

EPON OLT WEB USER MANUAL

Version V2.0.2

Release Date 2017-06-02

Contents

Chapter 1 System Description.....	6
1.1 Overview.....	6
1.1.1 OLT Introduction.....	6
1.1.2 PC System Requirement.....	6
1.2 Connection.....	7
Chapter 2 OLT Information.....	8
2.1 Login.....	8
2.2 Device Information.....	8
Chapter 3 OLT Configuration.....	10
3.1 VLAN.....	10
3.1.1 New VLAN.....	10
3.1.2 VLAN Port.....	10
3.1.3 QinQ/Translation.....	11
3.2 Uplink Port.....	12
3.2.1 Information.....	12
3.2.2 Configuration.....	13
3.3 PON.....	14
3.3.1 Information.....	14
3.3.2 Configuration.....	15
3.4 MAC.....	15
3.4.1 MAC Table.....	15
3.4.2 Configuration.....	16
3.5 LACP.....	17
3.6 QOS.....	18
3.7 ACL.....	18
3.7.1 IP Filter.....	18
3.7.2 MAC Filter.....	19
3.7.3 IP/MAC Filter.....	20
3.7.4 Effect Filter.....	20

3.8 IGMP.....	21
3.8.1 Group Member.....	21
3.8.2 Global.....	21
3.8.3 Port.....	22
3.8.4 Port User VLAN.....	23
3.8.5 Port Mrouter.....	24
3.8.6 Static Group.....	24
3.9 RSTP.....	25
3.9.1 Information.....	25
3.9.2 Global.....	26
3.9.3 Port.....	27
3.10 DHCP.....	27
3.10.1 DHCP Server.....	27
3.10.2 DHCP Relay.....	29
3.10.3 DHCP Snooping.....	29
3.11 IP Route.....	32
3.11.1 VLAN IP.....	32
3.11.2 ARP Proxy.....	33
3.11.3 Static Route.....	34
Chapter 4 ONU Configuration.....	35
4.1 ONU List.....	35
4.1.1 Config.....	35
4.1.2 Profile.....	46
4.1.3 Deregister Reset Unauth.....	47
4.1.4 ONU Status.....	47
4.1.5 OPM Diag.....	48
4.2 Authentication.....	48
4.2.1 Authentication Mode.....	48
4.2.2 MAC list.....	49
4.2.3 LOID List.....	50

4.3 Upgrade.....	51
4.3.1 Upgrade Status.....	51
4.3.2 Manual Upgrade.....	51
4.3.3 Auto Upgrade.....	52
Chapter 5 Profile Configuration.....	53
5.1 DBA Profile.....	53
5.1.1 Add/Commit.....	53
5.1.2 Bandwidth.....	53
5.2 Service Profile.....	54
5.2.1 Add/Commit.....	54
5.2.2 Content.....	55
5.3 VoIP Profile.....	55
5.3.1 Add/Commit.....	55
5.3.2 Content.....	56
5.4 Alarm Profile.....	57
5.4.1 Add/Commit.....	57
5.4.2 Content.....	58
5.5 Bind Profile.....	59
5.5.1 Information.....	59
5.5.2 Configuration.....	60
Chapter 6 System Configuration.....	62
6.1 System Log.....	62
6.1.1 System Log.....	62
6.1.2 Alarm.....	63
6.1.3 Threshold Alarm.....	64
6.1.4 Syslog Server.....	65
6.2 Device Management.....	66
6.2.1 Firmware Upgrade.....	66
6.2.2 Device Reboot.....	66
6.2.3 Config File.....	67

6.3 User Management.....	67
6.4 SNMP.....	68
6.4.1 SNMP V1/V2.....	68
6.4.2 SNMP V3.....	69
6.4.3 SMNP V3 Trap.....	70
6.5 AUX IP.....	71
6.6 System Time.....	71
6.6.1 RTC.....	71
6.6.2 NTP.....	72
6.7 FAN.....	72
6.8 Mirror.....	73
Chapter 7 Configuration Examples.....	74
7.1 Internet With VLAN 100.....	74
7.2 IPTV With VLAN 200.....	76
7.3 VoIP With VLAN 300.....	79

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		2 ports EPON OLT(L)	4 ports EPON OLT(L)	8 ports EPON OLT	16 ports EPON OLT
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	8	16	12
	Copper	2*10/100/1000M auto-negotiation	4*10/100/1000M auto-negotiation	8*10/100/1000M auto-negotiation	4*10/100/1000M
	SFP (Independent)	2*SFP	4*SFP	4*SFP and 4*SFP+ (SFP+ is compatible with 10GE)	4*SFP and 4*SFP+ (SFP+ is 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		SNMP, WEB, Telnet and CLI			

1.1.2 PC System Requirement

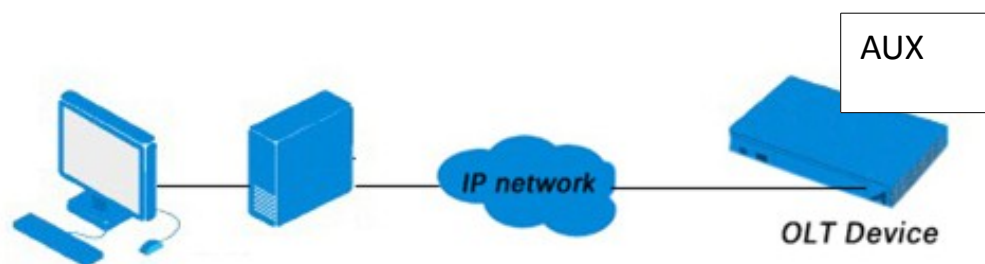
Table 1-2 PC System requirement

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

1.2 Connection

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

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

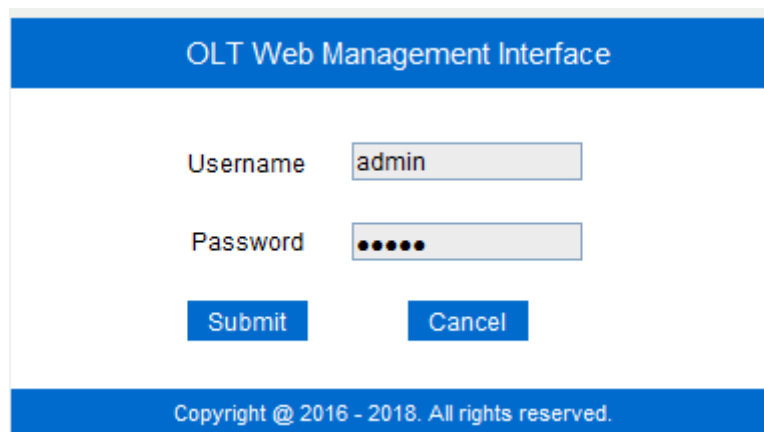


Chapter 2 OLT Information

2.1 Login

Follow the steps to login:

1. Conform "1.2 Connection" to connect;
2. The device default IP address is 192.168.8.100;
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. Both the username and password are "**admin**" by default.



The screenshot shows the login page of the OLT Web Management Interface. It features a blue header with the text "OLT Web Management Interface". Below the header, there are two input fields: "Username" with the value "admin" and "Password" with six black dots. Below the input fields are two buttons: "Submit" and "Cancel". At the bottom of the page, there is a blue footer with the text "Copyright @ 2016 - 2018. All rights reserved."

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 Status

PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8 GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8 GE9 GE10 GE11 GE12 GE13 GE14 GE15 GE16

Device Basic Information

System Name	epon-olt	Serial Number	V1603160001
Hardware Version	eight epon olt platform	Firmware Version	V2.03.21
MAC Address	80:14:A8:23:D6:F1	Temperature	55°C
System Time	2000 /1 /1 18:18:59	Running Time	0 Days 18 Hours 18 Minutes 2 Seconds
CPU Usage	53%	Memory Usage	13%

Submit Refresh

Figure 2-2: Device Information

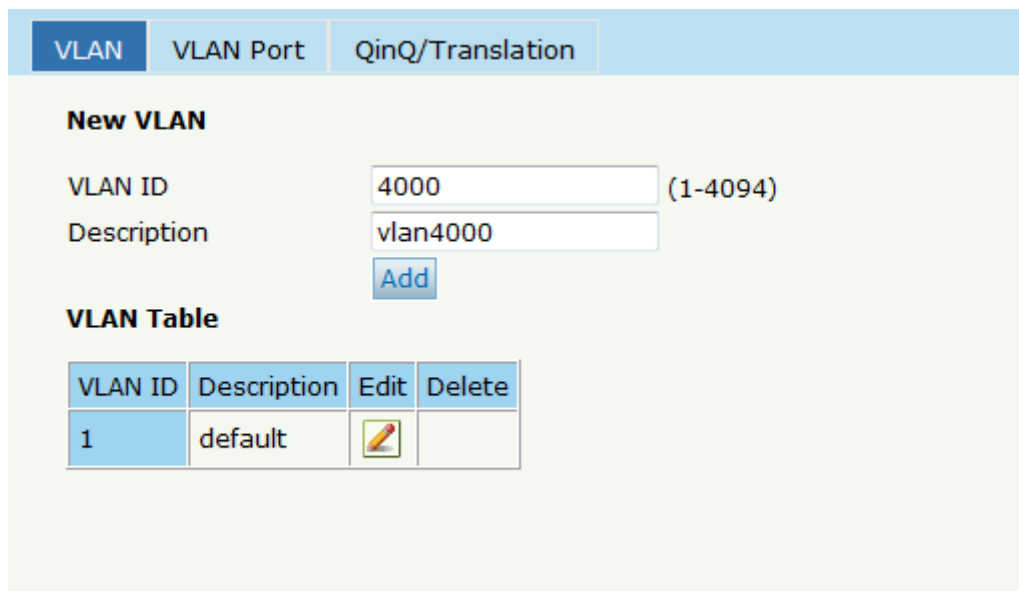
Chapter 3 OLT Configuration

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.



The screenshot shows a web interface for VLAN configuration. At the top, there are three tabs: 'VLAN' (selected), 'VLAN Port', and 'QinQ/Translation'. Below the tabs, the 'New VLAN' section contains two input fields: 'VLAN ID' with the value '4000' and a range '(1-4094)', and 'Description' with the value 'vlan4000'. An 'Add' button is located below the description field. Below this is the 'VLAN Table' section, which contains a table with the following data:


VLAN ID	Description	Edit	Delete
1	default		

Figure 3-1: Create New VLAN

3.1.2 VLAN Port

Assign the ports to the VLANs you created. Here, you can choose the tag or untag VLAN mode. Click **OLT Configuration**→**VLAN**→**VALN Port** as shown in Figure 3-2.

Port VLAN Configuration

VLAN ID: 4000

Port ID	Forbidden	Tag	Untag
GE1	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
GE3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GE4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE5	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE6	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE8	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GE9	<input checked="" type="radio"/>	<input 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 type="radio"/>	<input checked="" type="radio"/>
PON2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PON3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 3-2: 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 3-3.

QinQ Configuration

Port ID: GE4
Customer VLAN: 4000
Customer Cos: any
Service VLAN: 2000
Service Cos: any
Mode: VLAN Translation

VLAN QinQ Mapping Table

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

Figure 3-3: QinQ/Translation Configuration

3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

3.2.1 Information

Select **OLT Configuration**→**Uplink Port**→**Information**, as shown in Figure 3-5.

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

Figure3-4 : GE Traffic Statistics

3.2.2 Configuration

The GE ports basic configuration can be set. Select **OLT Configuration**

→Uplink Port→Information, as shown in Figure 3-6.

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

Submit Reset

Figure3-5: Uplink Ports 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.

Select **OLT Configuration**→**PON**→**Information**, you can show the PON port parameters, as shown in Figure 3-6.

Optical Transceiver				
Port ID	Temperature(Degree)	Voltage(V)	Bias Current(mA)	Transmit Power(dBm)
PON1	N/A	N/A	N/A	N/A
PON2	44.796	3.3487	12.412	3.645885
PON3	N/A	N/A	N/A	N/A
PON4	N/A	N/A	N/A	N/A
PON5	N/A	N/A	N/A	N/A
PON6	N/A	N/A	N/A	N/A
PON7	N/A	N/A	N/A	N/A
PON8	N/A	N/A	N/A	N/A

Traffic Statistics										
Port ID	Link Status	Speed	Rx Packets			Tx Packets			Collisions	Errors
			Packets	Broadcast	Multicast	Packets	Broadcast	Multicast		
PON1	Down	-	14	0	14	30	0	30	0	0
PON2	Up	1000M Full	14	0	14	30	0	30	0	0
PON3	Down	-	14	0	14	30	0	30	0	0
PON4	Down	-	13	0	13	28	0	28	0	0
PON5	Down	-	78	0	78	28	0	28	0	0
PON6	Down	-	78	0	78	28	0	28	0	0
PON7	Down	-	78	0	78	28	0	28	0	0
PON8	Down	-	78	0	78	28	0	28	0	0

Clear Counters Refresh

Figure3-6: PON Information

3.3.2 Configuration

The PON ports basic configuration can be set.

Select **OLT Configuration**→**PON**→**Configuration**, as shown in Figure 3-7.

Port ID	Description	Admin Status	Flow Control	Isolate	PVID	MAX RTT(2000-32000TQ)	ONU P2P	Storm(0(64-1000000fps)			Rate(0(32-1000000kbps)		MAC Limit(0-16384)
								Broadcast	Multicast	Unicast	Ingress	Egress	
PON1	admin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2000	14500	<input checked="" type="checkbox"/>	512	512	512	0	0	0
PON2		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0
PON8		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	14500	<input type="checkbox"/>	512	0	512	0	0	0

Submit Reset

Figure3-7: PON configuration

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 3-8.

MAC Address Table

Port ID

VLAN ID	MAC	Type	Physical Port
1	FC:AA:14:70:DB:99	Dynamic	GE12
1	B8:97:5A:69:94:03	Dynamic	GE12
1	40:61:86:CA:3B:68	Dynamic	GE12
1	00:0C:29:16:7E:03	Dynamic	GE12
1	00:0C:29:16:7E:F9	Dynamic	GE12
1	28:ED:58:B2:34:3F	Dynamic	GE12
1	00:1C:82:00:12:B7	Dynamic	GE12
1	00:E0:4C:00:00:00	Dynamic	GE12
1	00:D0:D0:00:00:01	Dynamic	GE12
1	00:0A:C2:11:D9:21	Dynamic	GE12
1	00:24:21:21:A7:1F	Dynamic	GE12
1	00:0C:29:E6:21:34	Dynamic	GE12
1	F4:4D:30:4E:45:D0	Dynamic	GE12
1	3C:D1:6E:09:9B:E9	Dynamic	GE12
1	00:20:23:00:00:00	Dynamic	GE12
1	3C:D1:6E:09:AF:2C	Dynamic	GE12
1	00:E0:EE:EC:EE:E9	Dynamic	GE12
1	80:14:A8:16:3A:E7	Dynamic	GE12

Figure3-8: 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 3-9.

MAC Table
Configuration

MAC Aging Configuration

Automated Aging:

Aging Time: (10-1000000s)

Add MAC Address

VLAN ID:

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

Type: Static Dynamic

Port ID:

Figure 3-9:MAC Configuration

3.5 LACP

Select **OLT Configuration**→**LACP**→**Static LACP** to assign and configure a 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:

Load Balance:

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

Channel Group Table

Group ID	Load Balance	Ports	Delete

Figure 3-10: Create Static LACP

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 3-11.

QoS Configuration								
QoS Mode	Strict-WRR							
Weight	Q0(1-127)	Q1(1-127)	Q2(1-127)	Q3(1-127)	Q4(0-127)	Q5(0-127)	Q6(0-127)	Q7(0-127)
	50	50	50	50	100	0	0	0
<input type="button" value="Submit"/>								

Figure 3-11: QOS Configuration

3.7 ACL

This part is about the security of OLT. It can permit or deny the clients access. Each access list can support 3 rules.

3.7.1 IP Filter

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

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

shown in Figure 3-12.

Access List IP Configuration

Access List ID: 1000 (1000-1999)

Filter Action: Deny Permit

Source IP: 192.168.3.33 Mask: 255.255.255.0

Source Port: (0-65535)

Destination IP: 192.168.3.213 Mask: 255.255.255.0

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

Figure 3-12: IP Filter

3.7.2 MAC Filter

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

Select **OLT Configuration** → **ACL** → **MAC Filter** to set the configuration, as shown in Figure 3-13.

IP Filter **MAC Filter** IP/MAC Filter Effect Filter

Access List MAC Configuration

Access List ID: 2001 (2000-2999)

Filter Action: Deny Permit

Source MAC: 00:00:00:00:00:01 Mask: FF:FF:FF:FF:FF:FF (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	Cos	Ethernet Type	Filter Action	Delete
---------	------------	-----------------	---------	-----	---------------	---------------	--------

Figure 3-13: MAC Filter

3.7.3 IP/MAC Filter

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

Select **OLT Configuration** → **ACL** → **IP/MAC Filter** to set the configuration, as shown in Figure 3-14.

IP Filter MAC Filter **IP/MAC Filter** Effect Filter

Access List Configuration

Access List ID: 5000 (5000-5999)

Filter Action: Deny Permit

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

Destination MAC: 00:00:00:00:00:05 Mask: FF:FF:FF:FF:FF:FF (HH:HH:HH:HH:HH:HH)

VLAN ID: 1

VLAN Cos: (0-7)

Ethernet Type: (HHHH)

Source IP: 192.168.6.32 Mask: 255.255.255.0

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

Figure 3-14 IP/MAC Filter

3.7.4 Effect Filter

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

Access List ID	Ports
1000	GE1 GE6 GE7 GE8 PON4

Figure 3-15: Bind Security Filter

3.8 IGMP

3.8.1 Group Member

Show about the group member in the list.

Select **OLT Configuration** → **IGMP** → **Group Member** to set the configuration, as shown in Figure 3-16.

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
IGMP Group Member					
Group VLAN ID	IP Address	Port ID	Type	User VLAN ID	
2000	239.0.0.1	PON1	Static	2000	
<input type="button" value="Refresh"/>					

Figure 3-16: Group Member

3.8.2 Global

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

→**IGMP**→**Global**.

Group Member	Global	Port	Port User VLAN	Port Mrouter	Static Group
IGMP Configuration					
IGMP Status	Enable				
Last Member Query Interval	1	(1-255s)			
Last Member Query Count	2	(1-255)			
Last Member Query Response	1	(1-255s)			
General Query Packet	<input 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 3-17: IGMP Global

3.8.3 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
IGMP Port Configuration					
Port ID	Fast Leave	Filter	Group Limit(0-1024)		
GE1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1024		
GE2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1024		
GE3	<input checked="" 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		

Figure 3-18: IGMP Port

3.8.4 Port User VLAN

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

VLAN and group VLAN.

User VLAN Configuration

Port ID: GE1
User VLAN ID: 1
Group VLAN ID: 1

User VLAN Table

Port ID	User VLAN ID	Group VLAN ID	Delete
PON1	1000	1000	<input type="checkbox"/>

Figure 3-19: IGMP Port User VLAN

3.8.5 Port Mrouter

To add a port to the IGMP multicast routing group, click **OLT Configuration** → **IGMP** → **Port Mrouter**, as shown in Figure 3-20.

Add Multicast Router

Port ID: GE2
Group VLAN ID: 1000

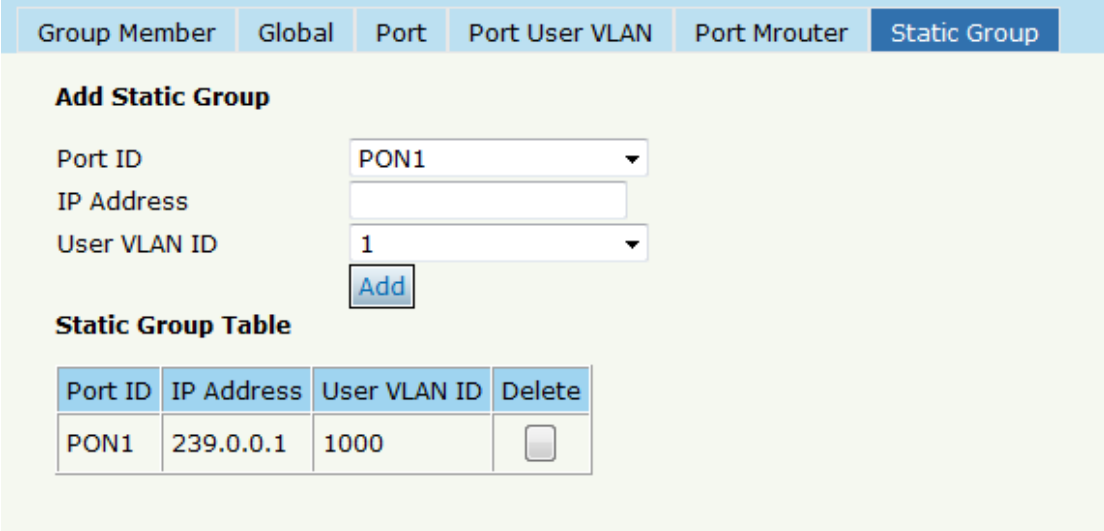
Multicast Router Table

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

Figure 3-20: IGMP Port Mroute

3.8.6 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 3-21.



The screenshot shows a web-based configuration interface with a top navigation bar containing tabs: Group Member, Global, Port, Port User VLAN, Port Mrouter, and Static Group. The 'Static Group' tab is selected. Below the navigation bar, the page title is 'Add Static Group'. There are three input fields: 'Port ID' with a dropdown menu showing 'PON1', 'IP Address' with an empty text box, and 'User VLAN ID' with a dropdown menu showing '1'. Below these fields is an 'Add' button. Underneath is a section titled 'Static Group Table' containing a table with the following data:

Port ID	IP Address	User VLAN ID	Delete
PON1	239.0.0.1	1000	<input type="checkbox"/>

Figure 3-21: IGMP Static Group

3.9 RSTP

3.9.1 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 3-22.

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 3-22:RSTP Information

3.9.2 Global

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

Information Global Port

RSTP Configuration

RSTP Status

Global Priority (0-61440)

Hello Time (1-10s)

Max Age (6-40s)

Forward Delay (4-30s)

Figure 3-23: RSTP Global Setup

3.9.3 Port

The RSTP ports parameter can be set by selecting click **OLT**

Configuration→**RSTP**→**Port** .

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

Figure 3-24: RSTP Port Setting

3.10 DHCP

3.10.1 DHCP Server

3.10.1.1 DHCP Lease

Click **OLT Configuration**→**DHCP**→**DHCP Server**→**Lease**, the DHCP Server Lease will be shown as Figure3-25.

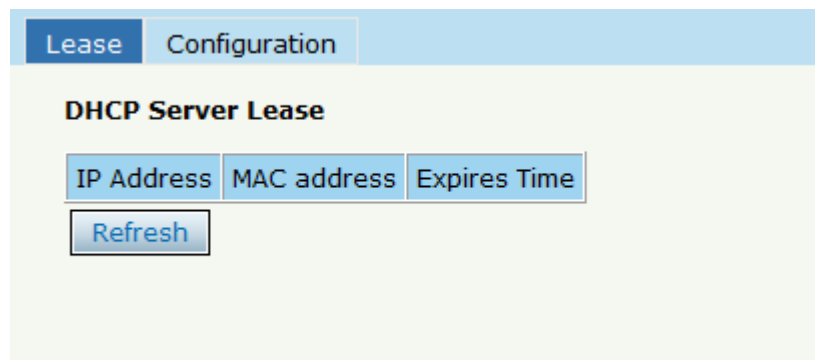


Figure 3-25: DHCP Lease

3.10.1.2 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 3-26.

Lease	Configuration
DHCP Server Configuration	
DHCP Server	Enable
VLAN ID	1
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>
DHCP Server Settings	
Start IP Address	192.168.0.20
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)
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

Figure 3-26:DHCP Configuration

3.10.2 DHCP Relay

3.10.2.1 DHCP Relay Configuration

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. The relay server IP address network segment should be the same as the DHCP server.

Configuration

Add Relay Server

Server IP

VLAN ID

Relay Server Table

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

Figure 3-27:DHCP Relay Configuration

3.10.3 DHCP Snooping

3.10.3.1 DHCP Snooping Bind List

The static bind of the DHCP Snooping will be shown , Click **OLT**

Configuration→DHCP→DHCP Snooping→Bind List

Bind List Global Port Static Bind

DHCP Snooping Bind List

MAC Address	VLAN ID	IP Address	Port ID	Lease	Type
00:00:00:00:00:02	200	192.168.2.111	GE1	0	Static

Figure 3-28:DHCP Snooping Bind List

3.10.3.2 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 screenshot shows the DHCP Snooping Global configuration interface. At the top, there are four tabs: 'Bind List', 'Global' (selected), 'Port', and 'Static Bind'. Below the tabs, the 'DHCP Snooping Configuration' section has a dropdown menu set to 'Enable' and two buttons: 'Submit' and 'Reset'. The 'DHCP Snooping Settings' section includes three radio button options: 'Option82 Control' (with 'Enable' selected), 'Option82 Strategy' (with 'Keep' selected), and 'Overspeed Recovery' (with 'Enable' selected). There are two input fields: 'Overspeed Recovery Interval' with the value '30' and a range '(3-3600s)', and 'Binding Delete Time' with the value '300' and a range '(1-3600s)'. Below these are 'Submit' and 'Reset' buttons. The 'VLAN ID List' section features a table with a 'List' header and a 'vlan200' entry. Below the table is a 'VLAN ID' dropdown menu set to '1' and 'Add' and 'Delete' buttons.

Figure 3-29:DHCP Snooping Global

3.10.3.3 Port

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

Port ID	Type	Option82 Circuit ID	Option82 Remote ID	Limit Rate(0-4096)
GE1	Untrust	asd123456	111111	512
GE2	Untrust			0
GE3	Untrust			0
GE4	Untrust			0
GE5	Untrust			0
GE6	Untrust			0
GE7	Untrust			0
GE8	Untrust			0
GE9	Untrust			0
GE10	Untrust			0

Figure 3-30:DHCP Snooping Port Setup

3.10.3.4 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 3-31.

Bind List	Global	Port	Static Bind
Add DHCP Snooping Bind			
MAC Address	00:00:00:00:02:01 (HH:HH:HH:HH:HH:HH)		
VLAN ID	200		
IP Address	192.168.2.155		
Port ID	GE1		
Lease	100 (60-1000000s)		
Add			
Static DHCP Snooping Bind Table			
MAC Address	VLAN ID	IP Address	Port ID
Lease	Delete		

Figure 3-31 DHCP Snooping Static Bind

3.11 IP Route

3.11.1 VLAN IP

Select the existing VLAN and set an IP address for this VLAN, as shown in Figure 3-32.

VLAN ID	IP Address	Subnet Mask	Delete
---------	------------	-------------	--------

Figure 3-32:VLAN IP

3.11.2 ARP Proxy

When serves as a 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** Static Route

ARP Proxy Configuration

VLAN ID: 200

ARP Proxy: Disable Enable

ARP Proxy Table

VLAN ID	ARP Proxy Status
1	disable
200	disable

Figure 3-33: ARP proxy configuration

3.11.3 Static Route

OLT supports static route L3 function. Click **Static Route** to configure, as shown in Figure 3-34

VLAN IP ARP Proxy **Static Route**

Add Static Route

Destination IP:

Destination Mask:

Gateway:

Static Route Table


Destination IP	Destination Mask	Gateway	Delete
192.168.6.0	255.255.255.0	192.168.6.1	

Figure 3-34: Static Route

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	Profile Unauth
EPON0/1:2	Online	80:14:A8:31:F1:68	N/A	80	1GE+WIFI	Auth	Idle	None	N/A	Config Profile Deregister Reset Unauth

Figure 4-1 ONU List

4.1.1 Config

Click **ONU List** → **Config**, shown as Figure 4-2.

ONU List

ONU Authentication Information

Port ID: PON1

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

ONU ID	LLID	Status	Last Dereg Reason	MAC Address	RTT	Description	Type	Auth Flag	Exchange	Auth Mode	Loid/pwd	Action
1	-1	Offline	Power Off	80:14:A8:1A:E0:F8	49	NULL	2GE+1POTS	Unauth	Idle	None	NULL	Profile Unauth
2	-1	Offline	Wire Down	80:14:A8:20:B6:D0	94	NULL	1GE	Unauth	Idle	None	NULL	Profile Unauth
3	2	Online	Wire Down	80:14:A8:3A:31:40	96	NULL	1GE+WIFI	Auth	Idle	None	NULL	Config Profile Deregister Reset Unauth

[Refresh](#)

Figure 4-2 Configure ONU

4.1.1.1 Information

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

ONU List

Information Bandwidth Port VLAN QoS IGMP Alarm WAN WIFI Advance PON 1 ONU 3 80:14:A8:3A:31:40 Go Back

Basic Information

Description

Basic Information			
Vendor ID	VSOL	Model ID	28RW
ONU ID	8014a83a3140	Hardware Version	V1.1
Software Version	V1.9.7	Firmware Version	0x312e312e322044656320323020323031
Optical Module Information			
Temperature	43 C	Supply Voltage	3.30 V
Bias Current	17 mA	Transmit Power	1.5100 mW (1.7898 dBm)
Receive Power	0.5681 mW (-2.4558 dBm)		
CAP2 Information			
ONU Type	0x1000000	Multi LLID	unsupport
Protection Type	unsupport	PONIF Count	1
Slot Count	0	Interface Type Count	2
Interface Type Port	GE(1); WLAN(1);		

Figure 4-3 ONU Information

4.1.1.2 Bandwidth

Limited the ONU upstream and downstream.

Click **ONU List**→**Config**→**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)

Figure 4-4 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 4-5

ONU List

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

Port Basic Configuration

ONU Port

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

Figure 4-5 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 4-6.

ONU List

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

VLAN Configuration

ONU Port

VLAN Mode

PVID (1-4095)

Figure 4-6 ONU Port VLAN

4.1.1.5 QoS

The QoS take effect with ONU port. Click **ONU List**→**Config**→**QoS**, shown as Figure 4-7.

ONU List

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

Port Class Configuration

ONU Port

Precedance (1-8) Priority (0-7) Queue (0-7)

Destination MAC (HH:HH:HH:HH:HH:HH)

Source MAC (HH:HH:HH:HH:HH:HH)

VLAN (1-4094)

COS (0-7)

Ethernet Type

Destination IP

Source IP

Protocol (0-255)

TOS (0-255)

Destination Port (0-65535)

Source Port (0-65535)

Figure 4-7 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 4-8.

The screenshot displays the configuration page for IGMP on an ONU. The top navigation bar includes tabs for Information, Bandwidth, Port, VLAN, QoS, IGMP (selected), Alarm, WAN, WIFI, and Advance. The main content area is divided into two sections: Multicast Configuration and Multicast Port Configuration. In the Multicast Configuration section, the Multicast Switch is set to Snooping (selected) and CTC Control is unselected. The Fast Leave State is set to Disable (selected) and Enable is unselected. A Submit button is present. In the Multicast Port Configuration section, the ONU Port is set to Port1. Below this, there are three configuration blocks: Multicast Max Group (value: 64, range: 0-255), Multicast VLAN (value: 2000), and VLAN Tag Strip Mode (value: Strip). Each block has a Submit button.

Figure 4-8 IGMP Configuration

4.1.1.7 Alarm

Show the ONU alarm status and threshold. Click **ONU List** → **Config** → **IGMP** , shown as Figure 4-9.

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 4-9 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 4-10.

ONU List

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

WAN Connect Table

Index	WAN Mode	Connect Mode	VLAN Mode	Service Mode	Configuration Info	Status
-------	----------	--------------	-----------	--------------	--------------------	--------

WAN Connect Parameter Configuration

Mode: bridge

VLAN Mode: Tag

VLAN ID: 1000 (0-4095)

VLAN Cos: 0 (0-7)

Qinq Enable: Disable

Qinq Tpid: (0-65534)

SVLAN ID: (0-4095)

SVLAN Cos: (0-7)

QOS Enable: Disable

Service Mode: Internet

Port Binding: Lan1 Lan2 Lan3 Lan4
 SSID1 SSID2 SSID3 SSID4

Add

WAN Connect running-config

Index	onu running-config	Delete
1	ConnectType : bridge, WanMode : internet, VLAN Mode : Tag, VLAN ID:1000, VLAN Cos:0	

Submit

Figure 4-10 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 4-11.

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)

WIFI SSID Configuration

SSID: SSID1
 ONU WIFI Status: enable
 Encryption Status: disable
 Name: qwerty
 Network Authentication: Open
 Encrypt Type: NONE

WIFI SSID Table


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

Figure 4-11 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 4-12.

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 4-12 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 4-13.

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 4-13 Advance

4.1.1.12 VoIP

VoIP ONU can set the VoIP global parameter.

ONU List → Config → VoIP, shown as Figure 4-14.

The screenshot shows a web interface for configuring VoIP parameters. At the top, there is a navigation bar with tabs: Information, Bandwidth, Port, VLAN, QoS, IGMP, VoIP (selected), SIP, POTS, Alarm, and Advance. Below the navigation bar, the page is titled "VoIP Global Configuration".

VoIP Global Configuration

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)

IAD Operation Status

IAD Operation Status: IAD fault

Set IAD Operation:

Fax/Modem Configuration

Voice T38 Status: Disable Enable

Fax/Modem Control: Negotiation Auto VBD

Figure 4-14 VoIP Global

4.1.1.13 SIP

VoIP ONU SIP parameter can be set in this page.

ONU List → Config → SIP, shown as Figure 4-15.

ONU List

Information	Bandwidth	Port	VLAN	QoS	IGMP	VoIP	SIP	POTS	Alarm	Advance
-------------	-----------	------	------	-----	------	------	------------	------	-------	---------

SIP Parameter Configuration

Manage Port	<input type="text" value="5060"/>	(1-65535)
Proxy Service IP/Port	<input type="text" value="192.168.6.33"/>	(x.x.x.x) <input type="text" value="5060"/> (1-65535)
Backup Proxy Service IP/Port	<input type="text" value="0.0.0.0"/>	(x.x.x.x) <input type="text" value="5060"/> (1-65535)
Register Service IP/Port	<input type="text" value="192.168.6.33"/>	(x.x.x.x) <input type="text" value="5060"/> (1-65535)
Backup Register Service IP/Port	<input type="text" value="0.0.0.0"/>	(x.x.x.x) <input type="text" value="5060"/> (0-65535)
Out Bound Service IP/Port	<input type="text" value="0.0.0.0"/>	(x.x.x.x) <input type="text" value="5060"/> (0-65535)
Register Interval	<input type="text" value="3600"/>	(0-65535)
Heartbeat Switch	<input type="text" value="Disable"/>	
Heartbeat Cycle	<input type="text" value="30"/>	(1-65535)
Heartbeat Count	<input type="text" value="1"/>	(1-65535)

Figure 4-15 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 4-16.

ONU List

Information Bandwidth Port VLAN QoS IGMP VoIP SIP **POTS** Alarm Advance

VoIP POTS Configuration

VoIP Port

POTS Information

Port Status	Inactive
Services State	EndNormal
Codec Mode	G711U

Manage Configuration

Manage Status Disable Enable

SIP User Parameter Configuration

User Account

User name

User Password

Figure 4-16 POTS Setting

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 4-17.

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 4-17 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 4-18.

ONU List

ONU Authentication Information

Port ID:

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

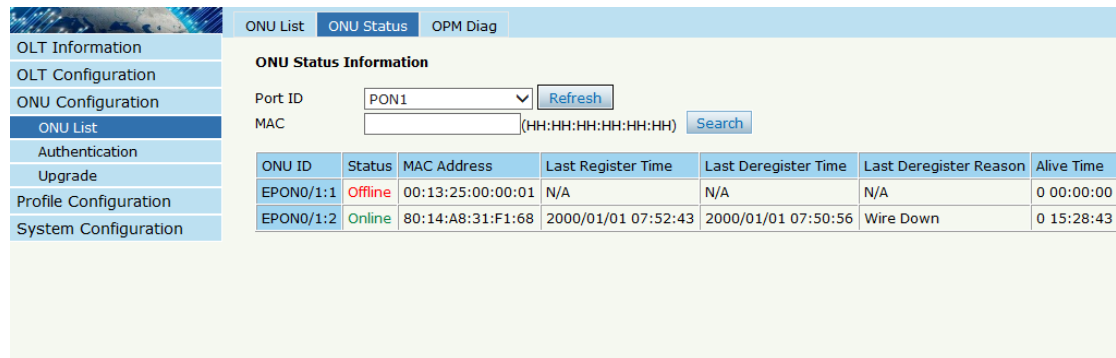
ONU ID	LLID	Description	MAC Address	RTT	Type	Auth Flag	Exchange	Auth Mode	Loid/pwd	Last Dereg Reason	Action
1	-1	NULL	80:14:A8:3A:31:40	97	1GE+WIFI	Unauth	Idle	None	NULL	Wire Down	Profile Unauth
2	1	NULL	80:14:A8:1A:E0:F8	50	2GE+1POTS	Auth	Idle	None	NULL	Wire Down	Config Profile Deregister Reset Unauth

Figure 4-18 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 4-19.



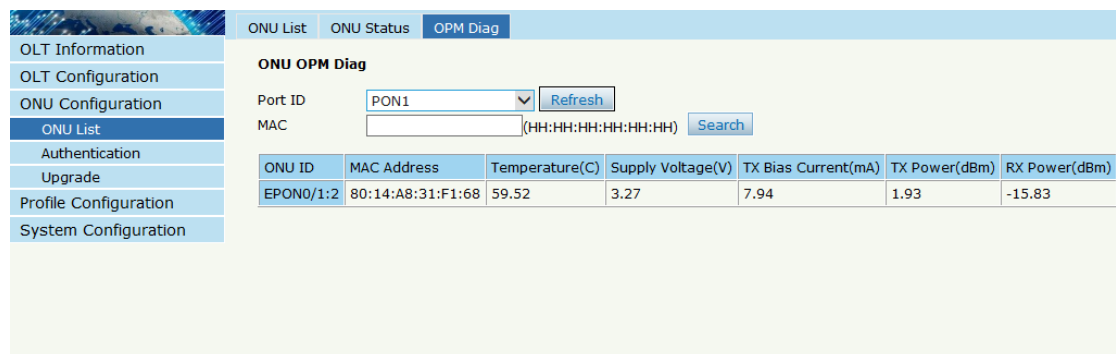
ONU ID	Status	MAC Address	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
EPON0/1:1	Offline	00:13:25:00:00:01	N/A	N/A	N/A	0 00:00:00
EPON0/1:2	Online	80:14:A8:31:F1:68	2000/01/01 07:52:43	2000/01/01 07:50:56	Wire Down	0 15:28:43

Figure 4-19 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 4-20.



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 4-20 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 4-21

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

submit

Figure 4-21 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 4-22.

Authentication Mode **MAC List** LOID List

ONU MAC Authentication

Port ID

MAC Type

Add MAC

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

White MAC Authentication Table

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

Figure 4-22 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 4-23..

Authentication Mode MAC List **LOID List**

ONU LOID

Port ID PON1 ▾

Add LOID

LOID

Password

ONU LOID Authentication Table


Index	LOID	Password	Delete
1	epon1234567	1234567	

Figure 4-23 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 4-24.

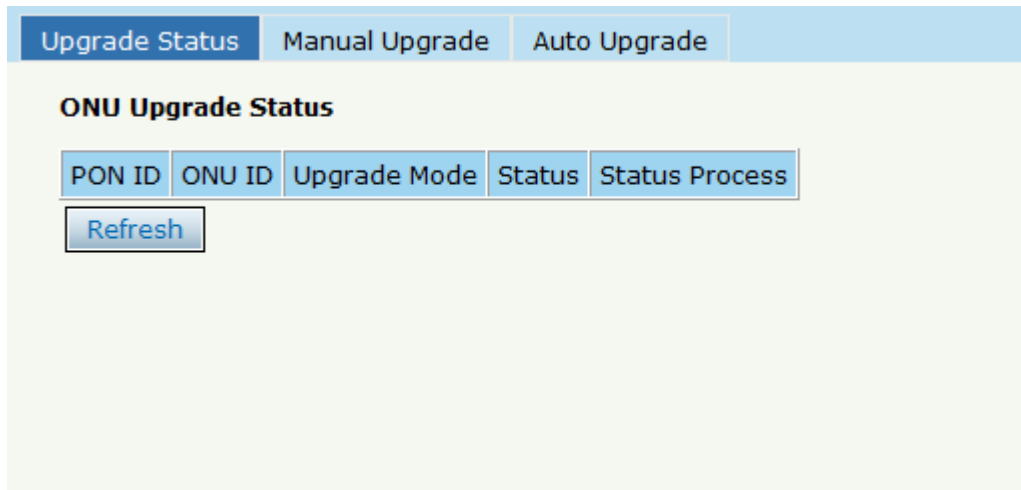


Figure 4-24 ONU Upgrade Status

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 4-25.

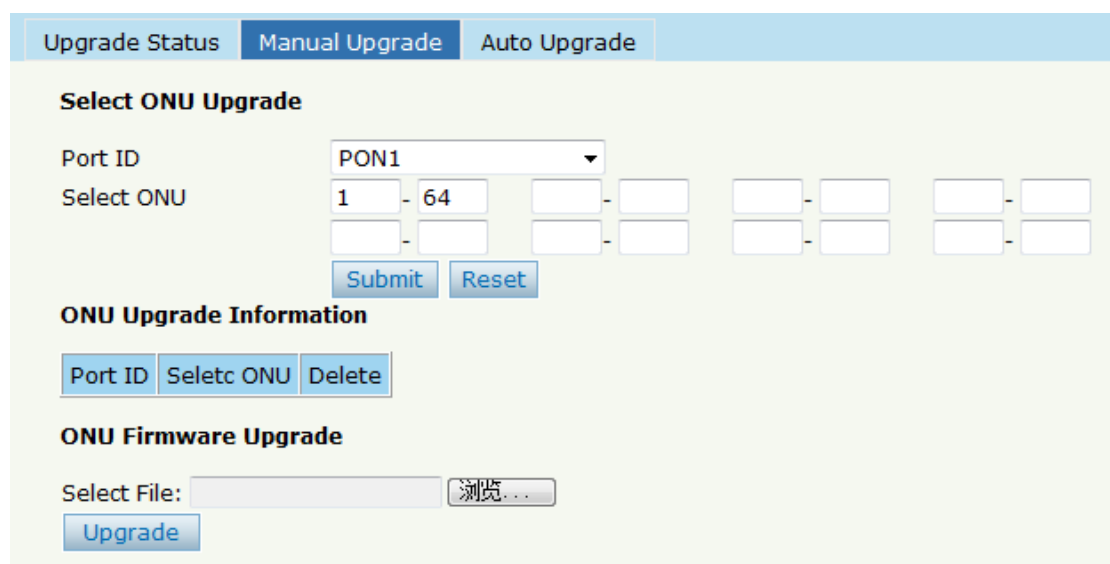


Figure 4-25 Manual Upgrade

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-

26.

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

Figure 4-26 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.



The screenshot shows a web interface with two tabs: 'Add/Commit' (selected) and 'Bandwidth'. Under the 'Add/Commit' tab, there is a section titled 'Create DBA Profile'. It contains a 'Profile ID' input field with the value '1' and a range '(1-32767)' to its right. Below the input field is an 'Add' button. Below this is a section titled 'DBA Profile Information' which includes a 'Profile ID' dropdown menu, a 'Delete' button, and a 'Commit' button. At the bottom, there is a table with two columns: 'Key' and 'Value'.

Figure 5-1 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 5-2 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 5-3.

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

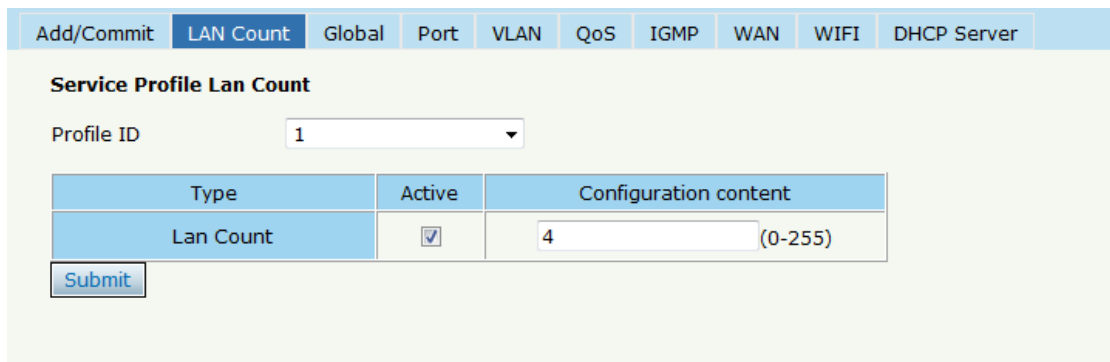
Key	Value
Ports Count	0
Global Parameter	

Figure 5-3 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.

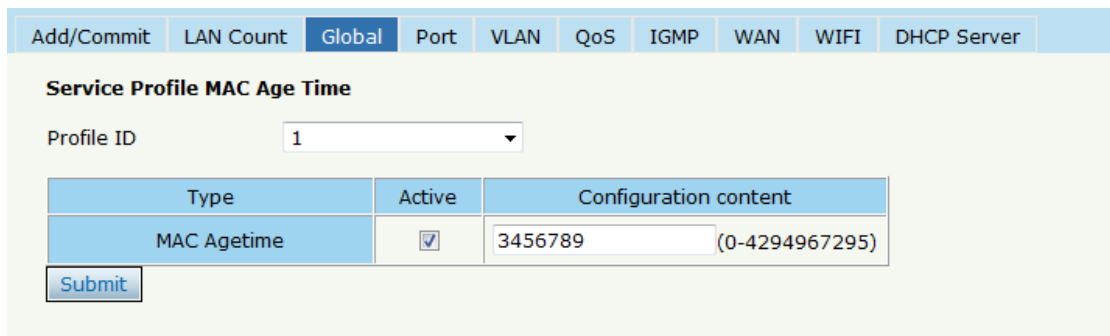
Click **Profile Configuration**→**Service Profile**



The screenshot shows the 'Service Profile Lan Count' configuration page. At the top, there is a navigation bar with tabs: Add/Commit, LAN Count (selected), Global, Port, VLAN, QoS, IGMP, WAN, WIFI, and DHCP Server. Below the navigation bar, the page title is 'Service Profile Lan Count'. There is a 'Profile ID' dropdown menu set to '1'. A table with three columns: 'Type', 'Active', and 'Configuration content'. The table has one row: 'Lan Count', a checked checkbox, and a text input field containing '4' with '(0-255)' to its right. A 'Submit' button is located at the bottom left of the configuration area.

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

Figure 5-4 LAN Count



The screenshot shows the 'Service Profile MAC Age Time' configuration page. At the top, there is a navigation bar with tabs: Add/Commit, LAN Count, Global (selected), Port, VLAN, QoS, IGMP, WAN, WIFI, and DHCP Server. Below the navigation bar, the page title is 'Service Profile MAC Age Time'. There is a 'Profile ID' dropdown menu set to '1'. A table with three columns: 'Type', 'Active', and 'Configuration content'. The table has one row: 'MAC Agetime', a checked checkbox, and a text input field containing '3456789' with '(0-4294967295)' to its right. A 'Submit' button is located at the bottom left of the configuration area.

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

Figure 5-5 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 5-6.

Add/Commit POTS Count VoIP SIP H.248 POTS

Create VoIP Profile

Profile ID (1-32767)

VoIP Profile Information

Profile ID

Description

Figure 5-6

Figure 5-6 Add/Commit VoIP Profile

5.3.2 Content

The VoIP profile configuration contains **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

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

Figure 5-7 POTS Count

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

Figure 5-8 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 5-9.

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

Figure 5-9 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"/> <input type="text" value="3"/> <input type="text" value="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"/> <input type="text" value="1280"/> <input type="text" value="1280"/> (-1280..1280,units:0.1C)
ONU Temp Low Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="text" value="-1280"/> <input type="text" value="-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 5-10 ONU Global Alarm

Add/Commit				ONU	PON	Port	POTS
PON Alarm Profile							
Profile ID		1					
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 5-11 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	Config
2	80:14:A8:20:B8:10	Unknown	0	0	0	0	0x0	Config
3	80:14:A8:20:B6:20	Unknown	0	0	0	0	0x0	Config
4	80:14:A8:20:B5:E8	Unknown	0	0	0	0	0x0	Config
5	00:13:25:00:00:01	Unknown	0	0	0	0	0x0	Config
6	80:14:A8:20:B7:00	Unknown	0	0	0	0	0x0	Config
7	80:14:A8:20:B7:40	Unknown	1	1	1	1	0x0	Config
8	80:14:A8:20:B6:68	Unknown	0	0	0	0	0x0	Config
9	80:14:A8:20:B6:80	Unknown	1	1	1	1	0x0	Config
10	80:14:A8:20:B6:60	Unknown	1	1	1	1	0x0	Config
11	80:14:A8:20:B7:F0	Unknown	0	0	0	0	0x0	Config
12	80:14:A8:20:B6:48	Unknown	1	1	0	0	0x0	Config
13	80:14:A8:20:B6:C8	Unknown	1	0	1	0	0x0	Config
14	80:14:A8:20:B5:E0	Unknown	1	0	1	0	0x0	Config
15	80:14:A8:20:B7:E0	Unknown	1	1	0	0	0x0	Config

Figure 5-12 Bind Profile Information

Information		Configuration	
Binding: PON 1 ONU 1 00:0B:05:62:F2:08 Go Back			
DBA Profile ID	1		
Service Profile ID	1		
VoIP Profile ID	1		
Alarm Profile ID	1		
		Submit	Reset
DBA Profile		Service Profile	
DBA Profile Information		VoIP Profile	
Profile ID	1		
Description			
Key	Value		
Upstream	FIR : 222222 CIR : 222222 PIR : 222222 WEIGHT : 1		
Downstream	PIR : 276567 WEIGHT : 1		

Figure 5-13 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	1	1	1	1
2	80:14:A8:20:B8:10	Unknown				
3	80:14:A8:20:B6:20	Unknown				
4	80:14:A8:20:B5:E8	Unknown				
5	00:13:25:00:00:01	Unknown				
6	80:14:A8:20:B7:00	Unknown				
7	80:14:A8:20:B7:40	Unknown	1	1	1	1
8	80:14:A8:20:B6:68	Unknown				
9	80:14:A8:20:B6:80	Unknown	1	1	1	1
10	80:14:A8:20:B6:60	Unknown	1	1	1	1

Figure 5-14 Bind Profile Configuration

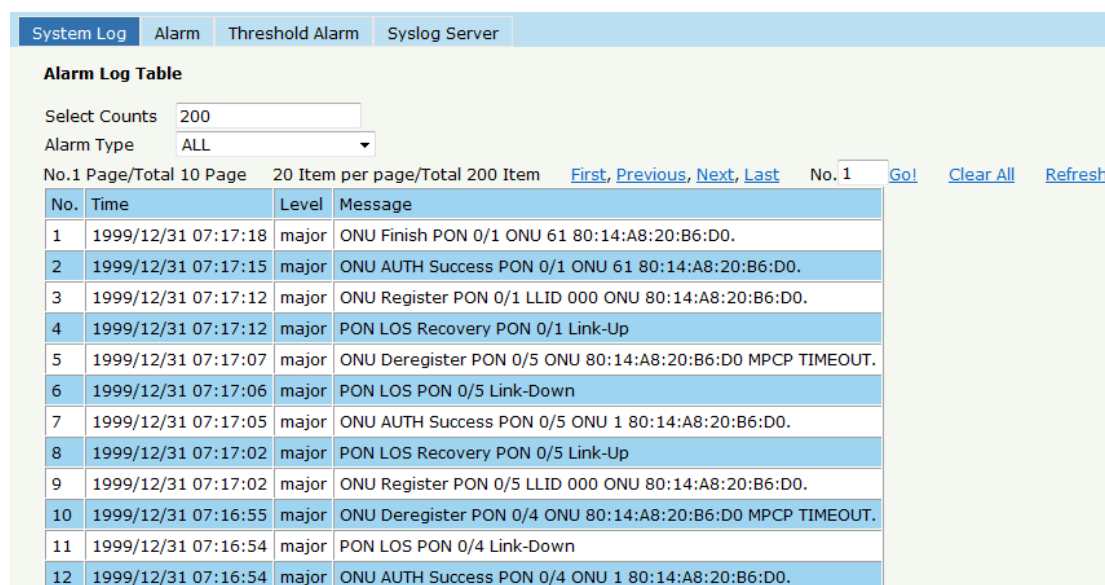
Chapter 6 System Configuration

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.



The screenshot shows the 'System Log' interface with a navigation bar containing 'System Log', 'Alarm', 'Threshold Alarm', and 'Syslog Server'. Below the navigation bar is the 'Alarm Log Table' section. It includes a 'Select Counts' input field set to '200' and an 'Alarm Type' dropdown menu set to 'ALL'. Below these are navigation links: 'No. 1 Page/Total 10 Page', '20 Item per page/Total 200 Item', 'First, Previous, Next, Last', 'No. 1', 'Go!', 'Clear All', and 'Refresh'. The main part of the interface is a table with the following data:

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 System Log

The events and alarms levels are listed in Table 2-1.

Table 2-1 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 6-2 Alarm

6.1.3 Threshold Alarm

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

System Log Alarm **Threshold Alarm** Syslog Server

Threshold Alarm Configuration

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

PON Optical Alarm Configuration

Port ID

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

Figure 6-3 Threshold Alarm

6.1.4 Syslog Server

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

System Log Alarm Threshold Alarm **Syslog Server**

Syslog Server Configuration

Syslog Server

Server IP

Server Port (1-65535)

Figure 6-4 Syslog Server

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**.

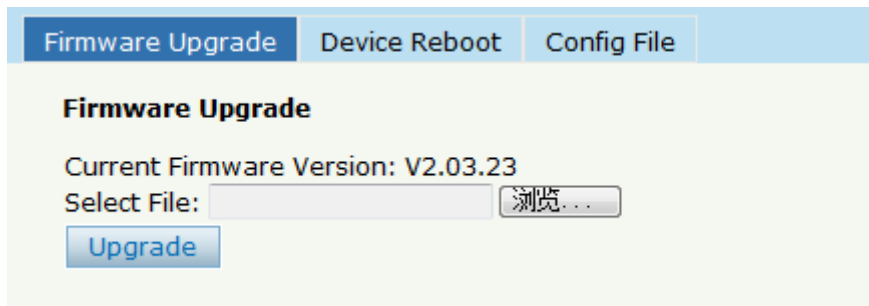


Figure 6-5 Firmware Upgrade

6.2.2 Device Reboot

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

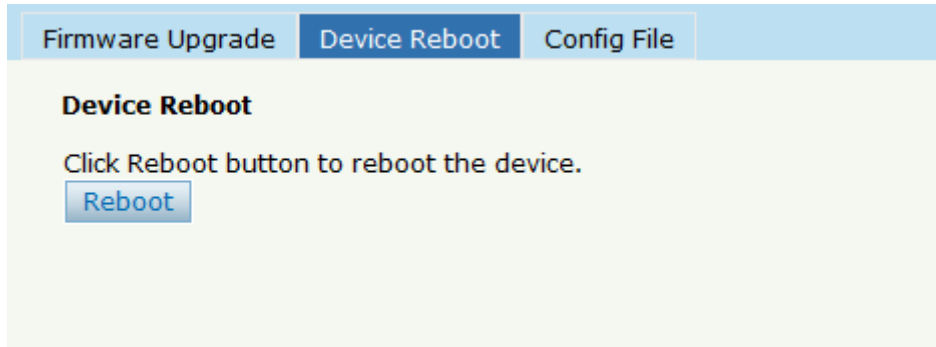


Figure 6-6 Device Reboot

6.2.3 Config File

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

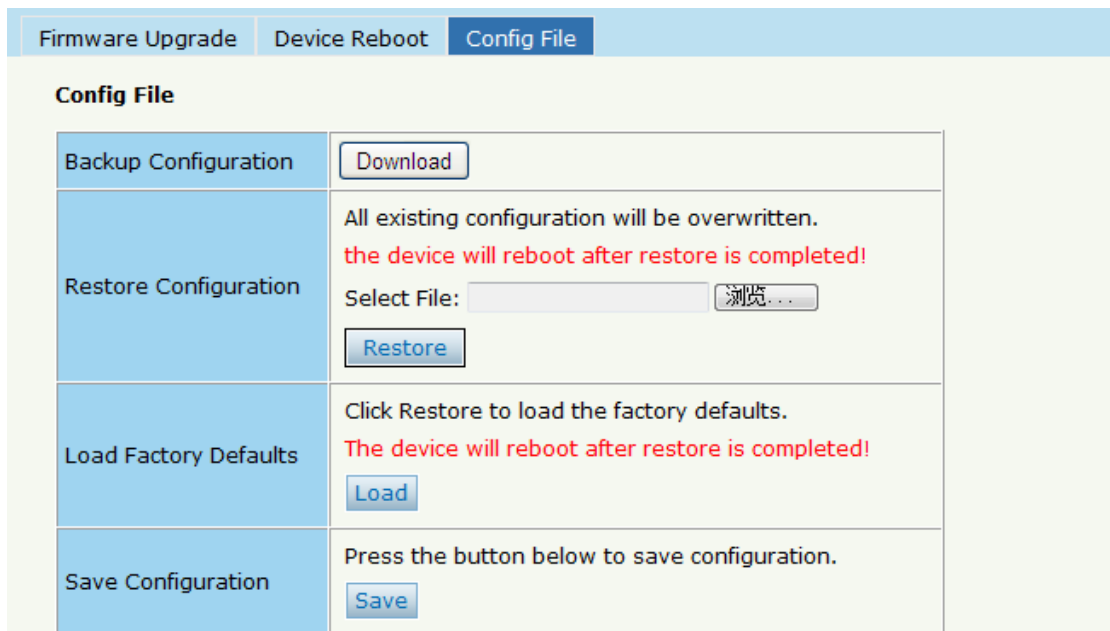
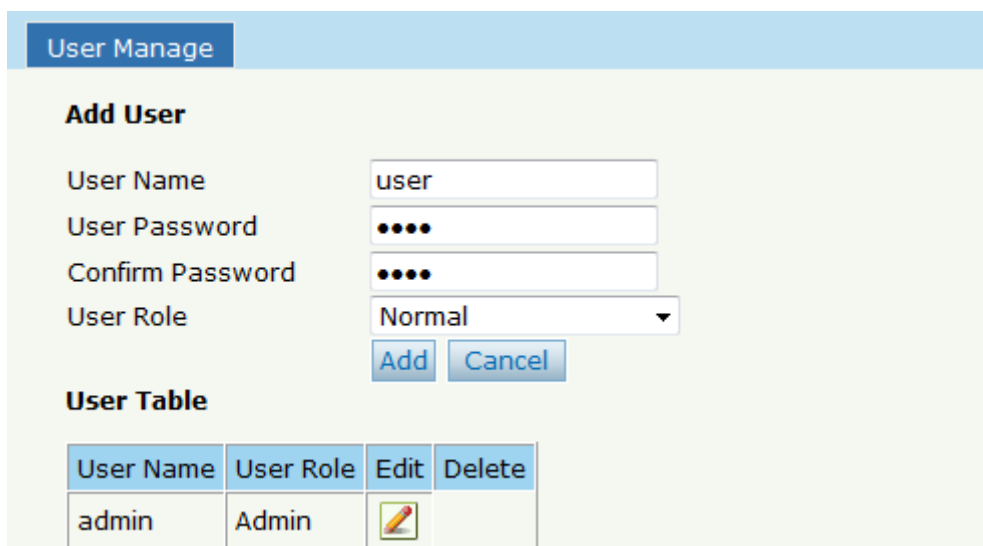


Figure 6-7 Config File

6.3 User Management

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.



The screenshot displays the 'User Manage' interface. It features a header 'User Manage' and a section titled 'Add User'. The form includes fields for 'User Name' (containing 'user'), 'User Password' (masked with four dots), 'Confirm Password' (masked with four dots), and 'User Role' (a dropdown menu set to 'Normal'). Below the form are 'Add' and 'Cancel' buttons. A 'User Table' is also present, showing a table with columns for 'User Name', 'User Role', 'Edit', and 'Delete'. The table contains one row with 'admin' as the user name and 'Admin' as the user role, with an edit icon in the 'Edit' column.


User Name	User Role	Edit	Delete
admin	Admin		

Figure6-8: User 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

Add Community

Community Name

Access Right ▼

Community Table

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

Add Trap

Host IP

UDP Port (1-65535)

Community Name

SNMP Version ▼

Trap Table

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

Figure6-9: 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 6-10.

SNMPV1/V2 **SNMPV3** SNMPV3 Trap

Add View

View Name

Subtree (Type:Object Identifier)

View Type ▼

View Table

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

Add Group

Group Name

Access Level ▼

Read View

Write View

Notify View

Group Table

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

Figure 6-10: SNMP V3

6.4.3 SMNP V3 Trap

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

SNMPV1/V2 SNMPV3 **SNMPV3 Trap**

Add Trap

Host IP

UDP Port (1-65535)

User Name

User Level ▼

Tag List ▼

Timeout (1-400000000)

Retry Count (1-100)

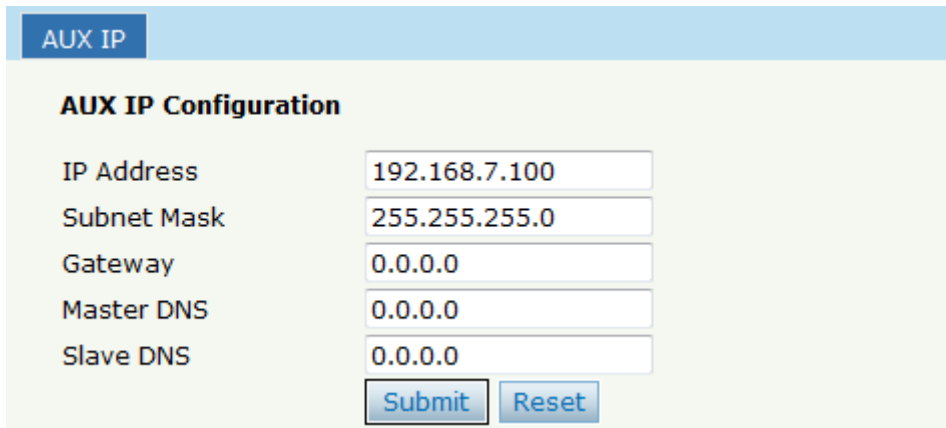
Trap Table

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

Figure 6-11: SNMP V3 Trap

6.5 AUX IP

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**



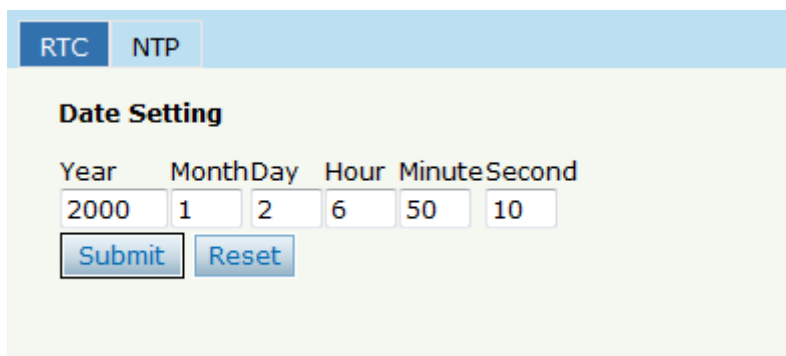
AUX IP Configuration	
IP Address	<input type="text" value="192.168.7.100"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="0.0.0.0"/>
Master DNS	<input type="text" value="0.0.0.0"/>
Slave DNS	<input type="text" value="0.0.0.0"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 6-12: AUX IP

6.6 System Time

6.6.1 RTC

Click **System Configuration** → **System Time** → **RTC** .The default system time is the OLT firmware release time.



RTC		NTP			
Date Setting					
Year	Month	Day	Hour	Minute	Second
<input type="text" value="2000"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="6"/>	<input type="text" value="50"/>	<input type="text" value="10"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>					

Figure 6-13: RTC Configuration

6.6.2 NTP

Synchronize the time to the NTP server. Click **System Configuration** →

System Time → **NTP**

RTC NTP

NTP Configuration

Enable NTP Synchronization

NTP Timezone

NTP Server

Current Time

Figure 6-14: NTP Configuration

6.7 FAN

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

Click **System Configuration** → **FAN**.

FAN

FAN Configuration

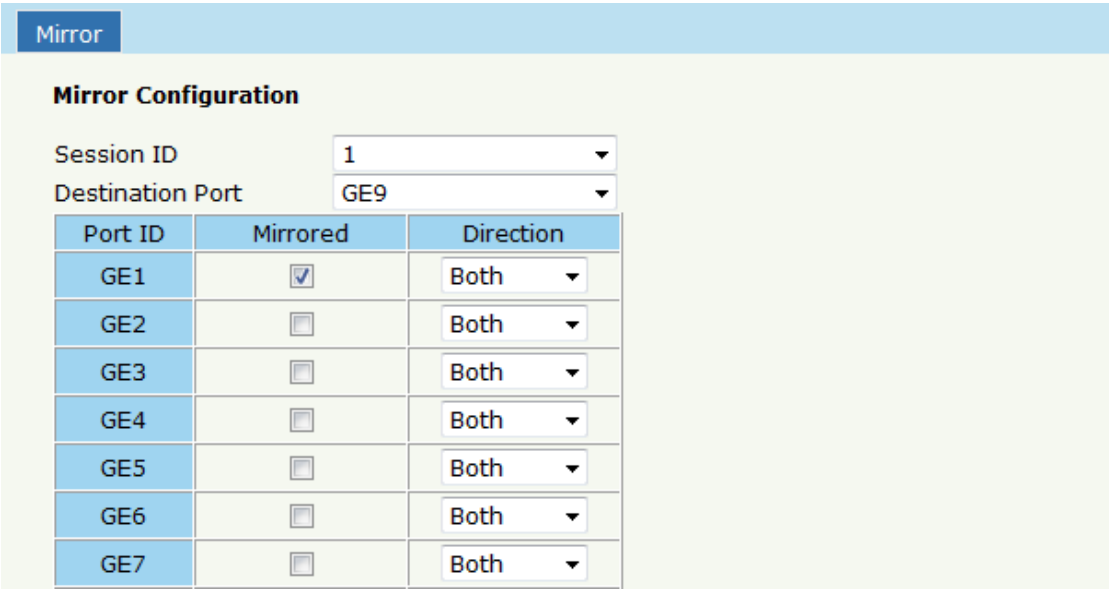
FAN Temperature (20-80)

FAN Mode Open Close Auto

Figure 6-15: FAN Configuration

6.8 Mirror

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



The screenshot displays the 'Mirror Configuration' interface. At the top, there is a blue header with the word 'Mirror'. Below it, the title 'Mirror Configuration' is shown. The configuration includes a 'Session ID' dropdown menu set to '1' and a 'Destination Port' dropdown menu set to 'GE9'. Below these are two tables. The first table has three columns: 'Port ID', 'Mirrored', and 'Direction'. The second table lists source ports from GE1 to GE7, with checkboxes for mirroring and dropdown menus for direction, all set to 'Both'.

Port ID	Mirrored	Direction
GE1	<input checked="" type="checkbox"/>	Both
GE2	<input type="checkbox"/>	Both
GE3	<input type="checkbox"/>	Both
GE4	<input type="checkbox"/>	Both
GE5	<input type="checkbox"/>	Both
GE6	<input type="checkbox"/>	Both
GE7	<input type="checkbox"/>	Both

Figure 6-16: Mirror

Chapter 7 Configuration Examples

7.1 Internet With VLAN 100

a. OLT configuration

Step 1: Create a new VLAN.

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

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 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

Port VLAN Configuration

VLAN ID: 200

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"/>

Step 3: Enable the IGMP status.

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

IGMP Configuration

IGMP Status: Enable

Last Member Query Interval: 1 (1-255s)

Last Member Query Count: 2 (1-255)

Last Member Query Response: 1 (1-255s)

General Query Packet: Disable Enable

General Query Interval: 125 (10-255s)

Query Source IP: 1.1.1.1

Step 4: Add the IGMP user VLAN and group VLAN

Group Member Global Port **Port User VLAN** 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 **Port Mrouter** 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.

ONU List

Information Bandwidth Port **VLAN** 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 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: 300

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: Static IP

IP Address: 192.168.3.33 (x.x.x.x)

Network Mask: 255.255.255.0 (x.x.x.x)

Default Gateway: 192.168.3.1 (x.x.x.x)

Tagged Flag: Tag

Voice Client VLAN: 300 (0-4095)

Voice Service VLAN: 0 (0-4095)

Voice Priority: 7 (0-7)

Submit

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	333333333
User name	333333333
User Password	333333333

Submit

Thank you!