



DIGISOL



DG-GO4300 Series OLT

USER MANUAL

(WEB Management)

V2.0.1

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

1.1.2 PC System Requirement

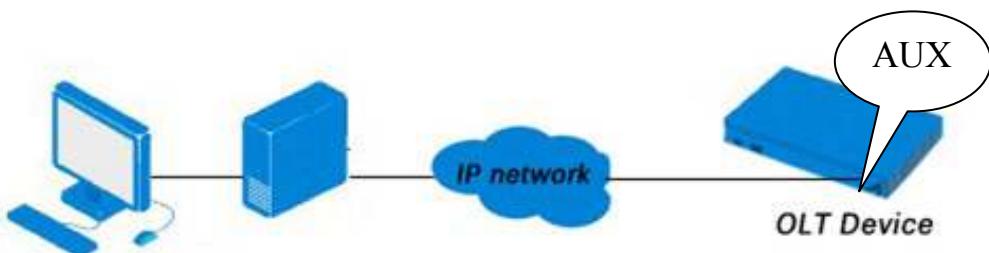
Table 1-2 PC System requirement

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.

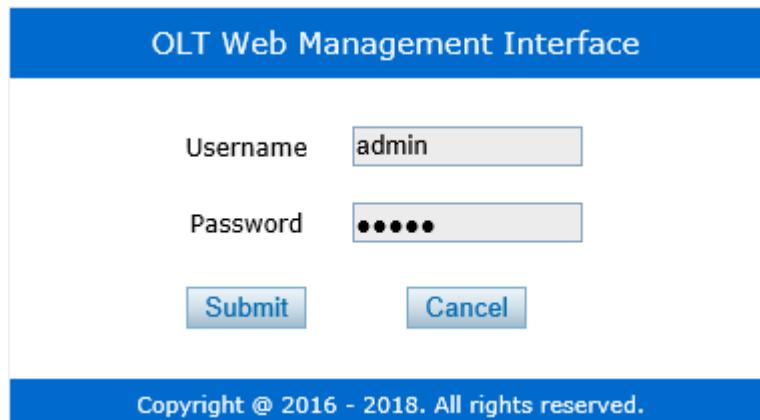


Figure 2-1: Login

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.

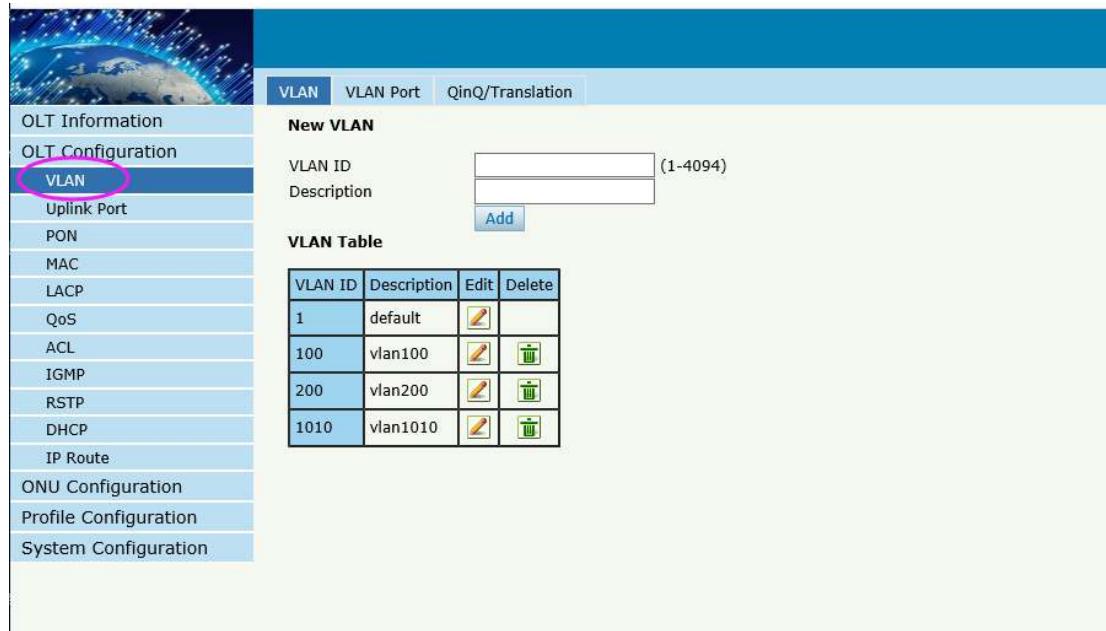
3.1 VLAN

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.

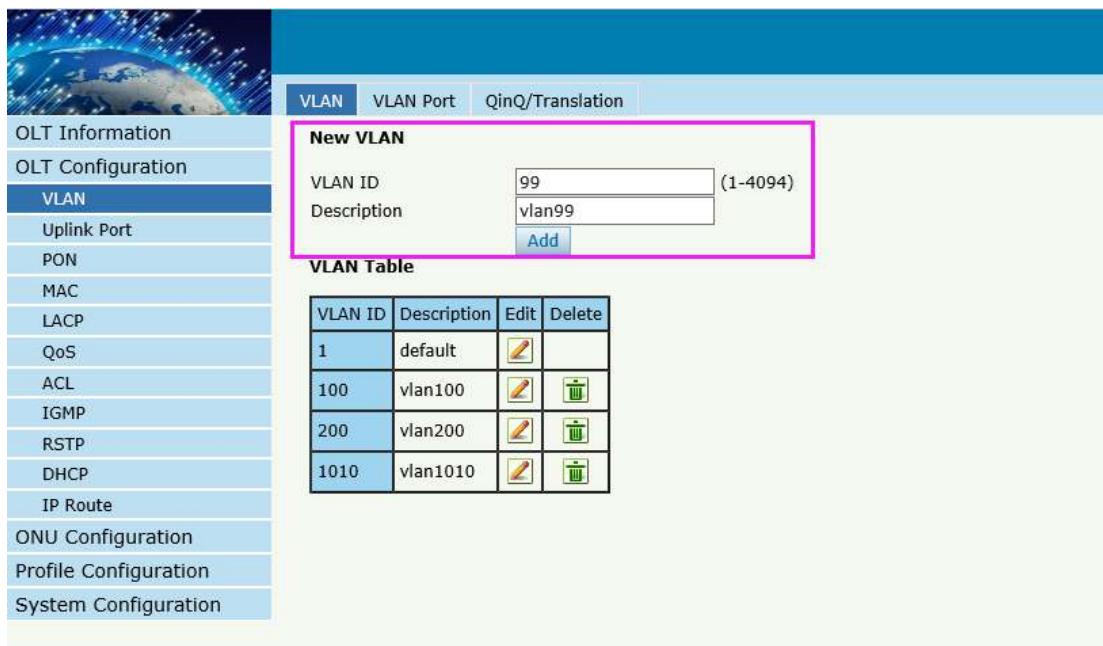


VLAN ID	Description	Edit	Delete
1	default		
100	vlan100		
200	vlan200		
1010	vlan1010		

3.1.1 Create VLAN

OLT Configuration→VLAN

In this user interface, we can create new VLANs.

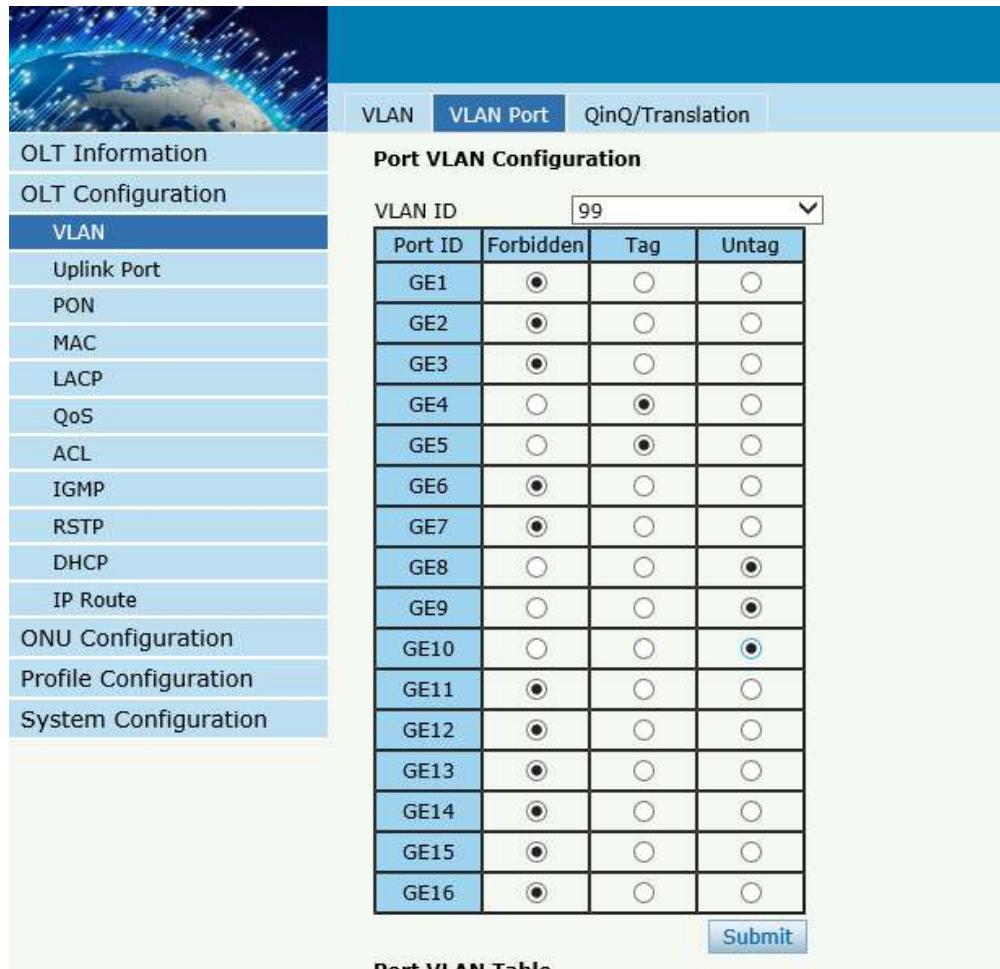


VLAN ID	Description	Edit	Delete
1	default		
100	vlan100		
200	vlan200		
1010	vlan1010		

Figure 3-1: Create New VLAN

3.1.2 VLAN Port

OLT Configuration → VLAN → VLAN Port.



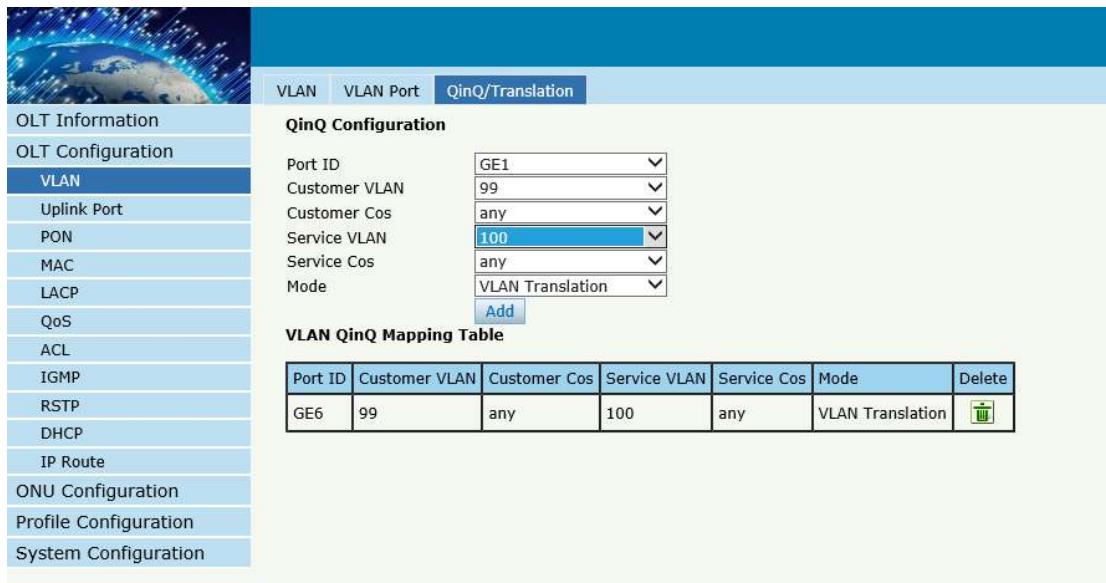
Port ID	Forbidden	Tag	Untag
GE1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE4	<input type="radio"/>	<input 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"/>

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.



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.

Traffic Statistics														Log	Stat	Status
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	
GE2	Down	-	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	
GE4	Down	-	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	
GE6	Down	-	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	
GE8	Down	-	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	
GE10	Down	-	4292241	50334	29673	17705	2953	4094572	60112	248	51731	8133	0	3		
GE11	Down	-	1505534975	11761992	11761992	0	0	4187	58	0	32	26	0	0		
GE12	Up	1000M Full	33217903360	266466398	266466393	0	0	31232952872	250979729	250905193	58255	16276	0	0		
GE13	Down	-	1161398784	9073428	9073428	0	0	1263815518	9873915	9873915	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	58155	7143	45949	5064	0	0		

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.

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

Figure3-5: Uplink Ports Configuration

Illustrations of each parameter:

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

3.3 PON

3.3.1 Information

OLT Configuration→PON→Information

This user interface is used to display parameters of PON port, such as PON module port current temperature, voltage, current, transmit power and the traffic statistics.



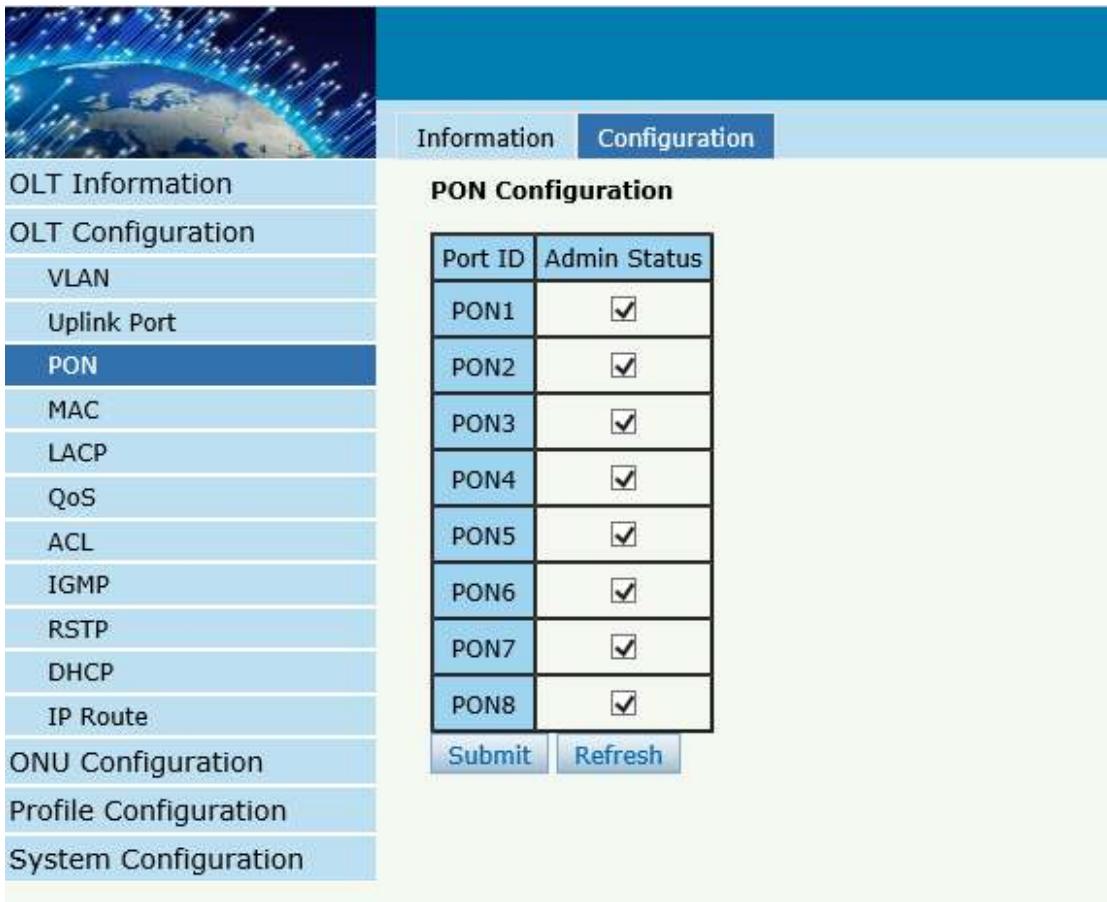
	Information	Configuration						
Optical Transceiver								
Port ID	Temperature(Degree)	Voltage(V)						
PON1	0.000	0.000						
PON2	57.242	3.377						
PON3	0.000	0.000						
PON4	55.969	3.344						
PON5	59.453	3.346						
PON6	0.000	0.000						
PON7	0.000	0.000						
PON8	53.551	3.343						
Traffic Statistics								
Interface	Rx Packets			Tx Packets			Collisions	Errors
	packets	Broadcast	Multicast	packets	Broadcast	Multicast		
PON	267170374	85036	1149	818451253	96059	1149	0	0
	Clear Counters	Refresh						

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"/>

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.



		MAC Table	Configuration
MAC Address Table			
Port ID	ALL		
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
Clean		Refresh	

Figure3-8: MAC Address Table

3.4.2 Configuration

OLT Configuration→MAC→Configuration

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



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

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.



Static LACP			
Channel Group Configuration			
Channel Group ID	1 <input type="button" value="▼"/>		
Load Balance	smac <input type="button" value="▼"/>		
Select GE Port	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		
<input type="button" value="Submit"/>			
Channel Group Table			
Group ID	Load Balance	Ports	Delete
1	smac	GE7 GE8	

Figure 3-10: Create Static LACP

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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.

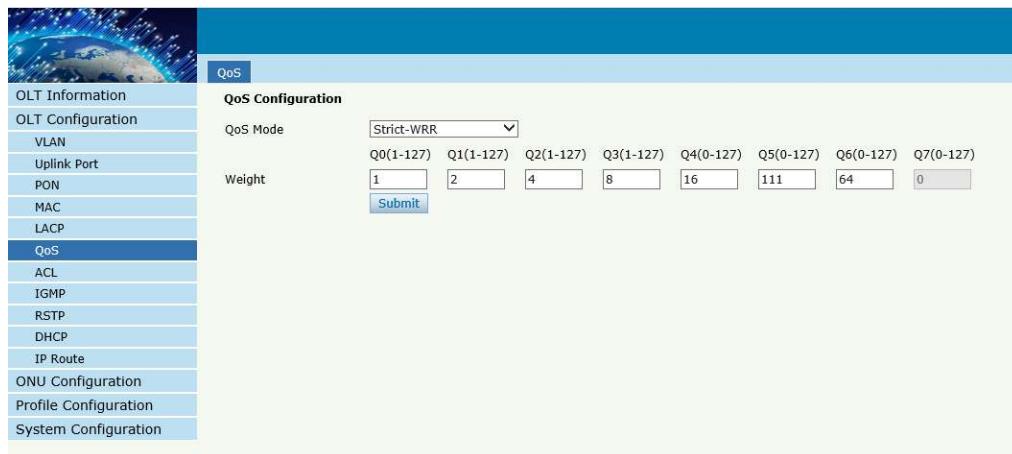


Figure 3-11: QOS Configuration

3.7 ACL

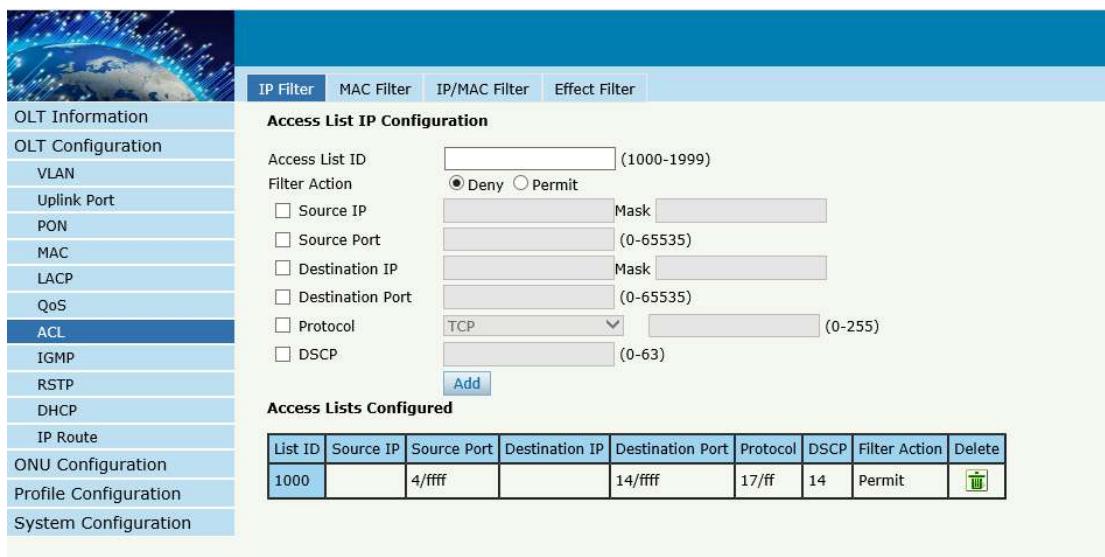
In order to filter data packages, network equipment need to setup a series of rules for identifying what need to be filtered. Only when matched with the rules the data packages can be filtered. ACL can achieve this function. Matched conditions of ACL rules can be source address, destination address,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



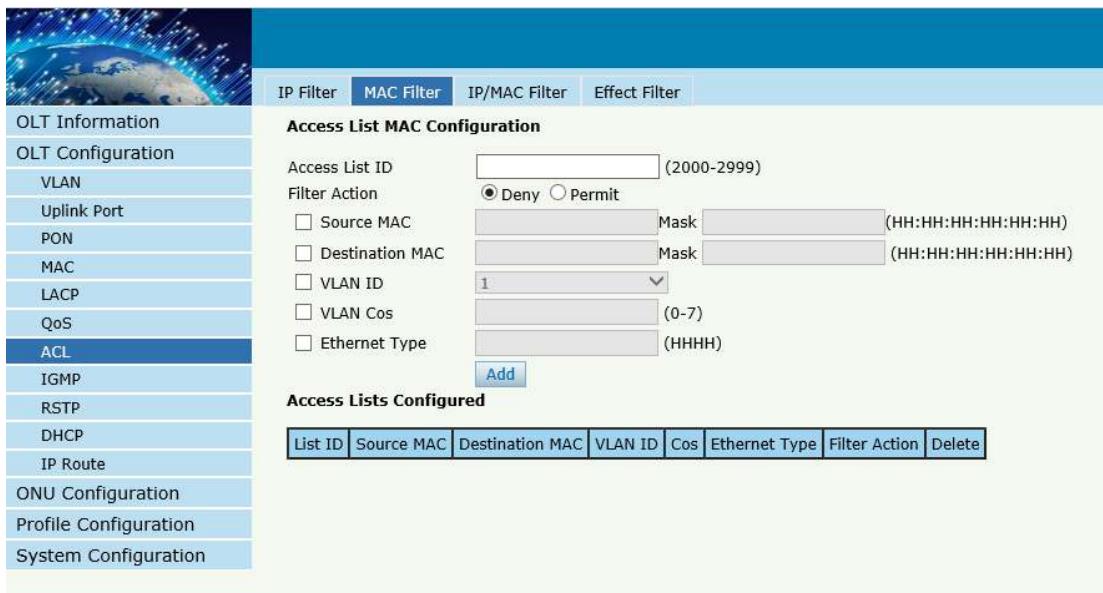
List ID	Source IP	Source Port	Destination IP	Destination Port	Protocol	DSCP	Filter Action	Delete
1000	4/ffff			14/ffff	17/ff	14	Permit	

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

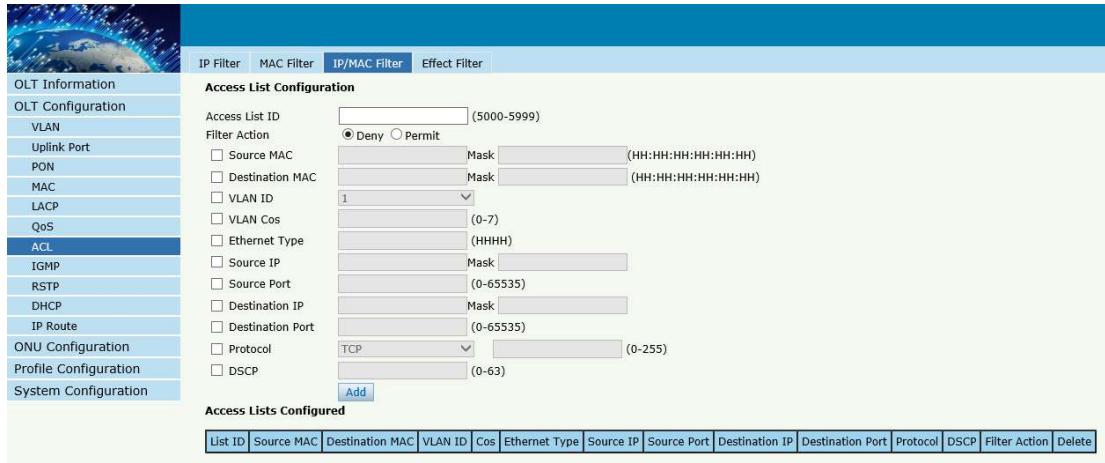


The screenshot shows the 'MAC Filter' configuration page. On the left, a sidebar lists various OLT configurations: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, **ACL**, IGMP, RSTP, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The 'ACL' option is selected. At the top right, there are tabs: IP Filter, **MAC Filter**, IP/MAC Filter, and Effect Filter. The 'MAC Filter' tab is active. Below the tabs, the section 'Access List MAC Configuration' is displayed. It includes fields for 'Access List ID' (set to 2000-2999), 'Filter Action' (set to Deny), and several checkboxes for filtering by Source MAC, Destination MAC, VLAN ID, VLAN Cos, and Ethernet Type. There is also a dropdown for VLAN ID and a mask field. An 'Add' button is present. Below this, the section 'Access Lists Configured' shows a table with columns: List ID, Source MAC, Destination MAC, VLAN ID, Cos, Ethernet Type, Filter Action, and Delete. A row for the newly added rule is visible.

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 sidebar and tabs are identical to Figure 3-13. The 'IP/MAC Filter' tab is active. The 'Access List Configuration' section is shown, featuring a more extensive set of filtering options compared to the MAC filter. It includes checkboxes for Source MAC, Destination MAC, VLAN ID, VLAN Cos, Ethernet Type, Source IP, Destination IP, Source Port, Destination Port, Protocol, and DSCP. Each checkbox has associated 'Mask' and value selection fields. An 'Add' button is located at the bottom of this section. Below it, the 'Access Lists Configured' table lists the same columns as Figure 3-13, showing the configuration for the new IP/MAC filter rule.

Figure 3-14 IP/MAC Filter

3.7.4 Effect Filter

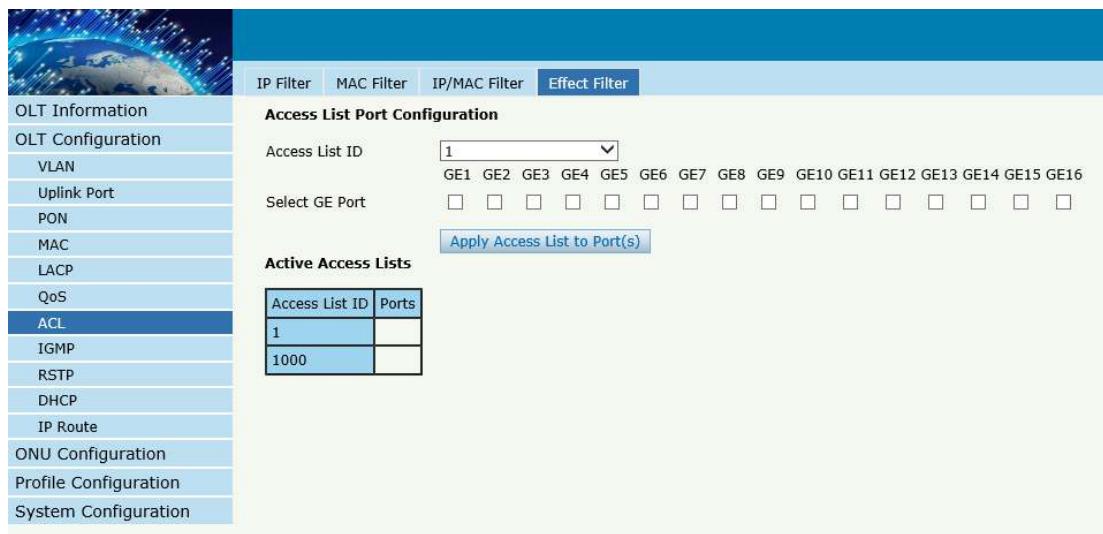
Bind the access list to the ports. Each access list can be bound to several ports.

OLT Configuration→ACL→Effect Filter

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Access List ID	Ports
1	
1000	

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



Group VLAN ID	IP Address	Port ID	Type	User VLAN ID
1010	239.1.1.1	PON7	Static	1010
1010	239.22.2.2	PON7	Static	1010
1010	236.0.1.1	PON7	Static	1010

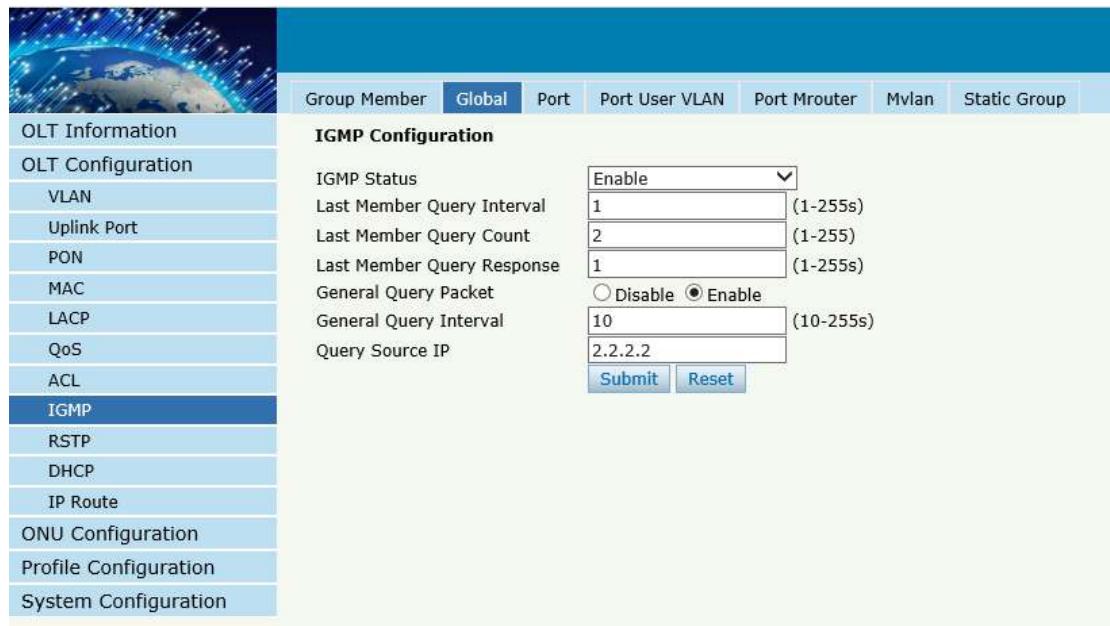
Figure 3-16: Group Member

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.



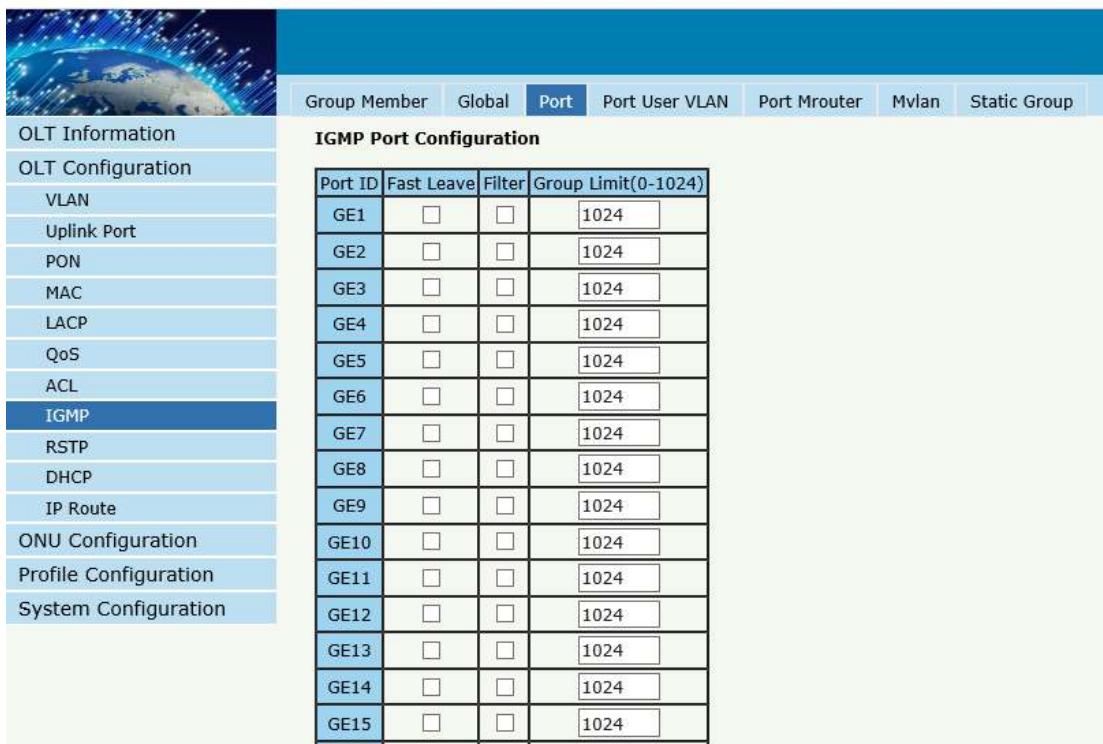
Group Member	Global	Port	Port User VLAN	Port Mrouter	Mvlan	Static Group
IGMP Configuration						
IGMP Status	Enable					
Last Member Query Interval	1	(1-255s)				
Last Member Query Count	2	(1-255)				
Last Member Query Response	1	(1-255s)				
General Query Packet	<input type="radio"/> Disable <input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

Figure 3-17: IGMP Global

3.8.3 Port

OLT Configuration → IGMP → Port.

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



The screenshot shows a navigation sidebar on the left with various configuration tabs: 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 is titled "IGMP Port Configuration" and contains a table with 15 rows, each representing a port (GE1 to GE15). The columns are Port ID, Fast Leave, Filter, and Group Limit(0-1024), all of which are set to 1024.

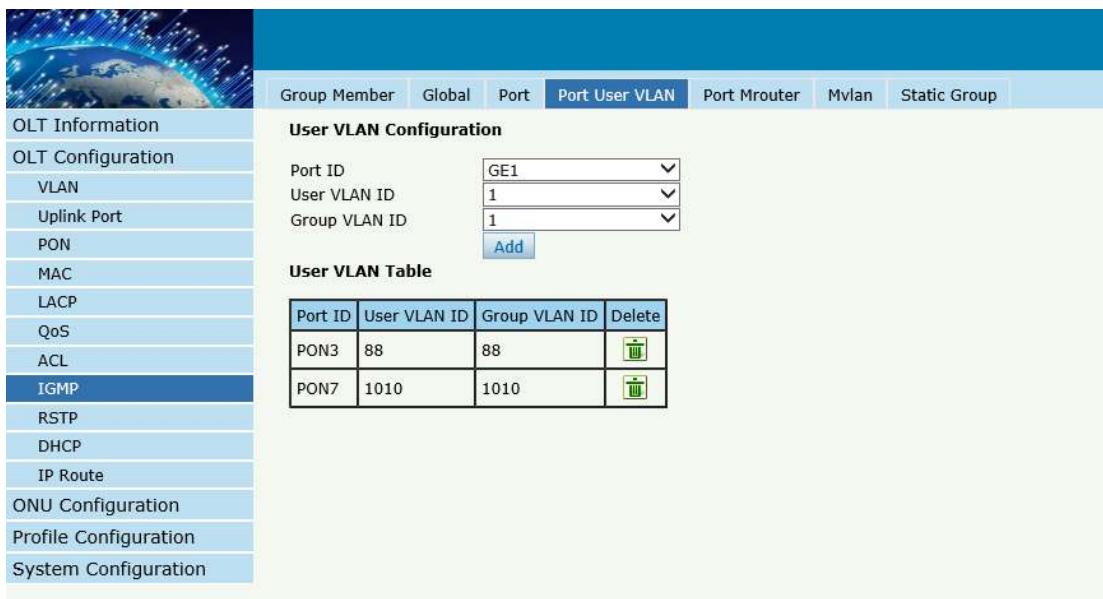
Port ID	Fast Leave	Filter	Group Limit(0-1024)
GE1	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE2	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE3	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE4	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE5	<input type="checkbox"/>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

Figure 3-18: IGMP Port

3.8.4 Port User VLAN

OLT Configuration → IGMP → Port User VLAN

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



The screenshot shows the 'User VLAN Configuration' section of the DIGISOL OLT User Interface. The left sidebar lists various configuration tabs: 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 'IGMP' tab is currently selected. The main panel has a header with tabs: Group Member, Global, Port, **Port User VLAN**, Port Mrouter, Mvlan, and Static Group. Below the header, there is a 'User VLAN Configuration' form with fields for Port ID (GE1), User VLAN ID (1), and Group VLAN ID (1), followed by an 'Add' button. Below the form is a 'User VLAN Table' containing two rows of data:

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

Figure 3-19: IGMP Port User VLAN

3.8.5 Port Mrouter

OLT Configuration → IGMP → Port Mrouter

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



The screenshot shows the 'Port Mrouter' configuration section of the DIGISOL OLT User Interface. The left sidebar lists various configuration tabs: 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 'IGMP' tab is currently selected. The main panel has a header with tabs: Group Member, Global, Port, Port User VLAN, **Port Mrouter**, Mvlan, and Static Group. Below the header, there is a 'Add Multicast Router' form with fields for Port ID (GE1) and Group VLAN ID (1), followed by an 'Add' button. Below the form is a 'Multicast Router Table' containing two rows of data:

Port ID	Group VLAN ID	Delete
GE12	88	
GE3	200	

Figure 3-20: IGMP Port Mroute

3.8.6 Mvlan

OLT Configuration → IGMP → Mvlan

This configuration is used to configure Mvlan and its mode.

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

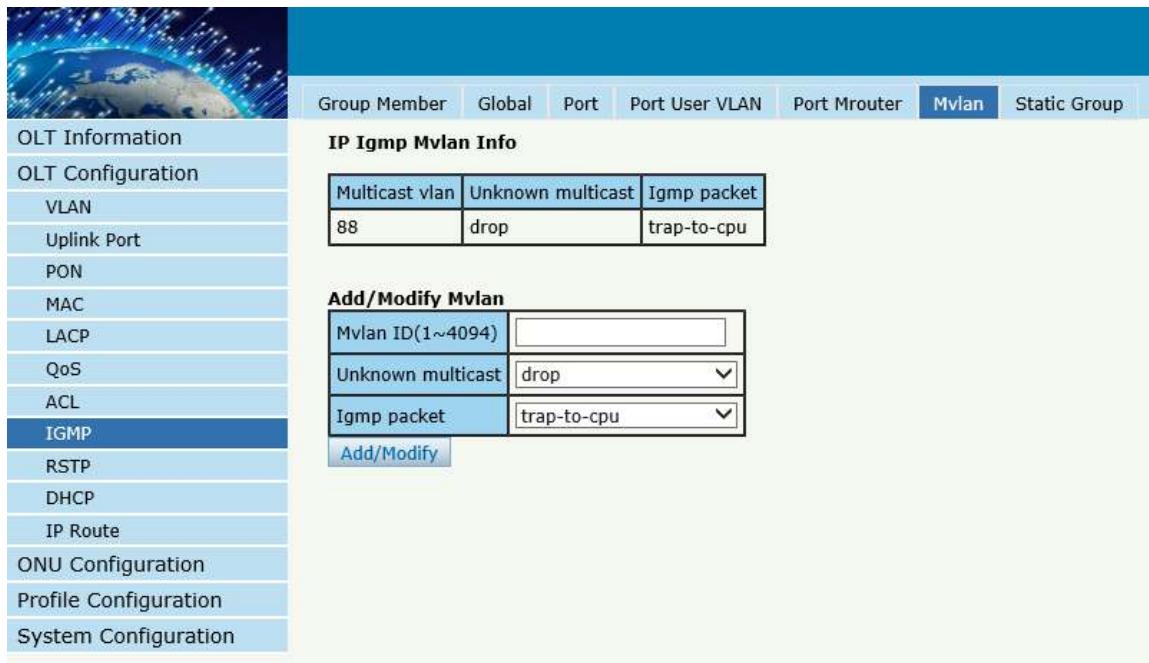
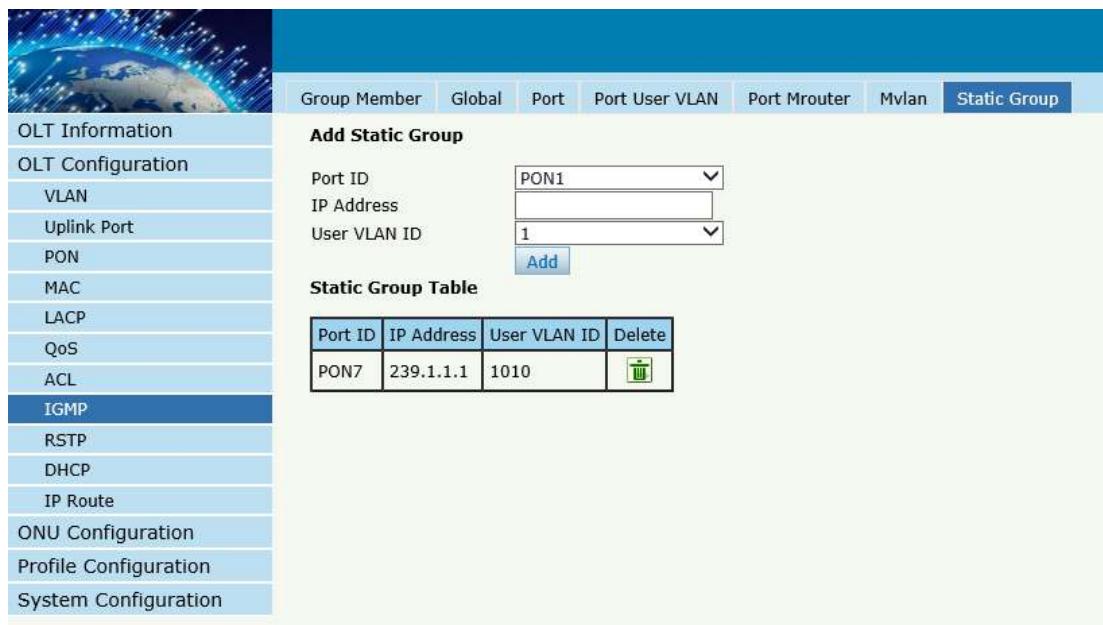


Figure 3-21: IGMP MVLAN

3.8.7 Static Group

OLT Configuration → IGMP → Static Group

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



The screenshot shows the 'IGMP' section of the configuration menu. On the left, a sidebar lists various configuration categories. The 'IGMP' option is highlighted. The main panel displays the 'Add Static Group' configuration screen. It includes fields for Port ID (PON1), IP Address (239.1.1.1), and User VLAN ID (1). An 'Add' button is present. Below this is a 'Static Group Table' containing one entry: PON7, 239.1.1.1, 1010, and a 'Delete' button.

Port ID	IP Address	User VLAN ID	Delete
PON7	239.1.1.1	1010	

Figure 3-22: IGMP Static Group

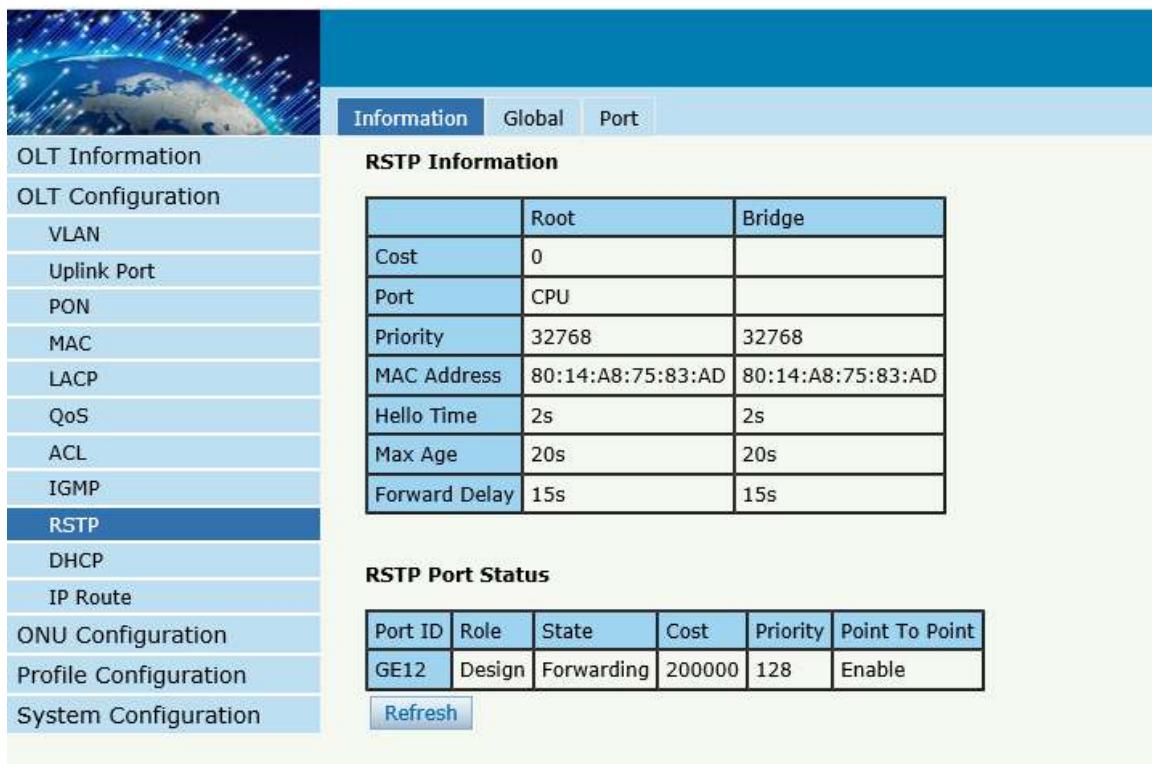
3.9 RSTP

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



The screenshot shows the RSTP Information page of the DIGISOL DG-GO4300 Series OLT User Manual. The left sidebar contains navigation links: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP (which is selected and highlighted in blue), DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area has tabs for Information, Global, and Port, with Information selected. It displays RSTP Information in a table:

	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

Below this is a table for RSTP Port Status:

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

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

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.

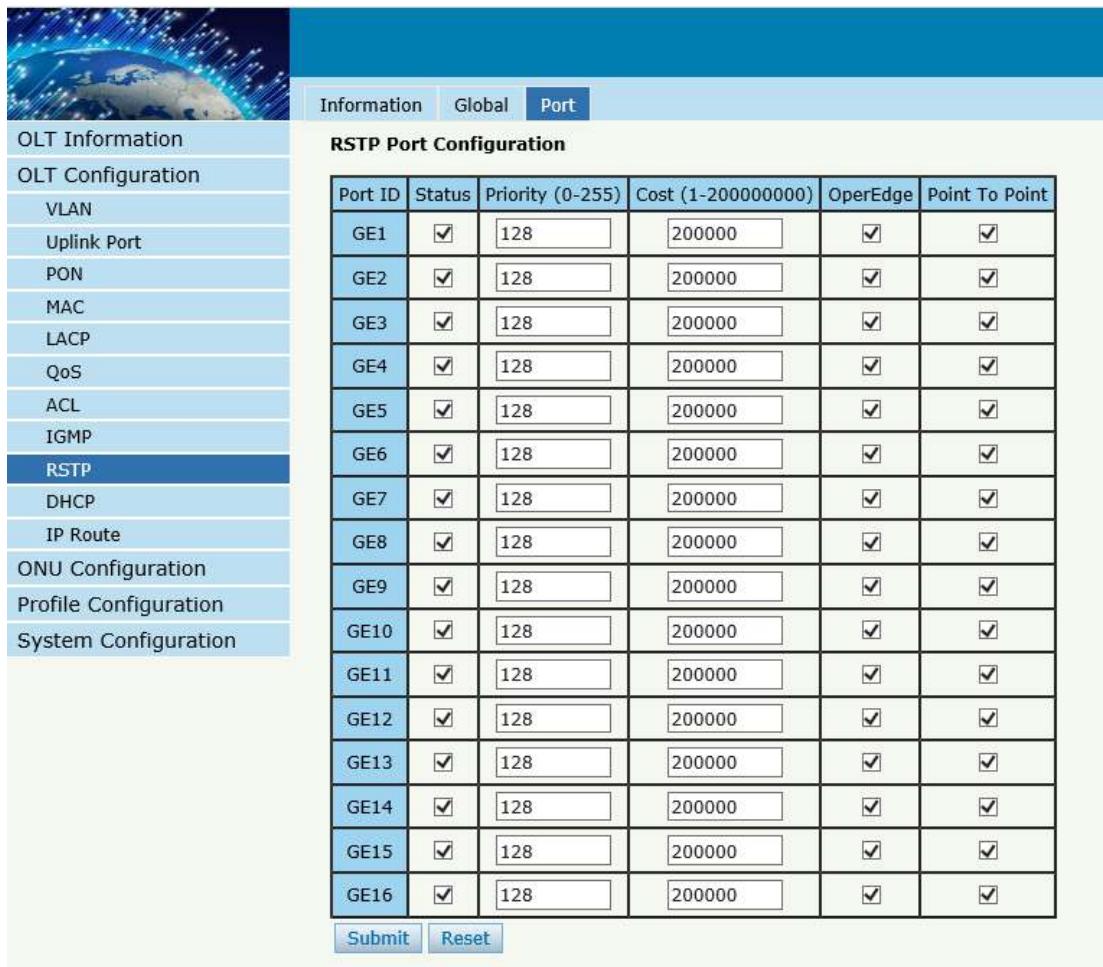


Figure 3-24: RSTP Global Setup

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.



Port ID	Status	Priority (0-255)	Cost (1-2000000000)	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"/>

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

Figure 3-25: RSTP Port Setting

3.10 DHCP

OLT can support the following DHCP functions.

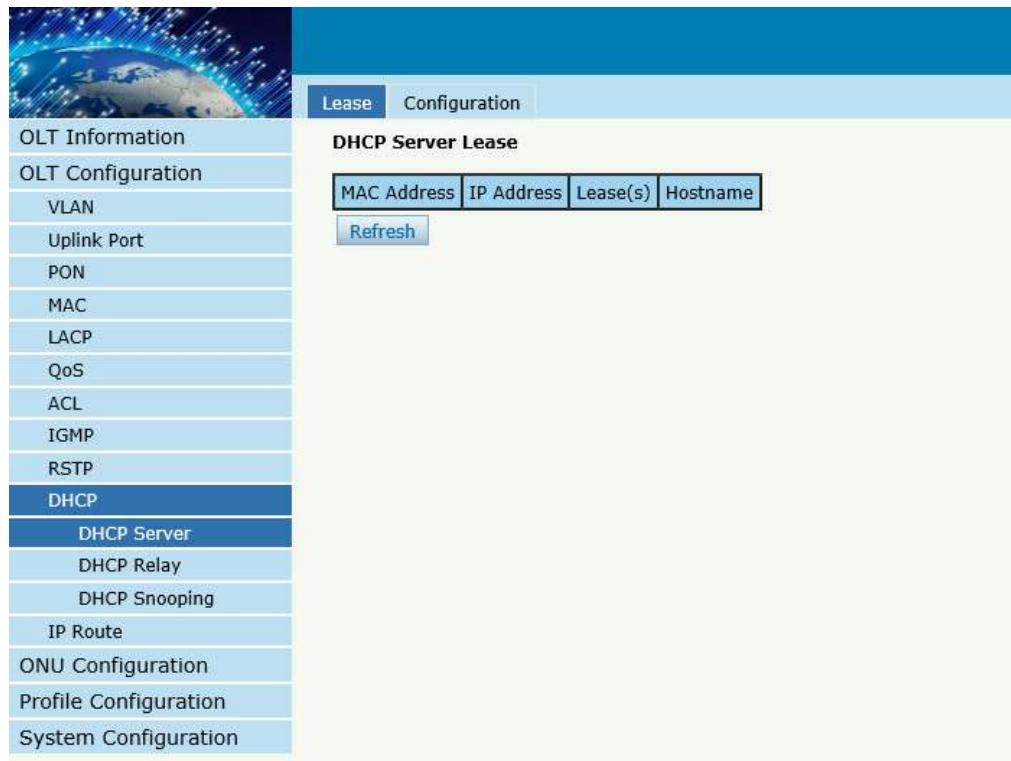
- DHCP Server
- DHCP Relay
- DHCP Snooping

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.



MAC Address	IP Address	Lease(s)	Hostname

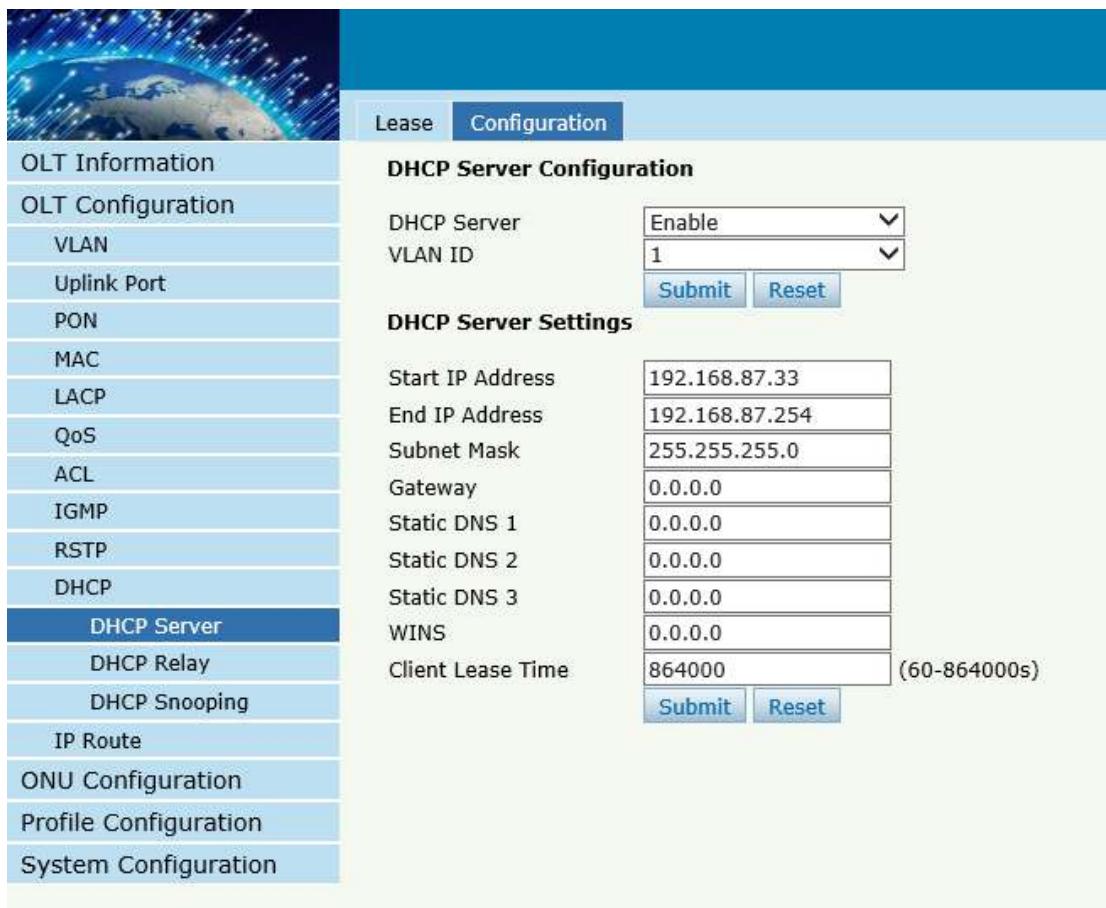
Figure 3-26: DHCP Lease

3.10.1.2 DHCP Configuration

OLT Configuration→DHCP→DHCP Server→Configuration

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

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



The screenshot shows the 'DHCP Server Configuration' page. On the left, there's a vertical navigation menu with options like OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, DHCP Server (which is selected), DHCP Relay, DHCP Snooping, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main area has tabs for 'Lease' and 'Configuration', with 'Configuration' selected. Under 'DHCP Server Configuration', there are dropdown menus for 'DHCP Server' (set to 'Enable') and 'VLAN ID' (set to '1'), and buttons for 'Submit' and 'Reset'. Below that is the 'DHCP Server Settings' section, which includes input fields for Start IP Address (192.168.87.33), End IP Address (192.168.87.254), Subnet Mask (255.255.255.0), Gateway (0.0.0.0), Static DNS 1 (0.0.0.0), Static DNS 2 (0.0.0.0), Static DNS 3 (0.0.0.0), WINS (0.0.0.0), and Client Lease Time (864000, with a note '(60-864000s)'). There are also 'Submit' and 'Reset' buttons for this section.

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.

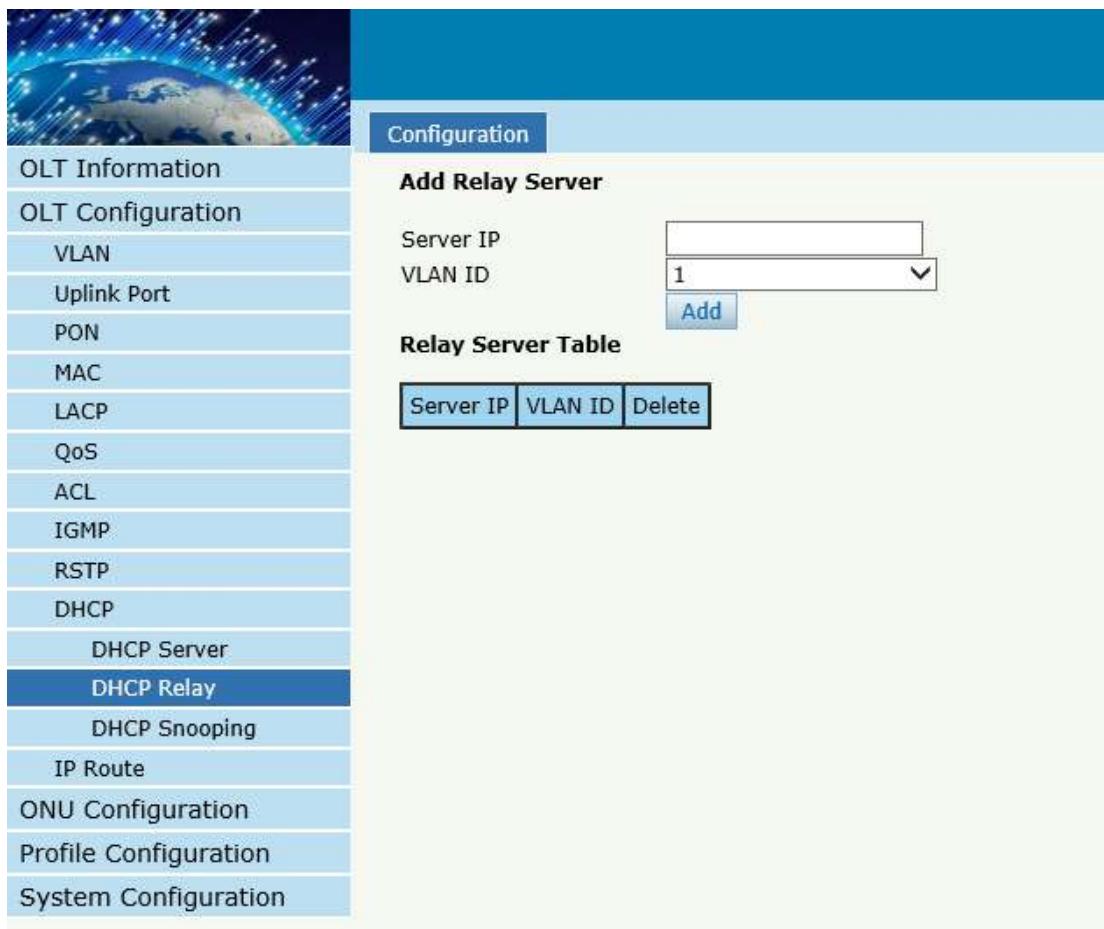


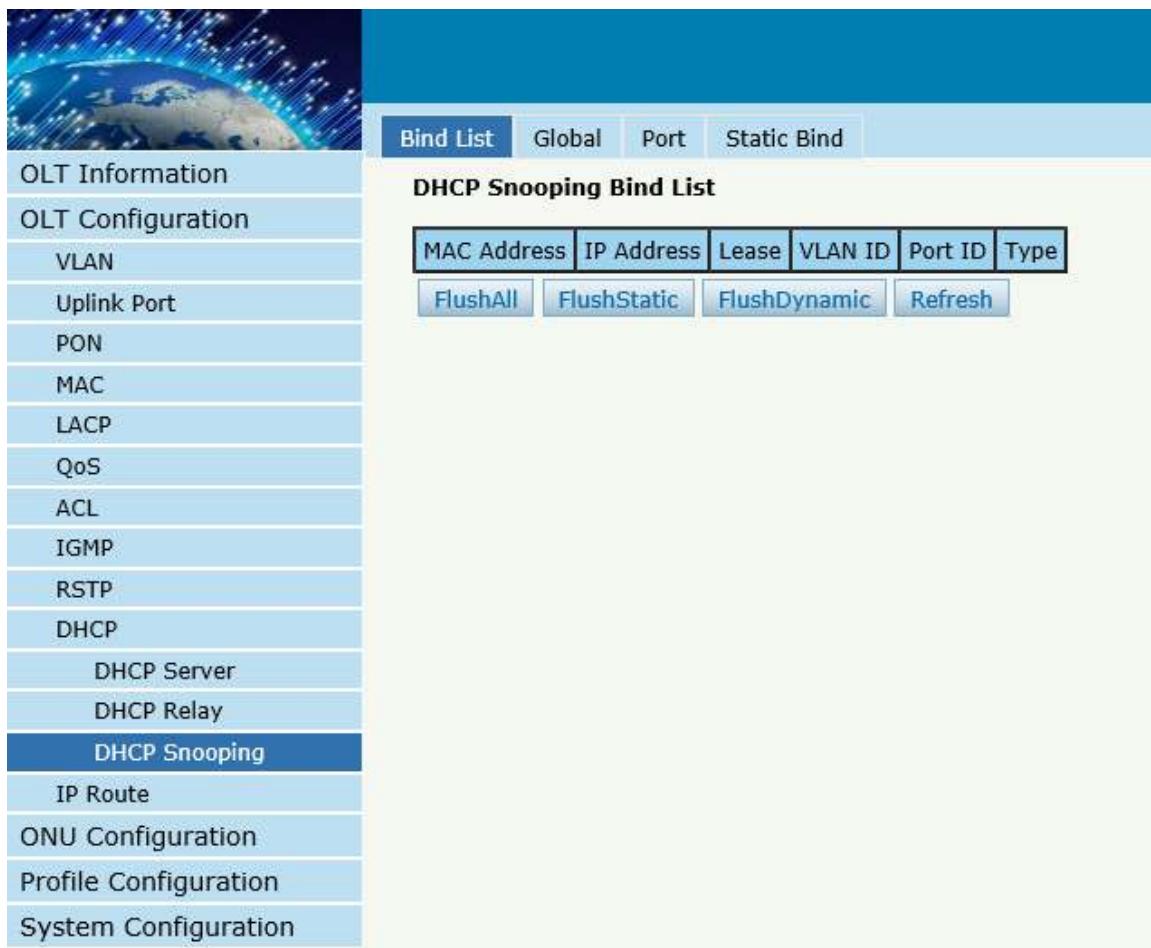
Figure 3-28:DHCP Relay Configuration

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 ,



The screenshot shows the configuration menu for the DG-GO4300 Series OLT. The left sidebar lists various configuration categories: 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 'DHCP Snooping' option is currently selected. The main panel displays the 'DHCP Snooping Bind List' with columns for MAC Address, IP Address, Lease, VLAN ID, Port ID, and Type. Below these columns are buttons for FlushAll, FlushStatic, FlushDynamic, and Refresh.

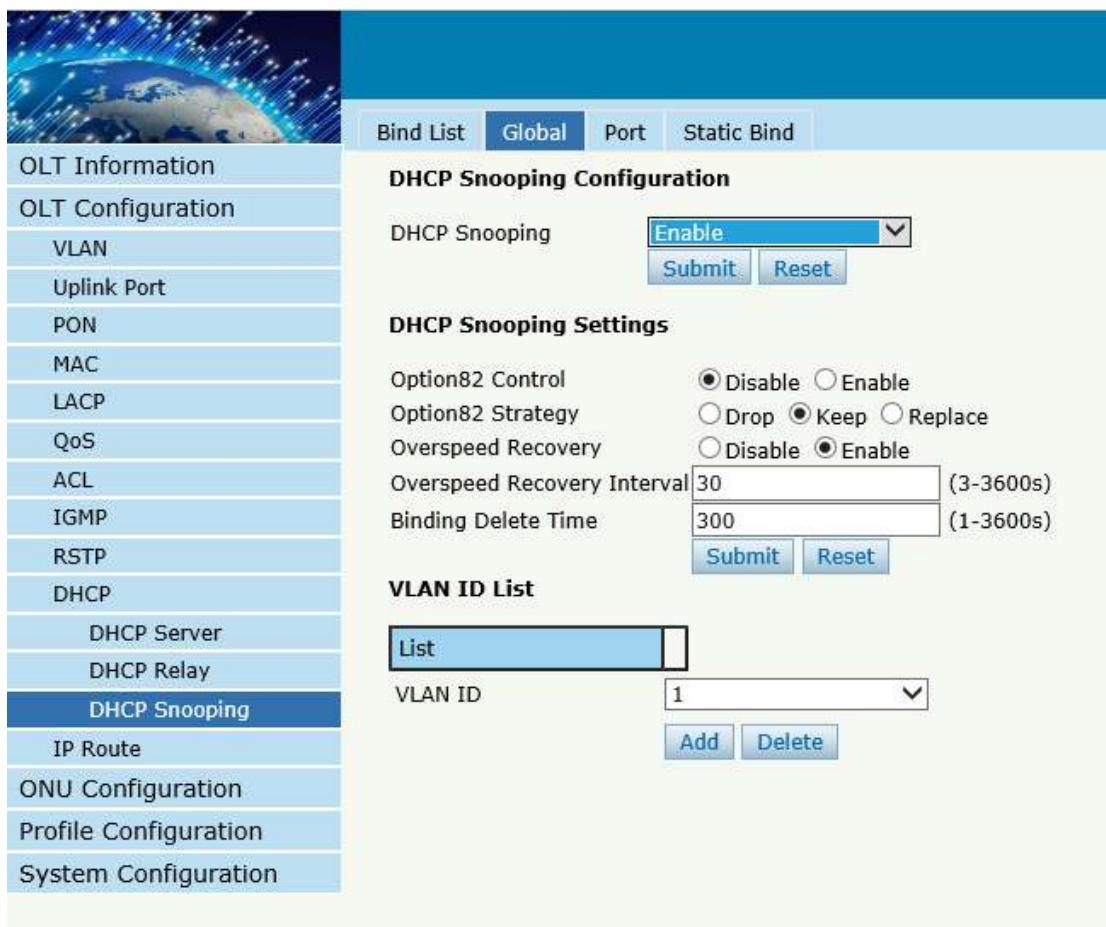
Figure 3-29:DHCP Snooping Bind List

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.



The screenshot shows the 'DHCP Snooping Configuration' section of the user interface. On the left, there is a vertical navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, DHCP Server, DHCP Relay, **DHCP Snooping**, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The 'DHCP Snooping' item is currently selected. The main panel has tabs at the top: Bind List, Global (which is selected), Port, and Static Bind. The 'DHCP Snooping Configuration' section contains the following settings:

- DHCP Snooping:** A dropdown menu set to **Enable**.
- Submit** and **Reset** buttons.
- DHCP Snooping Settings:**
 - Option82 Control:** Radio buttons for **Disable** (selected) and **Enable**.
 - Option82 Strategy:** Radio buttons for **Drop**, **Keep** (selected), and **Replace**.
 - Overspeed Recovery:** Radio buttons for **Disable** and **Enable** (selected).
 - Overspeed Recovery Interval:** A text input field containing **30** with a unit of **(3-3600s)**.
 - Binding Delete Time:** A text input field containing **300** with a unit of **(1-3600s)**.
 - Submit** and **Reset** buttons.
- VLAN ID List:**
 - A **List** button.
 - A **VLAN ID** dropdown menu set to **1**.
 - Add** and **Delete** buttons.

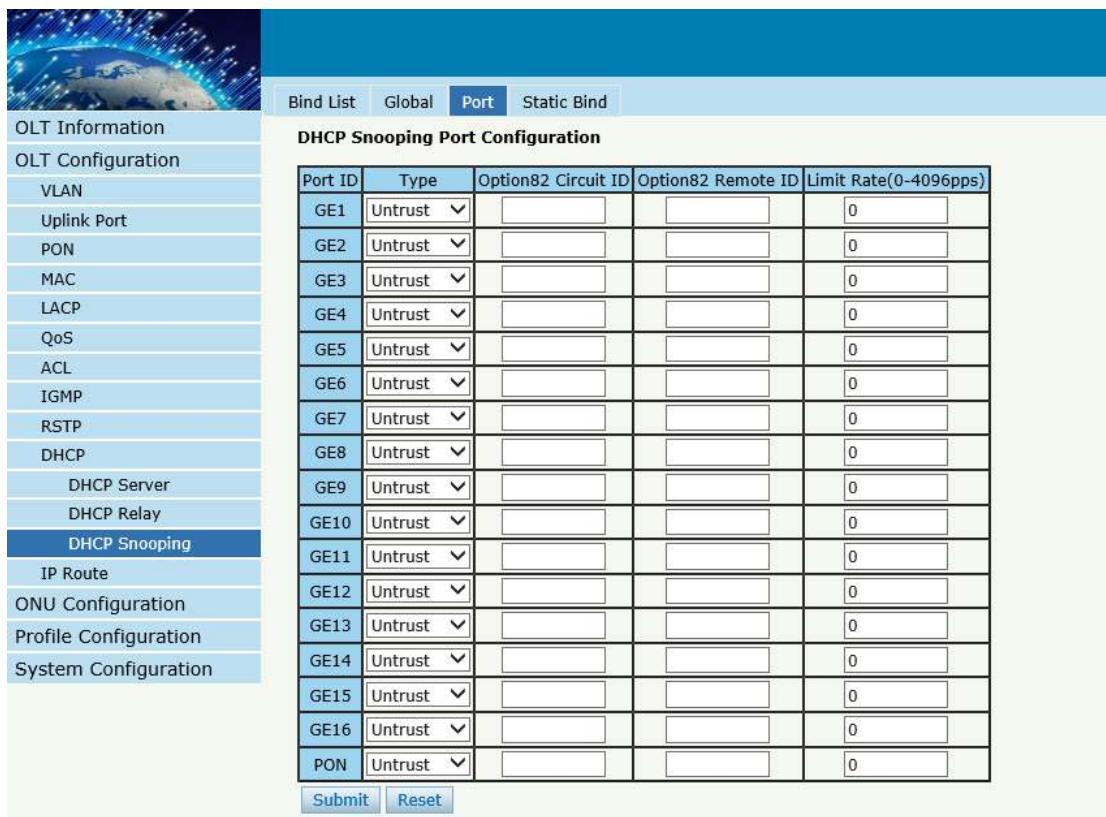
Figure 3-30:DHCP Snooping Global

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

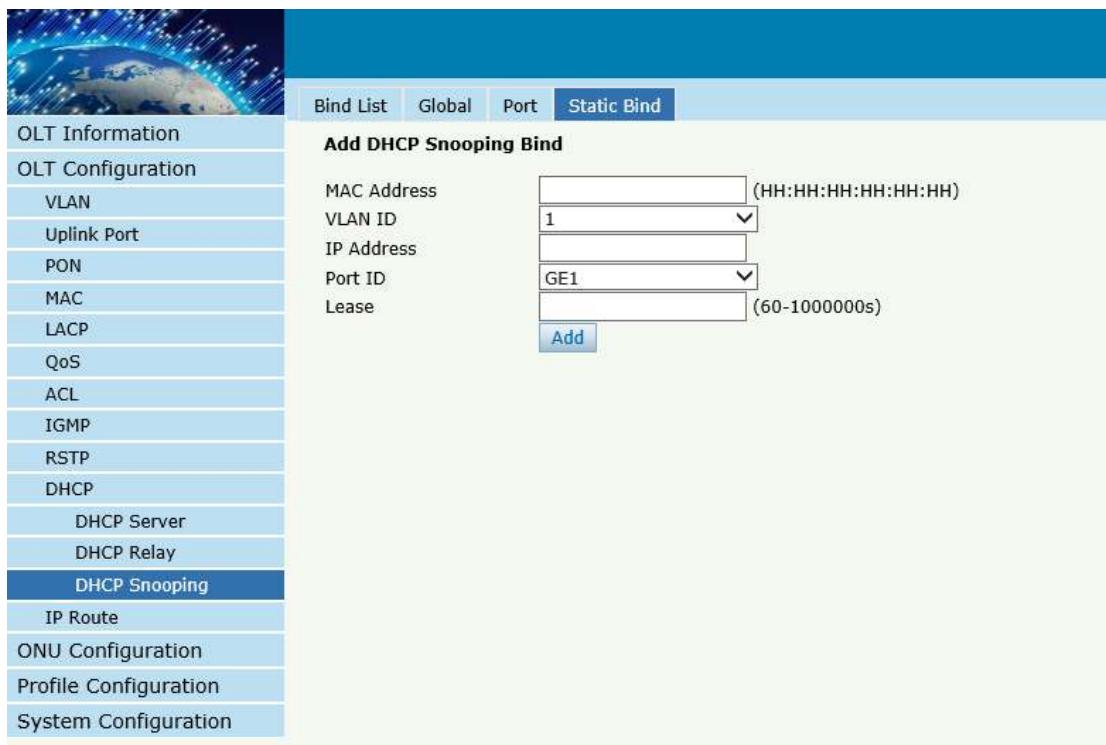
Submit **Reset**

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 'DHCP Snooping Static Bind' configuration page. On the left, there is a vertical navigation menu with the following items:

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

The main configuration area has tabs at the top: Bind List, Global, Port, and **Static Bind**. The 'Static Bind' tab is active. Below the tabs, the title 'Add DHCP Snooping Bind' is displayed. The configuration fields are as follows:

MAC Address	(HH:HH:HH:HH:HH:HH)
VLAN ID	1
IP Address	
Port ID	GE1
Lease	(60-1000000s)

At the bottom right of the configuration area is a blue 'Add' button.

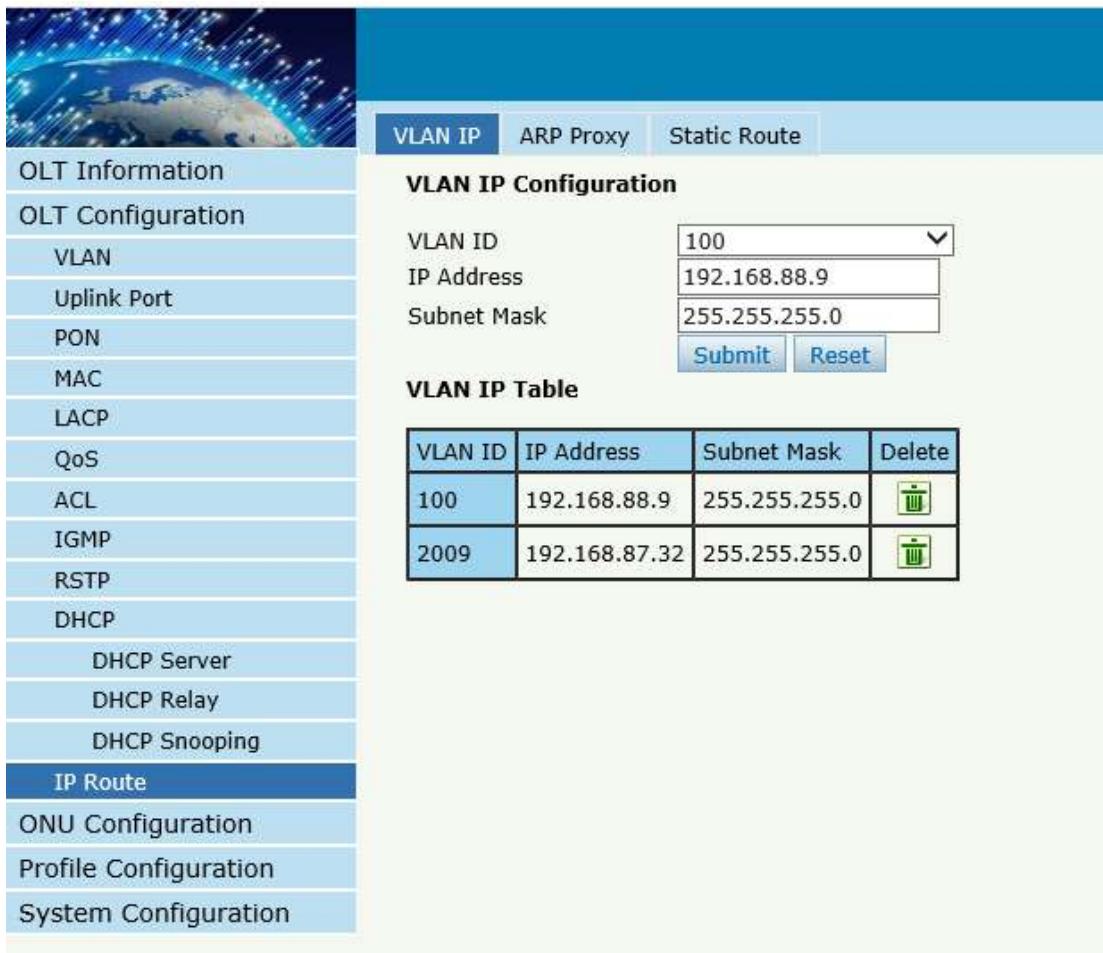
Figure 3-32 DHCP Snooping Static Bind

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.



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	

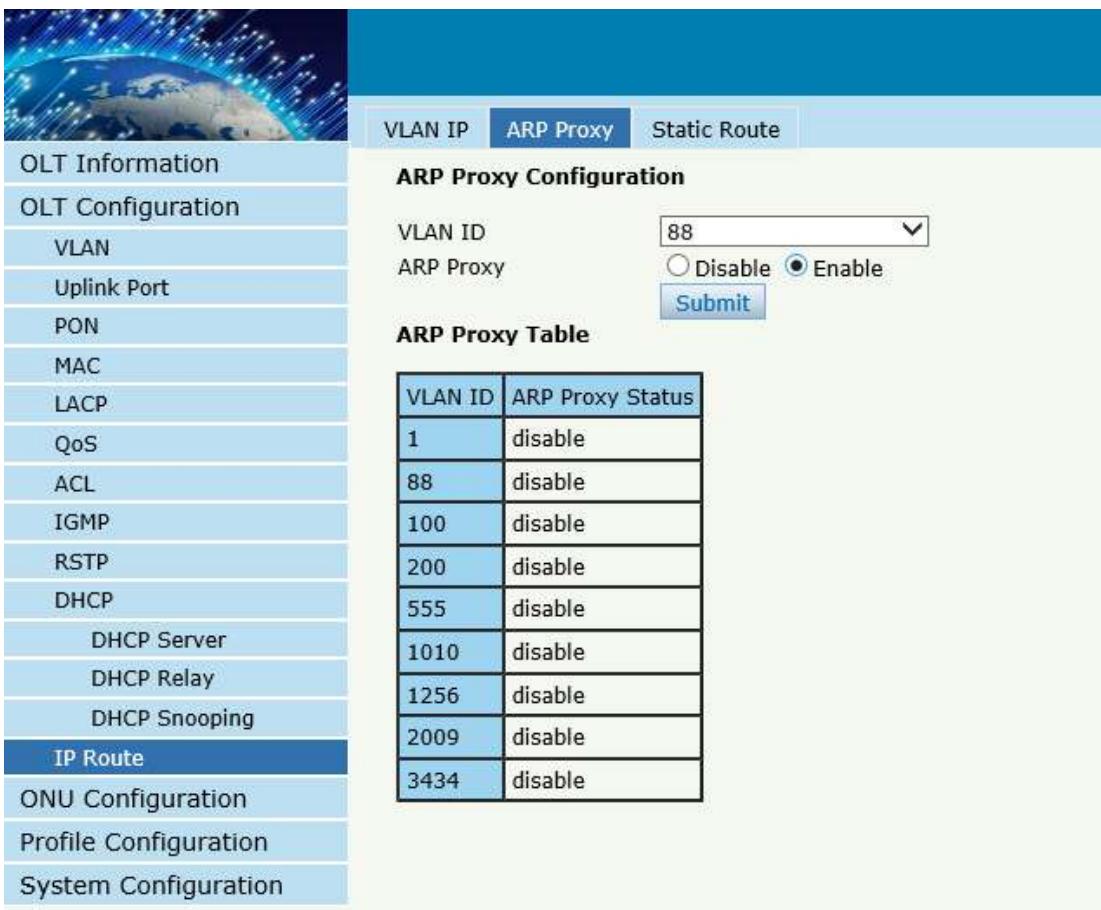
Figure 3-33:VLAN IP

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'.



The screenshot shows the 'ARP Proxy' tab selected in the top navigation bar. On the left, a vertical menu lists various configuration sections: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IGMP, RSTP, DHCP, IP Route (which is highlighted in blue), ONU Configuration, Profile Configuration, and System Configuration.

The main content area is titled 'ARP Proxy Configuration'. It includes a dropdown for 'VLAN ID' set to '88', a radio button for 'ARP Proxy' set to 'Enable', and a 'Submit' button. Below this is a table titled 'ARP Proxy Table' with columns 'VLAN ID' and 'ARP Proxy Status'. The table contains the following data:

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

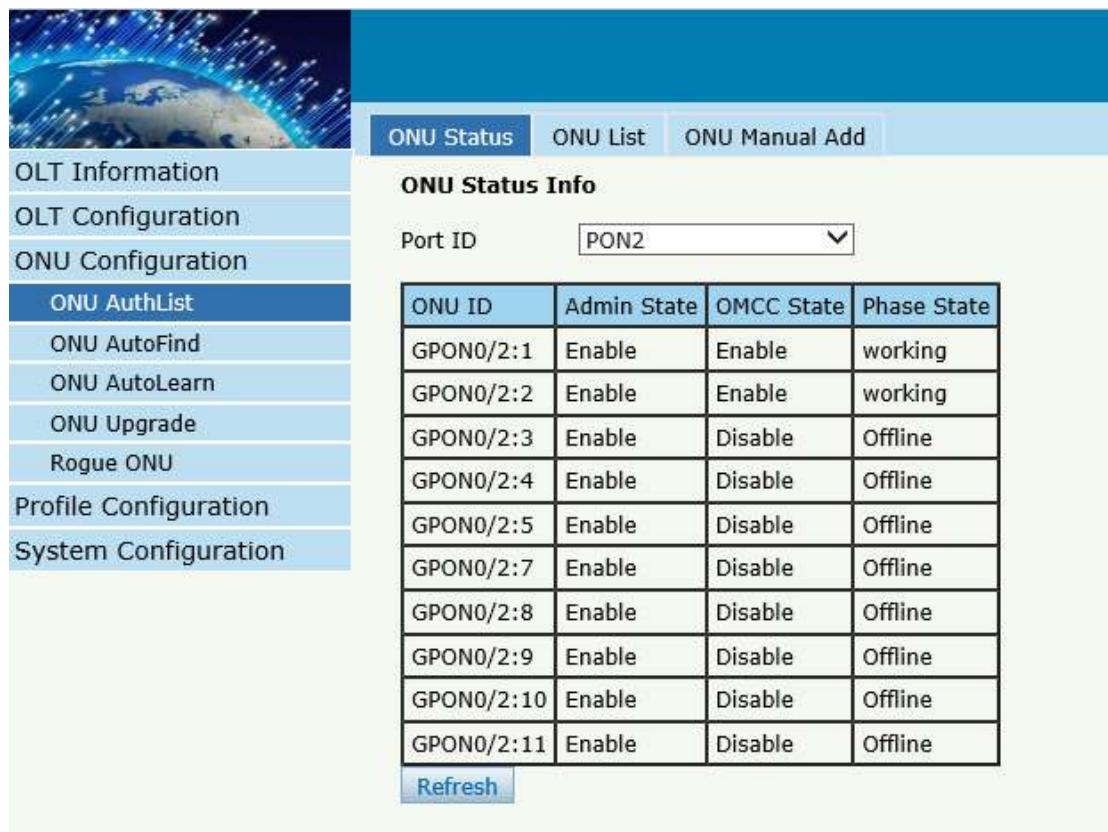
4.1.1 ONU Status

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



The screenshot shows the 'ONU Status' tab selected in a navigation bar. A dropdown menu for 'Port ID' is set to 'PON2'. Below this is a table titled 'ONU Status Info' with the following data:

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

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

Figure 4-1 ONU Status

Page 40

☎ 1800-209-3444 (Toll Free)

✉ helpdesk@digisol.com ⏱ sales@digisol.com 🌐 www.digisol.com

4.1.2 ONU List

ONU Configuration→ONU AuthList→ONU List

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



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

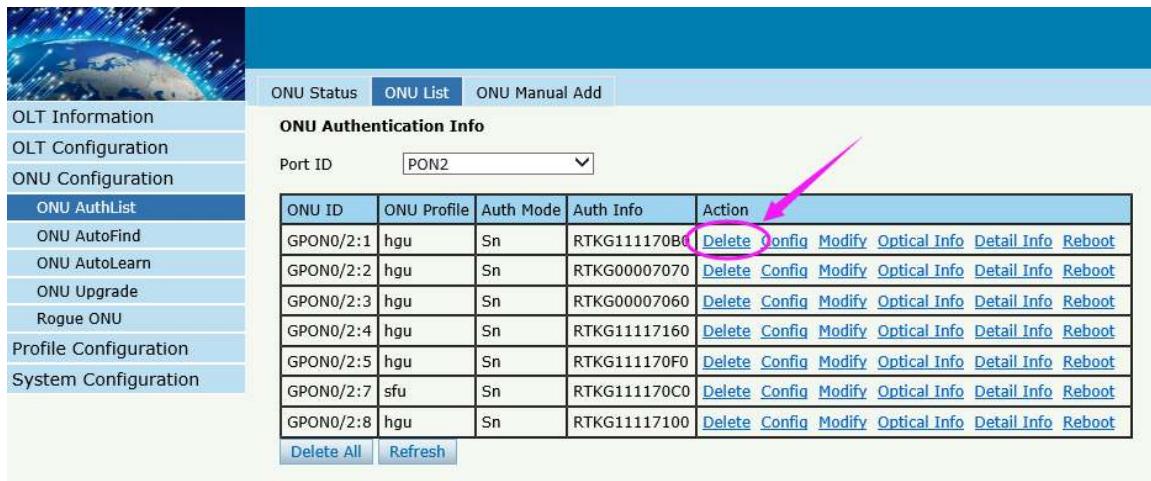
[Delete All](#) [Refresh](#)

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 Authentication Info

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

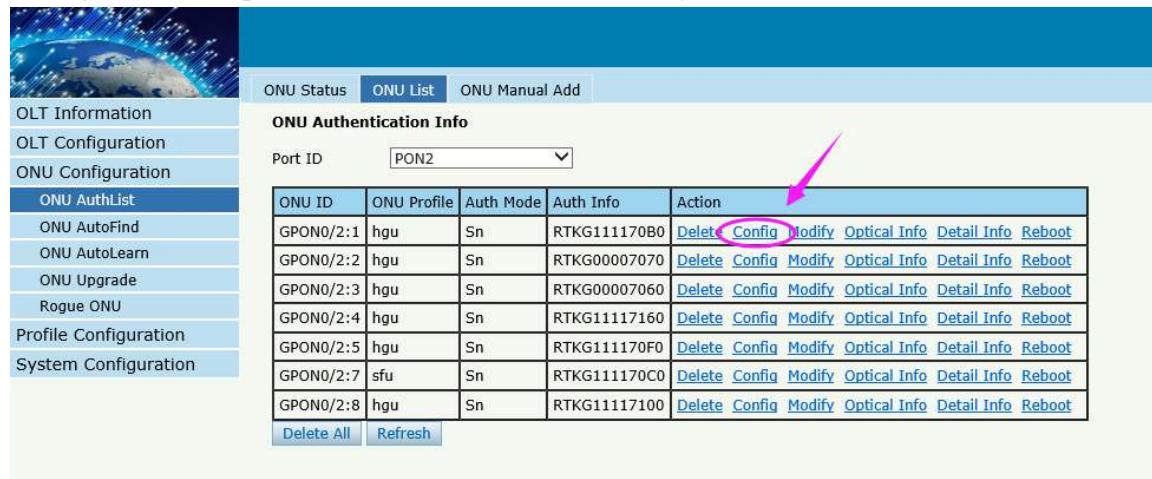
[Delete All](#) [Refresh](#)

Figure 4-3Delete ONU

4.1.2.2 Config

ONU Configuration→ONU AuthList→ONU List

Configure ONU parameter information which you selected,



ONU Authentication Info

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

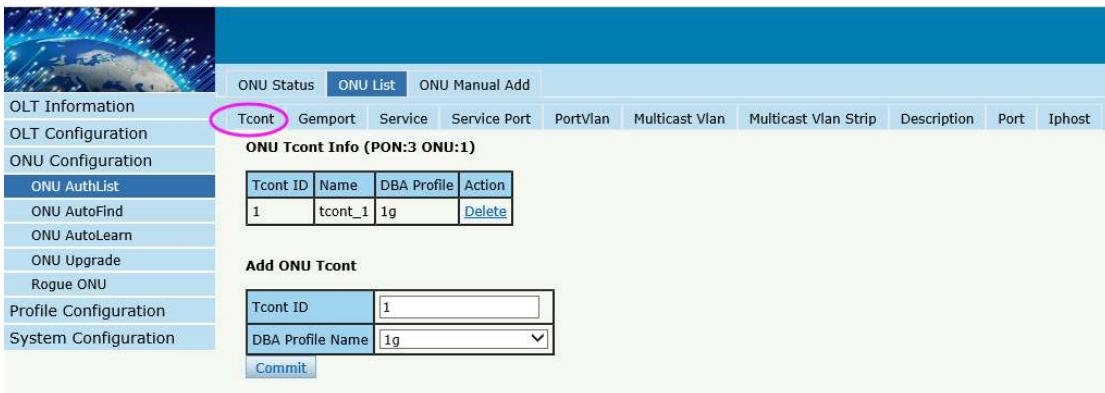


Figure 4-5 Create Tcont

Create a gempport ID and bind tcont ID

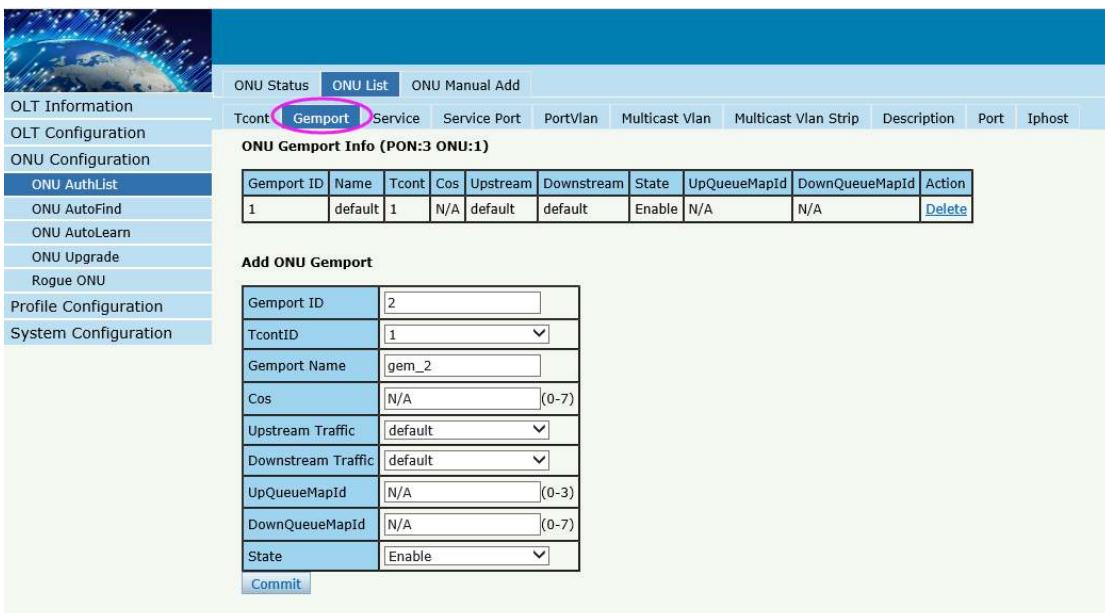
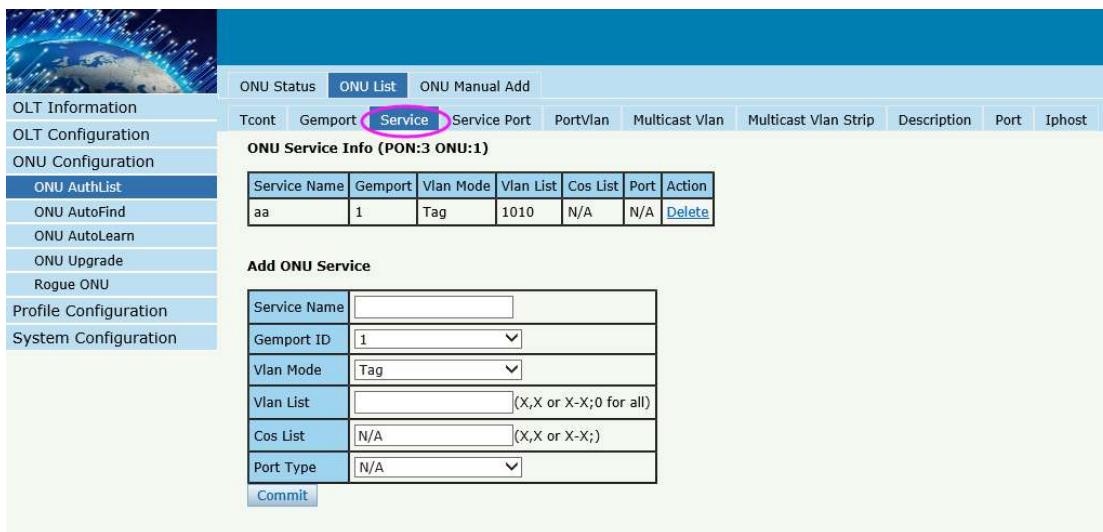


Figure 4-6 Create gempport

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



ONU Service Info (PON:3 ONU:1)						
Service Name	Gempport	Vlan Mode	Vlan List	Cos List	Port	Action
aa	1	Tag	1010	N/A	N/A	Delete

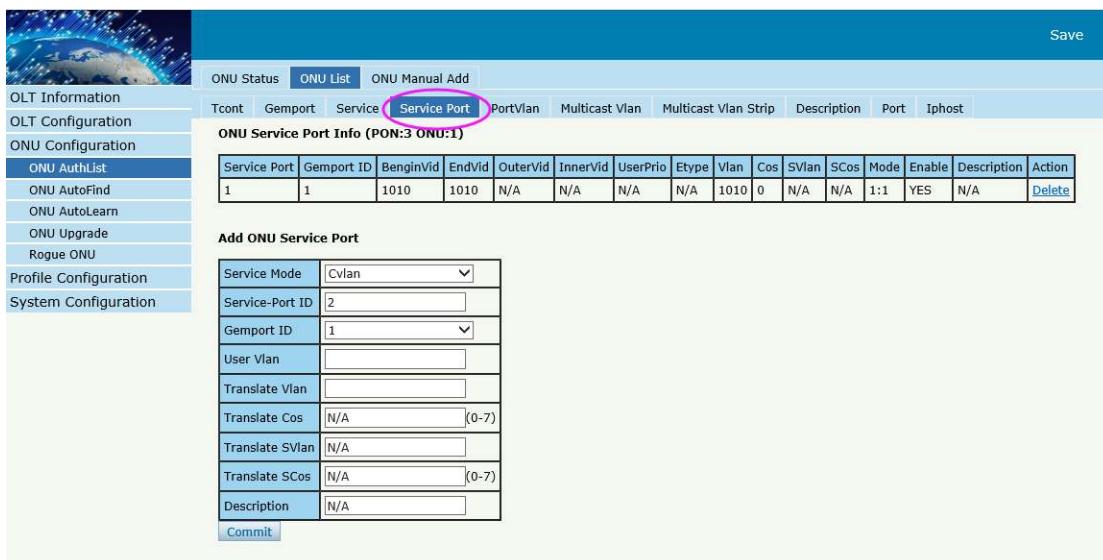
Add ONU Service

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

[Commit](#)

Figure 4-7 Create service

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



ONU Service Port Info (PON:3 ONU:1)															
Service Port	Gempport ID	BenginVid	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	Cvlan
Service-Port ID	2
Gempport ID	1
User Vlan	
Translate Vlan	
Translate Cos	(0-7)
Translate SVlan	
Translate SCos	(0-7)
Description	(N/A)

[Commit](#)

Figure 4-8 create service port

Set the VLAN mode of the ONU's port.

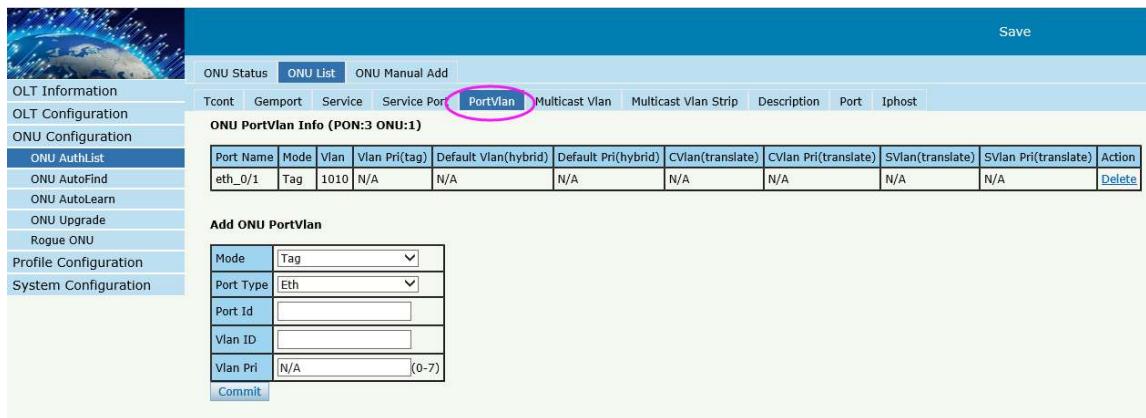


Figure 4-9 configure port VLAN mode

Set the Multicast VLAN of ONU

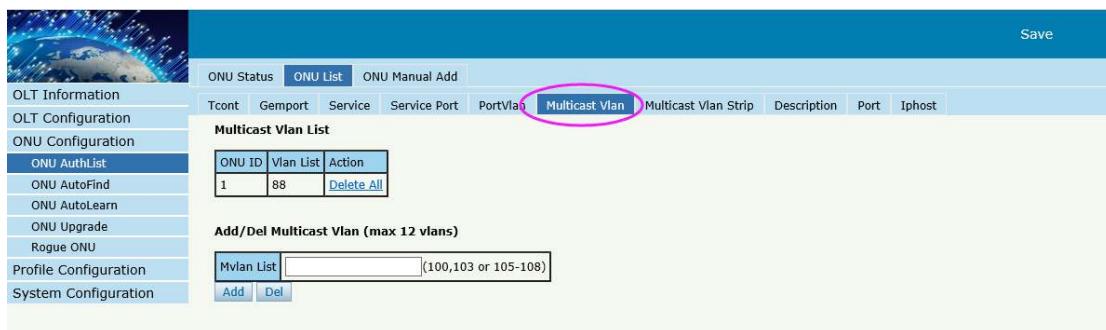


Figure 4-10 configure multicast VLAN

Set the Multicast VLAN mode of ONU's port

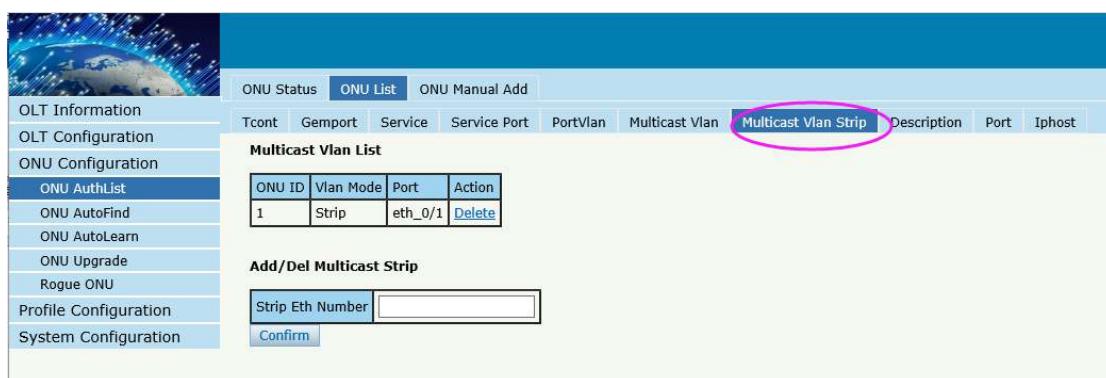


Figure 4-11 Configure multicast VLAN mode

Description for ONU

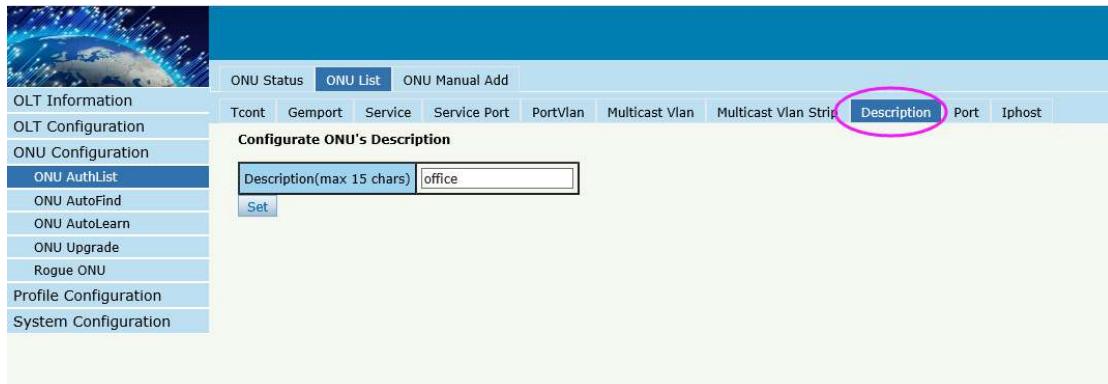


Figure 4-12 ONU's description

Port Basic State of ONU

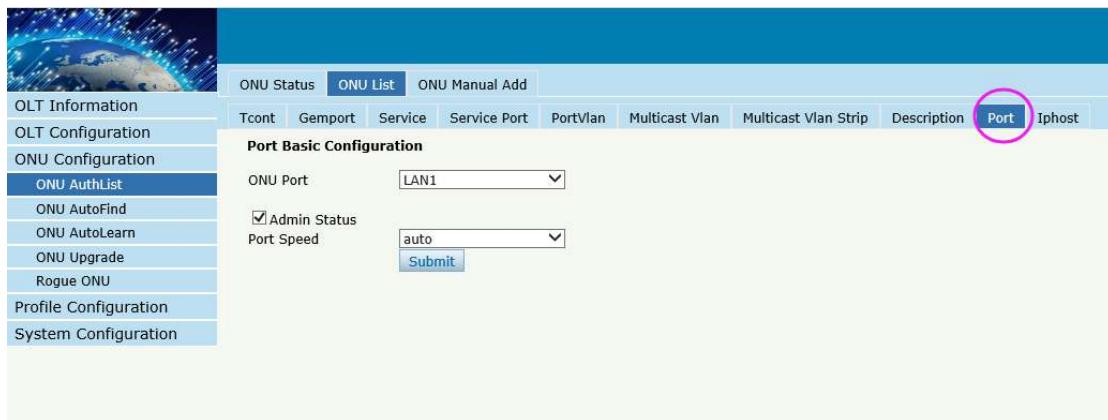


Figure 4-13 ONU's port state

Create Iphost for ONU wan connection.

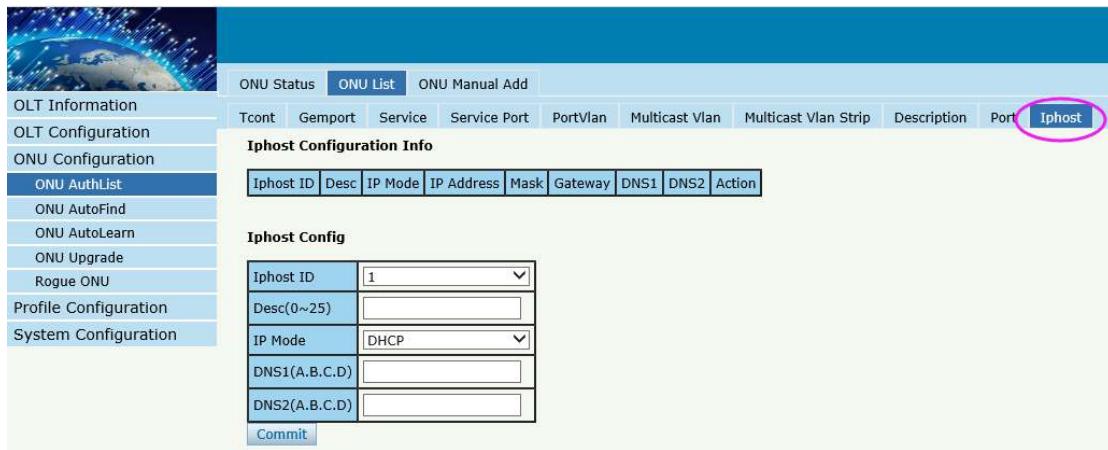
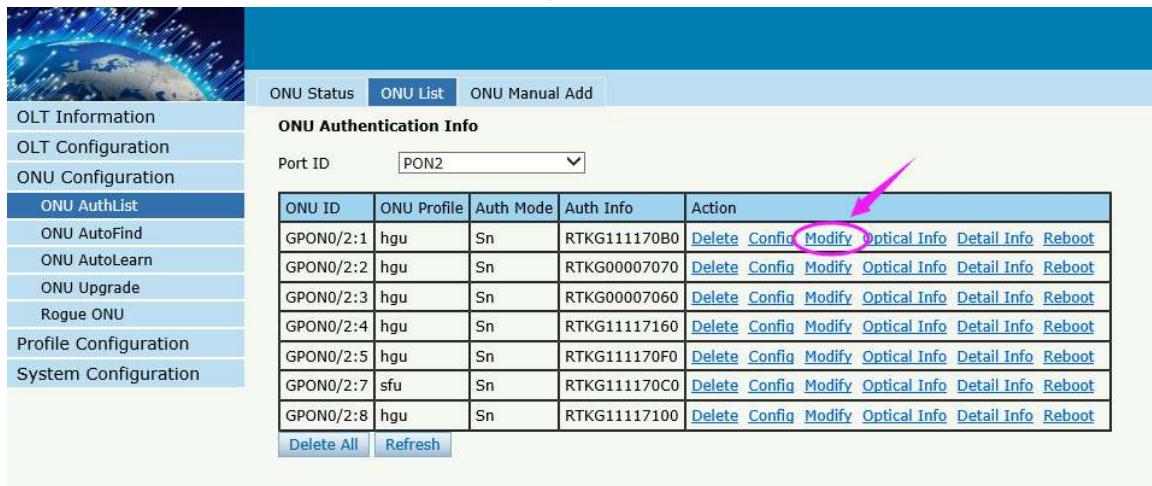


Figure 4-14 Configure IPhost

4.1.2.3 Modify

ONU Configuration→ONU AuthList→ONU List

Modify SN or LOID of ONU which you selected,



ONU Modify(PON:2 ONU1)

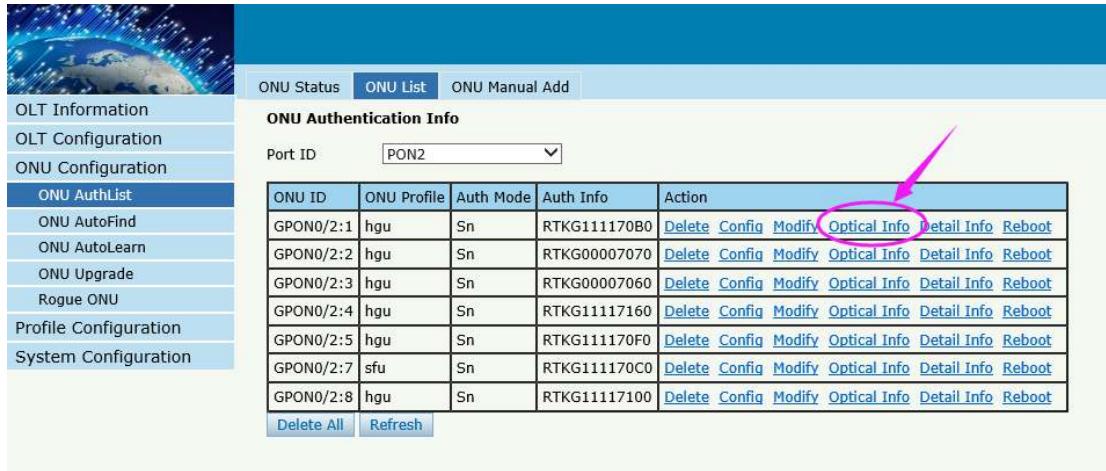
Auth Mode	<input type="text" value="Sn"/>
ONU Sn	<input type="text"/>
Submit	

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.



The screenshot shows the 'ONU Authentication Info' section of the configuration interface. On the left, there's a sidebar with various configuration tabs like OLT Information, OLT Configuration, and ONU Configuration. The main area has tabs for ONU Status, ONU List (which is selected), and ONU Manual Add. Under 'ONU Authentication Info', there's a dropdown for 'Port ID' set to 'PON2'. Below is a table with columns: ONU ID, ONU Profile, Auth Mode, Auth Info, and Action. The table lists eight ONUs. The 'Action' column contains links for Delete, Config, Modify, Optical Info, Detail Info, and Reboot. The 'Optical Info' link for the first ONU (GPON0/2:1) is circled in pink, and a pink arrow points to it from the top right. At the bottom of the table are 'Delete All' and 'Refresh' buttons.

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

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)

Figure 4-16 Optical info of ONU

4.1.2.5 Detail Info

ONU Configuration→ONU AuthList→ONU List

Check the Detail Info of ONU which you selected,



ONU Status **ONU List** **ONU Manual Add**

ONU Authentication Info

Port ID: 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 Detail Info

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

[Back](#)

Figure 4-17 Detail info of ONU

4.1.2.6 Reboot

ONU Configuration→ONU AuthList→ONU List

Reboot ONU which you have selected,



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

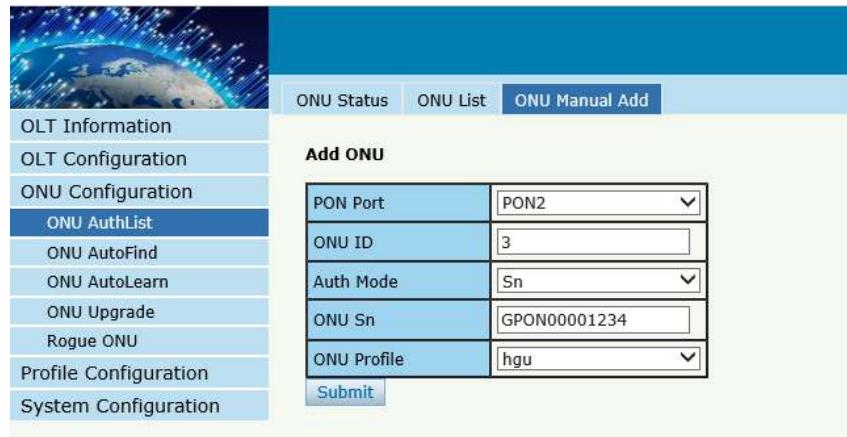
[Delete All](#) [Refresh](#)

Figure 4-18 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.’



PON Port	PON2
ONU ID	3
Auth Mode	Sn
ONU Sn	GPON00001234
ONU Profile	hgu

[Submit](#)

Figure 4-19 Manually add an ONU

[ONU Status](#) [ONU List](#) [ONU Manual Add](#)

ONU Authentication Info

Port ID ▾

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

[Delete All](#) [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.



[OLT Information](#)

[OLT Configuration](#)

[ONU Configuration](#)

[ONU AuthList](#)

[ONU AutoFind](#) **(Selected)**

[ONU AutoLearn](#)

[ONU Upgrade](#)

[Rogue ONU](#)

[Profile Configuration](#)

[System Configuration](#)

Automatic Discovery

Automatic Discovery

Port ID ▾

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

[Refresh](#)

Figure 4-20 Authentication Mode

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

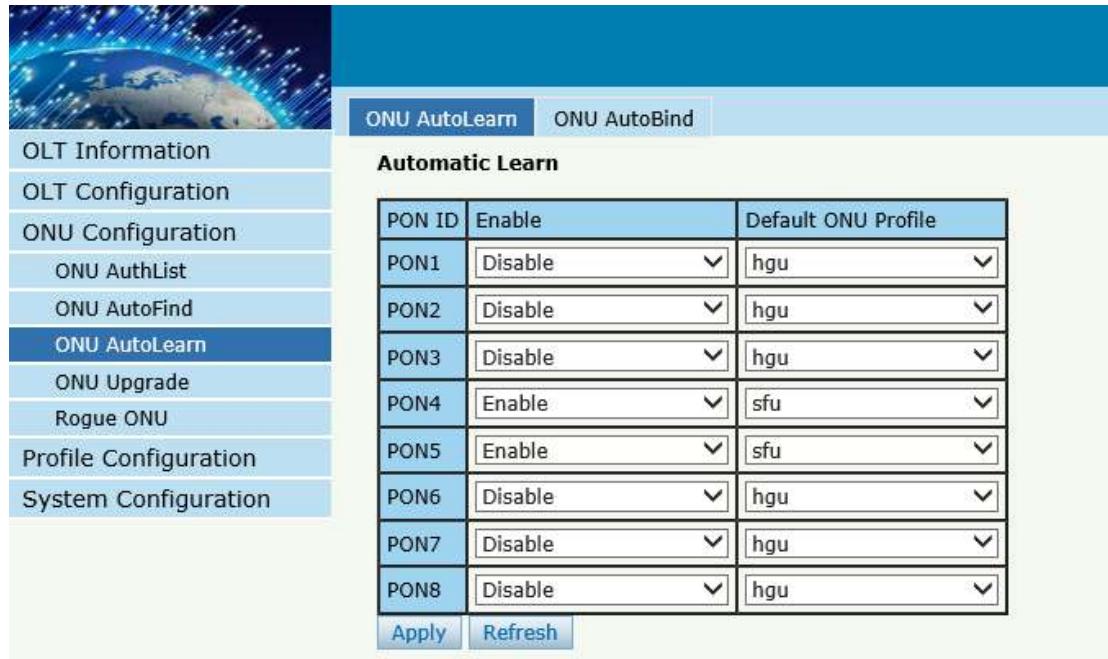
Figure 4-21 Detail info

4.3 ONU AutoLearn

4.3.1 ONU AutoLearn

Configuration→AutoLearn→ONU AutoLearn

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



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

Figure 4-22 Automatic learn

Page 53

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

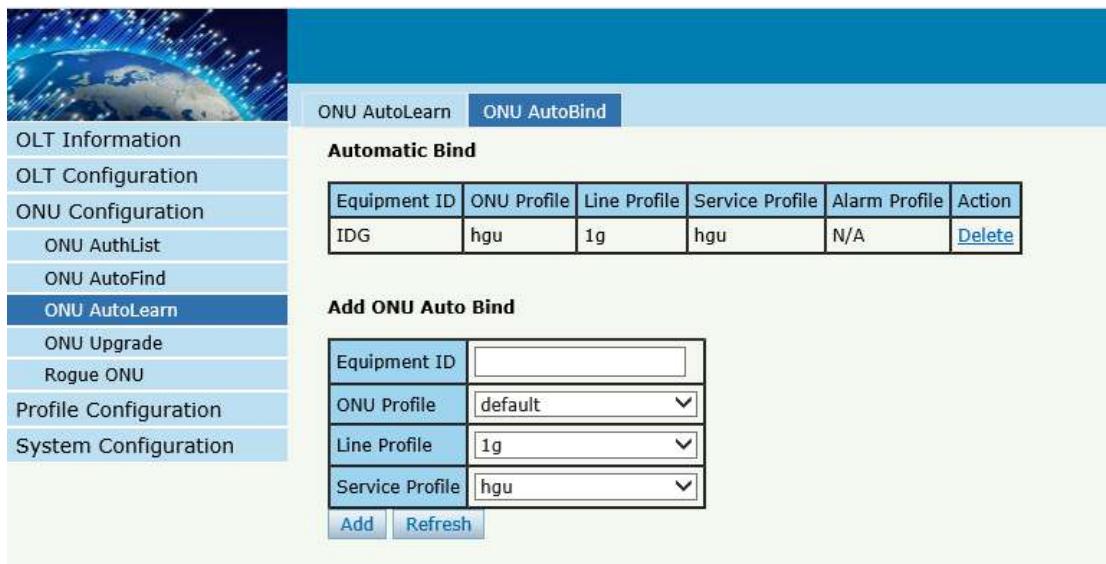


Figure 4-23 Bind profile

4.4 ONU Upgrade

ONU upgrade by OLT

4.4.1 Upload Image

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



Figure 4-24 Upload image

If the operation is successful, the following will appear

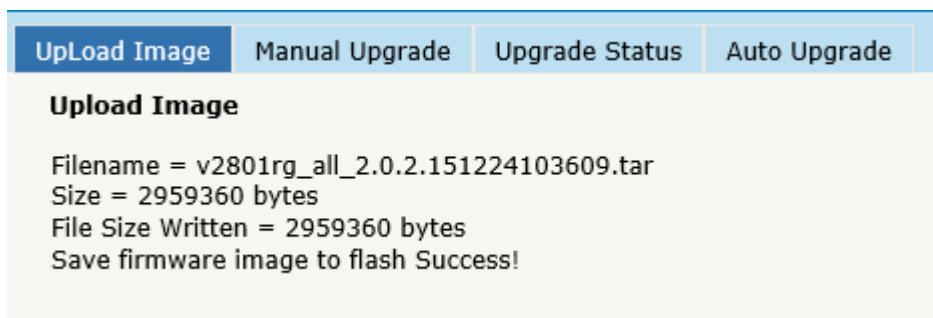


Figure 4-25 Upload info

4.4.2 Manual Upgrade

ONU Configuration→ONU Upgrade→Manual Upgrade

Select ONU which you need and click commit button

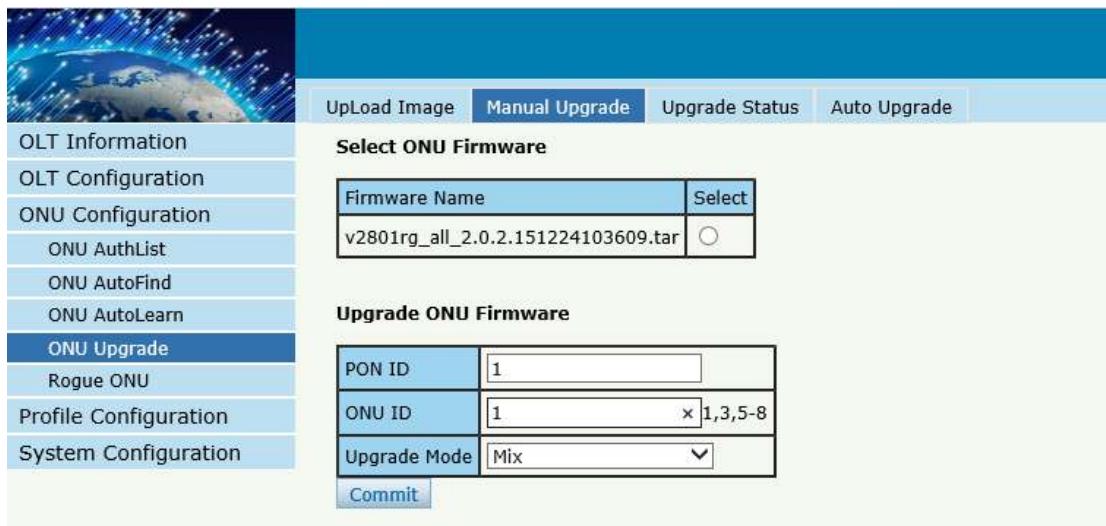


Figure 4-26 Manual Upgrade

4.4.3 Upgrade Status

ONU Configuration→ONU Upgrade→Upgrade Status

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



Figure 4-27 ONU Upgrade Status

4.3.4 Auto Upgrade

ONU Configuration→ONU Upgrade→Auto Upgrade

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

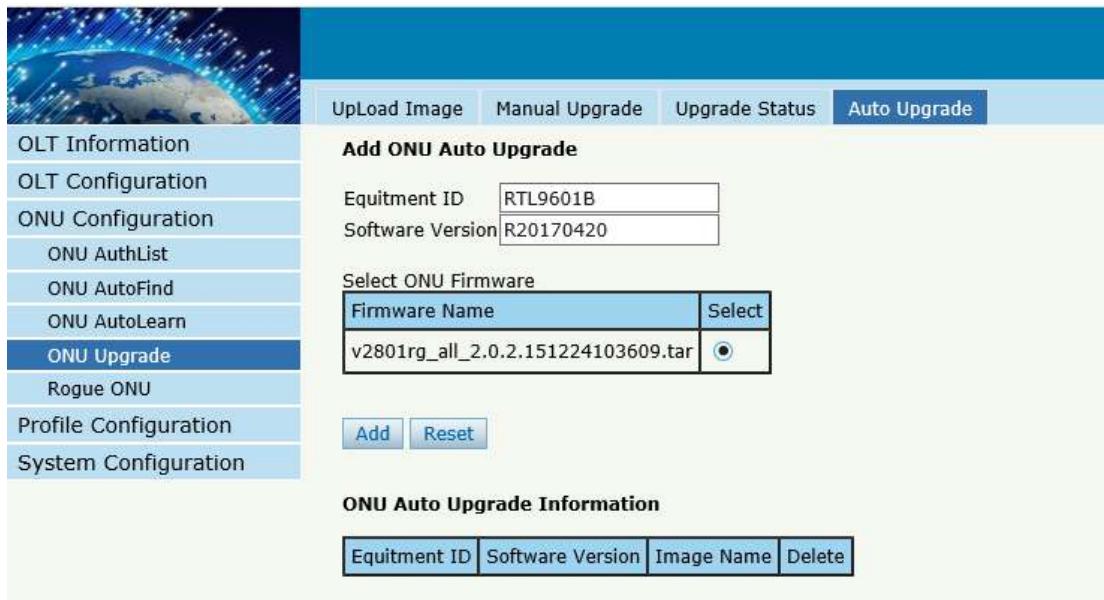


Figure 4-28 Auto Upgrade

4.5 Rogue ONU

ONU Configuration→Rogue ONU

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



Rogue ONU configuration

Rogue onu detect configuration

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

Change configuration

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

Rogue onu list

Pon	Onu	Keywords	Time	State
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.

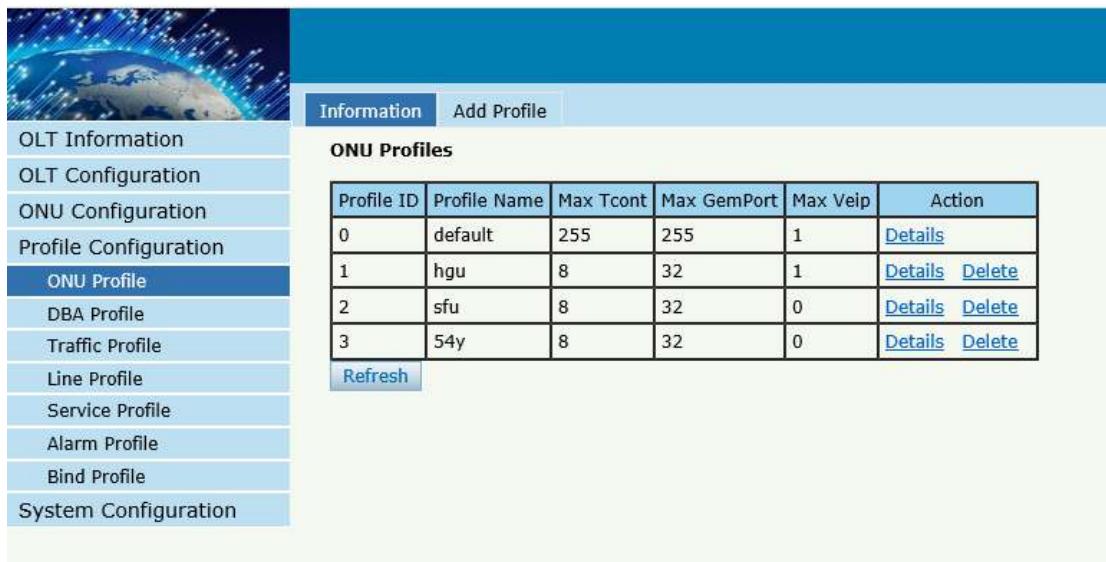
5.1 ONU Profile

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.



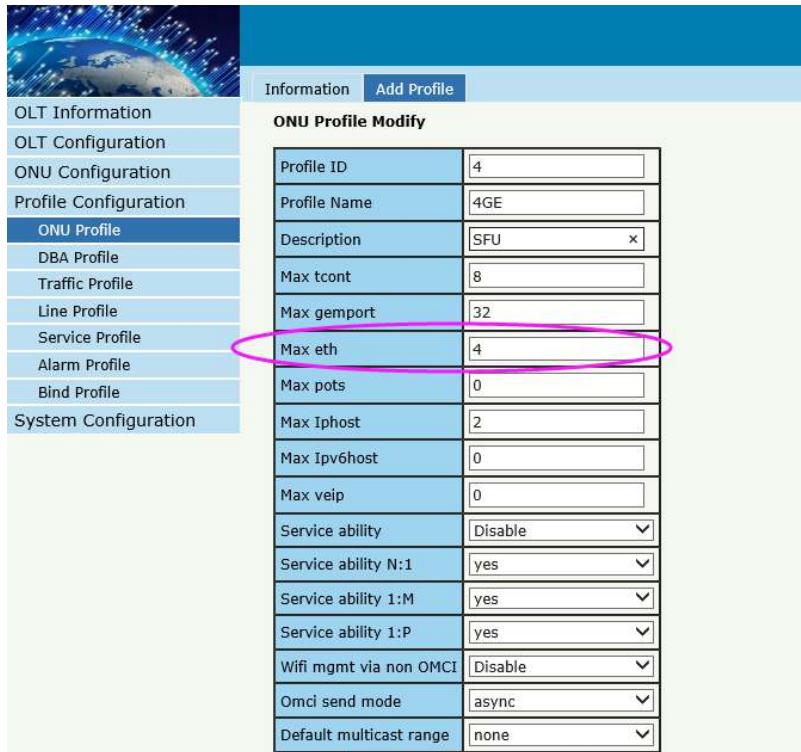
Profile ID	Profile Name	Max Tcont	Max GempPort	Max Veip	Action
0	default	255	255	1	Details Delete
1	hgu	8	32	1	Details Delete
2	sfu	8	32	0	Details Delete
3	54y	8	32	0	Details Delete

Figure 5-1 ONU profile list

5.1.2 Add profile

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

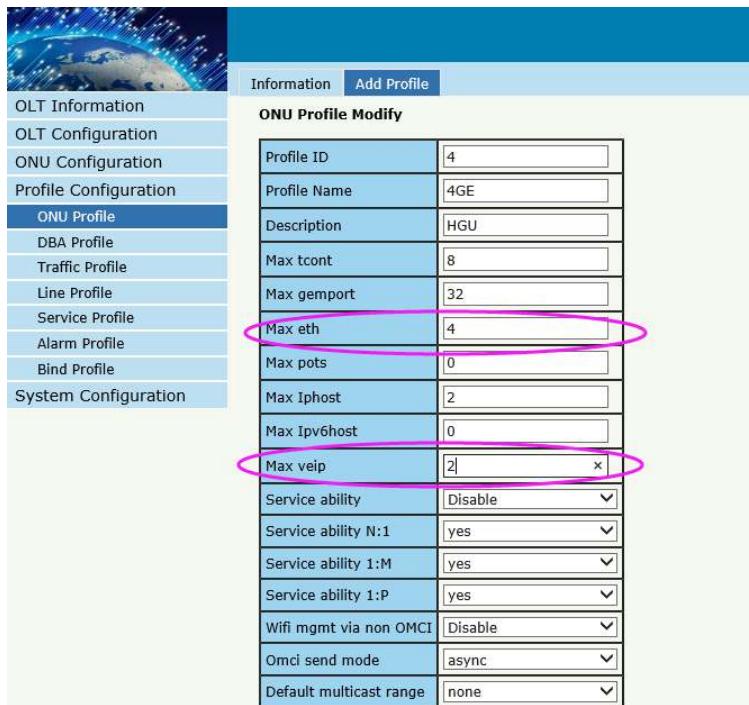
SFU mode (only using bridge mode):



ONU Profile Modify	
Profile ID	4
Profile Name	4GE
Description	SFU <input type="button" value="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 <input type="button" value="▼"/>
Service ability N:1	yes <input type="button" value="▼"/>
Service ability 1:M	yes <input type="button" value="▼"/>
Service ability 1:P	yes <input type="button" value="▼"/>
Wifi mgmt via non OMCI	Disable <input type="button" value="▼"/>
Omci send mode	async <input type="button" value="▼"/>
Default multicast range	none <input type="button" value="▼"/>

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 gempore	32
Max eth	4
Max pots	0
Max Iphost	2
Max Ipv6host	0
Max veip	2
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

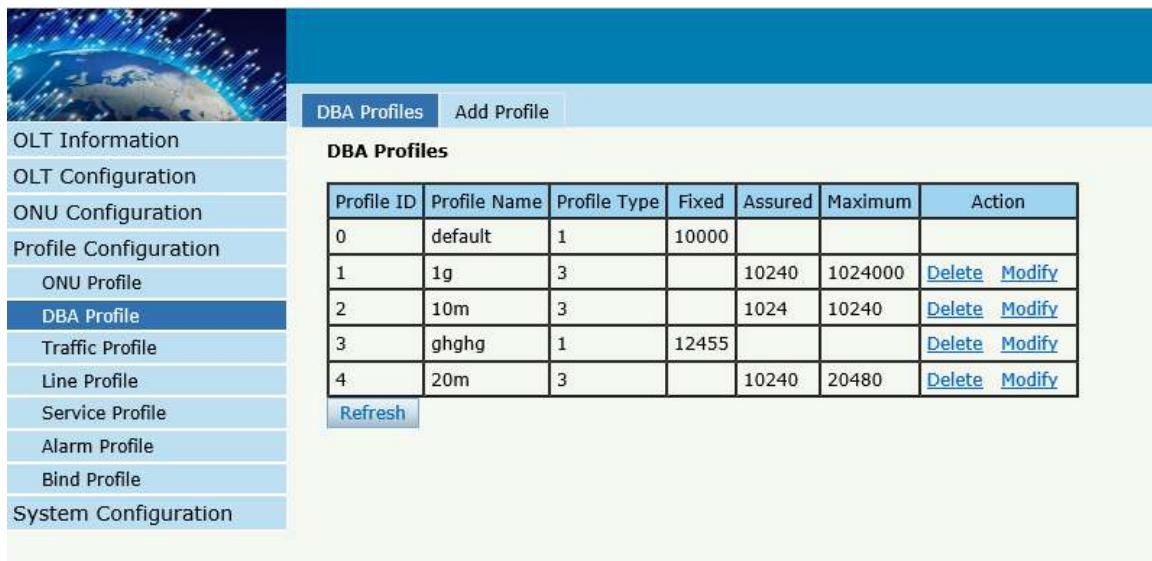
5.2 DBA Profile

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.



The screenshot shows the DIGISOL OLT User Interface. On the left, there is a vertical navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile (which is highlighted in blue), Traffic Profile, Line Profile, Service Profile, Alarm Profile, Bind Profile, and System Configuration. The main content area has a blue header bar with 'DBA Profiles' and 'Add Profile' buttons. Below this is a table titled 'DBA Profiles' with columns: Profile ID, Profile Name, Profile Type, Fixed, Assured, Maximum, and Action. The table contains five rows of data. At the bottom of the content area is a 'Refresh' button.

Profile ID	Profile Name	Profile Type	Fixed	Assured	Maximum	Action
0	default	1	10000			Delete Modify
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

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

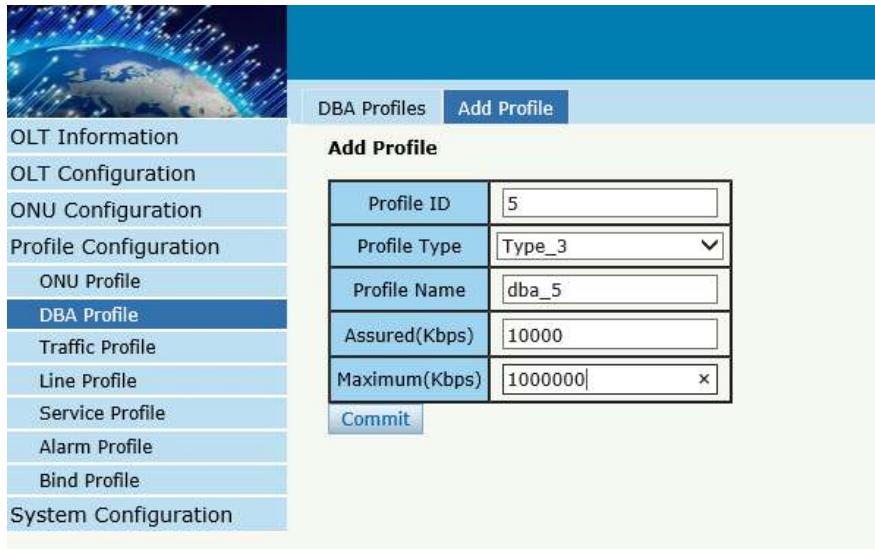


Figure 5-5 Add a DBA profile

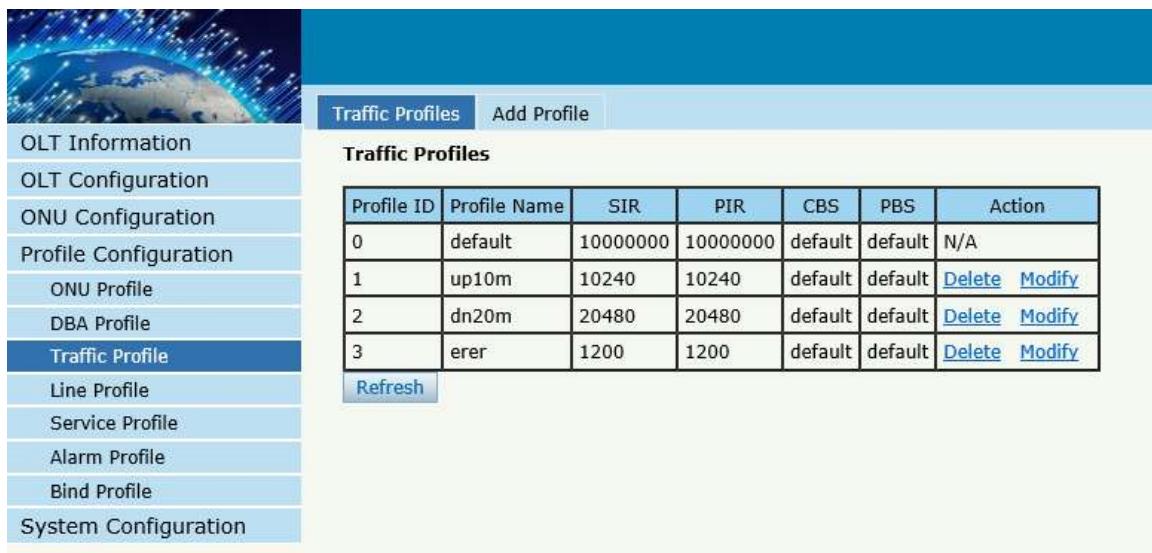
5.3 Traffic Profile

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

5.3.1 Traffic profiles

Profile Configuration→Traffic Profile → Traffic Profiles

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



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

Figure 5-6 Traffic Profile list

5.2.2 Add profile

Profile Configuration→Traffic Profile → Add Profile

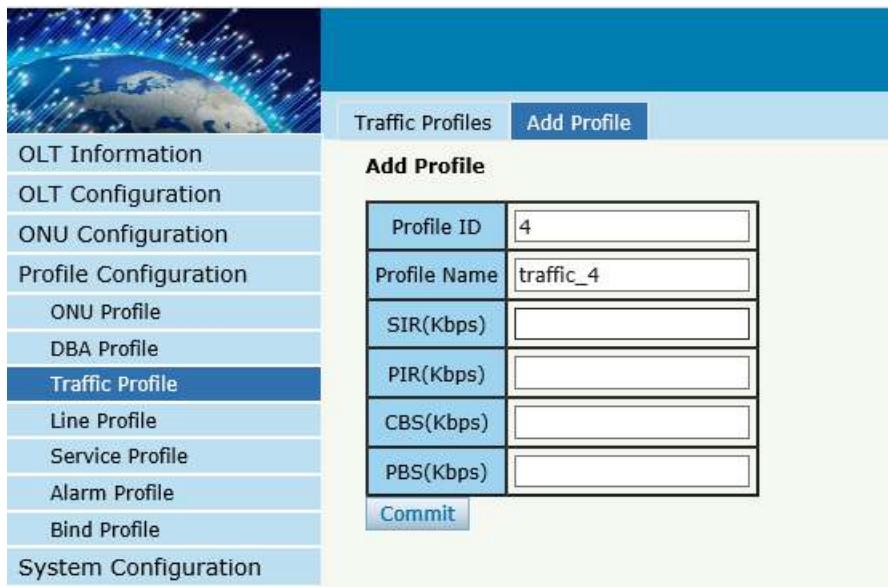
Configure Gempot to specify the upstream/downstream bandwidth.

SIR: Committed Information Rate

PIR: Peak Information Rate

CBS: Committed Burst Size

PBS: Peak Burst Size



The screenshot shows a configuration interface for an OLT. On the left is a vertical sidebar with icons and text links: 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 'Traffic Profile' link is highlighted. The main area has a blue header bar with 'Traffic Profiles' and 'Add Profile' buttons. Below is a form titled 'Add Profile' with fields for Profile ID (4), Profile Name (traffic_4), SIR(Kbps) (empty), PIR(Kbps) (empty), CBS(Kbps) (empty), PBS(Kbps) (empty), and a 'Commit' button at the bottom.

Figure 5-7 Add a traffic Profile

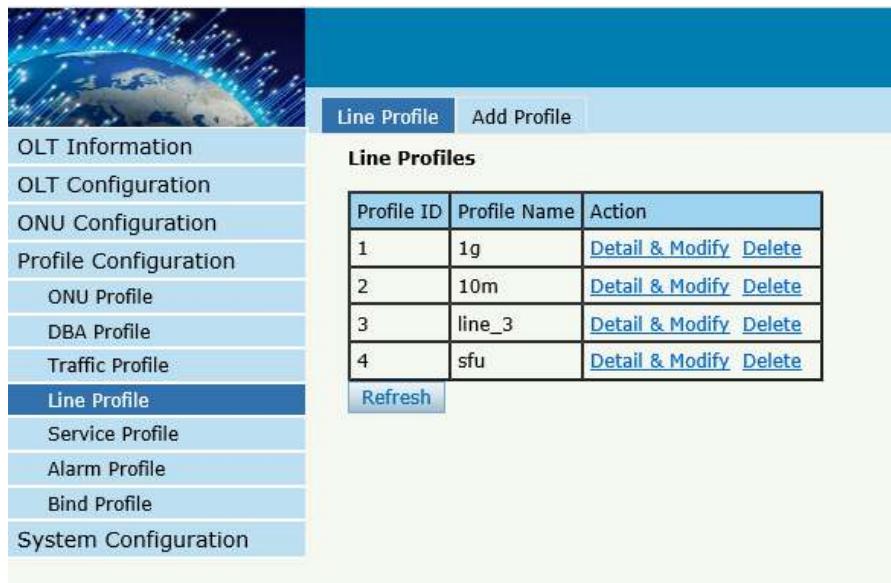
5.4 Line Profile

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

5.3.1 Line profile

Profile Configuration→Line Profile → Line Profile

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



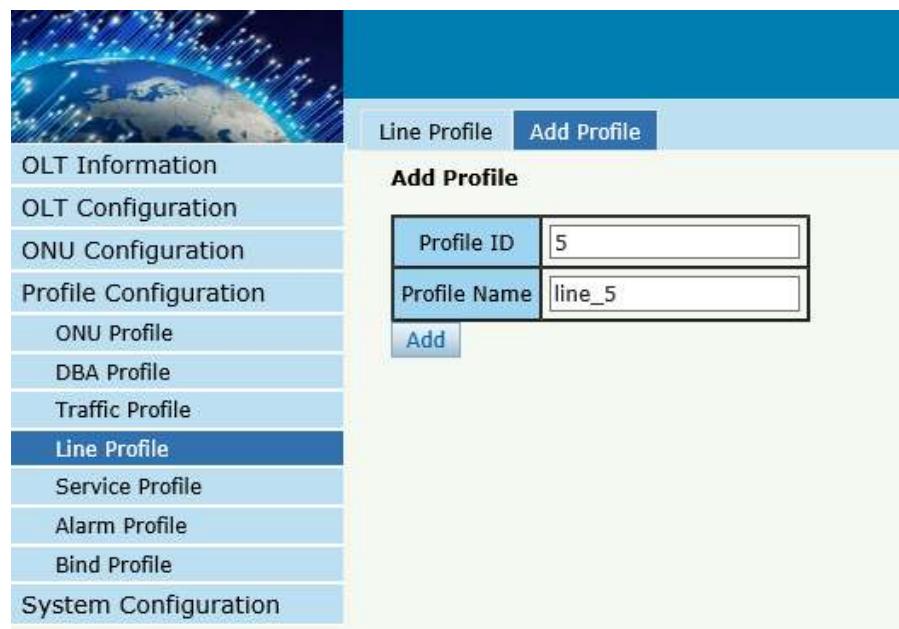
Profile ID	Profile Name	Action
1	1g	Detail & Modify Delete
2	10m	Detail & Modify Delete
3	line_3	Detail & Modify Delete
4	sfu	Detail & Modify Delete

Figure 5-8 Line Profile list

5.3.2 Add profile

Profile Configuration→Line profile→Add profile

Create a new line profile



Profile ID	5
Profile Name	line_5

Figure 5-9 Add Line Profile

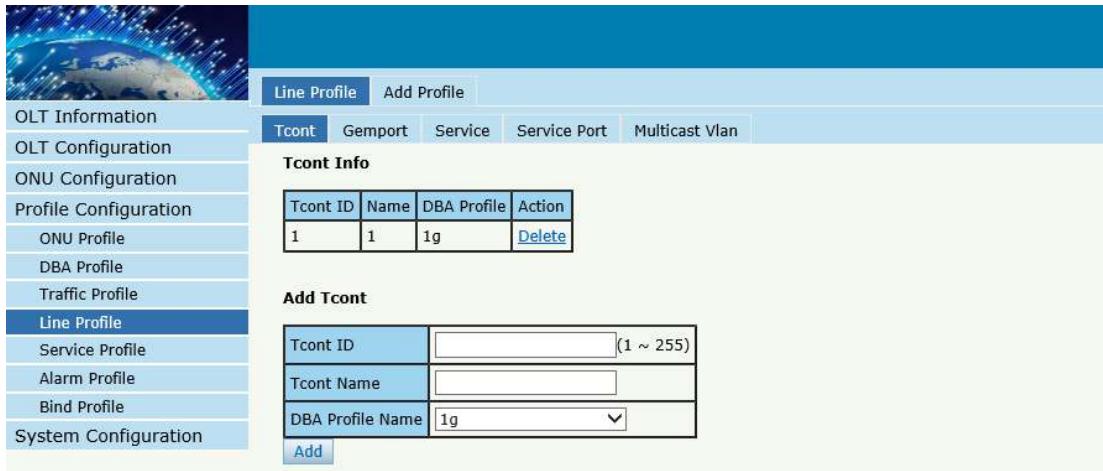
Modify the line profile parameters



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

Figure 5-10 Modify Line Profile

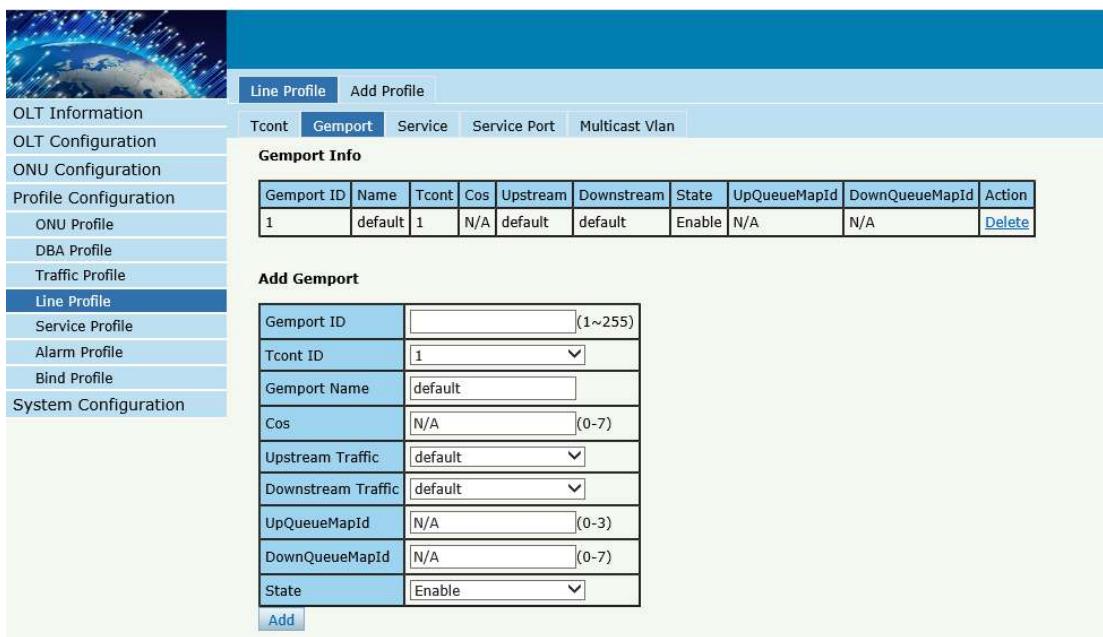
Create a tcont ID and bind DBA templates



Tcont ID	Name	DBA Profile	Action
1	1	1g	Delete

Figure 5-11 Add Tcont

Create a gempore ID and bind tcont ID



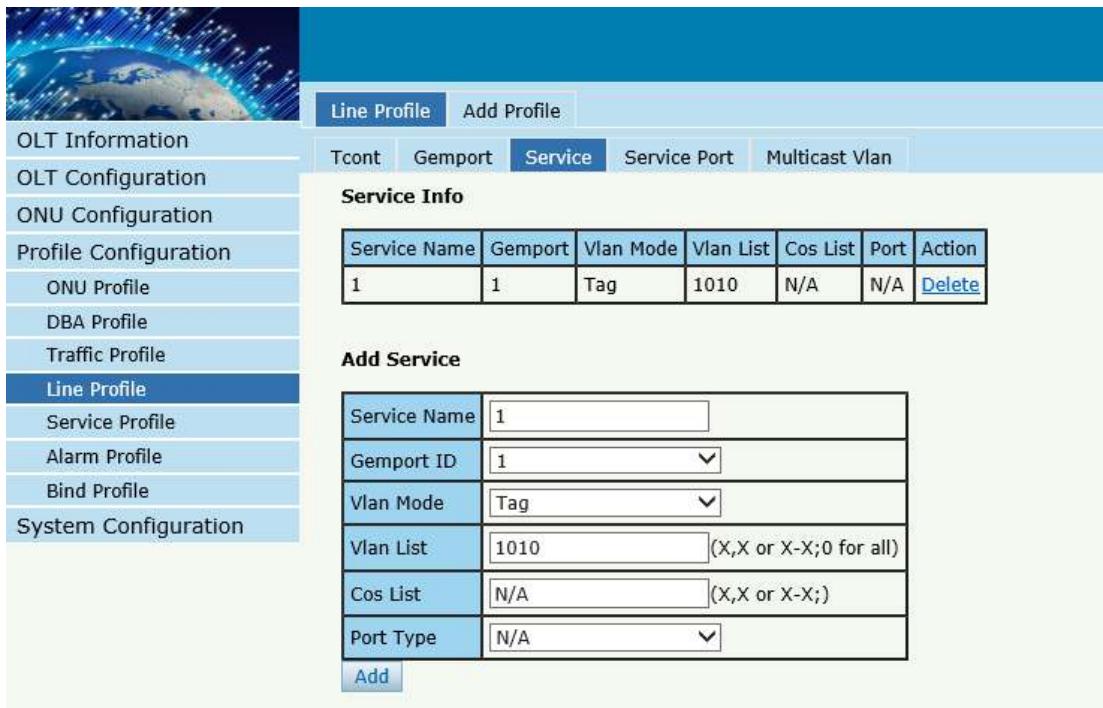
The screenshot shows the 'Line Profile' section of the configuration interface. Under the 'Gport' tab, there is a table titled 'Gport Info' showing one entry:

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

Below this is a form titled 'Add Gport' with fields for Gport ID, Tcont ID, Gport Name, Cos, Upstream Traffic, Downstream Traffic, UpQueueMapId, DownQueueMapId, and State. A blue 'Add' button is at the bottom.

Figure 5-12 Add Gport

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



The screenshot shows the 'Line Profile' section of the configuration interface. Under the 'Service' tab, there is a table titled 'Service Info' showing one entry:

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

Below this is a form titled 'Add Service' with fields for Service Name, Gport ID, Vlan Mode, Vlan List, Cos List, and Port Type. A blue 'Add' button is at the bottom.

Figure 5-13 Add service

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

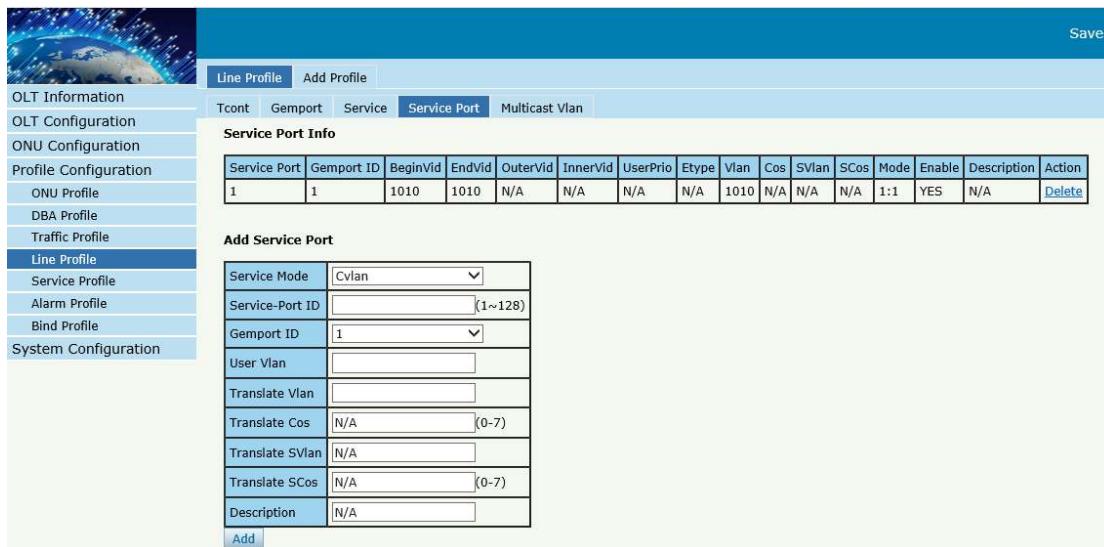


Figure 5-13 Add service port

Set the Multicast VLAN of ONU

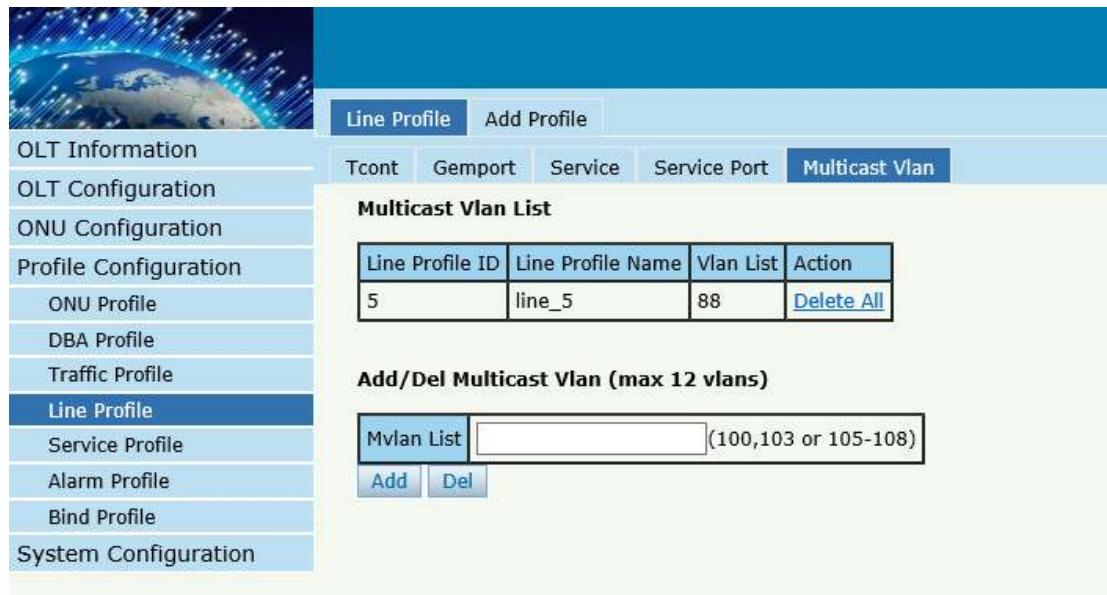


Figure 5-14 configure multicast VLAN

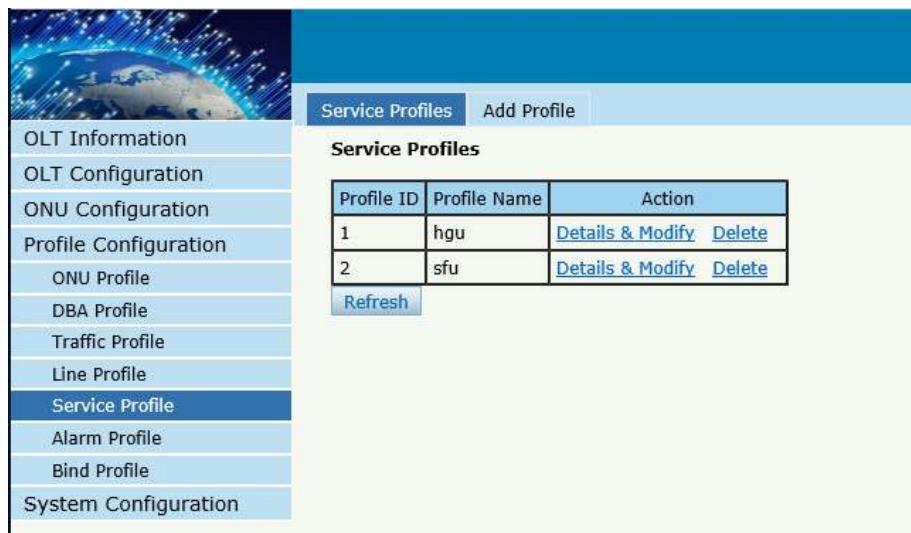
5.5 Service Profile

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

5.3.1 Line profile

Profile Configuration→Line Profile → Line Profile

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



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

Figure 5-15 Service profile list

5.3.2 Add profile

Profile Configuration→Line Profile →Add Profile

Create a new service profile

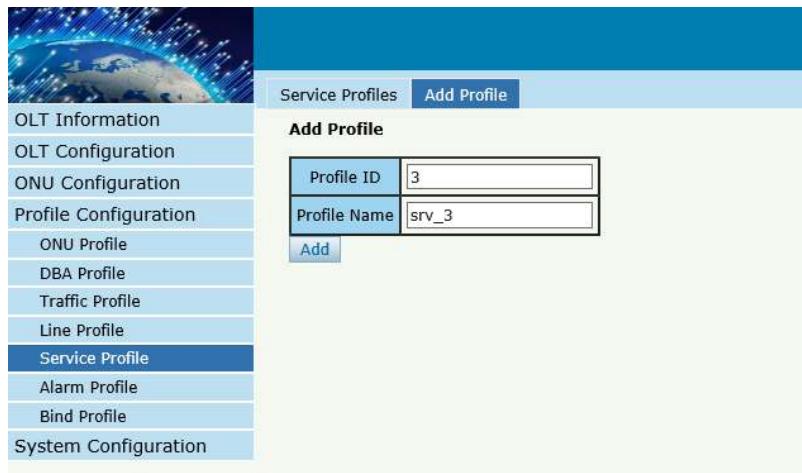


Figure 5-16 Add Service profile



Figure 5-17 Modify Service profile

Set the VLAN mode of the ONU's port.

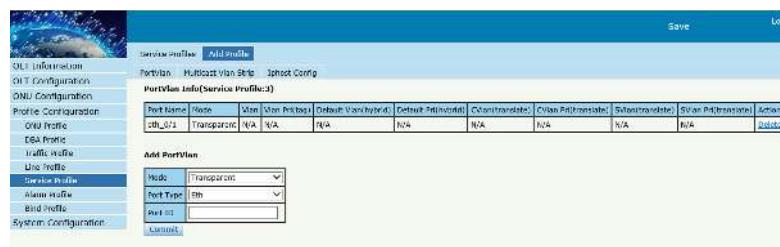


Figure 5-18 Port VLAN mode

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Set the Multicast VLAN mode of ONU's port

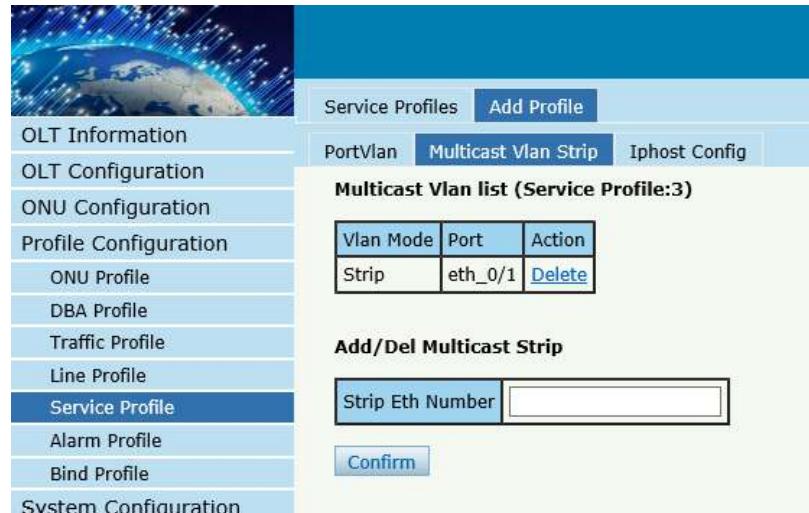


Figure 5-19 Port multicast VLAN mode

Create Iphost for ONU wan connection.

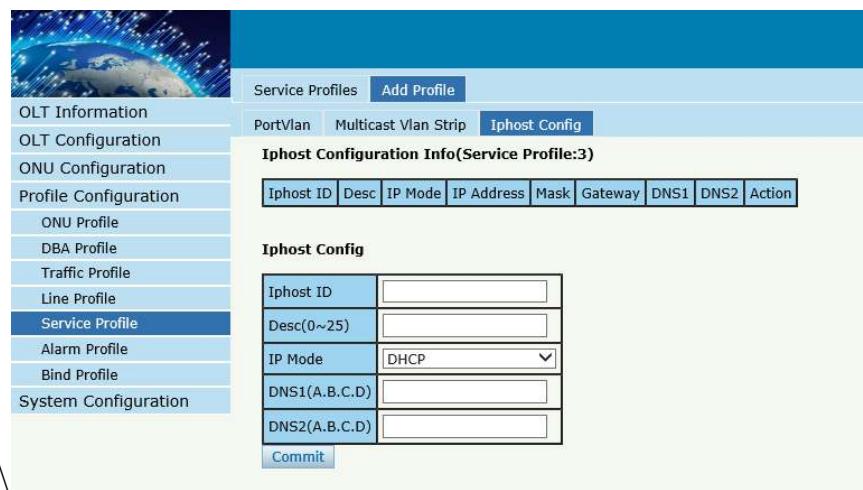


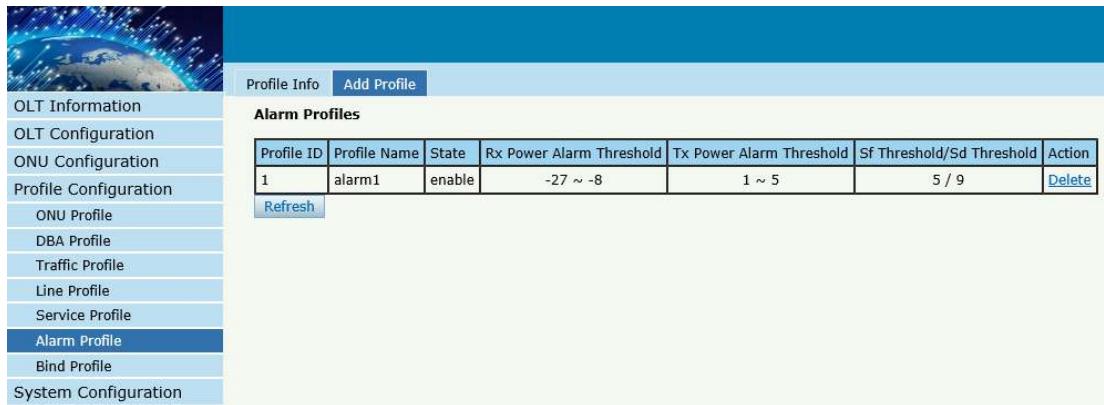
Figure 5-20 Add IPhost

5.6 Alarm Profile

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

5.4.1 Profile info

Profile Configuration→Alarm Profile →Profile info

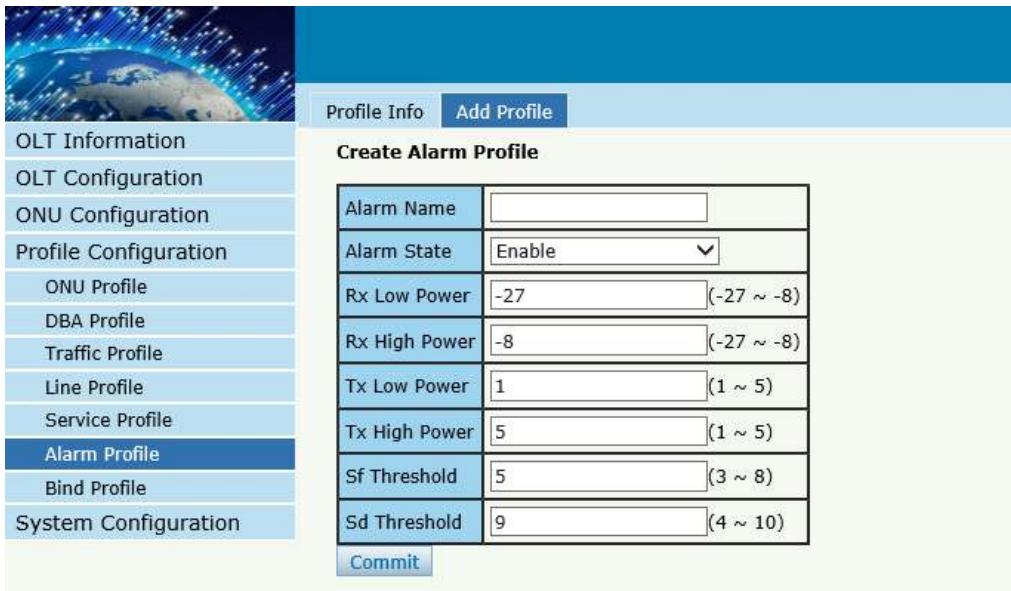


Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm1	enable	-27 ~ -8	1 ~ 5	5 / 9	Delete

Figure 5-21 Alarm Profile list

5.4.2 Add profile

Profile Configuration→Alarm Profile →Add profile



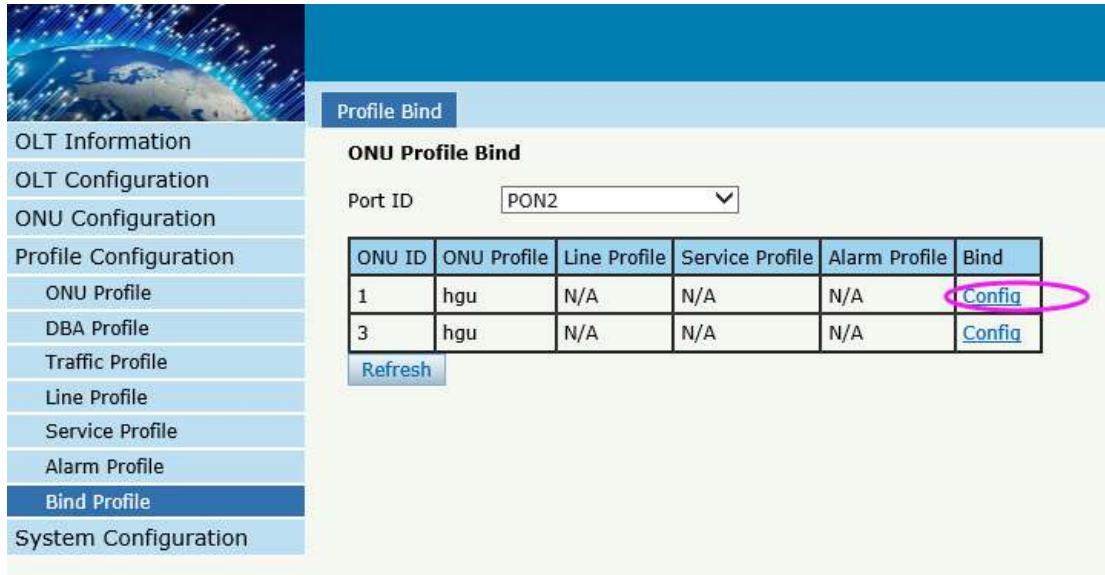
Alarm Name	<input type="text"/>
Alarm State	Enable <input type="button" value="▼"/>
Rx Low Power	-27 <input type="text"/> (-27 ~ -8)
Rx High Power	-8 <input type="text"/> (-27 ~ -8)
Tx Low Power	1 <input type="text"/> (1 ~ 5)
Tx High Power	5 <input type="text"/> (1 ~ 5)
Sf Threshold	5 <input type="text"/>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

Figure 5-21 Create Alarm profile

5.7 Bind Profile

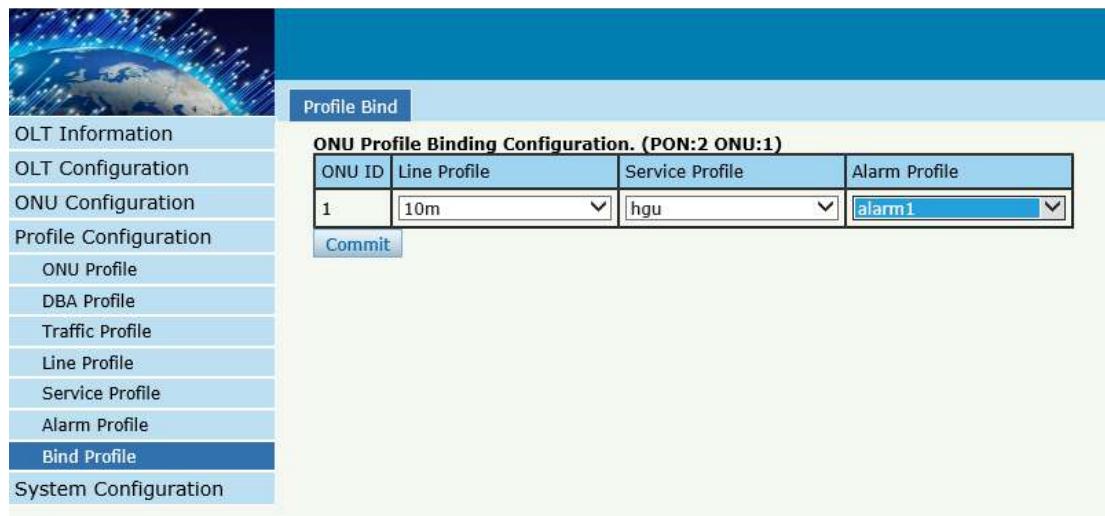
After profile is configured, it is necessary to bind it to ONU.

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

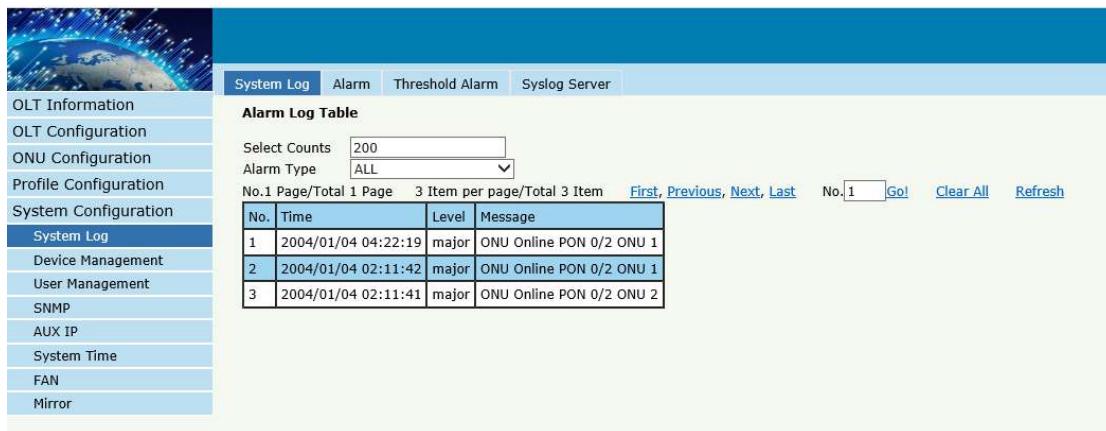
Chapter 6 System Configuration

This chapter is about the global management of OLT.

6.1 System Log

6.1.1 System Log

System Configuration→System Log



The screenshot shows the 'System Log' tab selected in the navigation bar. The main area displays an 'Alarm Log Table' with the following data:

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".

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

Figure 6-2 Alarm

6.1.3 Threshold Alarm

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

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

Submit **Reset**

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

Submit **Reset**

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**.

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

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)

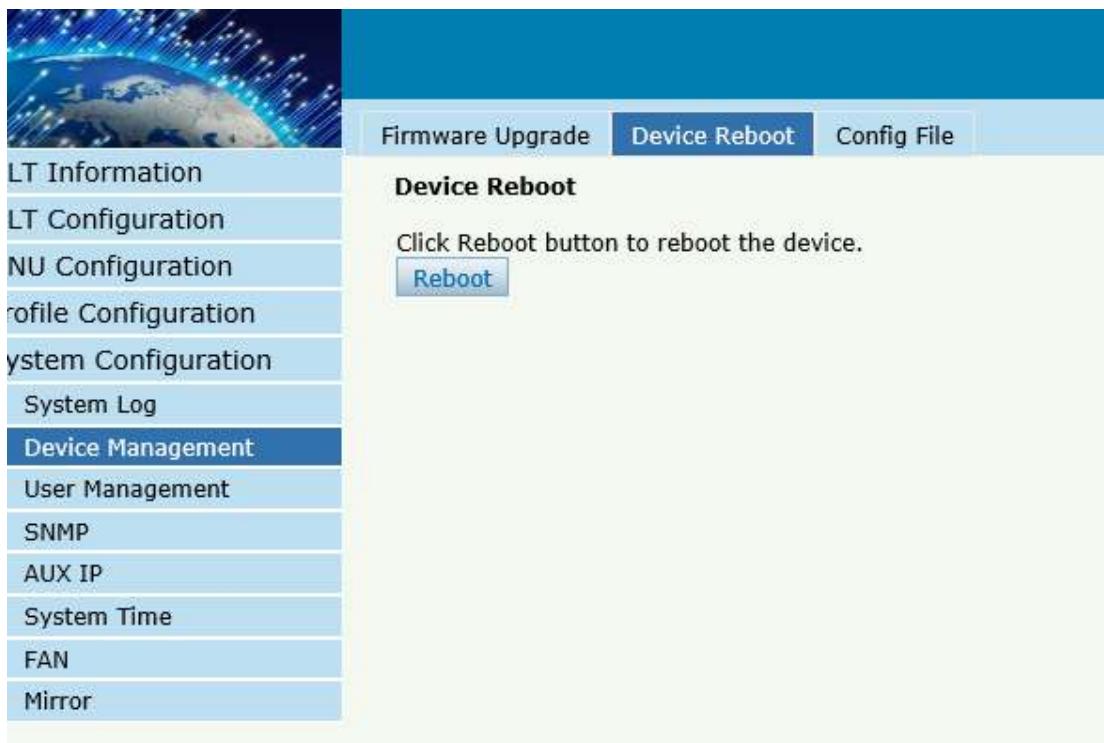
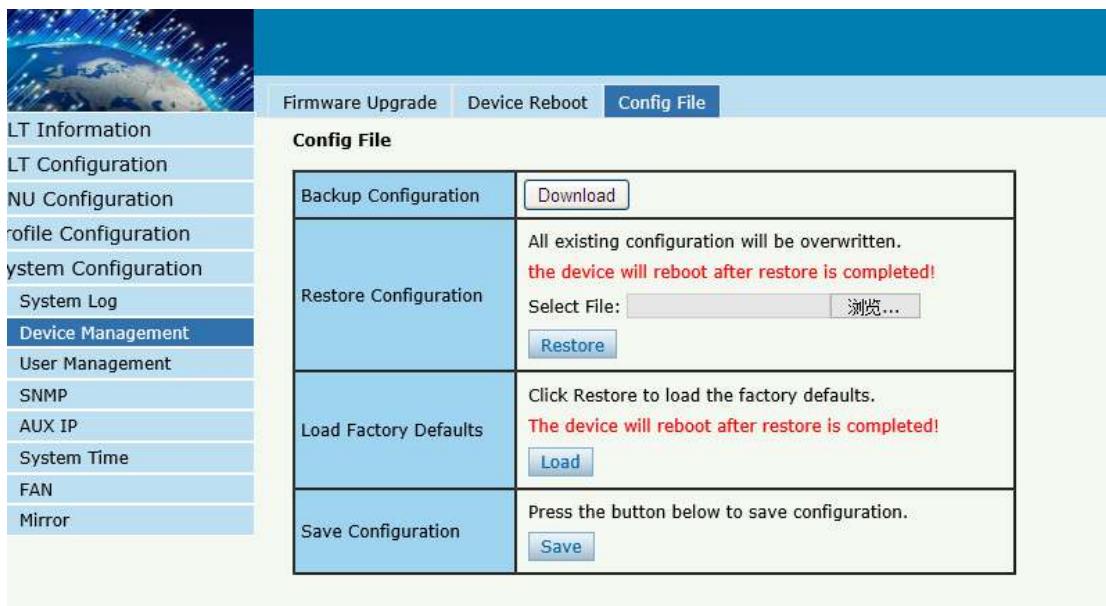


Figure 6-6 Device Reboot

6.2.3 Config File

System Configuration→Device Management →Config File,

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



The screenshot shows the 'File Configuration' section of the DIGISOL DG-GO4300 Series OLT User Manual. The left sidebar contains navigation links: LT Information, LT Configuration, NU Configuration, Profile Configuration, System Configuration, System Log, Device Management (highlighted in blue), User Management, SNMP, AUX IP, System Time, FAN, and Mirror. The main content area has tabs: Firmware Upgrade, Device Reboot, and Config File (highlighted in blue). The 'Config File' tab displays four options in a grid:

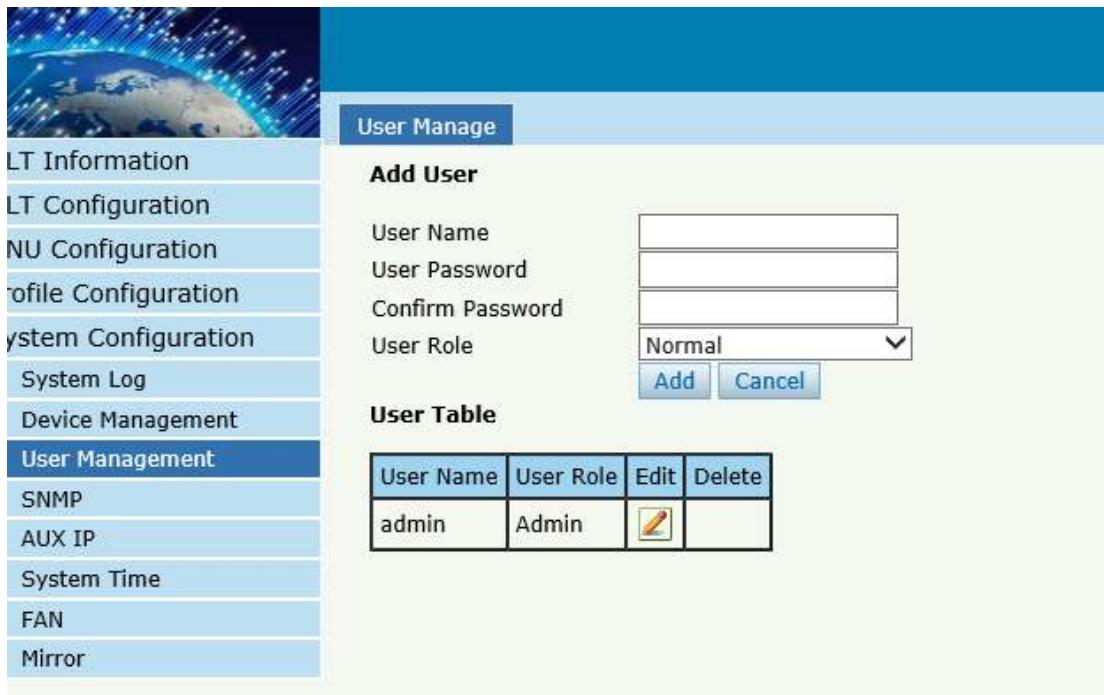
Backup Configuration	Download
Restore Configuration	All existing configuration will be overwritten. The device will reboot after restore is completed! Select File: <input type="text"/> 浏览... Restore
Load Factory Defaults	Click Restore to load the factory defaults. The device will reboot after restore is completed! Load
Save Configuration	Press the button below to save configuration. Save

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.



User Manage

Add User

User Name	<input type="text"/>
User Password	<input type="password"/>
Confirm Password	<input type="password"/>
User Role	Normal <input type="button" value="▼"/>

User Table

User Name	User Role	Edit	Delete
admin	Admin		<input type="button" value="Delete"/>

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 <input type="text"/> Access Right <input type="button" value="Read-Only"/> <input type="button" value="Add"/> Community Table <table border="1"> <thead> <tr> <th>Community Name</th> <th>Access Right</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>public</td> <td>Read-Only</td> <td></td> </tr> <tr> <td>private</td> <td>Read-Write</td> <td></td> </tr> </tbody> </table>			Community Name	Access Right	Delete	public	Read-Only		private	Read-Write	
Community Name	Access Right	Delete									
public	Read-Only										
private	Read-Write										
Add Trap Host IP <input type="text"/> UDP Port <input type="text" value="162"/> (1-65535) Community Name <input type="text" value="public"/> SNMP Version <input type="button" value="1"/> <input type="button" value="Add"/> Trap Table <table border="1"> <thead> <tr> <th>Host IP</th> <th>UDP Port</th> <th>SNMP Version</th> <th>Community Name</th> <th>Delete</th> </tr> </thead> </table>			Host IP	UDP Port	SNMP Version	Community Name	Delete				
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 <input type="text"/> Subtree <input type="text"/> (Type: Object Identifier) View Type <input type="text"/> include <input type="button" value="Add"/>								
View Table <table border="1"> <thead> <tr> <th>View Name</th> <th>Subtree</th> <th>View type</th> <th>Delete</th> </tr> </thead> </table>			View Name	Subtree	View type	Delete		
View Name	Subtree	View type	Delete					
Add Group Group Name <input type="text"/> Access Level <input type="text"/> noauth Read View <input type="text"/> Write View <input type="text"/> Notify View <input type="text"/> <input type="button" value="Add"/>								
Group Table <table border="1"> <thead> <tr> <th>Group Name</th> <th>Access Level</th> <th>Read View</th> <th>Write View</th> <th>Notify View</th> <th>Delete</th> </tr> </thead> </table>			Group Name	Access Level	Read View	Write View	Notify View	Delete
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 <input type="text"/> UDP Port <input type="text"/> 162 (1-65535) User Name <input type="text"/> User Level <input type="text"/> noauth Tag List <input type="text"/> trap Timeout <input type="text"/> (1-400000000) Retry Count <input type="text"/> (1-100) <input type="button" value="Add"/>											
Trap Table <table border="1"> <thead> <tr> <th>Host IP</th> <th>UDP Port</th> <th>Version</th> <th>User Name</th> <th>User Level</th> <th>Tag List</th> <th>Timeout</th> <th>Retry Count</th> <th>Delete</th> </tr> </thead> </table>			Host IP	UDP Port	Version	User Name	User Level	Tag List	Timeout	Retry Count	Delete
Host IP	UDP Port	Version	User Name	User Level	Tag List	Timeout	Retry Count	Delete			

Figure 6-11: SNMP V3 Trap

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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.

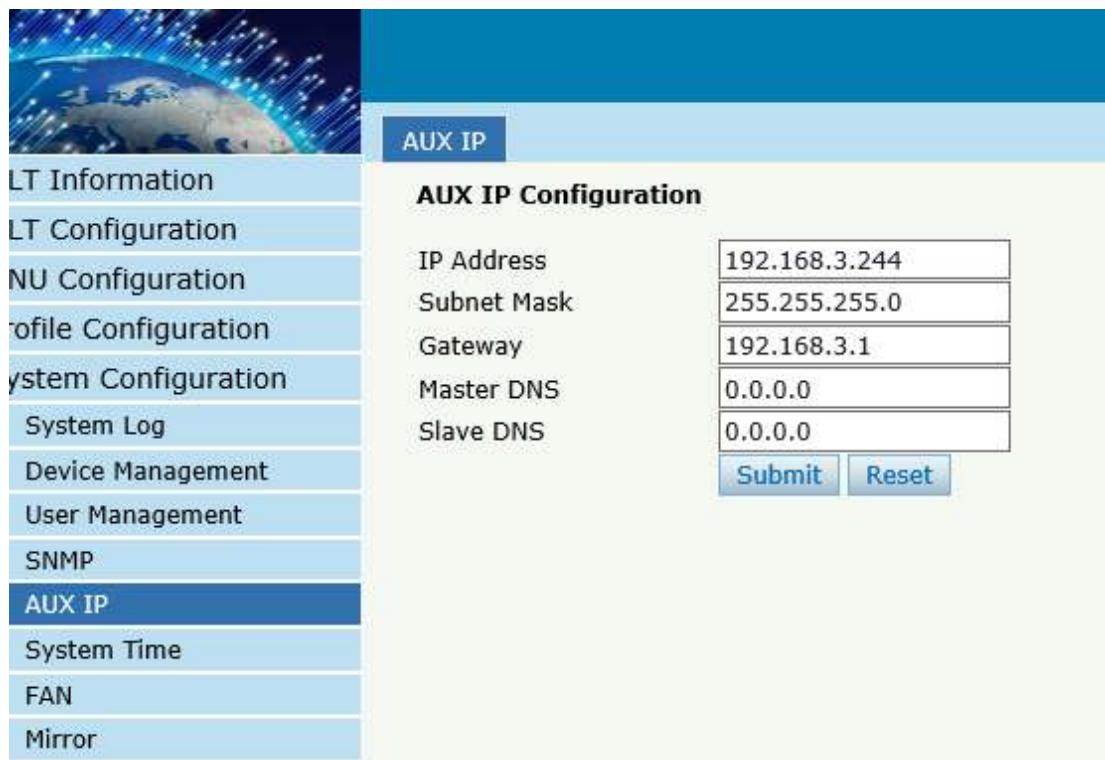


Figure 6-12: AUX IP

6.6 System Time

6.6.1 RTC

System Configuration → System Time→RTC .

The user can customize the OLT system time

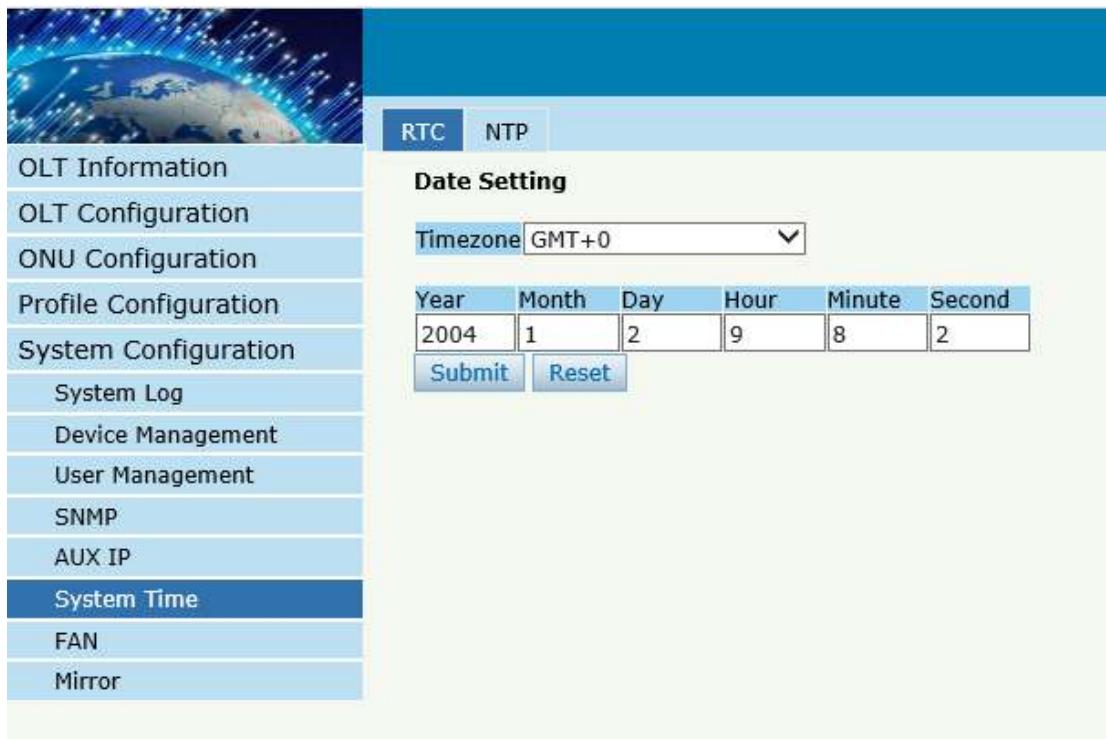


Figure 6-13: RTC Configuration

6.6.2 NTP

System Configuration → System Time→NTP

Synchronize the time to the NTP server.

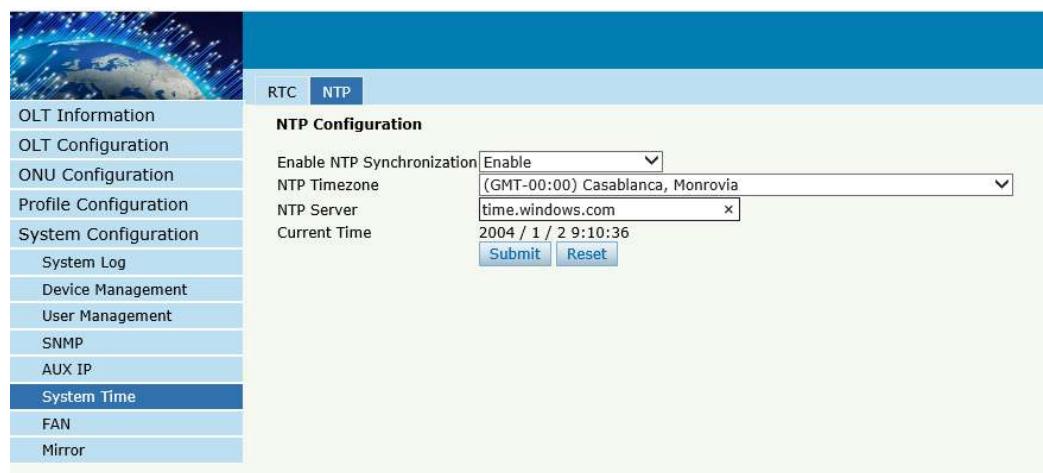


Figure 6-14: NTP Configuration

6.7 FAN

System Configuration → FAN.

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

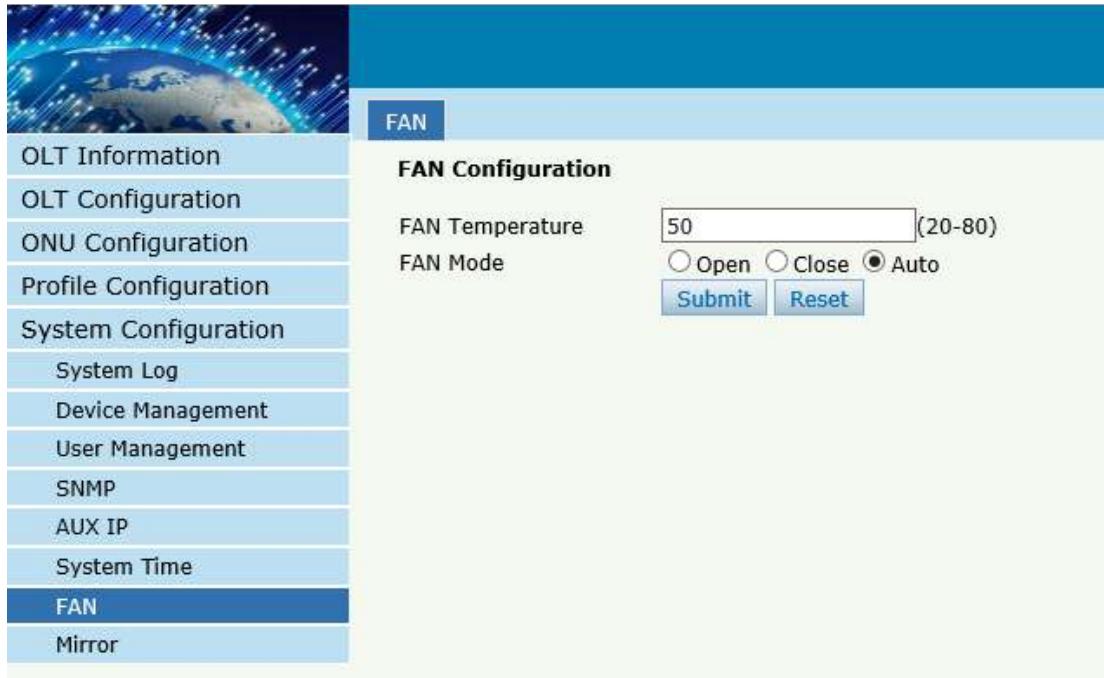
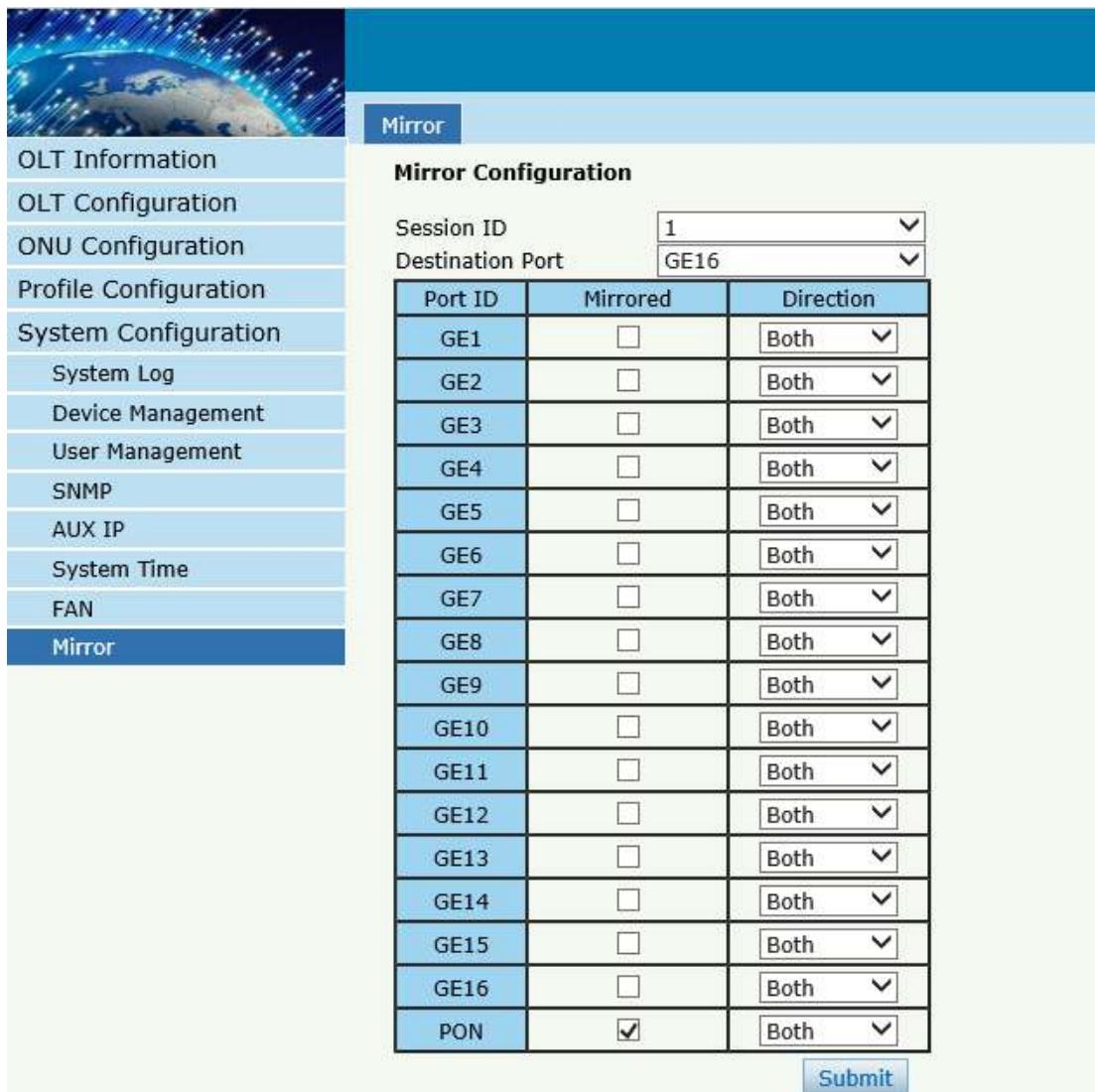


Figure 6-15: FAN Configuration

6.8 Mirror

System Configuration → Mirror.

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



The screenshot shows the DIGISOL DG-GO4300 Series OLT User Manual interface. On the left is a vertical navigation menu with the following items:

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

The "Mirror" option is highlighted with a blue background. The main content area is titled "Mirror Configuration". It includes two dropdown menus: "Session ID" set to "1" and "Destination Port" set to "GE16". Below these are two tables. The first table lists ports GE1 through GE16 and PON, each with a checkbox under "Mirrored" and a dropdown under "Direction" set to "Both". The second table is a grid of 16 rows by 3 columns, corresponding to the ports listed above.

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