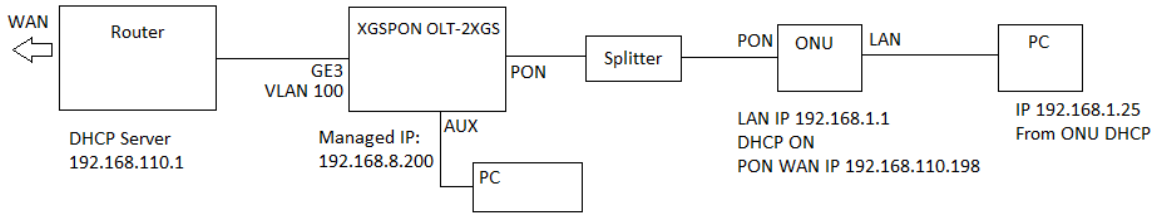
Setup guide for OLT and ONU in Default Route Configuration

AirLive XGSPON OLT-2XGS and ONU-10XG(S)-AX304P-2.5G

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

For the setup an AirLive GPON OLT-2XGS and a 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: On the ''port vlan'' page, for ONU, the Mode needs to be configured for ''transparent'', Port Type needs to be configured for ''veip'' and Port Id needs to be configured for ''1''.

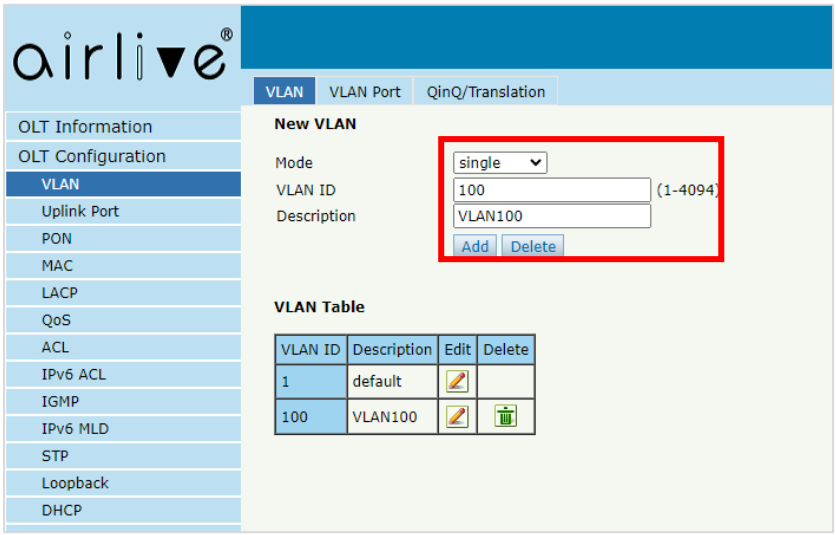
8: Then we need to create an Internet WAN connection for it, click on ''WAN'' page. Mode is Route, enable NAT, you can also choose three modes for Internet Wan connection. Here we use the DHCP mode. Then select the VLAN mode and fill in the VLAN information (100 in this example). And choose service mode is "Internet".

Please note: When the configuration is complete, you need to click the "Submit" button. At this point, the configuration is added to running-config list. Finally click the "submit" button.

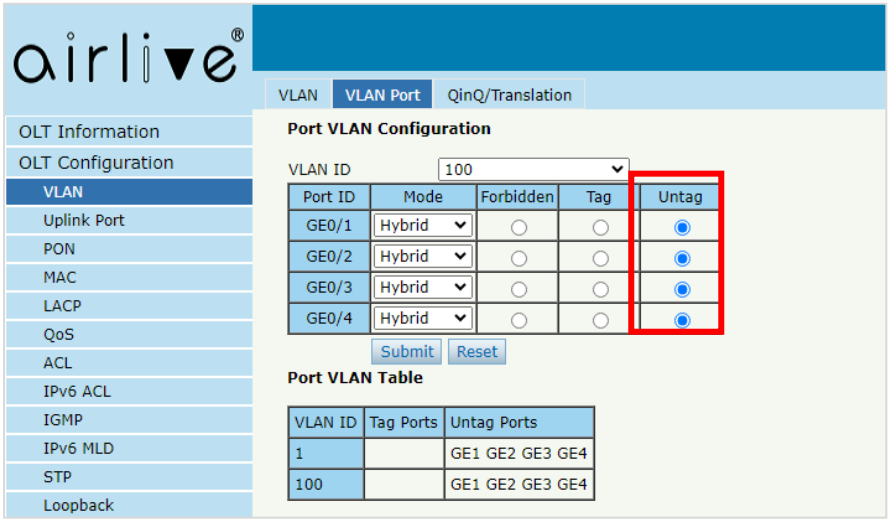
9: You can configure ONU DHCP Server on "DHCP server" page, configure the LAN IP and DHCP address pool you need.

10: Press “SAVE” in the top bar of the OLT so save the complete configuration.

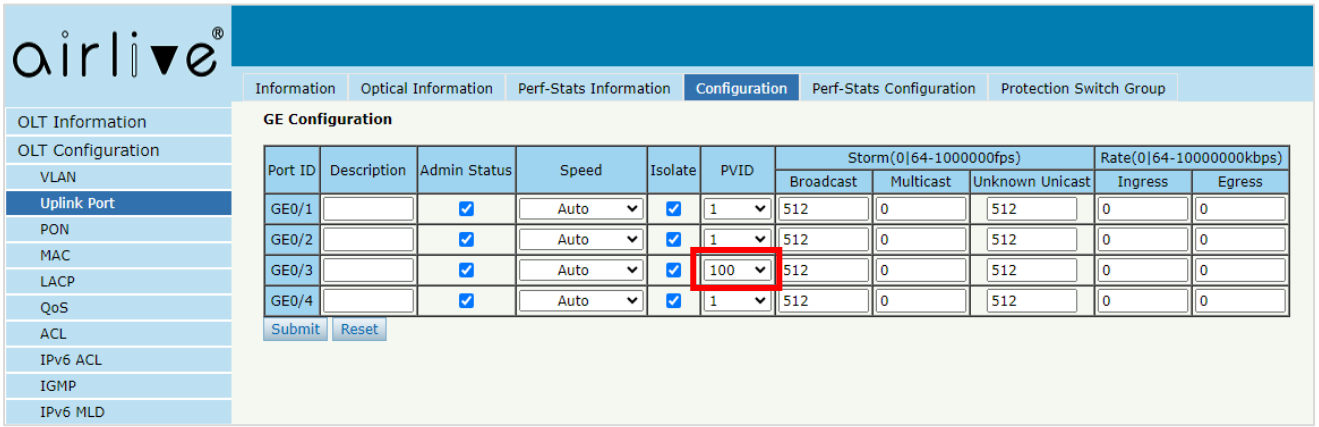
1: In the OLT Configuration select “VLAN” and make a VLAN ID in this example we make VLAN 100.



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.



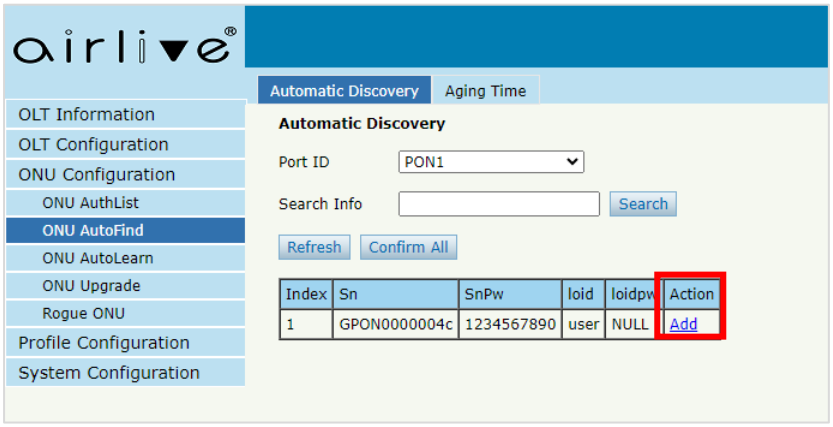
3: When the Uplink port is in “Untag" mode, the PVID (default VLAN id) needs to be configured. Go to “Uplink Port” >> “ Configuration”. Change the PVID for the uplink to 100 (in this example).



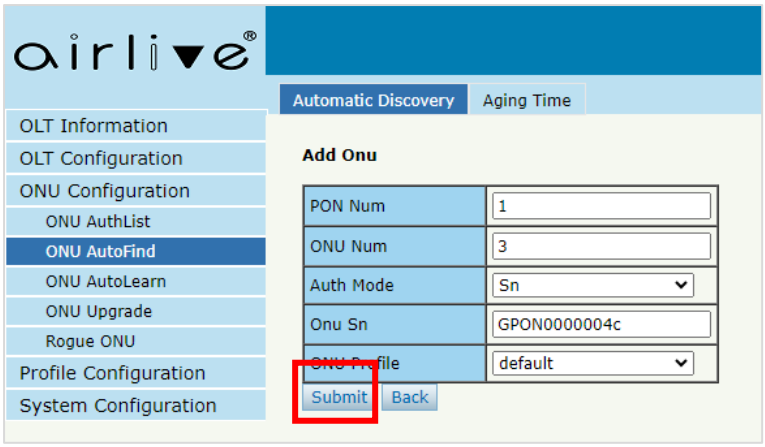
4: Adding the ONU to the OLT.

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.

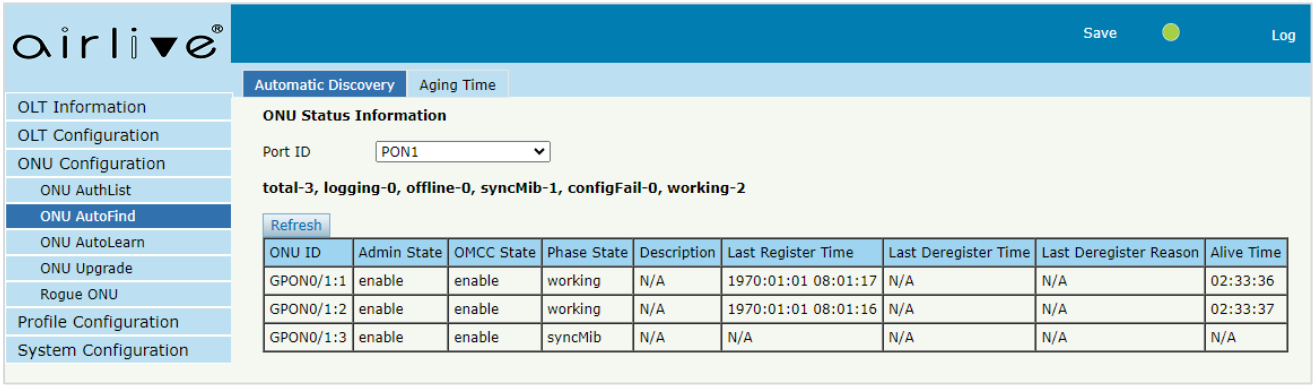
Click on “ONU Configuration” and select “ONU Autofind” when your ONU has been connected correctly. It will show up here. Select the ONU you want to add (when there are several) and click on “Add”.



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

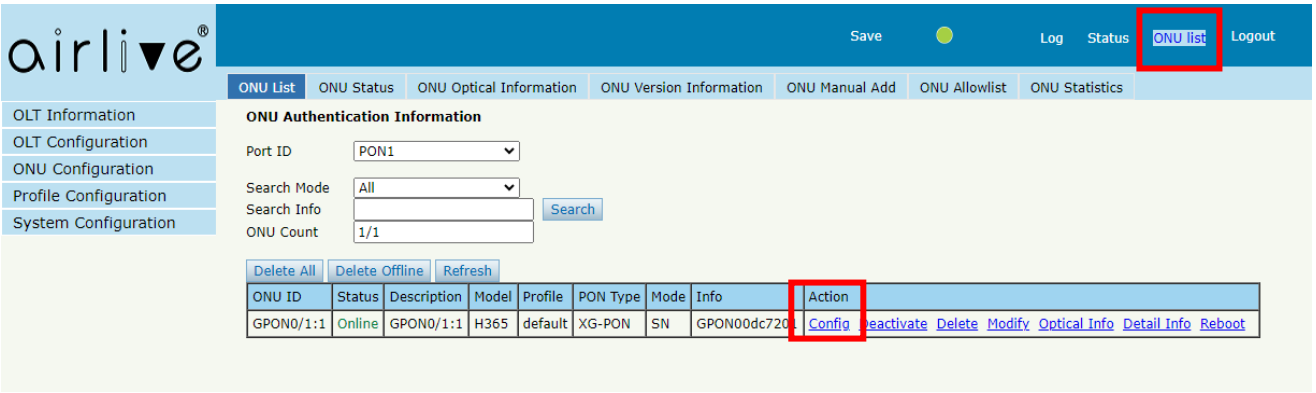


The ONU will now be shown and when connected correctly will show “Enable”



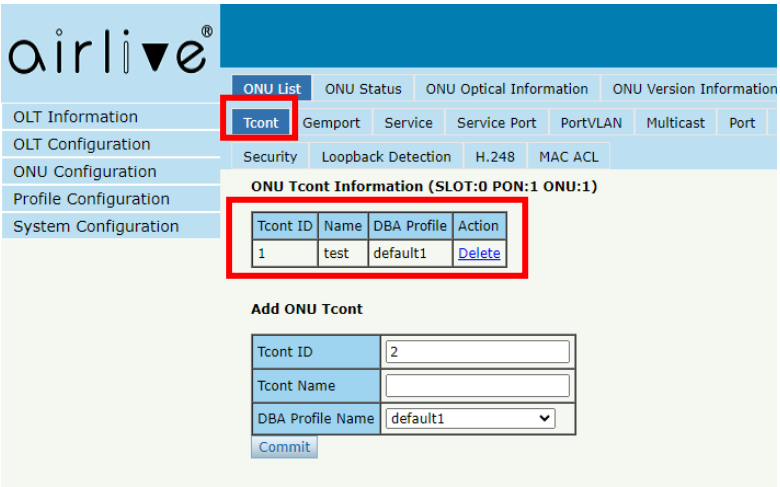
5: Configure the ONU, Click on the “ONU List” in the top right corner of the OLT menu bar.

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.

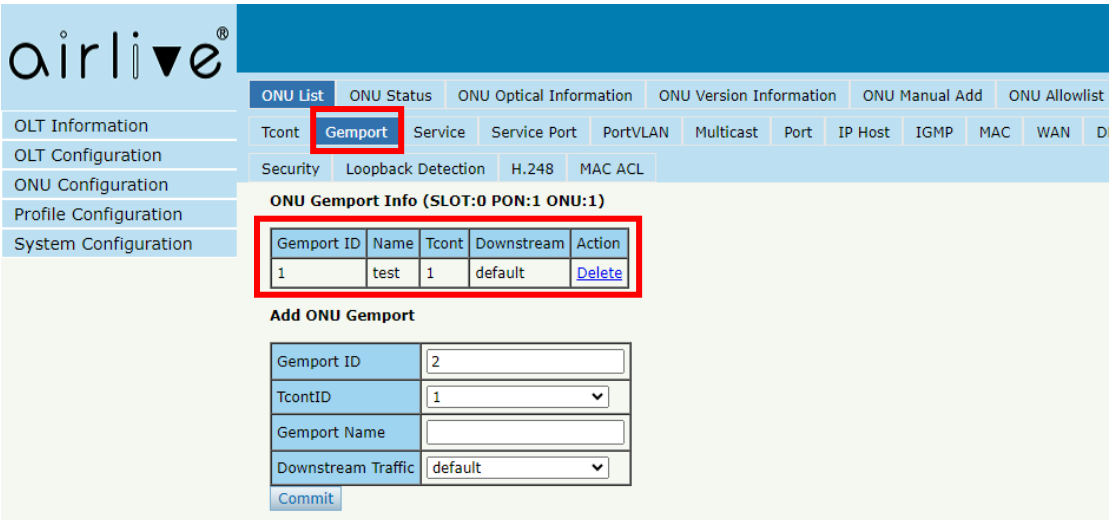


6: Setup the ''tcont'', ''gemport'', ''Service'', ''Service Port'' and other parameters.

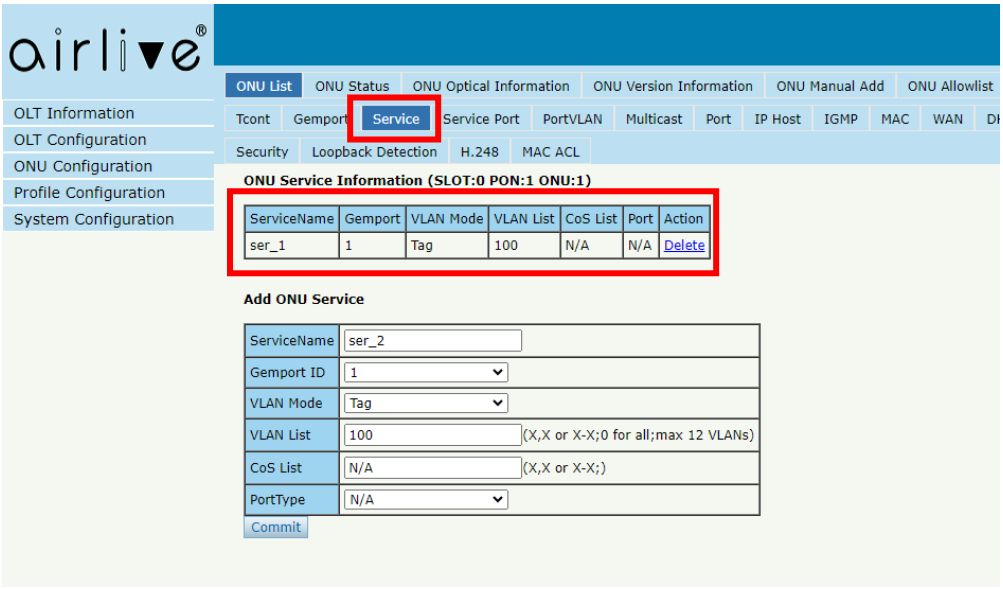
Setup the “tcon” default value is 1, in this example for name, the name test was used.



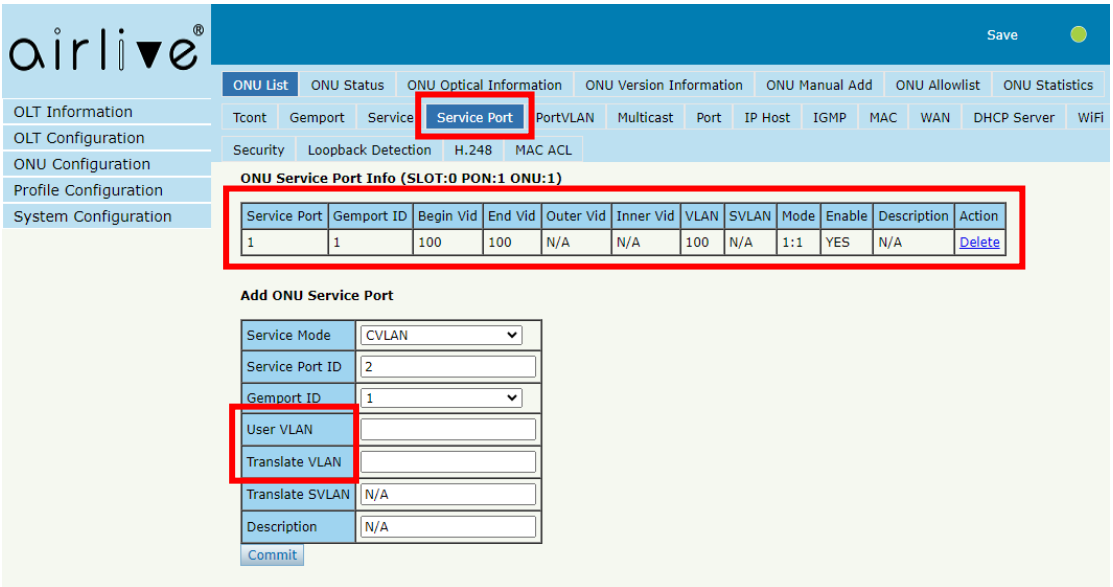
Setup the “gemport” the default value is 1, make sure the TcontID select is 1 (the one previously made. The name used in this example is test.



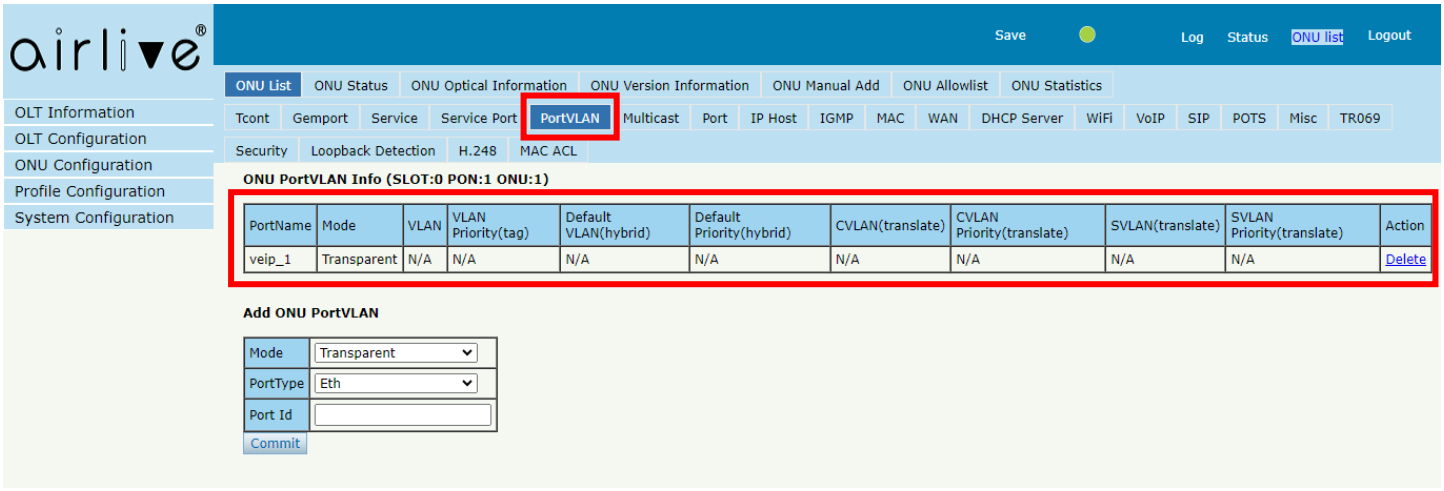
Setup the “Service”, make sure to select Gemport ID 1 (the one just made) and for VLAN mode select “Tag” for “VLAN List” enter the value 100, this is the VLAN id made in the OLT previously.



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

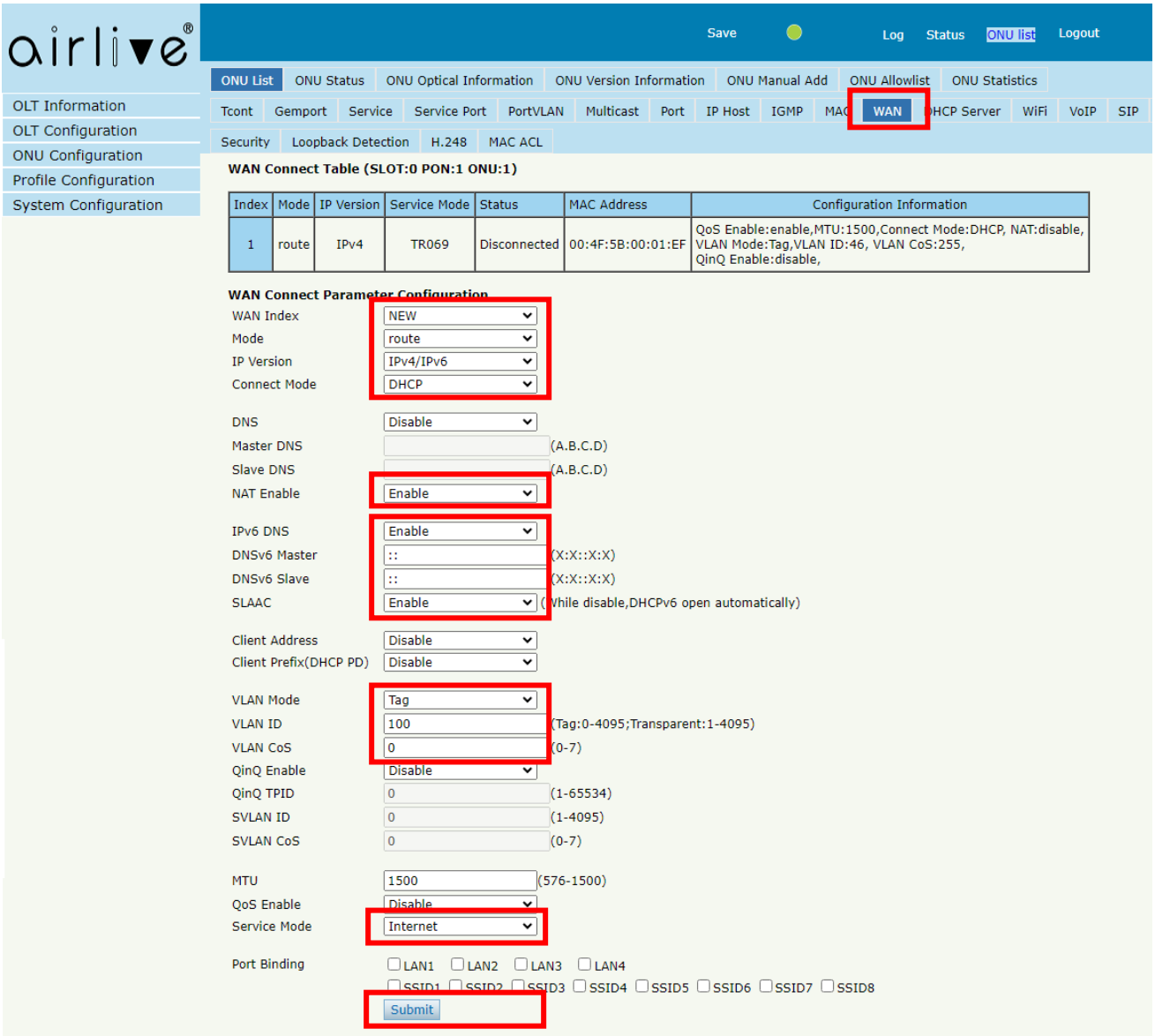


Setup the “PortVlan” On the ''PortVlan'' page, for HGU the mode needs to be configured for ''transparent'', the Port Type needs to be configured for ''veip'' and Port Id needs to be configured for ''1''.



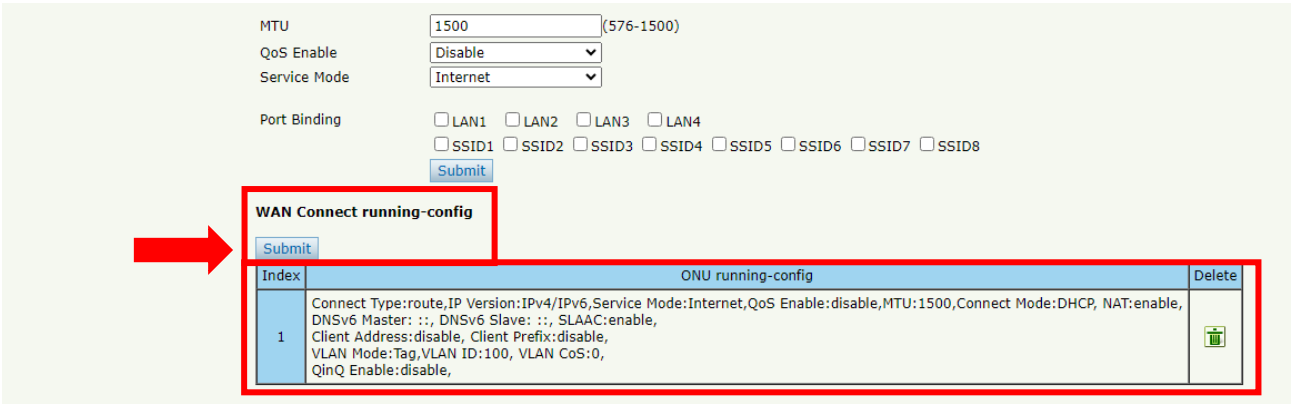
7: Setting up the WAN port information, click on the ''WAN'' page. Mode is Route, enable NAT, you can also choose three modes for Internet WAN connection. Here we use the DHCP mode. Then select the VLAN mode “Tag” in this example and fill in the VLAN information in this example 100. And choose service mode is "Internet".

Please note: When the configuration is complete, you need to click “Submit” button. At this point, the configuration is added to running-config list. Finally click the "submit" button to send the configuration to the ONU. Refresh the OLT page and in a few seconds the configuration will be shown it can take 1 min before it will show “connected” when the configuration has been setup up correctly.



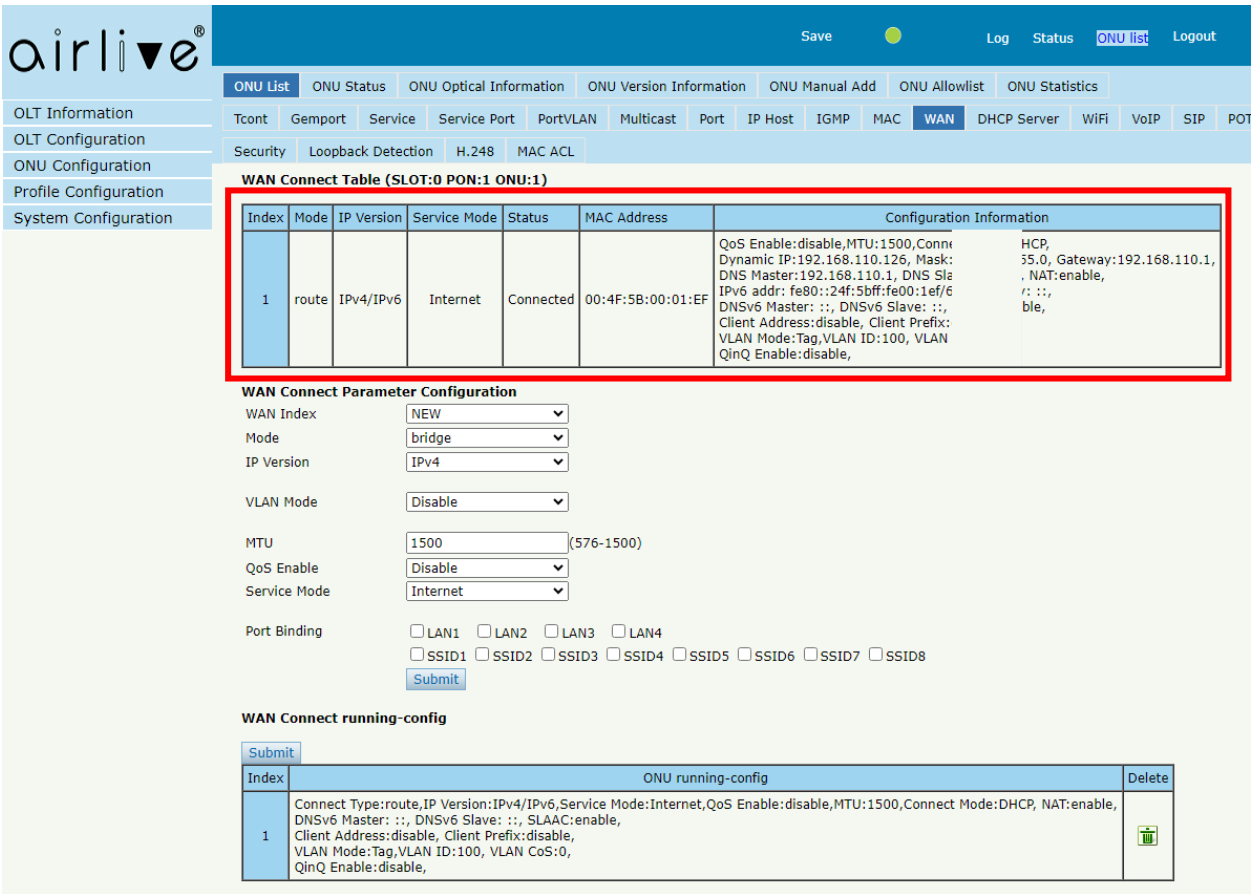
Important after pressing “Submit” your configuration is made but not yet sent to the ONU.

After pressing “Submit” the configuration will be shown as in the below example. Click “Submit” again on the second “Submit” button and the configuration will be sent to the ONU.



The configuration will now be sent to the ONU and the ONU will make an Internet connection. When the setup was done correctly the words “Connected” will be shown.

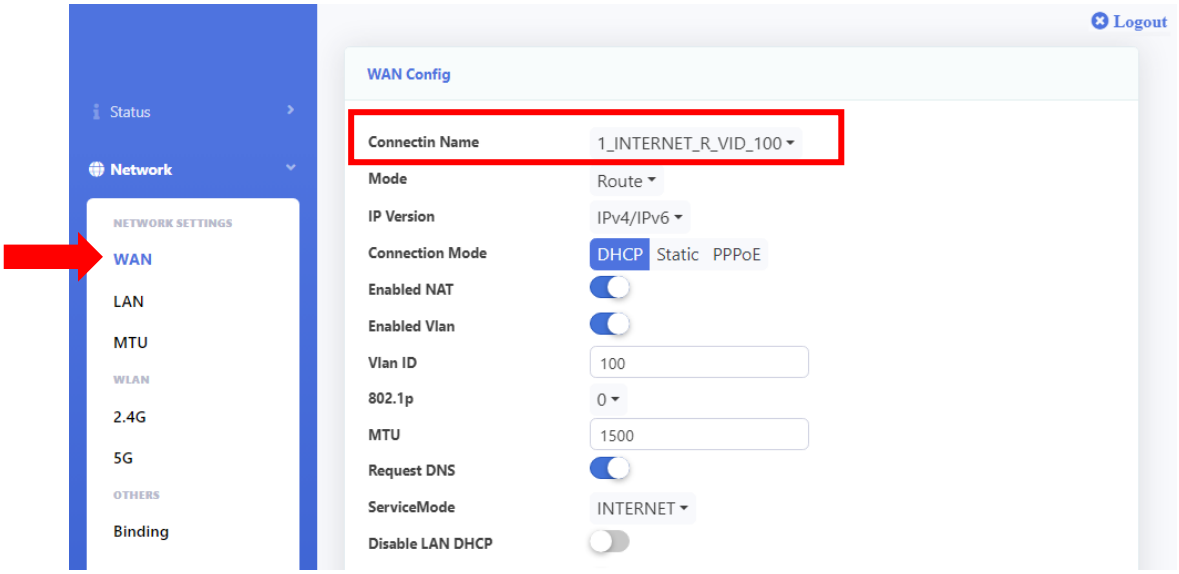
Note it can take 1 or 2 minutes before the correct information is shown, please refresh the page.



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: 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.



To see the IP address information Click on “Status” and Select “WAN info” so see the connection.