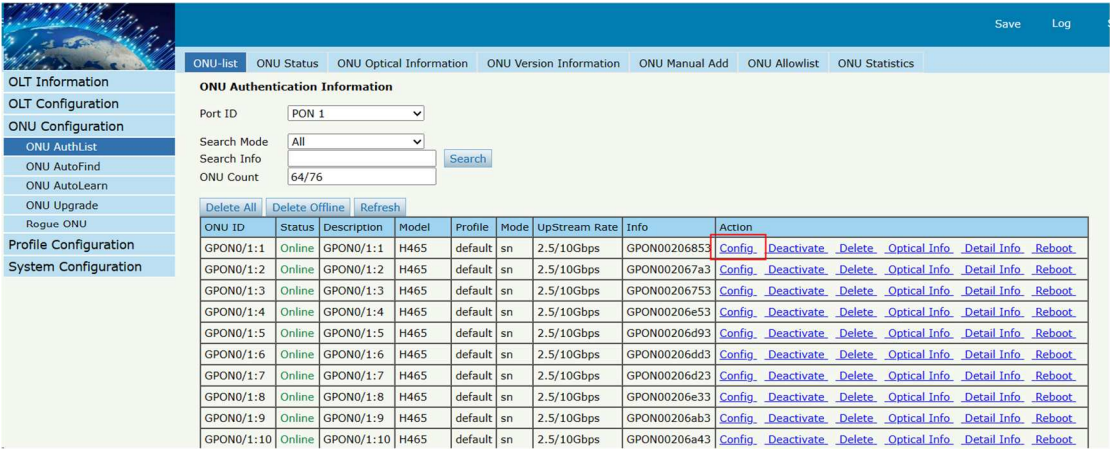


Figure 4.1-2: Configure ONU

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, shown as Figure 4.1-3.

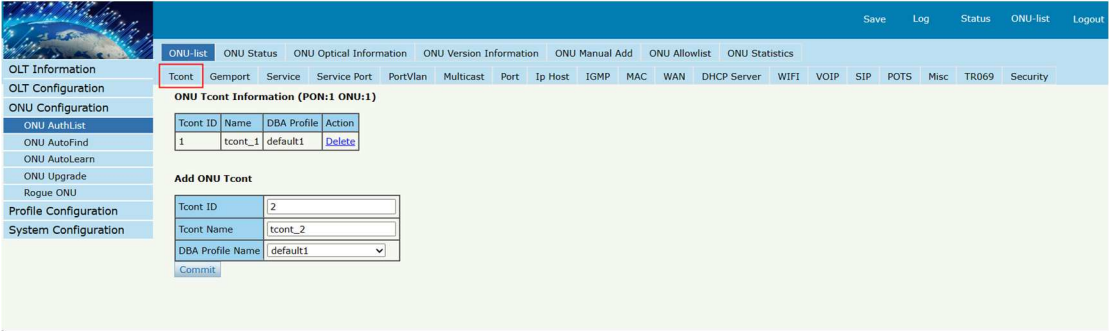


Figure 4.1-3: Create Tcont

4.1.1.1.2 Gemport

ONU Configuration → ONU AuthList → ONU List → Config → Gemport

Create gemport ID and bind tcont ID, shown as Figure 4.1-4.

Save Log Status ONU-list

ONU-list ONU Status ONU Optical Information ONU Version Information ONU Manual Add ONU Allowlist ONU Statistics

Tcont Gempport Service Service Port PortVlan Multicast Port Ip Host IGMP MAC WAN DHCP Server WIFI VOIP SIP POTS Misc TR069 Security

ONU Gempport Info (PON:1 ONU:1)

Gempport ID	Name	Tcont	Downstream	Action
1	gem_1	1	default	Delete

Add ONU Gempport

Gempport ID:

TcontID:

Gempport Name:

Downstream Traffic:

[Commit](#)

ONU Gempport Rate Limit Info

Gempport ID	Name	Tcont	Upstream CIR	Upstream PIR	Downstream CIR	Downstream PIR	Action
1	gem_1	1	0	0	0	0	Delete

ONU Gempport Rate Limit Configuration

Gempport ID:

Upstream Traffic Committed Rate Limit (B/s): (0-4294967295)

Upstream Traffic Peak Rate Limit (B/s): (0-4294967295)

Downstream Traffic Committed Rate Limit (B/s): (0-4294967295)

Downstream Traffic Peak Rate Limit (B/s): (0-4294967295)

[Commit](#)

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, shown as Figure 4.1-5.

Save Log Status ONU-list

ONU-list ONU Status ONU Optical Information ONU Version Information ONU Manual Add ONU Allowlist ONU Statistics

Tcont Gempport Service Service Port PortVlan Multicast Port Ip Host IGMP MAC WAN DHCP Server WIFI VOIP SIP POTS Misc TR069 Security

ONU Service Information (PON:1 ONU:1)

Service Name	Gempport	Vlan Mode	Vlan List	COS List	Port	Action
--------------	----------	-----------	-----------	----------	------	--------

Add ONU Service

Service Name:

Gempport ID:

Vlan Mode:

Port Type:

[Commit](#)

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 gempport ID. If don't need VLAN translation, just set translate VLAN

the same as user VLAN, shown as Figure 4.1-6.

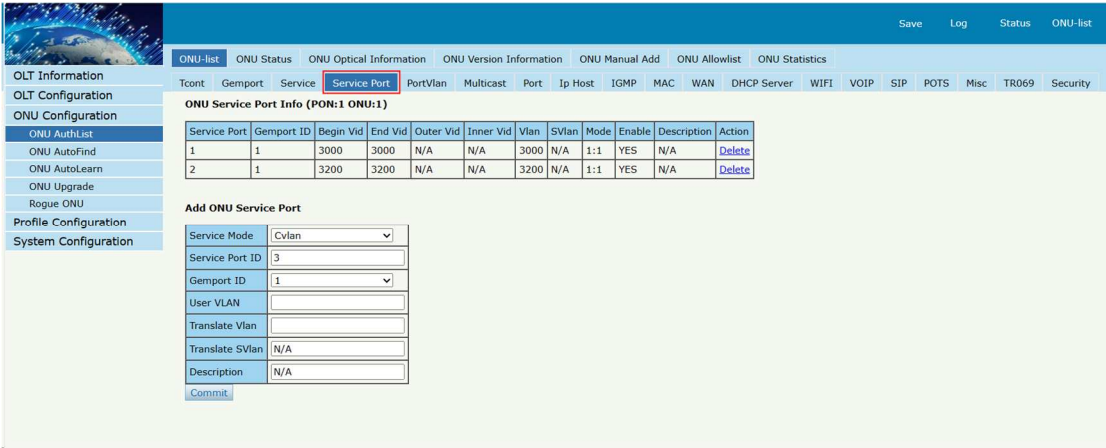


Figure 4.1-6: Create service port

4.1.1.1.5 PortVlan

ONU Configuration→ ONU AuthList→ ONUList→ 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, shown as Figure 4.1-7.

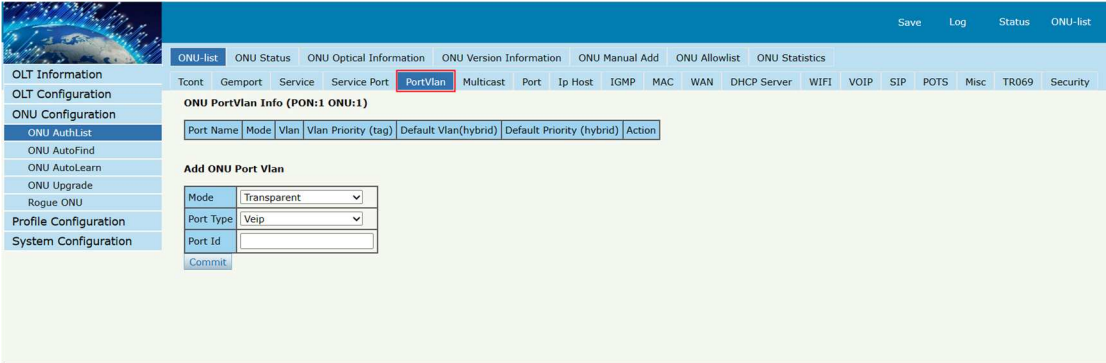


Figure 4.1-7: Create Portvlan

4.1.1.1.6 Multicast

ONU Configuration→ ONU AuthList→ ONUList→ Config→ Multicast

Set the Multicast VLAN of ONU and the Multicast VLAN mode of ONU's port, shown as Figure 4.1-8.

Save Log Status ONU-list

ONU-list ONU Status ONU Optical Information ONU Version Information ONU Manual Add ONU Allowlist ONU Statistics

Tcont Gempport Service Service Port PortVlan **Multicast** Port Ip Host IGMP MAC WAN DHCP Server WIFI VOIP SIP POTS Misc TR069 Security

Multicast Configuration (PON:1 ONU:1)

Multicast VLAN List

ONU ID	Vlan List	Action
1		Delete

(eg: 1,2,3-5,8, max 12 vlans.)

Add

Multicast vlan tag strip

Vlan Mode	Port	Action

(eth number, 1 ~ 32)

Add

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, shown as Figure 4.1-9.

Save Log Status ONU-list Logout

ONU-list ONU Status ONU Optical Information ONU Version Information ONU Manual Add ONU Allowlist ONU Statistics

Tcont Gempport Service Service Port PortVlan Multicast **Port** Ip Host IGMP MAC WAN DHCP Server WIFI VOIP SIP POTS Misc TR069 Security

Port Basic Configuration (PON:1 ONU:1)

ONU Port LAN1

☒ Admin Status

☐ Loopback Detect

Port Speed auto

Mac Limit (0-255) 0

Pause Time (0-65535) 0

Submit

Upstream Rate Limit Config

Upstream Rate-Limit CIR (0-33554431 kbps) 0

Upstream Rate-Limit PIR (0-33554431 kbps) 0

Commit

Downstream Rate Limit Config

Downstream Rate-Limit CIR (0-33554431 kbps) 0

Downstream Rate-Limit PIR (0-33554431 kbps) 0

Commit

Port Status

Refresh

Interface	Speed	Admin Status	Loopback Detect	Mac Limit	Pause Time	Upstream Rate-Limit (kbps)	Downstream Rate-Limit (kbps)
eth_0/1	auto	enable	disable	0	0	CIR:0 PIR:0	CIR:0 PIR:0
eth_0/2	auto	enable	disable	0	0	CIR:0 PIR:0	CIR:0 PIR:0
eth_0/3	auto	enable	disable	0	0	CIR:0 PIR:0	CIR:0 PIR:0
eth_0/4	auto	enable	disable	0	0	CIR:0 PIR:0	CIR:0 PIR:0

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, shown as Figure 4.1-10.

Save

ONU-list ONU Status ONU Optical Information ONU Version Information **ONU Manual Add** ONU Allowlist ONU Statistics

Tcont Gemport Service Service Port PortVlan Multicast Port **Ip Host** IGMP MAC WAN DHCP Server WIFI VOIP SIP

Ip Host Configuration Info (PON:1 ONU:1)

Ip Host ID	Description	IP Mode	IP Address	Mask	Gateway	Primary DNS	Secondary DNS	Ping Response	Traceroute	VLAN	Priority	Action
------------	-------------	---------	------------	------	---------	-------------	---------------	---------------	------------	------	----------	--------

Ip Host Config

Ip Host ID:

Description:

IP Mode:

DNS1 (A.B.C.D):

DNS2 (A.B.C.D):

Ip Host VLAN Config

VLAN(1-4094):

Priority (1-15):

Figure 4.1-10: Configure IPhost

4.1.1.1.9 IGMP

ONU Configuration → ONU AuthList → ONU List → Config → IGMP

Configure max group, bandwidth and bind profile for ONU IGMP, it includes detailed configuration of multicast monitoring, as well as a quick away function, shown as Figure 4.1-11.

ONU-list ONU Status ONU Optical Information ONU Version Information ONU Manual Add ONU Allowlist

Tcont Gemport Service Service Port PortVlan Multicast Port Ip Host **IGMP** MAC WAN DHCP

ONU IGMP Info Table (PON:1 ONU:1)

Port ID	Action
1	Delete

Max Group Configuration

Port Type:

Port ID: (1-32)

Max Group: (1-65535)

Bandwidth Configuration

Port Type:

Port ID: (1-32)

Max Bandwidth: (1-4294967295)

Enforce:

Bind Profile

Port Type:

Port ID: (1-32)

IGMP Profile:

Figure 4.1-11: Configure IGMP

4.1.1.1.10 MAC

ONU Configuration → ONU AuthList → ONU List → Config → MAC

Configure mac limit for ONU, shown as figure 4.1-12.

The screenshot shows a web management interface for ONU configuration. On the left is a sidebar menu with categories like OLT Information, OLT Configuration, ONU Configuration, and System Configuration. Under ONU Configuration, 'ONU AuthList' is selected. The main area has a top navigation bar with tabs: ONU-list, ONU Status, ONU Optical Information, ONU Version Information, ONU Manual Add, and ONU Allow. Below this is a sub-navigation bar with tabs: Tcont, Gemport, Service, Service Port, PortVlan, Multicast, Port, Ip Host, IGMP, MAC (highlighted with a red box), and WAN. The 'MAC' tab is active, displaying the 'ONU MAC Limit Configuration (PON:1 ONU:1)' page. This page includes a 'MAC Limit (0-255)' input field with the value '0' and a 'Submit' button. Below that is the 'Onu eth mac learned info' section, which has an 'onu Port' dropdown menu set to 'LAN1' and a 'Refresh' button. At the bottom, there is a table header with columns: Index, Action, Type, Age, and Address.

Figure 4.1-12: Configure MAC

4.1.1.1.11 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, shown as figure 4.1-13.

WAN Connect Table (PON:1 ONU:1)

Index	Mode	IP Version	Service Mode	Status	MAC Address	Configuration Information
1	bridge	Ipv4	other	Connected	6C:68:A4:20:66:0C	QoS Enable:disable,MTU:1500, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable Bind:lan2

WAN Connect Parameter Configuration

WAN Index:

Mode:

IP Version:

Connect Mode:

DNS:

Master DNS: (A.B.C.D)

Slave DNS: (A.B.C.D)

Nat Enable:

VLAN Mode:

MTU: (576-1500)

QoS Enable:

Service Mode:

Port Binding: ☐ Lan1 ☐ Lan2 ☐ Lan3 ☐ Lan4
☐ SSID1 ☐ SSID2 ☐ SSID3 ☐ SSID4 ☐ SSID5 ☐ SSID6 ☐ SSID7 ☐ SSID8

WAN Connect running-config

Index	onu running-config	Delete
1	Connect Type:bridge,IP Version:Ipv4,Service Mode:other,QoS Enable:disable,MTU:1500, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable Bind:lan2	Delete

Figure 4.1-13: Configure WAN

4.1.1.1.12 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, shown as figure 4.1-14.

The screenshot shows the 'DHCP Server Configuration (PON:1 ONU:1)' page. The left sidebar lists various configuration sections, with 'DHCP Server' highlighted. The main area contains two sections: 'DHCP Server Configuration' and 'LAN IPv6 Address'. The 'DHCP Server Configuration' section includes fields for LAN IP Address (192.168.1.1), LAN Subnet Mask (255.255.255.0), DHCP Server (Enable), Lease Time (86400), 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), and Gateway (192.168.1.1). The 'LAN IPv6 Address' section includes fields for LAN IPv6 Address (::), Prefix Mode (Static), Static IPv6 Address, LAN Prefixlen (48-64), DHCP Server IPv6 (Enable), Preference Time (10000), Valid Time (20000), Beginning IPv6 Address (0001:0001:0001:0001), Ending IPv6 Address (0002:0002:0002:0002), Pool Type (PC), DNSv6 Master (undefined), DNSv6 Slave (undefined), IPv6 Gateway (::), RA (Active), Manage (disable), Other (enable), Max Interval (600), and Min Interval (198). The 'Submit' and 'Clear' buttons are at the bottom of each section.

Figure 4.1-14: Configure DHCP Server

4.1.1.1.13 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, shown as Figure 4.1-15.

The screenshot shows the 'WIFI Switch Configuration (PON:1 ONU:1)' page. The left sidebar lists various configuration sections, with 'WIFI' highlighted. The main area contains two sections: 'WIFI Switch Configuration' and 'WIFI SSID Configuration'. The 'WIFI Switch Configuration' section includes fields for WIFIStatus (enable), WIFI1Status (enable), WIFI1Area (ETSI), WIFI1Standard (802.11b), WIFI1Channel (0), WIFI1Transmit Power (20), WIFI1Channel Width (20), and WIFI1EasyMesh Status (disable). The 'WIFI SSID Configuration' section includes fields for SSID (SSID1(WIFI0)), Name (input WIFI Name), WIFI Status (enable), Hide Status (disable), Network Authentication (WPA2PSK/WPA2PSK), Encrypt Type (TKIP+AES), and Shared Key (*****). The 'Submit' and 'Clear' buttons are at the bottom of each section.

Figure 4.1-15: WIFI Setting

4.1.1.1.14 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, shown as Figure 4.1-16.

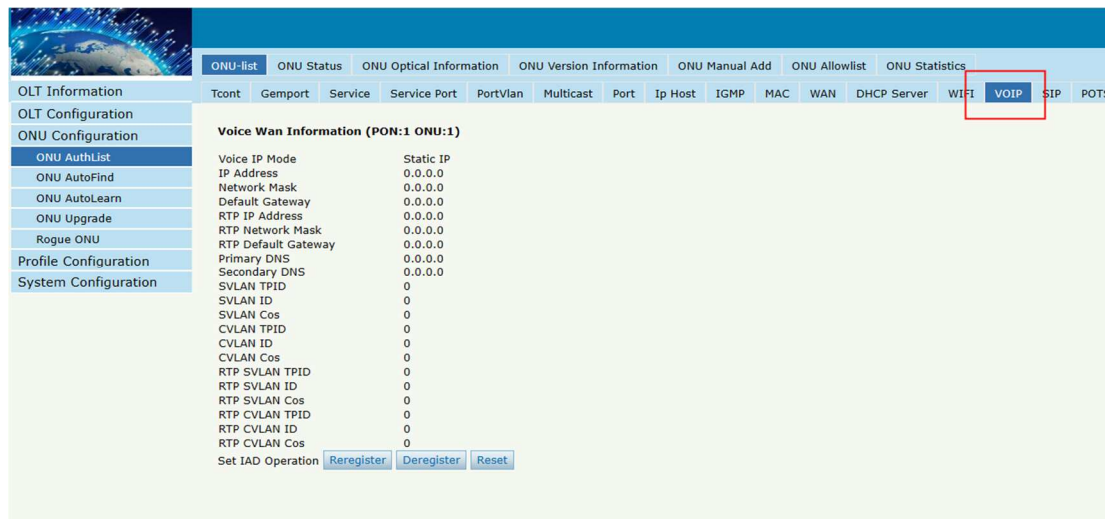


Figure 4.1-16: Voice Wan Information

4.1.1.1.15 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, shown as Figure 4.1-17.

SIP Parameter Configuration (PON:1 ONU:1)

Manage Port	5060	(1-65535)
Proxy Server IP Or Name / Port	0.0.0.0	5060 (1-65535)
Backup Proxy Server IP Or Name / Port	0.0.0.0	5060 (0-65535)
Register Server IP Or Name / Port	0.0.0.0	5060 (1-65535)
Backup Register Server IP Or Name / Port	0.0.0.0	5060 (0-65535)
Out Bound Server IP Or Name / Port	0.0.0.0	5060 (1-65535)
Register Interval	3600	(1-10000000)
Heartbeat Switch	Active	
Heartbeat Cycle	60	(1-65535)
Heartbeat Count	3	(1-65535)

SIP Digit Map Configuration

SIP Digit Map Block

Submit Clear

Figure 4.1-17: SIP Parameter

4.1.1.1.16 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, shown as Figure 4.1-18.

POTS Configuration (PON:1 ONU:1)

VoIP Port: Pots1

POTS Information

Port Status: Inactive

SIP User Parameter Configuration

Account active: ☒ Disable ☐ Enable

User Account:

User Name:

User Password:

Submit

Advanced Parameter Configuration

VAD:

Echo cancel:

Input gain (dB):

Output gain (dB):

Dtmf mode:

Submit

Figure 4.1-18: POTS Configuration

4.1.1.1.17 Misc

ONU Configuration → ONU AuthList → ONU List → Config → Misc

Misc includes other features of ONU which are configured by private OMCI, shown as Figure 4.1-19.

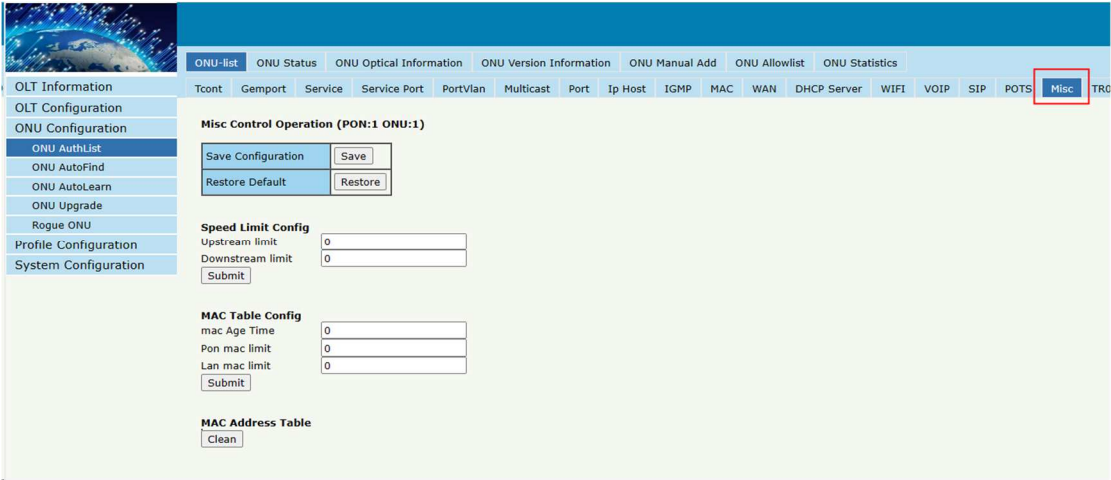


Figure 4.1-19: Misc Configuration

4.1.1.1.18 TR069

ONU Configuration → ONU AuthList → ONU List → Config → TR069

Configure the detailed parameters page of the protocol TR069 used by the remote management ONU, shown as Figure 4.1-20.

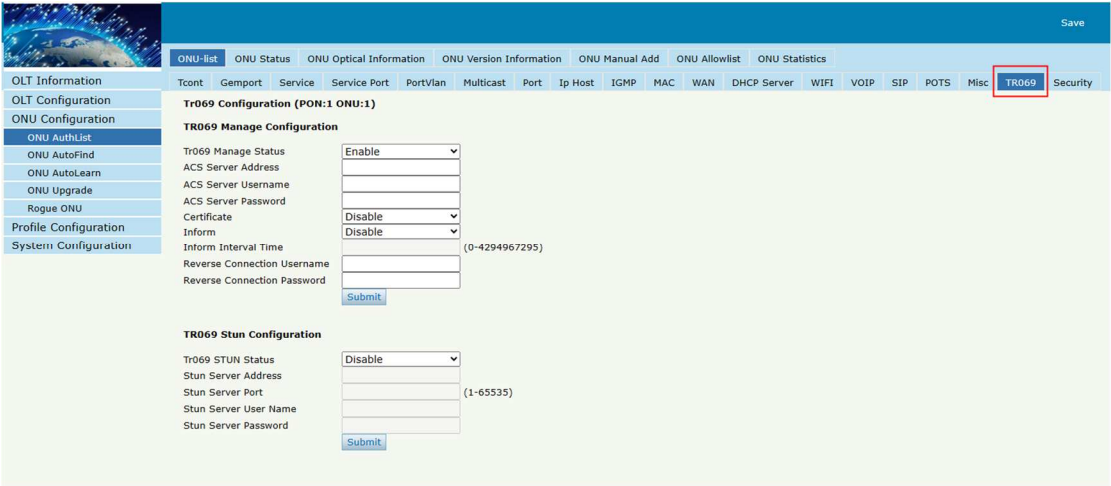


Figure 4.1-20: TR069 Configuration

4.1.1.1.19 Security

ONU Configuration → ONU AuthList → ONU List → Config → Security

This page allows you to view and configure the administrative user

password of the ONU and configure the ACL access rules of the ONU through OMCI privately, shown as Figure 4.1-21.

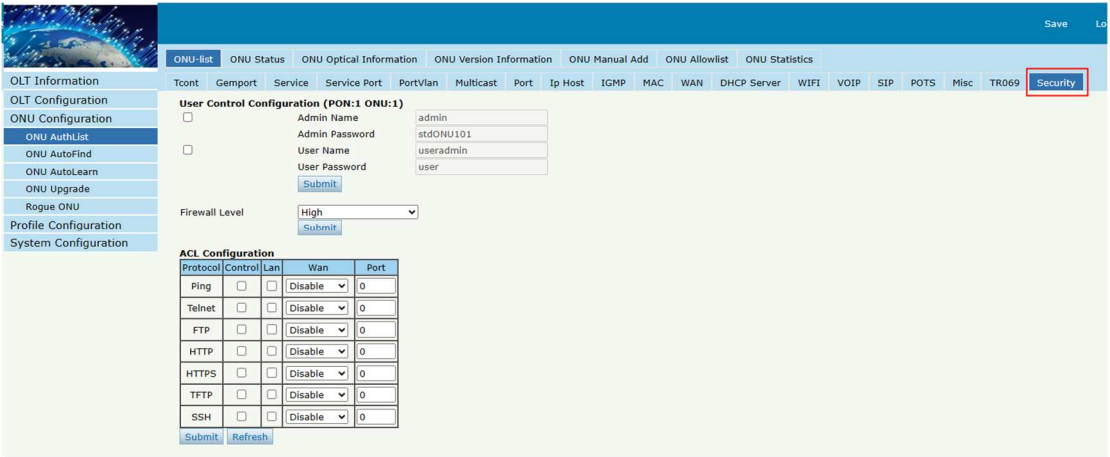


Figure 4.1-21: Security Configuration

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, shown as Figure 4.1-22.

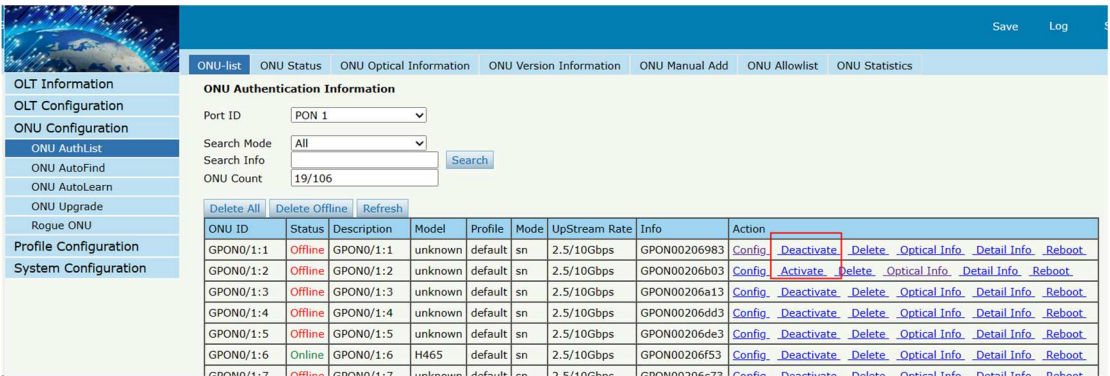


Figure 4.1-22: Deactivate/Activate ONU

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, shown as Figure 4.1-23.

The screenshot displays the 'ONU Authentication Information' section of a network management interface. It includes a sidebar with navigation options like 'OLT Information', 'ONU Configuration', and 'ONU AuthList'. The main area shows a table of ONU entries with columns for ID, Status, Description, Model, Profile, Mode, UpStream Rate, Info, and Action. The 'Delete' link in the Action column for the first row (GPON0/1:1) is highlighted with a red box.

ONU ID	Status	Description	Model	Profile	Mode	UpStream Rate	Info	Action
GPON0/1:1	Offline	GPON0/1:1	unknown	default	sn	2.5/10Gbps	GPON00206983	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:2	Offline	GPON0/1:2	unknown	default	sn	2.5/10Gbps	GPON00206b03	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:3	Offline	GPON0/1:3	unknown	default	sn	2.5/10Gbps	GPON00206a13	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:4	Offline	GPON0/1:4	unknown	default	sn	2.5/10Gbps	GPON00206dd3	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:5	Offline	GPON0/1:5	unknown	default	sn	2.5/10Gbps	GPON00206de3	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:6	Offline	GPON0/1:6	unknown	default	sn	2.5/10Gbps	GPON00206f53	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:7	Offline	GPON0/1:7	unknown	default	sn	2.5/10Gbps	GPON00206c73	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:8	Offline	GPON0/1:8	unknown	default	sn	2.5/10Gbps	GPON00206e33	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot

Figure 4.1-23: Delete ONU

4.1.1.4 Optical Info

ONU Configuration → ONU AuthList → ONU List → Optical Info

Check the Optical Information of ONU PON module which you selected, shown as Figure 4.1-24.



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 Information

ONU Version Inform

ONU Optical Info

Back

Interface	GPON0/1:2
GEM_blocklen	1
Sf threshold	5
Sd threshold	9
Alarm	enable
Alarm disable interval	0
Total T-CONT number	31
Piggyback DBA rpt mode	mode 0 only
Rx optical level	-15.72
Lower rx optical threshold	ont internal policy
Upper rx optical threshold	ont internal policy
Tx optical level	6.07
Lower tx optical threshold	ont internal policy
Upper tx optical threshold	ont internal policy
ONU response time	0
Power feed voltage	3.32(V)
Laser bias current	35.736(mA)
Temperature	41.367(C)
Distance	1(m)

Figure 4.1-24: Optical info of ONU

4.1.1.5 Detail Info

ONU Configuration → ONU AuthList → ONU List → Detail Info

Check the Detail Info of ONU which you selected, shown as Figure 4.1-25.

OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

Save

Log

ONU-list

ONU Status

ONU Optical Information

ONU Version Information

ONU Manual Add

ONU Allowlist

ONU Statistics

ONU Authentication Information

Port ID

PON 1

Search Mode

All

Search Info

Search

ONU Count

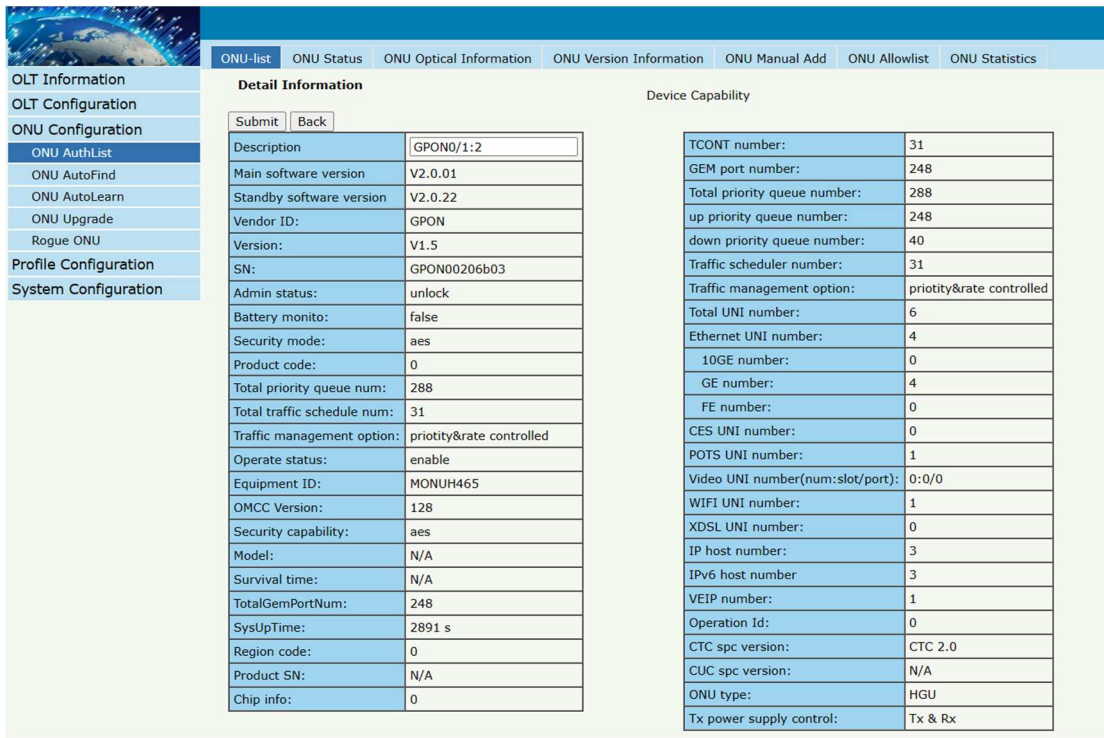
65/106

Delete All

Delete Offline

Refresh

ONU ID	Status	Description	Model	Profile	Mode	UpStream Rate	Info	Action
GPON0/1:1	Online	GPON0/1:1	H465	default	sn	2.5/10Gbps	GPON00206983	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:2	Online	GPON0/1:2	H465	default	sn	2.5/10Gbps	GPON00206b03	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:3	Online	GPON0/1:3	H465	default	sn	2.5/10Gbps	GPON00206a13	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:4	Offline	GPON0/1:4	unknown	default	sn	2.5/10Gbps	GPON00206dd3	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:5	Online	GPON0/1:5	H465	default	sn	2.5/10Gbps	GPON00206de3	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:6	Online	GPON0/1:6	H465	default	sn	2.5/10Gbps	GPON00206f53	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:7	Online	GPON0/1:7	H465	default	sn	2.5/10Gbps	GPON00206c73	Config. Deactivate Delete Optical Info. Detail Info. Reboot.
GPON0/1:8	Online	GPON0/1:8	H465	default	sn	2.5/10Gbps	GPON00206e33	Config. Deactivate Delete Optical Info. Detail Info. Reboot.



The screenshot shows the 'Detail Information' tab for an ONU configuration. It is divided into two main sections: 'Detail Information' on the left and 'Device Capability' on the right. The 'Detail Information' section contains a table with various parameters like Description, Main software version, Standby software version, Vendor ID, Version, SN, Admin status, Battery monito, Security mode, Product code, Total priority queue num, Total traffic schedule num, Traffic management option, Operate status, Equipment ID, OMCC Version, Security capability, Model, Survival time, TotalGemPortNum, SysUpTime, Region code, Product SN, and Chip info. The 'Device Capability' section contains a table with parameters like TCONT number, GEM port number, Total priority queue number, up priority queue number, down priority queue number, Traffic scheduler number, Traffic management option, Total UNI number, Ethernet UNI number, 10GE number, GE number, FE number, CES UNI number, POTS UNI number, Video UNI number, WIFI UNI number, XDSL UNI number, IP host number, IPv6 host number, VEIP number, Operation Id, CTC spc version, CUC spc version, ONU type, and Tx power supply control.

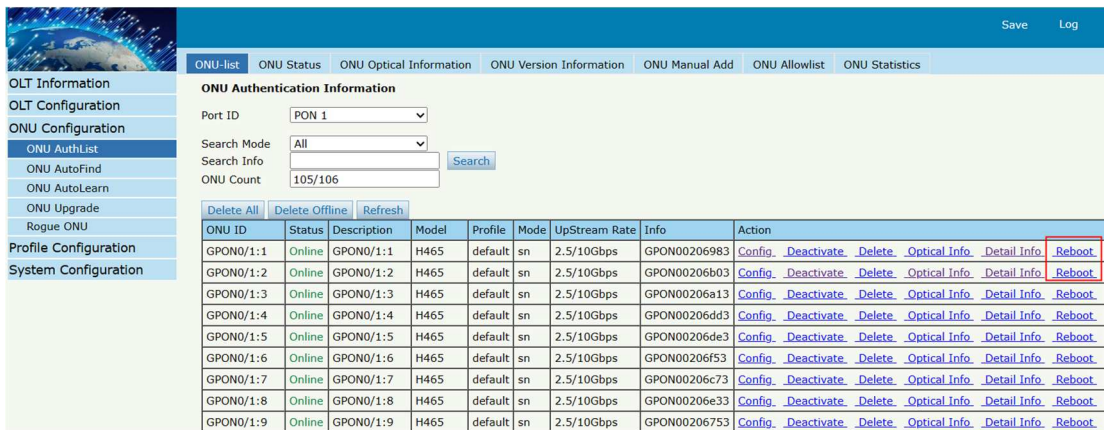
Detail Information		Device Capability	
Description	GPON0/1:2	TCONT number:	31
Main software version	V2.0.01	GEM port number:	248
Standby software version	V2.0.22	Total priority queue number:	288
Vendor ID:	GPON	up priority queue number:	248
Version:	V1.5	down priority queue number:	40
SN:	GPON00206b03	Traffic scheduler number:	31
Admin status:	unlock	Traffic management option:	priority&rate controlled
Battery monito:	false	Total UNI number:	6
Security mode:	aes	Ethernet UNI number:	4
Product code:	0	10GE number:	0
Total priority queue num:	288	GE number:	4
Total traffic schedule num:	31	FE number:	0
Traffic management option:	priority&rate controlled	CES UNI number:	0
Operate status:	enable	POTS UNI number:	1
Equipment ID:	MONUH465	Video UNI number(num:slot/port):	0:0/0
OMCC Version:	128	WIFI UNI number:	1
Security capability:	aes	XDSL UNI number:	0
Model:	N/A	IP host number:	3
Survival time:	N/A	IPv6 host number:	3
TotalGemPortNum:	248	VEIP number:	1
SysUpTime:	2891 s	Operation Id:	0
Region code:	0	CTC spc version:	CTC 2.0
Product SN:	N/A	CUC spc version:	N/A
Chip info:	0	ONU type:	HGU
		Tx power supply control:	Tx & Rx

Figure 4.1-25: Detail info of ONU

4.1.1.6 Reboot

ONU Configuration → ONU AuthList → ONU List → Reboot

Reboot ONU which you selected, shown as Figure 4.1-26.



The screenshot shows the 'ONU Authentication Information' tab. It includes search filters for Port ID, Search Mode, Search Info, and ONU Count. Below the filters is a table listing ONU details with columns for ONU ID, Status, Description, Model, Profile, Mode, UpStream Rate, Info, and Action. The 'Reboot' link in the Action column for the selected ONU (GPON0/1:2) is highlighted with a red box.

ONU ID	Status	Description	Model	Profile	Mode	UpStream Rate	Info	Action
GPON0/1:1	Online	GPON0/1:1	H465	default	sn	2.5/10Gbps	GPON00206983	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:2	Online	GPON0/1:2	H465	default	sn	2.5/10Gbps	GPON00206b03	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:3	Online	GPON0/1:3	H465	default	sn	2.5/10Gbps	GPON00206a13	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:4	Online	GPON0/1:4	H465	default	sn	2.5/10Gbps	GPON00206dd3	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:5	Online	GPON0/1:5	H465	default	sn	2.5/10Gbps	GPON00206de3	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:6	Online	GPON0/1:6	H465	default	sn	2.5/10Gbps	GPON00206f53	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:7	Online	GPON0/1:7	H465	default	sn	2.5/10Gbps	GPON00206c73	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:8	Online	GPON0/1:8	H465	default	sn	2.5/10Gbps	GPON00206e33	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot
GPON0/1:9	Online	GPON0/1:9	H465	default	sn	2.5/10Gbps	GPON00206753	Config , Deactivate , Delete , Optical Info , Detail Info , Reboot

Figure 4.1-26: 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, shown as Figure 4.1-27.

ONU ID	Admin State	OMCC State	Phase State	Description	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
GPON 0/1:1	enable	enable	working	N/A	2023-09-12 16:17:53	2023-09-12 16:16:53	Onu Los	00:03:17
GPON 0/1:2	enable	enable	working	N/A	2023-09-12 16:17:54	2023-09-12 16:16:53	Onu Los	00:03:16
GPON 0/1:3	enable	enable	working	N/A	2023-09-12 16:19:50	2023-09-12 16:16:53	Onu Los	00:01:20
GPON 0/1:4	enable	enable	working	N/A	2023-09-12 16:18:14	2023-09-12 16:16:53	Onu Los	00:02:56
GPON 0/1:5	enable	enable	working	N/A	2023-09-12 16:17:50	2023-09-12 16:16:53	Onu Los	00:03:20
GPON 0/1:6	enable	enable	working	N/A	2023-09-12 16:18:50	2023-09-12 16:16:53	Onu Los	00:02:20
GPON 0/1:7	enable	enable	working	N/A	2023-09-12 16:19:33	2023-09-12 16:16:53	Onu Los	00:01:37
GPON 0/1:8	enable	enable	working	N/A	2023-09-12 16:17:32	2023-09-12 16:16:53	Onu Los	00:03:38

Figure 4.1-27: 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, shown as Figure 4.1-28.

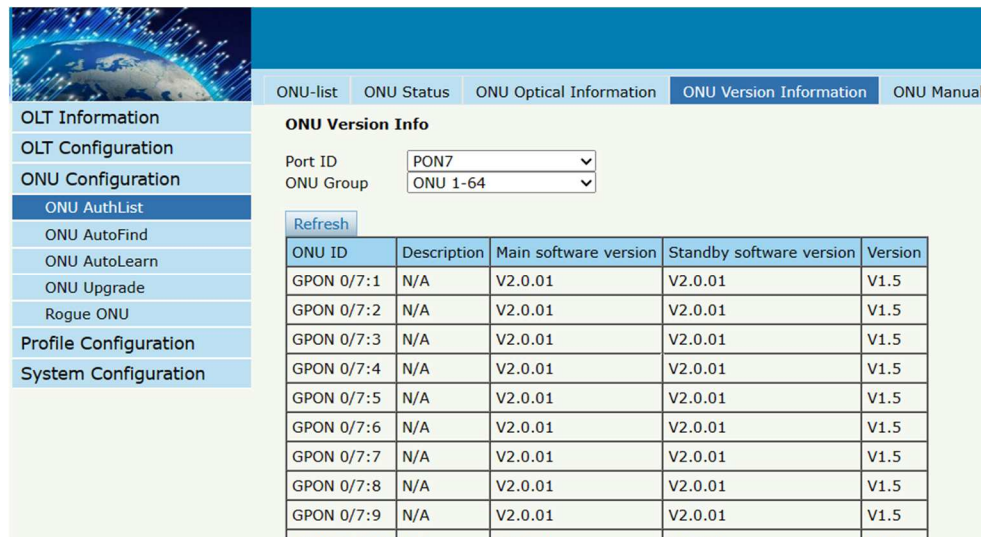
ONU ID	Description	RX Power	TX Power
GPON 0/6:1	N/A	N/A	N/A
GPON 0/6:2	N/A	N/A	N/A
GPON 0/6:3	N/A	-27.96	6.05

Figure 4.1-28: ONU Optical Info

4.1.4 ONU Version Info

ONU Configuration → ONU AuthList → ONU Version Info

On this page, you can view the version numbers of the primary and standby partitions of the batch ONU, shown as Figure 4.1-29.



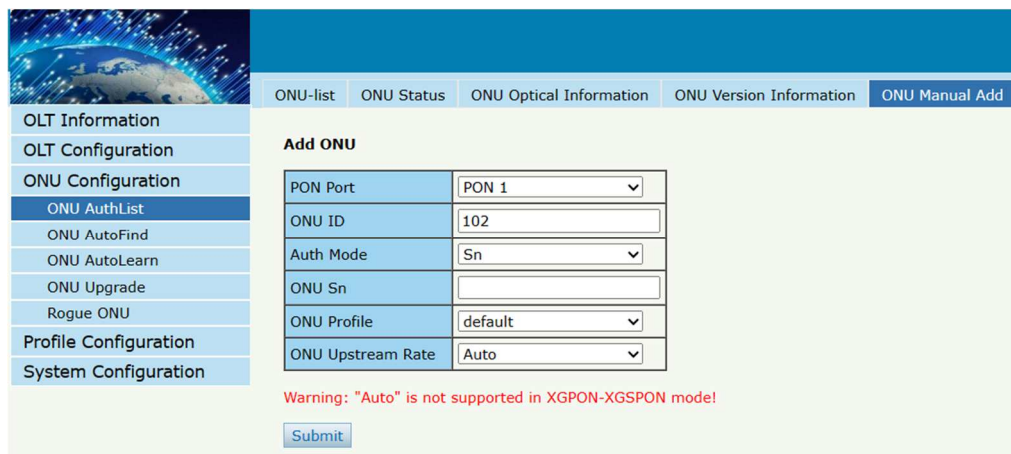
ONU ID	Description	Main software version	Standby software version	Version
GPON 0/7:1	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:2	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:3	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:4	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:5	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:6	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:7	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:8	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:9	N/A	V2.0.01	V2.0.01	V1.5
GPON 0/7:10	N/A	V2.0.01	V2.0.01	V1.5

Figure 4.1-29: ONU Version Info

4.1.5 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, shown as Figure 4.1-30.



Add ONU	
PON Port	PON 1
ONU ID	102
Auth Mode	Sn
ONU Sn	
ONU Profile	default
ONU Upstream Rate	Auto

Warning: "Auto" is not supported in XGPON-XGSPON mode!

Submit

Figure 4.1-30: ONU Manual Add

4.1.6 ONU Allowlist

ONU Configuration → ONU AuthList → ONU Allowlist

You can set up allowlist on this page.

Allowlist can limit illegal ONU to register. Only the GPON SN in the allowlist can register, but only effective for the ONU which has not been added to OLT, shown as Figure 4.1-31.

Index	SN	End SN	Delete

Figure 4.1-31: ONU Allowlist

4.1.7 ONU Statistics

ONU Configuration → ONU AuthList → ONU Statistics

This page displays the information of package count about ONU ports, shown as Figure 4.1-32.

ONU ID	Input bytes	Input packets	Output bytes	Output packets
GPON0/1:1	2240143	46487	43420581	854957
GPON0/1:2	2171652	45239	43255386	851943
GPON0/1:3	N/A	N/A	N/A	N/A
GPON0/1:4	2168592	45179	43031612	850121
GPON0/1:5	N/A	N/A	N/A	N/A
GPON0/1:6	2168688	45181	43130504	851599
GPON0/1:7	2224506	46342	43188095	851732
GPON0/1:8	2225562	46286	43308207	853563

Figure 4.1-32: ONU Statistics

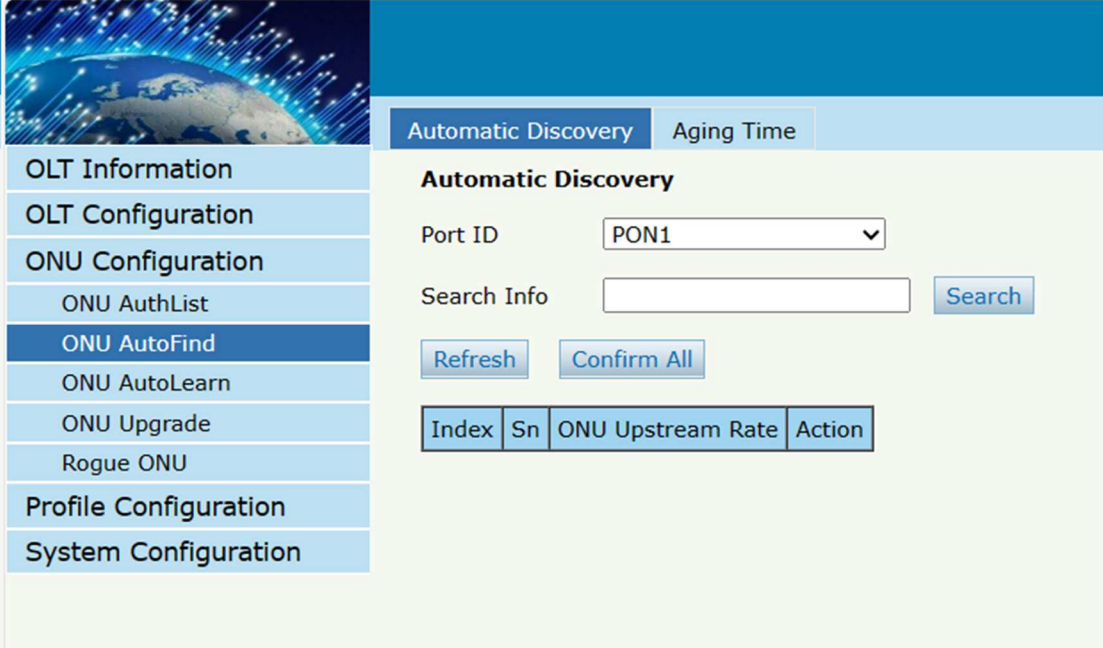
4.2 ONU AutoFind

4.2.1 Automatic Discovery

ONU Configuration → ONU AutoFind → Automatic Discovery

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, shown as Figure 4.2-1.



The screenshot shows a web interface for ONU configuration. On the left is a sidebar menu with the following items: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, **ONU AutoFind** (highlighted), ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has two tabs: 'Automatic Discovery' (active) and 'Aging Time'. Under the 'Automatic Discovery' tab, there is a 'Port ID' dropdown menu set to 'PON1', a 'Search Info' text input field, and a 'Search' button. Below these are 'Refresh' and 'Confirm All' buttons. At the bottom, there is a table header with four columns: 'Index', 'Sn', 'ONU Upstream Rate', and 'Action'.

Figure 4.2-1: Automatic Discovery

4.2.2 Aging Time

ONU Configuration → ONU AutoFind → Aging Time

Here you can configure the aging time of the discovery ONU, and the

ONU will be removed from the discovery list at the end of the time, shown as Figure 4.2-2.

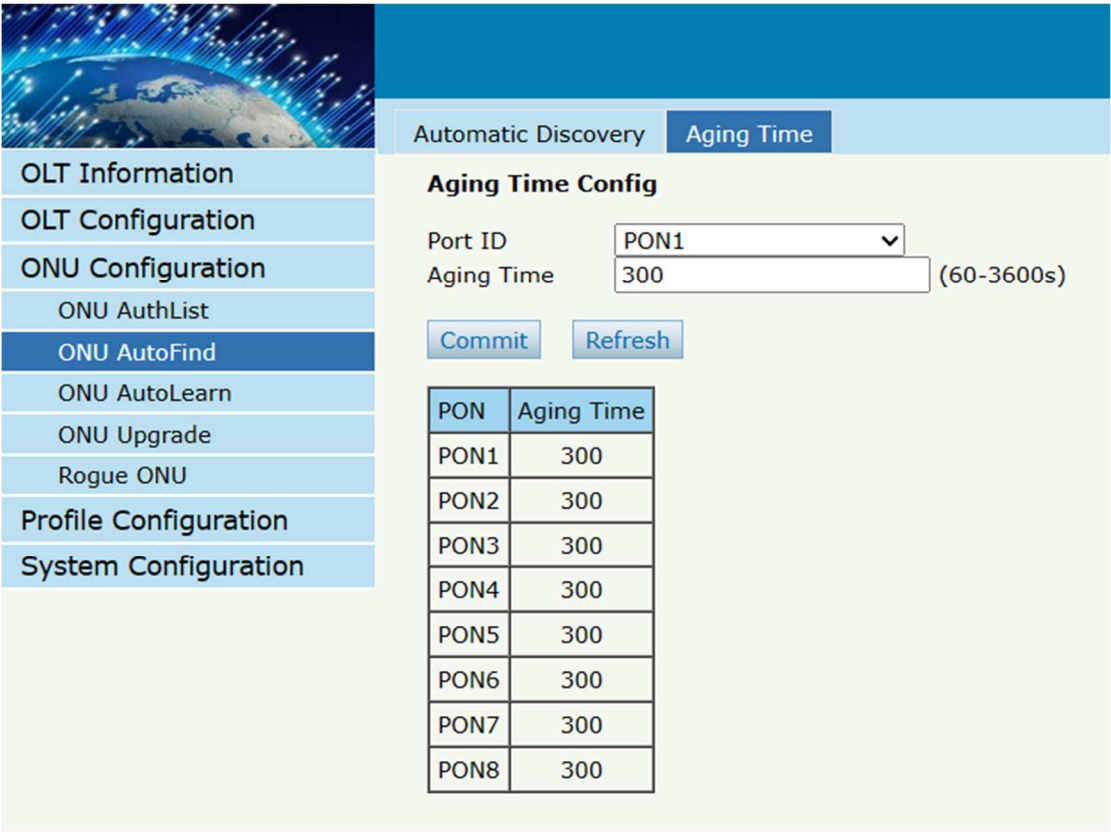


Figure 4.2-2: Aging Time

4.3 ONU AutoLearn

4.3.1 ONU AutoLearn

Configuration → AutoLearn → ONU AutoLearn

ONU can be authenticated automatically after enabling PON port automatic learning, shown as Figure 4.3-1.

Save Log Stat

ONU AutoLearn
ONU AutoBind
ONU AutoDelete

Automatic Learn ONU Profile

Default ONU Profile: default

Apply

Plug and Play

Enable: Disable

Vlan Mode: Default Vlan

Vlan ID: 1 (1-4094)

Apply

Automatic Learn

PON ID	Enable	Line Profile	Srv Profile	Alarm Profile	Pri Profile	Format Profile
PON1	Enable	line_profile_1	service_profile_1	N/A	pri_profile_7	N/A
PON2	Enable	N/A	N/A	N/A	N/A	N/A
PON3	Enable	N/A	N/A	N/A	N/A	N/A
PON4	Enable	N/A	N/A	N/A	N/A	N/A
PON5	Enable	line_profile_1	service_profile_1	N/A	N/A	N/A
PON6	Enable	N/A	N/A	N/A	N/A	N/A
PON7	Enable	N/A	N/A	N/A	N/A	N/A
PON8	Enable	N/A	N/A	N/A	N/A	N/A

Apply Refresh

Priority of Auto-Learn Profile Binding: ONU Auto-bind > PON Auto-Learn > ONU Plug-and-Play!

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, shown as Figure 4.3-2.

Note: you must create profile first.

ONU AutoLearn
ONU AutoBind
ONU AutoDelete

Automatic Bind

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

Select Equipment ID Matching Type

Matching Type: Exact Matching

Submit

Add ONU Automatic Bind

Equipment ID

ONU Profile: default

Line Profile: N/A

Service Profile: N/A

Alarm Profile: N/A

Pri Profile: N/A

Format Profile: N/A

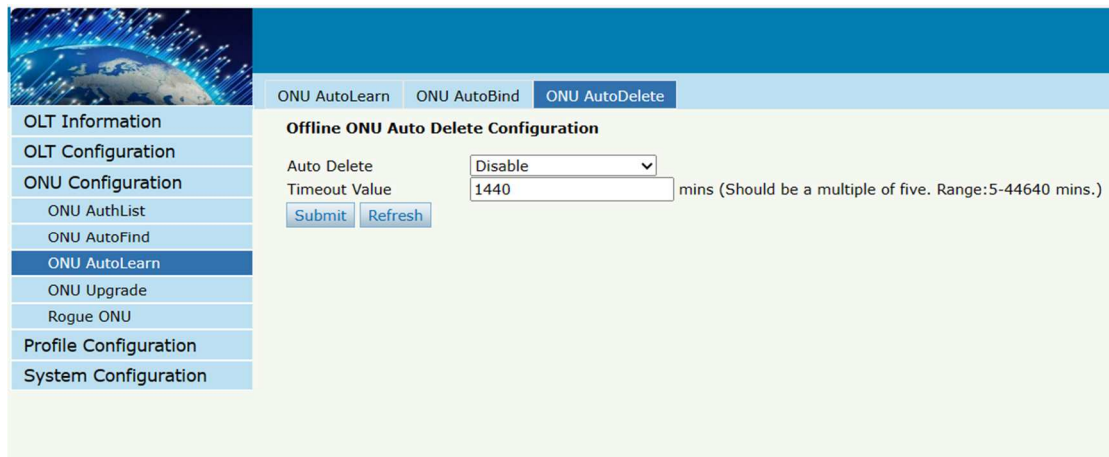
Add Refresh

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, shown as Figure 4.3-3.



The screenshot shows a web interface for ONU configuration. On the left is a sidebar menu with the following items: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, ONU AutoLearn (highlighted), ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has three tabs: ONU AutoLearn, ONU AutoBind, and ONU AutoDelete (selected). Below the tabs is the 'Offline ONU Auto Delete Configuration' section. It contains two fields: 'Auto Delete' with a dropdown menu set to 'Disable', and 'Timeout Value' with a text input set to '1440'. To the right of the input is a note: 'mins (Should be a multiple of five. Range:5-44640 mins.)'. At the bottom of the configuration area are two buttons: 'Submit' and 'Refresh'.

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, shown as Figure 4.4-1.

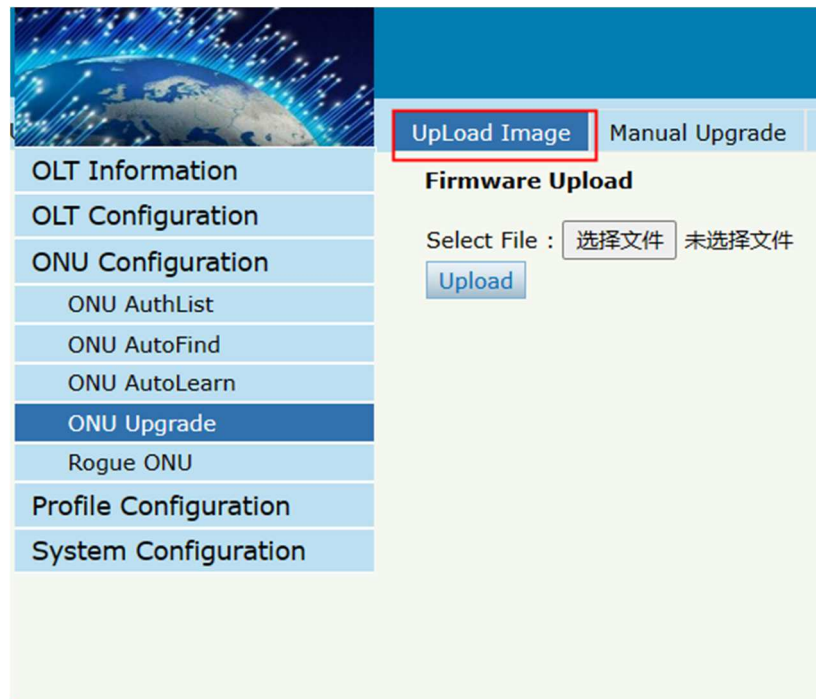


Figure 4.4-1: Upload image

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 every time, shown as Figure 4.4-2.

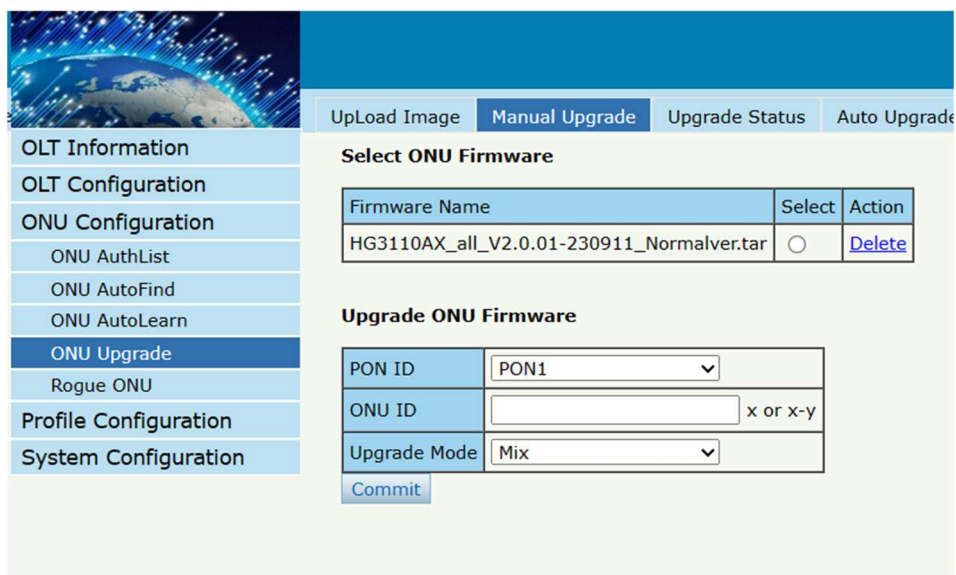


Figure 4.4-2: Manual Upgrade

4.4.3 Upgrade Status

Configuration → ONU Upgrade → Upgrade Status

When ONU is upgrading, the upgrading status will be shown on this page, shown as Figure 4.4-3.

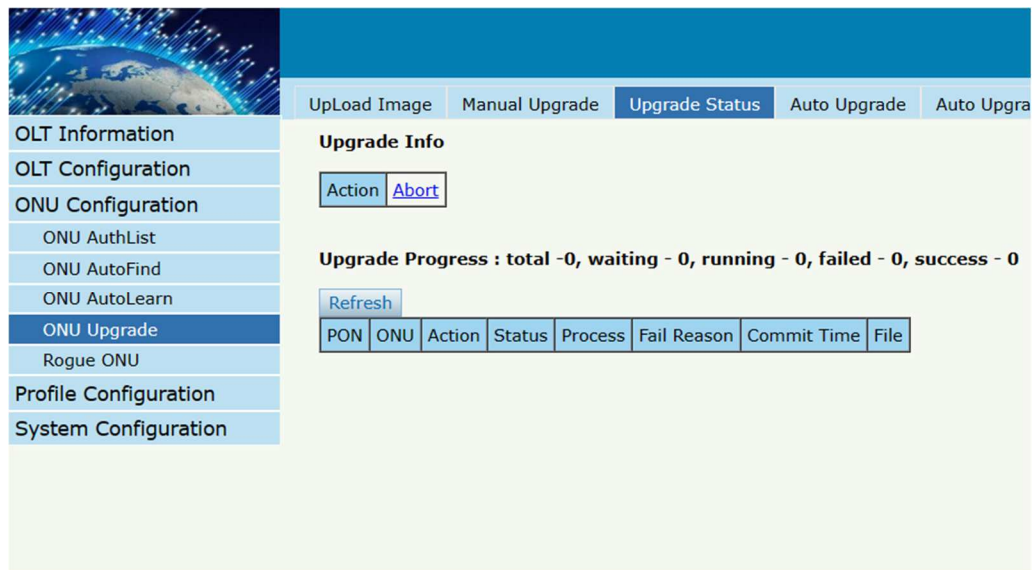


Figure 4.4-3: ONU Upgrade Status

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 model 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, shown as Figure 4.4-4.

UpLoad Image Manual Upgrade Upgrade Status **Auto Upgrade** Auto Upgrade Status

Add ONU Auto Upgrade

Equipment ID Software Version

Select ONU Firmware

Firmware Name	Select
HG3110AX_all_V2.0.01-230911_Normalver.tar	☐

ONU Auto Upgrade Information

Equipment ID	Software Version	Image Name	Delete
--------------	------------------	------------	--------

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, shown as Figure 4.4-5.

UpLoad Image Manual Upgrade Upgrade Status Auto Upgrade **Auto Upgrade Status**

Auto Upgrade Status
total - 0, waiting - 0, running - 0, failed - 0, success - 0

PON	ONU	Status	Progress	Action
-----	-----	--------	----------	--------

PON	ONU	Status	Progress	Fail Reason	Commit Time	Action
-----	-----	--------	----------	-------------	-------------	--------

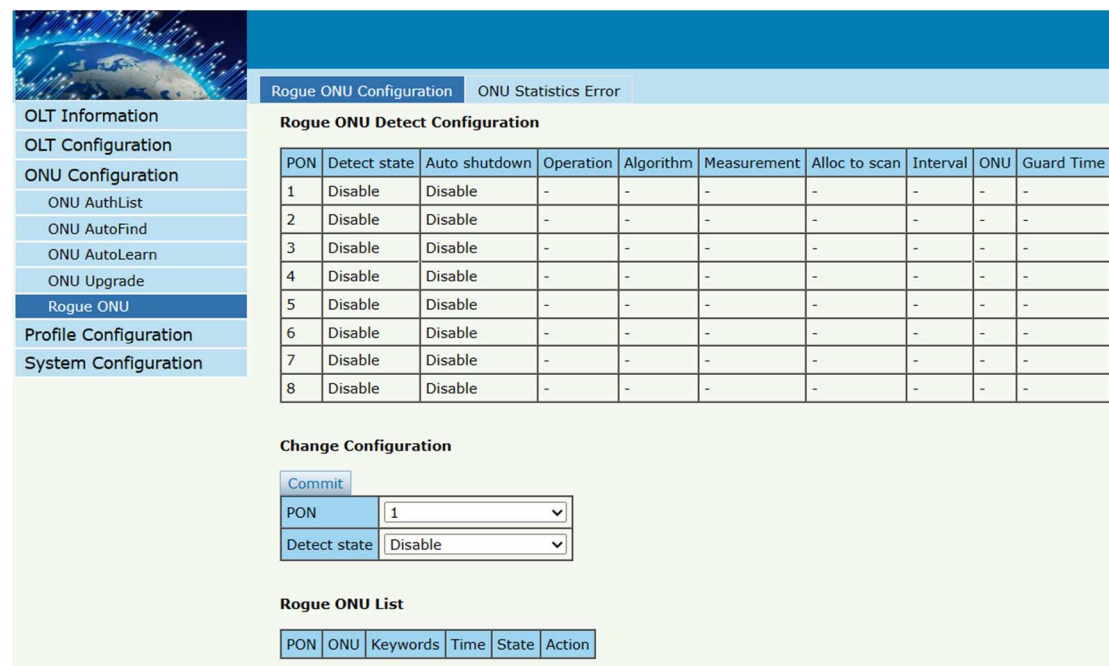
Figure 4.4-5: Auto Upgrade Status

4.5 Rogue ONU

4.5.1 Rogue ONU Configuration

ONU Configuration → Rogue ONU → Rogue ONU Configuration

After enabled rogue ONU detect, if there is a rogue ONU trying to register, it will appear in the list, shown as Figure 4.5-1.



The screenshot displays the 'Rogue ONU Configuration' page. On the left is a sidebar with navigation links: OLT Information, OLT Configuration, ONU Configuration (selected), ONU AuthList, ONU AutoFind, ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has two tabs: 'Rogue ONU Configuration' (active) and 'ONU Statistics Error'. Under the 'Rogue ONU Configuration' tab, there is a 'Rogue ONU Detect Configuration' section with a table of 8 rows. Each row has columns for PON, Detect state, Auto shutdown, Operation, Algorithm, Measurement, Alloc to scan, Interval, ONU, and Guard Time. All 'Detect state' and 'Auto shutdown' values are 'Disable'. Below this table is a 'Change Configuration' section with a 'Commit' button and two dropdown menus for 'PON' (set to 1) and 'Detect state' (set to Disable). At the bottom is a 'Rogue ONU List' section with a table header: PON, ONU, Keywords, Time, State, and Action.

PON	Detect state	Auto shutdown	Operation	Algorithm	Measurement	Alloc to scan	Interval	ONU	Guard Time
1	Disable	Disable	-	-	-	-	-	-	-
2	Disable	Disable	-	-	-	-	-	-	-
3	Disable	Disable	-	-	-	-	-	-	-
4	Disable	Disable	-	-	-	-	-	-	-
5	Disable	Disable	-	-	-	-	-	-	-
6	Disable	Disable	-	-	-	-	-	-	-
7	Disable	Disable	-	-	-	-	-	-	-
8	Disable	Disable	-	-	-	-	-	-	-

Change Configuration

Commit

PON: 1

Detect state: Disable

Rogue ONU List

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

Figure 4.5-1: Rogue ONU detect

4.5.2 ONU Statistics Error

ONU Configuration → Rogue ONU → ONU Statistics Error

This page, you can view information such as whether the packets that the ONU interacts with the OLT have errors, as well as the types and number of errors, shown as Figure 4.5-2.

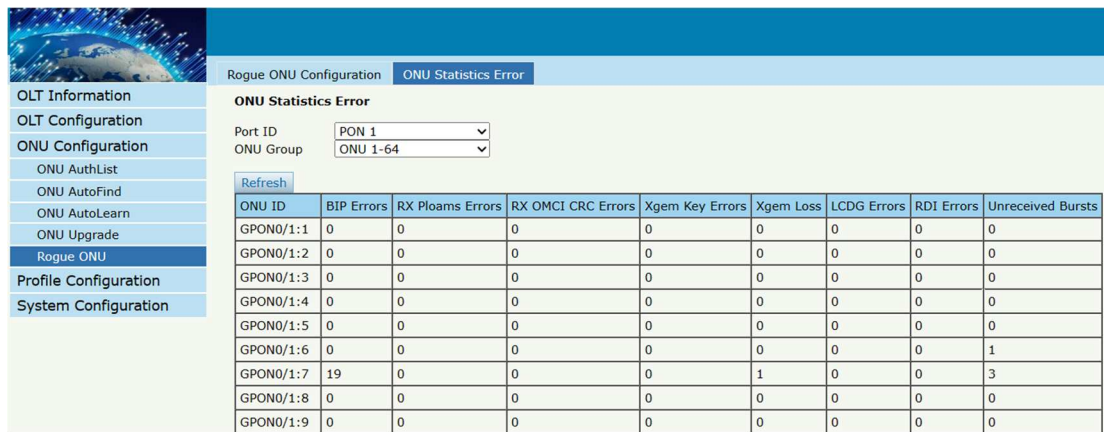


Figure 4.5-2: ONU Statistics Error

Chapter 5 Profile Configuration

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

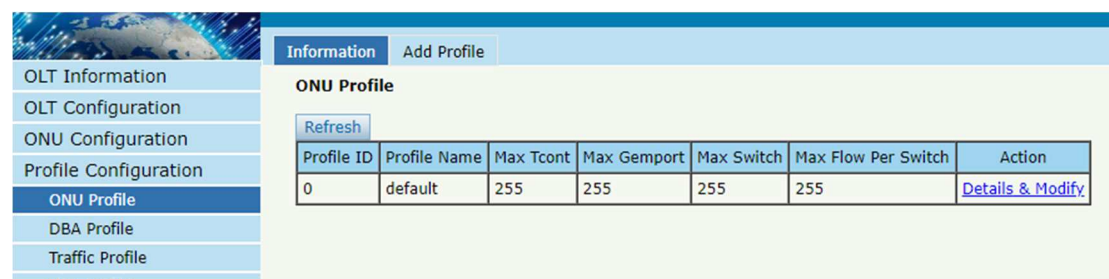
5.1 ONU Profile

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.



Profile ID	Profile Name	Max Tcont	Max Gemport	Max Switch	Max Flow Per Switch	Action
0	default	255	255	255	255	Details & Modify

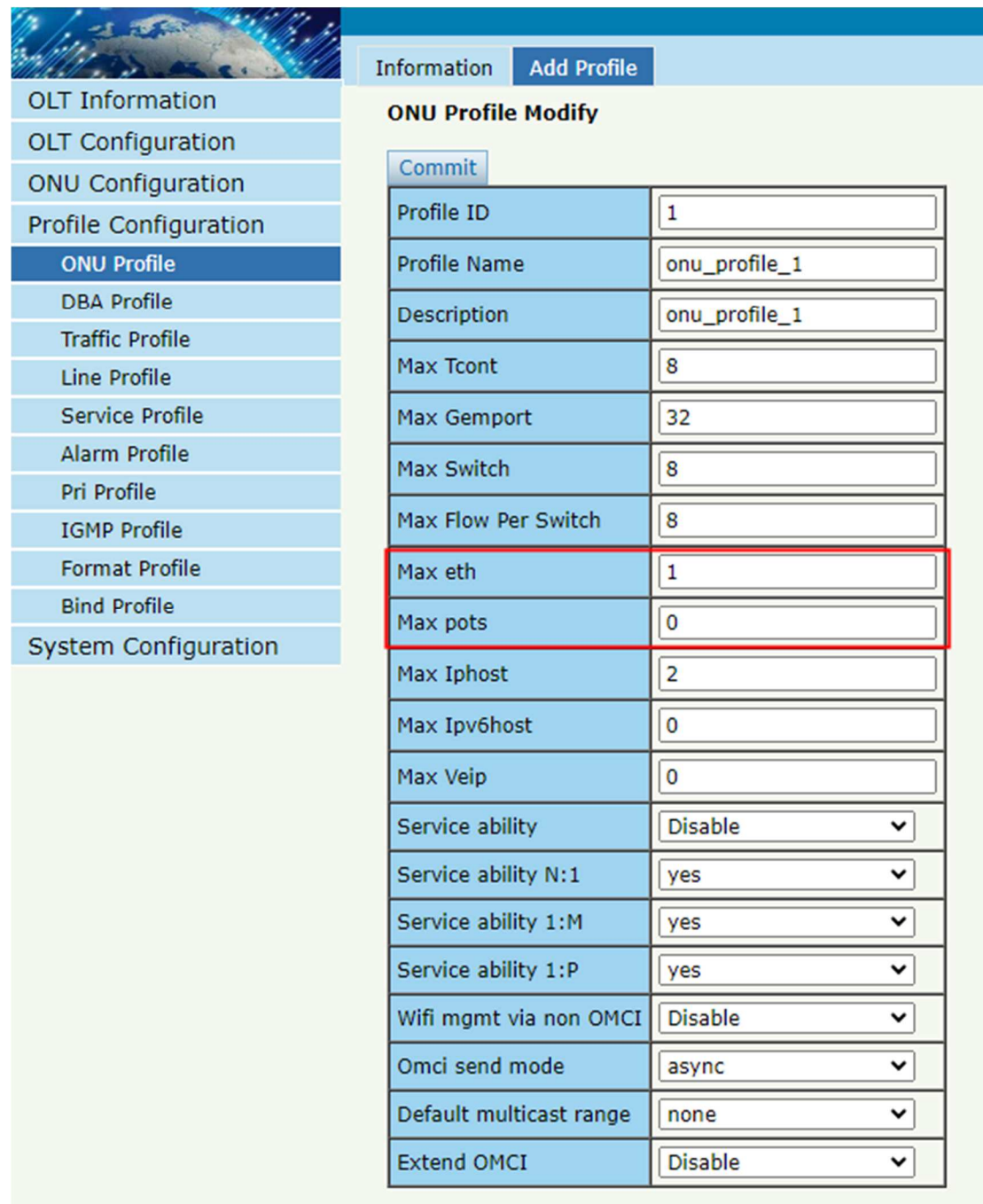
Figure 5.1-1: ONU profile list

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.



ONU Profile Modify

[Commit](#)

Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max Tcont	8
Max Gempport	32
Max Switch	8
Max Flow Per Switch	8
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
Extend OMCI	Disable

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

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

IGMP Profile

Format Profile

Bind Profile

System Configuration

Commit

Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max Tcont	8
Max Gempport	32
Max Switch	8
Max Flow Per Switch	8
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
Extend OMCI	Disable

Figure 5.1-3: Add HGU profile

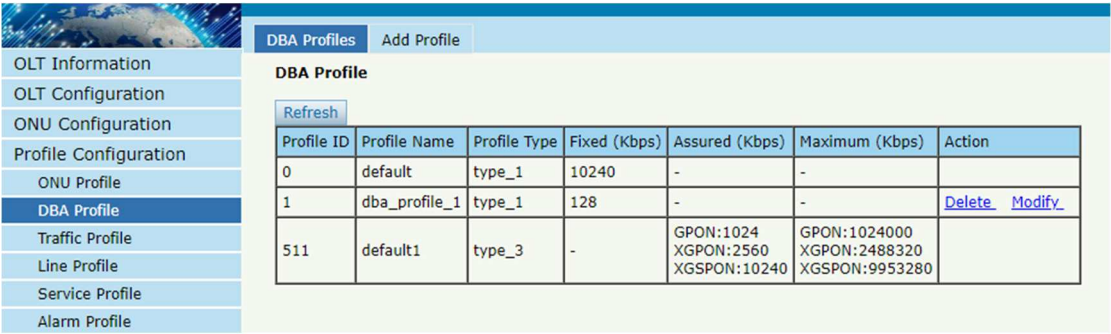
5.2 DBA Profile

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 <= maximum.

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.



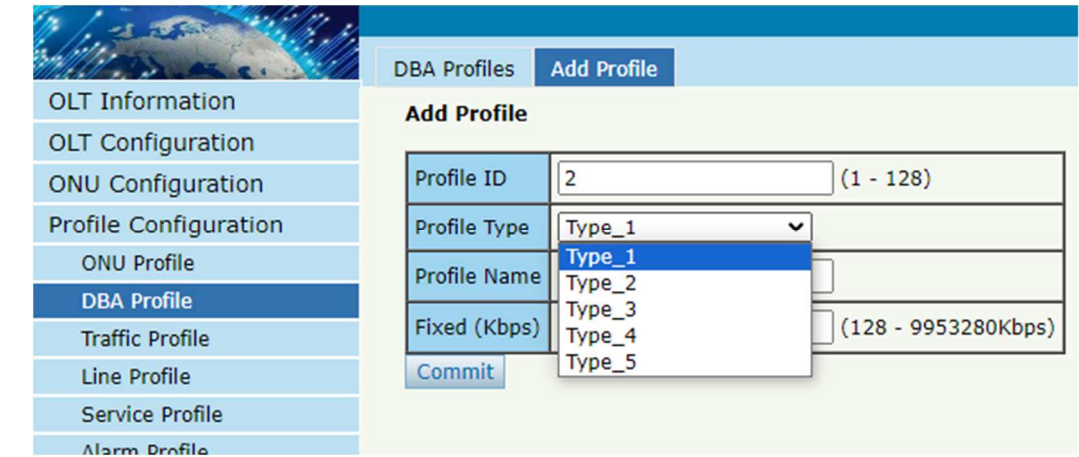
Profile ID	Profile Name	Profile Type	Fixed (Kbps)	Assured (Kbps)	Maximum (Kbps)	Action
0	default	type_1	10240	-	-	
1	dba_profile_1	type_1	128	-	-	Delete Modify
511	default1	type_3	-	GPON:1024 XGPON:2560 XGSPON:10240	GPON:1024000 XGPON:2488320 XGSPON:9953280	

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.



Profile ID	2	(1 - 128)
Profile Type	Type_1	
Profile Name	Type_1	
Fixed (Kbps)	Type_3	(128 - 9953280Kbps)
Commit		

Figure 5.2-2: Add a DBA profile

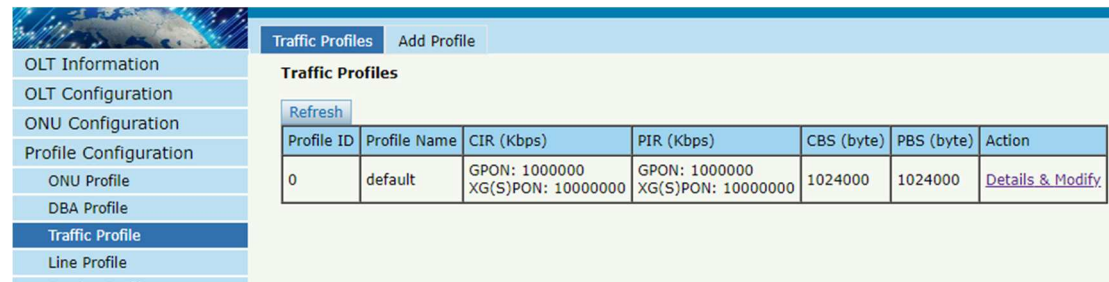
5.3 Traffic Profile

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.



Profile ID	Profile Name	CIR (Kbps)	PIR (Kbps)	CBS (byte)	PBS (byte)	Action
0	default	GPON: 1000000 XG(S)PON: 10000000	GPON: 1000000 XG(S)PON: 10000000	1024000	1024000	Details & Modify

Figure 5.3-1: Traffic Profile list

5.3.2 Add profile

Profile Configuration→Traffic Profile →Add Profile

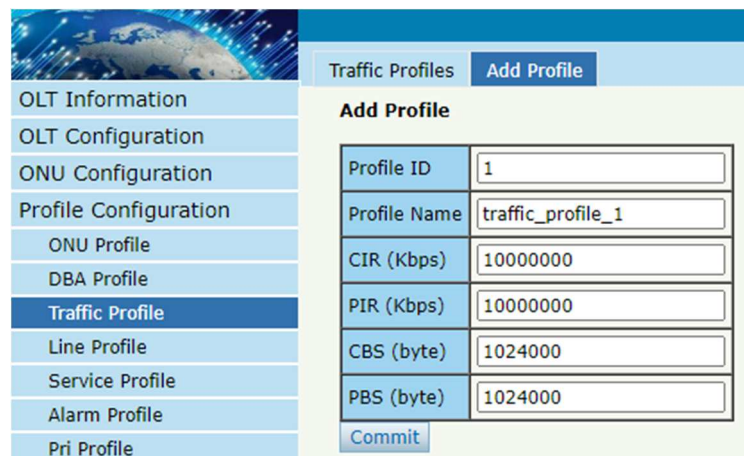
Configure gemport to specify the upstream/downstream bandwidth.

SIR: Committed Information Rate

PIR: Peak Information Rate

CBS: Committed Burst Size

PBS: Peak Burst Size



Profile ID	Profile Name	CIR (Kbps)	PIR (Kbps)	CBS (byte)	PBS (byte)
1	traffic_profile_1	10000000	10000000	1024000	1024000

Figure 5.3-2: Add a traffic Profile

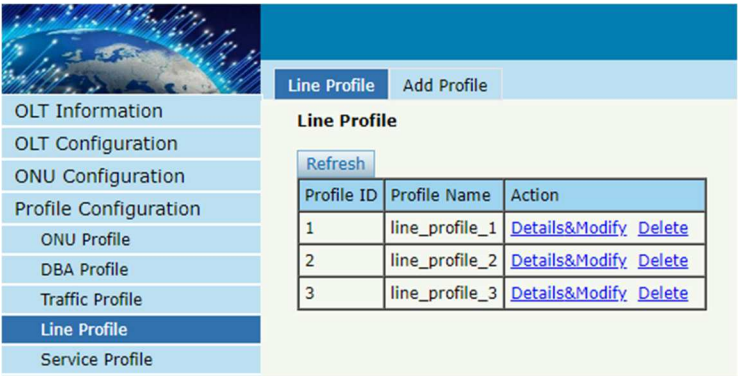
5.4 Line Profile

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.



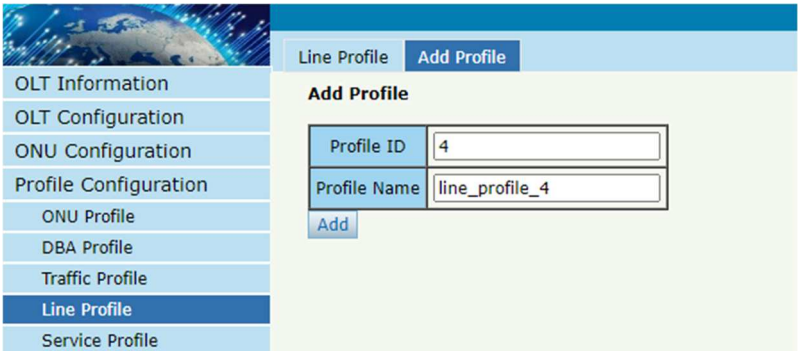
Line Profile		Add Profile
Line Profile		
Refresh		
Profile ID	Profile Name	Action
1	line_profile_1	Details&Modify Delete
2	line_profile_2	Details&Modify Delete
3	line_profile_3	Details&Modify Delete

Figure 5.4-1: Line Profile list

5.4.2 Add profile

Profile Configuration→Line profile→Add profile

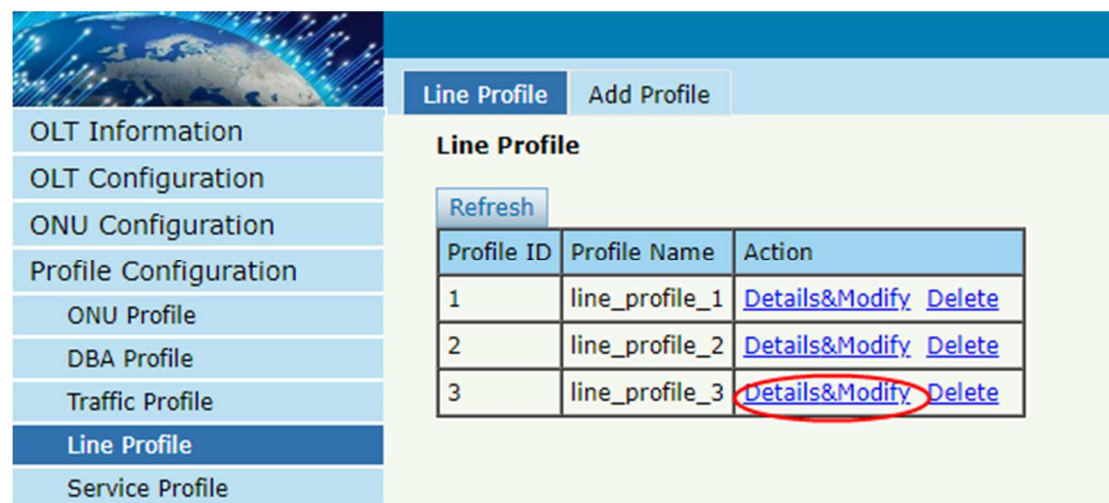
Create a new line profile.



Line Profile		Add Profile
Add Profile		
Profile ID	4	
Profile Name	line_profile_4	
Add		

Figure 5.4-2: Add Line Profile

Modify the line profile parameters.

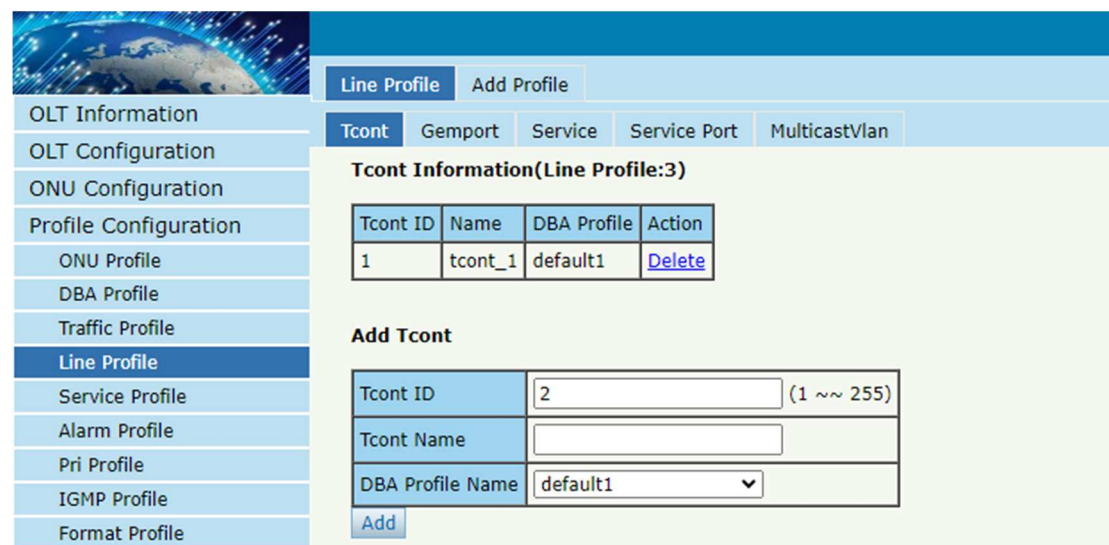


Profile ID	Profile Name	Action
1	line_profile_1	Details&Modify Delete
2	line_profile_2	Details&Modify Delete
3	line_profile_3	Details&Modify Delete

Figure 5.4-3: Modify Line Profile

5.4.2.1 Tcont

Add tcont ID and bind DBA profile.



Tcont ID	Name	DBA Profile	Action
1	tcont_1	default1	Delete

Tcont ID	2	(1 ~ 255)
Tcont Name		
DBA Profile Name	default1	
Add		

Figure 5.4-4: Add Tcont

5.4.2.2 Gemport

Add gemport ID and bind tcont ID.



Line Profile

Add Profile

Tcont

Gemport

Service

Service Port

MulticastVlan

Gemport Info(Line Profile:3)

Gemport ID	Name	Tcont	Downstream	Action
1	gem_1	1	default	Delete

Add Gemport

Gemport ID	2	(1~255)
Tcont ID	1	
Gemport Name		
Downstream Traffic	default	

Add

ONU Gemport Rate Limit Info

Gemport ID	Name	Tcont	Upstream CIR	Upstream PIR	Downstream CIR	Downstream PIR	Action
1	gem_1	1	NULL	NULL	NULL	NULL	Delete

ONU Gemport Rate Limit Configuration

Gemport ID	1
Upstream Traffic Committed Rate Limit (B/s)	0 (0-4294967295)
Upstream Traffic Peak Rate Limit (B/s)	0 (0-4294967295)
Downstream Traffic Committed Rate Limit (B/s)	0 (0-4294967295)
Downstream Traffic Peak Rate Limit (B/s)	0 (0-4294967295)

Commit

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.



Line Profile

Add Profile

Tcont

Gemport

Service

Service Port

MulticastVlan

Service Information(Line Profile:5)

Service Name	Gemport	Vlan Mode	Vlan List	COS List	Port	Action
1	1	tag	3000	N/A	N/A	Delete

Add Service

Service Name	
Gemport ID	1
Vlan Mode	Tag
Vlan List	(X,X or X-X;0 for all;max 12 vlans)
COS List	N/A (X,X or X-X;)
Port Type	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 gempport ID. If don't need VLAN translation, just set translate VLAN the same as user VLAN.

Line Profile **Add Profile**

Tcont Gempport Service **Service Port** MulticastVlan

Service Port Info(Line Profile:5)

Service Port	Gempport ID	Begin Vid	End Vid	Outer Vid	Inner Vid	Vlan	SVlan	Mode	Enable	Description	Action
1	1	3000	3000	N/A	N/A	3000	N/A	1:1	YES	N/A	Delete

Add Service Port

Service Mode:

Service Port ID: (1~128)

Gempport ID:

User VLAN:

Translate Vlan:

Translate SVlan:

Description:

[Add](#)

Figure 5.4-7: Add Service Port

5.4.2.5 Multicast Vlan

Set the Multicast VLAN of ONU.

Line Profile **Add Profile**

Tcont Gempport Service Service Port **MulticastVlan**

Multicast VLAN List(Line Profile:5)

Line Profile ID	Line Profile Name	Vlan List	Action
5	line_profile_5	3200	Delete All

Add/Del Multicast Vlan (max 12 vlans)

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

[Add](#) [Delete](#)

Figure 5.4-8: Configure Multicast VLAN

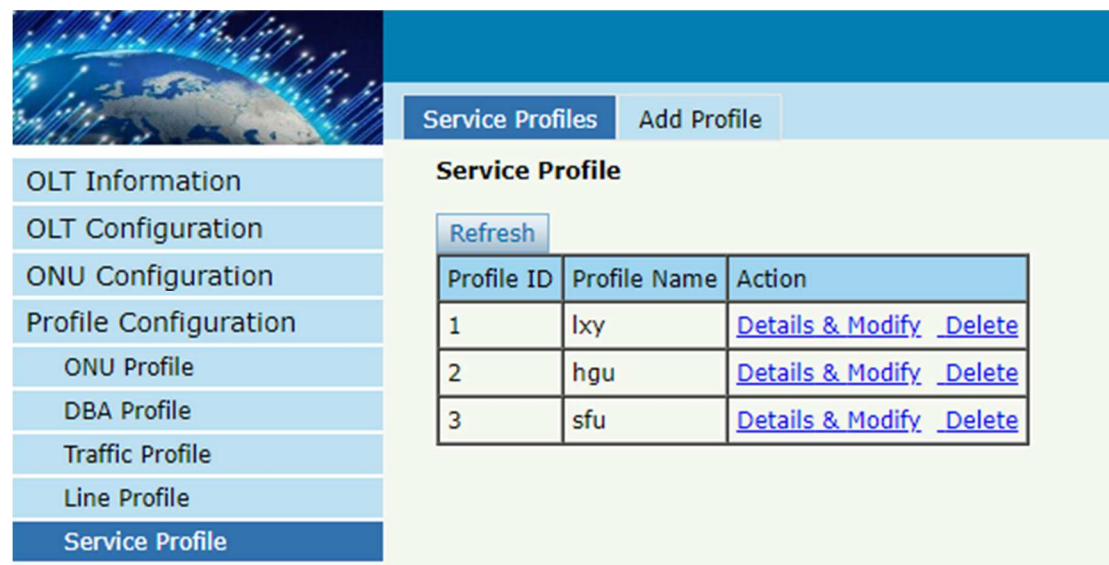
5.5 Service Profile

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.



Profile ID	Profile Name	Action
1	lxy	Details & Modify Delete
2	hgu	Details & Modify Delete
3	sfu	Details & Modify Delete

Figure 5.5-1: Service Profile List

5.5.2 Add profile

Profile Configuration→Service Profile →Add Profile

Add a new service profile.

Figure 5.5-2: Add Service profile

Profile ID	Profile Name	Action
1	lxy	Details & Modify Delete
2	hgu	Details & Modify Delete
3	sfu	Details & Modify Delete
4	service_profile_4	Details & Modify Delete

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

Port Vlan

Multicast Vlan

Port Config

Iphost Config

PortVlan Info (Service Profile:4)

Port Name	Mode	Vlan	Vlan Priority (tag)	Default Vlan(hybrid)	Default Priority (hybrid)	Action
veip_1	transparent	N/A	N/A	N/A	N/A	Delete

Add Port Vlan

Mode

Transparent

Port Type

Veip

Port ID

(1-32)

Commit

Figure 5.5-4: Port VLAN mode

5.5.2.2 Multicast Vlan Strip

Set the multicast VLAN mode of ONU's port.



Service Profiles

Add Profile

Port Vlan

Multicast Vlan

Port Config

Iphost Config

Multicast VLAN (Service Profile:4)

Multicast vlan tag strip

Vlan Mode	Port	Action
Strip	eth_0/1	Delete

(eth number, 1 ~ 32)

Add

Figure 5.5-5: Port Multicast VLAN Mode

5.5.2.3 Port Config

Port config is used to configure certain parameters for ONU ports, such as rate, MAC address limit, and upstream and downstream traffic limit.

Service Profiles Add Profile

Port Vlan Multicast Vlan **Port Config** Iphost Config

Port Basic Configuration (Service Profile:4)

Port Configuration LAN1

☐ Admin Status

☐ Loopback Detect

Port Speed auto

Mac Limit (0-255)

Pause Time (0-65535)

[Submit](#)

Upstream Rate Limit Config

Upstream Rate-Limit CIR (0-33554431 kbps)

Upstream Rate-Limit PIR (0-33554431 kbps)

[Commit](#)

Downstream Rate Limit Config

Downstream Rate-Limit CIR (0-33554431 kbps)

Downstream Rate-Limit PIR (0-33554431 kbps)

[Commit](#)

Port Status

[Refresh](#)

Interface	Speed	Admin Status	Loopback Detect	Mac Limit	Pause Time	Upstream Rate-Limit (kbps)	Downstream Rate-Limit (kbps)

Figure 5.5-6: Port Config

5.5.2.4 Iphost Config

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

Service Profiles Add Profile

Port Vlan Multicast Vlan Port Config **Iphost Config**

Iphost Configuration Info (Service Profile:4)

Iphost ID	Description	IP Mode	IP Address	Mask	Gateway	Primary DNS	Secondary DNS	Ping Response	Traceroute	VLAN	Priority	Action

Iphost Config

Iphost ID 1

Description

IP Mode N/A

DNS1 (A.B.C.D)

DNS2 (A.B.C.D)

[Commit](#)

Iphost VLAN Config

VLAN(1-4094)

Priority (1-15)

[Commit](#) [Delete](#)

Figure 5.5-7: Add IPhost

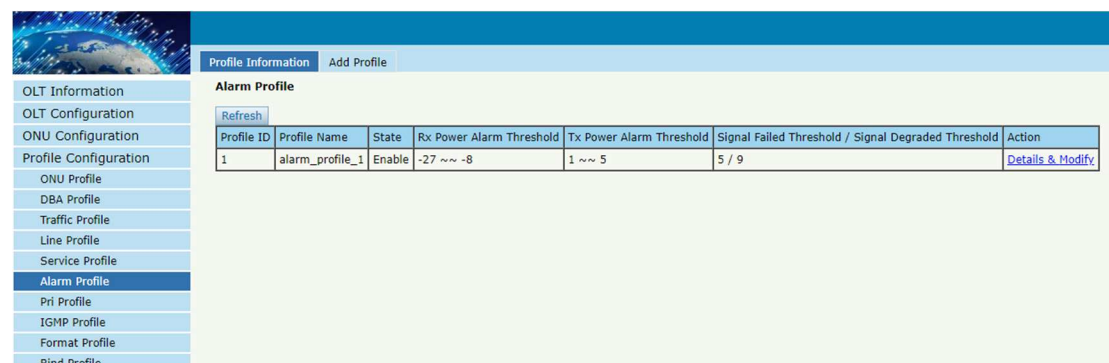
5.6 Alarm Profile

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.



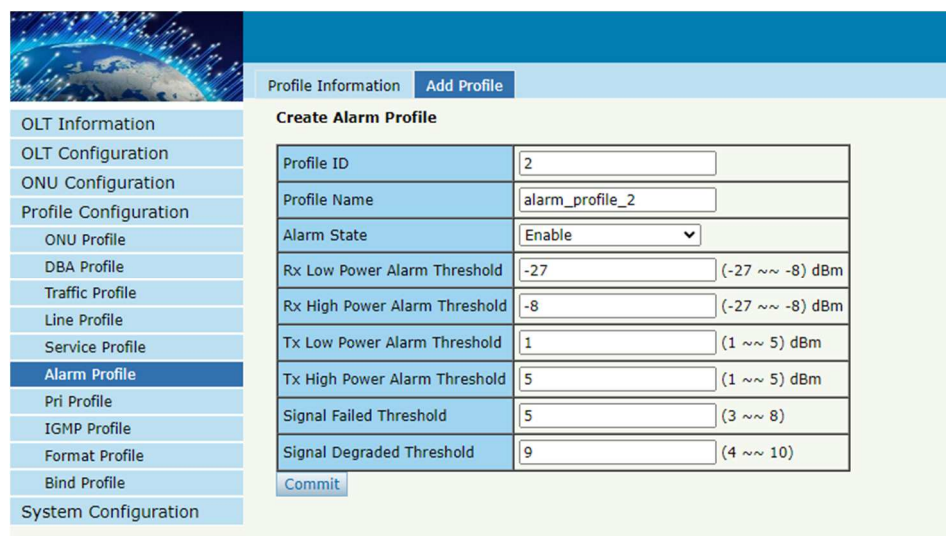
Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Signal Failed Threshold / Signal Degraded Threshold	Action
1	alarm_profile_1	Enable	-27 ~ -8	1 ~ 5	5 / 9	Details & Modify

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.



Profile ID	2
Profile Name	alarm_profile_2
Alarm State	Enable
Rx Low Power Alarm Threshold	-27 (-27 ~ -8) dBm
Rx High Power Alarm Threshold	-8 (-27 ~ -8) dBm
Tx Low Power Alarm Threshold	1 (1 ~ 5) dBm
Tx High Power Alarm Threshold	5 (1 ~ 5) dBm
Signal Failed Threshold	5 (3 ~ 8)
Signal Degraded Threshold	9 (4 ~ 10)

[Commit](#)

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.



OLT Information	Pri Profile Add Profile													
OLT Configuration	Pri Profile													
ONU Configuration	Refresh													
Profile Configuration	<table><tr><th>Profile ID</th><th>Profile Name</th><th>Action</th></tr><tr><td>1</td><td>lxy02</td><td>Details&Modify Delete</td></tr><tr><td>2</td><td>voip_cfg</td><td>Details&Modify Delete</td></tr><tr><td>3</td><td>buchuang</td><td>Details&Modify Delete</td></tr></table>		Profile ID	Profile Name	Action	1	lxy02	Details&Modify Delete	2	voip_cfg	Details&Modify Delete	3	buchuang	Details&Modify Delete
Profile ID	Profile Name	Action												
1	lxy02	Details&Modify Delete												
2	voip_cfg	Details&Modify Delete												
3	buchuang	Details&Modify Delete												
ONU Profile														
DBA Profile														
Traffic Profile														
Line Profile														
Service Profile														

Figure 5.7-1: Pri Profile

5.7.2 Add Profile

Profile Configuration→Pri Profile →Add profile

OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

IGMP Profile

Pri Profile Add Profile

Add Profile

Profile ID 4

Profile Name pri_profile_4

Add

Figure 5.7-2: Add Private Profile

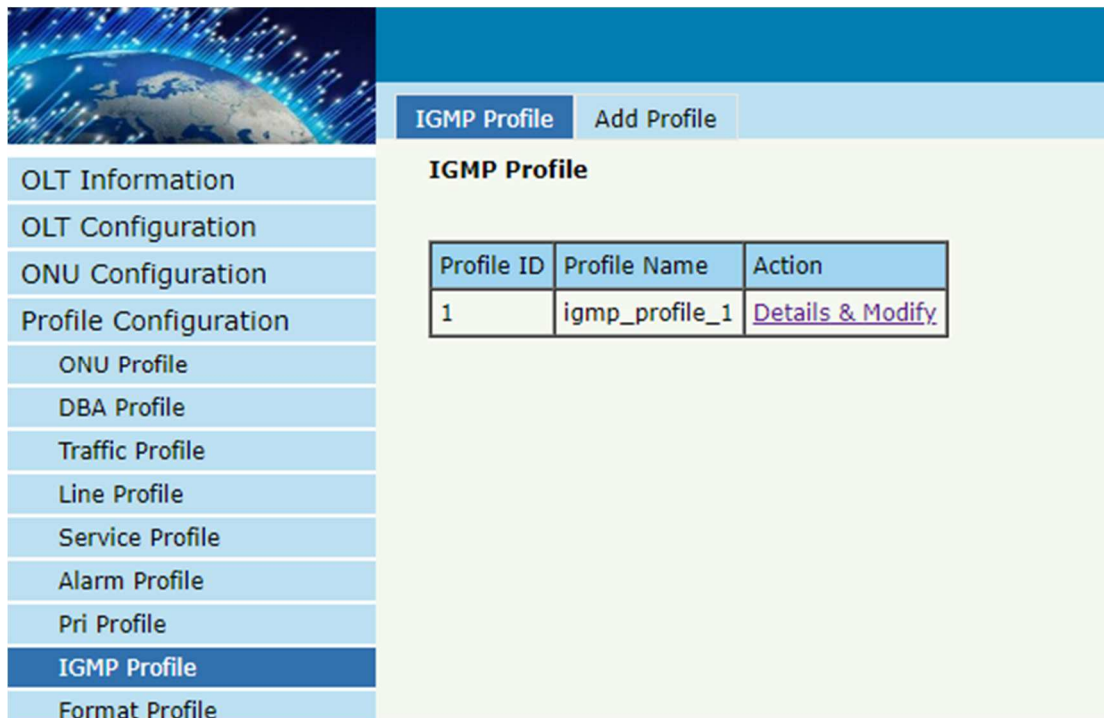
5.8 IGMP Profile

The multicast template is used to configure configuration items such as the multicast version, multicast proxy, query interval, and quick exit for the ONU.

5.8.1 IGMP Profile

Profile Configuration→IGMP Profile

The table displays IGMP profile list. You can click to look detail and modify.



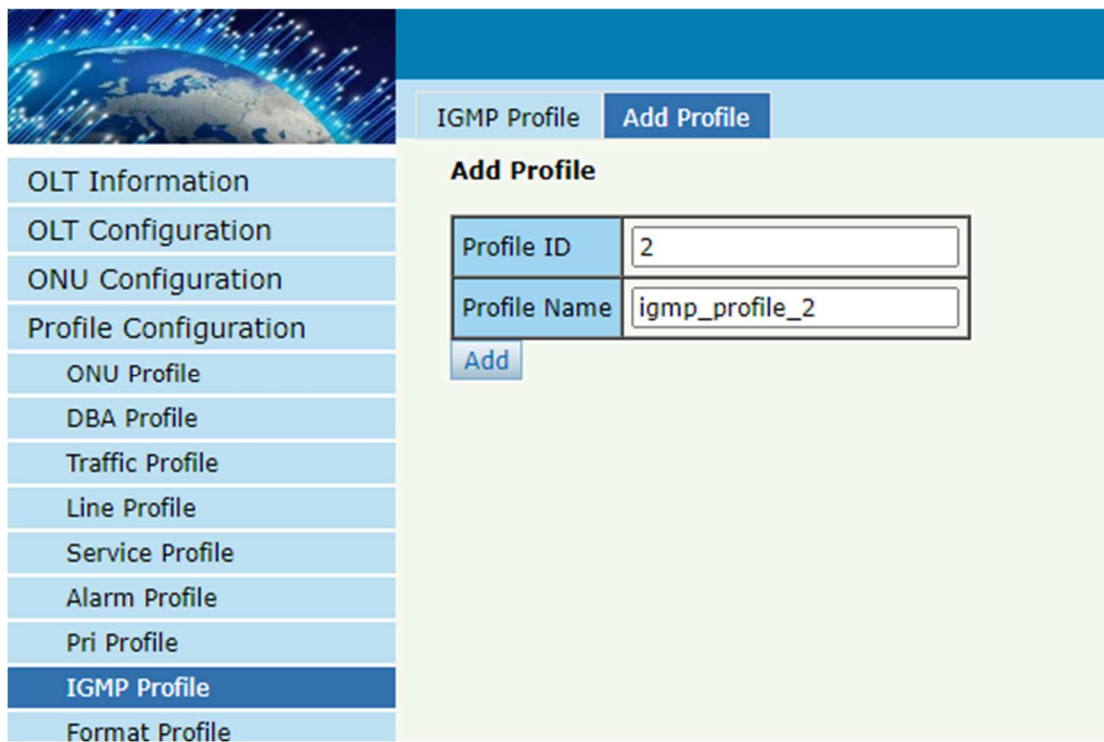
The interface shows a sidebar menu on the left with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Traffic Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, **IGMP Profile**, and Format Profile. The main content area has a header with 'IGMP Profile' and 'Add Profile' tabs. Below the header, the title 'IGMP Profile' is displayed. A table lists the existing profile:

Profile ID	Profile Name	Action
1	igmp_profile_1	Details & Modify

Figure 5.8-1: IGMP Profile

5.7.2 Add Profile

Profile Configuration→Pri Profile →Add profile



The interface shows the same sidebar menu as Figure 5.8-1. The main content area has a header with 'IGMP Profile' and 'Add Profile' tabs. Below the header, the title 'Add Profile' is displayed. There are two input fields for adding a new profile:

Profile ID	2
Profile Name	igmp_profile_2

Below the input fields is an 'Add' button.

Figure 5.8-2: Add IGMP Profile

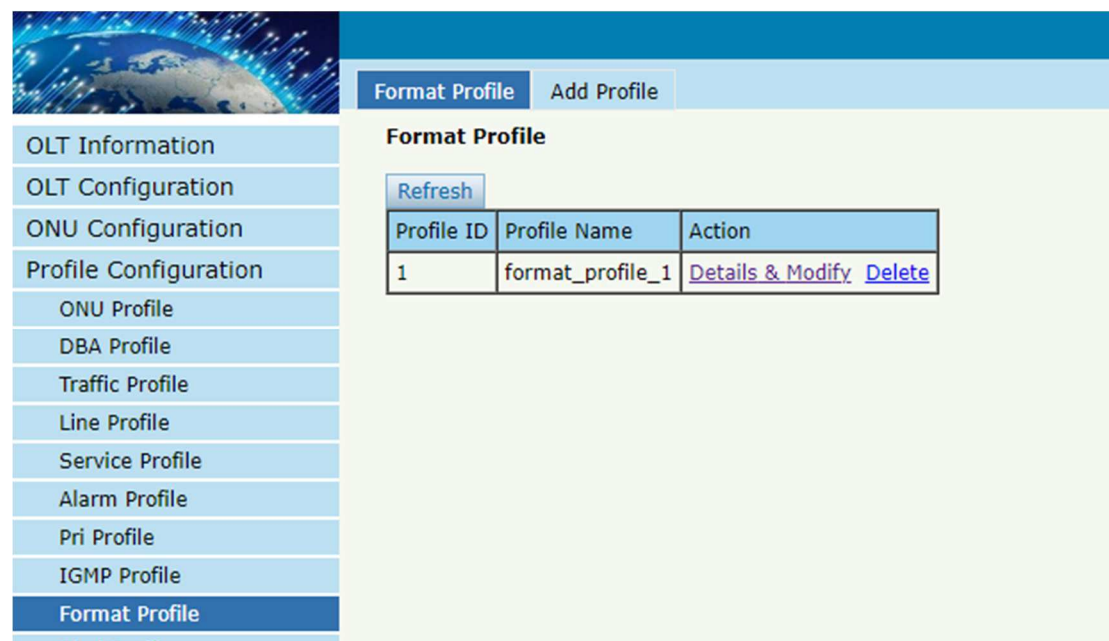
5.9 Format Profile

The format profile is used to configure data exchange, such as Option 18/37/82, pppoe plus, Circuit ID, and Remote ID.

5.9.1 Format Profile

Profile Configuration→Format Profile

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



Profile ID	Profile Name	Action
1	format_profile_1	Details & Modify Delete

Figure 5.9-1: Format Profile

5.9.2 Add Profile

Profile Configuration→Format Profile →Add profile

Format Profile **Add Profile**

Add Profile

Profile ID: 2

Profile Name: format_profile_2

Add

Figure 5.9-2: Add Format Profile

5.10 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: PON1

Refresh

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile	Bind
1	default	N/A	lxy	N/A	lxy02	N/A	Config_
2	default	lxy02	lxy	N/A	lxy02	N/A	Config_
3	default	lxy02	lxy	N/A	lxy02	N/A	Config_
4	default	lxy02	lxy	N/A	lxy02	N/A	Config_
5	default	lxy02	lxy	N/A	lxy02	N/A	Config_
6	default	lxy02	lxy	N/A	lxy02	N/A	Config_
7	default	lxy02	lxy	N/A	lxy02	N/A	Config_
8	default	lxy02	lxy	N/A	lxy02	N/A	Config_
9	default	lxy02	lxy	N/A	lxy02	N/A	Config_
10	default	lxy02	lxy	N/A	lxy02	N/A	Config_
11	default	lxy02	lxy	N/A	lxy02	N/A	Config_

Figure 5.10-1: Bind profile



OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Traffic Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

IGMP Profile

Format Profile

Bind Profile

System Configuration

Profile Bind

ONU Profile Binding Config (PON:1 ONU:1)

ONU ID	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile
1	lxy	lxy	alarm_profile_1	lxy02	format_profile_1

Commit

N/A

lxy

hgu

sfu

service_profile_4

Figure 5.10-2: Select Profile

Chapter 6 System Configuration

This chapter is about the global management of OLT.

6.1 System Log

6.1.1 System Log

Click **System Configuration**→**System Log** to view system event and alarm information.

Alarm Log Alarm Threshold Alarm Alarm Log Server Alarm Log Server IPv6

Alarm Log Table

Select Counts 200

Alarm Type ALL

Description

Submit

Operation Download Save to Flash Remove from Flash

No.1 Page/Total 10 Page 20 Item per page/Total 200 Item

First, Previous, Next, Last No. 1 Go Clear All Refresh

No.	Time	Level	Description	Message
1	2023/09/12 08:22:56	major	User Login	User admin logged in from 192.168.6.28 on web
2	2023/09/12 08:20:49	major	ONU Online	PON 0/5 ONU 32 sn GPON00206e43
3	2023/09/12 08:20:49	major	ONU Online	PON 0/5 ONU 6 sn GPON00206e83
4	2023/09/12 08:20:30	major	ONU Online	PON 0/5 ONU 13 sn GPON00206b73
5	2023/09/12 08:20:29	major	ONU Online	PON 0/5 ONU 40 sn GPON00206fc3
6	2023/09/12 08:20:29	major	ONU Online	PON 0/5 ONU 24 sn GPON00206ca3
7	2023/09/12 08:20:11	major	ONU Online	PON 0/5 ONU 17 sn GPON002070b3
8	2023/09/12 08:20:10	major	ONU Online	PON 0/5 ONU 25 sn GPON00206ec3
9	2023/09/12 08:20:10	major	ONU Online	PON 0/5 ONU 26 sn GPON00206cb3
10	2023/09/12 08:20:09	major	ONU Online	PON 0/5 ONU 33 sn GPON00206db3
11	2023/09/12 08:20:09	major	ONU Online	PON 0/5 ONU 30 sn GPON00206ce3
12	2023/09/12 08:19:51	major	ONU Online	PON 0/5 ONU 43 sn GPON00206ef3
13	2023/09/12 08:19:51	major	ONU Online	PON 0/5 ONU 21 sn GPON002068e3
14	2023/09/12 08:19:50	major	ONU Online	PON 0/5 ONU 49 sn GPON002069f3
15	2023/09/12 08:19:50	major	ONU Online	PON 0/5 ONU 14 sn GPON00206d33
16	2023/09/12 08:19:49	major	ONU Online	PON 0/5 ONU 11 sn GPON002070d3
17	2023/09/12 08:19:49	major	ONU Online	PON 0/5 ONU 19 sn GPON002067b3
18	2023/09/12 08:19:38	major	ONU Online	PON 0/5 ONU 42 sn GPON00206dc3
19	2023/09/12 08:19:38	major	ONU Online	PON 0/5 ONU 34 sn GPON00207073
20	2023/09/12 08:19:37	major	ONU Online	PON 0/5 ONU 12 sn GPON00206b43

Figure 6.1-1: System Log

The events and alarms levels are listed in Table 6-1.

Table 6-1 Event and Alarm level

Alarm	Level	Alarm	Level
OLT Temp High		OLT Temp Low	
OLT CPU Usage High	debug	OLT MEM Usage High	major
OLT FAN	info	Download File Failed	major
Upload File Failed		Upgrade File Failed	
OLT Port Updown	warning	OLT Port Loopback	warning
PON Deregister	critical	PON Register Failed	critical
PON Disable	alert	PON TX Power High	major
PON TX Power Low	major	PON TX Bias High	major
PON TX Bias Low	major	PON VCC High	major
PON VCC Low	major	PON Temp High	major
PON Temp Low	major	PON LOS	major
ONU Deregister	major	ONU Link LOST	major
ONU Illegal Register		ONU AUTH Failed	
ONU MAC Conflict	major	ONU LOID Conflict	major
ONU Critical Event	major	ONU Dying Gasp	major
ONU Offline		ONU Online	
ONU Event Notific	major	ONU Laser Always On	major
ONU Laser OverLapping	major	System Reset	critical
System Config Save		System Config Erase	
Download File Success	major	Upload File Success	major
Upgrade File Success	major	PON Register	critical
PON Enable	major	PON LOS Recovery	major
ONU Register	major	ONU Link Discover	major
ONU AUTH Success	major	ONU DEAUTH Success	major
ONU Upgrade Over		ONU Finish	
ONU PON RX Power High	major	ONU PON RX Power Low	major
ONU PON TX Power High	major	ONU PON TX Power Low	major

ONU PON TX Bias High		ONU PON TX Bias Low	
ONU PON VCC High	major	ONU PON VCC Low	major
ONU PON Temp High	major	ONU PON Temp Low	major
ONU Port AUTO Neg Failure	major	ONU Port Los	major
ONU Port Failure	major	ONU Port Loopback	major
ONU Pots Failure	major	OSPF Adjacency Change	major
DHCP Snooping Illegal Server		RIP Adjacency Change	
ONU vlan pool	major	ONU auth license	major
ONU running license	major	ONU SN Conflict	major
ONU offline timeout		MAC Flapping	
Port Link Flap	major	OLT Power1 Updown	major
OLT Power2 Updown	major	System Time Change	major
OSPF6 Adjacency Change		RIPng Adjacency Change	
PON PSG Switch	major	User Login	major
User Logout	major	ONU Port Uplink	major
DHCP Snooping Over Rate Limit	major	Battery Full	major
Battery Low	major	Rogue ONU	major
ONU Loopback Clear	major	ONU BIP8 ERR	major
Custfs block lost	major	System Config Auto Save	warning
Config Auto Backup	warning	Schedule Reset	critical
ONU PON RX Power High Clear	major	ONU PON RX Power Low Clear	major
ONU PON TX Power High Clear		ONU PON TX Power Low Clear	
PORT PSG Switch	major	PON Chip Disconnect	critical
Device Temperature High	major		

6.1.2 Alarm

It contains all the alarms of OLT. User can choose the different alarms to "Print", "Record", "Trap" and "Remote". Click **System Configuration → System Log → Alarm**.

Alarm Log

Alarm

Threshold Alarm

Alarm Log Server

Alarm Log Server IPv6

Alarm Configuration

Submit

Alarm	Level	Print	Record	Trap	Remote	Alarm	Level	Print	Record	Trap	Remote
OLT Temp High	major	☒	☒	☒	☒	OLT Temp Low	major	☒	☒	☒	☒
OLT CPU Usage High	major	☒	☒	☒	☒	OLT MEM Usage High	major	☒	☒	☒	☒
OLT FAN	major	☒	☒	☒	☒	Download File Failed	major	☒	☒	☒	☒
Upload File Failed	major	☒	☒	☒	☒	Upgrade File Failed	major	☒	☒	☒	☒
OLT Port Updown	warning	☒	☒	☒	☒	OLT Port Loopback	warning	☒	☒	☒	☒
PON Deregister	critical	☒	☐	☐	☐	PON Register Failed	critical	☒	☒	☒	☒
PON Disable	major	☒	☒	☒	☒	PON TX Power High	major	☒	☒	☒	☒
PON TX Power Low	major	☒	☒	☒	☒	PON TX Bias High	major	☒	☒	☒	☒
PON TX Bias Low	major	☒	☒	☒	☒	PON VCC High	major	☒	☒	☒	☒
PON VCC Low	major	☒	☒	☒	☒	PON Temp High	major	☒	☒	☒	☒
PON Temp Low	major	☒	☒	☒	☒	PON LOS	major	☒	☒	☒	☒
ONU Deregister	major	☒	☒	☒	☒	ONU Link LOST	major	☒	☒	☒	☒
ONU Illegal Register	major	☒	☒	☒	☒	ONU AUTH Failed	major	☒	☒	☒	☒
ONU MAC Conflict	major	☐	☒	☒	☒	ONU LOED Conflict	major	☒	☒	☒	☒
ONU Critical Event	major	☐	☐	☐	☐	ONU Dying Gasp	major	☒	☒	☒	☒
ONU Offline	major	☒	☒	☒	☒	ONU Online	major	☒	☒	☒	☒
ONU Event Notific	major	☒	☒	☒	☒	ONU Laser Always On	major	☒	☒	☒	☒
ONU Laser OverLapping	major	☒	☒	☒	☒	System Reset	critical	☒	☒	☒	☒
System Config Save	warning	☒	☒	☒	☒	System Config Erase	warning	☒	☒	☒	☒
Download File Success	major	☒	☒	☒	☒	Upload File Success	major	☒	☒	☒	☒
Upgrade File Success	major	☒	☒	☒	☒	PON Register	critical	☐	☒	☒	☒
PON Enable	major	☒	☒	☒	☒	PON LOS Recovery	major	☒	☒	☒	☒
ONU Register	major	☐	☒	☒	☒	ONU Link Discover	major	☒	☒	☒	☒
ONU AUTH Success	major	☒	☒	☒	☒	ONU DEAUTH Success	major	☐	☒	☒	☒
ONU Upgrade Over	major	☒	☒	☒	☒	ONU Finish	major	☐	☒	☒	☒
ONU PON RX Power High	major	☒	☒	☒	☒	ONU PON RX Power Low	major	☒	☒	☒	☒
ONU PON TX Power High	major	☒	☒	☒	☒	ONU PON TX Power Low	major	☒	☒	☒	☒
ONU PON TX Bias High	major	☒	☒	☒	☒	ONU PON TX Bias Low	major	☒	☒	☒	☒
ONU PON VCC High	major	☒	☒	☒	☒	ONU PON VCC Low	major	☒	☒	☒	☒
ONU PON Temp High	major	☒	☒	☒	☒	ONU PON Temp Low	major	☒	☒	☒	☒
ONU Port AUTO Neg Failure	major	☒	☒	☒	☒	ONU Port Los	major	☒	☒	☒	☒
ONU Port Failure	major	☒	☒	☒	☒	ONU Port Loopback	major	☒	☒	☒	☒
ONU Ports Failure	major	☒	☒	☒	☒	OSPF Adjacency Change	major	☒	☒	☒	☒
DHCP Snooping Illegal Server	major	☒	☒	☒	☒	RIP Adjacency Change	major	☒	☒	☒	☒
ONU vlan pool	major	☒	☒	☒	☒	ONU auth license	major	☒	☒	☒	☒
ONU running license	major	☒	☒	☒	☒	ONU SN Conflict	major	☒	☒	☒	☒
ONU offline timeout	major	☒	☒	☒	☒	MAC Flapping	major	☒	☒	☒	☒
Port Link Flap	major	☒	☒	☒	☒	OLT Power1 Updown	major	☒	☒	☒	☒
OLT Power2 Updown	major	☒	☒	☒	☒	System Time Change	major	☒	☒	☒	☒
OSPF6 Adjacency Change	major	☒	☒	☒	☒	RIPng Adjacency Change	major	☒	☒	☒	☒
PON PSG Switch	major	☒	☒	☒	☒	User Login	major	☒	☒	☒	☒
User Logout	major	☒	☒	☒	☒	ONU Port UpLink	major	☒	☒	☒	☒
DHCP Snooping Over Rate Limit	major	☒	☒	☒	☒	Battery Full	major	☒	☒	☒	☒
Battery Low	major	☒	☒	☒	☒	Roque ONU	major	☒	☒	☒	☒
ONU Loopback Clear	major	☒	☒	☒	☒	ONU BIP8 ERR	major	☒	☒	☒	☒
Custfs block lost	major	☒	☒	☒	☒	System Config Auto Save	warning	☒	☒	☒	☒
Config Auto Backup	warning	☒	☒	☒	☒	Schedule Reset	critical	☒	☒	☒	☒
ONU PON RX Power High Clear	major	☒	☒	☒	☒	ONU PON RX Power Low Clear	major	☒	☒	☒	☒
ONU PON TX Power High Clear	major	☒	☒	☒	☒	ONU PON TX Power Low Clear	major	☒	☒	☒	☒
PORT PSG Switch	major	☒	☒	☒	☒	PON Chip Disconnect	critical	☒	☒	☒	☒
Device Temperature High	major	☒	☒	☒	☒						

Figure 6.1-2: Alarm

6.1.3 Threshold Alarm

Configure the temperature threshold, CPU-usage threshold and memory- usage threshold, PON optical threshold. Click **System Configuration → System Log → Threshold Alarm**.

Alarm Log
Alarm
Threshold Alarm
Alarm Log Server
Alarm Log Server IPv6

Threshold Alarm Configuration

Type	State	Alarm Threshold	Clear Threshold
Temp High (°C)	☐	0.00	0.00
Temp Low (°C)	☐	0.00	0.00
CPU Usage High (%)	☐	0.00	0.00
MEM Usage High (%)	☐	0.00	0.00

Submit
Reset

PON Optical Alarm Configuration

Port ID
PON1

Type	State	Alarm Threshold	Clear Threshold
Tx Power High (dBm)	☐	0.00	0.00
Tx Power Low (dBm)	☐	0.00	0.00
Tx Bias High (mA)	☐	0.00	0.00
Tx Bias Low (mA)	☐	0.00	0.00
VCC High (V)	☐	0.00	0.00
VCC Low (V)	☐	0.00	0.00
Temp High (°C)	☐	0.00	0.00
Temp Low (°C)	☐	0.00	0.00

Submit
Reset

Figure 6.1-3: Threshold Alarm

6.1.4 Syslog Server

Configure the server of OLT remote system logs. Click **System Configuration**→ **System Log** →**Syslog Server**.

System Log
Alarm
Threshold Alarm
Syslog Server
Syslog Server IPv6

Syslog Server Configuration

Syslog Server
Enable

Server IP
192.168.6.89

Server Port
514
(1-65535)

Submit

Figure 6.1-4: Syslog Server

6.1.5 Syslog Server IPv6

This interface is used to configure the IPv6 OLT remote system log server.

Click **System Configuration**→ **System Log** →**Syslog Server IPv6**.

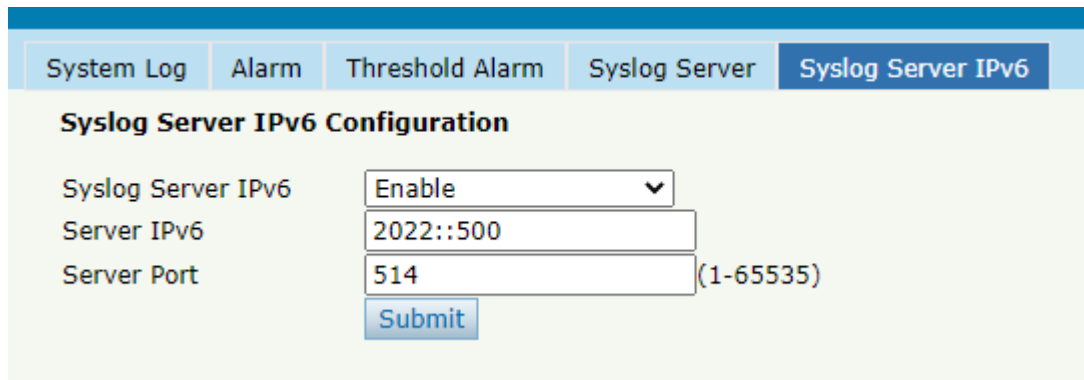


Figure 6.1-5: Syslog Server IPv6

6.2 Device Management

6.2.1 Firmware Upgrade

You can upgrade the OLT firmware by WEB, do not need TFTP server.

After finish upgrading, it will ask if you want to reboot OLT. It need to reboot after upgrade then take effect. Click **System Configuration**→

Device Management →**Firmware Upgrade**.



Figure 6.2-1: Firmware Upgrade

6.2.2 Device Reboot

Click **System Configuration**→ **Device Management** →**Device Reboot**, it will reboot the entire system.(Please save the configuration first)

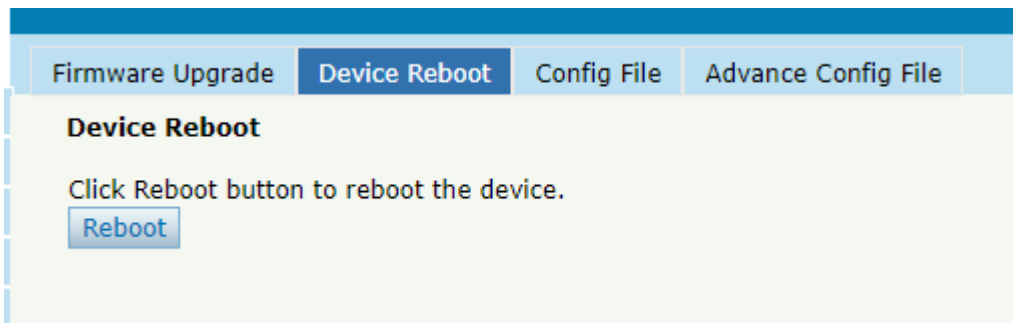


Figure 6.2-2: Device Reboot

6.2.3 Config File

Click **System Configuration**→ **Device Management** → **Config File**, you can backup configuration, restore configuration, restore factory defaults and save configuration.

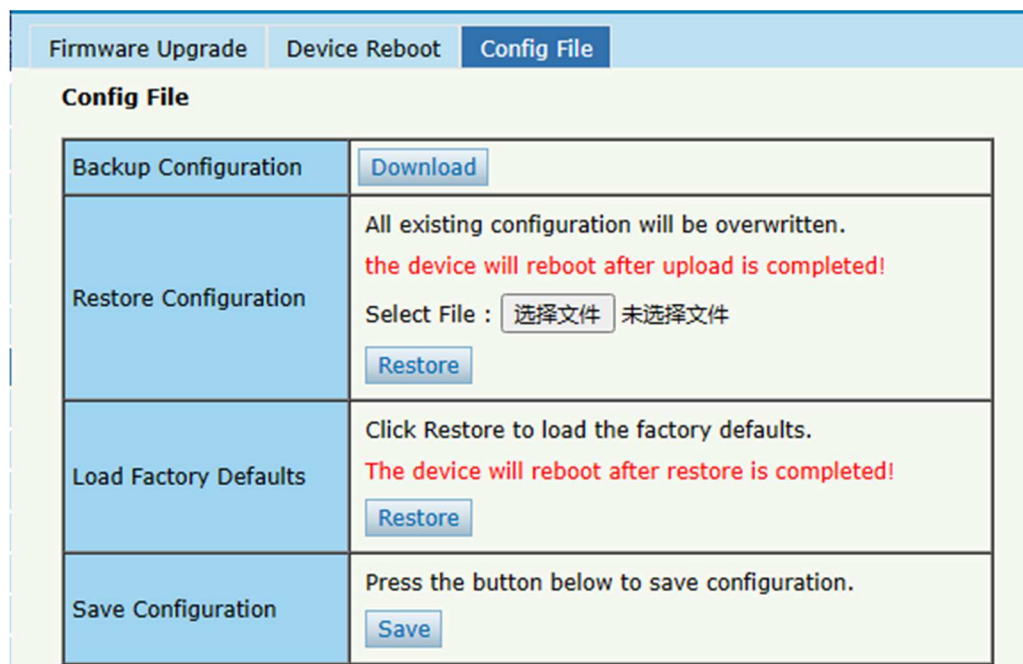
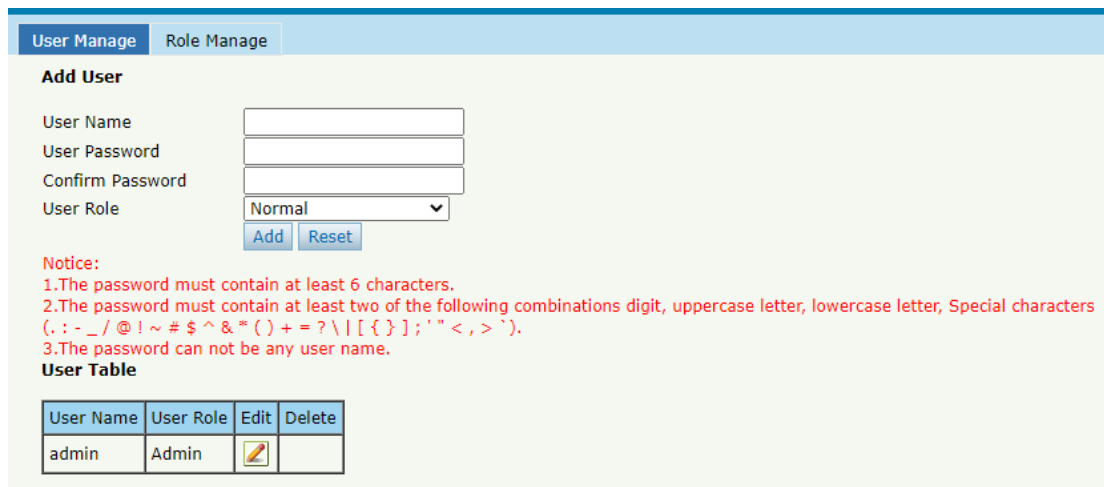


Figure 6.2-3: Config File

6.3 User Management

6.3.1 User Manage

Two kinds of users 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.



The screenshot shows a web interface for user management. At the top, there are two tabs: 'User Manage' (selected) and 'Role Manage'. Below the tabs, there is a section titled 'Add User' with four input fields: 'User Name', 'User Password', 'Confirm Password', and 'User Role'. The 'User Role' dropdown is currently set to 'Normal'. Below the input fields are two buttons: 'Add' and 'Reset'. Underneath the buttons, there is a 'Notice' section with three red text items: 1. The password must contain at least 6 characters. 2. The password must contain at least two of the following combinations digit, uppercase letter, lowercase letter, Special characters (. : - _ / @ ! ~ # \$ ^ & * () + = ? \ | [{ }] ; ' " < , > `). 3. The password can not be any user name. Below the notice is a 'User Table' with four columns: 'User Name', 'User Role', 'Edit', and 'Delete'. The table contains one row with the user 'admin' and role 'Admin'. The 'Edit' column has a pencil icon, and the 'Delete' column has a trash can icon.

User Name	User Role	Edit	Delete
admin	Admin		

Figure 6.3-1: User Manage

6.4 SNMP

6.4.1 SNMP V1/V2

The OLT supports SNMP v1/v2, click **System Configuration → SNMP → SNMP V1/V2** to configure.

SNMPV1/V2
SNMPV3
SNMPV3 Trap
Remote Server

Add Community

Community Name

Access Right Read-Only ▼

Community Table

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

Add Trap

Host IP

UDP Port 162 (1-65535)

Community Name public

SNMP Version 1 ▼

Trap Table

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

Figure 6.4-1: SNMP V1/V2

6.4.2 SNMP V3

The OLT also supports SNMP V3, click **System Configuration → SNMP → SNMP V3**, as shown in Figure 6.4-2.

SNMPV1/V2
SNMPV3
SNMPV3 Trap
Remote Server

Add View

View Name

Subtree (Type:Object Identifier)

View Type Include ▾

Add

View Table

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

Add Group

Group Name

Access Level No Auth ▾

Read View

Write View

Notify View

Add

Group Table

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

Add User

User Name

Group Name

Auth Type None ▾

Auth Password

Private Type None ▾

Private Password

Add

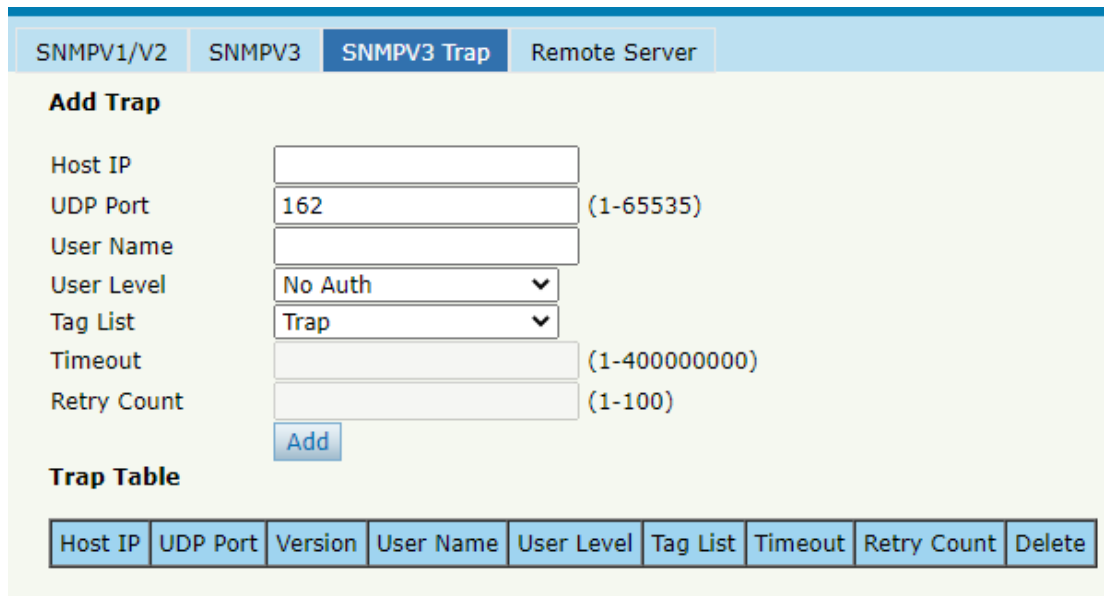
User Table

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

Figure 6.4-2: SNMP V3

6.4.3 SMNP V3 Trap

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



The interface shows the 'SNMPV3 Trap' tab selected. It contains an 'Add Trap' section with fields for Host IP, UDP Port (162), User Name, User Level (No Auth), Tag List (Trap), Timeout, and Retry Count. Below this is a 'Trap Table' with columns: Host IP, UDP Port, Version, User Name, User Level, Tag List, Timeout, Retry Count, and Delete.

Add Trap

Host IP:

UDP Port: (1-65535)

User Name:

User Level: ▼

Tag List: ▼

Timeout: (1-400000000)

Retry Count: (1-100)

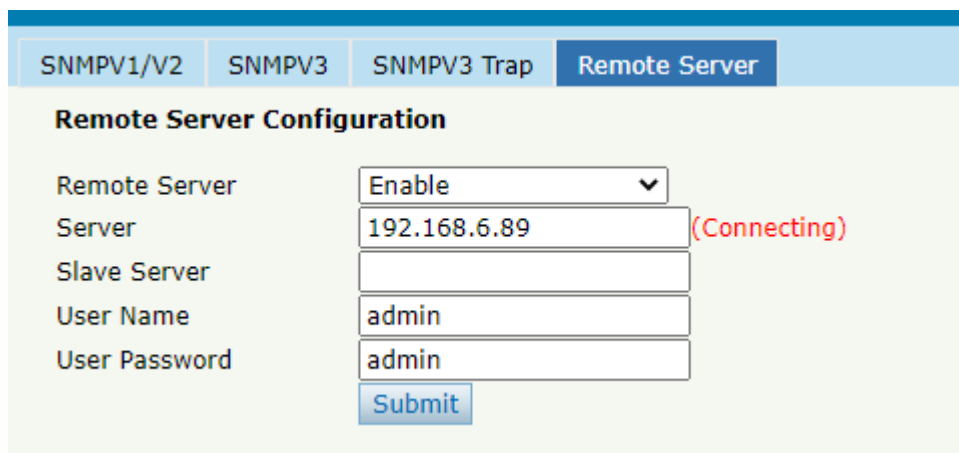
Trap Table

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

Configure the IP address of your SNMP network management server.



The interface shows the 'Remote Server' tab selected. It contains a 'Remote Server Configuration' section with fields for Remote Server (Enable), Server (192.168.6.89), Slave Server, User Name (admin), and User Password (admin). A red status indicator '(Connecting)' is shown next to the Server field. A 'Submit' button is at the bottom.

Remote Server Configuration

Remote Server: ▼

Server: (Connecting)

Slave Server:

User Name:

User Password:

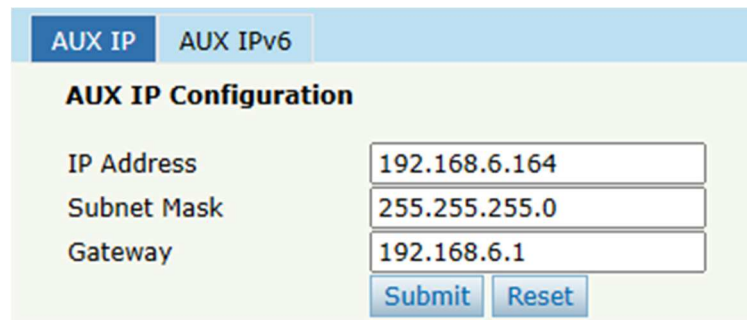
Figure 6.4-4: Remote Server

6.5 AUX IP

6.5.1 AUX IP

AUX port is out band management port. The IP address is out band management IP, default IP address is 192.168.8.200. User can change it if

need. Click **System Configuration → AUX IP**



The image shows the 'AUX IP' configuration page. At the top, there are two tabs: 'AUX IP' (selected) and 'AUX IPv6'. Below the tabs is the 'AUX IP Configuration' section. It contains three input fields: 'IP Address' with the value '192.168.6.164', 'Subnet Mask' with the value '255.255.255.0', and 'Gateway' with the value '192.168.6.1'. At the bottom of this section are two buttons: 'Submit' and 'Reset'.

Figure 6.5-1: AUX IP

6.5.2 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.



The image shows the 'AUX IPv6' configuration page. At the top, there are two tabs: 'AUX IP' and 'AUX IPv6' (selected). Below the tabs is the 'AUX IPv6 Configuration' section. It contains three input fields: 'IPv6 Address', 'Prefixlen', and 'Gateway'. At the bottom of this section are two buttons: 'Submit' and 'Reset'. Below this section is the 'AUX IPv6 Gateway' section, which contains a table with one row: 'IPv6 Gateway' and 'Delete'. Below this is the 'AUX IPv6 Table' section, which contains a table with three columns: 'IPv6 Address', 'Prefixlen', and 'Delete'.

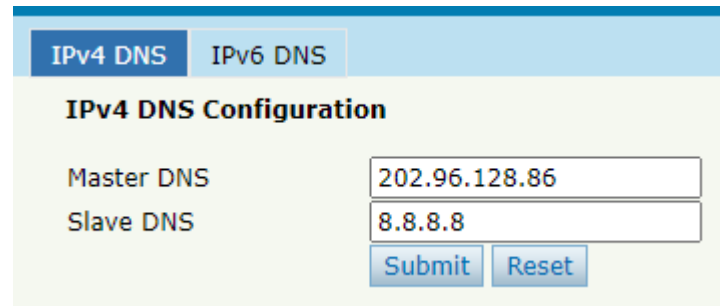
Figure 6.5-2: AUX IPv6

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

This page is used to configure IPv4 DNS.

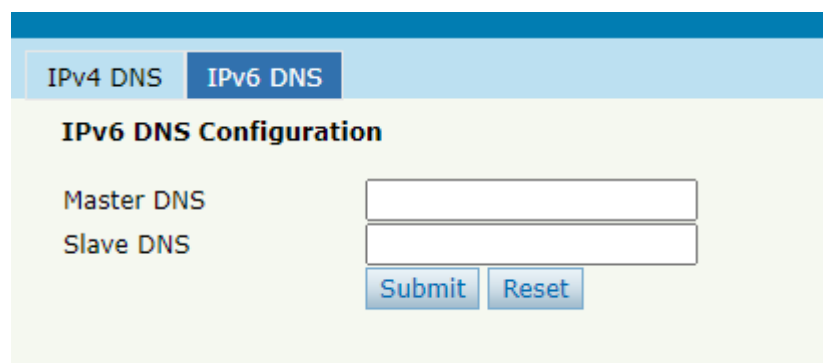


IPv4 DNS Configuration	
Master DNS	202.96.128.86
Slave DNS	8.8.8.8
Submit Reset	

Figure 6.6-1: IPv4 DNS

6.6.2 IPv6 DNS

This page is used to configure IPv6 DNS.



IPv6 DNS Configuration	
Master DNS	
Slave DNS	
Submit Reset	

Figure 6.6-2: IPv6 DNS

6.7 System Time

6.7.1 RTC

Click **System Configuration** → **System Time**→**RTC** .The default system time is the OLT firmware release time.

The image shows the 'RTC' tab in a configuration interface. Under the 'Date Setting' section, there are six input fields: Year (2023), Month (9), Day (13), Hour (15), Minute (11), and Second (39). Below these fields are two buttons: 'Submit' and 'Reset'.

Figure 6.7-1: RTC Configuration

6.7.2 NTP

Synchronize the time to the NTP server. Click **System Configuration** →

System Time → **NTP**

The image shows the 'NTP' tab in a configuration interface. Under the 'NTP Configuration' section, there are several fields: 'Enable NTP Synchronization' (a dropdown menu set to 'Enable'), 'NTP Timezone' (a dropdown menu set to 'Asia'), and 'GMT+0800 Shanghai' (a dropdown menu set to 'GMT+0800 Shanghai'). Below these are two text input fields for 'Master NTP Server' (ntp.aliyun.com) and 'Slave NTP Server'. At the bottom, there is a 'Current Time' field showing 'Wed, 13 Sep 2023 15:12:37 +0800' and two buttons: 'Submit' and 'Reset'.

Figure 6.7-2: NTP Configuration

6.8 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. The speed of the fan can be selected from low speed, medium speed, and high speed; You can also choose automatic mode.

This configuration will not be saved after reboot.

Click **System Configuration** → **FAN**.

The screenshot displays a web-based configuration interface for a network device. On the left, a vertical menu lists various system configuration options: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, SNMP, AUX IP, DNS, System Time, FAN (highlighted), Mirror, Login Management, NetWork Security, SSH, Diagnose, Tacacs+, and Radius. The main content area is titled 'FAN Configuration' and includes the following settings:

- FAN Temperature:** A text input field containing '35' with a range '(20-80)' indicated to its right.
- FAN Mode:** Radio buttons for 'Open', 'Close', and 'Auto'. The 'Auto' option is selected.
- FAN Speed:** Radio buttons for 'Low', 'Medium', 'High', and 'Auto'. The 'Auto' option is selected.

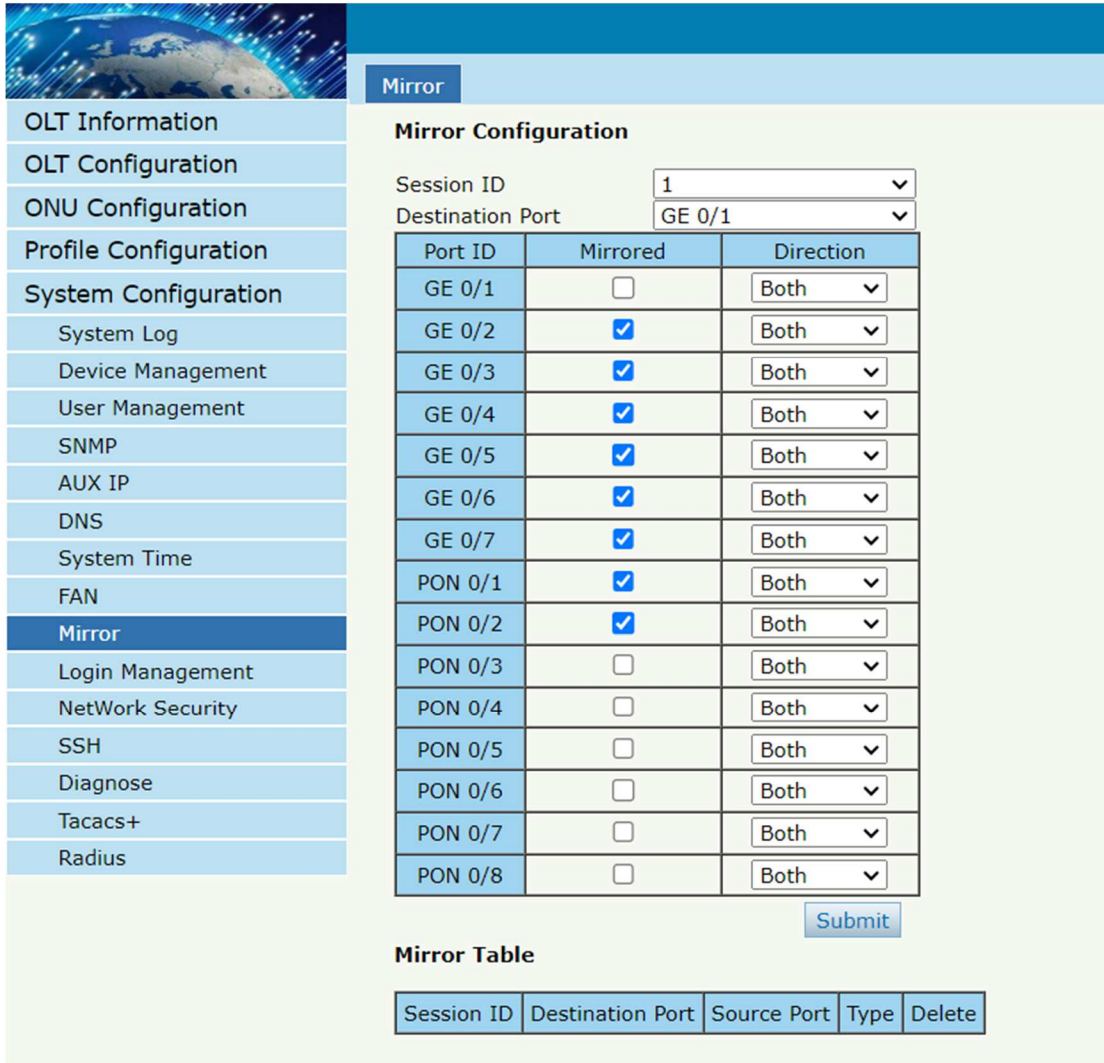
At the bottom of the configuration area are two buttons: 'Submit' and 'Reset'.

Figure 6-8: FAN Configuration

6.9 Mirror

Port mirror is usually used for troubleshooting. Each monitor session can be set with one destination port and up to 8 source ports. You can choose between entrance mirroring, exit mirroring, and bidirectional mirroring.

Click **System Configuration → Mirror**.



The interface shows a sidebar menu on the left with various configuration options. The 'Mirror' option is selected and highlighted. The main area is titled 'Mirror Configuration' and contains a 'Session ID' dropdown set to '1' and a 'Destination Port' dropdown set to 'GE 0/1'. Below these is a table with columns 'Port ID', 'Mirrored', and 'Direction'. The table lists ports from GE 0/1 to PON 0/8. Ports GE 0/2 through GE 0/7 and PON 0/1 and PON 0/2 have the 'Mirrored' checkbox checked. All 'Direction' dropdowns are set to 'Both'. A 'Submit' button is located at the bottom right of the table. Below the table is a 'Mirror Table' header and a table with columns 'Session ID', 'Destination Port', 'Source Port', 'Type', and 'Delete'.

Mirror Configuration

Session ID: 1
Destination Port: GE 0/1

Port ID	Mirrored	Direction
GE 0/1	☐	Both
GE 0/2	☒	Both
GE 0/3	☒	Both
GE 0/4	☒	Both
GE 0/5	☒	Both
GE 0/6	☒	Both
GE 0/7	☒	Both
PON 0/1	☒	Both
PON 0/2	☒	Both
PON 0/3	☐	Both
PON 0/4	☐	Both
PON 0/5	☐	Both
PON 0/6	☐	Both
PON 0/7	☐	Both
PON 0/8	☐	Both

Mirror Table

Session ID	Destination Port	Source Port	Type	Delete
------------	------------------	-------------	------	--------

Figure 6-9: Mirror

6.10 Login Management

6.10.1 Login Access List

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

System Configuration → Login Management → Login Access List

Filter Action	Internet Version	Protocol	Source IP / mask length\prefix length	Delete
deny	IPv4	telnet	0.0.0.0/0	
deny	IPv4	snmp	0.0.0.0/0	
deny	IPv6	telnet	::/0	
deny	IPv6	snmp	::/0	

Figure 6.10-1: Login Access List

6.10.2 Service Port

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

System Configuration → Login Management → Service Port

Figure 6.10-2:Service Port

6.10.3 Login Configuration

This page is used to set web timeout and verification code,and you can see which user is using web login.

System Configuration → Login Management → Login Configuration

User Name	Client	User Role
admin	192.168.6.21	ADMIN

Figure 6.10-3:Login Configuration

6.10.4 Telnet Management

This page is used to manage telnet users. You can see the user who is currently telnet the device, and you can also choose to delete the user, than their telnet connection will be disconnected.

System Configuration → LoginManagement → Telnet Management

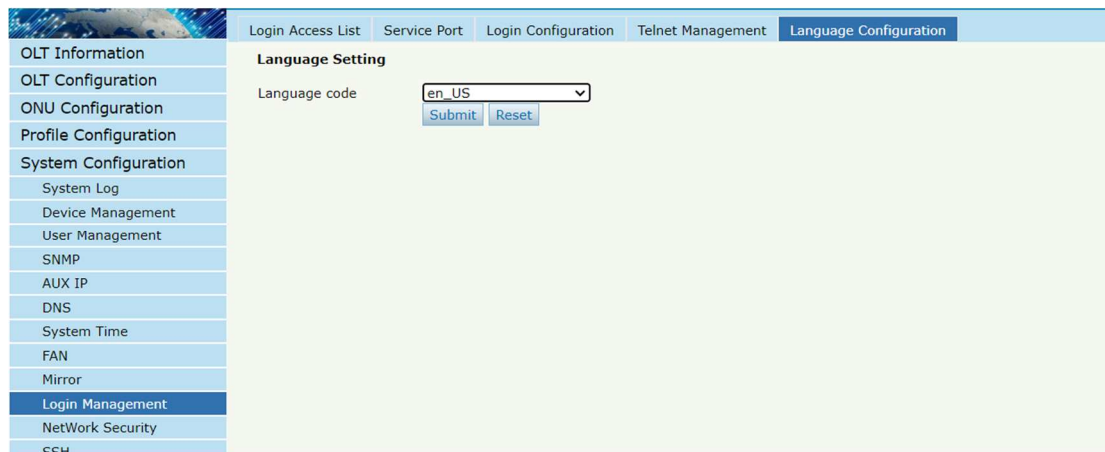
User Name	Vty Index	Remote Connector	Delete
admin	0	([::ffff:192.168.6.21]:55534)	

Figure 6.10-4:Telnet Management

6.10.5 Language Configuration

This page is used to select Language.

SystemConfiguration→LoginManagement→Language Configuration



The screenshot displays a web interface for network configuration. On the left is a sidebar menu with the following items: 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 (highlighted), NetWork Security, and SSH. The top navigation bar includes tabs for Login Access List, Service Port, Login Configuration, Telnet Management, and Language Configuration (which is active). The main content area is titled 'Language Setting' and contains a 'Language code' dropdown menu currently set to 'en_US'. Below the dropdown are 'Submit' and 'Reset' buttons.

Figure 6.10-5:Language Configuration

6.11 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.

6.11.1 SSH Server State

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

System Configuration → SSH→ SSH State

SSH Server State
SSH Enable

SSH Connection Table

Connection	Version	Mode	Encryption	Hmac	State	Username
0	2.0	IN	aes256-ctr	hmac-sha2-512	Session started	admin
0	2.0	OUT	aes256-ctr	hmac-sha2-512	Session started	admin

Refresh

Figure 6.11-1:SSH Server State

6.11.2 SSH Enable

This page is used to configure SSH protocol related parameters.

System Configuration → SSH → SSH Enable

SSH Server State
SSH Enable

SSH Enable

SSH

Enable

Version

2

Auth Retries

6

(0-6)

Timeout

60

(1-120)

Max Startups

3

(1-5)

Max Sessions

3

(1-12)

Modulus

2048

(1024-16384)

Submit
Reset

SSH Key Table

Key type	Encryption algorithm	Key data
ssh-rsa	SHA256	tv1Ib2QFiTMxrX7tjDIA7AUJ0FB6Ox3VDyG2IYtCUkw

Refresh

Figure 6.11-2:SSH Enable

6.12 Diagnose

6.12.1 Ping Diagnose

This interface is used to diagnose network connectivity.

System Configuration → Diagnose → Ping Diagnose

PING Tracert

Ping Diagnosis

Destination IP Address Or Host Name

IP type

Ping Test Result

PING 192.168.6.21 (192.168.6.21): 56 data bytes
64 bytes from 192.168.6.21: seq=0 ttl=128 time=1.937 ms
64 bytes from 192.168.6.21: seq=1 ttl=128 time=2.043 ms
64 bytes from 192.168.6.21: seq=2 ttl=128 time=1.963 ms

--- 192.168.6.21 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 1.937/1.981/2.043 ms

Figure 6.12-1: Ping Diagnose Configuration

6.12.2 Tracert Diagnose

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

System Configuration → Diagnose → Tracert Diagnose

Figure 6.12-2: Tracert Diagnose Configuration

6.13 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.

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

Tacacs+

Tacacs+ Configuration

Please note that default and continue-on-failed cannot be set to the same value

AAA Enable

☒

Console Enable Tacacs+

☐

Login

Authentication

Default

Continue-on-failed

Login

Enable

Authorization

Default

Continue-on-failed

exec

Commands

Command Level

0 1 15

Enable

☐ ☐ ☐

Accounting

Default

exec

Commands

Command Level

0 1 15

Enable

☐ ☐ ☐

Submit

Reset

Tacacs+ Key Configuration

Shared Key

Submit

Tacacs+ Server Configuration

Tacacs+ Server

Submit

Tacacs+ Server Table

Tacacs+ Server

Delete

Figure 6.13:Tacacs+

6.14 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.



- 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**

Radius

Radius Configuration
Please note that default and continue-on-failed cannot be set to the same value

AAA Enable

☒

Console Enable radius

☐ Login

Web Enable Radius

☐ Login

Authentication

Login

Default

none

Enable

Default

none

Accounting

exec

Default

Submit

Reset

continue-on-failed

Radius Server Configuration

Radius Server

Shared Key

Submit

Radius Server Table

Radius Server	Shared Key	Delete
---------------	------------	--------

Figure 6.14:Radius

Chapter 7 Configuration Examples

7.1 Internet Service with VLAN 100

a. OLT configuration

Step 1: Create a new VLAN.

VLAN

VLAN Port

QinQ/Translation

New VLAN

VLAN ID

100

(1-4094)

Description

vlan100

Add

VLAN Table

Step 2: Add the VLAN to GE port and PON port.

VLAN

VLAN Port

QinQ/Translation

Port VLAN Configuration

VLAN ID

100

Port ID	Forbidden	Tag	Untag
GE1	☒	☐	☐
GE2	☒	☐	☐
GE3	☒	☐	☐
GE4	☒	☐	☐
GE5	☒	☐	☐
GE6	☒	☐	☐
GE7	☒	☐	☐
GE8	☒	☐	☐
GE9	☐	☐	☒
GE10	☒	☐	☐
GE11	☒	☐	☐
GE12	☒	☐	☐
GE13	☒	☐	☐
GE14	☒	☐	☐
GE15	☒	☐	☐
GE16	☒	☐	☐
PON1	☐	☒	☐

Step 3: Configure the default VLAN ID (PVID) in untag port.

Information Configuration											
GE Configuration											
Port ID	Description	Admin Status	Flow Control	Isolate	PVID	Storm(0/64-1000000fps)			Rate(0/32-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Multicast	Unicast	Ingress	Egress	
GE1		☒	☐	☒	1	512	0	512	0	0	0
GE2		☒	☐	☒	1	512	0	512	0	0	0
GE3		☒	☐	☒	1	512	0	512	0	0	0
GE4		☒	☐	☒	1	512	0	512	0	0	0
GE5		☒	☐	☒	1	512	0	512	0	0	0
GE6		☒	☐	☒	1	512	0	512	0	0	0
GE7		☒	☐	☒	1	512	0	512	0	0	0
GE8		☒	☐	☒	1	512	0	512	0	0	0
GE9		☒	☐	☒	100	512	0	512	0	0	0
GE10		☒	☐	☒	46	512	0	512	0	0	0

b. ONU configuration (SFU)

Step 4: Choose the VLAN mode and set the PVID value.

ONU List

Information

Bandwidth

Port

VLAN

QoS

IGMP

Alarm

Advance

VLAN Configuration

ONU Port

Port1

VLAN Mode

tag

PVID

100

(1-4095)

Submit

7.2 IPTV Service with VLAN 200

a. OLT configuration

Step 1: Create a new VLAN.

VLAN

VLAN Port

QinQ/Translation

New VLAN

VLAN ID

200

(1-4094)

Description

vlan200

Add

VLAN Table

VLAN ID	Description	Edit	Delete
1	default		
2	vlan2		
3	vlan3		
4	vlan4		

Step 2: Add the VLAN to GE port and PON port.

VLAN VLAN Port QinQ/Translation

Port VLAN Configuration

VLAN ID 200

Port ID	Forbidden	Tag	Untag
GE1	☒	☐	☐
GE2	☒	☐	☐
GE3	☒	☐	☐
GE4	☒	☐	☐
GE5	☒	☐	☐
GE6	☒	☐	☐
GE7	☒	☐	☐
GE8	☒	☐	☐
GE9	☐	☒	☐
GE10	☒	☐	☐
GE11	☒	☐	☐
GE12	☒	☐	☐
GE13	☒	☐	☐
GE14	☒	☐	☐
GE15	☒	☐	☐
GE16	☒	☐	☐
PON1	☐	☒	☐

Step 3: Enable the IGMP status.

Group Member Global Port Port User VLAN Port Mrouter Static Group

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 ☒ Disable ☐ Enable

General Query Interval 125 (10-255s)

Query Source IP 1.1.1.1

Submit Reset

Step 4: Add the IGMP user VLAN and group VLAN

Group Member Global Port Port User VLAN Port Mrouter Static Group

User VLAN Configuration

Port ID PON1

User VLAN ID 200

Group VLAN ID 200

Add

User VLAN Table

Port ID	User VLAN ID	Group VLAN ID	Delete
---------	--------------	---------------	--------

Step 5: Add the M-router in GE port

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

Add Multicast Router

Port ID GE9
Group VLAN ID 200
[Add](#)

Multicast Router Table

Port ID	Group VLAN ID	Delete
GE9	200	

b. ONU configuration (SFU)

Step 6: Choose the VLAN mode and set the PVID value.

ONU List

Information Bandwidth Port **VLAN** QoS IGMP Alarm Advance

VLAN Configuration

ONU Port Port1
VLAN Mode tag
PVID 200 (1-4095)
[Submit](#)

Step 7: Configuration multicast VLAN

ONU List

Information Bandwidth Port VLAN QoS **IGMP** Alarm Advance

Multicast Configuration

Multicast Switch ☒ Snooping ☐ CTC Control
Fast Leave State ☐ Disable ☒ Enable
[Submit](#)

Multicast Port Configuration

ONU Port Port1

Multicast Max Group	0 (0-255) Submit
Multicast VLAN	200 Submit
VLAN Tag Strip Mode	Strip Submit

7.3 VoIP Service with VLAN 300

a. OLT Configuration

Step 1: Create a new VLAN

New VLAN

VLAN ID: 300 (1-4094)
Description: vlan300
[Add](#)

VLAN Table

VLAN ID	Description	Edit	Delete
1	default		
2	vlan2		
3	vlan3		
4	vlan4		

Step 2: Add the VLAN to GE port and PON port.

Port VLAN Configuration

VLAN ID: 300

Port ID	Forbidden	Tag	Untag
GE1	☒	☐	☐
GE2	☒	☐	☐
GE3	☒	☐	☐
GE4	☒	☐	☐
GE5	☒	☐	☐
GE6	☒	☐	☐
GE7	☒	☐	☐
GE8	☒	☐	☐
GE9	☐	☒	☐
GE10	☒	☐	☐
GE11	☒	☐	☐
GE12	☒	☐	☐
GE13	☒	☐	☐
GE14	☒	☐	☐
GE15	☒	☐	☐
GE16	☒	☐	☐
PON1	☐	☒	☐
PON2	☒	☐	☐

b. ONU Configuration

Step 3: Configure the VoIP global parameter

ONU List										
Information	Bandwidth	Port	VLAN	QoS	IGMP	VoIP	SIP	POTS	Alarm	Advance
VoIP Global Configuration										
Voice IP Mode	Static IP									
IP Address	192.168.3.33 (x.x.x.x)									
Network Mask	255.255.255.0 (x.x.x.x)									
Default Gateway	192.168.3.1 (x.x.x.x)									
Tagged Flag	Tag									
Voice Client VLAN	300 (0-4095)									
Voice Service VLAN	0 (0-4095)									
Voice Priority	7 (0-7)									
Submit										

Step 4: Setup the SIP configuration

ONU List										
Information	Bandwidth	Port	VLAN	QoS	IGMP	VoIP	SIP	POTS	Alarm	Advance
SIP Parameter Configuration										
Manage Port	5060 (1-65535)									
Proxy Service IP/Port	192.168.3.44 (x.x.x.x) 5060 (1-65535)									
Backup Proxy Service IP/Port	192.168.3.44 (x.x.x.x) 5060 (0-65535)									
Register Service IP/Port	192.168.3.44 (x.x.x.x) 5060 (1-65535)									
Backup Register Service IP/Port	192.168.3.44 (x.x.x.x) 5060 (0-65535)									
Out Bound Service IP/Port	192.168.3.44 (x.x.x.x) 5060 (1-65535)									
Register Interval	1000 (1-10000000)									
Heartbeat Switch	Enable									
Heartbeat Cycle	10000 (1-65535)									
Heartbeat Count	10000 (1-65535)									
Submit										

Step 5: Fill in the user account and password

ONU List

Information Bandwidth Port VLAN QoS IGMP VoIP SIP POTS Alarm Advance

VoIP POTS Configuration

VoIP Port Pots1

POTS Information

Port Status	Registering
Services State	Endlocal
Codec Mode	G711A

Manage Configuration

Manage Status ☒ Disable ☐ Enable

Submit

SIP User Parameter Configuration

User Account 3333333333

User name 3333333333

User Password 3333333333

Submit

7.4 DHCPv6 Configuration

Here is an example shows how to configure DHCPv6.

DHCPv6 server: OLT

DHCPv6 client: HGU

VLAN: 3000

1. Authenticate ONU.

The HGU is connecting to PON 1. It will show online after being authenticated.

OLT Information

OLT Configuration

ONU Configuration

ONU list

Authentication

Upgrade

Profile Configuration

System Configuration

ONU list

ONU Status

OPM Diag

ONU Authentication Information

Port ID PON1 Refresh

ONU Type Authentication Deregister Reset Unauth

MAC (HH:HH:HH:HH:HH:HH) Search

Description Search

ONU ID	Status	MAC Address	Description	RTT(TQ)	Type	Auth Flag
EPON0/1:1	Online	80:14:A8:91:A8:30	N/A	100	1GE+1FE+1POTS+4WIFI	Auth

2. Create VLAN.

Create a new VLAN for DHCPv6.

New VLAN

VLAN ID: (1-4094)

Description:

VLAN Table

VLAN ID	Description	Edit	Delete
1	default		
3000	vlan3000		

3. Add VLAN to ports

Add the VLAN to PON 1, which the HGU is connecting to.

Port VLAN Configuration

VLAN ID:

Port ID	Mode	Forbidden	Tag	Untag
GE1	Hybrid	☒	☐	☐
GE2	Hybrid	☒	☐	☐
GE3	Hybrid	☒	☐	☐
GE4	Hybrid	☒	☐	☐
GE5	Hybrid	☒	☐	☐
GE6	Hybrid	☒	☐	☐
GE7	Hybrid	☒	☐	☐
GE8	Hybrid	☒	☐	☐
GE9	Hybrid	☒	☐	☐
GE10	Hybrid	☐	☐	☒
GE11	Hybrid	☒	☐	☐
GE12	Hybrid	☐	☐	☒
GE13	Hybrid	☒	☐	☐
GE14	Hybrid	☒	☐	☐
GE15	Hybrid	☒	☐	☐
GE16	Hybrid	☒	☐	☐
PON1	Hybrid	☐	☒	☐
PON2	Hybrid	☒	☐	☐
PON3	Hybrid	☒	☐	☐
PON4	Hybrid	☒	☐	☐
PON5	Hybrid	☒	☐	☐
PON6	Hybrid	☒	☐	☐
PON7	Hybrid	☒	☐	☐
PON8	Hybrid	☒	☐	☐

4. Configure VLAN IPv6 address.

IPv6 address must be there so that DHCPv6 in this VLAN can be enabled.

The IPv6 address can be link local address or global unicast address.

VLAN IPv6 Configuration

VLAN ID: 1
 IPv6 Address:
 Prefixlen:
 Submit Reset

VLAN IPv6 Table

VLAN ID	IPv6 Address	Prefixlen	Delete
3000	fe80::bb8:8214:a8ff:fec4:1e5b		
	2202:abcd::ef:1	64	

5. Configure DHCPv6 pool.

Configure DHCPv6 address pool and other network parameters, such as life time, DNS server and domain.

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:
 Submit Reset

DHCPv6 Server Pool

Pool Name	Start IPv6 Address	End IPv6 Address	Valid LifeTime	Preferred LifeTime	DNS Server	Domain Name	Edit	Delete
test	2002:abcd::ef:1000/64	2002:abcd::ef:2000/64	600	500	2002:abcd::ef:11 2002:abcd::ef:1	test.com		

6. Enable DHCPv6 server.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

DHCPv6 Server Configuration

DHCPv6 Server

Disable

VLAN ID

1

Pool Name

Submit

Reset

DHCPv6 Interface Information

VLAN ID	Using Pool
3000	test

Refresh

7. Configure RA parameters.

Disable Suppress RA and M/O field should be checked, which means clients use DHCPv6 to get IPv6 address.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

IPv6 SLAAC

Route

IPv6 Route

IPv6 SLAAC

IPv6 SLAAC Prefix

IPv6 SLAAC Configuration

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000s)	M	O	Router Preference	MTU (1-1500)
3000	☐	200	600	0	☒	☒	MEDIUM	1500

Submit

8. Configure ONU IPv6 WAN.

Create an IPv6 WAN connection with correct VLAN.

Gateway Name: Household Gateway

Network

Status Network Security Application Management Diagnose

Internet Binding LAN IP Address WLAN Remote L2/L3 Configuration QoS Time Router

Internet Connection

Connection Name: 1_INTERNET_R_VID

Mode: Route

IP Protocol Mode: Ipv6

☒ DHCP Get an address from ISP

☐ PPPoE Select this when using PPPOE

☐ IPv6 If ISP only use MER for IPv6, Please Select This

MER ☐

Enable Vlan: ☒

Vlan ID: 3000

802.1p: 0

MTU: 1500

Request DNS: ☒ Enable ☐ Disable

Primary DNS:

Secondary DNS:

Service Mode: INTERNET

Turn off LAN DHCP: ☐

Port binding: ☒ Port_1 ☐ Port_2

☒ WLAN(SSID1)

IPv6 WAN:

IPv6 Address: DHCP

DHCP PD ☐

9. ONU obtains IPv6 address.

ONU will obtain IPv6 address from DHCPv6 server.

Gateway Name: Household Gateway Logout

Status

Status Network Security Application Management Diagnose Help

Device Information WAN Connection Info User Information VOIP Information Remote Management Status

IPv4 Connection Information

IPv6 Connection Information

EPON Information

WAN Info

Interface	VLAN ID	Protocol	IGMP	Status	IP Address	Obtain Prefix
1_INTERNET_R_VID_3000	3000	IPv6	Enable	up	2202:abcd:ef:1000::	eb3a:2000:0:b00:5362:8700::

NetWork Info

Service Interface	Default Gateway	Primary DNS	Secondary DNS
1_INTERNET_R_VID_3000	fe80::bb8:8214:a8ff:fec4:1e5b	2202:abcd:ef:2	2202:abcd:ef:1

DHCPv6 Bind Information DHCPv6 Server Enable Server Pool Configuration

DHCPv6 Bind Information

Client	DUID	Address	Preferred LifeTime	Valid LifeTime	Expire Time
fe80::8214:a8ff:fe91:a837	00:03:00:01:80:14:a8:91:a8:30	2202:abcd::ef:1000	500	600	2000-01-02 06:21:35 (410 seconds)

Refresh

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

7.5 IPv6 SLAAC Configuration

A computer is connected to OLT uplink port GE10, and the computer obtains IPv6 address by SLAAC.

1. Create VLAN.

Create a new VLAN for IPv6 SLAAC.

VLAN ID	Description	Edit	Delete
1	default		
3000	vlan3000		

2. Add VLAN to ports

Add the VLAN to port 10, which the PC or other devices are connecting to.

Port ID	Mode	Forbidden	Tag	Untag
GE1	Hybrid	☒	☐	☐
GE2	Hybrid	☒	☐	☐
GE3	Hybrid	☒	☐	☐
GE4	Hybrid	☒	☐	☐
GE5	Hybrid	☒	☐	☐
GE6	Hybrid	☒	☐	☐
GE7	Hybrid	☒	☐	☐
GE8	Hybrid	☒	☐	☐
GE9	Hybrid	☒	☐	☐
GE10	Hybrid	☐	☐	☒
GE11	Hybrid	☒	☐	☐
GE12	Hybrid	☐	☐	☒
GE13	Hybrid	☒	☐	☐
GE14	Hybrid	☐	☐	☒
GE15	Hybrid	☒	☐	☐
GE16	Hybrid	☒	☐	☐

3. Configure PVID of 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

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information

Configuration

GE Configuration

Port ID	Description	Admin Status	Speed	Flow Control	Isolate	PVID
GE1		☒	Auto	☐	☒	1
GE2		☒	Auto	☐	☒	1
GE3		☒	Auto	☐	☒	1
GE4		☒	Auto	☐	☒	1
GE5		☒	Auto	☐	☒	1
GE6		☒	Auto	☐	☒	1
GE7		☒	Auto	☐	☒	1
GE8		☒	Auto	☐	☒	1
GE9		☒	Auto	☐	☒	1
GE10		☒	Auto	☐	☐	3000
GE11		☒	Auto	☐	☒	1
GE12		☒	Auto	☐	☐	3000
GE13		☒	Auto	☐	☒	1
GE14		☒	Auto	☐	☒	3000
GE15		☒	Auto	☐	☒	1
GE16		☒	Auto	☐	☒	1

Submit

Reset

4. Configure VLAN IPv6 address.

IPv6 address must be there so that SLAAC in this VLAN can be available.

The IPv6 address can be link local address or global unicast address.

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

VLAN IPv6

VLAN IPv6 Configuration

VLAN ID

1

IPv6 Address

Prefixlen

Submit

Reset

VLAN IPv6 Table

VLAN ID	IPv6 Address	Prefixlen	Delete
3000	fe80::bb8:8214:a8ff:fec4:1e5b		
	2202:abcd::ef:1	64	

5. Configure RA parameters.

Disable Suppress RA and M/O field should be unchecked, which means clients use SLAAC to get IPv6 address.

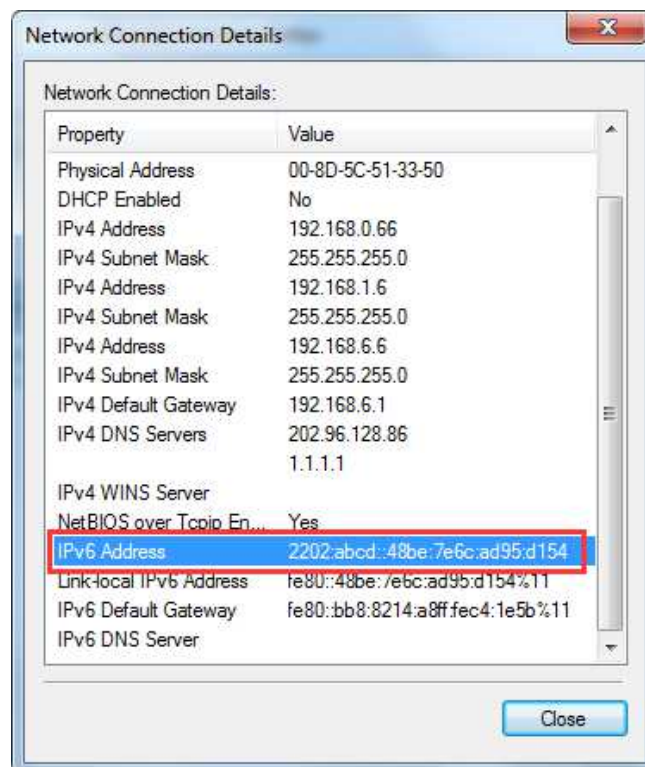
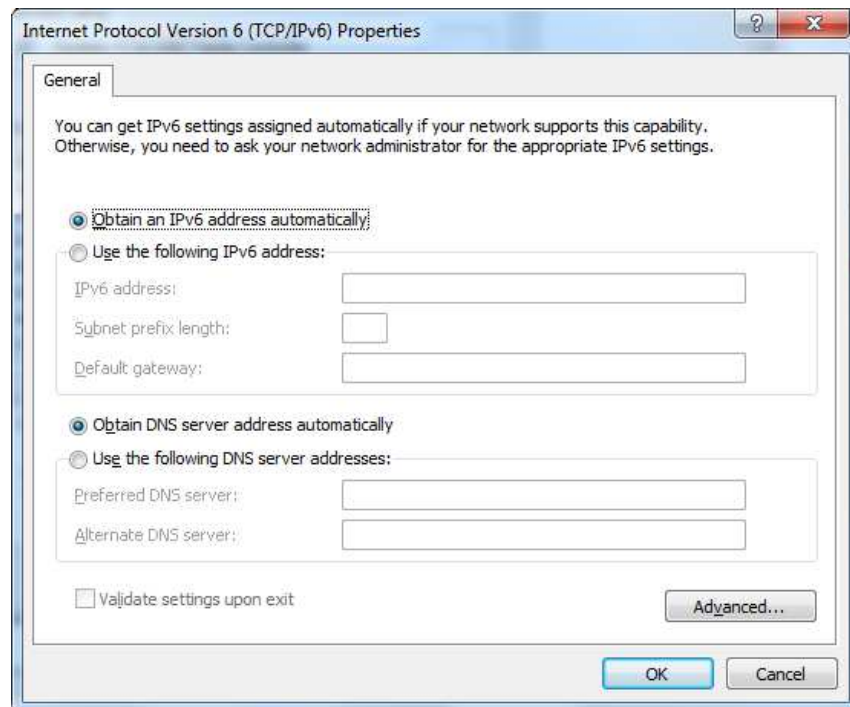
VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000s)	M	O	Router Preference	MTU (1-1500)
3000	☐	200	600	0	☐	☐	MEDIUM	1500

6. Configure SLAAC prefix.

Once IPv6 address of VLAN is added, the SLAAC prefix will generate automatically.

VLAN ID	ND Prefix	Valid LifeTime	Preferred LifeTime	Delete
3000	2202:abcd::/64	2592000	604800	

7. Connect the computer to OLT uplink GE10, choose Obtain an IPv6 Address automatically. The computer will obtain an IPv6 address by SLAAC.



----- END -----

Thank you!