



# **EPON OLT WEB USER MANUAL**

**Version V2.3**

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# Chapter 1 System Description

## 1.1 Overview

### 1.1.1 OLT Introduction

The WEB management user manual is for the OLTs listed in Table 1-1. After you have completed installation, connection and commissioning of the equipment, you can start on configuring various services and functions for the equipment.

Table 1-1 OLT interfaces

Products		222L	422L	8844	16444
Chassis	Rack	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box
1000M Uplink Port	QTY	4	4	16	12
	Copper	2*10/100/1000 M auto-negotiation	2*10/100/1000 M auto-negotiation	8*10/100/1000 M auto-negotiation	4*10/100/1000M
	SFP (Independ	2*SFP	2*SFP	4*SFP and 4*SFP+ (SFP+ is	4*SFP and 4*SFP+ (SFP+ is



	ent)			compatible with 10GE)	compatible with 10GE)
EPON Port	QTY	2	4	8	16
	Physical Interface	SFP Slots	SFP Slots	SFP Slots	SFP Slots
Management Ports		1*10/100BASE-T out-band port(AUX), 1*CONSOLE port			
Management Mode		WEB, Telnet and CLI			

### 1.1.2 OS Requirement

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

Table 1-2 OS requirements

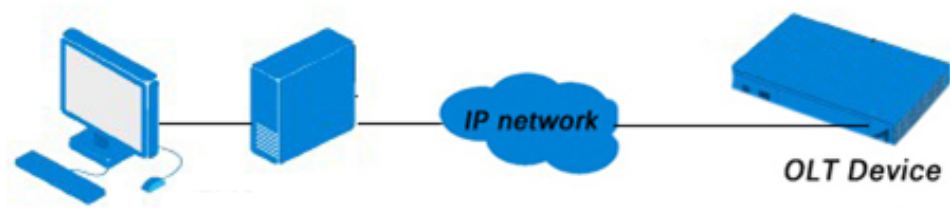
CPU	Memory	DISK	Video Card	Operating System
Frequency above 2GHz	2GB Or above	10GB disk space	65000 color resolving capability 1024*768 and above	Windows2008 Windows XP Windows 7 Windows 8 Windows 10

## 1.2 Connection

Connect the OLT AUX port to IP network. The OLT default management IP is 192.168.8.100.

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





## Chapter 2 OLT Information

### 2.1 Login

Follow the steps to login:

1. Confirm "1.2 Connection" to connect;
2. The device default IP address is 192.168.8.100;
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. The username and password are "admin" or "Xpon@Olt9417#" by default.

OLT Web Management Interface

Username

Password

Login

Reset

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Figure 2-1: Login

## 2.2 Device Information

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

Click **OLT Information**□**Device Information** to get the information.

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

Device Information

Device Status

PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8

GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8

GE10 GE12 GE14 GE16

GE9 GE11 GE13 GE15

Device Basic Information

System Name	<input type="text" value="epon-olt"/>	Serial Number	V1810176060
Hardware Version	optimized eight epon olt platform	Firmware Version	V2.03.56R_IPv6
MAC Address	80:14:A8:C4:1E:5B	Temperature	40°C
System Time	2000 /1 /3 21:47:53	Running Time	2 Days 21 Hours 37 Minutes 38 Seconds
CPU Usage	25%	Memory Usage	15%
License ONUs Limit	Unlimited	License Time	Permanent

Submit

Refresh

Figure 2-2: Device Information

# Chapter 3 OLT Configuration

This section is about the basic service of OLT configuration.

## 3.1 VLAN

### 3.1.1 New VLAN

Click **OLT Configuration**→**VLAN** to create new VLAN.

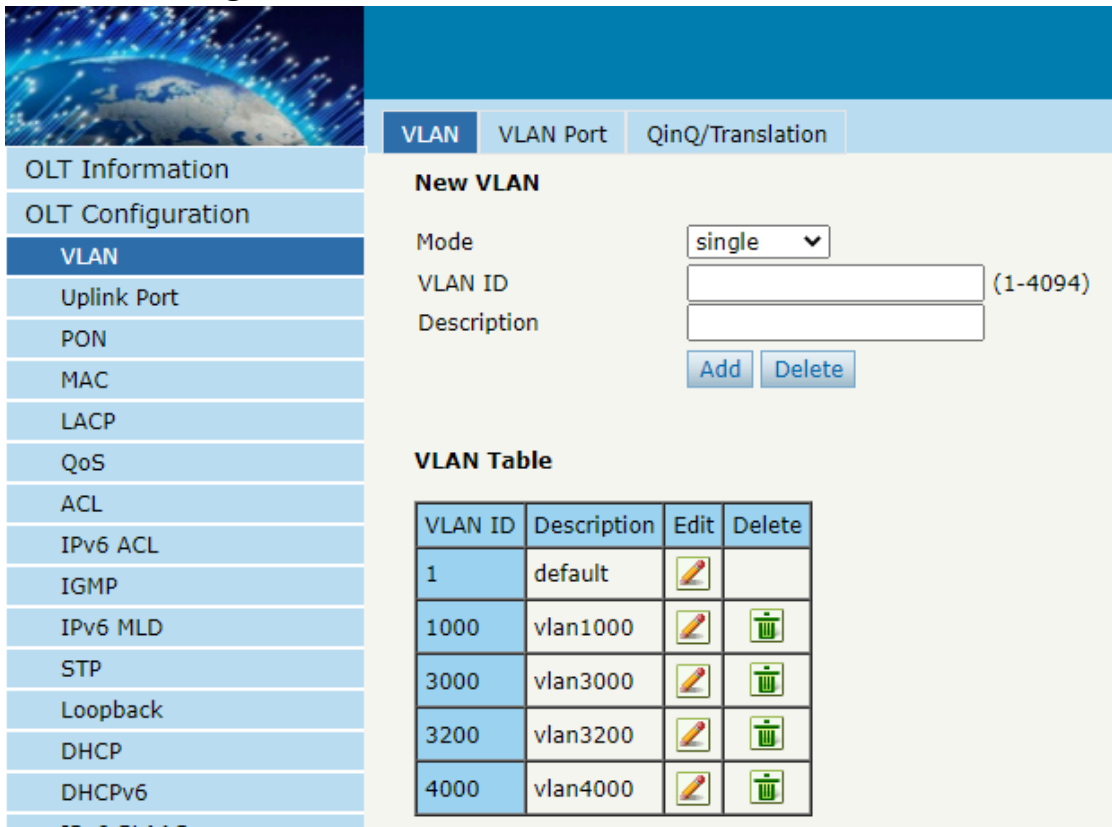



Figure 3.1-1: Create New VLAN

### 3.1.2 VLAN Port

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

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



OLT Information

OLT Configuration

**VLAN**

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

VLAN

**VLAN Port**

QinQ/Translation

Port VLAN Configuration

VLAN ID

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

Figure 3.1-2: Add VLAN Port

### 3.1.3 QinQ/Translation

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

VLAN

VLAN Port

**QinQ/Translation**

QinQ Configuration

Port ID

GE4

Customer VLAN

4000

Customer Cos

any

Service VLAN

2000

Service Cos

any

Mode

VLAN Translation

Add

VLAN QinQ Mapping Table


Port ID	Customer VLAN	Customer Cos	Service VLAN	Service Cos	Mode	Delete
GE9	2000	any	4000	any	QinQ	

Figure 3.1-3: QinQ/Translation Configuration

## 3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

### 3.2.1 Information

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

Traffic Statistics										
Port ID	Link Status	Speed	Rx Packets			Tx Packets			Collisions	Errors
			Packets	Broadcast	Multicast	Packets	Broadcast	Multicast		
GE1	Up	1000M Full	0	0	0	0	0	0	0	0
GE2	Up	1000M Full	0	0	0	0	0	0	0	0
GE3	Up	1000M Full	0	0	0	0	0	0	0	0
GE4	Up	1000M Full	0	0	0	0	0	0	0	0
GE5	Down	-	0	0	0	0	0	0	0	0
GE6	Down	-	0	0	0	0	0	0	0	0
GE7	Down	-	0	0	0	0	0	0	0	0
GE8	Down	-	0	0	0	0	0	0	0	0
GE9	Down	-	0	0	0	0	0	0	0	0
GE10	Down	-	0	0	0	0	0	0	0	0
GE11	Down	-	0	0	0	0	0	0	0	0
GE12	Down	-	0	0	0	0	0	0	0	0
GE13	Down	-	0	0	0	0	0	0	0	0
GE14	Down	-	0	0	0	0	0	0	0	0
GE15	Down	-	0	0	0	0	0	0	0	0
GE16	Down	-	0	0	0	0	0	0	0	0

Clear Counters Refresh

Figure3.2-1: GE Traffic Statistics

### 3.2.2 Configuration

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

GE Configuration											
Port ID	Description	Admin Status	Flow Control	Isolate	PVID	Storm(0 64-1000000fps)			Rate(0 32-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Multicast	Unicast	Ingress	Egress	
GE1	admin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2000	512	512	512	0	0	0
GE2		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE8		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE9		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE10		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE11		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE12		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE13		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE14		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE16		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0

Figure3.2-2: Uplink Ports Configuration

### 3.2.3 Perf-Stats Information

This interface displays the traffic rate for a specified port over a period of time if you enable perf-stats Configuration.Click **OLT Configuration** **Uplink Port****Perf-Stats Information** to check the information.

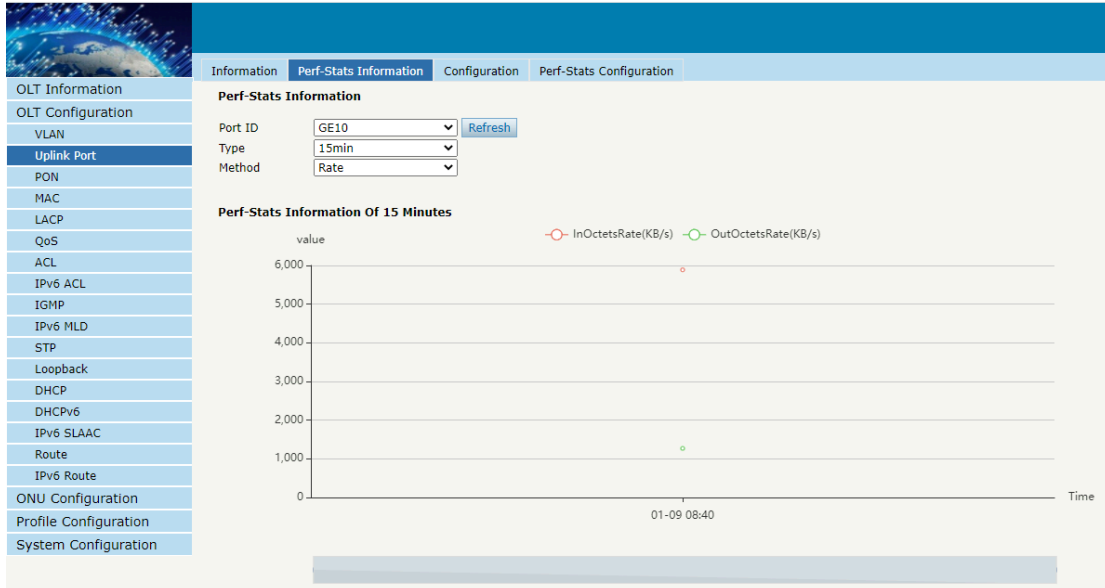



Figure3.2-3: Perf-Stats Information

### 3.2.4 Perf-Stats Configuration

Click **OLT Configuration** **Uplink Port****Perf-Stats Configuration** to enable perf-stats Configuration for a specified port .



OLT Information

OLT Configuration

VLAN

**Uplink Port**

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information

Perf-Stats Information

Configuration

**Perf-Stats Configuration**

**Perf-Stats Record Number Configuration**

Type	Max Record
15 Minutes	<input type="text" value="16"/> (1-96)
24 Hours	<input type="text" value="7"/> (1-30)

[Submit](#)

**Perf-Stats Configuration**

Port ID	15min	24hour
GE1	<input type="checkbox"/>	<input type="checkbox"/>
GE2	<input type="checkbox"/>	<input type="checkbox"/>
GE3	<input type="checkbox"/>	<input type="checkbox"/>
GE4	<input type="checkbox"/>	<input type="checkbox"/>
GE5	<input type="checkbox"/>	<input type="checkbox"/>
GE6	<input type="checkbox"/>	<input type="checkbox"/>
GE7	<input type="checkbox"/>	<input type="checkbox"/>
GE8	<input type="checkbox"/>	<input type="checkbox"/>
GE9	<input type="checkbox"/>	<input type="checkbox"/>
GE10	<input type="checkbox"/>	<input type="checkbox"/>
GE11	<input type="checkbox"/>	<input type="checkbox"/>
GE12	<input type="checkbox"/>	<input type="checkbox"/>
GE13	<input type="checkbox"/>	<input type="checkbox"/>
GE14	<input type="checkbox"/>	<input type="checkbox"/>
GE15	<input type="checkbox"/>	<input type="checkbox"/>
GE16	<input type="checkbox"/>	<input type="checkbox"/>

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

Figure3.2-4: Perf-Stats Configuration

## 3.3 PON

### 3.3.1 Information

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

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



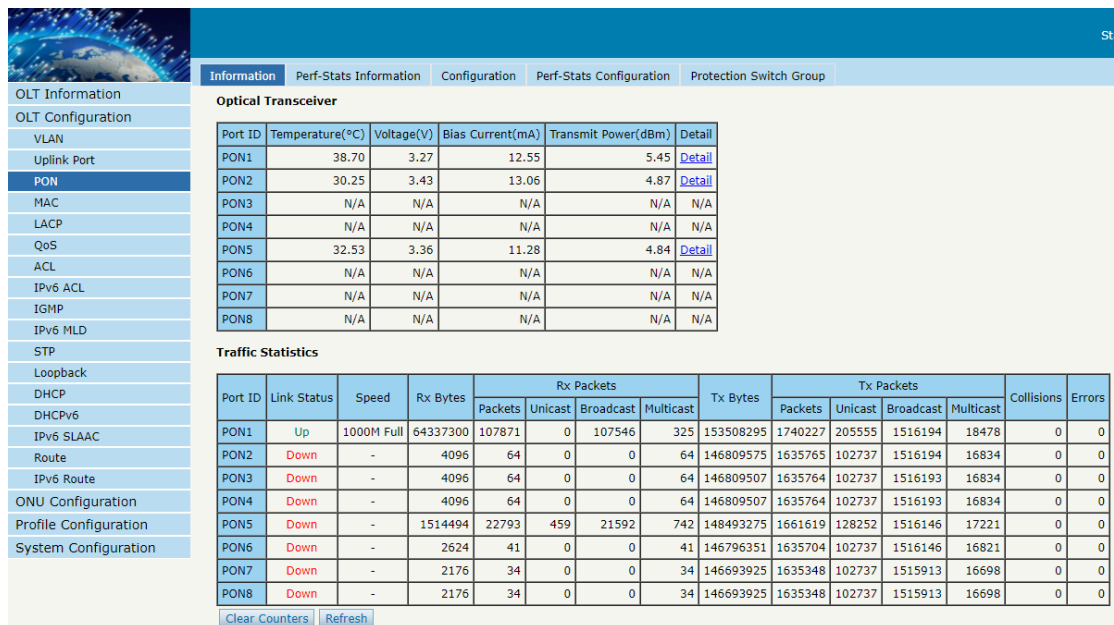


Figure3.3-1: PON Information

### 3.3.2 Configuration

The PON ports basic configuration can be set.

Click **OLT Configuration** **PON** **Configuration** to configure PON ports, as shown in Figure 3.3-2.

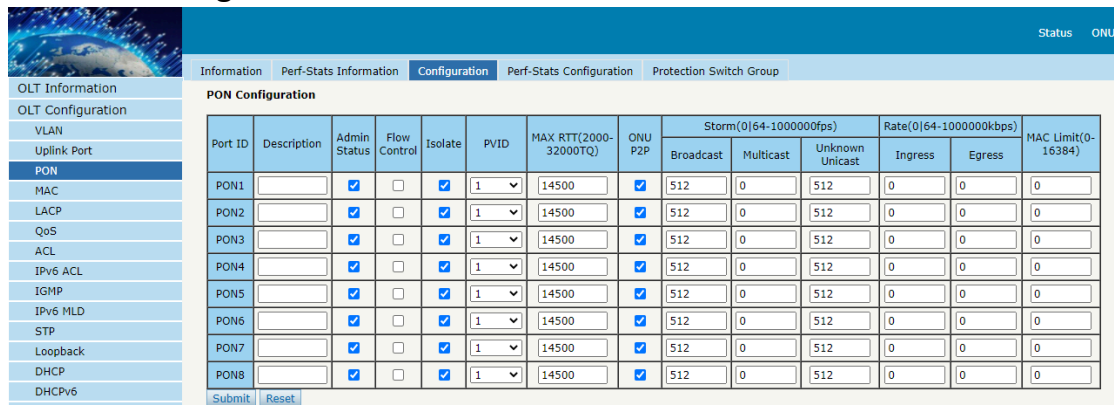


Figure3.3-2: PON configuration

### 3.3.3 Perf-Stats Information

This interface displays the traffic rate for a specified port over a period of time if you enable perf-stats Configuration. Click **OLT Configuration** **PON** **Perf-Stats Information** to check the information.

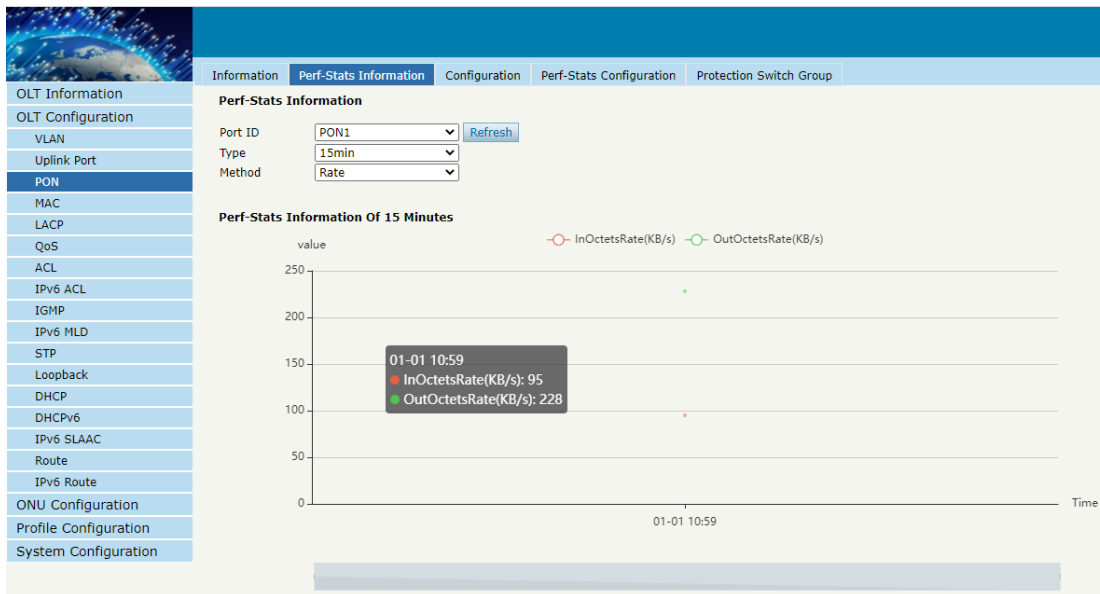


Figure3.3-3:Perf-Stats Information

### 3.3.4 Perf-Stats Configuration

Click **OLT Configuration** → **PON** → **Perf-Stats Configuration** to enable perf-stats Configuration for a specified port .

**Perf-Stats Record Number Configuration**

Type	Max Record
15 Minutes	16 (1-96)
24 Hours	7 (1-30)

Submit

**Perf-Stats Configuration**

Port ID	15min	24hour
PON1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PON2	<input type="checkbox"/>	<input type="checkbox"/>
PON3	<input type="checkbox"/>	<input type="checkbox"/>
PON4	<input type="checkbox"/>	<input type="checkbox"/>
PON5	<input type="checkbox"/>	<input type="checkbox"/>
PON6	<input type="checkbox"/>	<input type="checkbox"/>
PON7	<input type="checkbox"/>	<input type="checkbox"/>
PON8	<input type="checkbox"/>	<input type="checkbox"/>

Submit Reset

Figure3.3-4:Perf-Stats Configuration

### 3.3.5 Protection Switch Group

Click **OLT Configuration** **Protection Switch Group** to configure PSG parameters base on Type B.You can configure a Work PON and a Standby PON and connect them to a 2: N optical splitter.When the ONU is registered on the work PON, the registration information and PON configuration is synchronized to the Standby Pon.If the Work PON link is faulty, the ONU automatically registers with another PON.


Index	Group Name	Work Pon	Standby Pon	Active Pon	Lock Mode	Revertive Mode	Revertive Time	Delete
1	1	PON7	PON8	PON7	Not Lock	Revert	120	

Figure3.3-5:Protection Switch Group

## 3.4 MAC

### 3.4.1 MAC Table

All the OLT learning MAC can be shown.  
Select **OLT Configuration****MAC****MAC Table**, as shown in Figure 3.4-1.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

MAC Table

Configuration

MAC Flapping Information

MAC Address Table

Port ID

ALL

Total Addresses Found in System : 201

VLAN ID	MAC Address	Type	Port ID
3000	94:C6:91:51:D1:CA	Dynamic	GE10
3000	F8:75:88:88:04:36	Dynamic	GE10
3000	94:C6:91:91:CE:EB	Dynamic	GE10
3000	80:14:A8:C3:C0:19	Dynamic	GE10
3000	80:07:1B:5C:3A:4B	Dynamic	GE10
3000	80:07:1B:5C:3B:3D	Dynamic	GE10
3000	80:07:1B:5C:3A:F0	Dynamic	GE10
3000	00:24:21:57:AC:38	Dynamic	GE10
3000	80:07:1B:9C:DA:E1	Dynamic	GE10
3000	80:07:1B:5C:3A:A3	Dynamic	GE10

Figure3.4-1: MAC Address Table

### 3.4.2 Configuration

The default MAC aging time of OLT is 300s, user can change the value between 10~1000000s. Also, user can add the MAC to the OLT manually. Select **OLT Configuration**→**MAC**→**Configuration**, as shown in Figure 3.4-2.


 <ul style="list-style-type: none"> <li>OLT Information</li> <li>OLT Configuration</li> <li>VLAN</li> <li>Uplink Port</li> <li>PON</li> <li><b>MAC</b></li> <li>LACP</li> <li>QoS</li> <li>ACL</li> <li>IPv6 ACL</li> <li>IGMP</li> <li>IPv6 MLD</li> </ul>	<div>MAC Table Configuration MAC Flapping Information MAC Flapping Configuration</div> <div>MAC Aging Configuration</div> <div>           Automated Aging <span>Enable</span>            Aging Time <span>300</span> (10-1000000s)  <span>Submit</span> </div> <div> <b>Add MAC Address</b>            VLAN ID <span>1</span>            MAC Address <span></span> (HH:HH:HH:HH:HH:HH)            Type <span><input checked="" type="radio"/> Static <input type="radio"/> Dynamic</span>            Port ID <span>GE1</span>  <span>Add</span> <span>Delete</span> </div>
--	--

Figure 3.4-2: MAC Configuration

### 3.4.3 MAC Flapping Information

Click **OLT Configuration**→**MAC**→**MAC Flapping Information** to check the information learned on multiple ports for the same MAC if you enable MAC Flapping switch.

MAC Address	VLAN	Source port	Current Port	Begin Time	Last Time	Times
00:6D:61:FA:28:A0	3000	GE 0/10	GE 0/12	1985/01/29 05:31:18	1985/01/29 05:31:18	1/0
00:0C:29:66:66:66	3000	GE 0/10	GE 0/12	1985/01/29 05:31:18	1985/01/29 05:31:18	1/0
00:0C:29:62:32:55	3000	GE 0/10	GE 0/12	1985/01/29 05:31:18	1985/01/29 05:31:18	1/0
80:14:A8:67:2A:5C	3000	GE 0/10	GE 0/12	1985/01/29 05:31:18	1985/01/29 05:31:18	1/0

[Clean](#)

**MAC Flapping Suppression Information**

Interface	Mode	Time(s)	Source Interface
-----------	------	---------	------------------

[Refresh](#)

Figure 3.4-3: MAC Flapping Information

### 3.4.4 MAC Flapping Configuration

You can enable MAC Flapping Configuration in this interface.

**MAC Flapping Configuration**

Status:

Range:

Mode:

Interval:  (10-3600s)

Suppression Threshold:  (1-256)


Suppression Age Time:  (10-3600s)

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

Figure 3.4-4: MAC Flapping Configuration

### 3.4.5 MAC Flapping Port Configuration

You can click **OLT Configuration**→**MAC**→**MAC Flapping Port Configuration** to enable MAC Flapping Configuration for specific port.



OLT Information	MAC Table	Configuration	MAC Flapping Information	MAC Flapping Configuration	MAC Flapping Port Configuration
OLT Configuration	MAC Flapping Port Configuration				
VLAN					
Uplink Port					
PON					
MAC					
LACP					
QoS					
ACL					
IPv6 ACL					
IGMP					
IPv6 MLD					
STP					
Loopback					
DHCP					
DHCPv6					
IPv6 SLAAC					
Route					
IPv6 Route					
ONU Configuration					
Profile Configuration					
System Configuration					

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

Figure 3.4-5: MAC Flapping Port Configuration

## 3.5 LACP

### 3.5.1 Static LACP

Select **OLT Configuration**→**LACP**→**Static LACP** to assign and configure an uplink physical interface to an Ether Channel. When a traffic link can't be used suddenly, this traffic link will switch to another link automatically. The group range is from 1 to 4.Each group can add 4 ports maximally. Only GE ports can be added in the channel groups.

Static LACP

Channel Group Configuration

Channel Group ID
1
Load Balance
smac
GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8 GE9 GE10 GE11 GE12 GE13 GE14 GE15 GE16
Select GE Port
☒ ☐ ☐ ☐ ☒ ☐ ☐ ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Submit

Channel Group Table

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

Figure 3.5-1: Create Static LACP

## 3.5.2 Dynamic LACP

### 3.5.2.1 Information

This page displays dynamic LACP information. Only the port which is linkup can be shown in the table. OLT can detect how many devices the uplink ports connected to. If the ports are connected to the same device, they will be in a channel group, otherwise in different channel group.

Information
Configuration
Port

Dynamic LACP Global Information

System ID	0x8000, 8014.a8c4.1e5b
-----------	------------------------

Channel Group Table

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

Channel Group Port Information

Channel Group ID
1

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

Link Aggregation Information

Port ID	System Priority	Port Priority	Key	Aport	Syn	Col	Dis
---------	-----------------	---------------	-----	-------	-----	-----	-----

Figure 3.5.2-1: Dynamic LACP Information

### 3.5.2.2 Configuration

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

Information
Configuration
Port

### Dynamic LACP Global Configuration

System Priority  (0-65535)

### Channel Group Configuration


Channel Group ID

Load Balance

Figure 3.5.2-2: Dynamic LACP Configuration

### 3.5.2.3 Port

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



OLT Information
OLT Configuration
VLAN
Uplink Port
PON
MAC
LACP
Static LACP
Dynamic LACP
QoS
ACL
IPv6 ACL
IGMP
IPv6 MLD
STP
Loopback
DHCP
DHCPv6
IPv6 SLAAC
Route
IPv6 Route
ONU Configuration
Profile Configuration
System Configuration

Information
Configuration
Port

### Dynamic LACP Port Configuration

Port ID	LACP Status	Channel Group ID	Mode	Timeout	Port Priority(0-65535)
GE1	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE2	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE3	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE4	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE5	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE6	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE7	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE8	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE9	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE10	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE11	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE12	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE13	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE14	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE15	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>
GE16	<input type="checkbox"/>	<input type="text" value="1"/>	<input type="text" value="Passive"/>	<input type="text" value="Long"/>	<input type="text" value="32768"/>

Figure 3.5.2-3: Dynamic LACP Port Configuration

## 3.6 QOS

The EPON OLT supports layer 2 802.1p and layer 3 DSCP QOS. Frames can be placed in different queues and serviced via Strict Priority (SP), Weighted Round Robin (WRR) and SP+WRR. Select **OLT Configuration** □



**QoS** to set QoS configuration, as shown in Figure 3.6.

QoS

QoS Configuration

QoS Mode

Strict-WRR

Q0(1-127)

50

Q1(1-127)

50

Q2(1-127)

50

Q3(1-127)

50

Q4(0-127)

100

Q5(0-127)

0

Q6(0-127)

0

Q7(0-127)

0

Weight

50

50

50

50

100

0

0

0

Submit

Figure 3.6: QoS Configuration


3.7 ACL

This part is about the security configuration of OLT. ACL can permit or deny data passing and accessing.

3.7.1 IP Filter

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

Select **OLT Configuration**→**ACL** →**IP Filter** to set the configuration, as shown in Figure 3.7-1.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Static LACP

Dynamic LACP

QoS

**ACL**

IPv6 ACL

IGMP

IPv6 MLD

STP

IP Filter

MAC Filter

IP/MAC Filter

Ingress Effect Filter

Egress Effect Filter

Access List IP Configuration

Access List ID

(1000-1999)

Filter Action

☒ Deny

☐ Permit

☐ Source IP

Mask

☐ Source Port

(0-65535)

☐ Destination IP

Mask

☐ Destination Port

(0-65535)

☐ Protocol

TCP

(0-255)

☐ DSCP

(0-63)

Add

Access Lists Configured

List ID	Source IP	Source Port	Destination IP	Destination Port	Protocol	DSCP	Filter Action	Delete
1999		67/ffff		68/ffff	17/ff		Deny	

Figure 3.7-1: IP Filter

3.7.2 MAC Filter

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

Select **OLT Configuration**→**ACL** →**MAC Filter** to set the configuration, as

shown in Figure 3.7-2.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Static LACP

Dynamic LACP

QoS

**ACL**

IPv6 ACL

IGMP

IP Filter

**MAC Filter**

IP/MAC Filter

Ingress Effect Filter

Egress Effect Filter

**Access List MAC Configuration**

Access List ID: (2000-2999)

Filter Action: ☒ Deny ☐ Permit

☐ Source MAC: Mask (HH:HH:HH:HH:HH:HH)

☐ Destination MAC: Mask (HH:HH:HH:HH:HH:HH)

☐ VLAN ID: 1

☐ VLAN Cos: (0-7)

☐ Ethernet Type: (HHHH)

Add

**Access Lists Configured**

List ID	Source MAC	Destination MAC	VLAN ID	VLAN Cos	Ethernet Type	Filter Action	Delete
---------	------------	-----------------	---------	----------	---------------	---------------	--------

Figure 3.7-2: MAC Filter

### 3.7.3 IP/MAC Filter

This filter mix the IP address and MAC address, including source IP address and destination IP address, source MAC address and destination MAC address, VLAN, Ethernet type, protocol, TCP/UDP port, and so on. Select **OLT Configuration** → **ACL** → **IP/MAC Filter** to set the configuration, as shown in Figure 3.7-3.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Static LACP

Dynamic LACP

QoS

**ACL**

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IP Filter

MAC Filter

**IP/MAC Filter**

Ingress Effect Filter

Egress Effect Filter

**Access List Configuration**

Access List ID: (5000-5999)

Filter Action: ☒ Deny ☐ Permit

☐ Source MAC: Mask (HH:HH:HH:HH:HH:HH)

☐ Destination MAC: Mask (HH:HH:HH:HH:HH:HH)

☐ VLAN ID: 1

☐ VLAN Cos: (0-7)

☐ Ethernet Type: (HHHH)

☐ Source IP: Mask (0-65535)

☐ Source Port: (0-65535)

☐ Destination IP: Mask (0-65535)

☐ Destination Port: (0-65535)

☐ Protocol: TCP (0-255)

☐ TOS-DSCP: (0-255)

Add

**Access Lists Configured**

List ID	Source MAC	Destination MAC	VLAN ID	VLAN Cos	Ethernet Type	Source IP	Source Port	Destination IP	Destination Port	Protocol	TOS-DSCP	Filter Action	Delete
---------	------------	-----------------	---------	----------	---------------	-----------	-------------	----------------	------------------	----------	----------	---------------	--------

Figure 3.7-3 IP/MAC Filter

### 3.7.4 Ingress/Egress Effect Filter

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Static LACP

Dynamic LACP

QoS

**ACL**

IPv6 ACL

IGMP

IP Filter

MAC Filter

IP/MAC Filter

**Ingress Effect Filter**

Egress Effect Filter

**Access List Port Ingress Bind**

Access List ID: 1999

Select GE Port: GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8 GE9 GE10 GE11 GE12 GE13 GE14 GE15 GE16

Select PON Port: PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8

Apply Access List to Port(s)

**Active Access Lists**

Access List ID	Ports
1999	PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8

Figure 3.7-4: Bind Security Filter

## 3.8 IPv6 ACL

This part is about IPv6 security configuration of OLT. IPv6 ACL can permit or deny data passing or accessing by IPv6 packets.

### 3.8.1 IPv6 Filter

The filter is based on the IPv6 address, including source IPv6 address and destination IPv6 address.

Select **OLT Configuration** → **IPv6 ACL** → **IPv6 Filter** to set the configuration, as shown in Figure 3.8-1.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

Static LACP

Dynamic LACP

QoS

ACL

**IPv6 ACL**

IGMP

IPv6 MLD

STP

**IPv6 Filter**

IPv6/MAC Filter

IPv6 Ingress Effect Filter

IPv6 Egress Effect Filter

**Access List IPv6 Configuration**

Access List ID: 1999 (1000-1999)

Filter Action: ☒ Deny ☐ Permit

☐ Source IPv6: Prefixlen

☐ Source Port: (0-65535)

☐ Destination IPv6: Prefixlen

☐ Destination Port: (0-65535)

☐ Protocol: TCP (0-255)

☐ DSCP: (0-63)

Add

**Access Lists Configured**

List ID	Source IPv6	Source Port	Destination IPv6	Destination Port	Protocol	DSCP	Filter Action	Delete
1999					TCP		Deny	

Figure 3.8-1: IPv6 Filter

### 3.8.2 IPv6/MAC Filter

This filter mixes IPv6 address, MAC address and other parameters,

including source IPv6 address and destination IPv6 address, source MAC address and destination MAC address, VLAN, Ethernet type, protocol, TCP/UDP port, and so on.

Select **OLT Configuration** → **IPv6 ACL** → **IPv6/MAC Filter** to set the configuration, as shown in Figure 3.8-2.

The screenshot shows the 'IPv6/MAC Filter' configuration page. On the left is a navigation menu with options like OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, Static LACP, Dynamic LACP, QoS, ACL, IPv6 ACL (selected), IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCPv6, IPv6 SLAAC, and Route. The main area is titled 'Access List Configuration'. It includes fields for 'Access List ID' (with a range of 5000-5999), 'Filter Action' (radio buttons for Deny and Permit), and several checkboxes for filtering criteria: Source MAC, Destination MAC, VLAN ID, VLAN Cos, Ethernet Type, Source IPv6, Source Port, Destination IPv6, Destination Port, Protocol, and TOS-DSCP. Each criterion has a corresponding input field for its value. An 'Add' button is at the bottom of these fields. Below the configuration fields is a table titled 'Access Lists Configured' with columns: List ID, Source MAC, Destination MAC, VLAN ID, VLAN Cos, Ethernet Type, Source IPv6, Source Port, Destination IPv6, Destination Port, Protocol, TOS-DSCP, Filter Action, and Delete.

Figure 3.8-2: IPv6/MAC Filter

### 3.8.3 IPv6 Ingress/Egress Effect Filter

Bind access list to ports so that the ACL rules can take effect. Each access list can be bound to several ports.

The screenshot shows the 'Bind IPv6 Security Filter' page. The navigation menu on the left is the same as in Figure 3.8-2. The main area is titled 'Access List Port Ingress Bind'. It features a dropdown for 'Access List ID' and a grid of checkboxes to bind the filter to various ports: GE1 through GE16 and PON1 through PON8. An 'Apply Access List to Port(s)' button is located below the port selection grid. At the bottom, there is a section titled 'Active Access Lists' containing a table with columns 'Access List ID' and 'Ports'.

Figure 3.8-3: Bind IPv6 Security Filter

## 3.9 IGMP

### 3.9.1 Group Member

Show about the group member in the list.

Select **OLT Configuration** → **IGMP** → **Group Member** to display group member, as shown in Figure 3.9-1.

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>IGMP Group Member</b>					
Group VLAN ID	IP Address	Port ID	Type	User VLAN ID	
3234	239.1.1.10	PON1	Static	3234	
<a href="#">Refresh</a>					

Figure 3.9-1: IGMP Group Member

### 3.9.2 Global

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

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>IGMP Configuration</b>					
IGMP Status	Enable <input type="button" value="v"/>				
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 checked="" type="radio"/> Disable <input type="radio"/> Enable				
General Query Interval	125 (10-255s)				
Query Source IP	1.1.1.1				
<input type="button" value="Submit"/> <input type="button" value="Reset"/>					

Figure 3.9-2: IGMP Global

### 3.9.3 Port

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

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>IGMP Port Configuration</b>					
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		
GE16	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON1	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON2	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON3	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON4	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON5	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON6	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON7	<input type="checkbox"/>	<input type="checkbox"/>	1024		
PON8	<input type="checkbox"/>	<input type="checkbox"/>	1024		
Submit		Reset			

Figure 3.9-3: IGMP Port

### 3.9.4 Port User VLAN

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


Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>User VLAN Configuration</b>					
Port ID	GE1 ▼				
User VLAN ID	1 ▼				
Group VLAN ID	1 ▼				
<input type="button" value="Add"/>					
<b>User VLAN Table</b>					
Port ID	User VLAN ID	Group VLAN ID	Delete		
PON1	3234	3234			

Figure 3.9-4: IGMP Port User VLAN

### 3.9.5 Port Mrouter

To add a port to the IGMP multicast routing group, click **OLT Configuration** ▢ **IGMP** ▢ **Port Mrouter**, as shown in Figure 3.9-5.


Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>Add Multicast Router</b>					
Port ID	GE1 ▼				
Group VLAN ID	1 ▼				
<input type="button" value="Add"/>					
<b>Multicast Router Table</b>					
Port ID	Group VLAN ID	Delete			
GE1	3234				

Figure 3.9-5: IGMP Port Mrouter

### 3.9.6 Static Group

Add an IGMP group manually. Always choose the PON port as the group port. Click **OLT Configuration** ▢ **IGMP** ▢ **Static Group**, as shown in Figure 3.9-6.

Group Member
Global
Port
Port User VLAN
Port Mrouter
Static Group

### Add Static Group

Port ID
PON1

IP Address

User VLAN ID
1

Add

### Static Group Table

Port ID	IP Address	User VLAN ID	Delete
PON1	239.1.1.10	3234	

Figure 3.9-6: IGMP Static Group

## 3.10 IPv6 MLD

### 3.10.1 Group Member

This page displays IPv6 multicast group member ports.

Select **OLT Configuration** > **IPv6 MLD** > **Group Member** to display IPv6 group member ports, as shown in Figure 3.10-1.

Group Member

Global

Port User VLAN

Port

Port Mrouter

Static Group

IPv6 MLD Group Member

User VLAN ID	Group	Type	Version	Port List
766	ff10:abcd::1234	Static	MLD V1	epon 0/2

Refresh

Figure 3.10-1: IPv6 MLD Group Member

### 3.10.2 Global

To enable IPv6 MLD and set IPv6 MLD related parameters, click **OLT Configuration** > **IPv6 MLD** > **Global**.



Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
<b>IPv6 MLD Configuration</b>					
MLD Status	Enable				
MLDv2 Status	Enable				
Query interval	125 (1-255s)				
Query response interval	10 (1-3600s)				
Robustness variable	2 (1-3)				
Last listener query count	2 (1-7)				
Last listener query interval	1 (1-255s)				
Send general query packet	<input checked="" type="radio"/> Disable <input type="radio"/> Enable				
General query interval	125 (10-3600s)				
Query Source IP	fe80::1				
		<input type="button" value="Submit"/> <input type="button" value="Reset"/>			

Figure 3.10-2: IPv6 MLD Global

### 3.10.3 Port User VLAN

Click **OLT Configuration**  $\square$  **IPv6 MLD**  $\square$  **Port User VLAN** to configure IPv6 MLD port user VLAN.


Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
<b>User VLAN Configuration</b>					
User VLAN ID	1				
		<input type="button" value="Add"/>			
<b>User VLAN Table</b>					
User VLAN ID	Delete				
766					
		<input type="button" value="Refresh"/>			

Figure 3.10-3: IPv6 Port User VLAN

### 3.10.4 Port

To configure group limit value, fast leave for each port, click **OLT Configuration**  $\square$  **IPv6 MLD**  $\square$  **Port**.

Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
<b>IGMP Port Configuration</b>					
Port ID	Fast Leave	Group Limit(0-256)			
GE1	<input type="checkbox"/>	256			
GE2	<input type="checkbox"/>	256			
GE3	<input type="checkbox"/>	256			
GE4	<input type="checkbox"/>	256			
GE5	<input type="checkbox"/>	256			
GE6	<input type="checkbox"/>	256			
GE7	<input type="checkbox"/>	256			
GE8	<input type="checkbox"/>	256			
GE9	<input type="checkbox"/>	256			
GE10	<input type="checkbox"/>	256			
GE11	<input type="checkbox"/>	256			
GE12	<input type="checkbox"/>	256			
GE13	<input type="checkbox"/>	256			
GE14	<input type="checkbox"/>	256			
GE15	<input type="checkbox"/>	256			
GE16	<input type="checkbox"/>	256			
PON1	<input type="checkbox"/>	256			
PON2	<input type="checkbox"/>	256			
PON3	<input type="checkbox"/>	256			
PON4	<input type="checkbox"/>	256			
PON5	<input type="checkbox"/>	256			
PON6	<input type="checkbox"/>	256			
PON7	<input type="checkbox"/>	256			
PON8	<input type="checkbox"/>	256			
Submit	Reset				

Figure 3.10-4: IPv6 MLD Port

### 3.10.5 Port Mrouter

To add a port to IPv6 multicast routing group, click **OLT Configuration** ▢ **IPv6 MLD** ▢ **Port Mrouter**, as shown in Figure 3.10-5.


Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
<b>Add Multicast Router</b>					
Port ID	GE1				
Group VLAN ID	1				
<input type="button" value="Add"/>					
<b>Multicast Router Table</b>					
Port ID	Group VLAN ID	Type	Delete		
epon 0/2	766	static			
<input type="button" value="Refresh"/>					

Figure 3.10-5: IPv6 MLD Port Mrouter

### 3.10.6 Static Group

Add an IPv6 multicast group manually, click **OLT Configuration** ▢ **IPv6 MLD** ▢ **Static Group**, as shown in Figure 3.10-6. Generally choose the PON port as the group member port.


Group Member	Global	Port User VLAN	Port	Port Mrouter	Static Group
<b>Add Static Group</b>					
Port ID	GE1				
IPv6 Address					
User VLAN ID	1				
<input type="button" value="Add"/>					
<b>Static Group Table</b>					
User VLAN ID	Group	Type	Version	Port List	Delete
766	ff10:abcd::1234	Static	MLD V1	epon 0/2	
<input type="button" value="Refresh"/>					

Figure 3.10-6: IPv6 MLD Static Group

## 3.11 RSTP

### 3.11.1 Information

The OLT is disabling RSTP by default. When enable the RSTP, the RSTP

global information and port information can be shown by click **OLT Configuration**→**RSTP**→**Information**. See Figure 3.11-1.

Information

Global

Port

**RSTP Information**

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

**RSTP Port Status**

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

Refresh

Figure 3.11-1: RSTP Information

### 3.11.2 Global

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

Information

Global

Port

**RSTP Configuration**

RSTP Status

Enable

Global Priority

32768

(0-61440)

Hello Time

2

(1-10s)

Max Age

20

(6-40s)

Forward Delay

15

(4-30s)

Submit

Reset

Figure 3.11-2: RSTP Global Setup

### 3.11.3 Port

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

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

Figure 3.11-3: RSTP Port Setting

## 3.12 Loopback

### 3.12.1 Information

Loopback information displays current loop information.

Click **OLT Configuration** ▸ **Loopback** ▸ **Information** to check current loop information.

Interface	Mode	Time(s)	Source Interface
<input type="button" value="Refresh"/>			

Figure 3.12-1: Loopback Information

### 3.12.2 Global

Loopback is used to detect loop in the device. When this function is enabled and a loop exists in uplink port, OLT will shutdown the port. And when a loop exists in PON port, OLT will add the ONU where the loop located to black list.

Click **OLT Configuration** **Loopback** **Global** to configure parameters of loopback.

Status	Enable	▼
Range	All	▼
Mode	auto-recovery	▼
Age Time	60	(10-3600s)
<input type="button" value="Submit"/> <input type="button" value="Reset"/>		

Figure 3.12-2: Loopback Global Configuration

### 3.12.3 Port

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

Click **OLT Configuration** **Loopback** **Port** to configure port status of loopback.

Information	Global	Port
<b>Loopback Port Configuration</b>		
Port ID	Status	
GE1	<input checked="" type="checkbox"/>	
GE2	<input checked="" type="checkbox"/>	
GE3	<input checked="" type="checkbox"/>	
GE4	<input checked="" type="checkbox"/>	
GE5	<input checked="" type="checkbox"/>	

Figure 3.12-3: Loopback Port Configuration

## 3.13 DHCP

### 3.13.1 DHCP Server

#### 3.13.1.1 DHCP Lease

Click **OLT Configuration** ▢ **DHCP** ▢ **DHCP Server** ▢ **Lease**, the DHCP Server Lease will be shown as Figure 3.13.1-1.

Lease	Configuration
<b>DHCP Server Lease</b>	
IP Address	MAC address Expires Time
<a href="#">Refresh</a>	

Figure 3.13.1-1: DHCP Lease

#### 3.13.1.2 DHCP Configuration

When enable OLT DHCP server, the connecting devices will obtain an IP address. Click **OLT Configuration** ▢ **DHCP** ▢ **DHCP Server** ▢ **Configuration** to configure the DHCP Server, shown as Figure 3.13.1-2.

Lease
Configuration

### DHCP Server Configuration

DHCP Server
Enable

VLAN ID
1

Submit
Reset

### DHCP Server Settings

Start IP Address
192.168.0.20

End IP Address
192.168.0.254

Subnet Mask
0.0.0.0

Gateway
0.0.0.0

Static DNS 1
0.0.0.0

Static DNS 2
0.0.0.0

Static DNS 3
0.0.0.0

WINS
0.0.0.0

Client Lease Time
864000
(60-864000s)

Submit
Reset

Figure 3.13.1-2: DHCP Configuration

## 3.13.2 DHCP Relay

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

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

Configuration

### Add Relay Server

Server IP
192.168.12.126

VLAN ID
200

Add

### Relay Server Table

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

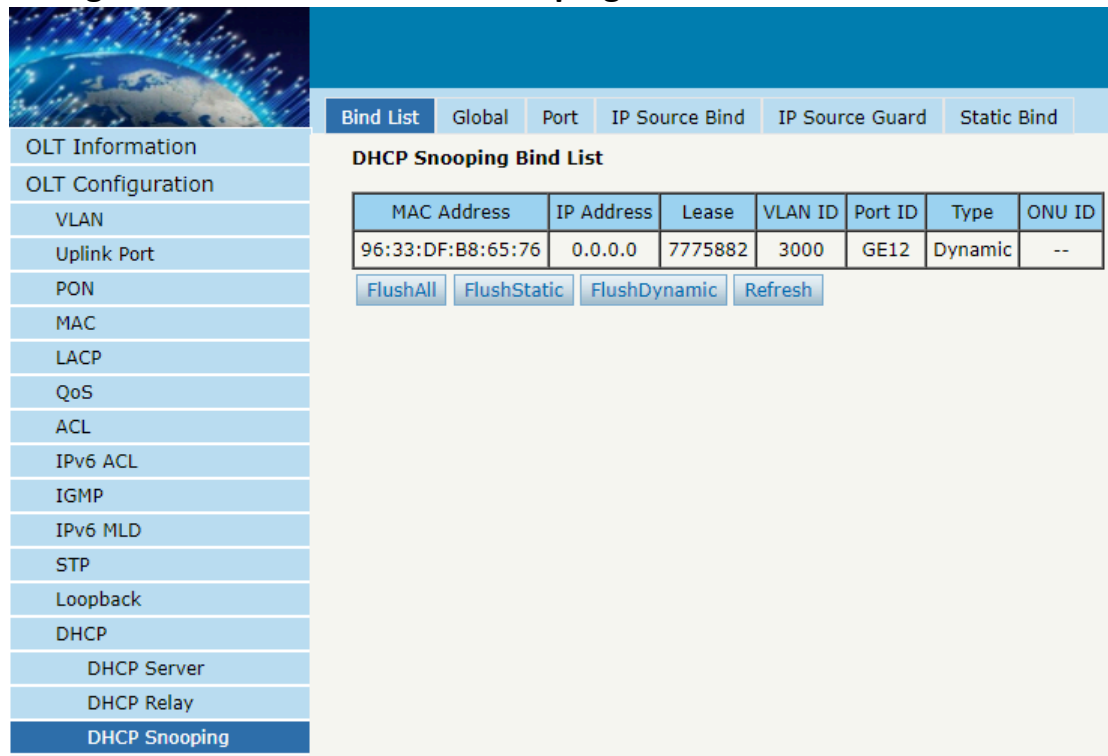
Figure 3.13.2: DHCP Relay Configuration



### 3.13.3 DHCP Snooping

#### 3.13.3.1 Bind List

The static bind of the DHCP Snooping will be shown, Click **OLT Configuration** > **DHCP** > **DHCP Snooping** > **Bind List**.

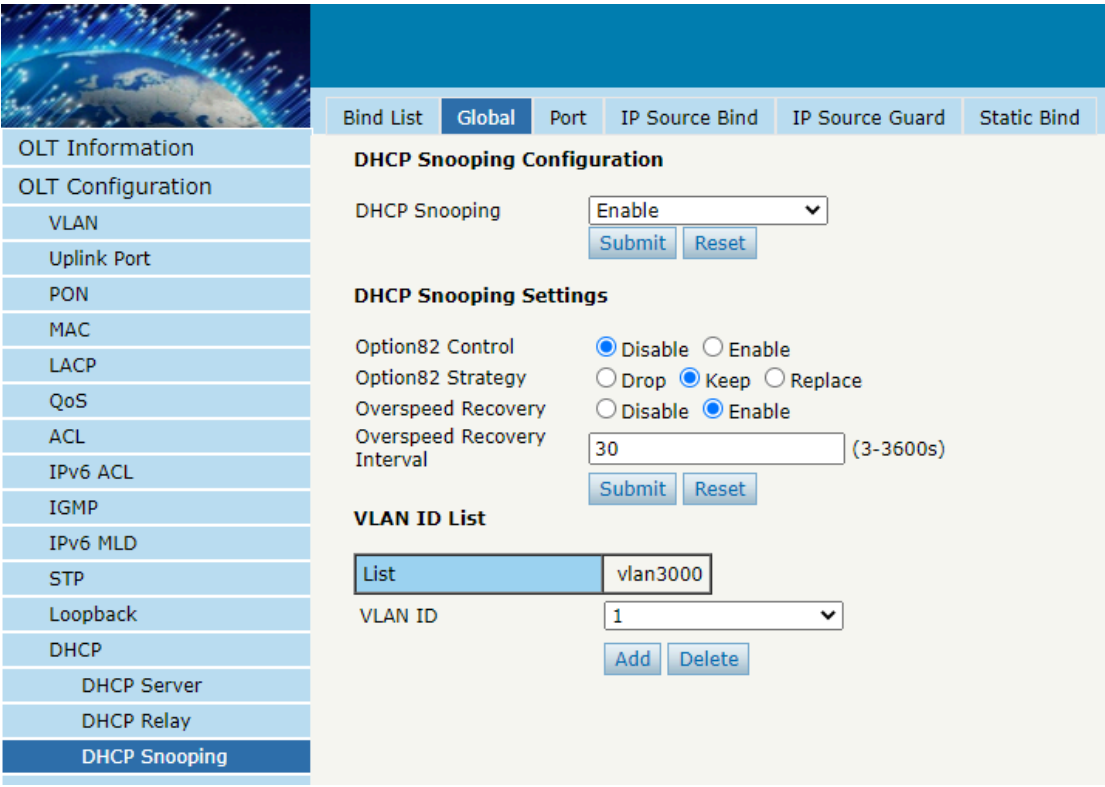


MAC Address	IP Address	Lease	VLAN ID	Port ID	Type	ONU ID
96:33:DF:B8:65:76	0.0.0.0	7775882	3000	GE12	Dynamic	--

Figure 3.13.3-1: DHCP Snooping Bind List

#### 3.13.3.2 Global

To prevent the DHCP message attacking and protect your network to get a useful IP address, it can deny the DHCP offers packets. DHCP Snooping is used for denying the DHCP offers packets. The DHCP server is forbidden, which cannot allocate the IP address successfully. Click **OLT Configuration** > **DHCP** > **DHCP Snooping** > **Global** to enable DHCP Snooping.



The interface shows the 'Global' tab for DHCP Snooping configuration. On the left is a navigation menu with options like OLT Information, VLAN, and DHCP Snooping. The main area has tabs for Bind List, Global, Port, IP Source Bind, IP Source Guard, and Static Bind. Under 'DHCP Snooping Configuration', the 'DHCP Snooping' dropdown is set to 'Enable'. Below this are 'DHCP Snooping Settings' for Option82 Control (Disable), Option82 Strategy (Keep), and Overspeed Recovery (Enable) with an interval of 30. At the bottom is a 'VLAN ID List' with a table containing one entry: 'vlan3000' with 'VLAN ID' 1.

**DHCP Snooping Configuration**

DHCP Snooping: Enable Submit Reset

**DHCP Snooping Settings**

Option82 Control: ☒ Disable ☐ Enable  
Option82 Strategy: ☐ Drop ☒ Keep ☐ Replace  
Overspeed Recovery: ☐ Disable ☒ Enable  
Overspeed Recovery Interval: 30 (3-3600s) Submit Reset

**VLAN ID List**


List	VLAN ID
vlan3000	1

Add Delete

Figure 3.13.3-2: DHCP Snooping Global

### 3.13.3.3 Port

The DHCP snooping ports are untrust by default. Click **OLT Configuration** **>** **DHCP** **>** **DHCP Snooping** **>** **Port** to configure.



The interface shows the 'Port' tab for DHCP Snooping Port Configuration. The left navigation menu is the same as in the previous figure. The main area has tabs for Bind List, Global, Port, IP Source Bind, IP Source Guard, and Static Bind. Below the tabs is a table for port configuration with columns: Port ID, Type, Option82 Circuit ID, Option82 Remote ID, and Limit Rate(0-4096pps). The table lists ports GE1 through GE13, with GE1-GE9 and GE11-GE13 set to 'Untrust' and GE10 set to 'Trust'. All other fields are empty.

**DHCP Snooping Port Configuration**

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	Trust			0
GE11	Untrust			0
GE12	Untrust			0
GE13	Untrust			0

Figure 3.13.3-3: DHCP Snooping Port Setup

### 3.13.3.4 Static Bind


Fill in the MAC address, choose the VLAN ID, port ID and the lease time. Click **OLT Configuration** ▢ **DHCP** ▢ **DHCP Snooping** ▢ **Static Bind** to configure, as shown in Figure 3.13.3-4.

The screenshot displays the configuration page for DHCP Snooping Static Bind. On the left is a sidebar menu with options like OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, STP, Loopback, DHCP, DHCP Server, DHCP Relay, and DHCP Snooping. The main area has tabs for Bind List, Global, Port, IP Source Bind, IP Source Guard, and Static Bind. The 'Static Bind' tab is active. It contains a form titled 'Add DHCP Snooping Bind' with fields for MAC Address (format HH:HH:HH:HH:HH:HH), VLAN ID (dropdown set to 1), IP Address, Port ID (dropdown set to GE1), and Lease (format 60-1000000s). An 'Add' button is at the bottom of the form. Below the form is a table titled 'Static DHCP Snooping Bind Table' with columns: MAC Address, VLAN ID, IP Address, Port ID, Lease, and Delete.

Figure 3.13.3-4: DHCP Snooping Static Bind

### 3.13.3.5 IP Source Guard

This function is actually based on the DHCP Snooping Bind List to restrict access to the external network. That means that an issue outside the list cannot access the external network.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCP Server

DHCP Relay

DHCP Snooping

Bind List

Global

Port

IP Source Bind

IP Source Guard

Static Bind

IP Source Guard Configuration

Port ID

GE1

FilterType

Disable

Filter Vlan ID

Submit

Reset


IP Source Guard Table

Interface	FilterType	FilterMode	IP Address	MAC Address	[filtervlanid]
PON1	IP-MAC	Active	Deny-All		100

Figure 3.13.3-5: IP Source Guard

### 3.13.3.6 IP Source Bind

If you configure a rule in IP Source Guard, a dynamic rule is displayed in IP Source Bind Table. You can add a static rule manually on this page. It works as described in the previous section.



OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCP Server

DHCP Relay

DHCP Snooping

Bind List

Global

Port

IP Source Bind

IP Source Guard

Static Bind

### IP Source Bind Configuration

VLAN ID

Port ID

IP Address

mask

MAC Address

(HH:HH:HH:HH:HH:HH)

Submit

Reset

### IP Source Bind Table


MAC Address	IP Address	Type	VLAN ID	Interface	Delete
80:14:A8:FB:40:18	192.168.22.125/24	Static	3000	PON3	

Figure 3.13.3-6: IP Source Bind

## 3.14 DHCPv6

### 3.14.1 DHCPv6 Server

DHCPv6 is a network protocol that used to configure IPv6 address, IPv6 prefix, DNS, domain and other network parameters for a host which operating on an IPv6 network.

#### 3.14.1.1 Bind Information

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

Click **OLT Configuration** **>** **DHCPv6** **>** **DHCPv6 Server** **>** **DHCPv6 Bind Information** to show the information.

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

DHCPv6 Bind Information

Client	DUID	Address	Preferred LifeTime	Valid LifeTime	Expire Time
fe80::65ca:ddac:a59d:28de	00:01:00:01:22:da:15:a2:c8:5b:76:03:b5:f2	2002:abcd::ef:1000	500	600	2019-03-12 09:28:32 (592 seconds)

Refresh

Figure 3.14.1-1: DHCPv6 Bind Information

### 3.14.1.2 Server Enable

Select VLAN and fill in DHCPv6 pool name, enable DHCPv6 server, then the VLAN will be added into the table. Before enabled DHCPv6 server, VLAN IP and server pool are required.

Click **OLT Configuration** ▢ **DHCPv6** ▢ **DHCPv6 Server** ▢ **DHCPv6 Server Enable** to configure DHCPv6 server.

DHCPv6 Bind Information			DHCPv6 Server Enable		Server Pool Configuration	
<b>DHCPv6 Server Configuration</b>						
DHCPv6 Server		<div>Disable ▾</div>				
VLAN ID		<div>1 ▾</div>				
Pool Name		<div></div>				
		<div>SubmitReset</div>				
<b>DHCPv6 Interface Information</b>						
VLAN ID		Using Pool				
3000		test				
		<div>Refresh</div>				

Figure 3.14.1-2: DHCPv6 Server

### 3.14.1.3 Pool Configuration

DHCPv6 pool specifies the range of assigned IPv6 address. Life time, DNS and domain also can be specified here for DHCPv6 client.

Click **OLT Configuration** ▢ **DHCPv6** ▢ **DHCPv6 Server** ▢ **Server Pool Configuration** to configure DHCPv6 address pool and other network parameters.

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

### DHCPv6 Server Pool Setting

Pool Name

Start IPv6 Address

End IPv6 Address

Valid LifeTime

Preferred LifeTime

DNS Server

Domain Name

(60-4294967295)s

(60-4294967295)s(Valid lifetime must be large than Preferred lifetime)

Submit

Reset

#### DHCPv6 Server Pool

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

Figure 3.14.1-3: DHCPv6 Pool

### 3.14.1.4 DHCPv6 DUID

Click **OLT Configuration** **DHCPv6** **DHCPv6 Server** **DHCPv6 DUID** to configure DUID type and enterprise number.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

DHCPv6 DUID

### DHCPv6 DUID Configuration

DUID Type

Enterprise Number

Identifier

DUID-LLT

(1-4294967295)

Submit

Reset

#### DHCPv6 DUID Table

DUID Type	DUID
DUID-LLT	00:01:00:01:28:9e:34:40:00:6d:61:51:8c:3d

Refresh

Figure 3.14.1-4: DHCPv6 DUID

### 3.14.2 DHCPv6 Relay

During the process of obtaining the IPv6 address/prefix and other network configuration parameters dynamically through the DHCPv6 relay, the DHCPv6 client and the DHCPv6 server are processed in the same way as when the DHCPv6 relay is not processed.

Click **OLT Configuration** **DHCPv6** **DHCPv6 Relay** **Configuration** to

configure DHCPv6 relay server.

Configuration

Add DHCPv6 Relay Server

VLAN ID

1

Server IPv6

Add

DHcipv6 Realy Server Table

VLAN ID	Server IPv6	Delete
---------	-------------	--------

Figure 3.14-2: DHCPv6 Relay

### 3.15 IPv6 SLAAC

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

#### 3.15.1 IPv6 SLAAC

When IPv6 host use SLAAC (Stateless Address AutoConfiguration), OLT will send a route advertisement (RA) packet to it. This page is used to configure parameters of the route advertisement packet. Click **OLT Configuration** **IPv6 SLAAC** **IPv6 SLAAC** to configure RA parameters.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

IPv6 SLAAC

IPv6 SLAAC Prefix

RDNSS

IPv6 SLAAC Configuration

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000ms)	Suppress RDNSS	M	O	Router Preference	MTU (1280-1500)
3000	<input checked="" type="checkbox"/>	200	600	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEDIUM	1500

Submit

Figure 3.15-1: IPv6 SLAAC

#### 3.15.2 IPv6 SLAAC Prefix

When IPv6 host uses stateless address auto configuration, OLT can



provide IPv6 prefix. The host will generate an IPv6 address with the prefix.

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

**IPv6 SLAAC Prefix Configuration**

VLAN ID: 1  
ND Prefix:   
ND Prefix Length:   
Valid LifeTime: 2592000 (0-4294967295)s  
Preferred LifeTime: 604800 (0-4294967295)s (Valid lifetime must be larger or equal than Preferred lifetime)  
Add

**IPv6 SLAAC Prefix**

VLAN ID	ND Prefix	Valid LifeTime	Preferred LifeTime	Delete
3000	2021::/64	2592000	604800	

Figure 3.15-2: IPv6 SLAAC Prefix

### 3.15.3 RDNSS

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

**RDNSS Configuration**

VLAN ID: 1  
Sequence:   
Lifetime: 600 (60-4294967295s)  
DNSServer:   
Notice: Lifetime must be at least or equal 3 \* sent RA time  
Submit Reset

**RDNSS Table**

VLAN ID	Sequence	DNSServer	DNSServer	DNSServer	Lifetime	Delete
3000	1	2077::12			600	

Refresh

Figure 3.15-3: RDNSS

# 3.16 Route

## 3.16.1 IP

### 3.16.1.1 VLAN IP

Select an existing VLAN and set an IP address for this VLAN, as shown in Figure 3.16.1-1.

VLAN IP

ARP Proxy

**VLAN IP Configuration**  

VLAN ID

1

IP Address

Subnet Mask

Submit

Reset

**VLAN IP Table**


VLAN ID	IP Address	Subnet Mask	Delete
3000	192.168.6.181	255.255.255.0	

Figure 3.16.1-1: VLAN IP

### 3.16.1.2 ARP Proxy

When serves as an ARP proxy, the OLT processes the ARP request message via configuring the VLAN as the layer 3 interface. The VLAN ID configuration value ranges is from 1 to 4085.  
First, configure the VLAN IP.  
Then enable the ARP proxy.

VLAN IP
ARP Proxy

### ARP Proxy Configuration

VLAN ID
1

ARP Proxy
☒ Disable
☐ Enable

Submit

### ARP Proxy Table

VLAN ID	ARP Proxy Status
1	disable
2	disable
766	disable
3000	disable
3234	disable

Figure 3.16.1-2: ARP Proxy

## 3.16.2 Static Route

OLT supports static route L3 function. Click **Static Route** to configure, as shown in Figure 3.16-2.

Static Route

### Add Static Route

Destination IP

Destination Mask

Gateway

Add

### Static Route Table


Destination IP	Destination Mask	Gateway	Delete
192.168.10.0	255.255.255.0	192.168.3.1	

Figure 3.16-2: Static Route

## 3.16.3 RIP

RIP (Routing Information Protocol) is a simple internal gateway protocol, which is based on the D-V algorithm and uses hop count to represent metric. The hop count is the number of routers that a datagram must pass through. RIP only support maximum 15 hops; hence it is fit for a

small network.

### 3.16.3.1 RIP Information

This page displays RIP information.  
Click **OLT Configuration** > **Route** > **RIP** > **RIP Information** to check RIP route table and routing information sources.

RIP InformationRIP EnableRIP Route NetworkingRIP RedistributeRIP Interface

RIP Route Table

Route Type	Network	Next Hop	Metric	From	Tag	Time
------------	---------	----------	--------	------	-----	------

Routing Information Sources

Gateway	BadPackets	BadRoutes	Distance	Last Update
---------	------------	-----------	----------	-------------

Refresh

Figure 3.16.3-1: RIP Information

### 3.16.3.2 RIP Enable

Enable RIP protocol and configure RIP parameters.  
Click **OLT Configuration** > **Route** > **RIP** > **RIP Enable** to configure RIP basic parameters.

RIP InformationRIP EnableRIP Route NetworkingRIP RedistributeRIP Interface

RIP Enable Configuration

RIP Route

Disable

Base

RIP Version

Update Time

30

(5-2147483647s)

Timeout Time

180

(5-2147483647s)

Garbage Time

120

(5-2147483647s)

Default Metric

1

(1-16)

Distance

120

(1-255)

Submit

Reset

Figure 3.16.3-2: RIP Enable

### 3.16.3.3 RIP Route Networking

This page is used to add RIP route networking. VLAN IP address must be set before adding the VLAN to RIP route networking table.  
Click **OLT Configuration** > **Route** > **RIP** > **RIP Route Networking** to add

the VLAN to RIP route networking table.


RIP Information	RIP Enable	RIP Route Networking	RIP Redistribute	RIP Interface
<b>RIP Route Networking</b>				
VLAN	3000			
IP Address	192.168.6.181			
Subnet Mask	255.255.255.0			
	<input type="button" value="Add"/> <input type="button" value="Reset"/>			
<b>RIP Route Networking Table</b>				
Network	Delete			
192.168.6.181/24				
<input type="button" value="Refresh"/>				

Figure 3.16.3-3: RIP Route Networking

### 3.16.3.4 RIP Redistribute

This page is used to enable or disable route redistribute and choose redistribute mode.

Click **OLT Configuration** **>** **Route** **>** **RIP** **>** **RIP Redistribute** to configure RIP redistribute.

RIP Information	RIP Enable	RIP Route Networking	RIP Redistribute	RIP Interface
<b>Default Route Redistribute</b>				
Default Route Redistribute	Disable			
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>			
<b>Redistribute</b>				
Redistribute	Kernel			
Metric	<input type="text" value=""/> (0-16)			
	<input type="button" value="Add"/> <input type="button" value="Reset"/>			
<b>Redistribute Table</b>				
Redistribute Type	Metric	Delete		
<input type="button" value="Refresh"/>				

Figure 3.16.3-4: RIP Redistribute

### 3.16.3.5 RIP Interface

This page is used to configure RIP interface and its authentication type. VLAN IP address must be set before configuring RIP interface. And auth

chain should be set on page **Key Chain**, refer to section 3.16.5.

Click **OLT Configuration** ▢ **Route** ▢ **RIP** ▢ **RIP Interface** to configure RIP interface parameters.

RIP InformationRIP EnableRIP Route NetworkingRIP RedistributeRIP Interface

**RIP Interface Configuration**

VLAN3000

IP Address

Subnet Mask

Send Version1

Recv Version1

AuthenticationDisable

SubmitReset

**RIP Interface Table**

Interface	Network	Send Version	Recv Version	Authentication
ethv0.3000	192.168.6.181/24	2	1 2	

Refresh

Figure 3.16.3-5: RIP Interface

## 3.16.4 OSPF

OSPF (Open Shortest Path First) is an internal gateway protocol based on link state routing protocol. This protocol uses the Dijkstra algorithm to calculate the shortest path to each network, and performs the algorithm to quickly converge to the new loop-free topology when detecting changes in the link (such as link failure).

### 3.16.4.1 OSPF Information

This page displays OSPF information, including neighbor information and OSPF routing information.

Click **OLT Configuration** ▢ **Route** ▢ **OSPF** ▢ **OSPF Information** to check OSPF information.

OSPF Information	OSPF Enable	OSPF Route Networking	OSPF Area Type	OSPF Area Summary	OSPF Redistribute	OSPF Interface
------------------	-------------	-----------------------	----------------	-------------------	-------------------	----------------

OSPF Neighbor Table								
Neighbor ID	Priority	State	Dead Time	Address	Interface	RXmtL	RqstL	DBsmL
192.168.6.182	1	Full/DR	39.081s	192.168.6.182	ethv0.3000:192.168.6.181	0	0	0

OSPF Routing Table				
OSPF Network Routing Table				
Destination Type	Network	Cost	Area	Interface
N	3.3.0.0/16	1	3.3.3.3	directly attached to ethv0.3
N	192.168.6.0/24	1	0.0.0.0	directly attached to ethv0.3000
OSPF Router Routing Table				
Destination Type	Network	Cost	Area/Type	Interface
OSPF External Routing Table				
Destination Type	Network	Cost/Type2 Cost	Tag	Interface

Figure 3.16.4-1: OSPF Information

### 3.16.4.2 OSPF Enable

This page is used to enable OSPF. Fill in route ID and let it blank, enable OSPF. OLT will use the biggest IP address as route ID if it's blank. Click **OLT Configuration** **Route** **OSPF** **OSPF Enable** to enable OSPF.

OSPF Information	OSPF Enable	OSPF Route Networking	OSPF Area Type	OSPF Area Summary	OSPF Redistribute	OSPF Interface
------------------	-------------	-----------------------	----------------	-------------------	-------------------	----------------

OSPF Enable Configuration	
OSPF Route	Enable
Router ID	192.168.6.181
	Submit Reset

Figure 3.16.4-2: OSPF Enable

### 3.16.4.3 OSPF Route networking

This page is used to configure area number for VLAN where OSPF protocol is operating. Click **OLT Configuration** **Route** **OSPF** **OSPF Route Networking** to configure area number.

OSPF Information	OSPF Enable	OSPF Route Networking	OSPF Area Type	OSPF Area Summary	OSPF Redistribute	OSPF Interface
------------------	-------------	-----------------------	----------------	-------------------	-------------------	----------------

OSPF Route Networking	
Area	
VLAN	3
IP Address	
Subnet Mask	
	Add Reset

OSPF Route Networking Table		
Area	Network	Delete
3.3.3.3	3.3.3.3/16	
0.0.0.0	192.168.6.181/24	
Refresh		

Figure 3.16.4-3: OSPF Route Networking

### 3.16.4.4 OSPF Area Type

This page is used to configure area type. Backbone area will not display on this page.

OSPF Information OSPF Enable OSPF Route Networking **OSPF Area Type** OSPF Area Summary OSPF Redistribute OSPF Interface

**OSPF Area Type Configuration**

Area: 3.3.3.3 ▾ Notice: Backbone cannot be configured as stub  
Area Type: Stub ▾  
No Summary: Disable ▾  
Add Reset

**OSPF Area Type Table**

Area	Type	No Summary	Delete
3.3.3.3	STUB	disable	

Refresh

Figure 3.16.4-4: OSPF Area Type

### 3.16.4.5 OSPF Area Summary

This page is used to configure area IP address summary.

OSPF Information OSPF Enable OSPF Route Networking OSPF Area Type **OSPF Area Summary** OSPF Redistribute OSPF Interface

**OSPF Area Summary Configuration**

Area: 0.0.0.0 ▾  
IP Address:   
Subnet Mask:   
Add Reset

**OSPF Area Summary Table**

Area	Network	Delete
3.3.3.3	192.168.20.1/24	

Refresh

Figure 3.16.4-5: OSPF Area Summary

### 3.16.4.6 OSPF Redistribute

The router can use route redistribution to broadcast the OSPF routing it learns through another routing protocol so that several routing protocols can cooperate with each other in a network.



OSPF Information

OSPF Enable

OSPF Route Networking

OSPF Area Type

OSPF Area Summary

OSPF Redistribute

OSPF Interface

Default Route Redistribute

Default Route Redistribute

Disable

Always

Metric

(1-16777214)

Metric Type

(1-2)

Submit

Reset

Redistribute

Redistribute

Kernel

Metric

(1-16777214)

Metric Type

(1-2)

Add

Reset

Redistribute Table

Redistribute Table

Metric

Metric Type

Delete

Refresh

Figure 3.16.4-6: OSPF Redistribute

### 3.16.4.7 OSPF Interface

This page is used to OSPF interface parameters such as cost, time, priority, authentication, and so on.

OSPF Information

OSPF Enable

OSPF Route Networking

OSPF Area Type

OSPF Area Summary

OSPF Redistribute

OSPF Interface

OSPF Interface Configuration

VLAN

3

Base

IP Address

3.3.3.3

Subnet Mask

255.255.0.0

Cost

1

(1-65535)

Retransmit Interval

5

(3-65535s)

Transmit Delay

1

(1-65535s)

Hello Interval

10

(1-65535s)

Dead Interval

40

(1-65535s)

Priority

1

(0-255)

Authentication

Enable

Auth Type

MD5

Key ID

1

(1-255)

Auth String

(Auth String length must be less than 16)

Submit

Reset

OSPF Interface Table

VLAN	Network	Cost	Priority	Retransmit Interval	Transmit Delay	Hello Interval	Dead Interval	Authentication
3000	192.168.6.181/24	1	1	5	1	10	40	
3	3.3.3.3/16	1	1	5	1	10	40	

Refresh

Figure 3.16.4-7: OSPF Interface

### 3.16.5 Key Chain

Key management is a method of controlling the authentication key used by routing protocols. The authentication key is available for EIGRP and RIP version 2. To manage the authentication key needs a key chain. Each key has its own key identifier, which is stored locally. The combination of the key identifier and the interface associated with the message uniquely

identifies the authentication algorithm and MD5 authentication key in use.

Key Chain

Add Key Chain

Key Chain

Key ID

Key String

(0-2147483647)

Add

Reset

Key Chain Table

Key Chain	Key ID	Key String	Edit	Delete
-----------	--------	------------	------	--------

Refresh

Figure 3.16-5: Key Chain

## 3.16.6 Route Table

This page displays routing items of OLT.

Route Table

Route Types: K - kernel route, C - connected, S - static, R - RIP, O - OSPF, > - selected route, \* - FIB route

Route Table

Route Type	Network	Distance	Metric	Interface	Time
O	3.3.0.0/16	110	1	directly connected, ethv0.3	02:34:33
C>*	3.3.0.0/16			directly connected, ethv0.3	
C>*	127.0.0.0/8			directly connected, lo	
O	192.168.6.0/24	110	1	directly connected, ethv0.3000	03:34:37
C>*	192.168.6.0/24			directly connected, ethv0.3000	
S	192.168.10.0/24	1	0	via, 192.168.3.1	

Refresh

Figure 3.16-6: Route Table

## 3.17 IPv6 Route

### 3.17.1 VLAN IPv6

Configure IPv6 address for VLAN that has been created.

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

VLAN IPv6

### VLAN IPv6 Configuration

VLAN ID

1

▼

IPv6 Address

Prefixlen

Submit

Reset

### VLAN IPv6 Table

VLAN ID	IPv6 Address	Prefixlen	Delete
3000	fe80::bb8:8214:a8ff:fec4:1e5b		

Figure 3.17-1: VLAN IPv6

### 3.17.2 IPv6 Static Route

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

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

IPv6 Static Route

### Add IPv6 Static Route

Destination IPv6

Destination Prefixlen

Gateway

Add

### IPv6 Static Route Table

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

Figure 3.17-2: IPv6 Static Route

### 3.17.3 IPv6 Route Table

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

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

IPv6 Route Table					
Route Types: K - kernel route, C - connected, S - static, R - RIPng, O - OSPFv6, > - selected route, * - FIB route					
IPv6 Route Table					
Route Type	Network	Distance	Metric	Interface	Time
K>*	ff00::/8			directly connected, ethv0.3000	
Refresh					

Figure 3.17-3: IPv6 Route Table

# Chapter 4 ONU Configuration

This chapter is about the ONU management by OLT.

## 4.1 ONU List

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

Click **ONU Configuration**→**ONU List**, shown as Figure 4-1.

ONU List

ONU Status

OPM Diag

ONU Authentication Information

Port ID

PON1

Refresh

ONU Type

Authentication

Deregister

Reset

Unauth

MAC

(HH:HH:HH:HH:HH:HH)

Search

ONU ID	Status	MAC Address	Description	RTT	Type	Auth Flag	Exchange	Auth Mode	Loid/pwd	Action
EPON0/1:1	Offline	00:13:25:00:00:01	N/A	0	N/A	Unauth	Idle	None	N/A	<a href="#">Profile</a> <a href="#">Unauth</a>
EPON0/1:2	Online	80:14:A8:31:F1:68	N/A	80	1GE+WIFI	Auth	Idle	None	N/A	<a href="#">Config</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>

Figure 4-1: ONU List

### 4.1.1 Config

Click **ONU List**→**Config**, shown as Figure 4.1-1.

OLT Information

OLT Configuration

ONU Configuration

ONU list

Authentication

Upgrade

Profile Configuration

System Configuration

ONU list

ONU Status

OPM Diag

ONU Authentication Information

Port ID

PON1

Refresh

ONU Type

Authentication

Deregister

Reset

Unauth

MAC

(HH:HH:HH:HH:HH:HH)

Search

Description

Search


Online 62 ONUs / Total 62 ONUs

ONU ID	Status	MAC Address	Description	RTT(TQ)	Type	Auth Flag	Exchange	Auth Mode	Loid/Password	Action
EPON0/1:1	Online	80:07:1B:E6:8A:AC	N/A	101	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>
EPON0/1:2	Online	80:07:1B:E6:8E:CC	N/A	101	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>
EPON0/1:3	Online	80:07:1B:E6:8A:4C	N/A	102	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>
EPON0/1:4	Online	80:07:1B:E6:8D:CC	N/A	101	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>
EPON0/1:5	Online	80:07:1B:E6:8B:FC	N/A	101	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>
EPON0/1:6	Online	80:07:1B:E6:8E:DC	N/A	101	2GE+1POTS+2WIFI	Auth	Finish	None	N/A	<a href="#">Config</a> <a href="#">MacInfo</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>

Figure 4.1-1: Configure ONU

#### 4.1.1.1 Information

Click **ONU List**→**Config**→**Information**, show the ONU information.



OLT Information

OLT Configuration

ONU Configuration

**ONU list**

Authentication

Upgrade

Profile Configuration

System Configuration

ONU list

ONU Status

OPM Diag

Information

Bandwidth

Port

VLAN

QoS

IGMP

VoIP

SIP

POTS

Alarm

Advance

Basic Information

Description

Submit

Basic Information			
Vendor ID	MONU	Model ID	H423
ONU ID	80071be68aac	Hardware Version	V4.1
Software Version	V3.1.11-210805	Firmware Version	1.1.2 Aug 5 2021 15:18:45
Optical Module Information			
Temperature	44.77 °C	Supply Voltage	3.31 V
Bias Current	9.38 mA	Transmit Power	1.37 mW (1.38 dBm)
Receive Power	0.01 mW (-20.13 dBm)		
CAP2 Information			
ONU Type	HGU	Multi LLID	unsupport
Protection Type	unsupport	PONIF Count	1
Slot Count	0	Interface Type Count	5
Interface Type Port	GE(2); FE(0); POTS(1); USB(0); WLAN(2);		
VoIP Information			
MAC Address	80:07:1B:E6:8A:AC	Protocol Support	SIP
Software Version	V3.1.11-210805	Software Time	20210805151720
User Count	1		

Figure 4.1.1-1: ONU Information

### 4.1.1.2 Bandwidth

Click **ONU List**→**Config**→**Bandwidth** to configure ONU upstream and downstream bandwidth.

ONU List

Information

**Bandwidth**

Port

VLAN

QoS

IGMP

Alarm

WAN

WIFI

Advance

Bandwidth Configuration

Type	Enable	Content	
Upstream	<input checked="" type="checkbox"/>	Fix Rate	10000 (0-950000Kbps)
		Commit Rate	10000 (1-950000Kbps)
		Peak Rate	10000 (512-1000000Kbps)
		WRR Weight	1 (1-20)
Downstream	<input checked="" type="checkbox"/>	Peak Rate	10000 (0-1000000Kbps)
		WRR Weight	1 (1-16)

Submit

Figure 4.1.1-2: ONU Bandwidth

### 4.1.1.3 Port

The ONU port basic configure switch can be operated. And this page can configure the ONU port bandwidth.

Click **ONU List**→**Config**→**Port**, shown as Figure 4.1.1-3

**Port Basic Configuration**

ONU Port: Port1

**Basic Configuration**

Link Status: Down

☒ Admin Status    ☒ Auto Negotiation    ☒ Flow Control    ☒ Loop Detection

**Bandwidth Configuration**

Type	Enable	Content
Upstream	<input checked="" type="checkbox"/>	Commit Rate: 1000 (0-1048576kbit/s)
		Certain Burst: 100 (0-10240byte)
		Extra Burst: 100 (0-10240byte)
Downstream	<input checked="" type="checkbox"/>	Commit Rate: 1000 (0-1048576kbps)
		Peak Rate: 1000 (0-1048576kbps)

Figure 4.1.1-3: ONU Port Configuration

#### 4.1.1.4 VLAN

ONU port default VLAN mode is transparent, the VLAN mode can be changed to tag mode, translation mode, aggregation mode, trunk mode. Click **ONU List**→**Config**→**VLAN**, shown as Figure 4.1.1-4.

**VLAN Configuration**

ONU Port: Port1

VLAN Mode: tag

PVID: 1000 (1-4095)

Figure 4.1.1-4: ONU Port VLAN

#### 4.1.1.5 QoS

The QoS take effect with ONU port. Click **ONU List**→**Config**→**QoS**, shown as Figure 4.1.1-5.

ONU List

Information

Bandwidth

Port

VLAN

QoS

IGMP

Alarm

WAN

WIFI

Advance

Port Class Configuration

ONU Port

Port1

Precedance

1

(1-8)

Priority

1

(0-7)

Queue

1

(0-7)

☒ Destination MAC
 

Equal

00:00:00:00:00:03

(HH:HH:HH:HH:HH:HH)

☒ Source MAC
 

Equal

00:00:00:00:00:02

(HH:HH:HH:HH:HH:HH)

☐ VLAN
 

Equal

(1-4094)

☐ COS
 

Equal

(0-7)

☐ Ethernet Type
 

Equal

☐ Destination IP
 

Equal

☐ Source IP
 

Equal

☐ Protocol
 

Equal

(0-255)

☐ TOS
 

Equal

(0-255)

☐ Destination Port
 

Equal

(0-65535)

☐ Source Port
 

Equal

(0-65535)

Add

Precedance

Priority

Queue

Class Details

Delete

Clear

Figure 4.1.1-5: QoS Configuration

#### 4.1.1.6 IGMP

Configure the ONU IGMP mode(Snooping or CTC Control),and the IGMP VLAN mode.

Click **ONU List**→**Config**→**IGMP**, shown as Figure 4.1.1-6.



**ONU List**

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

**Multicast Configuration**

Multicast Switch ☒ Snooping ☐ CTC Control

Fast Leave State ☒ Disable ☐ Enable

[Submit](#)

**Multicast Port Configuration**

ONU Port Port1

Multicast Max Group	64 (0-255)	<a href="#">Submit</a>
Multicast VLAN	2000	<a href="#">Submit</a>
VLAN Tag Strip Mode	Strip	<a href="#">Submit</a>

Figure 4.1.1-6: IGMP Configuration

#### 4.1.1.7 Alarm

Show the ONU alarm status and threshold. Click **ONU List** ▢ **Config** ▢ **IGMP** , shown as Figure 4.1.1-7.

**ONU List**

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

**ONU Alarm Information**

Alarm Type Equipment Alarm

Alarm Status

**PON Alarm Information**

Alarm Type Rx Power High Alarm

Alarm Status

Alarm Threshold -inf dBm

Clear Threshold -inf dBm

**Port Alarm Information**

Port ID Port1

Alarm Type Ethernet Port Auto Neg Failure

Alarm Status

Alarm Threshold

Clear Threshold

Figure 4.1.1-7: ONU Alarm

### 4.1.1.8 WAN

This is the private OAM between OLT and ONU. When the connected ONU support this function, the option "WAN" can be show in this page. Click **ONU List** ▢ **Config** ▢ **WAN** , fill in the parameter, click "**Add**" then click "Submit" it will take effect, shown as Figure 4.1.1-8.

The screenshot shows the WAN configuration page. At the top, there's a tab bar with 'ONU List' selected. Below it, a sub-tab bar includes 'Information', 'Bandwidth', 'Port', 'VLAN', 'QoS', 'IGMP', 'Alarm', 'WAN' (selected), 'WIFI', and 'Advance'. The main content area is titled 'WAN Connect Table' and contains a table with columns: Index, WAN Mode, Connect Mode, VLAN Mode, Service Mode, Configuration Info, and Status. Below this is the 'WAN Connect Parameter Configuration' section with various settings: Mode (bridge), VLAN Mode (Tag), VLAN ID (1000), VLAN Cos (0), Qinq Enable (Disable), Qinq Tpid, SVLAN ID, SVLAN Cos, QOS Enable (Disable), Service Mode (Internet), and Port Binding (checkboxes for Lan1-Lan4 and SSID1-SSID4). An 'Add' button is located below the Port Binding section. At the bottom, the 'WAN Connect running-config' section shows a table with one entry: Index 1, Configuration Info 'ConnectType : bridge, WanMode : internet, VLAN Mode :Tag, VLAN ID:1000, VLAN Cos:0', and a Delete button. A 'Submit' button is at the very bottom.

Index	WAN Mode	Connect Mode	VLAN Mode	Service Mode	Configuration Info	Status
1	bridge		Tag	Internet	ConnectType : bridge, WanMode : internet, VLAN Mode :Tag, VLAN ID:1000, VLAN Cos:0	

Figure 4.1.1-8: WAN Connection

### 4.1.1.9 WIFI

This is the private OAM between OLT and ONU. When the connected ONU support this function, the option "WIFI" can be show in this page. Click **ONU List** ▢ **Config** ▢ **WIFI**, the SSID and the password can be set, shown as Figure 4.1.1-9.

ONU List

Information

Bandwidth

Port

VLAN

QoS

IGMP

Alarm

WAN

WIFI

Advance

WIFI Switch Configuration

Status

enable

Communication Rules

ETSI

Protocol Cluster

80211bgn

Channel

0

(0-13)

Transmit Power

20

(0-20)

submit

Delete

WIFI SSID Configuration

SSID

SSID1

ONU WIFI Status

enable

Encryption Status

disable

Name

qwerty

Network Authentication

Open

Encrypt Type

NONE

submit

WIFI SSID Table


wifi_ssid	wifi statue	name	hide	auth_mode	encrypt_type	content	delete
1	enable	qwerty	disable	OPEN	NONE		

Figure 4.1.1-9: WIFI Setting

#### 4.1.1.10 DHCP Server

This is the private OAM between OLT and ONU. When the connected ONU support this function, the option "DHCP Server" can be show in this page.

Click **ONU List** **Config** **DHCP Server**, the ONU Lan port DHCP server can be changed, shown as Figure 4.1.1-10.

ONU List	ONU Status	OPM Diag
Information	Bandwidth	Port
VLAN	QoS	IGMP
Alarm	WAN	WIFI
DHCP Server		

Advance	
---------	--

### DHCP Server Configuration

LAN IP Address	<input type="text" value="192.168.2.1"/>
LAN Subnet Mask	<input type="text" value="255.255.255.0"/>
DHCP Server	<input type="text" value="Enable"/>
Lease Time	<input type="text" value="3600"/> (0-4294967295)
Beginning IP Address	<input type="text" value="192.168.2.2"/>
Ending IP Address	<input type="text" value="192.168.2.254"/>
Pool Type	<input type="text" value="PC"/>
Master DNS	<input type="text" value="8.8.8.8"/>
Slave DNS	<input type="text" value="8.8.8.8"/>
Gateway	<input type="text" value="192.168.2.1"/>
<input type="button" value="Submit"/>	

Figure 4.1.1-10: DHCP Server Setting

#### 4.1.1.11 Advance

ONU management IP and ONU MAC aging time can be set. The ONU which support management IP and MAC aging time can take effect. Click **ONU List** **Config** **Advance**, shown as Figure 4.1.1-11.

ONU List
Information
Bandwidth
Port
VLAN
QoS
IGMP
Alarm
WAN
WIFI
Advance

### Management IP Configuration

IP Address	<input type="text" value="192.168.5.126"/>
Network Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="192.168.5.1"/>
Client VLAN	<input type="text" value="1000"/> (0-4095)
Service VLAN	<input type="text" value="0"/> (0-4095)
Priority	<input type="text" value="0"/> (0-7)
<input type="button" value="Submit"/>	

### MAC Aging Configuration

Aging Time	<input type="text" value="600"/> (0-65535)
<input type="button" value="Submit"/>	

Figure 4.1.1-11: Advance

#### 4.1.1.12 VoIP

VoIP ONU can set the VoIP global parameter.

**ONU List** **Config** **VoIP**, shown as Figure 4.1.1-12.

ONU List	
Information	Bandwidth
<div>Port</div> <div>VLAN</div> <div>QoS</div> <div>IGMP</div> <div>VoIP</div> <div>SIP</div> <div>POTS</div> <div>Alarm</div> <div>Advance</div>	
<b>VoIP Global Configuration</b>	
Voice IP Mode	Static IP
IP Address	192.168.6.66 (x.x.x.x)
Network Mask	255.255.255.0 (x.x.x.x)
Default Gateway	192.168.6.1 (x.x.x.x)
Tagged Flag	Tag
Voice Client VLAN	1000 (0-4095)
Voice Service VLAN	0 (0-4095)
Voice Priority	7 (0-7)
<input type="button" value="Submit"/>	
<b>IAD Operation Status</b>	
IAD Operation Status	IAD fault
Set IAD Operation	<input type="button" value="Reregister"/> <input type="button" value="Deregister"/> <input type="button" value="Reset"/>
<b>Fax/Modem Configuration</b>	
Voice T38 Status	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Fax/Modem Control	<input checked="" type="radio"/> Negotiation <input type="radio"/> Auto VBD
<input type="button" value="Submit"/>	

Figure 4.1.1-12: VoIP Global

### 4.1.1.13 SIP

VoIP ONU SIP parameter can be set in this page.

**ONU List** **Config** **SIP**, shown as Figure 4.1.1-13.

ONU List	
Information	Bandwidth
<div>Port</div> <div>VLAN</div> <div>QoS</div> <div>IGMP</div> <div>VoIP</div> <div>SIP</div> <div>POTS</div> <div>Alarm</div> <div>Advance</div>	
<b>SIP Parameter Configuration</b>	
Manage Port	5060 (1-65535)
Proxy Service IP/Port	192.168.6.33 (x.x.x.x) 5060 (1-65535)
Backup Proxy Service IP/Port	0.0.0.0 (x.x.x.x) 5060 (1-65535)
Register Service IP/Port	192.168.6.33 (x.x.x.x) 5060 (1-65535)
Backup Register Service IP/Port	0.0.0.0 (x.x.x.x) 5060 (0-65535)
Out Bound Service IP/Port	0.0.0.0 (x.x.x.x) 5060 (0-65535)
Register Interval	3600 (0-65535)
Heartbeat Switch	Disable
Heartbeat Cycle	30 (1-65535)
Heartbeat Count	1 (1-65535)
<input type="button" value="Submit"/>	

Figure 4.1.1-13: SIP Parameter

### 4.1.1.14 POTS

VoIP ONU POTS account and password set in this page, the length can't be more than 16 bits.

**ONU List > Config >POTS**, shown as Figure 4.1.1-14.

ONU List

Information

Bandwidth

Port

VLAN

QoS

IGMP

VoIP

SIP

POTS

Alarm

Advance

**VoIP POTS Configuration**

VoIP Port

Pots1

**POTS Information**

Port Status	Inactive
Services State	EndNormal
Codec Mode	G711U

**Manage Configuration**

Manage Status

☒ Disable ☐ Enable

Submit

**SIP User Parameter Configuration**

User Account

1212421212

User name

1212121212

User Password

1111111111

Submit

Figure 4.1.1-14: POTS Setting

**4.1.1.15 MAC Info**

This interface displays the MAC addresses learned by the ONU.  
**ONU List > Config >MAC Info**, shown as Figure 4.1.1-15.

ONU list

ONU Status

OPM Diag

Information

Bandwidth

Port

VLAN

QoS

IGMP

Alarm

WAN

WiFi

DHCP Server

MAC Info

Security

Tr069

Advance

**Port MAC Info**

ONU Port

Port1

Learning MAC Number	164
Report MAC Number	160

Index	MAC	VLAN
1	00:00:00:00:00:00	1
2	e4:77:23:ba:cb:c2	3000
3	80:07:1b:9c:da:d9	3000
4	80:07:1b:a0:a5:9d	3000
5	7c:39:53:5b:cf:8a	3000
6	00:6d:61:da:f1:2d	3000

Figure 4.1.1-15: MAC Info

### 4.1.1.16 Security

You can configure the ONU user name and password, as well as ACL configuration for some common protocols on this interface. You must lower the firewall level before modifying the ACL configuration.

**ONU List > Config > Security**, shown as Figure 4.1.1-16.

ONU listONU StatusOPM Diag

InformationBandwidthPortVLANQoSIGMPAlarmWANWiFiDHCP ServerMAC InfoSecurityTr069Advance

User Control Configuration

☐ Admin Name

admin

Admin Password

12345678

☐ User Name

user

User Password

user

Submit

Firewall Level

Firewall LevelLow

Submit

ACL Configuration

Protocol	Control	Lan	Wan	Port
Telnet	<input type="checkbox"/>	<input type="checkbox"/>	<div><div>Enable</div><div><input checked="" type="checkbox"/> IPv4 Addr0.0.0.0Mask0.0.0.0</div><div><input type="checkbox"/> IPv6 Addr/</div></div>	23
FTP	<input type="checkbox"/>	<input type="checkbox"/>	<div>Disable</div>	21
HTTP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<div><div>Enable</div><div><input checked="" type="checkbox"/> IPv4 Addr0.0.0.0Mask0.0.0.0</div><div><input type="checkbox"/> IPv6 Addr/</div></div>	80
TFTP	<input type="checkbox"/>	<input type="checkbox"/>	<div>Disable</div>	69
PING	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<div><div>Enable</div><div><input checked="" type="checkbox"/> IPv4 Addr0.0.0.0Mask0.0.0.0</div><div><input type="checkbox"/> IPv6 Addr/</div></div>	0

Submit

Figure 4.1.1-16: Security

### 4.1.1.17 TR069

You can configure TR069 parameters for the ONU on this interface.

**ONU List > Config > TR069**, shown as Figure 4.1.1-17.

ONU listONU StatusOPM Diag

InformationBandwidthPortVLANQoSIGMPAlarmWANWiFiDHCP ServerMAC InfoSecurityTr069Advance

Tr069 Configuration

Tr069 Manage StatusEnable

ACS Server Addresshttp://devacs.edatahome.

ACS Server Usernamehgw

ACS Server Passwordhgw

CertificateDisable

InformEnable

Inform Interval Time43200(0-4294967295)

Reverse-Conn User Nameitms

Reverse-Conn Passworditms

Submit

Figure 4.1.1-17: Tr069

## 4.1.2 Profile

All the profile are shown in this page, choose the suitable profile binding the ONU. Click **ONU Configuration**→**ONU List**→**Profile**, shown as Figure 4.1-2.

**ONU List**

**Binding: PON 1 ONU 1 80:14:A8:3A:31:40** [Go Back](#)

DBA Profile ID:   
Service Profile ID:   
VoIP Profile ID:   
Alarm Profile ID:

**DBA Profile** | Service Profile | VoIP Profile | Alarm Profile

**DBA Profile Information**

Profile ID:   
Description:

Key	Value
Upstream	FIR : 50000 CIR : 50000 PIR : 50000 WEIGHT : 1
Downstream	PIR : 50000 WEIGHT : 1

Figure 4.1-2: Profile Bind

## 4.1.3 Deregister Reset Unauth

Single ONU can be operated deregister, reset(reboot), unauth. And the same PON ONU can be operated batch. Click **ONU Configuration**→**ONU List**, shown as Figure 4.1-3.

**ONU List**

**ONU Authentication Information**

Port ID:   
ONU Type:  [Deregister All](#) [Reset All](#) [UnAuth All](#)

ONU ID	LLID	Description	MAC Address	RTT	Type	Auth Flag	Exchange	Auth Mode	Loid/pwd	Last Dereg Reason	Action
1	-1	NULL	80:14:A8:3A:31:40	97	1GE+WIFI	Unauth	Idle	None	NULL	Wire Down	<a href="#">Profile</a> <a href="#">Unauth</a>
2	1	NULL	80:14:A8:1A:E0:F8	50	2GE+IPOTS	Auth	Idle	None	NULL	Wire Down	<a href="#">Config</a> <a href="#">Profile</a> <a href="#">Deregister</a> <a href="#">Reset</a> <a href="#">Unauth</a>

Figure 4.1-3: Deregister Reset Unauth Setting



## 4.1.4 ONU Status

Showing about the ONU information of the activity. User can check "Last Register Time", "Last Deregister Reason", "Active Time" for each ONU. Click **ONU Configuration** **ONU List** **ONU Status**, shown as Figure 4.1-4.

OLT Information

OLT Configuration

ONU Configuration

ONU List

Authentication

Upgrade

Profile Configuration

System Configuration

ONU List

ONU Status

OPM Diag

ONU Status Information

Port ID

PON1

Refresh

MAC

(HH:HH:HH:HH:HH:HH)

Search

ONU ID	Status	MAC Address	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
EPON0/1:1	Offline	00:13:25:00:00:01	N/A	N/A	N/A	0 00:00:00
EPON0/1:2	Online	80:14:A8:31:F1:68	2000/01/01 07:52:43	2000/01/01 07:50:56	Wire Down	0 15:28:43

Figure 4.1-4: ONU Status

## 4.1.5 OPM Diag

Check the ONU RX power, a batch of ONU RX power information can be shown in a list. Clearly to check the register power, when register issue happen. Click **ONU Configuration** **ONU List** **OPM Diag**, shown as Figure 4.1-5.

OLT Information

OLT Configuration

ONU Configuration

ONU List

Authentication

Upgrade

Profile Configuration

System Configuration

ONU List

ONU Status

OPM Diag

ONU OPM Diag

Port ID

PON1

Refresh

MAC

(HH:HH:HH:HH:HH:HH)

Search

ONU ID	MAC Address	Temperature(C)	Supply Voltage(V)	TX Bias Current(mA)	TX Power(dBm)	RX Power(dBm)
EPON0/1:2	80:14:A8:31:F1:68	59.52	3.27	7.94	1.93	-15.83

Figure 4.1-5: OPM Diag

## 4.2 Authentication

### 4.2.1 Authentication Mode

Authentication mode is basic on PON, it is "Disable" mode by default. There are 4 modes of the ONU authentication: Disable mode, MAC mode, LOID mode and Hybrid mode. Click **ONU**

**Configuration** → **Authentication** → **Authentication Mode**, shown as Figure 4.2-1.

Port ID	Authentication Mode
PON1	MAC
PON2	Disable
PON3	Disable
PON4	Disable
PON5	Disable
PON6	Disable
PON7	Disable
PON8	Disable

submit

Figure 4.2-1: Authentication Mode

### 4.2.2 MAC list

When the ONU authentication mode is MAC mode, only ONUs with their MAC on the white list can register to the OLT. The black MAC list ONU cannot register whatever the mode.

Click **ONU Configuration** → **Authentication** → **MAC List**, shown as Figure 4.2-2.

Authentication Mode
MAC List
LOID List

**ONU MAC Authentication**

Port ID
PON1

MAC Type
White

**Add MAC**

MAC Address
(HH:HH:HH:HH:HH:HH)

Add

**White MAC Authentication Table**

Index	MAC	Delete
1	80:14:A8:1A:E0:F8	

Clear

Figure 4.2-2: MAC List

### 4.2.3 LOID List

When the authentication mode is LOID, only the ONUs on the LOID list can register to the OLT. Click **ONU Configuration**→**Authentication**→**LOID List**, shown as Figure 4.2-3.

Authentication Mode
MAC List
LOID List

**ONU LOID**

Port ID
PON1

**Add LOID**

LOID

Password

Add

**ONU LOID Authentication Table**

Index	LOID	Password	Delete
1	epon1234567	1234567	

Clear

Figure 4.2-3: LOID List

## 4.3 Upgrade

ONU upgrade by OLT

### 4.3.1 Upgrade Status

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

Click **ONU Configuration**→**Upgrade**→**Upgrade Status**, shown as Figure 4.3-1.

PON ID	ONU ID	Upgrade Mode	Status	Status Process
--------	--------	--------------	--------	----------------

[Refresh](#)

Figure 4.3-1: ONU Upgrade Status

### 4.3.2 Manual Upgrade

Choose the ONU which need to upgrade, select the ONU(fill in the ONU ID),browse the firmware ,click upgrade will be OK.

Click **ONU Configuration**→**Upgrade**→**Manual Upgrade**, shown as Figure 4.3-2.

**Select ONU Upgrade**

Port ID: PON1

Select ONU: 1 - 64

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

**ONU Upgrade Information**

Port ID	Seletc ONU	Delete
---------	------------	--------

**ONU Firmware Upgrade**

Select File:  [浏览...](#)

[Upgrade](#)

Figure 4.3-2: Manual Upgrade

### 4.3.3 Auto Upgrade

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

Click **ONU Configuration**→**Upgrade**→**Auto Upgrade**, shown as Figure 4.3-3.

The screenshot shows the 'Auto Upgrade' tab selected in the 'Upgrade' section. The 'Add ONU Auto Upgrade' form includes the following fields and controls:

- Force Mode:** Radio buttons for 'Disable' (selected) and 'Enable'.
- Vendor ID:** Text input field containing 'VSOL'.
- Model ID:** Text input field containing '28HE'.
- Software Version:** Text input field containing 'V1.7.2'.
- Select File:** Text input field with a '浏览...' (Browse...) button next to it.
- Buttons:** 'Upgrade' and 'Reset' buttons.

Below the form is the 'ONU Auto Upgrade Information' section, which contains a table with the following headers:

Force State	Vendor ID	Model ID	Software Version	Image Name	IP Address	Delete
-------------	-----------	----------	------------------	------------	------------	--------

Figure 4.3-3: Auto Upgrade

## Chapter 5 Profile Configuration

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

### 5.1 DBA Profile

All the ONU will be bound an default DBA profile. When the user bind manually, the new template will take effect.

#### 5.1.1 Add/Commit

Add a DBA profile first, Click **Profile Configuration**→**DBA Profile** → **Add/Commit**, shown as Figure 5-1.

Add/Commit
Bandwidth

### Create DBA Profile

Profile ID  (1-32767)

### DBA Profile Information

Profile ID

Key	Value
-----	-------

Figure 5.1-1: Add/Commit DBA Profile

5.1.2 Bandwidth

Select the DBA profile ID, configure the content of DBA. Click **Profile Configuration**→**DBA Profile** → **Add/Bandwidth**, shown as Figure 5-2.

Add/Commit
Bandwidth

### DBA Profile Bandwidth

Profile ID

Type	Active	Configuration content	
Upstream Configuration	<input checked="" type="checkbox"/>	Upstream FIR	<input type="text" value="222222"/> (0-950000Kbps)
		Upstream CIR	<input type="text" value="222222"/> (1-950000Kbps)
		Upstream PIR	<input type="text" value="222222"/> (512-1000000Kbps)
		Upstream Weight	<input type="text" value="1"/> (1-20)
Downstream Configuration	<input checked="" type="checkbox"/>	Downstream PIR	<input type="text" value="276567"/> (0-1000000Kbps)
		Downstream Weight	<input type="text" value="1"/> (1-16)

Figure 5.1-2: Bandwidth Content

5.2 Service Profile

The ONU service configuration can be set as a profile.

5.2.1 Add/Commit

Add a service profile ID first, Click **Profile Configuration**→**Service Profile** → **Add/Commit**, shown as Figure 5.2-1.

Add/Commit	LAN Count	Global	Port	VLAN	QoS	IGMP	WAN	WIFI	DHCP Server
------------	-----------	--------	------	------	-----	------	-----	------	-------------

**Create Service Profile**

Profile ID  (1-32767)

**Service Profile Information**

Profile ID     
 Description

Key	Value
Ports Count	0
Global Parameter	

Figure 5.2-1: Add/Commit Service Profile

## 5.2.2 Content

The server profile configuration contain **LAN Conut**, **Global(MAC Age time)**, **Port**, **VLAN**, **QoS**, **IGMP**, **WAN** , **WIFI**, **DHCP Server** etc.

Click **Profile Configuration**□**Service Profile**

Add/Commit	LAN Count	Global	Port	VLAN	QoS	IGMP	WAN	WIFI	DHCP Server
------------	-----------	--------	------	------	-----	------	-----	------	-------------

**Service Profile Lan Count**

Profile ID

Type	Active	Configuration content
Lan Count	<input checked="" type="checkbox"/>	4 <input type="text"/> (0-255)

Figure 5.2-2: LAN Count

Add/Commit	LAN Count	Global	Port	VLAN	QoS	IGMP	WAN	WIFI	DHCP Server
------------	-----------	--------	------	------	-----	------	-----	------	-------------

**Service Profile MAC Age Time**

Profile ID

Type	Active	Configuration content
MAC Agetime	<input checked="" type="checkbox"/>	3456789 <input type="text"/> (0-4294967295)

Figure 5.2-2: Global

# 5.3 VoIP Profile

The VoIP ONU can use this profile.

## 5.3.1 Add/Commit

Add a VoIP profile ID first, Click **Profile Configuration**→**VoIP Profile** → **Add/Commit**, shown as Figure 5.3-1.

Add/Commit

POTS Count

VoIP

SIP

H.248

POTS

Create VoIP Profile

Profile ID

1

(1-32767)

Add

VoIP Profile Information

Profile ID

1

Delete

Commit

Description

Submit

Figure 5.3-1: Add/Commit VoIP Profile

## 5.3.2 Content

The VoIP profile configuration contain **POTS Count**, **VoIP**, **SIP**, **H.248**, **POTS** etc. Click **Profile Configuration**→**VoIP Profile**.

Add/Commit

POTS Count

VoIP

SIP

H.248

POTS

POTS Count Profile

Profile ID

1

Type	Active	Content
POTS Count	<input checked="" type="checkbox"/>	Pots Count <div>2</div> (0-255)

Submit

Figure 5.3-2: POTS Count



Add/Commit	POTS Count	VoIP	SIP	H.248	POTS
<b>VoIP Global Profile</b>					
Profile ID		1			
Type	Active	Content			
VoIP Global	<input checked="" type="checkbox"/>	Voice IP Mode <input type="text" value="PPPoE"/> PPPoE Mode <input type="text" value="AUTO"/> UserName <input type="text" value="1212121"/> Password <input type="text" value="11111"/> VLAN Mode <input type="text" value="VLAN Stacking"/> CVLAN <input type="text" value="1000"/> (0-4095) SVLAN <input type="text" value="0"/> (0-4095) Priority <input type="text" value="7"/> (0-7)			
Fax/Modem	<input checked="" type="checkbox"/>	Voice T38 Status <input type="text" value="enable"/> Fax/Modem Control <input type="text" value="negotiation"/>			
<input type="button" value="Submit"/>					

Figure 5.3-2-1: VoIP

## 5.4 Alarm Profile

### 5.4.1 Add/Commit

Add a alarm profile ID first, Click **Profile Configuration**→**Alarm Profile** → **Add/Commit**, shown as Figure 5.4-1.

Add/Commit	ONU	PON	Port	POTS
<b>Create Alarm Profile</b>				
Profile ID		1 (1-32767)		
<input type="button" value="Add"/>				
<b>Alarm Profile Information</b>				
Profile ID		1 <input type="button" value="Delete"/> <input type="button" value="Commit"/>		
Description		<input type="text"/> <input type="button" value="Submit"/>		

Figure 5.4-1: Add/Commit Alarm Profile

### 5.4.2 Content

The alarm profile contains **ONU global threshold alarm**, **PON alarm**, **Port alarm**, **POTS alarm**, etc. Click **Profile Configuration**→**Alarm Profile**.

Add/Commit **ONU** PON Port POTS

### ONU Alarm Profile Configuration

Profile ID

Alarm Type	Active	State / Alarm Threshold / Clear Threshold	
Equipment Alarm	<input checked="" type="checkbox"/>	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
Power Alarm	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
Battery Missing	<input checked="" type="checkbox"/>	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
Battery Failure	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
Battery Volt Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 3	3 (0..65535,units:0.1V)
Physical Intrusion	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
ONU Self Test Failure	<input checked="" type="checkbox"/>	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
ONU Temp High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 1280	1280 (-1280..1280,units:0.1C)
ONU Temp Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> -1280	-1280 (-1280..1280,units:0.1C)
Iad Connection Failure	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
PON If Switch	<input checked="" type="checkbox"/>	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
Sleep Status Update	<input checked="" type="checkbox"/>	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	

Figure 5.4-2: ONU Global Alarm

Add/Commit **PON** ONU Port POTS

### PON Alarm Profile

Profile ID

Alarm Type	Active	State / Alarm Threshold / Clear Threshold	
Rx Power High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 82	82 (-400..82,units:0.1dBm)
Rx Power Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> -400	-400 (-400..82,units:0.1dBm)
Tx Power High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 82	82 (-400..82,units:0.1dBm)
Tx Power Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> -400	-400 (-400..82,units:0.1dBm)
Tx Bias High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 1310	1310 (0..1310,units:0.1mA)
Tx Bias Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 100	100 (0..1310,units:0.1mA)
Vcc High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 65	65 (0..65,units:0.1V)
Vcc Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 10	10 (0..65,units:0.1V)
Temp High Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 1280	1280 (-1280..1280,units:0.1C)
Temp Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> -1210	-1210 (-1280..1280,units:0.1C)

Figure 5.4-2-1: PON Alarm

## 5.5 Bind Profile

The DBA profile, server profile, VoIP profile, alarm profile can be bound

to the ONU.

## 5.5.1 Information

In this page, the ONU profile bind list will be shown, and configure the ONU profile by click the "Config", Click **Profile Configuration**□**Bind Profile**□**Information**.

Information

Configuration

Bind Profile Information

Port ID

PON1

ONU ID	MAC Address	Type	Profile ID					Bind
			DBA	Service	VoIP	Alarm	Default Service	
1	00:0B:05:62:F2:08	Unknown	1	1	1	1	0x0	<a href="#">Config</a>
2	80:14:A8:20:B8:10	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
3	80:14:A8:20:B6:20	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
4	80:14:A8:20:B5:E8	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
5	00:13:25:00:00:01	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
6	80:14:A8:20:B7:00	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
7	80:14:A8:20:B7:40	Unknown	1	1	1	1	0x0	<a href="#">Config</a>
8	80:14:A8:20:B6:68	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
9	80:14:A8:20:B6:80	Unknown	1	1	1	1	0x0	<a href="#">Config</a>
10	80:14:A8:20:B6:60	Unknown	1	1	1	1	0x0	<a href="#">Config</a>
11	80:14:A8:20:B7:F0	Unknown	0	0	0	0	0x0	<a href="#">Config</a>
12	80:14:A8:20:B6:48	Unknown	1	1	0	0	0x0	<a href="#">Config</a>
13	80:14:A8:20:B6:C8	Unknown	1	0	1	0	0x0	<a href="#">Config</a>
14	80:14:A8:20:B5:E0	Unknown	1	0	1	0	0x0	<a href="#">Config</a>
15	80:14:A8:20:B7:E0	Unknown	1	1	0	0	0x0	<a href="#">Config</a>

Figure 5.5-1: Bind Profile Information

Information		Configuration							
<b>Binding: PON 1 ONU 1 00:0B:05:62:F2:08</b> <a href="#">Go Back</a>									
DBA Profile ID	1								
Service Profile ID	1								
VoIP Profile ID	1								
Alarm Profile ID	1								
		<a href="#">Submit</a>	<a href="#">Reset</a>						
DBA Profile		Service Profile		VoIP Profile					
DBA Profile Information									
Profile ID		1							
Description									
Key		Value							
Upstream		FIR : 222222 CIR : 222222 PIR : 222222 WEIGHT : 1							
Downstream		PIR : 276567 WEIGHT : 1							

Figure 5.5-1-1: Config

## 5.5.2 Configuration

In this page, the ONU list about the profile binding will be show, batch to bind the profile can be allowed. Click **Profile Configuration**→**Bind Profile**→**Configuration**.

Information

Configuration

**Bind Profile Information**

Port ID 

PON1

ONU ID	MAC Address	Type	Profile ID			
			DBA	Service	VoIP	Alarm
1	00:0B:05:62:F2:08	Unknown	<div>1</div>	<div>1</div>	<div>1</div>	<div>1</div>
2	80:14:A8:20:B8:10	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
3	80:14:A8:20:B6:20	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
4	80:14:A8:20:B5:E8	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
5	00:13:25:00:00:01	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
6	80:14:A8:20:B7:00	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
7	80:14:A8:20:B7:40	Unknown	<div>1</div>	<div>1</div>	<div>1</div>	<div>1</div>
8	80:14:A8:20:B6:68	Unknown	<div></div>	<div></div>	<div></div>	<div></div>
9	80:14:A8:20:B6:80	Unknown	<div>1</div>	<div>1</div>	<div>1</div>	<div>1</div>
10	80:14:A8:20:B6:60	Unknown	<div>1</div>	<div>1</div>	<div>1</div>	<div>1</div>

Figure 5.5-2: Bind Profile Configuration

## Chapter 6 System Configuration

This chapter is about the global management of OLT.

## 6.1 System Log

### 6.1.1 System Log

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

System Log	Alarm	Threshold Alarm	Syslog Server
<b>Alarm Log Table</b>			
Select Counts <input type="text" value="200"/>			
Alarm Type <input type="text" value="ALL"/>			
No.1 Page/Total 10 Page 20 Item per page/Total 200 Item <a href="#">First</a> , <a href="#">Previous</a> , <a href="#">Next</a> , <a href="#">Last</a> No. 1 <a href="#">Go!</a> <a href="#">Clear All</a> <a href="#">Refresh</a>			
No.	Time	Level	Message
1	1999/12/31 07:17:18	major	ONU Finish PON 0/1 ONU 61 80:14:A8:20:B6:D0.
2	1999/12/31 07:17:15	major	ONU AUTH Success PON 0/1 ONU 61 80:14:A8:20:B6:D0.
3	1999/12/31 07:17:12	major	ONU Register PON 0/1 LLID 000 ONU 80:14:A8:20:B6:D0.
4	1999/12/31 07:17:12	major	PON LOS Recovery PON 0/1 Link-Up
5	1999/12/31 07:17:07	major	ONU Deregister PON 0/5 ONU 80:14:A8:20:B6:D0 MPCP TIMEOUT.
6	1999/12/31 07:17:06	major	PON LOS PON 0/5 Link-Down
7	1999/12/31 07:17:05	major	ONU AUTH Success PON 0/5 ONU 1 80:14:A8:20:B6:D0.
8	1999/12/31 07:17:02	major	PON LOS Recovery PON 0/5 Link-Up
9	1999/12/31 07:17:02	major	ONU Register PON 0/5 LLID 000 ONU 80:14:A8:20:B6:D0.
10	1999/12/31 07:16:55	major	ONU Deregister PON 0/4 ONU 80:14:A8:20:B6:D0 MPCP TIMEOUT.
11	1999/12/31 07:16:54	major	PON LOS PON 0/4 Link-Down
12	1999/12/31 07:16:54	major	ONU AUTH Success PON 0/4 ONU 1 80:14:A8:20:B6:D0.

Figure 6.1-1: System Log



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

Table 6-1 Event and Alarm level

ITEM	DESCRIPTION	LEVEL	ITEM	DESCRIPTION	LEVEL
ALARM	OLT Port Up down	warning	EVENT	System Config Save	warning
	OLT Port Loopback	warning		System Config Erase	warning
	OLT Temp High	major		Download File Success	major
	OLT Temp Low	major		Upload File Success	major
	OLT CPU Usage High	major		Upgrade File Success	major
	OLT MEM Usage High	major		PON Register	critical
	OLT FAN	major		PON Enable	major
	Download File Failed	major		PON LOS Recovery	major
	Upload File Failed	major		ONU is Registering	major
	Upgrade File Failed	major		ONU Link Discover	major
	PON Disable	major		ONU AUTH Success	major
	PON TX Power High	major		ONU DEAUTH Success	major
	PON TX Power Low	major		ONU Upgrade Over	major
	PON TX Bias High	major		ONU finish the register and AUTH	major
	PON TX Bias Low	major		System Reset	critical

	PON VCC High	major			
	PON VCC Low	major			
	PON Temp High	major			
	PON Temp Low	major			
	PON LOS	major			
	ONU Deregister	major			
	ONU Link LOST	major			
	ONU Illegal Register	major			
	ONU AUTH Failed	major			
	ONU MAC Conflict	major			
	ONU LOID Conflict	major			
	ONU Critical Event	major			
	Dying Gasp	major			
	ONU Link Fault	major			
	ONU Link Event	major			
	ONU Event Notific	major			
	ONU Laser Always On	major			
	PON Deregister	critical			
	PON Register Failed	critical			

## 6.1.2 Alarm

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



System Log Alarm Threshold Alarm Syslog Server

Alarm Configuration

Type	Print	Record	Trap	Remote	Type	Print	Record	Trap	Remote
FAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upload File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Upgrade File Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Port Updown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Port Loopback	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Deregister	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Register Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Disable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Txpower High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Txpower Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Txbias High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Txbias Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Vcc High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Vcc Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Temp High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PON Temp Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PON Los	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU Deregister	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Link Lost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ONU Illegal Register	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Auth Failed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONU MAC Conflict	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ONU Loid 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 6.1-2: Alarm

### 6.1.3 Threshold Alarm

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

System LogAlarmThreshold AlarmSyslog Server

Threshold Alarm Configuration

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

SubmitReset

PON Optical Alarm Configuration

Port IDPON1

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

SubmitReset

Figure 6.1-3: Threshold Alarm

### 6.1.4 Syslog Server



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

Figure 6.1-4: Syslog Server

### 6.1.5 Syslog Server IPv6

This interface is used to configure the IPv6 OLT remote system log server. Click **System Configuration** **System Log** **Syslog Server IPv6**.

Figure 6.1-5: Syslog Server IPv6

## 6.2 Device Management

### 6.2.1 Firmware Upgrade

You can upgrade the OLT firmware by WEB, do not need TFTP server. After finish upgrading, it will ask if you want to reboot OLT. It need to reboot after upgrade then take effect. Click **System Configuration** **Device Management** **Firmware Upgrade**.





Figure 6.2-1: Firmware Upgrade

## 6.2.2 Device Reboot

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

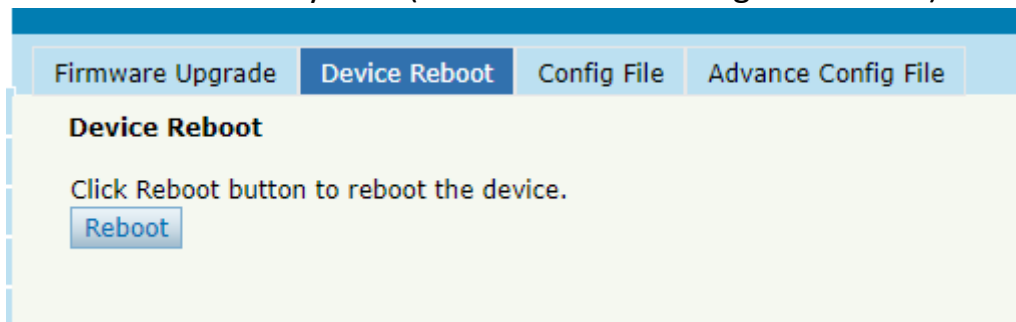


Figure 6.2-2: Device Reboot

## 6.2.3 Config File

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

Firmware Upgrade	Device Reboot	<b>Config File</b>	Advance Config File
------------------	---------------	--------------------	---------------------

### Config File

Backup Configuration	<a href="#">Download</a>
Load Factory Defaults	<p>Are you sure to restore the factory settings?</p> <p><b>The device will reboot after restore is completed!</b></p> <p><a href="#">Restore</a></p>
Save Configuration	<p>Press the button below to save configuration.</p> <p><a href="#">Save</a></p>
Upload Configuration	<p>All existing configuration will be overwritten.</p> <p><b>the device will reboot after upload is completed!</b></p> <p>Select File: <a href="#">选择文件</a> 未选择任何文件</p> <p><a href="#">Upload</a></p>

Figure 6.2-3: Config File

## 6.2.4 Advance Config File

Click **System Configuration** → **Device Management** → **Advance Config File**, you can configure the OLT auto-save configuration time.

Firmware Upgrade	Device Reboot	Config File	<b>Advance Config File</b>
------------------	---------------	-------------	----------------------------

### Current Time

Mon Aug 9 18:40:43 2021

### Auto Save Configuration

Auto Save: [Fix-Time](#)

Fix Time: [1](#) Day [0](#) Hour [0](#) Minute

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

### Auto Backup Configuration

Auto Backup: [Disable](#)

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

Figure 6.2-4: Advance Config File

# 6.3 User Management

## 6.3.1 User Manage

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

User ManageRole Manage

Add User

User Name

User Password

Confirm Password

User Role

Normal

Add

Reset

Notice:

1.The password must contain at least 6 characters.

2.The password must contain at least two of the following combinations digit, uppercase letter, lowercase letter, Special characters (. : - \_ / @ ! ~ # \$ ^ & \* ( ) + = ? \ | [ { } ] ; ' " < , > ` ).

3.The password can not be any user name.

User Table


User Name	User Role	Edit	Delete
admin	Admin		

Figure 6.3-1: User Manage

## 6.3.2 Role Manage

You can divide accounts into different role groups and then configure operation rights for each group.

User Manage

Role Manage

Add New Role

Role Description Name

Add

Role Management

Role Group Name

custom\_default

Authorization Module	Read	Write
OLT Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OLT Configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ONU Configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Profile Configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System Configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit

Delete

Figure 6.3-2: Role Manage

## 6.4 SNMP

### 6.4.1 SNMP V1/V2

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

SNMPV1/V2
SNMPV3
SNMPV3 Trap
Remote Server


### Add Community

Community Name

Access Right Read-Only ▼

Add

### Community Table

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

### Add Trap

Host IP

UDP Port 162 (1-65535)

Community Name public

SNMP Version 1 ▼

Add

### Trap Table

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

Figure 6.4-1: SNMP V1/V2

## 6.4.2 SNMP V3

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

SNMPV1/V2
SNMPV3
SNMPV3 Trap
Remote Server

### Add View

View Name

Subtree  (Type:Object Identifier)

View Type Include ▾

Add

### View Table

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

### Add Group

Group Name

Access Level No Auth ▾

Read View

Write View

Notify View

Add

### Group Table

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

### Add User

User Name

Group Name

Auth Type None ▾

Auth Password

Private Type None ▾

Private Password

Add

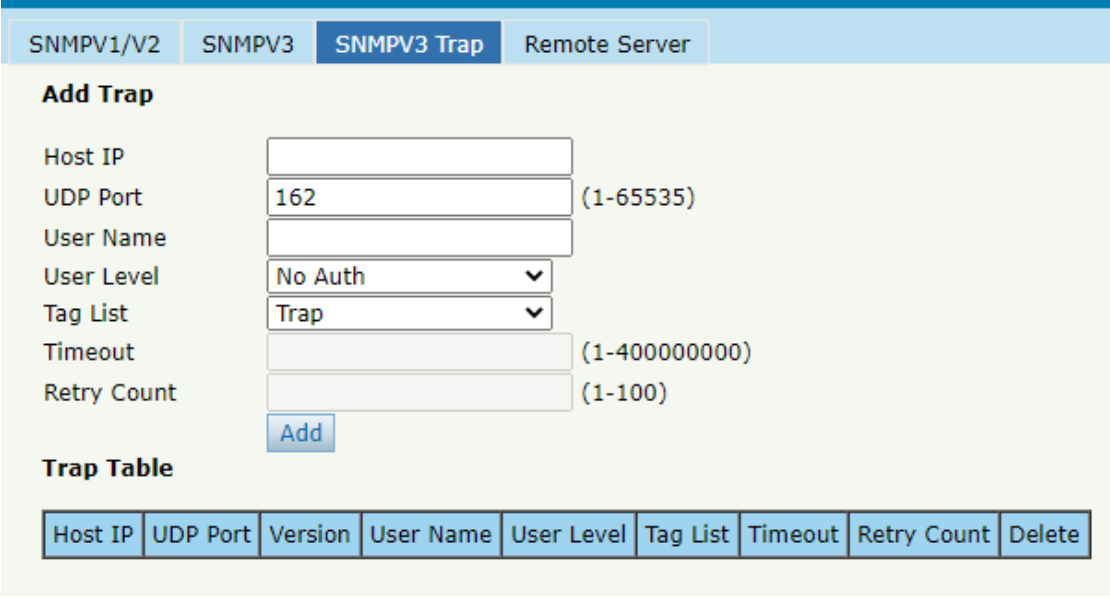
### User Table

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

Figure 6.4-2: SNMP V3

### 6.4.3 SMNP V3 Trap

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

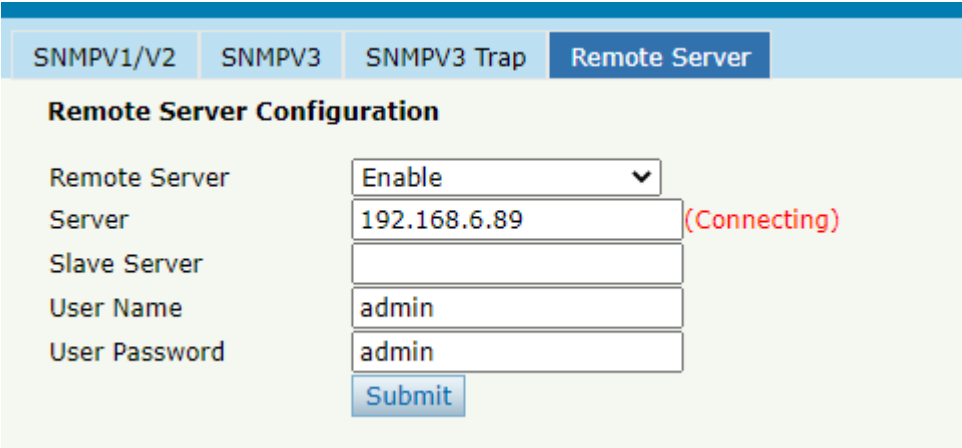


The interface shows the 'SNMPV3 Trap' tab selected. It contains an 'Add Trap' section with input fields for Host IP, UDP Port (162), User Name, User Level (No Auth), Tag List (Trap), Timeout, and Retry Count. Below this is a 'Trap Table' with columns: Host IP, UDP Port, Version, User Name, User Level,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

Figure 6.4-3: SNMP V3 Trap

## 6.4.4 Remote Server

Configure the IP address of your SNMP network management server.



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

Figure 6.4-4: Remote Server

## 6.5 AUX IP

### 6.5.1 AUX IP

AUX port is out band management port. The IP address is out band management IP, default IP address is 192.168.8.100. User can change it if need. Click **System Configuration** ▢ **AUX IP**

AUX IP

### AUX IP Configuration

IP Address

Subnet Mask

Gateway

Master DNS

Slave DNS

Submit
Reset

Figure 6.5-1: AUX IP

## 6.5.2 AUX IPv6

AUX port is out band management port. The IP address of aux port is out band management IP. By default, there is a link local address.

AUX IP
AUX IPv6

### AUX IPv6 Gateway

Gateway

Submit
Reset

### AUX IPv6 Configuration

IPv6 Address

Prefixlen

Submit
Reset

### AUX IPv6 Table

IPv6 Address	Prefixlen	Delete
fe80::8214:a8ff:feff:e8b3		
fec0::8214:a8ff:feff:e8b3	64	

Figure 6.5-2: AUX IPv6

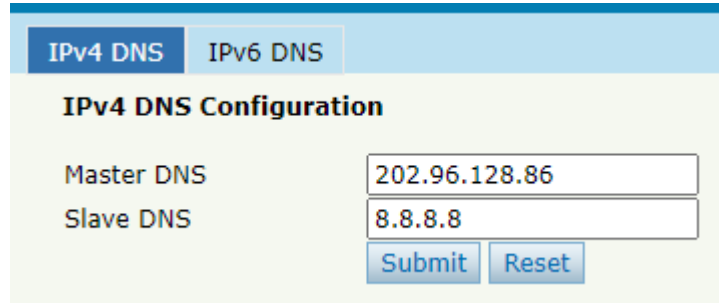
## 6.6 DNS

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



## 6.6.1 IPv4 DNS

This page is used to configure IPv4 DNS.

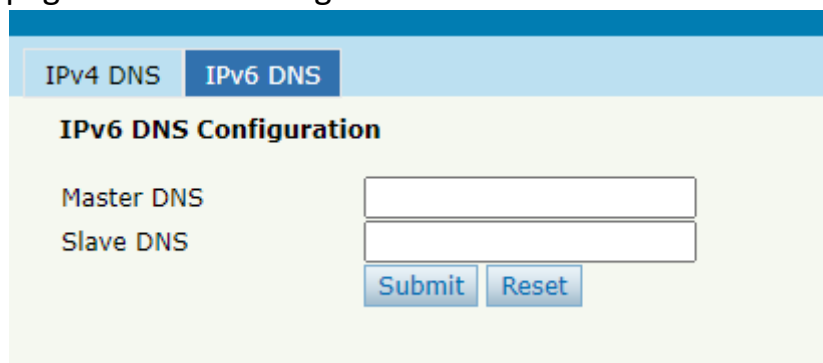


IPv4 DNS	
<b>IPv4 DNS Configuration</b>	
Master DNS	<input type="text" value="202.96.128.86"/>
Slave DNS	<input type="text" value="8.8.8.8"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 6.6-1: IPv4 DNS

## 6.6.2 IPv6 DNS

This page is used to configure IPv6 DNS.



IPv6 DNS	
<b>IPv6 DNS Configuration</b>	
Master DNS	<input type="text"/>
Slave DNS	<input type="text"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

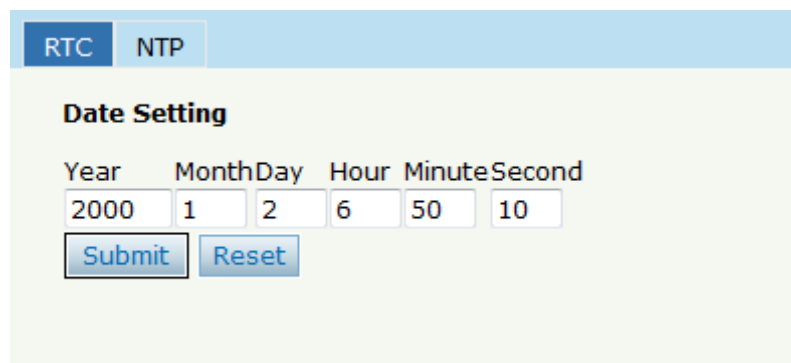
Figure 6.6-2: IPv6 DNS

## 6.7 System Time

### 6.7.1 RTC

Click **System Configuration** → **System Time** → **RTC** .The default system time

is the OLT firmware release time.

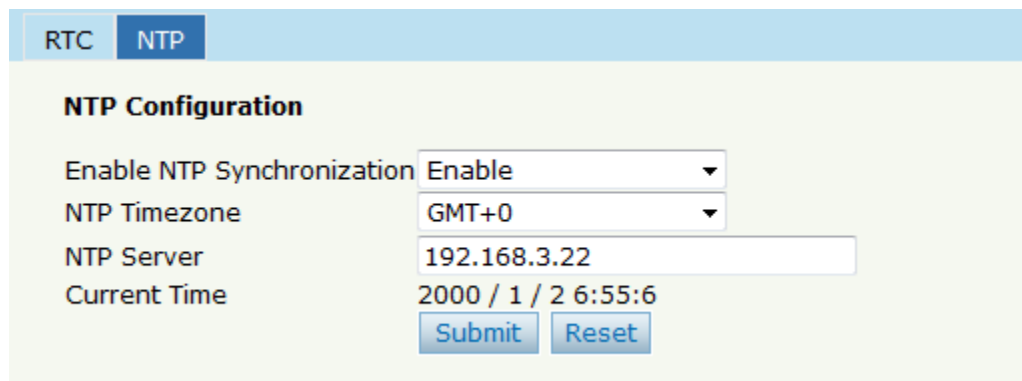


The image shows the 'RTC Configuration' interface. At the top, there are two tabs: 'RTC' (selected) and 'NTP'. Below the tabs is the title 'Date Setting'. Under this title, there are input fields for 'Year', 'Month', 'Day', 'Hour', 'Minute', and 'Second'. The values entered are 2000, 1, 2, 6, 50, and 10 respectively. At the bottom of the form, there are two buttons: 'Submit' and 'Reset'.

Figure 6.7-1: RTC Configuration

## 6.7.2 NTP

Synchronize the time to the NTP server. Click **System Configuration** > **System Time** > **NTP**

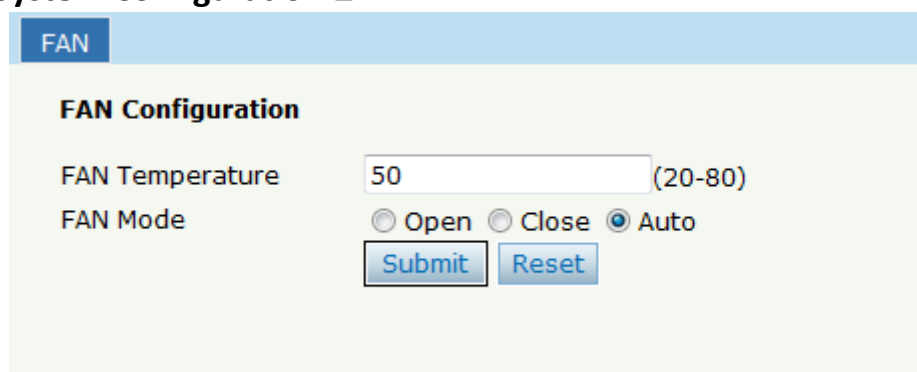


The image shows the 'NTP Configuration' interface. At the top, there are two tabs: 'RTC' and 'NTP' (selected). Below the tabs is the title 'NTP Configuration'. Under this title, there are four rows of configuration options: 'Enable NTP Synchronization' with a dropdown menu set to 'Enable'; 'NTP Timezone' with a dropdown menu set to 'GMT+0'; 'NTP Server' with a text input field containing '192.168.3.22'; and 'Current Time' with a text input field showing '2000 / 1 / 2 6:55:6'. At the bottom of the form, there are two buttons: 'Submit' and 'Reset'.

Figure 6.7-2: NTP Configuration

## 6.8 FAN

The fans can be controlled to turn on/off, or turn on automatically. Click **System Configuration** > **FAN**.



The image shows the 'FAN Configuration' interface. At the top, there is a single tab: 'FAN'. Below the tab is the title 'FAN Configuration'. Under this title, there are two rows of configuration options: 'FAN Temperature' with a text input field containing '50' and a range '(20-80)' to its right; and 'FAN Mode' with three radio buttons: 'Open', 'Close', and 'Auto' (which is selected). At the bottom of the form, there are two buttons: 'Submit' and 'Reset'.

Figure 6-8: FAN Configuration

## 6.9 Mirror

Each monitor session can be set with one destination port and up to 8 source ports. Click **System Configuration** ▢ **Mirror**.

Mirror

**Mirror Configuration**

Session ID

1

Destination Port

GE1

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

Figure 6-9: Mirror

## 6.10 Login Management

### 6.10.1 Login Access List

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

Login Access List
Service Port
Login Configuration

### Login Access Status

Login Access Status

### Login Access List Configuration

Filter Action
☒ Deny
☐ Permit

Internet Version

Protocol

Source IP

IP Mask

### Login Access List

Filter Action	Internet Version	Protocol	Source IP/mask length\prefix length	Delete
Deny	IPv4	SNMP	0.0.0.0/0	
Deny	IPv6	SNMP	::/0	
Deny	IPv6	Telnet	::/0	

Figure 6.10-1: Login Access List

## 6.10.2 Service Port

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

Login Access List
Service Port
Login Configuration

### Service Port

Web Port
(1-65535)

Telnet Port
(1-65535)

SSH Port
(1-65535)

SNMP Port
(1-65535)

Figure 6.10-2:Service Port

## 6.10.3 Login Configuration

This page is used to set web timeout.

Login Access List

Service Port

Login Configuration

**Web Configuration**

Login Timeout

20

(1-180 minutes)

Verification Code

Disable

▼

Session Key

Enable

▼

Submit

Reset

Figure 6.10-3:Login Configuration

## 6.11 SSH

SSH (Secure Shell) is a reliable protocol that provides security for remote login sessions and other network services. The SSH protocol can effectively prevent information leakage during remote management.

### 6.11.1 SSH Server State

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

SSH Server State

SSH Enable

**SSH Connection Table**

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

Refresh

Figure 6.11-1:SSH Server State

### 6.11.2 SSH Enable

This page is used to configure SSH protocol related parameters.

SSH Server State

SSH Enable

SSH Enable

SSH

Enable

Version

2

Auth Retries

6

(0-6)

Timeout

60

(1-120)

Max Startups

3

(1-5)

Max Sessions

3

(1-12)

Modulus

2048

(1024-16384)

Submit

Reset

SSH Key Table

Key type	Encryption algorithm	Key data
ssh-rsa	SHA256	tv1Ib2QFiTMxrX7tjDIA7AUJ0FB6Ox3VDyG2IYtCUkw

Refresh

Figure 6.11-2:SSH Enable

## 6.12 Diagnose

### 6.12.1 PING Diagnose

This interface is used to diagnose network connectivity.

PING Diagnose

Tracert Diagnose

Ping Diagnosis

Destination IP Address  
Or Host Name

IP type

IPv4

Submit

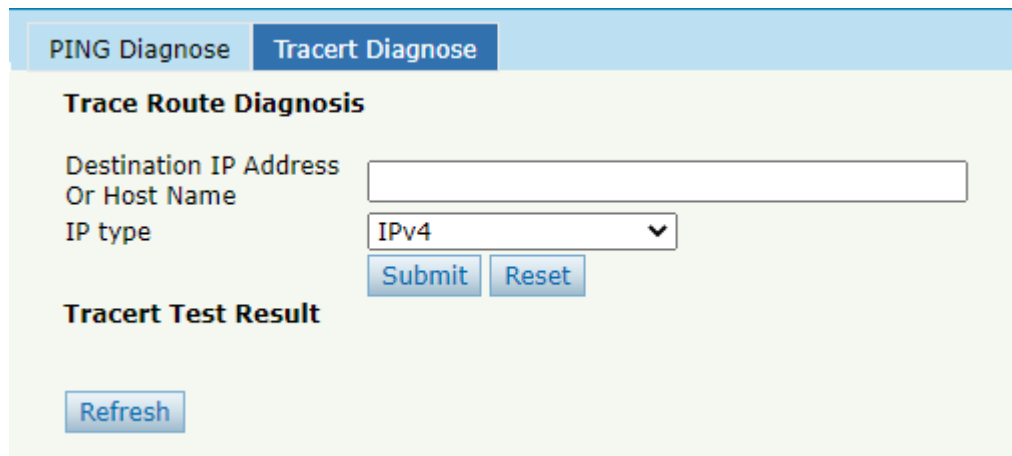
Reset

Ping Test Result

Figure 6.12-1:PING Diagnose

### 6.12.2 Tracert Diagnose

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



The image shows a web-based interface for network diagnostics. At the top, there are two tabs: 'PING Diagnose' and 'Tracert Diagnose', with the latter being the active tab. Below the tabs, the section is titled 'Trace Route Diagnosis'. It contains a text input field for 'Destination IP Address Or Host Name', a dropdown menu for 'IP type' currently set to 'IPv4', and two buttons labeled 'Submit' and 'Reset'. Below this section, there is a heading 'Tracert Test Result' and a single button labeled 'Refresh'.

Figure 6.12-2:Tracert Diagnose

## 6.13 Tacacs+

Tacacs+ is a protocol that provides access control for routers, network access servers, and other interconnected computing devices through one or more centralized servers. Tacacs+ provides independent authentication, authorization, and billing services. This interface allows you to configure the Tacacs+ server IP address and other specific parameters.

Tacacs+

Tacacs+ Configuration

AAA Enable

☒

Console Enable Tacacs+

☐ Login

Authentication

☐ Login

☐ Local

☐ Enable

☐ Enable Local

Authorization

☐ Exec

☐ Local

Command Level

0 1 15

Enable

☐ ☐ ☐

Accounting

☐ Exec

Command Level

0 1 15

Enable

☐ ☐ ☐

Submit

Reset

Tacacs+ Key Configuration

Shared Key

Submit

Tacacs+ Server Configuration

Tacacs+ Server

Submit

Tacacs+ Server Table

Tacacs+ Server

Delete

Figure 6.13-1:Tacacs+

## 6.14 Radius

Radius is a protocol for authentication, authorization, and accounting information. The Radius server is responsible for receiving the user's connection request, authenticating the user, and then returning all the necessary configuration information to the client to send the service to the user. This interface allows you to configure the Radius server IP address and other parameters.



Radius

Radius Configuration

AAA Enable

☒

Console Enable radius

☐

Login

Authentication

☐

Login

☐

Local

☐

Dot1x

☐

Local

☐

Enable

☐

Enable Local

Authorization

☐

Dot1x

Accounting

☐

Exec

☐

Dot1x

Submit

Reset

Radius Server Configuration

Radius Server

Shared Key

Submit

Radius Server Table

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

Figure 6.14:Radius

## 6.15 Dot1x

802.1x is a Client/ server-based access control and authentication protocol. It can restrict unauthorized users/devices from accessing a LAN/WLAN through an access port. After the authentication, normal data can pass through the Ethernet port.

### 6.15.1 Dot1x Information

This interface will display dot1x entry information when an 802.1x user passes authentication on the server, the server sends the authorization information to the device.

Dot1x Information

Dot1x Global Enable

Port Configuration

Dot1x Port Table

Dot1xPort	AuthenType	PortControl	MethodType	MaxUser	GuestVlan	AuthFailVlan	TxTimer	SuppTimer	HandshakeEnable	HandshakeTimer
-----------	------------	-------------	------------	---------	-----------	--------------	---------	-----------	-----------------	----------------

Refresh

Figure 6.15-1:Dot1x Information

## 6.15.2 Dot1x Global Enable

You can enable Dot1x on this interface.

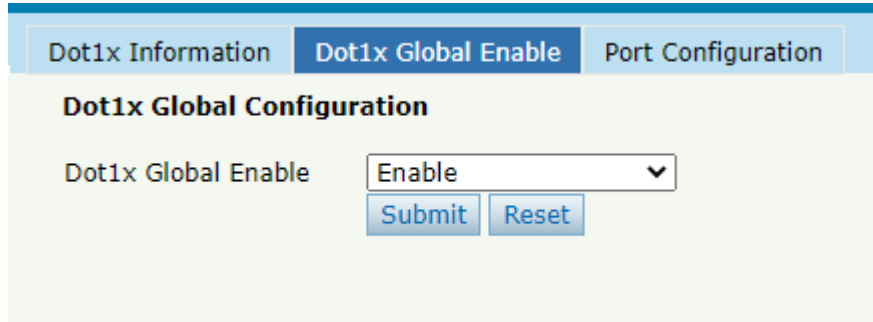


Figure 6.15-2:Dot1x Global Enable

## 6.15.3 Port Configuration

You can configure detailed Dot1x parameters for a specified port on this interface.

Dot1x Information Dot1x Global Enable Port Configuration											
Port Configuration											
Port ID	Status	Authen Type	Port Control	Method Type	Max User (1-256)	Guest Vlan (1-4094)	Auth-Fail Vlan (1-4094)	Tx Timer (10-120)s	Supp Timer (10-120)s	Handshake Enable	Handshake Timer (5-1024)s
GE1	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE2	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE3	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE4	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE5	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE6	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE7	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE8	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE9	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE10	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE11	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE12	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE13	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE14	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE15	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
GE16	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON1	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON2	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON3	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON4	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON5	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15
PON6	<input type="checkbox"/>	CHAP	auto	macbased	256			30	30	<input type="checkbox"/>	15

Figure 6.15-3:Port Configuration



# Chapter 7 Configuration Examples

## 7.1 Internet Service with VLAN 100

a. OLT configuration

Step 1: Create a new VLAN.

VLAN	VLAN Port	QinQ/Translation
<b>New VLAN</b>		
VLAN ID	<input type="text" value="100"/>	(1-4094)
Description	<input type="text" value="vlan100"/>	
	<input type="button" value="Add"/>	
<b>VLAN Table</b>		

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

VLAN
VLAN Port
QinQ/Translation

### Port VLAN Configuration

VLAN ID

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE5	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE9	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE10	<input checked="" type="radio"/>	<input type="radio"/>	<input 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"/>
PON1	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

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

Information
Configuration

### GE Configuration

Port ID	Description	Admin Status	Flow Control	Isolate	PVID	Storm(0 64-1000000fps)			Rate(0 32-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Multicast	Unicast	Ingress	Egress	
GE1		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE2		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE8		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	512	0	512	0	0	0
GE9		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	100	512	0	512	0	0	0
GE10		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	46	512	0	512	0	0	0

b. ONU configuration

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

ONU List

Information

Bandwidth

Port

VLAN

QoS

IGMP

Alarm

Advance

VLAN Configuration

ONU Port

Port1

VLAN Mode

tag

PVID

100

(1-4095)

Submit

## 7.2 IPTV Service with VLAN 200

a. OLT configuration

Step 1: Create a new VLAN.

VLAN

VLAN Port

QinQ/Translation

New VLAN

VLAN ID

200








(1-4094)

Description

vlan200

Add

VLAN Table

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

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

VLAN	VLAN Port	QinQ/Translation
<b>Port VLAN Configuration</b>		
VLAN ID	200	
Port ID	Forbidden	Tag Untag
GE1	<input checked="" type="radio"/>	<input type="radio"/>
GE2	<input checked="" type="radio"/>	<input type="radio"/>
GE3	<input checked="" type="radio"/>	<input type="radio"/>
GE4	<input checked="" type="radio"/>	<input type="radio"/>
GE5	<input checked="" type="radio"/>	<input type="radio"/>
GE6	<input checked="" type="radio"/>	<input type="radio"/>
GE7	<input checked="" type="radio"/>	<input type="radio"/>
GE8	<input checked="" type="radio"/>	<input type="radio"/>
GE9	<input type="radio"/>	<input checked="" type="radio"/>
GE10	<input checked="" type="radio"/>	<input type="radio"/>
GE11	<input checked="" type="radio"/>	<input type="radio"/>
GE12	<input checked="" type="radio"/>	<input type="radio"/>
GE13	<input checked="" type="radio"/>	<input type="radio"/>
GE14	<input checked="" type="radio"/>	<input type="radio"/>
GE15	<input checked="" type="radio"/>	<input type="radio"/>
GE16	<input checked="" type="radio"/>	<input type="radio"/>
PON1	<input type="radio"/>	<input checked="" type="radio"/>

Step 3: Enable the IGMP status.

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
<b>IGMP Configuration</b>					
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 checked="" type="radio"/> Disable <input type="radio"/> Enable				
General Query Interval	125	(10-255s)			
Query Source IP	1.1.1.1				
<input type="button" value="Submit"/> <input type="button" value="Reset"/>					

Step 4: Add the IGMP user VLAN and group VLAN

Group Member	Global	Port	<b>Port User VLAN</b>	Port Mrouter	Static Group
--------------	--------	------	-----------------------	--------------	--------------

**User VLAN Configuration**

Port ID: PON1

User VLAN ID: 200

Group VLAN ID: 200

[Add](#)

**User VLAN Table**

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

Step 5: Add the M-router in GE port

Group Member	Global	Port	Port User VLAN	<b>Port Mrouter</b>	Static Group
--------------	--------	------	----------------	---------------------	--------------

**Add Multicast Router**

Port ID: GE9

Group VLAN ID: 200

[Add](#)

**Multicast Router Table**

Port ID	Group VLAN ID	Delete
GE9	200	<input type="checkbox"/>

b. ONU configuration

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

<b>ONU List</b>							
Information	Bandwidth	Port	<b>VLAN</b>	QoS	IGMP	Alarm	Advance

**VLAN Configuration**

ONU Port: Port1

VLAN Mode: tag

PVID: 200 (1-4095)

[Submit](#)

Step 7: Configuration multicast VLAN



**ONU List**

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

**Multicast Configuration**

Multicast Switch ☒ Snooping ☐ CTC Control  
Fast Leave State ☐ Disable ☒ Enable

**Multicast Port Configuration**

ONU Port Port1

Multicast Max Group	0 (0-255)	<input type="button" value="Submit"/>
Multicast VLAN	200	<input type="button" value="Submit"/>
VLAN Tag Strip Mode	Strip	<input type="button" value="Submit"/>

## 7.3 VoIP Service with VLAN 300

### a. OLT Configuration

#### Step 1: Create a new VLAN

**VLAN** VLAN Port QinQ/Translation

**New VLAN**

VLAN ID 300 (1-4094)  
Description vlan300

**VLAN Table**

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

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

VLAN
VLAN Port
QinQ/Translation

### Port VLAN Configuration

VLAN ID

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE5	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE9	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE10	<input checked="" type="radio"/>	<input type="radio"/>	<input 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"/>
PON1	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
PON2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## b. ONU Configuration

Step 3: Configure the VoIP global parameter

ONU List

Information
Bandwidth
Port
VLAN
QoS
IGMP
VoIP
SIP
POTS
Alarm
Advance

### VoIP Global Configuration

Voice IP Mode

IP Address  (x.x.x.x)

Network Mask  (x.x.x.x)

Default Gateway  (x.x.x.x)

Tagged Flag

Voice Client VLAN  (0-4095)

Voice Service VLAN  (0-4095)

Voice Priority  (0-7)

Step 4: Setup the SIP configuration

ONU List

Information Bandwidth Port VLAN QoS IGMP VoIP SIP POTS Alarm Advance

### SIP Parameter Configuration

Manage Port	5060	(1-65535)
Proxy Service IP/Port	192.168.3.44	(x.x.x.x) 5060 (1-65535)
Backup Proxy Service IP/Port	192.168.3.44	(x.x.x.x) 5060 (0-65535)
Register Service IP/Port	192.168.3.44	(x.x.x.x) 5060 (1-65535)
Backup Register Service IP/Port	192.168.3.44	(x.x.x.x) 5060 (0-65535)
Out Bound Service IP/Port	192.168.3.44	(x.x.x.x) 5060 (1-65535)
Register Interval	1000	(1-10000000)
Heartbeat Switch	Enable	
Heartbeat Cycle	10000	(1-65535)
Heartbeat Count	10000	(1-65535)

Submit

Step 5: Fill in the user account and password

ONU List

Information Bandwidth Port VLAN QoS IGMP VoIP SIP POTS Alarm Advance

### VoIP POTS Configuration

VoIP Port Pots1

### POTS Information

Port Status	Registering
Services State	Endlocal
Codec Mode	G711A

### Manage Configuration

Manage Status ☒ Disable ☐ Enable

Submit

### SIP User Parameter Configuration

User Account	3333333333
User name	3333333333
User Password	3333333333

Submit

## 7.4 DHCPv6 Configuration

Here is an example shows how to configure DHCPv6.

DHCPv6 server: OLT

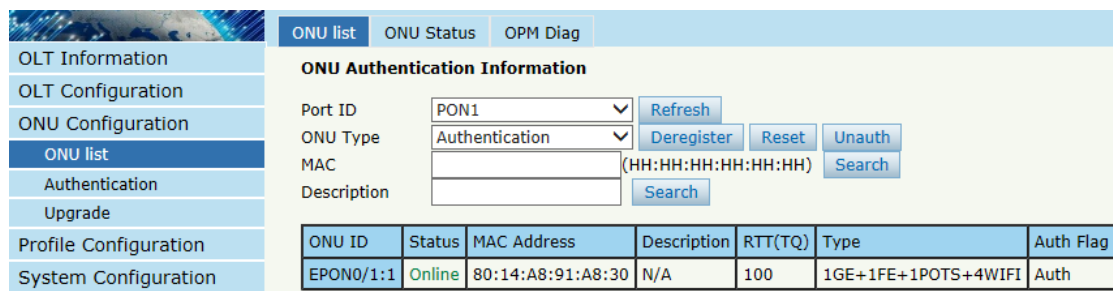
DHCPv6 client: HGU

VLAN: 3000

1. Authenticate ONU.

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

authenticated.

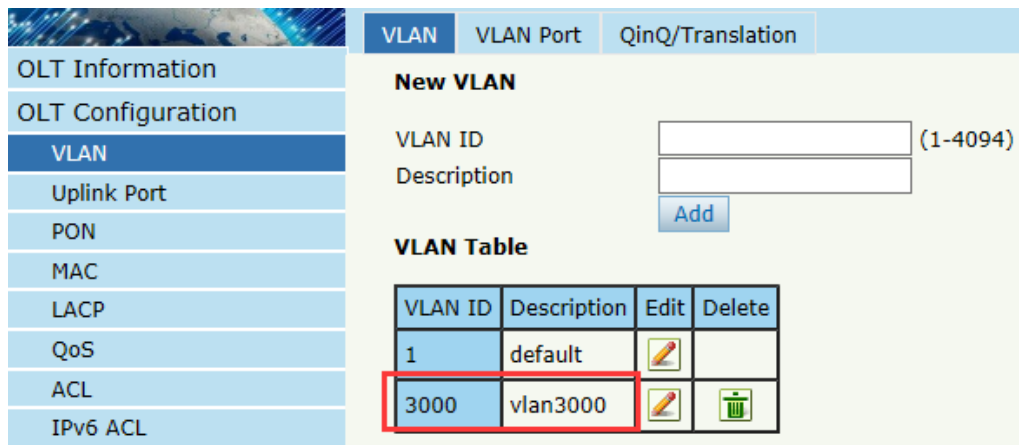


The screenshot shows the 'ONU Authentication Information' page. On the left is a navigation menu with options: OLT Information, OLT Configuration, ONU Configuration, ONU list (selected), Authentication, Upgrade, Profile Configuration, and System Configuration. The main content area has tabs for 'ONU list', 'ONU Status', and 'OPM Diag'. Below the tabs, there are input fields for 'Port ID' (PON1), 'ONU Type' (Authentication), 'MAC' (with a placeholder HH:HH:HH:HH:HH:HH), and 'Description'. Action buttons include 'Refresh', 'Deregister', 'Reset', 'Unauth', and 'Search'. At the bottom, a table lists ONU details.

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

## 2. Create VLAN.

Create a new VLAN for DHCPv6.



The screenshot shows the 'VLAN' configuration page. The left navigation menu includes: OLT Information, OLT Configuration, VLAN (selected), Uplink Port, PON, MAC, LACP, QoS, ACL, and IPv6 ACL. The main area has tabs for 'VLAN', 'VLAN Port', and 'QinQ/Translation'. Under the 'VLAN' tab, there is a 'New VLAN' section with input fields for 'VLAN ID' and 'Description', and an 'Add' button. Below this is a 'VLAN Table' with a table listing existing VLANs.

VLAN ID	Description	Edit	Delete
1	default		
3000	vlan3000		

## 3. Add VLAN to ports

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

VLAN

VLAN Port

QinQ/Translation

Port VLAN Configuration

VLAN ID 3000

Port ID	Mode	Forbidden	Tag	Untag
GE1	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE2	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE3	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE4	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE5	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE6	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE7	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE8	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE9	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE10	Hybrid	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE11	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE12	Hybrid	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE13	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE14	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE15	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE16	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON1	Hybrid	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
PON2	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON3	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON4	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON5	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON6	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON7	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON8	Hybrid	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Submit

Reset

#### 4. Configure VLAN IPv6 address.

IPv6 address must be there so that DHCPv6 in this VLAN can be enabled.  
The IPv6 address can be link local address or global unicast address.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

**IPv6**

IPv6 Static Route

IPv6 Route Table

VLAN IPv6

### VLAN IPv6 Configuration

VLAN ID

IPv6 Address

Prefixlen

### VLAN IPv6 Table

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

## 5. Configure DHCPv6 pool.

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

**DHCPv6 Server**

DHCPv6 Relay

DHCPv6 Bind Information
DHCPv6 Server Enable
Server Pool Configuration

### DHCPv6 Server Pool Setting

Pool Name

Start IPv6 Address

End IPv6 Address

Valid LifeTime

Preferred LifeTime  (valid lifetime must be large than Preferred lifetime)

DNS Server

Domain Name

### DHCPv6 Server Pool

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

## 6. Enable DHCPv6 server.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

DHCPv6 Server Configuration

DHCPv6 Server

Disable

VLAN ID

1

Pool Name

Submit

Reset

DHCPv6 Interface Information

VLAN ID	Using Pool
3000	test

Refresh

## 7. Configure RA parameters.

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay

IPv6 SLAAC

Route

IPv6 Route

IPv6 SLAAC

IPv6 SLAAC Prefix

IPv6 SLAAC Configuration

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000s)	M	O	Router Preference	MTU (1-1500)
3000	<input type="checkbox"/>	200	600	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MEDIUM	1500

Submit

## 8. Configure ONU IPv6 WAN.

Create an IPv6 WAN connection with correct VLAN.

# Network

Gateway Name: Household Gateway

Status

Network

Security

Application

Management

Diagnose

Internet

Binding

LAN IP Address

WLAN

Remote

LOID Configuration

QoS

Time

Router

Internet Connection

Connection Name:

1\_INTERNET\_R\_VID

Mode:

Route

IP Protocol Mode:

Ipv6

☒ DHCP
 Get an address from ISP

☐ PPPoE
 Select this when using PPPOE

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

Enable Vlan:

☒

Vlan ID:

3000

802.1p:

0

MTU:

1500

Request DNS:

☒ Enable
 ☐ Disable

Primary DNS:

Secondary DNS:

Service Mode

INTERNET

Turn off LAN DHCP:

☐

Port binding:

☒ Port\_1
 ☐ Port\_2

☒ WLAN(SSID1)

IPv6 WAN:

IPv6 Address:

DHCP

DHCP PD

☐

9. ONU obtains IPv6 address.  
ONU will obtain IPv6 address from DHCPv6 server.

Status

Gateway Name: Household Gateway Logout

Status

Network

Security

Application

Management

Diagnose

Help

Device Information

WAN Connection Info

User Information

VOIP Information

Remote Management Status

IPv4 Connection Information

IPv6 Connection Information

EPON Information

WAN Info

Interface	VLAN ID	Protocol	IGMP	Status	IP Address	Obtain Prefix
1_INTERNET_R_VID_3000	3000	IPv6	Enable	up	2202:abcd:ef:1000/64	eb3a:2000:0:b00:5362:8700::

NetWork Info

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

DHCPv6 Bind Information

DHCPv6 Server Enable

Server Pool Configuration

DHCPv6 Bind Information

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

Refresh

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

DHCPv6 Server

DHCPv6 Relay



## 7.5 IPv6 SLAAC Configuration

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

### 1. Create VLAN.

Create a new VLAN for IPv6 SLAAC.

VLAN ID	Description	Edit	Delete
1	default		
3000	vlan3000		

### 2. Add VLAN to ports

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

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

### 3. Configure PVID of the port.

OLT Information

OLT Configuration

VLAN

**Uplink Port**

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

ONU Configuration

Profile Configuration

System Configuration

Information

**Configuration**

**GE Configuration**

Port ID	Description	Admin Status	Speed	Flow Control	Isolate	PVID
GE1		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE2		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE3		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE4		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE5		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE6		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE7		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE8		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE9		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE10		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	3000
GE11		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE12		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input type="checkbox"/>	3000
GE13		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE14		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3000
GE15		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
GE16		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Submit

Reset

#### 4. Configure VLAN IPv6 address.

IPv6 address must be there so that SLAAC in this VLAN can be available.  
The IPv6 address can be link local address or global unicast address.

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

**IPv6**

IPv6 Static Route

IPv6 Route Table

**VLAN IPv6**

**VLAN IPv6 Configuration**

VLAN ID

1

IPv6 Address

Prefixlen

Submit

Reset

**VLAN IPv6 Table**

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

## 5. Configure RA parameters.

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IPv6 Route

IPv6 SLAAC

IPv6 SLAAC Prefix

IPv6 SLAAC Configuration

VLAN ID	Suppress RA	Send RA Time (1-1800s)	RA LifeTime (0-9000s)	Reachable Time (0-3600000s)	M	O	Router Preference	MTU (1-1500)
3000	<input type="checkbox"/>	200	600	0	<input type="checkbox"/>	<input type="checkbox"/>	MEDIUM	1500

Submit

## 6. Configure SLAAC prefix.

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

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

RSTP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

IPv6 SLAAC

IPv6 SLAAC Prefix

IPv6 SLAAC Prefix Configuration

VLAN ID

ND Prefix

ND Prefix Length

Valid LifeTime

Preferred LifeTime

1

(0-4294967295)s

(0-4294967295)s(Valid lifetime must be large than Preferred lifetime)

Add

IPv6 SLAAC Prefix

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

Refresh

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

Internet Protocol Version 6 (TCP/IPv6) Properties

General

You can get IPv6 settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IPv6 settings.

☒ Obtain an IPv6 address automatically:

☐ Use the following IPv6 address:

IPv6 address:

Subnet prefix length:

Default gateway:

☒ Obtain DNS server address automatically

☐ Use the following DNS server addresses:

Preferred DNS server:

Alternate DNS server:

☐ Validate settings upon exit

Advanced...

OK Cancel

Network Connection Details

Network Connection Details:

Property	Value
Physical Address	00-8D-5C-51-33-50
DHCP Enabled	No
IPv4 Address	192.168.0.66
IPv4 Subnet Mask	255.255.255.0
IPv4 Address	192.168.1.6
IPv4 Subnet Mask	255.255.255.0
IPv4 Address	192.168.6.6
IPv4 Subnet Mask	255.255.255.0
IPv4 Default Gateway	192.168.6.1
IPv4 DNS Servers	202.96.128.86 1.1.1.1
IPv4 WINS Server	
NetBIOS over Tcpip En...	Yes
IPv6 Address	2202:abcd::48be:7e6c:ad95:d154
Link-local IPv6 Address	fe80::48be:7e6c:ad95:d154%11
IPv6 Default Gateway	fe80::bb8:8214:a8ff:fec4:1e5b%11
IPv6 DNS Server	

Close

Thank you!