
GPON OLT USER MANUAL (WEB Management)

Version V2.0.1

Release Date 2017-08-08

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Chapter 1 System Description

1.1 Overview

1.1.1 OLT Introduction

The Web management user manual is for the OLTs listed in Table 1-1.

After you have completed installation, connection and commissioning of the equipment, you can start on configuring various services and functions for the equipment.

Table 1-1 OLT interfaces

Products		8 ports GPON OLT
Chassis	Rack	1U 19 inch standard box
1000M Uplink Port	QTY	14
	Copper	8*10/100/1000M auto- negotiation
	SFP (Independent)	6*SFP
10000M Uplink Port	QTY	2
	SFP (Independent)	2*SFP+ (SFP+ is compatible with 10GE)
GPON Port	QTY	8
	Physical Interface	SFP Slots
Management Ports		1*10/100BASE-T out-band port(AUX), 1*CONSOLE port
Management Mode		SNMP, WEB, Telnet and CLI

1.1.2 PC System Requirement

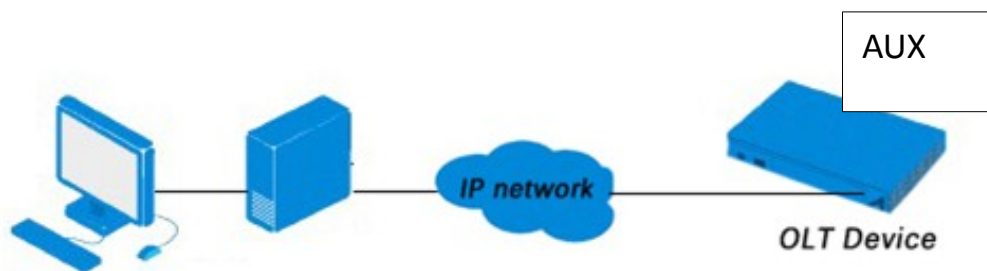
Table 1-2 PC System requirement

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

1.2 Connection

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

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

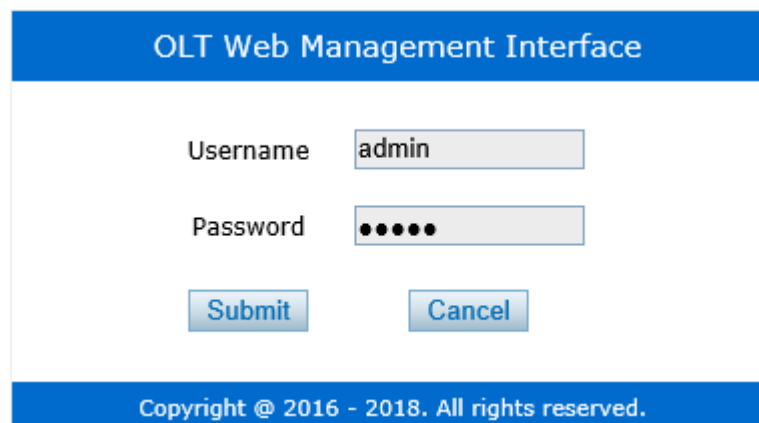


Chapter 2 OLT Information

2.1 Login

Follow the steps to login:

1. Confirm "1.2 Connection" to connect;
2. The device default IP address is 192.168.8.200;
3. Open your web browser, type the device IP in address bar;
4. Entry of the username and password will be prompted. Enter the default login User Name and Password. Both the username and password are "**admin**" by default.



OLT Web Management Interface

Username

Password

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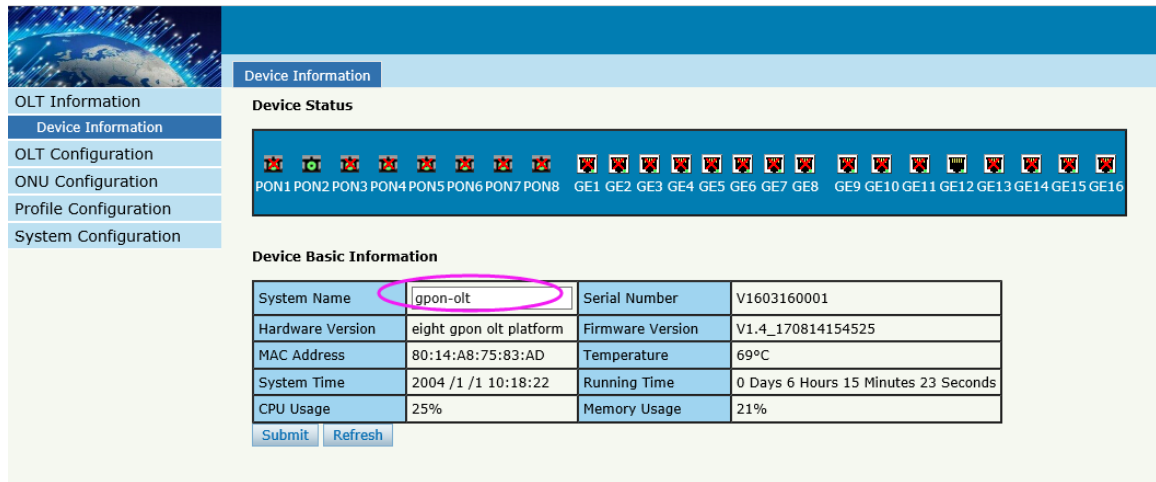
Figure 2-1: Login

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, serialnumber, hardwareversion, firmwareversion, MAC address and system time. The system name can be modified if need.



The screenshot displays the 'Device Information' page. On the left is a navigation menu with the following items: OLT Information, Device Information (selected), OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'Device Information' and contains a 'Device Status' section with a row of 16 port status icons labeled PON1 through PON8 and GE1 through GE16. Below this is the 'Device Basic Information' table:

System Name	gpon-olt	Serial Number	V1603160001
Hardware Version	eight gpon olt platform	Firmware Version	V1.4_170814154525
MAC Address	80:14:A8:75:83:AD	Temperature	69°C
System Time	2004 / 1 / 1 10:18:22	Running Time	0 Days 6 Hours 15 Minutes 23 Seconds
CPU Usage	25%	Memory Usage	21%

At the bottom of the table are two buttons: 'Submit' and 'Refresh'.

Figure 2-2: Device Information

Chapter 3 OLT Configuration

This section is about the basic service of OLT configuration.

3.1 VLAN

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

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

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

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

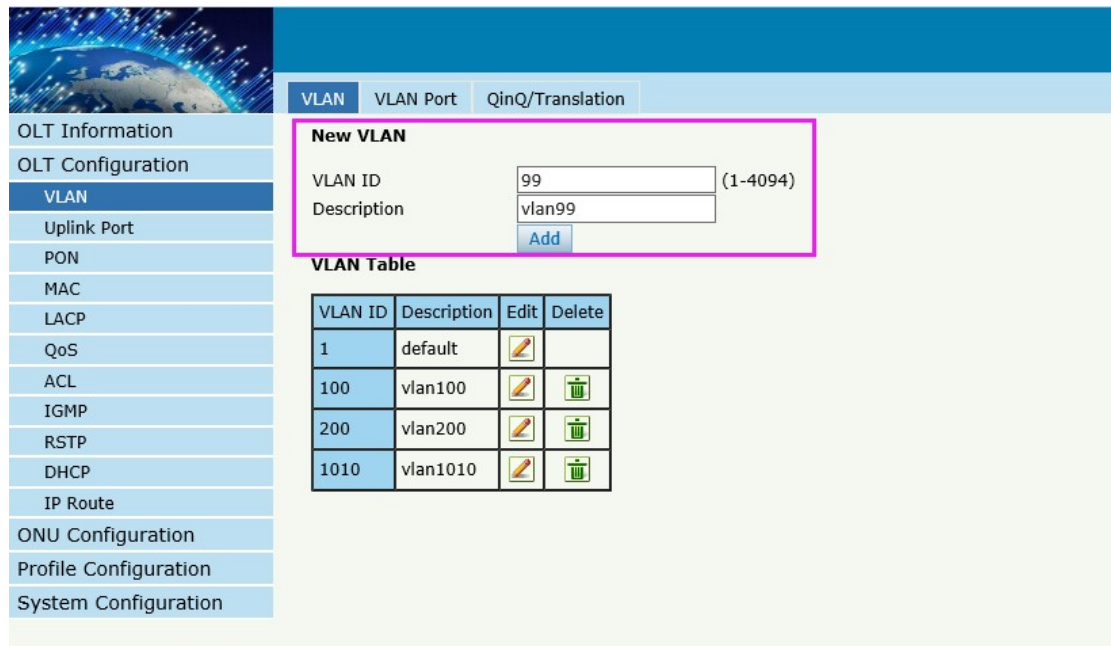
The screenshot shows a web-based configuration interface for OLT. On the left is a navigation menu with items like 'OLT Information', 'OLT Configuration', 'VLAN', 'Uplink Port', 'PON', 'MAC', 'LACP', 'QoS', 'ACL', 'IGMP', 'RSTP', 'DHCP', 'IP Route', 'ONU Configuration', 'Profile Configuration', and 'System Configuration'. The 'VLAN' item is highlighted with a red circle. The main content area has tabs for 'VLAN', 'VLAN Port', and 'QinQ/Translation'. Under the 'VLAN' tab, there is a 'New VLAN' section with input fields for 'VLAN ID' (with a range of 1-4094) and 'Description', and an 'Add' button. Below that is a 'VLAN Table' with the following data:

VLAN ID	Description	Edit	Delete
1	default		
100	vlan100		
200	vlan200		
1010	vlan1010		

3.1.1 Create VLAN

OLT Configuration → VLAN

In this user interface, can be create new VLAN.



The screenshot shows a web-based configuration interface for an OLT. On the left is a navigation menu with options like OLT Information, OLT Configuration, VLAN (selected), Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main area has tabs for VLAN, VLAN Port, and QinQ/Translation. The 'New VLAN' form is highlighted with a pink box and contains fields for 'VLAN ID' (value: 99, range: 1-4094) and 'Description' (value: vlan99), with an 'Add' button below. Below the form is a 'VLAN Table' with the following data:

VLAN ID	Description	Edit	Delete
1	default		
100	vlan100		
200	vlan200		
1010	vlan1010		

Figure 3-1: Create New VLAN

3.1.2 VLAN Port

OLT Configuration → VLAN → VALN Port.

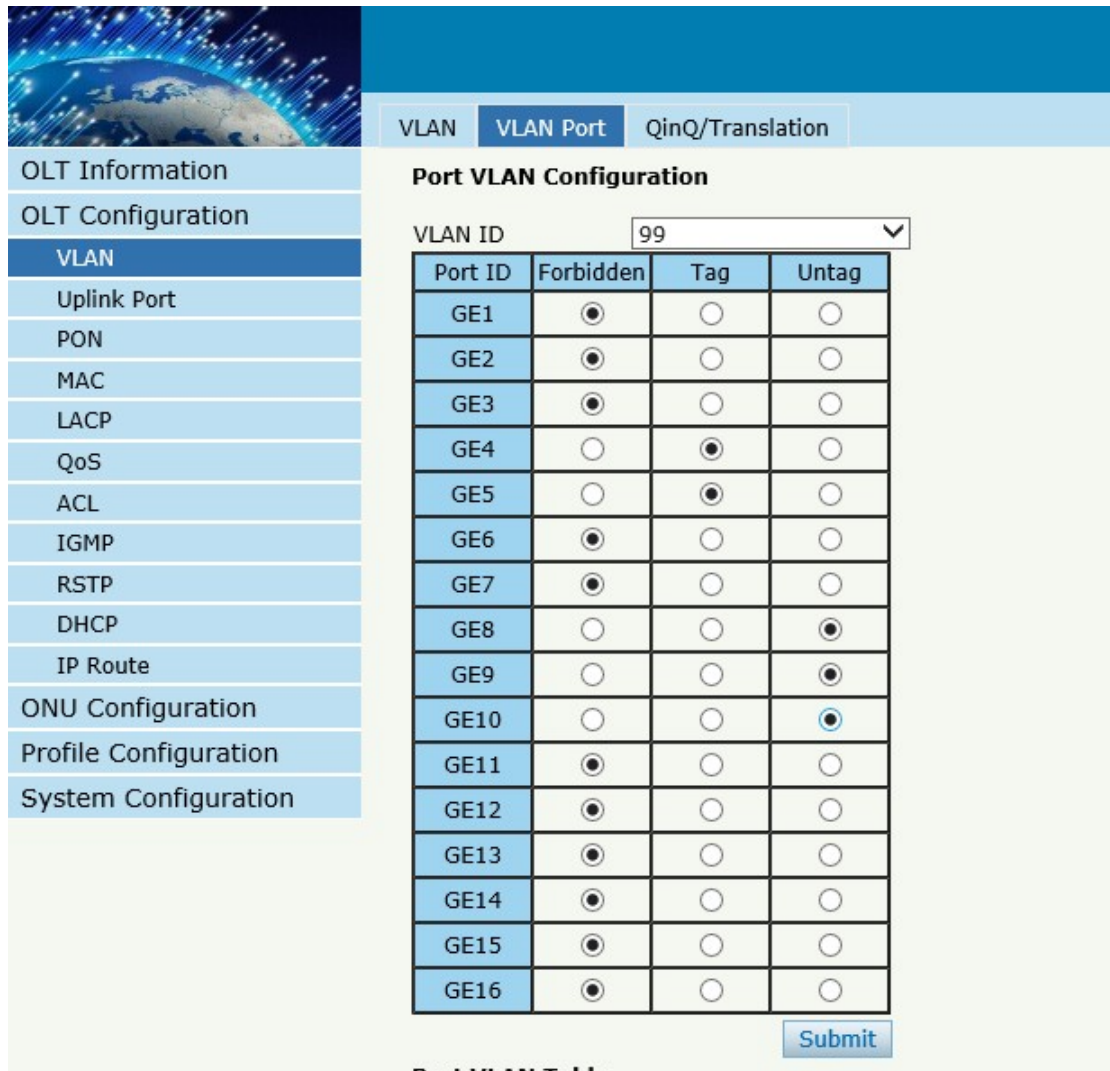


Figure 3-2: Add VLAN Port

3.1.3 QinQ/Translation

OLT Configuration → VLAN → QinQ/Translation

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

Qinq Configuration

Port ID: GE1
 Customer VLAN: 99
 Customer Cos: any
 Service VLAN: 100
 Service Cos: any
 Mode: VLAN Translation

VLAN Qinq Mapping Table

Port ID	Customer VLAN	Customer Cos	Service VLAN	Service Cos	Mode	Delete
GE6	99	any	100	any	VLAN Translation	

Figure 3-3: Qinq/Translation Configuration

3.2 Uplink Port

GE port traffic statistics and basic configuration setting.

3.2.1 Information

OLT Configuration → Uplink Port → Information

This user interface displays traffic statistics of uplink ports.

Port ID	Link Status	Speed	Rx Bytes	Rx Packets				Tx Bytes	Tx Packets				Collisions	Errors
				Packets	Unicast	Broadcast	Multicast		Packets	Unicast	Broadcast	Multicast		
GE1	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE2	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE3	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE4	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE5	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE6	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE7	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE8	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE9	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE10	Down	-	4292241	50334	29673	17705	2953	4094572	60112	248	51731	8133	0	3
GE11	Down	-	1505534976	11761992	11761992	0	0	4187	58	0	32	26	0	0
GE12	Up	1000M Full	33217903360	266466398	266466393	0	0	31232952872	250979729	250905193	58255	16276	0	0
GE13	Down	-	1161398784	9073428	9073428	0	0	1263815518	9873915	9873163	601	151	0	0
GE14	Down	-	0	0	0	0	0	64	1	0	0	1	0	0
GE15	Down	-	0	0	0	0	0	0	0	0	0	0	0	0
GE16	Down	-	0	0	0	0	0	4568247	58156	7143	45949	5064	0	0

Figure3-4 : GETraffic Statistes

3.2.2 Configuration

OLT Configuration → Uplink Port → Information

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

Port ID	Description	Admin Status	Flow Control	Isolate	PVID	Storm(0 64-1000000fps)			Rate(0 32-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Multicast	Unicast	Ingress	Egress	
GE1		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	100
GE2		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE8		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE9		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	10
GE10		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE11		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE12		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1010	512	0	512	0	0	0
GE13		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	512	0	512	0	0	0
GE14		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0
GE16		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	512	0	512	0	0	0

Figure3-5: Uplink Ports Configuration

Illustrations of each parameter:

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

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 and the traffic statistics.

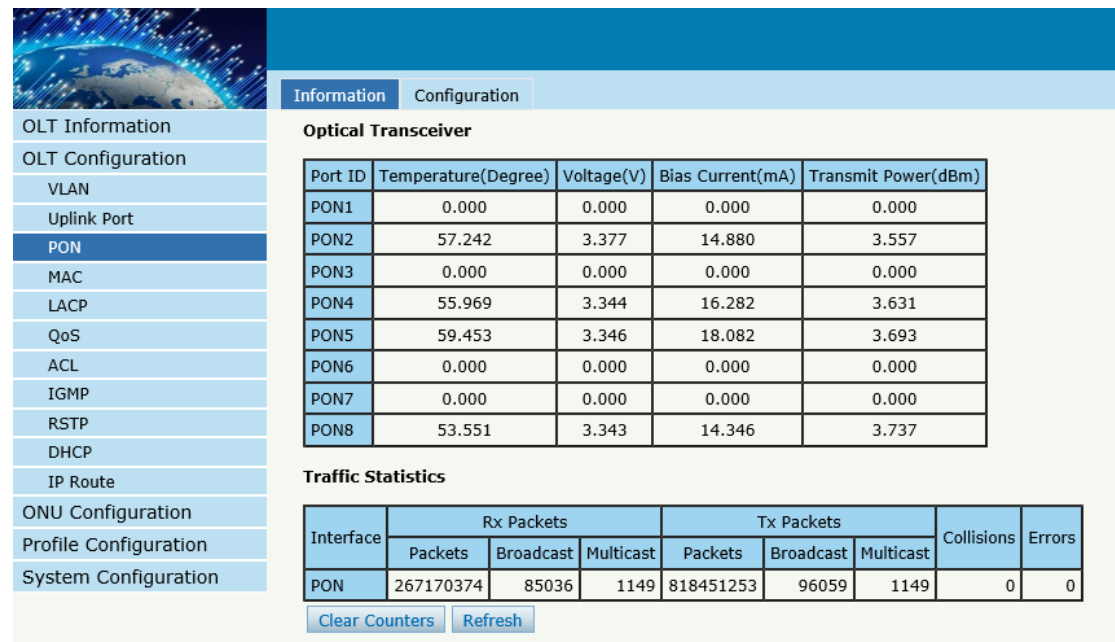
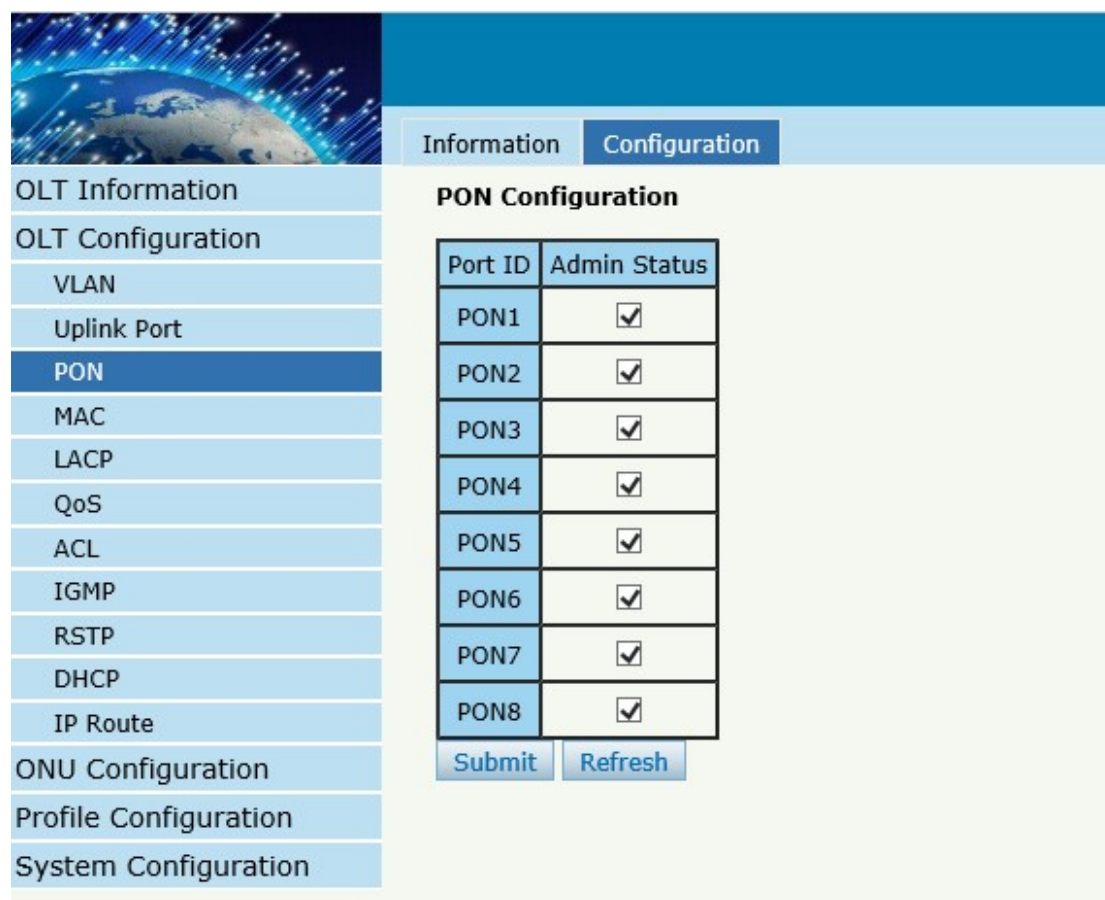


Figure3-6: PON Information

3.3.2 Configuration

OLT Configuration → PON → Configuration

This user interface is used to configure port status



The screenshot displays a web-based configuration interface for a network device. On the left, a vertical menu lists various configuration options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON (highlighted in dark blue), MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'PON Configuration' and features a table with two columns: 'Port ID' and 'Admin Status'. The table lists eight ports (PON1 through PON8), each with a checked checkbox in the 'Admin Status' column. Below the table are two buttons: 'Submit' and 'Refresh'. At the top of the main area, there are two tabs: 'Information' and 'Configuration' (which is active).

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

Figure3-7: PON configuration

3.4 MAC

In this section, you can check MAC address table of OLT, set MAC aging time and MAC limit of the ports.

3.4.1 MAC Table

OLT Configuration → MAC → MAC Table

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

The screenshot shows the 'MAC Address Table' configuration page. The left sidebar contains a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, **MAC**, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area has two tabs: 'MAC Table' (selected) and 'Configuration'. Below the tabs, there is a 'Port ID' dropdown menu set to 'ALL'. The 'MAC Address Table' is displayed as follows:

VLAN ID	MAC	Type	Physical Port
1010	01:00:5E:16:02:02	Static	CPU
1010	01:00:5E:00:01:01	Static	CPU
1010	00:24:21:57:AC:39	Dynamic	PON1
1010	00:E0:4C:86:70:70	Dynamic	PON1
1010	01:00:5E:01:01:01	Static	CPU

Below the table, there are two buttons: 'Clean' and 'Refresh'.

Figure3-8: MAC Address Table

3.4.2 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 the MAC to the OLT manually.

The screenshot displays the 'MAC Configuration' page. On the left is a navigation menu with items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, **MAC**, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main area has two tabs: 'MAC Table' and 'Configuration'. Under 'Configuration', there are two sections:

- MAC Aging Configuration:**
 - Automated Aging: Enable (dropdown)
 - Aging Time: 300 (input field) (10-1000000s)
 - Submit button
- Add MAC Address:**
 - VLAN ID: 1 (dropdown)
 - MAC Address: (input field) (HH:HH:HH:HH:HH:HH)
 - Type: Static Dynamic
 - Port ID: GE1 (dropdown)
 - Add and Delete buttons

Figure 3-9:MAC Configuration

3.5 LACP

OLT Configuration→LACP→Static LACP

To assign and configure uplink physical interface to an EtherChannel.

When a traffic link can't be used suddenly, this traffic link will switch to another link automatically. The group range is from 1 to 4.Each group can add 4 ports maximally. Only GE ports can be added in the channel groups.

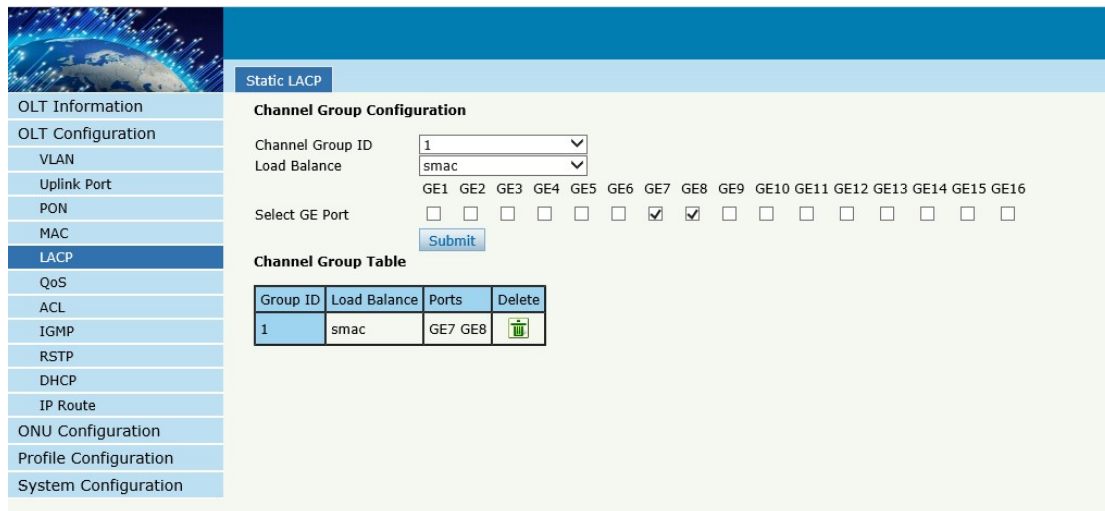


Figure 3-10: Create Static LACP

3.6 QOS

OLT Configuration → QOS

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

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

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

QoS Mode	Q0(1-127)	Q1(1-127)	Q2(1-127)	Q3(1-127)	Q4(0-127)	Q5(0-127)	Q6(0-127)	Q7(0-127)
Strict-WRR	1	2	4	8	16	111	64	0

Figure 3-11: QoS Configuration

3.7 ACL

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

This device supports the following types of ACL.

3.7.1 IP Filter

The filter is basic on the IP address, include source IP address and

destination IP address.

OLT Configuration → ACL → IP Filter

The screenshot displays the 'Access List IP Configuration' page in the OLT configuration interface. The left sidebar lists various configuration categories, with 'ACL' selected. The main content area is divided into two sections: 'Access List IP Configuration' and 'Access Lists Configured'.

Access List IP Configuration

Access List ID: [] (1000-1999)
Filter Action: Deny Permit

Source IP: [] Mask []
 Source Port: [] (0-65535)
 Destination IP: [] Mask []
 Destination Port: [] (0-65535)
 Protocol: TCP [] (0-255)
 DSCP: [] (0-63)

[Add]

Access Lists Configured

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

Figure 3-12: IP Filter

3.7.2 MAC Filter

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

OLT Configuration → ACL → MAC Filter

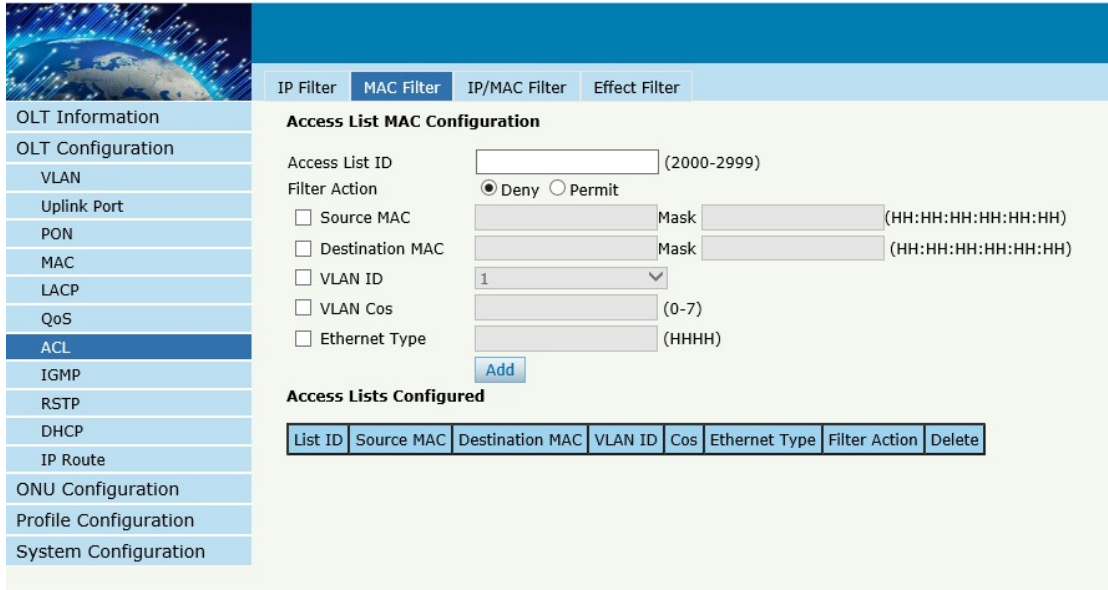


Figure 3-13: MAC Filter

3.7.3 IP/MAC Filter

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

OLT Configuration → ACL → IP/MAC Filter

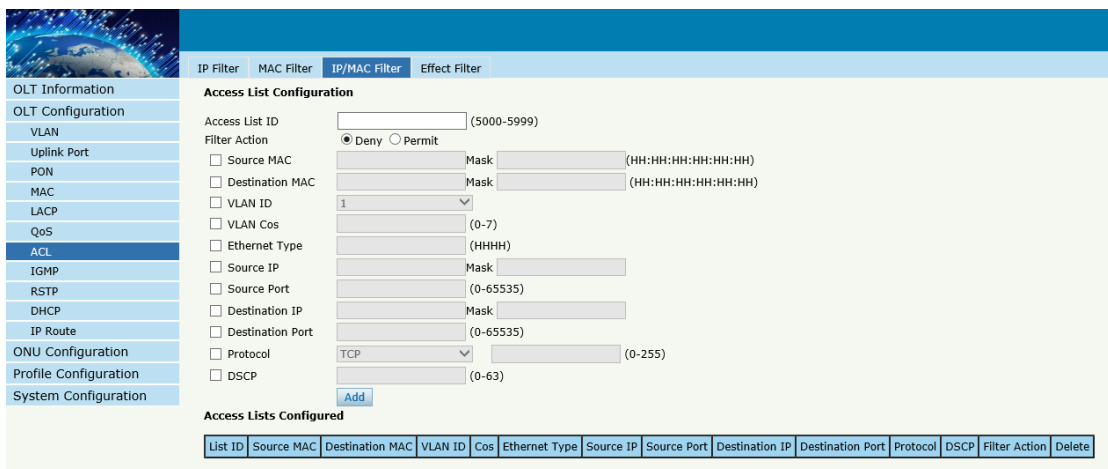


Figure 3-14 IP/MAC Filter

3.7.4 Effect Filter

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

OLT Configuration → ACL → Effect Filter

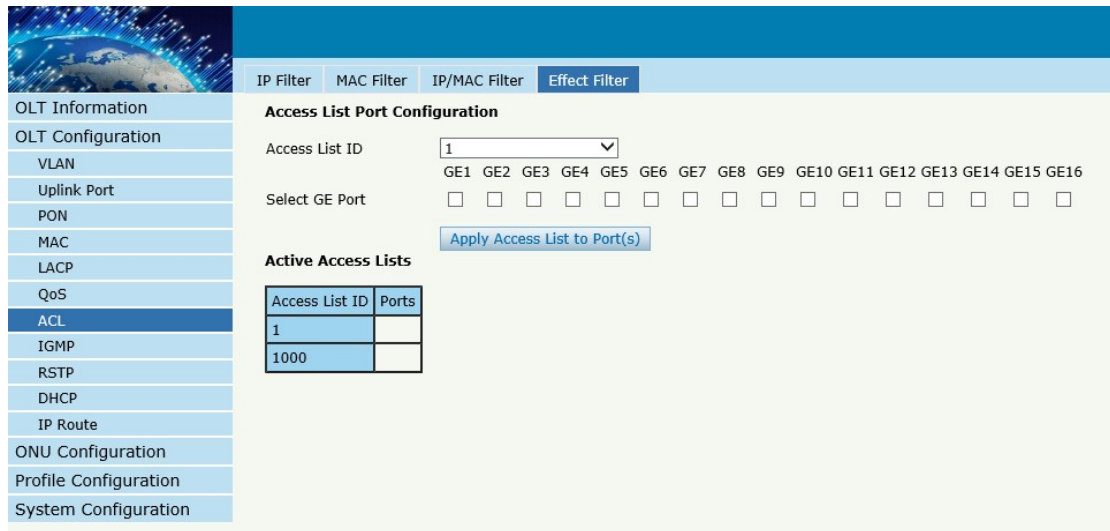


Figure 3-15: Bind Security Filter

3.8 IGMP

3.8.1 Group Member

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

OLT Configuration → IGMP → Group Member



Figure 3-16: Group Member

3.8.2 Global

OLT Configuration →IGMP→Global.

IGMP basic configuration mainly contains parameters of query packet.

When IGMP status is checked, 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 disable, OLT works at

transparent mode.

Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
IGMP Configuration						
IGMP Status	Enable					
Last Member Query Interval	1	(1-255s)				
Last Member Query Count	2	(1-255)				
Last Member Query Response	1	(1-255s)				
General Query Packet	<input type="radio"/> Disable <input checked="" type="radio"/> Enable					
General Query Interval	10	(10-255s)				
Query Source IP	2.2.2.2					
		Submit	Reset			

Figure 3-17: 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.

The screenshot displays the 'IGMP Port Configuration' page in a network management system. The left sidebar lists various configuration categories, with 'IGMP' selected. The main content area shows a table for configuring 15 ports (GE1 to GE15). Each row in the table has four columns: 'Port ID', 'Fast Leave', 'Filter', and 'Group Limit(0-1024)'. The 'Fast Leave' and 'Filter' columns contain checkboxes, and the 'Group Limit' column contains a text input field with the value '1024'.

Port ID	Fast Leave	Filter	Group Limit(0-1024)
GE1	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE2	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE3	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE4	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE5	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE6	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE7	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE8	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE9	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE10	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE11	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE12	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE13	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE14	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE15	<input type="checkbox"/>	<input type="checkbox"/>	1024

Figure 3-18: 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.

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

User VLAN Configuration

Port ID GE1
 User VLAN ID 1
 Group VLAN ID 1
 Add

User VLAN Table

Port ID	User VLAN ID	Group VLAN ID	Delete
PON3	88	88	
PON7	1010	1010	

Figure 3-19: 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.

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

Add Multicast Router

Port ID GE1
 Group VLAN ID 1
 Add

Multicast Router Table

Port ID	Group VLAN ID	Delete
GE12	88	
GE3	200	

Figure 3-20: IGMP Port Mroute

3.8.6 Mvlan

OLT Configuration →IGMP→Mvlan

This configuration is used to configure Mvlan and its mode.

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

The screenshot shows the OLT configuration interface for IGMP Mvlan. The navigation menu on the left includes OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP (selected), RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area displays 'IP Igmp Mvlan Info' with a table showing Multicast vlan (88), Unknown multicast (drop), and Igmp packet (trap-to-cpu). Below this is an 'Add/Modify Mvlan' form with fields for Mvlan ID (1~4094), Unknown multicast (drop), and Igmp packet (trap-to-cpu), and an 'Add/Modify' button.

Figure 3-21: IGMP MVLAN

3.8.7 Static Group

OLT Configuration →IGMP→Static Group

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

The screenshot shows a network configuration interface. On the left is a sidebar with a navigation menu. The top navigation bar has tabs for 'Group Member', 'Global', 'Port', 'Port User VLAN', 'Port Mrouter', 'Mvlan', and 'Static Group'. The 'Static Group' tab is selected. The main content area is titled 'Add Static Group' and contains a form with the following fields: 'Port ID' (dropdown menu with 'PON1' selected), 'IP Address' (text input field), and 'User VLAN ID' (dropdown menu with '1' selected). Below the form is an 'Add' button. Underneath is a 'Static Group Table' with the following data:

Port ID	IP Address	User VLAN ID	Delete
PON7	239.1.1.1	1010	

Figure 3-22: IGMP Static Group

3.9 RSTP

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

3.9.1 Information

OLT Configuration → RSTP → Information

Global information mainly displays RSTP parameters of root bridge device.

The screenshot displays a network configuration interface. On the left is a vertical navigation menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, **RSTP**, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area has tabs for 'Information', 'Global', and 'Port'. The 'Information' tab is active, showing 'RSTP Information' and 'RSTP Port Status'.

RSTP Information

	Root	Bridge
Cost	0	
Port	CPU	
Priority	32768	32768
MAC Address	80:14:A8:75:83:AD	80:14:A8:75:83:AD
Hello Time	2s	2s
Max Age	20s	20s
Forward Delay	15s	15s

RSTP Port Status

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

Refresh

Figure 3-23:RSTP Information

3.9.2 Global

OLT Configuration→RSTP→Global

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

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

Figure 3-24: RSTP Global Setup

3.9.3 Port

OLT Configuration → RSTP → Port .

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

The screenshot displays the 'RSTP Port Configuration' interface. On the left is a navigation menu with options: OLT Information, OLT Configuration (VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route), ONU Configuration, Profile Configuration, and System Configuration. The 'RSTP' option is selected. The main area shows a table with columns: Port ID, Status, Priority (0-255), Cost (1-200000000), OperEdge, and Point To Point. All ports (GE1-GE16) have their Status checked, Priority set to 128, Cost set to 200000, OperEdge checked, and Point To Point checked. At the bottom are 'Submit' and 'Reset' buttons.

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

Figure 3-25: RSTP Port Setting

3.10 DHCP

OLT can support the following DHCP functions.

- DHCP Server
- DHCP Relay
- DHCP Snooping

3.10.1 DHCP Server

3.10.1.1 DHCP Lease

OLT Configuration → DHCP → DHCP Server → Lease

This table displays IP addresses assigned and their MAC addresses, lease time.

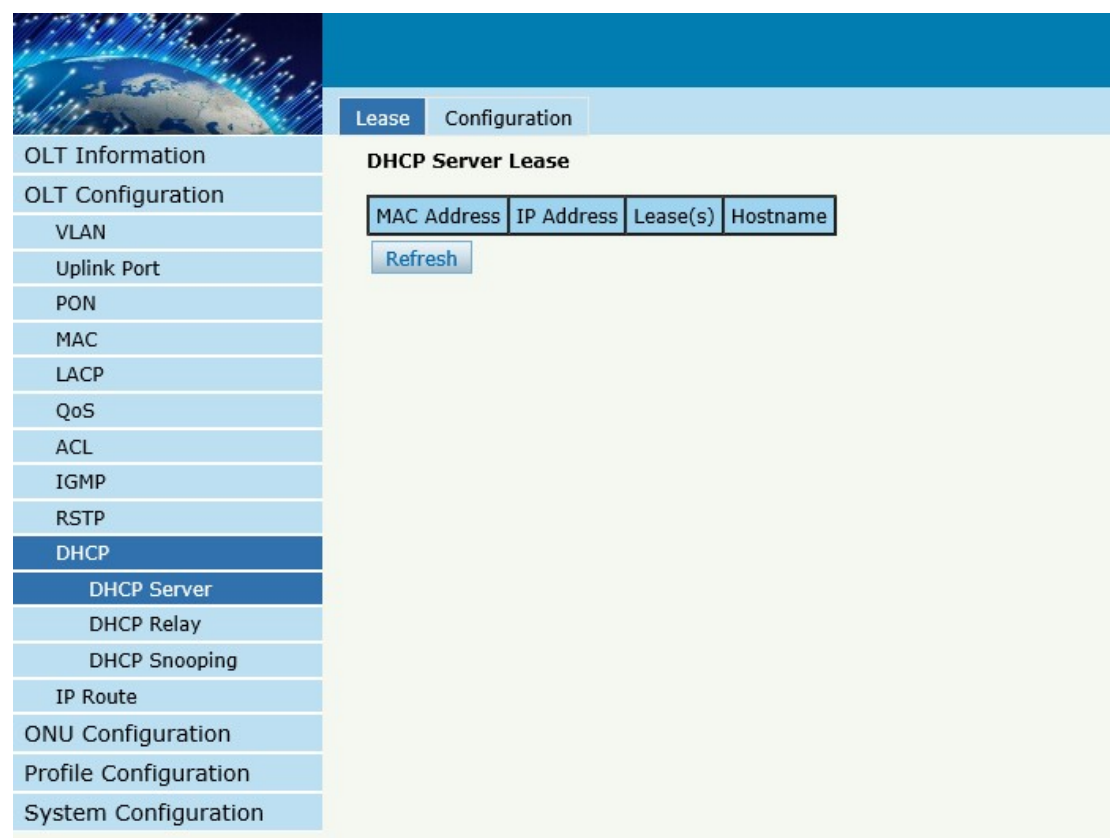


Figure 3-26: DHCP Lease

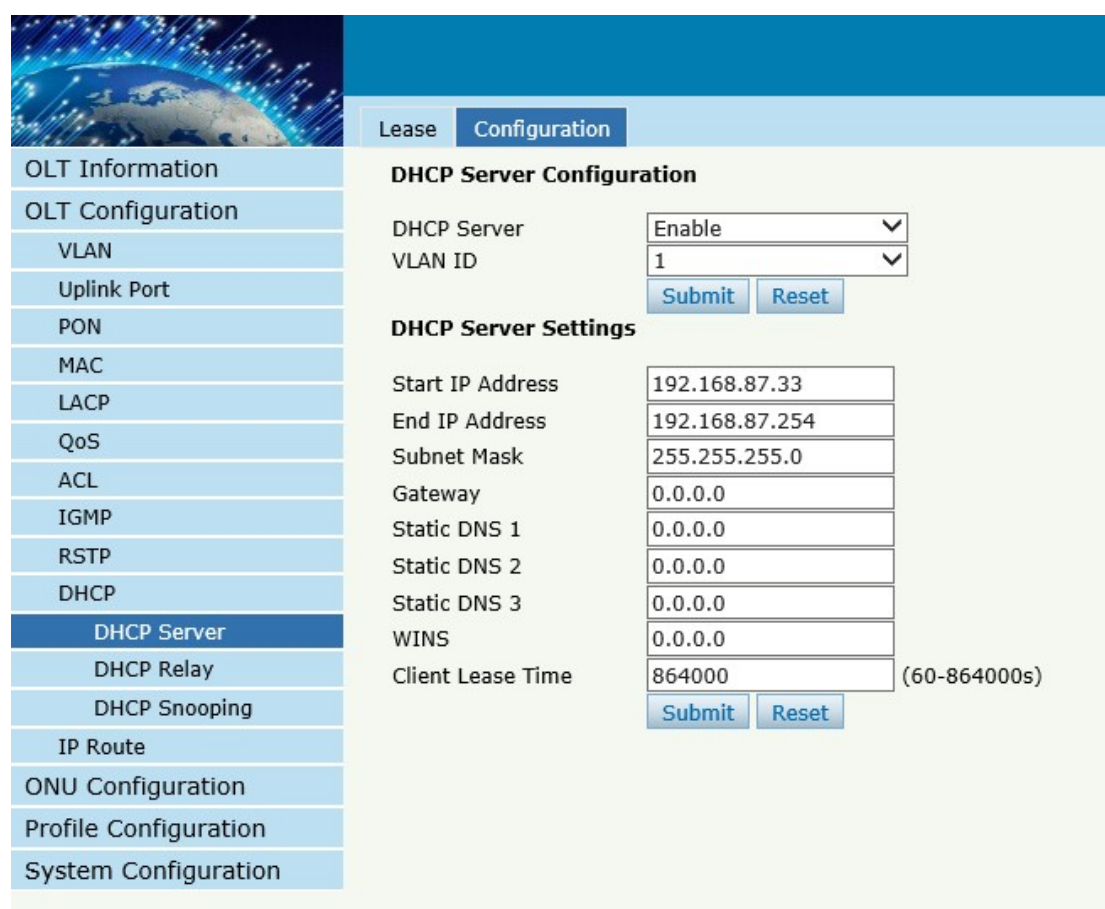
3.10.1.2 DHCP Configuration

OLT Configuration → DHCP → DHCP Server → Configuration

Sometimes the devices need dynamic IP addresses, but there is no special

DHCP server in network. These configurations can solve the problem. OLT will be a DHCP server in network and assign IP addresses to other devices.

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



The screenshot shows a web-based configuration interface for a DHCP server. On the left is a navigation menu with various configuration options, and on the right is the main configuration area. The 'DHCP Server' option in the menu is highlighted. The main area is divided into two tabs: 'Lease' and 'Configuration', with 'Configuration' selected. The 'DHCP Server Configuration' section includes a dropdown for 'DHCP Server' set to 'Enable' and a dropdown for 'VLAN ID' set to '1'. Below these are 'Submit' and 'Reset' buttons. The 'DHCP Server Settings' section includes input fields for 'Start IP Address' (192.168.87.33), 'End IP Address' (192.168.87.254), 'Subnet Mask' (255.255.255.0), 'Gateway' (0.0.0.0), 'Static DNS 1', 'Static DNS 2', 'Static DNS 3', and 'WINS', all set to 0.0.0.0. The 'Client Lease Time' is set to 864000 seconds (60-864000s). 'Submit' and 'Reset' buttons are also present at the bottom of this section.

Field	Value
DHCP Server	Enable
VLAN ID	1
Start IP Address	192.168.87.33
End IP Address	192.168.87.254
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)

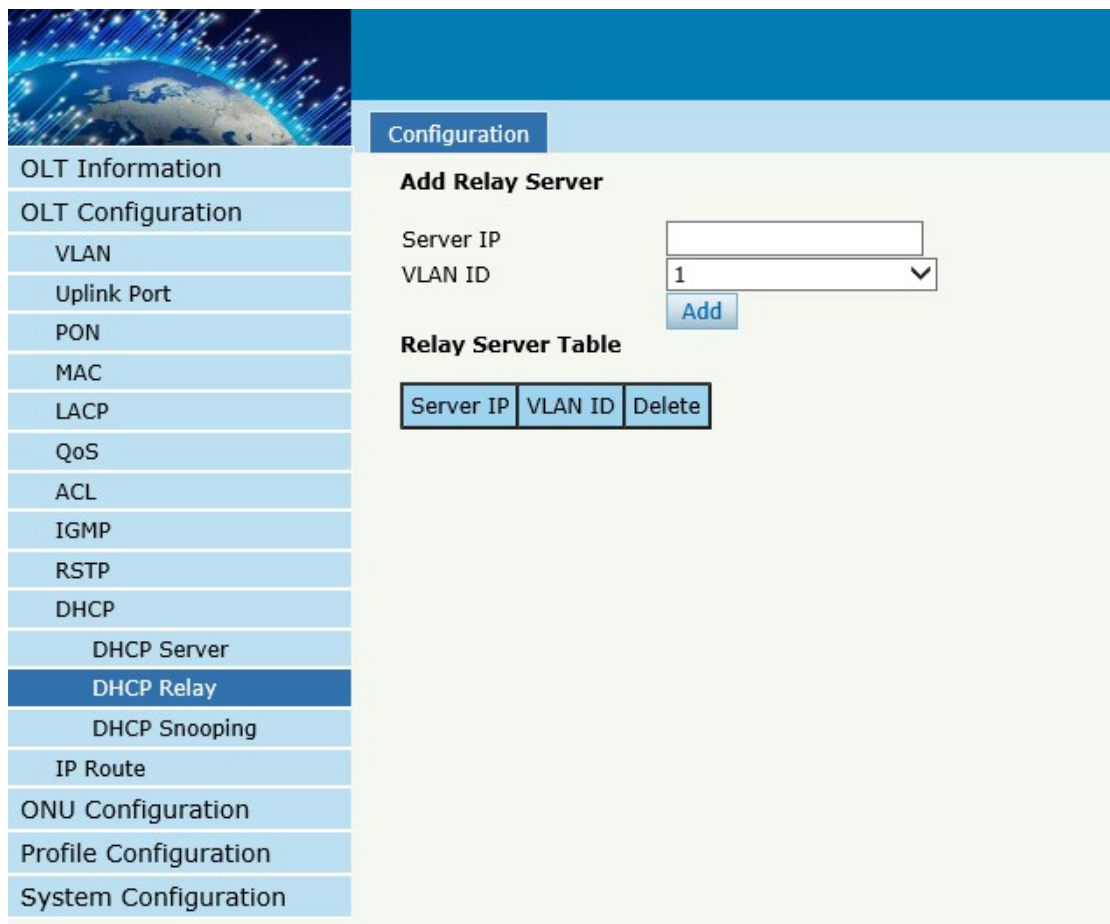
Figure 3-27:DHCP Configuration

3.10.2 DHCP Relay

3.10.2.1 DHCP Relay Configuration

OLT Configuration→DHCP→DHCP Relay

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



The screenshot shows a web-based configuration interface for DHCP Relay. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, DHCP Server, DHCP Relay (highlighted), DHCP Snooping, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'Configuration' and contains the following sections:

- Add Relay Server**: Includes a text input field for 'Server IP', a dropdown menu for 'VLAN ID' with '1' selected, and an 'Add' button.
- Relay Server Table**: A table with three columns: 'Server IP', 'VLAN ID', and 'Delete'.

Figure 3-28:DHCP Relay Configuration

3.10.3 DHCP Snooping

3.10.3.1 DHCP Snooping Bind List

OLT Configuration → DHCP → DHCP Snooping → Bind List

The static bind of the DHCP Snooping will be shown ,

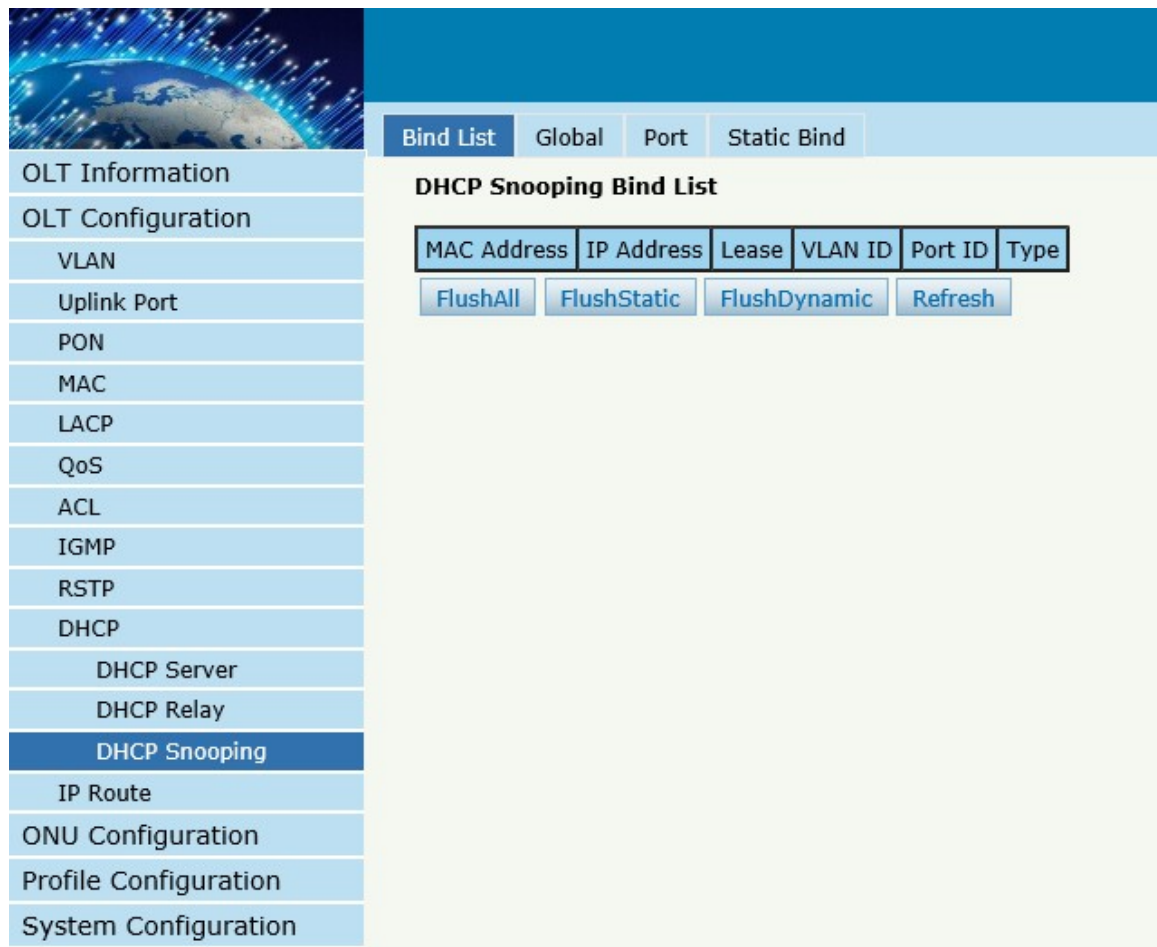


Figure 3-29:DHCP Snooping Bind List

3.10.3.2 Global

OLT Configuration → DHCP → DHCP Snooping → Global

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

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

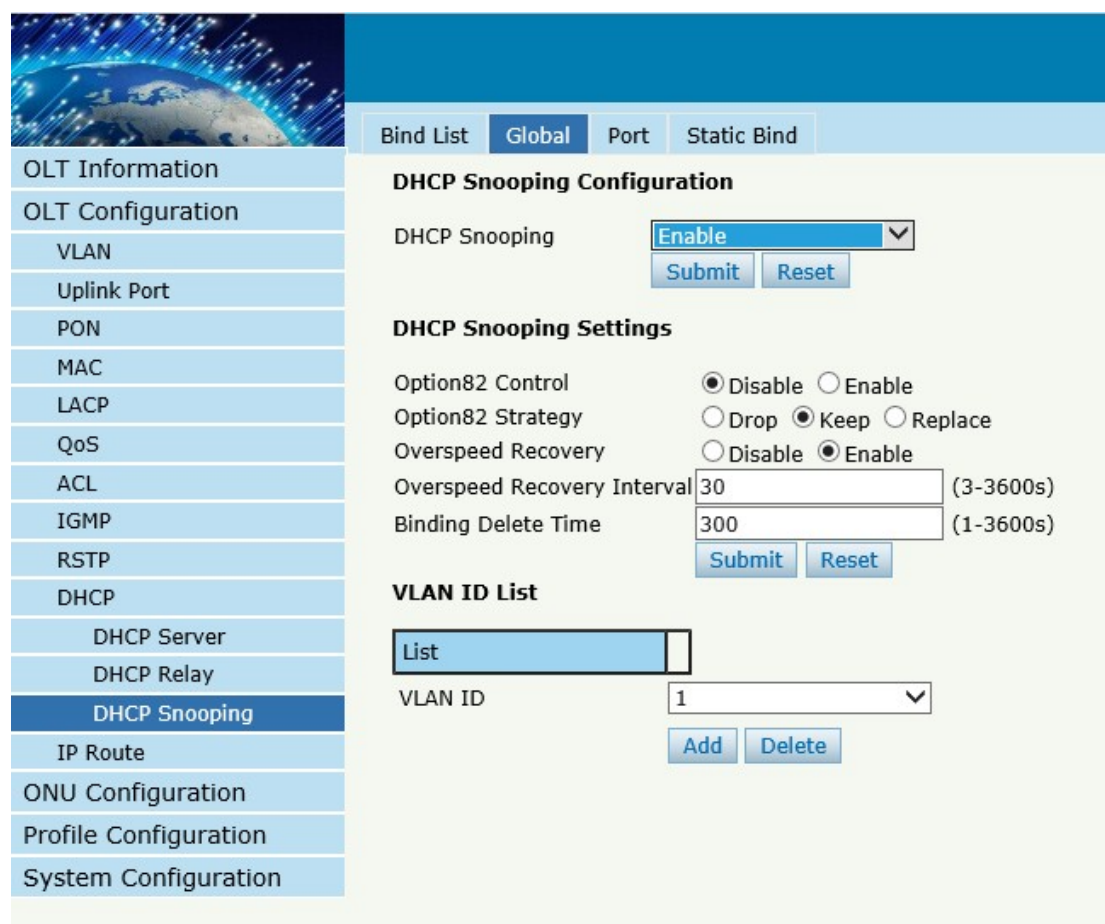


Figure 3-30:DHCP Snooping Global

3.10.3.3 Port

OLT Configuration→DHCP→DHCP Snooping→Port

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

All the ports are untrust ports by default. Option82 parameters, “Option 82 Circuit ID” and “Option 82 Remote ID”, are effective for untrust ports.

“Limit Rate” is the ports’ max speed of receiving DHCP packets.

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

Figure 3-31:DHCP Snooping Port Setup

3.10.3.4 Static Bind

OLT Configuration→DHCP→DHCP Snooping→Static Bind

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

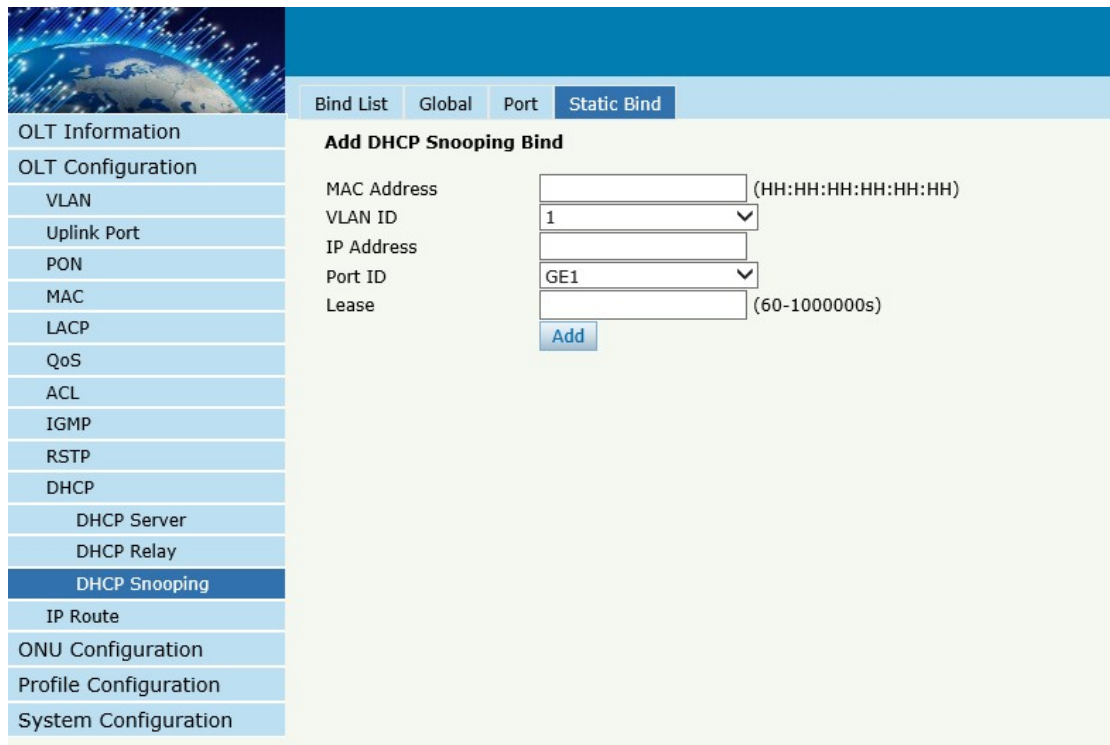


Figure 3-32 DHCP Snooping Static Bind

3.11 IP Route

3.11.1 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.

The screenshot displays a network configuration web interface. On the left is a sidebar with a navigation menu. The main content area is titled 'VLAN IP Configuration' and includes a sub-section 'VLAN IP Table'.

Navigation Menu (Left Sidebar):

- OLT Information
- OLT Configuration
 - VLAN
 - Uplink Port
 - PON
 - MAC
 - LACP
 - QoS
 - ACL
 - IGMP
 - RSTP
 - DHCP
 - DHCP Server
 - DHCP Relay
 - DHCP Snooping
 - IP Route**
 - ONU Configuration
 - Profile Configuration
 - System Configuration

VLAN IP Configuration (Main Area):

- Sub-tabs: VLAN IP (selected), ARP Proxy, Static Route
- VLAN ID: 100
- IP Address: 192.168.88.9
- Subnet Mask: 255.255.255.0
- Buttons: Submit, Reset

VLAN IP Table:

VLAN ID	IP Address	Subnet Mask	Delete
100	192.168.88.9	255.255.255.0	
2009	192.168.87.32	255.255.255.0	

Figure 3-33:VLAN IP

3.11.2 ARP Proxy

OLT Configuration → IP Route → ARP Proxy

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

The process which results in the node responding with its own MAC address to an ARP request for a different IP address for proxying purposes is sometimes referred to as 'publishing'.

The screenshot displays a network configuration page. On the left is a sidebar menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP (with sub-items: DHCP Server, DHCP Relay, DHCP Snooping), IP Route (highlighted), ONU Configuration, Profile Configuration, and System Configuration. The main content area has three tabs: 'VLAN IP', 'ARP Proxy' (selected), and 'Static Route'. Under the 'ARP Proxy' tab, the 'ARP Proxy Configuration' section shows 'VLAN ID' as a dropdown menu with '88' selected, and 'ARP Proxy' with radio buttons for 'Disable' and 'Enable' (the 'Enable' option is selected). A 'Submit' button is located below these options. The 'ARP Proxy Table' section contains a table with two columns: 'VLAN ID' and 'ARP Proxy Status'. The table lists the following entries:

VLAN ID	ARP Proxy Status
1	disable
88	disable
100	disable
200	disable
555	disable
1010	disable
1256	disable
2009	disable
3434	disable

Figure 3-34: ARP proxy configuration

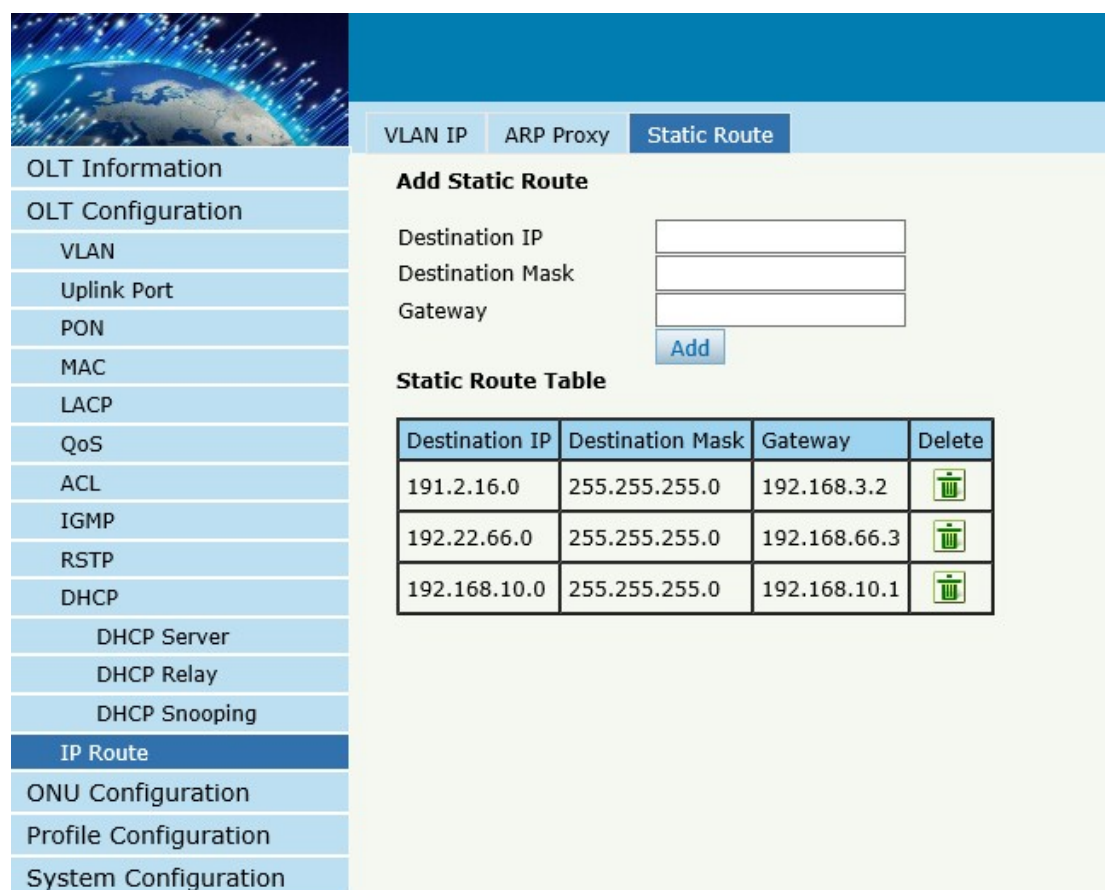
3.11.3 Static Route

OLT Configuration → IP Route → Static Route

Static route is a form of routing that a router uses a manually-configured routing entry. In many cases, static routes are manually configured by a network administrator. Unlike dynamic routing, static routes are fixed and

do not change if the network is changed or reconfigured.

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



The screenshot shows a web-based configuration interface for an OLT. On the left is a navigation menu with various configuration options. The 'Static Route' tab is selected. The main area contains an 'Add Static Route' section with input fields for Destination IP, Destination Mask, and Gateway, and an 'Add' button. Below this is a 'Static Route Table' with three entries, each having a delete icon.




Destination IP	Destination Mask	Gateway	Delete
191.2.16.0	255.255.255.0	192.168.3.2	
192.22.66.0	255.255.255.0	192.168.66.3	
192.168.10.0	255.255.255.0	192.168.10.1	

Figure 3-35: Static Route

Chapter 4 ONU Configuration

This chapter is about the ONU management by OLT.

4.1 ONU AuthList

4.1.1 ONU Status

ONU Configuration→ONU AuthList→ONU Status

Select PON port ID, all ONUs will be displayed in this interface.

You can check ONU Admin state、 OMCC state and phase state.

If the phase state is working ,this ONU is registered successfully

The screenshot displays the 'ONU Status' interface. 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 is titled 'ONU Status Info' and includes a 'Port ID' dropdown menu set to 'PON2'. Below this is a table with the following data:

ONU ID	Admin State	OMCC State	Phase State
GPON0/2:1	Enable	Enable	working
GPON0/2:2	Enable	Enable	working
GPON0/2:3	Enable	Disable	Offline
GPON0/2:4	Enable	Disable	Offline
GPON0/2:5	Enable	Disable	Offline
GPON0/2:7	Enable	Disable	Offline
GPON0/2:8	Enable	Disable	Offline
GPON0/2:9	Enable	Disable	Offline
GPON0/2:10	Enable	Disable	Offline
GPON0/2:11	Enable	Disable	Offline

Below the table is a 'Refresh' button.

Figure 4-1 ONU Status

4.1.2 ONU List

ONU Configuration→ONU AuthList→ONU List

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

ONU Status **ONU List** ONU Manual Add

ONU Authentication Info

Port ID

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:9	hgu	Sn	RTKG11117120	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:10	hgu	Sn	RTKG000072C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:11	hgu	Sn	RTKG11117210	Delete Config Modify Optical Info Detail Info Reboot

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

Figure 4-2 ONU List

4.1.2.1 Delete

ONU Configuration → ONU AuthList → ONU List

Delete ONU which you selected, the ONU will be deleted and the registration failed

ONU Status **ONU List** ONU Manual Add

ONU Authentication Info

Port ID

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot

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

Figure 4-3 Delete ONU

4.1.2.2 Config

ONU Configuration → ONU AuthList → ONU List

Configure ONU parameter information which you selected,

The screenshot shows the 'ONU List' configuration page. On the left is a navigation menu with options like 'OLT Information', 'ONU Configuration', and 'ONU AuthList'. The main area is titled 'ONU Authentication Info' and shows a 'Port ID' dropdown set to 'PON2'. Below this is a table with columns for 'ONU ID', 'ONU Profile', 'Auth Mode', 'Auth Info', and 'Action'. The 'Action' column contains links for 'Delete', 'Config', 'Modify', 'Optical Info', 'Detail Info', and 'Reboot'. The 'Config' link for the first row (ONU ID: GPON0/2:1) is circled in pink, and a pink arrow points to it. At the bottom of the table are 'Delete All' and 'Refresh' buttons.

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot

Figure 4-4 Configure ONU

Create a tcont ID and bind DBA templates

The screenshot shows the 'ONU Tcont Info (PON:3 ONU:1)' configuration page. The 'Tcont' tab is selected and circled in pink. The page displays a table with columns for 'Tcont ID', 'Name', 'DBA Profile', and 'Action'. The first row shows '1', 'tcont_1', '1g', and a 'Delete' link. Below the table is the 'Add ONU Tcont' form, which has 'Tcont ID' set to '1' and 'DBA Profile Name' set to '1g'. A 'Commit' button is at the bottom.

Tcont ID	Name	DBA Profile	Action
1	tcont_1	1g	Delete

Figure 4-5 Create Tcont

Create a gempport ID and bind tcont ID

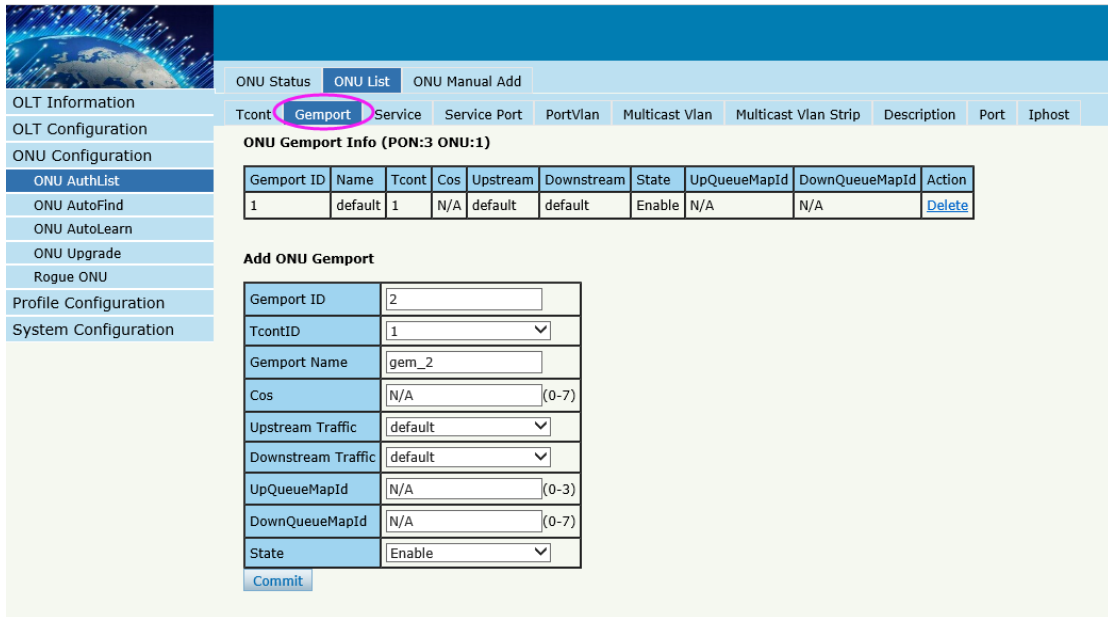


Figure 4-6 Create gempport

Create a service , Set the VLAN and VLAN mode and let it bind one gempport ID.

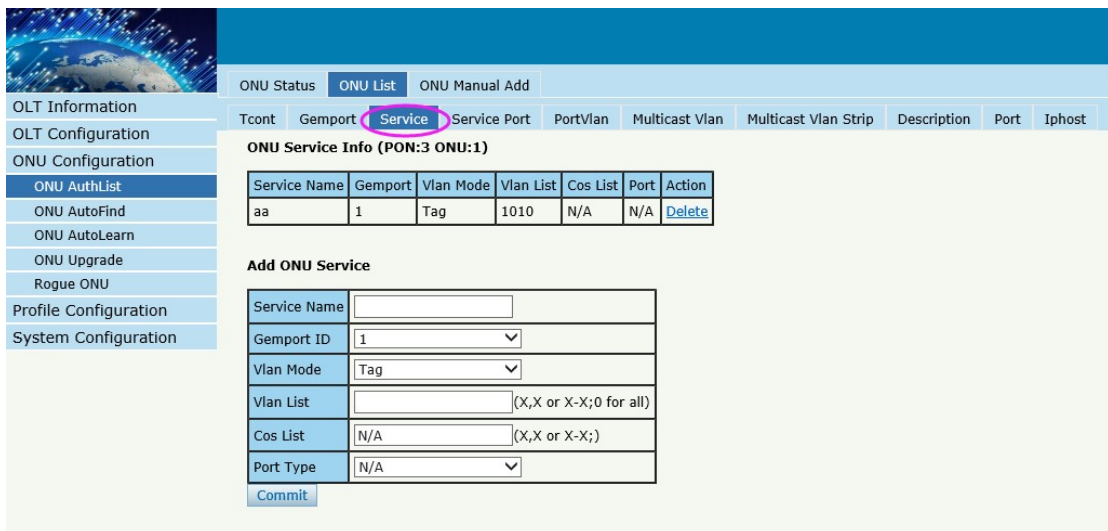


Figure 4-7 Create service

Create a service port, Set the user VLAN and translate VLAN and let it bind one gempport ID.

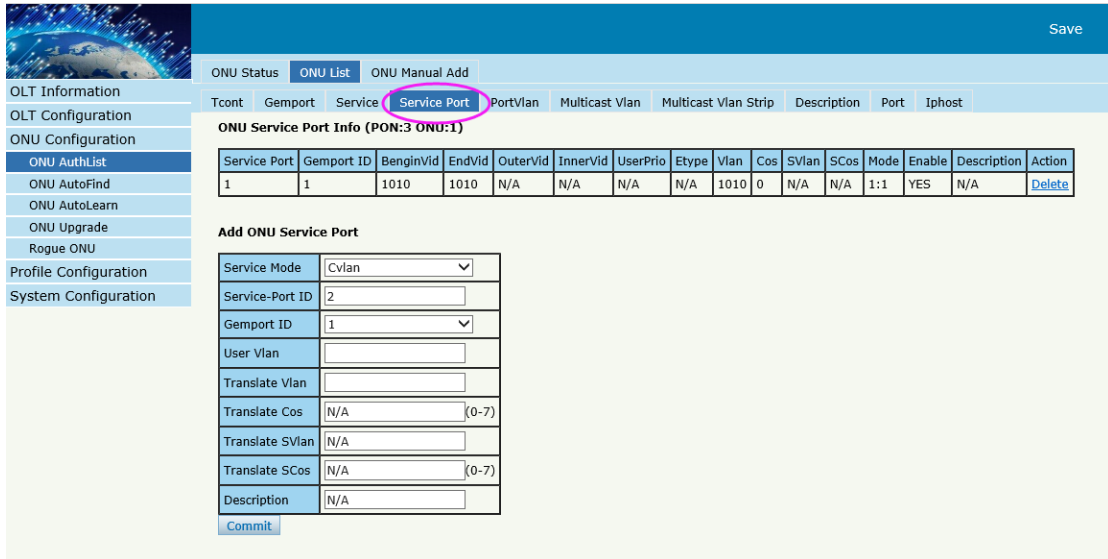


Figure 4-8 create service port

Set the VLAN mode of the ONU's port.

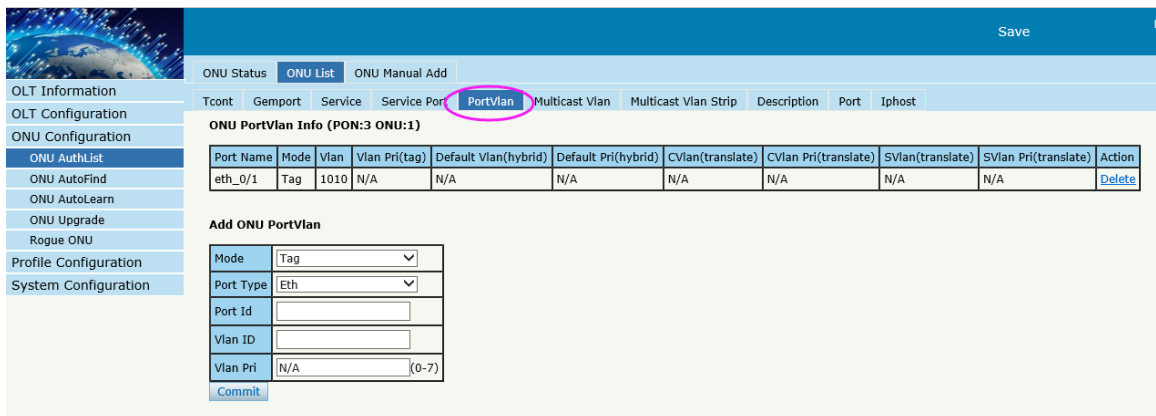


Figure 4-9 configure port VLAN mode

Set the Multicast VLAN of ONU

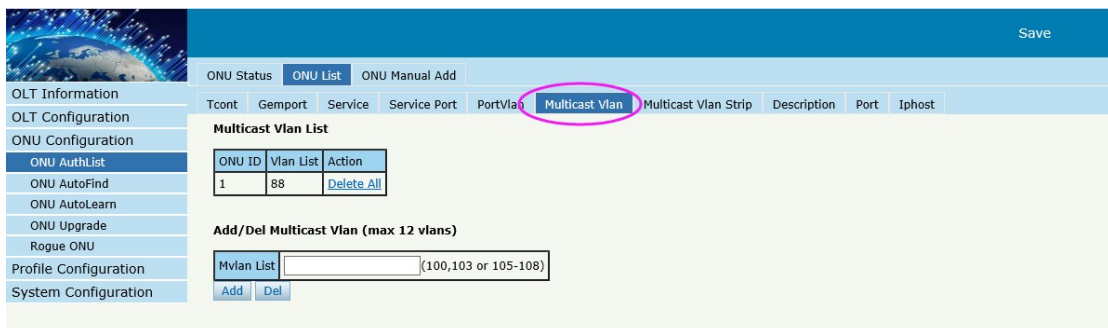


Figure 4-10 configure multicast VLAN

Set the Multicast VLAN mode of ONU's port

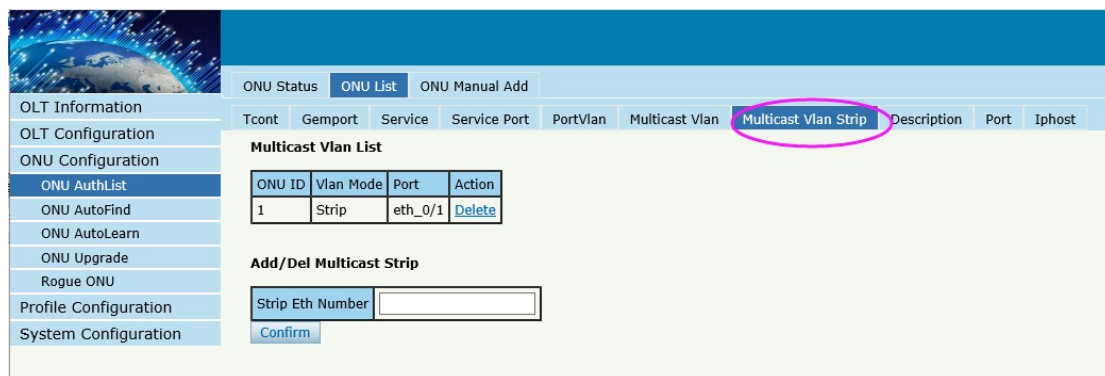


Figure 4-11 configure multicast VLAN mode

Description for ONU

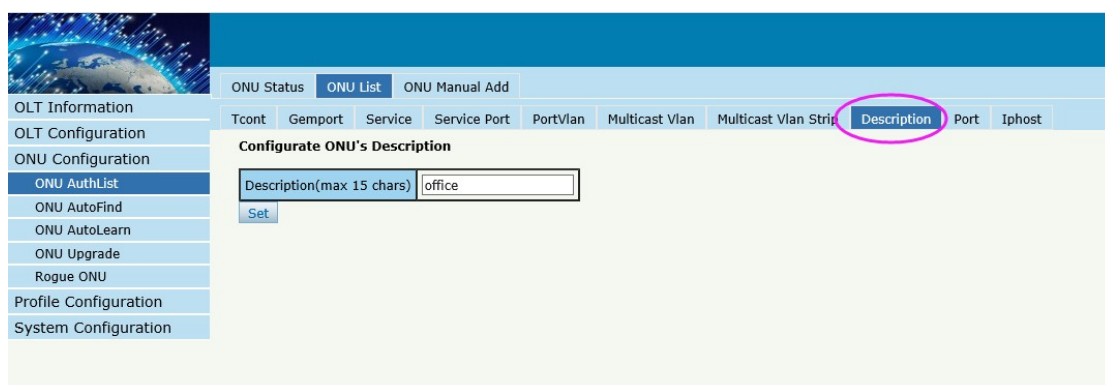


Figure 4-12 ONU's description

Port Basic State of ONU

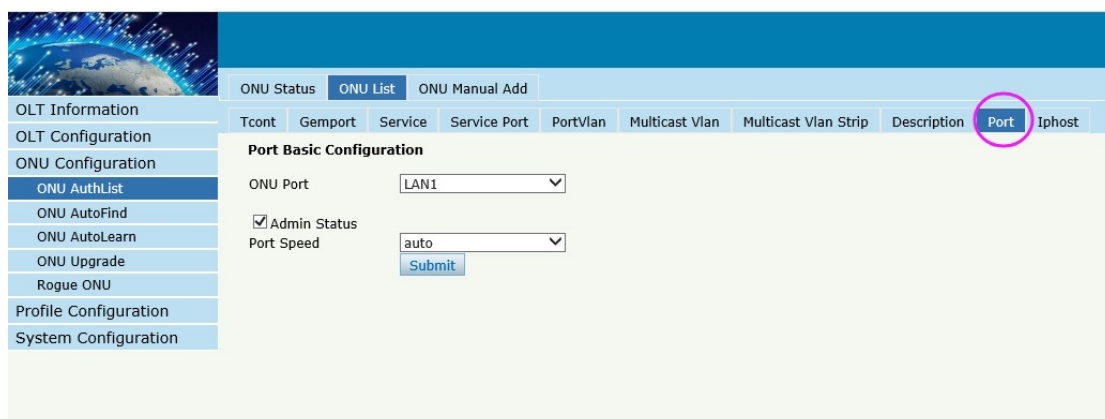


Figure 4-13 ONU's port state

Create Iphost for ONU wan connection.

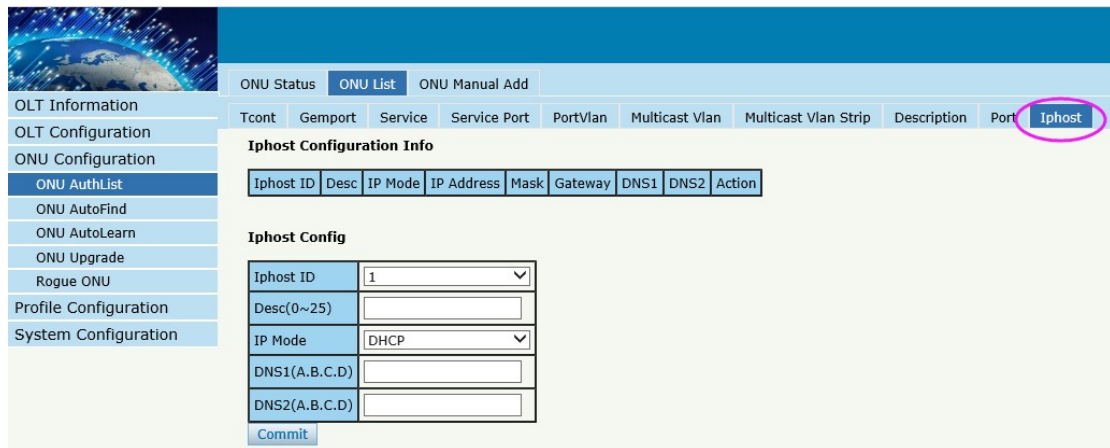


Figure 4-14 configure IPhost

4.1.2.3 Modify

ONU Configuration→ONU AuthList→ONU List

Modify SN or LOID of ONU which you selected,

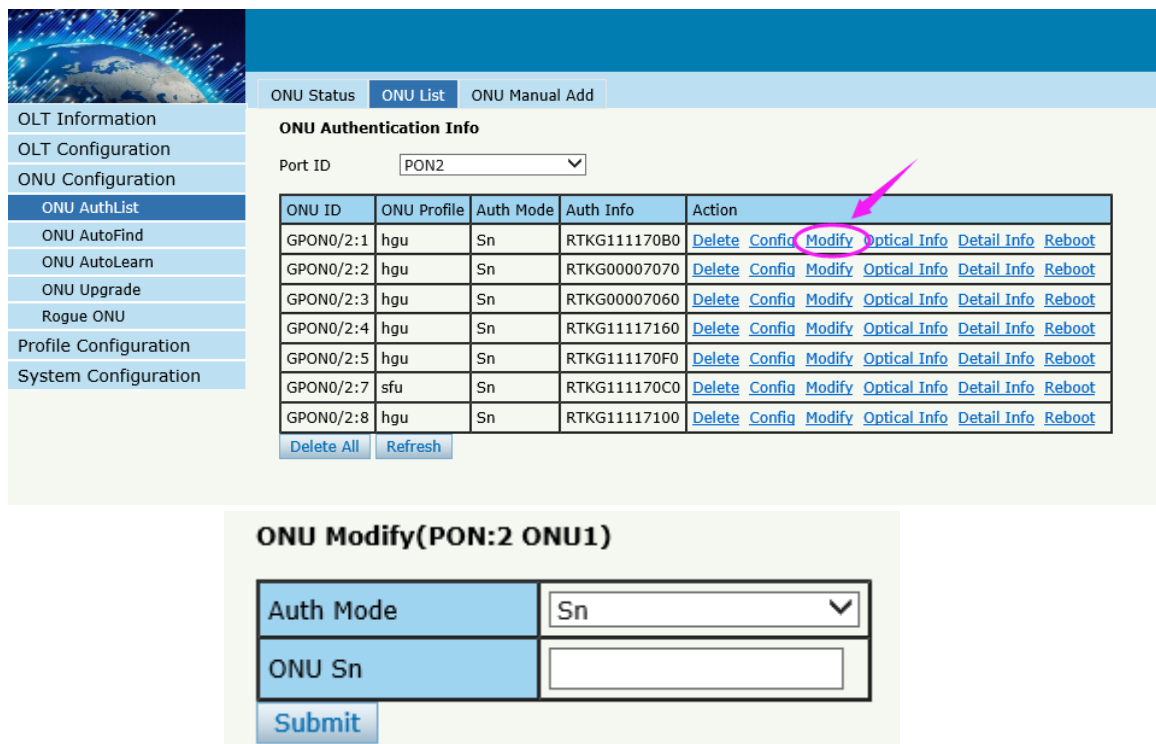
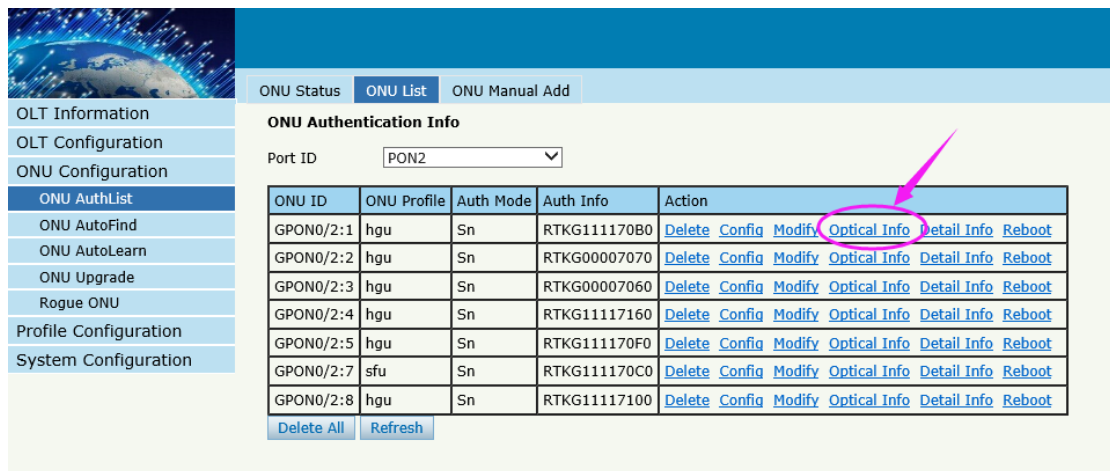


Figure 4-15 Modify ONU Registration mode

4.1.2.4 Optical Info

ONU Configuration → ONU AuthList → ONU List

Check the Optical Info of ONU which you selected,



The screenshot displays the 'ONU Authentication Info' configuration page. On the left is a navigation menu with options like 'OLT Information', 'ONU Configuration', and 'ONU AuthList'. The main area shows a 'Port ID' dropdown set to 'PON2'. Below this is a table listing ONU details. The 'Optical Info' link in the 'Action' column of the first row is circled in pink, with a pink arrow pointing to it.

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot

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

ONU Optical Info	
Interface	pon_0/1
GEM_blocklen	48
Sf threshold	5
Sd threshold	9
Alarm	enable
Alarm disable interval	0
Total T-CONT number	31
Piggyback DBA rpt mode	mode0 only
Whole ONU DBA rpt mode	not support
Rx optical level	-19.102(dBm)
Lower rx optical threshold	ont internal policy
Upper rx optical threshold	ont internal policy
Tx optical level	2.546(dBm)
Lower tx optical threshold	ont internal policy
Upper tx optical threshold	ont internal policy
ONU response time	0
Power feed voltage	3.32(V)
Laser bias current	14.900(mA)
Temperature	46.758(C)
<input type="button" value="Back"/>	

Figure 4-16 Optical info of ONU

4.1.2.5 Detail Info

ONU Configuration→ONU AuthList→ONU List

Check the Detail Info of ONU which you selected,

ONU Status **ONU List** ONU Manual Add

ONU Authentication Info

Port ID:

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot

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

ONU Detail Info

Description	N/A
Vendor ID:	RTKG
Version:	RTL960x
SN:	RTKG111170b0
Admin status:	unlock
Battery monitor:	false
Security mode:	aes
Product code:	0
Total priority queue num:	127
Total traffic schedule num:	31
Traffic management option:	priority-rate-controlled
Operate status:	enable
Equipment ID:	IGD
OMCC Version:	128
Security capability:	aes
Model:	IGD
Survival time:	N/A
TotalGemPortNum:	127
SysUpTime:	87763.00 s
Region code:	N/A
Product SN:	N/A
Chip info:	0

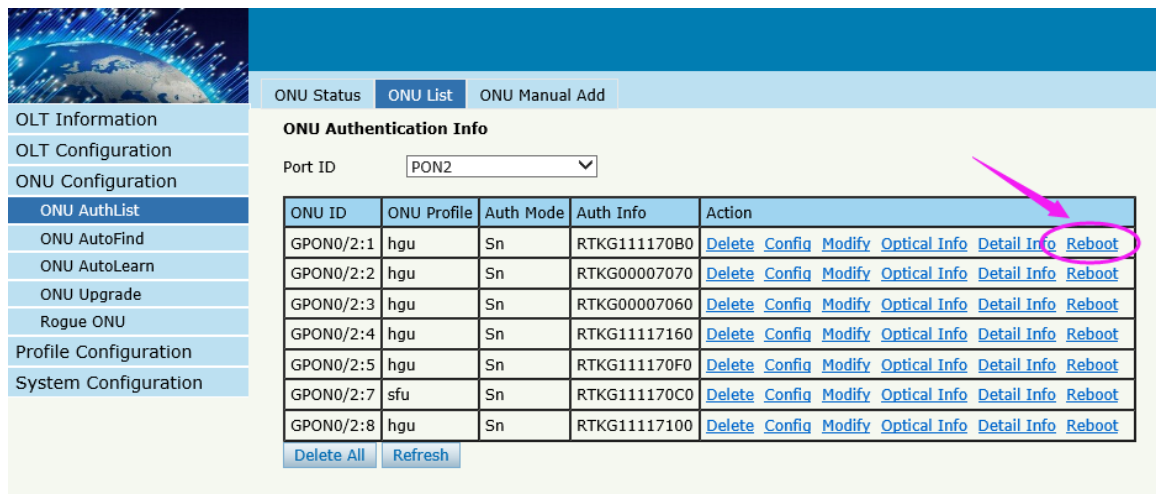
[Back](#)

Figure 4-17 Detail info of ONU

4.1.2.6 Reoot

ONU Configuration→ONU AuthList→ONU List

Reboot ONU which you selected,



The screenshot shows the 'ONU Authentication Info' page. On the left is a navigation menu with 'ONU AuthList' selected. The main area has a 'Port ID' dropdown set to 'PON2'. Below is a table with columns: ONU ID, ONU Profile, Auth Mode, Auth Info, and Action. The 'Action' column contains links for Delete, Config, Modify, Optical Info, Detail Info, and Reboot. The 'Reboot' link for the first row (ONU ID: GPON0/2:1) is circled in pink, with a pink arrow pointing to it. At the bottom are 'Delete All' and 'Refresh' buttons.

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	hgu	Sn	RTKG11117160	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:5	hgu	Sn	RTKG111170F0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:7	sfu	Sn	RTKG111170C0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:8	hgu	Sn	RTKG11117100	Delete Config Modify Optical Info Detail Info Reboot

Figure 4-18 reboot ONU

4.1.3 ONU Manual Add

ONU Configuration→ONU AuthList→ONU Manual Add

You can manually add a ONU to your chosen PON port. ONU will appear on the ONU list after you operated.

Figure 4-19 manually add a ONU

ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	GPON00001234	Delete Config Modify Optical Info Detail Info Reboot

Figure 4-19 ONU info

4.2 ONU AutoFind

Configuration → AutoFind

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

More information will be show under the ONU Detail menu.

Automatic Discovery

Port ID:

ONU ID	Sn	State	Action
GPON0/2:1	RTKG111170B0	Unknown	Add Detail Info
GPON0/2:2	RTKG00007070	Unknown	Add Detail Info

[Refresh](#)

Figure 4-20 Authentication Mode

Automatic Discovery Detail

ONU ID	SN	PW	LOID	LOIDPW	Model	Version
1	RTKG111170B0	1234567890	admin	admin	IGD	N/A
2	RTKG00007070	1234567890	bjhj	nkjnk	IGD	N/A

[Back](#)

Figure 4-21 Detail info

4.3 ONU AutoLearn

4.3.1 ONU AutoLearn

Configuration→AutoLearn→ONU AutoLearn

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

PON ID	Enable	Default ONU Profile
PON1	Disable	hgu
PON2	Disable	hgu
PON3	Disable	hgu
PON4	Enable	sfu
PON5	Enable	sfu
PON6	Disable	hgu
PON7	Disable	hgu
PON8	Disable	hgu

Figure 4-22 Automatic learn

4.3.2 ONU AutoBind

Configuration → AutoLearn → ONU AutoBind

Input the Equipment ID and bind the template you need

Note: you must build the template first

Equipment ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Action
IDG	hgu	1g	hgu	N/A	Delete

Figure 4-23 Bind profile

4.4 ONU Upgrade

ONU upgrade by OLT

4.4.1 Upload Image

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



Figure 4-24 Upload image

If the operation is successful, the following will appear

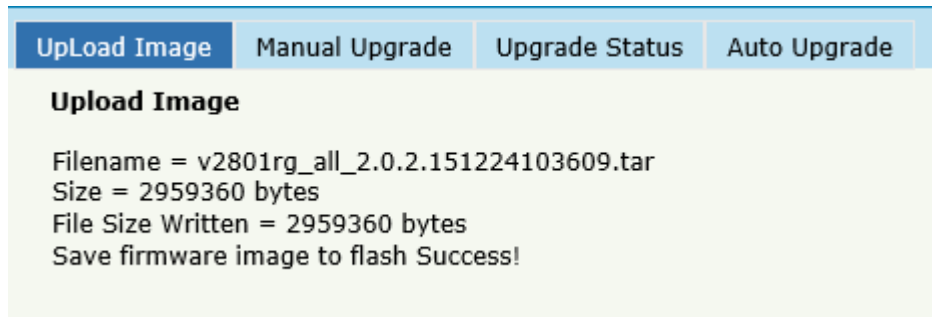


Figure 4-25 Upload info

4.4.2 Manual Upgrade

ONU Configuration → ONU Upgrade → Manual Upgrade

Select ONU which you need and click commit button

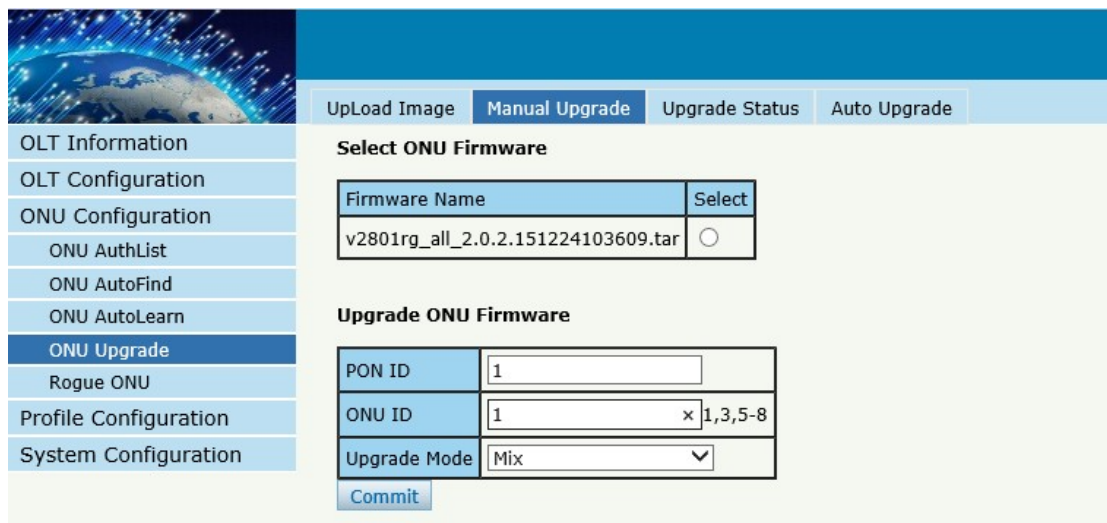


Figure 4-26 Manual Upgrade

4.4.3 Upgrade Status

ONU Configuration → ONU Upgrade → Upgrade Status

When ONU is upgrading, the list will be shown in this page.

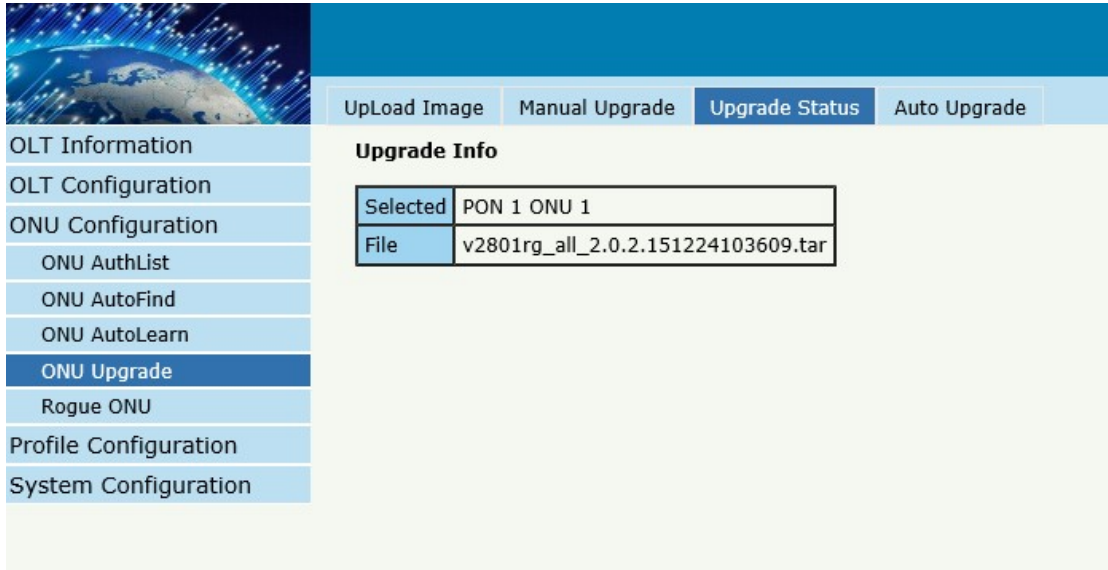


Figure 4-27 ONU Upgrade Status

4.3.4 Auto Upgrade

ONU Configuration → ONU Upgrade → Auto Upgrade

The ONU firmware will be saved in the OLT's RAM first, when the ONU come online, it will auto upgrade the firmware.

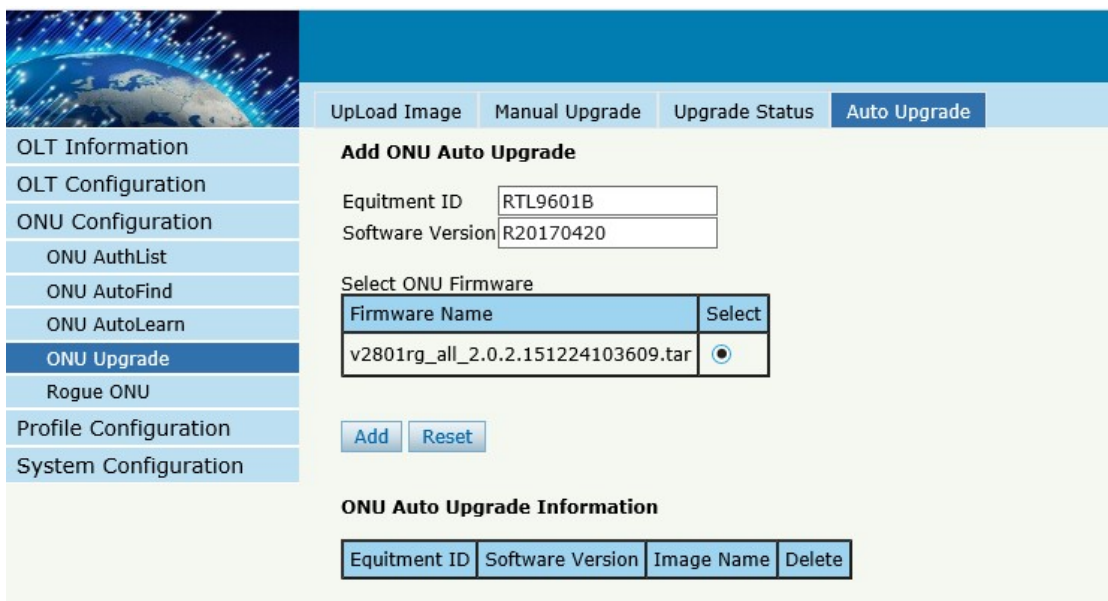


Figure 4-28 Auto Upgrade

4.5 Rogue ONU

ONU Configuration → Rogue ONU

Enable this function, If there is a rogue ONU, it will appear in the list

The screenshot shows the 'Rogue ONU configuration' page. On the left is a navigation menu with the following items: 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 'Rogue ONU configuration' and contains three sections:

- Rogue onu detect configuration:** A table showing the current state of various settings.

Detect state	Locate state	Auto shutdown	Control mode
disable	N/A	N/A	private
- Change configuration:** A set of four dropdown menus for configuring the settings.

Detect state	Enable
Locate state	Enable
Auto shutdown	Enable
Control mode	private
- Rogue onu list:** A table with columns for Pon, Onu, Keywords, Time, and State, and a 'Commit' button below it.

Figure 4-29 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 ONU must specify only one ONU profile when authorized. The ONU profile specifies the capability of this ONU.

5.1.1 Information

Profile Configuration → ONU profile → Information

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

The screenshot shows a network management interface. On the left is a sidebar with a navigation menu. The main content area is titled 'ONU Profiles' and contains a table with the following data:

Profile ID	Profile Name	Max Tcont	Max GemPort	Max Veip	Action
0	default	255	255	1	Details
1	hgu	8	32	1	Details Delete
2	sfu	8	32	0	Details Delete
3	54y	8	32	0	Details Delete

Below the table is a 'Refresh' button. The sidebar menu includes: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, **ONU Profile**, DBA Profile, Traffic Profile, Line Profile, Service Profile, Alarm Profile, Bind Profile, and System Configuration. The top navigation bar has 'Information' and 'Add Profile' tabs.

Figure 5-1 ONU profile list

5.1.2 Add profile

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

SFU mode (only using bridge mode):

Information Add Profile

ONU Profile Modify

Profile ID	4
Profile Name	4GE
Description	SFU x
Max tcont	8
Max gempport	32
Max eth	4
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 5-2 Add SFU profile

HGU mode (with the routing wan connection mode)

Information Add Profile

ONU Profile Modify

Profile ID	4
Profile Name	4GE
Description	HGU
Max tcont	8
Max gempport	32
Max eth	4
Max pots	0
Max Iphost	2
Max Ipv6host	0
Max veip	2 x
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 5-3 Add HGU profile

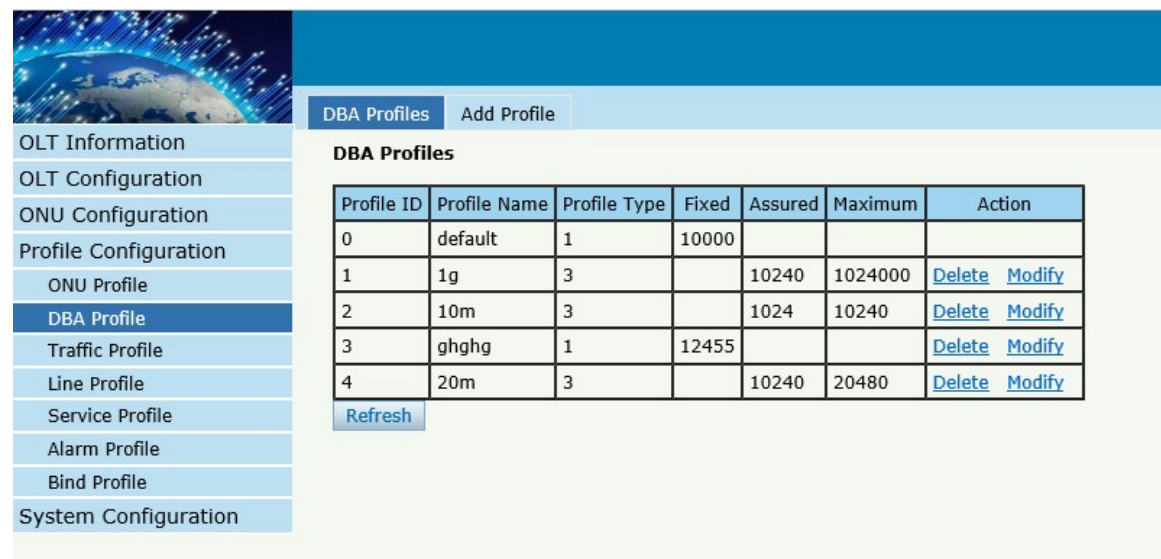
5.2 DBA Profile

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 $fix \leq assure \leq max$.

5.2.1 DBA profiles

Profile Configuration → DBA Profile → DBA Profiles

The table displays DBA profile list. We can also do some operation, such delete and modify.



Profile ID	Profile Name	Profile Type	Fixed	Assured	Maximum	Action
0	default	1	10000			
1	1g	3		10240	1024000	Delete Modify
2	10m	3		1024	10240	Delete Modify
3	ghghg	1	12455			Delete Modify
4	20m	3		10240	20480	Delete Modify

[Refresh](#)

Figure 5-4 DBA profile list

5.1.2 Add profile

Profile Configuration → DBA Profile → Add profile

Types: 1, 2, 3, 4, 5, In general, we use type 3

Relationships:

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

The screenshot shows the 'Add Profile' configuration page. The left sidebar contains a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, **DBA Profile**, Traffic Profile, Line Profile, Service Profile, Alarm Profile, Bind Profile, and System Configuration. The main content area is titled 'DBA Profiles' and 'Add Profile'. The form fields are: Profile ID (5), Profile Type (Type_3), Profile Name (dba_5), Assured(Kbps) (10000), and Maximum(Kbps) (1000000). A 'Commit' button is present at the bottom of the form.

Figure 5-5 Add a DBA profile

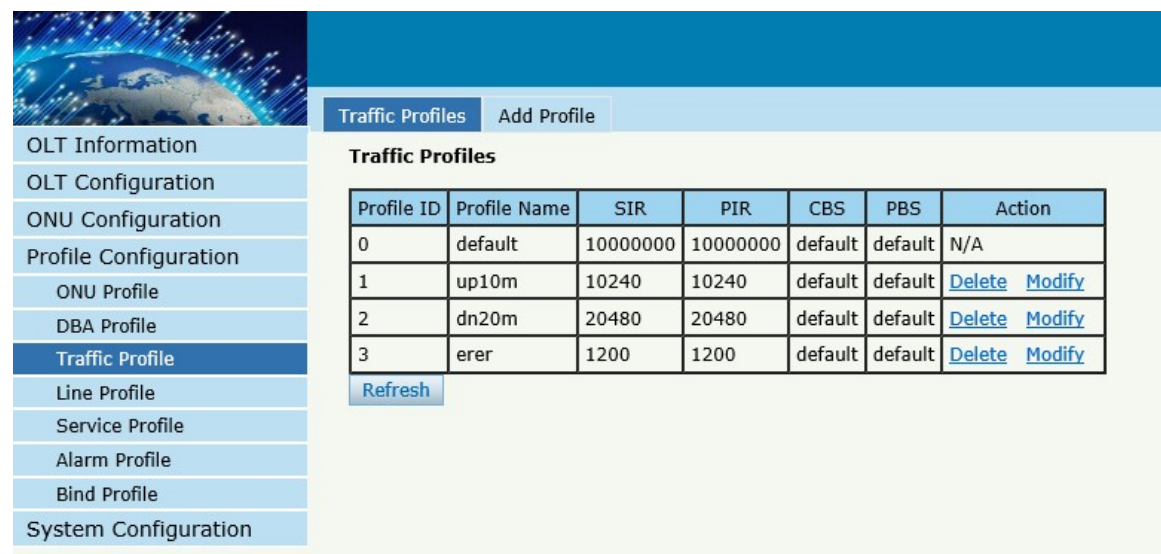
5.3 Traffic Profile

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

5.3.1 Traffic profiles

Profile Configuration → Traffic Profile → Traffic Profiles

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



Profile ID	Profile Name	SIR	PIR	CBS	PBS	Action
0	default	10000000	10000000	default	default	N/A
1	up10m	10240	10240	default	default	Delete Modify
2	dn20m	20480	20480	default	default	Delete Modify
3	erer	1200	1200	default	default	Delete Modify

Figure 5-6 Traffic Profile list

5.2.2 Add profile

Profile Configuration → Traffic Profile → Add Profile

Configure Gemport to specify the upstream/downstream bandwidth.

SIR: Committed Information Rate

PIR: Peak Information Rate

CBS: Committed Burst Size

PBS: Peak Burst Size

Traffic Profiles	
Add Profile	
Profile ID	4
Profile Name	traffic_4
SIR(Kbps)	
PIR(Kbps)	
CBS(Kbps)	
PBS(Kbps)	
Commit	

Figure 5-7 Add a traffic Profile

5.4 Line Profile

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

5.3.1 Line profile

Profile Configuration → Line Profile → Line Profile

The table displays Line profile list. We can also do some operation, such

delete and modify.

Profile ID	Profile Name	Action
1	1g	Detail & Modify Delete
2	10m	Detail & Modify Delete
3	line_3	Detail & Modify Delete
4	sfu	Detail & Modify Delete

Figure 5-8 Line Profile list

5.3.2 Add profile

Profile Configuration→**Line profile**→**Add profile**

Create a new line profile

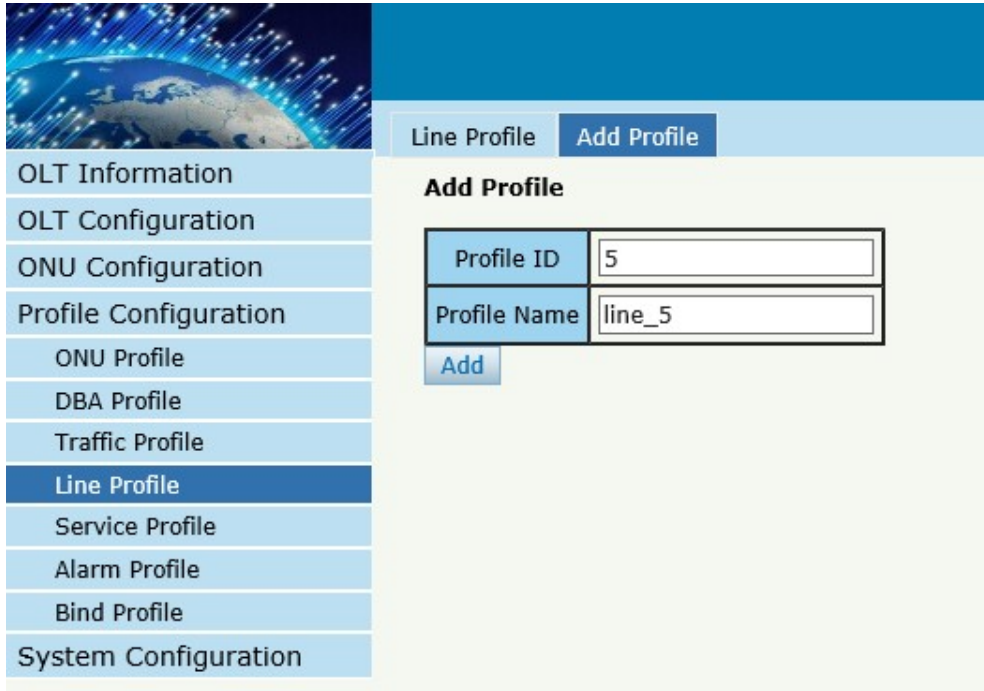


Figure 5-9 Add Line Profile

Modify the line profile parameters

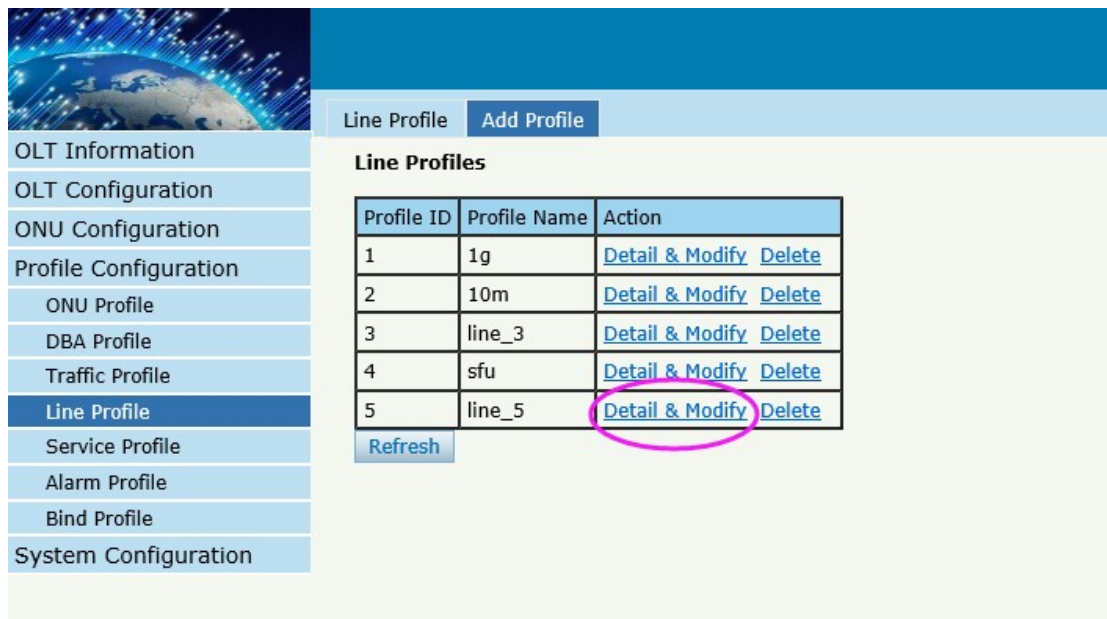


Figure 5-10 Modify Line Profile

Create a tcont ID and bind DBA templates

Figure 5-11 Add Tcont

Create a gempport ID and bind tcont ID

Figure 5-12 Add Gempport

Create a service , Set the VLAN and VLAN mode and let it bind one gempport ID.

Service Info

Service Name	Gemport	Vlan Mode	Vlan List	Cos List	Port	Action
1	1	Tag	1010	N/A	N/A	Delete

Add Service

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

[Add](#)

Figure 5-13 Add service

Create a service port, Set the user VLAN and translate VLAN and let it bind one gemport ID.

Service Port Info

Service Port	Gemport ID	BeginVid	EndVid	OuterVid	InnerVid	UserPrio	Etype	Vlan	Cos	SVlan	SCos	Mode	Enable	Description	Action
1	1	1010	1010	N/A	N/A	N/A	N/A	1010	N/A	N/A	N/A	1:1	YES	N/A	Delete

Add Service Port

Service Mode	<input type="text" value="Cvlan"/>
Service-Port ID	<input type="text" value="1"/> (1~128)
Gemport ID	<input type="text" value="1"/>
User Vlan	<input type="text"/>
Translate Vlan	<input type="text"/>
Translate Cos	<input type="text" value="N/A"/> (0-7)
Translate SVlan	<input type="text" value="N/A"/>
Translate SCos	<input type="text" value="N/A"/> (0-7)
Description	<input type="text" value="N/A"/>

[Add](#)

Figure 5-13 Add service port

Set the Multicast VLAN of ONU

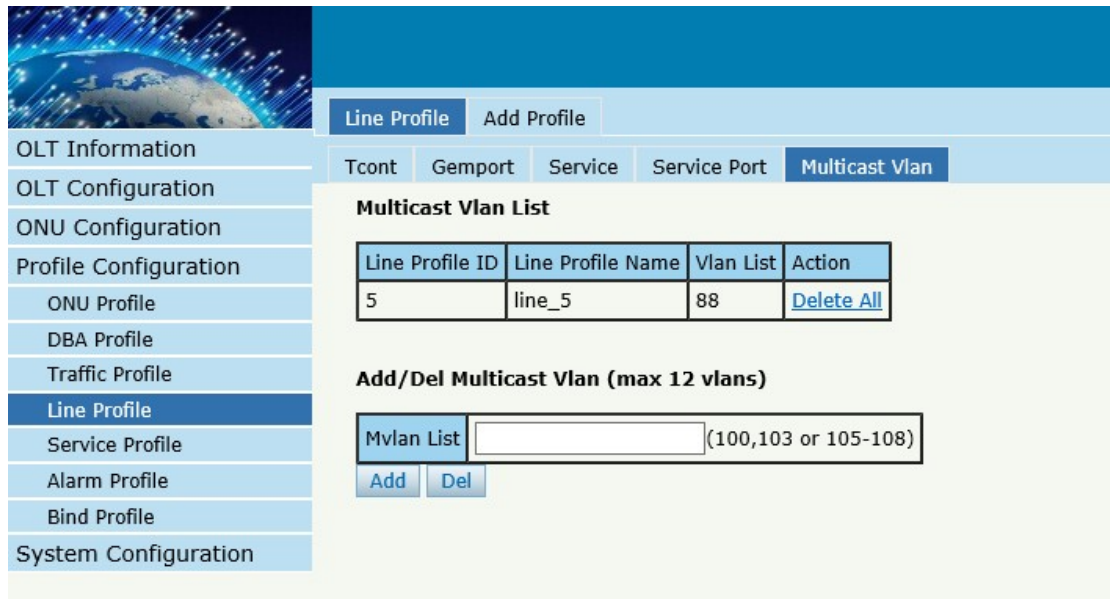


Figure 5-14 configure multicast VLAN

5.5 Service Profile

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

5.3.1 Line profile

Profile Configuration → Line Profile → Line Profile

The table displays service profile list. We can also do some operation, such delete and modify.

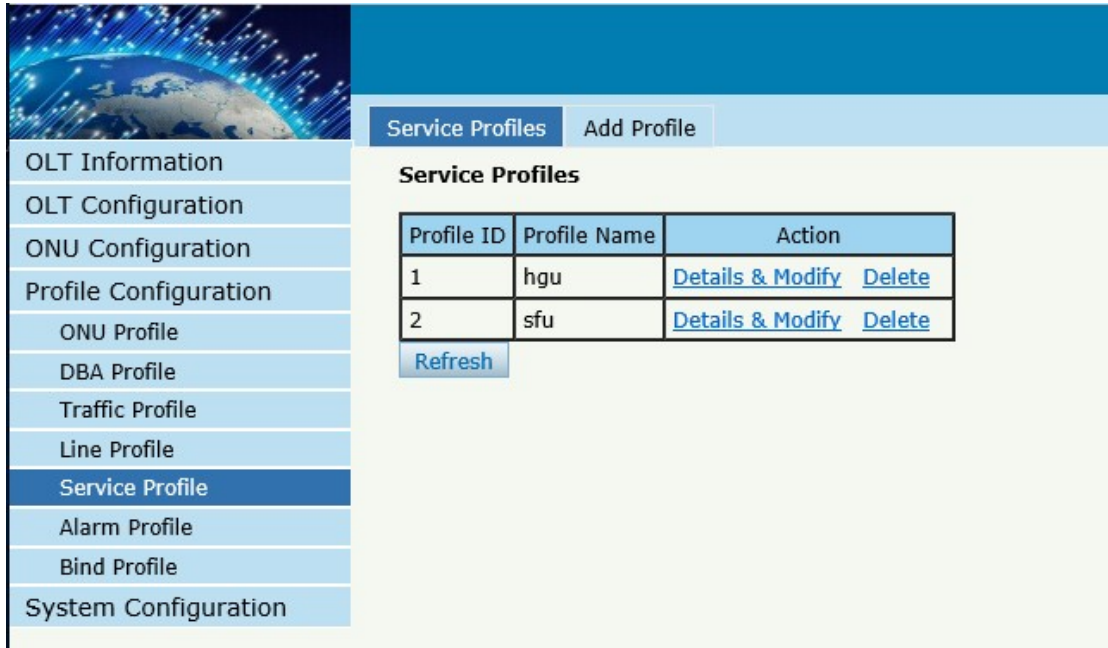


Figure 5-15 Service profile list

5.3.2 Add profile

Profile Configuration → Line Profile → Add Profile

Create a new service profile

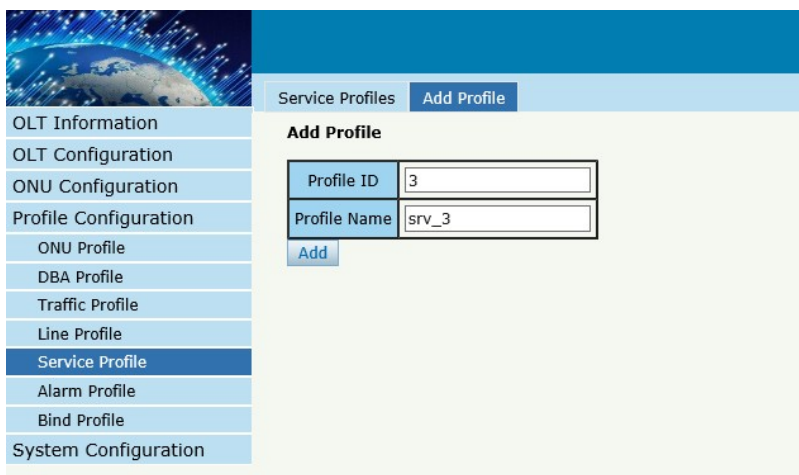


Figure 5-16 Add Service profile

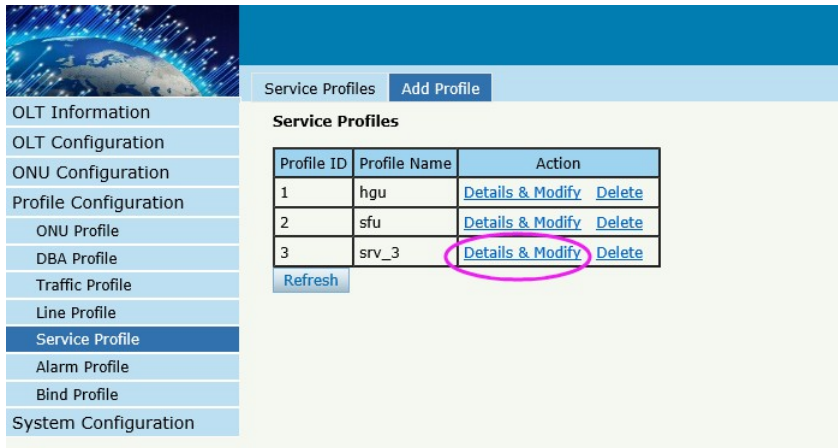


Figure 5-17 modify Service profile

Set the VLAN mode of the ONU's port.

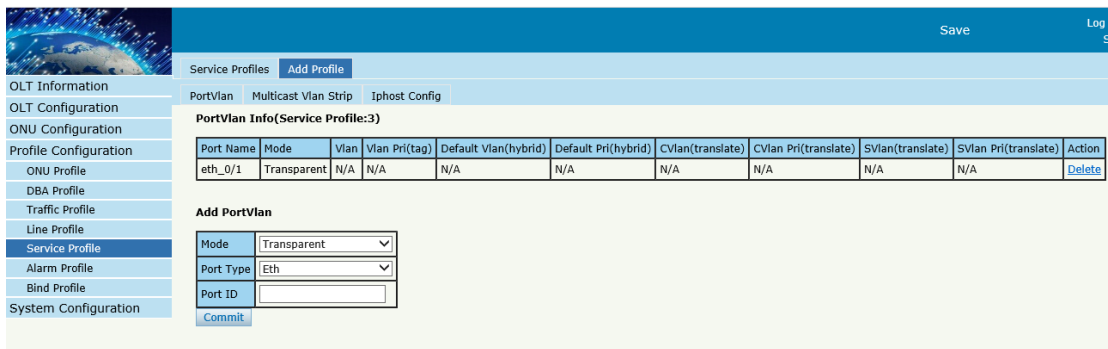


Figure 5-18 Port VLAN mode

Set the Multicast VLAN mode of ONU's port

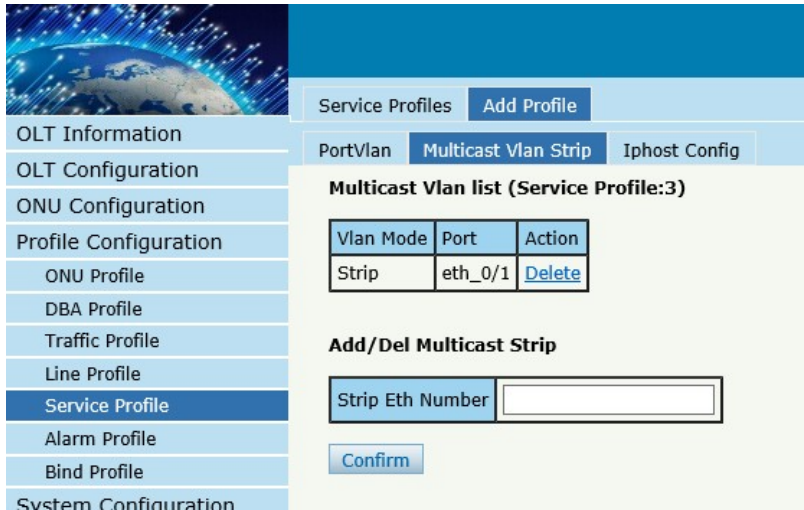


Figure 5-19 Port multicast VLAN mode

Create Iphost for ONU wan connection.

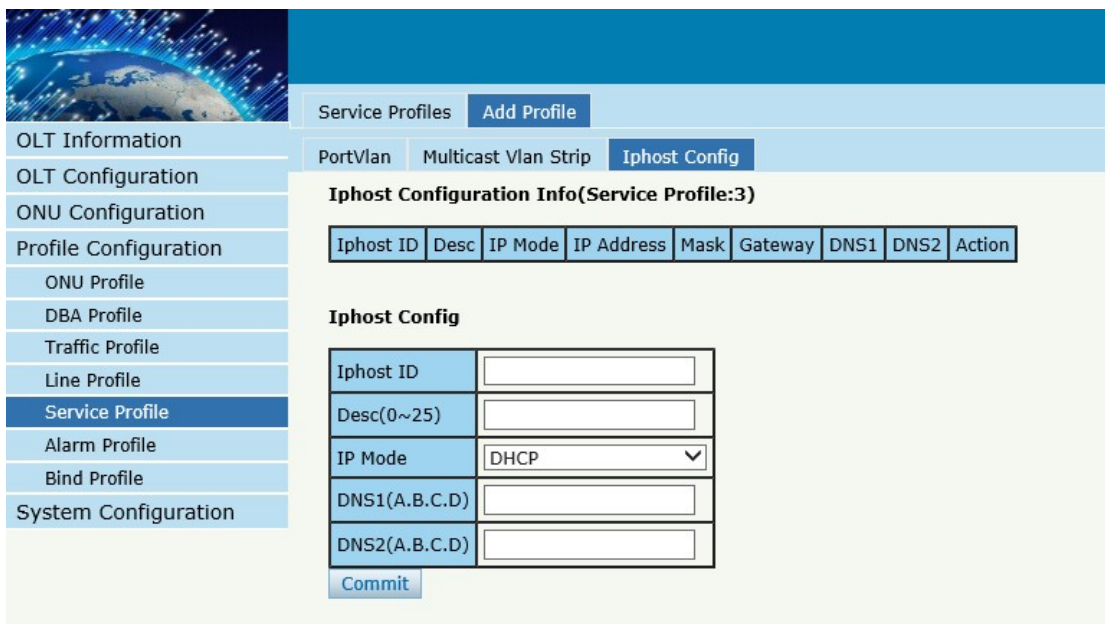


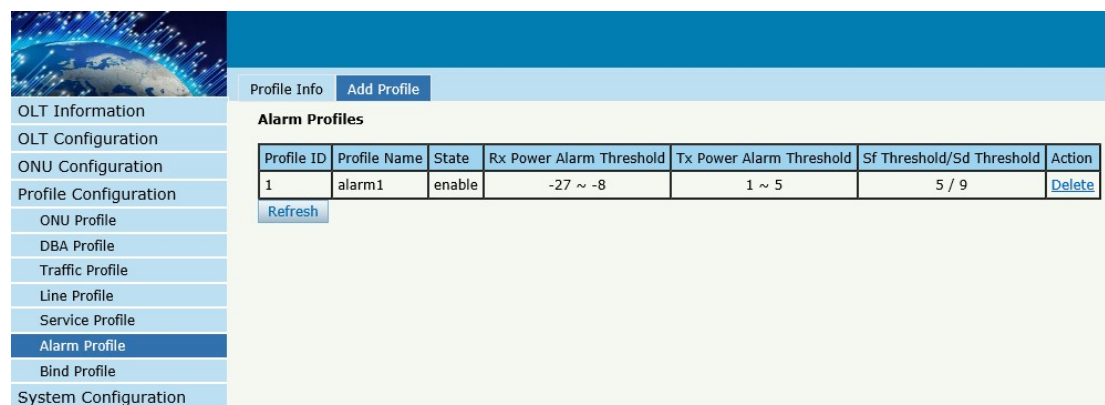
Figure 5-20 Add IPhost

5.6 Alarm Profile

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

5.4.1 profile info

Profile Configuration → Alarm Profile → profile info



The screenshot shows the 'Alarm Profiles' section of the configuration interface. On the left is a navigation menu with 'Alarm Profile' selected. The main area displays a table with one profile entry and a 'Refresh' button.

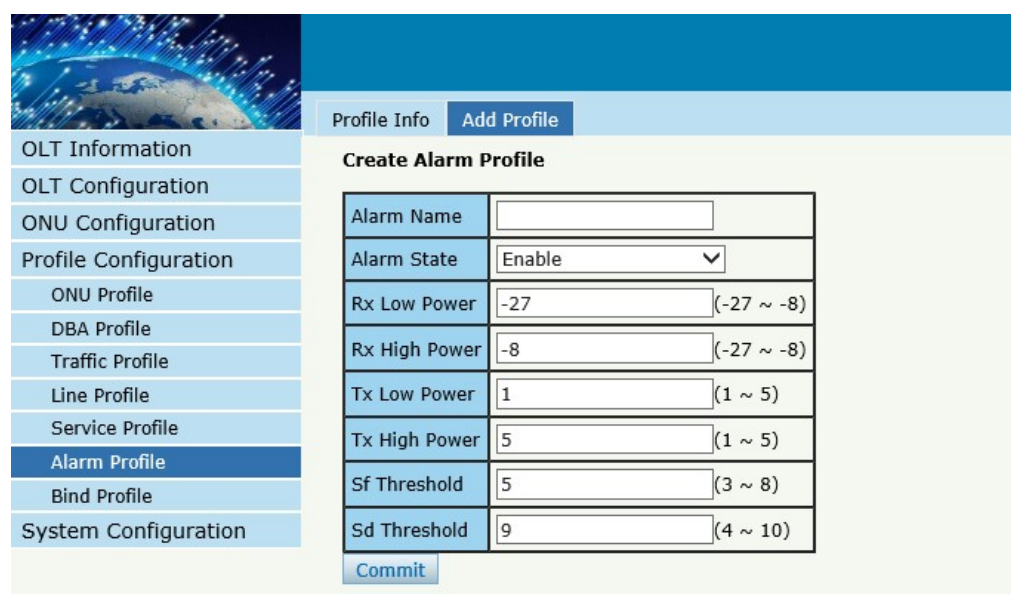
Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm1	enable	-27 ~ -8	1 ~ 5	5 / 9	Delete

Refresh

Figure 5-21 Alarm Profile list

5.4.2 Add profile

Profile Configuration → Alarm Profile → Add profile



The screenshot shows the 'Create Alarm Profile' form. The left navigation menu is the same as in the previous figure. The main area contains a form with several input fields and a 'Commit' button.

Alarm Name	<input type="text"/>
Alarm State	Enable <input type="button" value="v"/>
Rx Low Power	-27 <input type="text"/> (-27 ~ -8)
Rx High Power	-8 <input type="text"/> (-27 ~ -8)
Tx Low Power	1 <input type="text"/> (1 ~ 5)
Tx High Power	5 <input type="text"/> (1 ~ 5)
Sf Threshold	5 <input type="text"/> (3 ~ 8)
Sd Threshold	9 <input type="text"/> (4 ~ 10)

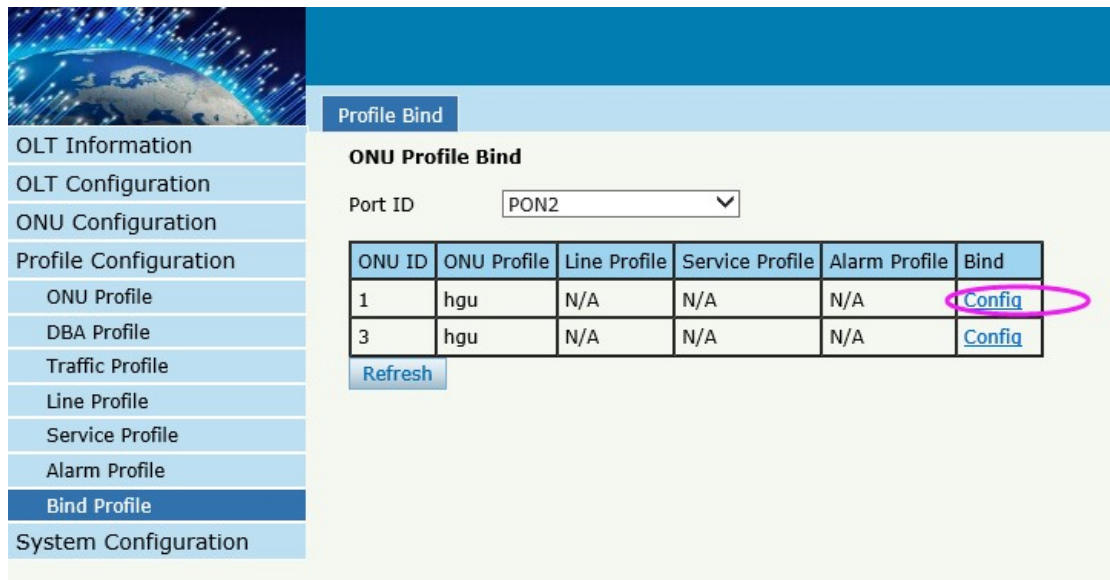
Commit

Figure 5-21 Create Alarm profile

5.7 Bind Profile

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

Profile Configuration → Bind Profile



Profile Bind

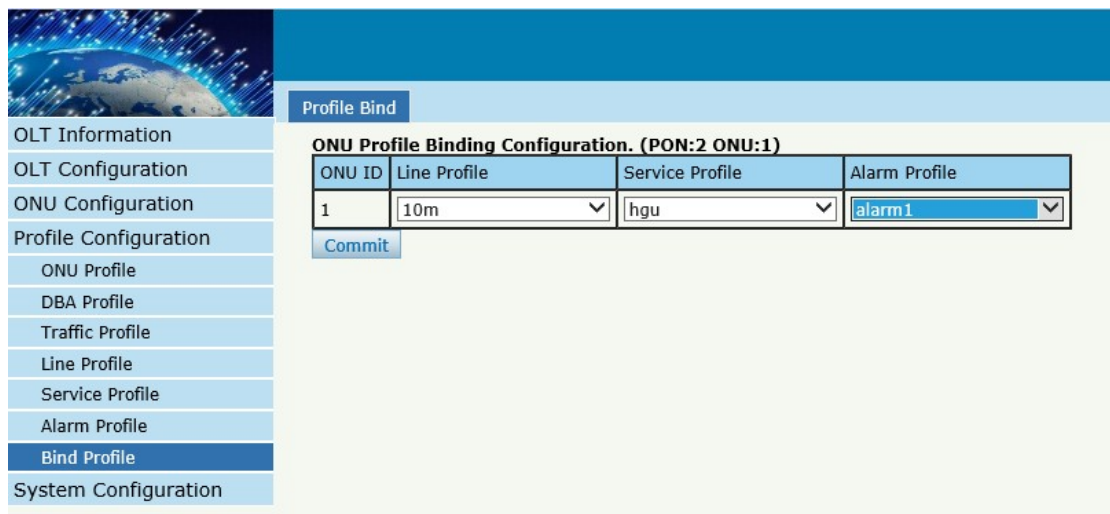
ONU Profile Bind

Port ID: PON2

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Bind
1	hgu	N/A	N/A	N/A	Config
3	hgu	N/A	N/A	N/A	Config

Refresh

Figure 5-22 Bind profile



Profile Bind

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

ONU ID	Line Profile	Service Profile	Alarm Profile
1	10m	hgu	alarm1

Commit

Figure 5-23 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

The screenshot shows a web interface with a sidebar on the left containing menu items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log (selected), Device Management, User Management, SNMP, AUX IP, System Time, FAN, and Mirror. The main content area has tabs for System Log, Alarm, Threshold Alarm, and Syslog Server. Under the Alarm tab, there is an "Alarm Log Table" section. It includes a "Select Counts" input field set to 200, an "Alarm Type" dropdown menu set to "ALL", and pagination controls showing "No.1 Page/Total 1 Page 3 Item per page/Total 3 Item" with links for "First, Previous, Next, Last" and a "Go!" button. Below this is a table with three columns: No., Time, Level, and Message.

No.	Time	Level	Message
1	2004/01/04 04:22:19	major	ONU Online PON 0/2 ONU 1
2	2004/01/04 02:11:42	major	ONU Online PON 0/2 ONU 1
3	2004/01/04 02:11:41	major	ONU Online PON 0/2 ONU 2

Figure 6-1 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".

The screenshot shows the "Alarm Configuration" section of the web interface. It features a table with columns for "Type", "Print", "Record", "Trap", and "Remote" (repeated twice). Each cell contains a checkbox to enable or disable that action for the specific alarm type.

Type	Print	Record	Trap	Remote	Type	Print	Record	Trap	Remote
FAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upload File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Upgrade File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Port Updown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Port Loopback	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Deregister	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Register Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Disable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Txpower High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Txpower Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Txbias High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Txbias Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Vcc High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Vcc Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Temp High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Temp Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Los	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Deregister	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Lost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU Illegal Register	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Auth Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU MAC Conflict	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Loid Conflict	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Critical Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ONU Dying Gasp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Link Fault	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Event	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU Event Notific	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Reset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Config Save	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Config Erase	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Download File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Upload File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upgrade File Success	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Register	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PON Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Los Recovery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Register	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Discover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 6-2 Alarm

6.1.3 Threshold Alarm

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

→System Log →ThresholdAlarm.

Threshold Alarm Configuration

Type	Print	Record	Trap	Remote	Alarm Threshold	Clear Threshold
Temp High (C)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	70.00	70.00
Temp Low (C)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20.00	20.00
CPU Usage High (%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00	0.00
MEM Usage High (%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00	0.00

PON Optical Alarm Configuration

Port ID: PON1

Type	State	Alarm Threshold	Clear Threshold
Tx Power High (dBm)	<input checked="" type="checkbox"/>	10.00	10.00
Tx Power Low (dBm)	<input type="checkbox"/>	0.00	0.00
Tx Bias High (mA)	<input checked="" type="checkbox"/>	30.00	30.00
Tx Bias Low (mA)	<input type="checkbox"/>	0.00	0.00
Vcc High (V)	<input type="checkbox"/>	0.00	0.00
Vcc Low (V)	<input type="checkbox"/>	0.00	0.00
Temp High (C)	<input type="checkbox"/>	0.00	0.00
Temp Low (C)	<input type="checkbox"/>	0.00	0.00

Figure 6-3 Threshold Alarm

6.1.4 Syslog Server

Configure the server of OLT remote system logs. Click **System**

Configuration→System Log →Syslog Server.

System Log	Alarm	Threshold Alarm	Syslog Server
------------	-------	-----------------	----------------------

Syslog Server Configuration

Syslog Server	<input type="text" value="Enable"/>
Server IP	<input type="text" value="192.168.2.33"/>
Server Port	<input type="text" value="514"/> (1-65535)

Figure 6-4 Syslog Server

6.2 Device Management

6.2.1 Firmware Upgrade

System Configuration → Device Management → Firmware Upgrade.

You can upgrade the OLT firmware by WEB, it want to reboot OLT after upgrade then take effect.

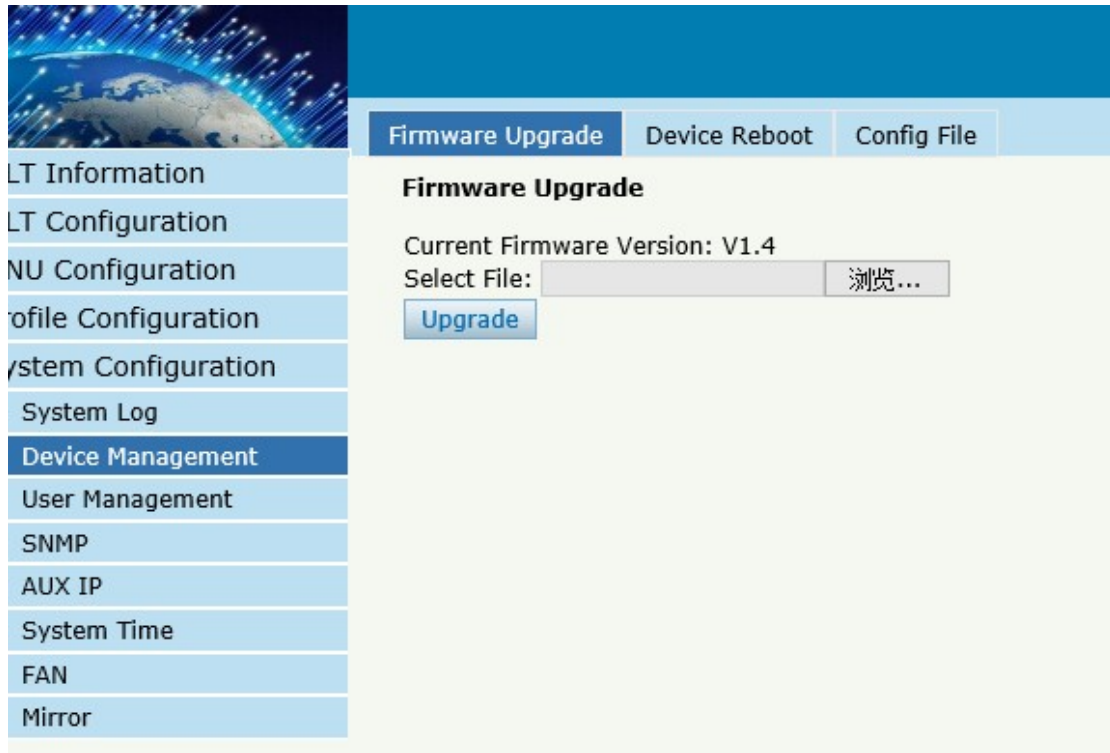


Figure 6-5 Firmware Upgrade

6.2.2 Device Reboot

System Configuration → Device Management → Device Reboot

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

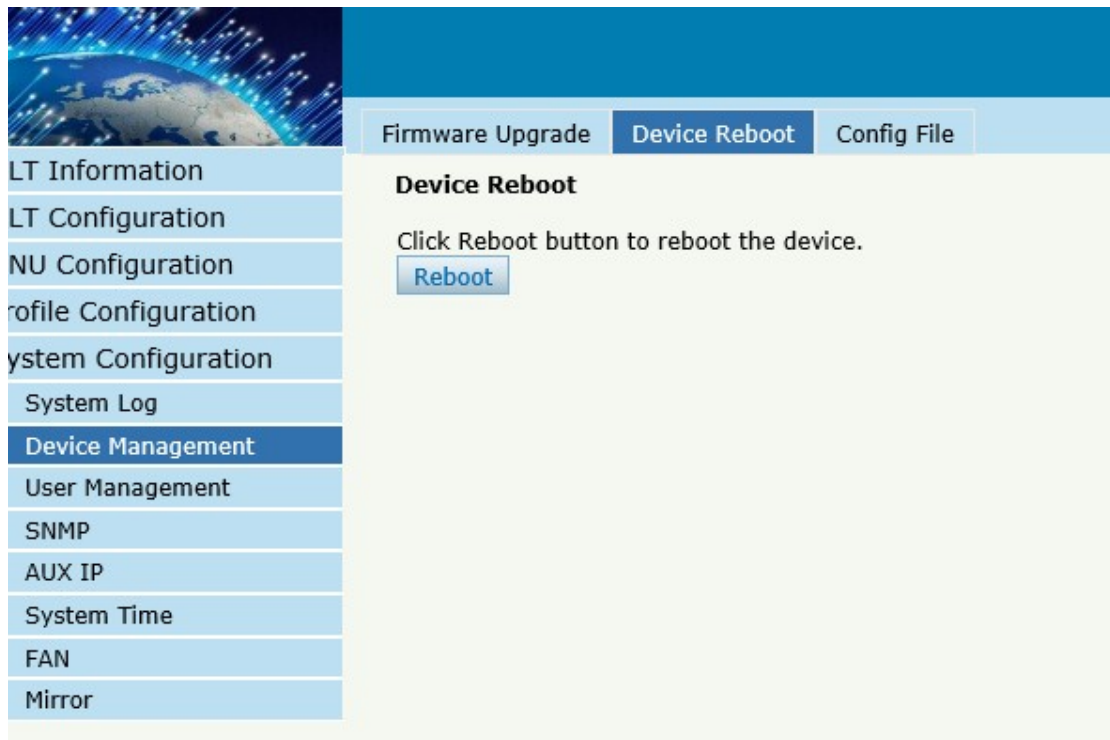


Figure 6-6 Device Reboot

6.2.3 Config File

System Configuration → Device Management → Config File,

you can backup configuration, restore configuration, restore factory defaults and save configuration.

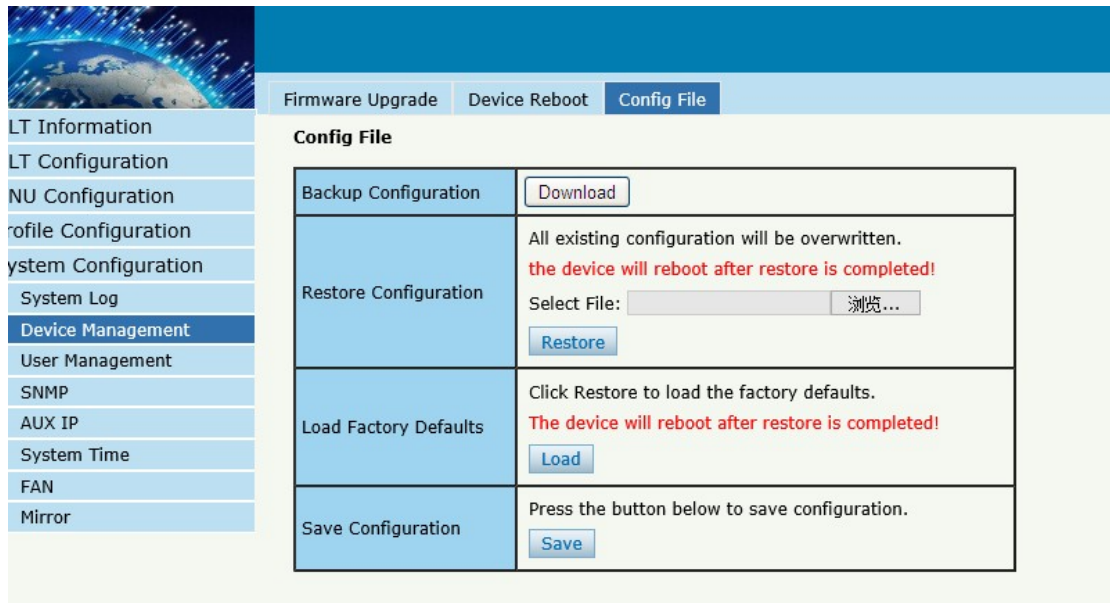


Figure 6-7 File Configuration

6.3 User Management

System Configuration → User manage

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

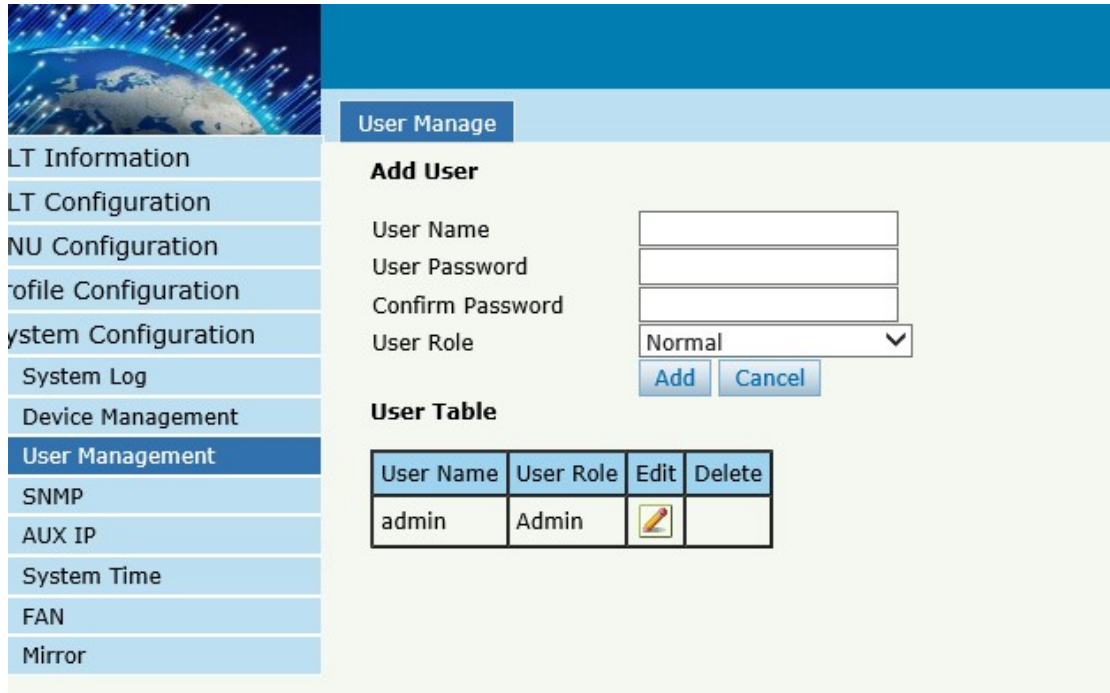


Figure6-8: User Manage

6.4 SNMP

6.4.1 SNMP V1/V2

System Configuration → SNMP →SNMP V1/V2

The OLT supports SNMP v1/v2,



SNMPV1/V2
SNMPV3
SNMPV3 Trap

Add Community

Community Name

Access Right Read-Only ▼

Community Table

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

Add Trap

Host IP

UDP Port 162 (1-65535)

Community Name public

SNMP Version 1 ▼

Trap Table

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

Figure6-9: SNMP V1/V2

6.4.2 SNMP V3

System Configuration → SNMP →SNMP V3

The OLT supports SNMP V3.

SNMPV1/V2 **SNMPV3** SNMPV3 Trap

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
------------	--------------	-----------	------------	-------------	--------

Figure6-10: SNMP V3

6.4.3 SMNP V3 Trap

System Configuration → SNMP →SNMP V3 Trap

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

SNMPV1/V2 SNMPV3 **SNMPV3 Trap**

Add Trap

Host IP

UDP Port (1-65535)

User Name

User Level

Tag List

Timeout (1-400000000)

Retry Count (1-100)

Trap Table

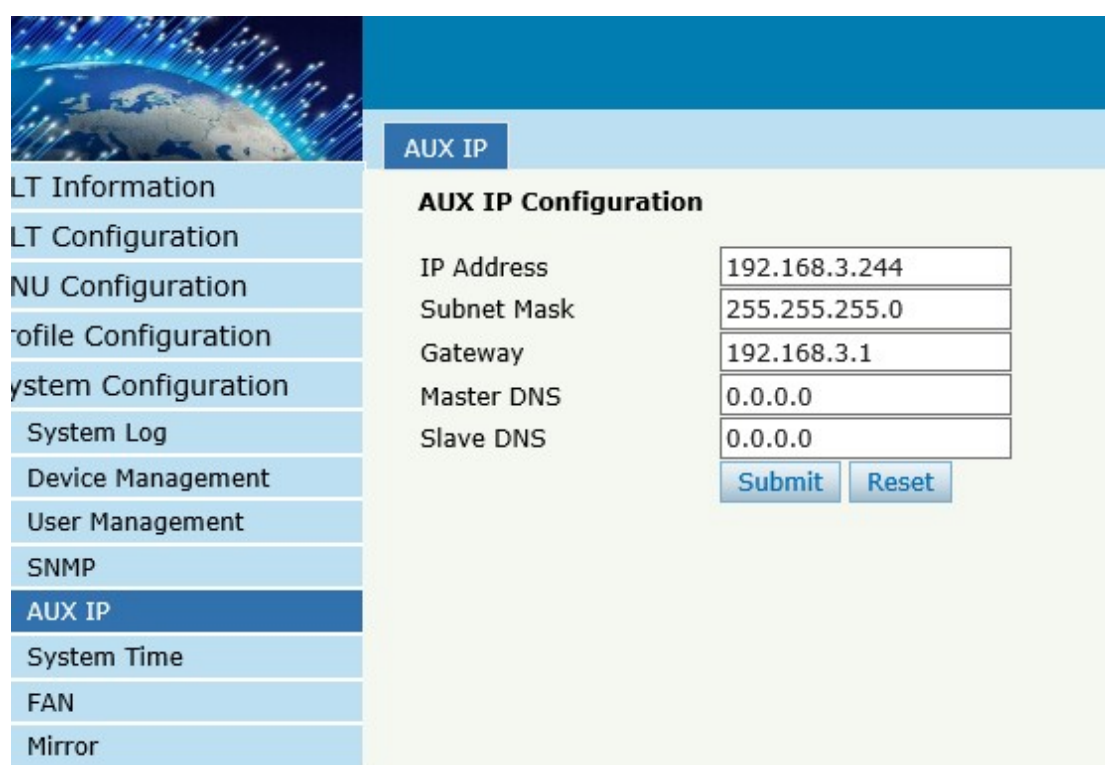
Host IP	UDP Port	Version	User Name	User Level	Tag List	Timeout	Retry Count	Delete
---------	----------	---------	-----------	------------	----------	---------	-------------	--------

Figure 6-11: SNMP V3 Trap

6.5 AUX IP

System Configuration → AUX IP

AUX port is out band management port. The IP address is out band management IP, default IP address is 192.168.8.200.



AUX IP	
AUX IP Configuration	
IP Address	192.168.3.244
Subnet Mask	255.255.255.0
Gateway	192.168.3.1
Master DNS	0.0.0.0
Slave DNS	0.0.0.0
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

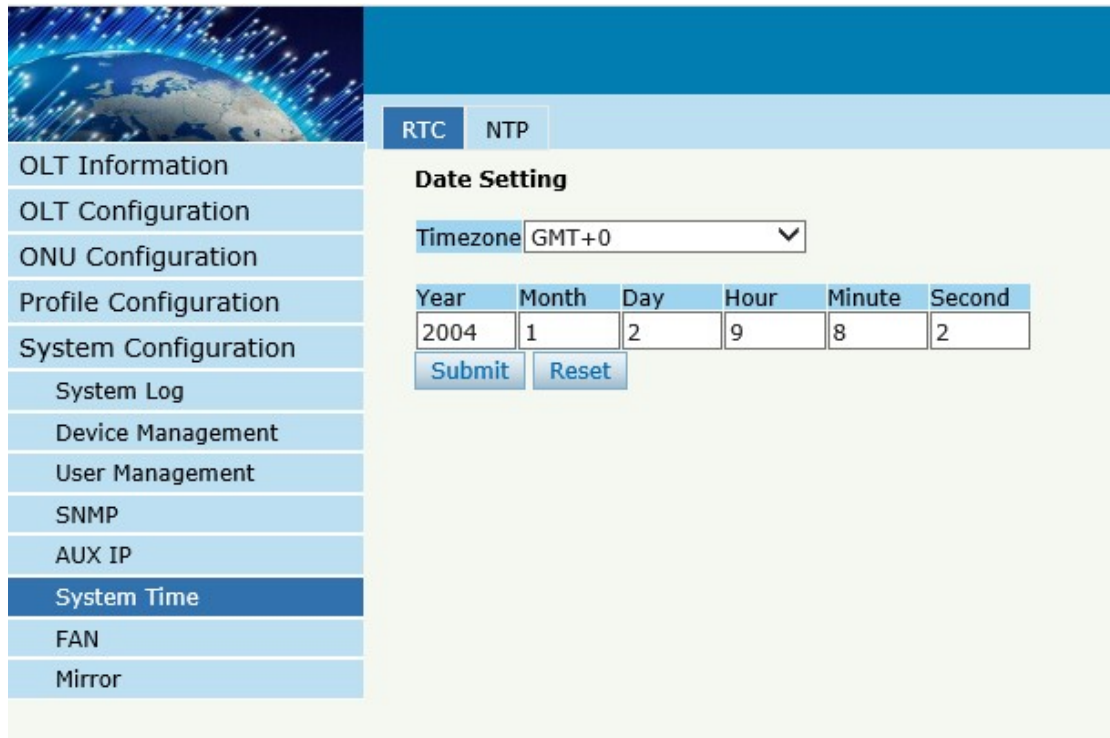
Figure 6-12: AUX IP

6.6 System Time

6.6.1 RTC

System Configuration → System Time → RTC .

The user can customize the OLT system time



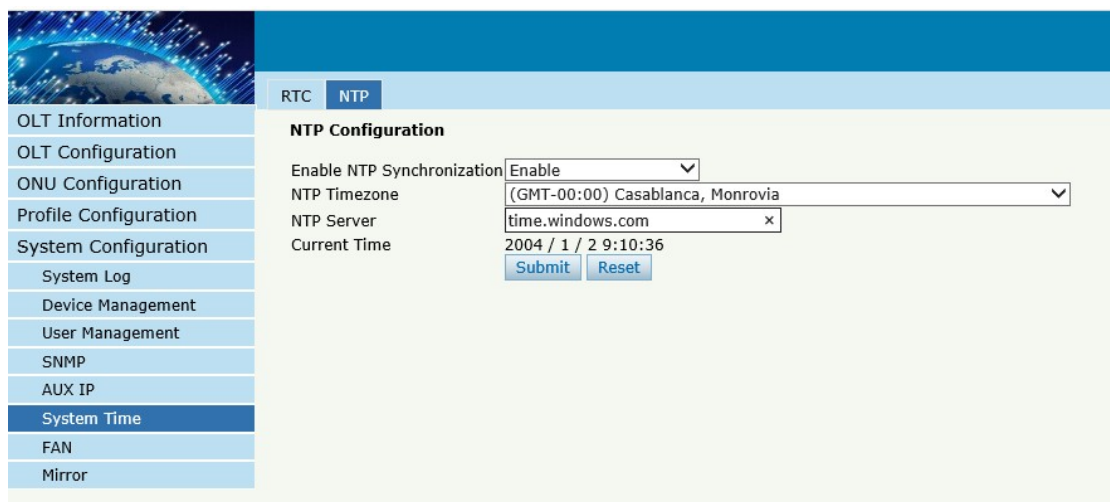
Year	Month	Day	Hour	Minute	Second
2004	1	2	9	8	2

Figure 6-13: RTC Configuration

6.6.2 NTP

System Configuration → System Time → NTP

Synchronize the time to the NTP server.



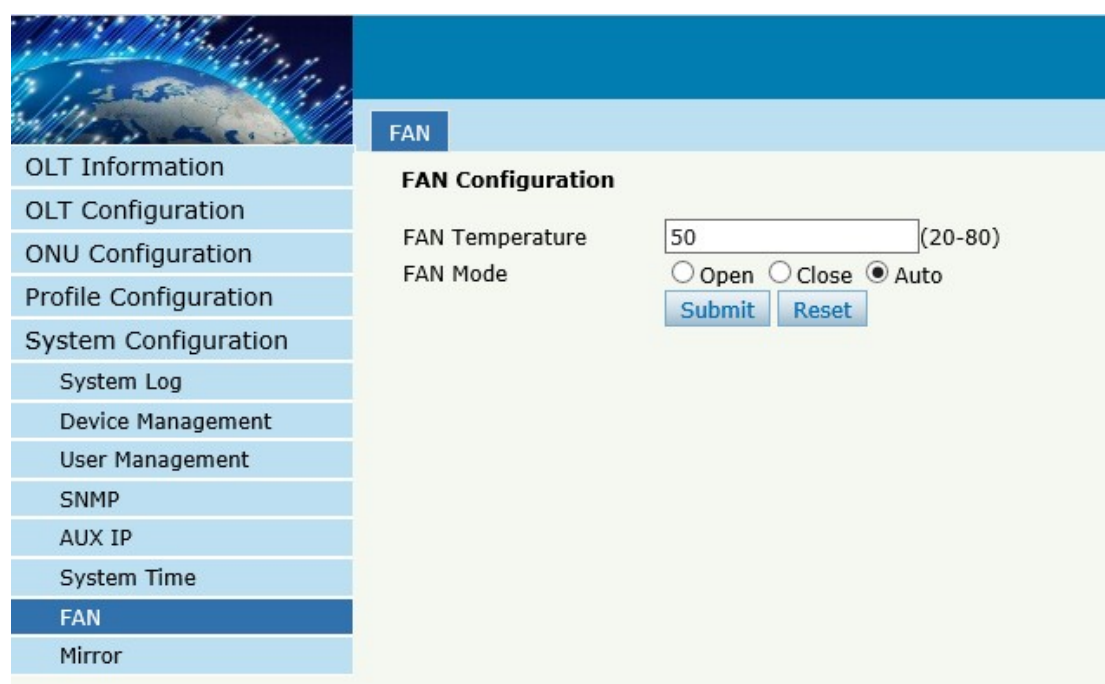
Enable NTP Synchronization	Enable
NTP Timezone	(GMT-00:00) Casablanca, Monrovia
NTP Server	time.windows.com
Current Time	2004 / 1 / 2 9:10:36

Figure 6-14: NTP Configuration

6.7 FAN

System Configuration → FAN.

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




The screenshot shows a web-based configuration interface. On the left is a vertical navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, SNMP, AUX IP, System Time, FAN (highlighted in dark blue), and Mirror. The main content area is titled 'FAN' and contains the following configuration options: 'FAN Configuration' header, 'FAN Temperature' with a text input field containing '50' and a range '(20-80)', and 'FAN Mode' with three radio buttons: 'Open', 'Close', and 'Auto' (which is selected). Below the radio buttons are 'Submit' and 'Reset' buttons.

Figure 6-15: FAN Configuration

6.8 Mirror

System Configuration → Mirror.

Each monitor session can be set with one destination port and up to 8 source ports.



- OLT Information
- OLT Configuration
- ONU Configuration
- Profile Configuration
- System Configuration
- System Log
- Device Management
- User Management
- SNMP
- AUX IP
- System Time
- FAN
- Mirror

Mirror

Mirror Configuration

Session ID

Destination Port

Port ID	Mirrored	Direction
GE1	<input type="checkbox"/>	Both
GE2	<input type="checkbox"/>	Both
GE3	<input type="checkbox"/>	Both
GE4	<input type="checkbox"/>	Both
GE5	<input type="checkbox"/>	Both
GE6	<input type="checkbox"/>	Both
GE7	<input type="checkbox"/>	Both
GE8	<input type="checkbox"/>	Both
GE9	<input type="checkbox"/>	Both
GE10	<input type="checkbox"/>	Both
GE11	<input type="checkbox"/>	Both
GE12	<input type="checkbox"/>	Both
GE13	<input type="checkbox"/>	Both
GE14	<input type="checkbox"/>	Both
GE15	<input type="checkbox"/>	Both
GE16	<input type="checkbox"/>	Both
PON	<input checked="" type="checkbox"/>	Both

Figure 6-16: Mirror

Thank you!