

Single PON Port GPON OLT WEB USER MANUAL

Version V1.1

Release Date 2024-9-30

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Chapter 1 System Description

1.1 Overview

1.1.1 OLT Introduction

The Web management user manual is for the OLT 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 OLT interfaces

Products		Single PON port GPON OLT
Chassis	Racks	1U
1G/10G Uplink Port	QTY	3
	Copper	2*100/1000M auto-negotiation
	SFP(Independent)	1*SFP+ (SFP+ is compatible with 10GE)
GPON Port	QTY	1
	Fiber Type	9/125μm SM
Management Mode		Console, WEB, Telnet and CLI

1.1.2 OS Requirement

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

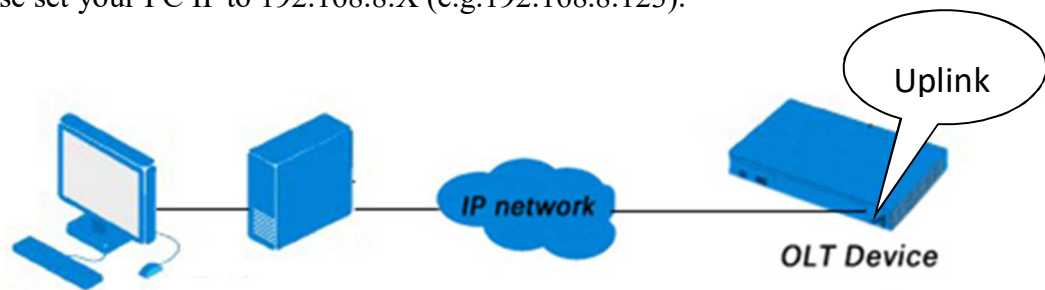
Table 1-2 Operation System requirement

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 Uplink 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 your web browser, type the device IP in the address bar;
4. Entry of the username and password will be prompted. Enter the default login User Name and Password.

The default username and password is "admin/Xpon@Olt9417#".

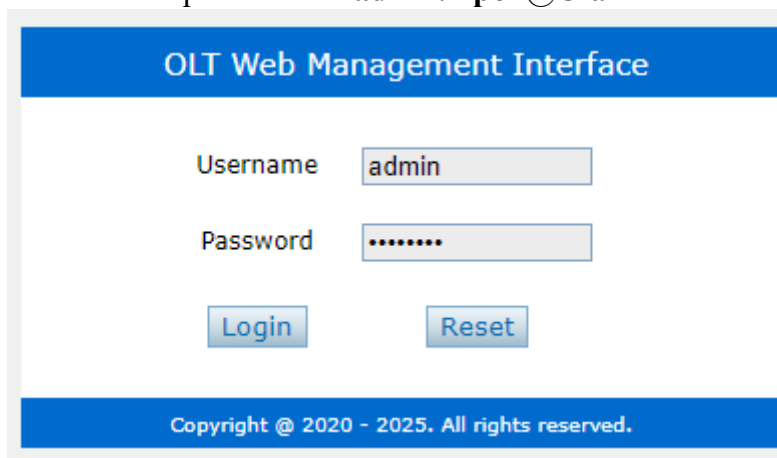
The image shows a web browser window displaying the 'OLT Web Management Interface' login page. The page has a blue header with the title 'OLT Web Management Interface'. Below the header, there are two input fields: 'Username' with the text 'admin' and 'Password' with masked characters '.....'. Below these fields are two buttons: 'Login' and 'Reset'. At the bottom of the page, there is a blue footer with the text 'Copyright @ 2020 - 2025. All rights reserved.'

Figure 2-1-1: Login

2.2 Device Information

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

OLT Information → Device Information

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



中文

Device Information

Device Status

Device Basic Information

OLT Information

Device Information

OLT Configuration

ONU Configuration

Profile Configuration

System Configuration

Submit

Refresh

System Name	gpon-olt	Serial Number	V2302090010
Hardware Version	V3.1.1	Software Version	V1.0.6
MAC Address	1C:EF:03:B6:C2:4A	Temperature	44°C
System Time	1970 /1 /4 19:36:35	Running Time	3 Days 11 Hours 36 Minutes 35 Seconds
CPU Usage	6%	Memory Usage	48%
License Limit	Unlimited	License Time	Permanent
Software Created Time	Tue, 28 Feb 2023 12:28:42	Device Model	GPON-OLT



PON1



GE1



GE2



GE3

Figure 2-2-1: Device Information

Chapter 3 OLT Configuration

3.1 VLAN

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

- Support Port-based VLAN and IEEE802.1Q VLAN.
- Support full 512 VLAN at the same time, VLAN range is 1~4094.

All switch ports, including uplink ports and downlink ports, support VLAN partition. VLAN 1 is the system reserved VLAN, it includes all switch ports which are untag mode.

3.1.1 Create VLAN

OLT Configuration → VLAN

In this user interface, you can create new VLAN.

VLAN VLAN Port

New VLAN

VLAN ID (1-4094, format as X or X-X)

Description

VLAN Table

Maximum: 512 vlans
Used: 4 vlans

VLAN ID	Description	Edit	Delete
1	vlan_1		
6	vlan6		
20	vlan20		
888	vlan888		

Figure 3-1-1: Create New VLAN

3.1.2 VLAN Port

OLT Configuration → VLAN → VALN Port

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

Port VLAN Configuration

VLAN ID:

Port ID	Mode	Forbidden	Tag	Untag
GE1	Hybrid	☐	☐	☒
GE2	Hybrid	☐	☐	☒
GE3	Hybrid	☐	☐	☒

Port VLAN Table

VLAN ID	Tag Ports	Untag Ports
1		GE1 GE2 GE3
6	GE1 GE3	GE2
20		
888	GE1 GE2	

Figure 3-1-2: Add VLAN Port

3.1.3 QinQ/Translation

OLT Configuration → VLAN → QinQ/Translation

In this page, VLAN QinQ and VLAN translation can be configured. VLAN QinQ and translation are applied to the incoming direction of port traffic.

QinQ Configuration

Port ID:

Mode:

Customer VLAN:

Service VLAN:

VLAN QinQ Mapping Table

Port ID	Mode	Customer VLAN	Service VLAN	Delete
GE1	VLAN Translation	1	3000	Delete

Figure 3-1-3: VLAN QinQ/Translation

3.1.4 P2P

OLT Configuration → VLAN → P2P

In this page, P2P functionality can be enabled based on VLAN.



Figure 3-1-4: P2P Function

3.1.5 DSCP

OLT Configuration → VLAN → DSCP

In this page, you can manually configure the DSCP value of IP packets, set the DSCP mapping to a new DSCP, and support the configuration of IP DSCP mapping VLAN priority.

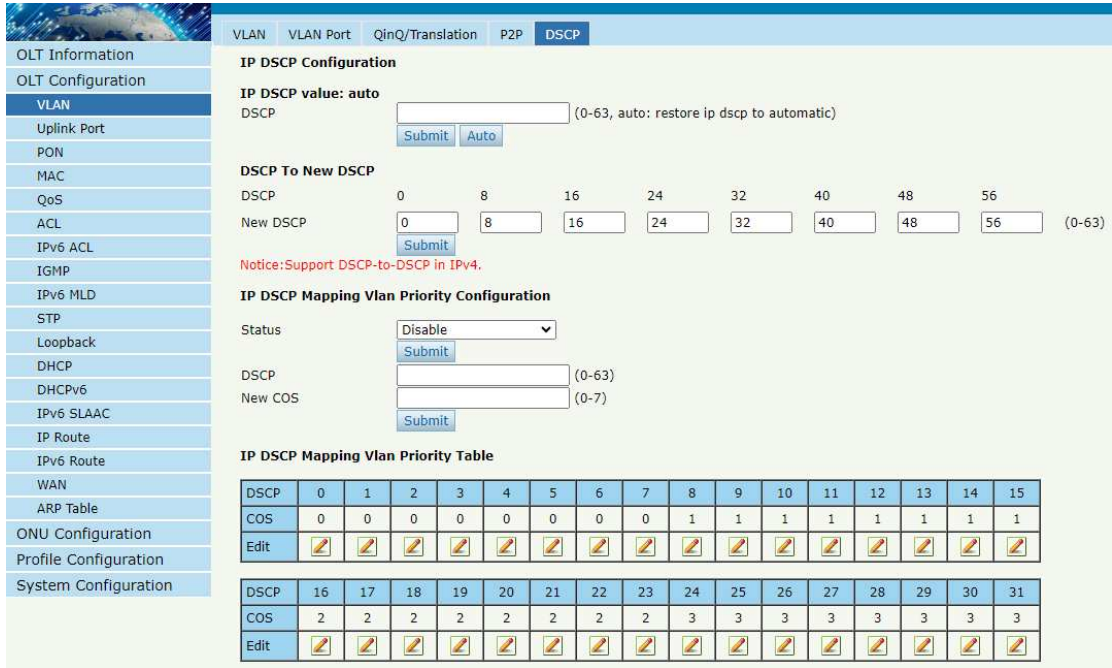


Figure 3-1-5: DSCP Configuration

3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

3.2.1 Information

OLT Configuration → Uplink Port → Information

This user interface displays traffic statistics of uplink ports.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

IGMP

Loopback

IP Route

ONU Configuration

Profile Configuration

Save

Log

Status

ONU list

Logout

Information

Configuration

Optical Information

Traffic Statistics

Clear Counters

Refresh

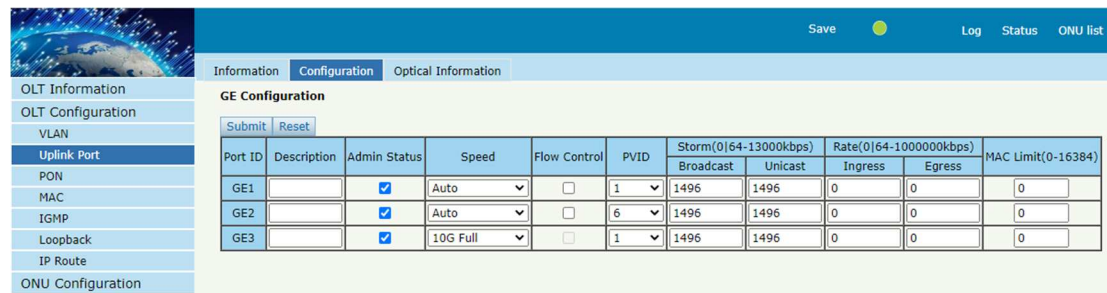
Port ID	Link Status	Speed	Rx Bytes	Rx Packets				Tx Bytes	Tx Packets				Collisions	Errors
				Packets	Unicast	Broadcast	Multicast		Packets	Unicast	Broadcast	Multicast		
GE1	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE2	Up	1000M Full	368580049015	429162977	379368125	38810682	3660328	74231801339	293581333	284277316	6825321	2478696	0	0
GE3	Down	-	0	0	0	0	0	4213905987	45599873	1674165	38492215	5433493	0	0

Figure 3-2-1: GE Traffic Statistics

3.2.2 Configuration

OLT Configuration → Uplink Port → Information

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



Port ID	Description	Admin Status	Speed	Flow Control	PVID	Storm(0/64-13000kbps)		Rate(0/64-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Unicast	Ingress	Egress	
GE1		☒	Auto	☐	1	1496	1496	0	0	0
GE2		☒	Auto	☐	6	1496	1496	0	0	0
GE3		☒	10G Full	☐	1	1496	1496	0	0	0

Figure 3-2-2: Uplink Ports Configuration

Illustrations of each parameter:

Parameters	Illustration
Port ID	GE port has two types, copper (GE1 to GE2) and fiber SFP (GE3).
Description	Descriptions or remarks of port.
Admin Status	Active or inactive status of port. It is enabled by default.
Speed	Configuring Port Rate.
Flow Control	Enable or disable flow control function of uplink port to control congestion. It is disabled by default.
PVID	Default VLAN ID of the port.
Broadcast	Broadcast storm suppression.
Unknown Unicast	Unknown unicast storm suppression.
Ingress Rate	Port ingress rate.

Egress Rate	Port egress rate.
MAC limit	Number of MAC address can be learnt in the port.

3.2.3 Optical Information

OLT Configuration → Uplink Port → Optical Information

This page can be used to view the optical port temperature, voltage, current, transmitted and received optical power and other parameters

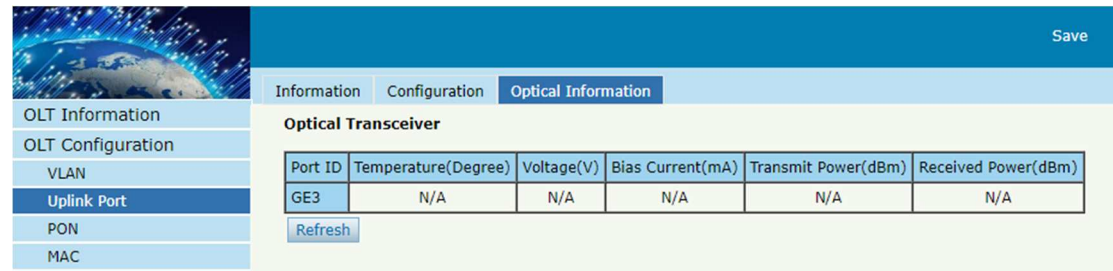


Figure 3-2-3: Optical Information

3.3 PON

3.3.1 Information

OLT Configuration → PON → Information

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

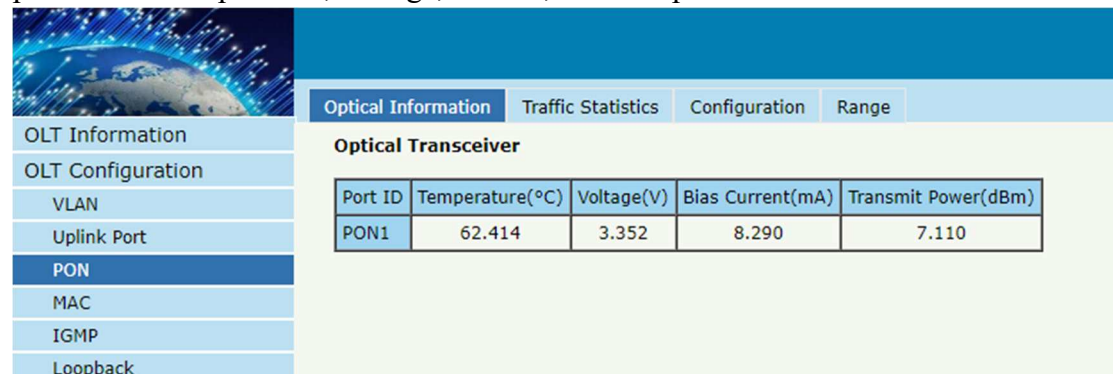


Figure 3-3-1: PON Information

3.3.2 Traffic Statistics

OLT Configuration → PON → Traffic Statistics

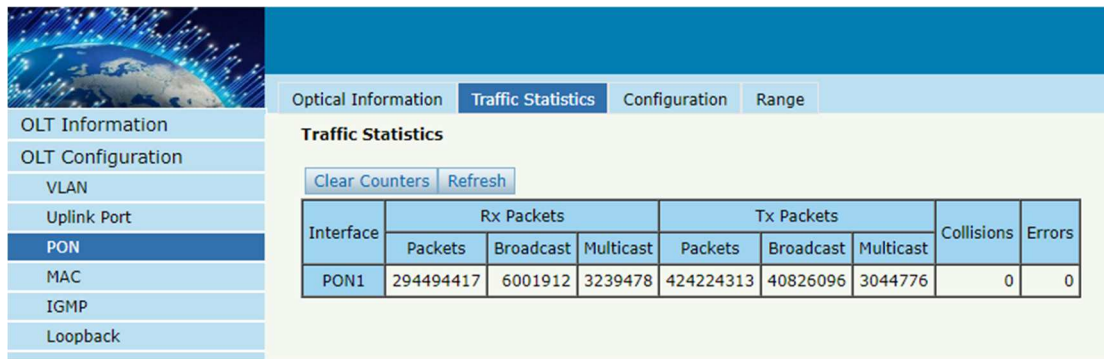


Figure 3-3-2: Traffic Statistics

3.3.3 Configuration

OLT Configuration → PON → Configuration

This page is used to configure functions and characteristic parameters of the PON port, such as port attributes, storm suppression, and rate limiting.

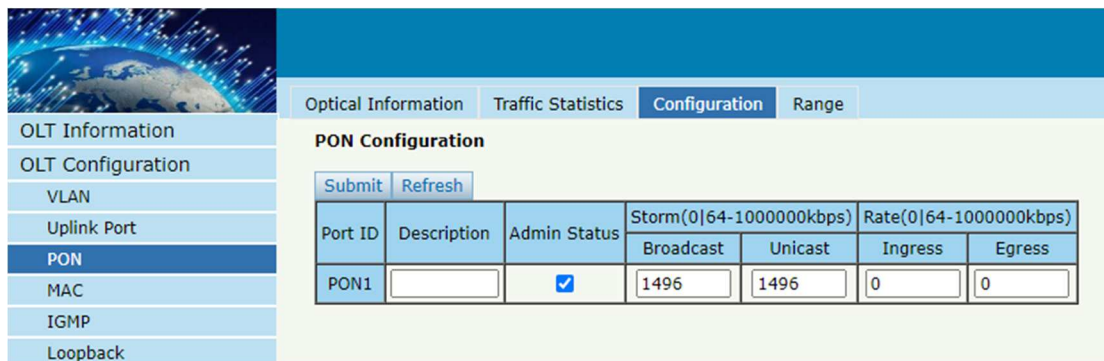


Figure 3-3-3: PON configuration

3.3.4 ALS Configuration

OLT Configuration → PON → Configuration

This page is used to configure port status. When the function is turned on and PONLOS is detected, the laser will be turned off. If the restart mode is auto, set the number of cycles to turn on the laser and the duration for how many seconds. If an ONU is found during the turning on of the laser, keep the laser on until the PONLOS signal is received again.

If it is in manual mode, after turning off the laser, it needs to be manually restarted using the no shutdown command.

ALS Configuration

Submit Refresh

Port ID	State	Restart Mode	interval(20-20000s)	width(2-200s)
PON1	☐	auto	100	2

Notice:
 1. In manual mode, after turning off the laser light emission, you need to execute the "no shutdown" command on the PON port on the command line to turn on the laser for ONU registration.
 2. Turning the als function on or off while the laser is off also requires executing the "no shutdown" command on the PON port on the command line to turn the laser on for ONU registration.

Figure 3-3-4: ALS Configuration

3.3.5 Range

OLT Configuration → PON → Range

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

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

PON Range Configuration

Submit Refresh

Port ID	Min(100M)	Max(100M)
PON1	0 (0-599)	200 (1-600)

Figure 3-3-5: PON Range Configuration

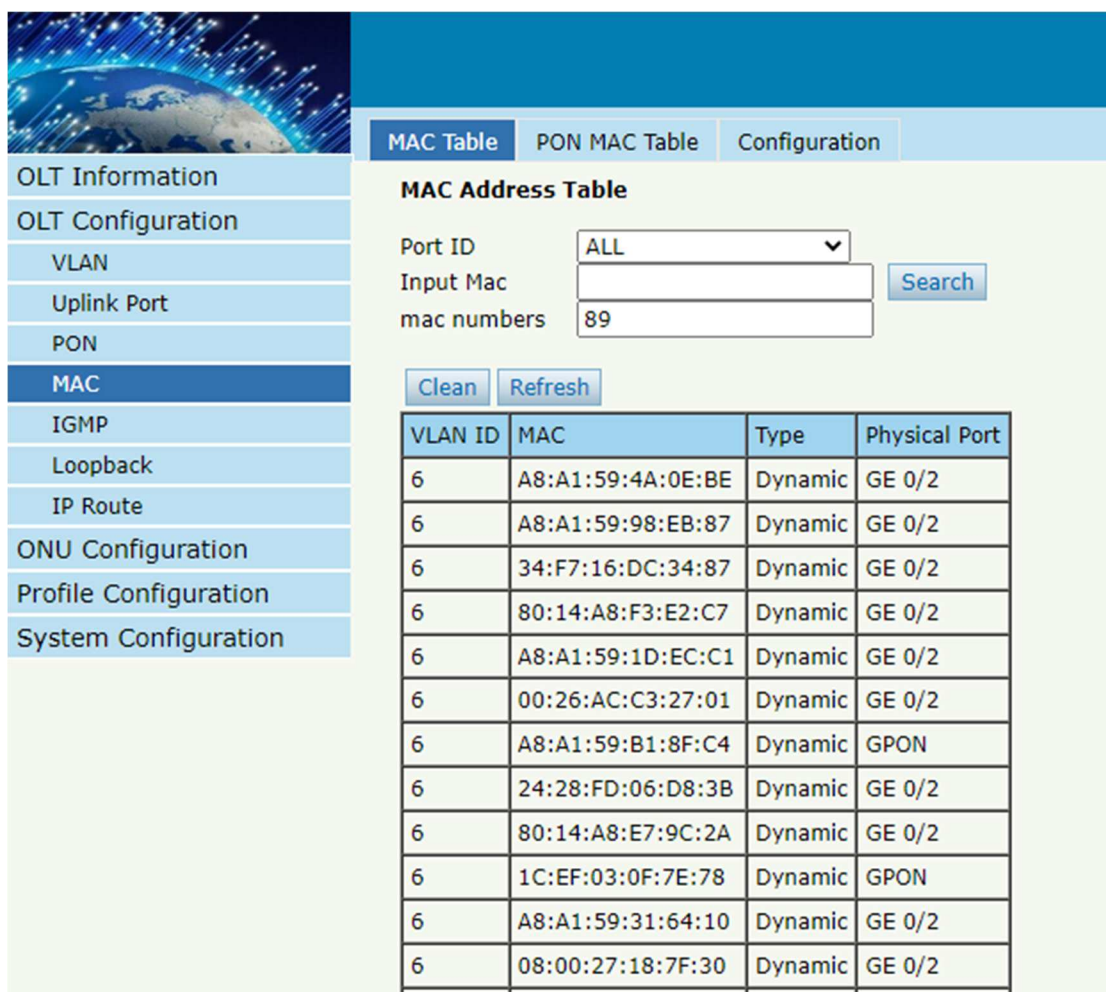
3.4 MAC

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

3.4.1 MAC Table

OLT Configuration → MAC → MAC Table

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



MAC Address Table

Port ID:

Input Mac:

mac numbers:

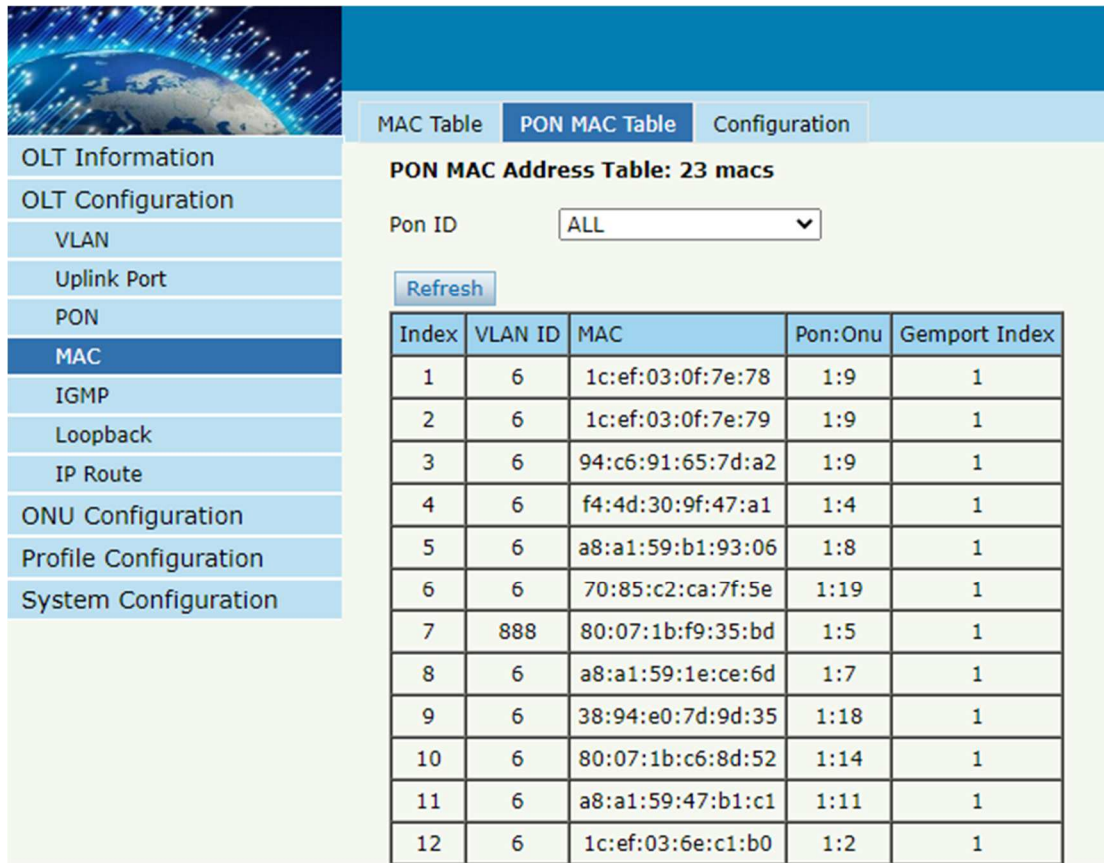
VLAN ID	MAC	Type	Physical Port
6	A8:A1:59:4A:0E:BE	Dynamic	GE 0/2
6	A8:A1:59:98:EB:87	Dynamic	GE 0/2
6	34:F7:16:DC:34:87	Dynamic	GE 0/2
6	80:14:A8:F3:E2:C7	Dynamic	GE 0/2
6	A8:A1:59:1D:EC:C1	Dynamic	GE 0/2
6	00:26:AC:C3:27:01	Dynamic	GE 0/2
6	A8:A1:59:B1:8F:C4	Dynamic	GPON
6	24:28:FD:06:D8:3B	Dynamic	GE 0/2
6	80:14:A8:E7:9C:2A	Dynamic	GE 0/2
6	1C:EF:03:0F:7E:78	Dynamic	GPON
6	A8:A1:59:31:64:10	Dynamic	GE 0/2
6	08:00:27:18:7F:30	Dynamic	GE 0/2

Figure 3-4-1: MAC Address Table

3.4.2 PON MAC Table

OLT Configuration → MAC → PON MAC Table

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



The screenshot shows the OLT Web User Interface. On the left is a navigation menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC (selected), IGMP, Loopback, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area has tabs for MAC Table, PON MAC Table (selected), and Configuration. Below the tabs, it says 'PON MAC Address Table: 23 macs'. There is a 'Pon ID' dropdown menu set to 'ALL' and a 'Refresh' button. Below these is a table with 5 columns: Index, VLAN ID, MAC, Pon:Onu, and Gemport Index. The table contains 12 rows of data.

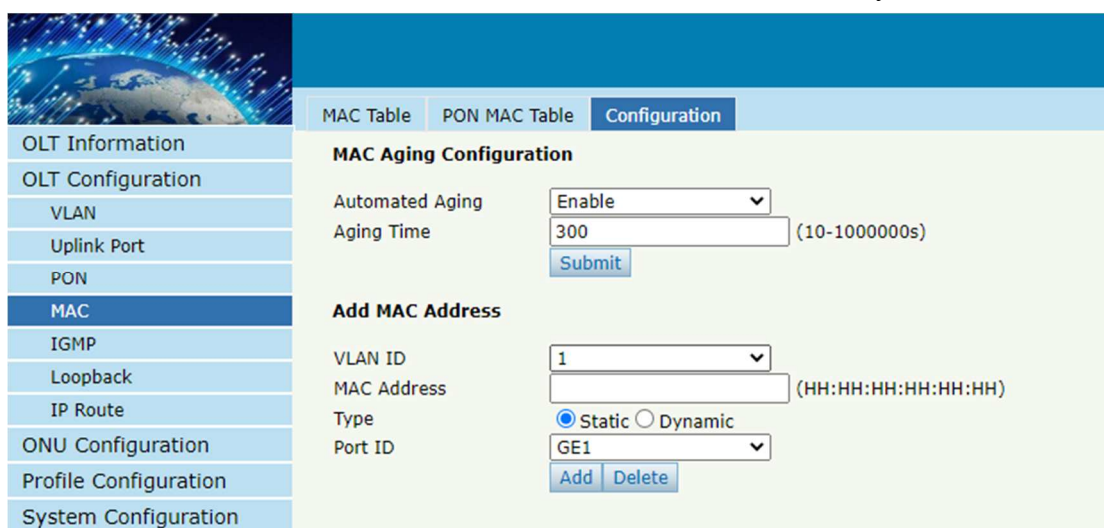
Index	VLAN ID	MAC	Pon:Onu	Gemport Index
1	6	1c:ef:03:0f:7e:78	1:9	1
2	6	1c:ef:03:0f:7e:79	1:9	1
3	6	94:c6:91:65:7d:a2	1:9	1
4	6	f4:4d:30:9f:47:a1	1:4	1
5	6	a8:a1:59:b1:93:06	1:8	1
6	6	70:85:c2:ca:7f:5e	1:19	1
7	888	80:07:1b:f9:35:bd	1:5	1
8	6	a8:a1:59:1e:ce:6d	1:7	1
9	6	38:94:e0:7d:9d:35	1:18	1
10	6	80:07:1b:c6:8d:52	1:14	1
11	6	a8:a1:59:47:b1:c1	1:11	1
12	6	1c:ef:03:6e:c1:b0	1:2	1

Figure 3-4-2: PON MAC Table

3.4.3 Configuration

OLT Configuration → MAC → Configuration

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



The screenshot shows the 'Configuration' tab in the OLT Web User Interface. It contains two sections: 'MAC Aging Configuration' and 'Add MAC Address'. In the 'MAC Aging Configuration' section, 'Automated Aging' is set to 'Enable' and 'Aging Time' is set to '300' (with a range of 10-1000000s). In the 'Add MAC Address' section, 'VLAN ID' is set to '1', 'MAC Address' is empty (with a format hint of HH:HH:HH:HH:HH:HH), 'Type' is set to 'Static' (radio button selected), and 'Port ID' is set to 'GE1'. There are 'Submit', 'Add', and 'Delete' buttons.

Figure 3-4-3: MAC Configuration

3.5 QoS

OLT Configuration → QoS → QoS

When bandwidth is insufficient or there is congestion in the network, queue scheduling can ensure that high priority data traffic passes through the device first. Traffic will be mapped to the queue based on its priority and transmitted within the queue.

OLT supports a total of 8 queues. The queue scheduling modes include strict priority (SP), weighted loop (WRR), and mixed mode (SP-WRR).

Strict priority scheduling ensures the bandwidth occupied by high priority traffic. Traffic with lower priority will only pass through when there is remaining bandwidth.

QoS Configuration

Qos Status:

Qos Mode:

Queue ID	Queue Priority
Q1	1
Q2	2
Q3	3
Q4	4

Qos Rules

Access List ID: (1-100)

Queue ID: (1-4)

☐ DSCP: (0-63)

☐ Source MAC: (HH:HH:HH:HH:HH:HH)

☐ Source IP: Mask:

☐ Source Port: (0-65535)

☐ Destination IP: Mask:

☐ Destination Port: (0-65535)

☐ Protocol:

QoS Rule Table

List ID	Queue ID	DSCP	Source MAC	Source IP	Source Port	Destination IP	Destination Port	Protocol	Delete
---------	----------	------	------------	-----------	-------------	----------------	------------------	----------	--------

Figure 3-5-1: Qos Configuration

3.6 ACL

In order to filter packets, network devices need to set a series of rules to determine the content that needs to be filtered. These packets can only be filtered if they match the rules. Access control lists can achieve this function. The matching criteria for access control list rules can be source address, destination address, Ethernet type, VLAN, protocol port, etc. These access control list rules can also be used in other situations, such as the classification of flows in quality of service. Access control list rules can contain one or more sub rules with different matching conditions.

This device supports the following types of access control lists.

3.6.1 IP/MAC Filter

OLT Configuration → ACL → IP/MAC Filter

The filter is mainly based on IP/MAC addresses, including source IP address and destination IP address, source MAC address and destination MAC address.

Access List Configuration

Access List ID: (1-7999)

Filter Action: ☒ Deny ☐ Permit

Filtering Direction: Input

☐ Source MAC: (HH:HH:HH:HH:HH:HH)

☐ Source IP: Mask:

☐ Source Port: (0-65535)

☐ Destination IP: Mask:

☐ Destination Port: (0-65535)

☐ Protocol: TCP (0-255)

Access Lists Configured

List ID	Source MAC	Source IP	Source Port	Destination IP	Destination Port	Protocol	Filtering Direction	Filter Action	Delete
1	6c:68:a4:c6:bb:a1						Input	Deny	Delete

Figure 3-6-1: IP/MAC Filter

3.6.2 Configuration

OLT Configuration → ACL → Configuration

The main configuration controls the access list status and effective period.

Access List status

Access List status: Disable

Notice: This switch is used to enable or disable the ACL at any time, does not affect the timing function.

Effective Period

Effective Period: 00 : 00 ~ 00 : 00 (HH:MM ~ HH:MM)

Notice: The function will be turned off if the effective and ineffective times are the same.

Figure 3-6-2: Configuration

3.7 IPv6 ACL

This section is about the IPv6 security configuration of OLT. IPv6 access control lists can allow or deny data transmission or access through IPv6 packets.

3.7.1 IPv6/MAC Filter

OLT Configuration → IPv6 ACL → IPv6/MAC Filter

The filter is mainly based on IPv6/MAC addresses, including source and destination IPv6 addresses, as well as source and destination MAC addresses.

List ID	Source MAC	Source IPv6	Source Port	Destination IPv6	Destination Port	Protocol	Filtering Direction	Filter Action	Delete
1		2023::33/64					Input	Deny	

Figure 3-7-1: IPv6/MAC Filter

3.7.2 Configuration

OLT Configuration → IPv6 ACL → Configuration

The main configuration controls the access list status and effective period.

Figure 3-7-2: Configuration

3.8 IGMP

3.8.1 Group Member

OLT Configuration → IGMP → Group Member

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

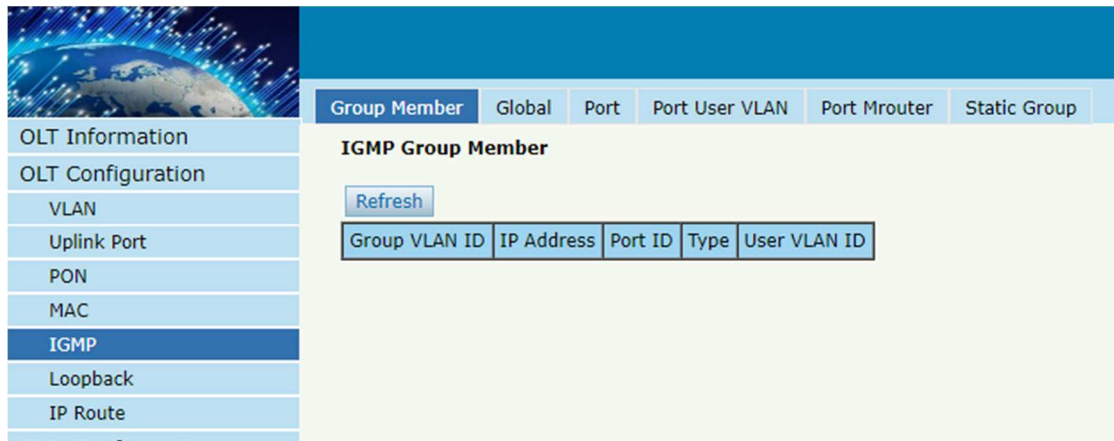


Figure 3-8-1: Group Member

3.8.2 Global

OLT Configuration → IGMP → Global

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

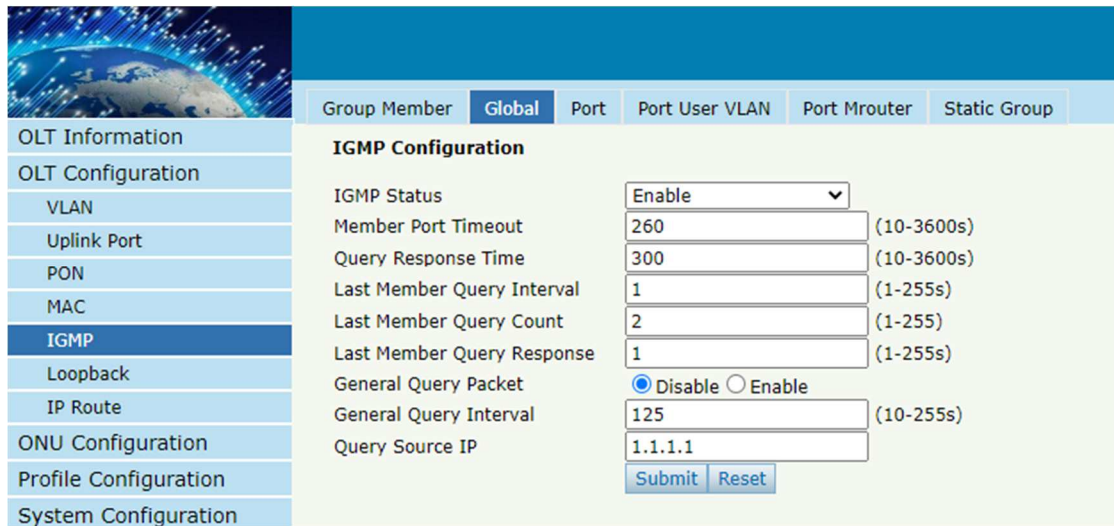


Figure 3-8-2: IGMP Global

3.8.3 Port

OLT Configuration → IGMP → Port

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

Port ID	Fast Leave	Filter	Group Limit(0-1024)
GE1	☐	☐	1024
GE2	☐	☐	1024
GE3	☐	☐	1024
PON1	☐	☐	1024

Figure 3-8-3: IGMP Port

3.8.4 Port User VLAN

OLT Configuration → IGMP → Port User VLAN

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

Port ID	User VLAN ID	Group VLAN ID	Delete
PON1	20	20	

Figure 3-8-4: IGMP Port User VLAN

3.8.5 Port Mrouter

OLT Configuration → IGMP → Port Mrouter

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

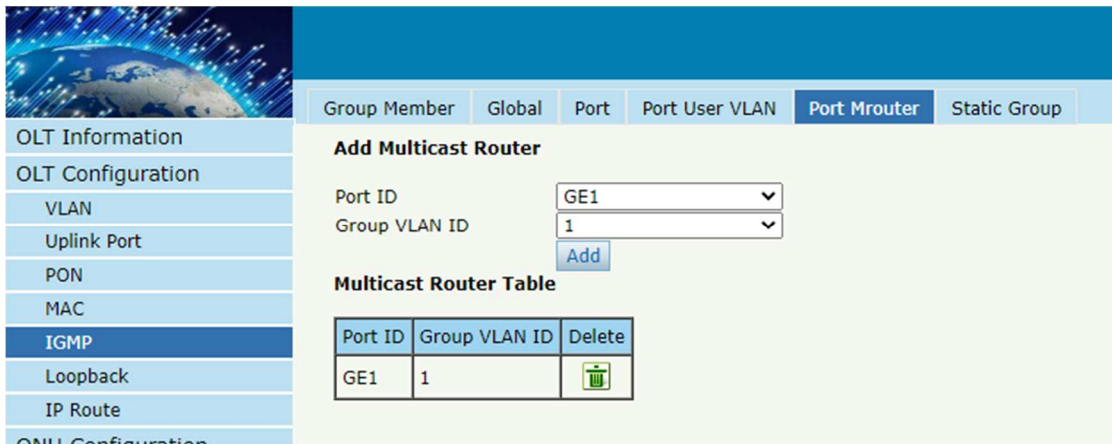


Figure 3-8-5: IGMP Port Mrouter

3.8.6 Static Group

OLT Configuration → IGMP → Static Group

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

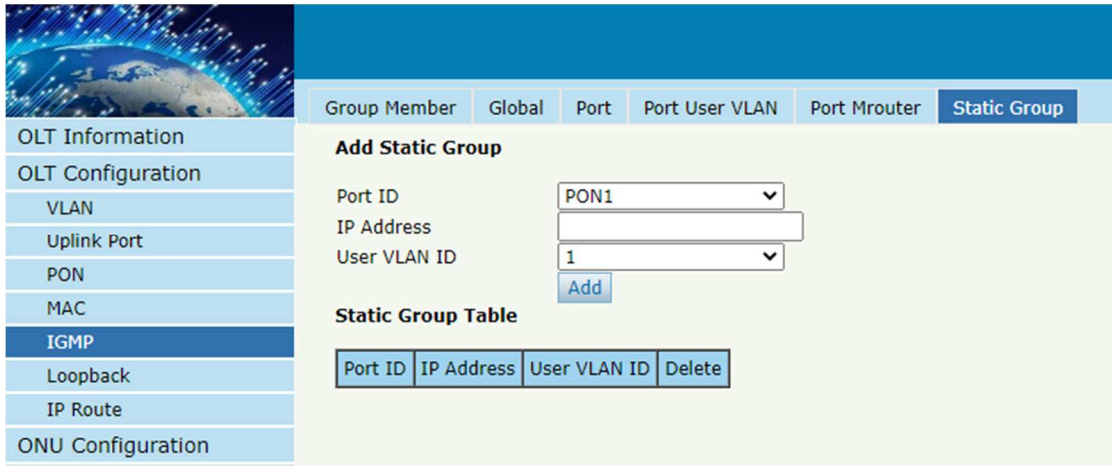


Figure 3-8-6: IGMP Static Group

3.9 IPv6 MLD

3.9.1 Group Member

OLT Configuration → IPv6 MLD → Group Member

When a MLD group is generated, it will be displayed in this table.

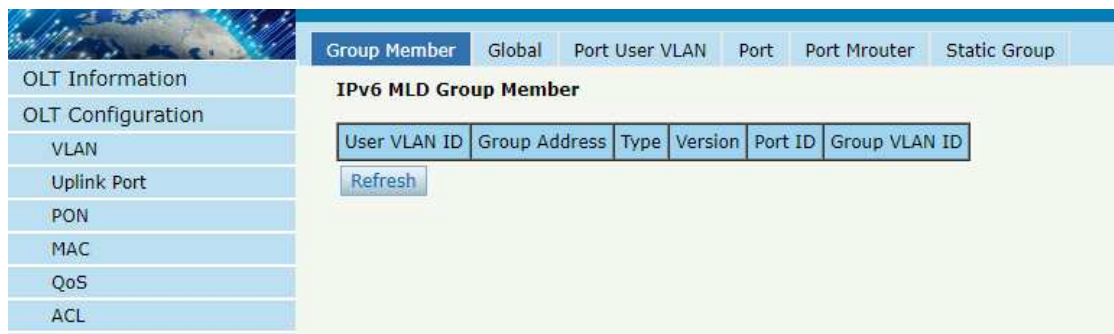


Figure 3-9-1: Group Member

3.9.2 Global

OLT Configuration → IPv6 MLD → Global

The basic configuration of MLD mainly includes query packet parameters and member timeout parameters. When MLD mode is enabled, OLT operates in MLD listening mode. MLD monitoring is the process of monitoring Internet group management protocol (MLD) network traffic. This feature allows network switches to "listen" to MLD conversations between hosts and routers. By monitoring these conversations, the switch maintains a mapping of which devices require which IP MLD streams. MLD can enter line filtering from ports that do not require them, thereby controlling which ports receive specific MLD traffic. When MLD status is disabled, OLT operates in transparent mode.

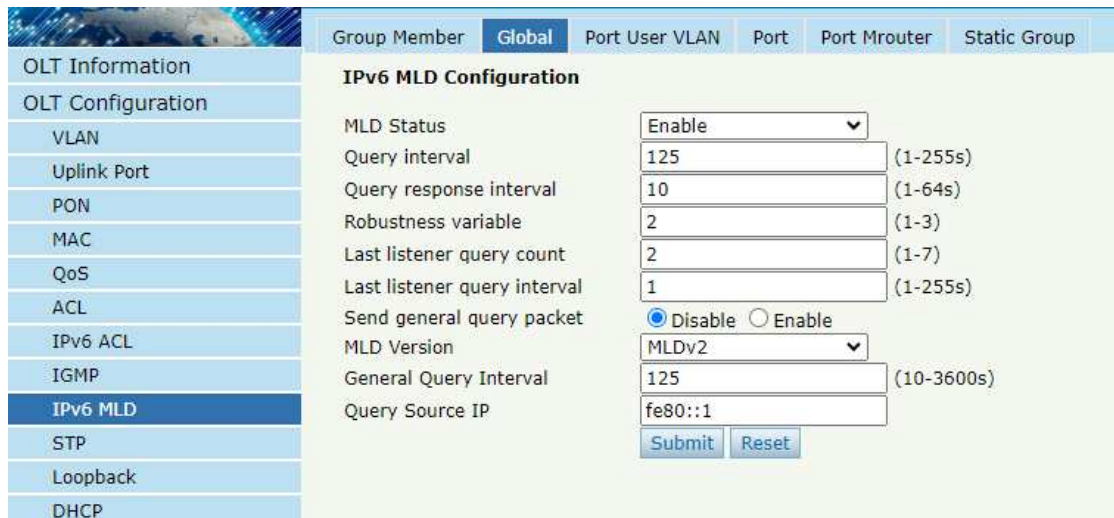


Figure 3-9-2: Global

3.9.3 Port User VLAN

OLT Configuration → IPv6 MLD → Port User VLAN

This configuration is used to configure MLD VLAN for OLT. Generally, PON ports should be configured, with the same user VLAN and group VLAN. If they are different, the MLD data VLAN will be converted and forwarded.

Figure 3-9-3: Port User VLAN

3.9.4 Port

OLT Configuration → IPv6 MLD → Port

This configuration is used to set the group limit, filtering, and fast departure mode for MLD ports.

Figure 3-9-4: Port

3.9.5 Port Mrouter

OLT Configuration → IPv6 MLD → Port Mrouter

The MLD router port is used to transmit MLD signal messages. Usually, the line port on the OLT should be set as a MLD router port.

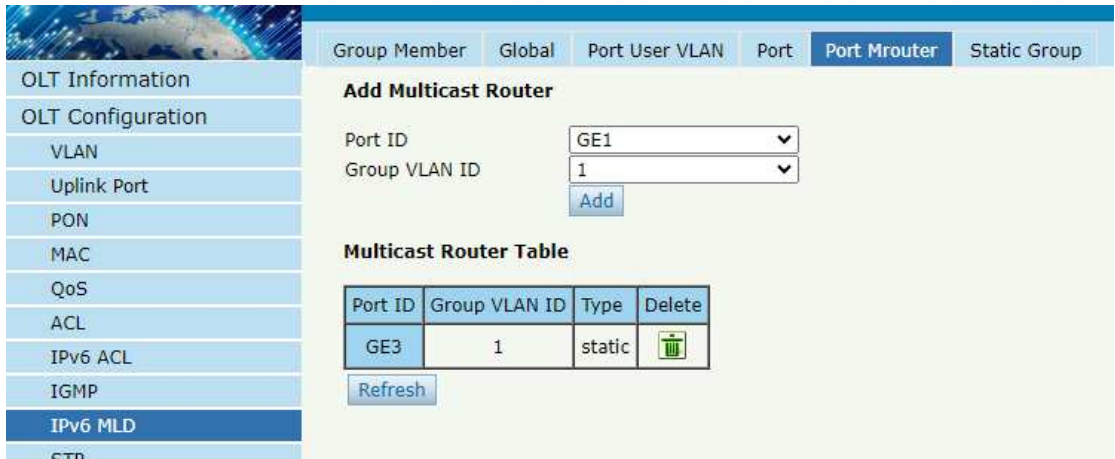


Figure 3-9-5: Port Mrouter

3.9.6 Static Group

OLT Configuration → IPv6 MLD → Static Group

This configuration is used to bind MLD IPv6 addresses and VLAN ID.

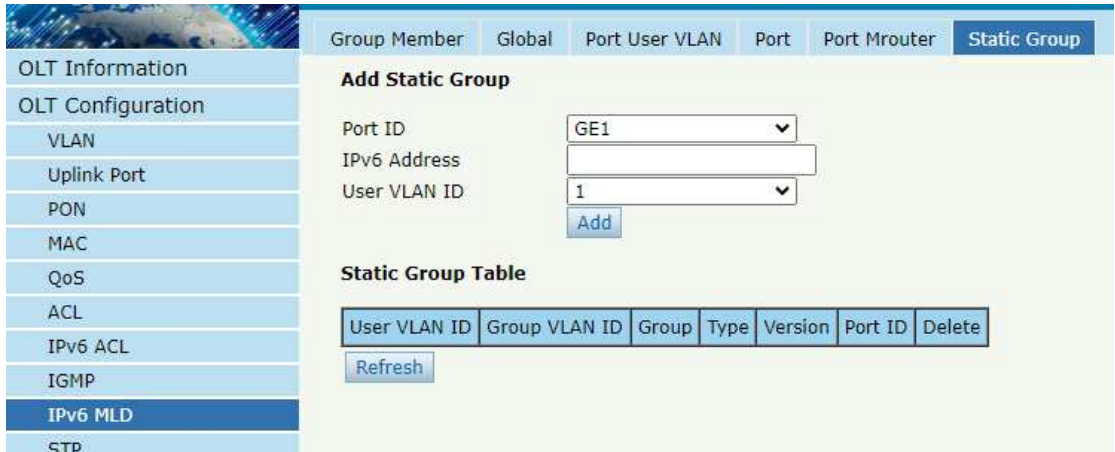


Figure 3-9-6: Static Group

3.10 STP

The spanning tree protocol is a second layer protocol that eliminates network loops by selectively blocking redundant network links. It also has the feature of link backup.

3.10.1 RSTP

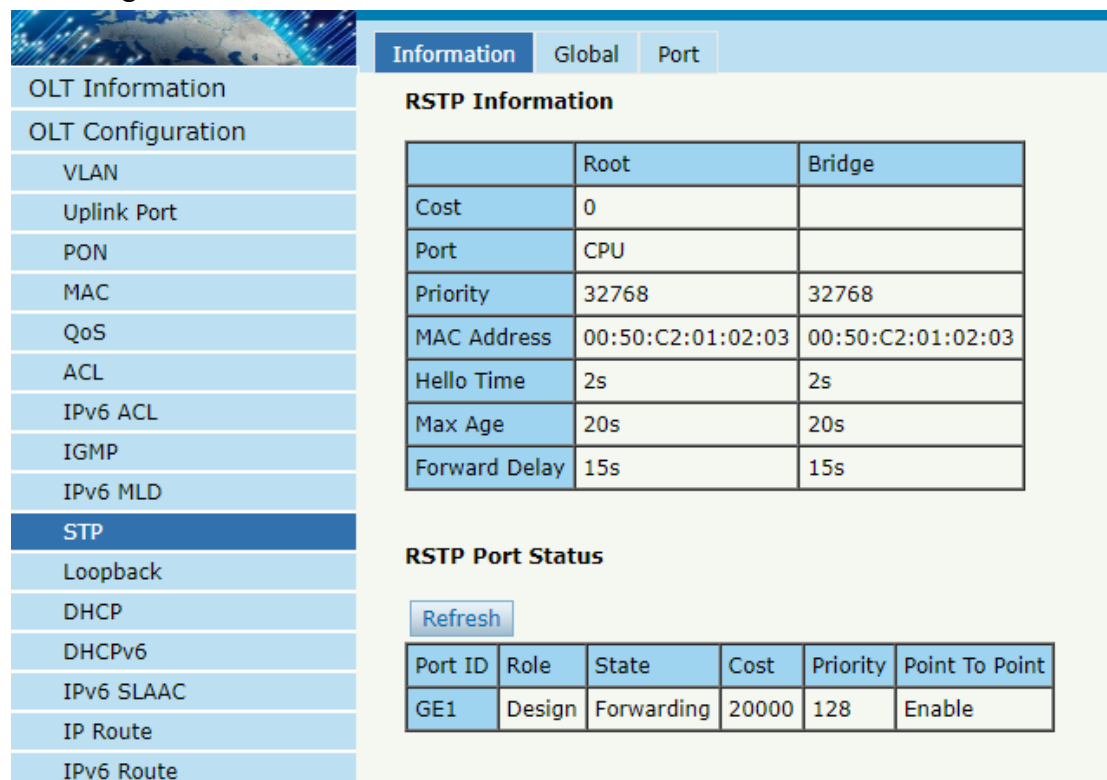
The Fast Spanning Tree Protocol (RSTP) is defined by the IEEE 802.1w standard, which has been improved on the basis of STP to achieve fast convergence of network topology. Its "speed" is reflected in the fact that when a port is selected as the root port and designated port, the delay for it to enter forwarding state will be greatly

reduced, thereby shortening the time required for the network to ultimately reach topological stability.

3.10.1.1 Information

OLT Configuration → STP → Information

The RSTP information mainly displays the spanning tree protocol parameters of the root bridge device.



The screenshot displays the 'RSTP Information' page in the OLT web interface. On the left is a navigation menu with categories like OLT Information, VLAN, Uplink Port, PON, MAC, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, **STP**, Loopback, DHCP, DHCPv6, IPv6 SLAAC, IP Route, and IPv6 Route. The main content area has tabs for 'Information', 'Global', and 'Port', with 'Information' selected. It contains two sections: 'RSTP Information' and 'RSTP Port Status'.

RSTP Information

	Root	Bridge
Cost	0	
Port	CPU	
Priority	32768	32768
MAC Address	00:50:C2:01:02:03	00:50:C2:01:02:03
Hello Time	2s	2s
Max Age	20s	20s
Forward Delay	15s	15s

RSTP Port Status

[Refresh](#)

Port ID	Role	State	Cost	Priority	Point To Point
GE1	Design	Forwarding	20000	128	Enable

Figure 3-10-1: RSTP Information

3.10.1.2 Global

OLT Configuration → STP → Global

This page is used to set the parameters of the device's spanning tree protocol, including spanning tree protocol switch, priority, hello time, maximum aging time, and forwarding delay.

Figure 3-10-2: RSTP Global

3.10.1.3 Port

OLT Configuration → STP → Port

This page is used to set port fast spanning tree protocol parameters, including spanning tree protocol switches, priority, cost, edge ports, and point-to-point.

Port ID	Status	Priority (0-240)	Cost (0-200000000)	admin Edge	Operating Edge	Point To Point
GE1	☒	128	20000	☐	☐	☒
GE2	☒	128	20000000	☐	☐	☒
GE3	☒	128	2000000	☐	☐	☒

Figure 3-10-3: RSTP Port

3.11 Loopback

Loopback can detect loop ports and process loop ports.

3.11.1 Information

OLT Configuration → Loopback → Information

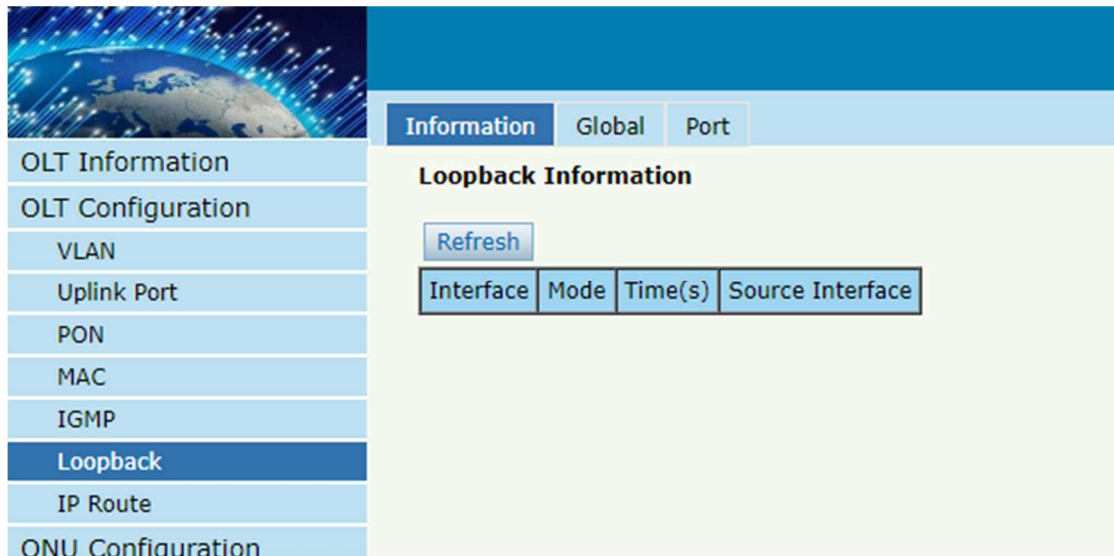


Figure 3-11-1: Loopback Information

3.11.2 Global

OLT Configuration → Loopback → Global

This page is used to enable or disable loopback detect, set the loopback range, mode, and aging time, loopback packet sending mode and packet sending interval.

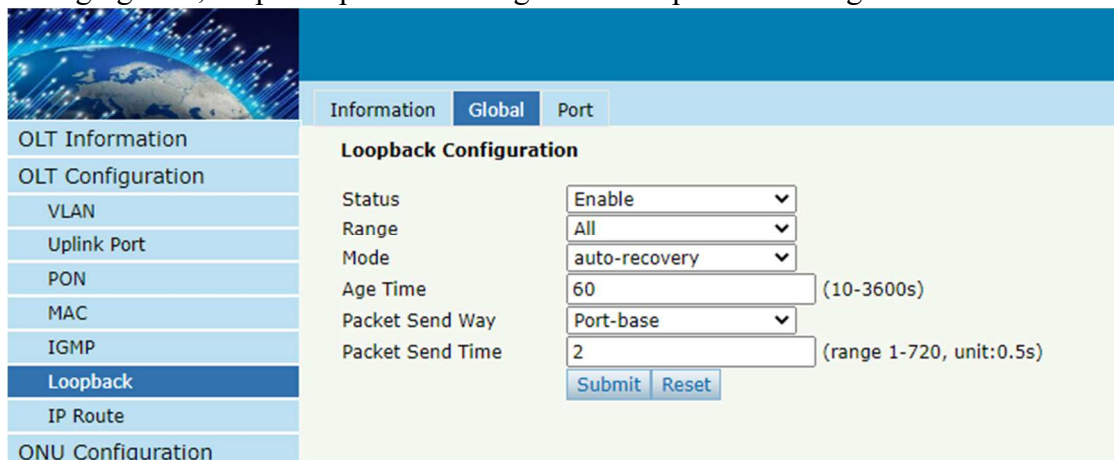


Figure 3-11-2: Loopback Global

3.11.3 Port

OLT Configuration → Loopback → Port

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

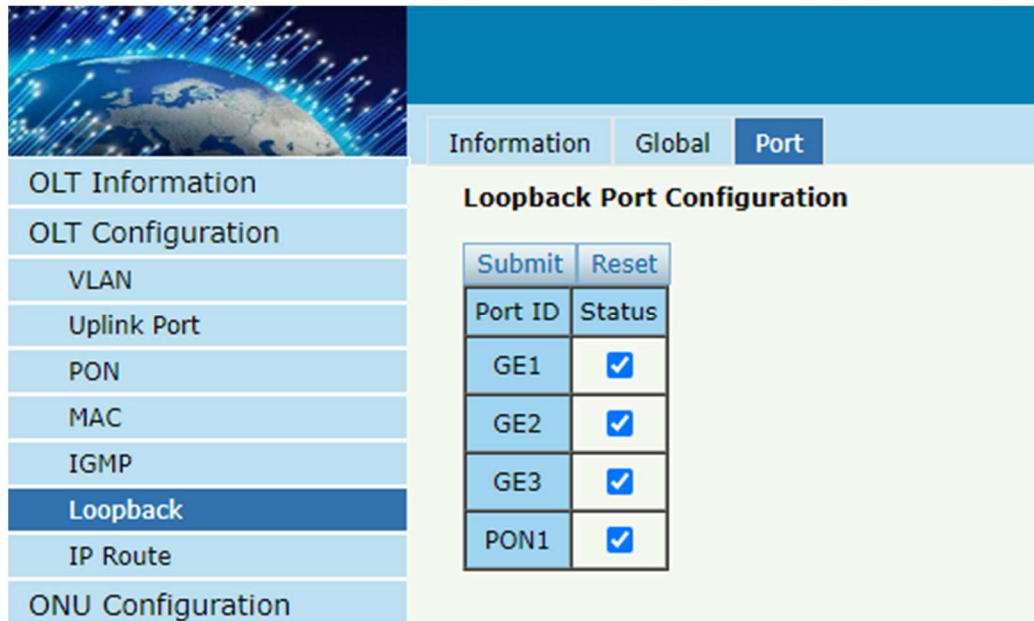


Figure 3-11-3: Loopback Port

3.12 DHCP

OLT can support the following DHCP functions.

- DHCP server
- DHCP proxy
- DHCP relay

3.12.1 DHCP Server

3.12.1.1 Lease

OLT Configuration → DHCP → DHCP Server → Lease

This table displays the MAC addresses, host names and IP addresses, and lease terms assigned to them.

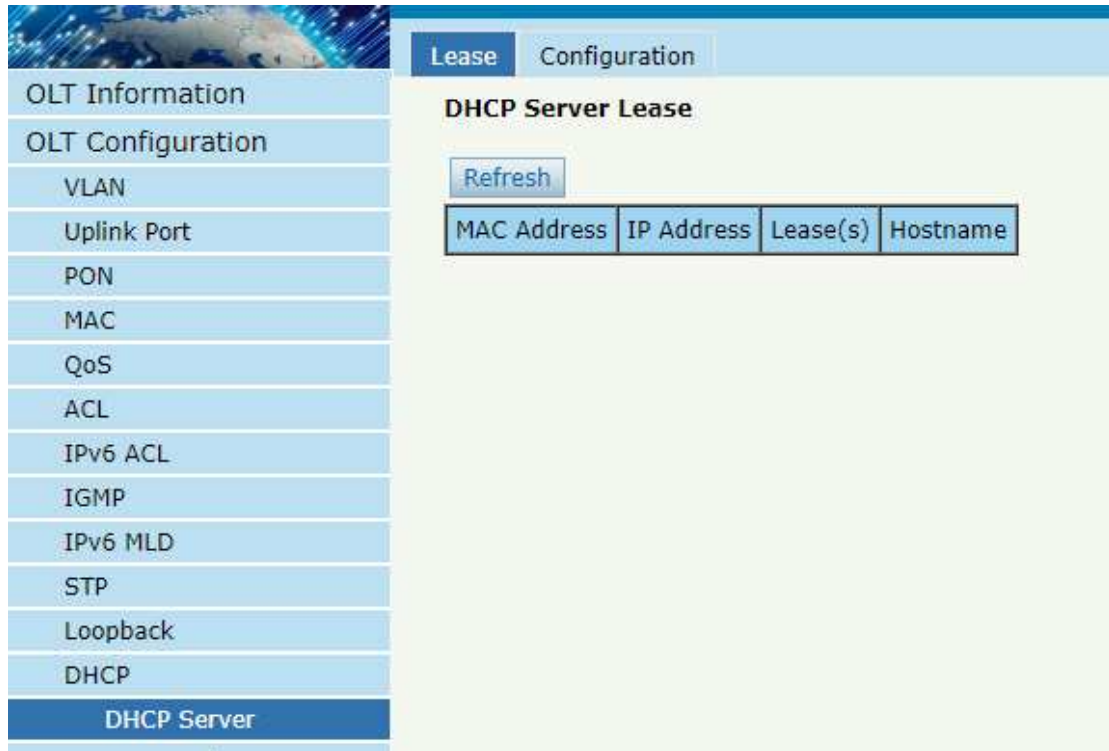


Figure 3-12-1: Lease

3.12.1.2 Configuration

OLT Configuration → DHCP → DHCP Server → Configuration

Sometimes devices require dynamic IP addresses, but there are no special DHCP servers in the network. These configurations can solve this problem. OLT will be a DHCP server in the network and allocate IP addresses to other devices.

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

Lease		Configuration	
DHCP Server Configuration			
DHCP Server	Enable		
VLAN ID	1		
		Submit	Reset
DHCP Server Settings			
Start IP Address	192.168.60.231		
End IP Address	192.168.60.254		
Subnet Mask	255.255.255.0		
Gateway	0.0.0.0		
Static DNS 1	0.0.0.0		
Static DNS 2	0.0.0.0		
Static DNS 3	0.0.0.0		
WINS	0.0.0.0		
Client Lease Time	864000		(60-864000s)
		Submit	Reset

Figure 3-12-2: DHCP Server Configuration

3.12.2 DHCP Relay

Due to the DHCP process using broadcast to generate request messages, servers and clients usually need to be in the same network segment. DHCP relay can solve the problem that DHCP servers and clients do not exist in the same network.

3.12.2.1 Configuration

OLT Configuration → DHCP→DHCP Relay → Configuration

This page is used to configure the IP and working VLAN of DHCP relay servers.

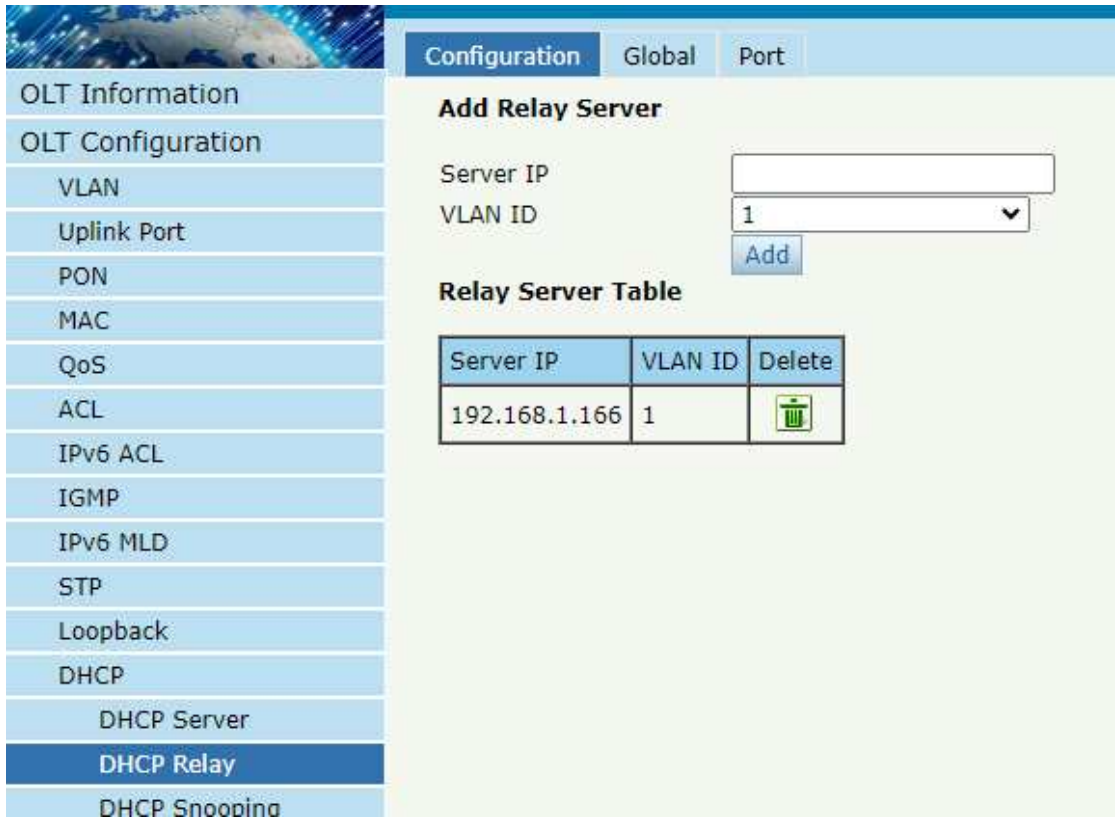


Figure 3-12-3: DHCP Relay Configuration

3.12.2.2 Global

OLT Configuration → DHCP→DHCP Relay → Global

This page is used to configure the Option 82 function of DHCP relay. After receiving the DHCP request message, the DHCP relay will process the message according to whether it contains Option 82 and the processing strategy and padding mode configured by the user, and forward the processed message to the DHCP server.

The screenshot shows the 'Global' configuration tab for DHCP Relay. On the left is a navigation menu with items like OLT Information, VLAN, Uplink Port, and DHCP Relay (which is highlighted). The main content area is titled 'DHCP Relay Settings' and includes radio buttons for 'Option82 Control' (Disable is selected) and 'Option82 Strategy' (Keep is selected). Below this is a table for 'VLAN option82 Profile (Format Profile) Bind' with columns for VLAN, Profile Id, and Profile Name. The first row shows VLAN ID '1' and an empty Profile Name field. 'Add' and 'Delete' buttons are at the bottom of the table.

VLAN	Profile Id	Profile Name
VLAN ID	1	Profile

Figure 3-12-4: DHCP Relay Global

3.12.2.3 Port

OLT Configuration → DHCP→DHCP Relay → Port

This page is used to configure the Option 82 line ID and remote ID of the port.

The screenshot shows the 'Port' configuration tab for DHCP Relay. The main content area is titled 'DHCP Relay Port Configuration' and contains a table with columns for Port ID, Option82 Circuit ID, and Option82 Remote ID. The table has four rows for ports GE1, GE2, GE3, and PON1, each with empty input fields for the IDs. 'Submit' and 'Reset' buttons are located above the table.

Port ID	Option82 Circuit ID	Option82 Remote ID
GE1		
GE2		
GE3		
PON1		

Figure 3-12-5: DHCP Relay Port

3.12.3 DHCP Snooping

DHCP Snooping is a security feature of DHCP that ensures that clients obtain IP addresses from legitimate servers and record the correspondence between DHCP client IP and MAC.

3.12.3.1 Bind List

OLT Configuration → DHCP→DHCP Snooping → Bind List

This page is used to display the correspondence information between DHCP client IP and MAC detected by DHCP.

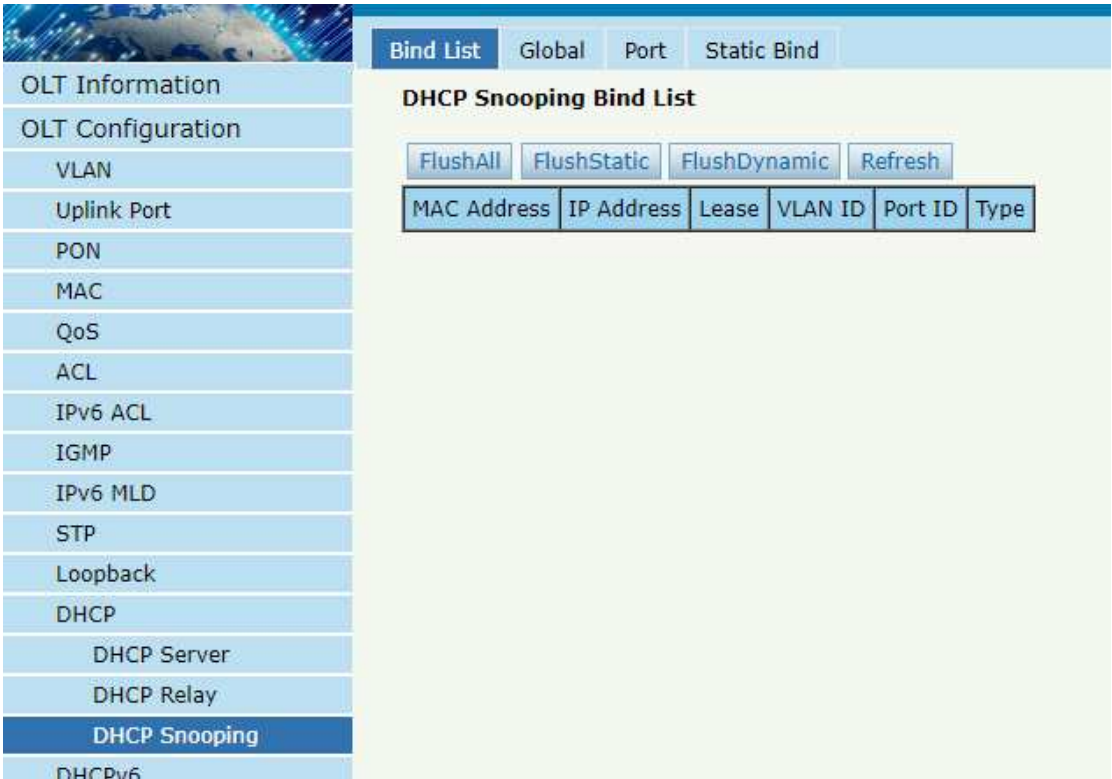


Figure 3-12-6: Bind List

3.12.3.2 Global

OLT Configuration → DHCP→DHCP Snooping → Global

The global configuration of DHCP Snooping mainly includes Option 82 global settings, listening VLAN configuration, and VLAN based Option 82 template (format template) binding.

The screenshot displays the 'Global' configuration page for DHCP Snooping. The left sidebar contains a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCP Server, DHCP Relay, **DHCP Snooping**, DHCPv6, IPv6 SLAAC, IP Route, IPv6 Route, WAN, and ADD TEL. The main configuration area is titled 'Global' and includes the following sections:

- DHCP Snooping Configuration:** A dropdown menu for 'DHCP Snooping' is set to 'Enable'. Below it are 'Submit' and 'Reset' buttons.
- DHCP Snooping Settings:** This section contains several radio button options:
 - Option82 Control: ☐ Disable, ☒ Enable
 - Option82 Strategy: ☐ Drop, ☒ Keep, ☐ Replace, ☐ Merge
 - Overspeed Recovery: ☐ Disable, ☒ Enable
 - Overspeed Recovery Interval: A text input field with '30' and a unit '(3-3600s)'.
 - Binding Delete Time: A text input field with '60' and a unit '(1-3600s)'.
 'Submit' and 'Reset' buttons are at the bottom of this section.
- VLAN ID List:** A table with a header 'List' and a single entry 'vlan3000'. Below the table is a 'VLAN ID' dropdown menu set to '1', with 'Add' and 'Delete' buttons.
- VLAN option82 Profile(Format Profile) Bind:** A table with headers 'VLAN', 'Profile Id', and 'Profile Name'. Below the table is a 'VLAN ID' dropdown menu set to '1', a 'Profile' dropdown menu, and 'Add' and 'Delete' buttons.

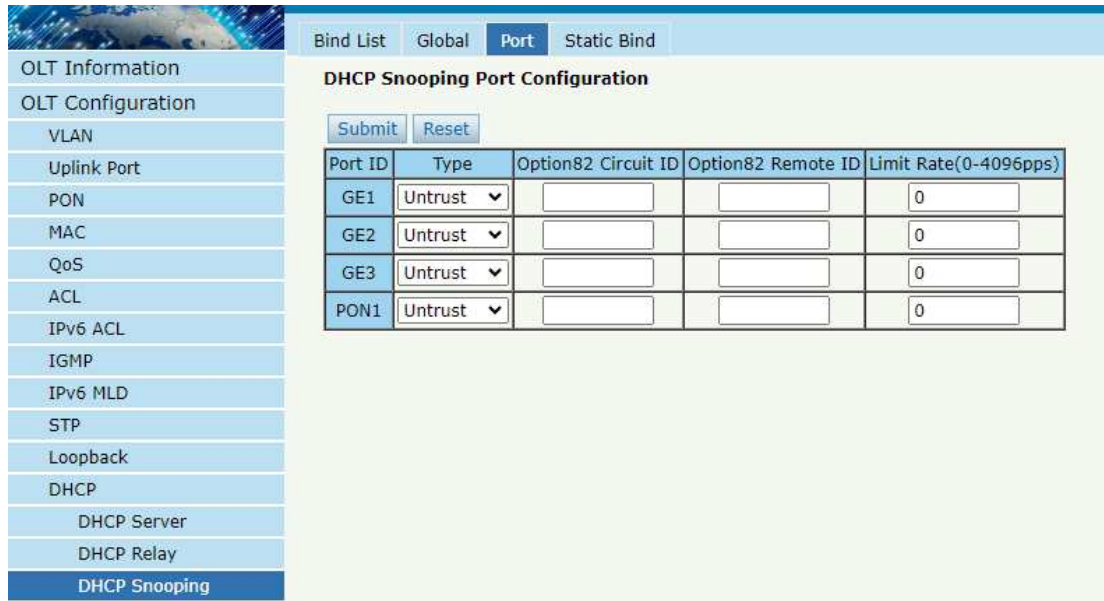
Figure 3-12-7: DHCP Snooping Global

3.12.3.3 Port

OLT Configuration → DHCP→DHCP Snooping → Port

This interface is used to configure DHCP Snooping parameters for ports that include port types, Option 82 parameters, and rate limits.

All ports default to untrusted ports. Option 82 parameters, 'Option 82 Circuit ID' and 'Option 82 Remote ID', are valid for untrusted ports. 'Restricted speed' refers to the maximum speed at which a port can receive DHCP packets.



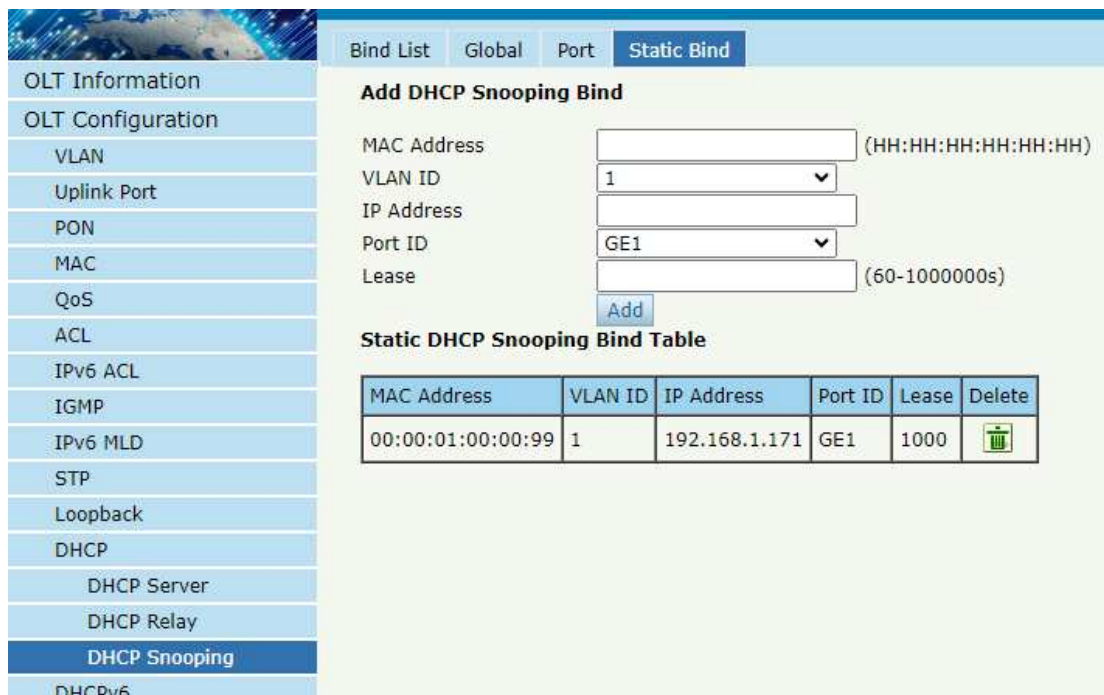
Port ID	Type	Option82 Circuit ID	Option82 Remote ID	Limit Rate(0-4096pps)
GE1	Untrust			0
GE2	Untrust			0
GE3	Untrust			0
PON1	Untrust			0

Figure 3-12-8: DHCP Snooping Port

3.12.3.4 Static Bind

OLT Configuration → DHCP → DHCP Snooping → Static Bind

When a host needs a fixed IP address allocated by a DHCP server from a specific port, DHCP listening for static binding is very useful.



MAC Address	VLAN ID	IP Address	Port ID	Lease	Delete
00:00:01:00:00:99	1	192.168.1.171	GE1	1000	

Figure 3-12-9: Static Bind

3.13 DHCPv6

DHCPv6 is a network protocol used to configure IPv6 addresses, IPv6 prefixes, DNS, domains, and other network parameters for hosts running on IPv6 networks.

3.13.1 DHCPv6 Server

3.13.1.1 DHCPv6 Bind Information

OLT Configuration → DHCPv6→DHCPv6 Server → DHCPv6 Bind Information

The DHCPv6 binding information displays the IPv6 address assigned to the host.

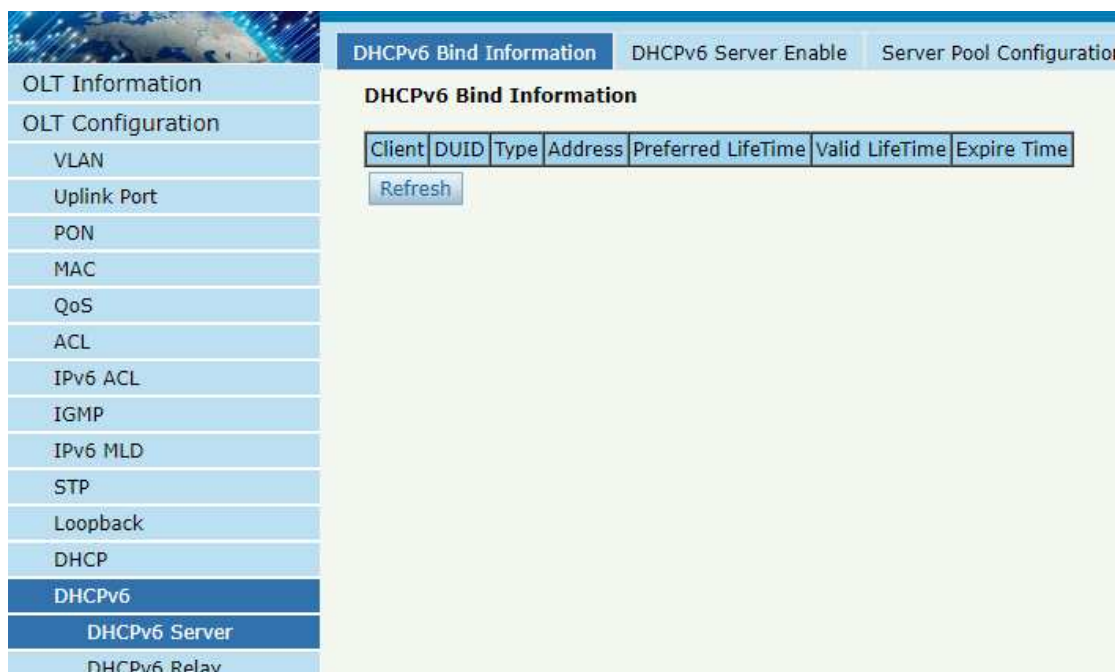


Figure 3-13-1: DHCPv6 Bind Information

3.13.1.2 DHCPv6 Server Enable

OLT Configuration → DHCPv6→DHCPv6 Server → DHCPv6 Server Enable

Select VLAN, fill in the DHCPv6 pool name, enable the DHCPv6 service, and then add the VLAN to the table. Before enabling the DHCPv6 service, it is necessary to complete the configuration of VLAN IPv6 address and server address pool information.

The screenshot shows the 'DHCPv6 Server Enable' configuration page. On the left is a navigation menu with options like OLT Information, VLAN, Uplink Port, PON, MAC, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCPv6 (selected), DHCPv6 Server, DHCPv6 Relay, IPv6 SLAAC, IP Route, and IPv6 Route. The main content area has three tabs: 'DHCPv6 Bind Information', 'DHCPv6 Server Enable' (active), and 'Server Pool Configuration'. Under 'DHCPv6 Server Configuration', there are fields for VLAN ID (1), Pool Name, Preference Value (unchecked), and Rapid Commit (On/Off radio buttons). Below this is the 'DHCPv6 DUID Configuration' section with fields for DUID Type (Ilt), Enterprise Number, and Identifier. A 'DHCPv6 DUID Table' shows the DUID Type as Ilt and the DUID as 00:01:00:01:c7:92:bc:ba:00:50:c2:01:02:03. At the bottom is the 'DHCPv6 Interface Information' table with columns for VLAN ID, Using Pool, Preference Value, Rapid Commit, and Delete, and a Refresh button.

Figure 3-13-2: DHCPv6 Server Enable

3.13.1.3 Server Pool Configuration

OLT Configuration → DHCPv6→DHCPv6 Server → Server Pool Configuration
 DHCPv6 address pool specifies the range of IPv6 addresses. Here, you can also provide the effective time, preferred time, DNS, and domain for DHCPv6 clients.

The screenshot shows the 'Server Pool Configuration' page. The navigation menu is the same as in Figure 3-13-2, with 'DHCPv6 Server' selected. The main content area has four tabs: 'DHCPv6 Bind Information', 'DHCPv6 Server Enable', 'Server Pool Configuration' (active), and 'Prefix Delegation Configuration'. Under 'DHCPv6 Server Pool Setting', there are fields for Pool Name, Start IPv6 Address, End IPv6 Address, Valid LifeTime (172800s), Preferred LifeTime (86400s), DNS Server, and Domain Name. Below this is the 'DHCPv6 Server Pool' table with columns for Pool Name, Start IPv6 Address, End IPv6 Address, Valid LifeTime, Preferred LifeTime, DNS Server, Domain Name, Edit, and Delete.

Figure 3-13-3: Server Pool Configuration

3.13.1.4 Prefix Delegation Configuration

OLT Configuration → DHCPv6 → DHCPv6 Server → Prefix Delegation Configuration

This page supports configuring DHCPv6 prefix proxy, which can configure the prefix information, address prefix validity time, and preferred time allocated by the DHCPv6 service.

The screenshot displays the 'Prefix Delegation Configuration' page in the OLT web interface. On the left is a sidebar menu with options including OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCPv6, DHCPv6 Server, and DHCPv6 Relay. The main area features four tabs: DHCPv6 Bind Information, DHCPv6 Server Enable, Server Pool Configuration, and Prefix Delegation Configuration. The 'Prefix Delegation Configuration' tab is selected, showing the 'DHCPv6 Prefix Delegation Setting' section. This section includes input fields for 'Pool Name' (a dropdown), 'Prefix Delegation' (a text box), 'PD ValidLifeTime' (a text box with a default value of '(60-4294967295)s'), and 'PD PreferLifeTime' (a text box with a default value of '(60-4294967295)s'). There are 'Submit' and 'Reset' buttons below these fields. Below the settings is the 'DHCPv6 Server Pool' section, which contains a table with the following columns: Pool Name, prefix address, Valid LifeTime, Preferred LifeTime, and Delete.

Figure 3-13-4: Prefix Delegation Configuration

3.13.2 DHCPv6 Relay

OLT Configuration → DHCPv6 → DHCPv6 Relay → Configuration

This page supports dynamically obtaining network configuration parameters such as IPv6 address/prefix through DHCPv6 relay, and supports Option 37 and Option 38 functions.

Configuration

DHCPv6 Global Configuration

option37

option38

Add DHCPv6 Relay Server

VLAN ID

Server IPv6

Remote id

Subscriber id

DHCPv6 Realy Server Table

VLAN ID	Server IPv6	Remote id	Subscriber id	Delete
---------	-------------	-----------	---------------	--------

Figure 3-13-5: DHCPv6 Relay Configuration

3.14 IPv6 SLAAC

IPv6 networks use the ICMPv6 routing discovery protocol. When an IPv6 host connects to the network for the first time, it automatically configures based on the information obtained from route discovery/prefix discovery. Route discovery/prefix discovery refers to the ability of a host to discover local routers and obtain configuration parameters such as neighbor information and current network prefix from RA packets when connected to an IPv6 network.

3.14.1 IPv6 SLAAC

OLT Configuration → IPv6 SLAAC→IPv6 SLAAC

When an IPv6 host uses stateless address configuration (stateless address auto configuration), the OLT will send it an RA packet. This page is used to configure the parameters of RA messages.

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000ms)	Suppress RDNSS	M	O	Router Preference	MTU (1280-1500)
1	☒	200	600	30000	☒	☐	☐	MEDIUM	1500
3000	☒	200	600	30000	☒	☐	☐	MEDIUM	1500

Figure 3-14-1: IPv6 SLAAC

3.14.2 IPv6 SLAAC Prefix

OLT Configuration → IPv6 SLAAC→IPv6 SLAAC Prefix

When IPv6 hosts use stateless address auto configuration, OLT can provide IPv6 prefix. The host will generate an IPv6 address with a prefix.

VLAN ID	ND Prefix	Valid LifeTime	Preferred LifeTime	Delete
---------	-----------	----------------	--------------------	--------

Figure 3-14-2: IPv6 SLAAC Prefix

3.14.3 RDNSS

OLT Configuration → IPv6 SLAAC→RDNSS

Recursive DNS Server (RDNSS) is a DNS server in the IPv6 network protocol. This interface supports configuring RA messages to carry recursive DNS server information.

RDNSS Configuration

VLAN ID: (0-8)

Sequence:

Lifetime: (60-4294967295s)

DNSServer:

Notice: Lifetime must be at least or equal 3 * sent RA time

RDNSS Table

VLAN ID	Sequence	DNSServer	DNSServer	DNSServer	Lifetime	Delete
Refresh						

Figure 3-14-3: RDNSS

3.15 IP Route

3.15.1 VLAN IP

OLT Configuration → IP Route → VLAN IP

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

VLAN IP Configuration

VLAN ID:

IP Address:

Subnet Mask:

VLAN IP Table

VLAN ID	IP Address	Subnet Mask	Delete
1	192.168.6.111	255.255.255.0	Delete
6	192.168.8.111	255.255.255.0	Delete

Figure 3-15-1: VLAN IP

3.15.2 Static Route

OLT Configuration → IP Route → Static Route

Static routing is a form of routing where routers use manually configured routing items. In many cases, static routing is manually configured by network administrators. Unlike dynamic routing, static routing is fixed and will not change even if the network environment is changed or reconfigured.

After configuring the VLAN IP address, adding static routing can enable communication between networks on different network segments.

The screenshot displays the 'Static Route' configuration page in the OLT Web User Interface. On the left, a sidebar lists configuration categories: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, and IP Route (which is currently selected). The main content area features two tabs: 'VLAN IP' and 'Static Route'. The 'Static Route' tab is active, showing an 'Add Static Route' section with three input fields for 'Destination IP', 'Destination Mask', and 'Gateway', and an 'Add' button. Below this is a 'Static Route Table' containing a single entry with the following details:

Destination IP	Destination Mask	Gateway	Delete
0.0.0.0	255.255.255.0	192.168.6.1	

Figure 3-15-2: Static Route

3.16 IPv6 Route

3.16.1 VLAN IPv6

OLT Configuration → IPv6 Route → VLAN IPv6

Configure IPv6 addresses for the created VLAN.

VLAN IPv6 IPv6 Static Route

VLAN IPv6 Configuration

VLAN ID:

IPv6 Address:

Prefixlen:

VLAN IPv6 Table

VLAN ID	IPv6 Address	Prefixlen	Delete
1	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		
0	fe80::250:c2ff:fe01:203		

Figure 3-16-1: VLAN IPv6

3.16.2 IPv6 Static Route

OLT Configuration → IPv6 Route → IPv6 Static Route

This page is used to manually add IPv6 static routing. Even if the network topology has changed, static routing will not alter the configuration.

OLT Information

OLT Configuration

- VLAN
- Uplink Port
- PON
- MAC
- QoS
- ACL
- IPv6 ACL
- IGMP
- IPv6 MLD
- STP
- Loopback
- DHCP
- DHCPv6
- IPv6 SLAAC
- IP Route
- IPv6 Route**

VLAN IPv6 **IPv6 Static Route**

Add IPv6 Static Route

Destination IPv6

Destination Prefixlen

Gateway

Add

IPv6 Static Route Table

Destination IPv6	Destination Prefixlen	Gateway	Delete
6000::	64	2000::1	

Figure 3-16-2: IPv6 Static Route

3.17 WAN

This function is used to set the OLT working mode to three layers, which can be used as a router, with GE3 as the WAN side, PON, GE1, and GE2 as the LAN side. The OLT can perform DHCP, PPPOE, and static IP upstream for internet access.

3.17.1 WAN

OLT Configuration → WAN → WAN

This page is used to configure WAN and display WAN business status.

Figure 3-17-1: WAN Status

3.17.2 LAN

OLT Configuration → WAN → LAN

This page is configured with LAN side IP address and DHCP server.

Figure 3-17-2: LAN

3.17.3 NAT

OLT Configuration → WAN → NAT

This page is used to configure the routing NAT mode for DMZ hosts.

Figure 3-17-3: NAT

3.18 ARP Table

Mainly displays OLT ARP table and ARP restriction function.

3.18.1 ARP Table

OLT Configuration → ARP Table → ARP Table

This page displays the OLT ARP table and allows manual addition of MAC.

The screenshot shows the 'ARP Table' configuration page. On the left is a navigation menu with items like 'OLT Information', 'VLAN', 'Uplink Port', 'PON', 'MAC', 'QoS', 'ACL', 'IPv6 ACL', 'IGMP', 'IPv6 MLD', 'STP', 'Loopback', 'DHCP', 'DHCPv6', 'IPv6 SLAAC', 'IP Route', 'IPv6 Route', 'WAN', and 'ARP Table' (which is highlighted). The main content area has two tabs: 'ARP Table' and 'ARP Restriction'. The 'ARP Table' tab is active, showing an 'ARP Config' section with fields for 'IP Address' (with a hint '(A.B.C.D)'), 'MAC Address' (with a hint '(HH:HH:HH:HH:HH:HH)'), 'Type' (radio buttons for 'Static' and 'Dynamic', with 'Static' selected), and 'Interface' (a dropdown menu showing 'WAN'). There are 'Add' and 'Delete' buttons below these fields. Below the config section is an 'ARP Table' section with 'Refresh' and 'Clean' buttons. It contains a table with the following data:

IP Address	MAC Address	Type	Interface	Delete
192.168.6.124	a8:a1:59:98:eb:87	Dynamic	Vlan1	

Figure 3-18-1: ARP Table

3.18.2 ARP Restriction

OLT Configuration → ARP Table → ARP Restriction

This page mainly configures the ARP learning rate and ARP restriction rules.

The screenshot shows the 'ARP Restriction' configuration page. The navigation menu on the left is the same as in Figure 3-18-1. The main content area has two tabs: 'ARP Table' and 'ARP Restriction'. The 'ARP Restriction' tab is active. It contains an 'ARP Rate Limit' section with an 'ARP Rate' field set to '128' (with a hint '(pps)') and a 'Submit' button. Below this is an 'ARP Restriction Rules' section with an 'Access List ID' field (hint '(1-100)'), two checkboxes for 'Source MAC' and 'Source IP' (both are unchecked), and corresponding input fields for MAC address (hint '(HH:HH:HH:HH:HH:HH)') and IP address with a 'Mask' field. There is an 'Add' button below these fields. At the bottom is an 'ARP Restriction Table' section with a table header:

List ID	Source MAC	Source IP	Delete
---------	------------	-----------	--------

Figure 3-18-2: ARP Restriction

Chapter 4 ONU Configuration

This chapter is about the ONU management by OLT.

4.1 ONU AuthList

4.1.1 ONU List

ONU Configuration → ONU AuthList → ONU List

All registered ONUs will be displayed in this interface. You can check ONU using profile, Registration mode and do some operations on every ONU.

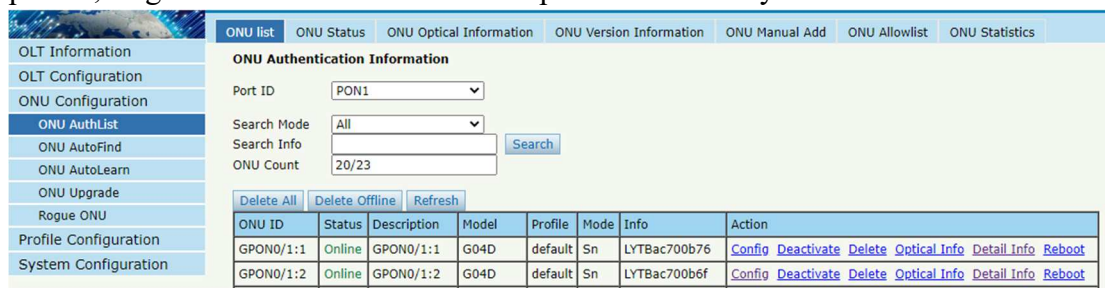


Figure 4-1-1: ONU List

4.1.1.1 Config

ONU Configuration → ONU AuthList → ONU List → Config

Configure ONU parameter information which you selected.

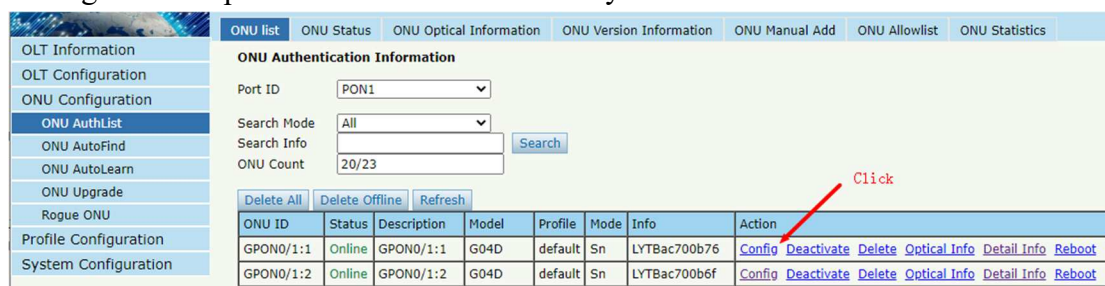


Figure 4-1-2: Configure ONU

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.

ONU Tcont Information (PON:1 ONU:24)

Tcont ID	Name	DBA Profile	Action
1	tcont_1	default1	Delete

Add ONU Tcont

Tcont ID	2
Tcont Name	
DBA Profile Name	default1
Commit	

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.

ONU Gemport Info (PON:1 ONU:24)

Gemport ID	Name	Tcont	State	UpQueueMapId	DownQueueMapId	Action
1	gem_1	1	Enable	N/A	N/A	Delete

Add ONU Gemport

Gemport ID	2
TcontID	1
Gemport Name	
UpQueueMapId	N/A
DownQueueMapId	N/A
State	Enable
Commit	

ONU Gemport Rate Limit Info

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

ONU Gemport Rate Limit Configuration

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

Figure 4-1-4: Create gemport

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 gemport ID.

ONU Service Information (PON:1 ONU:24)

ServiceName	Gemport	Vlan Mode	Vlan List	Port	Action
ser_1	1	Tag	3000	N/A	Delete

Add ONU Service

ServiceName	ser_2
Gemport ID	1
Vlan Mode	Tag
Vlan List	3000 (X,X or X-X;0 for all;max 12 vlans)
PortType	N/A

[Commit](#)

Figure 4-1-5: Create service

4.1.1.1.4 PortVlan

ONU Configuration → ONU AuthList → ONU List → Config → PortVlan

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

ONU PortVlan Info (PON:1 ONU:24)

PortName	Mode	Vlan	Vlan Priority(tag)	Default Vlan(hybrid)	Default Priority(hybrid)	CVlan(translate)	CVlan Priority(translate)	SVlan(translate)	SVlan Priority(translate)	Action
veip_1	Transparent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete

Add ONU PortVlan

Mode	Transparent
PortType	Eth
Port Id	

[Commit](#)

Figure 4-1-6: Configure port VLAN mode

4.1.1.1.5 Multicast

ONU Configuration → ONU AuthList → ONU List → Config → Multicast

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

Multicast VLAN

ONU ID	Vlan List	Action
24	N/A	Delete All

(100,103 or 105-108;max 12 vlans)

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

Multicast vlan tag strip

Vlan Mode	Port	Action

[Add](#) (eth number)

Figure 4-1-7: Configure multicast VLAN

4.1.1.1.6 Port

ONU Configuration → ONU AuthList → ONU List → Config → Port

Set the basic configuration and speed limit of the ONU LAN port.

Please note that you can select the LAN port to configure on the ONU Port.

Port Basic Configuration (PON:1 ONU:24)

ONU Port:

☒ Admin Status

☐ Loopback

Port Speed:

MAC Limit(0-255):

Upstream Rate Limit Config

Upstream Rate-Limit CIR (kbps):

Upstream Rate-Limit PIR (kbps):

Downstream Rate Limit Config

Downstream Rate-Limit CIR (kbps):

Downstream Rate-Limit PIR (kbps):

Port Status

Interface	Speed Status	Speed Config	Link Status	Admin Status	LOOP status	Max Frame	Upstream Rate-Limit (kbps)	Downstream Rate-Limit (kbps)
LAN1	unknown	auto	down	enable	disable	1632	CIR:0 PIR:0	CIR:0 PIR:0
LAN2	unknown	auto	down	enable	disable	1632	CIR:0 PIR:0	CIR:0 PIR:0

Figure 4-1-8: ONU Port Configuration

4.1.1.1.7 Ip Host

ONU Configuration → ONU AuthList → ONU List → Config → Ip Host

Create IP host for ONU wan connection. It is used for ONU management.

Iphost Configuration Info (PON:1 ONU:24)

Iphost ID	Description	IP Mode	IP Address	Mask	Gateway	DNS1	DNS2	VLAN	Priority	Action
1		DHCP								

Iphost Config

Iphost ID:

Description:

IP Mode:

DNS1(A.B.C.D):

DNS2(A.B.C.D):

Iphost VLAN Config

VLAN(0-4094):

Priority(1-15):

Figure 4-1-9: Configure IP host

4.1.1.1.8 MAC

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

Configure the MAC counts limit based on ONU or Gempport, and 0 means there is no

limit.

This interface can also display the learned MAC addresses of each LAN port of the ONU.

ONU MAC Limit Configuration (PON:1 ONU:24)

MAC Limit(0-255)

GEM Mac limit configuration

gemport MAC Counts(0-128, 0 for not limit)

Onu eth mac learned info

onu Port

Index	Action	Type	Age	Address
-------	--------	------	-----	---------

Figure 4-1-10: MAC Limit

4.1.1.1.9 WAN

ONU Configuration → ONU AuthList → ONU List → Config → WAN

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

WAN Connect Table (PON:1 ONU:24)

Index	Mode	IP Version	Service Mode	Status	MAC Address	Configuration Information
1	route	ipv4	internet	Disconnected	1C:EF:03:04:A9:49	QoS Enable:disable,MTU:1500,Connect Mode:DHCP, Nat:enable, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable, Bind:lan1

WAN Connect Parameter Configuration

WAN Index

Mode

IP Version

VLAN Mode

VLAN ID (Tag:0-4095;Transparent:1-4095)

VLAN Cos (0-7)

QinQ Enable

QinQ TPID (1-65534)

SVLAN ID (1-4095)

SVLAN Cos (0-7)

QoS Enable

Service Mode

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

WAN Connect running-config

Index	onu running-config	Delete
1	Connect Type:route,IP Version:ipv4,Service Mode:internet,QoS Enable:disable,MTU:1500,Connect Mode:DHCP, Nat:enable, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable, Bind:lan1	Delete

Figure 4-1-11: Configure WAN

4.1.1.1.10 DHCP Server

ONU Configuration → ONU AuthList → ONU List → Config → DHCP Server

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

ONU list	ONU Status	ONU Optical Information	ONU Version Information	ONU Manual Add	ONU Allowlist	ONU Statistics
OLT Information	Tcont	Gemport	Service	PortVlan	Multicast	Port
OLT Configuration	SIP	POTS	Misc	Misc2	TR069	Security
ONU Configuration	Loopback Detection					
ONU AuthList	DHCP Server Configuration (PON:1 ONU:24)					
ONU AutoFind	LAN IP Address: 192.168.1.1					
ONU AutoLearn	LAN Subnet Mask: 255.255.255.0					
ONU Upgrade	DHCP Server: Enable					
Rogue ONU	Lease Time: 86400 (0-4294967295)					
Profile Configuration	Beginning IP Address: 192.168.1.33					
System Configuration	Ending IP Address: 192.168.1.254					
	Pool Type: PC					
	Master DNS: 202.96.128.86					
	Slave DNS: 8.8.8.8					
	Gateway: 192.168.1.1					
	Submit					
	LAN IPv6 Address: fe80::1					
	Prefix Mode: Static					
	Static IPv6 Address: 2099::					
	LAN Prefixlen: 64 (48-64)					
	DHCP Server IPv6: Enable					
	Preference Time: 10000 (0-4294967295)					
	Valid Time: 20000 (0-4294967295)					
	Beginning IPv6 Address: 0001:0001:0001:0001 (HHHH:HHHH:HHHH:HHHH)(Last 64 bits of IP address)					
	Ending IPv6 Address: 0002:0002:0002:0002 (HHHH:HHHH:HHHH:HHHH)(Last 64 bits of IP address)					
	Pool Type: PC					
	DNSv6 Master:					
	DNSv6 Slave:					
	IPv6 Gateway: fe80::1					
	RA: Active					
	Manage: disable					
	Other: enable					
	Max Interval: 20 (1-1800)s					
	Min Interval: 10 (1-1800)s					
	Submit					

Figure 4-1-12: ONU DHCP Server

4.1.1.1.11 Bind Mode

ONU Configuration → ONU AuthList → ONU List → Config → Bind Mode

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

ONU list	ONU Status	ONU Optical Information	ONU Version Information	ONU Manual Add	ONU Allowlist	ONU Statistics
OLT Information	Tcont	Gemport	Service	PortVlan	Multicast	Port
OLT Configuration	SIP	POTS	Misc	Misc2	TR069	Security
ONU Configuration	Loopback Detection					
ONU AuthList	LAN Bind Mode Configuration (PON:1 ONU:24)					
ONU AutoFind	Port: LAN1					
ONU AutoLearn	Bind Mode: N/A					
ONU Upgrade	Submit					
Rogue ONU						
Profile Configuration						
System Configuration						

Figure 4-1-13: LAN Bind Mode Configuration

4.1.1.1.12 WIFI

ONU Configuration → ONU AuthList → ONU List → Config → WIFI

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

The screenshot shows the 'WIFI' configuration page. The top navigation bar has tabs for 'ONU list', 'ONU Status', 'ONU Optical Information', 'ONU Version Information', 'ONU Manual Add', 'ONU Allowlist', 'ONU Statistics', 'WIFI', 'VOIP', and 'SIP'. The 'WIFI' tab is selected. The left sidebar shows the configuration tree with 'ONU Configuration' expanded. The main content area displays 'WiFi Switch Configuration (PON:1 ONU:24)' and 'WiFi SSID Configuration'. The WiFi Switch Configuration includes fields for WiFi0 and WiFi1 Status, Area, Standard, Channel, Transmit Power, and Channel Width. The WiFi SSID Configuration includes fields for SSID, Name, WiFi Status, Hide Status, Network Authentication, Encrypt Type, and Shared Key. Both sections have 'Submit' buttons.

Figure 4-1-14: WIFI Configuration

4.1.1.1.13 VOIP

ONU Configuration → ONU AuthList → ONU List → Config → VOIP

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

The screenshot shows the 'VOIP' configuration page. The top navigation bar has tabs for 'ONU list', 'ONU Status', 'ONU Optical Information', 'ONU Version Information', 'ONU Manual Add', 'ONU Allowlist', 'ONU Statistics', 'WIFI', 'VOIP', and 'SIP'. The 'VOIP' tab is selected. The left sidebar shows the configuration tree with 'ONU Configuration' expanded. The main content area displays 'Voice Wan Information (PON:1 ONU:24)'. It includes fields for Voice IP Mode, IP Address, Network Mask, Default Gateway, Voice Client VLAN, and Voice Priority. There are also buttons for 'Reregister', 'Deregister', and 'Reset'.

Figure 4-1-15: Voice Wan Information

4.1.1.1.14 SIP

ONU Configuration → ONU AuthList → ONU List → Config → SIP

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

Figure 4-1-16: SIP Parameter

4.1.1.1.15 POTS

ONU Configuration → ONU AuthList → ONU List → Config → POTS

ONU VoIP POTS account, password and other VOIP parameters of POTS can be configured on this page; the length of SIP account and password can't be more than 16 characters, the length of SIP username can't be more than 32 characters.

When the connected ONU supports VOIP, the option "POTS" can be shown on this page.

Figure 4-1-17: POTS Configuration

4.1.1.1.16 Misc

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

Misc includes other features of ONUs configured by private OMCI, such as reset default, CATV control, and so on.

The screenshot shows the OLT Web User Interface. The left sidebar contains a menu with items like OLT Information, OLT Configuration, ONU Configuration, and System Configuration. The main content area is titled 'Misc Control Operation' and includes several configuration sections:

- Misc Control Operation:** Contains buttons for 'Save configuration', 'Restore default', and checkboxes for 'IGMP configuration', 'STP configuration', and 'Port isolate' with 'Submit' buttons.
- Speed Limit Configuration:** Includes input fields for 'Upstream limit' and 'DownStream limit' with a 'Submit' button.
- Mac Table Configuration:** Includes input fields for 'mac age time', 'Pon mac limit', and 'Lan mac limit' with a 'Submit' button.
- Mac Address Table:** Includes a 'Clean' button.

Figure 4-1-18: Misc Configuration

4.1.1.1.17 Misc2

ONU Configuration → ONU AuthList → ONU List → Config → Misc2

Misc2 includes the NAT type and UPnP configuration of ONUs configured by private OMCI.

The screenshot shows the OLT Web User Interface with the 'Misc2' tab selected. The main content area is titled 'Misc2 Control Operation (PON:1 ONU:24)' and includes the following configuration sections:

- ONU NAT Type:** Includes a dropdown menu for 'NAT Type' (set to NAT1) and 'Submit'/'Refresh' buttons.
- ONU UPnP Configuration:** Includes dropdown menus for 'UPnP Status' (set to disable) and 'WAN Index' (set to 1), with 'Submit'/'Refresh' buttons.

Figure 4-1-19: Misc2 Configuration

4.1.1.1.18 TR069

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

ONU TR069 is configured by private OMCI between OLT and ONU.

It supports configuring TR069 management parameters and STUN server configurations.

Figure 4-1-20: TR069 Configuration

4.1.1.1.19 Security

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

ONU Security is configured by private OMCI between OLT and ONU.

It supports you to modify ONU passwords, firewall level, and device access rules.

Please note that if you need to enable the device's access protocol, you need to first modify the firewall level to low or disabled.

Protocol	Control	Lan	Wan	Port
Ping	☐	☒	Disable	
Telnet	☐	☐	Disable	23
FTP	☐	☐	Disable	21
HTTP	☐	☒	Disable	80
HTTPS	☐	☒	Disable	443
TFTP	☐	☐	Disable	0
SSH	☐	☐	Disable	22

Figure 4-1-21: Security Configuration

4.1.1.1.20 Loopback Detection

ONU Configuration → ONU AuthList → ONU List → Config → Loopback Detection

ONU Loopback Detection is configured by private OMCI between OLT and ONU. It supports configuring the loop detection status and parameters of the ONU.

Loopback Detection Configuration (PON:1 ONU:24)

Please note that not all onu support Destination MAC Type, Port Closing Time, Alarm and Portdislooped configuration.

Status	enable	
Check Interval	1000	(1-60000)ms
Recover Interval	60	(1-1800)s
Ethernet Type	fffa	(HHHH)
VLAN ID	0	(0-4094; 0 means no vlan is configured)
Destination MAC Type	Broadcast Address	
Port Closing Time	60	(1-1800)s
Alarm	enable	
Portdislooped	enable	

Submit Refresh

Figure 4-1-22: Loopback Detection Configuration

4.1.1.2 Deactivate

ONU Configuration → ONU AuthList → ONU List → Deactivate (Activate)

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

ONU Authentication Information

Port ID: PON1

Search Mode: All

Search Info:

ONU Count: 20/24

Delete All Delete Offline Refresh

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	LYTBac700b6f	Config Activate Delete Optical Info Detail Info Reboot

Figure 4-1-23: Deactivate/Activate ONU

4.1.1.3 Delete

ONU Configuration → ONU AuthList → ONU List → Delete

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

ONU Authentication Information

Port ID: PON1

Search Mode: All

Search Info:

ONU Count: 21/24

Delete All Delete Offline Refresh

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot

Figure 4-1-24: 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.

ONU Authentication Information

Port ID: PON1

Search Mode: All

Search Info:

ONU Count: 21/24

[Delete All](#) [Delete Offline](#) [Refresh](#)

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot

ONU Optical Info

[Back](#)

Interface	pon_0/1
GEM_blocklen	48
Sf Threshold	5
Sd Threshold	9
Alarm	enable
Alarm disable interval	0
Total T-CONT number	12
Piggyback DBA rpt mode	mode 0 only
Rx optical level	-11.04
Lower rx optical threshold	onu internal policy
Upper rx optical threshold	onu internal policy
Tx optical level	1.79
Lower tx optical threshold	onu internal policy
Upper tx optical threshold	onu internal policy
ONU response time	0
Power feed voltage	3.42(V)
Laser bias current	21.40(mA)
Temperature	32.35(C)
Distance	1(m)

Figure 4-1-25: Optical Info of ONU

4.1.1.5 Detail Info

ONU Configuration → ONU AuthList → ONU List → Detail Info

Check the Detail Info of the ONU which you selected.

ONU Authentication Information

Port ID: PON1

Search Mode: All

Search Info:

ONU Count: 21/24

[Delete All](#) [Delete Offline](#) [Refresh](#)

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot

Figure 4-1-26: Click Detail info

ONU list	ONU Status	ONU Optical Information	ONU Version Information	ONU Manual Add	ONU Allowlist	ONU Statistics
OLT Information	Detail Information		Device Capability			
OLT Configuration	Submit Back Description: GPON0/1:1 Main software version: GEXv1.1.6 Standby software version: GEXv1.1.7 Vendor ID: HWTC Version: V1.0 SN: LYTbac700b76 Admin Status: unlock Battery monito: false Security mode: aes Product code: 0 Total priority queue num: 128 Total traffic schedule num: 12 Traffic management option: priority&rate controlled Operate status: enable Equipment ID: G04D OMCC Version: 128 Security capability: aes Model: N/A Survival time: N/A TotalGemPortNum: 127 SysUpTime: 991592 s Region code: 0 Product SN: N/A Chip info: 0		TCONT number: 12 GEM port number: 127 Total priority queue number: 128 up priority queue number: 96 down priority queue number: 32 Traffic scheduler number: 12 Traffic management option: priority&rate controlled Total UNI number: 4 Chip info: 4 40GE number: 0 25GE number: 0 10GE number: 0 5GE number: 0 2.5GE number: 0 GE number: 0 FE number: 3 CES UNI number: 0 POTS UNI number: 0 Video UNI number(num:slot/port): 0:0/0 WIFI UNI number: 0 XDSL UNI number: 0 IP host number: 3 IPv6 host number: 0 VEIP number: 0 Operation Id: 0 CTC spc Version: CTC 2.0 CUC spc Version: N/A ONU Type: SFU Tx power supply control: Not support			
ONU Configuration						
ONU AuthList						
ONU AutoFind						
ONU AutoLearn						
ONU Upgrade						
Rogue ONU						
Profile Configuration						
System Configuration						

Figure 4-1-27: Detail info of ONU

4.1.1.6 Reboot

ONU Configuration → ONU AuthList → ONU List → Reboot

Reboot ONU which you selected.

ONU list	ONU Status	ONU Optical Information	ONU Version Information	ONU Manual Add	ONU Allowlist	ONU Statistics																								
OLT Information	ONU Authentication Information																													
OLT Configuration	Port ID: PON1 Search Mode: All Search Info: ONU Count: 21/24 Search																													
ONU Configuration	Delete All Delete Offline Refresh																													
ONU AuthList	<table border="1"> <thead> <tr> <th>ONU ID</th> <th>Status</th> <th>Description</th> <th>Model</th> <th>Profile</th> <th>Mode</th> <th>Info</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>GPON0/1:1</td> <td>Online</td> <td>GPON0/1:1</td> <td>G04D</td> <td>default</td> <td>Sn</td> <td>LYTBac700b76</td> <td> Config Deactivate Delete Optical Info Detail Info Reboot </td> </tr> <tr> <td>GPON0/1:2</td> <td>Online</td> <td>GPON0/1:2</td> <td>G04D</td> <td>default</td> <td>Sn</td> <td>LYTBac700b6f</td> <td> Config Deactivate Delete Optical Info Detail Info Reboot </td> </tr> </tbody> </table>						ONU ID	Status	Description	Model	Profile	Mode	Info	Action	GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot	GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot
ONU ID	Status	Description	Model	Profile	Mode	Info	Action																							
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete Optical Info Detail Info Reboot																							
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot																							
ONU AutoFind																														
ONU AutoLearn																														
ONU Upgrade																														
Rogue ONU																														
Profile Configuration																														
System Configuration																														

Figure 4-1-28: Reboot ONU

4.1.2 ONU Status

ONU Configuration → ONU AuthList → ONU Status

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

ONU ID	Admin State	OMCC State	Phase State	Description	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
GPON0/1:1	enable	enable	working	GPON0/1:1	1970:01:01 08:01:18	N/A	N/A	11 11:27:39
GPON0/1:2	enable	enable	working	N/A	1970:01:12 19:23:36	N/A	Manual Deactivate	00:05:21
GPON0/1:3	enable	enable	working	NEO	1970:01:01 08:01:07	N/A	N/A	11 11:27:50
GPON0/1:4	enable	enable	working	N/A	1970:01:01 08:01:07	N/A	N/A	11 11:27:50

Figure 4-1-29: 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.

ONU ID	Description	RX Power	TX Power
GPON0/1:1	GPON0/1:1	-11.04	1.79
GPON0/1:2	N/A	-11.52	2.09
GPON0/1:3	NEO	-22.44	2.40
GPON0/1:4	N/A	-15.74	2.29

Figure 4-1-30: ONU Optical Info

4.1.4 ONU Version Information

ONU Configuration → ONU AuthList → ONU Version Information

This page displays the main and standby software versions of the ONU. You can display the version information of a batch of ONUs in the list.

ONU ID	Description	Main software version	Standby software version	Version
GPON0/1:1	GPON0/1:1	GEXv1.1.6	GEXv1.1.7	V1.0
GPON0/1:2	N/A	GEXv1.1.6	GEXv1.1.7	V1.0
GPON0/1:3	NEO	1.0.36	1.0.29	V1.0
GPON0/1:4	N/A	1.0.38	1.0.38	V3.21

Figure 4-1-31: 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.

The screenshot shows the 'Add ONU' page in the OLT web interface. The sidebar on the left lists various configuration options, with 'ONU AuthList' currently selected. The main content area has a tabbed interface with 'ONU Manual Add' active. The 'Add ONU' form includes the following fields:

- PON Port: PON1 (dropdown menu)
- ONU ID: 25 (text input)
- Auth Mode: Sn (dropdown menu)
- ONU Sn: (empty text input)
- ONU Profile: default (dropdown menu)

A 'Submit' button is located below the form fields.

Figure 4-1-32: Add ONU Manually

4.1.6 ONU Allowlist

ONU Configuration → ONU AuthList → ONU Allowlist

You can set up an allowlist on this page.

Allowlist can restrict ONU registration based on SN. It allows ONUs within one or more segments to register, while other ONUs cannot register and go online.

The screenshot shows the 'Add ONU Allowlist' page. The sidebar on the left has 'ONU AuthList' selected. The main content area has a tabbed interface with 'ONU Allowlist' active. The 'Add ONU Allowlist' section contains:

- sn: (text input)
- Endsn: (text input)
- Add: (button)

Below this is the 'ONU AllowList Table' with the following structure:

Index	Allowlist	Delete

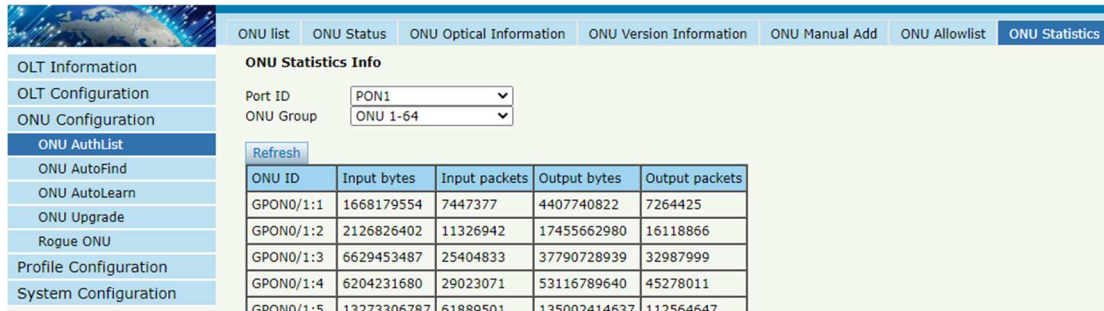
Below the table are 'Clear' and 'Refresh' buttons.

Figure 4-1-33: ONU Allowlist

4.1.7 ONU Statistics

ONU Configuration → ONU AuthList → ONU Statistics

This page displays the number of incoming and outgoing packets for batch ONUs.



ONU ID	Input bytes	Input packets	Output bytes	Output packets
GPON0/1:1	1668179554	7447377	4407740822	7264425
GPON0/1:2	2126826402	11326942	17455662980	16118866
GPON0/1:3	6629453487	25404833	37790728939	32987999
GPON0/1:4	6204231680	29023071	53116789640	45278011
GPON0/1:5	12773306787	61880501	125002414637	112564647

Figure 4-1-34: ONU Statistics Info

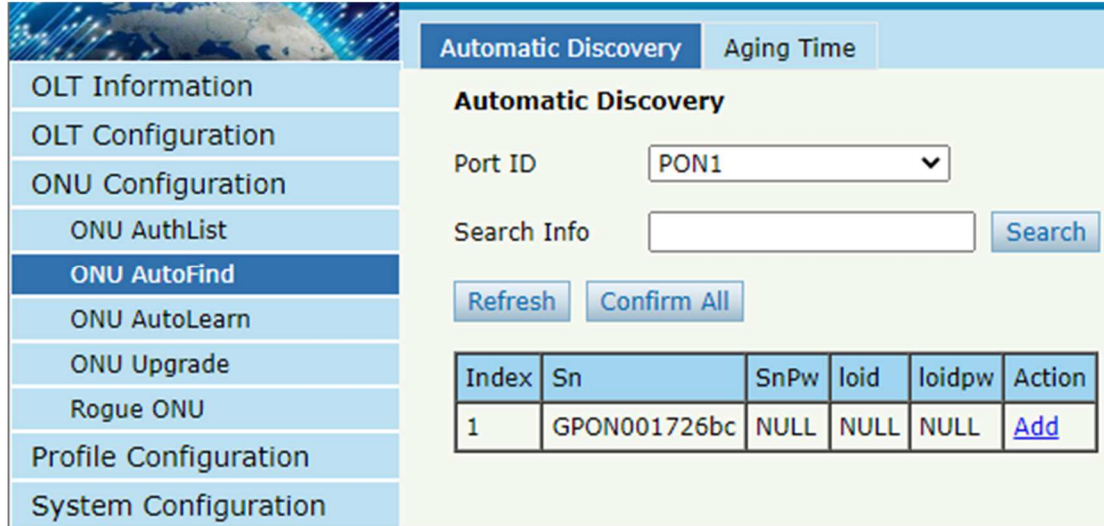
4.2 ONU AutoFind

This chapter is about the configuration and management of automatic discovery ONUs.

4.2.1 Automatic Discovery

ONU Configuration → ONU AutoFind → Automatic Discovery

All ONUs which are authenticated failed or not authenticated will be displayed in this interface. You can check the serial number of ONUs. Then click Add to authenticate ONU.



Index	Sn	SnPw	loid	loidpw	Action
1	GPON001726bc	NULL	NULL	NULL	Add

Figure 4-2-1: Automatic Discovery

Automatic Discovery		Aging Time
Add Onu		
PON Num	1	
ONU Num	25	
Auth Mode	Sn	
Onu Sn	GPON001726bc	
ONU Profile	default	
Submit		Back

Figure 4-2-2: Add ONU

4.2.2 Aging Time

ONU Configuration → ONU AutoFind → Aging Time

It allows you to configure the retention time of automatically discovered ONU information. The default configuration is 5 minutes.

Automatic Discovery		Aging Time
Aging Time Config		
Port ID	PON1	
Aging Time	300 (60-3600s)	
Commit		Refresh
PON	Aging Time	
PON1	300	

Figure 4-2-3: Aging Time

4.3 ONU AutoLearn

4.3.1 ONU AutoLearn

ONU Configuration → AutoLearn → ONU AutoLearn

ONU can automatically authenticate after enabling PON port automatic learning. At

the same time, OLT supports automatic binding templates based on PON ports. There are also plug and play enabled switches on this interface.

Note: this autolearn feature is disabled by default.

Figure 4-3-1:ONU AutoLearn

4.3.2 ONU AutoBind

ONU Configuration → AutoLearn → ONU AutoBind

Input the Equipment ID and bind the profile you need

Note: you must create a profile first.

Figure 4-3-2: Bind profile

4.3.3 ONU AutoDelete

ONU Configuration → AutoLearn → ONU AutoDelete

It supports periodic checking and deleting offline ONUs and this feature is disabled by default.

The screenshot shows the 'ONU AutoDelete' configuration page. On the left is a navigation menu with options: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, **ONU AutoLearn**, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has tabs for 'ONU AutoLearn', 'ONU AutoBind', and 'ONU AutoDelete'. The 'Offline ONU Auto Delete Configuration' section contains a form with 'Auto Delete' set to 'Disable', 'Timeout Value' set to '1440' minutes, and 'Submit' and 'Refresh' buttons.

Figure 4-3-3: ONU AutoDelete

4.3.4 ONU Scheduled Reboot

ONU Configuration → AutoLearn → ONU Scheduled Reboot

Configure ONU to automatically restart based on time.

The screenshot shows the 'ONU Scheduled Reboot' configuration page. The left navigation menu is the same as in Figure 4-3-3, with 'ONU AutoLearn' selected. The main content area has tabs for 'ONU AutoLearn', 'ONU AutoBind', 'ONU AutoDelete', **ONU Scheduled Reboot**, and 'ONU Pre Configure'. The 'Current Time' is displayed as 'Sun Sep 29 15:34:03 2024'. The 'ONU Scheduled Reboot Configuration' section includes a form with 'ONU Scheduled Reboot' set to 'enable', 'Port ID' set to 'PON1', 'Select ONU' set to '(1 or 1-3 or 1,2)', 'Schedule Reboot' set to 'Fix-Time (Monthly)', and 'Fix Time (Monthly)' set to '1' Day, '0' Hour, and '0' Minute. There are 'Submit' and 'Delete' buttons. Below this is the 'ONU Reboot Table' with a table header: ONU ID, Reboot Types, Reboot Time, and Action.

Figure 4-3-4: ONU Scheduled Reboot

4.3.5 ONU Pre-Configure

ONU Configuration → AutoLearn → ONU Pre-Configure

Manually add a pre-registration configuration to the ONU list in PON, and when the ONU is registered with that ID, it will automatically bind the configuration settings.

Add ONU Pre Configure

Port ID	PON1
ONU ID	(1 or 1-3 or 1,2)
ONU Profile	default
Line Profile	line_1
Service Profile	service

Submit Delete

ONU Pre Configure Table

Clean Refresh

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile	Action
GPON0/1:2	default	line_1	service	N/A	N/A	N/A	

Figure 4-3-5: ONU Pre-Configure

4.4 ONU Upgrade

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

4.4.1 UpLoad Image

ONU Configuration → ONU Upgrade → ONU Image

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

UpLoad Image Manual Upgrade Upgrade Status Auto Upgrade Auto Upgrade Status

Firmware Upload

Select File: Choose File No file chosen

Upload

Figure 4-4-1: Upload image

4.4.2 Manual Upgrade

ONU Configuration → ONU Upgrade → Manual Upgrade

Select the ONU image and the ONU that needs upgrade, click Commit button to start upgrading. You can upgrade the same ONU model under one PON port each time.

The screenshot shows the 'Manual Upgrade' tab selected in the top navigation bar. On the left is a sidebar menu with options: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, ONU AutoLearn, **ONU Upgrade**, Rogue ONU, Profile Configuration, and System Configuration. The main content area is titled 'Manual Upgrade' and contains two sections: 'Select ONU Firmware' and 'Upgrade ONU Firmware'. The 'Select ONU Firmware' section has a table with columns 'Firmware Name', 'Select', and 'Action'. The 'Upgrade ONU Firmware' section has a form with fields for 'PON ID' (set to 'PON1'), 'ONU ID' (with a placeholder 'x or x-y'), and 'Upgrade Mode' (set to 'Mix'). A 'Commit' button is at the bottom of this section.

Figure 4-4-2: Manual Upgrade

4.4.3 Upgrade Status

ONU Configuration → ONU Upgrade → Upgrade Status

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

The screenshot shows the 'Upgrade Status' tab selected in the top navigation bar. The sidebar menu is the same as in Figure 4-4-2, with 'ONU Upgrade' highlighted. The main content area is titled 'Upgrade Status' and contains two sections: 'Upgrade Info' and 'Upgrade Progress'. The 'Upgrade Info' section has a table with columns 'Selected', 'PON 0 ONU', and 'Action'. The 'Upgrade Progress' section has a 'Refresh' button and a table with columns: PON, ONU, Action, Status, Process, Fail Reason, and Commit Time.

Figure 4-4-3: ONU Upgrade Status

4.4.4 Auto Upgrade

ONU 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 comes online, they will be upgraded automatically.

Each type of ONU has its own equipment ID, which you can check in ONU detail info.

Note: please upload the ONU firmware in advance on the upload image interface

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

Quick Activation ONU Equipment ID

Equipment ID

Add ONU Auto Upgrade

Equipment ID

Software Version

Select ONU Firmware

Firmware Name

ONU Auto Upgrade Information

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

Figure 4-4-4: Auto Upgrade

4.4.5 Auto Upgrade Status

ONU Configuration → ONU Upgrade → Auto Upgrade Status

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

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

Auto Upgrade Status
total-0, waiting-0, running-0, finish-0

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

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

Figure 4-4-5: Auto Upgrade Status

4.5 Rogue ONU

ONU Configuration → Rogue ONU

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



Rogue ONU Configuration

OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

Rogue ONU Detect Configuration

PON	Detect state	Measurement	Alloc to scan	Auto shutdown	Operation	Algorithm
PON 1	disable	silent	all	manual	reboot	Early Detection

Change Configuration

Commit

PON	1
Detect state	Disable
Measurement	Silent
Alloc to scan	All
Auto shutdown	Disable
Shutdown type	reboot
Algorithm	Early Rogue Detector

Rogue ONU List

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

Figure 4-5-1: Rogue ONU detect

Chapter 5 Profile Configuration

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

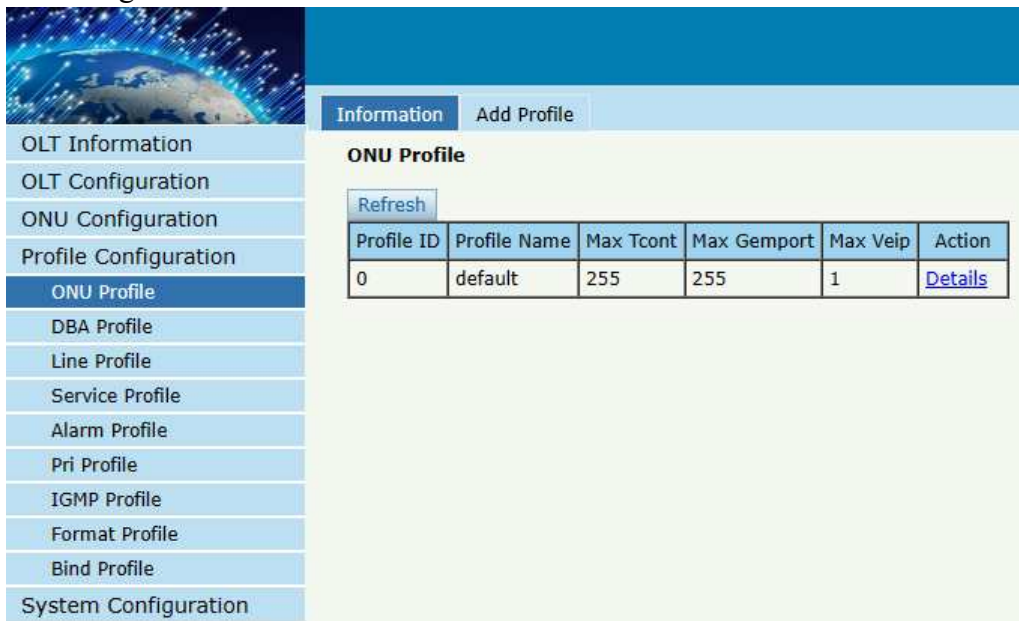
5.1 ONU Profile

The ONU profile is used for ONU authorization, and each type of 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 deleting and checking details info.



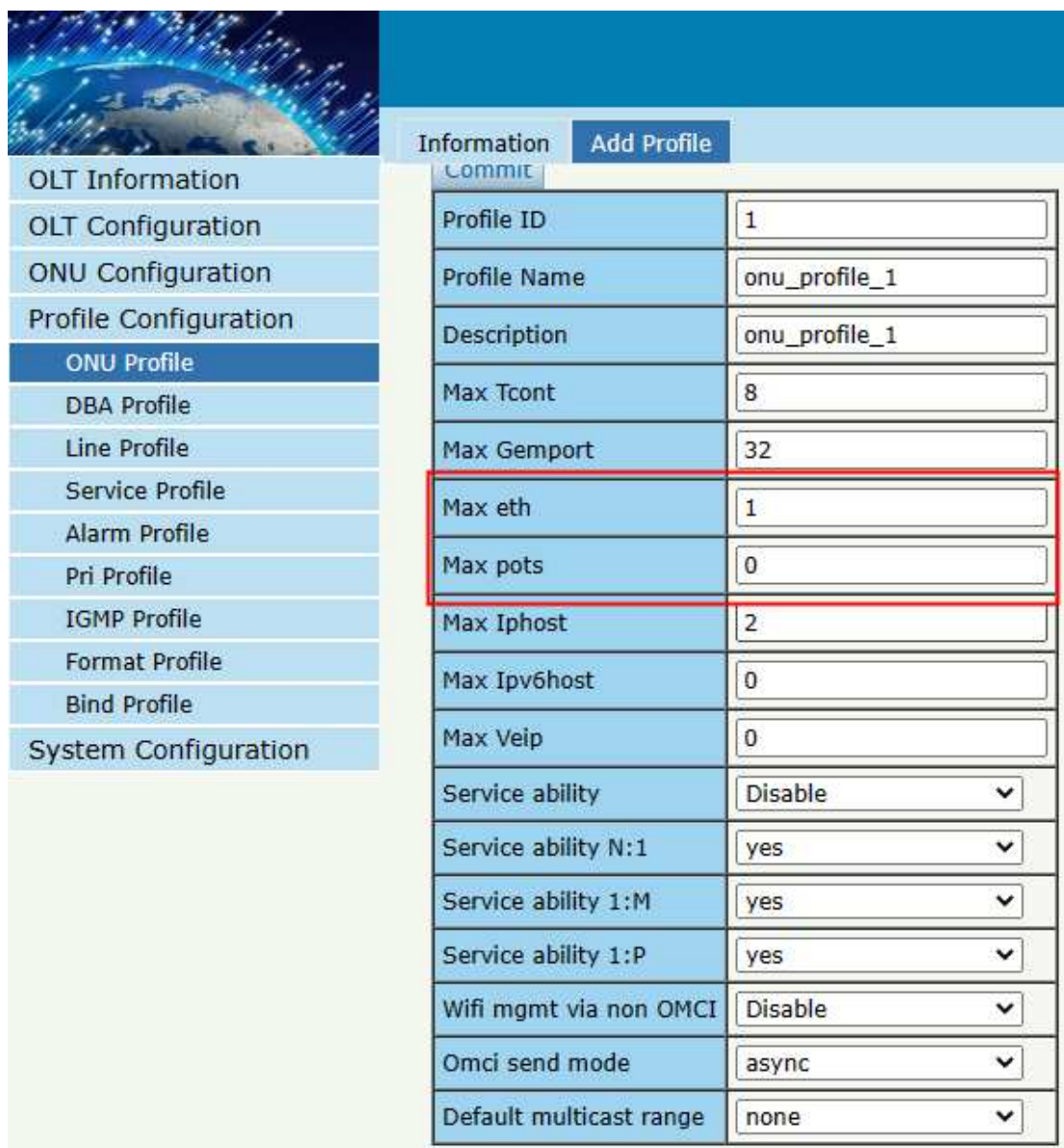
Profile ID	Profile Name	Max Tcont	Max Gemport	Max Veip	Action
0	default	255	255	1	Details

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 types. SFU type (only using bridge mode):

Usually, only need to set correct eth port and POTS port number of ONU, others can be kept default.

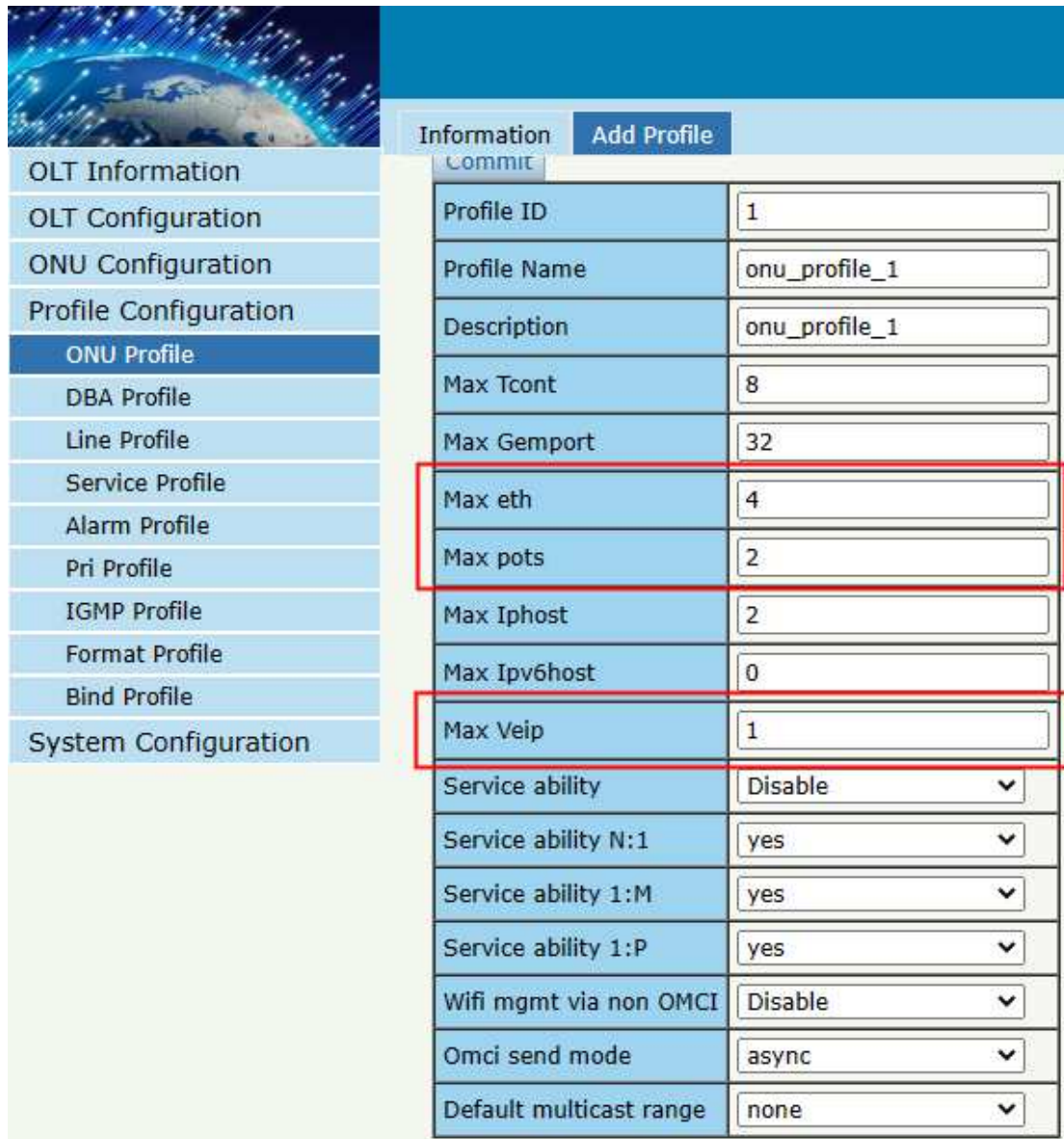


Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max Tcont	8
Max Gemport	32
Max eth	1
Max pots	0
Max Iphost	2
Max Ipv6host	0
Max Veip	0
Service ability	Disable
Service ability N:1	yes
Service ability 1:M	yes
Service ability 1:P	yes
Wifi mgmt via non OMCI	Disable
Omci send mode	async
Default multicast range	none

Figure 5-1-2: Add SFU profile

HGU type (with the routing wan connection mode):

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



Information		Add Profile
OLT Information	Profile ID	1
OLT Configuration	Profile Name	onu_profile_1
ONU Configuration	Description	onu_profile_1
Profile Configuration	Max Tcont	8
ONU Profile	Max Gemport	32
DBA Profile	Max eth	4
Line Profile	Max pots	2
Service Profile	Max Iphost	2
Alarm Profile	Max Ipv6host	0
Pri Profile	Max Veip	1
IGMP Profile	Service ability	Disable
Format Profile	Service ability N:1	yes
Bind Profile	Service ability 1:M	yes
System Configuration	Service ability 1:P	yes
	Wifi mgmt via non OMCI	Disable
	Omci send mode	async
	Default multicast range	none

Figure 5-1-3: Add HGU profile

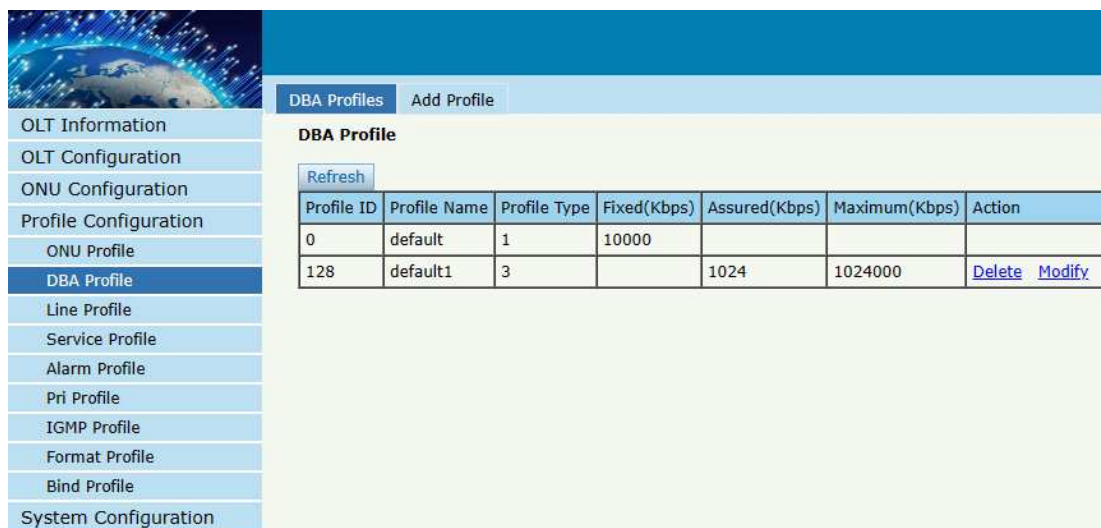
5.2 DBA Profile

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

5.2.1 DBA Profiles

Profile Configuration → DBA Profile → DBA Profiles

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



Profile ID	Profile Name	Profile Type	Fixed(Kbps)	Assured(Kbps)	Maximum(Kbps)	Action
0	default	1	10000			
128	default1	3		1024	1024000	Delete Modify

Figure 5-2-1: DBA profile list

5.2.2 Add Profile

Profile Configuration → DBA Profile → Add profile

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

BW Type	Delay Sensitive	Applicable T-CONT Types				
		Type 1	Type 2	Type 3	Type 4	Type 5
Fixed	Yes	√				√
Assured	No		√	√		√
Maximum	No			√	√	√



Profile ID	1
Profile Type	Type_3
Profile Name	dba_1
Assured(Kbps)	(128 - 1200960Kbps)
Maximum(Kbps)	(128 - 1244160Kbps)

[Commit](#)

Figure 5-2-2: Add DBA profile

5.3 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.

5.3.1 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.



The screenshot shows the 'Line Profile' configuration page. On the left is a sidebar menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (expanded), ONU Profile, DBA Profile, **Line Profile** (selected), Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area has a blue header with 'Line Profile' and 'Add Profile' buttons. Below this is a 'Line Profile' section with a 'Refresh' button and a table:

Profile ID	Profile Name	Action
1	vlan6	Details & Modify Delete

Figure 5-3-1: Line Profile list

5.3.2 Add Profile

Profile Configuration → Line profile → Add profile

Create a new line profile, set the profile name.

Line Profile Add Profile

Add Profile

Profile ID	2
Profile Name	line_2

Add

Figure 5-3-2: Add Line Profile

5.3.3 Display or Modify Line Profile Info

Profile Configuration → Line Profile → Line Profile → Details & Modify
In the interface of line profile list, click Details&Modify to edit the profile.

Line Profile Add Profile

Line Profile

Refresh

Profile ID	Profile Name	Action
1	vlan6	Details & Modify Delete
2	line_2	Details & Modify Delete
3	line_3	Details & Modify Delete

Figure 5-3-3: Modify Line Profile

5.3.3.1 Tcont

Profile Configuration → Line Profile → Line Profile → Details & Modify → Tcont

Add Tcont ID and bind DBA profile.

The screenshot displays the 'Tcont' configuration page. On the left, a sidebar lists various configuration options, with 'Line Profile' highlighted. The main content area features a top navigation bar with tabs for 'Line Profile', 'Add Profile', 'Tcont', 'Gemport', 'Service', and 'Multicast Vlan'. The 'Tcont' tab is selected, showing a section titled 'Tcont Information(Line Profile:2)'. This section contains a table with the following data:

Tcont ID	Name	DBA Profile	Action
1	tcont_1	default1	Delete

Below the table is the 'Add Tcont' section, which includes a form with the following fields:

- Tcont ID:** A text input field containing the value '2', with a range indicator '(1 ~ 255)' to its right.
- Tcont Name:** An empty text input field.
- DBA Profile Name:** A dropdown menu currently showing 'default1'.
- Add:** A blue button to submit the form.

Figure 5-3-4: Add Tcont

5.3.3.2 Gemport

Profile Configuration → Line Profile → Line Profile → Details & Modify → Gemport

Add gemport ID and bind tcont ID.

You can also limit the forwarding speed according to the Gemport ID.

Line Profile Add Profile

Tcont **Gemport** Service Multicast Vlan

Gemport Info (Line Profile: 2)

Gemport ID	Name	Tcont	COS	Downstream	State	UpQueueMapId	DownQueueMapId	Action
1	gem_1	1	N/A	default	Enable	N/A	N/A	Delete

Add Gemport

Gemport ID	2	(1~255)
Tcont ID	1	▼
Gemport Name		
COS	N/A	(0-7)
Downstream Traffic	default	▼
UpQueueMapId	N/A	(0-3)
DownQueueMapId	N/A	(0-7)
State	Enable	▼

[Add](#)

Figure 5-3-5: Add Gemport

Pri Profile
IGMP Profile
Format Profile
Bind Profile
System Configuration

ONU Gemport Rate Limit Info

Gemport ID	Name	Tcont	Upstream CIR	Upstream PIR	Downstream CIR	Downstream PIR	Action
1	gem_1	1	0	0	0	0	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 5-3-6: ONU Gemport Rate Limit Configuration

5.3.3.3 Service

Profile Configuration → Line Profile → Line Profile → Details & Modify → Service

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



The screenshot shows the 'Add Service' configuration page in the OLT web interface. The left sidebar contains a navigation menu with categories like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. The 'Line Profile' option is selected. The main content area has tabs for 'Tcont', 'Gemport', 'Service', and 'Multicast Vlan', with 'Service' being the active tab. Below the tabs, the 'ServiceInformation(Line Profile:2)' section displays a table with one service entry: 'ser_1' with Gemport 1, Tag mode, and Vlan List 6. The 'AddService' section contains input fields for 'ServiceName' (ser_2), 'Gemport ID' (1), 'Vlan Mode' (Tag), 'Vlan List' (6), and 'Port Type' (N/A). An 'Add' button is at the bottom.

ServiceName	Gemport	Vlan Mode	Vlan List	Port	Action
ser_1	1	Tag	6	N/A	Delete

AddService

ServiceName	ser_2
Gemport ID	1
Vlan Mode	Tag
Vlan List	6 (X,X or X-X;0 for all;max 12 vlans)
Port Type	N/A

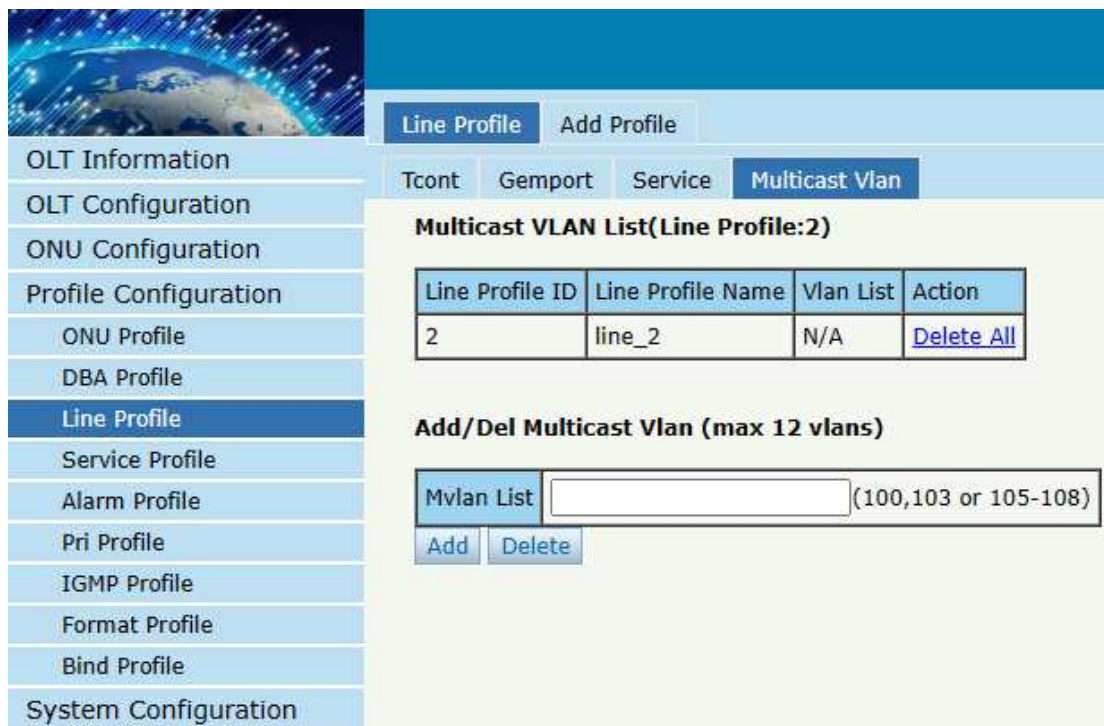
[Add](#)

Figure 5-3-7: Add Service

5.3.3.4 Multicast VLAN

Profile Configuration → Line Profile → Line Profile → Details & Modify → Multicast Vlan

Set the Multicast VLAN of ONU.



The screenshot shows the 'Configure Multicast VLAN' page. The 'Multicast Vlan' tab is selected. The 'Multicast VLAN List(Line Profile:2)' section shows a table with one entry: Line Profile ID 2, Line Profile Name line_2, and Vlan List N/A. The 'Add/Del Multicast Vlan (max 12 vlans)' section has an input field for 'Mvlan List' and 'Add'/'Delete' buttons.

Line Profile ID	Line Profile Name	Vlan List	Action
2	line_2	N/A	Delete All

Add/Del Multicast Vlan (max 12 vlans)

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

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

Figure 5-3-8: Configure Multicast VLAN

5.4 Service Profile

The service configuration file is used to configure the UNI side and multicast of the ONU.

5.4.1 Service Profile

Profile Configuration → Service Profile → Service Profile

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



The screenshot shows the 'Service Profiles' section of the OLT Web User Interface. On the left is a sidebar menu with various configuration options, including 'Service Profile' which is currently selected. The main area is titled 'Service Profile' and contains a 'Refresh' button and a table of existing profiles.

Profile ID	Profile Name	Action
1	tag6	Details & Modify Delete
2	transparent6	Details & Modify Delete

Figure 5-4-1: Service Profile List

5.4.2 Add Profile

Profile Configuration → Service Profile → Add Profile

Add a new service profile, set the profile name.

Service Profiles [Add Profile](#)

Add Profile

Profile ID

Profile Name

[Add](#)

Figure 5-4-2: Add Service profile

5.4.3 Display or Modify Line Profile Info

Profile Configuration → Service Profile → Service Profile → Details & Modify
In the interface of service profile list, click Details&Modify to edit the profile.

Service Profiles [Add Profile](#)

Service Profile

[Refresh](#)

Profile ID	Profile Name	Action
1	tag6	Details & Modify Delete
2	transparent6	Details & Modify Delete
3	srv_3	Details & Modify Delete

Figure 5-4-3: Modify service profile

5.4.3.1 PortVlan

Profile Configuration → Service Profile → Service Profile → Details & Modify → PortVlan

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

The screenshot shows the 'PortVlan' configuration page. On the left is a navigation menu with options like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The 'Service Profile' option is selected. The main area has tabs for 'PortVlan', 'Multicast VLAN Strip', 'Port', and 'Iphost Config'. The 'PortVlan' tab is active, showing 'PortVlan Info(Service Profile:1)' with a table of port configurations. Below the table is an 'Add PortVlan' form with fields for Mode (set to Transparent), PortType (set to Eth), and Port ID, followed by a 'Commit' button.

Port Name	Mode	Vlan	Vlan Priority(tag)	Default Vlan(hybrid)	Default Priority(hybrid)	CVlan(translate)	CVlan Priority(translate)	SVlan(translate)	SVlan Priority(translate)	Action
eth_0/1	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/2	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/3	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/4	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete

Add PortVlan

Mode:

PortType:

Port ID:

[Commit](#)

Figure 5-4-4: Port VLAN mode

5.4.3.2 Multicast Vlan Strip

Profile Configuration → Service Profile → Service Profile → Details & Modify → Multicast VLAN Strip

Set the multicast VLAN mode of ONU's port.

The screenshot shows the 'Multicast VLAN Strip' configuration page. The navigation menu is the same as in Figure 5-4-4. The 'Service Profile' option is selected. The main area has tabs for 'PortVlan', 'Multicast VLAN Strip', 'Port', and 'Iphost Config'. The 'Multicast VLAN Strip' tab is active, showing 'Multicast VLAN List (Service Profile:1)' with a table with columns 'Vlan Mode', 'Port', and 'Action'. Below the table is an 'Add/Del Multicast Strip' form with a 'Strip Eth Number' input field and a 'Confirm' button.

Vlan Mode	Port	Action
-----------	------	--------

Add/Del Multicast Strip

Strip Eth Number:

[Confirm](#)

Figure 5-4-5: Port Multicast VLAN Mode

5.4.3.3 Port

Profile Configuration → Service Profile → Service Profile → Details & Modify → Port

Set the rate negotiation mode of the ONULAN interface. You can also choose whether to enable ports or not, and even limit the rates of different LAN ports.

The screenshot displays the 'Port Basic Configuration' page for 'Service Profile:1'. On the left is a sidebar menu with categories: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (highlighted), and System Configuration. Under Profile Configuration, options include ONU Profile, DBA Profile, Line Profile, Service Profile (selected), Alarm Profile, Pri Profile, IGMP Profile, Format Profile, and Bind Profile. The main content area has tabs for PortVlan, Multicast VLAN Strip, Port (selected), and Iphost Config. The 'Port Basic Configuration' section includes:

- ONU Port: A dropdown menu showing 'LAN1'.
- Admin Status: A checked checkbox.
- Loopback: A checked checkbox.
- Port Speed: A dropdown menu showing 'auto'.
- A 'Submit' button.

 Below this are two sections for rate limiting:

- Upstream Rate Limit Config:** Contains two input fields for 'Upstream Rate-Limit CIR (kbps)' and 'Upstream Rate-Limit PIR (kbps)', both set to '0', and a 'Commit' button.
- Downstream Rate Limit Config:** Contains two input fields for 'Downstream Rate-Limit CIR (kbps)' and 'Downstream Rate-Limit PIR (kbps)', both set to '0', and a 'Commit' button.

Figure 5-4-6: Port Basic Configuration

5.4.3.4 Iphost Config

Profile Configuration → Service Profile → Service Profile → Details & Modify → Iphost Config

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

Service Profiles Add Profile

PortVlan Multicast VLAN Strip Port **Iphost Config**

Iphost Configuration Info(Service Profile:1)

Iphost ID	Description	IP Mode	IP Address	Mask	Gateway	DNS1	DNS2	VLAN	Priority	Action

Iphost Config

Iphost ID

Description

IP Mode

DNS1(A.B.C.D)

DNS2(A.B.C.D)

[Commit](#)

Iphost VLAN Config

VLAN(0-4904)

Priority(1-15)

[Commit](#)

Figure 5-4-7: Iphost Config

5.5 Alarm Profile

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

5.5.1 Profile Info

Profile Configuration → Alarm Profile → Profile Information

The table displays alarm profile list.

[Save](#)

Profile Information Add Profile

Alarm Profile

[Refresh](#)

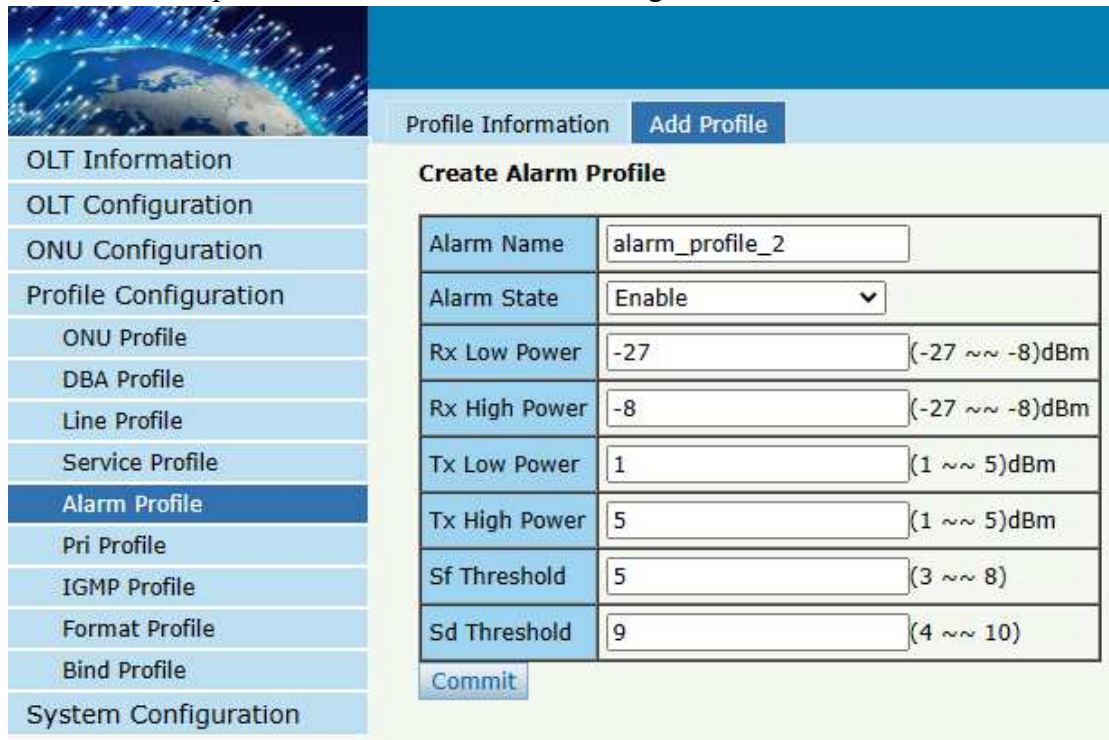
Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm_profile_1	enable	-27 ~ -8	1 ~ 5	5 / 9	Delete

Figure 5-5-1: Alarm Profile List

5.5.2 Add Profile

Profile Configuration → Alarm Profile → Add Profile

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



Profile Information **Add Profile**

Create Alarm Profile

Alarm Name	alarm_profile_2	
Alarm State	Enable ▼	
Rx Low Power	-27	(-27 ~ -8)dBm
Rx High Power	-8	(-27 ~ -8)dBm
Tx Low Power	1	(1 ~ 5)dBm
Tx High Power	5	(1 ~ 5)dBm
Sf Threshold	5	(3 ~ 8)
Sd Threshold	9	(4 ~ 10)

Commit

Figure 5-5-2: Add Alarm Profile

5.6 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.

5.6.1 Pri Profile

Profile Configuration → Pri Profile → Pri Profile

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

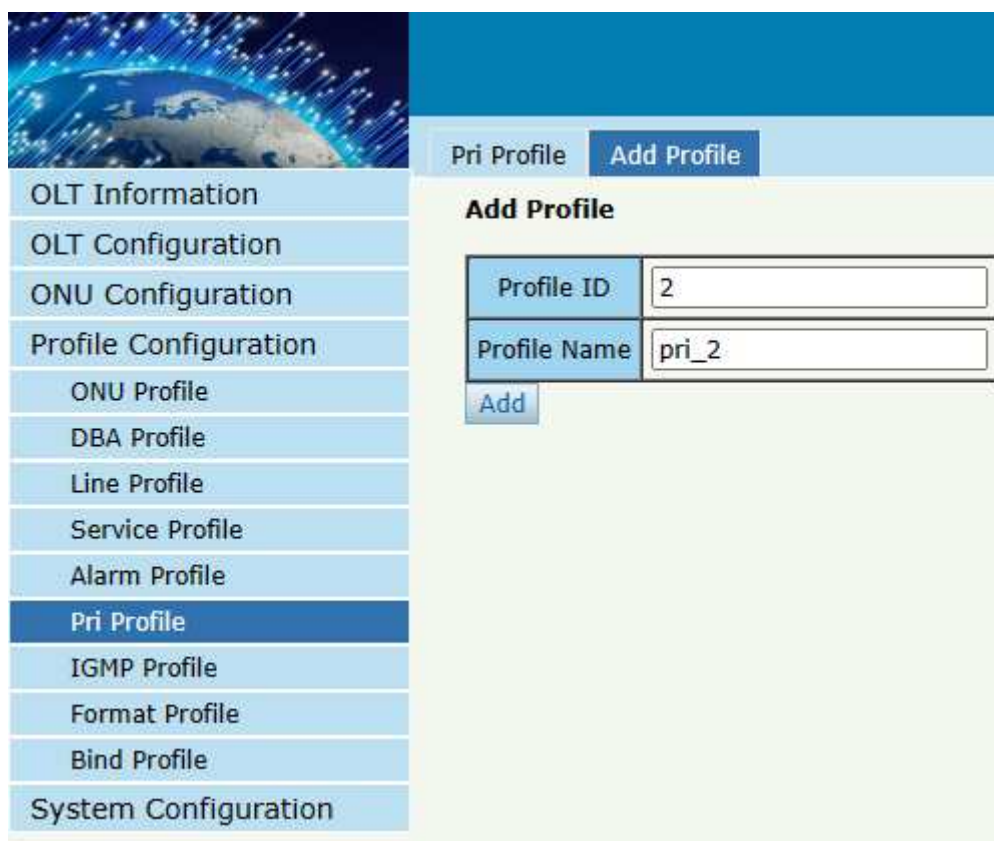


Figure 5-6-1: Pri Profile

5.6.2 Add Profile

Profile Configuration → Pri Profile → Add profile

Add a private profile, set the profile name.



OLT Information

OLT Configuration

ONU Configuration

Profile Configuration

ONU Profile

DBA Profile

Line Profile

Service Profile

Alarm Profile

Pri Profile

IGMP Profile

Format Profile

Bind Profile

System Configuration

Pri Profile Add Profile

Add Profile

Profile ID 2

Profile Name pri_2

Add

Figure 5-6-2: Add Pri Profile

5.6.3 Display or Modify Pri Profile Info

Profile Configuration → pri Profile → pri Profile → Details & Modify

In the interface of pri profile list, click Details&Modify to edit the profile.



Figure 5-6-3: Modify Pri Profile

5.6.3.1 WAN

Profile Configuration → pri Profile → pri Profile → Details & Modify → WAN
Add IPv4 single-stack WAN connection for Pri Profile.

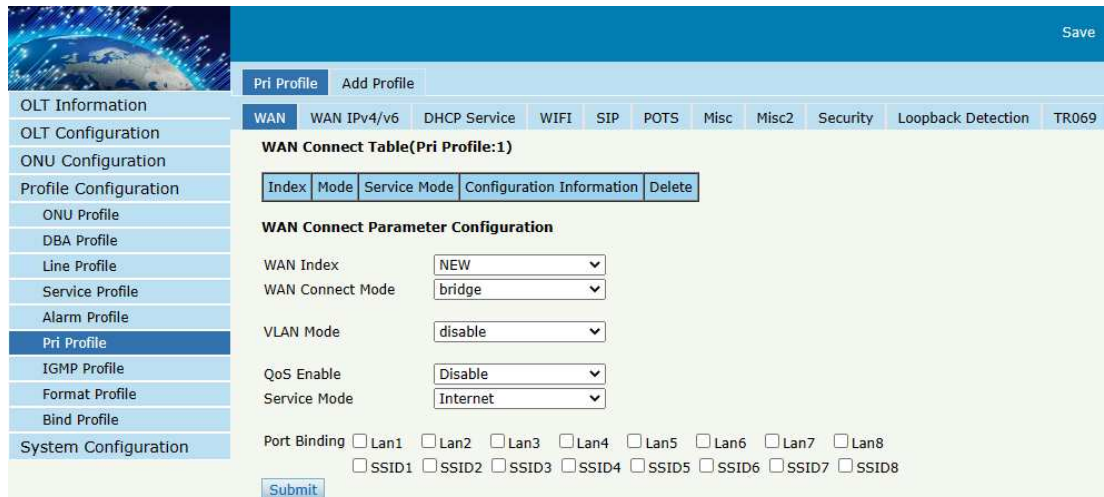


Figure 5-6-4: WAN Configuration

5.6.3.2 WAN IPv4/v6

Profile Configuration → pri Profile → pri Profile → Details & Modify → WAN
IPv4/v6

Add IPv4/IPv6 dual-stack WAN connections for Pri Profile.

Save

Pri Profile Add Profile

WAN WAN IPv4/v6 DHCP Service WIFI SIP POTS Misc Misc2 Security Loopback Detection TR069

WAN Connect Table(Pri Profile:1)

Index	Mode	IP Version	Service Mode	Configuration Information	Delete
WAN Connect Parameter Configuration WAN Index: NEW Mode: bridge IP Version: ipv4 VLAN Mode: Disable MTU: 1500 (576-1500) QoS Enable: Disable Service Mode: Internet Port Binding: ☐ Lan1 ☐ Lan2 ☐ Lan3 ☐ Lan4 ☐ Lan5 ☐ Lan6 ☐ Lan7 ☐ Lan8 ☐ SSID1 ☐ SSID2 ☐ SSID3 ☐ SSID4 ☐ SSID5 ☐ SSID6 ☐ SSID7 ☐ SSID8 ☐ SSID9 ☐ SSID10 Submit					

Figure 5-6-5: WAN IPv4/v6 Configuration

5.6.3.3 DHCP Service

Profile Configuration → pri Profile → pri Profile → Details & Modify → DHCP Service

Configure IPv4/v6 DHCP server parameters for Pri Profile.

Save

Pri Profile Add Profile

WAN WAN IPv4/v6 DHCP Service WIFI SIP POTS Misc Misc2 Security Loopback Detection TR069

DHCP Server Configuration(Pri Profile:1)

Type	Active	Configuration content
DHCP Server	☐	LAN IP Address LAN Subnet Mask DHCP Server: Disable
DHCP Server Ipv6	☐	LAN IPv6 Address Prefix Mode: ☐ Static Static Ipv6 Address LAN Prefixlen: (48-64) DHCP Server Ipv6: Disable RA: ☐ Active Manage: disable Other: disable Max Interval: (1-1800)s Min Interval: (1-1800)s

Submit

Figure 5-6-6: DHCP Service

5.6.3.4 WIFI

Profile Configuration → pri Profile → pri Profile → Details & Modify → WIFI

Configure WiFi parameters for Pri Profile.

Figure 5-6-7: WIFI Configuration

5.6.3.5 SIP

Profile Configuration → pri Profile → pri Profile → Details & Modify → SIP
 Configure SIP parameters for Pri Profile.

Figure 5-6-8: SIP Configuration

5.6.3.6 POTS

Profile Configuration → pri Profile → pri Profile → Details & Modify → POTS
 Configure POTS parameters for Pri Profile.

Figure 5-6-9: POTS Configuration

5.6.3.7 MISC

Profile Configuration → pri Profile → pri Profile → Details & Modify → MISC

Some misc configurations, including CATV switches, speed limits, limit the number of MAC learning, and so on.

Figure 5-6-10: MISC Configuration

5.6.3.8 MISC2

Profile Configuration → pri Profile → pri Profile → Details & Modify → MISC2

Some misc configurations, including NAT Type and UPnP Status.

The screenshot shows the 'Misc2 Control Operation(Pri Profile:1)' configuration page. On the left is a navigation menu with categories: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. Under Profile Configuration, 'Pri Profile' is selected. The main content area has tabs for WAN, WAN IPv4/v6, DHCP Service, WIFI, SIP, POTS, Misc, Misc2 (active), Security, Loopback Detection, and TR069. The 'Misc2' tab contains two sections: 'ONU NAT Type' with a dropdown set to 'NAT1' and 'Submit/Refresh' buttons; and 'ONU UPnP Configuration' with 'UPnP Status' set to 'disable' and 'WAN Index' set to '1', also with 'Submit/Refresh' buttons.

Figure 5-6-11: MISC2 Configuration

5.6.3.9 Security

Profile Configuration → pri Profile → pri Profile → Details & Modify → Security
Configure security parameters for Pri Profile.

The screenshot shows the 'Security' configuration page for 'Pri Profile:1'. The navigation menu and tabs are similar to the previous figure, but the 'Security' tab is active. It contains three main sections: 'User Control Configuration' with checkboxes for 'Admin Name/Password' and 'User Name/Password' and a 'Submit' button; 'Firewall Level' with a dropdown set to 'Disable' and a 'Submit' button; and 'ACL Configuration' with dropdowns for 'Protocol' (set to 'Ping') and 'Control' (set to 'Disable'), with a 'Submit' button. At the bottom is an 'ACL Table' with columns: Protocol Type, Control, Lan, Wan, IPv4, IPv6, Port, and Delete, and a 'Refresh' button.

Figure 5-6-12: Security Configuration

5.6.3.10 Loopback Detection

Profile Configuration → pri Profile → pri Profile → Details & Modify → Loopback Detection
Configure Loopback Detection parameters for Pri Profile.

The screenshot shows the 'Loopback Detection Configuration(Pri Profile:1)' page. On the left is a navigation menu with categories: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. Under Profile Configuration, 'Pri Profile' is selected. The main area has tabs for WAN, WAN IPv4/v6, DHCP Service, WIFI, SIP, POTS, Misc, Misc2, Security, Loopback Detection, and TR069. The 'Loopback Detection' tab is active, showing configuration fields for 'Pri Profile:1'. The fields are: Status (enable), Check Interval (1000), Recover Interval (60), Ethernet Type (fffa), VLAN ID (0), Destination MAC Type (Broadcast Address), Port Closing Time (60), Alarm (enable), and Portdislooped (enable). Each field has a range or unit in parentheses. At the bottom are 'Submit' and 'Refresh' buttons.

Field	Value	Range/Unit
Status	enable	
Check Interval	1000	(1-60000)ms
Recover Interval	60	(1-1800)s
Ethernet Type	fffa	(HHHH)
VLAN ID	0	(0-4094; 0 means no vlan is configured)
Destination MAC Type	Broadcast Address	
Port Closing Time	60	(1-1800)s
Alarm	enable	
Portdislooped	enable	

Figure 5-6-13: Loopback Detection Configuration

5.6.3.11 TR069

Profile Configuration → pri Profile → pri Profile → Details & Modify → TR069
Configure TR069 parameters for Pri Profile.

The screenshot shows the 'TR069 Configuration(Pri Profile:1)' page. The navigation menu and tabs are the same as in Figure 5-6-13, but the 'TR069' tab is active. The main area contains a table with two sections: 'TR069 Manage Configuration' and 'TR069 Stun Configuration'. Each section has an 'Active' checkbox and a 'Configuration content' column with various fields and a 'Submit' button at the bottom.

Type	Active	Configuration content																		
TR069 Manage Configuration	☐	<table border="1"><tr><td>Tr069 Manage Status</td><td>Disable</td></tr><tr><td>ACS Server Address</td><td></td></tr><tr><td>ACS Server Username</td><td></td></tr><tr><td>ACS Server Password</td><td></td></tr><tr><td>Certificate</td><td>Disable</td></tr><tr><td>Inform</td><td>Disable</td></tr><tr><td>Inform Interval Time</td><td>(0-4294967295)</td></tr><tr><td>Reverse Connection Username</td><td></td></tr><tr><td>Reverse Connection Password</td><td></td></tr></table>	Tr069 Manage Status	Disable	ACS Server Address		ACS Server Username		ACS Server Password		Certificate	Disable	Inform	Disable	Inform Interval Time	(0-4294967295)	Reverse Connection Username		Reverse Connection Password	
Tr069 Manage Status	Disable																			
ACS Server Address																				
ACS Server Username																				
ACS Server Password																				
Certificate	Disable																			
Inform	Disable																			
Inform Interval Time	(0-4294967295)																			
Reverse Connection Username																				
Reverse Connection Password																				
TR069 Stun Configuration	☐	<table border="1"><tr><td>Tr069 STUN Status</td><td>Disable</td></tr><tr><td>Stun Server Address</td><td></td></tr><tr><td>Stun Server Port</td><td>(1-65535)</td></tr><tr><td>Stun Server User Name</td><td></td></tr><tr><td>Stun Server Password</td><td></td></tr></table>	Tr069 STUN Status	Disable	Stun Server Address		Stun Server Port	(1-65535)	Stun Server User Name		Stun Server Password									
Tr069 STUN Status	Disable																			
Stun Server Address																				
Stun Server Port	(1-65535)																			
Stun Server User Name																				
Stun Server Password																				

Figure 5-6-14: TR069 Configuration

5.7 IGMP Profile

5.7.1 IGMP Profile

Profile Configuration → IGMP Profile → IGMP Profile

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

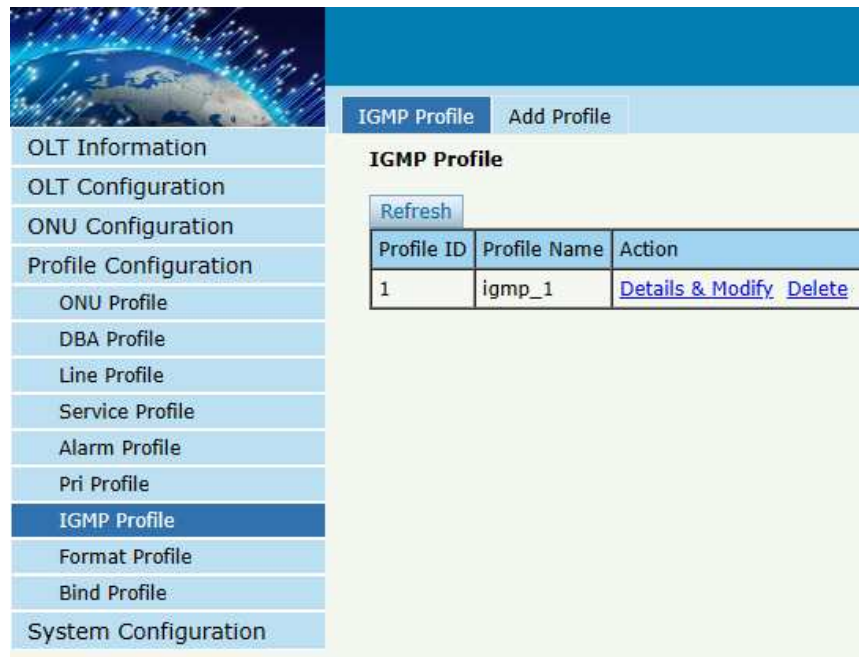


Figure 5-7-1: IGMP Profile list

5.7.2 Add Profile

Profile Configuration → IGMP Profile → Add profile

Add new IGMP profile, set the profile name.

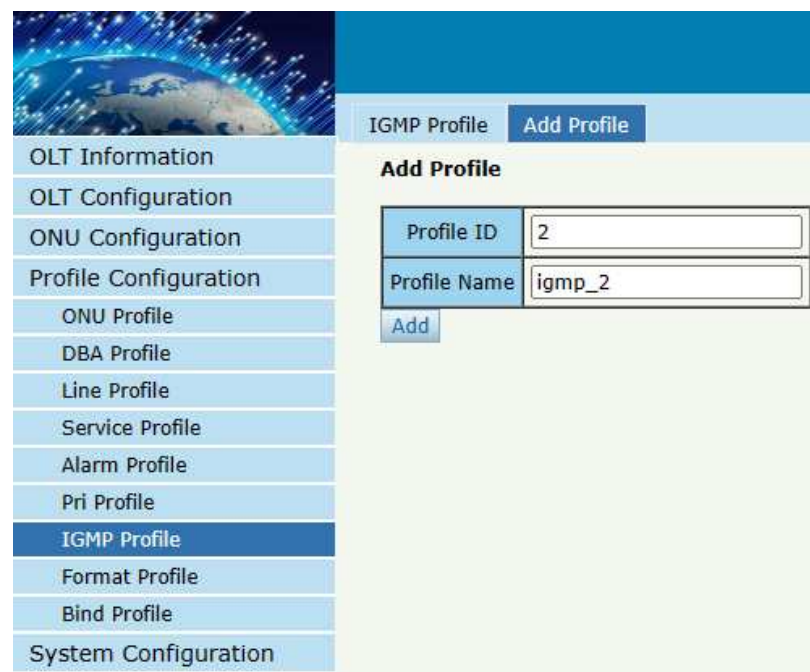


Figure 5-7-2: Add Profile

5.7.3 Display or Modify IGMP Profile Info

Profile Configuration → IGMP Profile → IGMP Profile → Details & Modify

In the interface of IGMP profile list, click Details&Modify to edit the profile.

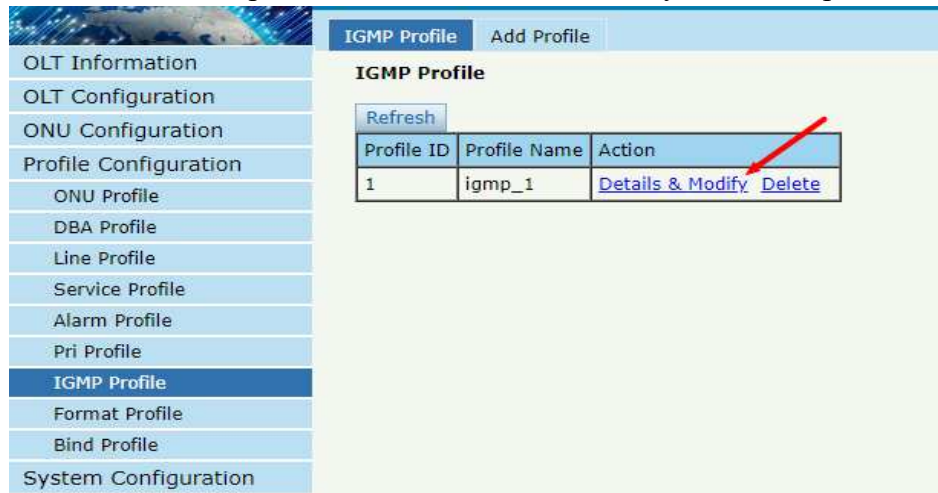


Figure 5-7-3: Modify IGMP profile

5.7.3.1 Config

Profile Configuration → IGMP Profile → IGMP Profile → Details & Modify → Config

Set IGMP/MLD protocol parameters as required.

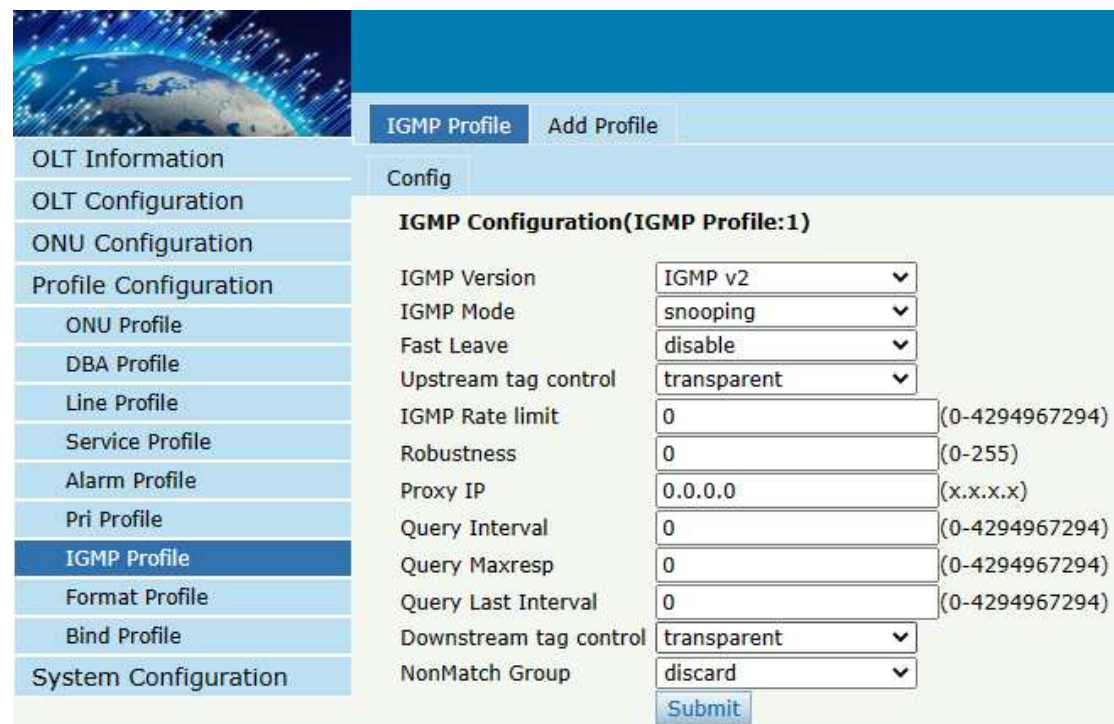


Figure 5-7-4: IGMP Configuration

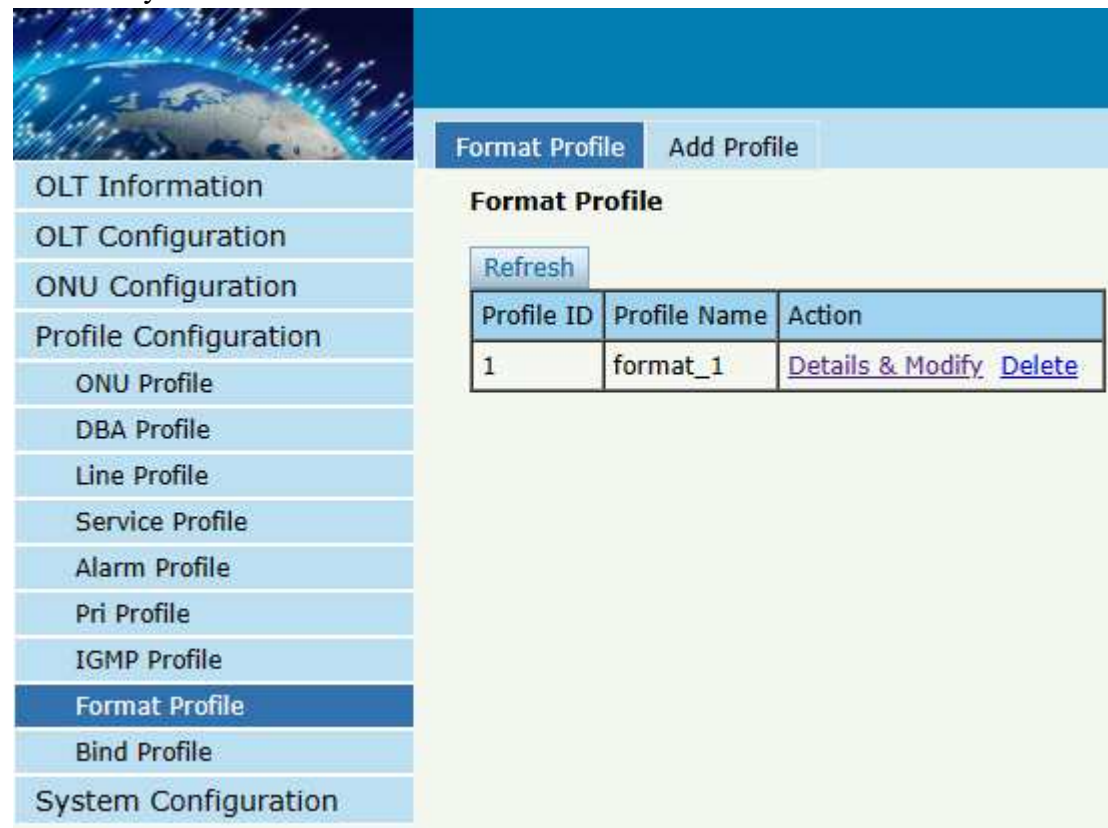
5.8 Format Profile

Format profile is mainly used to configure the DHCP option format of ONU.

5.8.1 Format Profile

Profile Configuration → Format Profile → Format Profile

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



The screenshot shows the 'Format Profile' configuration page. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (expanded), ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, **Format Profile** (selected), Bind Profile, and System Configuration. The main content area has a blue header with 'Format Profile' and 'Add Profile' buttons. Below this is a 'Format Profile' section with a 'Refresh' button and a table.

Profile ID	Profile Name	Action
1	format_1	Details & Modify Delete

Figure 5-8-1: Format Profile list

5.8.2 Add Profile

Profile Configuration → Format Profile → Add profile

Add new format profile, set the profile name.

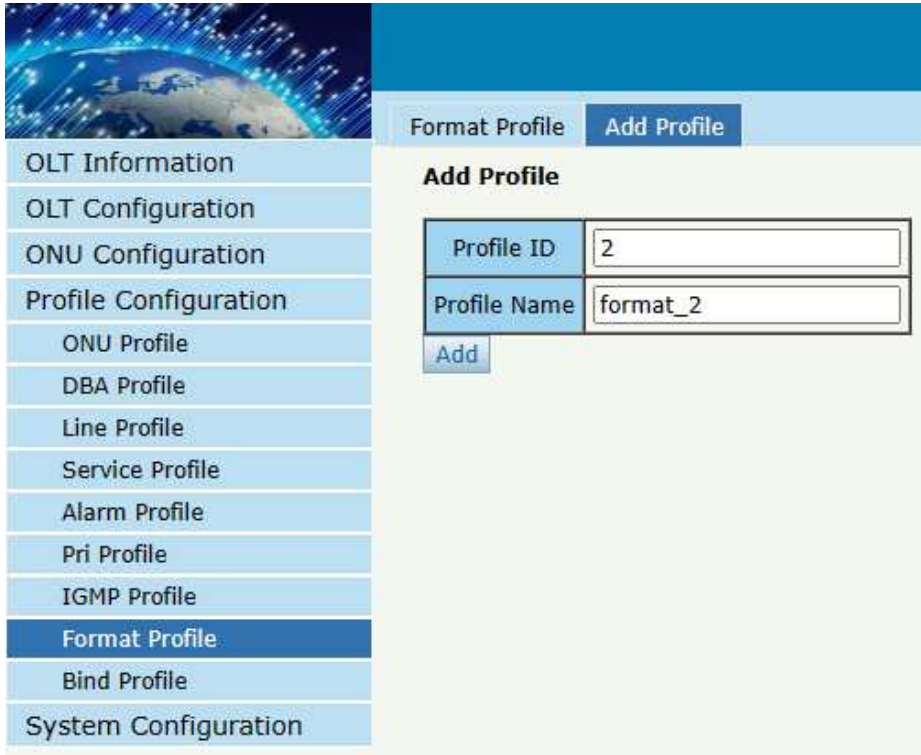


Figure 5.8-2: Add Format Profile

5.8.3 Display or Modify Format Profile Info

Profile Configuration → Format Profile → Format Profile → Details & Modify
In the interface of Format profile list, click Details&Modify to edit the profile.

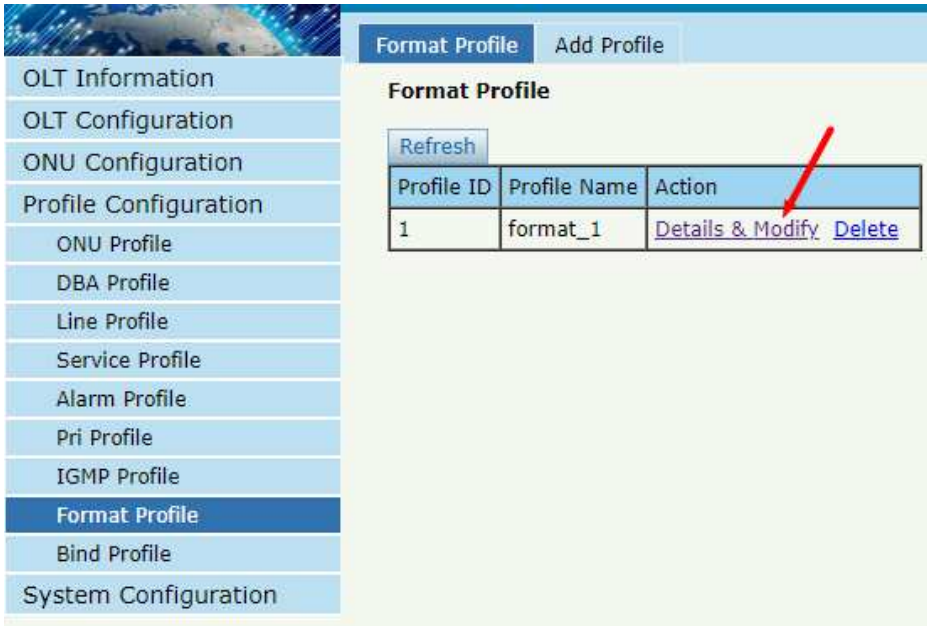


Figure 5-8-3: Modify Format profile

5.8.3.1 Config

Profile Configuration → Format Profile → Format Profile → Details & Modify → Config

Set DHCP option parameters as required.

Format Profile Add Profile

Config

Switch Configuration

Option82 enable ▼

Option18 disable ▼

Option37 disable ▼

PPPoE Plus disable ▼

Submit

Format Type Configuration

Format Type custom ▼

Submit

Circuit ID / Remote ID Configuration

ID	Circuit ID ▼
Index	
Type	cvlan ▼

Submit

Circuit ID / Remote ID Table

ID	Type
Circuit ID	cvlan

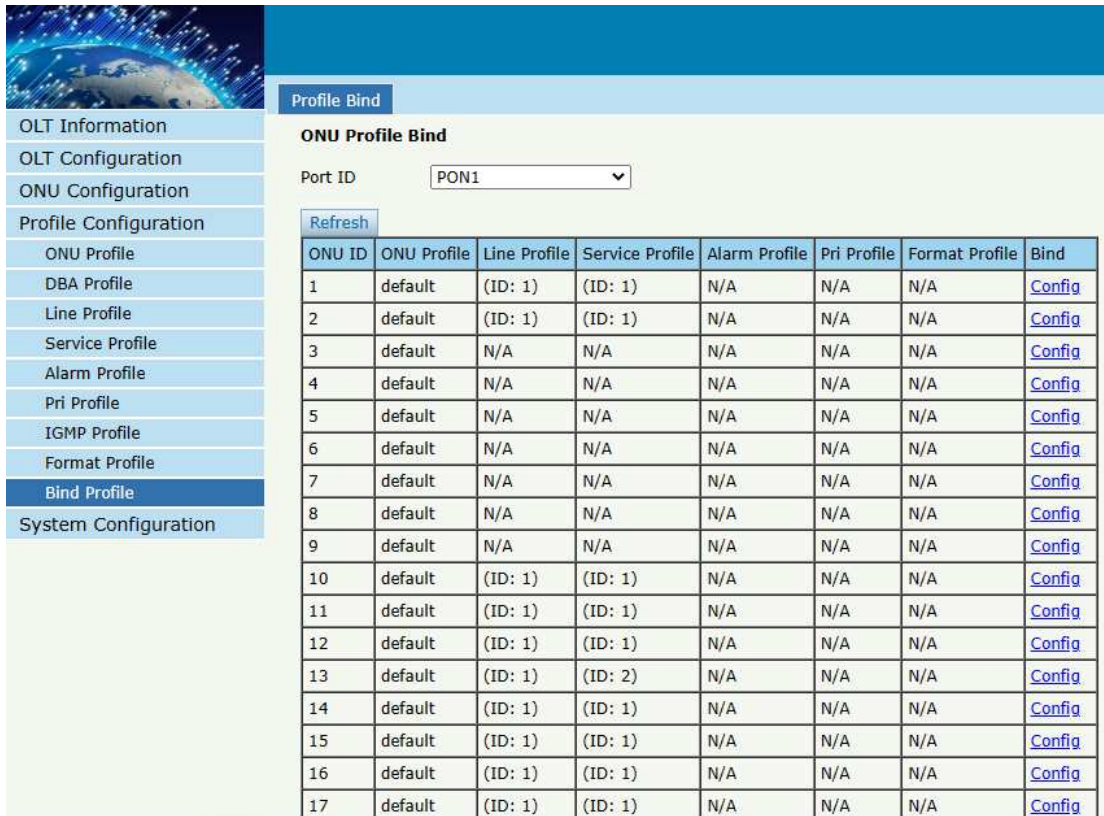
Refresh

Figure 5-8-4: Format Profile Configuration

5.9 Bind Profile

Profile Configuration → Bind Profile

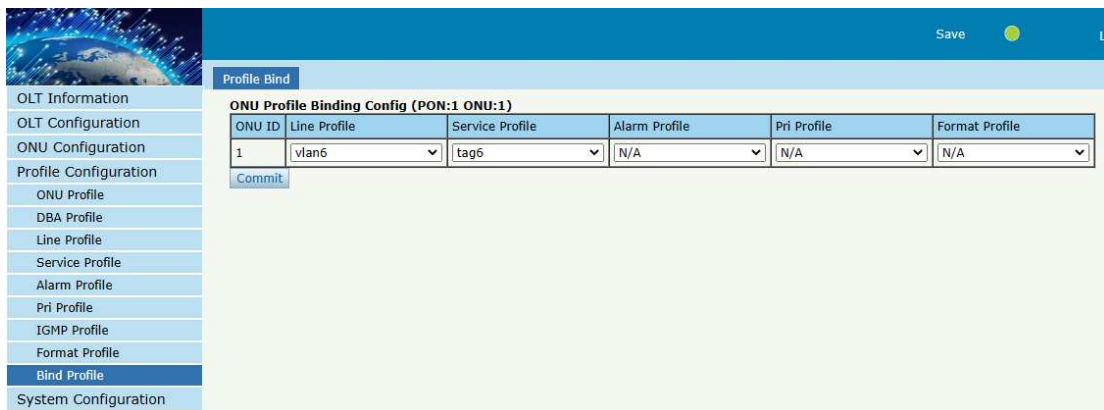
After profile is configured, it is necessary to bind it to ONU.



The screenshot shows the 'Profile Bind' page in the OLT web interface. On the left is a navigation menu with categories: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. Under Profile Configuration, 'Bind Profile' is selected. The main area is titled 'ONU Profile Bind' and features a 'Port ID' dropdown set to 'PON1'. Below this is a 'Refresh' button and a table listing 17 ONU profiles. Each row includes an ONU ID, ONU Profile (all 'default'), Line Profile, Service Profile, Alarm Profile, Pri Profile, Format Profile, and a 'Bind' link.

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile	Bind
1	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
2	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
3	default	N/A	N/A	N/A	N/A	N/A	Config
4	default	N/A	N/A	N/A	N/A	N/A	Config
5	default	N/A	N/A	N/A	N/A	N/A	Config
6	default	N/A	N/A	N/A	N/A	N/A	Config
7	default	N/A	N/A	N/A	N/A	N/A	Config
8	default	N/A	N/A	N/A	N/A	N/A	Config
9	default	N/A	N/A	N/A	N/A	N/A	Config
10	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
11	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
12	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
13	default	(ID: 1)	(ID: 2)	N/A	N/A	N/A	Config
14	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
15	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
16	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config
17	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	Config

Figure 5-9-1: Bind profile



The screenshot shows the 'ONU Profile Binding Config' page for 'PON:1 ONU:1'. It includes a 'Save' button in the top right. The main configuration area has a table with columns: ONU ID, Line Profile, Service Profile, Alarm Profile, Pri Profile, and Format Profile. The first row shows ONU ID 1 with Line Profile 'vlan6', Service Profile 'tag6', and other profiles set to 'N/A'. A 'Commit' button is located below the table.

ONU ID	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile
1	vlan6	tag6	N/A	N/A	N/A

Figure 5-9-2: Select Profile

Chapter 6 System Configuration

This chapter is about the global management of OLT.

6.1 System Log

6.1.1 System Log

System Configuration → System Log

This page displays OLT system alarms and events.

Alarm Log Table

Select Counts: 200
 Alarm Type: ALL
 Description:
 Download Log Type: txt
 Download Log:

No.1 Page/Total 10 Page 20 Item per page/Total 200 Item [First](#) [Previous](#) [Next](#) [Last](#) No. 1 [Clear All](#) [Refresh](#)

No..	Time	Level	Message
1	1970/01/12 17:56:49	major	System Time Change change by ntp.
2	1970/01/12 17:55:48	major	User Logout User admin logouted from 192.168.8.34 on web
3	1970/01/12 17:55:28	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
4	1970/01/12 17:55:27	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
5	1970/01/12 17:52:49	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
6	1970/01/12 17:52:48	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
7	1970/01/12 17:51:39	major	System Time Change change by ntp.
8	1970/01/12 17:50:55	major	User Login User admin logged in from 192.168.8.86 on web
9	1970/01/12 17:49:59	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
10	1970/01/12 17:49:58	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
11	1970/01/12 17:48:15	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
12	1970/01/12 17:48:14	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103

Figure 6-1-1: System Log

6.1.2 Alarm

System Configuration → System Log → Alarm

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

Type	Print	Record	Trap	Remote	Type	Print	Record	Trap	Remote
FAN	☐	☐	☐	☐	Download File Failed	☒	☒	☒	☒
Upload File Failed	☒	☒	☒	☒	Upgrade File Failed	☒	☒	☒	☒
Port Updown	☒	☒	☒	☒	Port Loopback	☒	☒	☒	☒
PON Deregister	☐	☐	☐	☐	PON Register Failed	☒	☒	☒	☒
PON Disable	☒	☒	☒	☒	PON Txpower High	☒	☒	☒	☒
PON Txpower Low	☒	☒	☒	☒	PON Txbias High	☒	☒	☒	☒
PON Txbias Low	☒	☒	☒	☒	PON Vcc High	☒	☒	☒	☒
PON Vcc Low	☒	☒	☒	☒	PON Temp High	☒	☒	☒	☒
PON Temp Low	☒	☒	☒	☒	PON Los	☒	☒	☒	☒
ONU Deregister	☒	☒	☒	☒	ONU Link Lost	☐	☐	☐	☐
ONU Illegal Register	☒	☒	☒	☒	ONU Auth Failed	☒	☒	☒	☒
ONU MAC Conflict	☐	☒	☒	☒	ONU Loid Conflict	☒	☒	☒	☒
ONU Critical Event	☒	☒	☒	☒	ONU Dying Gasp	☒	☒	☒	☒
ONU Link Fault	☒	☒	☒	☒	ONU Link Event	☒	☒	☒	☒
ONU Event Notific	☒	☒	☒	☒	Reset	☒	☒	☒	☒
Config Save	☒	☒	☒	☒	Config Erase	☒	☒	☒	☒
Download File Success	☒	☒	☒	☒	Upload File Success	☒	☒	☒	☒
Upgrade File Success	☒	☒	☒	☒	PON Register	☐	☒	☒	☒

Figure 6-1-2: Alarm

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

6.1.3 Threshold Alarm

System Configuration → System Log → Threshold Alarm

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



System Log Alarm **Threshold Alarm**

Threshold Alarm Configuration

Type	Print	Record	Trap	Remote	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

PON Optical Alarm Configuration

Port ID

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

Figure 6-1-3: Threshold Alarm

6.2 Device Management

6.2.1 Firmware Upgrade

System Configuration → Device Management → Firmware Upgrade

You can upgrade the OLT firmware on this page. OLT will reboot automatically with the new firmware after upgraded when you select the option “Reboot After Upgrade”.



Figure 6-2-1: Firmware Upgrade

6.2.2 Device Reboot

System Configuration → Device Management → Device Reboot

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

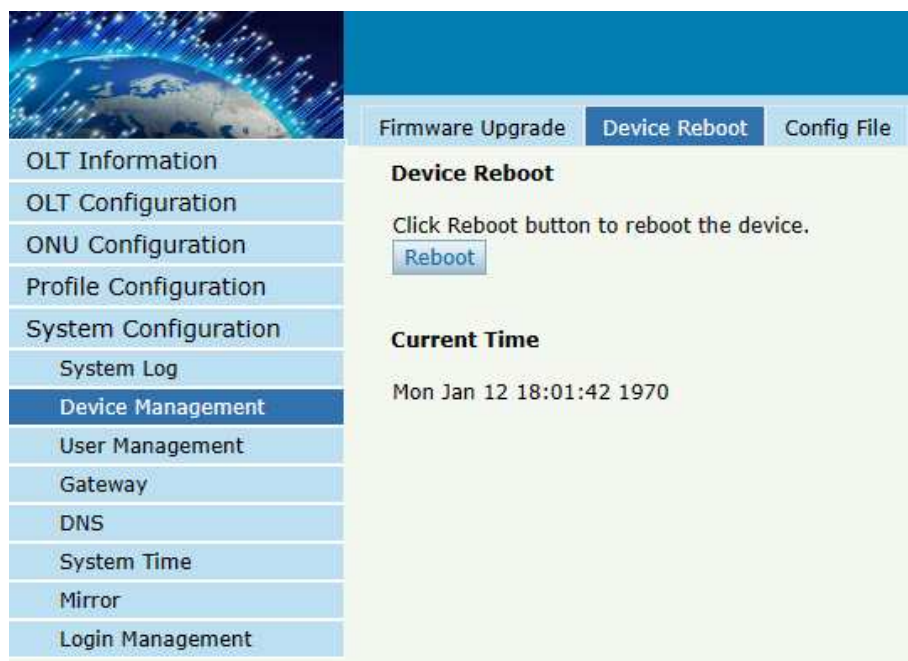


Figure 6-2-2: Device Reboot

6.2.3 Config File

System Configuration → Device Management → Config File

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

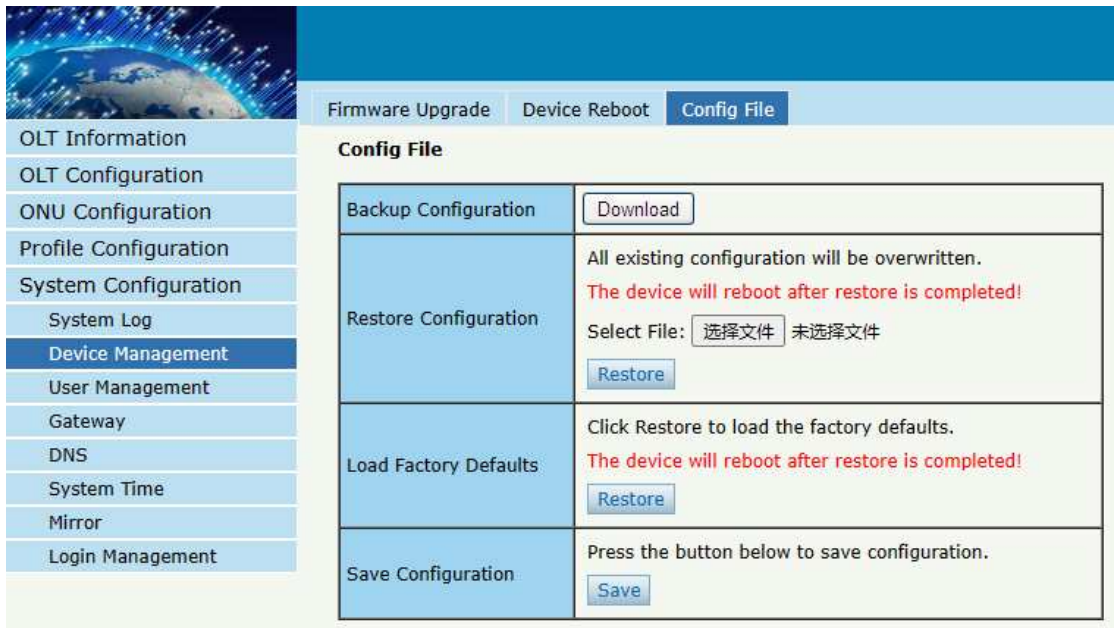


Figure 6-2-3: Config File Configuration

6.2.4 Advance Config File

System Configuration → Device Management → Advance Config File

You can automatically backup files on this page.

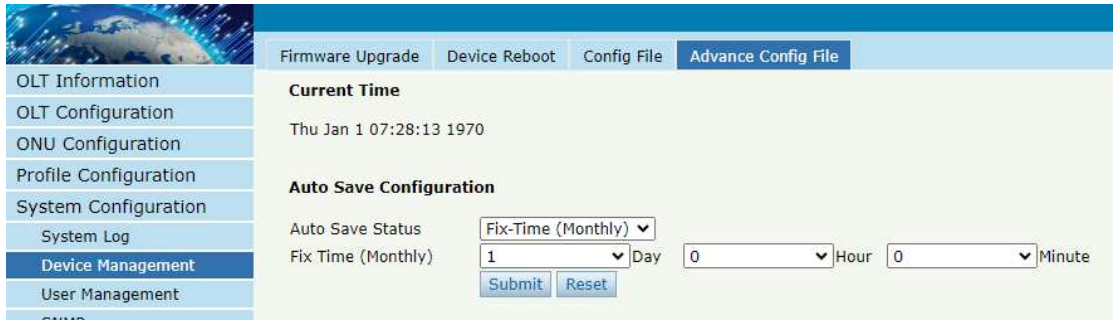


Figure 6-2-4: Advance Config File Configuration

6.3 User Management

System Configuration → User Management

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

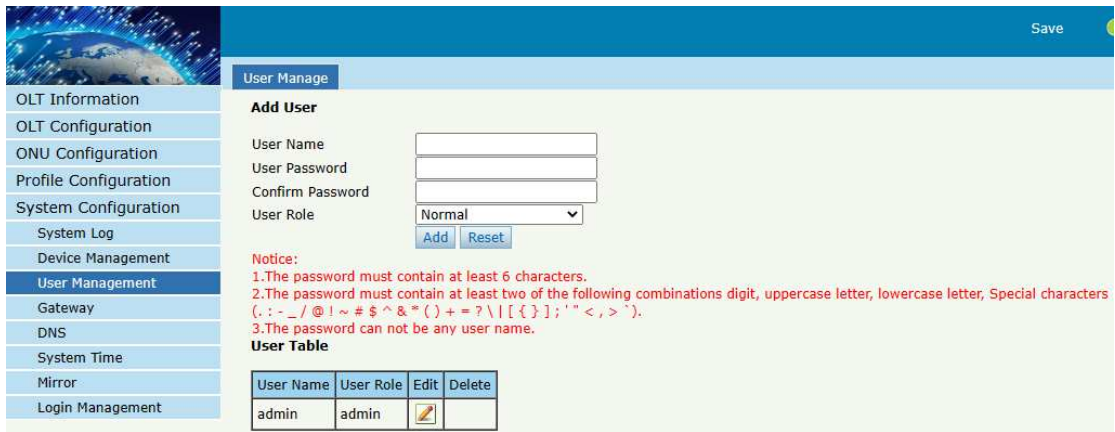


Figure 6-3-1: User Manage

6.4 SNMP

6.4.1 SNMPV1/V2

System Configuration → SNMP→ SNMPV1/V2

This page is used to configure SNMP V1/V2 parameters for OLT management. It is not recommended to modify the default community name in the following image, as it may cause the network management system to be unable to manage and configure it.

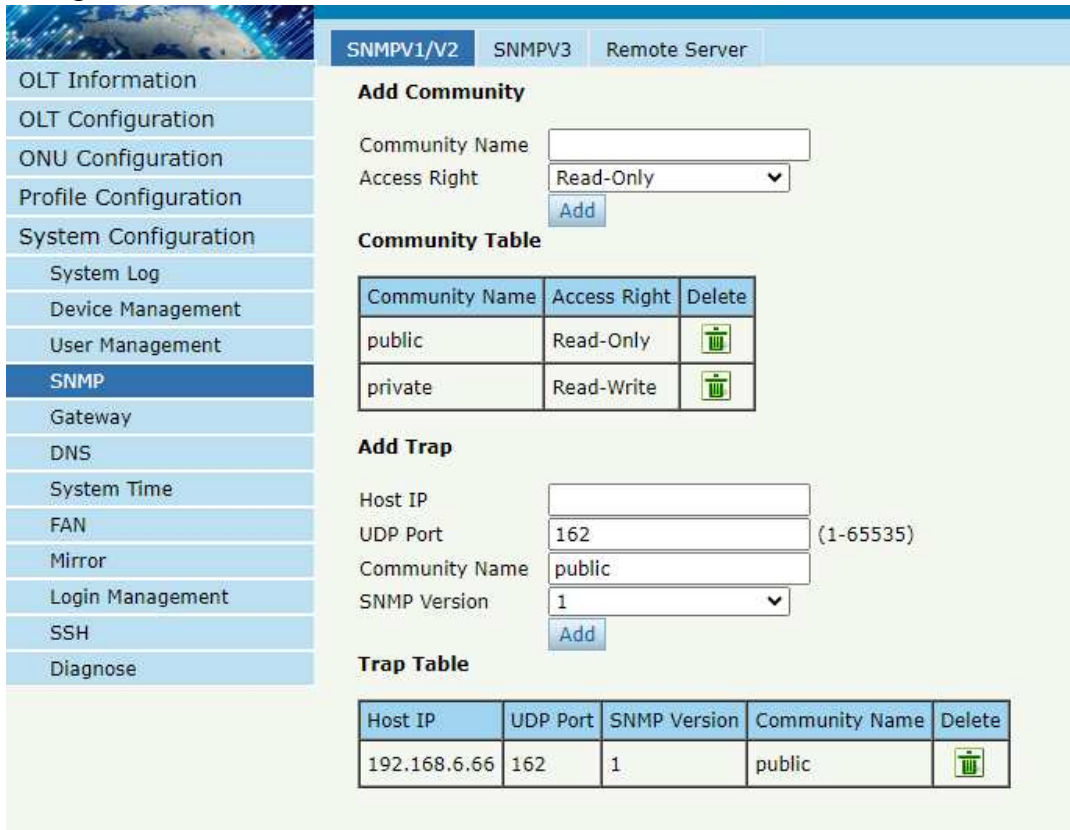


Figure 6-4-1: SNMPV1/V2

6.4.2 SNMPv3

System Configuration → SNMP → SNMPV3

This page is used to configure SNMP V3 parameters for OLT management.

The screenshot shows the SNMPV3 configuration page. The sidebar menu on the left includes the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, **SNMP**, Gateway, DNS, System Time, FAN, Mirror, Login Management, SSH, and Diagnose. The main content area has three tabs: SNMPV1/V2, **SNMPV3**, and Remote Server. The SNMPV3 tab is active and contains the following sections:

Add View

View Name:
 Subtree: (Type: Object Identifier)
 View Type:

View Table

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

Add Group

Group Name:
 Access Level:
 Read View:
 Write View:
 Notify View:

Group Table

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

Add User

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

User Table

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

Figure 6-4-2: SNMPv3

6.4.3 Remote Server

System Configuration → SNMP → Remote Server

This page is used to configure B/S EMS, VSOL INCE server IP.



The screenshot shows the 'Remote Server' configuration page. On the left is a navigation menu with options: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, and SNMP (highlighted). The main content area has tabs for SNMPV1/V2, SNMPV3, and Remote Server (selected). Under 'Remote Server Configuration', there are fields for 'Remote Server' (a dropdown menu set to 'Enable'), 'Server' (a text box containing '192.168.6.66' with a red '(Connected)' status indicator to its right), 'Slave Server' (an empty text box), and 'INCE SN' (an empty text box). A 'Submit' button is located below these fields.

Figure 6-4-3: Remote Server

6.5 Gateway

System Configuration → Gateway

This page is used to configure the OLT gateway in case of that the OLT needs to access Internet or any Layer 3 network.



The screenshot shows the 'Gateway' configuration page. The left navigation menu includes: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway (highlighted), DNS, System Time, Mirror, and Login Management. The main content area has a 'Gateway' tab selected. Below the tab title, there is a 'Gateway' label followed by a text box containing '192.168.6.1'. At the bottom of the configuration area are 'Submit' and 'Reset' buttons.

Figure 6-5-1: Gateway Configuration

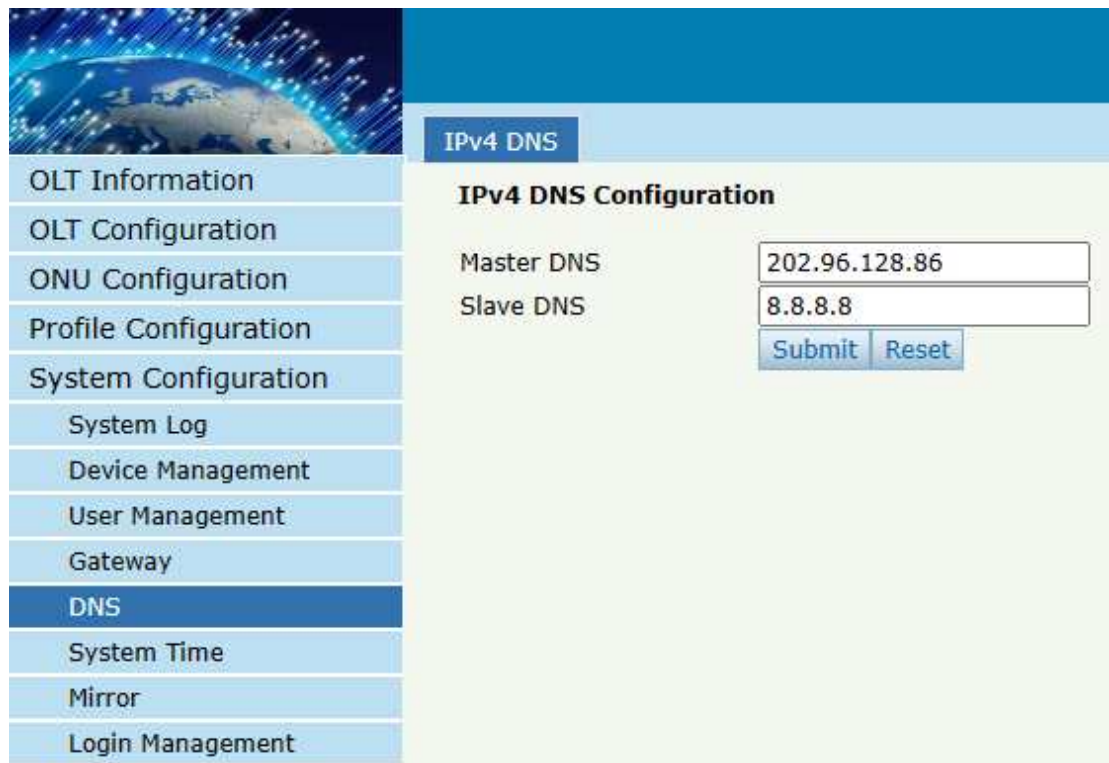
6.6 DNS

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

6.6.1 IPv4 DNS

System Configuration → DNS → IPv4 DNS

This page is used to configure IPv4 DNS.



IPv4 DNS	
IPv4 DNS Configuration	
Master DNS	202.96.128.86
Slave DNS	8.8.8.8
Submit Reset	

Figure 6-6-1: IPv4 DNS

6.7 System Time

6.7.1 RTC

System Configuration → System Time → RTC

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

The screenshot shows the 'RTC' tab selected in the 'System Time' configuration section. The 'Date Setting' table is as follows:

Year	Month	Day	Hour	Minute	Second
1970	1	12	17	47	18

Below the table are 'Submit' and 'Reset' buttons. The left sidebar contains a menu with 'System Time' highlighted.

Figure 6-7-1: RTC Setting

6.7.2 NTP

System Configuration → System Time → NTP

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

The screenshot shows the 'NTP' tab selected. The 'NTP Configuration' section includes the following fields:

- Enable NTP Synchronization:
- NTP Timezone:
- Daylight Saving Time:
- Master NTP Server:
- Slave NTP Server:
- Current Time: 1970 / 1 / 12 17:50:19

'Submit' and 'Reset' buttons are at the bottom. The left sidebar menu shows 'System Time' highlighted.

Figure 6-7-2: NTP Configuration

6.8 FAN

System Configuration → FAN

This page is used to configure the working mode of the fan.



Figure 6-8-1: FAN

6.9 Mirror

System Configuration → Mirror

Port mirror is usually used for troubleshooting. It can forward incoming and outgoing packets from the source port to the destination port.

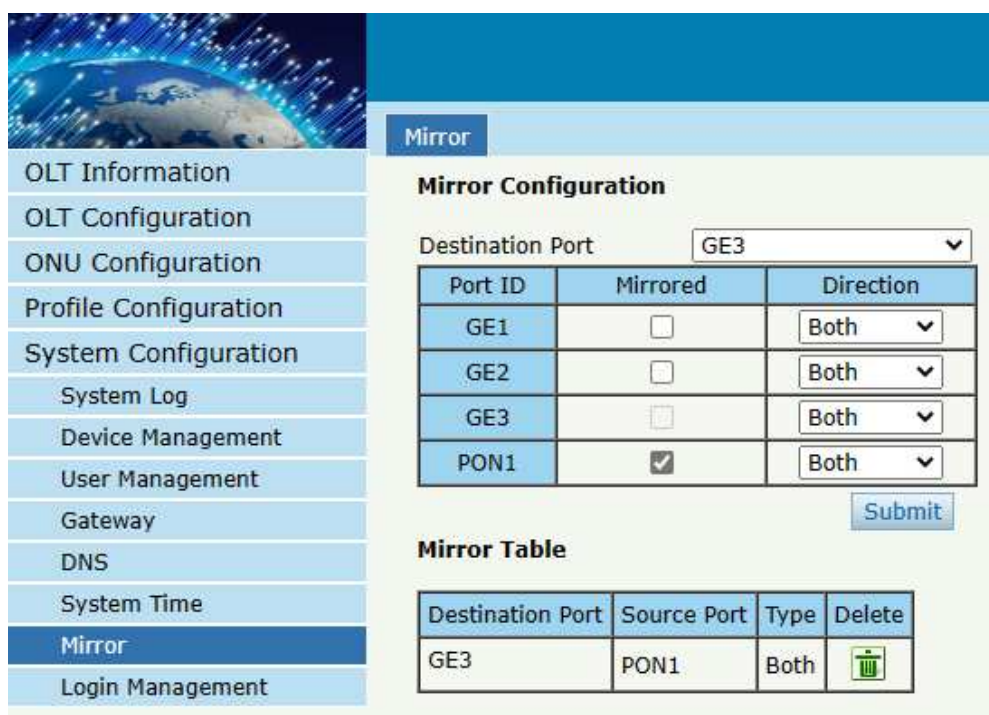


Figure 6-9-1: Mirror Configuration

6.10 Login Management

6.10.1 Login Access List

System Configuration → Login Management → Login Access List

This page is used to configure access rights for management. You can configure access rights for Telnet, Web, according to source IP address.

Filter Action	Protocol	Source IP	IP Mask	Delete
---------------	----------	-----------	---------	--------

Figure 6-10-1: Login Access List Configuration

6.10.2 Service Port

System Configuration → Login Management → Service Port

This page is used to set Web, Telnet Port .

The screenshot shows the 'Service Port' configuration page. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management (which is highlighted). The main content area has a top bar with 'Login Access List', 'Service Port' (selected), 'Login Configuration', and 'Telnet Management'. Below this, the 'Service Port' section contains two input fields: 'Web Port' with the value '443' and a range '(1-65535)', and 'Telnet Port' with the value '23' and a range '(1-65535)'. At the bottom of these fields are 'Submit' and 'Reset' buttons.

Figure 6-10-2: Service Port Configuration

6.10.3 Login Configuration

System Configuration→ Login Management →Login Configuration

This page is used to set login timeout and verification code switch .

The screenshot shows the 'Login Configuration' page. The navigation menu on the left is identical to the previous page, with 'Login Management' highlighted. The main content area's top bar shows 'Login Access List', 'Service Port', 'Login Configuration' (selected), and 'Telnet Management'. The 'Web Configuration' section contains two settings: 'Login Timeout' with a value of '10' and a range '(1-30 minutes)', and 'Verification Code' with a dropdown menu currently set to 'Disable'. 'Submit' and 'Reset' buttons are located at the bottom of these settings.

Figure 6-10-3: Login Configuration

6.10.4 Telnet Management

System Configuration→ Login Management→ Telnet Management

This page displays the current telnet connection information.You can see the host IP

address and user name information that are currently accessing the OLT through telnet.

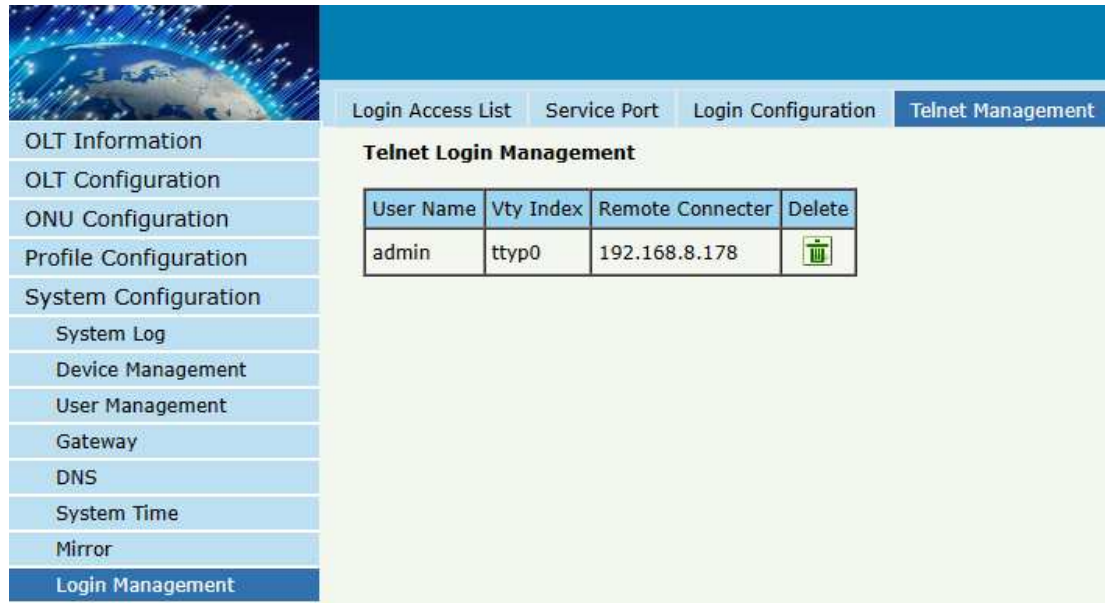


Figure 6-10-4: Telnet Management

6.11 SSH

6.11.1 SSH Enable

System Configuration → SSH → SSH Enable

This page is used to configure SSH protocol related parameters.

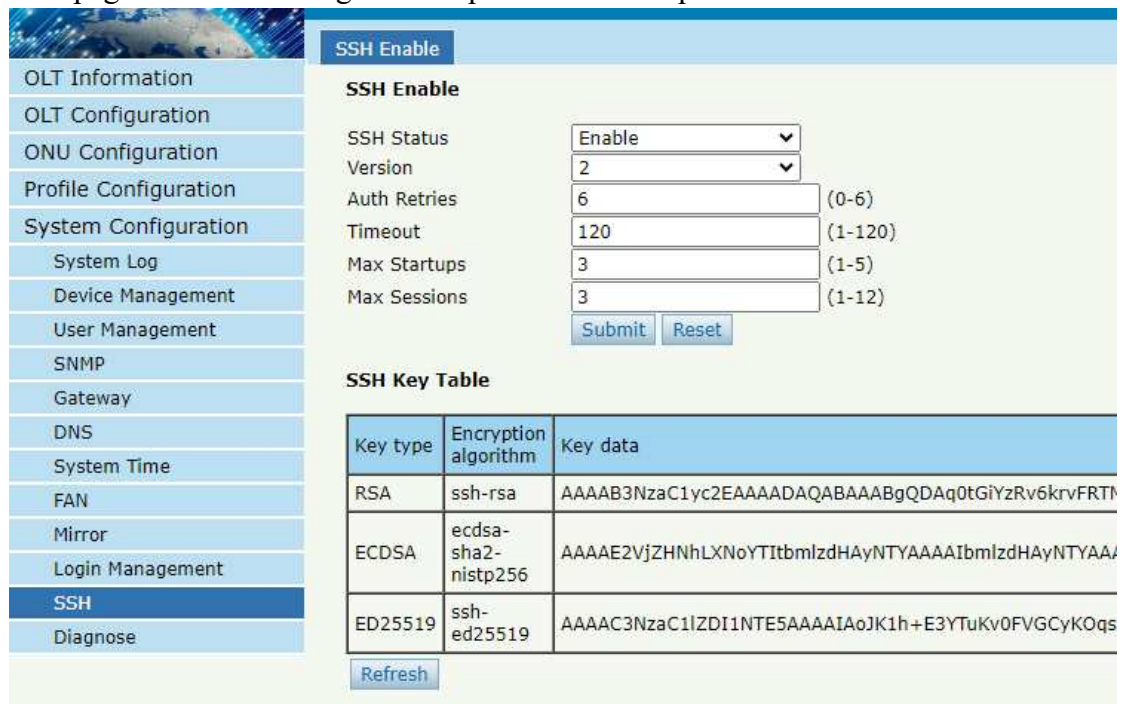


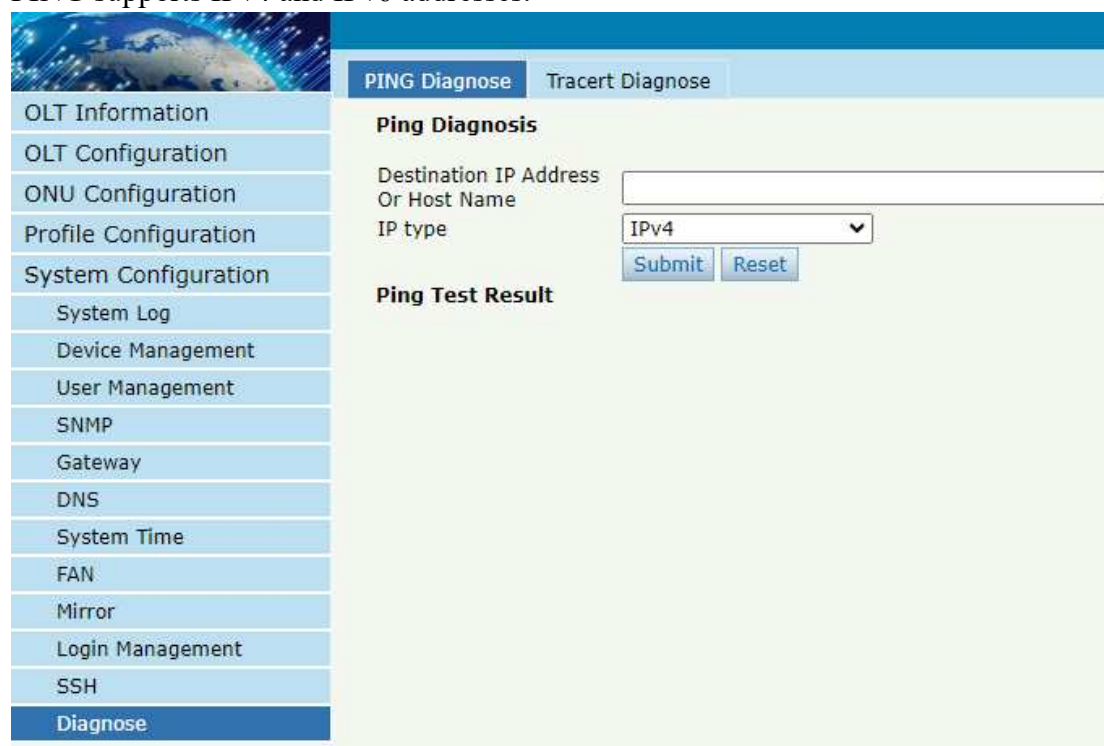
Figure 6-11-1: SSH Enable

6.12 Diagnose

6.12.1 PING Diagnose

System Configuration→ Diagnose→ PING Diagnose

This page supports diagnosing network connections using the PING command. PING supports IPv4 and IPv6 addresses.



The screenshot shows the 'PING Diagnose' web interface. 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, Gateway, DNS, System Time, FAN, Mirror, Login Management, SSH, and Diagnose (highlighted). The main content area has two tabs: 'PING Diagnose' and 'Tracert Diagnose'. The 'PING Diagnose' tab is active and contains a 'Ping Diagnosis' section. This section includes a text input field for 'Destination IP Address Or Host Name', a dropdown menu for 'IP type' (currently set to 'IPv4'), and 'Submit' and 'Reset' buttons. Below the input fields is a 'Ping Test Result' section, which is currently empty.

Figure 6-12-1:PING Diagnose

6.12.2 Tracert Diagnose

System Configuration→ Diagnose→ Tracert Diagnose

This page supports using Tracert commands for route tracing to diagnose network connections.

The routing tracking function supports IPv4 and IPv6 addresses.

The screenshot displays the 'Tracert Diagnose' page of a web management interface. On the left is a vertical sidebar with a list of menu items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, SNMP, Gateway, DNS, System Time, FAN, Mirror, Login Management, SSH, and Diagnose (which is highlighted in dark blue). The main content area has a top navigation bar with 'PING Diagnose' and 'Tracert Diagnose' tabs, with the latter being active. Below the tabs, the section is titled 'Trace Route Diagnosis'. It contains a text input field for 'Destination IP Address Or Host Name', a dropdown menu for 'IP type' currently set to 'IPv4', and two buttons labeled 'Submit' and 'Reset'. Below this, the section is titled 'Tracert Test Result' and contains a single 'Refresh' button.

Menu Item
OLT Information
OLT Configuration
ONU Configuration
Profile Configuration
System Configuration
System Log
Device Management
User Management
SNMP
Gateway
DNS
System Time
FAN
Mirror
Login Management
SSH
Diagnose

Tracert Diagnose

Trace Route Diagnosis

Destination IP Address Or Host Name:

IP type:

Tracert Test Result

Figure 6-12-2:Tracert Diagnose

Thank You !