Setup guide for OLT and ONU

Route configuration

AirLive GPON OLT-121 & OLT-121-64

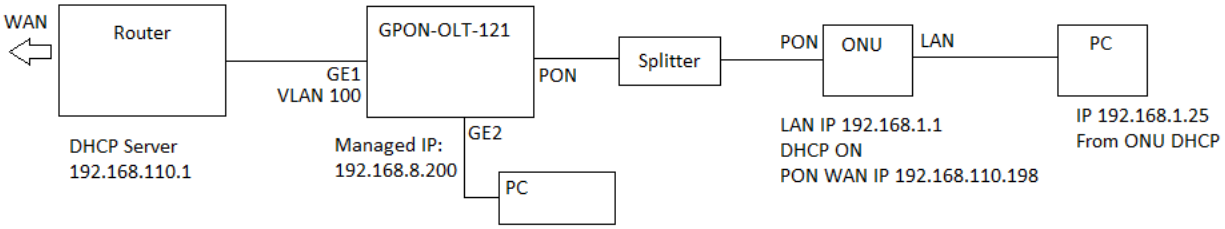
and XPON ONU

airlive®

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

For the setup an AirLive GPON OLT-121-64 and an Airlive 2.5GE XPON ONU was used.

The setup is following the diagram below, 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

2: If we want to configure the ONU to access the Internet, we need to create a VLAN in OLT first.

3: Create a VLAN, 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''.

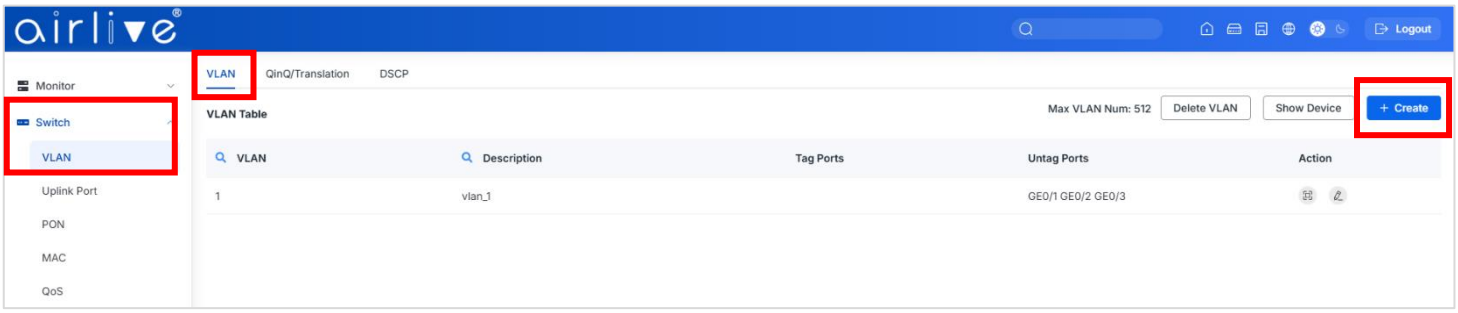
8: Then we need to create an Internet WAN connection for it, click on ''WAN'' page. Mode is Route, enable NAT, you can also choose three modes for Internet Wan connection. Here we use the DHCP mode. Then select the VLAN mode and fill in the VLAN information (100 in this example). And choose service mode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

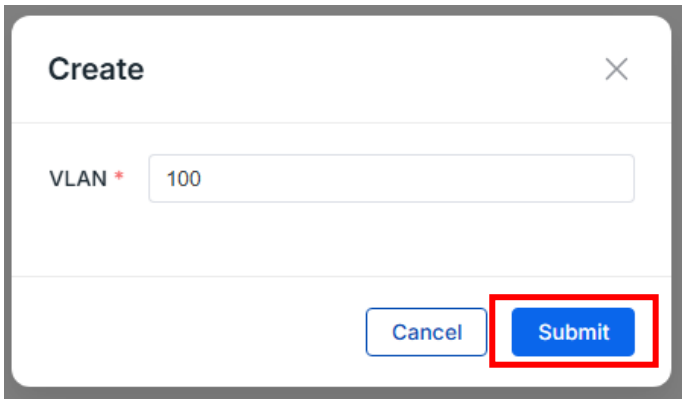
Please note: When the configuration is complete, you need to click "Submit" button. At this point, the configuration is added to running-config list. Finally click the "submit" button.

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

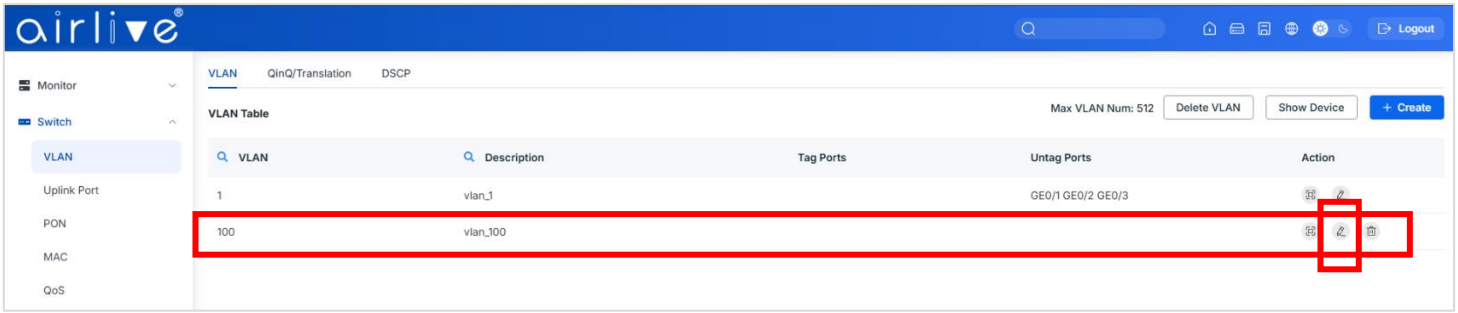
10: Press "SAVE" in the top bar of the OLT so save the complete configuration.

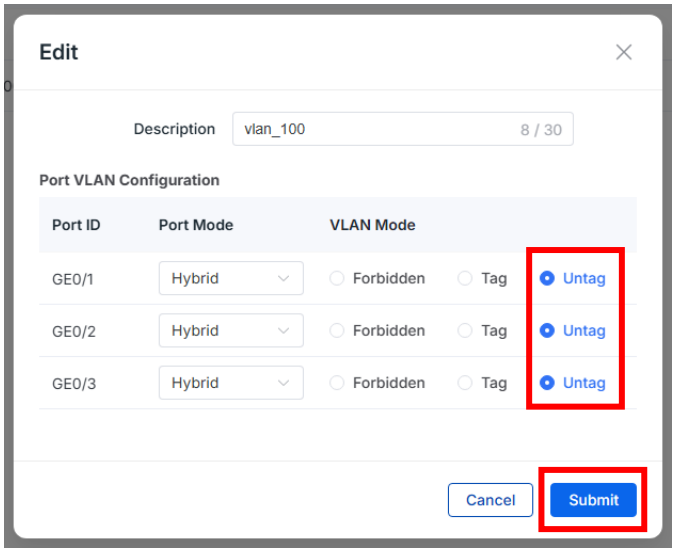
1: In the “Switch” Configuration select “VLAN” and click on “Create” to make a VLAN ID, in this example we make VLAN 100. Enter 100 and click Submit.



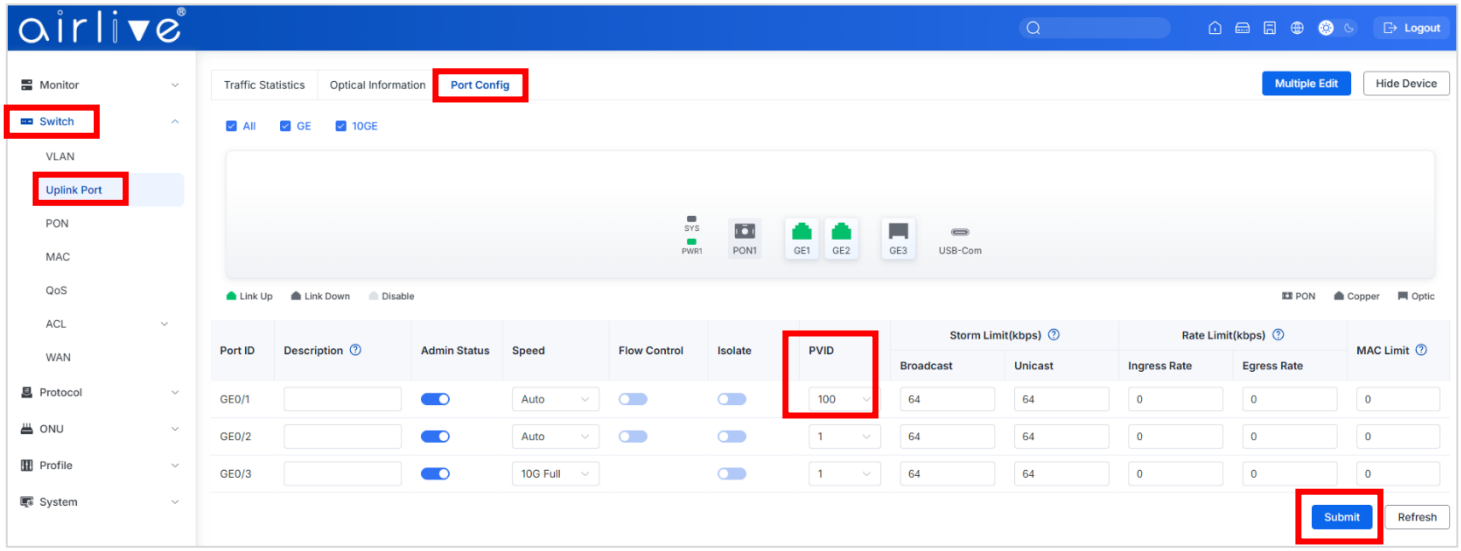


2: Bind the Uplink GE port go the “Modify” for VLAN 100, in this example all ports were binded to the VLAN 100. Make sure the Uplink is in “Untag” mode.





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



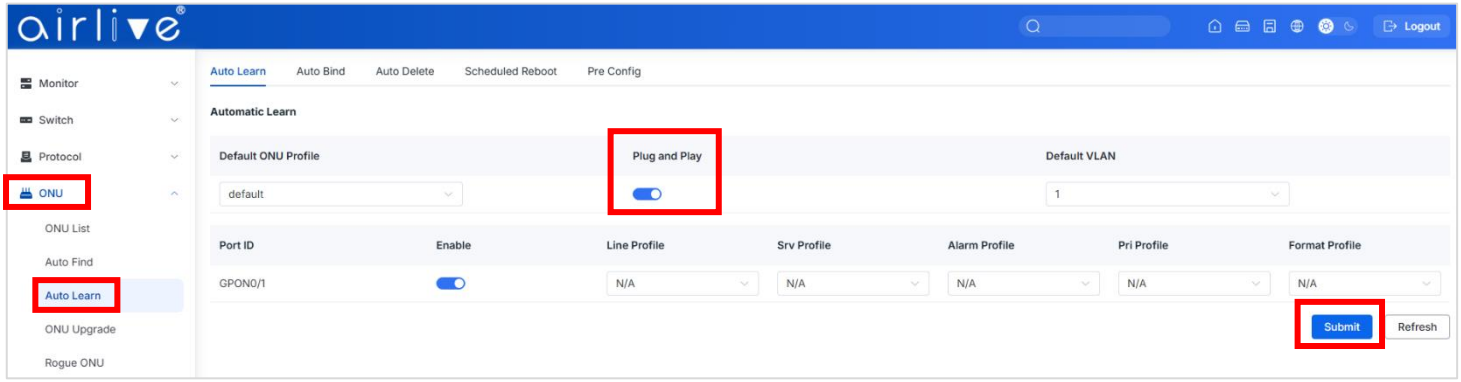
4: Adding the ONU to the OLT.

Make sure to read the full text of point 4 first, before the ONU has been connected to the OLT via its PON port and a Splitter.

Click on “ONU” and select “ONU List” when your ONU has been connected correctly. It will show up here.

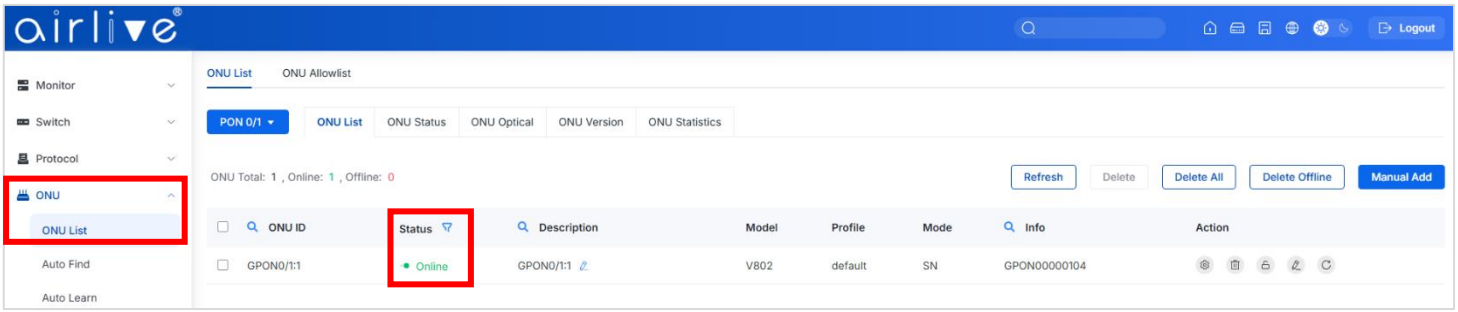
4.1 Note: By default, “ AutoLearn” Plug and Play function is enabled. This function will automatically add the default Profile to the ONU. If these are not the setting you want to use for you ONU. Then first either make your own Profile and select this “Auto Learn” or Disable the Plug and Play function in Auto Learn before you add connect the ONU to the OLT.

4.2 If you prefer to add the ONU’s manually or when the ONU cannot be found, then please also disable Plug and Play in Auto Learn. And select Manual Add from the ONU List.



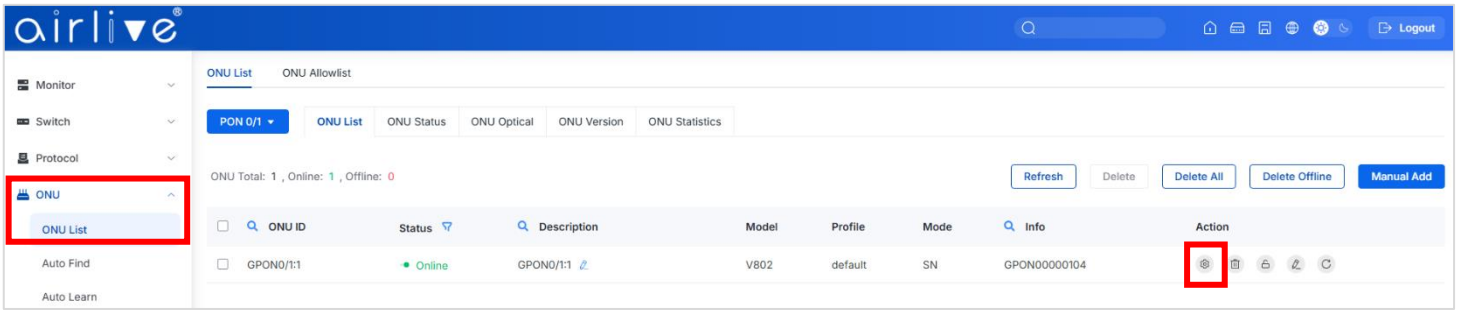
The above image is for turning the Plug and Play option when needed. Slide the blue bar to the left to turn the function off. Click “Submit “ to save the settings.

The ONU will now be shown in the ONU List and when connected correctly it will display “Online” in green at Status.



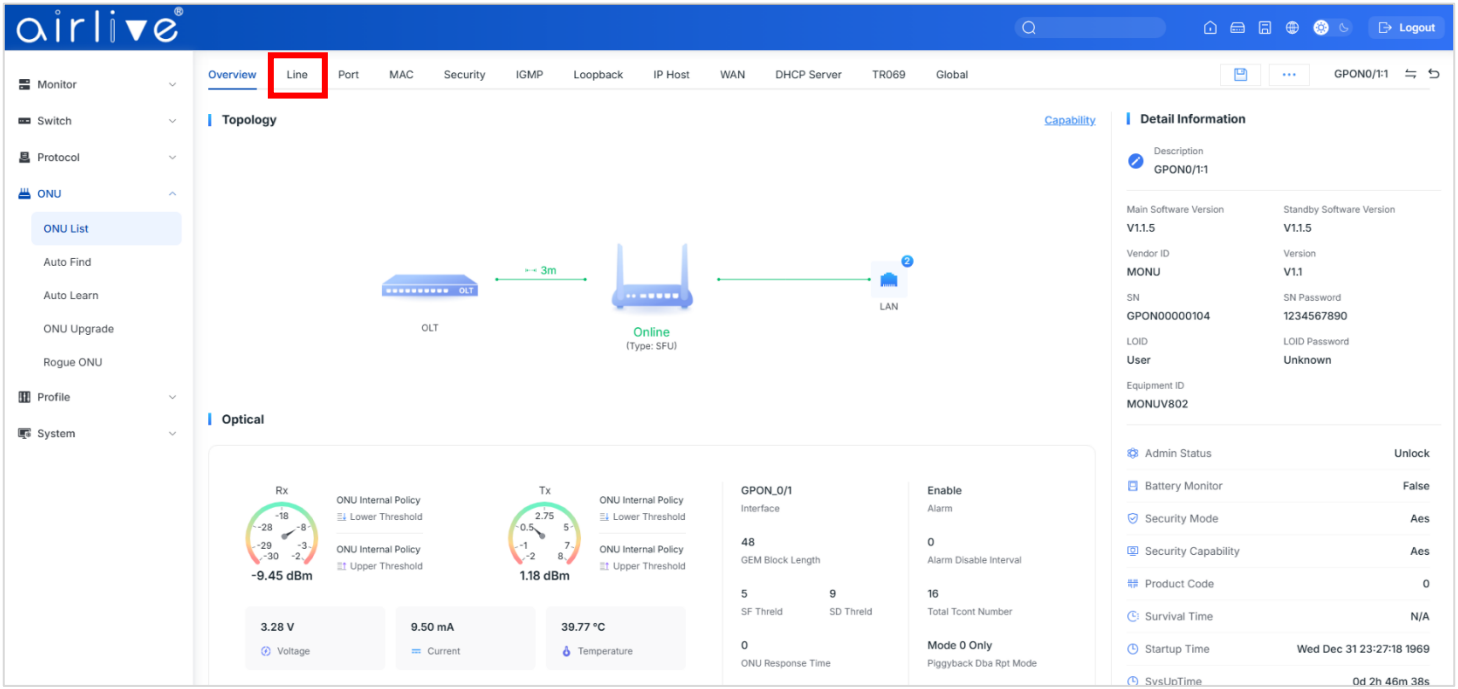
5: Configure the ONU, Click on the “ONU List” in the OLT menu.

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 “Configuration” button.



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

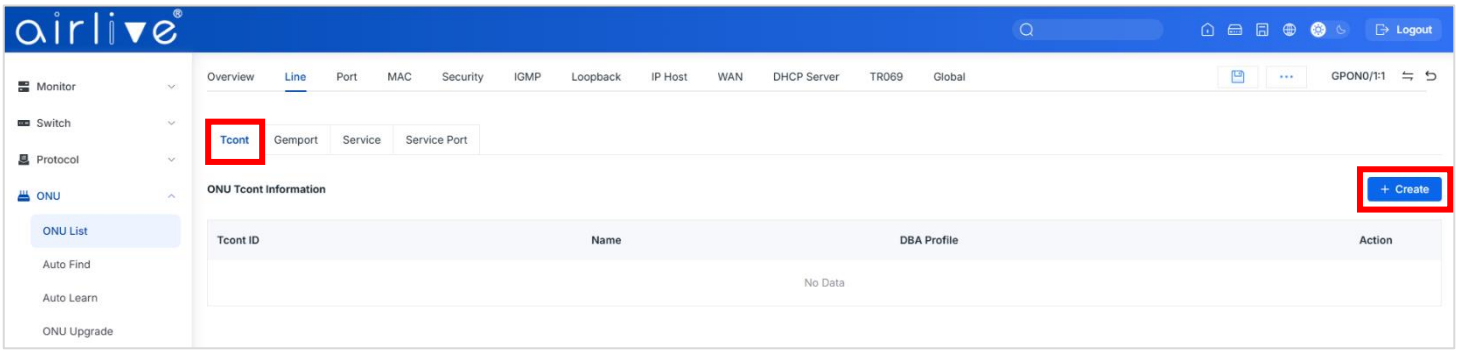
On the main Overview page select “Line”.

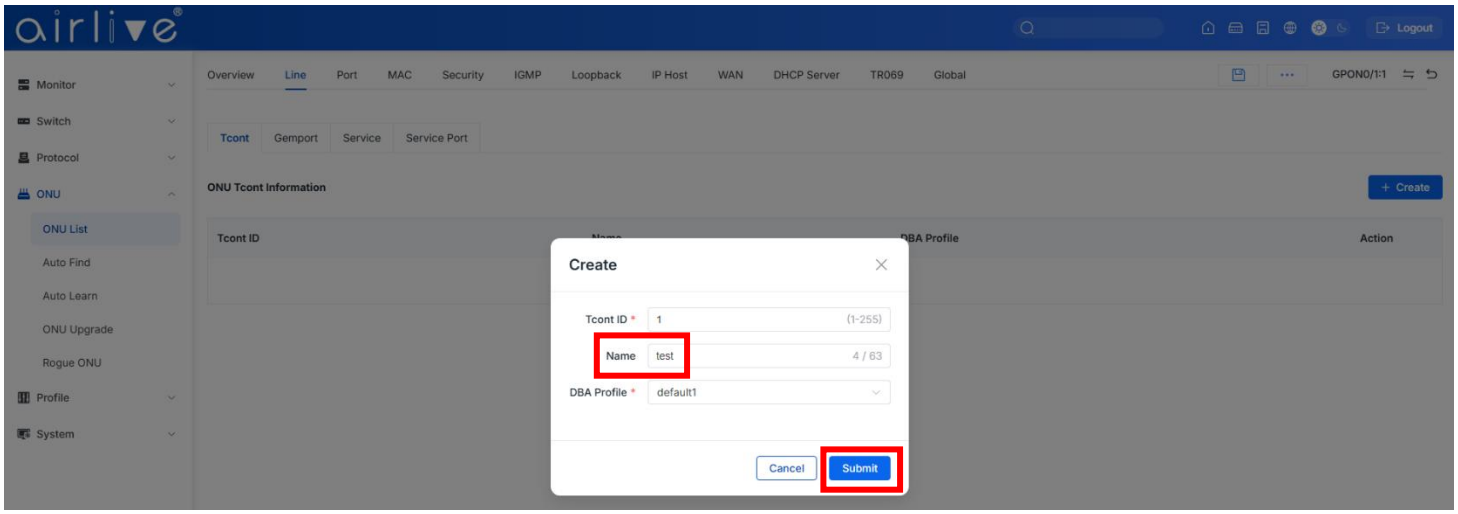


Select “Tcont”

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

Click “Create” to add the “Tcon”. After entering the information Click “Submit”

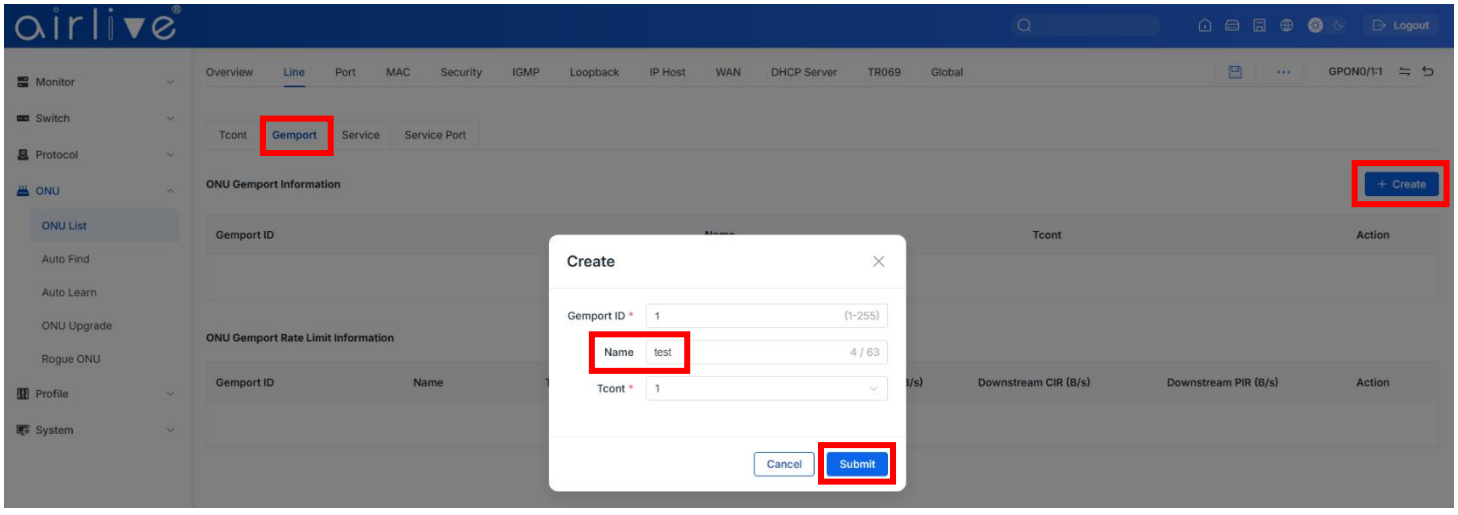




Select “Gemport”

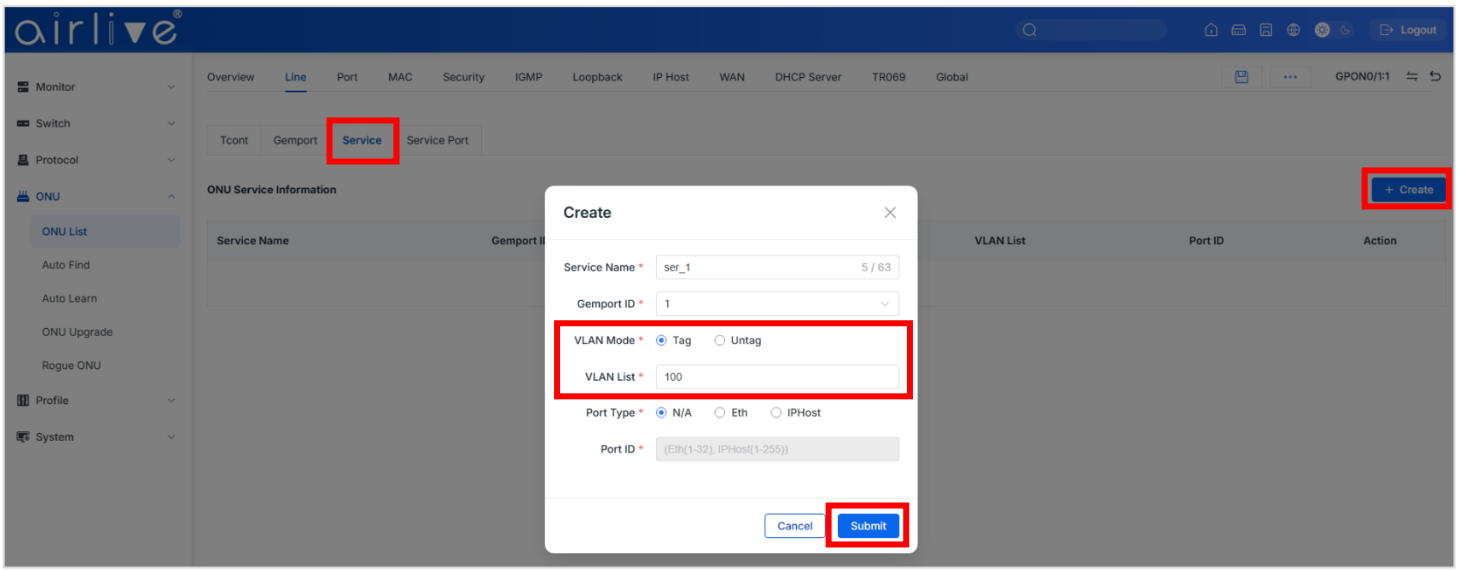
Setup the “Gemport” the default value is 1, make sure the TcontID select is 1 (the one previously made. The name used in this example is test.

Click “Create” to add the “Gemport”. After entering the information Click “Submit”



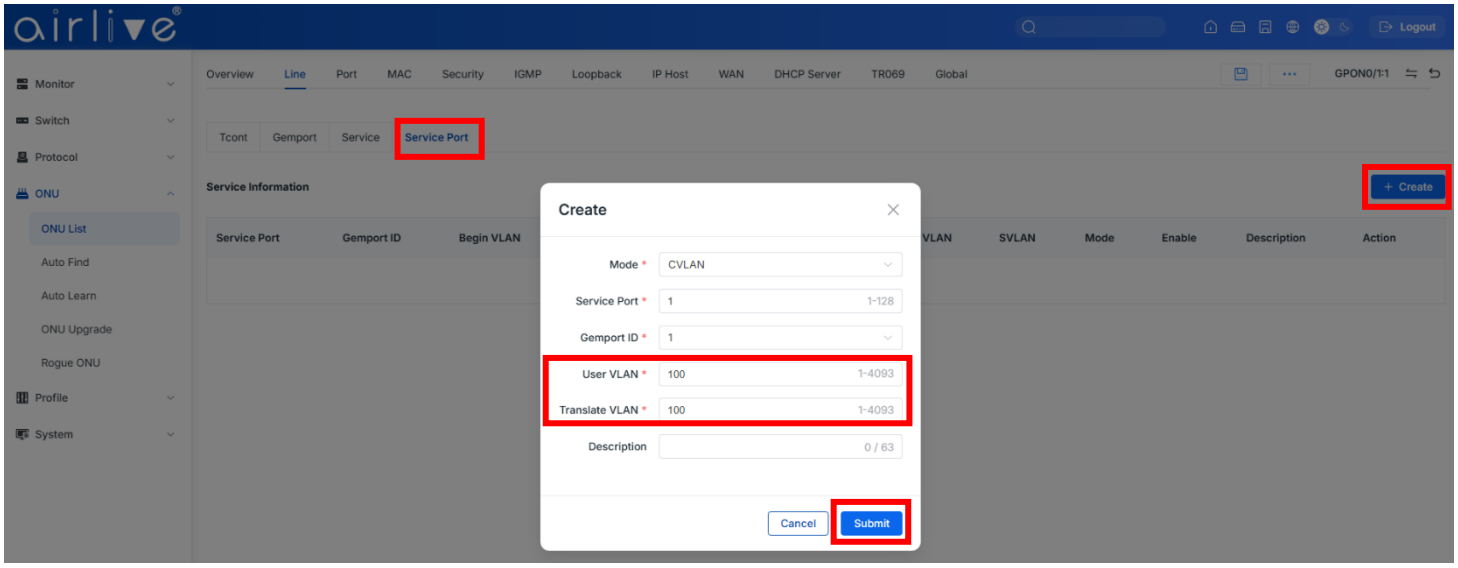
Setup the “Service”, make sure to select Gemport ID 1 (the one just made) and for VLAN mode select “Tag” for “VLAN List” enter the value 100, this is the VLAN id made in the OLT previously.

Click “Create” to add the “Service”. After entering the information Click “Submit”



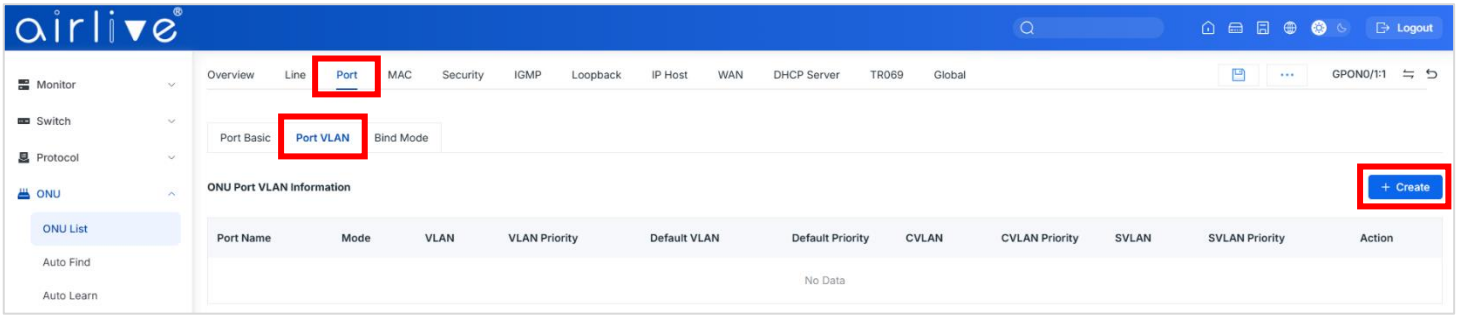
Setup the “Service Port” enter the User VLAN and Translate VLAN in this example both are 100. (as this example is using VLAN 100).

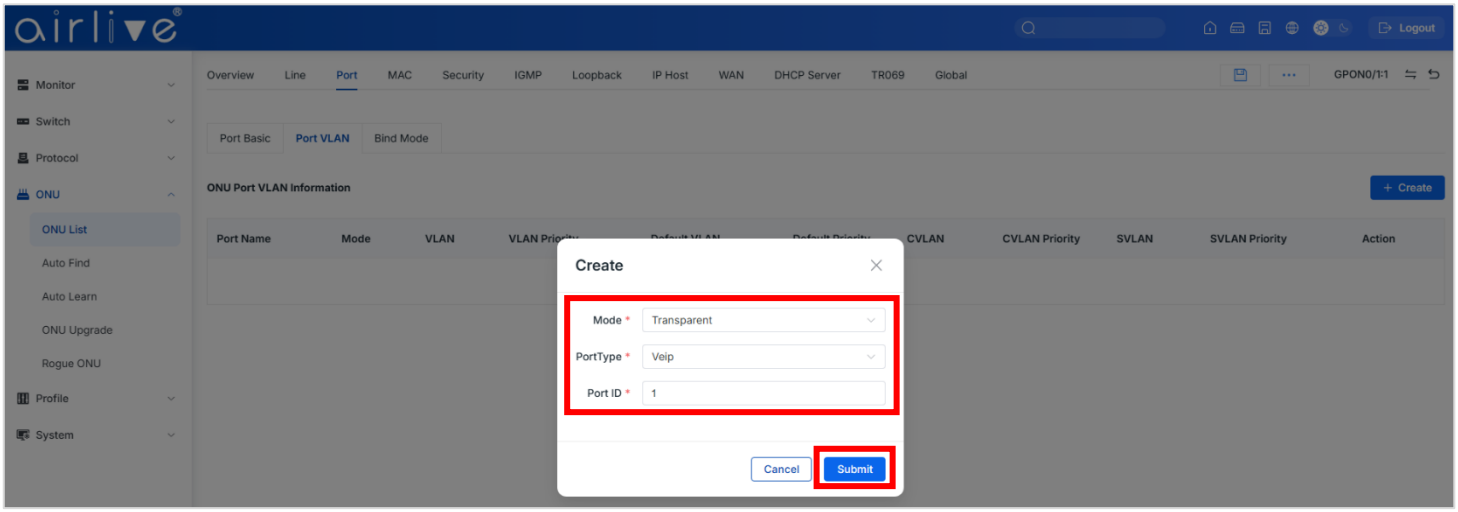
Click “Create” to add the “Service”. After entering the information Click “Submit”

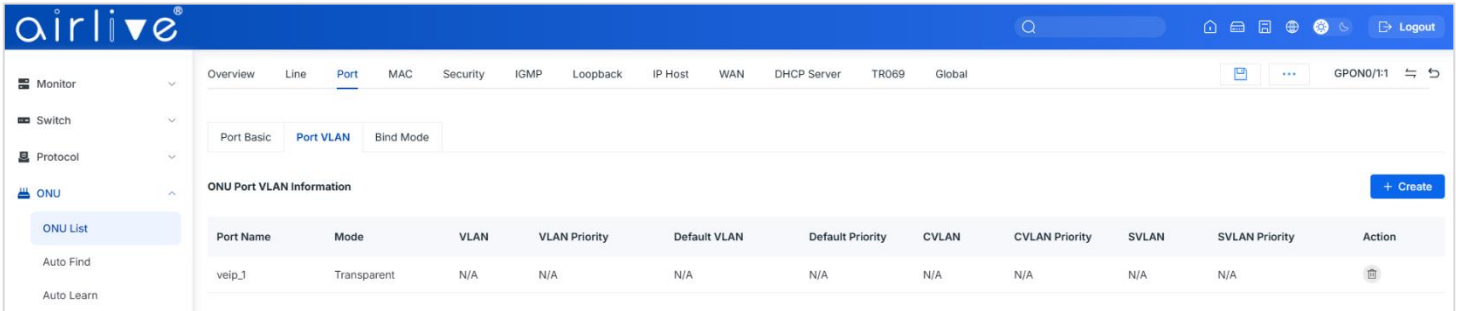


Setup the “Port VLAN” On the ''Port VLAN'' page, for HGU the mode needs to be configured to ''transparent'', the Port Type needs to be configured as ''veip'' and Port Id needs to be configured as ''1''.

From the Top menu Click on “Port”, Then select “Port VLAN” and Click Create.

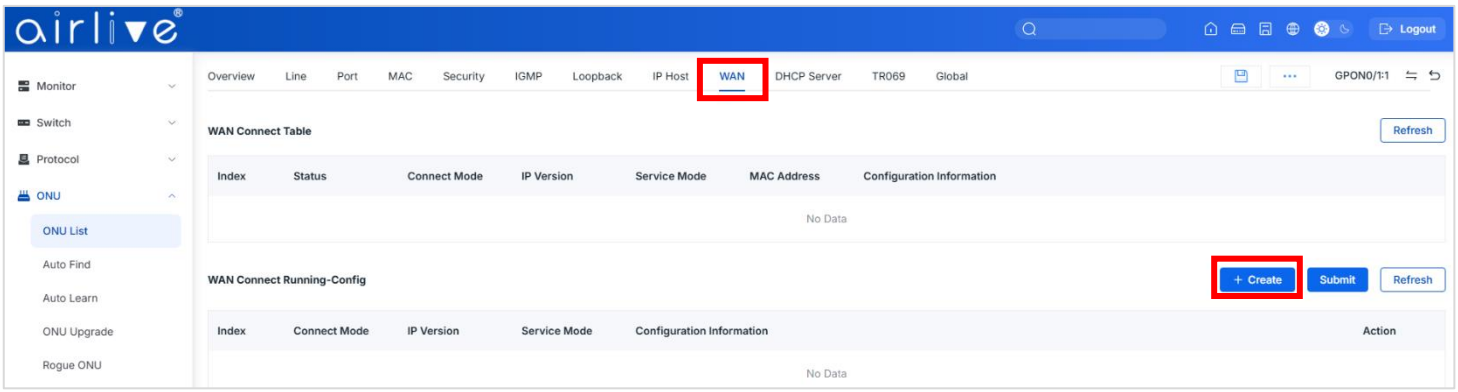


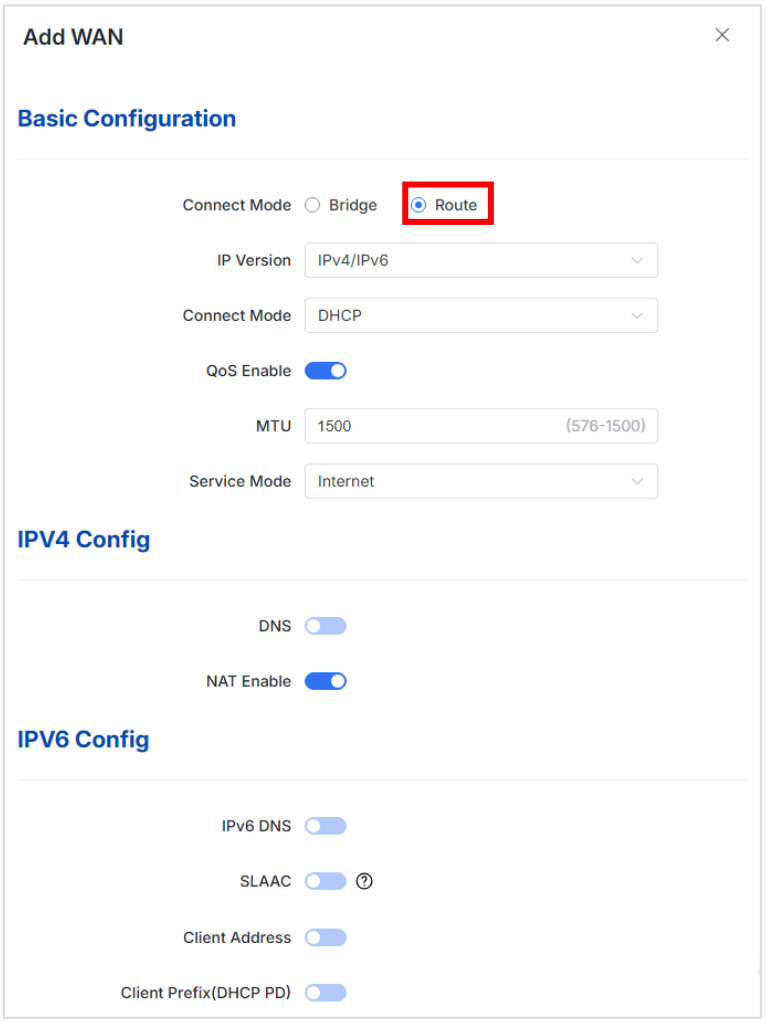


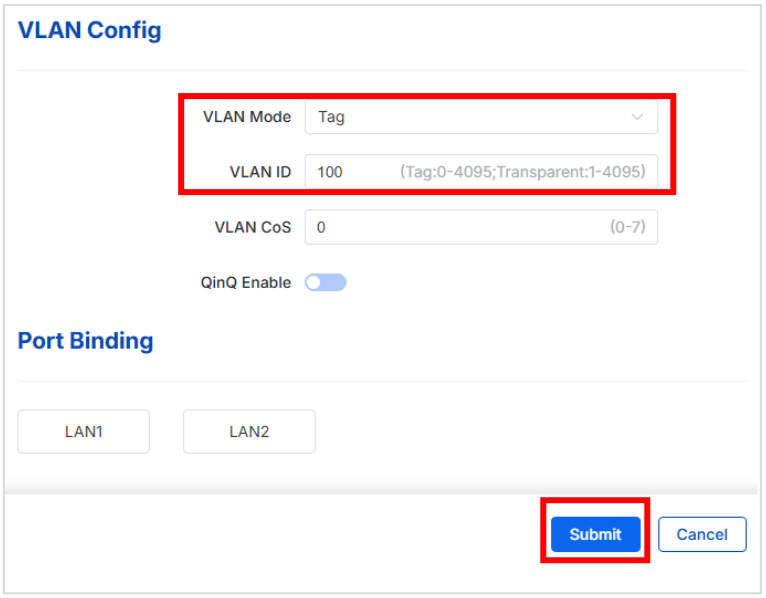


7: Setting up the WAN port information, click on ''WAN'' in the top menu bar. In the WAN menu, Click on “Create” to add WAN. Select the Mode “Route”, enable NAT, you can also choose three modes for Internet WAN connection. Here we use the DHCP mode. Then select the VLAN mode “Tag” and fill in the VLAN information in this example 100 and Click “Submit”

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.

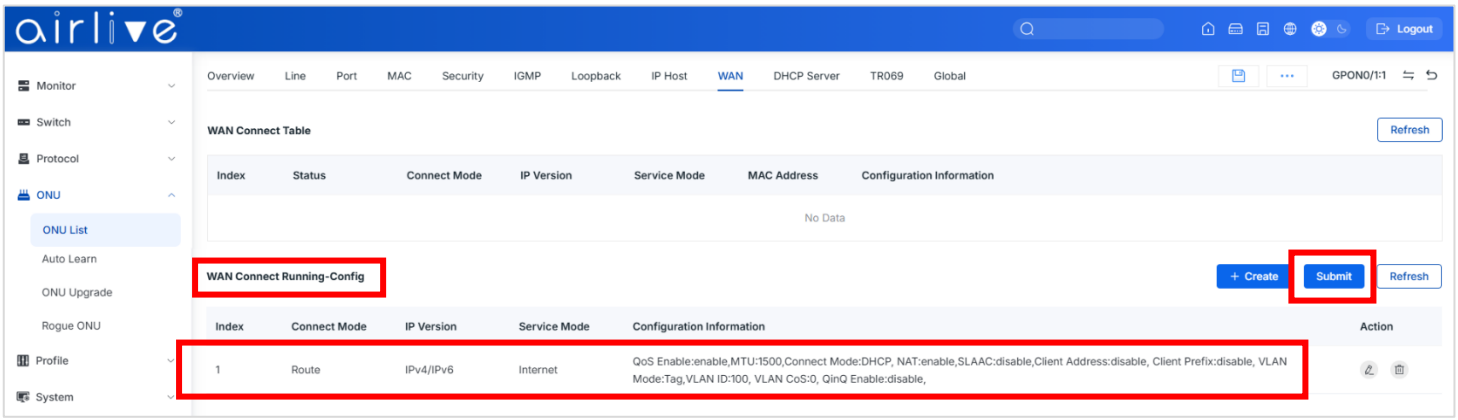






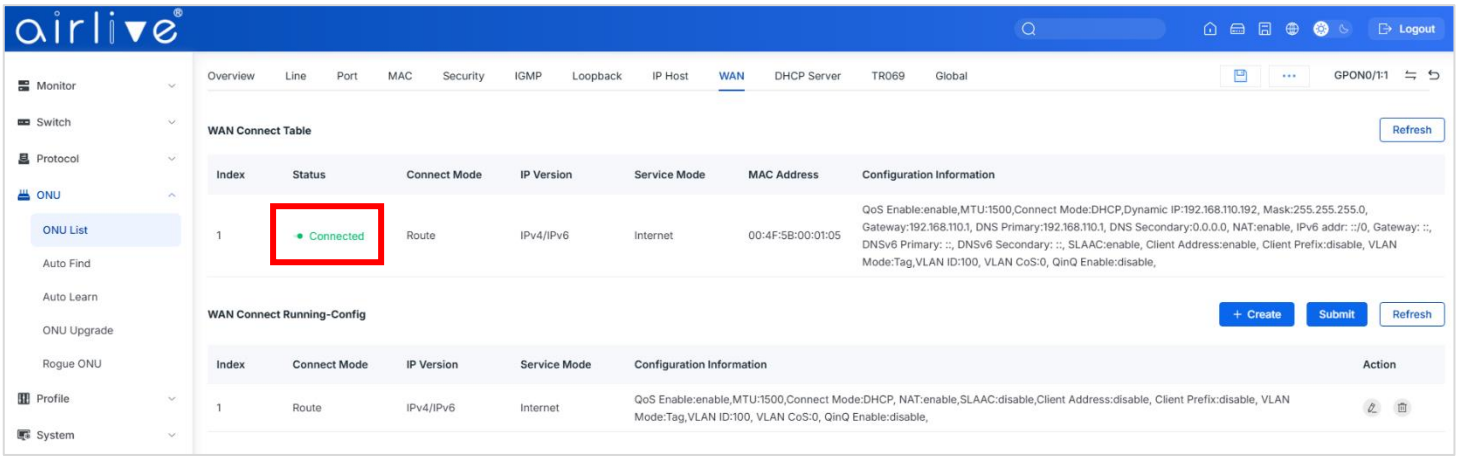
Important after pressing “Submit” your configuration is made but not yet sent to the ONU.

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 “Setup” and Select “WAN” scroll down to the bottom of the page and select your active setup, one’s check marked your configuration will be shown, which is the same as which was setup in the OLT.

