



DG-GO4300 Series OLT

USER MANUAL

(WEB Management)

V2.0.1

19-04-2019

As our products undergo continuous development the specifications are subject to change without prior notice.

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Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be allowed at all times to ensure the safe use of the equipment.

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Chapter 1 System Description

1.1 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.

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
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1.1.2 PC System Requirement

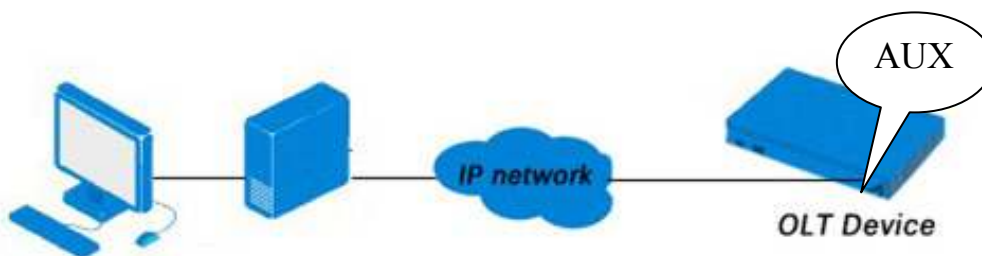
Table 1-2 PC System requirement

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

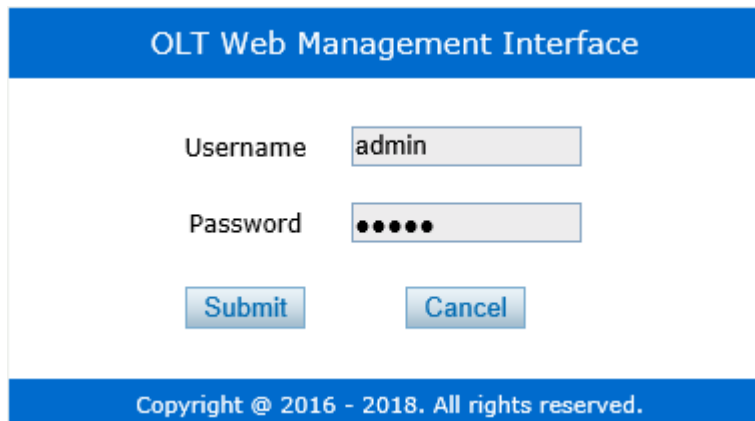


Figure 2-1: Login

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, serial number, hardware version, firmware version, MAC address and system time. The system name can be modified if needed.

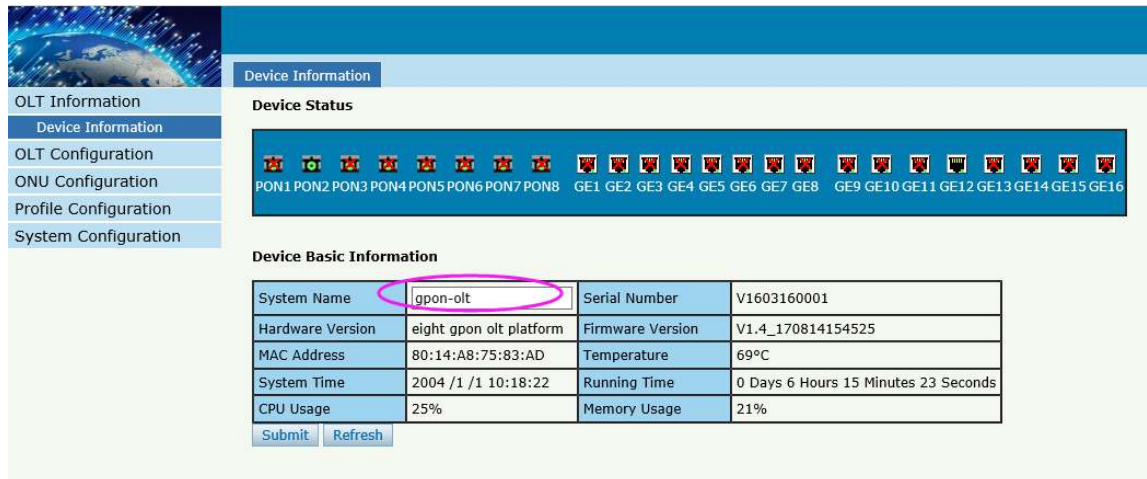


Figure 2-2: Device Information

Chapter 3 OLT Configuration

This section is about the basic service of OLT configuration.

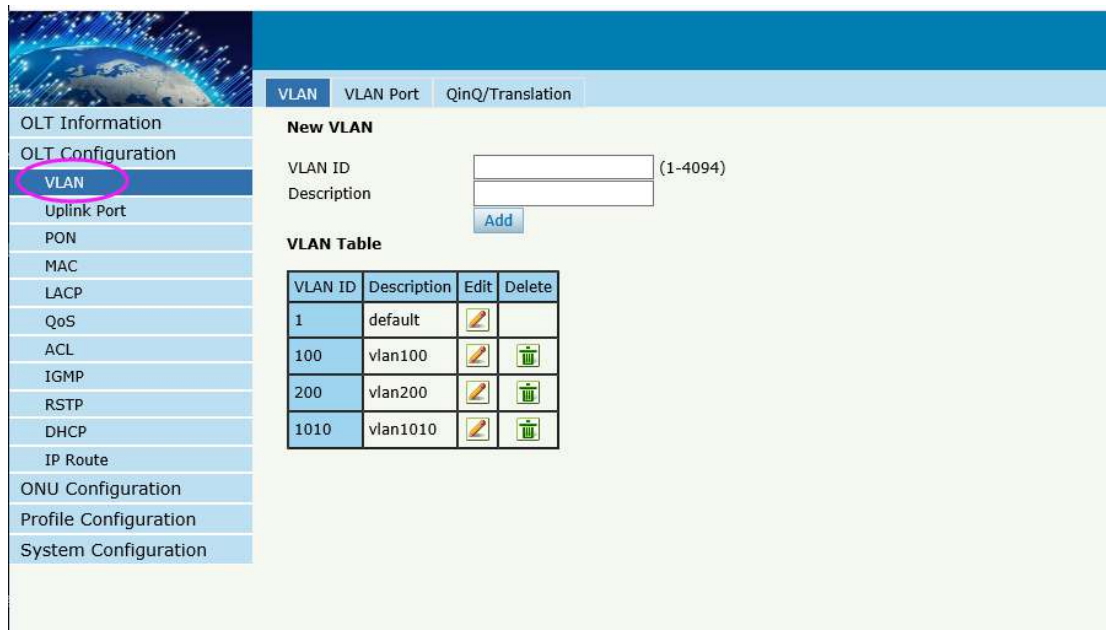
3.1 VLAN

OLT equipment switch engine is fully compliant with the IEEE 802.1Q VLAN standard and has the following main features:

- Support Port-based VLAN and IEEE 802.1Q VLAN.
- Support full 4K VLAN group, VID range 1~4095.

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

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



3.1.1 Create VLAN

OLT Configuration→VLAN

In this user interface, we can create new VLANs.

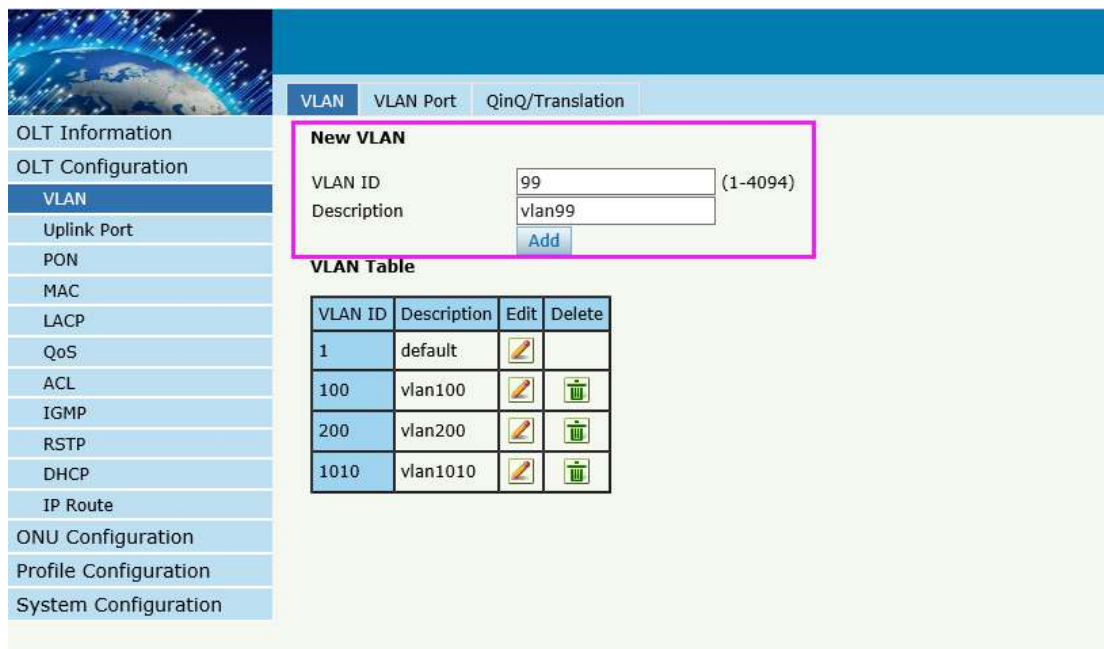



Figure 3-1: Create New VLAN

3.1.2 VLAN Port

OLT Configuration → VLAN → VLAN Port.



The screenshot shows the 'VLAN Port' configuration page for VLAN ID 99. The interface includes a sidebar with navigation options and a main configuration area with a table for port settings.

Navigation Sidebar:

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

Port VLAN Configuration

VLAN ID: 99

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

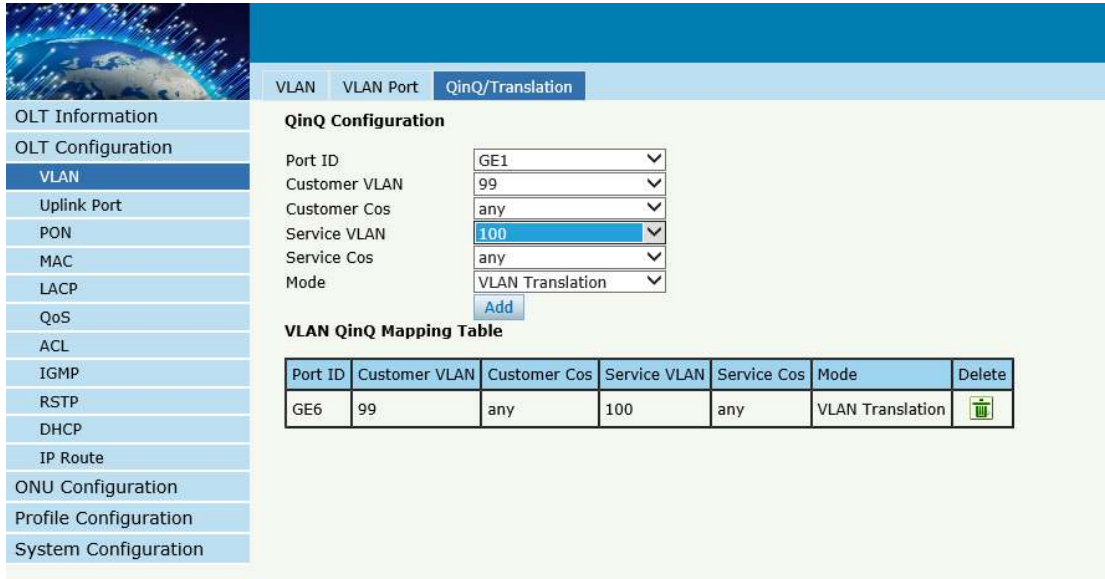
Submit

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
 Add

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 ports traffic statistics and basic configuration setting.

3.2.1 Information

OLT Configuration→Uplink Port→Information

This user interface displays traffic statistics of uplink ports.

Information		Configuration														Log	Stat
Information		Configuration														Status	
OLT Information																	
OLT Configuration																	
VLAN																	
Uplink Port																	
PON																	
MAC																	
LACP																	
QoS																	
ACL																	
IGMP																	
RSTP																	
DHCP																	
IP Route																	
ONU Configuration																	
Profile Configuration																	
System Configuration																	

Traffic Statistics																
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	0	0
GE2	Down	-	0	0	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	0	0
GE4	Down	-	0	0	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	0	0
GE6	Down	-	0	0	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	0	0
GE8	Down	-	0	0	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	0	0
GE10	Down	-	4292241	50334	29673	17705	2933	4094572	60112	248	51731	8133	0	3		
GE11	Down	-	1505534976	11761992	11761992	0	0	4187	58	0	32	26	0	0		
GE12	Up	1009M Full	33217903360	266466398	266466393	0	0	31232932872	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	5964	0	0		

Clear Counters Refresh

Figure3-4 : GE Traffic Statistics

3.2.2 Configuration

OLT Configuration→Uplink Port→Information

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

Information		Configuration										
Information		Configuration										
OLT Information												
OLT Configuration												
VLAN												
Uplink Port												
PON												
MAC												
LACP												
QoS												
ACL												
IGMP												
RSTP												
DHCP												
IP Route												
ONU Configuration												
Profile Configuration												
System Configuration												

GE Configuration											
Port ID	Description	Admin Status	Flow Control	Isolate	PVID	Storm(0 64-1000000fps)			Rate(0 32-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Multicast	Unicast	Ingress	Egress	
GE1		<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

Submit Reset

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 display parameters of PON port, such as PON module port current temperature, voltage, current, transmit power and the traffic statistics.

Page 13

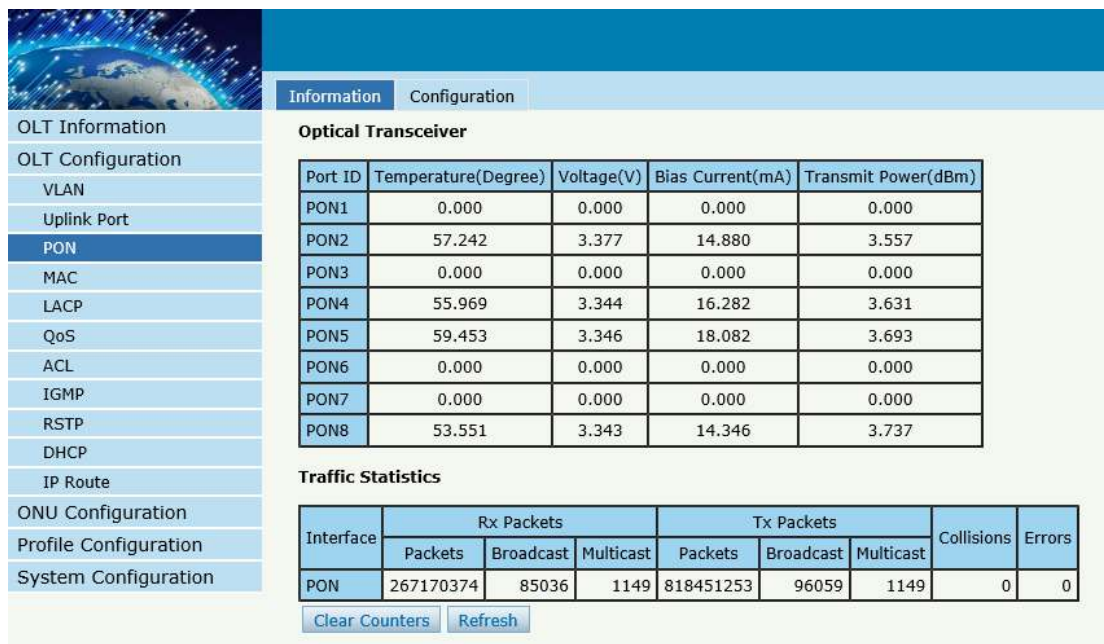
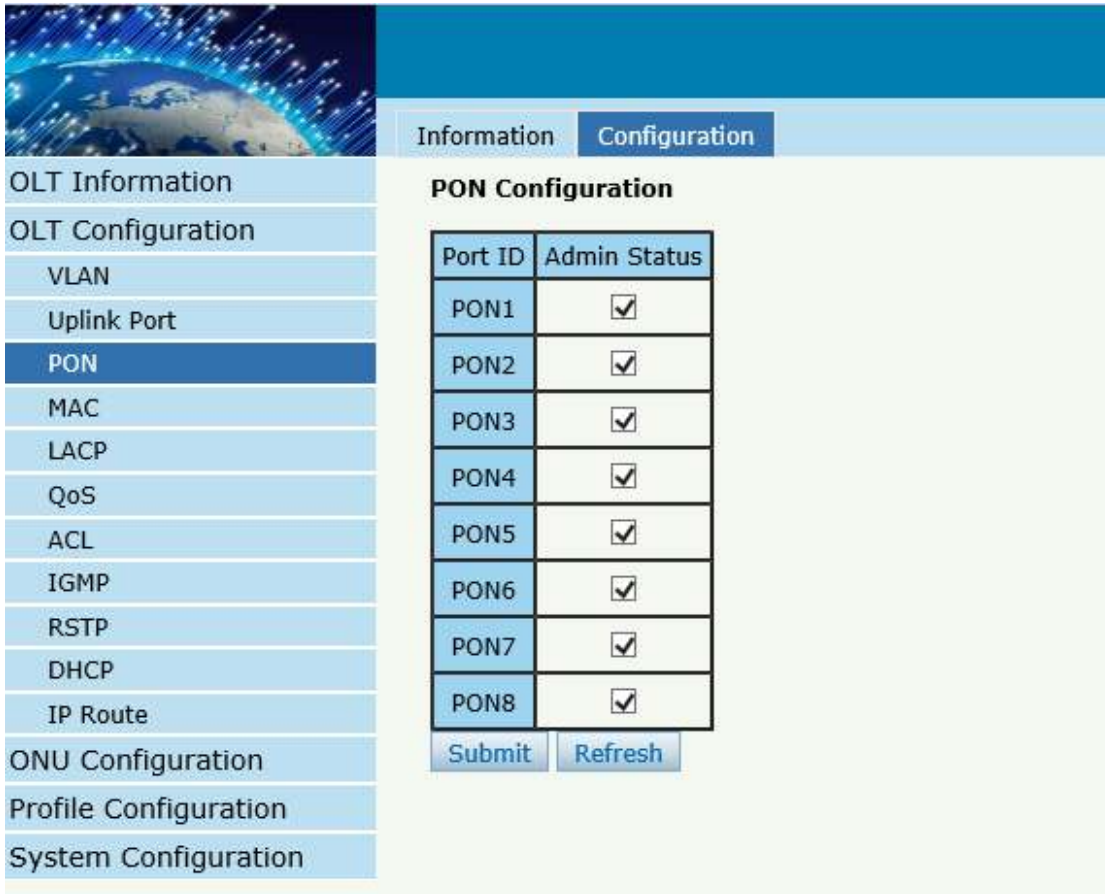


Figure3-6: PON Information

3.3.2 Configuration

OLT Configuration→PON→Configuration

This user interface is used to configure port status



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

Submit Refresh

Figure3-7: PON configuration

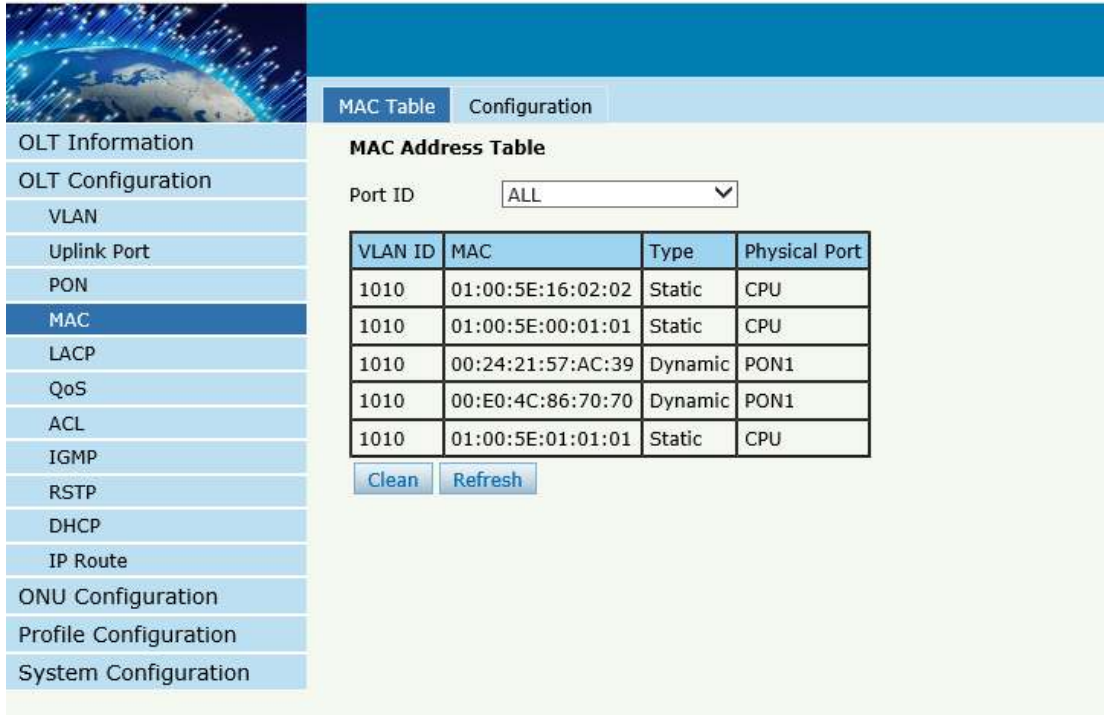
3.4 MAC

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 learned by OLT at PON and GE port.



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

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.

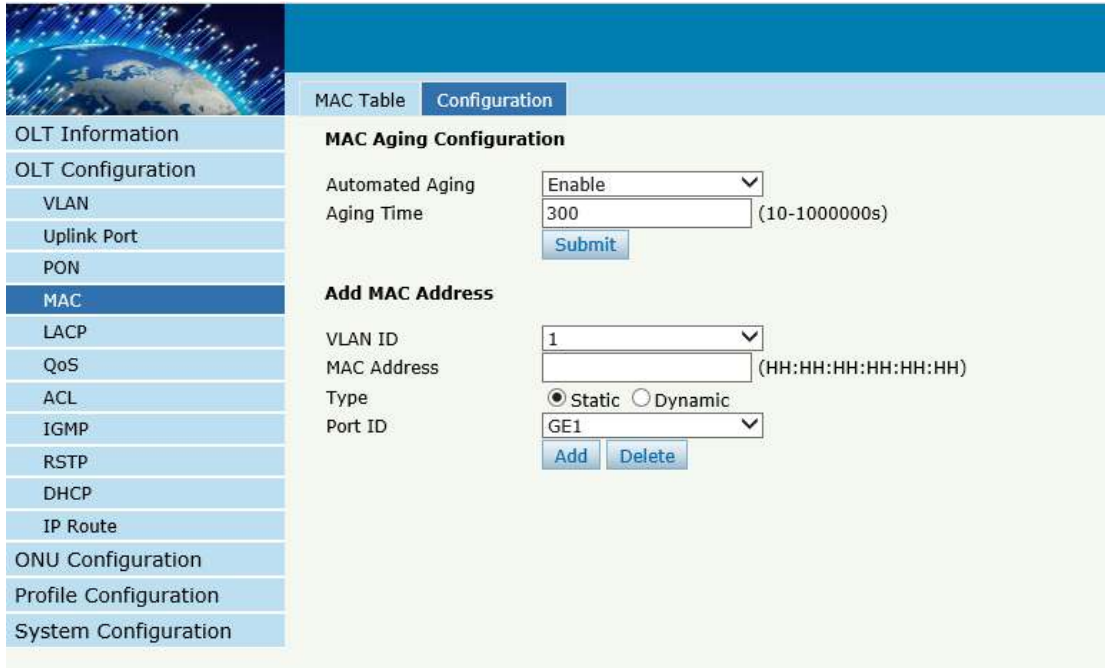
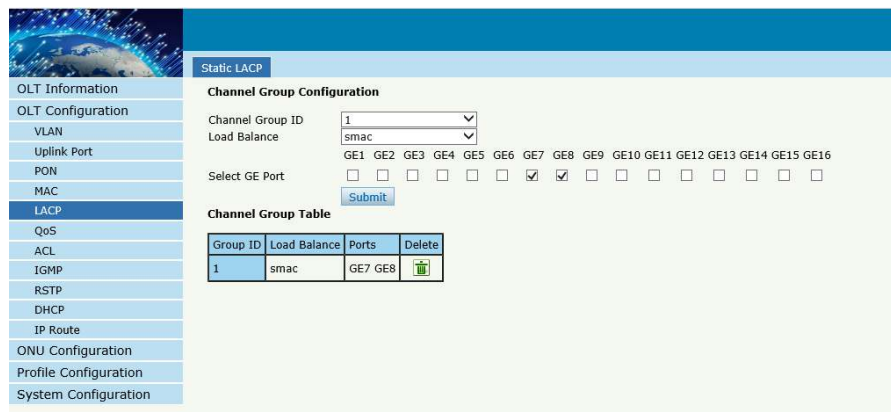


Figure 3-9:MAC Configuration

3.5 LACP

OLT Configuration→LACP→Static LACP

To assign and configure an uplink physical interface to an Ether Channel. When a link fails due to some reason, traffic will switch to another link automatically. The group range is from 1 to 4.Each group can add maximum of 4 ports. Only GE ports can be added in the channel groups.




Group ID	Load Balance	Ports	Delete
1	smac	GE7 GE8	

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.

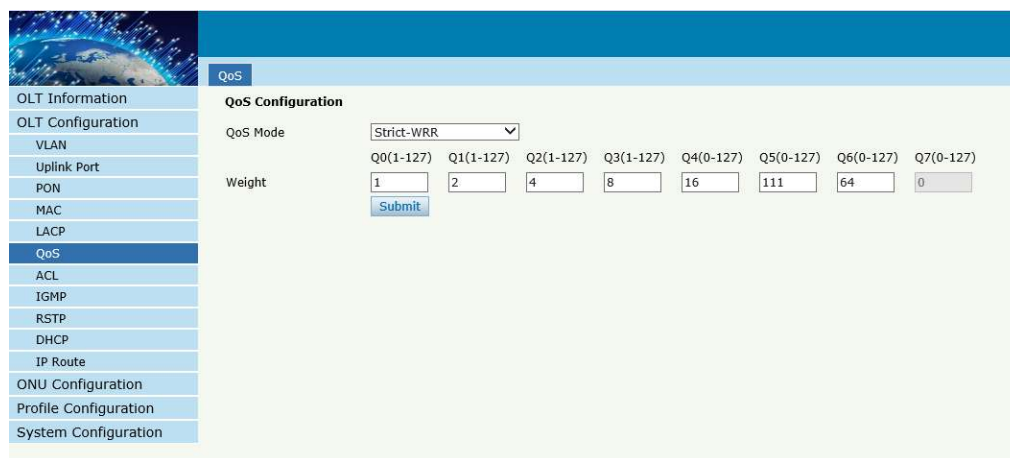


Figure 3-11: QOS Configuration

3.7 ACL

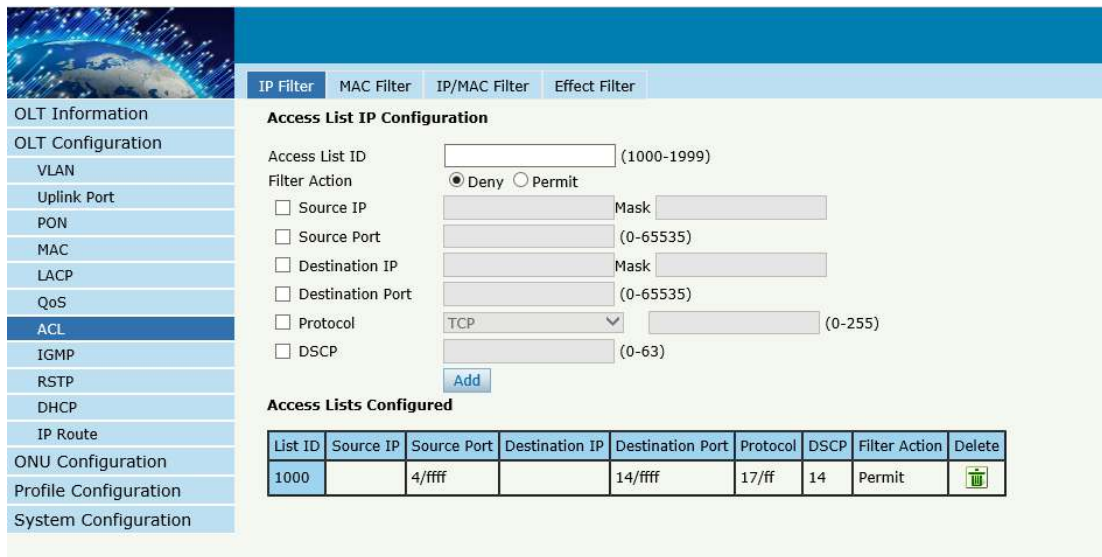
In order to filter data packages, network equipment need to setup a series of rules for identifying what need to be filtered. Only when matched with the rules the data packages can be filtered. ACL can achieve this function. Matched conditions of ACL rules can be source address, destination address, 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 based on the IP address, including the source IP address and destination IP address.

OLT Configuration→ACL→IP Filter



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: (0-255)

☐ DSCP: (0-63)

Access Lists Configured


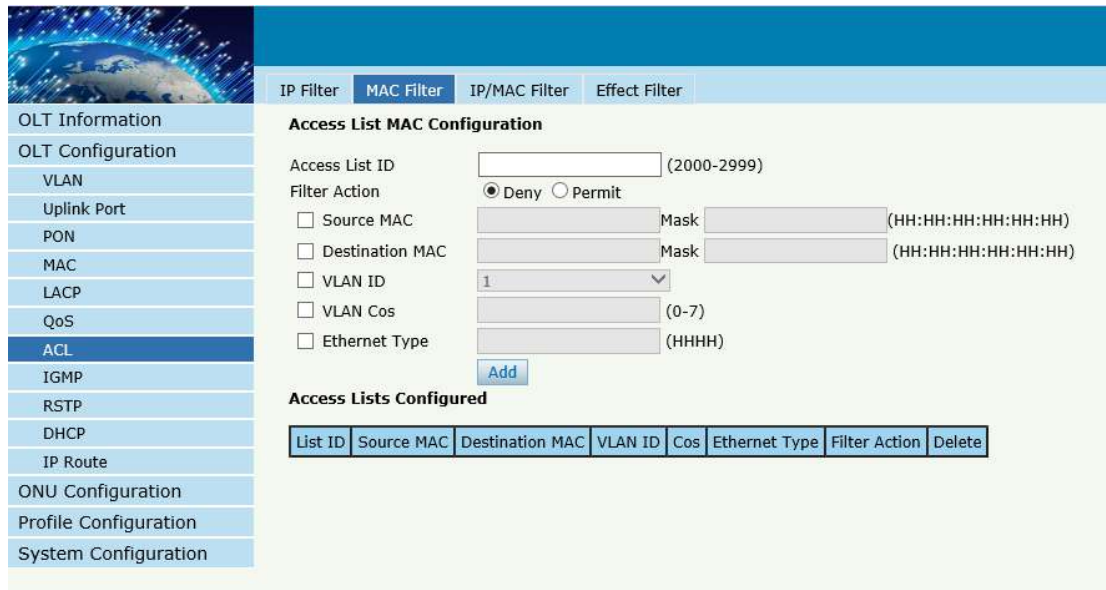
List ID	Source IP	Source Port	Destination IP	Destination Port	Protocol	DSCP	Filter Action	Delete
1000		4/ffff		14/ffff	17/ff	14	Permit	

Figure 3-12: IP Filter

3.7.2 MAC Filter

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

OLT Configuration→ACL→MAC Filter

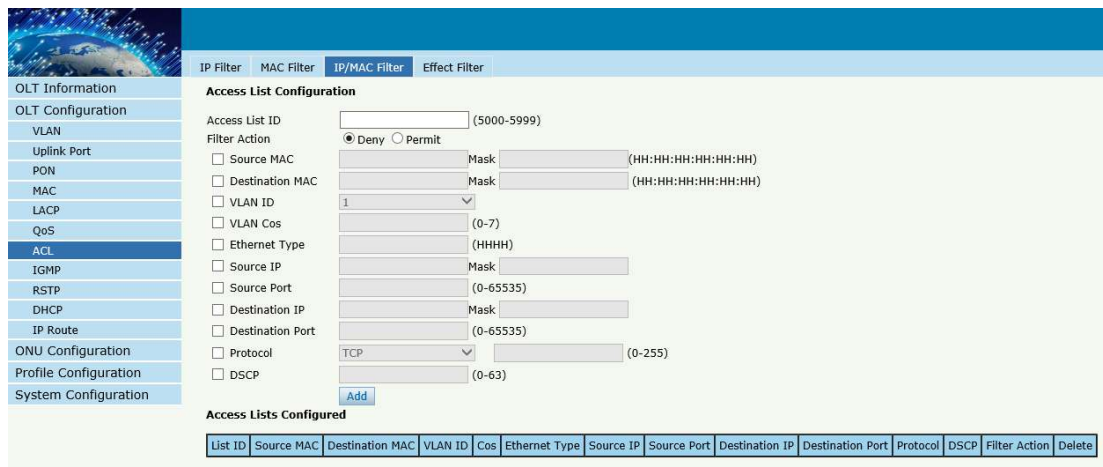


The screenshot shows the 'MAC Filter' configuration page. On the left is a navigation menu with options like OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL (selected), IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main area has tabs for IP Filter, MAC Filter (selected), IP/MAC Filter, and Effect Filter. Under 'Access List MAC Configuration', there are fields for Access List ID (2000-2999), Filter Action (Deny selected, Permit unselected), and checkboxes for Source MAC, Destination MAC, VLAN ID (set to 1), VLAN Cos (0-7), and Ethernet Type (HHHH). Each checkbox has a corresponding Mask field. An 'Add' button is at the bottom. Below this is a table titled 'Access Lists Configured' with columns: List ID, Source MAC, Destination MAC, VLAN ID, Cos, Ethernet Type, Filter Action, and Delete.

Figure 3-13: MAC Filter

3.7.3 IP/MAC Filter

OLT Configuration→ACL→IP/MAC Filter



The screenshot shows the 'IP/MAC Filter' configuration page. The navigation menu is the same as in Figure 3-13, with 'ACL' selected. The main area has tabs for IP Filter, MAC Filter, IP/MAC Filter (selected), and Effect Filter. Under 'Access List Configuration', there are fields for Access List ID (5000-5999), Filter Action (Deny selected, Permit unselected), and checkboxes for Source MAC, Destination MAC, VLAN ID (set to 1), VLAN Cos (0-7), Ethernet Type (HHHH), Source IP (Mask), Source Port (0-65535), Destination IP (Mask), Destination Port (0-65535), Protocol (TCP selected, 0-255), and DSCP (0-63). Each checkbox has a corresponding Mask field. An 'Add' button is at the bottom. Below this is a table titled 'Access Lists Configured' with columns: List ID, Source MAC, Destination MAC, VLAN ID, Cos, Ethernet Type, Source IP, Source Port, Destination IP, Destination Port, Protocol, DSCP, Filter Action, and Delete.

Figure 3-14 IP/MAC Filter

3.7.4 Effect Filter

Bind the access list to the ports. Each access list can be bound to several ports.

OLT Configuration→ACL→Effect Filter

Page 20

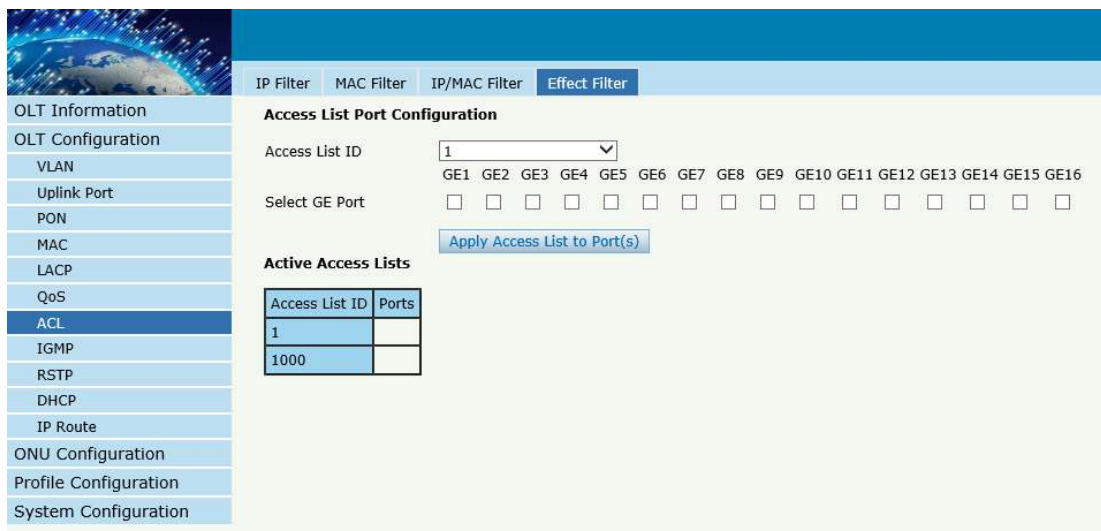


Figure 3-15: Bind Security Filter

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



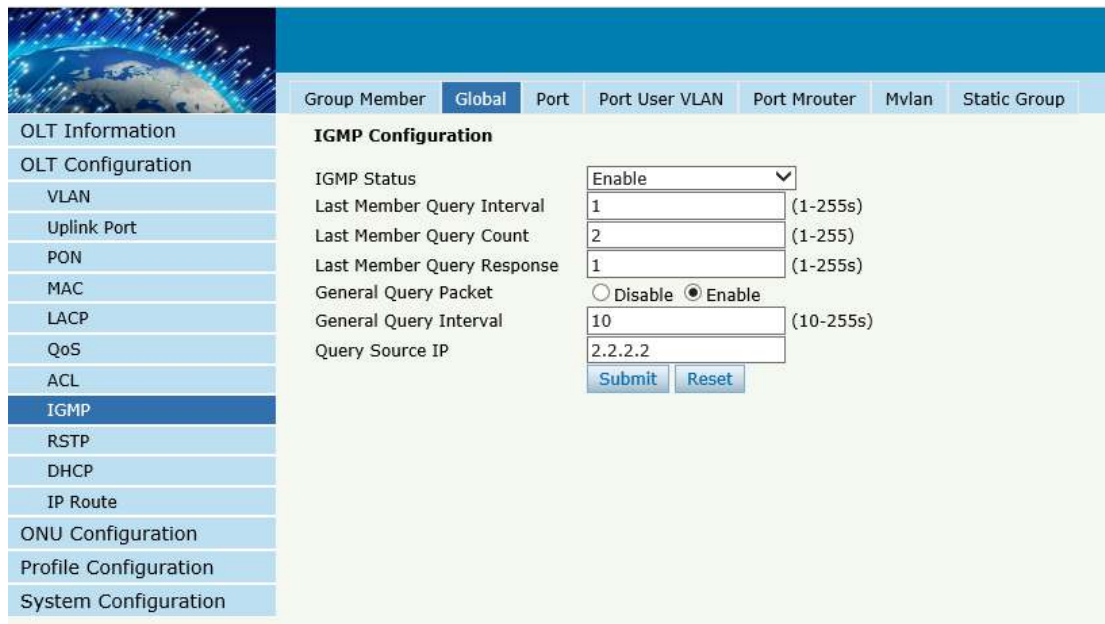
Figure 3-16: Group Member

3.8.2 Global

OLT Configuration →IGMP→Global.

IGMP basic configuration mainly contains parameters of query packet.

When IGMP status is checked, OLT works in 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 in transparent mode.



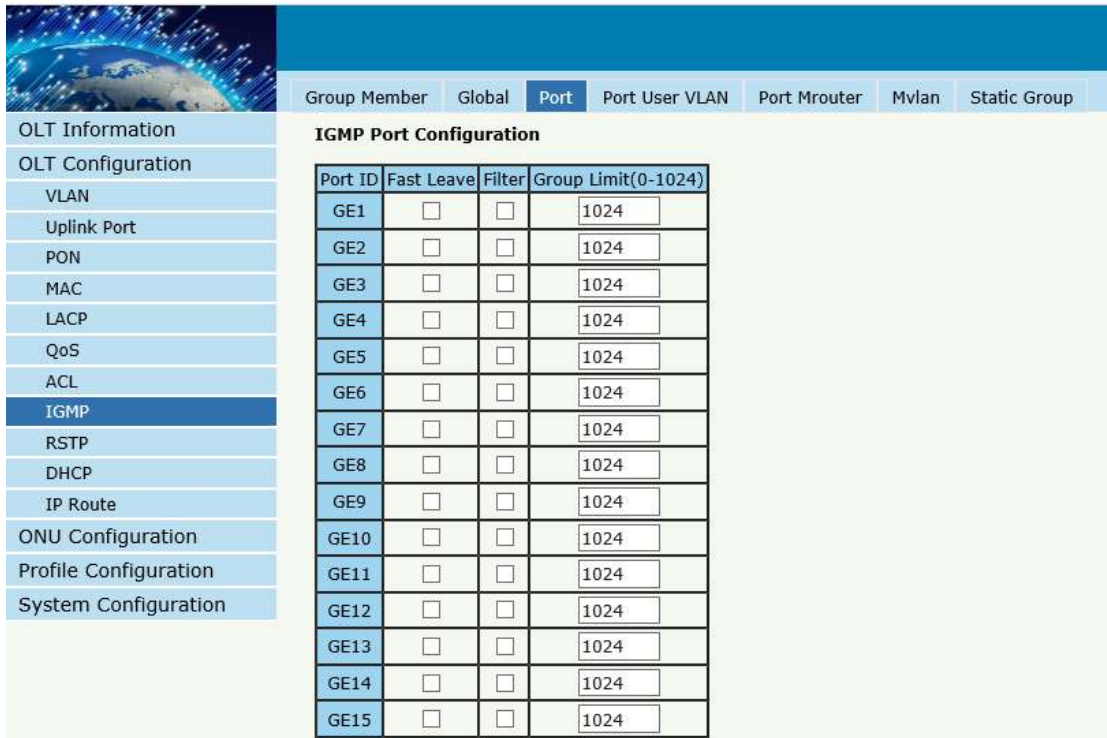
Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
IGMP Configuration						
IGMP Status	Enable					
Last Member Query Interval	1 (1-255s)					
Last Member Query Count	2 (1-255)					
Last Member Query Response	1 (1-255s)					
General Query Packet	<input type="radio"/> Disable <input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



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.

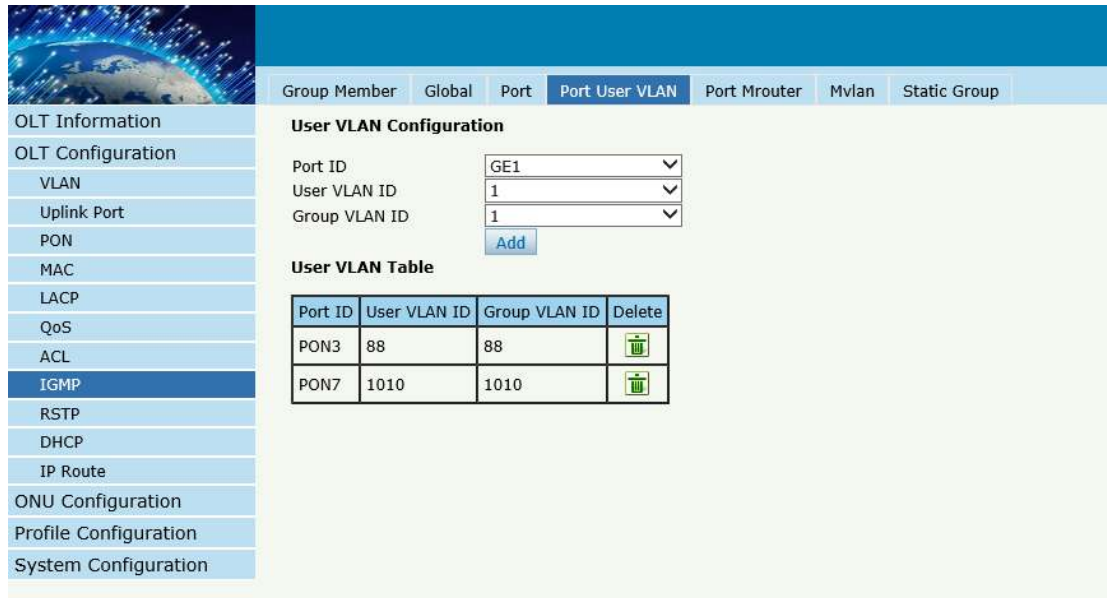


Figure 3-19: IGMP Port User VLAN

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.

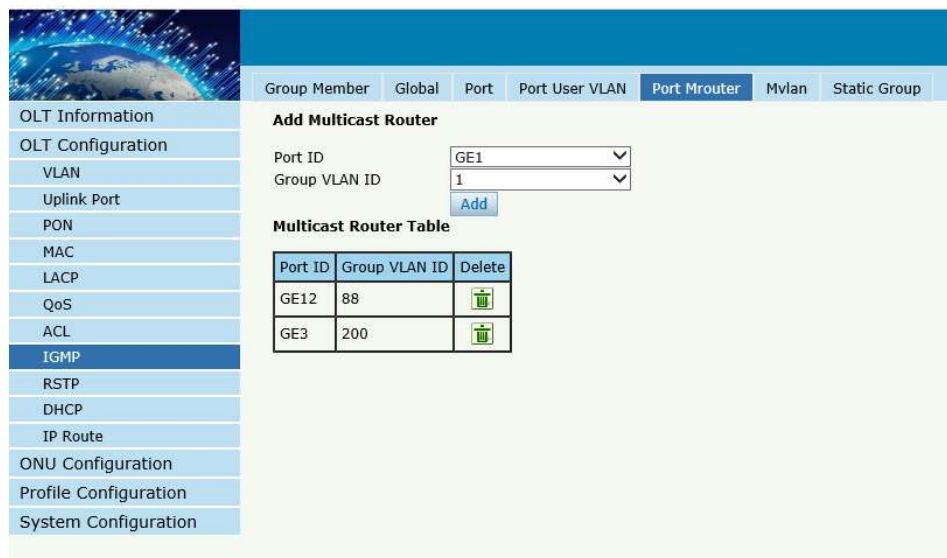


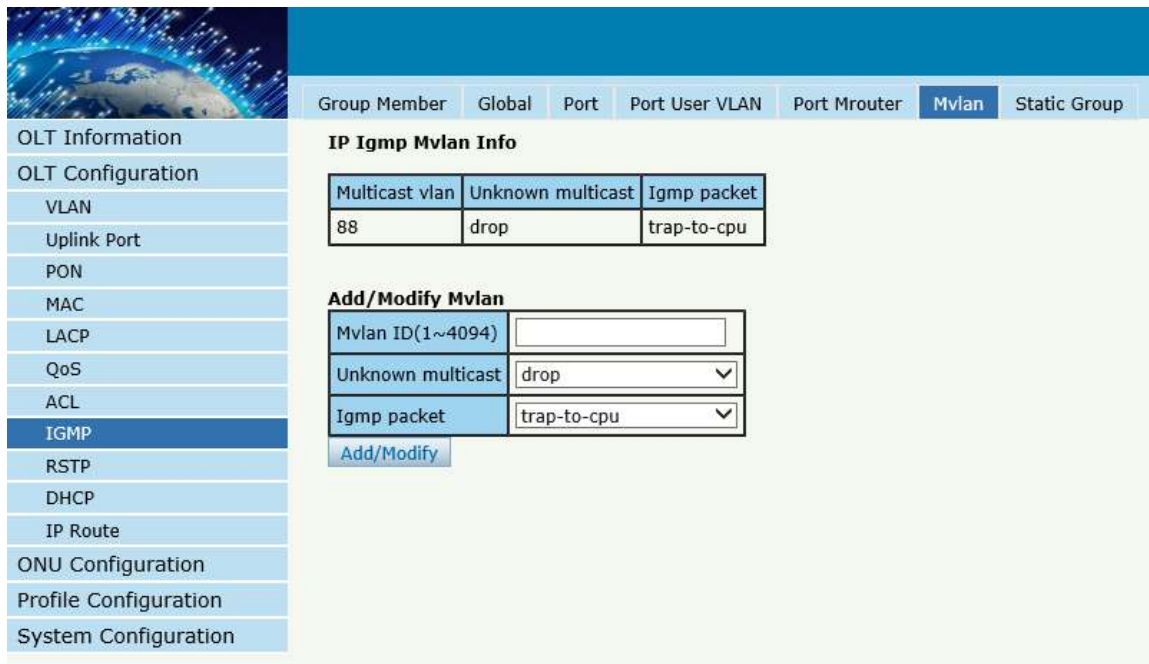
Figure 3-20: IGMP Port Mroute

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 displays the OLT configuration interface. On the left, a navigation menu lists various configuration options, with 'IGMP' currently selected. The main configuration area is titled 'IP Igmp Mvlan Info' and contains a table with the following data:

Multicast vlan	Unknown multicast	Igmp packet
88	drop	trap-to-cpu

Below the table, there is an 'Add/Modify Mvlan' section with three input fields: 'Mvlan ID(1~4094)', 'Unknown multicast' (set to 'drop'), and 'Igmp packet' (set to 'trap-to-cpu'). An 'Add/Modify' button is located at the bottom of this section.

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.

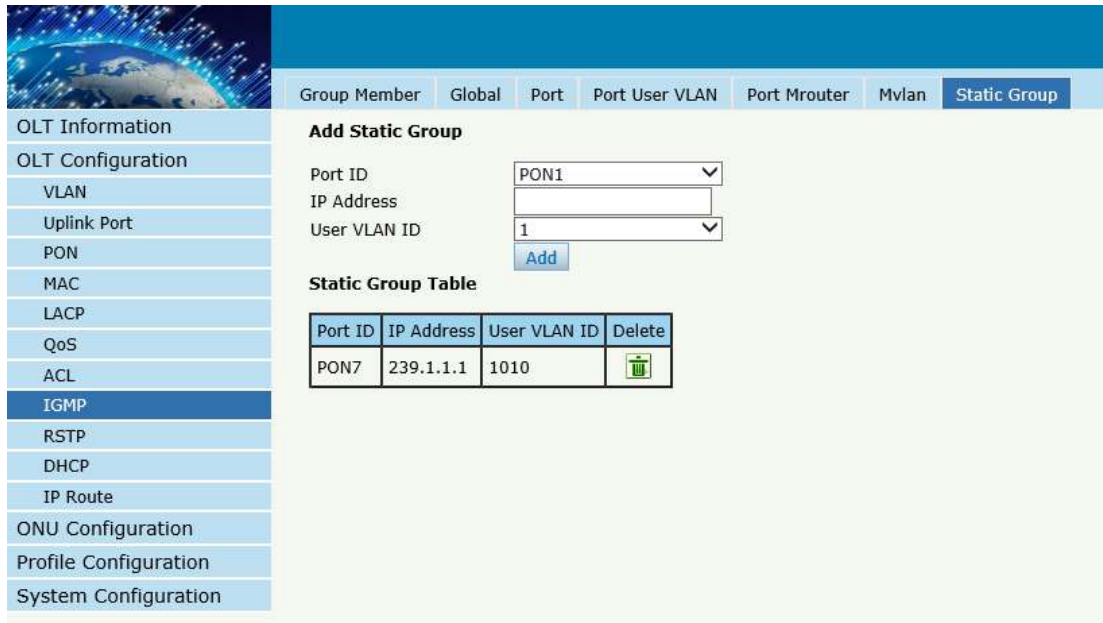


Figure 3-22: IGMP Static Group


3.9 RSTP

Spanning Tree Protocol is layer2 protocol, which is used to eliminate network loops 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.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IGMP

RSTP

DHCP

IP Route

ONU Configuration

Profile Configuration

System Configuration

Information

Global

Port

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.



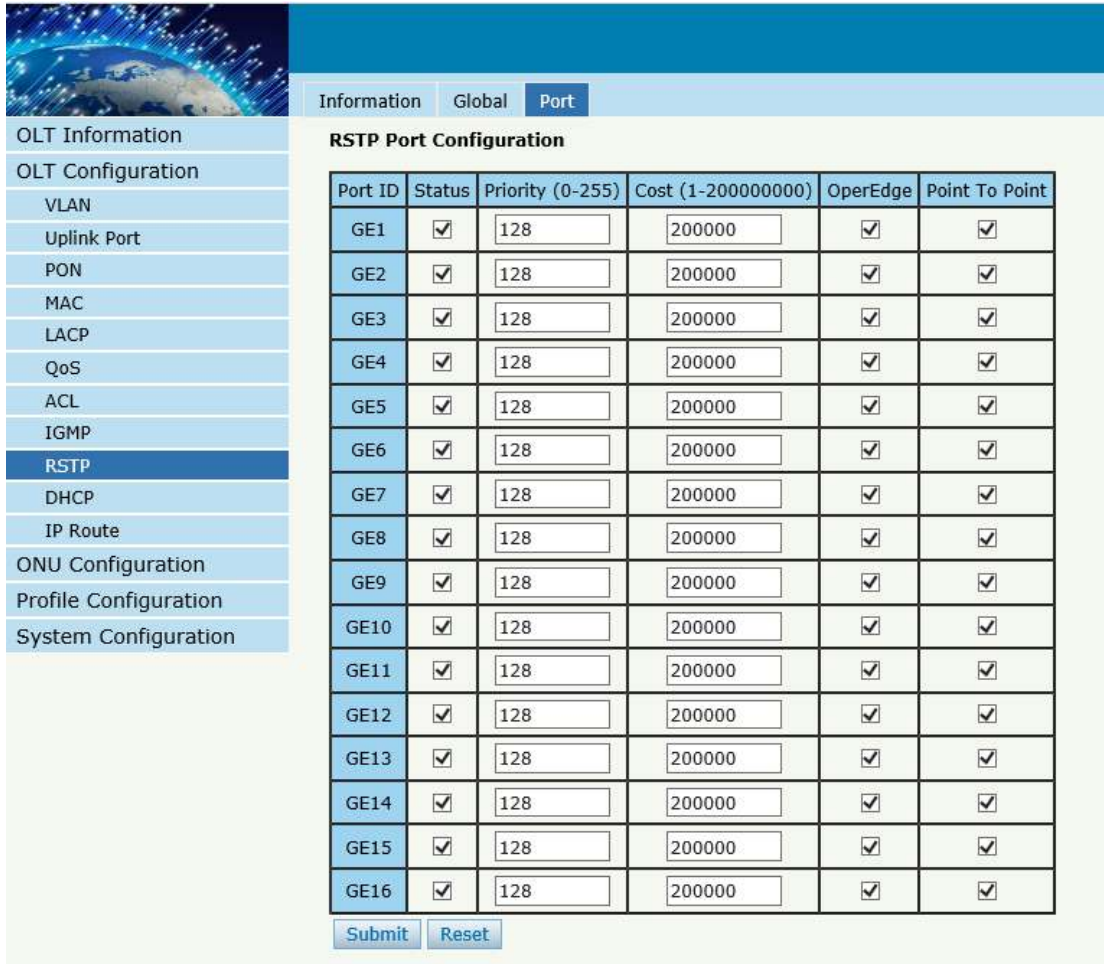
Information	Global	Port
RSTP Configuration		
RSTP Status	Enable	
Global Priority	32768	(0-61440)
Hello Time	2	(1-10s)
Max Age	20	(6-40s)
Forward Delay	15	(4-30s)
Notice: $2 * (\text{HelloTime} + 1) \leq \text{MaxAge} \leq 2 * (\text{ForwardDelay} - 1)$		
<input type="button" value="Submit"/> <input type="button" value="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 point to point port.



The interface shows the RSTP Port Configuration page. 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 main area has tabs for Information, Global, and Port. The RSTP Port Configuration table lists 16 ports (GE1 to GE16) with columns for Port ID, Status, Priority (0-255), Cost (1-200000000), OperEdge, and Point To Point. All ports are checked for Status, OperEdge, and Point To Point. The Priority and Cost fields are input boxes containing the values 128 and 200000 respectively. Submit and Reset buttons are at the bottom.

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

3.10.1DHCP Server

3.10.1.1 DHCP Lease

OLT Configuration→DHCP→DHCP Server→Lease

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

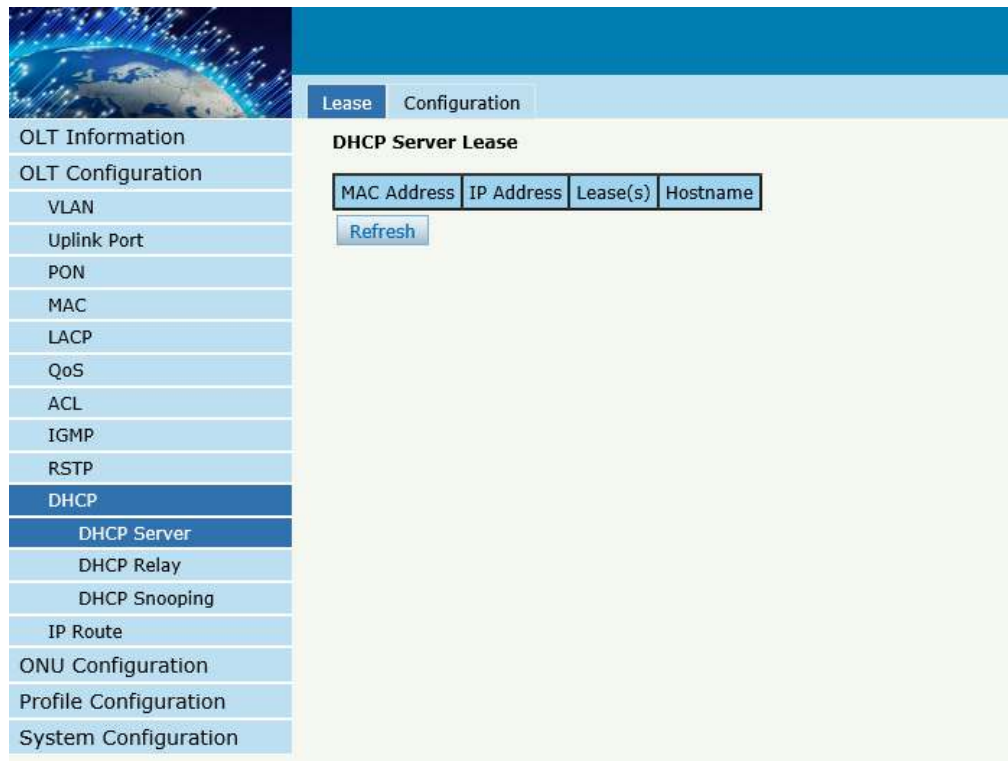


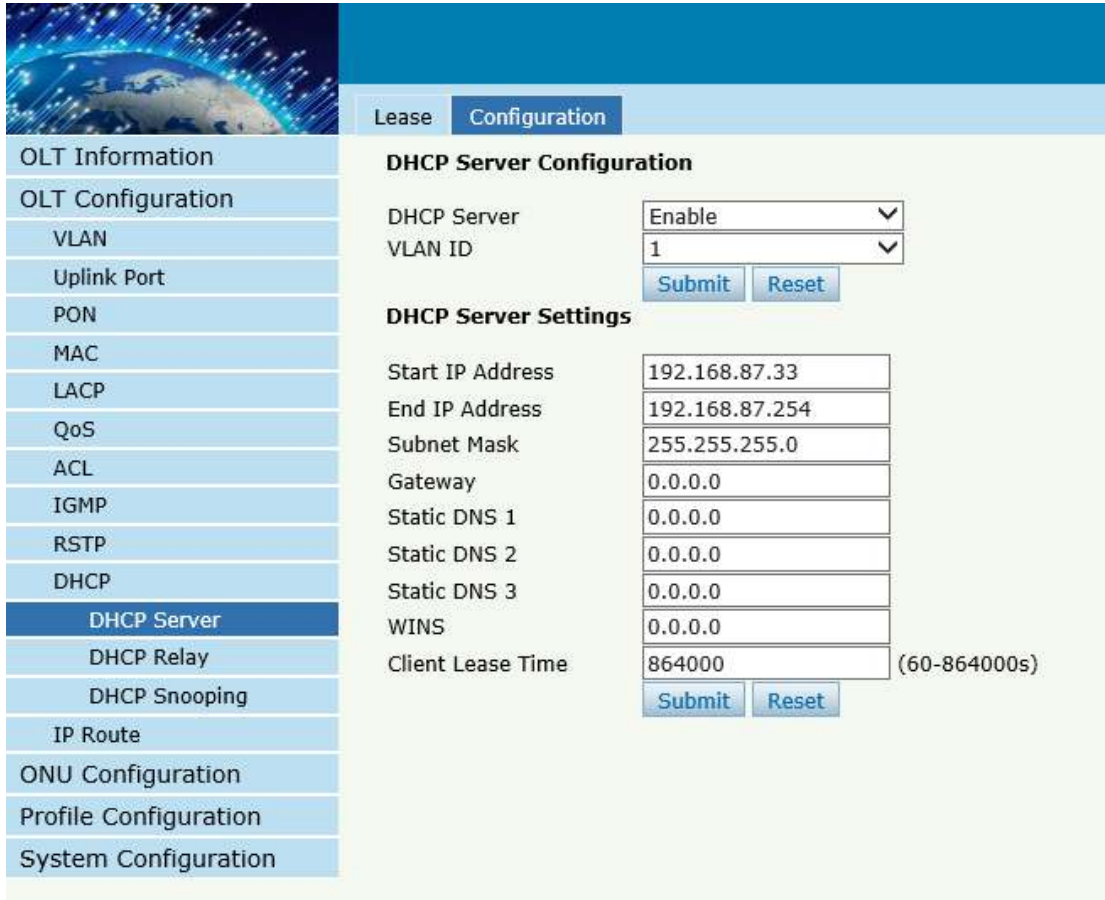
Figure 3-26: DHCP Lease

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.



Lease		Configuration
DHCP Server Configuration		
DHCP Server	Enable	▼
VLAN ID	1	▼
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		
DHCP Server Settings		
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)
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		

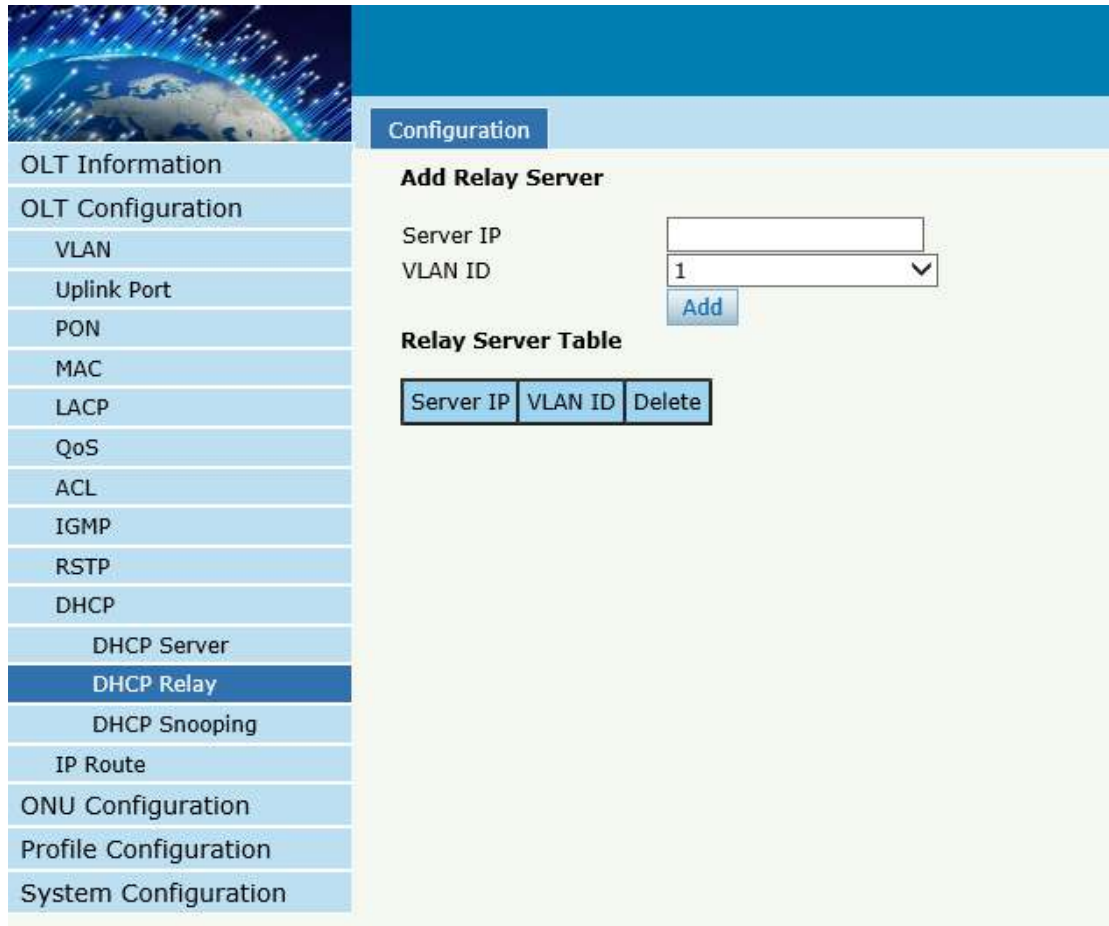
Figure 3-27:DHCP Configuration

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.



Configuration

Add Relay Server

Server IP

VLAN ID

Relay Server Table

Server IP	VLAN ID	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 ,

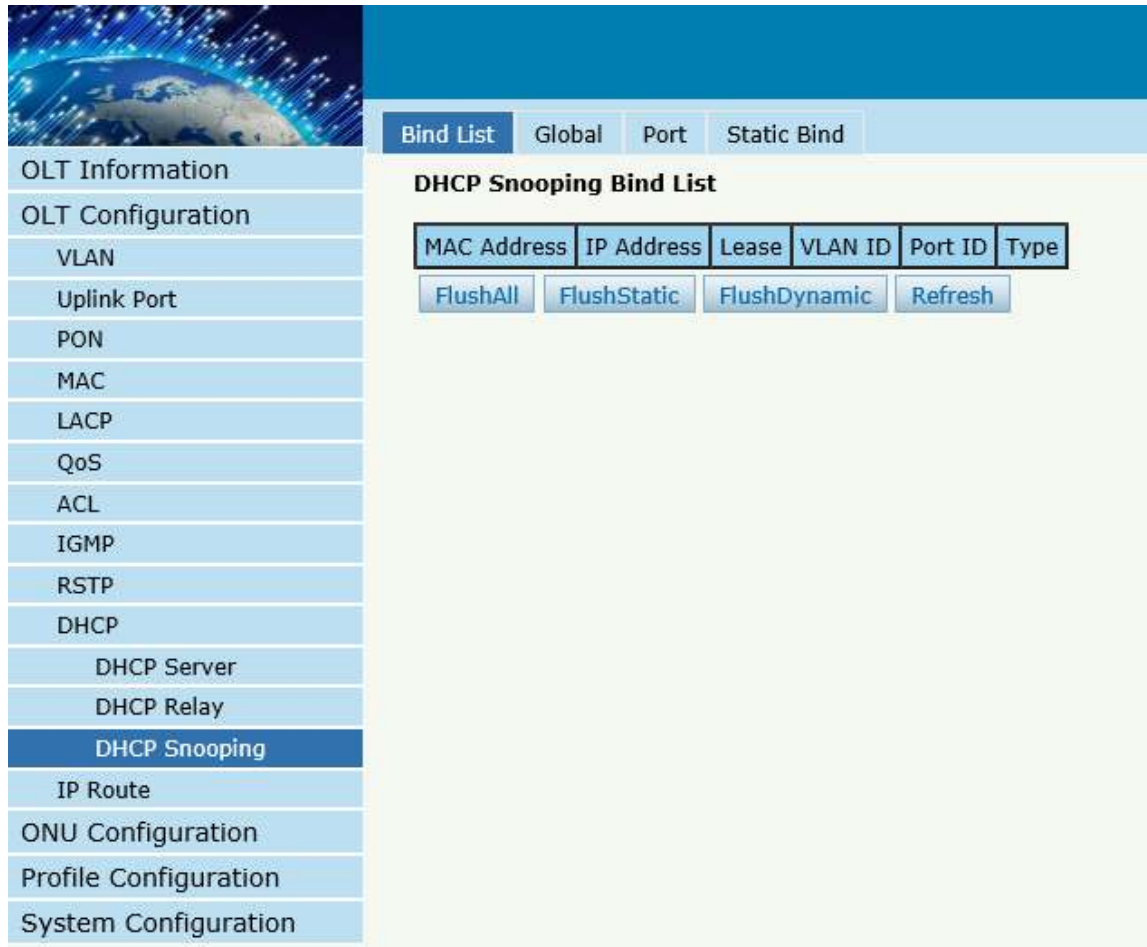


Figure 3-29:DHCP Snooping Bind List

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.

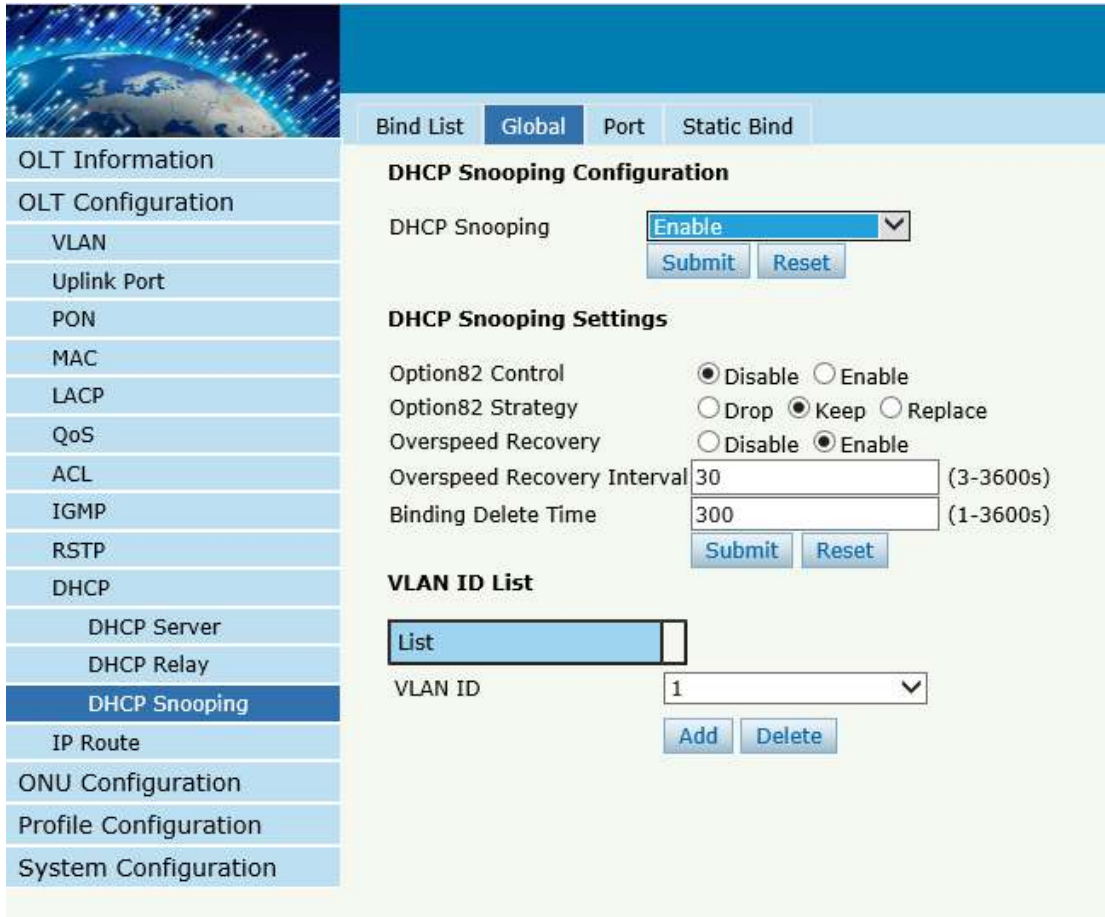


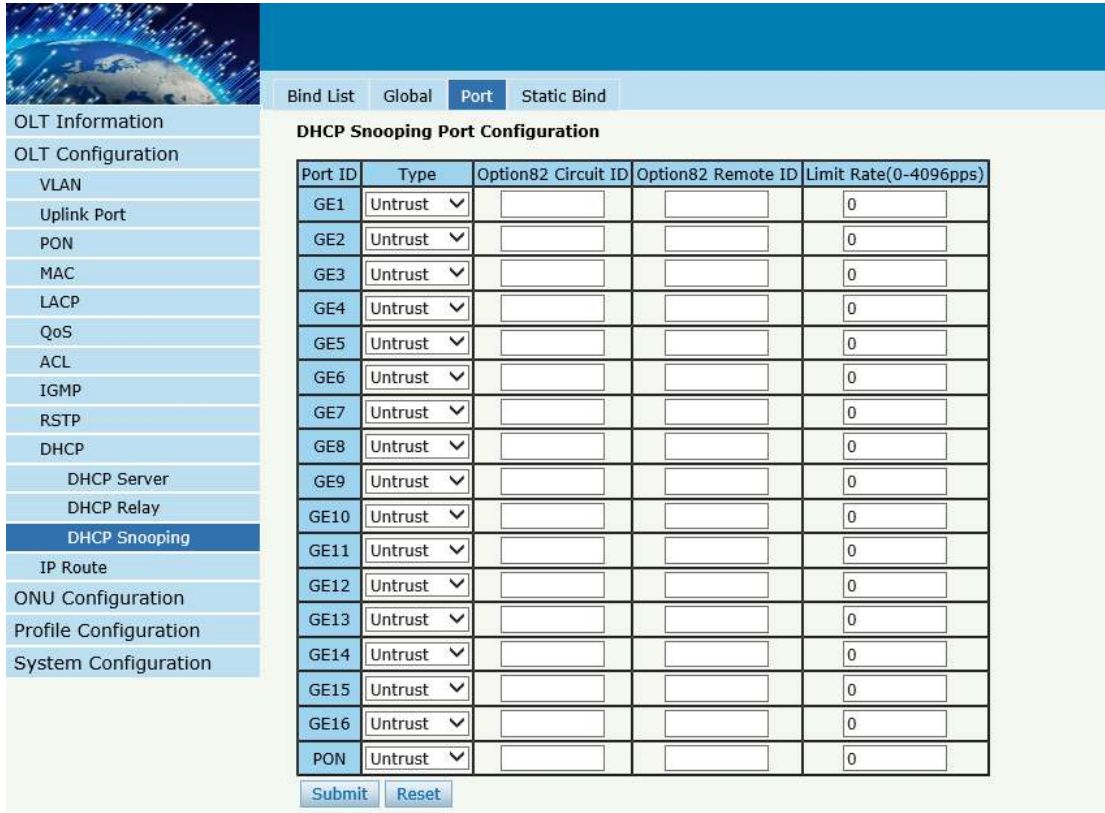
Figure 3-30:DHCP Snooping Global

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.



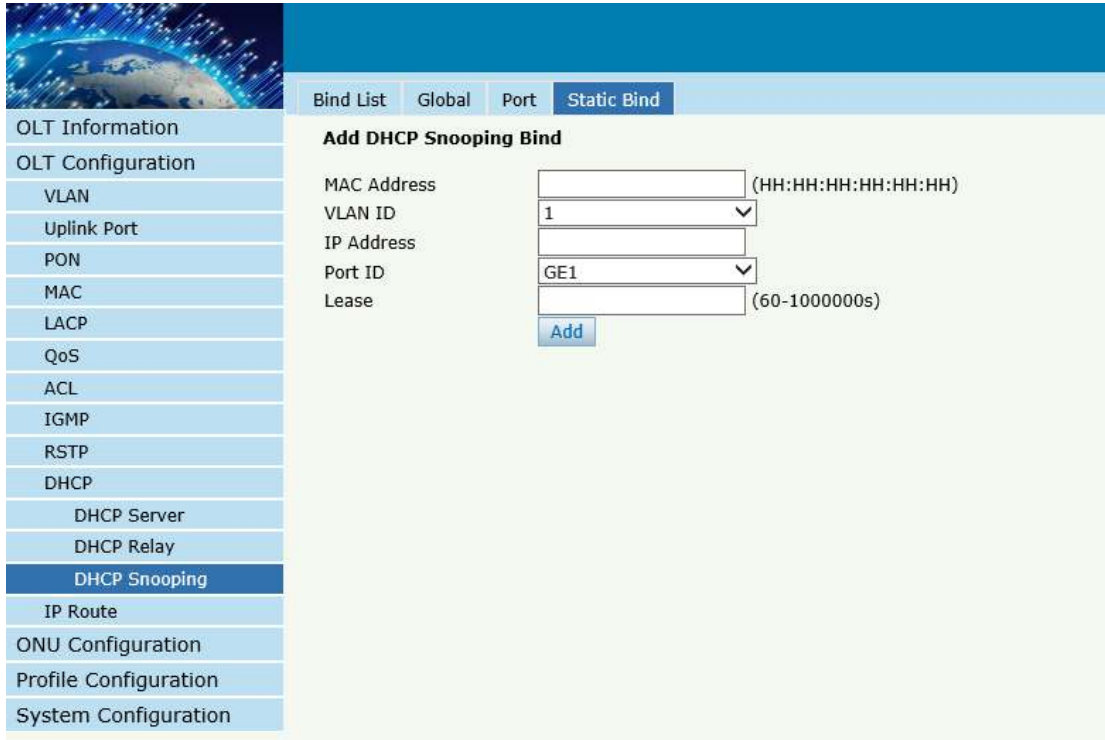
Port ID	Type	Option82 Circuit ID	Option82 Remote ID	Limit Rate(0-4096pps)
GE1	Untrust			0
GE2	Untrust			0
GE3	Untrust			0
GE4	Untrust			0
GE5	Untrust			0
GE6	Untrust			0
GE7	Untrust			0
GE8	Untrust			0
GE9	Untrust			0
GE10	Untrust			0
GE11	Untrust			0
GE12	Untrust			0
GE13	Untrust			0
GE14	Untrust		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



The screenshot shows the OLT web interface with a sidebar menu on the left and a main configuration area on the right. The sidebar menu includes: 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, and System Configuration. The main area has tabs for Bind List, Global, Port, and Static Bind. The Static Bind tab is active, showing the 'Add DHCP Snooping Bind' form. The form fields are: MAC Address (empty, with format (HH:HH:HH:HH:HH:HH)), VLAN ID (1, with a dropdown arrow), IP Address (empty), Port ID (GE1, with a dropdown arrow), and Lease (empty, with format (60-1000000s)). An 'Add' button is at the bottom of the form.

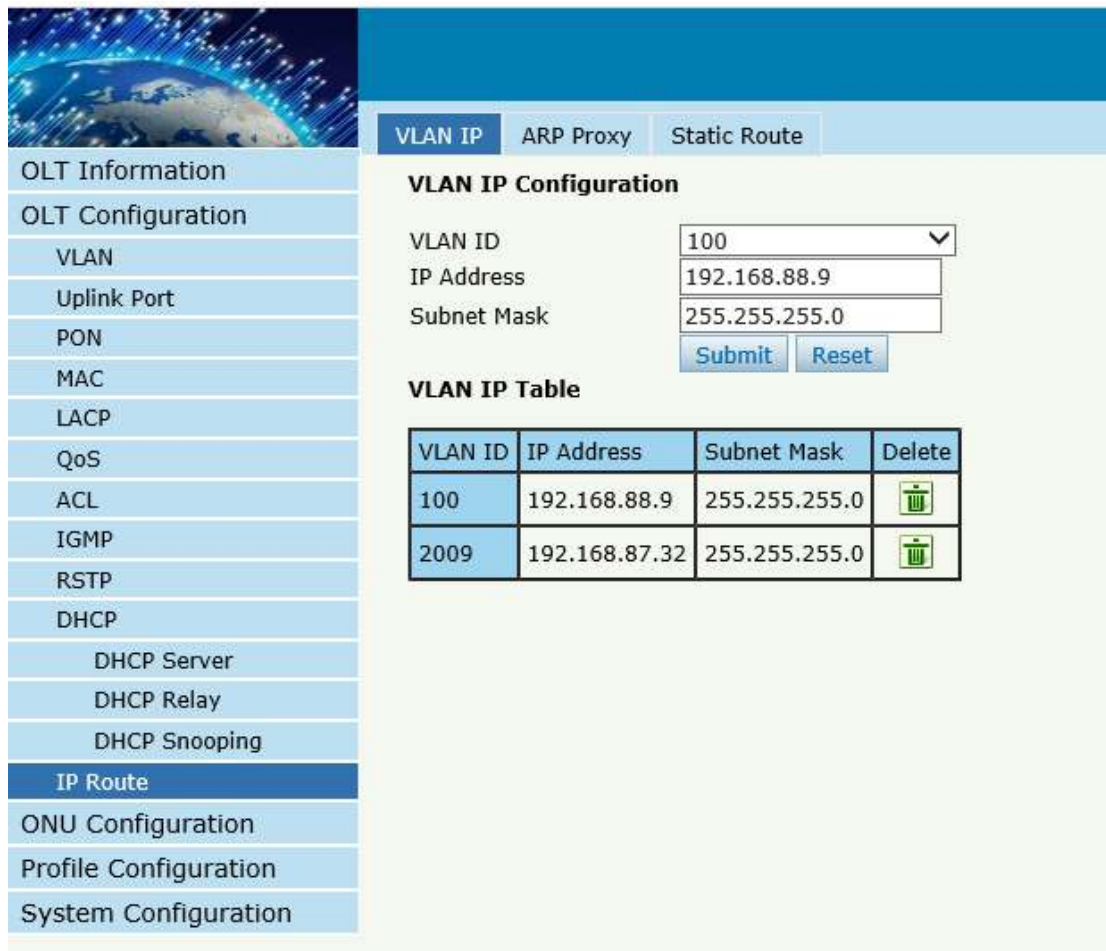
Figure 3-32 DHCP Snooping Static Bind

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 the OLT by the IP address from the port.



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
ARP Proxy
Static Route

VLAN IP Configuration

VLAN ID ▼

IP Address

Subnet Mask

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	

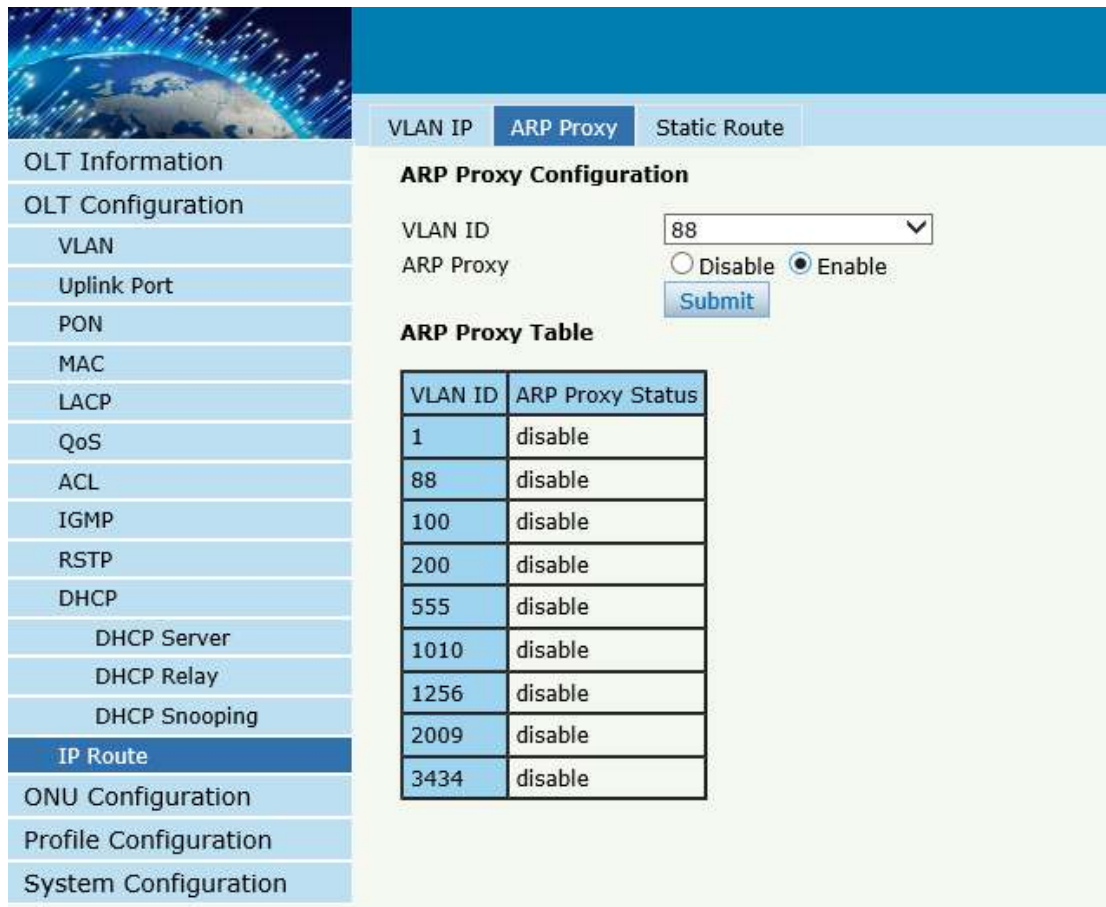
Figure 3-33:VLAN IP

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 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'.



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 for a manually-configured routing entry. In many cases, static routes are manually configured by a network administrator. Unlike dynamic routing, static routes are fixed and do not change if the network is changed or reconfigured.

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



OLT 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 ARP Proxy **Static Route**

Add Static Route

Destination IP
Destination Mask
Gateway

Static Route Table




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

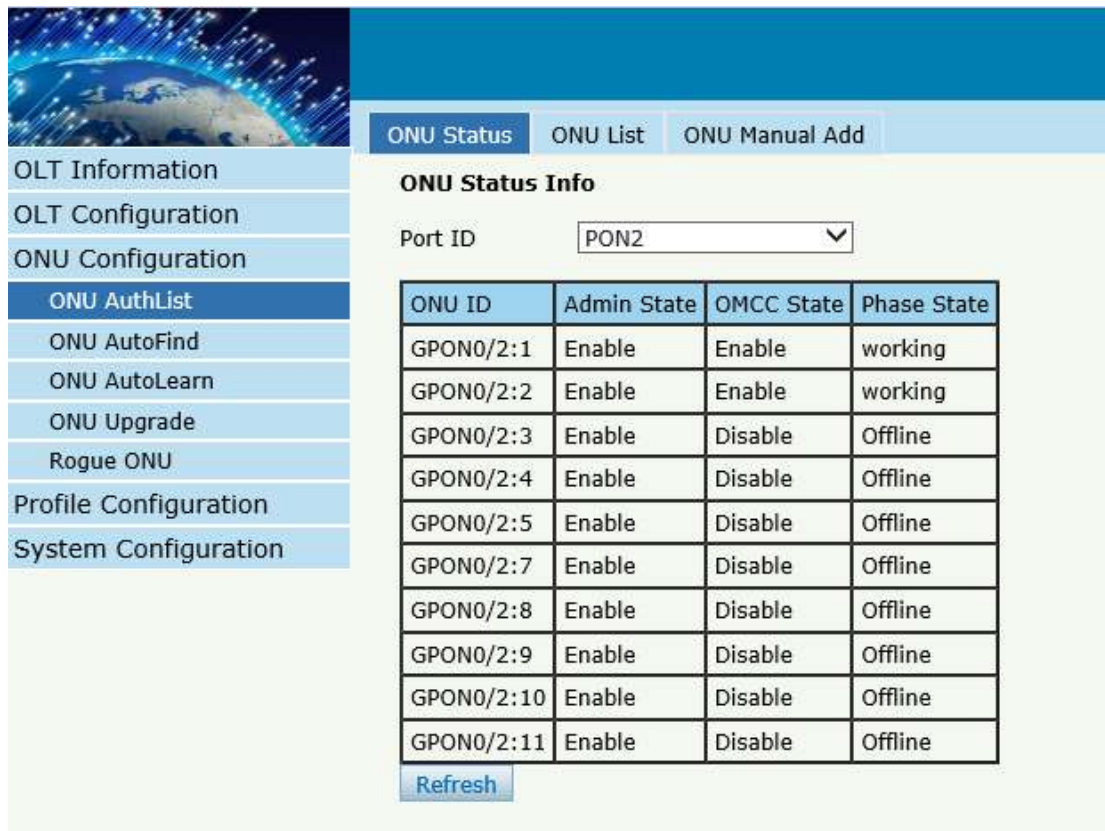
4.1.1 ONU Status

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 ,then the ONU is registered successfully




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

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.



OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

ONU Status

ONU List

ONU Manual Add

ONU Authentication Info

Port ID

PON2

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

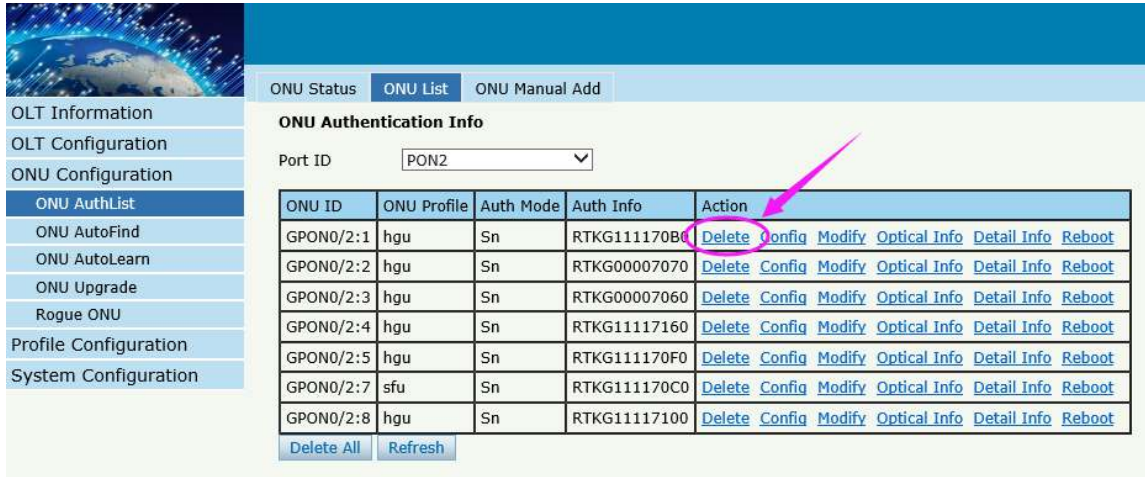
Refresh

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 shows 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

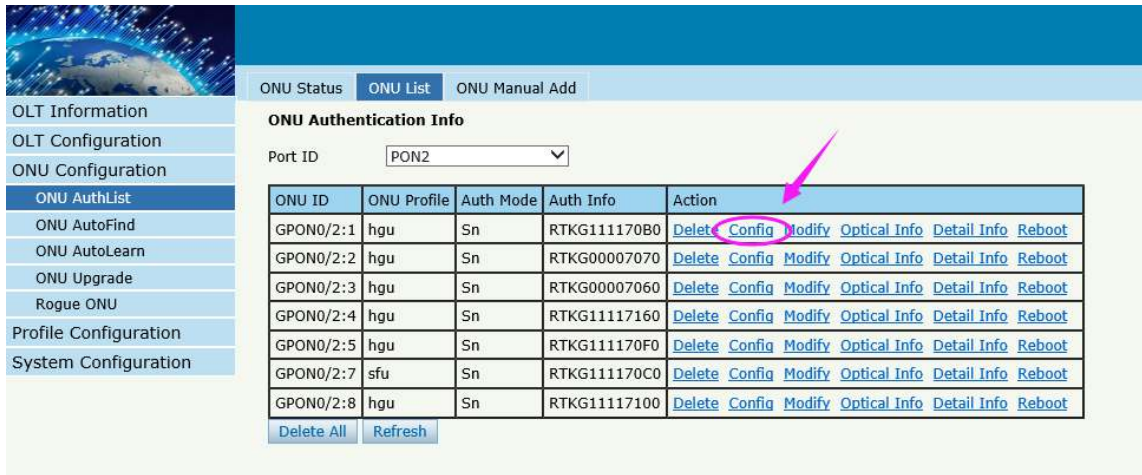
[Delete All](#) [Refresh](#)

Figure 4-3Delete ONU

4.1.2.2 Config

ONU Configuration→ONU AuthList→ONU List

Configure ONU parameter information which you selected,



ONU Status **ONU List** ONU Manual Add

ONU Authentication Info

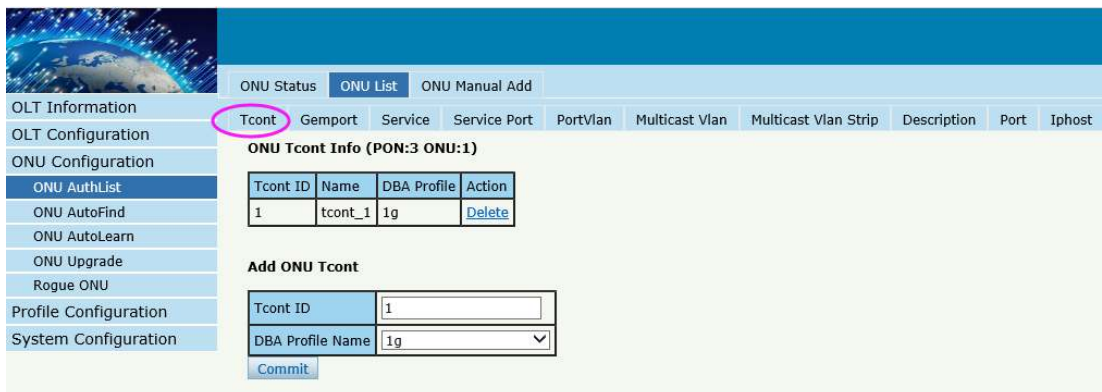
Port ID:

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](#)

Figure 4-4 Configure ONU

Create a tcont ID and bind DBA templates



ONU Status **ONU List** ONU Manual Add

Tcont **Gemport** Service Service Port PortVlan Multicast Vlan Multicast Vlan Strip Description Port Iphost

ONU Tcont Info (PON:3 ONU:1)

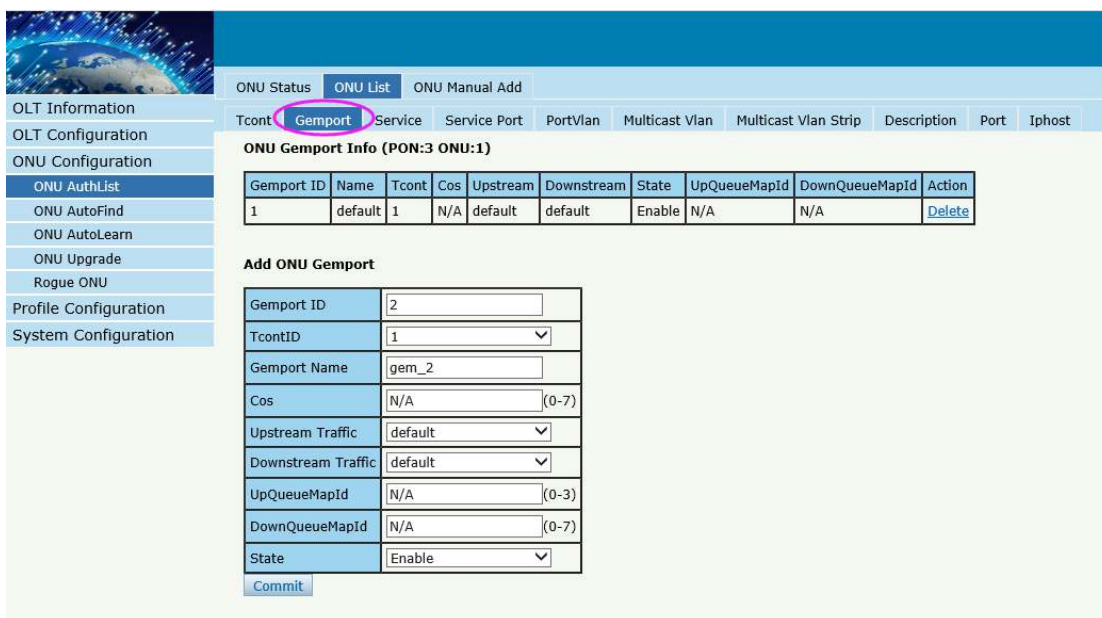
Tcont ID	Name	DBA Profile	Action
1	tcont_1	1g	Delete

Add ONU Tcont

Tcont ID	<input type="text" value="1"/>
DBA Profile Name	<input type="text" value="1g"/>
Commit	

Figure 4-5 Create Tcont

Create a gemport ID and bind tcont ID



ONU Status **ONU List** ONU Manual Add

Tcont **Gemport** Service Service Port PortVlan Multicast Vlan Multicast Vlan Strip Description Port Iphost

ONU Gemport Info (PON:3 ONU:1)

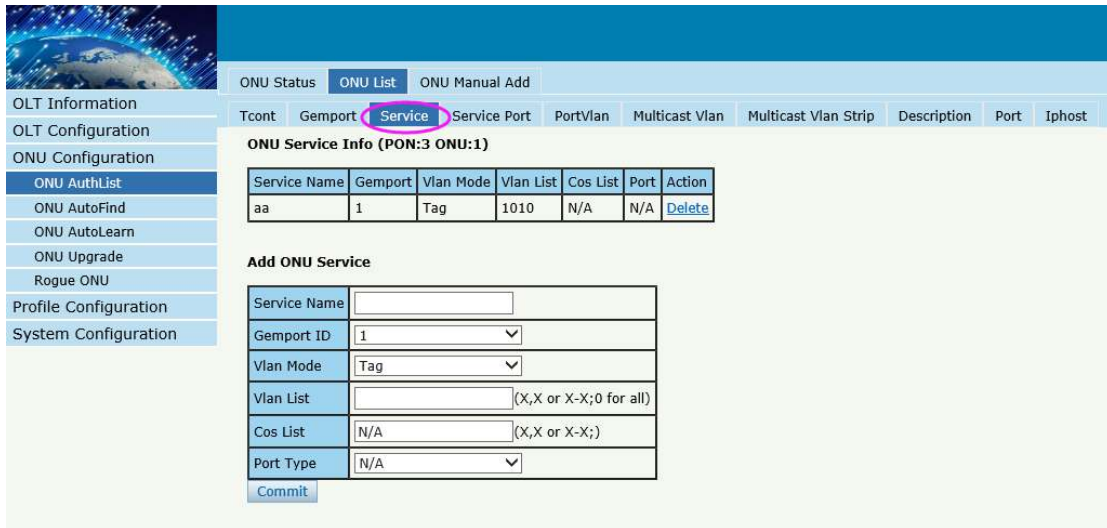
Gemport ID	Name	Tcont	Cos	Upstream	Downstream	State	UpQueueMapId	DownQueueMapId	Action
1	default	1	N/A	default	default	Enable	N/A	N/A	Delete

Add ONU Gemport

Gemport ID	<input type="text" value="2"/>
TcontID	<input type="text" value="1"/>
Gemport Name	<input type="text" value="gem_2"/>
Cos	<input type="text" value="N/A"/> (0-7)
Upstream Traffic	<input type="text" value="default"/>
Downstream Traffic	<input type="text" value="default"/>
UpQueueMapId	<input type="text" value="N/A"/> (0-3)
DownQueueMapId	<input type="text" value="N/A"/> (0-7)
State	<input type="text" value="Enable"/>
Commit	

Figure 4-6 Create gemport

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



ONU Status **ONU List** ONU Manual Add

Tcont Gemport **Service** Service Port PortVlan Multicast Vlan Multicast Vlan Strip Description Port Iphost

ONU Service Info (PON:3 ONU:1)

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

Add ONU Service

Service Name

Gemport ID

Vlan Mode

Vlan List (X,X or X-X; 0 for all)

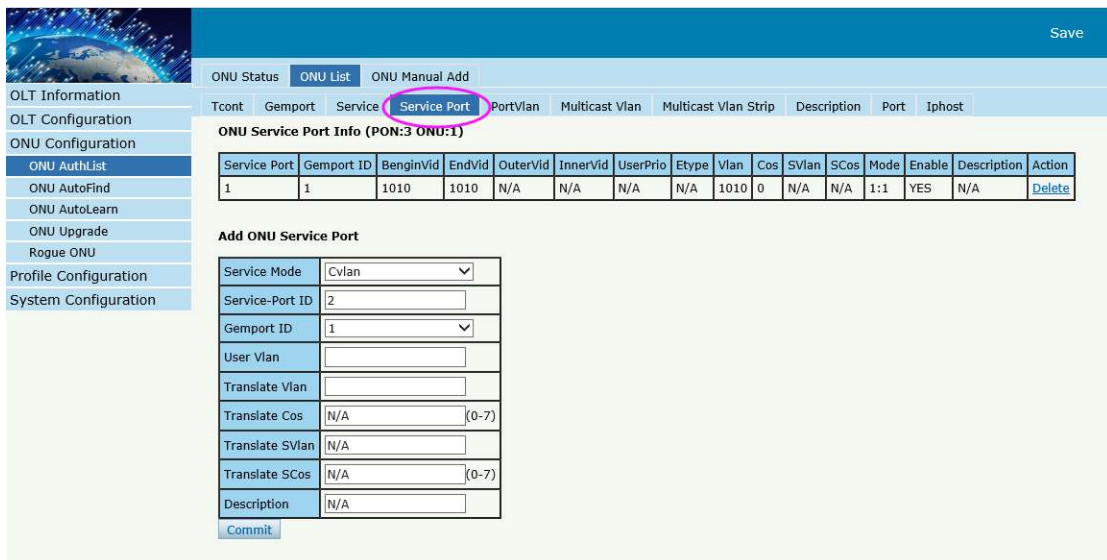
Cos List (X,X or X-X;)

Port Type

[Commit](#)

Figure 4-7 Create service

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



Save

ONU Status **ONU List** ONU Manual Add

Tcont Gemport Service **Service Port** PortVlan Multicast Vlan Multicast Vlan Strip Description Port Iphost

ONU Service Port Info (PON:3 ONU:1)

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	0	N/A	N/A	1:1	YES	N/A	Delete

Add ONU Service Port

Service Mode

Service-Port ID

Gemport ID

User Vlan

Translate Vlan

Translate Cos (0-7)

Translate SVlan

Translate SCos (0-7)

Description

[Commit](#)

Figure 4-8 create service port

Set the VLAN mode of the ONU's port.

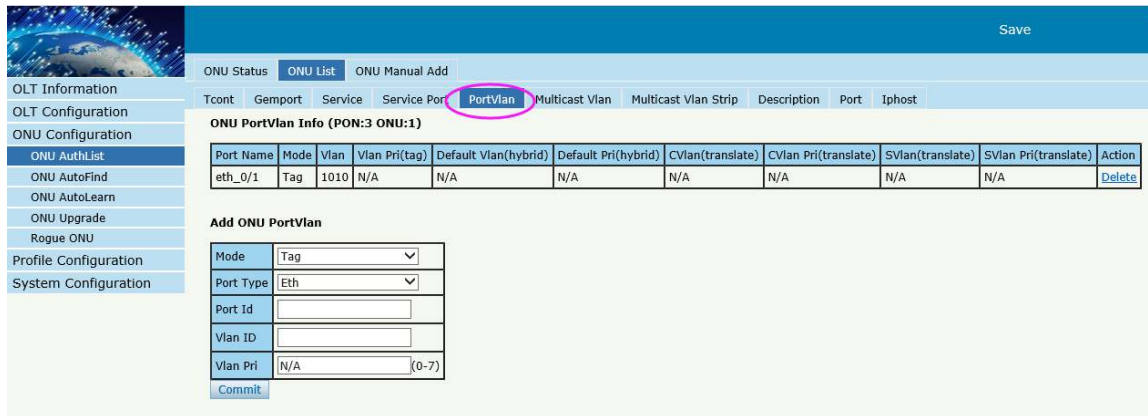


Figure 4-9 configure port VLAN mode

Set the Multicast VLAN of ONU

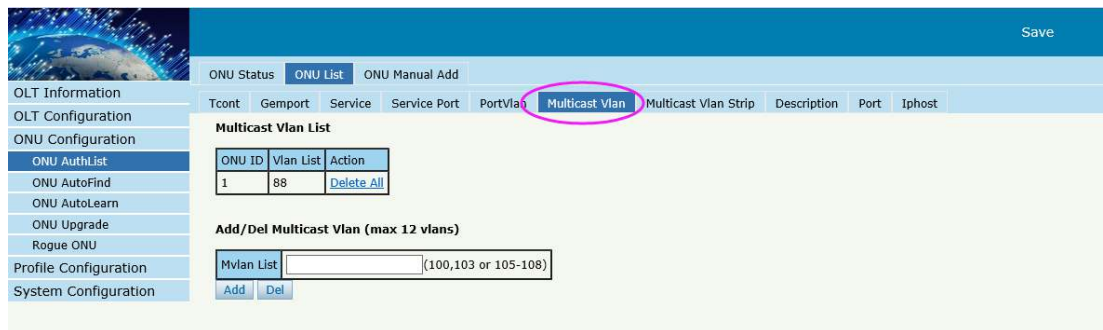


Figure 4-10 configure multicast VLAN

Set the Multicast VLAN mode of ONU's port

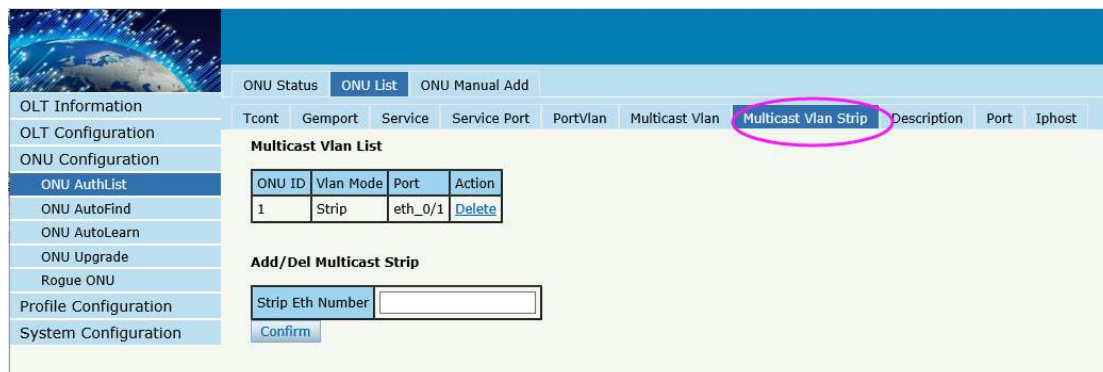
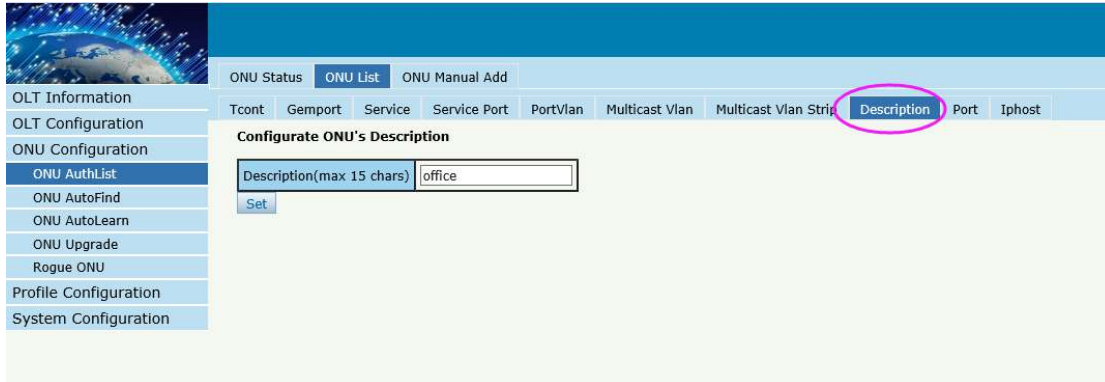


Figure 4-11 Configure multicast VLAN mode

Description for ONU



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

ONU Status **ONU List** ONU Manual Add

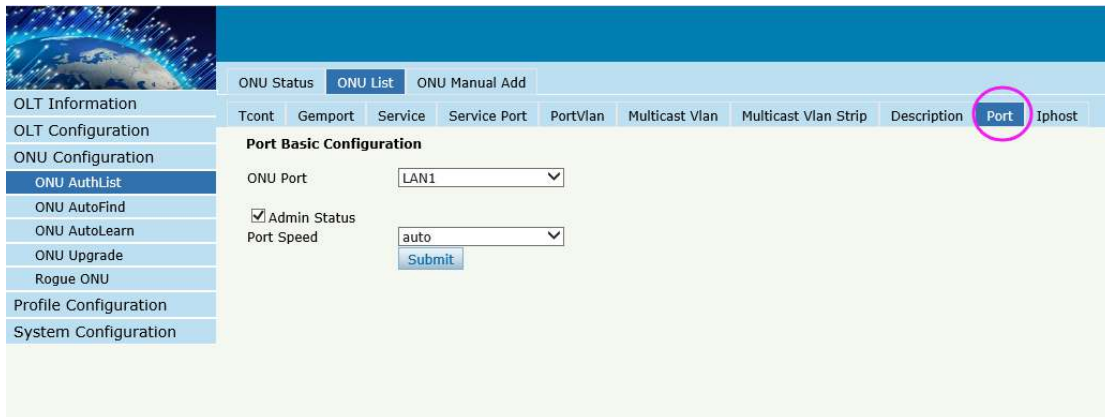
Tcont Gempport Service Service Port PortVlan Multicast Vlan Multicast Vlan Strip **Description** Port Iphost

Configure ONU's Description

Description(max 15 chars)

Figure 4-12 ONU's description

Port Basic State of ONU



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

ONU Status **ONU List** ONU Manual Add

Tcont Gempport Service Service Port PortVlan Multicast Vlan Multicast Vlan Strip Description **Port** Iphost

Port Basic Configuration

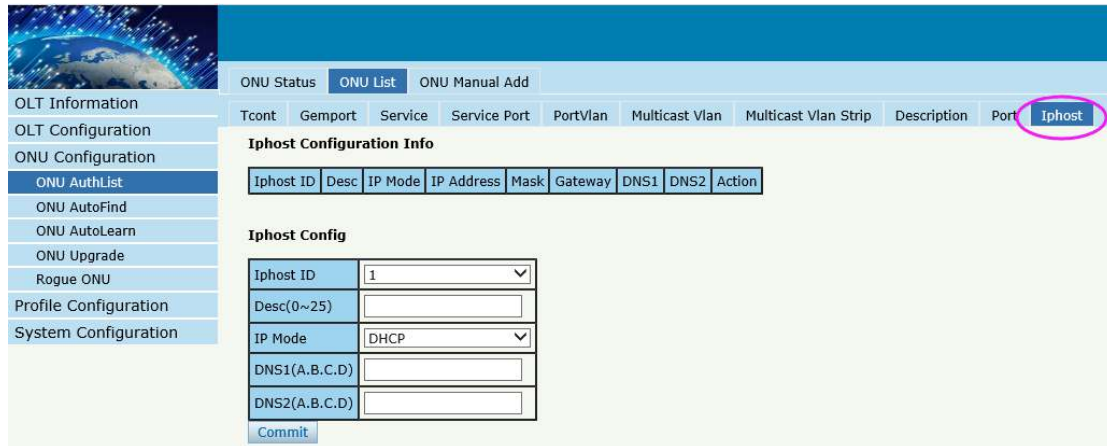
ONU Port

☒ Admin Status

Port Speed

Figure 4-13 ONU's port state

Create Iphost for ONU wan connection.



ONU Status **ONU List** ONU Manual Add

Tcont Gempport Service Service Port PortVlan Multicast Vlan Multicast Vlan Strip Description Port **Iphost**

Iphost Configuration Info

Iphost ID	Desc	IP Mode	IP Address	Mask	Gateway	DNS1	DNS2	Action
1		DHCP						

Iphost Config

Iphost ID: 1

Desc(0~25):

IP Mode: DHCP

DNS1(A.B.C.D):

DNS2(A.B.C.D):

Commit

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,



ONU Status **ONU List** ONU Manual Add

ONU Authentication Info

Port ID: PON2

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 Modify(PON:2 ONU1)

Auth Mode	Sn
ONU Sn	

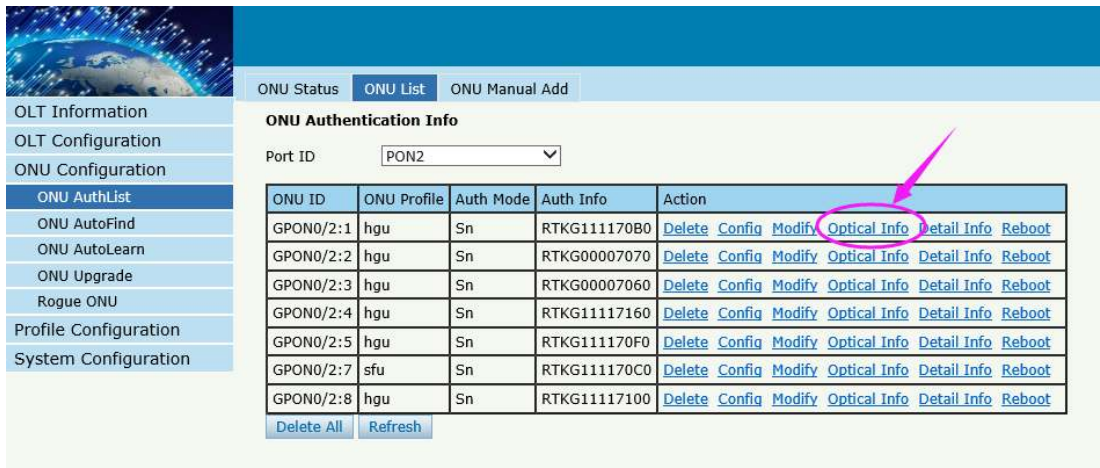
Submit

Figure 4-15 Modify ONU Registration mode

4.1.2.4 Optical Info

ONU Configuration→ONU AuthList→ONU List

Check the Optical Info of the ONU which you have 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 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)
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,



OLT Information

OLT Configuration

ONU Configuration

ONU AuthList

ONU AutoFind

ONU AutoLearn

ONU Upgrade

Rogue ONU

Profile Configuration

System Configuration

ONU Status

ONU List

ONU Manual Add

ONU Authentication Info

Port ID PON2

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

Delete All
Refresh

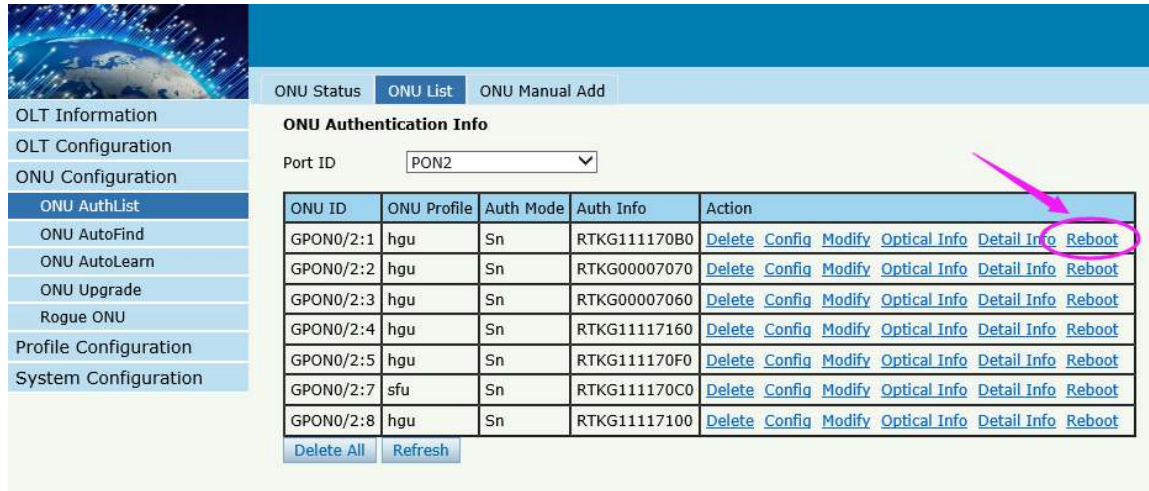
ONU Detail Info	
Description	N/A
Vendor ID:	RTKG
Version:	RTL960x
SN:	RTKG111170b0
Admin status:	unlock
Battery monitor:	false
Security mode:	aes
Product code:	0
Total priority queue num:	127
Total traffic schedule num:	31
Traffic management option:	priority-rate-controlled
Operate status:	enable
Equipment 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
<a>Back	

Figure 4-17 Detail info of ONU

4.1.2.6 Reboot

ONU Configuration→ONU AuthList→ONU List

Reboot ONU which you have selected,



The screenshot shows the 'ONU List' tab in the management interface. A table lists ONU entries with columns for ONU ID, ONU Profile, Auth Mode, Auth Info, and Action. The 'Reboot' link in the Action column for the first entry (GPON0/2:1) is highlighted with a red circle and a red arrow.

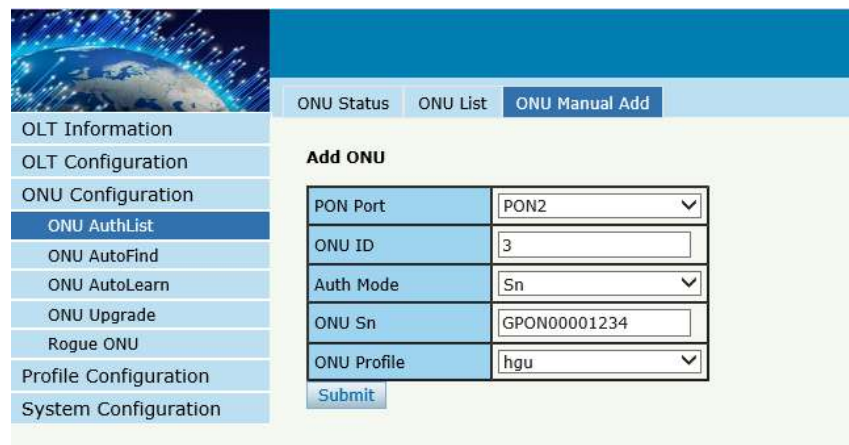
ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:2	hgu	Sn	RTKG00007070	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:3	hgu	Sn	RTKG00007060	Delete Config Modify Optical Info Detail Info Reboot
GPON0/2:4	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 an ONU to your chosen PON port. ONU will appear on the ONU list after you click on 'Submit.'



The screenshot shows the 'ONU Manual Add' tab in the management interface. It contains a form with the following fields:

- PON Port: PON2 (dropdown)
- ONU ID: 3 (text input)
- Auth Mode: Sn (dropdown)
- ONU Sn: GPON00001234 (text input)
- ONU Profile: hgu (dropdown)

A 'Submit' button is located at the bottom of the form.

Figure 4-19 Manually add an ONU

<div> <div>ONU Status</div> <div>ONU List</div> <div>ONU Manual Add</div> </div>				
ONU Authentication Info				
Port ID <div>PON2</div>				
ONU ID	ONU Profile	Auth Mode	Auth Info	Action
GPON0/2:1	hgu	Sn	RTKG111170B0	<a>Delete <a>Config <a>Modify <a>Optical Info <a>Detail Info <a>Reboot
GPON0/2:3	hgu	Sn	GPON00001234	<a>Delete <a>Config <a>Modify <a>Optical Info <a>Detail Info <a>Reboot
<a>Delete All		<a>Refresh		

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 the ONUs.

More information will be shown under the ONU Detail menu.


 <div> <div>OLT Information</div> <div>OLT Configuration</div> <div>ONU Configuration</div> <div>ONU AuthList</div> <div>ONU AutoFind</div> <div>ONU AutoLearn</div> <div>ONU Upgrade</div> <div>Rogue ONU</div> <div>Profile Configuration</div> <div>System Configuration</div> </div>	<div>Automatic Discovery</div>			
	Automatic Discovery			
	Port ID <div>PON2</div>			
	ONU ID	Sn	State	Action
	GPON0/2:1	RTKG111170B0	Unknown	<a>Add <a>Detail Info
	GPON0/2:2	RTKG00007070	Unknown	<a>Add <a>Detail Info
	<a>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.


 <ul style="list-style-type: none"> OLT Information OLT Configuration ONU Configuration <ul style="list-style-type: none"> ONU AuthList ONU AutoFind ONU AutoLearn ONU Upgrade Rogue ONU Profile Configuration System Configuration 	<div> <div>ONU AutoLearn</div> <div>ONU AutoBind</div> </div>	
	Automatic Learn	
	PON ID	Default ONU Profile
	PON1	hgu
	PON2	hgu
	PON3	hgu
	PON4	sfu
	PON5	sfu
	PON6	hgu
	PON7	hgu
	PON8	hgu
	<div> <div>Apply</div> <div>Refresh</div> </div>	

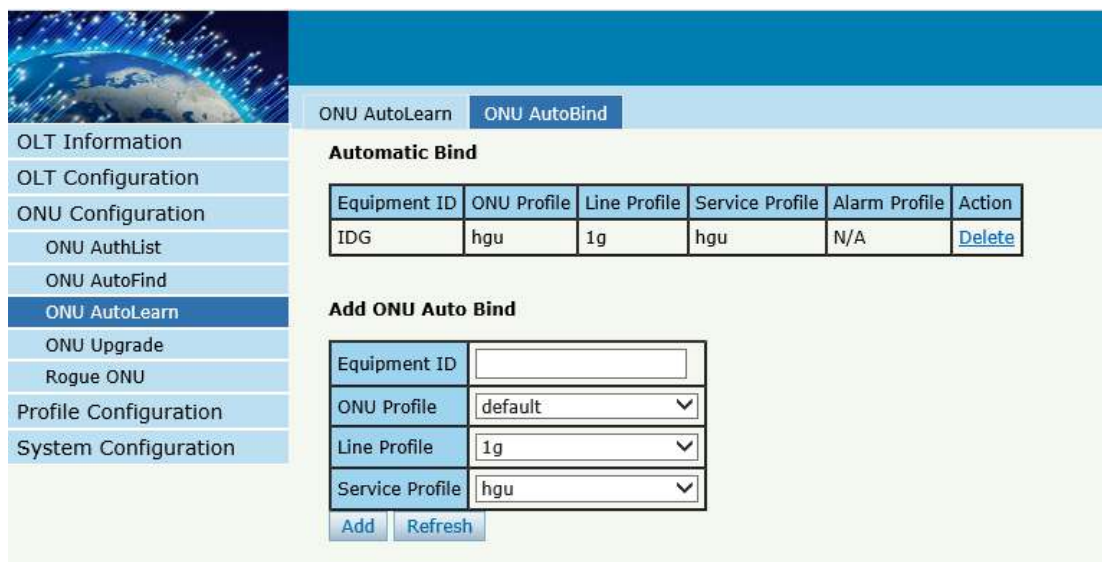
Figure 4-22 Automatic learn

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

Add ONU Auto Bind

Equipment ID	<input type="text"/>
ONU Profile	default ▼
Line Profile	1g ▼
Service Profile	hgu ▼

[Add](#) [Refresh](#)

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

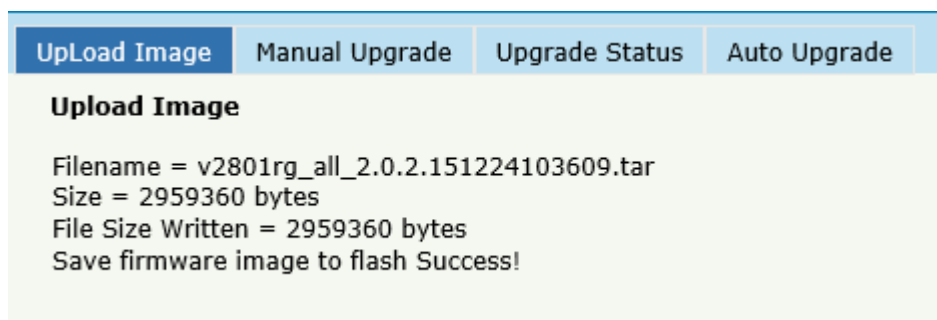
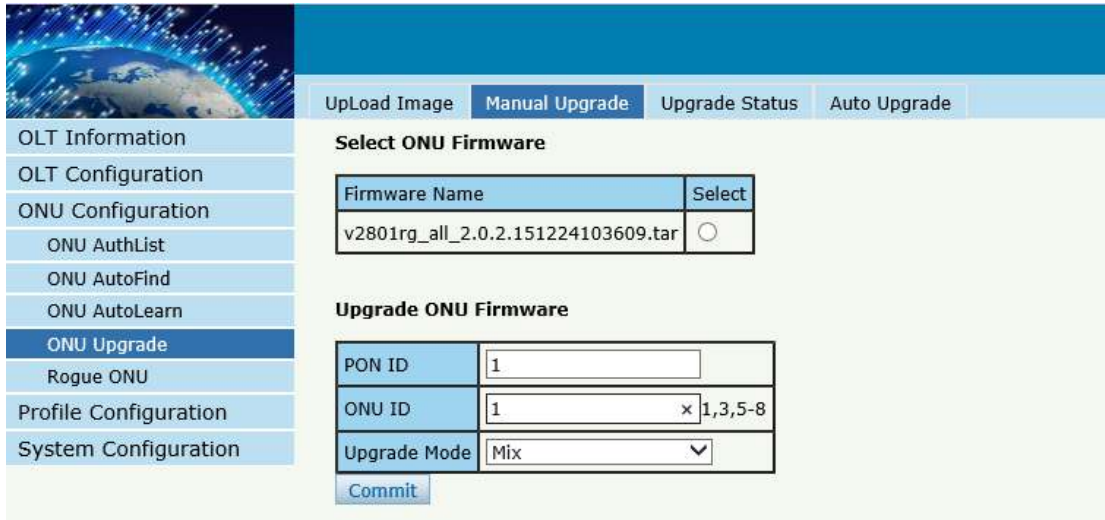


Figure 4-25 Upload info

4.4.2 Manual Upgrade

ONU Configuration→ONU Upgrade→Manual Upgrade

Select ONU which you need and click commit button



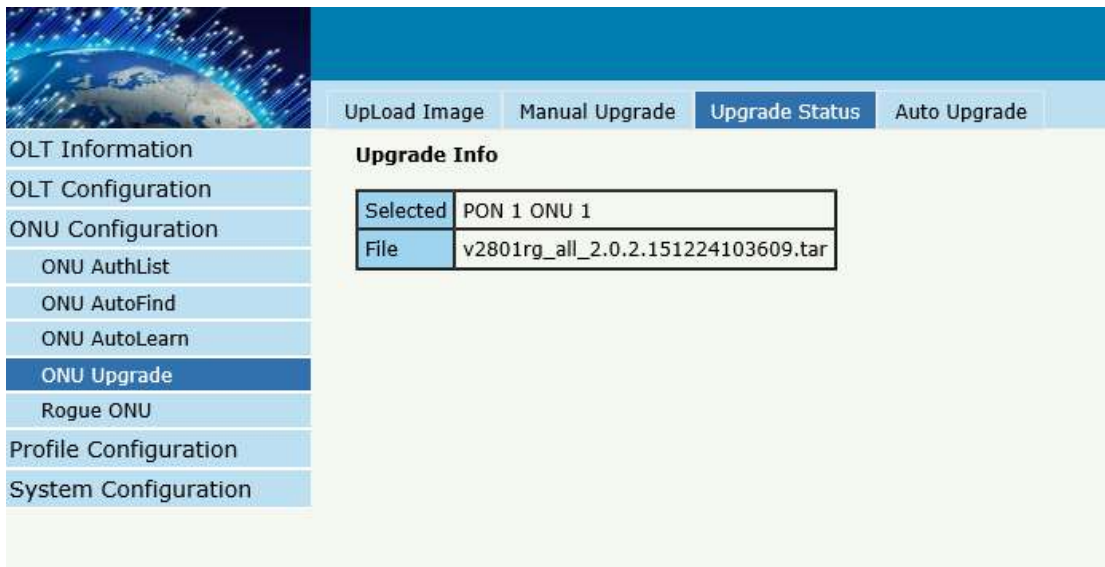
The screenshot shows the 'Manual Upgrade' tab selected in the top navigation bar. On the left is a sidebar menu with options: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, ONU AutoLearn, **ONU Upgrade**, Rogue ONU, Profile Configuration, and System Configuration. The main content area is titled 'Select ONU Firmware' and contains a table with two columns: 'Firmware Name' and 'Select'. The first row shows 'v2801rg_all_2.0.2.151224103609.tar' and a radio button. Below this is the 'Upgrade ONU Firmware' section with three input fields: 'PON ID' (value: 1), 'ONU ID' (value: 1, with a multiplier 'x' and range '1,3,5-8'), and 'Upgrade Mode' (dropdown menu showing 'Mix'). A 'Commit' button is at the bottom left of the main content area.

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.



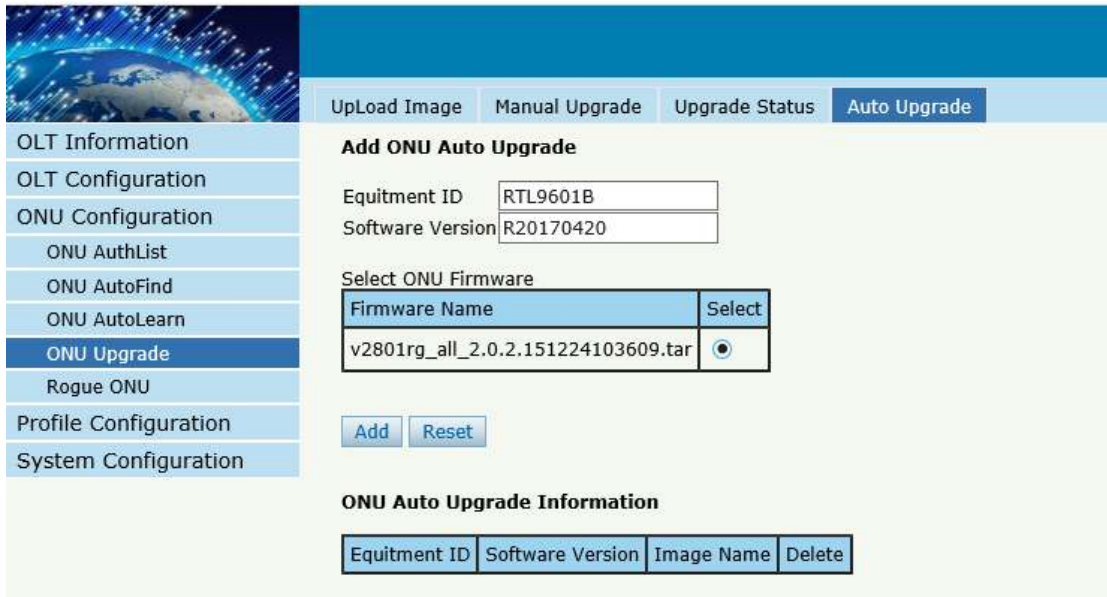
The screenshot shows the 'Upgrade Status' tab selected in the top navigation bar. The sidebar menu is the same as in Figure 4-26, with 'ONU Upgrade' highlighted. The main content area is titled 'Upgrade Info' and contains a table with two rows: 'Selected' (value: PON 1 ONU 1) and 'File' (value: v2801rg_all_2.0.2.151224103609.tar).

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 comes online, it will auto upgrade the firmware.




Equipment ID	Software Version	Image Name	Delete
RTL9601B	R20170420	v2801rg_all_2.0.2.151224103609.tar	

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



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

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

Change configuration

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

Rogue onu list

Pon	Onu	Keywords	Time	State
Commit				

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.



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

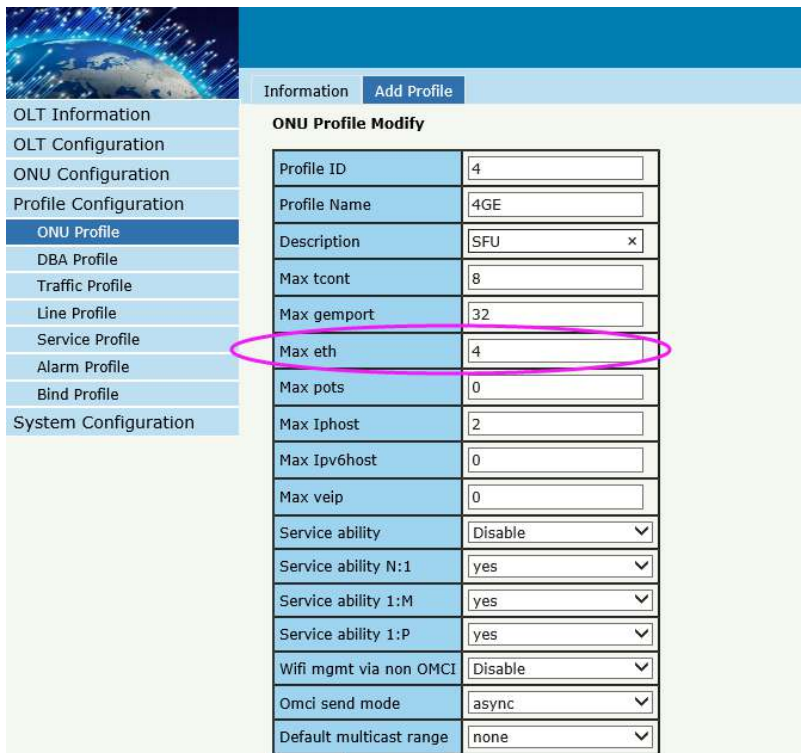
[Refresh](#)

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):

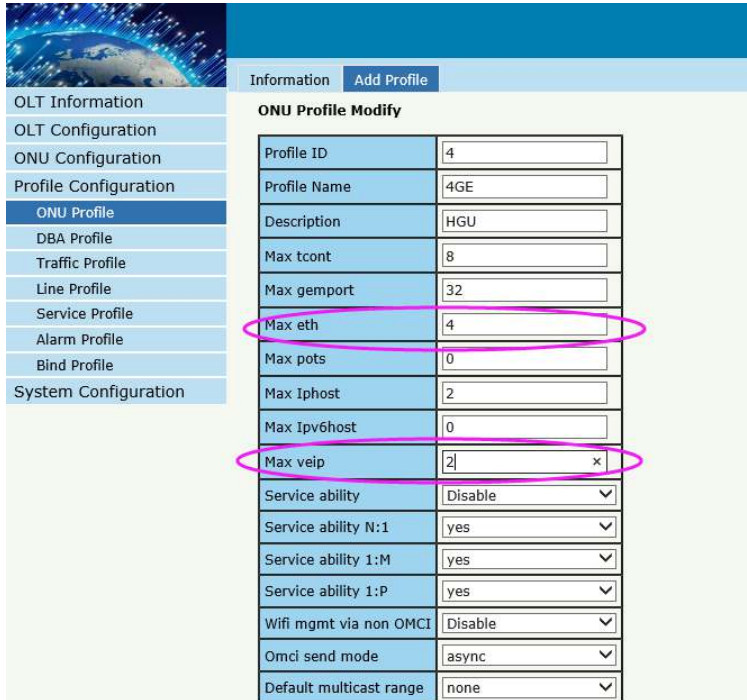


The screenshot shows the 'ONU Profile Modify' web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, **ONU Profile**, DBA Profile, Traffic Profile, Line Profile, Service Profile, Alarm Profile, Bind Profile, and System Configuration. The 'ONU Profile' item is selected. The main content area has two tabs: 'Information' and 'Add Profile', with 'Add Profile' being the active tab. Below the tabs is the title 'ONU Profile Modify' and a form with the following fields:

Profile ID	4
Profile Name	4GE
Description	SFU x
Max tcont	8
Max gemport	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)



ONU Profile Modify	
Profile ID	4
Profile Name	4GE
Description	HGU
Max tcont	8
Max gemport	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

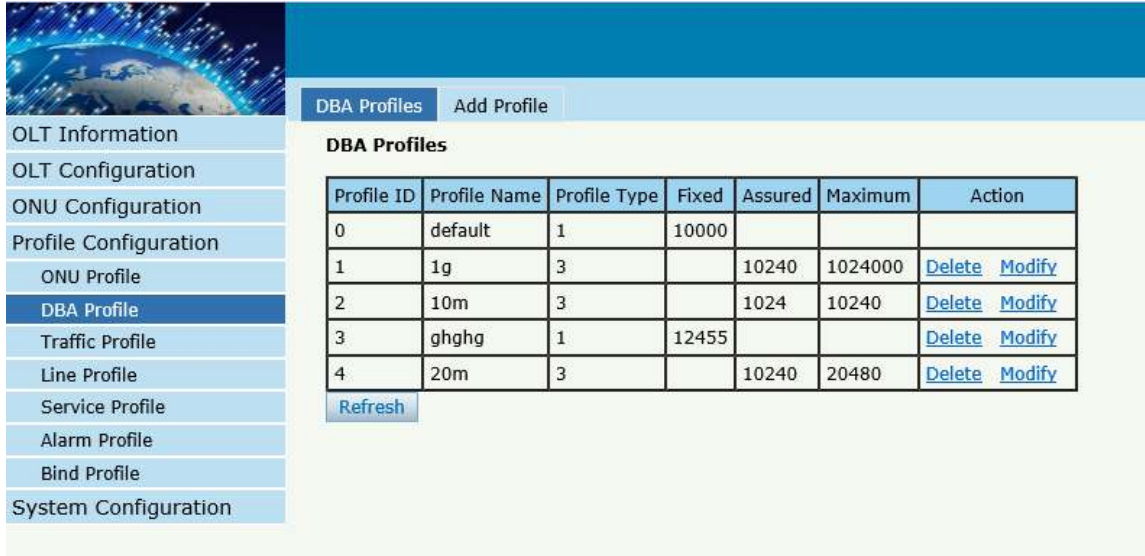
5.2 DBA Profile

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<=assure<=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.



DBA Profiles Add Profile

DBA Profiles

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

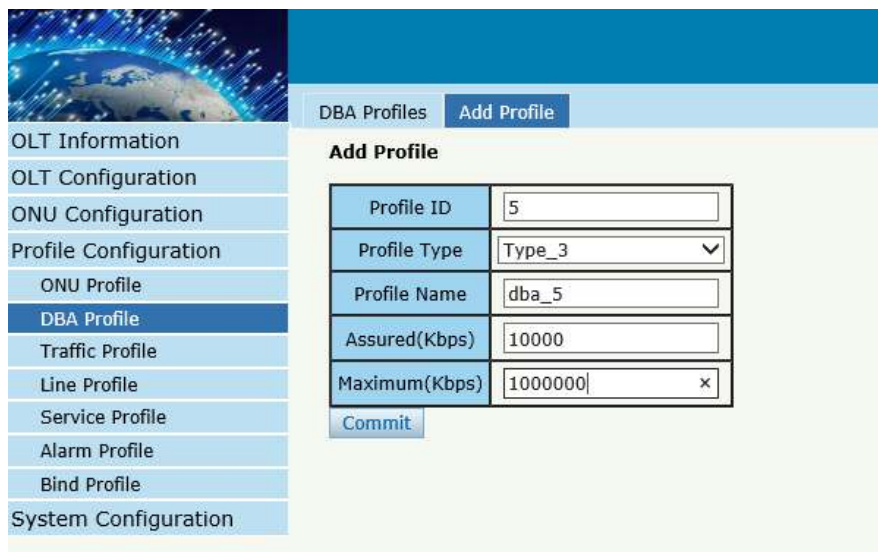
5.1.2 Add profile

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



Profile ID	5
Profile Type	Type_3
Profile Name	dba_5
Assured(Kbps)	10000
Maximum(Kbps)	1000000

Figure 5-5 Add a DBA profile

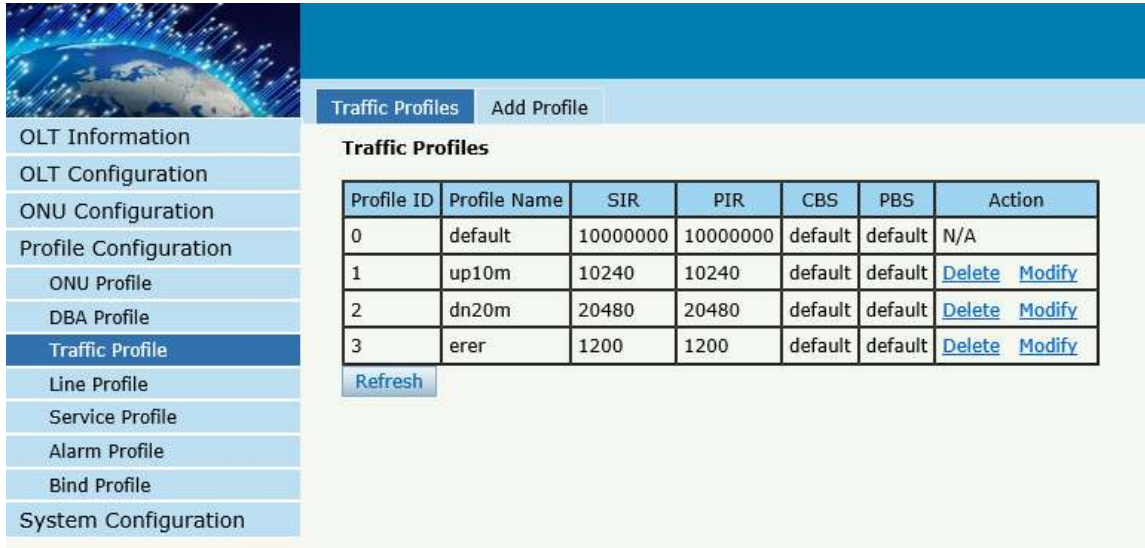
5.3 Traffic Profile

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

[Refresh](#)

Figure 5-6 Traffic Profile list

5.2.2 Add profile

Profile Configuration → Traffic Profile → Add Profile

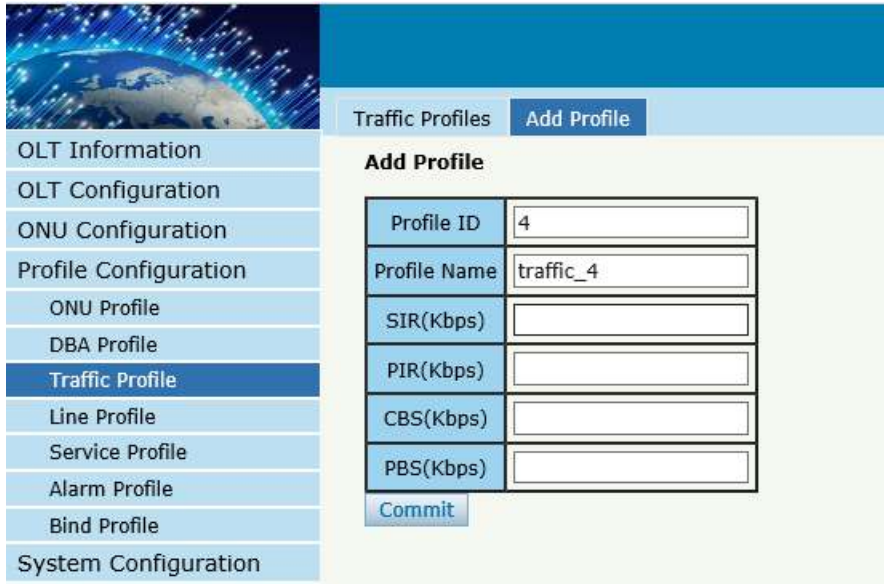
Configure Gempport to specify the upstream/downstream bandwidth.

SIR: Committed Information Rate

PIR: Peak Information Rate

CBS: Committed Burst Size

PBS: Peak Burst Size



Traffic Profiles		Add Profile
Add Profile		
Profile ID	<input type="text" value="4"/>	
Profile Name	<input type="text" value="traffic_4"/>	
SIR(Kbps)	<input type="text"/>	
PIR(Kbps)	<input type="text"/>	
CBS(Kbps)	<input type="text"/>	
PBS(Kbps)	<input type="text"/>	
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.

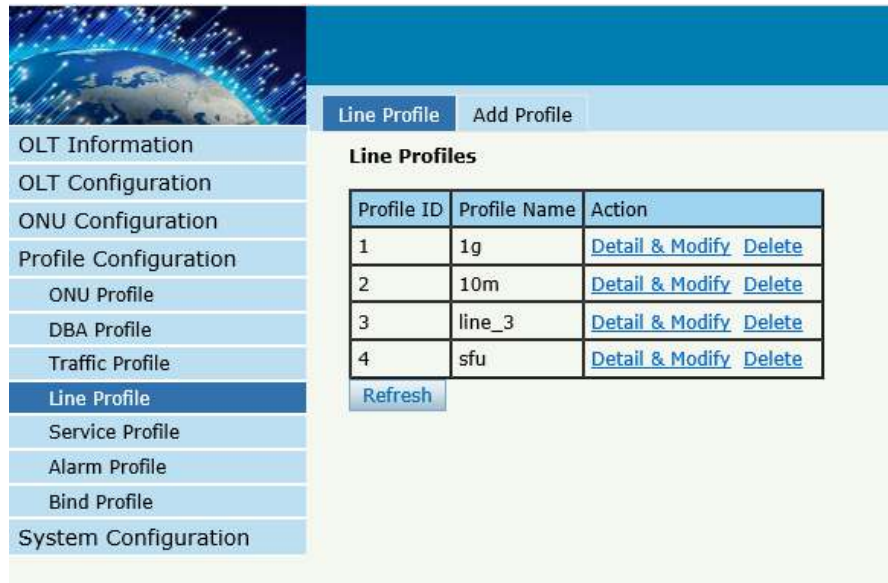


Figure 5-8 Line Profile list

5.3.2 Add profile

Profile Configuration→Line profile→Add profile

Create a new line profile

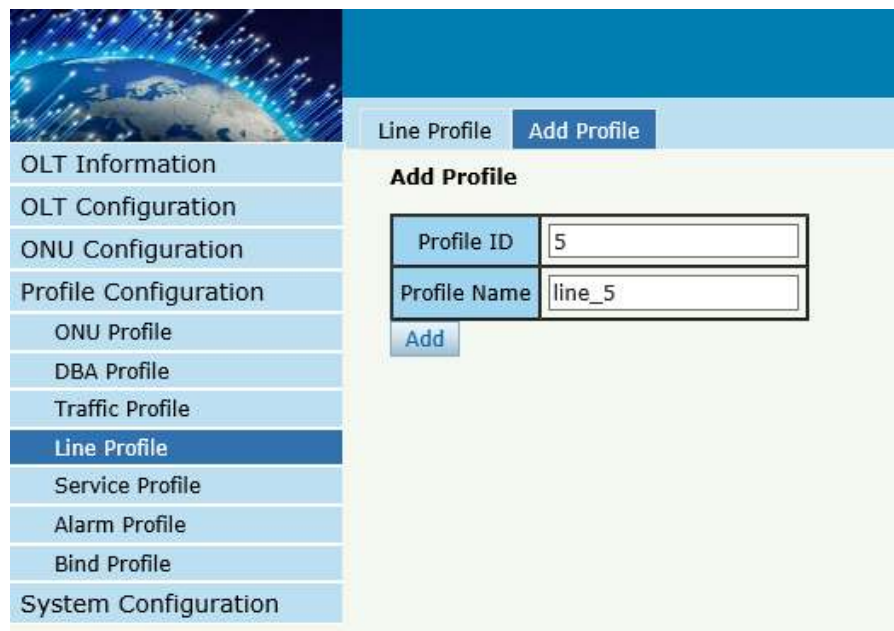


Figure 5-9 Add Line Profile

Modify the line profile parameters



Line Profile [Add Profile](#)

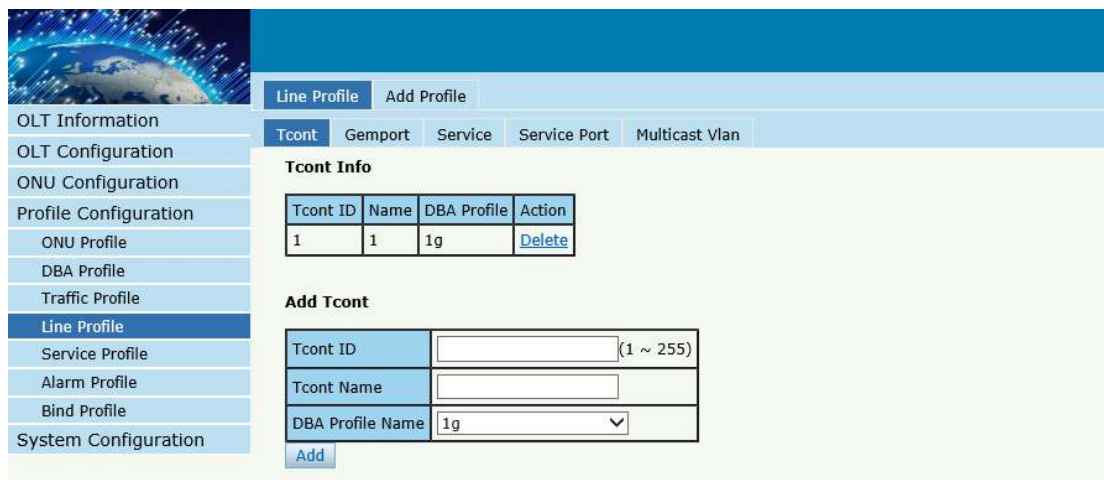
Line Profiles

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
5	line_5	Detail & Modify Delete

[Refresh](#)

Figure 5-10 Modify Line Profile

Create a tcont ID and bind DBA templates



Line Profile [Add Profile](#)

Tcont [Gemport](#) [Service](#) [Service Port](#) [Multicast Vlan](#)

Tcont Info

Tcont ID	Name	DBA Profile	Action
1	1	1g	Delete

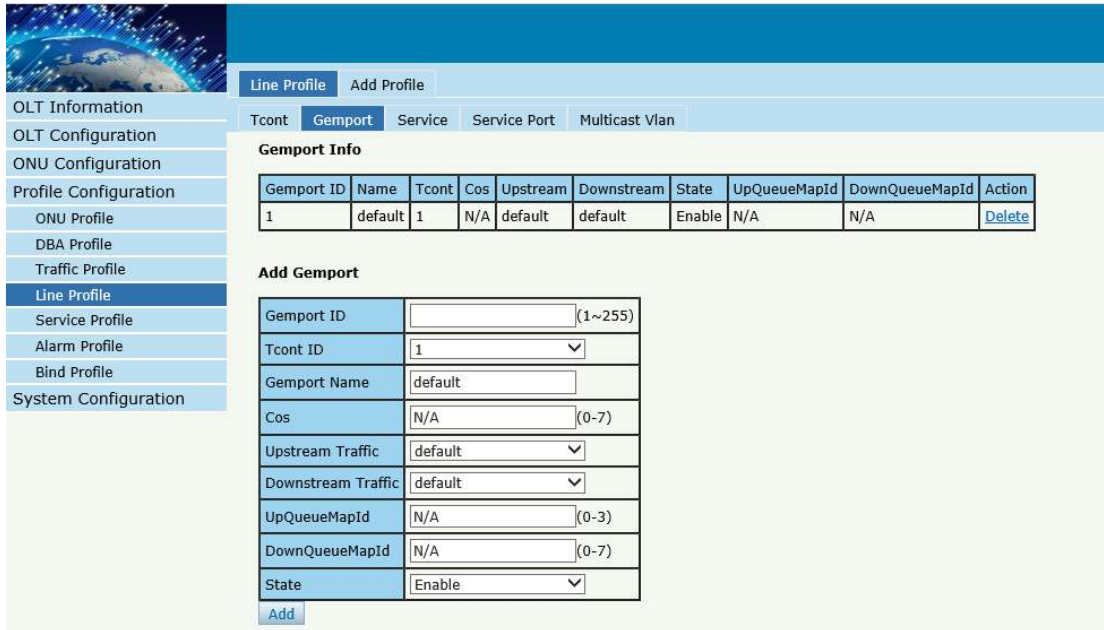
Add Tcont

Tcont ID	<input type="text"/> (1 ~ 255)
Tcont Name	<input type="text"/>
DBA Profile Name	<input type="text" value="1g"/>

[Add](#)

Figure 5-11 Add Tcont

Create a gemport ID and bind tcont ID



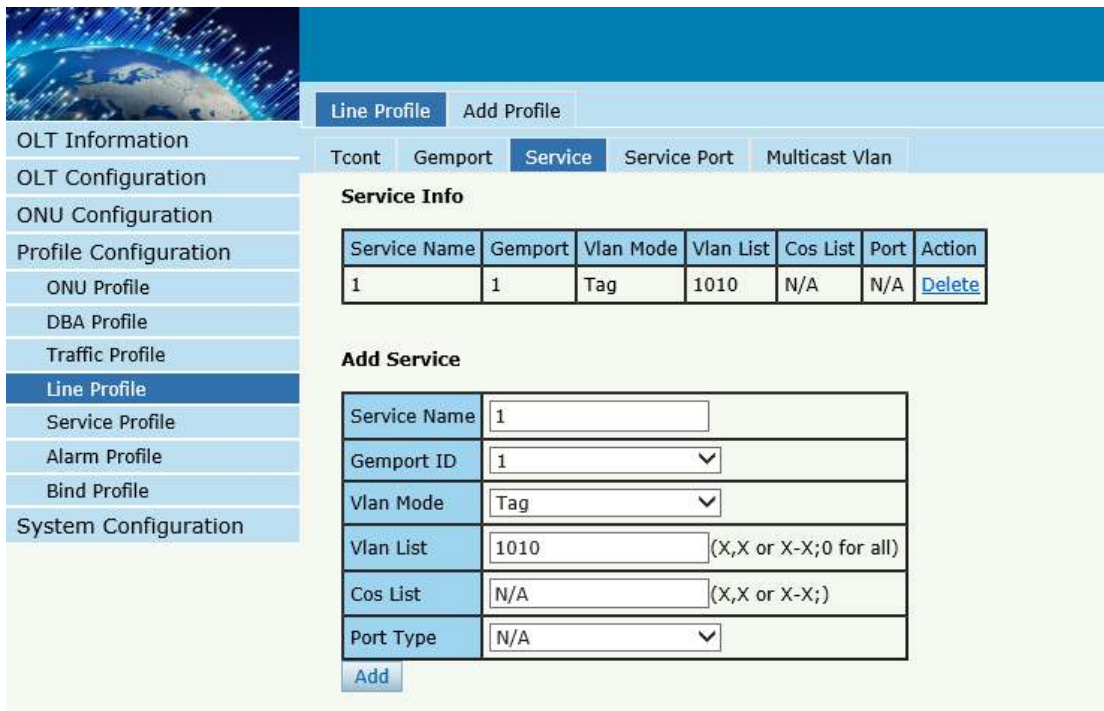
The screenshot shows the 'Line Profile' configuration page with the 'Gemport' tab selected. The 'Gemport Info' table lists one gemport with ID 1, name 'default', Tcont 1, Cos N/A, and default upstream/downstream settings. The 'Add Gemport' form below contains the following fields:

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

An 'Add' button is located at the bottom left of the form.

Figure 5-12 Add Gemport

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



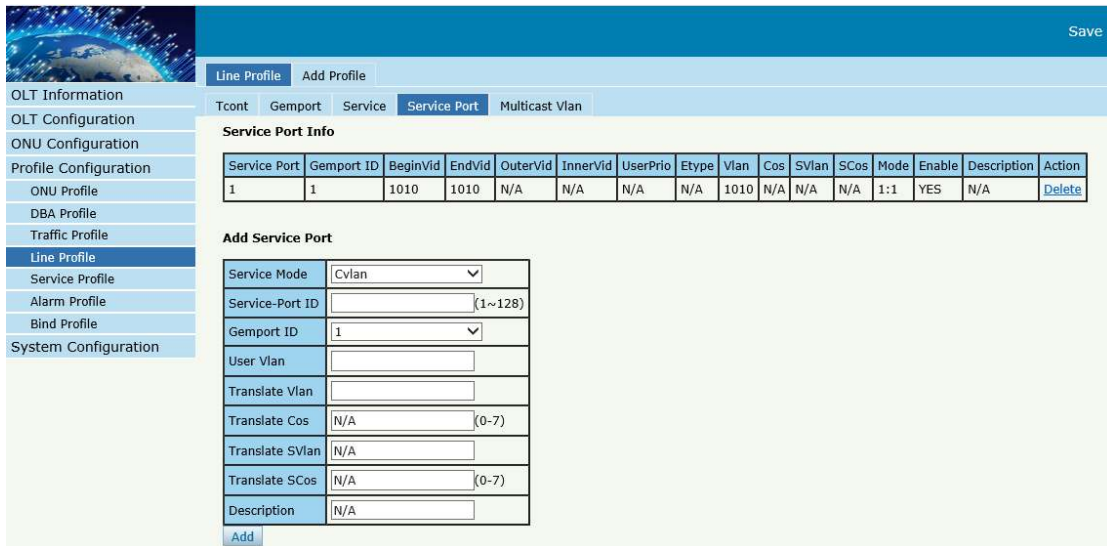
The screenshot shows the 'Line Profile' configuration page with the 'Service' tab selected. The 'Service Info' table lists one service with ID 1, name '1', Gemport 1, Vlan Mode 'Tag', Vlan List '1010', Cos List 'N/A', and Port 'N/A'. The 'Add Service' form below contains the following fields:

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"/>

An 'Add' button is located at the bottom left of the form.

Figure 5-13 Add service

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



The screenshot shows the 'Add Service Port' configuration page. The left sidebar contains a navigation menu with options 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', 'Service Port', and 'Multicast Vlan'. The 'Service Port' tab is active, displaying a 'Service Port Info' table and an 'Add Service Port' form.

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

[Add](#)

Figure 5-13 Add service port

Set the Multicast VLAN of ONU



The screenshot shows the 'Multicast Vlan List' configuration page. The left sidebar is the same as in Figure 5-13. The main content area has tabs for 'Tcont', 'Gemport', 'Service', 'Service Port', and 'Multicast Vlan'. The 'Multicast Vlan' tab is active, displaying a 'Multicast Vlan List' table and an 'Add/Del Multicast Vlan' form.

Line Profile ID	Line Profile Name	Vlan List	Action
5	line_5	88	Delete All

Add/Del Multicast Vlan (max 12 vlans)

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

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

Figure 5-14 configure multicast VLAN

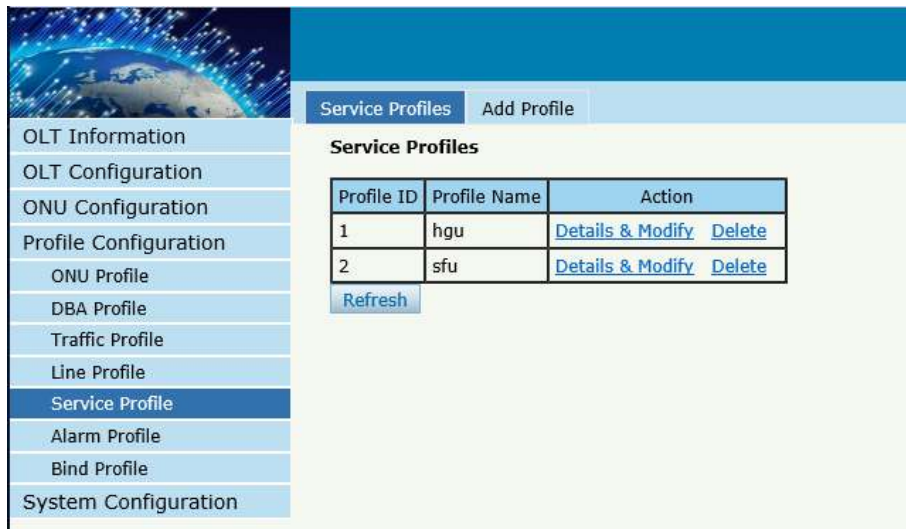
5.5 Service Profile

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 as delete and modify.



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

Refresh

Figure 5-15 Service profile list

5.3.2 Add profile

Profile Configuration → Line Profile → Add Profile

Create a new service profile

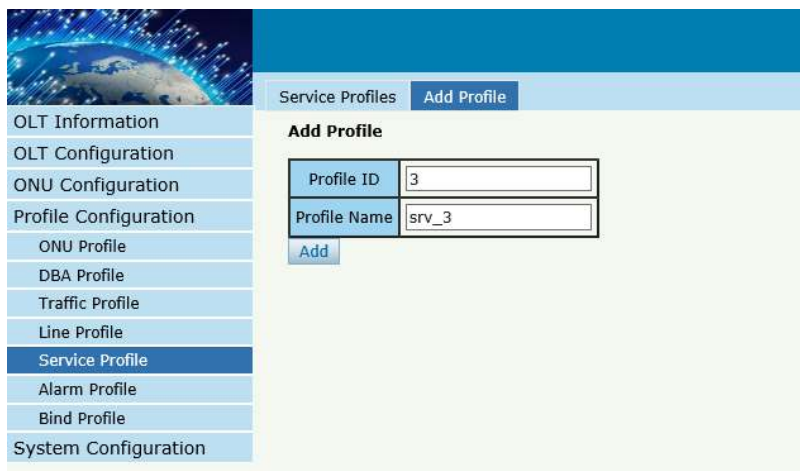


Figure 5-16 Add Service profile



Figure 5-17 Modify Service profile

Set the VLAN mode of the ONU's port.

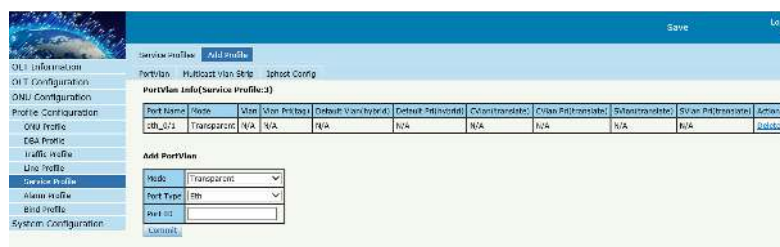
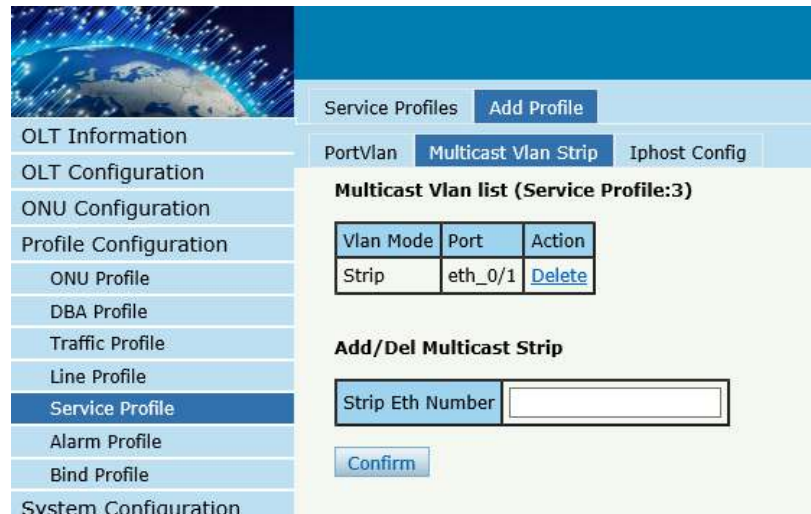


Figure 5-18 Port VLAN mode

Set the Multicast VLAN mode of ONU's port



Service Profiles [Add Profile](#)

PortVlan **Multicast Vlan Strip** Iphost Config

Multicast Vlan list (Service Profile:3)

Vlan Mode	Port	Action
Strip	eth_0/1	Delete

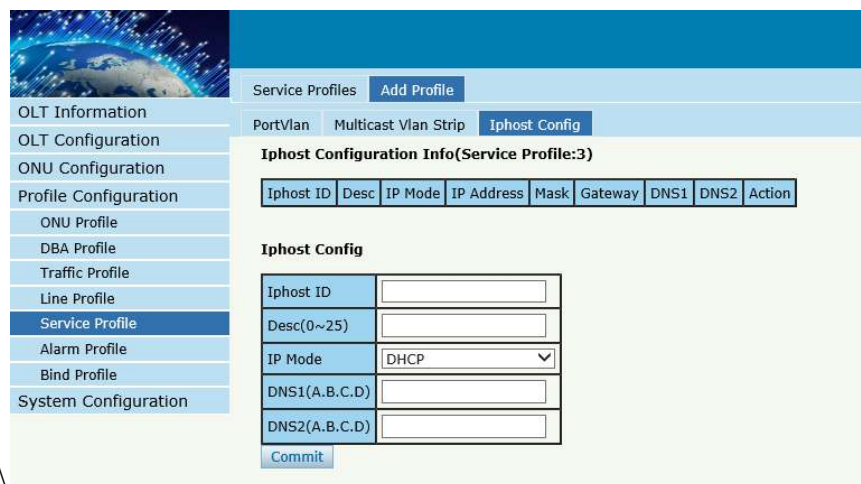
Add/Del Multicast Strip

Strip Eth Number

[Confirm](#)

Figure 5-19 Port multicast VLAN mode

Create Iphost for ONU wan connection.



Service Profiles [Add Profile](#)

PortVlan Multicast Vlan Strip **Iphost Config**

Iphost Configuration Info(Service Profile:3)

Iphost ID	Desc	IP Mode	IP Address	Mask	Gateway	DNS1	DNS2	Action
-----------	------	---------	------------	------	---------	------	------	--------

Iphost Config

Iphost ID

Desc(0~25)

IP Mode

DNS1(A.B.C.D)

DNS2(A.B.C.D)

[Commit](#)

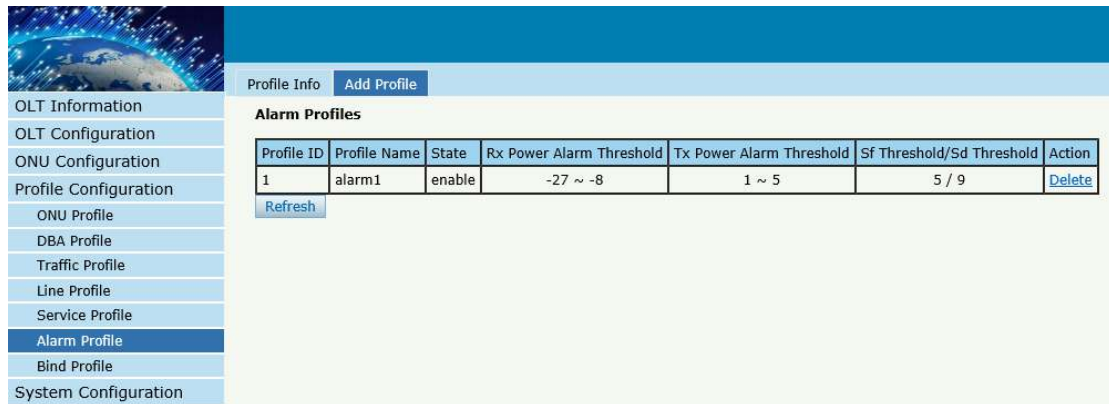
Figure 5-20 Add IPhost

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 management interface. On the left is a navigation menu with options like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (selected), and System Configuration. Under Profile Configuration, 'Alarm Profile' is highlighted. The main area has tabs for 'Profile Info' and 'Add Profile'. Below the tabs is a table listing the alarm profiles.

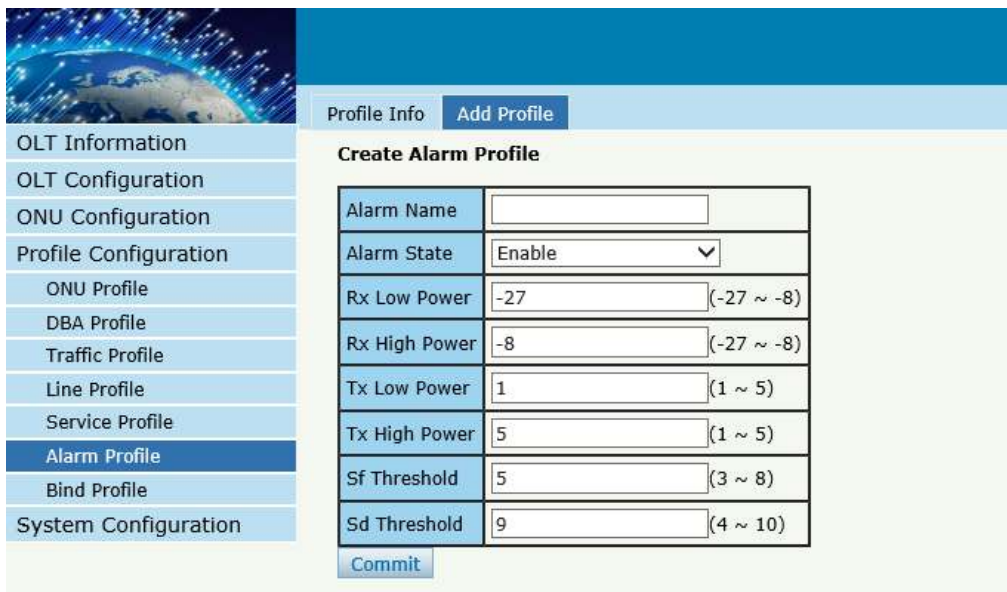
Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm1	enable	-27 ~ -8	1 ~ 5	5 / 9	Delete

Below the table is a 'Refresh' button.

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. It has a navigation menu on the left similar to the previous screenshot, with 'Alarm Profile' selected. The main area has tabs for 'Profile Info' and 'Add Profile'. The 'Add Profile' tab is active, showing a form with the following fields:

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

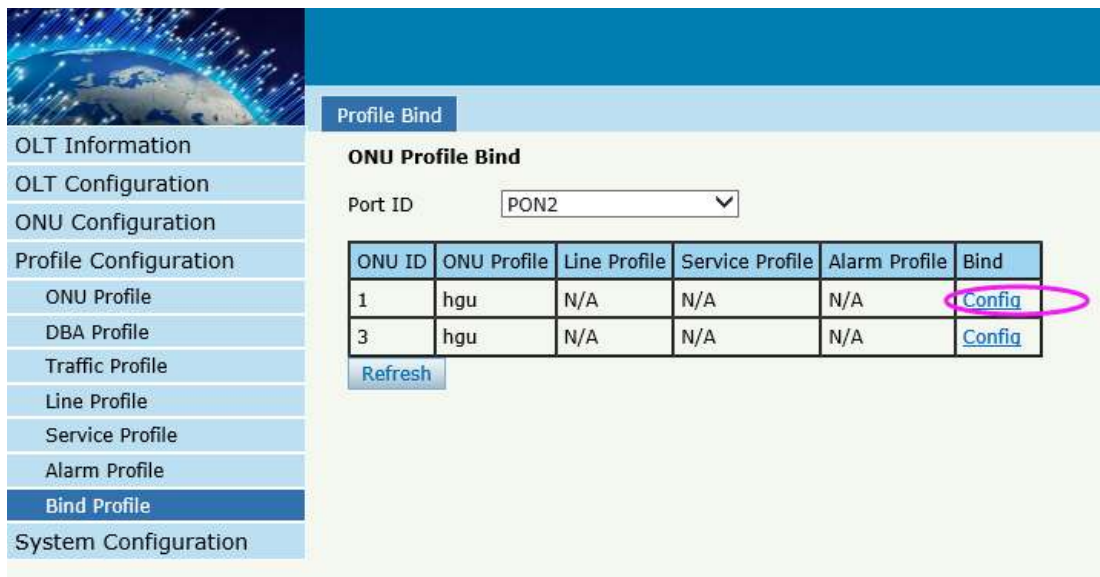
At the bottom of the form is a 'Commit' button.

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



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

Figure 5-22 Bind profile



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

Figure 5-23 select Profile

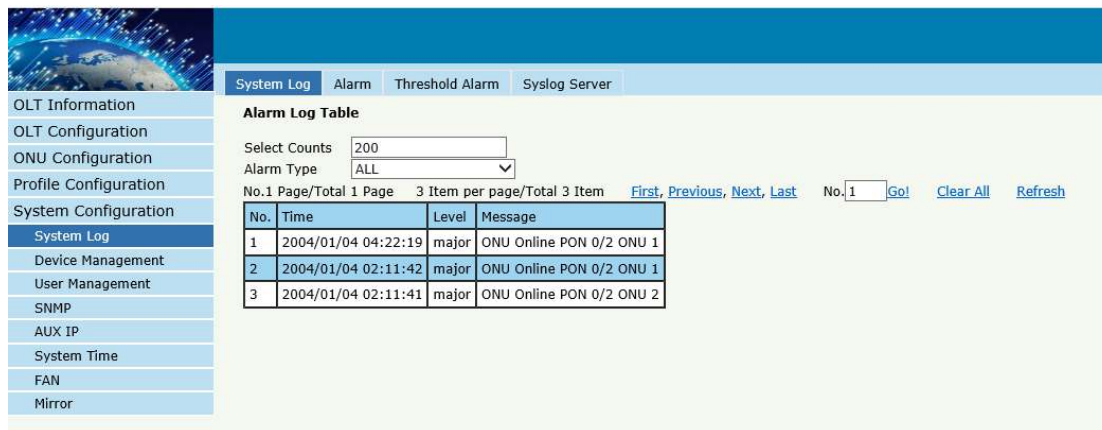
Chapter 6 System Configuration

This chapter is about the global management of OLT.

6.1 System Log

6.1.1 System Log

System Configuration → System Log



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"**.

System LogAlarmThreshold AlarmSyslog Server

Alarm Configuration

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 Confiict	<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 → Threshold Alarm**.

System Log
Alarm
Threshold Alarm
Syslog Server

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: Enable

Server IP: 192.168.2.33

Server Port: 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, need to reboot the OLT after upgrade to 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)

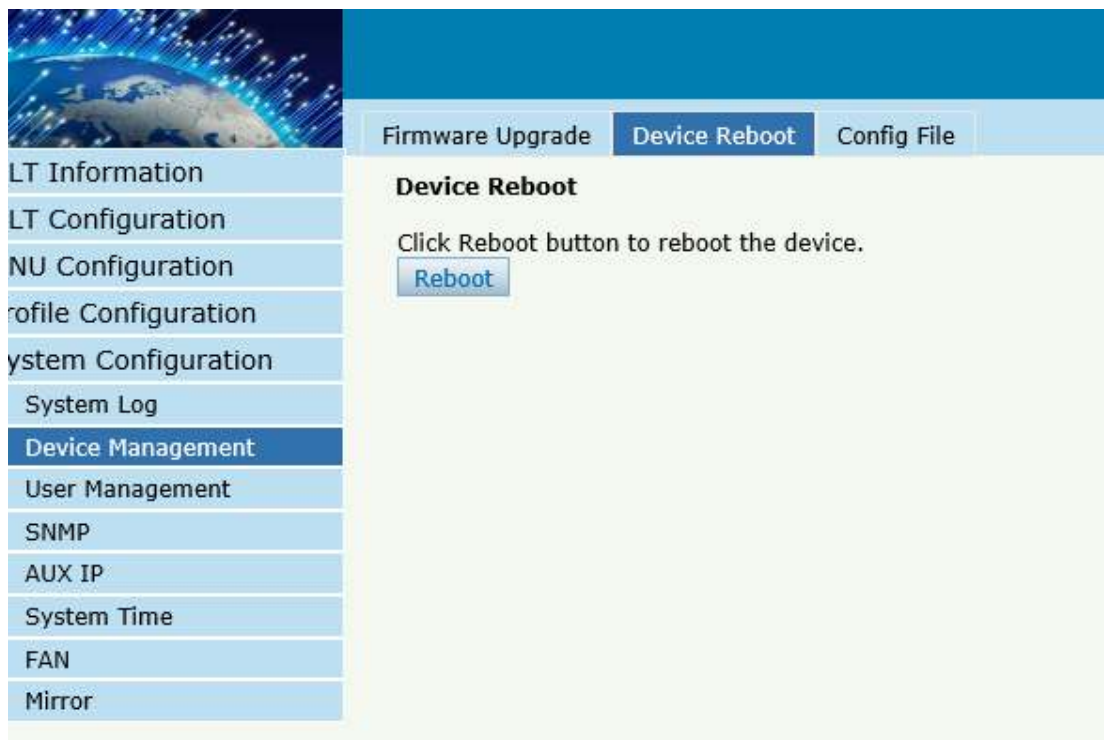


Figure 6-6 Device Reboot

6.2.3 Config File

System Configuration → Device Management → Config File,

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

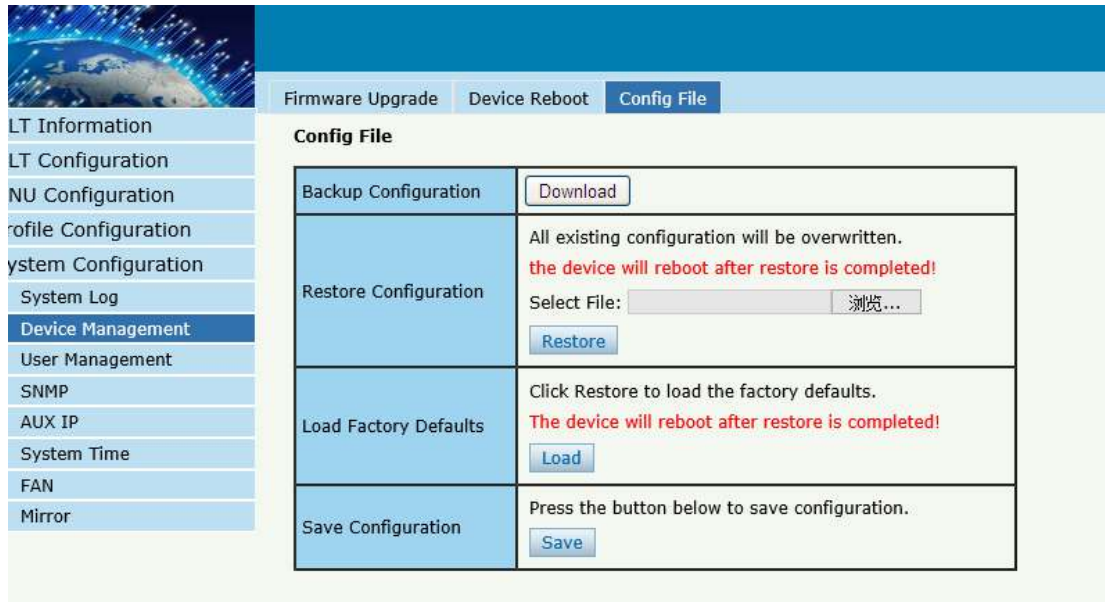


Figure 6-7 File Configuration

6.3 User Management

System Configuration → User manage

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

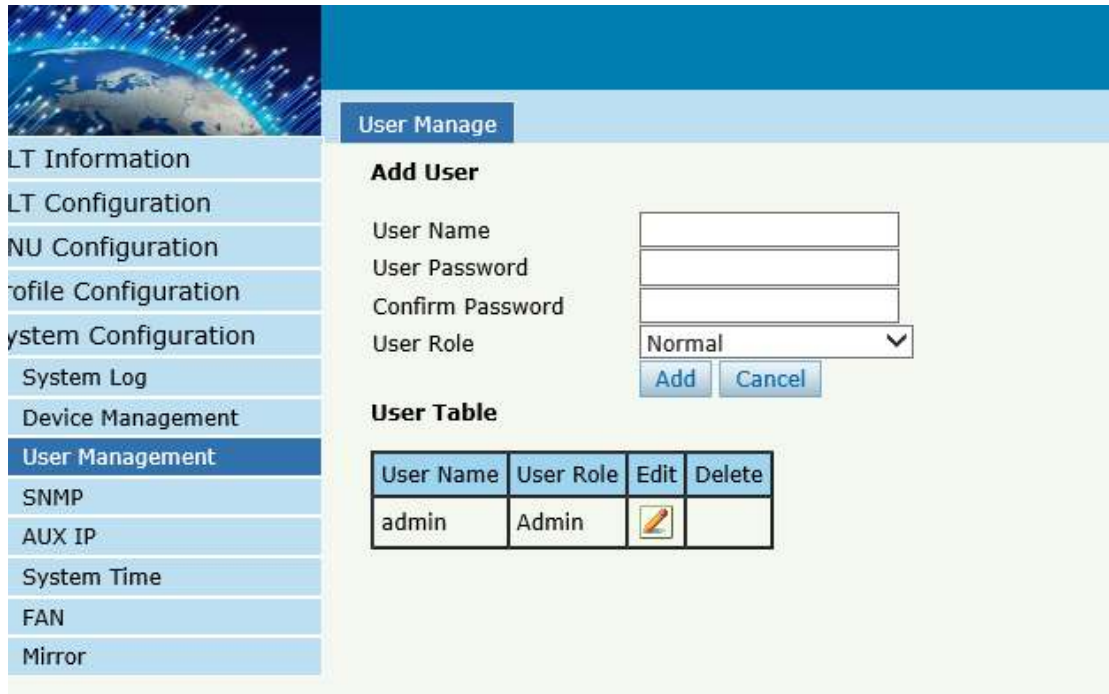


Figure6-8: User Manage

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 ▼

Add

Community Table

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

Add Trap

Host IP

UDP Port (1-65535)

Community Name

SNMP Version 1 ▼

Add

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 include

View Table

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

Add Group

Group Name

Access Level noauth

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 162 (1-65535)

User Name

User Level noauth

Tag List trap

Timeout (1-400000000)

Retry Count (1-100)

Trap Table

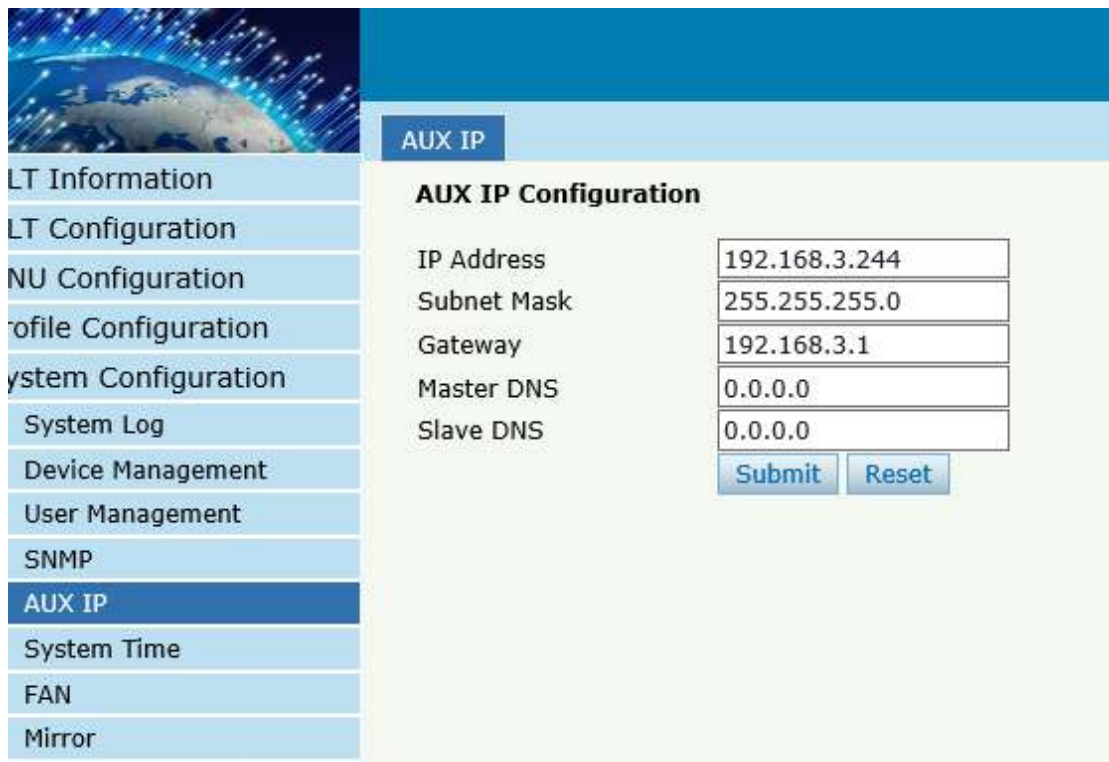
Host IP	UDP Port	Version	User Name	User Level	Tag List	Timeout	Retry Count	Delete
---------	----------	---------	-----------	------------	----------	---------	-------------	--------

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 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"/>	

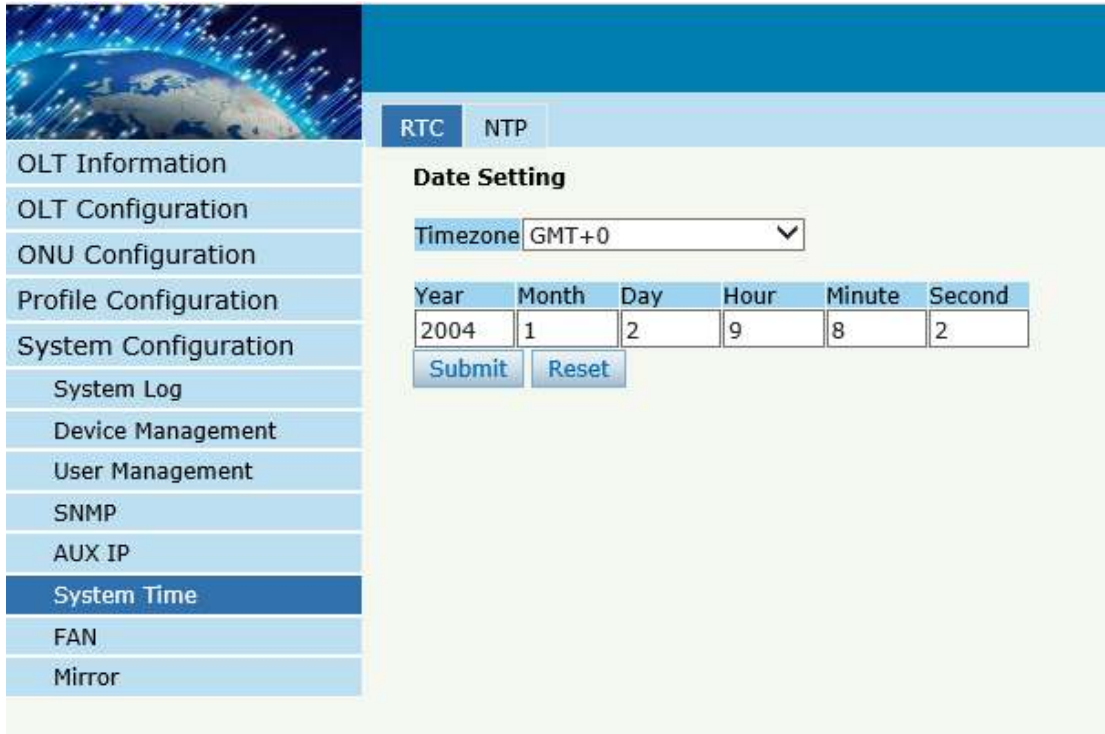
Figure 6-12: AUX IP

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

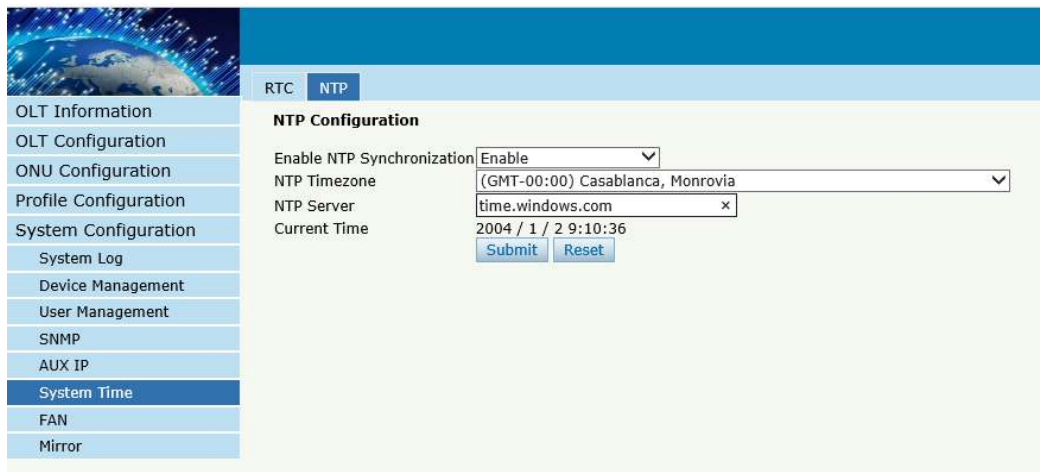
Submit Reset

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

Submit Reset

Figure 6-14: NTP Configuration

6.7 FAN

System Configuration → FAN.

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




FAN	
FAN Configuration	
FAN Temperature	<input type="text" value="50"/> (20-80)
FAN Mode	<input type="radio"/> Open <input type="radio"/> Close <input checked="" type="radio"/> Auto
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 6-15: 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 1 ▼
 Destination Port GE16 ▼

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

Submit

Figure 6-16: Mirror

This product comes with standard one year warranty. For further details about warranty policy and Product Registration, please visit support section of www.digisol.com