



EPON OLT WEB

USER MANUAL

Version V1.0.3

Release Date 2016-8-26

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Chapter 1 System Description

1.1 Overview

1.1.1 OLT Introduction

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

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

Table 1-1 OLT interfaces

Products		2 ports EPON OLT	4 ports EPON OLT	8 ports EPON OLT
Chassis	Rack	1U 19 inch standard box	1U 19 inch standard box	1U 19 inch standard box
1000M Uplink Port	QTY	4	8	16
	Copper	2*10/100/1000M auto-negotiation	4*10/100/1000M auto-negotiation	8*10/100/1000M auto-negotiation
	SFP (Independent)	2*SFP	4*SFP	4*SFP and 4*SFP+ (SFP+ is compatible with 10GE)
EPON Port	QTY	2	4	8
	Physical Interface	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

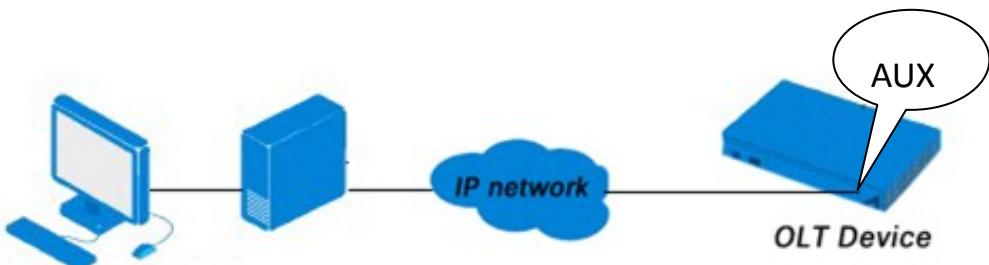
CPU	Memory	DISK	Video Card	Operating

				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).

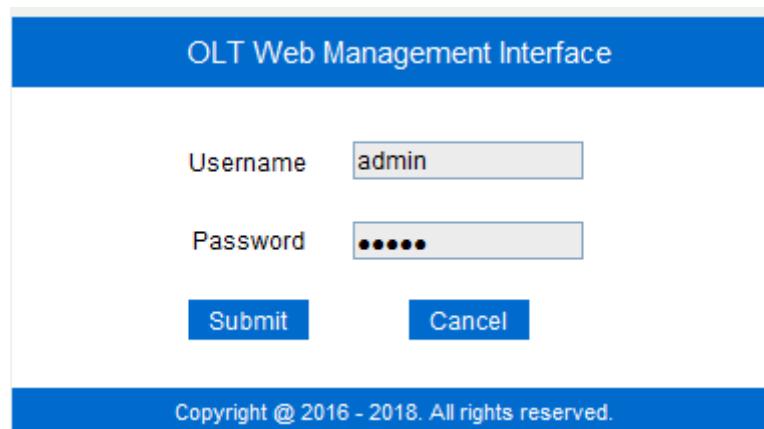


Chapter 2 OLT Application Status

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 image shows a screenshot of the OLT Web Management Interface login page. At the top, a blue header bar contains the text "OLT Web Management Interface". Below this, there are two input fields: "Username" with the value "admin" and "Password" with five redacted dots. At the bottom of the form are two buttons, "Submit" and "Cancel", both in blue. A copyright notice at the very bottom of the page reads "Copyright @ 2016 - 2018. All rights reserved."

Figure 2-1: Login

2.2 Status

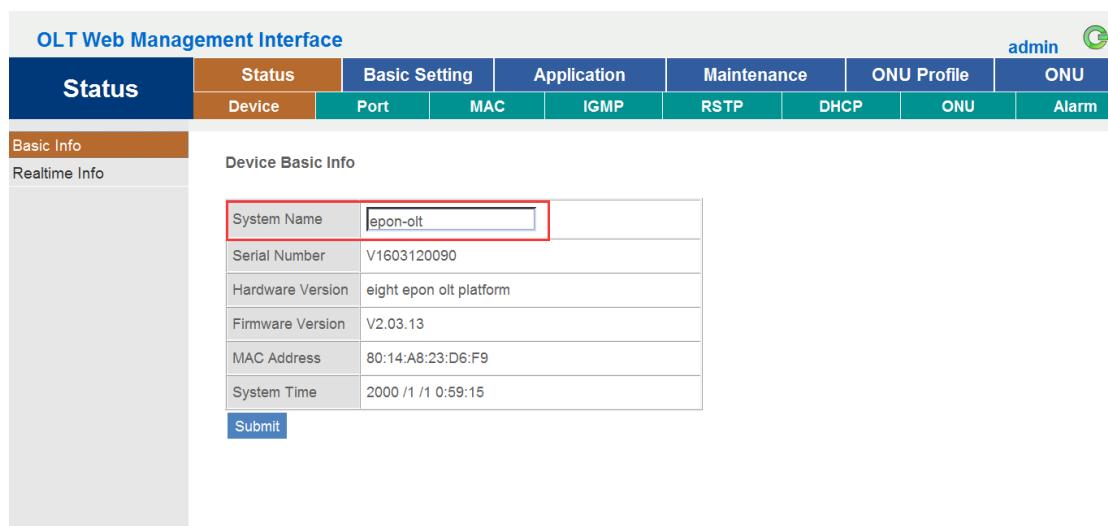
This part shows the main information and the service status of OLT.

2.2.1 Device

It's about the OLT basic information and the real-time information. Click **Status→Device** to get the information.

2.2.1.1 Basic Info

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.



The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has tabs for Status, Basic Setting, Application, Maintenance, ONU Profile, and ONU. Under Status, there are sub-tabs for Device, Port, MAC, IGMP, RSTP, DHCP, ONU, and Alarm. The 'Basic Info' tab is selected. The 'Device Basic Info' section contains fields for System Name (set to 'epon-olt'), Serial Number (V1603120090), Hardware Version (eight epon olt platform), Firmware Version (V2.03.13), MAC Address (80:14:A8:23:D6:F9), and System Time (2000 /1 /1 0:59:15). A 'Submit' button is at the bottom.

System Name	epon-olt
Serial Number	V1603120090
Hardware Version	eight epon olt platform
Firmware Version	V2.03.13
MAC Address	80:14:A8:23:D6:F9
System Time	2000 /1 /1 0:59:15

Figure 2-2: Device Information

2.2.1.2 Realtime Info

This part shows the real-time information, including the CPU load, Memory load, Temperature and Running time.

OLT Web Management Interface																
Status	Status	Basic Setting		Application		Maintenance		ONU Profile								
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm								
Basic Info	Realtime Info															
Realtime Info	<table border="1"> <tr><td>CPU Load</td><td>53%</td></tr> <tr><td>Memory Load</td><td>14%</td></tr> <tr><td>Temperature</td><td>53°C</td></tr> <tr><td>Running Time</td><td>0 Days 1 Hours 2 Minutes 52 Seconds</td></tr> </table>								CPU Load	53%	Memory Load	14%	Temperature	53°C	Running Time	0 Days 1 Hours 2 Minutes 52 Seconds
CPU Load	53%															
Memory Load	14%															
Temperature	53°C															
Running Time	0 Days 1 Hours 2 Minutes 52 Seconds															

Figure 2-3: Device Real-time Information

2.2.2 Port

This part is about the OLT GE port and PON port information.

Click **Status→Port→GE Info** to show the GE port link status, speed and the packets statistics.

OLT Web Management Interface																																																																																																																																																																		
Status	Status	Basic Setting		Application		Maintenance		ONU Profile																																																																																																																																																										
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm																																																																																																																																																										
GE Info	Traffic Statistics																																																																																																																																																																	
PON Info	<table border="1"> <thead> <tr> <th>Port ID</th><th>Link Status</th><th>Speed</th><th>Rx Packets</th><th>Rx Broadcast</th><th>Rx Multicast</th><th>Tx Packets</th><th>Tx Broadcast</th><th>Tx Multicast</th><th>Collisions</th><th>Errors</th></tr> </thead> <tbody> <tr><td>GE1</td><td>Up</td><td>1000M Full</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE2</td><td>Up</td><td>1000M Full</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE3</td><td>Up</td><td>1000M Full</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE4</td><td>Up</td><td>1000M Full</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE5</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE6</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE7</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE8</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE9</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE10</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE11</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE12</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>GE13</td><td>Down</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>								Port ID	Link Status	Speed	Rx Packets	Rx Broadcast	Rx Multicast	Tx Packets	Tx Broadcast	Tx Multicast	Collisions	Errors	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
Port ID	Link Status	Speed	Rx Packets	Rx Broadcast	Rx Multicast	Tx Packets	Tx Broadcast	Tx Multicast	Collisions	Errors																																																																																																																																																								
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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																																																																																																																																																								

Figure 2-4: GE Port Information

The **PON Info** will show the optical parameters exactly.

OLT Web Management Interface																																																																	
Status	Status		Basic Setting		Application		Maintenance		ONU Profile																																																								
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm	admin	Logout																																																							
GE Info																																																																	
PON Info																																																																	
Optical Transceiver																																																																	
<table border="1"> <thead> <tr> <th>Port ID</th> <th>Temperature</th> <th>Voltage</th> <th>Bias Current</th> <th>Transmit Power</th> </tr> </thead> <tbody> <tr> <td>PON1</td> <td>42.268 C</td> <td>3.3304 V</td> <td>12.96 mA</td> <td>4.825163 dbm</td> </tr> <tr> <td>PON2</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON3</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON4</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON5</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON6</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON7</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>PON8</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>											Port ID	Temperature	Voltage	Bias Current	Transmit Power	PON1	42.268 C	3.3304 V	12.96 mA	4.825163 dbm	PON2	N/A	N/A	N/A	N/A	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										
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PON3	Down	-	14	0	14	28	0	28	0	0																																																							
rx packets	rx bytes		rx err	rx drop	rx mult	tx err	tx drop	tx mult	tx col	tx err																																																							

Figure 2-5: PON Port Information

2.2.3 MAC

MAC Info is to show the learning MAC address of OLT. All the MAC addresses of all the ports with VLAN can be shown.

OLT Web Management Interface																																																																				
Status	Status		Basic Setting		Application		Maintenance		ONU Profile																																																											
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm	admin	Logout																																																										
MAC Info																																																																				
MAC Address Table																																																																				
<table border="1"> <thead> <tr> <th>Port ID</th> <th>ALL</th> </tr> </thead> <tbody> <tr> <td>VLAN ID</td> <td>MAC</td> <td>Type</td> <td>Physical Port</td> </tr> <tr> <td>960</td> <td>40:61:86:02:42:CA</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>7C:08:D9:03:13:5C</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>34:97:F6:85:50:9B</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:0A:C2:21:0B:BD</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>62:08:D9:D3:13:5C</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>3C:D1:6E:09:DE:57</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:05:A8:1E:5A:70</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:1F:16:2F:ED:35</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>E8:03:9A:DE:B1:E8</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:0C:29:36:4E:9D</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:1E:EC:11:7D:07</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:20:23:00:00:00</td> <td>Dynamic</td> <td>GE10</td> </tr> <tr> <td>960</td> <td>00:05:A8:0A:EF:C1</td> <td>Dynamic</td> <td>GE10</td> </tr> </tbody> </table>											Port ID	ALL	VLAN ID	MAC	Type	Physical Port	960	40:61:86:02:42:CA	Dynamic	GE10	960	7C:08:D9:03:13:5C	Dynamic	GE10	960	34:97:F6:85:50:9B	Dynamic	GE10	960	00:0A:C2:21:0B:BD	Dynamic	GE10	960	62:08:D9:D3:13:5C	Dynamic	GE10	960	3C:D1:6E:09:DE:57	Dynamic	GE10	960	00:05:A8:1E:5A:70	Dynamic	GE10	960	00:1F:16:2F:ED:35	Dynamic	GE10	960	E8:03:9A:DE:B1:E8	Dynamic	GE10	960	00:0C:29:36:4E:9D	Dynamic	GE10	960	00:1E:EC:11:7D:07	Dynamic	GE10	960	00:20:23:00:00:00	Dynamic	GE10	960	00:05:A8:0A:EF:C1	Dynamic	GE10
Port ID	ALL																																																																			
VLAN ID	MAC	Type	Physical Port																																																																	
960	40:61:86:02:42:CA	Dynamic	GE10																																																																	
960	7C:08:D9:03:13:5C	Dynamic	GE10																																																																	
960	34:97:F6:85:50:9B	Dynamic	GE10																																																																	
960	00:0A:C2:21:0B:BD	Dynamic	GE10																																																																	
960	62:08:D9:D3:13:5C	Dynamic	GE10																																																																	
960	3C:D1:6E:09:DE:57	Dynamic	GE10																																																																	
960	00:05:A8:1E:5A:70	Dynamic	GE10																																																																	
960	00:1F:16:2F:ED:35	Dynamic	GE10																																																																	
960	E8:03:9A:DE:B1:E8	Dynamic	GE10																																																																	
960	00:0C:29:36:4E:9D	Dynamic	GE10																																																																	
960	00:1E:EC:11:7D:07	Dynamic	GE10																																																																	
960	00:20:23:00:00:00	Dynamic	GE10																																																																	
960	00:05:A8:0A:EF:C1	Dynamic	GE10																																																																	

Figure 2-6: MAC Table

2.2.4 IGMP

Click **Status→IGMP→Group Member**, IGMP Group Member (both the dynamic and static IGMP Group) can be shown.

OLT Web Management Interface

Status	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU										
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm												
Group Member	IGMP Group Member																			
	<table border="1"> <tr><td>Group VLAN ID</td><td>IP Address</td><td>Port ID</td><td>Type</td><td>User VLAN ID</td></tr> <tr><td>960</td><td>239.0.0.1</td><td>PON1</td><td>Static</td><td>46</td></tr> </table>					Group VLAN ID	IP Address	Port ID	Type	User VLAN ID	960	239.0.0.1	PON1	Static	46	<input type="button" value="Refresh"/>				
Group VLAN ID	IP Address	Port ID	Type	User VLAN ID																
960	239.0.0.1	PON1	Static	46																

Figure 2-7: IGMP Group Member

2.2.5 RSTP

The OLT is disabling RSTP by default. When enable the RSTP, the RSTP global information and port information can be shown by click **Status→RSTP**. See Figure 2-8 and Figure 2-9.

OLT Web Management Interface

Status	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU																								
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm																										
Global Info	RSTP Information																																	
Port Info	<table border="1"> <tr><td></td><td>Root</td><td>Bridge</td></tr> <tr><td>Cost</td><td>0</td><td></td></tr> <tr><td>Port</td><td>GE0</td><td></td></tr> <tr><td>Priority</td><td>32768</td><td>32768</td></tr> <tr><td>MAC Address</td><td>80:14:A8:23:D6:F9</td><td>80:14:A8:23:D6:F9</td></tr> <tr><td>Hello Time</td><td>2s</td><td>2s</td></tr> <tr><td>Max Age</td><td>20s</td><td>20s</td></tr> <tr><td>Forward Delay</td><td>15s</td><td>15s</td></tr> </table>											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
	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																																

Figure 2-8: RSTP Global Information

OLT Web Management Interface

Status	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU																														
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm																																
Global Info	RSTP Port Status																																							
Port Info	<table border="1"> <thead> <tr> <th>Port ID</th> <th>Role</th> <th>State</th> <th>Cost</th> <th>Priority</th> <th>Point To Point</th> </tr> </thead> <tbody> <tr> <td>GE1</td> <td>Design</td> <td>Forwarding</td> <td>200000</td> <td>128</td> <td>Enable</td> </tr> <tr> <td>GE2</td> <td>Design</td> <td>Forwarding</td> <td>200000</td> <td>128</td> <td>Enable</td> </tr> <tr> <td>GE3</td> <td>Design</td> <td>Forwarding</td> <td>200000</td> <td>128</td> <td>Enable</td> </tr> <tr> <td>GE4</td> <td>Design</td> <td>Forwarding</td> <td>200000</td> <td>128</td> <td>Enable</td> </tr> </tbody> </table> <input type="button" value="Refresh"/>										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
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																																			

Figure 2-9: RSTP Port Information

2.2.6 DHCP

Click **Status→DHCP**, the DHCP Server Lease and DHCP Snooping Bind List will be shown as Figure 2-10 and Figure 2-11.

OLT Web Management Interface

Status	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU						
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm								
Server Lease	DHCP Server Lease															
Snooping Bind List	<table border="1"> <thead> <tr> <th>IP Address</th> <th>MAC address</th> <th>Expires Time</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <input type="button" value="Refresh"/>										IP Address	MAC address	Expires Time			
IP Address	MAC address	Expires Time														

Figure 2-10: DHCP Server list

OLT Web Management Interface

Status	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU												
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm														
Server Lease	DHCP Snooping Bind List																					
Snooping Bind List	<table border="1"> <thead> <tr> <th>MAC Address</th> <th>VLAN ID</th> <th>IP Address</th> <th>Port ID</th> <th>Lease</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>01:00:00:02:01:00</td> <td>1</td> <td>192.168.1.222</td> <td>GE2</td> <td>55</td> <td>Static</td> </tr> </tbody> </table> <input type="button" value="FlushAll"/> <input type="button" value="FlushStatic"/> <input type="button" value="FlushDynamic"/> <input type="button" value="Refresh"/>										MAC Address	VLAN ID	IP Address	Port ID	Lease	Type	01:00:00:02:01:00	1	192.168.1.222	GE2	55	Static
MAC Address	VLAN ID	IP Address	Port ID	Lease	Type																	
01:00:00:02:01:00	1	192.168.1.222	GE2	55	Static																	

Figure 2-11: DHCP Snooping list

2.2.7 ONU

When ONU had connected to OLT, it should be authenticated first. This page shows about the ONU authentication list. It will be bound a profile ID 0 when ONU is authenticated successfully. Click **Status→ONU**, as shown in Figure 2-12 and Figure 2-13.

OLT Web Management Interface										admin		
Status	Status		Basic Setting		Application		Maintenance		ONU Profile		ONU	
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm				
Authentication Info												
Automatic Discovery												
Bind Profile Info												
	ONU ID	LLID	Status	MAC Address	RTT	Type	Auth Flag	Exchange	Auth Mode	Loid/pwd		
	1	-1	Offline	80:14:A8:20:BA:10	0	Unknown	Unauth	Idle	None	NULL		
	2	-1	Offline	80:14:A8:20:BA:58	0	Unknown	Unauth	Idle	None	NULL		
	3	-1	Offline	80:14:A8:20:B6:E0	0	Unknown	Unauth	Idle	None	NULL		
	4	-1	Offline	80:14:A8:0D:CE:30	0	Unknown	Unauth	Idle	None	NULL		
	5	-1	Offline	80:14:A8:20:BA:20	0	Unknown	Unauth	Idle	None	NULL		
	6	-1	Offline	80:14:A8:1A:E0:58	0	Unknown	Unauth	Idle	None	NULL		
	7	-1	Offline	80:14:A8:1A:E0:78	0	Unknown	Unauth	Idle	None	NULL		
	8	-1	Offline	80:14:A8:1A:E2:08	0	Unknown	Unauth	Idle	None	NULL		
	9	-1	Offline	80:14:A8:20:B9:80	0	Unknown	Unauth	Idle	None	NULL		
	10	-1	Offline	80:14:A8:20:BA:40	0	Unknown	Unauth	Idle	None	NULL		
	11	-1	Offline	80:14:A8:1A:E1:E8	0	Unknown	Unauth	Idle	None	NULL		
	12	-1	Offline	80:14:A8:1A:E2:C8	0	Unknown	Unauth	Idle	None	NULL		
	13	-1	Offline	80:14:A8:1A:E2:48	0	Unknown	Unauth	Idle	None	NULL		
	14	-1	Offline	80:14:A8:1A:E1:68	0	Unknown	Unauth	Idle	None	NULL		
	15	-1	Offline	80:14:A8:1A:E0:C8	0	Unknown	Unauth	Idle	None	NULL		

Figure 2-12: ONU Authentication List

OLT Web Management Interface										admin		
Status	Status		Basic Setting		Application		Maintenance		ONU Profile		ONU	
	Device	Port	MAC	IGMP	RSTP	DHCP	ONU	Alarm				
Authentication Info												
Automatic Discovery												
Bind Profile Info												
	Port ID	PON1										
	ONU ID	MAC Address	DBA Profile	Server Profile	VoIP Profile	Alarm Profile	Default Server Profile					
	1	80:14:A8:20:BA:10	0	0	0	0	0x0					
	2	80:14:A8:20:BA:58	0	0	0	0	0x0					
	3	80:14:A8:20:B6:E0	0	0	0	0	0x0					
	4	80:14:A8:0D:CE:30	0	0	0	0	0x0					
	5	80:14:A8:20:BA:20	0	0	0	0	0x0					
	6	80:14:A8:1A:E0:58	0	0	0	0	0x0					
	7	80:14:A8:1A:E0:78	0	0	0	0	0x0					
	8	80:14:A8:1A:E2:08	0	0	0	0	0x0					
	9	80:14:A8:20:B9:80	0	0	0	0	0x0					
	10	80:14:A8:20:BA:40	0	0	0	0	0x0					
	11	80:14:A8:1A:E1:E8	0	0	0	0	0x0					
	12	80:14:A8:1A:E2:C8	0	0	0	0	0x0					
	13	80:14:A8:1A:E2:48	0	0	0	0	0x0					
	14	80:14:A8:1A:E1:68	0	0	0	0	0x0					

Figure 2-13: ONU Profile Bind List

2.2.8 Alarm

Click **Status→Alarm** to view system event and alarm information.

No.	Time	Level	Message
1	1999/12/31 00:01:21	major	PON Enable PON 5-8 Enable!
2	1999/12/31 00:01:21	major	PON Enable PON 1-4 Enable!
3	1999/12/31 00:00:55	critical	PON Deregister DEVICE 7 by IROS_MSG_TYPE_APPS_OLT_REG.
4	1999/12/31 00:00:13	critical	PON Deregister DEVICE 0 by IROS_MSG_TYPE_APPS_OLT_REG.
5	1999/12/31 00:00:13	critical	PON Deregister DEVICE 7 by IROS_MSG_TYPE_APPS_OLT_REG.
6	1999/12/31 00:00:13	critical	PON Deregister DEVICE 0 by IROS_MSG_TYPE_APPS_OLT_REG.
7	1999/12/31 00:00:09	warning	OLT Port Updown Uplink-port 0/3 Up
8	1999/12/31 00:00:09	warning	OLT Port Updown Uplink-port 0/4 Up
9	1999/12/31 00:00:09	warning	OLT Port Updown Uplink-port 0/2 Up
10	1999/12/31 00:00:09	warning	OLT Port Updown Uplink-port 0/1 Up

Figure 2-14: Alarm Events

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				

Chapter 3 OLT Basic Setting

This section is about the basic service of OLT configuration.

3.1 VLAN

3.1.1 New VLAN

Click **Basic Setting**→**VLAN**→**New VLAN** to create new VLAN.

The screenshot shows the 'Basic Setting' tab selected in the top navigation bar. Under the 'VLAN' sub-tab, there is a 'New VLAN' section. It contains fields for 'VLAN ID' (set to 255) and 'Description' (set to 'vlan255'), with an 'Add' button below. Below this is a 'VLAN Table' section containing a table with five rows. The table columns are 'VLAN ID', 'Description', 'Edit', and 'Delete'. The rows are:

VLAN ID	Description	Edit	Delete
1	default		
960	vlan960		
2000	vlan2000		
4000	vlan4000		

Figure 3-1: Create New VLAN

3.1.2 Port VLAN

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU
	VLAN	Port	QoS	MAC	Security					
New VLAN	Port VLAN Configuration									
Port VLAN	VLAN ID	2000								
QinQ	GE1	<input type="radio"/> None <input checked="" type="radio"/> Tag <input type="radio"/> Untag								
VLAN IP	GE2	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE3	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE4	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE5	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE6	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE7	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE8	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE9	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE10	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE11	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE12	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE13	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE14	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE15	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	GE16	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	PON1	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								
	PON2	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag								

Figure 3-2: Add Port VLAN

3.1.3 QinQ

To configure the port mode VLAN translation or double VLAN tag, click

Basic Setting→**VLAN**→**QinQ**, as shown in Figure 3-3.

OLT Web Management Interface

Basic Setting	Status	Basic Setting		Application		Maintenance		ONU Profile		ONU
	VLAN	Port	QoS	MAC	Security					
New VLAN	QinQ Configuration									
Port VLAN	Port ID	GE1								
QinQ	Customer VLAN	1								
VLAN IP	Customer Cos	any								
	Service VLAN	1								
	Service Cos	any								
	Mode	VLAN Translation								
	Add									
	VLAN QinQ Mapping Table									
	Port ID	Customer VLAN	Customer Cos	Service VLAN	Service Cos	Mode	Delete			
	GE1	2000	1	4000	2	VLAN Translation	Delete			
	GE1	960	0	960	0	QinQ	Delete			

Figure 3-3: QinQ Configuration

3.1.4 VLAN IP

Select the existing VLAN and set an IP address for this VLAN, as shown in

Figure 3-4.

The screenshot shows the 'VLAN IP Config' section of the OLT Web Management Interface. The 'Basic Setting' tab is selected, and the 'VLAN IP' sub-tab is active. The VLAN ID is set to 960, and the IP Address and Subnet Mask fields are filled with 192.168.1.120 and 255.255.255.0 respectively. A 'Submit' and 'Reset' button are at the bottom. Below this, a 'VLAN IP Table' displays a single entry for VLAN 960 with IP 192.168.1.120 and Subnet Mask 255.255.255.0, with a 'Delete' button.

Figure 3-4: VLAN IP

3.2 Port

GE ports and PON ports basic service can be configured here.

3.2.1 GE Setup

Select **Basic Setting**→**Port**→**GE Setup**, you can configure the uplink GE port parameters, as shown in Figure 3-5.

The screenshot shows the 'GE Configuration' section of the OLT Web Management Interface. The 'Basic Setting' tab is selected, and the 'Port' sub-tab is active. The 'GE1' port is selected. Configuration options include Port ID (GE1), Admin Status (Enable), Flow Control (On), Isolate (Enable), Broadcast Storm Protection (512), Multicast Storm Protection (0), Unicast Storm Protection (512), Ingress Rate (0), Egress Rate (0), MAC Limit (0), and Default VLAN ID (1). A 'Submit' and 'Reset' button are at the bottom.

Figure3-5: GE Setup

3.2.2 PON Setup

Select **Basic Setting**→**Port**→**PON Setup**, you can configure the PON port parameters, as shown in Figure 3-6.

The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'Basic Setting' selected. Under 'Basic Setting', 'PON Setup' is selected. The sub-menu on the left includes 'GE Setup', 'PON Setup' (which is highlighted in orange), 'Channel Group', and 'Mirroring'. The right panel displays the 'PON Configuration' settings for PON1. The configuration includes fields for Port ID (PON1), Admin Status (Enable), Flow Control (On), Isolate (Enable), Broadcast/Multicast/Unicast Storm Protection (values 512, 0, 512 respectively), Ingress/Egress Rate (values 0, 0 respectively), MAC Limit (0), Default VLAN ID (1), MAX RTT (14500), and ONU P2P (Enable). There are 'Submit' and 'Reset' buttons at the bottom.

Figure3-6: PON Setup

3.2.3 Channel Group

Select **Basic Setting**→**Port**→**Channel Group** 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.

OLT Web Management Interface

admin 

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU									
	VLAN	Port	QOS	MAC	Security										
GE Setup	Channel Group Configuration														
PON Setup															
Channel Group	Channel Group ID	<input type="text" value="1"/>													
Mirroring	Load Balance	<input type="text" value="dmac"/>													
		GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8 GE9 GE10 GE11 GE12 GE13 GE14 GE15 GE16													
	Select GE Port	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
		<input type="button" value="Submit"/>													
	Channel Group Table														
	<table border="1"> <thead> <tr> <th>Group ID</th> <th>Load Balance</th> <th>Ports</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>dmac</td> <td>GE2 GE5 GE9 GE12</td> <td><input type="button" value="Delete"/></td> </tr> </tbody> </table>							Group ID	Load Balance	Ports	Delete	1	dmac	GE2 GE5 GE9 GE12	<input type="button" value="Delete"/>
Group ID	Load Balance	Ports	Delete												
1	dmac	GE2 GE5 GE9 GE12	<input type="button" value="Delete"/>												

Figure 3-7: Create Channel Groups

3.2.4 Mirroring

Select **Basic Setting**→**Port**→**Mirroring** to create monitor session. Each monitor session can be set with one destination port and up to 8 source ports.

OLT Web Management Interface						
Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	VLAN	Port	QOS	MAC	Security	
GE Setup						
PON Setup						
Channel Group						
Mirroring						
	Mirror Configuration					
	Session ID	1				
	Destination Port	GE1				
	Source Port1	GE3	Both			
	Source Port2	PON6	Both			
	Source Port3	GE11	Both			
	Source Port4		Both			
	Source Port5		Both			
	Source Port6		Both			
	Source Port7		Both			
	Source Port8		Both			
	<input type="button" value="Submit"/>					

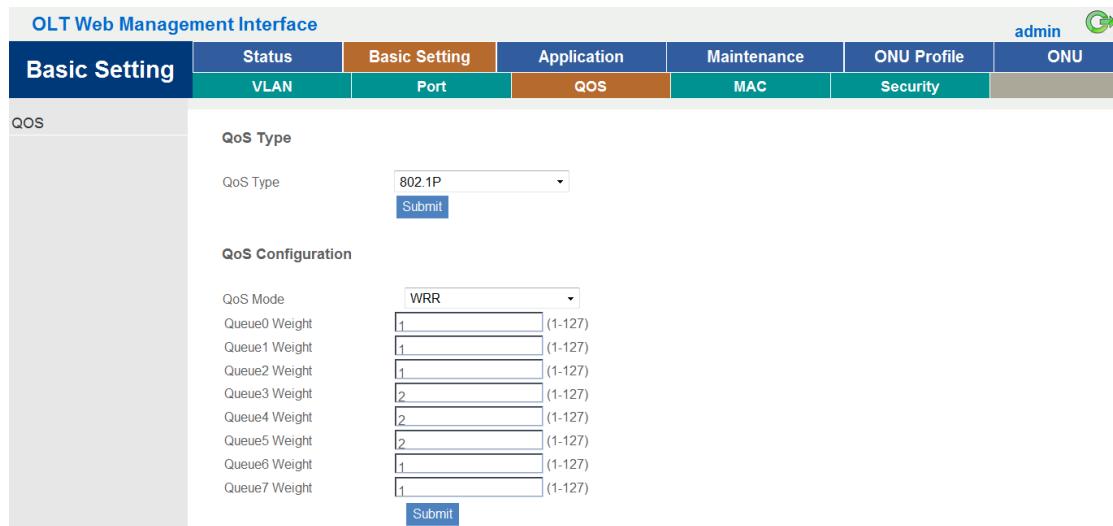
Figure 3-8:Traffic Mirroring

3.3 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 **Basic**

Setting→QOS to set QOS configuration, as shown in Figure 3-8.

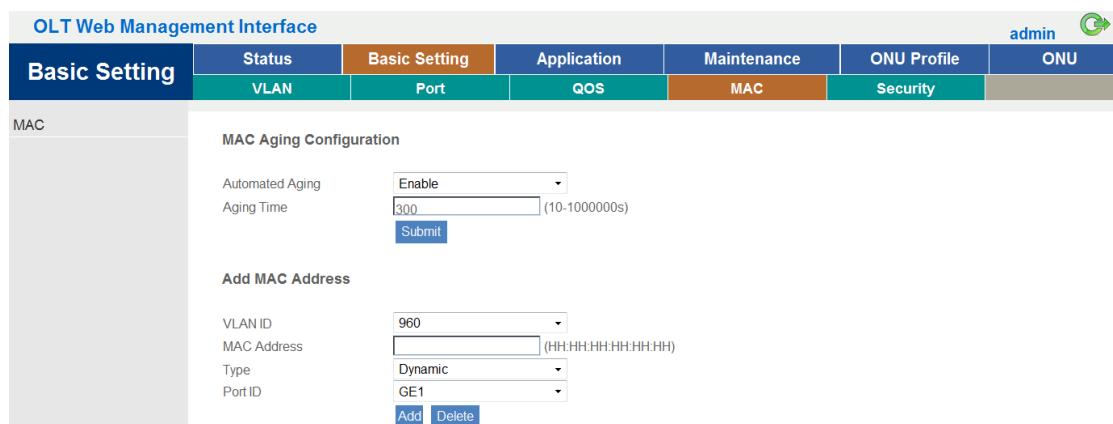


The screenshot shows the 'QoS' configuration page under the 'Basic Setting' tab. At the top, there's a 'QoS Type' dropdown set to '802.1P' with a 'Submit' button. Below it, the 'QoS Mode' is set to 'WRR'. There are eight input fields for 'Queue Weight' ranging from 1 to 127, each with a '(1-127)' range indicator. A 'Submit' button is located at the bottom of this section.

Figure 3-9: QOS Configuration

3.4 MAC

The MAC aging time is 300s by default. You can add a static MAC address manually with VLAN and port.



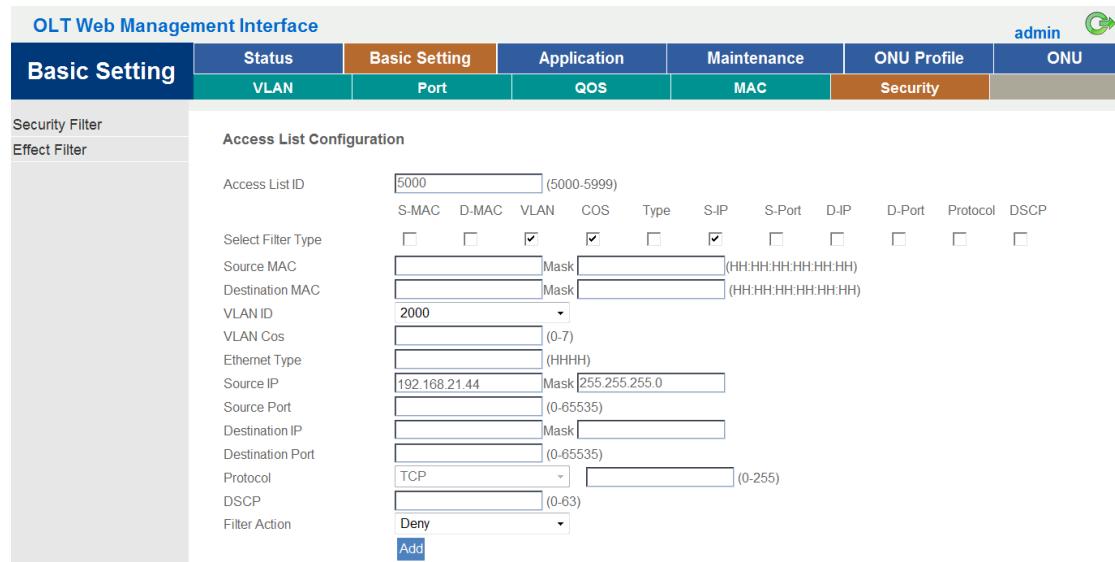
The screenshot shows the 'MAC' configuration page under the 'Basic Setting' tab. In the 'MAC Aging Configuration' section, 'Automated Aging' is set to 'Enable' and 'Aging Time' is set to '300' (10-1000000s). A 'Submit' button is present. Below it, the 'Add MAC Address' section includes fields for 'VLAN ID' (960), 'MAC Address' (a dropdown menu), 'Type' (Dynamic), and 'Port ID' (GE1). There are 'Add' and 'Delete' buttons at the bottom of this section.

Figure 3-10: MAC Configuration

3.5 Security (ACL)

3.5.1 Security Filter

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



The screenshot shows the 'OLT Web Management Interface' with the 'Basic Setting' tab selected. Under 'Basic Setting', the 'Security Filter' option is chosen. The main area is titled 'Access List Configuration'. It includes fields for 'Access List ID' (set to 5000), 'Select Filter Type' (with several checkboxes checked), and various filtering parameters like 'Source MAC', 'Destination MAC', 'VLAN ID', 'Source IP', 'Destination IP', 'Protocol', and 'DSCP'. At the bottom right of the configuration area is a blue 'Add' button.

Figure 3-11: Security Filter

3.5.2 Effect Filter

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	
	VLAN	Port	QoS	MAC	Security		
Security Filter	Access List Port Configuration						
Effect Filter	Access List ID: <input type="text" value="5000"/> GE1 GE2 GE3 GE4 GE5 GE6 GE7 GE8 GE9 GE10 GE11 GE12 GE13 GE14 GE15 GE16 Select GE Port: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8 Select PON Port: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="button" value="Apply Access List to Port(s)"/>						
	Active Access Lists						
	Access List ID	Ports					
	5000	GE3 GE5 PON5 PON6					

Figure 3-12: Bind Security Filter

Chapter 4 Application

This chapter is about the protocol service configuration.

4.1 IGMP

4.1.1 Global Setup

To enable the IGMP snooping mode, click **Application→IGMP→Global Setup**.

Setup.

The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'Application' selected, which is further expanded to show 'Status', 'Basic Setting', 'Application' (selected), 'Maintenance', 'ONU Profile', and 'ONU'. Under 'Application', 'IGMP' is selected. The left sidebar has 'Global Setup' selected, along with 'Port Setup', 'Port User VLAN', 'Port Mrouter', and 'Static Group'. The main content area is titled 'IGMP Configuration' and contains the following fields:

IGMP Status	Enable
Last Member Query Interval	1 (1-255s)
Last Member Query Count	2 (1-255)
Last Member Query Response	1 (1-255s)
General Query Packet	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
General Query Interval	125 (10-255s)
Query Source IP	1.1.1.1

At the bottom are 'Submit' and 'Reset' buttons.

Figure 4-1: IGMP Snooping Status

4.1.2 Port Setup

Click **Application→IGMP→Port Setup** to set group limit value, enable/disable fast leave and filter.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup						
Port Setup	IGMP Port Configuration					
Port User VLAN	Port ID	GE1				
Port Mrouter	Fast Leave	<input checked="" type="radio"/> Disable <input type="radio"/> Enable				
Static Group	Filter	<input checked="" type="radio"/> Disable <input type="radio"/> Enable				
	Group Limit	1024	(0-1024)	Submit	Reset	
	IGMP Port Table					
	Port ID	Fast Leave	Filter	Group Limit		
	GE1	disable	disable	1024		
	GE2	disable	disable	1024		
	GE3	disable	disable	1024		
	GE4	disable	disable	1024		
	GE5	disable	disable	1024		
	GE6	disable	disable	1024		

Figure 4-2: IGMP Port Setting

4.1.3 Port User VLAN

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

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup						
Port Setup	User VLAN Configuration					
Port User VLAN	Port ID	GE1				
Port Mrouter	User VLAN ID	46				
Static Group	Group VLAN ID	46				
	Add					
	User VLAN Table					
	Port ID	User VLAN ID	Group VLAN ID	Delete		
	PON1	46	960	Delete		

Figure 4-3: IGMP User VLAN

4.1.4 Port Mrouter

To add a port to the IGMP multicast routing group, click

Application→IGMP→Port Mrouter, as shown in Figure 4-1.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	Add Multicast Router					
Port Setup						
Port User VLAN						
Port Mrouter	Port ID	GE1				
	Group VLAN ID	960				
	Add					
Static Group	Multicast Router Table					
	Port ID	Group VLAN ID	Delete			
	GE1	46	Delete			

Figure 4-4: IGMP Port Mrouter

4.1.5 Static Group

Add an IGMP group manually. Always choose the PON port as the group port.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	Add Static Group					
Port Setup						
Port User VLAN						
Port Mrouter	Port ID	PON1				
Static Group	IP Address	239.0.0.2				
	User VLAN ID	46				
	Add					
	Static Group Table					
	Port ID	IP Address	User VLAN ID	Delete		
	PON1	239.0.0.1	46	Delete		

Figure 4-5: IGMP Static Group

4.2 RSTP

4.2.1 Global Setup

RSTP is disable by default, click **Application→RSTP→Global Setup** to enable.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	RSTP Configuration					
Port Setup	RSTP Status: Enable Global Priority: 32768 (0-61440) Hello Time: 2 (1-10s) Max Age: 20 (6-40s) Forward Delay: 15 (4-30s) <input type="button" value="Submit"/> <input type="button" value="Reset"/>					

Figure 4-6: RSTP Global Setup

4.2.2 Port Setup

The RSTP ports parameter can be set by selecting

Application→RSTP→Port Setup.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU																																																																														
	IGMP	RSTP	ARP Proxy	DHCP	Static Route																																																																															
Global Setup	RSTP Port Configuration																																																																																			
Port Setup	<table border="1"> <thead> <tr> <th>Port ID</th> <th>Status</th> <th>Priority (0-255)</th> <th>Cost (1-200000000)</th> <th>OperEdge</th> <th>Point To Point</th> </tr> </thead> <tbody> <tr><td>GE1</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE2</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE3</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE4</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE5</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE6</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE7</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE8</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE9</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE10</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE11</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> <tr><td>GE12</td><td>Enable</td><td>128</td><td>200000</td><td>Enable</td><td>Enable</td></tr> </tbody> </table>						Port ID	Status	Priority (0-255)	Cost (1-200000000)	OperEdge	Point To Point	GE1	Enable	128	200000	Enable	Enable	GE2	Enable	128	200000	Enable	Enable	GE3	Enable	128	200000	Enable	Enable	GE4	Enable	128	200000	Enable	Enable	GE5	Enable	128	200000	Enable	Enable	GE6	Enable	128	200000	Enable	Enable	GE7	Enable	128	200000	Enable	Enable	GE8	Enable	128	200000	Enable	Enable	GE9	Enable	128	200000	Enable	Enable	GE10	Enable	128	200000	Enable	Enable	GE11	Enable	128	200000	Enable	Enable	GE12	Enable	128	200000	Enable	Enable
Port ID	Status	Priority (0-255)	Cost (1-200000000)	OperEdge	Point To Point																																																																															
GE1	Enable	128	200000	Enable	Enable																																																																															
GE2	Enable	128	200000	Enable	Enable																																																																															
GE3	Enable	128	200000	Enable	Enable																																																																															
GE4	Enable	128	200000	Enable	Enable																																																																															
GE5	Enable	128	200000	Enable	Enable																																																																															
GE6	Enable	128	200000	Enable	Enable																																																																															
GE7	Enable	128	200000	Enable	Enable																																																																															
GE8	Enable	128	200000	Enable	Enable																																																																															
GE9	Enable	128	200000	Enable	Enable																																																																															
GE10	Enable	128	200000	Enable	Enable																																																																															
GE11	Enable	128	200000	Enable	Enable																																																																															
GE12	Enable	128	200000	Enable	Enable																																																																															

Figure 4-7: RSTP Port Setting

4.3 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 from 1 to 4085.

First, configure the VLAN IP.

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU								
	VLAN	Port	QOS	MAC	Security									
New VLAN														
Port VLAN														
QinQ														
VLAN IP	VLAN IP Config VLAN ID: 960 IP Address: 192.168.1.120 Subnet Mask: 255.255.255.0 <input type="button" value="Submit"/> <input type="button" value="Reset"/> VLAN IP Table <table border="1"> <thead> <tr> <th>VLAN ID</th> <th>IP Address</th> <th>Subnet Mask</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>960</td> <td>192.168.1.120</td> <td>255.255.255.0</td> <td><input type="button" value="Delete"/></td> </tr> </tbody> </table>						VLAN ID	IP Address	Subnet Mask	Delete	960	192.168.1.120	255.255.255.0	<input type="button" value="Delete"/>
VLAN ID	IP Address	Subnet Mask	Delete											
960	192.168.1.120	255.255.255.0	<input type="button" value="Delete"/>											

Figure 4-8:VLAN IP

Then enable the ARP proxy.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU								
	IGMP	RSTP	ARP Proxy	DHCP	Static Route									
ARP Proxy	ARP Proxy Configuration VLAN ID: 960 ARP Proxy: <input checked="" type="radio"/> Enable <input type="button" value="Submit"/> ARP Proxy Table <table border="1"> <thead> <tr> <th>VLAN ID</th> <th>ARP Proxy Status</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>disable</td> </tr> <tr> <td>960</td> <td>disable</td> </tr> <tr> <td>1000</td> <td>disable</td> </tr> </tbody> </table>						VLAN ID	ARP Proxy Status	1	disable	960	disable	1000	disable
VLAN ID	ARP Proxy Status													
1	disable													
960	disable													
1000	disable													

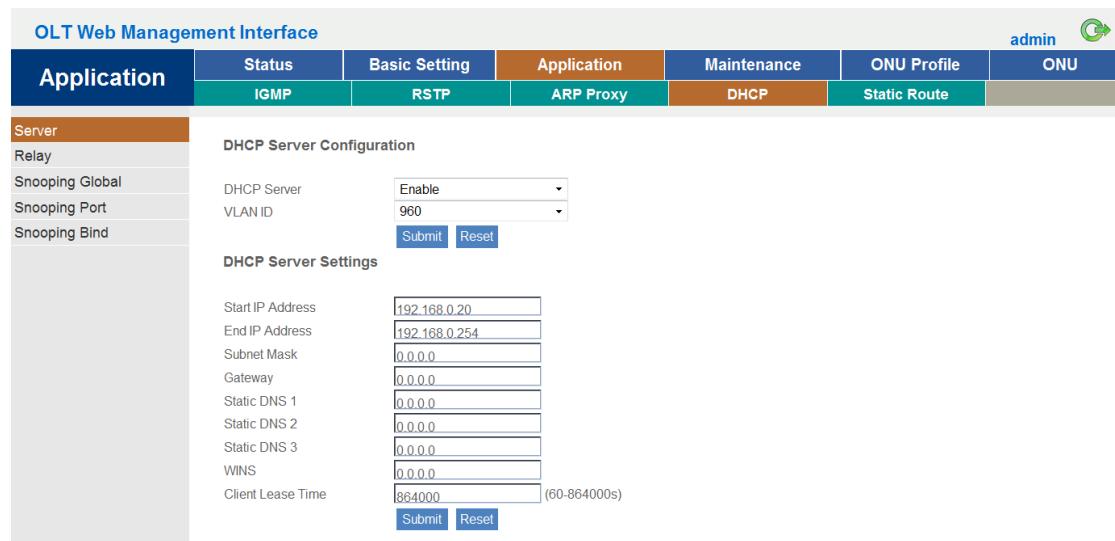
Figure4-9: ARP proxy configuration

4.4 DHCP

OLT supports 3 services of DHCP: DHCP server, DHCP relay, DHCP Snooping.

4.4.1 DHCP Server

When enable OLT DHCP server, the connecting devices will obtain an IP address. Click **Application**→**DHCP**→**Server** to configure the DHCP Server.

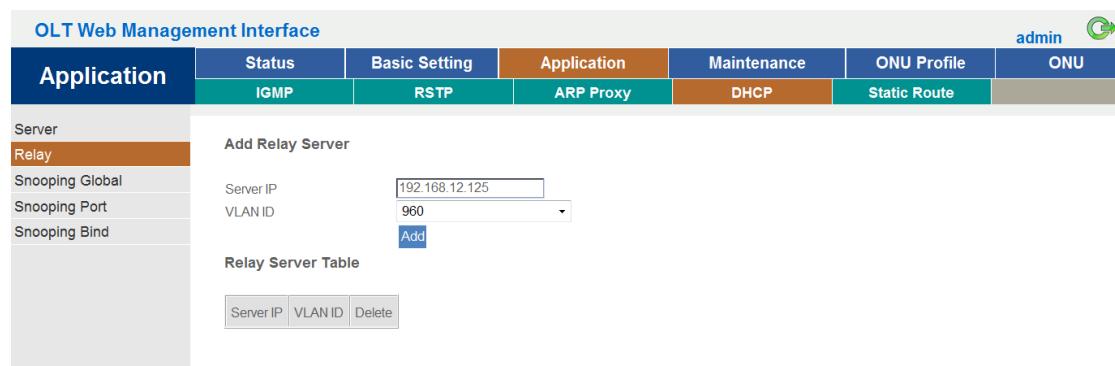


The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'Application' selected, which is further expanded to show 'Status', 'Basic Setting', 'Application' (selected), 'Maintenance', 'ONU Profile', and 'ONU'. Under 'Application', 'DHCP' is selected. The left sidebar has 'Server' selected, with 'Relay' and 'Snooping' sub-options. The main content area is titled 'DHCP Server Configuration'. It contains two sections: 'DHCP Server Configuration' and 'DHCP Server Settings'. In 'DHCP Server Configuration', 'DHCP Server' is set to 'Enable' and 'VLAN ID' is set to '960'. In 'DHCP Server Settings', fields include '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), and 'Client Lease Time' (864000, 60-864000s). Buttons for 'Submit' and 'Reset' are at the bottom of each section.

Figure4-10: DHCP Server

4.4.2 DHCP Relay

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



The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'Application' selected, which is further expanded to show 'Status', 'Basic Setting', 'Application' (selected), 'Maintenance', 'ONU Profile', and 'ONU'. Under 'Application', 'DHCP' is selected. The left sidebar has 'Server' selected, with 'Relay' and 'Snooping' sub-options. The main content area is titled 'Add Relay Server'. It contains a form with 'Server IP' (192.168.12.125) and 'VLAN ID' (960). A 'Add' button is below the form. Below the form is a 'Relay Server Table' with three buttons: 'Server IP', 'VLAN ID', and 'Delete'.

Figure4-11: DHCP Relay

4.4.3 DHCP Snooping 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 forbided, which can not allocate the IP address successfully. Click **Snooping Global** to enable DHCP Snooping.

The screenshot shows the 'OLT Web Management Interface' with the title 'DHCP Snooping Configuration'. The left sidebar has a tree view with nodes: Server, Relay, Snooping Global (selected), Snooping Port, and Snooping Bind. The main area has tabs: Status, Basic Setting, Application (selected), Maintenance, ONU Profile, and ONU. Under Application, there are sub-tabs: IGMP, RSTP, ARP Proxy, DHCP (selected), and Static Route. The 'DHCP Snooping' section contains a dropdown menu set to 'Enable' with 'Submit' and 'Reset' buttons. The 'DHCP Snooping Settings' section includes fields for Option82 Control (radio buttons for Disable, Enable, Drop, Keep, Replace), Overspeed Recovery (radio buttons for Disable, Enable), Overspeed Recovery Interval (input field '30' with range '(3-3600s)'), Binding Delete Time (input field '300' with range '(1-3600s)'), and 'Submit' and 'Reset' buttons. The 'VLAN ID List' section shows a table with one entry: VLAN ID List 'vian1' and VLAN ID '1000' with 'Add' and 'Delete' buttons.

Figure4-12: DHCP Snooping Global

4.4.4 DHCP Snooping Port

The DHCP snooping ports are untrust by default. Click **Snooping Port** to configure, as shown in Figure 4-12.

OLT Web Management Interface						
Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
DHCP Snooping Port Configuration						
Server						
Relay						
Snooping Global						
Snooping Port						
Snooping Bind						

Figure4-13: DHCP Snooping Port

4.4.5 DHCP Snooping Bind

Fill in the MAC address, choose the VLAN ID, port ID and the lease time.

Click "Add", it will create a DHCP snooping bind list.

OLT Web Management Interface						
Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Server						
Relay						
Snooping Global						
Snooping Port						
Snooping Bind						

Figure4-14: DHCP Snooping Bind

4.5 Static Route

OLT supports static route L3 function. Click **Static Route** to configure, as

shown in Figure 4-14.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU																
IGMP	RSTP	ARP Proxy	DHCP	Static Route																		
Static Route	<p>Add Static Route</p> <table border="1"><tr><td>Destination IP</td><td>192.169.3.123</td></tr><tr><td>Destination Mask</td><td>255.255.255.0</td></tr><tr><td>Gateway</td><td>192.168.6.1</td></tr><tr><td colspan="2"><input type="button" value="Add"/></td></tr></table> <p>Static Route Table</p> <table border="1"><thead><tr><th>Destination IP</th><th>Destination Mask</th><th>Gateway</th><th>Delete</th></tr></thead><tbody><tr><td>192.168.6.0</td><td>255.255.255.0</td><td>192.168.3.1</td><td><input type="button" value="Delete"/></td></tr></tbody></table>						Destination IP	192.169.3.123	Destination Mask	255.255.255.0	Gateway	192.168.6.1	<input type="button" value="Add"/>		Destination IP	Destination Mask	Gateway	Delete	192.168.6.0	255.255.255.0	192.168.3.1	<input type="button" value="Delete"/>
Destination IP	192.169.3.123																					
Destination Mask	255.255.255.0																					
Gateway	192.168.6.1																					
<input type="button" value="Add"/>																						
Destination IP	Destination Mask	Gateway	Delete																			
192.168.6.0	255.255.255.0	192.168.3.1	<input type="button" value="Delete"/>																			

Figure4-15: Static Route

Chapter 5 Maintenance

This chapter is about the global management of OLT.

5.1 User Manage

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

User Name	User Role	Edit	Delete
admin	Admin		
user	Normal		

Figure5-1: User Manage

5.2 Device Manage

5.2.1 Firmware Upgrade

You can upgrade the OLT firmware by WEB, do not need TFTP server.

After finish upgrading, it will reboot automatically. Click

Maintenance→Device Manage to upgrade firmware.

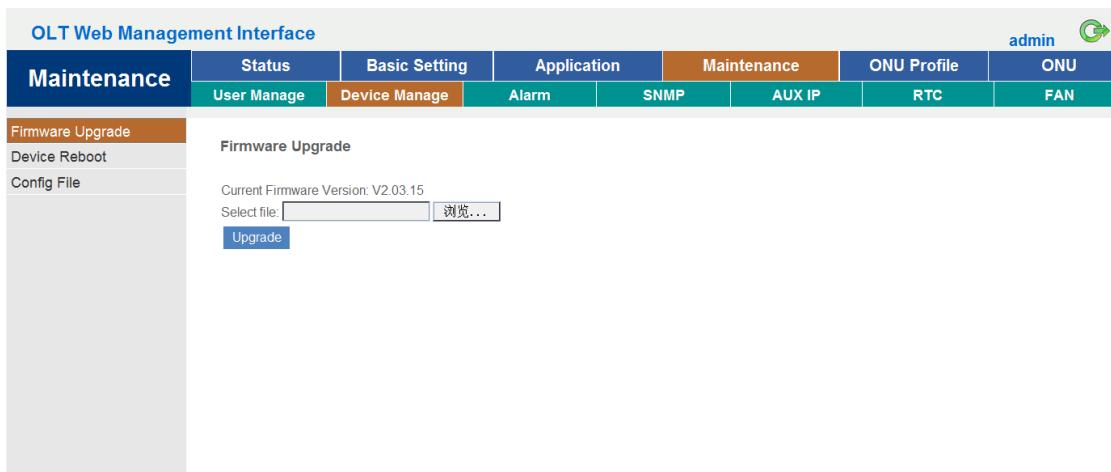


Figure5-2: Firmware Upgrade

5.2.2 Device Reboot

Click **Maintenance**→**Device Manage**→**Device Reboot**, it will reboot the entire system.(Please save the configuration first)

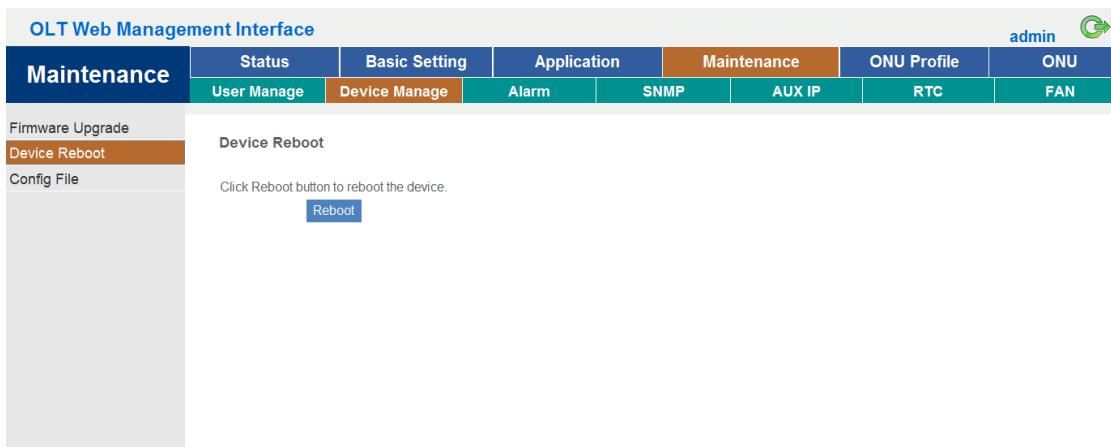


Figure5-3: Device Reboot

5.2.3 Config File

Click **Maintenance**→**Device Manage**→**Config File**, you can backup configuration, restore configuration, restore factory defaults and save configuration.

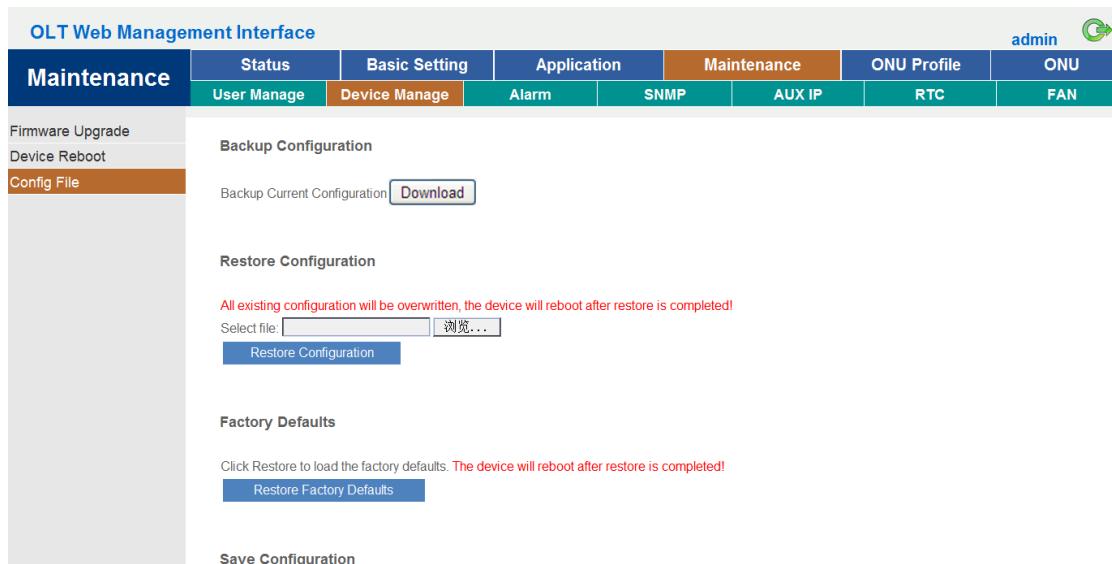


Figure5-4: Config File

5.3 Alarm

Show the alarm configuration list.

5.3.1 Alarm

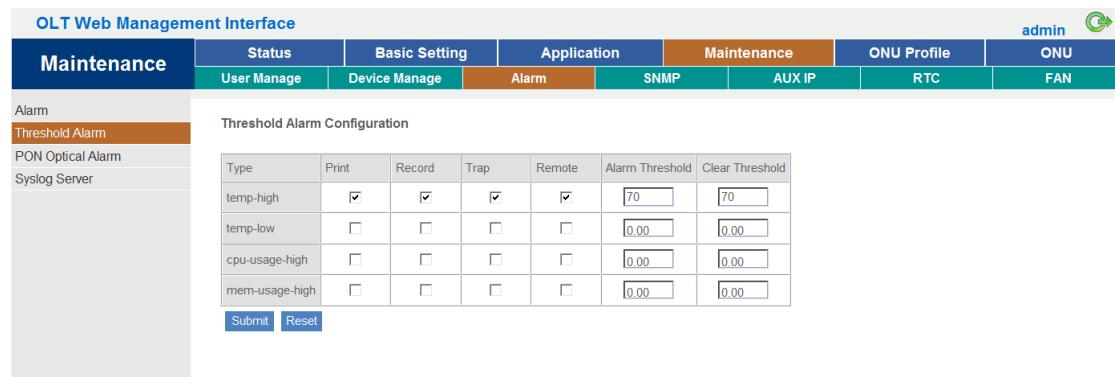
It contains all the alarms of OLT. User can choose the different alarms to "Print", "Record", "Trap" and "Remote".

OLT Web Management Interface							
Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	admin
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC	FAN
Alarm							
Threshold Alarm							
PON Optical Alarm							
Syslog Server							
Alarm Configuration							
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"/>			

Figure5-5: Alarm configuration

5.3.2 Threshold Alarm

Configure the temperature threshold, CPU-usage threshold and memory- usage threshold.



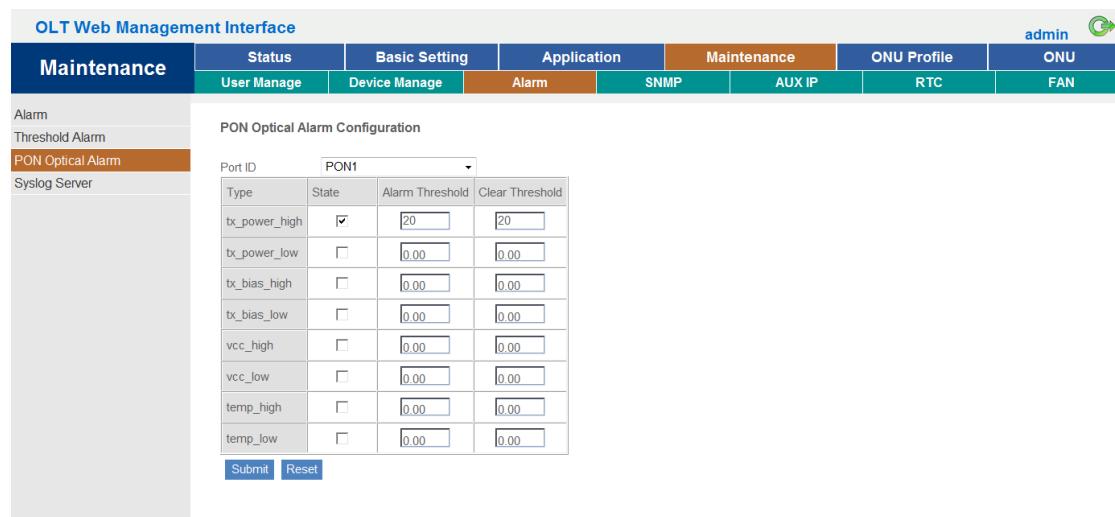
The screenshot shows the 'Threshold Alarm Configuration' page of the OLT Web Management Interface. The top navigation bar includes tabs for Status, Basic Setting, Application, Maintenance, ONU Profile, and ONU, with 'Maintenance' currently selected. The left sidebar lists 'Alarm', 'Threshold Alarm' (which is selected and highlighted in orange), 'PON Optical Alarm', and 'Syslog Server'. The main content area is titled 'Threshold Alarm Configuration' and contains a table for setting thresholds for various parameters: temp-high, temp-low, cpu-usage-high, and mem-usage-high. Each row has checkboxes for Print, Record, Trap, and Remote, and input fields for Alarm Threshold and Clear Threshold. Buttons for 'Submit' and 'Reset' are at the bottom.

Type	Print	Record	Trap	Remote	Alarm Threshold	Clear Threshold
temp-high	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	70	70
temp-low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00	0.00
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

Figure5-6: Threshold Alarm

5.3.3 PON Optical Alarm

It is about the PON optical parameter threshold alarm configuration.



The screenshot shows the 'PON Optical Alarm Configuration' page of the OLT Web Management Interface. The top navigation bar includes tabs for Status, Basic Setting, Application, Maintenance, ONU Profile, and ONU, with 'Maintenance' currently selected. The left sidebar lists 'Alarm', 'Threshold Alarm', 'PON Optical Alarm' (which is selected and highlighted in orange), and 'Syslog Server'. The main content area is titled 'PON Optical Alarm Configuration' and contains a table for setting thresholds for various PON optical parameters. A dropdown menu for 'Port ID' shows 'PON1'. The table rows include tx_power_high, tx_power_low, tx_bias_high, tx_bias_low, vcc_high, vcc_low, temp_high, and temp_low. Each row has checkboxes for State and input fields for Alarm Threshold and Clear Threshold. Buttons for 'Submit' and 'Reset' are at the bottom.

Type	State	Alarm Threshold	Clear Threshold
tx_power_high	<input checked="" type="checkbox"/>	20	20
tx_power_low	<input type="checkbox"/>	0.00	0.00
tx_bias_high	<input type="checkbox"/>	0.00	0.00
tx_bias_low	<input type="checkbox"/>	0.00	0.00
vcc_high	<input type="checkbox"/>	0.00	0.00
vcc_low	<input type="checkbox"/>	0.00	0.00
temp_high	<input type="checkbox"/>	0.00	0.00
temp_low	<input type="checkbox"/>	0.00	0.00

Figure5-7: PON Threshold Alarm

5.3.4 Syslog Server

Configure the server of OLT remote system logs.

OLT Web Management Interface

Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU								
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC								
						FAN								
Alarm														
Threshold Alarm														
PON Optical Alarm														
Syslog Server	<p>Syslog Server Configuration</p> <table border="1"> <tr> <td>Syslog Server</td> <td>Enable</td> </tr> <tr> <td>Server IP</td> <td>192.168.3.123</td> </tr> <tr> <td>Server Port</td> <td>514 (1-65535)</td> </tr> <tr> <td colspan="2"><input type="button" value="Submit"/></td> </tr> </table>						Syslog Server	Enable	Server IP	192.168.3.123	Server Port	514 (1-65535)	<input type="button" value="Submit"/>	
Syslog Server	Enable													
Server IP	192.168.3.123													
Server Port	514 (1-65535)													
<input type="button" value="Submit"/>														

Figure5-8: Syslog Server Configuration

5.4 SNMP

5.4.1 SNMP V1/V2

The EPON OLT supports SNMP v1/v2, click Maintenance → SNMP → SNMP V1/V2 to configure.

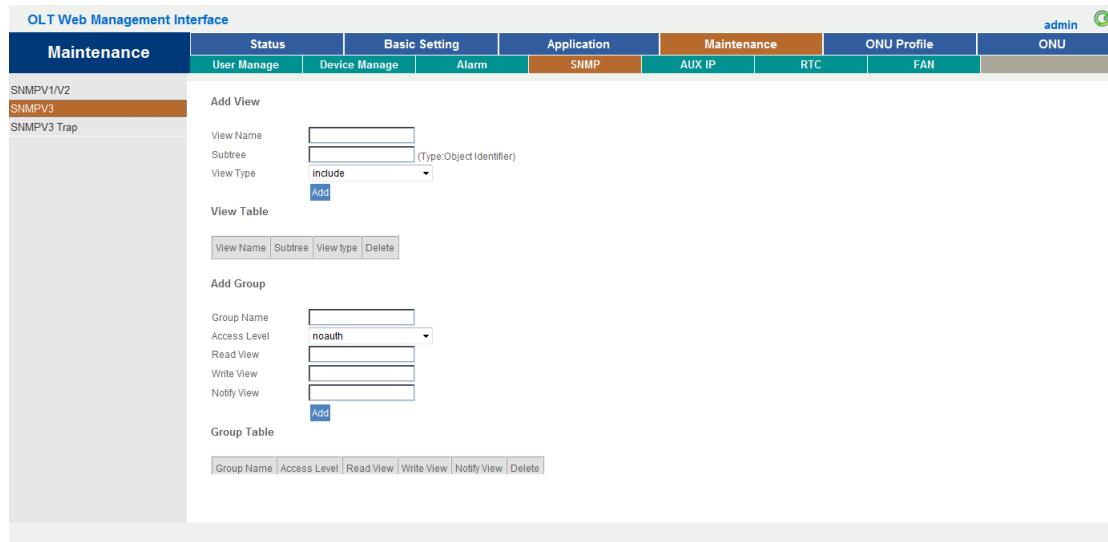
OLT Web Management Interface

Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU																																		
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC																																		
						FAN																																		
SNMPV1/V2	Access Right	Read-Only																																						
SNMPV3		<input type="button" value="Add"/>																																						
SNMPV3 Trap	<p>Community Table</p> <table border="1"> <tr> <td>Community Name</td> <td>Access Right</td> <td>Delete</td> </tr> <tr> <td>public</td> <td>Read-Only</td> <td><input type="button" value="Delete"/></td> </tr> <tr> <td>private</td> <td>Read-Write</td> <td><input type="button" value="Delete"/></td> </tr> </table> <p>Add Trap</p> <table border="1"> <tr> <td>Host IP</td> <td></td> </tr> <tr> <td>UDP Port</td> <td>162 (1-65535)</td> </tr> <tr> <td>Community Name</td> <td>public</td> </tr> <tr> <td>SNMP Version</td> <td>1</td> </tr> <tr> <td colspan="2"><input type="button" value="Add"/></td> </tr> </table> <p>Trap Table</p> <table border="1"> <thead> <tr> <th>Host IP</th> <th>UDP Port</th> <th>SNMP Version</th> <th>Community Name</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>192.168.5.125</td> <td>162</td> <td>2c</td> <td>adsl</td> <td><input type="button" value="Delete"/></td> </tr> <tr> <td>192.168.5.191</td> <td>162</td> <td>2c</td> <td>adsl</td> <td><input type="button" value="Delete"/></td> </tr> </tbody> </table>						Community Name	Access Right	Delete	public	Read-Only	<input type="button" value="Delete"/>	private	Read-Write	<input type="button" value="Delete"/>	Host IP		UDP Port	162 (1-65535)	Community Name	public	SNMP Version	1	<input type="button" value="Add"/>		Host IP	UDP Port	SNMP Version	Community Name	Delete	192.168.5.125	162	2c	adsl	<input type="button" value="Delete"/>	192.168.5.191	162	2c	adsl	<input type="button" value="Delete"/>
Community Name	Access Right	Delete																																						
public	Read-Only	<input type="button" value="Delete"/>																																						
private	Read-Write	<input type="button" value="Delete"/>																																						
Host IP																																								
UDP Port	162 (1-65535)																																							
Community Name	public																																							
SNMP Version	1																																							
<input type="button" value="Add"/>																																								
Host IP	UDP Port	SNMP Version	Community Name	Delete																																				
192.168.5.125	162	2c	adsl	<input type="button" value="Delete"/>																																				
192.168.5.191	162	2c	adsl	<input type="button" value="Delete"/>																																				

Figure5-9: SNMP V1/V2

5.4.2 SNMP V3

The EPON OLT also supports SNMP V3, as shown in Figure 5-10.

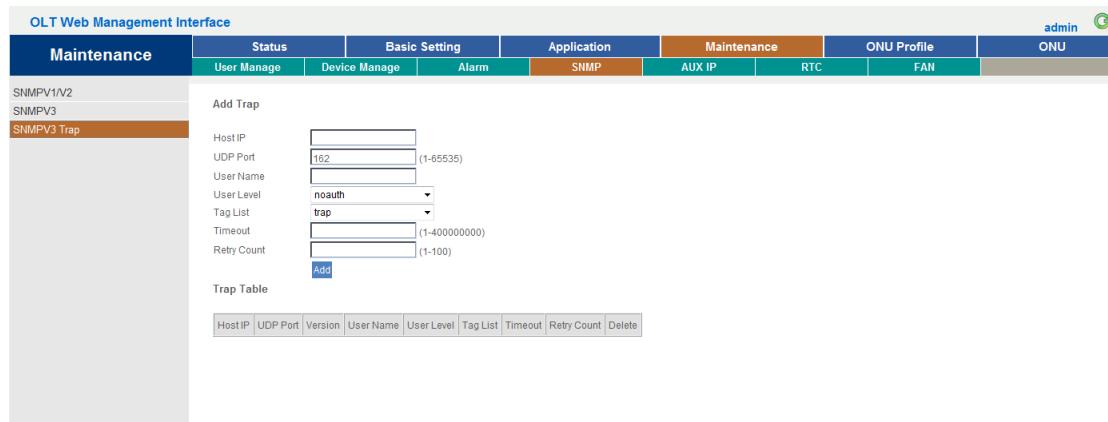


This screenshot shows the 'SNMPV3' section of the OLT Web Management Interface. The left sidebar lists 'SNMPV1/V2', 'SNMPV3' (which is selected and highlighted in orange), and 'SNMPV3 Trap'. The main area has tabs for 'Add View', 'View Name', 'Subtree', 'View Type', 'Add', 'View Table', 'Add Group', 'Group Name', 'Access Level' (set to 'noauth'), 'Read View', 'Write View', 'Notify View', and 'Add'. Below these are 'Group Table' and a table with columns for 'Group Name', 'Access Level', 'Read View', 'Write View', 'Notify View', and 'Delete'.

Figure5-10: SNMP V3

5.4.3 SMNP V3 Trap

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



This screenshot shows the 'SNMPV3 Trap' section of the OLT Web Management Interface. The left sidebar lists 'SNMPV1/V2', 'SNMPV3' (selected and highlighted in orange), and 'SNMPV3 Trap'. The main area has tabs for 'Add Trap', 'Host IP' (162), 'UDP Port' (162), 'User Name', 'User Level' (set to 'noauth'), 'Tag List' (trap), 'Timeout' (1-400000000), 'Retry Count' (1-100), and 'Add'. Below these is a 'Trap Table' with columns for 'Host IP', 'UDP Port', 'Version', 'User Name', 'User Level', 'Tag List', 'Timeout', 'Retry Count', and 'Delete'.

Figure5-11: SNMP V3 Trap

5.5 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.

OLT Web Management Interface							admin
Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC	FAN
AUX IP	AUX IP Configuration						
	<input type="text" value="192.168.5.5"/> IP Address <input type="text" value="255.255.255.0"/> Subnet Mask <input type="text" value="0.0.0.0"/> Gateway	<input type="button" value="Submit"/>	<input type="button" value="Reset"/>				

Figure5-12: AUX IP

5.6 RTC

Select Maintenance →RTC to set system time. The default system time is the OLT firmware release time.

OLT Web Management Interface							admin
Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC	FAN
RTC	Date Setting						
	<input type="text" value="2016"/> Year <input type="text" value="7"/> Month <input type="text" value="29"/> Day <input type="text" value="15"/> Hour <input type="text" value="21"/> Minute <input type="text" value="17"/> Second	<input type="button" value="Submit"/>	<input type="button" value="Reset"/>				

Figure5-13: RTC Configuration

5.7 FAN

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

OLT Web Management Interface

Maintenance	Status	Basic Setting	Application	Maintenance	ONU Profile	admin	ONU
	User Manage	Device Manage	Alarm	SNMP	AUX IP	RTC	FAN
FAN	FAN Configuration						
	FAN Temperature	<input type="text" value="60"/> (20-80)					
	FAN Mode	Auto					
		<input type="button" value="Submit"/>	<input type="button" value="Reset"/>				

Figure5-14: FAN Configuration

Chapter 6 ONU Profile

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

6.1 DBA Profile

The default system will have an id 0 DBA template, this template parameters cannot be modified. All ONU will be bound the template.

When the user bind manually, the new template will take effect.

The screenshot shows the 'OLT Web Management Interface' with the 'ONU Profile' tab selected. Under 'Status', 'DBA Profile' is highlighted. The main area displays a 'Create DBA Profile' form. It includes fields for 'Profile ID' (set to 1) and a 'DBA Profile Information' section with dropdown menus for 'Profile ID' and 'DBA Profile table'. There are also 'Delete' and 'Commit' buttons. A 'Key Value' table is present but empty. The top right corner shows the user 'admin' with a green online status icon.

Figure6-1: Add a DBA Profile

The screenshot shows the 'OLT Web Management Interface' with the 'ONU Profile' tab selected. Under 'Status', 'DBA Profile' is highlighted. The main area displays a 'Upstream Configuration' section with fields for 'Upstream FIR', 'Upstream CIR', 'Upstream PIR', and 'Upstream Weight'. Below it is a 'Downstream Configuration' section with fields for 'Downstream PIR' and 'Downstream Weight'. Each section has 'Add' and 'Delete' buttons. The top right corner shows the user 'admin' with a green online status icon.

Figure6-2: DBA Profile Configure

6.2 Server Profile

Create a server profile, it can be shown in the table when user select the profile ID.

The screenshot shows the 'OLT Web Management Interface' with the 'ONU Profile' tab selected. In the top navigation bar, the 'admin' user is logged in. The main content area is titled 'Create Service Profile'. It includes fields for 'Profile ID' (set to 1) and an 'Add' button. Below this is a 'Service Profile Info' section with a dropdown for 'Profile ID' set to 11, and 'Delete' and 'Commit' buttons. A 'Service Profile Table' follows, containing a single row with 'Key' and 'Value' columns. The 'Value' column contains the text: 'Vlan mode translation; Default 111; tpid 10; Translation : 111 to 222;'. On the left sidebar, under the 'ONU Profile' section, 'LAN Count' is highlighted, and other options like 'SNMP', 'LLID', 'FEC Mode', 'SLA', 'Multicast', 'MAC Age Time', 'Active PON', 'PON Setting', 'Port Basic', 'Port VLAN', 'Port Class', 'Multicast Port', 'Multicaset VLAN', 'Monitor Status', and 'Monitor Current' are listed.

Figure6-3: Add Server Profile

The server profile configuration contain ONU PON configuration, port configuration, multicast configuration, etc.

The screenshot shows the 'OLT Web Management Interface' with the 'ONU Profile' tab selected. In the top navigation bar, the 'admin' user is logged in. The main content area is titled 'Service Profile Lan Count'. It includes fields for 'Profile ID' (set to 1) and 'Lan Count' (set to 2), with a note '(0-255)' next to it. There are 'Submit' and 'Delete' buttons. On the left sidebar, under the 'ONU Profile' section, 'LAN Count' is highlighted, and other options like 'SNMP', 'LLID', 'FEC Mode', 'SLA', 'Multicast', 'MAC Age Time', 'Active PON', 'PON Setting', 'Port Basic', 'Port VLAN', 'Port Class', 'Multicast Port', 'Multicaset VLAN', 'Monitor Status', and 'Monitor Current' are listed.

Figure6-4: Server Profile Configuration

6.3 VoIP Profile

As the above, create a profile first, and it will be shown in the table when user select the profile ID.

The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'ONU Profile' selected, which is further divided into 'Status', 'Basic Setting', 'Application', 'Maintenance', 'ONU Profile', and 'ONU'. Under 'ONU Profile', 'VolP Profile' is selected. On the left sidebar, 'POTS Count' is highlighted. The main content area shows a 'Create VoIP Profile' form with a 'Profile ID' input field containing '0' and an 'Add' button. Below it is a 'VoIP Profile Info' section with a dropdown menu set to '1' and 'Submit' and 'Delete' buttons. A 'VolP Profile Table' is displayed with a single row for 'global_param' containing various configuration parameters like 'Voice IP Mode : staticip' and 'IAD IP Address : 192.168.3.56'.

Figure6-5: Add VoIP Profile

The screenshot shows the 'OLT Web Management Interface' with the 'admin' user logged in. The main menu has 'ONU Profile' selected, which is further divided into 'Status', 'Basic Setting', 'Application', 'Maintenance', 'ONU Profile', and 'ONU'. Under 'ONU Profile', 'Server Profile' is selected. On the left sidebar, 'POTS Count' is highlighted. The main content area shows a 'VolP Profile Info' section with a dropdown menu set to '1'. Below it is an 'Add VolP Pots Count' section with a 'Pots Count' input field containing '2' and a 'Submit' button.

Figure6-6: Server Profile Configuration

6.4 Alarm Profile

As the above, create a profile first, and it will be shown in the table when user select the profile ID.

OLT Web Management Interface

ONU Profile	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	DBA Profile	Server Profile	VoIP Profile	Alarm Profile	Bind Profile	
Add/Commit	Create Alarm Profile Profile ID: <input type="text" value="1"/> (1-32767) <input type="button" value="Add"/> Alarm Profile Info Profile ID: <input type="text" value="1"/> commit delete					
ONU						
PON						
PON Statistics						
Port						
Port Statistics						
POTS						
E1						

Figure6-7: Add Alarm Profile

The alarm profile contains ONU global threshold alarm, PON alarm, port alarm, pots alarm, etc.

OLT Web Management Interface

ONU Profile	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	DBA Profile	Server Profile	VoIP Profile	Alarm Profile	Bind Profile	
Add/Commit						
ONU	Alarm Profile Info Profile ID: <input type="text" value="1"/> ONU Alarm System State ONU Alarm Type: <input type="text" value="equipment_Alarm"/> Alarm State: <input type="text" value="enable"/> <input type="button" value="Commit"/> <input type="button" value="Delete"/> ONU Temperature Alarm Threshold Alarm Type: <input type="text" value="onu_Temp_High_Alarm"/> Alarm State: <input type="text" value="enable"/> Alarm Threshold: <input type="text" value="700"/> (-1280..1280,units:0.1C) Alarm Clear Threshold: <input type="text" value="700"/> (-1280..1280,units:0.1C) <input type="button" value="Commit"/> <input type="button" value="Delete"/> ONU VCC Alarm Threshold ONU VCC Switch: <input type="text" value="enable"/> Alarm Threshold: <input type="text" value="6000"/> (0..65535,units:0.1V) Alarm Clear Threshold: <input type="text" value="6000"/> (0..65535,units:0.1V) <input type="button" value="Commit"/> <input type="button" value="Delete"/>					
PON						
PON Statistics						
Port						
Port Statistics						
POTS						
E1						

Figure6-8: Alarm Profile Configuration

6.5 Bind Profile

The DBA profile, server profile, VoIP profile, alarm profile can be bound to the ONU.

OLT Web Management Interface

ONU Profile	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	DBA Profile	Server Profile	VoIP Profile	Alarm Profile	Bind Profile	
Bind Profile	Profile Binding					
	Port ID ONU ID DBA Profile ID SRV Profile ID VoIP Profile ID Alarm Profile ID	PON1 2 1 11 12 13				
						<input type="button" value="Commit"/>

Figure6-9: Bind Profile Configuration

Chapter 7 ONU

This chapter is about configuring a single ONU by OLT.

7.1 Authentication

7.1.1 ONU authentication

There are 4 modes of the ONU authentication. The default mode is disable.

The screenshot shows the 'OLT Web Management Interface' with a navigation bar at the top. The 'ONU' tab is selected, and under it, the 'Authentication' sub-tab is active. The main content area displays the 'ONU Authentication' configuration. It includes fields for 'Port ID' (set to 'PON1') and 'Port Authentication Mode' (set to 'Disable'), along with a 'submit' button. On the left, there is a sidebar with links for 'ONU Authentication', 'MAC List', 'LOID List', and 'ONU Action'.

Figure7-1 ONU Authentication

7.1.2 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.

The screenshot shows the OLT Web Management Interface for managing ONUs. The main menu at the top includes Status, Basic Setting, Application, Maintenance, ONU Profile, and ONU. The ONU section is expanded, showing sub-options for Authentication, ONU Global, ONU Port, ONU VoIP, and ONU Alarm. The 'Authentication' tab is selected. On the left sidebar, 'MAC List' is highlighted. The main content area displays 'ONU MAC Authentication' settings for PON1, including fields for MAC Authentication (00:00:01:00:11:25) and Black MAC Authentication, both with 'Add' buttons. Below these are tables for 'ONU MAC Authentication Table' and 'ONU Black MAC Authentication Table', each with 'Index', 'Delete' buttons, and a 'Clear' button.

Figure7-2 MAC List

7.1.3 LOID List

When the authentication mode is LOID, only the ONUs on the LOID list can register to the OLT.

The screenshot shows the OLT Web Management Interface for managing ONUs. The main menu at the top includes Status, Basic Setting, Application, Maintenance, ONU Profile, and ONU. The ONU section is expanded, showing sub-options for Authentication, ONU Global, ONU Port, ONU VoIP, and ONU Alarm. The 'Authentication' tab is selected. The left sidebar highlights 'LOID List'. The main content area displays 'ONU LOID' settings for PON1, including fields for LOID (8014A81235) and Password (1111), both with an 'Add' button. Below these is a table for 'ONU LOID Authentication Table' with columns for Index, LOID, Password, and Delete, along with a 'Clear' button.

Figure7-3LOID List

7.1.4 ONU Action

Manage the ONU unauth, deregister, reset. User can operate one of the

ONU, or a batch of ONUs in the same PON port.

ONU ID	LLID	Status	MAC Address	Unauth	Deregister	Reset
1	58	Online	80:14:A8:20:B5:A0	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
2	4	Online	80:14:A8:20:B4:88	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
3	11	Online	80:14:A8:20:B4:D8	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
4	17	Online	80:14:A8:20:B5:58	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
5	6	Online	80:14:A8:20:B8:C0	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
6	12	Online	80:14:A8:20:B4:98	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
7	27	Online	80:14:A8:20:B4:D0	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>
8	19	Online	80:14:A8:20:B4:80	<button>UnAuth</button>	<button>Deregister</button>	<button>Reset</button>

Figure7-4 ONU Action

7.2 ONU Global

In this section, all the global configuration of ONU can be operated.

Temperature	60 C
Supply Voltage	3.27 V
Transmit BIAS	8 mA
Transmit Power	1.5609 mW (1.9338 dbm)
Receive Power	0.0871 mW (-10.5998 dbm)

CTC Version	0x30
OUI	0x11 0x11 0x11
RTT	81
Vendor ID	0x56534f4c

Figure7-5 ONU Global Configuration

7.3 ONU Port

All the port services can be configured. It contains port VLAN, multicast, monitor and so on.

PON ID	PON1
ONU ID	1
ONU Port	Port1
VLAN Mode	Transparent
PVID Value	0
Port VLAN Value	

VLAN Mode	tag
PVID Value	100 (1-4095)

Figure7-6 ONU Port Configuration

7.4 ONU VoIP

Configure the HGU ONU VoIP parameter, including H.248 protocol and SIP protocol configuration.

PON ID	PON1
ONU ID	61
Voice IP Mode	DHCP
Tagged Flag	Transparent
Voice Priority	1 (0-7)
Voice Client VLAN	100 (0-4095)
Voice Service VLAN	100 (0-4095)

Figure7-7 ONU VoIP Configuration

7.5 ONU Alarm

In this page, user can view the chosen ONU alarm information, the alarm info contains ONU global alarm info, PON alarm info, port alarm info, POTs alarm info, E1 alarm info.

OLT Web Management Interface										
ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU				
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	admin				
ONU Alarm Info	ONU Alarm Information									
PON Alarm Info										
Port Alarm Info										
POTS Alarm Info										
E1 Alarm Info										
	ONU Alarm									
	Alarm Type: Equipment Alarm									
	<table border="1"><tr><td>Alarm Name</td><td>equipment_alarm</td></tr><tr><td>Alarm Configuration</td><td>disable</td></tr></table>						Alarm Name	equipment_alarm	Alarm Configuration	disable
Alarm Name	equipment_alarm									
Alarm Configuration	disable									

Figure7-8 ONU Alarm Information

Chapter 8 Configuration Examples

8.1 Internet With VLAN 100

a. OLT configuration

Step 1: Create a new VLAN.

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	VLAN	Port	QoS	MAC	Security	
New VLAN	New VLAN					
Port VLAN						
QinQ						
VLAN IP						
	VLAN ID	100	(1-4094)			
	Description	Vlan100				
		Add				
	VLAN Table					
	VLAN ID	Description	Edit	Delete		
	1	default	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>		
	960	vlan960	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>		
	1000	vlan1000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>		
	1001	vlan1001	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>		
	1010	vlan1010	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>		

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	VLAN	Port	QoS	MAC	Security	
New VLAN	Port VLAN Configuration					
Port VLAN						
QinQ						
VLAN IP						
	VLAN ID	100				
	GE1	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE2	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE3	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE4	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE5	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE6	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE7	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE8	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE9	<input checked="" type="radio"/> None <input type="radio"/> Tag <input checked="" type="radio"/> Untag				
	GE10	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE11	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE12	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE13	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE14	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE15	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	GE16	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag				
	PON1	<input checked="" type="radio"/> None <input checked="" type="radio"/> Tag <input type="radio"/> Untag				

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	VLAN	Port	QoS	MAC	Security	
GE Setup	GE Configuration <div style="border: 1px solid red; padding: 5px;"> <input style="width: 100%;" type="text" value="GE9"/> </div> <p>Description: <input type="text"/></p> <p>Admin Status: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>Flow Control: <input checked="" type="radio"/> On <input type="radio"/> Off</p> <p>Isolate: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>Broadcast Storm Protection: <input type="text" value="512"/> (0~64-1000000fps)</p> <p>Multicast Storm Protection: <input type="text" value="0"/> (0~64-1000000fps)</p> <p>Unicast Storm Protection: <input type="text" value="512"/> (0~64-1000000fps)</p> <p>Ingress Rate: <input type="text" value="0"/> (0~32-1000000kbps)</p> <p>Egress Rate: <input type="text" value="0"/> (0~32-1000000kbps)</p> <p>MAC Limit: <input type="text" value="0"/> (0-16384)</p> <p>Default VLAN ID: <input style="width: 100%;" type="text" value="100"/> (1-4095)</p> <p>Submit Reset</p>					

b. ONU configuration

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

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU						
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm							
Basic Info												
VLAN	VLAN <div style="border: 1px solid #ccc; padding: 5px;"> <p>PON ID: <input type="text" value="PON1"/></p> <p>ONU ID: <input type="text" value="1"/></p> <p>ONU Port: <input type="text" value="Port1"/></p> </div> <p>VLAN Information</p> <table border="1" style="margin-top: 10px;"> <tr> <td>VLAN Mode</td> <td>Transparent</td> </tr> <tr> <td>PVID Value</td> <td>0</td> </tr> <tr> <td>Port VLAN Value</td> <td></td> </tr> </table> <p>VLAN Configuration</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>VLAN Mode: <input type="text" value="tag"/></p> <p>PVID Value: <input style="width: 100%;" type="text" value="100"/> (1-4095)</p> <p>Commit</p> </div>						VLAN Mode	Transparent	PVID Value	0	Port VLAN Value	
VLAN Mode	Transparent											
PVID Value	0											
Port VLAN Value												
Port Class												
Multicast VLAN												
Multicast Port												
Monitor Status												
Monitor Current												

8.2 IPTV With VLAN 200

a. OLT configuration

Step 1: Create a new VLAN.

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU																												
	VLAN	Port	QoS	MAC	Security																													
New VLAN	New VLAN Port VLAN VLAN ID: 200 (1-4094) Description: vlan200 <input type="button" value="Add"/> VLAN Table <table border="1"> <thead> <tr> <th>VLAN ID</th> <th>Description</th> <th>Edit</th> <th>Delete</th> </tr> </thead> <tbody> <tr><td>1</td><td>default</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> <tr><td>100</td><td>vlan100</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> <tr><td>960</td><td>vlan960</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> <tr><td>1000</td><td>vlan1000</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> <tr><td>1001</td><td>vlan1001</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> <tr><td>1010</td><td>vlan1010</td><td><input type="button" value="Edit"/></td><td><input type="button" value="Delete"/></td></tr> </tbody> </table>						VLAN ID	Description	Edit	Delete	1	default	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	100	vlan100	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	960	vlan960	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	1000	vlan1000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	1001	vlan1001	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	1010	vlan1010	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
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Port VLAN																																		
QinQ																																		
VLAN IP																																		

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU																																														
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Port VLAN	Port VLAN Configuration VLAN ID: 200 <table> <tbody> <tr><td>GE1</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE2</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE3</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE4</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE5</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE6</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE7</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag</td></tr> <tr><td>GE8</td><td><input checked="" type="radio"/> None <input type="radio"/> Tag 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PON7	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag																																																			
QinQ																																																				
VLAN IP																																																				

Step 3: Enable the IGMP status.

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	IGMP Configuration					
Port Setup						
Port User VLAN	IGMP Status: <input type="button" value="Enable"/> (1-255s) Last Member Query Interval: <input type="text" value="1"/> Last Member Query Count: <input type="text" value="2"/> Last Member Query Response: <input type="text" value="1"/> General Query Packet: <input type="radio"/> Disable <input checked="" type="radio"/> Enable General Query Interval: <input type="text" value="125"/> General Query Source IP: <input type="text" value="1.1.1.1"/>					
Port Mrouter						
Static Group						

Step 4: Add the IGMP user VLAN and group VLAN

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	User VLAN Configuration					
Port Setup						
Port User VLAN	Port ID: PON1 User VLAN ID: 200 Group VLAN ID: 200 <input type="button" value="Add"/>					
Port Mrouter						
Static Group	User VLAN Table					
	<input type="button" value="Port ID"/> <input type="button" value="User VLAN ID"/> <input type="button" value="Group VLAN ID"/> <input type="button" value="Delete"/>					

Step 5: Add the M-router in GE port

OLT Web Management Interface

Application	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	IGMP	RSTP	ARP Proxy	DHCP	Static Route	
Global Setup	Add Multicast Router					
Port Setup						
Port User VLAN						
Port Mrouter	Port ID: GE9 Group VLAN ID: 200 <input type="button" value="Add"/>					
Static Group	Multicast Router Table					
	<input type="button" value="Port ID"/> <input type="button" value="Group VLAN ID"/> <input type="button" value="Delete"/>					

b. ONU configuration

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

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	
Basic Info	VLAN					
VLAN	PON ID	PON1	ONU ID	2	ONU Port	Port1
Port Class	Multicast VLAN					
Multicast VLAN	Multicast Port					
Multicast Port	Monitor Status					
Monitor Status	Monitor Current					
Monitor Current	VLAN Information					
	VLAN Mode					
	PVID Value	0				
	Port VLAN Value					
	VLAN Configuration					
	VLAN Mode	tag	ONU Port	200	(1-4095)	
	<input type="button" value="Commit"/>					

Step 7: Configuration multicast VLAN

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	ONU Private
Basic Info	Multicast VLAN					
VLAN	PON ID	PON1	ONU ID	2	ONU Port	Port1
Port Class	Multicast VLAN Configuration					
Multicast VLAN	Multicast VLAN	200	(1-4095)	<input type="button" value="Add"/>		
Multicast Port	<input type="button" value="Multicast VLAN"/> <input type="button" value="Delete"/>					
Monitor Status	<input type="button" value="Clear"/>					
Monitor Current						

Step 8: Configure the IGMP VLAN tagstrip mode

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	ONU Private
Basic Info						
VLAN						
Port Class						
Multicast VLAN						
Multicast Port						
Monitor Status						
Monitor Current						
Multicast Port						
PON ID	PON1					
ONU ID	2					
ONU Port	Port1					
Multicast Max Group						
Multicast Max Group	64 (0-4096)					
Commit						
Multicast Port Information						
Tagstrip Mode	no strip					
Tagstrip Value						
Multicast Port Configuration						
Tagstrip Mode	Strip					

8.3 VoIP With VLAN 300

a. OLT Configuration

Step 1: Create a new VLAN

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	VLAN	Port	QoS	MAC	Security	
New VLAN						
Port VLAN						
QinQ						
VLAN IP						
New VLAN						
VLAN ID	300 (1-4094)					
Description	vlan300					
Add						
VLAN Table						
VLAN ID	Description	Edit	Delete			
1	default					
100	vlan100					
200	vlan200					
960	vlan960					
1000	vlan1000					
1001	vlan1001					
1010	vlan1010					

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

OLT Web Management Interface

Basic Setting	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	
	VLAN	Port	QOS	MAC	Security		
New VLAN	Port VLAN Configuration						
Port VLAN	VLAN ID	300					
QinQ	GE1	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
VLAN IP	GE2	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE3	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE4	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE5	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE6	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE7	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE8	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE9	<input checked="" type="radio"/> None <input checked="" type="radio"/> Tag <input type="radio"/> Untag					
	GE10	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE11	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE12	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE13	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE14	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE15	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	GE16	<input checked="" type="radio"/> None <input type="radio"/> Tag <input type="radio"/> Untag					
	PON1	<input checked="" type="radio"/> None <input checked="" type="radio"/> Tag <input type="radio"/> Untag					

b. ONU Configuration

Step 3: Configure the VoIP global parameter

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU	
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	ONU Private	
Basic Info	Choose ONU						
Global	PON ID	PON5					
H248 Global	ONU ID	9					
H248 POTS	Global Parameter Config						
SIP Global	Voice IP Mode	Static_IP					
SIP POTS	Tagged Flag	Tag					
Fax Modem	Voice Priority	7	(0-7)				
IAD Oper	Voice Client VLAN	300	(0-4095)				
	Voice Service VLAN	300	(0-4095)				
	IAD IP Adress	192.168.3.123	(x.x.x.x)				
	IAD Net Mask	255.255.255.0	(x.x.x.x)				
	IAD Default Gateway	192.168.3.1	(x.x.x.x)				
		Commit					

Step 4: Setup the SIP configuration

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	ONU Private
Basic Info	ONU ID	4				
Global						
H248 Global						
H248 POTS						
SIP Global	Heartbeat Switch	Enable				
SIP POTS	Heartbeat Cycle	30	(1-65535)			
Fax Modem	Heartbeat Count	1	(1-65535)			
IAD Oper	SIP Register Interval	0	(0-65535)			
	Manage Port	5060	(1-65535)			
	Out Bound Service IP	0.0.0.0				
	Out Bound Service Port	5060	(0-65535)			
	SIP Proxy Service IP	192.168.3.45				
	SIP Proxy Service Port	5060	(1-65535)			
	Backup SIP Proxy Service Ip	192.168.3.45				
	Backup SIP Proxy Service Port	5060	(1-65535)			
	SIP Register Service IP	192.168.3.45				
	SIP Register Service Port	5060	(1-65535)			
	Backup SIP Register Service IP	192.168.3.45				
	Backup SIP Register Service Port	5060	(0-65535)			
		Commit				

Step 5: Fill in the user account and password

OLT Web Management Interface

ONU	Status	Basic Setting	Application	Maintenance	ONU Profile	ONU
	Authentication	ONU Global	ONU Port	ONU VoIP	ONU Alarm	ONU Private
Basic Info	Choose ONU					
Global						
H248 Global						
H248 POTS						
SIP Global	PON ID	PON5				
SIP POTS	ONU ID	5				
Fax Modem	ONU VoIP Port	Pots1				
IAD Oper						
	SIP User Parameter Config					
	User Account	12345678				
	User name	12345678				
	User Password	00000000				
		commit				

Thank you!