

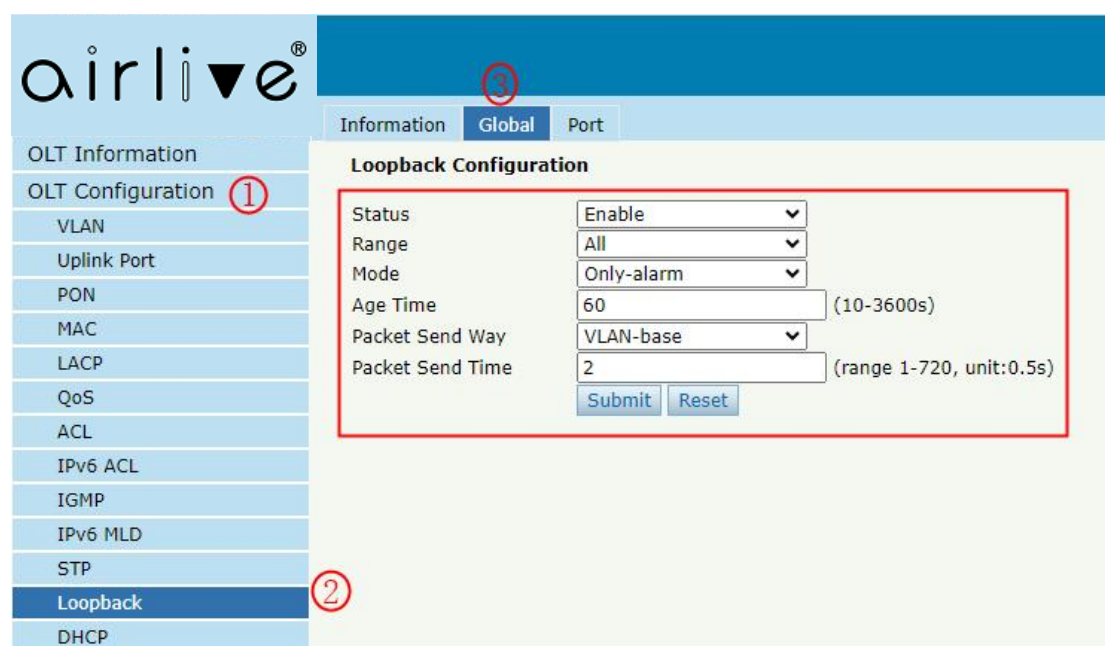
The Loopback function of OLT

1. When the network experiences excessive lag or receives a high volume of data packets, the OLT Loopback detection function can be activated to verify the presence of any loops.

2. Introduction to Loopback Configuration.

An GPON OLT has been used in this example, settings can vary slightly depending on the OLT model used. Please see the product user guide for more information.

2.1 OLT Configuration>Loopback>Global



The screenshot shows the Airlive OLT configuration interface. The left sidebar contains a menu with items: OLT Information, OLT Configuration (1), VLAN, Uplink Port, PON, MAC, LACP, QoS, ACL, IPv6 ACL, IGMP, IPv6 MLD, STP, Loopback (2), and DHCP. The top navigation bar has tabs: Information, Global (3), and Port. The main configuration area is titled 'Loopback Configuration' and contains the following fields:

Status	Enable	(dropdown)
Range	All	(dropdown)
Mode	Only-alarm	(dropdown)
Age Time	60	(10-3600s)
Packet Send Way	VLAN-base	(dropdown)
Packet Send Time	2	(range 1-720, unit:0.5s)

At the bottom of the configuration area are 'Submit' and 'Reset' buttons.

Status: Enable or Disable the status of Loopback.

Range: Interface for enabling Loop detection.

Mode: Measures taken after the Loop has occurred.

Age Time: Aging time of Loop alarm list.

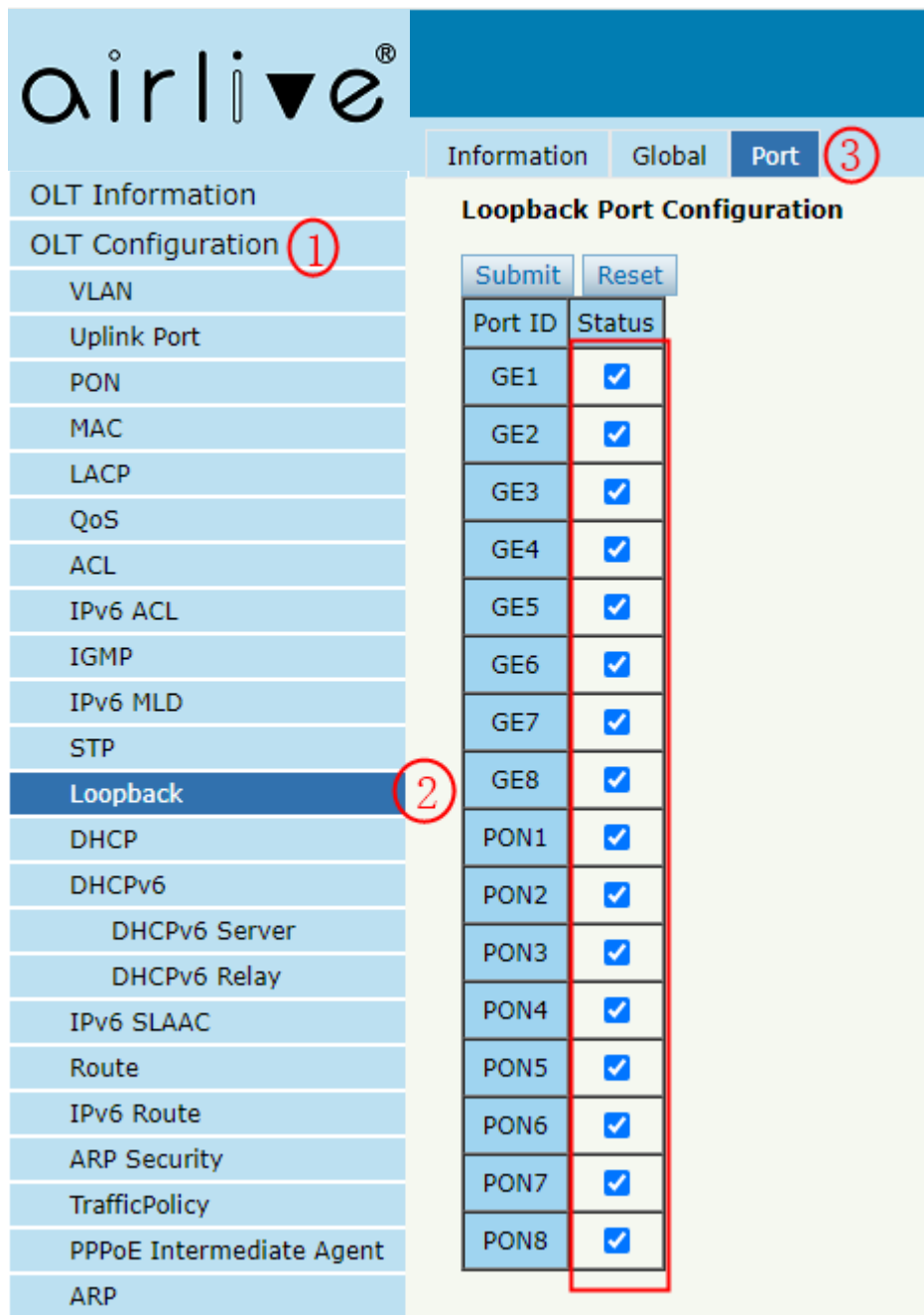
Packet Send Way:

1) VLAN-base: The Loop detection package includes VLAN and is transmitted based on the VLAN.

2) Port-base: The Loop detection package does not include VLAN and is transmitted based on the port.

Packet Send Time: The Loop detection package delivery time interval.

2.2 OLT Configuration>Loopback>Port



The screenshot shows the Airlive OLT configuration interface. On the left is a navigation menu with 'Loopback' selected. The main area shows the 'Loopback Port Configuration' page with a table of ports and their status.

Navigation Menu (Left):

- OLT Information
- OLT Configuration **1**
- VLAN
- Uplink Port
- PON
- MAC
- LACP
- QoS
- ACL
- IPv6 ACL
- IGMP
- IPv6 MLD
- STP
- Loopback 2**
- DHCP
- DHCPv6
 - DHCPv6 Server
 - DHCPv6 Relay
- IPv6 SLAAC
- Route
 - IPv6 Route
- ARP Security
- TrafficPolicy
- PPPoE Intermediate Agent
- ARP

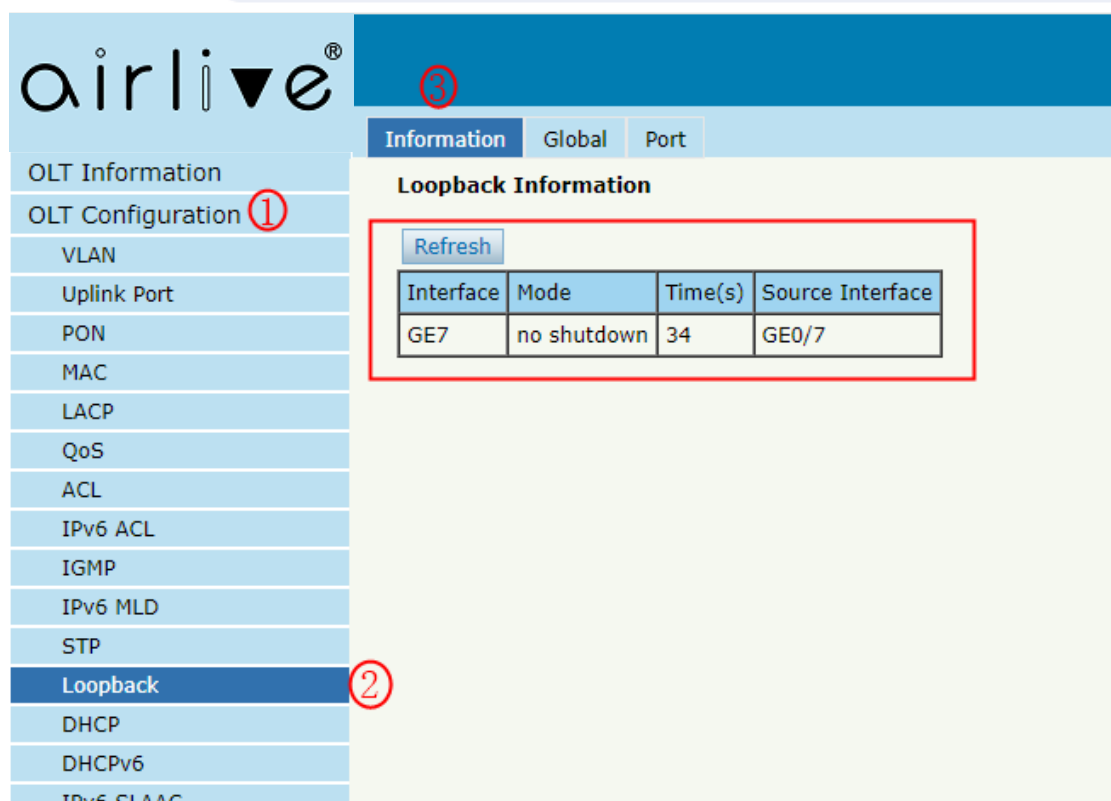
Loopback Port Configuration (Right):

Buttons: Submit, Reset

Port ID	Status
GE1	<input checked="" type="checkbox"/>
GE2	<input checked="" type="checkbox"/>
GE3	<input checked="" type="checkbox"/>
GE4	<input checked="" type="checkbox"/>
GE5	<input checked="" type="checkbox"/>
GE6	<input checked="" type="checkbox"/>
GE7	<input checked="" type="checkbox"/>
GE8	<input checked="" type="checkbox"/>
PON1	<input checked="" type="checkbox"/>
PON2	<input checked="" type="checkbox"/>
PON3	<input checked="" type="checkbox"/>
PON4	<input checked="" type="checkbox"/>
PON5	<input checked="" type="checkbox"/>
PON6	<input checked="" type="checkbox"/>
PON7	<input checked="" type="checkbox"/>
PON8	<input checked="" type="checkbox"/>

Configure whether to enable the port for Loop detection.

2.3 OLT Configuration>Loopback>Port



The screenshot shows the airtlive OLT configuration interface. On the left is a navigation menu with 'Loopback' selected. The main area displays 'Loopback Information' with a table of loop detection alarms. A red box highlights the table, and red circles mark the 'Loopback' menu item and the 'Refresh' button.

Interface	Mode	Time(s)	Source Interface
GE7	no shutdown	34	GE0/7

Loop detection alarm list.

As shown in the above example, an alarm indicates a loop between GE7 and GE0/7. At this time, it is necessary to check if there is a Loop in GE0/7: it could be the wiring or the configuration has an setup error causing the Loop.