

**Setup guide for OLT and ONU in
Default Configuration**

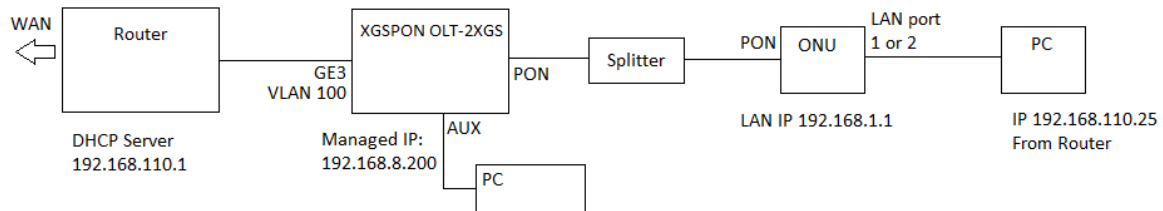
**AirLive XGSPON OLT-2XGS and
ONU-10XG(S)-1001-10G**

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How to Setup the OLT and ONU in combination with a Router.

For the setup an AirLive GPON OLT-2XGS and an AirLive ONU-10XG(S)-AX304P-2.5G was used.

The setup is following the below diagram, please do **not** use VLAN: 0, 1, 2, 9, 8, 10, 4000, 4005, 4012-4017, 4095.



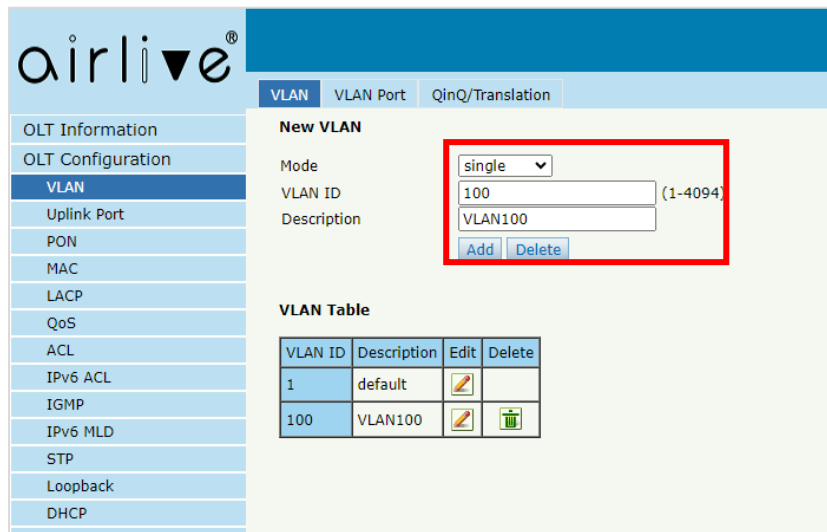
Do **not** use vlan : 0 , 1 , 2 , 9 , 8 , 10 , 4000 , 4005 , 4012-4017 , 4095

Setup Steps:

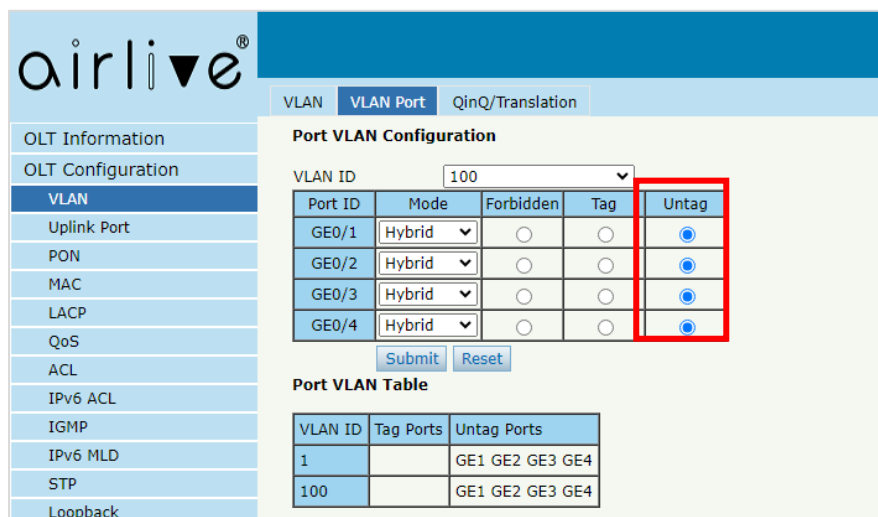
- 1: Login to the OLT management web interface. The default IP is 192.168.8.200 using the AUX port. Make sure the PON mode is the correct one for the ONU used.
- 2: If we want to configure ONU access the Internet, we need to create a VLAN in OLT first.
- 3: Create a VLAN 100 (for this example) for Internet.
- 4: VLAN bindings for uplink GE port
please note: If the uplink port is in the untag mode, PVID (default vlan id) needs to be configured (100 in this example).
- 5: Open ONU list page, Select the PON port where ONU is located. Find out what ONU you want to configure. Check the ONU status and ensure the ONU is in Online state.
- 6: Click on the ONU configuration page to configure "tcont", "gemport", "Service", "Service Port" and other parameters.
- 7: As the ONU is a SFU the Ethernet port needs to be setup directly.
On the "PortVlan" page, for ONU, the Mode needs to be configured for "Tag", PortType needs to be configured for "Eth" and Port Id needs to be configured for each of the ethernet ports of the ONU in this case the ONU has 2 LAN ports for both need to be setup here. First Enter "1" for LAN port 1, then enter the VLAN ID which in this example is 100 and press commit. Now the same thing needs to be setup for LAN port 2. Follow the same steps but now enter "2" at Port Id and press commit again. Now both ports are connect to Internet.
- 10: Press "SAVE" in the top bar of the OLT so save the complete configuration.

A computer connected to the ONU will now receive a IP address from the Router. In this example in the range of 192.168.110.x.

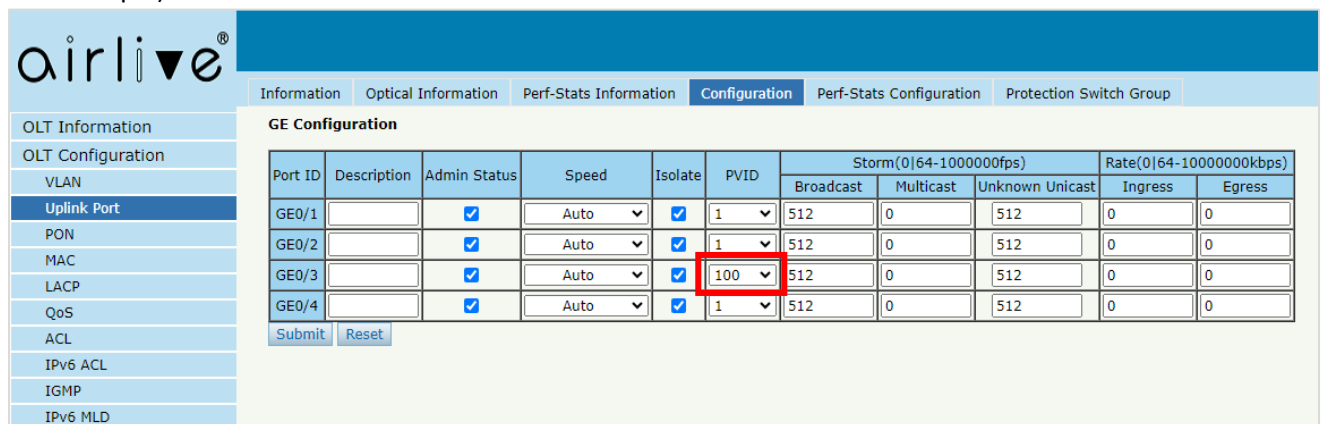
1: In the OLT Configuration select “VLAN” and make a VLAN ID in this example we make VLAN 100.



2: Bind the Uplink GE port go the “VLAN” >> “VLAN Port”, in this example all ports were binded to the VLAN 100. Make sure the Uplink is in “Untag” mode.



3: When the Uplink port is in “Untag” mode, the PVID (default VLAN id) needs to be configured. Go to “Uplink Port” >> “Configuration”. Change the PVID for the uplink to 100 (in this example).



4: Adding the ONU to the OLT. These steps are only needed when the ONU is not auto detected.

Note: By default in “ONU AutoLearn” Plug and Play is enabled. This means that when a SFU ONU like the ONU-10XG(S)-1001-10G is connected it will automatically file in configuration information like Tcont, Gempport ect. If these settings are different from the ones you want to use then you need to edit them. When you do not want the automatic function then please Disable the “Plug and Plug” function before you connect the ONU.

The screenshot shows the 'Automatic Learn' configuration page in the AirLive OLT interface. The 'Plug and Play' dropdown menu is highlighted with a red box and is currently set to 'disable'. Other settings include 'Default ONU Profile' set to 'default', 'Default VLAN' set to 'enable', and 'Variable VLAN' set to 'disable' with a value of '1'.

PON ID	Enable	Line Profile	Srv Profile
PON1	Enable	N/A	N/A
PON2	Enable	N/A	N/A

Make sure the ONU has been connected to the OLT via its PON ports and a Splitter. Click ONU “AuthList” it could that your ONU has been automatically added, if this is the case you can go to step 5 directly. If not follow that steps as below.

Click on “ONU Configuration” and select “ONU Autofind” when your ONU has been connected correctly. It will show up here. Select the ONU you want to add (when there are several) and click on “Add”.

The screenshot shows the 'Automatic Discovery' configuration page in the AirLive OLT interface. The 'Add' button in the table is highlighted with a red box. The table contains one entry with the following details:

Index	Sn	SnPw	loid	loidpw	Action
1	GPON0000004c	1234567890	user	NULL	Add

Click on “Submit” on the next page which will automatically appear.

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Automatic Discovery Aging Time

OLT Information
OLT Configuration
ONU Configuration
ONU AuthList
ONU AutoFind
ONU AutoLearn
ONU Upgrade
Rogue ONU
Profile Configuration
System Configuration

Add Onu

PON Num	1
ONU Num	3
Auth Mode	Sn
Onu Sn	GPON0000004c
ONU Profile	default

Submit Back

The ONU will now be shown and when connected correctly will show “Enable”

airlive® Save Log

Automatic Discovery Aging Time

OLT Information
OLT Configuration
ONU Configuration
ONU AuthList
ONU AutoFind
ONU AutoLearn
ONU Upgrade
Rogue ONU
Profile Configuration
System Configuration

ONU Status Information

Port ID PON1

total-3, logging-0, offline-0, syncMib-1, configFail-0, working-2

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	N/A	1970:01:01 08:01:17	N/A	N/A	02:33:36
GPON0/1:2	enable	enable	working	N/A	1970:01:01 08:01:16	N/A	N/A	02:33:37
GPON0/1:3	enable	enable	syncMib	N/A	N/A	N/A	N/A	N/A

5: Configure the ONU, Click on the “ONU List” in the top right corner of the OLT menu bar. if you do not have the ONU List button, then go to ONU Configuration and click on ONU AuthList.

The active ONU’s will now be shown, select the ONU you want to configure (make sure the status is “Online”) and click on the “Config” button.

airlive® Save Log Status **ONU list** Logout

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

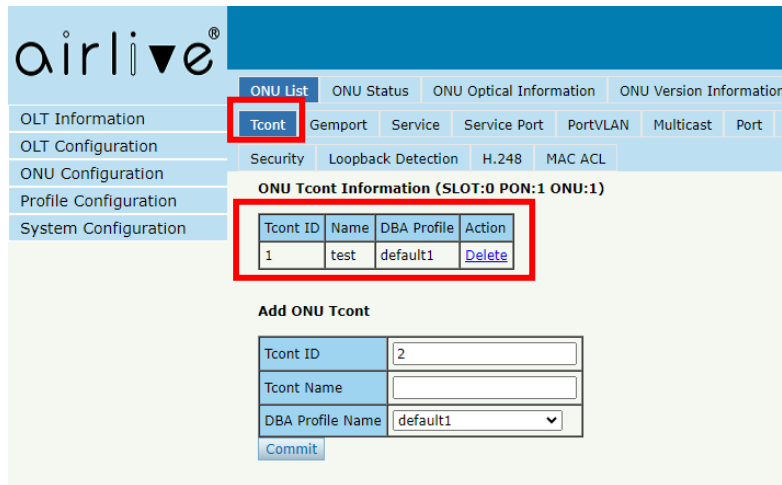
ONU Count 1/1

Delete All Delete Offline Refresh

ONU ID	Status	Description	Model	Profile	PON Type	Mode	Info	Action
GPON0/1:1	Online	GPON0/1:1	H365	default	XG-PON	SN	GPON00dc7201	Config Deactivate Delete Modify Optical Info Detail Info Reboot

6: Setup the "tcont", "gempport", "Service", "Service Port" and other parameters.

Setup the "tcon" default value is 1, in this example for name, the name test was used.



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ONU List | ONU Status | ONU Optical Information | ONU Version Information

OLT Information | **Tcont** | Gempport | Service | Service Port | PortVLAN | Multicast | Port

OLT Configuration | Security | Loopback Detection | H.248 | MAC ACL

ONU Configuration

Profile Configuration

System Configuration

ONU Tcont Information (SLOT:0 PON:1 ONU:1)

Tcont ID	Name	DBA Profile	Action
1	test	default1	Delete

Add ONU Tcont

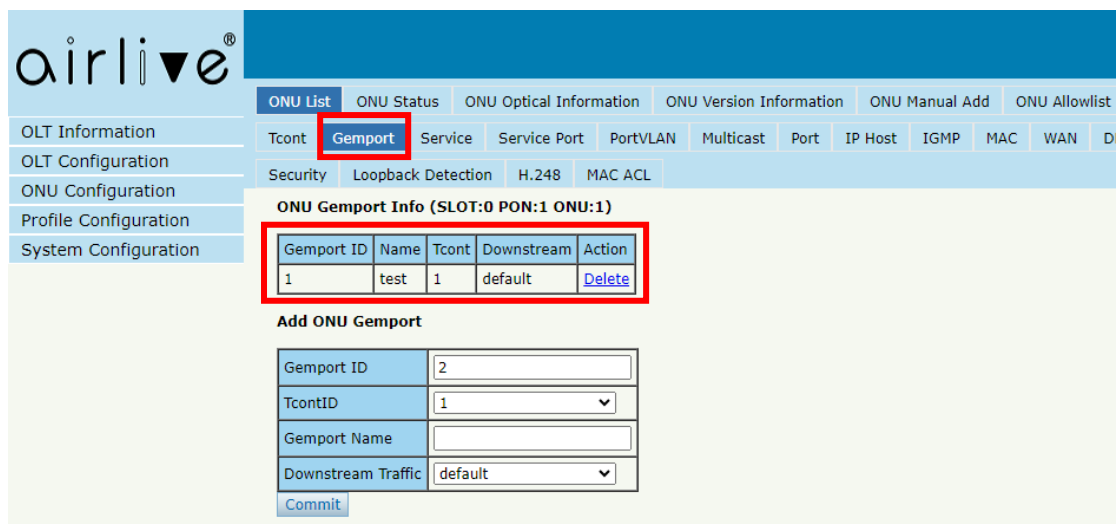
Tcont ID:

Tcont Name:

DBA Profile Name:

[Commit](#)

Setup the "gempport" the default value is 1, make sure the TcontID select is 1 (the one previously made). The name used in this example is test.



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ONU List | ONU Status | ONU Optical Information | ONU Version Information | ONU Manual Add | ONU Allowlist

OLT Information | Tcont | **Gempport** | Service | Service Port | PortVLAN | Multicast | Port | IP Host | IGMP | MAC | WAN | D

OLT Configuration | Security | Loopback Detection | H.248 | MAC ACL

ONU Configuration

Profile Configuration

System Configuration

ONU Gempport Info (SLOT:0 PON:1 ONU:1)

Gempport ID	Name	Tcont	Downstream	Action
1	test	1	default	Delete

Add ONU Gempport

Gempport ID:

TcontID:

Gempport Name:

Downstream Traffic:

[Commit](#)

Setup the "Service", make sure to select Gemport ID 1 (the one just made) and for VLAN mode select "Tag" for "VLAN List" enter the value 100, this is the VLAN id made in the OLT previously.

ONU Service Information (SLOT:0 PON:1 ONU:1)

ServiceName	Gemport	VLAN Mode	VLAN List	CoS List	Port	Action
ser_1	1	Tag	100	N/A	N/A	Delete

Add ONU Service

ServiceName	ser_2
Gemport ID	1
VLAN Mode	Tag
VLAN List	100 (X,X or X-X;0 for all;max 12 VLANs)
CoS List	N/A (X,X or X-X;)
PortType	N/A
Commit	

Setup the "Service Port" enter the User VLAN and Translate VLAN in this example both are 100. (as this example is using VLAN 100).

ONU Service Port Info (SLOT:0 PON:1 ONU:1)

Service Port	Gemport ID	Begin Vid	End Vid	Outer Vid	Inner Vid	VLAN	SVLAN	Mode	Enable	Description	Action
1	1	100	100	N/A	N/A	100	N/A	1:1	YES	N/A	Delete

Add ONU Service Port

Service Mode	CVLAN
Service Port ID	2
Gemport ID	1
User VLAN	
Translate VLAN	
Translate SVLAN	N/A
Description	N/A
Commit	

As the ONU is a SFU the Ethernet port needs to be setup directly.

On the "PortVlan" page, for ONU, the Mode needs to be configured for "Tag", PortType needs to be configured for "Eth" and Port Id needs to be configured for each of the ethernet ports of the ONU in this case the ONU has 2 LAN ports for both need to be setup here. First Enter "1" for LAN port 1, then enter the VLAN ID which in this example is 100 and press commit. Now the same thing needs to be setup for LAN port 2. Follow the same steps but now enter "2" at Port Id and press commit again. Now both ports are connected to Internet.

The screenshot shows the AirLive OLT configuration interface. The top navigation bar includes 'Status', 'Save', and 'Logout'. The 'Save' button is highlighted in red. Below the navigation tabs, the 'PortVLAN' tab is selected and highlighted. A table titled 'ONU PortVLAN Info (SLOT:0 PON:1 ONU:3)' shows two entries for ports eth_0/1 and eth_0/2, both configured with Mode 'Tag' and VLAN ID '100'. Below the table is a form to 'Add ONU PortVLAN' with fields for Mode (Tag), PortType (Eth), Port Id, VLAN ID, and VLAN Priority (N/A), and a Commit button.

PortName	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	100	0	N/A	N/A	N/A	N/A	N/A	N/A	Delete
eth_0/2	Tag	100	0	N/A	N/A	N/A	N/A	N/A	N/A	Delete

Press "SAVE" in the top bar of the OLT so save the complete configuration.

The Setup is now complete, and the ONU is connected to Internet.

To see the settings of the ONU (which the OLT sent to the ONU), please connect to the ONU with a PC, and enter the default IP address of the ONU in a browser. The default IP address is 192.168.1.1. Note you need to setup your computer to a fixed IP address in the range of 192.168.1.x . As by default the computer will get an IP address from the router in the 192.192.110.x range (as per example).

Note: to see and change the WAN port setup please login as Administrator and not as User. Click on "Network" and Select "WAN" at "Connection Name" select the VLAN 100 connection (in this example) so see the setup.