

**Single PON port  
AirLive GPON OLT-121  
WEB USER MANUAL**

airlive®

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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 and Table 1-2. 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		Single PON port GPON OLT
Chassis	Racks	1U
1G/10G Uplink Port	QTY	3
	Copper	2*100/1000M auto-negotiation
	SFP (Independent)	1*SFP+ ( <b>SFP+ is compatible with 10GE</b> )
GPON Port	QTY	1
	Fiber Type	9/125 $\mu$ m SM
Management Mode		Console, WEB, Telnet and CLI

### 1.1.2 OS Requirement

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

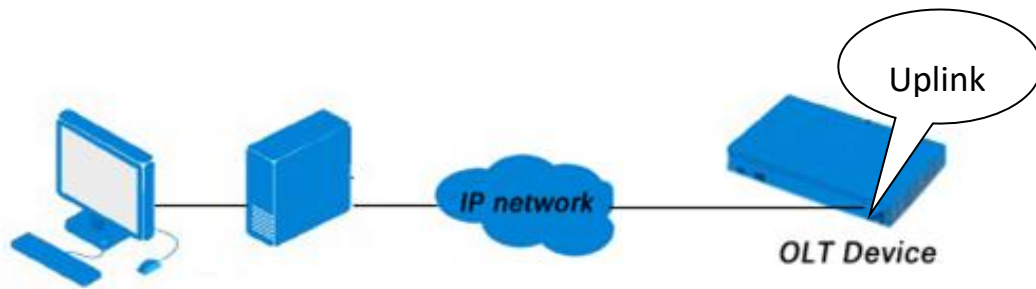
Table 1-2 Operation System requirement

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 Uplink port to IP network. The OLT default management IP is 192.168.8.200.

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



## Chapter 2 OLT Information

### 2.1 Login

Follow the steps to login:

1. Conform “1.2 Connection” to connect;
2. The device default IP address is 192.168.8.200;
3. Open your web browser, type the device IP in the address bar;
4. Entry of the username and password will be prompted. Enter the default login User Name and Password. The default username and password is "**admin/Xpon@Olt9417#**".

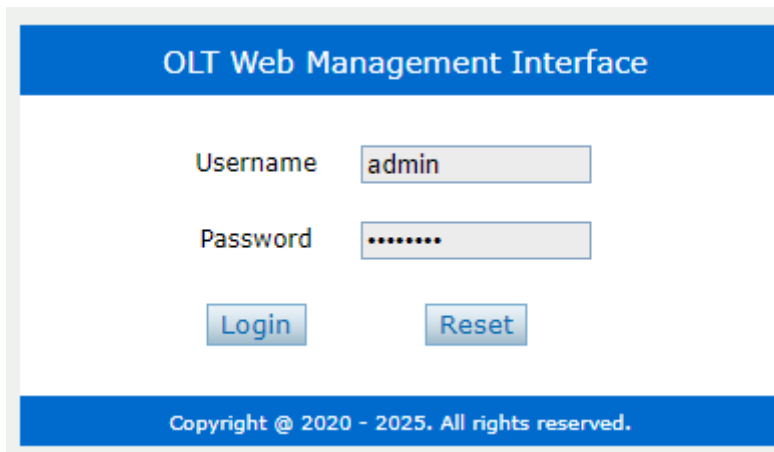


Figure 2-1-1: Login

### 2.2 Device Information

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

#### **OLT Information → Device Information**

This part shows the OLT information such as system name, serial number,



hardware version, firmware version, MAC address and system time. The system name can be modified in need.

The screenshot displays the AirLive web interface for device configuration. The top navigation bar includes the AirLive logo and a 'Save' button. The left sidebar lists configuration options: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'Device Information' and contains two sections:

**Device Status**: A visual representation of the device's ports, showing PON1, GE1, GE2, and GE3.

**Device Basic Information**: A table providing detailed system and hardware data.

Device Basic Information	
<a href="#">Submit</a>   <a href="#">Refresh</a>	
System Name	gpon-olt
Hardware Version	V3.1.1
MAC Address	00:4F:5B:00:00:04
System Time	1970 / 1 / 1 12:17:25
CPU Usage	5%
License Limit	Unlimited
Software Created Time	Tue, 23 May 2023 11:48:43
Serial Number	AT121C70002
Software Version	V1.0.7
Temperature	42°C
Running Time	0 Days 4 Hours 17 Minutes 26 Seconds
Memory Usage	48%
License Time	Permanent
Device Model	GPON-OLT

Below the table, a red warning message states: **It is recommended to change your default password for this device for security and safety reasons.** A [ChangeNow](#) button is provided to facilitate this action.

Figure 2-2-1: Device Information

## Chapter 3 OLT Configuration

This section is about the basic service of OLT configuration.

### 3.1 VLAN

OLT equipment switch engine is fully compliant with the IEEE802.1Q VLAN standard and has the following main features:

- Support Port-based VLAN and IEEE802.1Q VLAN.
- Support full 512 VLAN at the same time, VLAN range is 1~4094.

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

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

Please do not use VLAN : 0, 1, 2, 9, 8, 10, 4000, 4005, 4012-4017, 4095, These are system reserved VLAN's.

#### 3.1.1 Create VLAN

##### OLT Configuration → VLAN

In this user interface, you can create new VLAN.

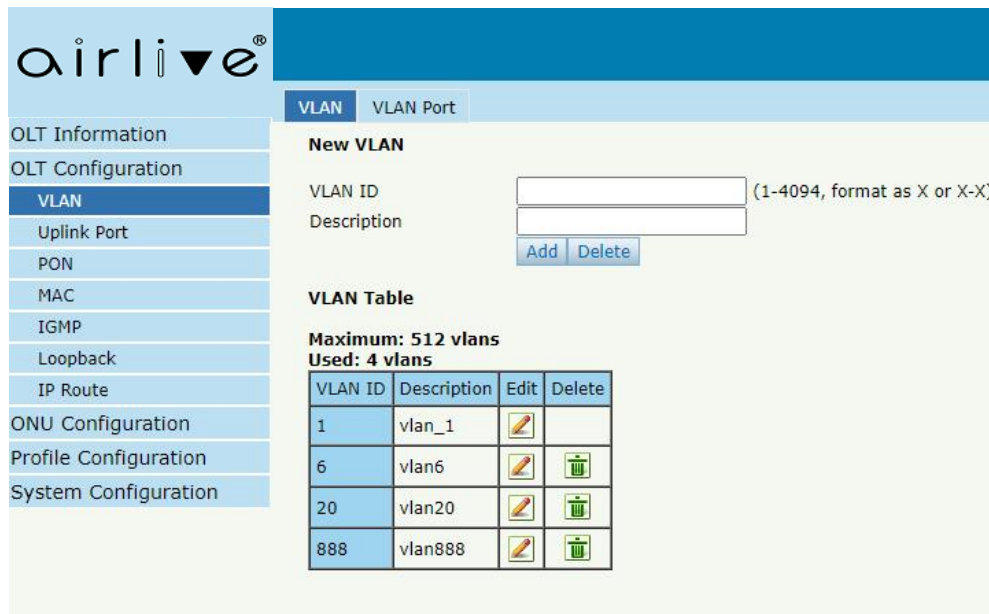


Figure 3-1-1: Create New VLAN

### 3.1.2 VLAN Port

#### OLT Configuration → VLAN → VALN Port

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

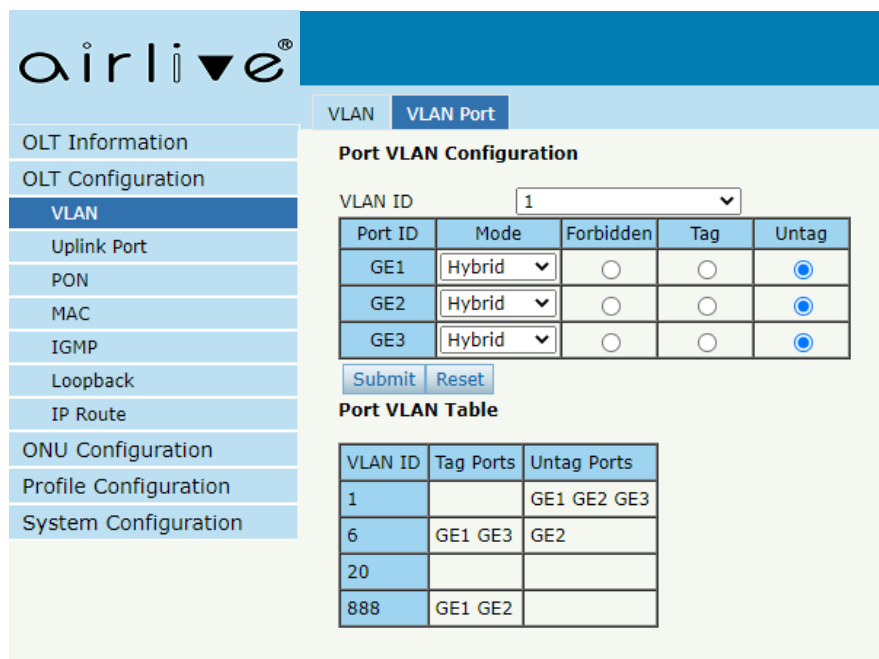


Figure 3-1-2: Add VLAN Port

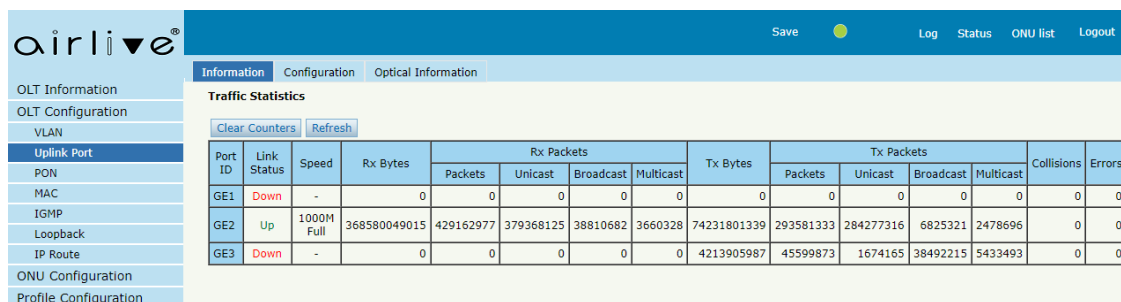
## 3.2 Uplink Port

GE ports traffic statistics and basic configuration setting.

### 3.2.1 Information

#### OLT Configuration → Uplink Port → Information

This user interface displays traffic statistics of uplink ports.



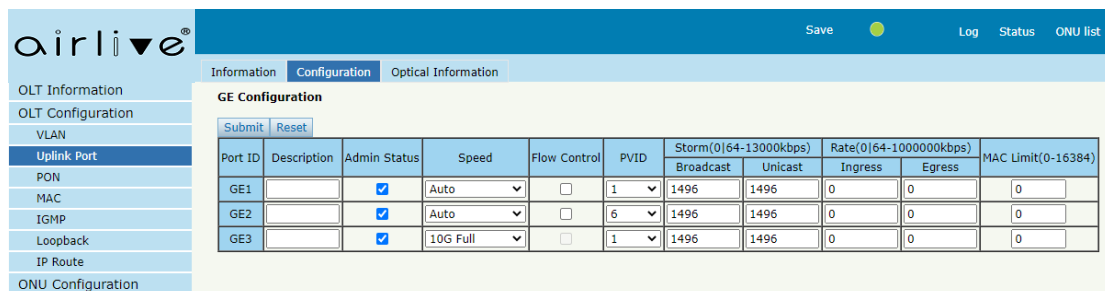
Port ID	Link Status	Speed	Rx Bytes	Rx Packets			Tx Bytes	Tx Packets			Collisions	Errors		
				Packets	Unicast	Broadcast		Multicast	Packets	Unicast			Broadcast	Multicast
GE1	Down	-	0	0	0	0	0	0	0	0	0	0		
GE2	Up	1000M Full	368580049015	429162977	379368125	38810682	3660328	74231801339	293581333	284277316	6825321	2478696	0	0
GE3	Down	-	0	0	0	0	0	4213905987	45599873	1674165	38492215	5433493	0	0

Figure 3-2-1: GE Traffic Statistics

### 3.2.2 Configuration

#### OLT Configuration → Uplink Port → Information

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



Port ID	Description	Admin Status	Speed	Flow Control	PVID	Storm(0/64-13000kbps)		Rate(0/64-1000000kbps)		MAC Limit(0-16384)
						Broadcast	Unicast	Ingress	Egress	
GE1		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	1	1496	1496	0	0	0
GE2		<input checked="" type="checkbox"/>	Auto	<input type="checkbox"/>	6	1496	1496	0	0	0
GE3		<input checked="" type="checkbox"/>	10G Full	<input type="checkbox"/>	1	1496	1496	0	0	0

Figure 3-2-2: Uplink Ports Configuration

Illustrations of each parameter:

Parameters	Illustration
Port ID	GE port has two types, copper (GE1 to GE2) and fiber SFP (GE3).
Description	Descriptions or remarks of port.
Admin Status	Active or inactive status of port. It is enabled by default.
Speed	Configuring Port Rate.
Flow Control	Enable or disable flow control function of uplink port to control congestion. It is disabled by default.
PVID	Default VLAN ID of the port.
Broadcast	Broadcast storm suppression.
Unknown Unicast	Unknown unicast storm suppression.
Ingress Rate	Port ingress rate.
Egress Rate	Port egress rate.
MAC limit	Number of MAC address can be learnt in the port.

### 3.2.3 Optical Information

#### OLT Configuration → Uplink Port → Optical Information

This page can be used to view the optical port temperature, voltage, current, transmitted and received optical power and other parameters

The screenshot shows the AirLive web interface. On the left is a navigation menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, and MAC. The main content area has tabs for Information, Configuration, and Optical Information. Under the Optical Information tab, there is a section titled "Optical Transceiver" containing a table with the following data:

Port ID	Temperature(Degree)	Voltage(V)	Bias Current(mA)	Transmit Power(dBm)	Received Power(dBm)
GE3	N/A	N/A	N/A	N/A	N/A

Below the table is a "Refresh" button.

Figure 3-2-3: Optical Information

## 3.3 PON

### 3.3.1 Information

#### OLT Configuration → PON → Information

This user interface is used to displays parameters of PON port, such as PON module port current temperature, Voltage, current, transmit power.

The screenshot shows the AirLive web interface. On the left is a navigation menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, IGMP, and Loopback. The main content area has tabs for Optical Information, Traffic Statistics, Configuration, and Range. Under the Optical Information tab, there is a section titled "Optical Transceiver" containing a table with the following data:

Port ID	Temperature(°C)	Voltage(V)	Bias Current(mA)	Transmit Power(dBm)
PON1	62.414	3.352	8.290	7.110

Figure 3-3-1: PON Information

### 3.3.2 Traffic Statistics

#### OLT Configuration → PON → Traffic Statistics

Interface	Rx Packets			Tx Packets			Collisions	Errors
	Packets	Broadcast	Multicast	Packets	Broadcast	Multicast		
PON1	294494417	6001912	3239478	424224313	40826096	3044776	0	0

Figure 3-3-2: Traffic Statistics

### 3.3.3 Configuration

#### OLT Configuration → PON → Configuration

This page is used to configure functions and characteristic parameters of the PON port, such as port attributes, storm suppression, and rate limiting.

Port ID	Description	Admin Status	Storm(0 64-1000000kbps)		Rate(0 64-1000000kbps)	
			Broadcast	Unicast	Ingress	Egress
PON1		<input checked="" type="checkbox"/>	1496	1496	0	0

Figure 3-3-3: PON configuration

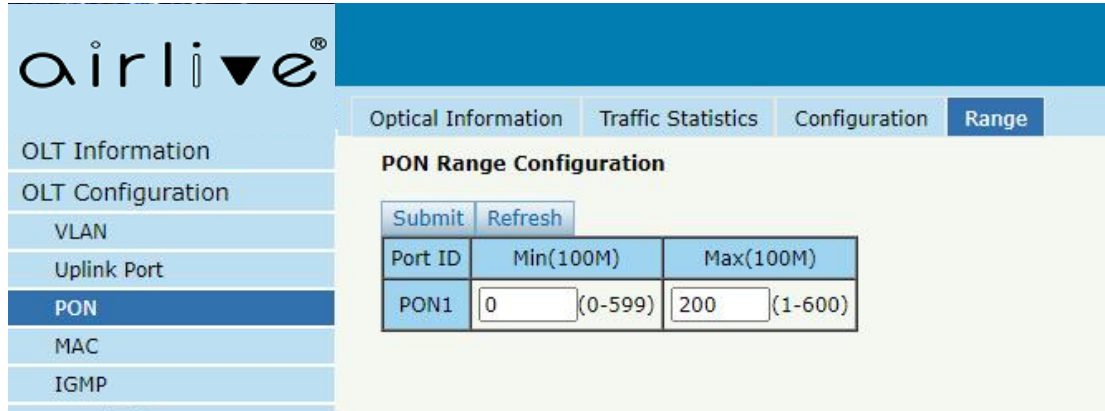
### 3.3.4 Range

#### OLT Configuration → PON → Range

When ONU is more than 20km away from OLT, you need to configure PON distance range. The difference between minimum and maximum

should not be more than 20km. The unit is 100m.

For example, ONU is 25km away from OLT, the minimum is 50 and the maximum is 250.



The screenshot shows the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON (highlighted), MAC, and IGMP. The main content area is titled 'PON Range Configuration' and includes 'Submit' and 'Refresh' buttons. Below these is a table with the following structure:

Port ID	Min(100M)	Max(100M)
PON1	<input type="text" value="0"/> (0-599)	<input type="text" value="200"/> (1-600)

Figure 3-3-4: PON Range Configuration

## 3.4 MAC

In this section, you can check MAC address table of OLT, set MAC aging time and add MAC address manually.

### 3.4.1 MAC Table

#### OLT Configuration → MAC → MAC Table

This table displays MAC addresses that OLT has learned at PON ports and GE ports.



The screenshot shows the AirLive web interface. On the left is a navigation menu with options: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, **MAC**, IGMP, Loopback, DHCP, IP Route, ONU Configuration, Profile Configuration, and System Configuration. The main content area has tabs for 'MAC Table', 'PON MAC Table', and 'Configuration'. The 'MAC Table' tab is active, displaying the 'MAC Address Table' configuration. It includes a 'Port ID' dropdown menu set to 'ALL', an 'Input Mac' text field, and a 'mac numbers' text field containing '4'. A 'Search' button is to the right of the 'Input Mac' field. Below the search fields are 'Clean' and 'Refresh' buttons. The resulting table is as follows:

VLAN ID	MAC	Type	Physical Port
1	C8:4D:44:25:2D:C9	Dynamic	GE 0/2
100	00:4F:4B:B2:15:DA	Dynamic	GE 0/1
100	00:4F:5B:00:01:25	Dynamic	GPON
100	00:4F:4B:B2:15:D9	Dynamic	GE 0/1

Figure 3-4-1: MAC Address Table

### 3.4.2 PON MAC Table

**OLT Configuration → MAC → PON MAC Table**

This table displays MAC addresses that OLT has learnt at PON ports.

The screenshot shows the AirLive web interface with the 'PON MAC Table' tab selected. The page title is 'PON MAC Address Table: 1 macs'. Below the title, there is a 'Pon ID' dropdown menu set to 'ALL' and a 'Refresh' button. A table displays the following data:

Index	VLAN ID	MAC	Pon:Onu	Gemport Index
1	100	00:4f:5b:00:01:25	1:2	1

Figure 3-4-2: PON MAC Table

### 3.4.3 Configuration

#### OLT Configuration → MAC → Configuration

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

The screenshot shows the AirLive web interface with the 'Configuration' tab selected. The page title is 'MAC Aging Configuration'. Below the title, there are two main sections:

**MAC Aging Configuration**

- Automated Aging: Enable
- Aging Time: 300 (10-1000000s)
- Submit button

**Add MAC Address**

- VLAN ID: 1
- MAC Address: (HH:HH:HH:HH:HH:HH)
- Type:  Static  Dynamic
- Port ID: GE1
- Add and Delete buttons

Figure 3-4-1: MAC Configuration

## 3.5 IGMP

### 3.5.1 Group Member

#### OLT Configuration → IGMP → Group Member

When there is a multicast group produced, the group will display in this table.



Figure 3-5-1: Group Member

### 3.5.2 Global

#### OLT Configuration → IGMP → Global

IGMP basic configuration mainly contains parameters of query packet and member timeout. When IGMP status is enabled, OLT works at IGMP snooping mode. IGMP snooping is the process of listening to Internet Group Management Protocol (IGMP) network traffic. The feature allows a network switch to "listen in" on the IGMP conversation between hosts and routers. By listening to these conversations, the switch maintains a

map of which devices need which IP multicast streams. Multicasts may be filtered from the ports which do not need them and thus controls which ports receive specific multicast traffic. When IGMP status is disabled, OLT works at transparent mode.

The screenshot shows the 'IGMP Configuration' page in the AirLive web interface. The 'Global' tab is selected. The configuration includes the following fields:

- IGMP Status: Enable (dropdown)
- Member Port Timeout: 260 (10-3600s)
- Query Response Time: 300 (10-3600s)
- Last Member Query Interval: 1 (1-255s)
- Last Member Query Count: 2 (1-255)
- Last Member Query Response: 1 (1-255s)
- General Query Packet:  Disable  Enable
- General Query Interval: 125 (10-255s)
- Query Source IP: 1.1.1.1

Buttons for 'Submit' and 'Reset' are located at the bottom of the configuration area.

Figure 3-5-2: IGMP Global

### 3.5.3 Port

#### OLT Configuration → IGMP → Port

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

The screenshot shows the 'Port Configuration' page in the AirLive web interface. The 'Port' tab is selected. The configuration is presented in a table with the following columns: Port ID, Fast Leave, Filter, and Group Limit(0-1024).

Port ID	Fast Leave	Filter	Group Limit(0-1024)
GE1	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE2	<input type="checkbox"/>	<input type="checkbox"/>	1024
GE3	<input type="checkbox"/>	<input type="checkbox"/>	1024
PON1	<input type="checkbox"/>	<input type="checkbox"/>	1024

Buttons for 'Submit' and 'Reset' are located above the table.

Figure 3-5-3: IGMP Port

### 3.5.4 Port User VLAN

#### OLT Configuration → IGMP → Port User VLAN

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

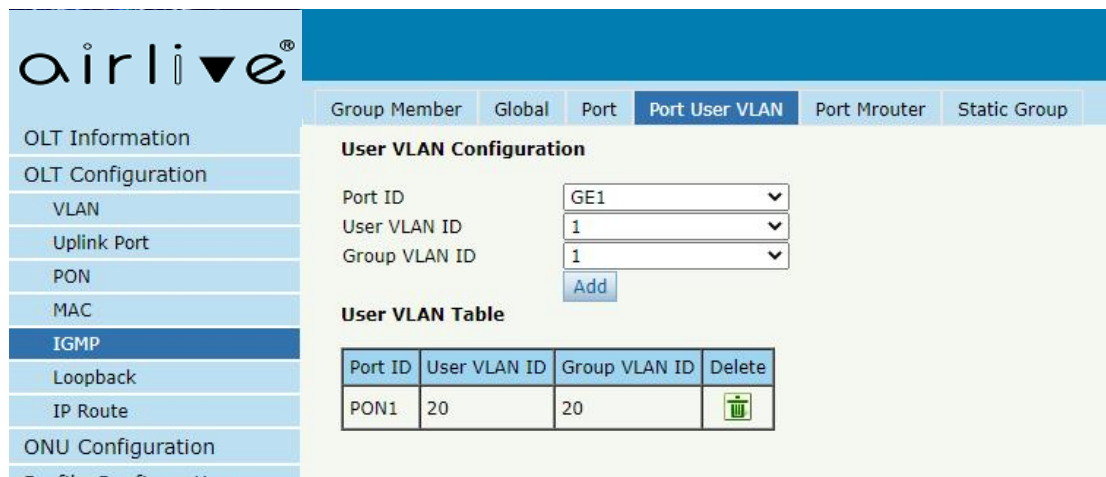


Figure 3-5-4: IGMP Port User VLAN

### 3.5.5 Port Mrouter

#### OLT Configuration → IGMP → Port Mrouter

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

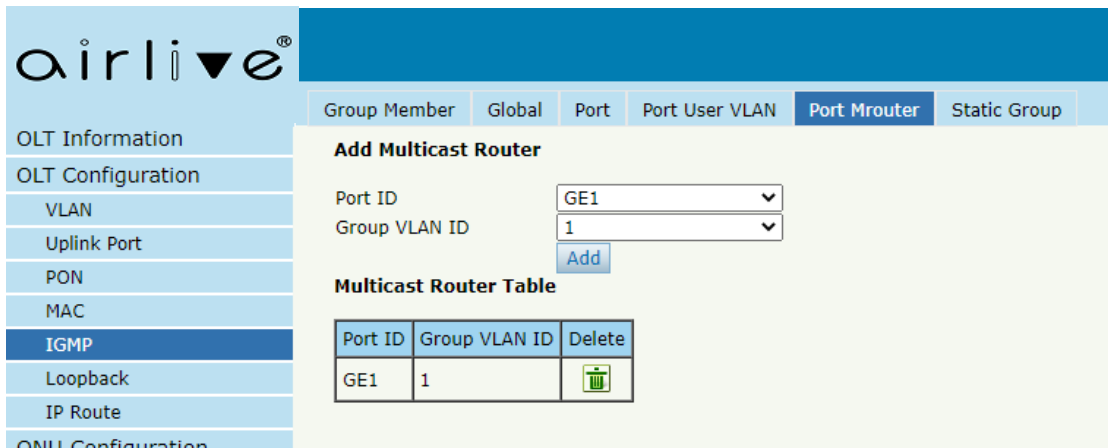


Figure 3-5-5: IGMP Port Mrouter

### 3.5.6 Static Group

#### OLT Configuration → IGMP → Static Group

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

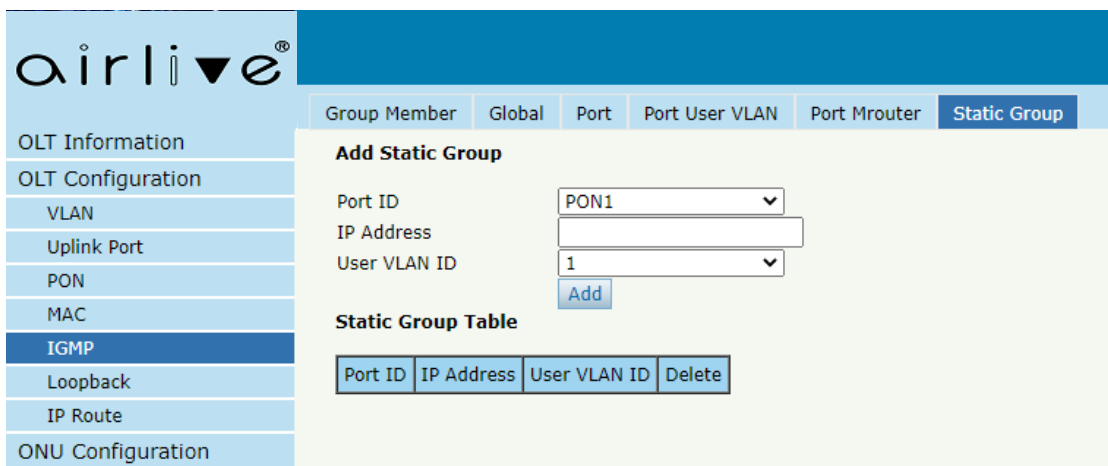


Figure 3-5-7: IGMP Static Group

### 3.6 Loopback

Loopback can detect loop ports and process loop ports.

### 3.6.1 Information

#### OLT Configuration → Loopback → Information

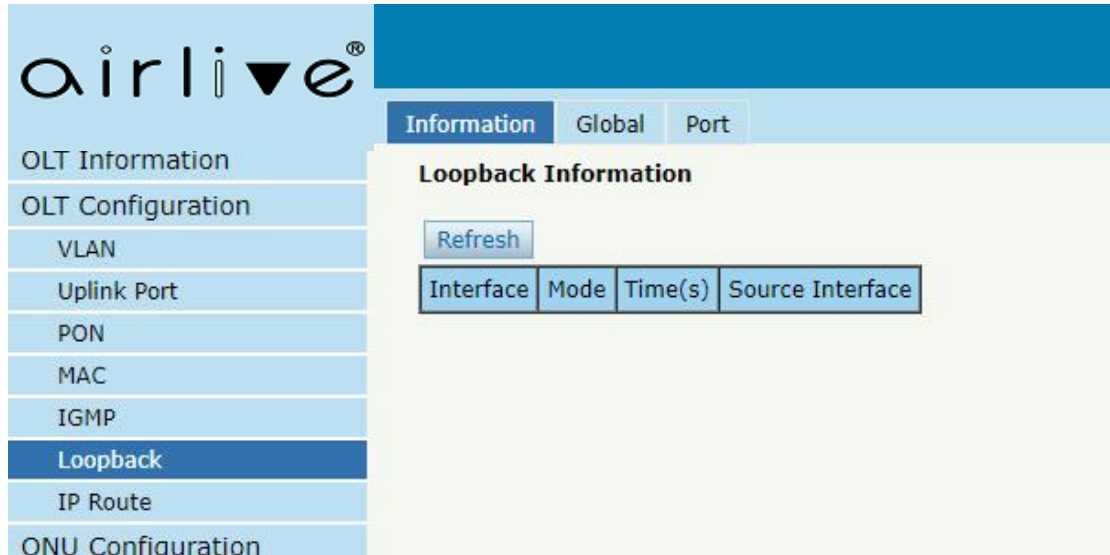


Figure 3-6-1: Loopback Information

### 3.6.2 Global

#### OLT Configuration → Loopback → Global

This page is used to enable or disable loopback detect, set the loopback range, mode, and aging time, loopback packet sending mode and packet sending interval.

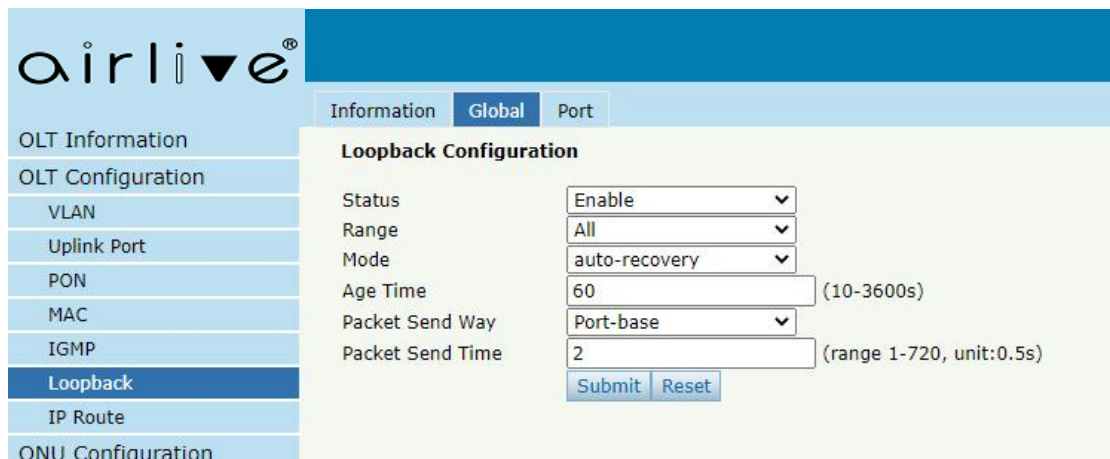


Figure 3-6-2: Loopback Global

### 3.6.3 Port

#### OLT Configuration → Loopback → Port

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

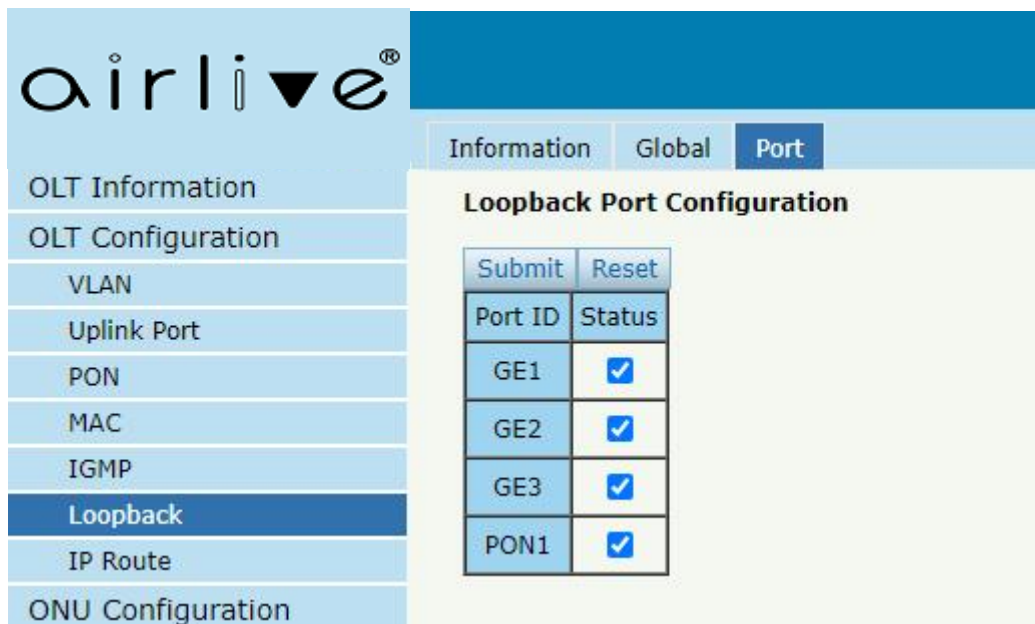


Figure 3-6-3: Loopback Port

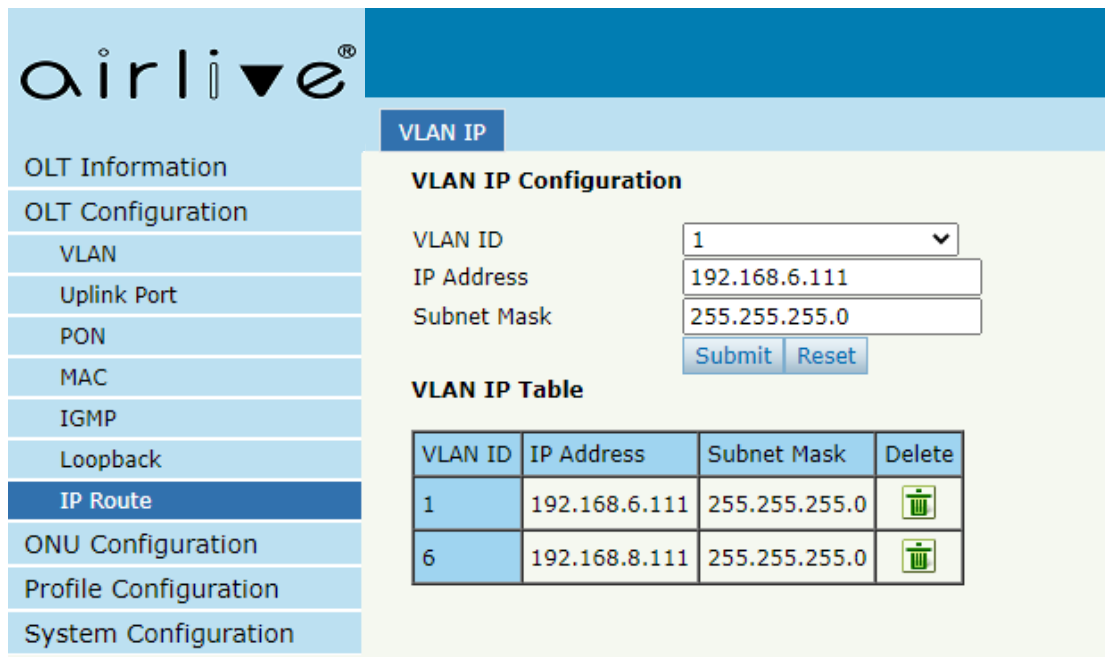
## 3.7 IP Route

### 3.7.1 VLAN IP

#### OLT Configuration → IP Route → VLAN IP

This configuration is used to configure IP address for VLAN. When the VLAN is added to a port, you can access OLT by the IP address from the port.





The screenshot displays the AirLive web interface for VLAN IP configuration. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, VLAN, Uplink Port, PON, MAC, IGMP, Loopback, IP Route (highlighted), ONU Configuration, Profile Configuration, and System Configuration. The main content area is titled 'VLAN IP' and contains two sections:

**VLAN IP Configuration**

VLAN ID: 1 (dropdown menu)  
IP Address: 192.168.6.111  
Subnet Mask: 255.255.255.0  
Buttons: Submit, Reset

**VLAN IP Table**



VLAN ID	IP Address	Subnet Mask	Delete
1	192.168.6.111	255.255.255.0	
6	192.168.8.111	255.255.255.0	

Figure 3-7-1: VLAN IP

## Chapter 4 ONU Configuration

This chapter is about the ONU management by OLT.

### 4.1 ONU AuthList

#### 4.1.1 ONU List

**ONU Configuration → ONU AuthList → ONU List**

All registered ONUs will be displayed in this interface. You can check ONU using profile, Registration mode and do some operations on every ONU.

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTbac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTbac700b6f	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-1: ONU List

#### 4.1.1.1 Config

**ONU Configuration → ONU AuthList → ONU List → Config**

Configure ONU parameter information which you selected.

**ONU Authentication Information**

Port ID:

Search Mode:

Search Info:

ONU Count: 20/23

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-2: Configure ONU

#### 4.1.1.1.1 Tcont

**ONU Configuration → ONU AuthList → ONU List → Config → Tcont**

Create tcont ID and bind DBA profile. Tcont name is optional.

**ONU Tcont Information (PON:1 ONU:24)**

Tcont ID	Name	DBA Profile	Action
1	tcont_1	default1	<a href="#">Delete</a>

**Add ONU Tcont**

Tcont ID:

Tcont Name:

DBA Profile Name:

Figure 4-1-3: Create Tcont

#### 4.1.1.1.2 Gempport

**ONU Configuration → ONU AuthList → ONU List → Config → Gempport**

Create gempport ID and bind tcont ID.

**ONU Gempport Info (PON:1 ONU:24)**

Gempport ID	Name	Tcont	State	UpQueueMapId	DownQueueMapId	Action
1	gem_1	1	Enable	N/A	N/A	<a href="#">Delete</a>

**Add ONU Gempport**

Gempport ID	<input type="text" value="2"/>
TcontID	<input type="text" value="1"/>
Gempport Name	<input type="text"/>
UpQueueMapId	<input type="text" value="N/A"/> (0-3)
DownQueueMapId	<input type="text" value="N/A"/> (0-7)
State	<input type="text" value="Enable"/>

[Commit](#)

**ONU Gempport Rate Limit Info**

Gempport ID	Name	Tcont	Upstream CIR	Upstream PIR	Downstream CIR	Downstream PIR	Action
1	gem_1	1	0	0	0	0	<a href="#">Delete</a>

**ONU Gempport Rate Limit Configuration**

Gempport ID	<input type="text" value="1"/>
Upstream Traffic Committed Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Upstream Traffic Peak Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Downstream Traffic Committed Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Downstream Traffic Peak Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)

[Commit](#)

Figure 4-1-4: Create gempport

### 4.1.1.1.3 Service

**ONU Configuration → ONU AuthList → ONU List → Config → Service**

Create a service, set the VLAN and VLAN mode and bind one gempport ID.

**ONU Service Information (PON:1 ONU:24)**

ServiceName	Gempport	Vlan Mode	Vlan List	Port	Action
ser_1	1	Tag	3000	N/A	<a href="#">Delete</a>

**Add ONU Service**

ServiceName	<input type="text" value="ser_2"/>
Gempport ID	<input type="text" value="1"/>
Vlan Mode	<input type="text" value="Tag"/>
Vlan List	<input type="text" value="3000"/> (X,X or X-X;0 for all;max 12 vlans)
PortType	<input type="text" value="N/A"/>

[Commit](#)

Figure 4-1-5: Create service

#### 4.1.1.1.4 PortVlan

**ONU Configuration → ONU AuthList → ONU List → Config → PortVlan**

Set the VLAN mode of the ONU's port. For HGU, need to configure veip 1 transparent; for SFU, configure Ethernet port directly.

PortName	Mode	Vlan	Vlan Priority(tag)	Default Vlan(hybrid)	Default Priority(hybrid)	CVlan(translate)	CVlan Priority(translate)	SVlan(translate)	SVlan Priority(translate)	Action
veip_1	Transparent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete

**Add ONU PortVlan**

Mode:

PortType:

Port Id:

Figure 4-1-6: Configure port VLAN mode

#### 4.1.1.1.5 Multicast

**ONU Configuration → ONU AuthList → ONU List → Config → Multicast**

Set the Multicast VLAN of ONU and the Multicast VLAN mode of ONU's port.

ONU ID	Vlan List	Action
24	N/A	Delete All

(100,103 or 105-108;max 12 vlans)

**Multicast vlan tag strip**

Vlan Mode | Port | Action

(eth number)

Figure 4-1-7: Configure multicast VLAN

#### 4.1.1.1.6 Port

**ONU Configuration → ONU AuthList → ONU List → Config → Port**

Set the basic configuration and speed limit of the ONU LAN port.

Please note that you can select the LAN port to configure on the ONU Port.

**Port Basic Configuration (PON:1 ONU:24)**

ONU Port: LAN1

Admin Status

Loopback

Port Speed: auto

MAC Limit(0-255): 0

**Upstream Rate Limit Config**

Upstream Rate-Limit CIR (kbps): 0

Upstream Rate-Limit PIR (kbps): 0

**Downstream Rate Limit Config**

Downstream Rate-Limit CIR (kbps): 0

Downstream Rate-Limit PIR (kbps): 0

**Port Status**

Interface	Speed Status	Speed Config	Link Status	Admin Status	LOOP status	Max Frame	Upstream Rate-Limit (kbps)	Downstream Rate-Limit (kbps)
LAN1	unknown	auto	down	enable	disable	1632	CIR:0 PIR:0	CIR:0 PIR:0
LAN2	unknown	auto	down	enable	disable	1632	CIR:0 PIR:0	CIR:0 PIR:0

Figure 4-1-8: ONU Port Configuration

#### 4.1.1.1.7 Ip Host

**ONU Configuration → ONU AuthList → ONU List → Config → Ip Host**

Create IP host for ONU wan connection. It is used for ONU management.

The screenshot shows the 'Ip Host' configuration page in the AirLive web interface. The 'Ip Host' tab is highlighted in red. The page displays configuration options for IP host ID, description, IP mode (set to DHCP), and DNS servers. There are also sections for IP host VLAN configuration with fields for VLAN ID and priority.

Figure 4-1-9: Configure IP host

#### 4.1.1.1.8 MAC

**ONU Configuration → ONU AuthList → ONU List → Config → MAC**

Configure the MAC counts limit based on ONU or Gemport, and 0 means there is no limit.

This interface can also display the learned MAC addresses of each LAN port of the ONU.

The screenshot shows the 'MAC' configuration page in the AirLive web interface. The 'MAC' tab is highlighted in red. The page displays configuration options for MAC limit (0-255) and GEM Mac limit configuration (gemport, MAC Counts(0-128, 0 for not limit)). There is also a section for 'Onu eth mac learned info' with a dropdown for 'onu Port' and a 'Refresh' button.

Figure 4-1-10: MAC Limit

#### 4.1.1.1.9 WAN

**ONU Configuration → ONU AuthList → ONU List → Config → WAN**

ONU WAN connection is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "WAN" can be shown on this page.

The screenshot shows the WAN configuration interface. The top navigation bar includes tabs for 'ONU list', 'ONU Status', 'ONU Optical Information', 'ONU Version Information', 'ONU Manual Add', 'ONU Allowlist', and 'ONU Statistics'. The 'WAN' tab is highlighted. Below the navigation bar, there are sub-tabs for 'SIP', 'POTS', 'Misc', 'Misc2', 'TR069', 'Security', and 'Loopback Detection'. The main content area is titled 'WAN Connect Table (PON:1 ONU:24)' and contains a table with the following data:

Index	Mode	IP Version	Service Mode	Status	MAC Address	Configuration Information
1	route	ipv4	internet	Disconnected	00:4F:5B:00:01:25	QoS Enable:disable,MTU:1500,Connect Mode:DHCP, Nat:enable, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable, Bind:lan1

Below the table is the 'WAN Connect Parameter Configuration' section, which includes the following fields:

- WAN Index: NEW
- Mode: bridge
- IP Version: ipv4
- VLAN Mode: Tag
- VLAN ID: 0 (Tag:0-4095;Transparent:1-4095)
- VLAN Cos: 0 (0-7)
- QinQ Enable: Disable
- QinQ TPID: 0 (1-65534)
- SVLAN ID: 0 (1-4095)
- SVLAN Cos: 0 (0-7)
- QoS Enable: Disable
- Service Mode: Internet

There are also checkboxes for 'Port Binding' (Lan1, Lan2) and 'SSID' (SSID1 through SSID8). A 'Submit' button is located below these fields.

At the bottom, there is a 'WAN Connect running-config' section with a 'Submit' button and a table showing the running configuration for the WAN connection:

Index	onu running-config	Delete
1	Connect Type:route,IP Version:ipv4,Service Mode:internet,QoS Enable:disable,MTU:1500,Connect Mode:DHCP, Nat:enable, VLAN Mode:Tag,VLAN ID:3000, VLAN Cos:0, QinQ Enable:disable, Bind:lan1	

Figure 4-1-11: Configure WAN

#### 4.1.1.1.10 DHCP Server

**ONU Configuration → ONU AuthList → ONU List → Config → DHCP Server**

ONU LAN and DHCP server are configured by private OMCI between



OLT and ONU. When the connected ONU supports this function, the option "DHCP Server" can be shown on this page.

ONU list		ONU Status	ONU Optical Information	ONU Version Information	ONU Manual Add	ONU Allowlist	ONU Statistics						
OLT Information	Tcont	Gempport	Service	Port/Vlan	Multicast	Port	Ip Host	MAC	WAN	<b>DHCP Server</b>	Bind Mode	WIFI	VOIP
OLT Configuration	SIP	POTS	Misc	Misc2	TR069	Security	Loopback Detection						
ONU Configuration	<b>DHCP Server Configuration (PON:1 ONU:24)</b>												
ONU AuthList	LAN IP Address	192.168.1.1											
ONU AutoFind	LAN Subnet Mask	255.255.255.0											
ONU AutoLearn	DHCP Server	Enable											
ONU Upgrade	Lease Time	86400											(0-4294967295)
Rogue ONU	Beginning IP Address	192.168.1.33											
Profile Configuration	Ending IP Address	192.168.1.254											
System Configuration	Pool Type	PC											
	Master DNS	202.96.128.86											
	Slave DNS	8.8.8.8											
	Gateway	192.168.1.1											
	<input type="button" value="Submit"/>												
	LAN IPv6 Address	fe80::1											
	Prefix Mode	<input checked="" type="checkbox"/> Static											
	Static Ipv6 Address	2099::											
	LAN Prefixlen	64											(48-64)
	DHCP Server Ipv6	Enable											
	Preference Time	10000											(0-4294967295)
	Valid Time	20000											(0-4294967295)
	Beginning IPv6 Address	0001:0001:0001:0001											
	Ending IPv6 Address	0002:0002:0002:0002											
	Pool Type	PC											
	DNSv6 Master												
	DNSv6 Slave												
	IPv6 Gateway	fe80::1											
	RA	<input checked="" type="checkbox"/> Active											
	Manage	disable											
	Other	enable											
	Max Interval	20											(1-1800)s
	Min Interval	10											(1-1800)s
	<input type="button" value="Submit"/>												

Figure 4-1-12: ONU DHCP Server

#### 4.1.1.1.11 Bind Mode

**ONU Configuration → ONU AuthList → ONU List → Config → Bind Mode**

ONU LAN bind mode is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "Bind Mode" can be shown on this page.

The screenshot shows the 'LAN Bind Mode Configuration (PON:1 ONU:24)' page. The 'Bind Mode' tab is circled in red. The configuration includes:

- Port: LAN1
- Bind Mode: N/A
- Submit button

Figure 4-1-13: LAN Bind Mode Configuration

#### 4.1.1.1.12 WIFI

**ONU Configuration → ONU AuthList → ONU List → Config → WIFI**

ONU WIFI is configured by private OMCI between OLT and ONU. When the connected ONU supports this function, the option "WIFI" can be shown on this page.

The screenshot shows the 'WiFi Switch Configuration (PON:1 ONU:24)' page. The 'WIFI' tab is circled in red. The configuration includes:

- WiFi Switch Configuration:**
  - WiFi0 Status: enable
  - WiFi0 Area: FCC
  - WiFi0 Standard: 802.11ac-A/N/AC
  - WiFi0 Channel: auto
  - WiFi0 Transmit Power: 20 (0-20dBm)
  - WiFi0 Channel Width: 80 MHz
  - WiFi0 EasyMesh Status: disable
  - WiFi1 Status: enable
  - WiFi1 Area: FCC
  - WiFi1 Standard: 802.11bgn
  - WiFi1 Channel: 0 (ETSI/SPAIN/RUSSIAN/CN/World-wide:0-13;FCC/IC/NCC:0-11;FRANCE:0,10-13;MKK/MKK1/MKK2/MKK3/Global:0-14;ISREAL:0,3-13;0:auto)
  - WiFi1 Transmit Power: 20 (0-20dBm)
  - WiFi1 Channel Width: 20 MHz
- WiFi SSID Configuration:**
  - SSID: SSID1(WIFI0)
  - Name: FTTH-5G
  - WiFi Status: enable
  - Hide Status: disable
  - Network Authentication: WPAPSK/WPA2PSK
  - Encrypt Type: TKIP+AES
  - Shared Key: \*\*\*\*\*

Figure 4-1-14: WIFI Configuration

#### 4.1.1.1.13 VOIP

**ONU Configuration → ONU AuthList → ONU List → Config → VOIP**

This page shows WAN information of VOIP service, including IP address and VLAN. You can also operate VOIP module on this page. When the connected ONU supports VOIP, the option "VOIP" can be shown on this page.

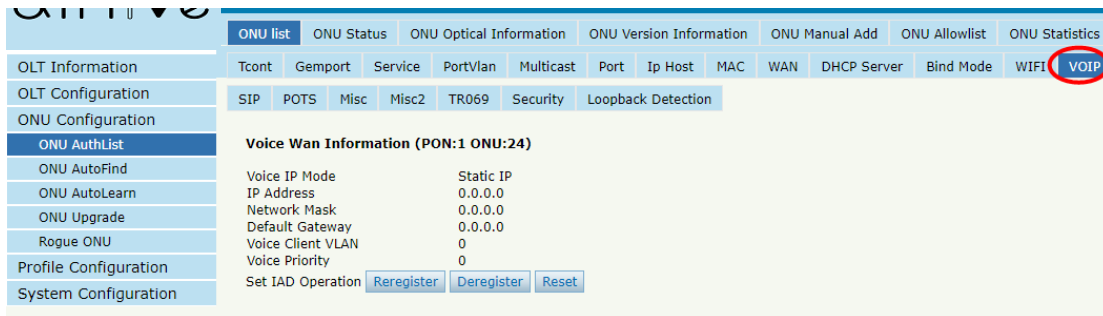


Figure 4-1-15: Voice Wan Information

#### 4.1.1.1.14 SIP

**ONU Configuration → ONU AuthList → ONU List → Config → SIP**

ONU VoIP SIP parameter can be configured on this page, including SIP server, proxy server, digit map and so on. When the connected ONU supports VOIP, the option "SIP" can be shown on this page.

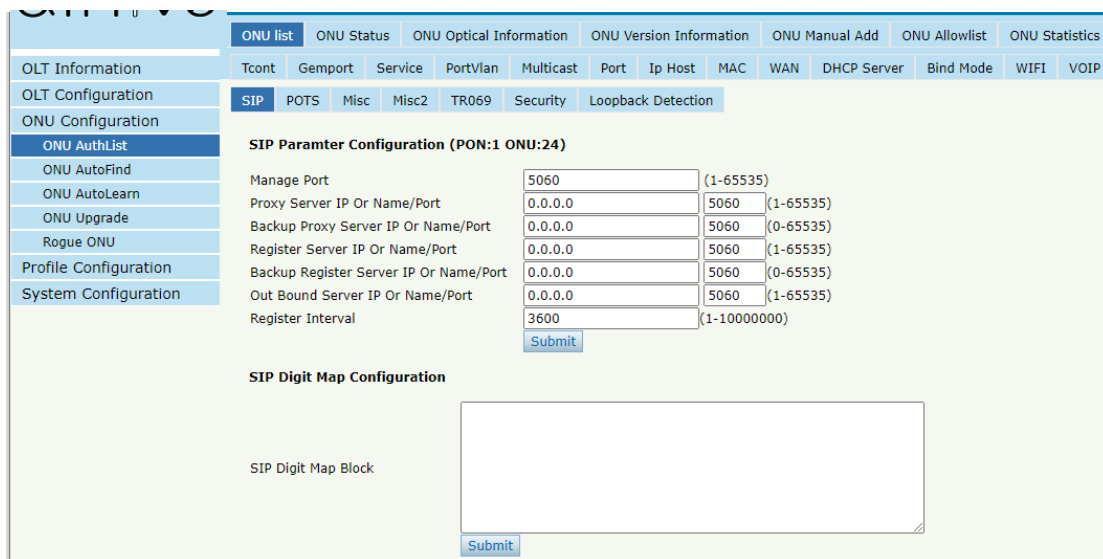


Figure 4-1-16: SIP Parameter

#### 4.1.1.1.15 POTS

**ONU Configuration → ONU AuthList → ONU List → Config → POTS**

ONU VoIP POTS account, password and other VOIP parameters of POTS can be configured on this page; the length of SIP account and password can't be more than 16 characters, the length of SIP username can't be more than 32 characters.

When the connected ONU supports VOIP, the option "POTS" can be shown on this page.

The screenshot displays the POTS configuration page. The left sidebar contains navigation options: OLT Information, OLT Configuration, ONU Configuration, ONU AuthList, ONU AutoFind, ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area is divided into several sections:

- Navigation Tabs:** ONU list, ONU Status, ONU Optical Information, ONU Version Information, ONU Manual Add, ONU Allowlist, ONU Statistics.
- Configuration Tabs:** Tcont, Gemport, Service, PortVlan, Multicast, Port, Ip Host, MAC, WAN, DHCP Server, Bind Mode, WIFI, VOIP.
- Sub-sections:** SIP, POTS (highlighted with a red circle), Misc, Misc2, TR069, Security, Loopback Detection.
- VoIP Port:** A dropdown menu currently set to 'Pots1'.
- POTS Information:** A 'Port Status' field set to 'Inactive'.
- SIP User Parameter Configuration (PON:1 ONU:24):**
  - Account active:  Disable  Enable
  - User Account:
  - User Name:
  - User Password:
  - Submit button.
- Advanced Parameter Configuration:**
  - VAD:
  - Echo cancel:
  - Input gain(dB):
  - Output gain(dB):
  - Dtmf mode:
  - Submit button.

Figure 4-1-17: POTS Configuration

#### 4.1.1.1.16 Misc

**ONU Configuration → ONU AuthList → ONU List → Config → Misc**

Misc includes other features of ONUs configured by private OMCI, such as reset default, CATV control, and so on.

The screenshot shows the 'Misc Control Operation' configuration page in the AirLive OLT web interface. The left sidebar contains a navigation menu with 'ONU AuthList' selected. The main content area is divided into several sections:

- Misc Control Operation:**
  - Save configuration: Save
  - Restore default: Restore
  - IGMP configuration:  IGMP Enable Submit
  - STP configuration:  STP Enable Submit
  - Port isolate:  Port isolate Enable Submit
- Speed Limit Configuration:**
  - Upstream limit: 0
  - DownStream limit: 0
  - Submit
- Mac Table Configuration:**
  - mac age time: 0
  - Pon mac limit: 0
  - Lan mac limit: 0
  - Submit
- Mac Address Table:**
  - Clean

Figure 4-1-18: Misc Configuration

#### 4.1.1.1.17 Misc2

**ONU Configuration → ONU AuthList → ONU List → Config → Misc2**

Misc2 includes the NAT type and UPnP configuration of ONUs configured by private OMCI.

The screenshot shows the 'Misc2 Control Operation (PON:1 ONU:24)' configuration page in the AirLive OLT web interface. The left sidebar contains a navigation menu with 'ONU AuthList' selected. The main content area is divided into several sections:

- Misc2 Control Operation (PON:1 ONU:24):**
  - ONU NAT Type:**
    - NAT Type: NAT1
    - Submit Refresh
  - ONU UPnP Configuration:**
    - UPnP Status: disable
    - WAN Index: 1
    - Submit Refresh

Figure 4-1-19: Misc2 Configuration

#### 4.1.1.1.18 TR069

**ONU Configuration → ONU AuthList → ONU List → Config → TR069**

ONU TR069 is configured by private OMCI between OLT and ONU.

It supports configuring TR069 management parameters and STUN server configurations.

The screenshot displays the TR069 Configuration page for PON:1 ONU:24. The interface is divided into two main sections: TR069 Manage Configuration and TR069 Stun Configuration. The TR069 Manage Configuration section includes the following fields: Tr069 Manage Status (set to Disable), ACS Server Address, ACS Server Username, ACS Server Password, Certificate (set to Disable), Inform (set to Disable), Inform Interval Time (0-4294967295), Reverse Connection Username, and Reverse Connection Password. The TR069 Stun Configuration section includes the following fields: Tr069 STUN Status (set to Disable), Stun Server Address, Stun Server Port (1-65535), Stun Server User Name, and Stun Server Password. A Submit button is located at the bottom of each configuration section.

Figure 4-1-20: TR069 Configuration

#### 4.1.1.1.19 Security

**ONU Configuration → ONU AuthList → ONU List → Config → Security**

ONU Security is configured by private OMCI between OLT and ONU.

It supports you to modify ONU passwords, firewall level, and device access rules.

Please note that if you need to enable the device's access protocol, you need to first modify the firewall level to low or disabled.

**User Control Configuration (PON:1 ONU:24)**

Admin Name: admin

Admin Password: admin123

User Name: user

User Password: user123

**Firewall Level**

Firewall Level: High

**ACL Configuration**

Protocol	Control	Lan	Wan	Port
Ping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disable	
Telnet	<input type="checkbox"/>	<input type="checkbox"/>	Disable	23
FTP	<input type="checkbox"/>	<input type="checkbox"/>	Disable	21
HTTP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disable	80
HTTPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disable	443
TFTP	<input type="checkbox"/>	<input type="checkbox"/>	Disable	0
SSH	<input type="checkbox"/>	<input type="checkbox"/>	Disable	22

Figure 4-1-21: Security Configuration

#### 4.1.1.1.20 Loopback Detection

**ONU Configuration → ONU AuthList → ONU List → Config → Loopback Detection**

ONU Loopback Detection is configured by private OMCI between OLT and ONU. It supports configuring the loop detection status and parameters of the ONU.

**Loopback Detection Configuration (PON:1 ONU:24)**

**Please note that not all onu support Destination MAC Type,Port Closing Time, Alarm and Portdislooped configuration.**

Status: enable

Check Interval: 1000 (1-60000)ms

Recover Interval: 60 (1-1800)s

Ethernet Type: fffa (HHHH)

VLAN ID: 0 (0-4094; 0 means no vlan is configured)

Destination MAC Type: Broadcast Address

Port Closing Time: 60 (1-1800)s

Alarm: enable

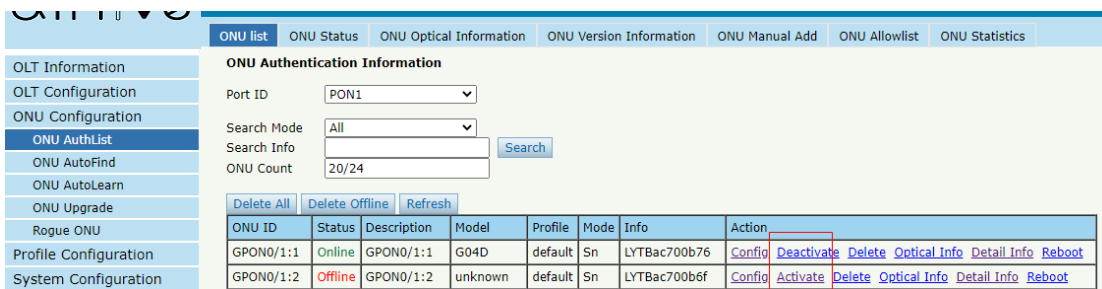
Portdislooped: enable

Figure 4-1-22: Loopback Detection Configuration

### 4.1.1.2 Deactivate

**ONU Configuration → ONU AuthList → ONU List → Deactivate (Activate)**

Deactivate the ONU which you selected, the ONU will be disabled and the registration failed. Activate selected ONU, this ONU will register successfully.



The screenshot shows the 'ONU Authentication Information' page. The 'ONU List' tab is selected. The page displays search filters (Port ID: PON1, Search Mode: All, Search Info: , ONU Count: 20/24) and a table of ONUs. The 'Deactivate' link for the first ONU (GPON0/1:1) is highlighted with a red box.

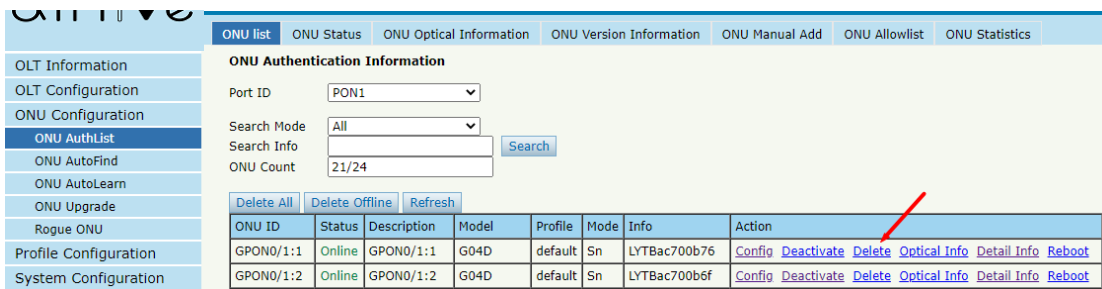
ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Offline	GPON0/1:2	unknown	default	Sn	LYTBac700b6f	<a href="#">Config</a> <a href="#">Activate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-23: Deactivate/Activate ONU

### 4.1.1.3 Delete

**ONU Configuration → ONU AuthList → ONU List → Delete**

Delete the ONU which you selected, the ONU will be deleted and the registration failed. All the configurations related this ONU will be deleted as well.



The screenshot shows the 'ONU Authentication Information' page. The 'ONU List' tab is selected. The page displays search filters (Port ID: PON1, Search Mode: All, Search Info: , ONU Count: 21/24) and a table of ONUs. The 'Delete' link for the first ONU (GPON0/1:1) is highlighted with a red arrow.

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-24: Delete ONU



### 4.1.1.4 Optical Info

**ONU Configuration → ONU AuthList → ONU List → Optical Info**

Check the Optical Information of ONU PON module which you selected.

The screenshot shows the 'ONU Optical Information' page in the AirLive web interface. The page is divided into two main sections: 'ONU Authentication Information' and 'ONU Optical Info'.

**ONU Authentication Information:**

- Port ID: PON1
- Search Mode: All
- Search Info: (empty)
- ONU Count: 21/24
- Buttons: Delete All, Delete Offline, Refresh

**ONU List Table:**

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	Config Deactivate Delete <b>Optical Info</b> Detail Info Reboot
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	Config Deactivate Delete Optical Info Detail Info Reboot

**ONU Optical Info:**

Back

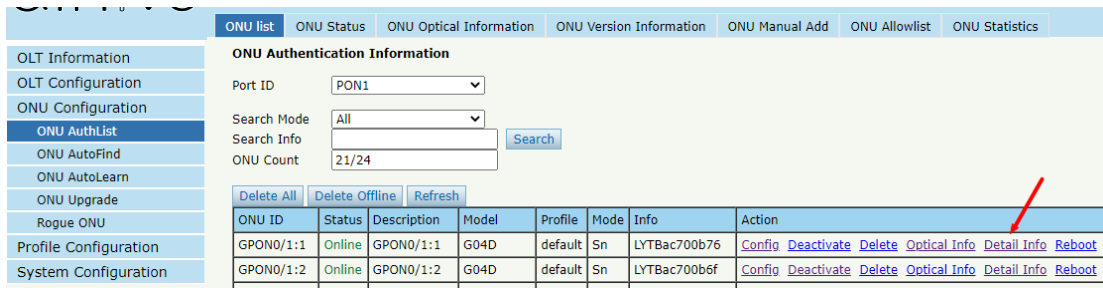
Interface	pon_0/1
GEM_blocklen	48
Sf Threshold	5
Sd Threshold	9
Alarm	enable
Alarm disable interval	0
Total T-CONT number	12
Piggyback DBA rpt mode	mode 0 only
Rx optical level	-11.04
Lower rx optical threshold	onu internal policy
Upper rx optical threshold	onu internal policy
Tx optical level	1.79
Lower tx optical threshold	onu internal policy
Upper tx optical threshold	onu internal policy
ONU response time	0
Power feed voltage	3.42(V)
Laser bias current	21.40(mA)
Temperature	32.35(C)
Distance	1(m)

Figure 4-1-25: Optical Info of ONU

### 4.1.1.5 Detail Info

**ONU Configuration → ONU AuthList → ONU List → Detail Info**

Check the Detail Info of the ONU which you selected.



ONU list | ONU Status | ONU Optical Information | ONU Version Information | ONU Manual Add | ONU Allowlist | ONU Statistics

**ONU Authentication Information**

Port ID: PON1

Search Mode: All

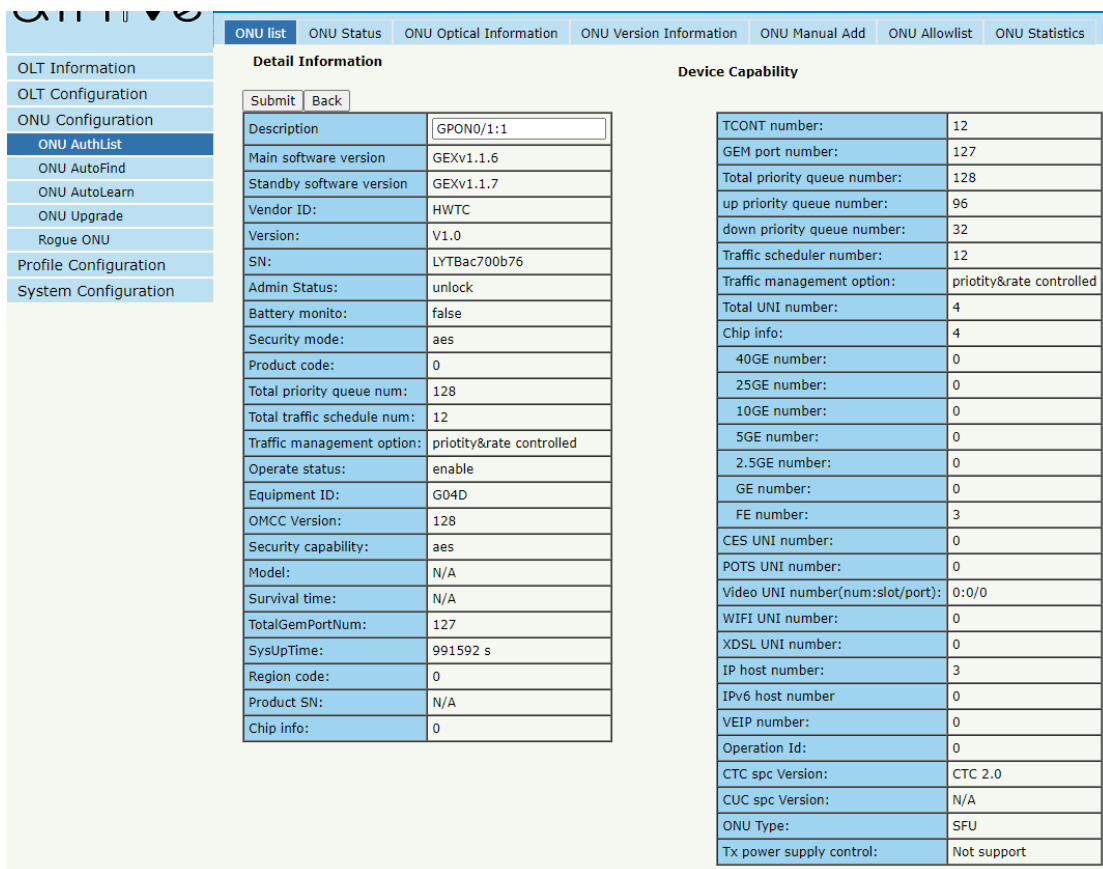
Search Info:

ONU Count: 21/24

Delete All | Delete Offline | Refresh

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPN0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPN0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-26: Click Detail info



ONU list | ONU Status | ONU Optical Information | ONU Version Information | ONU Manual Add | ONU Allowlist | ONU Statistics

**Detail Information**

Submit | Back

Description	GPN0/1:1
Main software version	GEXv1.1.6
Standby software version	GEXv1.1.7
Vendor ID:	HWTC
Version:	V1.0
SN:	LYTBac700b76
Admin Status:	unlock
Battery monito:	false
Security mode:	aes
Product code:	0
Total priority queue num:	128
Total traffic schedule num:	12
Traffic management option:	priority&rate controlled
Operate status:	enable
Equipment ID:	G04D
OMCC Version:	128
Security capability:	aes
Model:	N/A
Survival time:	N/A
TotalGemPortNum:	127
SysUpTime:	991592 s
Region code:	0
Product SN:	N/A
Chip info:	0

**Device Capability**

TCONT number:	12
GEM port number:	127
Total priority queue number:	128
up priority queue number:	96
down priority queue number:	32
Traffic scheduler number:	12
Traffic management option:	priority&rate controlled
Total UNI number:	4
Chip info:	4
40GE number:	0
25GE number:	0
10GE number:	0
5GE number:	0
2.5GE number:	0
GE number:	0
FE number:	3
CES UNI number:	0
POTS UNI number:	0
Video UNI number(num:slot/port):	0:0/0
WIFI UNI number:	0
XDSL UNI number:	0
IP host number:	3
IPv6 host number:	0
VEIP number:	0
Operation Id:	0
CTC spc Version:	CTC 2.0
CUC spc Version:	N/A
ONU Type:	SFU
Tx power supply control:	Not support

Figure 4-1-27: Detail info of ONU

#### 4.1.1.6 Reboot

**ONU Configuration → ONU AuthList → ONU List → Reboot**

Reboot ONU which you selected.

**ONU Authentication Information**

Port ID: PON1

Search Mode: All

Search Info: [ ] Search

ONU Count: 21/24

Buttons: Delete All, Delete Offline, Refresh

ONU ID	Status	Description	Model	Profile	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	G04D	default	Sn	LYTBac700b76	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>
GPON0/1:2	Online	GPON0/1:2	G04D	default	Sn	LYTBac700b6f	<a href="#">Config</a> <a href="#">Deactivate</a> <a href="#">Delete</a> <a href="#">Optical Info</a> <a href="#">Detail Info</a> <a href="#">Reboot</a>

Figure 4-1-28: Reboot ONU

## 4.1.2 ONU Status

### ONU Configuration → ONU AuthList → ONU Status

This page shows the ONU information of the activity. User can check "Last Register Time", "Last Deregister Reason" and "Active Time" of each ONU.

**ONU Status Information**

Port ID: PON1

total-24, logging-0, offline-3, syncMib-0, configFail-0, working-21

Buttons: Refresh

ONU ID	Admin State	OMCC State	Phase State	Description	Last Register Time	Last Deregister Time	Last Deregister Reason	Alive Time
GPON0/1:1	enable	enable	working	GPON0/1:1	1970:01:01 08:01:18	N/A	N/A	11 11:27:39
GPON0/1:2	enable	enable	working	N/A	1970:01:12 19:23:36	N/A	Manual Deactivate	00:05:21
GPON0/1:3	enable	enable	working	NEO	1970:01:01 08:01:07	N/A	N/A	11 11:27:50
GPON0/1:4	enable	enable	working	N/A	1970:01:01 08:01:07	N/A	N/A	11 11:27:50

Figure 4-1-29: ONU Status

## 4.1.3 ONU Optical Info

### ONU Configuration → ONU AuthList → ONU Optical Info

This page displays ONU Rx and Tx power. A batch of ONU optical power information can be shown in a list. Clearly to check the register power when register issue happens.

ONU ID	Description	RX Power	TX Power
GPON0/1:1	GPON0/1:1	-11.04	1.79
GPON0/1:2	N/A	-11.52	2.09
GPON0/1:3	NEO	-22.44	2.40
GPON0/1:4	N/A	-15.74	2.29

Figure 4-1-30: ONU Optical Info

#### 4.1.4 ONU Version Information

##### ONU Configuration → ONU AuthList → ONU Version Information

This page displays the main and standby software versions of the ONU.

You can display the version information of a batch of ONUs in the list.

ONU ID	Description	Main software version	Standby software version	Version
GPON0/1:1	GPON0/1:1	GEXv1.1.6	GEXv1.1.7	V1.0
GPON0/1:2	N/A	GEXv1.1.6	GEXv1.1.7	V1.0
GPON0/1:3	NEO	1.0.36	1.0.29	V1.0
GPON0/1:4	N/A	1.0.38	1.0.38	V3.21

Figure 4-1-31: ONU Version Info

#### 4.1.5 ONU Manual Add

##### ONU Configuration → ONU AuthList → ONU Manual Add

You can manually add ONU to a selected PON port. ONU will appear in the ONU list after you added.

The screenshot shows the 'Add ONU' configuration page. The sidebar on the left contains the following menu items: OLT Information, OLT Configuration, ONU Configuration, **ONU AuthList**, ONU AutoFind, ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has a breadcrumb trail: ONU list > ONU Status > ONU Optical Information > ONU Version Information > **ONU Manual Add** > ONU Allowlist > ONU Statistics. The 'Add ONU' form contains the following fields:

PON Port	PON1
ONU ID	25
Auth Mode	Sn
ONU Sn	
ONU Profile	default

A 'Submit' button is located below the form.

Figure 4-1-32: Add ONU Manually

### 4.1.6 ONU Allowlist

**ONU Configuration → ONU AuthList → ONU Allowlist**

You can set up an allowlist on this page.

Allowlist can restrict ONU registration based on SN. It allows ONUs within one or more segments to register, while other ONUs cannot register and go online.

The screenshot shows the 'Add ONU Allowlist' configuration page. The sidebar on the left contains the following menu items: OLT Information, OLT Configuration, ONU Configuration, **ONU AuthList**, ONU AutoFind, ONU AutoLearn, ONU Upgrade, Rogue ONU, Profile Configuration, and System Configuration. The main content area has a breadcrumb trail: ONU list > ONU Status > ONU Optical Information > ONU Version Information > ONU Manual Add > **ONU Allowlist** > ONU Statistics. The 'Add ONU Allowlist' form contains the following fields:

sn	
Endsn	

An 'Add' button is located below the form. Below the form is the 'ONU AllowList Table' with the following structure:

Index	Allowlist	Delete

'Clear' and 'Refresh' buttons are located below the table.

Figure 4-1-33: ONU Allowlist

### 4.1.7 ONU Statistics

**ONU Configuration → ONU AuthList → ONU Statistics**

This page displays the number of incoming and outgoing packets for batch ONUs.

ONU Statistics Info

Port ID: PON1  
ONU Group: ONU 1-64

Refresh

ONU ID	Input bytes	Input packets	Output bytes	Output packets
GPON0/1:1	1668179554	7447377	4407740822	7264425
GPON0/1:2	2126826402	11326942	17455662980	16118866
GPON0/1:3	6629453487	25404833	37790728939	32987999
GPON0/1:4	6204231680	29023071	53116789640	45278011
GPON0/1:5	12773306787	61880501	125007214637	112564647

Figure 4-1-34: ONU Statistics Info

## 4.2 ONU AutoFind

This chapter is about the configuration and management of automatic discovery ONUs.

### 4.2.1 Automatic Discovery

#### ONU Configuration → ONU AutoFind → Automatic Discovery

All ONUs which are authenticated failed or not authenticated will be displayed in this interface. You can check the serial number of ONUs.

Then click Add to authenticate ONU.

Automatic Discovery Aging Time

Automatic Discovery

Port ID: PON1

Search Info:  Search

Refresh Confirm All

Index	Sn	SnPw	loid	loidpw	Action
1	GPON001726bc	NULL	NULL	NULL	<a href="#">Add</a>

Figure 4-2-1: Automatic Discovery

	Automatic Discovery	Aging Time												
OLT Information	<p><b>Add Onu</b></p> <table border="1"> <tr> <td>PON Num</td> <td>1</td> </tr> <tr> <td>ONU Num</td> <td>25</td> </tr> <tr> <td>Auth Mode</td> <td>Sn</td> </tr> <tr> <td>Onu Sn</td> <td>GPON001726bc</td> </tr> <tr> <td>ONU Profile</td> <td>default</td> </tr> <tr> <td colspan="2"> <input type="button" value="Submit"/> <input type="button" value="Back"/> </td> </tr> </table>		PON Num	1	ONU Num	25	Auth Mode	Sn	Onu Sn	GPON001726bc	ONU Profile	default	<input type="button" value="Submit"/> <input type="button" value="Back"/>	
PON Num			1											
ONU Num			25											
Auth Mode			Sn											
Onu Sn			GPON001726bc											
ONU Profile			default											
<input type="button" value="Submit"/> <input type="button" value="Back"/>														
OLT Configuration														
ONU Configuration														
ONU AuthList														
<b>  ONU AutoFind</b>														
ONU AutoLearn														
ONU Upgrade														
Rogue ONU														
Profile Configuration														
System Configuration														

Figure 4-2-2: Add ONU

## 4.2.2 Aging Time

**ONU Configuration → ONU AutoFind → Aging Time**

It allows you to configure the retention time of automatically discovered ONU information. The default configuration is 5 minutes.

	Automatic Discovery	Aging Time				
OLT Information	<p><b>Aging Time Config</b></p> <p>Port ID <input type="text" value="PON1"/></p> <p>Aging Time <input type="text" value="300"/> (60-3600s)</p> <p><input type="button" value="Commit"/> <input type="button" value="Refresh"/></p> <table border="1"> <thead> <tr> <th>PON</th> <th>Aging Time</th> </tr> </thead> <tbody> <tr> <td>PON1</td> <td>300</td> </tr> </tbody> </table>		PON	Aging Time	PON1	300
PON			Aging Time			
PON1			300			
OLT Configuration						
ONU Configuration						
ONU AuthList						
<b>  ONU AutoFind</b>						
ONU AutoLearn						
ONU Upgrade						
Rogue ONU						
Profile Configuration						
System Configuration						

Figure 4-2-3: Aging Time

## 4.3 ONU AutoLearn

### 4.3.1 ONU AutoLearn

#### ONU Configuration → AutoLearn → ONU AutoLearn

ONU can automatically authenticate after enabling PON port automatic learning. At the same time, OLT supports automatic binding templates based on PON ports. There are also plug and play enabled switches on this interface.

*Note: this autolearn feature is disabled by default.*

PON ID	Enable	Line Profile	Srv Profile	Alarm Profile	Pri Profile	Format Profile
PON1	Disable	N/A	N/A	N/A	N/A	N/A

Figure 4-3-1:ONU AutoLearn

### 4.3.2 ONU AutoBind

#### ONU Configuration → AutoLearn → ONU AutoBind

Input the Equipment ID and bind the profile you need

*Note: you must create a profile first.*



Figure 4-3-2: Bind profile

### 4.3.3 ONU AutoDelete

#### ONU Configuration → AutoLearn → ONU AutoDelete

It supports periodic checking and deleting offline ONUs and this feature is disabled by default.

Figure 4-3-3: ONU AutoDelete

## 4.4 ONU Upgrade

ONU firmware can be upgraded by OLT. OLT supports manual upgrade and automatic upgrade.

### 4.4.1 UpLoad Image

#### ONU Configuration → ONU Upgrade → ONU Image

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

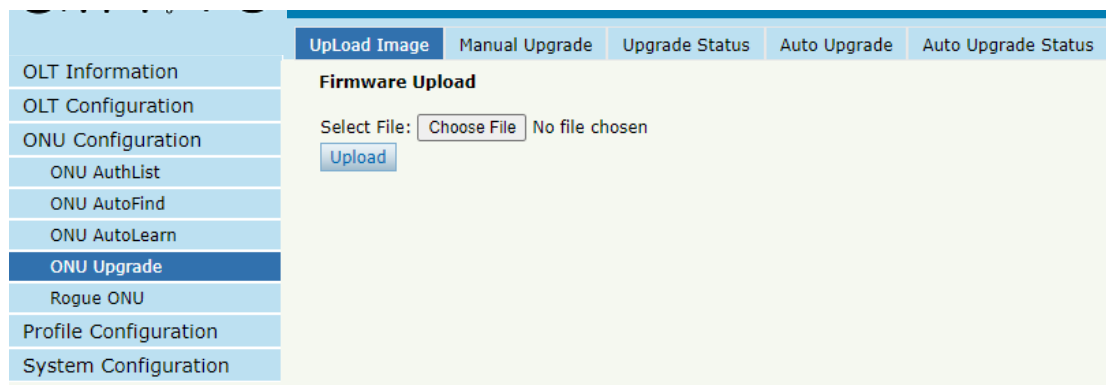


Figure 4-4-1: Upload image

### 4.4.2 Manual Upgrade

#### ONU Configuration → ONU Upgrade → Manual Upgrade

Select the ONU image and the ONU that needs upgrade, click Commit button to start upgrading. You can upgrade the same ONU model under one PON port each time.

Figure 4-4-2: Manual Upgrade

### 4.4.3 Upgrade Status

#### ONU Configuration → ONU Upgrade → Upgrade Status

When ONU is upgrading, the upgrading status will be shown on this page.

Figure 4-4-3: ONU Upgrade Status

### 4.4.4 Auto Upgrade

#### ONU Configuration → ONU Upgrade → Auto Upgrade

After uploaded the ONU firmware image, configured automatic upgrade conditions, once the ONU which has the same equipment ID and different

software version comes online, they will be upgraded automatically.

Each type of ONU has its own equipment ID, which you can check in ONU detail info.

Note: please upload the ONU firmware in advance on the upload image interface

The screenshot shows the 'Auto Upgrade' tab selected in the top navigation bar. On the left is a sidebar menu with 'ONU Upgrade' highlighted. The main content area is divided into several sections:

- Quick Activation ONU Equipment ID:** Contains a text input field for 'Equipment ID' and a 'Submit' button.
- Add ONU Auto Upgrade:** Contains two stacked text input fields for 'Equipment ID' and 'Software Version'.
- Select ONU Firmware:** Contains a dropdown menu for 'Firmware Name' and a 'Select' button.
- Buttons:** 'Add' and 'Reset' buttons are located below the firmware selection.
- ONU Auto Upgrade Information:** A table with columns for 'Equipment ID', 'Software Version', 'Image Name', and 'Delete'.

Figure 4-4-4: Auto Upgrade

#### 4.4.5 Auto Upgrade Status

**ONU Configuration → ONU Upgrade → Auto Upgrade Status**

When ONU is auto upgrading, the upgrading status will be shown on this page.

Auto Upgrade Status  
total-0, waiting-0, running-0, finish-0

Refresh Clean

PON	ONU	Status	Progress	Fail Reason	Action

PON	ONU	Status	Progress	Fail Reason	Commit Time	Action

Figure 4-4-5: Auto Upgrade Status

## 4.5 Rogue ONU

### ONU Configuration → Rogue ONU

After enabled rogue ONU detection, if there is a rogue ONU trying to register, it will appear in the list.

Rogue ONU Configuration

Rogue ONU Detect Configuration

PON	Detect state	Measurement	Alloc to scan	Auto shutdown	Operation	Algorithm
PON 1	disable	silent	all	manual	reboot	Early Detection

Change Configuration

Commit

PON	1
Detect state	Disable
Measurement	Silent
Alloc to scan	All
Auto shutdown	Disable
Shutdown type	reboot
Algorithm	Early Rogue Detector

Rogue ONU List

PON	ONU	Keywords	Time	State

Figure 4-5-1: Rogue ONU detect

## Chapter 5 Profile Configuration

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

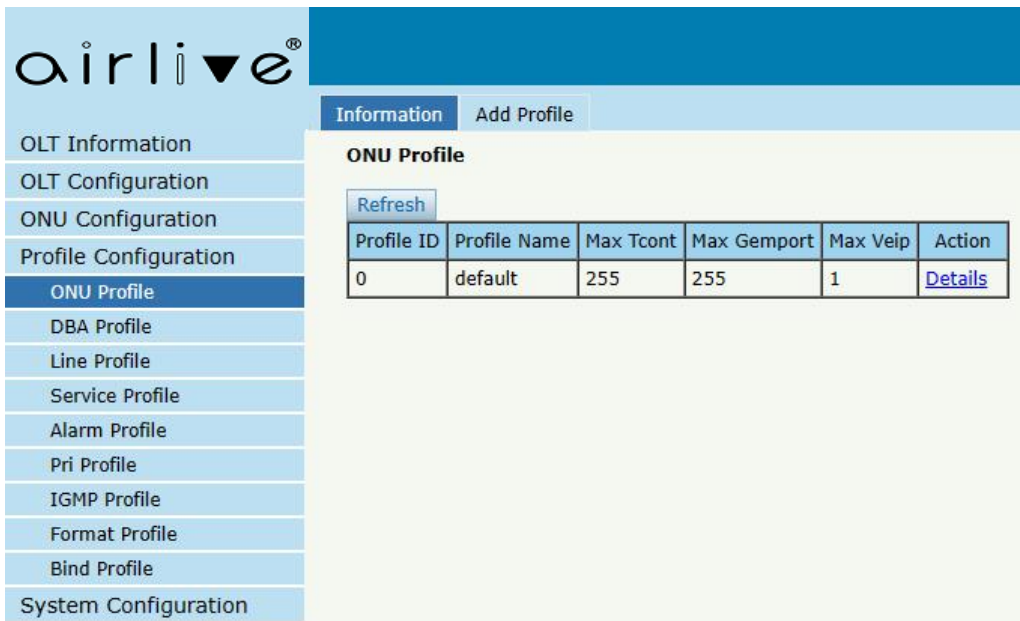
### 5.1 ONU Profile

The ONU profile is used for ONU authorization, and each type of ONU must specify only one ONU profile when authorization. The ONU profile specifies the capability of this ONU.

#### 5.1.1 Information

**Profile Configuration → ONU profile → Information**

The table displays ONU profile list. You can also do some operations, such as deleting and checking details info.



The screenshot shows the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, **ONU Profile** (highlighted), DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area has a header with 'Information' and 'Add Profile' tabs. Below the header is the 'ONU Profile' section, which includes a 'Refresh' button and a table with the following data:

Profile ID	Profile Name	Max Tcont	Max Gemport	Max Veip	Action
0	default	255	255	1	<a href="#">Details</a>

Figure 5-1-1: ONU profile list

### 5.1.2 Add profile

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

SFU type (only using bridge mode):

Usually, only need to set correct eth port and POTS port number of ONU, others can be kept default.

Information		Add Profile
OLT Information	Commit	
OLT Configuration	Profile ID	1
ONU Configuration	Profile Name	onu_profile_1
Profile Configuration	Description	onu_profile_1
<b>ONU Profile</b>	Max Tcont	8
DBA Profile	Max Gemport	32
Line Profile	Max eth	1
Service Profile	Max pots	0
Alarm Profile	Max Iphost	2
Pri Profile	Max Ipv6host	0
IGMP Profile	Max Veip	0
Format Profile	Service ability	Disable
Bind Profile	Service ability N:1	yes
System Configuration	Service ability 1:M	yes
	Service ability 1:P	yes
	Wifi mgmt via non OMCI	Disable
	Omci send mode	async
	Default multicast range	none

Figure 5-1-2: Add SFU profile

HGU type (with the routing wan connection mode):

For HGU type, need to set correct eth port and POTS port number, and set Veip to be 1, keep others default.

The screenshot shows the 'Add Profile' configuration page in the AirLive web interface. The left sidebar contains a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, **ONU Profile**, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'Add Profile' and includes a 'Commit' button. Below the button is a form with the following fields:

Profile ID	1
Profile Name	onu_profile_1
Description	onu_profile_1
Max Tcont	8
Max Gemport	32
Max eth	4
Max pots	2
Max Iphost	2
Max Ipv6host	0
Max Veip	1
Service ability	Disable
Service ability N:1	yes
Service ability 1:M	yes
Service ability 1:P	yes
Wifi mgmt via non OMCI	Disable
Omci send mode	async
Default multicast range	none

Figure 5-1-3: Add HGU profile

## 5.2 DBA Profile

DBA is a bandwidth allocation strategy that changes uplink bandwidth assigned to each T-CONT in real time according to the instant service



status of each ONU. There are five BW types supported and make sure that fixed  $\leq$  assured  $\leq$  max.

### 5.2.1 DBA profiles

**Profile Configuration → DBA Profile → DBA Profiles**

The table displays DBA profile list. You can also do some operations, such as delete and modify.

Profile ID	Profile Name	Profile Type	Fixed(Kbps)	Assured(Kbps)	Maximum(Kbps)	Action
0	default	1	10000			
128	default1	3		1024	1024000	<a href="#">Delete</a> <a href="#">Modify</a>

Figure 5-2-1: DBA profile list

### 5.2.2 Add profile

**Profile Configuration → DBA Profile → Add profile**

There are five types of DBA profile. In general, we use type3.

BW Type	Delay Sensitive	Applicable T-CONT Types				
		Type 1	Type 2	Type 3	Type 4	Type 5
Fixed	Yes	√				√
Assured	No		√	√		√
Maximum	No			√	√	√

The screenshot shows the 'Add Profile' form in the AirLive web interface. The left sidebar contains a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, **DBA Profile**, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'DBA Profiles' and 'Add Profile'. The form contains the following fields:

Profile ID	<input type="text" value="1"/>
Profile Type	<input type="text" value="Type_3"/>
Profile Name	<input type="text" value="dba_1"/>
Assured(Kbps)	<input type="text"/> (128 - 1200960Kbps)
Maximum(Kbps)	<input type="text"/> (128 - 1244160Kbps)

Below the form is a 'Commit' button.

Figure 5-2-2: Add DBA profile

## 5.3 Line Profile

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

### 5.3.1 Line profile

**Profile Configuration → Line Profile → Line Profile**

The table displays Line profile list. You can also do some operations, such as delete and modify.

The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile (highlighted), Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'Line Profile' and includes a 'Refresh' button and a table with the following data:


Profile ID	Profile Name	Action
1	vlan6	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-3-1: Line Profile list

### 5.3.2 Add profile

**Profile Configuration → Line profile → Add profile**

Create a new line profile, set the profile name.



The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile (highlighted), Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'Line Profile' and contains an 'Add Profile' button. Below this is the 'Add Profile' form, which includes two input fields: 'Profile ID' with the value '2' and 'Profile Name' with the value 'line\_2'. An 'Add' button is located below the input fields.

Add Profile	
Profile ID	2
Profile Name	line_2
<input type="button" value="Add"/>	

Figure 5-3-2: Add Line Profile

### 5.3.3 Display or modify line profile info

**Profile Configuration → Line Profile → Line Profile → Details & Modify**

In the interface of line profile list, click Details&Modify to edit the profile.

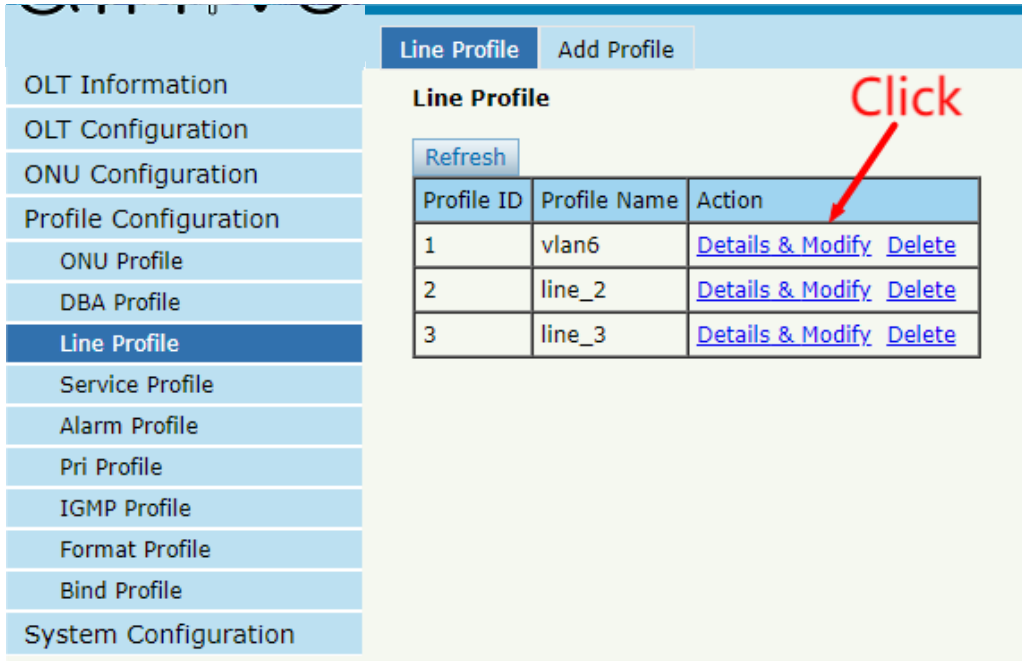


Figure 5-3-3: Modify Line Profile

### 5.3.3.1 Tcont

**Profile Configuration → Line Profile → Line Profile → Details & Modify → Tcont**

Add Tcont ID and bind DBA profile.

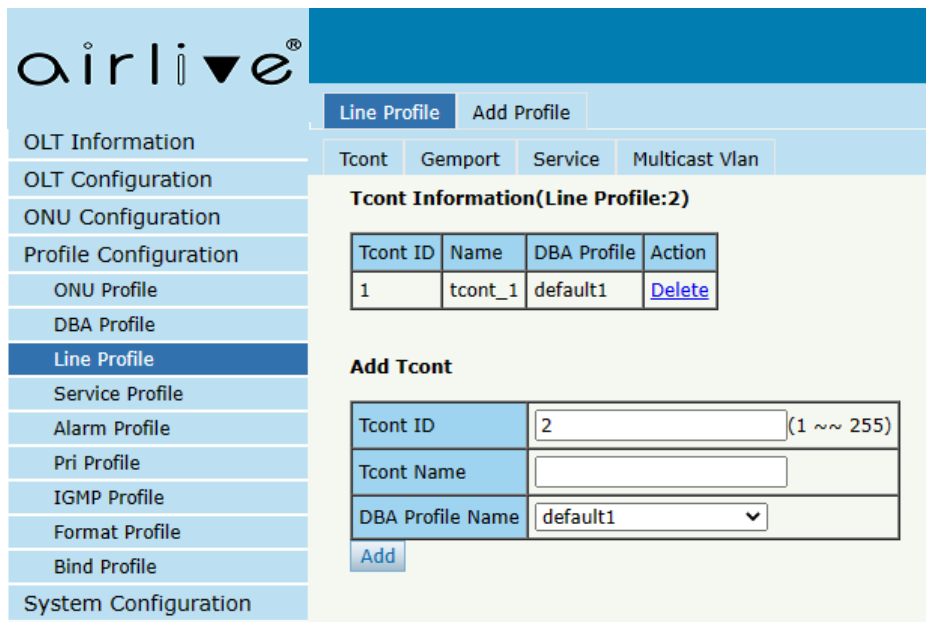


Figure 5-3-4: Add Tcont

### 5.3.3.2 Gempport

**Profile Configuration → Line Profile → Line Profile → Details & Modify → Gempport**

Add gempport ID and bind tcont ID.

You can also limit the forwarding speed according to the Gempport ID.

**Gempport Info(Line Profile:2)**

Gempport ID	Name	Tcont	COS	Downstream	State	UpQueueMapId	DownQueueMapId	Action
1	gem_1	1	N/A	default	Enable	N/A	N/A	<a href="#">Delete</a>

**Add Gempport**

Gempport ID	<input type="text" value="2"/> (1~255)
Tcont ID	<input type="text" value="1"/> ▼
Gempport Name	<input type="text"/>
COS	<input type="text" value="N/A"/> (0-7)
Downstream Traffic	<input type="text" value="default"/> ▼
UpQueueMapId	<input type="text" value="N/A"/> (0-3)
DownQueueMapId	<input type="text" value="N/A"/> (0-7)
State	<input type="text" value="Enable"/> ▼

[Add](#)

Figure 5-3-5: Add Gempport

**ONU Gempport Rate Limit Info**

Gempport ID	Name	Tcont	Upstream CIR	Upstream PIR	Downstream CIR	Downstream PIR	Action
1	gem_1	1	0	0	0	0	<a href="#">Delete</a>

**ONU Gempport Rate Limit Configuration**

Gempport ID	<input type="text" value="1"/> ▼
Upstream Traffic Committed Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Upstream Traffic Peak Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Downstream Traffic Committed Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)
Downstream Traffic Peak Rate Limit (B/s)	<input type="text" value="0"/> (0-4294967295)

[Commit](#)

Figure 5-3-6: ONU Gempport Rate Limit Configuration

### 5.3.3.3 Service

**Profile Configuration → Line Profile → Line Profile → Details & Modify → Service**

Add service, set the VLAN mode and VLAN ID and bind one Gemport ID.

The screenshot shows the AirLive web interface. On the left is a navigation menu with categories like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, and System Configuration. The 'Line Profile' option is selected. The main content area has tabs for 'Line Profile', 'Add Profile', 'Tcont', 'Gemport', 'Service', and 'Multicast Vlan'. The 'Service' tab is active, showing 'ServiceInformation(Line Profile:2)' with a table of existing services. Below this is the 'AddService' form with fields for ServiceName, Gemport ID, Vlan Mode, Vlan List, and Port Type, along with an 'Add' button.

ServiceName	Gemport	Vlan Mode	Vlan List	Port	Action
ser_1	1	Tag	6	N/A	<a href="#">Delete</a>

ServiceName	<input type="text" value="ser_2"/>
Gemport ID	<input type="text" value="1"/>
Vlan Mode	<input type="text" value="Tag"/>
Vlan List	<input type="text" value="6"/> (X,X or X-X;0 for all;max 12 vlans)
Port Type	<input type="text" value="N/A"/>

Figure 5-3-7: Add Service

### 5.3.3.4 Multicast Vlan

**Profile Configuration → Line Profile → Line Profile → Details & Modify → Multicast Vlan**

Set the Multicast VLAN of ONU.

The screenshot shows the AirLive web interface. On the left is a navigation menu with options like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The 'Line Profile' option is selected. At the top, there are tabs for 'Line Profile' and 'Add Profile'. Below that, there are sub-tabs for 'Tcont', 'Gempport', 'Service', and 'Multicast Vlan', with 'Multicast Vlan' being the active tab. The main content area is titled 'Multicast VLAN List(Line Profile:2)' and contains a table with the following data:

Line Profile ID	Line Profile Name	Vlan List	Action
2	line_2	N/A	<a href="#">Delete All</a>

Below the table is a section titled 'Add/Del Multicast Vlan (max 12 vlans)'. It features an input field labeled 'Mvlan List' with a placeholder '(100,103 or 105-108)' and two buttons: 'Add' and 'Delete'.

Figure 5-3-8: Configure Multicast VLAN

## 5.4 Service Profile

The service configuration file is used to configure the UNI side and multicast of the ONU.

### 5.4.1 Service profile

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

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



The screenshot shows the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile, **Service Profile**, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'Service Profiles' and includes an 'Add Profile' button. Below this is a 'Service Profile' section with a 'Refresh' button and a table:

Profile ID	Profile Name	Action
1	tag6	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
2	transparent6	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-4-1: Service Profile List

## 5.4.2 Add profile

**Profile Configuration** → **Service Profile** → **Add Profile**

Add a new service profile, set the profile name.

The screenshot shows the 'Add Profile' form in the AirLive web interface. The left sidebar is the same as in Figure 5-4-1. The main content area is titled 'Add Profile' and includes an 'Add Profile' button. Below this is a form with two input fields:

Profile ID	<input type="text" value="3"/>
Profile Name	<input type="text" value="srv_3"/>

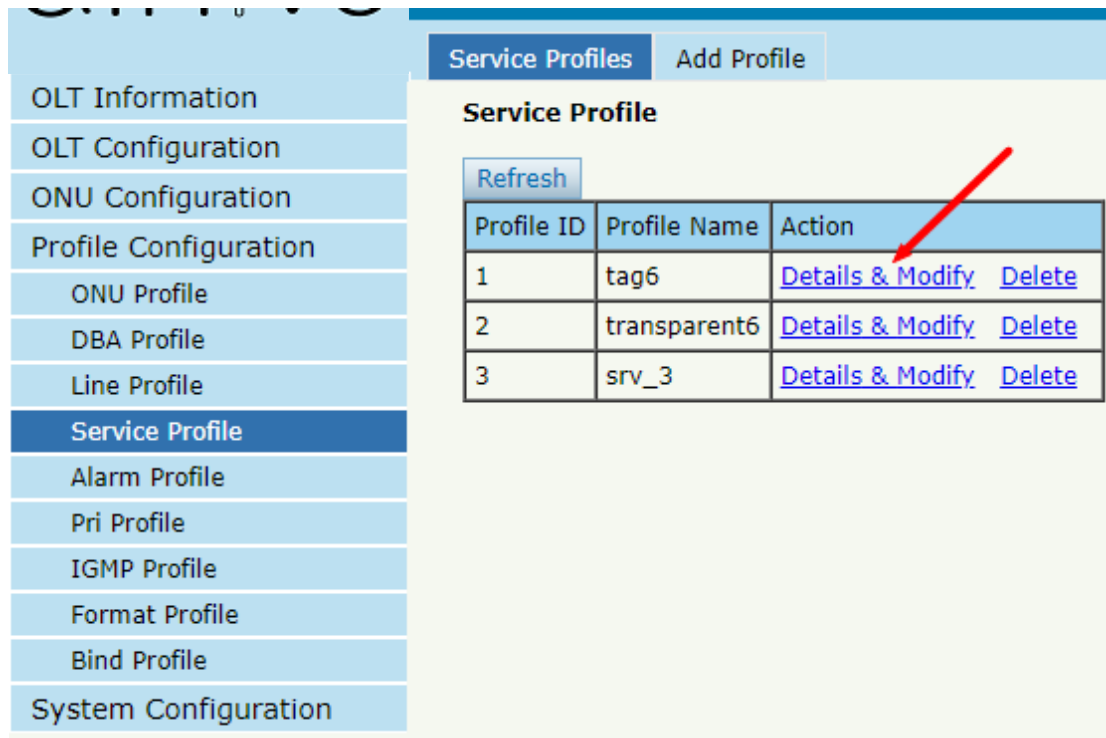
Below the form is an 'Add' button.

Figure 5-4-2: Add Service profile

### 5.4.3 Display or modify line profile info

**Profile Configuration → Service Profile → Service Profile → Details & Modify**

In the interface of service profile list, click Details&Modify to edit the profile.



The screenshot shows the 'Service Profiles' management interface. On the left is a navigation menu with 'Service Profile' highlighted. The main area has a 'Service Profiles' header with an 'Add Profile' button. Below is a 'Service Profile' section with a 'Refresh' button and a table:

Profile ID	Profile Name	Action
1	tag6	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
2	transparent6	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>
3	srv_3	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-4-3: Modify service profile

#### 5.4.3.1 PortVlan

**Profile Configuration → Service Profile → Service Profile → Details & Modify → PortVlan**

Set the VLAN mode of the ONU's port. For HGU, need to configure veip 1 transparent; for SFU, configure Ethernet port directly.

Service Profiles Add Profile

PortVlan Multicast VLAN Strip Port Iphost Config

PortVlan Info(Service Profile:1)

Port Name	Mode	Vlan	Vlan Priority(tag)	Default Vlan(hybrid)	Default Priority(hybrid)	CVlan(translate)	CVlan Priority(translate)	SVlan(translate)	SVlan Priority(translate)	Action
eth_0/1	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/2	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/3	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/4	Tag	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Delete

Add PortVlan

Mode: Transparent

PortType: Eth

Port ID:

Commit

Figure 5-4-4: Port VLAN mode

### 5.4.3.2 Multicast Vlan Strip

**Profile Configuration → Service Profile → Service Profile → Details & Modify → Multicast VLAN Strip**

Set the multicast VLAN mode of ONU's port.

Service Profiles Add Profile

PortVlan Multicast VLAN Strip Port Iphost Config

Multicast VLAN List (Service Profile:1)

Vlan Mode	Port	Action

Add/Del Multicast Strip

Strip Eth Number:

Confirm

Figure 5-4-5: Port Multicast VLAN Mode

### 5.4.3.3 Port

**Profile Configuration → Service Profile → Service Profile → Details & Modify → Port**

Set the rate negotiation mode of the ONULAN interface. You can also choose whether to enable ports or not, and even limit the rates of different LAN ports.

The screenshot displays the 'Port Basic Configuration' page for a specific service profile. The left sidebar lists various configuration categories, with 'Service Profile' selected. The main area is divided into several sections:

- Port Basic Configuration (Service Profile:1)**: Includes a dropdown for 'ONU Port' (set to LAN1), checkboxes for 'Admin Status' and 'Loopback' (both checked), and a 'Port Speed' dropdown (set to auto). A 'Submit' button is located below these options.
- Upstream Rate Limit Config**: Contains two input fields for 'Upstream Rate-Limit CIR (kbps)' and 'Upstream Rate-Limit PIR (kbps)', both set to 0. A 'Commit' button is positioned below these fields.
- Downstream Rate Limit Config**: Contains two input fields for 'Downstream Rate-Limit CIR (kbps)' and 'Downstream Rate-Limit PIR (kbps)', both set to 0. A 'Commit' button is positioned below these fields.

Figure 5-4-6: Port Basic Configuration

### 5.4.3.4 Iphost Config

**Profile Configuration → Service Profile → Service Profile → Details & Modify → Iphost Config**

Add Iphost for ONU wan connection. Iphost is used for ONU management.

The screenshot shows the 'Service Profiles' configuration page. The 'Iphost Config' tab is active. The 'Iphost Configuration Info' section displays a table with the following columns: Iphost ID, Description, IP Mode, IP Address, Mask, Gateway, DNS1, DNS2, VLAN, Priority, and Action. Below the table is the 'Iphost Config' form, which includes input fields for Iphost ID, Description, a dropdown menu for IP Mode (currently set to DHCP), and input fields for DNS1(A.B.C.D) and DNS2(A.B.C.D). A 'Commit' button is located below the form. The 'Iphost VLAN Config' section includes input fields for VLAN(0-4904) and Priority(1-15), with another 'Commit' button below.

Figure 5-4-7: Iphost Config

## 5.5 Alarm Profile

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

### 5.5.1 Profile Info

**Profile Configuration** → **Alarm Profile** → **Profile Information**

The table displays alarm profile list.

The screenshot shows the AirLive web interface. On the left is a sidebar with navigation options: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (with sub-items: ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile, Bind Profile), and System Configuration. The 'Alarm Profile' option is selected. The main content area has a header with 'Profile Information' and 'Add Profile' buttons. Below this is a 'Refresh' button and a table titled 'Alarm Profile'.

Profile ID	Profile Name	State	Rx Power Alarm Threshold	Tx Power Alarm Threshold	Sf Threshold/Sd Threshold	Action
1	alarm_profile_1	enable	-27 ~ -8	1 ~ 5	5 / 9	<a href="#">Delete</a>

Figure 5-5-1: Alarm Profile List

## 5.5.2 Add Profile

**Profile Configuration → Alarm Profile → Add Profile**

Add new alarm profile, set the threshold of alarm generation.

The screenshot shows the 'Create Alarm Profile' form in the AirLive web interface. The sidebar is the same as in Figure 5-5-1. The main content area has a header with 'Profile Information' and 'Add Profile' buttons. Below this is a 'Create Alarm Profile' form with the following fields:

Alarm Name	<input type="text" value="alarm_profile_2"/>
Alarm State	<input type="text" value="Enable"/>
Rx Low Power	<input type="text" value="-27"/> (-27 ~ -8)dBm
Rx High Power	<input type="text" value="-8"/> (-27 ~ -8)dBm
Tx Low Power	<input type="text" value="1"/> (1 ~ 5)dBm
Tx High Power	<input type="text" value="5"/> (1 ~ 5)dBm
Sf Threshold	<input type="text" value="5"/> (3 ~ 8)
Sd Threshold	<input type="text" value="9"/> (4 ~ 10)

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

Figure 5-5-2: Add Alarm Profile

## 5.6 Pri Profile

Pri Profile is the profile which the parameters are configured by private OMCI, including WAN, SIP, WIFI, CATV, DHCP Server, and so on.

### 5.6.1 Pri Profile

**Profile Configuration → Pri Profile → Pri Profile**

The table displays private profile list. You can also do some operations, such as delete and modify.



The screenshot displays the AirLive web interface for Pri Profile configuration. The left sidebar lists various configuration options, with 'Pri Profile' highlighted. The main content area shows a table of private profiles. The table has three columns: Profile ID, Profile Name, and Action. A single profile is listed with ID 1 and name pri\_1. The Action column contains links for 'Details & Modify' and 'Delete'. There is also a 'Refresh' button above the table.

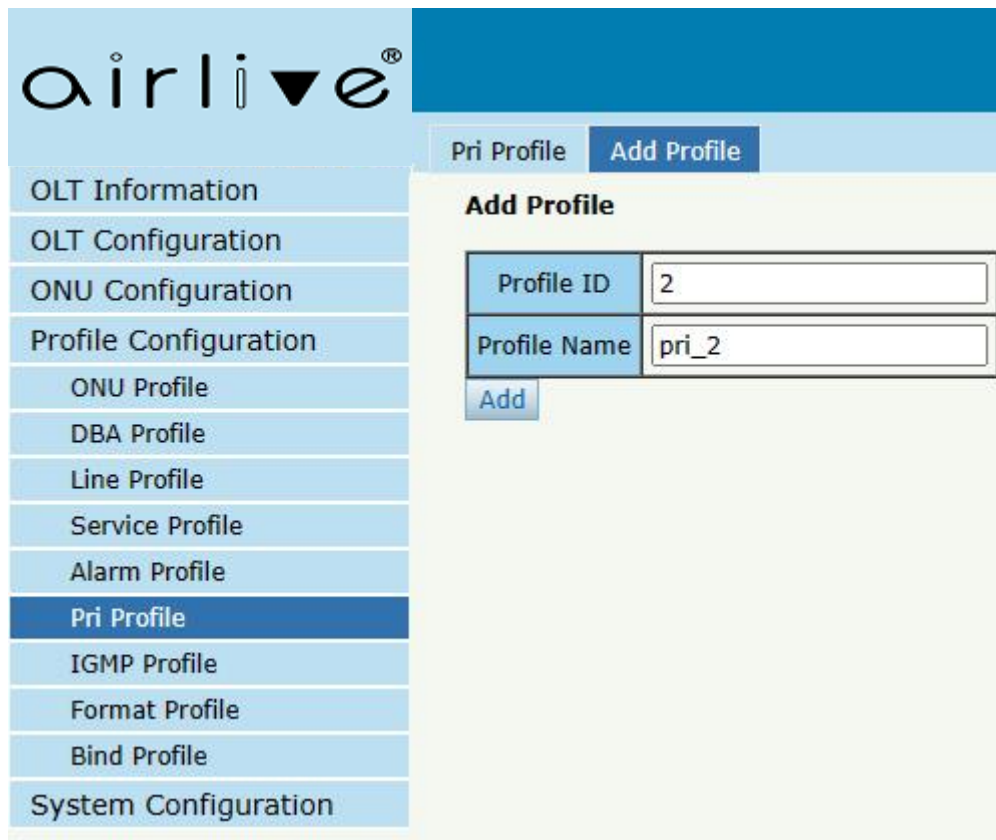
Profile ID	Profile Name	Action
1	pri_1	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-6-1: Pri Profile

### 5.6.2 Add Profile

**Profile Configuration → Pri Profile → Add profile**

Add a private profile, set the profile name.



The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile (highlighted in dark blue), IGMP Profile, Format Profile, Bind Profile, and System Configuration. The main content area is titled 'Pri Profile' and contains an 'Add Profile' button. Below this is a form titled 'Add Profile' with two input fields: 'Profile ID' containing the value '2' and 'Profile Name' containing the value 'pri\_2'. An 'Add' button is located below the input fields.

Figure 5-6-2: Add Private Profile

### 5.6.3 Display or modify pri profile info

**Profile Configuration → pri Profile → pri Profile → Details & Modify**

In the interface of pri profile list, click Details&Modify to edit the profile.



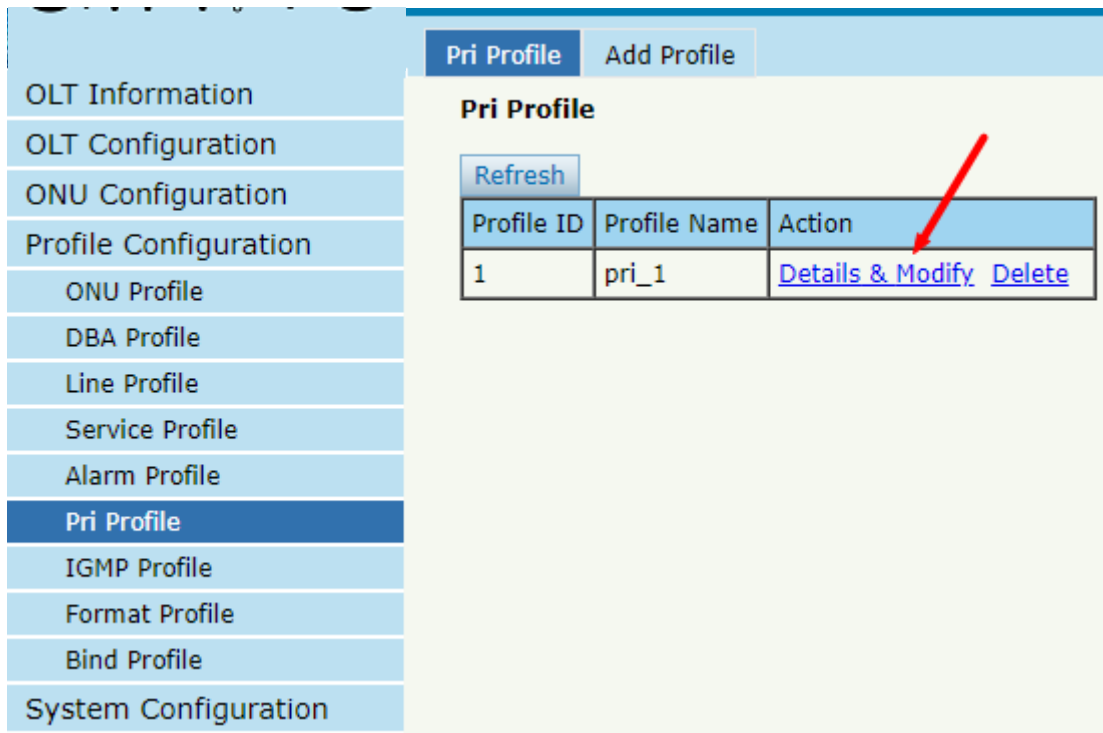


Figure 5-6-3: Modify pri profile

### 5.6.3.1 WAN

**Profile Configuration → pri Profile → pri Profile → Details & Modify → WAN**

Add IPv4 single-stack WAN connection for Pri Profile.

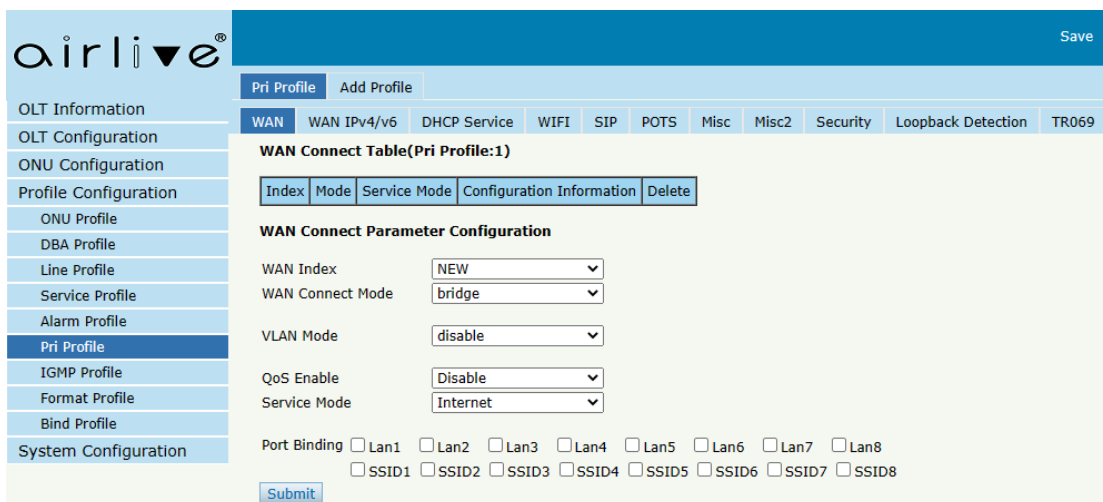


Figure 5-6-4: WAN Configuration

### 5.6.3.2 WAN IPv4/v6

**Profile Configuration → pri Profile → pri Profile → Details & Modify → WAN IPv4/v6**

Add IPv4/IPv6 dual-stack WAN connections for Pri Profile.

The screenshot shows the AirLive web interface for configuring WAN IPv4/v6. The left sidebar lists various configuration categories, with 'Profile Configuration' expanded to show 'Pri Profile' selected. The top navigation bar includes 'Save' and 'Add Profile' buttons. The main content area has tabs for 'WAN', 'WAN IPv4/v6', 'DHCP Service', 'WIFI', 'SIP', 'POTS', 'Misc', 'Misc2', 'Security', 'Loopback Detection', and 'TR069'. The 'WAN IPv4/v6' tab is active, showing a table for 'WAN Connect Table(Pri Profile:1)' and a 'WAN Connect Parameter Configuration' section. The configuration parameters include:

- WAN Index: NEW
- Mode: bridge
- IP Version: ipv4
- VLAN Mode: Disable
- MTU: 1500 (range 576-1500)
- QoS Enable: Disable
- Service Mode: Internet
- Port Binding: checkboxes for Lan1-Lan8 and SSID1-SSID10.

A 'Submit' button is located at the bottom of the configuration section.

Figure 5-6-5: WAN IPv4/v6 Configuration

### 5.6.3.3 DHCP Service

**Profile Configuration → pri Profile → pri Profile → Details & Modify → DHCP Service**

Configure IPv4/v6 DHCP server parameters for Pri Profile.

Type	Active	Configuration content
DHCP Server	<input type="checkbox"/>	LAN IP Address LAN Subnet Mask DHCP Server: Disable
DHCP Server Ipv6	<input type="checkbox"/>	LAN IPv6 Address Prefix Mode: <input type="checkbox"/> Static Static Ipv6 Address LAN Prefixlen: (48-64) DHCP Server Ipv6: Disable RA: <input type="checkbox"/> Active Manage: disable Other: disable Max Interval: (1-1800)s Min Interval: (1-1800)s

Figure 5-6-6: DHCP Service

### 5.6.3.4 WIFI

**Profile Configuration → pri Profile → pri Profile → Details & Modify → WIFI**

Configure WiFi parameters for Pri Profile.

Figure 5-6-7: WIFI Configuration

### 5.6.3.5 SIP

**Profile Configuration → pri Profile → pri Profile → Details &**

**Modify → SIP**

Configure SIP parameters for Pri Profile.

The screenshot displays the 'SIP Parameter Configuration' for a 'Pri Profile:1'. The configuration includes the following fields:

Manage Port	5060	(1-65535)
Proxy Server IP Or Name/Port	0.0.0.0	5060 (1-65535)
Backup Proxy Server IP Or Name/Port	0.0.0.0	0 (0-65535)
Register Server IP Or Name/Port	0.0.0.0	5060 (1-65535)
Backup Register Server IP Or Name/Port	0.0.0.0	0 (0-65535)
Out Bound Server IP Or Name/Port	0.0.0.0	5060 (1-65535)
Register Interval	3600	(1-10000000)

Below the SIP configuration is the 'SIP Digit Map Configuration' section, which contains a large empty text area for defining digit maps and a 'Submit' button.

Figure 5-6-8: SIP Configuration

**5.6.3.6 POTS**

**Profile Configuration → pri Profile → pri Profile → Details & Modify → POTS**

Configure POTS parameters for Pri Profile.

The screenshot displays the 'SIP User Parameter Configuration' for a 'Pri Profile:1'. The configuration includes the following fields:

POTS Port	Pots1
Account active	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
User Account	
User Name	
User Password	

Below the user parameters is the 'Advanced Parameter Configuration' section, which includes the following fields:

VAD	Disable
Echo cancel	Disable
Input gain(dB)	0
Output gain(dB)	0
Dtmf mode	Transparent

Figure 5-6-9: POTS Configuration

### 5.6.3.7 MISC

**Profile Configuration → pri Profile → pri Profile → Details & Modify → MISC**

Some misc configurations, including CATV switches, speed limits, limit the number of MAC learning, and so on.

Misc Control Operation(Pri Profile:1)	
CATV Configuration	<input type="checkbox"/> CATV Enable <input type="button" value="Submit"/>
IGMP Config	<input type="checkbox"/> IGMP Enable <input type="button" value="Submit"/>
STP Config	<input type="checkbox"/> STP Enable <input type="button" value="Submit"/>
Port Isolate	<input type="checkbox"/> Port Isolate Enable <input type="button" value="Submit"/>
<b>Speed Limit Config</b>	
Upstream limit	<input type="text" value="0"/>
Downstream limit	<input type="text" value="0"/>
<input type="button" value="Submit"/>	
<b>MAC Table Config</b>	
mac Age Time	<input type="text" value="0"/>
Pon mac limit	<input type="text" value="0"/>
Lan mac limit	<input type="text" value="0"/>
<input type="button" value="Submit"/>	

Figure 5-6-10: MISC Configuration

### 5.6.3.8 MISC2

**Profile Configuration → pri Profile → pri Profile → Details & Modify → MISC2**

Some misc configurations, including NAT Type and UPnP Status.

**Pri Profile** Add Profile

WAN WAN IPv4/v6 DHCP Service WIFI SIP POTS Misc **Misc2** Security Loopback Detection TR069

**Misc2 Control Operation(Pri Profile:1)**

**ONU NAT Type**  
 NAT Type

**ONU UPnP Configuration**  
 UPnP Status   
 WAN Index

Figure 5-6-11: MISC2 Configuration

### 5.6.3.9 Security

**Profile Configuration → pri Profile → pri Profile → Details & Modify → Security**

Configure security parameters for Pri Profile.

**Pri Profile** Add Profile

WAN WAN IPv4/v6 DHCP Service WIFI SIP POTS Misc Misc2 **Security** Loopback Detection TR069

**User Control Configuration(Pri Profile:1)**

Admin Name

Admin Password

User Name

User Password

**Firewall Level**  
 Firewall Level

**ACL Configuration**  
 Protocol   
 Control

**ACL Table**

Protocol Type	Control	Lan	Wan	IPv4	IPv6	Port	Delete
<input type="button" value="Refresh"/>							

Figure 5-6-12: Security Configuration

### 5.6.3.10 Loopback Detection

**Profile Configuration → pri Profile → pri Profile → Details & Modify → Loopback Detection**

Configure Loopback Detection parameters for Pri Profile.

Loopback Detection Configuration(Pri Profile:1)	
Status	enable
Check Interval	1000 (1-60000)ms
Recover Interval	60 (1-1800)s
Ethernet Type	fffa (HHHH)
VLAN ID	0 (0-4094; 0 means no vlan is configured)
Destination MAC Type	Broadcast Address
Port Closing Time	60 (1-1800)s
Alarm	enable
Portdislooped	enable

Figure 5-6-13: Loopback Detection Configuration

### 5.6.3.11 TR069

**Profile Configuration → pri Profile → pri Profile → Details & Modify → TR069**

Configure TR069 parameters for Pri Profile.

Type	Active	Configuration content
TR069 Manage Configuration	<input type="checkbox"/>	Tr069 Manage Status: Disable ACS Server Address: <input type="text"/> ACS Server Username: <input type="text"/> ACS Server Password: <input type="text"/> Certificate: Disable Inform: Disable Inform Interval Time: (0-4294967295) Reverse Connection Username: <input type="text"/> Reverse Connection Password: <input type="text"/>
TR069 Stun Configuration	<input type="checkbox"/>	Tr069 Stun Status: Disable Stun Server Address: <input type="text"/> Stun Server Port: (1-65535) Stun Server User Name: <input type="text"/> Stun Server Password: <input type="text"/>

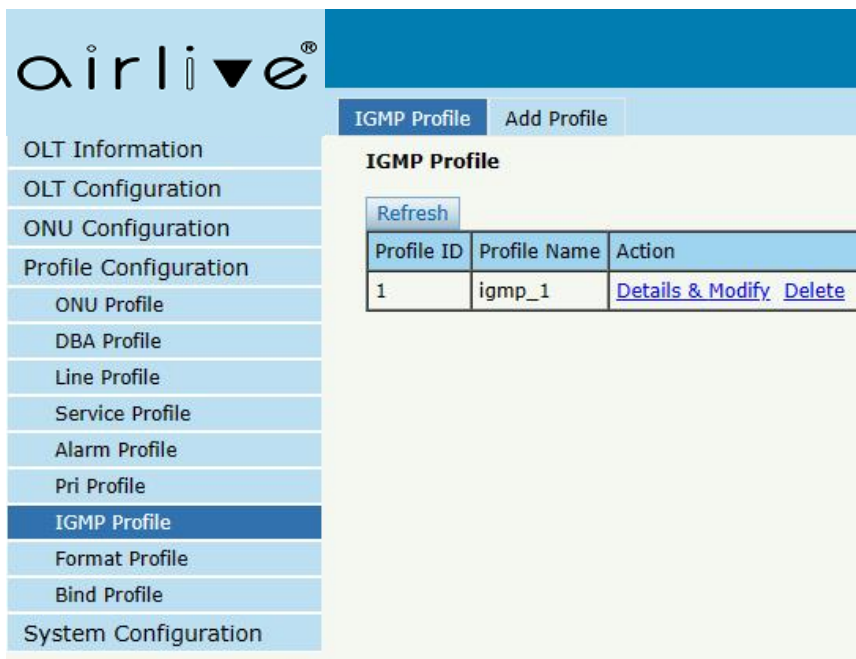
Figure 5-6-14: TR069 Configuration

## 5.7 IGMP Profile

### 5.7.1 IGMP Profile

**Profile Configuration → IGMP Profile → IGMP Profile**

The table displays IGMP profile list. You can also do some operations, such as delete and modify.



The screenshot shows the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration (expanded), ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile (selected), Format Profile, Bind Profile, and System Configuration. The main content area is titled 'IGMP Profile' and contains a 'Refresh' button and a table with the following data:

Profile ID	Profile Name	Action
1	igmp_1	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-7-1: IGMP Profile list

### 5.7.2 Add Profile

**Profile Configuration → IGMP Profile → Add profile**

Add new IGMP profile, set the profile name.



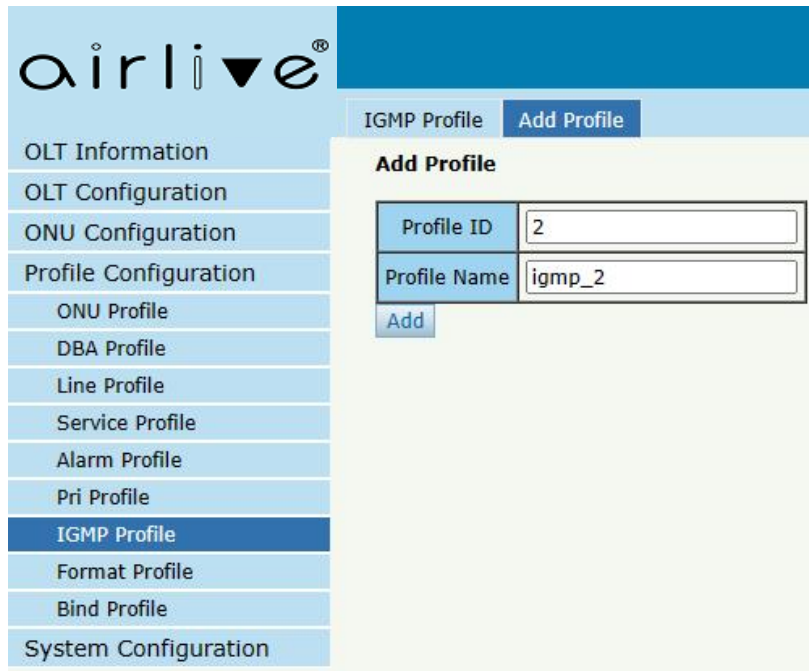


Figure 5-7-2: Add Profile

### 5.7.3 Display or modify IGMP profile info

**Profile Configuration → IGMP Profile → IGMP Profile → Details & Modify**

In the interface of IGMP profile list, click Details&Modify to edit the profile.

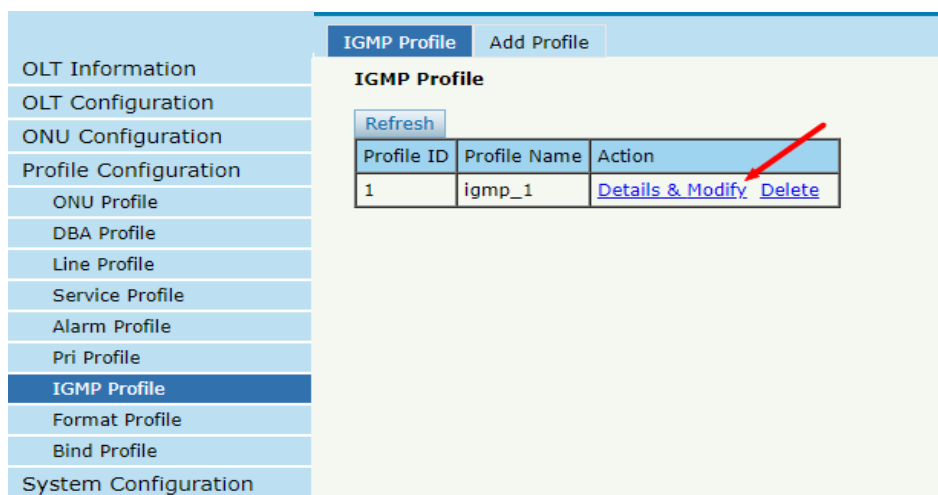


Figure 5-7-3: Modify IGMP profile

### 5.7.3.1 Config

**Profile Configuration → IGMP Profile → IGMP Profile → Details & Modify → Config**

Set IGMP/MLD protocol parameters as required.

IGMP Configuration(IGMP Profile:1)	
IGMP Version	IGMP v2
IGMP Mode	snooping
Fast Leave	disable
Upstream tag control	transparent
IGMP Rate limit	0 (0-4294967294)
Robustness	0 (0-255)
Proxy IP	0.0.0.0 (x.x.x.x)
Query Interval	0 (0-4294967294)
Query Maxresp	0 (0-4294967294)
Query Last Interval	0 (0-4294967294)
Downstream tag control	transparent
NonMatch Group	discard

Submit

Figure 5-7-4: IGMP Configuration

## 5.8 Format Profile

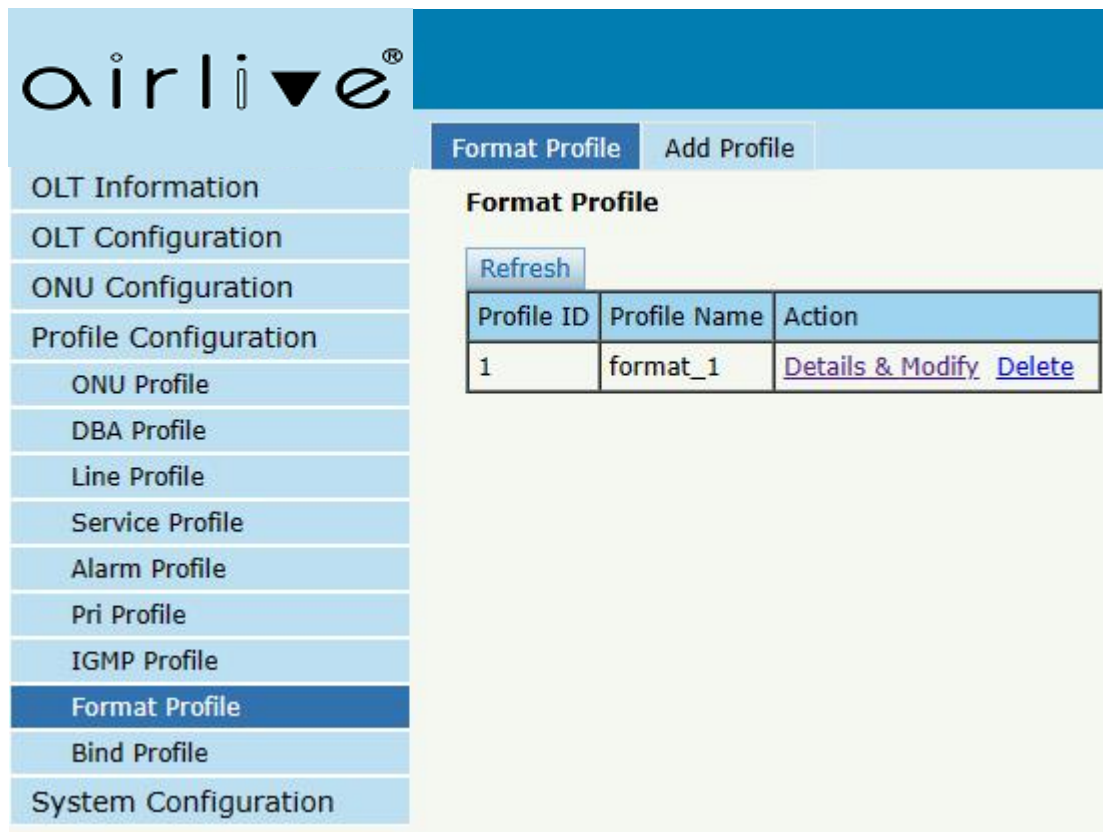
Format profile is mainly used to configure the DHCP option format of ONU.

### 5.8.1 Format Profile

**Profile Configuration → Format Profile → Format Profile**

The table displays Format profile list. You can also do some operations,

such as delete and modify.



The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile (highlighted), Bind Profile, and System Configuration. The main content area is titled 'Format Profile' and contains a 'Refresh' button and a table with the following data:

Profile ID	Profile Name	Action
1	format_1	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-8-1: Format Profile list

## 5.8.2 Add Profile

**Profile Configuration** → **Format Profile** → **Add profile**

Add new format profile, set the profile name.

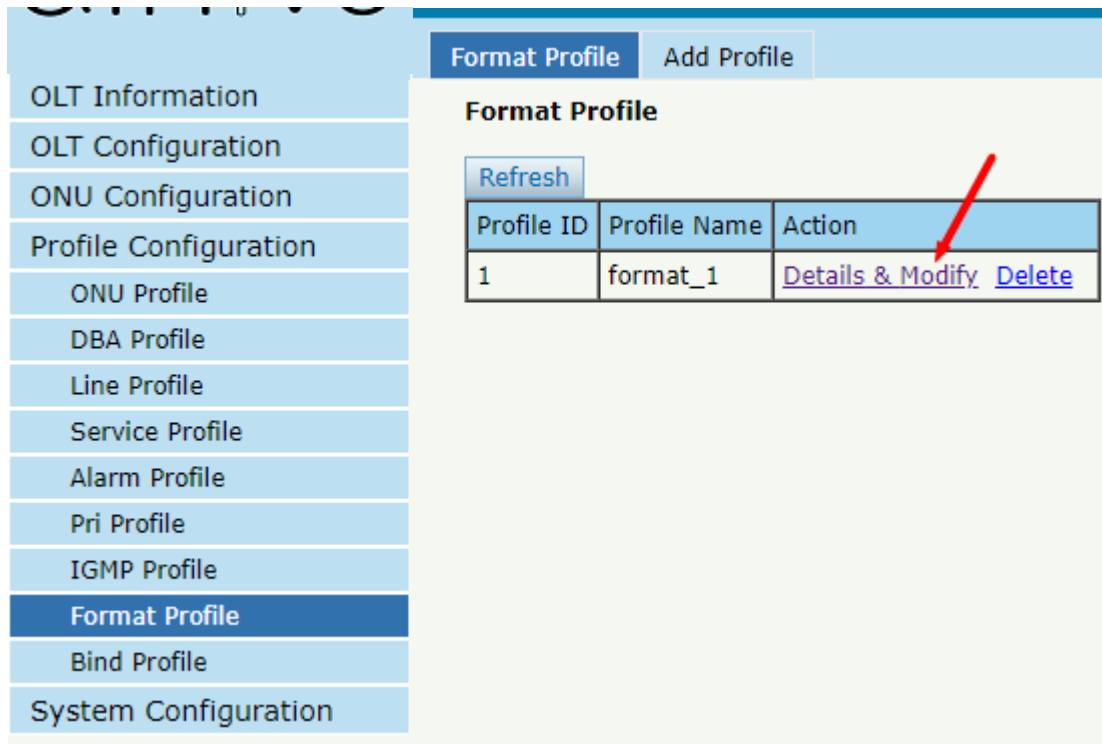
The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, ONU Profile, DBA Profile, Line Profile, Service Profile, Alarm Profile, Pri Profile, IGMP Profile, Format Profile (highlighted in dark blue), Bind Profile, and System Configuration. The main content area is titled 'Add Profile' and contains two input fields: 'Profile ID' with the value '2' and 'Profile Name' with the value 'format\_2'. Below these fields is an 'Add' button. At the top of the main content area, there are two tabs: 'Format Profile' and 'Add Profile'.

Figure 5.8-2: Add Format Profile

### 5.8.3 Display or modify Format profile info

**Profile Configuration → Format Profile → Format Profile →  
Details & Modify**

In the interface of Format profile list, click Details&Modify to edit the profile.



The screenshot displays the 'Format Profile' configuration page. On the left, a sidebar menu lists various configuration categories, with 'Format Profile' highlighted. The main content area features a 'Format Profile' section with a 'Refresh' button and a table. The table contains one row for profile ID 1, named 'format\_1', with two action links: 'Details & Modify' and 'Delete'. A red arrow points to the 'Details & Modify' link.

Profile ID	Profile Name	Action
1	format_1	<a href="#">Details &amp; Modify</a> <a href="#">Delete</a>

Figure 5-8-3: Modify Format profile

### 5.8.3.1 Config

**Profile Configuration → Format Profile → Format Profile →  
Details & Modify → Config**

Set DHCP option parameters as required.

The screenshot displays the 'Format Profile Configuration' page in the AirLive web interface. The left sidebar lists various configuration options, with 'Format Profile' selected. The main content area features a 'Config' tab and three configuration sections:

- Switch Configuration:** Includes dropdown menus for 'Option82' (enable), 'Option18' (disable), 'Option37' (disable), and 'PPPoE Plus' (disable), followed by a 'Submit' button.
- Format Type Configuration:** Includes a 'Format Type' dropdown menu set to 'custom' and a 'Submit' button.
- Circuit ID / Remote ID Configuration:** Includes form fields for 'ID' (Circuit ID), 'Index', and 'Type' (cvlan), followed by a 'Submit' button.

Below these sections is a 'Circuit ID / Remote ID Table' with the following data:

ID	Type
Circuit ID	cvlan

A 'Refresh' button is located below the table.

Figure 5-8-4: Format Profile Configuration

## 5.9 Bind Profile

### Profile Configuration → Bind Profile

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

**Profile Bind**

**ONU Profile Bind**

Port ID: PON1

[Refresh](#)

ONU ID	ONU Profile	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile	Bind
1	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
2	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
3	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
4	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
5	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
6	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
7	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
8	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
9	default	N/A	N/A	N/A	N/A	N/A	<a href="#">Config</a>
10	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
11	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
12	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
13	default	(ID: 1)	(ID: 2)	N/A	N/A	N/A	<a href="#">Config</a>
14	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
15	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
16	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>
17	default	(ID: 1)	(ID: 1)	N/A	N/A	N/A	<a href="#">Config</a>

Figure 5-9-1: Bind profile

**Profile Bind**

**ONU Profile Binding Config (PON:1 ONU:1)**

ONU ID	Line Profile	Service Profile	Alarm Profile	Pri Profile	Format Profile
1	vlan6	tag6	N/A	N/A	N/A

[Commit](#)

Figure 5-9-2: Select Profile

## Chapter 6 System Configuration

This chapter is about the global management of OLT.

### 6.1 System Log

#### 6.1.1 System Log

**System Configuration** → **System Log**

This page displays OLT system alarms and events.

The screenshot shows the AirLive web interface with the 'System Log' tab selected. The page includes a navigation menu on the left and a main content area with search filters and a table of log entries.

**Alarm Log Table**

Select Counts:   
 Alarm Type:   
 Description:   
 Download Log Type:   
 Download Log:

No.1 Page/Total 10 Page 20 Item per page/Total 200 Item [First](#), [Previous](#), [Next](#), [Last](#) No.1   [Clear All](#) [Refresh](#)

No..	Time	Level	Message
1	1970/01/12 17:56:49	major	System Time Change change by ntp.
2	1970/01/12 17:55:48	major	User Logout User admin logouted from 192.168.8.34 on web
3	1970/01/12 17:55:28	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
4	1970/01/12 17:55:27	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
5	1970/01/12 17:52:49	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
6	1970/01/12 17:52:48	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
7	1970/01/12 17:51:39	major	System Time Change change by ntp.
8	1970/01/12 17:50:55	major	User Login User admin logged in from 192.168.8.86 on web
9	1970/01/12 17:49:59	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
10	1970/01/12 17:49:58	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103
11	1970/01/12 17:48:15	major	ONU PON TX Power Low Clear PON 0/1 ONU 4 sn MONU1ce7a103
12	1970/01/12 17:48:14	major	ONU PON TX Power Low PON 0/1 ONU 4 sn MONU1ce7a103

Figure 6-1-1: System Log

#### 6.1.2 Alarm

**System Configuration** → **System Log** → **Alarm**

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



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

Figure 6-1-2: Alarm

options	Illustration
Print	Alarm and event show in console and telnet, but not show in syslog, EMS and remote log server.
Record	Alarm and event show in syslog, but not show in console, telnet, EMS and remote log server.
Trap	Alarm and event show in EMS, but not show in console, telnet, syslog and remote log server.
Remote	Alarm and event show in remote log server, but not show in console, telnet, syslog and EMS.

### 6.1.3 Threshold Alarm

**System Configuration** → **System Log** → **Threshold Alarm**

This page is used to configure OLT temperature threshold, CPU-usage

threshold and memory- usage threshold, PON optical threshold.

The screenshot displays the AirLive web interface. On the left is a navigation menu with options: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log (selected), Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management. The main content area is titled 'Threshold Alarm Configuration' and includes a sub-section for 'PON Optical Alarm Configuration'.

**Threshold Alarm Configuration**

Type	Print	Record	Trap	Remote	Alarm Threshold	Clear Threshold
Temp High (°C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00	0.00
Temp Low (°C)	<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

Buttons: Submit, Reset

**PON Optical Alarm Configuration**

Port ID: PON1

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

Buttons: Submit, Reset

Figure 6-1-3: Threshold Alarm

## 6.2 Device Management

### 6.2.1 Firmware Upgrade

**System Configuration → Device Management → Firmware Upgrade**

You can upgrade the OLT firmware on this page. OLT will reboot automatically with the new firmware after upgraded when you select the option “Reboot After Upgrade”.

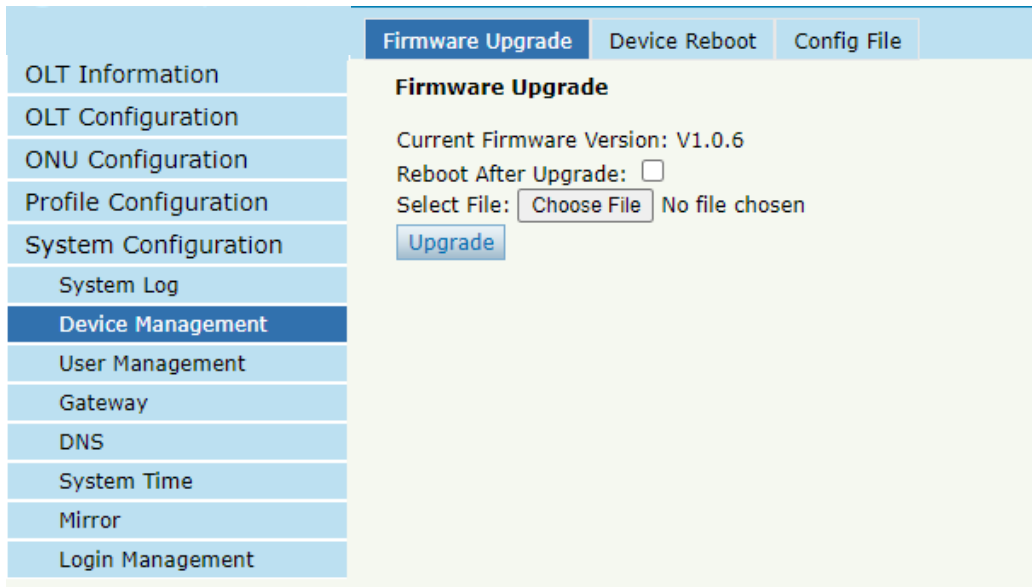


Figure 6-2-1: Firmware Upgrade

## 6.2.2 Device Reboot

**System Configuration → Device Management → Device Reboot**

You can reboot the entire system on this page. Please do save the configuration before reboot.

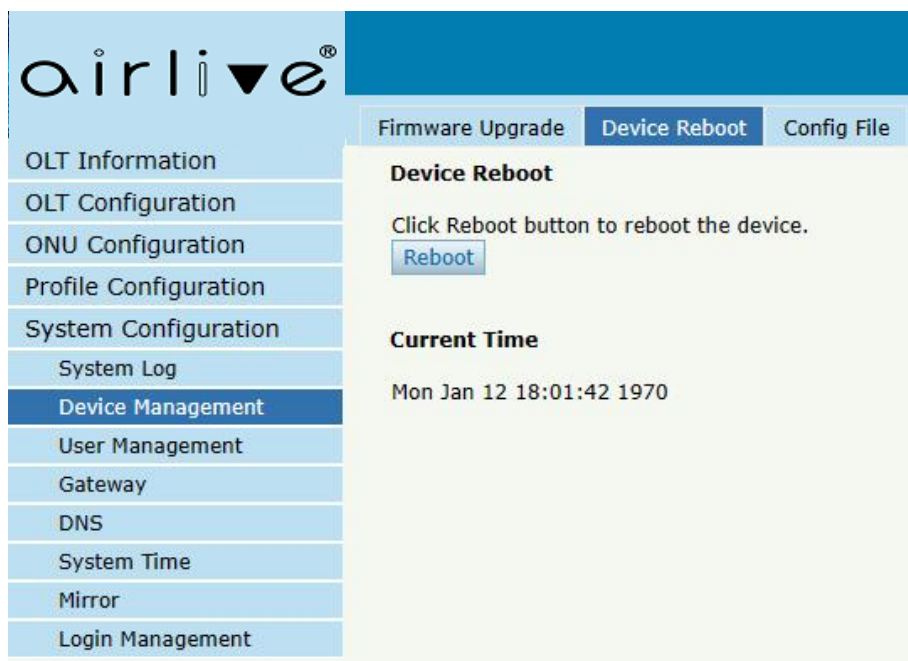


Figure 6-2-2: Device Reboot

## 6.2.3 Config File

**System Configuration → Device Management → Config File**

You can backup configuration, restore configuration, restore factory defaults and save configuration on this page.

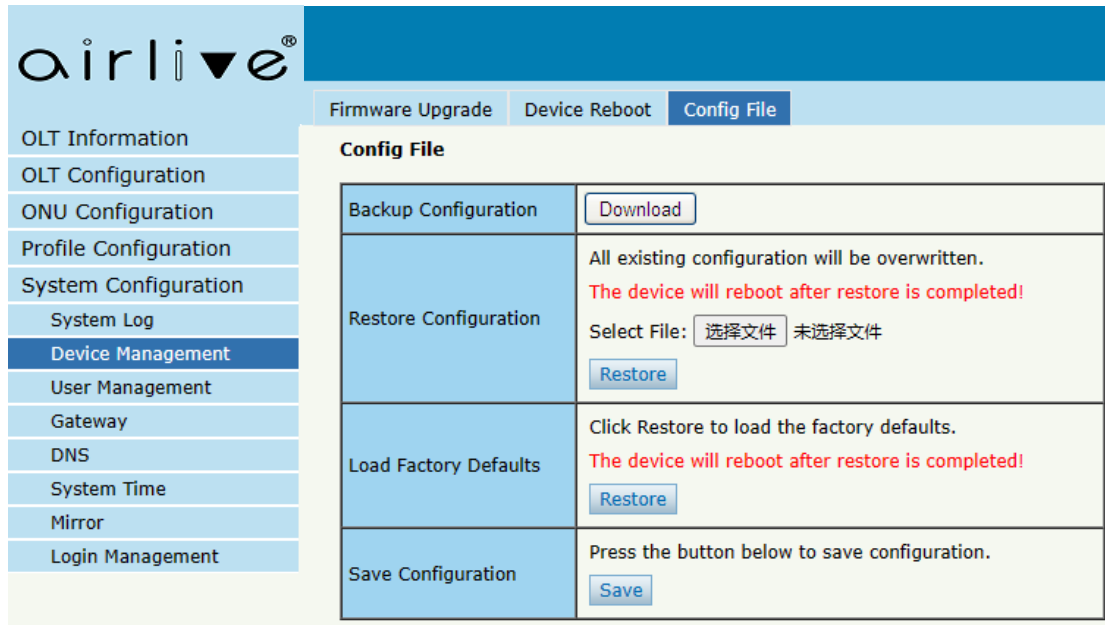


Figure 6-2-3: Config File Configuration

## 6.3 User Management

**System Configuration → User Management**

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

airlive® Save

User Manage

**Add User**

User Name

User Password

Confirm Password

User Role

**Notice:**

- 1.The password must contain at least 6 characters.
- 2.The password must contain at least two of the following combinations digit, uppercase letter, lowercase letter, Special characters (.:\_-/@!~# \$ ^ & \* ( ) + = ? \ | [ { } ] ; ' " < , > `).
- 3.The password can not be any user name.

**User Table**

User Name	User Role	Edit	Delete
admin	admin		

Figure 6-3-1: User Manage

## 6.4 Gateway

### System Configuration → Gateway

This page is used to configure the OLT gateway in case of that the OLT needs to access Internet or any Layer 3 network.

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Gateway

**Gateway**

Gateway

Figure 6-4-1: Gateway Configuration

## 6.5 DNS

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

### 6.5.1 IPv4 DNS

**System Configuration → DNS → IPv4 DNS**

This page is used to configure IPv4 DNS.



The screenshot displays the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS (highlighted), System Time, Mirror, and Login Management. The main content area is titled 'IPv4 DNS Configuration' and contains the following fields and buttons:

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

Figure 6-5-1: IPv4 DNS

## 6.6 System Time

### 6.6.1 RTC

**System Configuration → System Time → RTC**

This page is used to set OLT system time. RTC stands for Real-Time Clock, it provides clock signal to the system. There is no battery inside OLT, so the time will not be saved after powered off.

Year	Month	Day	Hour	Minute	Second
1970	1	12	17	47	18

Figure 6-6-1: RTC Setting

### 6.6.2 NTP

**System Configuration → System Time → NTP**

This page is used to configure NTP server. OLT will synchronize time with the NTP server at a given time.

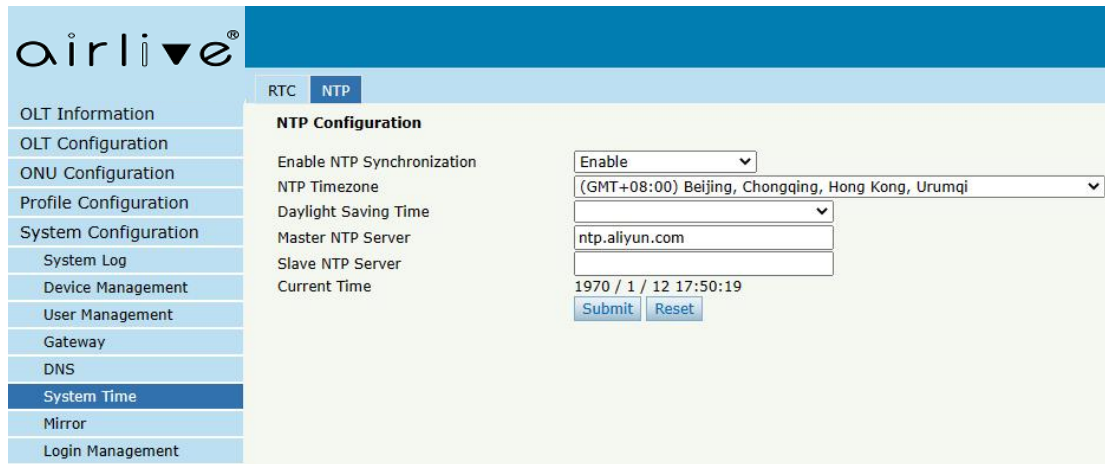


Figure 6-6-2: NTP Configuration

## 6.7 Mirror

### System Configuration → Mirror

Port mirror is usually used for troubleshooting. It can forward incoming and outgoing packets from the source port to the destination port.

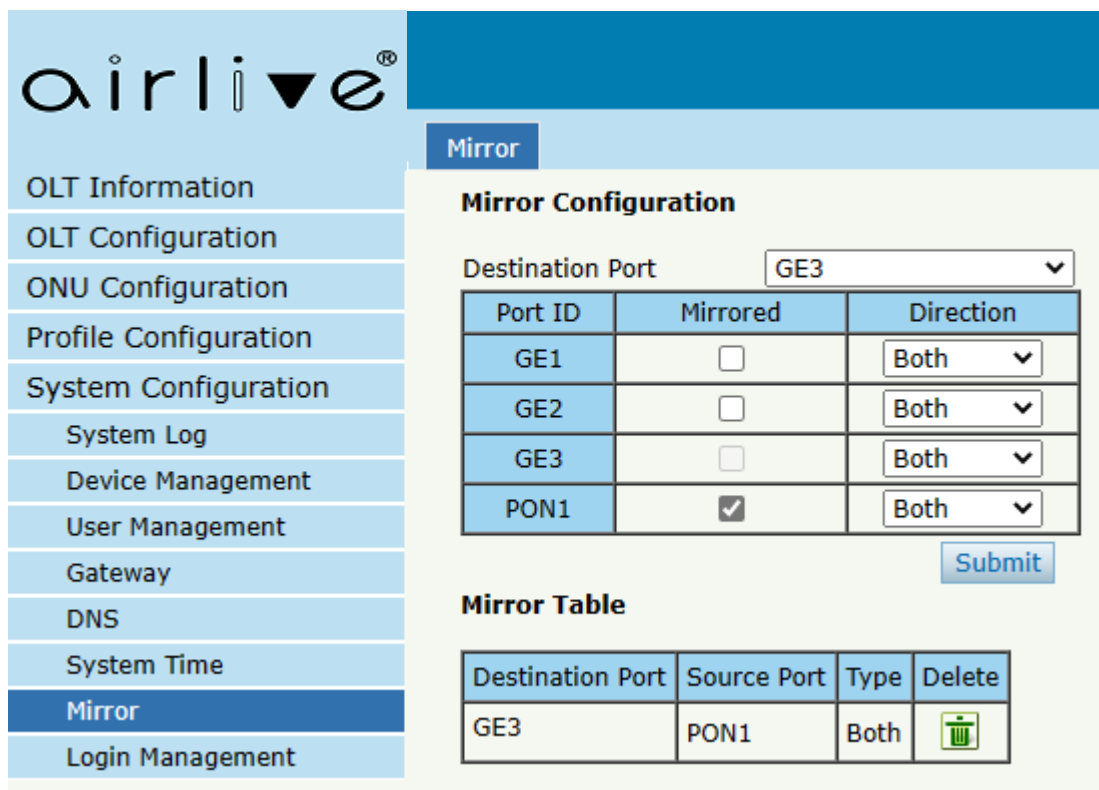


Figure 6-7-1: Mirror Configuration



## 6.8 Login Management

### 6.8.1 Login Access List

**System Configuration → Login Management → Login Access List**

This page is used to configure access rights for management. You can configure access rights for Telnet, Web, according to source IP address.

The screenshot shows the AirLive web interface for the 'Login Access List' configuration page. The interface includes a sidebar menu on the left with options like OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management. The main content area has tabs for 'Login Access List', 'Service Port', 'Login Configuration', and 'Telnet Management'. Under 'Login Access List', there are sections for 'Login Access Status' (with a dropdown set to 'Disable' and a 'Submit' button), 'Login Access List Configuration' (with radio buttons for 'Deny' and 'Permit', a 'Protocol' dropdown set to 'Telnet', and input fields for 'Source IP' and 'IP Mask' with an 'Add' button), and 'Login Access List' (with a 'Clean' button and a table with columns: Filter Action, Protocol, Source IP, IP Mask, and Delete).

Figure 6-8-1: Login Access List Configuration

### 6.8.2 Service Port

**System Configuration → Login Management → Service Port**

This page is used to set Web, Telnet Port .

The screenshot displays the AirLive web management interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management (highlighted in blue). The top navigation bar includes: Login Access List, Service Port (highlighted), Login Configuration, and Telnet Management. The main content area is titled "Service Port" and contains two input fields: "Web Port" with the value "443" and "(1-65535)", and "Telnet Port" with the value "23" and "(1-65535)". Below these fields are "Submit" and "Reset" buttons.

Figure 6-8-2: Service Port Configuration

### 6.8.3 Login Configuration

**System Configuration → Login Management → Login Configuration**

This page is used to set login timeout and verification code switch .

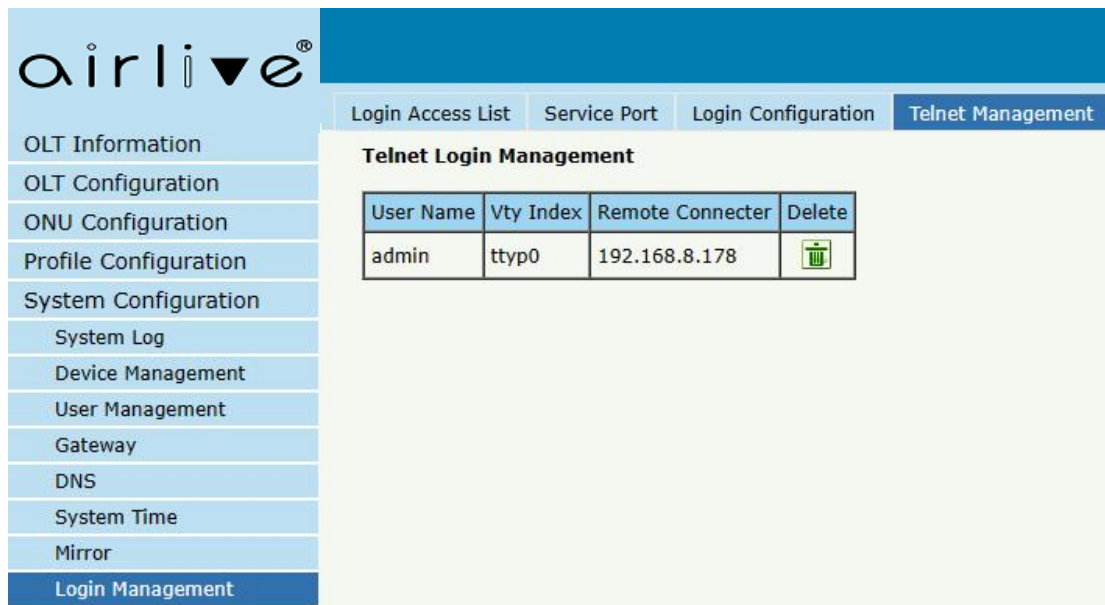
The screenshot displays the AirLive web management interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management (highlighted in blue). The top navigation bar includes: Login Access List, Service Port, Login Configuration (highlighted), and Telnet Management. The main content area is titled "Web Configuration" and contains two input fields: "Login Timeout" with the value "10" and "(1-30 minutes)", and "Verification Code" with a dropdown menu set to "Disable". Below these fields are "Submit" and "Reset" buttons.

Figure 6-8-3: Login Configuration

## 6.8.4 Telnet Management

### System Configuration → Login Management → Telnet Management

This page displays the current telnet connection information. You can see the host IP address and user name information that are currently accessing the OLT through telnet.



The screenshot shows the AirLive web interface. On the left is a navigation menu with the following items: OLT Information, OLT Configuration, ONU Configuration, Profile Configuration, System Configuration, System Log, Device Management, User Management, Gateway, DNS, System Time, Mirror, and Login Management (highlighted in blue). The main content area has a top navigation bar with 'Login Access List', 'Service Port', 'Login Configuration', and 'Telnet Management' (highlighted in blue). Below this is the 'Telnet Login Management' section, which contains a table with the following data:


User Name	Vty Index	Remote Connector	Delete
admin	ttyp0	192.168.8.178	

Figure 6-8-4: Telnet Management