ASCENT
Communication Technology

AP8608B/ AP8616B GPON Web GUI Configuration

User Guide

Revision B

AP8608B/AP8616B GPON GUI Configuration User Guide

ACT Document Number: AP8608B/AP8616B GPON GUI Configuration UG Revision B

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Revision History

Revision	Date	Reason for Change
A	13/12/2022	Draft
B	19/12/2022	Initial Release

Contents

Chapter 1 Configuration Preparation 5

1.1 HTTP Configuration 5

1.1.1 Main Features 5

1.1.2 Configuring HTTP Access Mode 5

1.1.3 Configuring HTTP Access Mode 5

1.1.4 Configuring the maximum number of VLAN entries displayed on a web page 6

1.1.5 Configuring the Maximum Number of Multicast Entries Displayed on a Web Page 6

1.1.6 Choosing the prompt 6

1.2 HTTPS Configuration 6

1.2.1 Configuring HTTP Access Mode 6

1.2.2 Configuring the HTTPS port 7

Chapter2 Accessing the OLT 8

2.1 Accessing the OLT through HTTP 8

2.1.1 Initially Accessing the OLT via MGMT Port 8

2.1.2 Upgrading to the Web-Supported Version 9

2.2 Accessing an OLT through Secure Links 9

2.3 Accessing an OLT through Secure Links 10

2.3.1 Top Control Bar 10

2.3.2 Navigation Bar 11

2.3.3 System Information 11

2.3.4 Configuration Area 12

Chapter 3 Realtime Monitor 13

3.1 Device Info 13

3.2 Port Status 14

3.3 Port Statistics 14

3.4 PON Optical Info 15

3.5 Mac Table 15

3.6 ARP Table 16

3.7 ONU Info 16

3.8 Rejected ONU Info 17

3.9 ONU Optic Info 17

3.10 STP Status 18

3.11 LLDP Status 18

3.12 DDM Status 18

3.13 DHCP Status 19

3.14 Log Query 19

3.15 About 19

Chapter 4 ONU Profile Configuration....20
4.1 T-Cont....20
4.2 Rate Limit....21
4.3 Virtual Port....21
4.4 T-Cont Virtual Port Bind....22
4.5 VLAN....22
4.6 Flow Mapping....25
4.7 ONU Port Loopback....26
Chapter 5 Advanced Configuration....27
5.1 VLAN Configuration....27
5.2 Strom Control....28
5.3 IP Access List....29
5.4 MAC Access List....30
5.5 Access Management....31
5.6 Static Route....32
Chapter 6 PON Configuration....33
6.1 PON List....33
Chapter 7 ONU Configuration....35
7.1 ONU List....35
7.1.1 SFU Config....36
7.1.2 HGU Config....36
Chapter 8 Switch Configuration....39
8.1 Switch List....40
8.2 VLAN Interface....41
8.3 LLDP Configuration....41
8.3.1 Basic Configuration of LLDP....41
8.3.2 LLDP Port Configuration....42
8.4 Port Mirror....42
8.5 Port Configuration....43
8.6 Protected Group Configuration....43
8.7 STP Configuration....44
8.8 Aggregation....44
8.8.1 Port Aggregation Configuration....44
8.8.2 Global Load Balance of Port Aggregation....45
8.9 EAPS Configuration....45
8.9.1 EAPS Configuration....46
8.10 ERPS Configuration....46
8.10.1. EAPS Configuration....46
8.11 DDM Configuration....47
8.12 MTU Configuration....47
Chapter 9 System....48

9.1 MGMT Configuration 48
9.2 SNMP Mgr 48
9.2.1 SNMP Community Management 49
9.2.2 SNMP Host Management 49
9.3 NTP 49
9.4 Diagnostic 50
9.5 Hostname 50
9.6 User Mgr 51
9.7 Log Mgr 51
9.8 Configuration File 52
9.9 IOS File 52
9.10 Restore 53
9.11 Reboot 53

Chapter 1 Configuration Preparation

1.1 HTTP Configuration

OLT configuration can be conducted not only through command lines and SNMP but also through Web browser. The OLT supports the HTTP configuration, the abnormal packet timeout configuration, and so on.

1.1.1 Main Features

The OLT supports to control the HTTP access. By default the HTTP service is enabled. Only when the HTTP service is enabled can HTTP exchange happen between the OLT and PC and, when the HTTP service is disabled, HTTP exchange stops.

Command	**Purpose**
Ip http server	Enables the HTTP service

1.1.2 Configuring HTTP Access Mode

Generally, the HTTP port is port 80 by default, and users can access an OLT by entering the IP address directly; however, the OLT also supports users to change the service port and after the service port is changed you have to use the IP address and the changed port to access OLT. For example, if you set the IP address and the service port to 192.168.1.3 and 1234 respectively, the HTTP access address should be changed to http:// 192.168.1.3:1234. You'd better not use other common protocols' ports so that access collision should not happen. Because the ports used by a lot of protocols are hard to remember, you'd better use port IDs following port 1024.

Command	**Purpose**
Ip http port { portNumber }	Sets the HTTP Port

1.1.3 Configuring HTTP Access Mode

You can access a switch through two access modes: HTTP access and HTTPS access, and you can use the following command to set the access mode to HTTP.

Command	**Purpose**
Ip http http-access enable	Sets the HTTP Access Mode

1.1.4 Configuring the maximum number of VLAN entries displayed on a web page

An OLT supports at most 4094 VLANs and in most cases Web only displays parts of VLANs, that is, those VLANs users want to see. You can use the following command to set the maximum number of VLANs. The default maximum number of VLANs is 100.

Command	Purpose
Ip http web max-vlan	Sets the maximum number of VLAN entries displayed in web page

1.1.5 Configuring the Maximum Number of Multicast Entries Displayed on a Web Page

An OLT supports at most 100 multicast entries. You can run the following command to set the maximum number of multicast entries and Web then shows these multicast entries. The default maximum number of multicast entries is 15.

Command	Purpose
Ip http web max igmp-groups	Sets the maximum number of multicast entries displayed in a web page

1.1.6 Choosing the prompt

Up to now, the OLT supports two languages, that is, English and Chinese, and the two languages can be switched over through the following command.

Command	Purpose
Ip http language {Chinese | English}	Sets the prompt language of web configuration to (Chinese to English)

1.2 HTTPS Configuration

In order to improve the security of communications, the OLT supports not only the HTTP protocol but also the HTTPS protocol. HTTPS is a security-purposed HTTP channel and it is added to the SSL layer under HTTP.

1.2.1 Configuring HTTP Access Mode

You can run the following command to set the access mode to HTTPS.

Command	Purpose

Ip http ssl-access enable	Sets the HTTPS access mode

1.2.2 Configuring the HTTPS port

As the HTTP port, HTTPS has its default service port, port 443, and you also can run the following command to change its service port. It is recommended to use those ports following port 1024 so as to avoid collision with other protocols' ports.

Chapter 2 Accessing the OLT

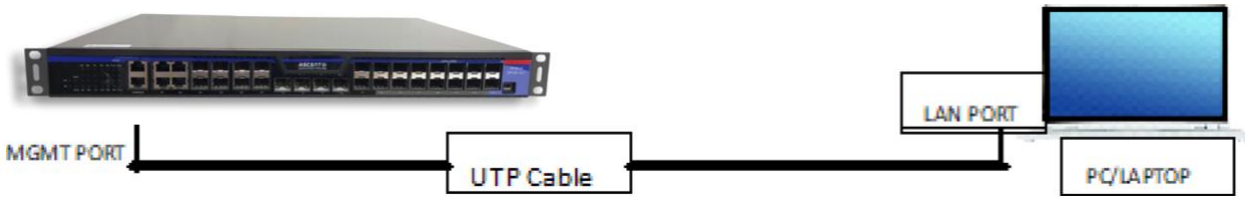
2.1 Accessing the OLT through HTTP

When accessing the OLT through Web, please make sure that the applied browser complies with the following requirements:

- HTML of version 4.0
- HTTP of version 1.1
- JavaScriptTM of version 1.5

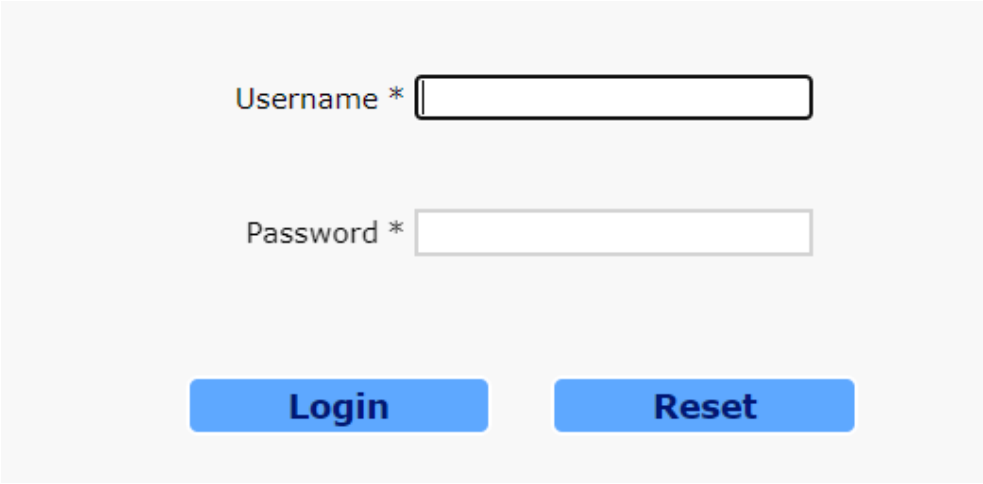
What's more, please ensure that the main program file, running on an OLT, supports Web access and your computer has already connected the network in which the OLT is located.

2.1.1 Initially Accessing the OLT via MGMT Port



When the OLT is initially used, you can use the Web access without any extra settings:

1. Modify the IP address of the network adapter and subnet mask of your computer to192.168.0.2 and 255.255.255.0 respectively.
2. Open the Web browser and enter 192.168.0.1 in the address bar. It is noted that192.168.0.1 is the default management address of the OLT.
3. If the Google Chrome browser is used, you can see the dialog box as below. Both the original username and the password are “admin”, which is capital sensitive



4. After successful authentication, the systematic information about the OLT will appear on the browser.

2.1.2 Upgrading to the Web-Supported Version

If your OLT is upgraded to the Web-supported version during its operation and the OLT has already stored its configuration files, the Web visit cannot be directly applied on the OLT. Perform the following steps one by one to enable the Web visit on the OLT:

1. Connect the console port of the OLT with the accessory cable, or telnet to the management address of the OLT through the computer.
2. Enter the global configuration mode of the OLT through the command line, the prompt of which is similar to "**Switch_config#**".
3. If the management address of the OLT is not configured, please create the VLAN interface and configure the IP address.
4. Enter The "**ip htttp server**" command in global configuration mode and start the web server (Enabled by Default)
5. Enter the username to set the User name and Password of the OLT. For how to use this command, refer to the "**Security Configuration**" section in the user manual.

After the above-mentioned steps are performed, you can enter the address of the switch in the Web browser to access the OLT.

Enter "**write all**" to store the current configuration to the configuration file.

2.2 Accessing an OLT through Secure Links

The data between the WEB browser and the OLT will not be encrypted if you access anOLT through common HTTP. To encrypt these data, you can use the secure links, which are based on the secure sockets layer, to access the OLT.

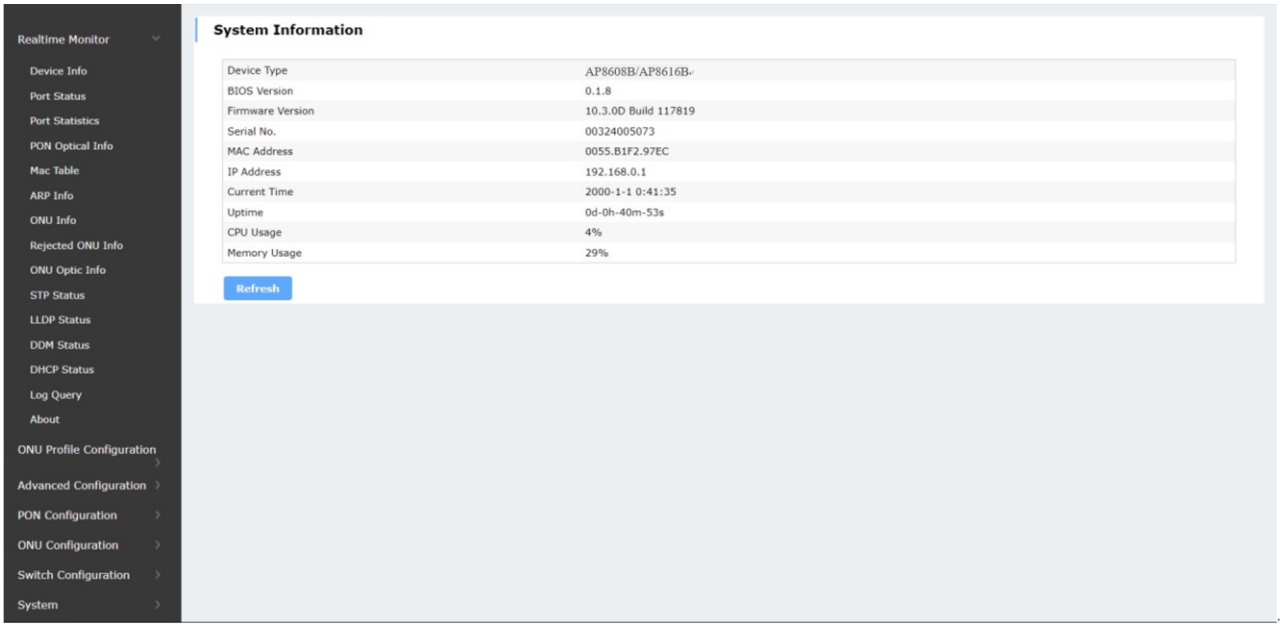
To do this, you should follow the following steps:

1. Connect the console port of the OLT with the accessory cable, or telnet to the management address of the OLT through the computer.
2. Enter the global configuration mode of the OLT through the command line, the DOS prompt of which is similar to "Switch_config#".
3. If the management address of the OLT is not configured, please create the VLAN interface and configure the IP address.
4. Enter the "**ip http server**" command in global configuration mode and start the Web server (Enabled by Default)
5. Enter the "**username**" to set the user name and password of the OLT for how to use this command, refer to the "**Security Configuration**" section in the user manual.
6. Run "**ip http ssl-access enable**" to enable the secure link access of the OLT.
7. Run "**no ip http http-access enable**" to access the OLT through insecure links.
8. Enter "**write all**" to store the current configuration to the configuration file.
9. Open the WEB browser on the PC that the OLT connects, enter https://192.168.0.1 on the address bar (192.168.0.1 stands for the management IP address of the OLT) IP address of the OLT) and then

press the Enter key. Then the OLT can be accessed through the secure links.

2.3 Accessing an OLT through Secure Links

The whole Web homepage consists of the top control bar, the navigation bar, the configuration area.



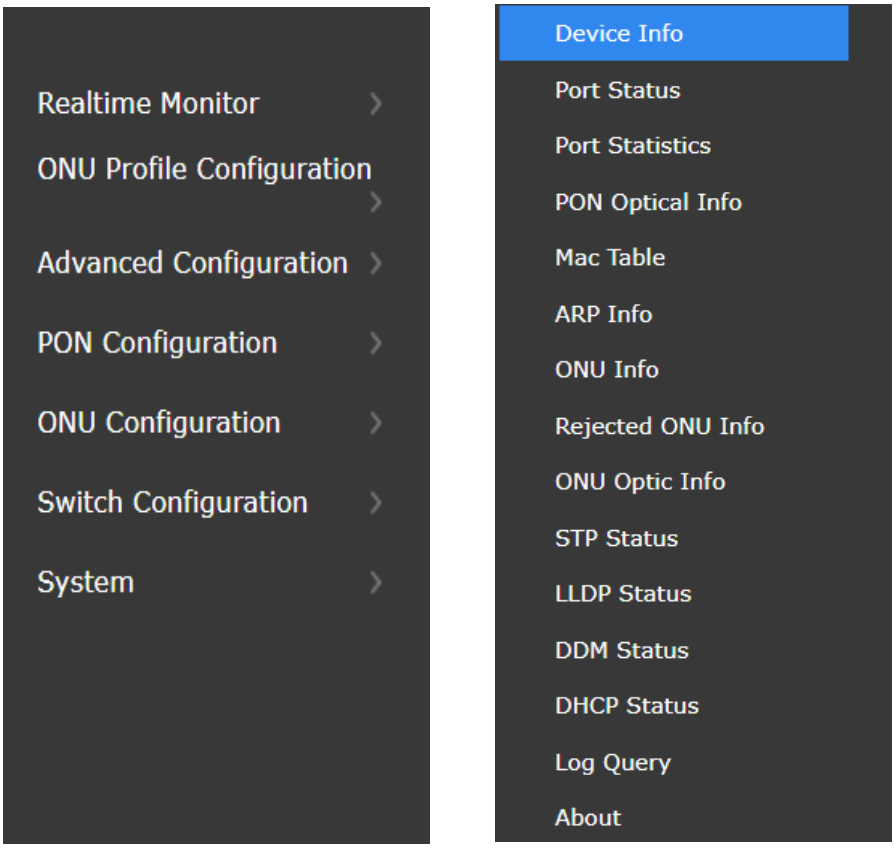
2.3.1. Top Control Bar

Save All Write the current settings to the configuration file of the device. It is equivalent to the execution of the "**write all**" command. The configuration that is made through Web will not be promptly written to the configuration file after validation. On the left navigation bar, click "**Save All**", the unsaved configuration will be lost after rebooting.

Logout Exit from the current login state. After you click "**logout**", you have to enter the username and the password again if you want to continue the Web function.

After you configure the device, the result of the previous step will appear on the left side of the top control bar. If error occurs, please check your configuration and retry it later.

2.3.2. Navigation Bar

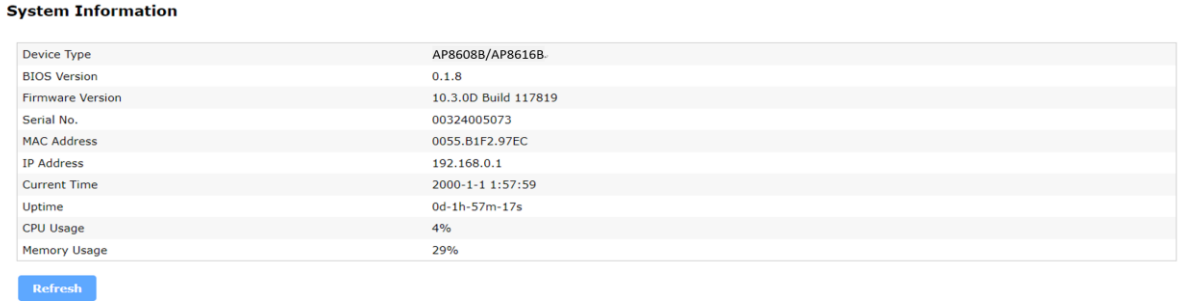


The contents shown. The contents are shown in a form of list and are classified according to types. By default, the list is located at "**Real time Monitor**". If a certain item need be configured, please click the group name and then the sub item. For example, to browse the Optical power of, you have to click "Interface State" and then "**Interface Flow**".

Note:

The limited user can only browse the state of the device and cannot modify the configuration of the device. If you log on to the Web with limited user's permissions, only "**Interface State**" will appear.

2.3.3. System Information



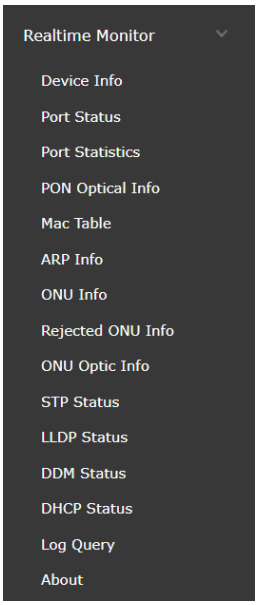
The configuration display area shows the state and configuration of the device. The content of this area can be modified by the clicking of the items.

2.3.4. Configuration Area

The configuration area is to show the content that is selected in the navigation area. The configuration area always contains one or more buttons, and their functions are listed in the following table:

Refresh	Refresh the content shown in the current configuration area.
Apply	Apply the modified configuration to the device. The application of the configuration does not mean that the configuration is saved in the configuration file. To save the configuration, you have to click "**Save All**" on the top control bar.
Reset	Means discarding the modification of the sheet. The content of the sheet will be reset.
New	Creates a list item. For example, you can create a VLAN item or a new user.
Delete	Deletes an item in the list.
Back	Go back to the previous-level configuration page.

Chapter 3 Realtime Monitor

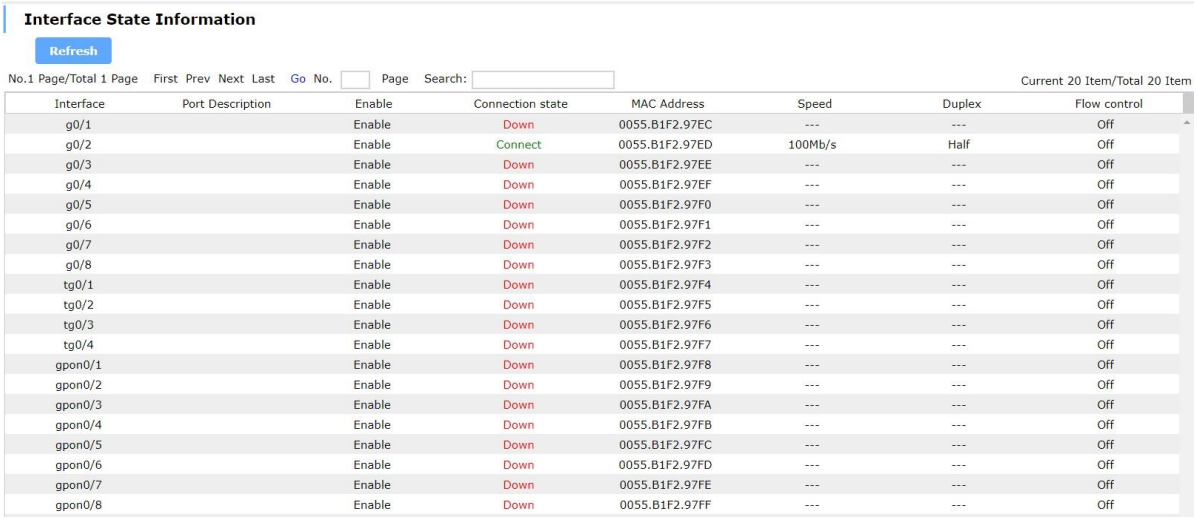


3.1 Device Info

This section is to show the system information. This section contains Device Type, Firmware Version, MAC & IP Address, Uptime, CPU & Memory Usage. To configure or view certain item, click the group name and the sub item.

3.2 Port Status

Show the Interface State Information containing All the ports (Ethernet & PON), Port Description, Connection state, Interface maximum bandwidth, MAC address of the interface. There is also search functionality by which you can search by a specific port or MAC and check the Port description, state, speed and transmission mode. On the Top left corner there is a **Refresh** Button which refreshes the content shown in the current configuration area.



Interface State Information

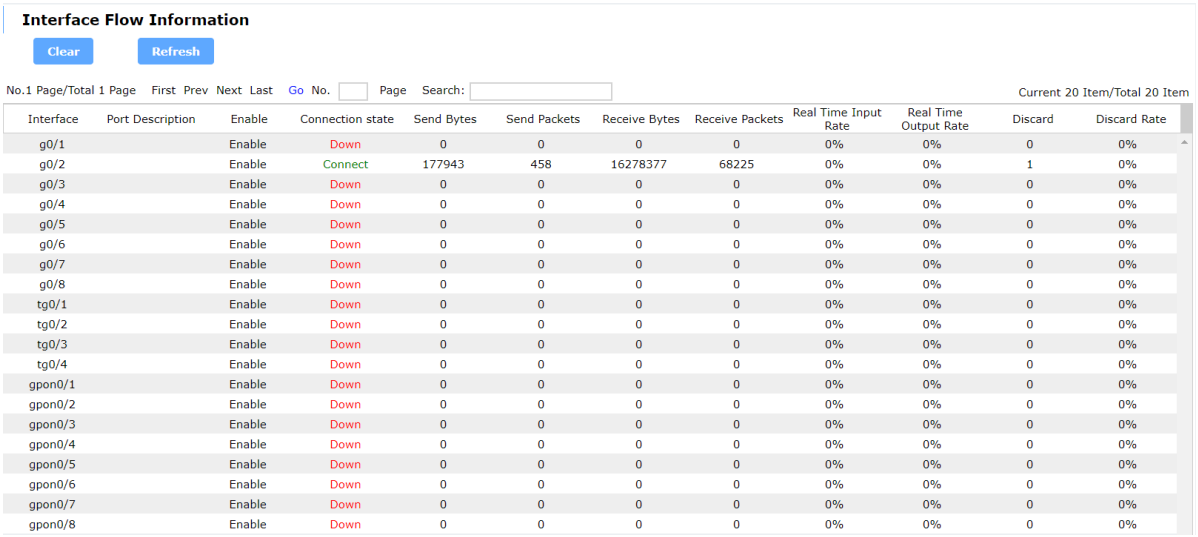
Refresh

No.1 Page/Total 1 Page First Prev Next Last Go No. Page Search: Current 20 Item/Total 20 Item

Interface	Port Description	Enable	Connection state	MAC Address	Speed	Duplex	Flow control
g0/1		Enable	Down	0055.B1F2.97EC	---	---	Off
g0/2		Enable	Connect	0055.B1F2.97ED	100Mb/s	Half	Off
g0/3		Enable	Down	0055.B1F2.97EE	---	---	Off
g0/4		Enable	Down	0055.B1F2.97EF	---	---	Off
g0/5		Enable	Down	0055.B1F2.97F0	---	---	Off
g0/6		Enable	Down	0055.B1F2.97F1	---	---	Off
g0/7		Enable	Down	0055.B1F2.97F2	---	---	Off
g0/8		Enable	Down	0055.B1F2.97F3	---	---	Off
tg0/1		Enable	Down	0055.B1F2.97F4	---	---	Off
tg0/2		Enable	Down	0055.B1F2.97F5	---	---	Off
tg0/3		Enable	Down	0055.B1F2.97F6	---	---	Off
tg0/4		Enable	Down	0055.B1F2.97F7	---	---	Off
gpon0/1		Enable	Down	0055.B1F2.97F8	---	---	Off
gpon0/2		Enable	Down	0055.B1F2.97F9	---	---	Off
gpon0/3		Enable	Down	0055.B1F2.97FA	---	---	Off
gpon0/4		Enable	Down	0055.B1F2.97FB	---	---	Off
gpon0/5		Enable	Down	0055.B1F2.97FC	---	---	Off
gpon0/6		Enable	Down	0055.B1F2.97FD	---	---	Off
gpon0/7		Enable	Down	0055.B1F2.97FE	---	---	Off
gpon0/8		Enable	Down	0055.B1F2.97FF	---	---	Off

3.3 Port Statistics

Along with Port Status, this section shows the Interface Flow Information such as sent & received bytes and packets, discard rate for all Ethernet as well as PON Ports. On the Top corner there are two Button, 1st One is called **Clear** which clears all the interface packet counter. And 2nd one is **Refresh** Which refreshes the counter.



Interface Flow Information

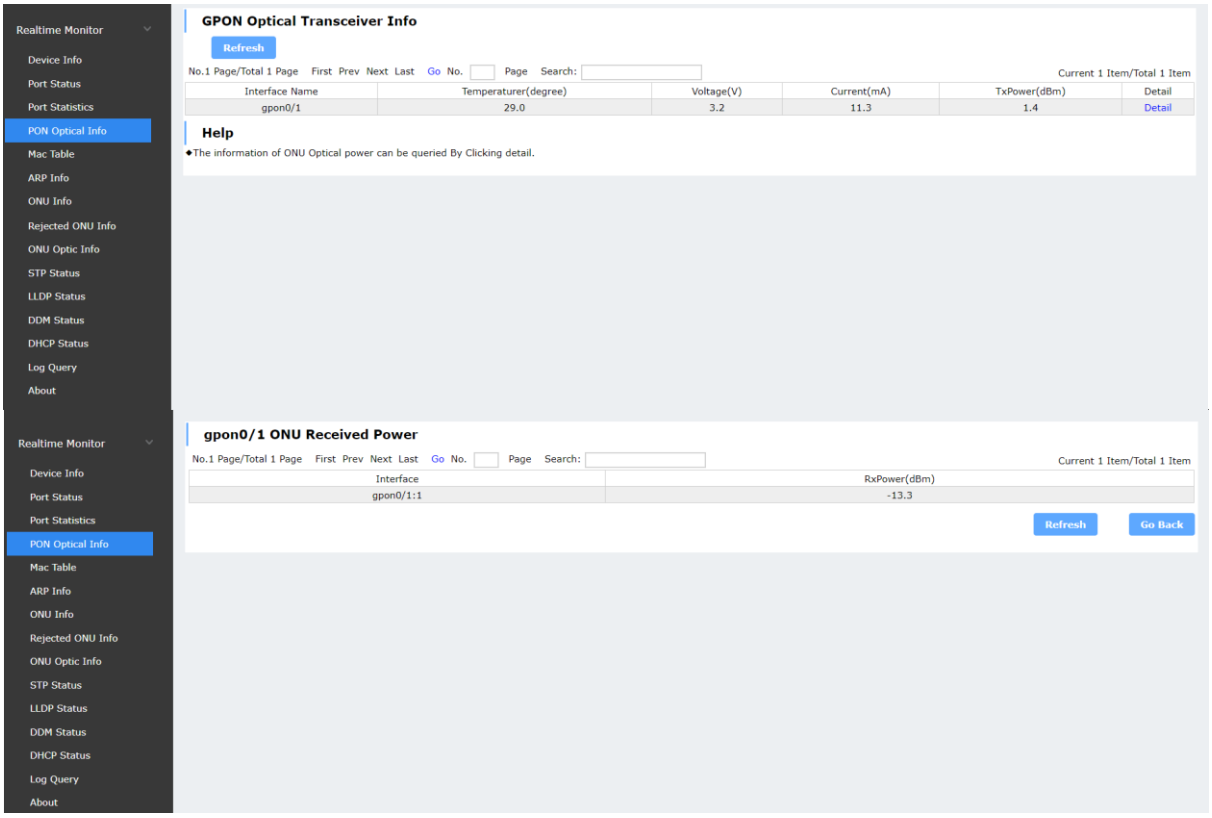
Clear Refresh

No.1 Page/Total 1 Page First Prev Next Last Go No. Page Search: Current 20 Item/Total 20 Item

Interface	Port Description	Enable	Connection state	Send Bytes	Send Packets	Receive Bytes	Receive Packets	Real Time Input Rate	Real Time Output Rate	Discard	Discard Rate
g0/1		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/2		Enable	Connect	177943	458	16278377	68225	0%	0%	1	0%
g0/3		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/4		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/5		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/6		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/7		Enable	Down	0	0	0	0	0%	0%	0	0%
g0/8		Enable	Down	0	0	0	0	0%	0%	0	0%
tg0/1		Enable	Down	0	0	0	0	0%	0%	0	0%
tg0/2		Enable	Down	0	0	0	0	0%	0%	0	0%
tg0/3		Enable	Down	0	0	0	0	0%	0%	0	0%
tg0/4		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/1		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/2		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/3		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/4		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/5		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/6		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/7		Enable	Down	0	0	0	0	0%	0%	0	0%
gpon0/8		Enable	Down	0	0	0	0	0%	0%	0	0%

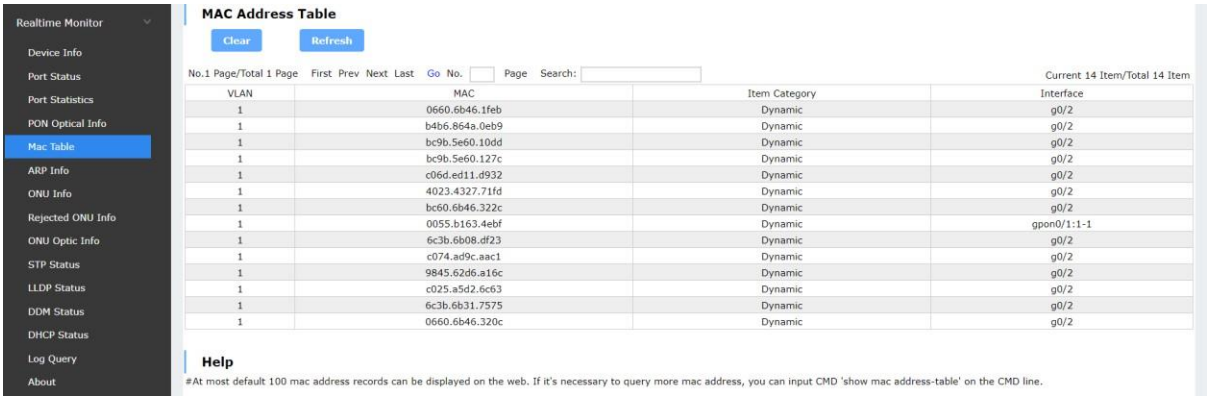
3.4 PON Optical Info

This section Contains the Optical Transceiver Info consists of PON Interface List, Temperature, Voltage and Current, TxPower. It also has search functionality the **Refresh** Button to Refreshes the contents in this section. In the Detail Section, it contains Rx Power of ONU.



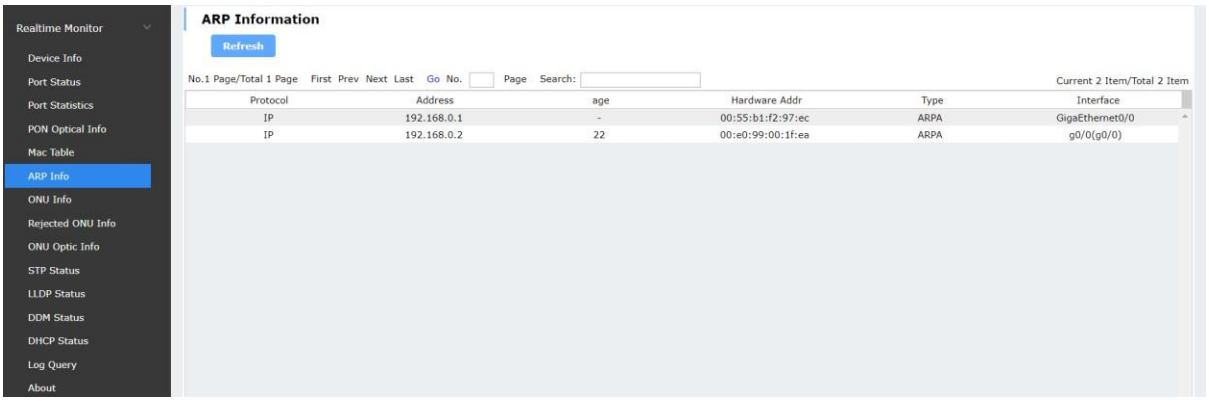
3.5 Mac Table

Shows the Mac Entries along with respective VLAN Entry, and Interface info. It has the search functionality. At most default 100 mac address records can be displayed on the web. If it's necessary to query more mac address, you can input CMD 'show mac address-table' on the CMD line. Has the Clear and Refresh button as well at top left corner.



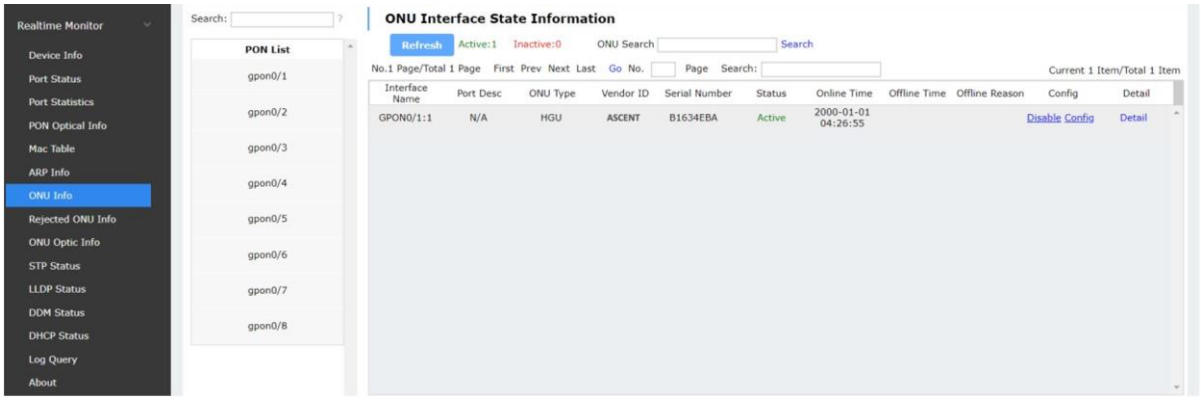
3.6 ARP Table

This section Contains OLT connected L3 device ARP Information which includes Protocol, Ip address, Hardware address, ARP type and the interface in which the ARP is coming from. This section also got Refresh and Search Functionality for



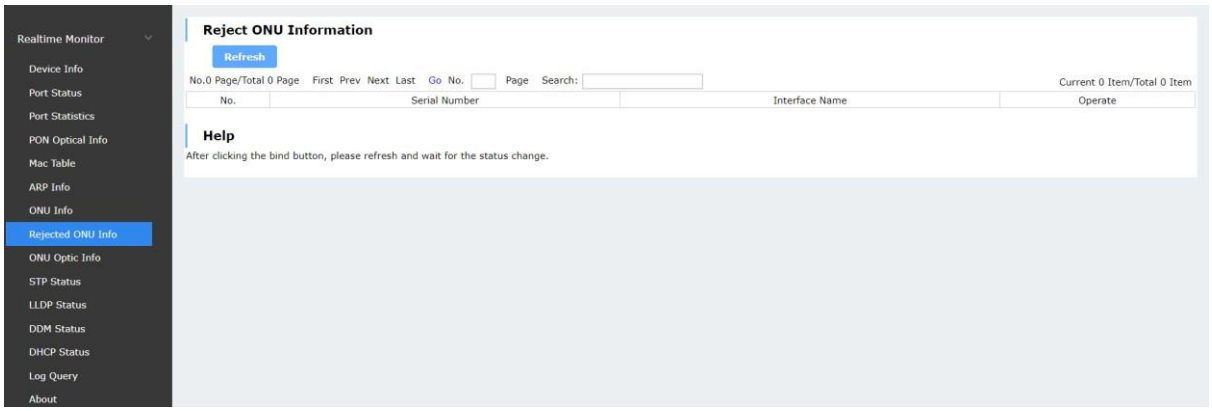
3.7 ONU Info

This section contains ONU Interface State information. Each PON port is divided into sub sections. PON port wise ONU can be viewed from this section. Contains ONU information, port description, ONU Type, Vendor ID, SN, ONU status, Online & Offline time, Offline reason, also from here, ONU can be Disabled/Enabled, ONU can be configured also. From button tab, ONU interface Basic Info Can be seen, like ONU Image Info, Uni Port, Operational State, product code etc.



3.8 Rejected ONU Info

Rejected ONU information will be displayed in this section if used any authentication method and ONU is not authenticated.

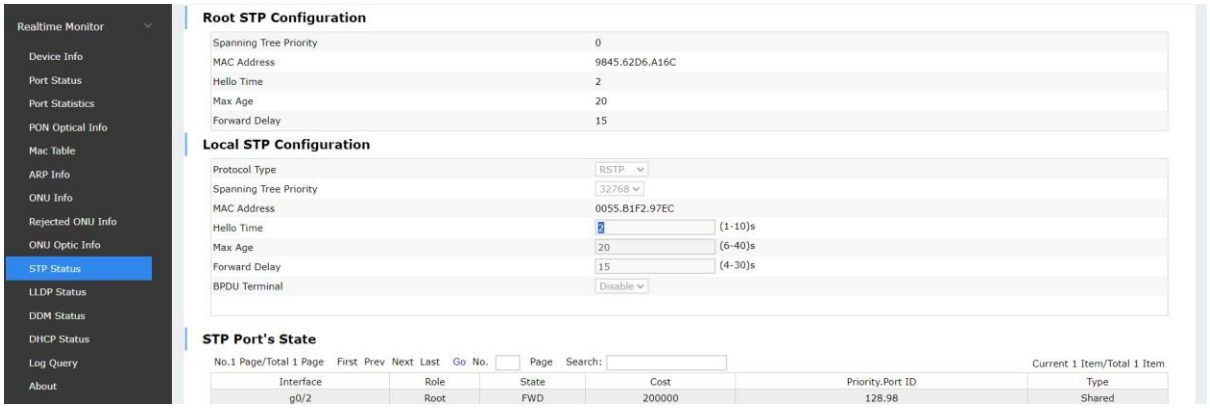


3.9 ONU Optic Info

ONU optical module Info Can be viewed from this section. This section is also sub-sectioned by PON port. Here, there is a ONU Search option as well as generic search option. ONU Rx & Tx power can be viewed from here.

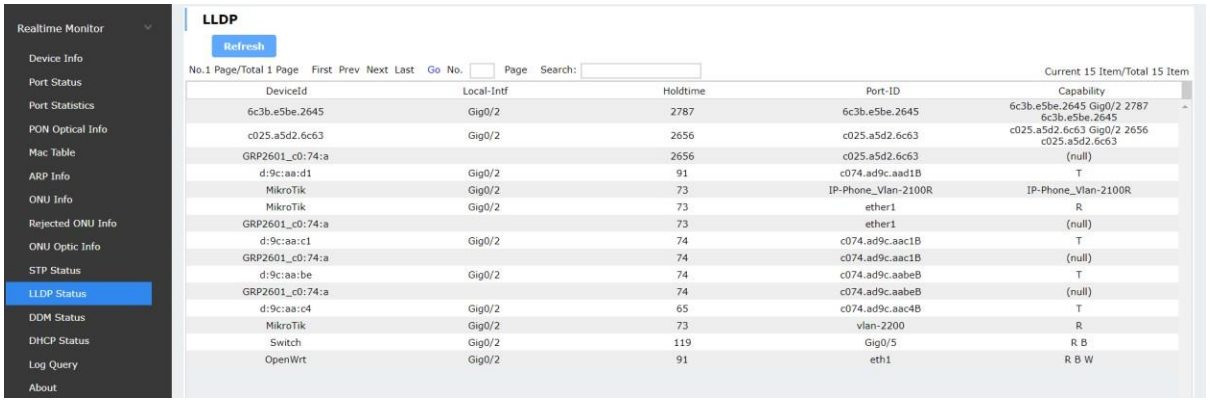
3.10 STP Status

In this section, there are three sub sections which are, Root STP Configuration, Local STP Configuration and STP port's state. Spanning tree priority, Hello Time, Delay, Port Role, state and cost information can be obtained from here.



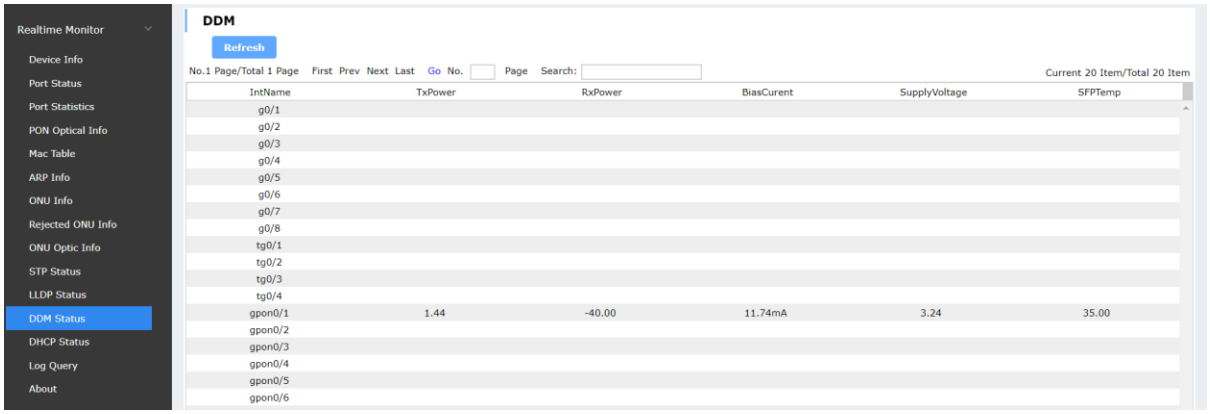
3.11 LLDP Status

Show information about directly connected peers.



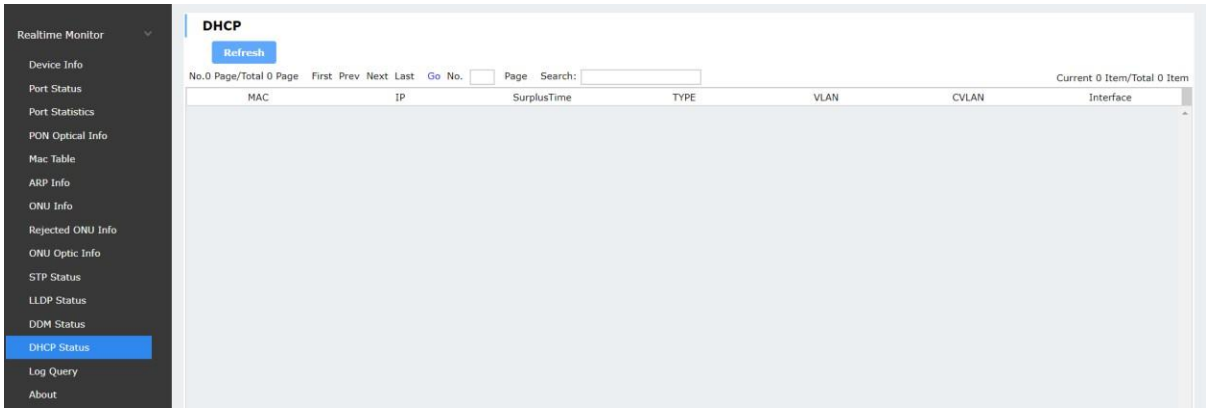
3.12 DDM Status

This section shows information about SFP Module's Tx & Rx Power along with Bias current, supply Voltage and SFP temperature.



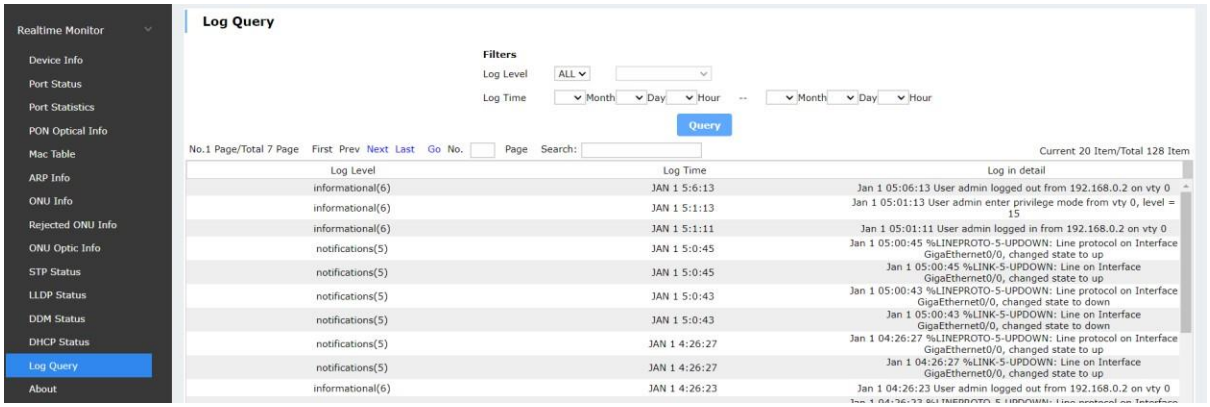
3.13 DHCP Status

OLT's DHCP information will show up here in this section.



3.14 Log Query

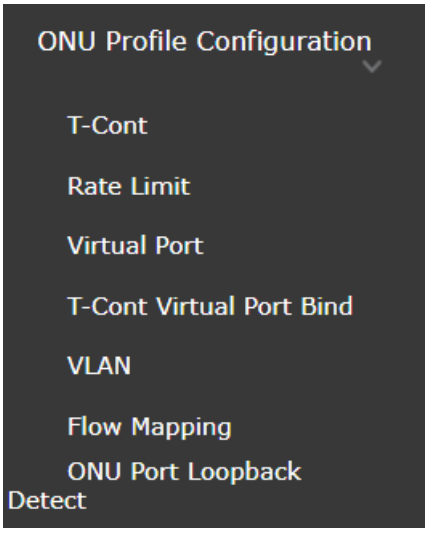
OLT's Detailed LOG Information is shown here along with Log Level, Log Time. This log table can be queried by different parameters.



3.15 About

This is an Ascent's informative section.

Chapter 4 ONU Profile Configuration

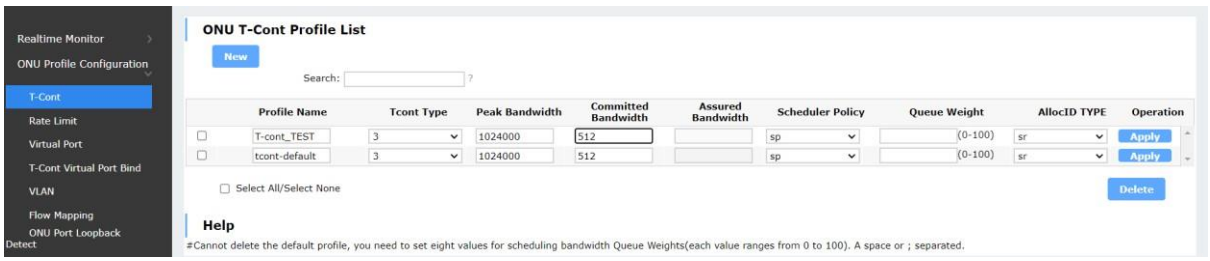


4.1 T-Cont

Click In the Profile configuration > T-Cont, and the following page appears.

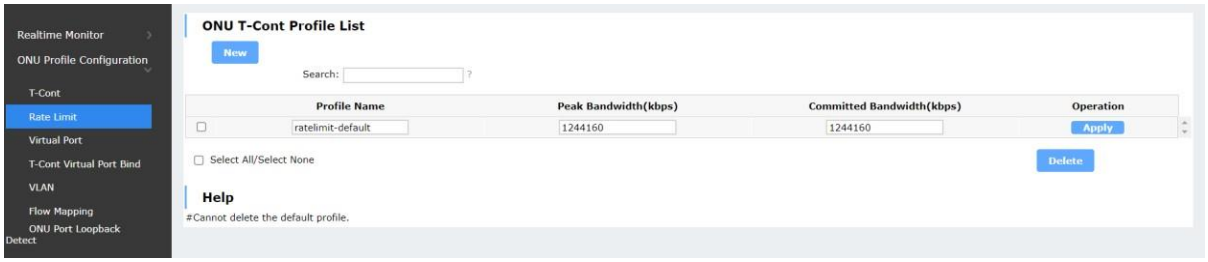
On ONU T-Cont Profile List, select a to-be-deleted item, click “Delete” to delete the corresponding ONU profile. The default profile cannot be deleted.

Click “New” to add the new profile on the following page. On the page, you can edit Profile Name or select Tcont type (1-5), peak bandwidth, committed bandwidth and assured bandwidth (one or multiple). After completing the configuration, click “Apply” to save the configuration.



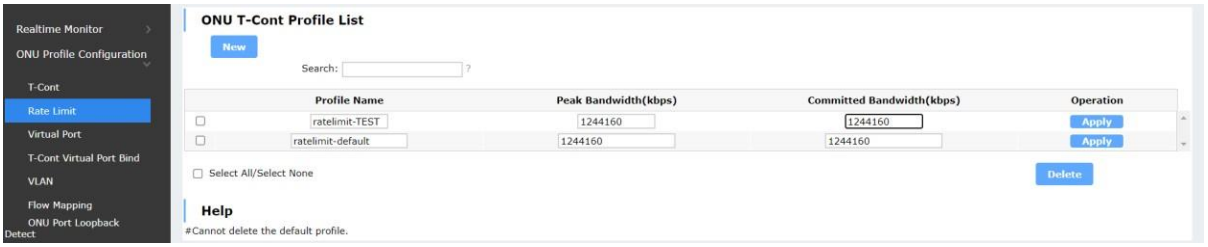
4.2 Rate Limit

In this section, Profile configuration > Rate Limit, following page appears.



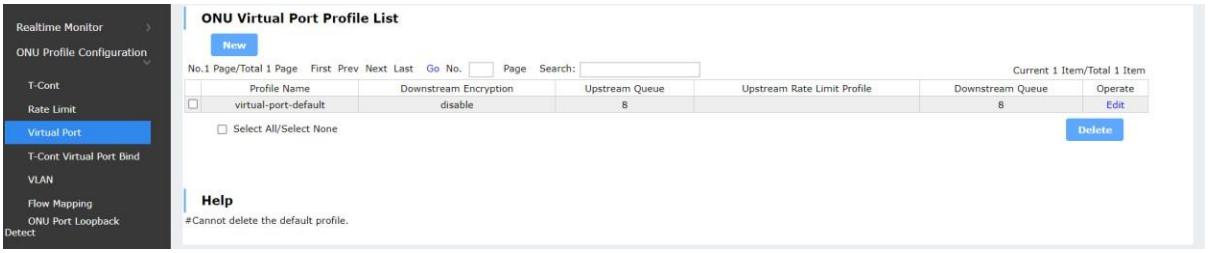
On ONU T-Cont Profile List, select a to-be-deleted item, click **"Delete"** to delete the corresponding ONU profile. The default profile cannot be deleted.

Click "**New**" add the profile on the following page. On the page, you can add Profile Name or set Peak Bandwidth and Committed Bandwidth. After the configuration is finished, click "**Apply**" to save the configuration.



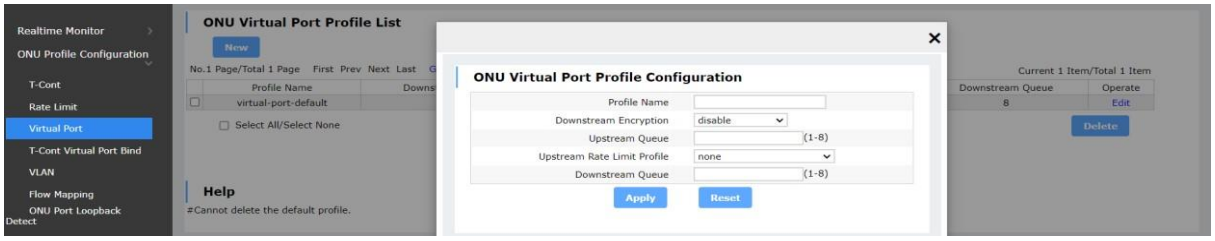
4.3 Virtual Port

In this section, Profile configuration > Virtual Port, following page appears.



On ONU Virtual Profile List, select a to-be-deleted item, click "**Delete**" to delete the corresponding ONU profile. The default profile cannot be deleted.

Click "**New**" or "**Edit**" to edit the profile on the following page. On the page, you can add Profile Name, Downstream Encryption, Upstream Queue, Upstream Rate Limit Profile and Downstream Queue. After the configuration is finished, click "**Apply**" to save the configuration.

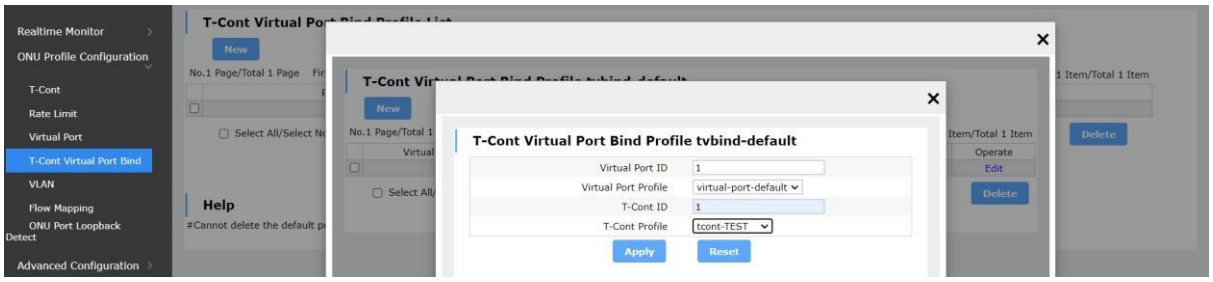


4.4 T-Cont Virtual Port Bind

In this section, Profile configuration > T-Cont Virtual Port Bind, following page appears.

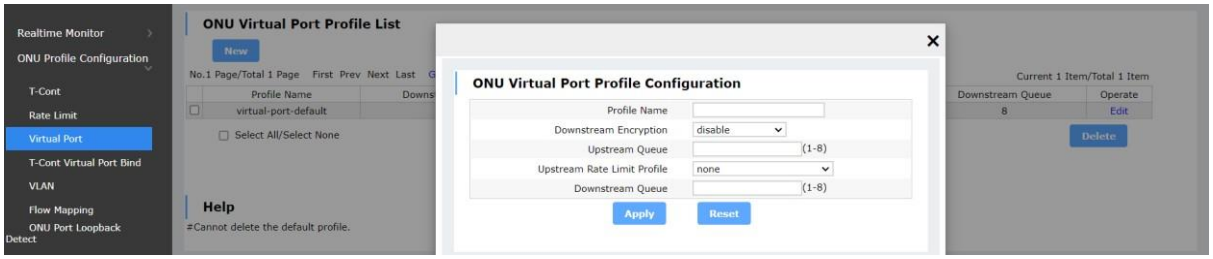
On ONU Virtual Profile List, select a to-be-deleted item, click "**Delete**" to delete the corresponding ONU profile. The default profile cannot be deleted.

Click "**New**" to add the profile on the following page. On the page, you can edit Virtual Port ID, Virtual Port Profile, T-Cont ID and T-Cont Profile. After the configuration is finished, click "**Apply**" to save the configuration.



4.5 VLAN

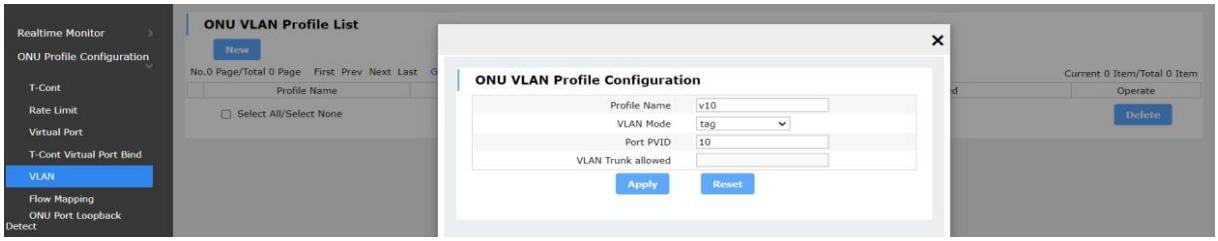
In this section, Profile configuration > VLAN, following page appears.



On ONU Virtual Profile List, select a to-be-deleted item, click "**Delete**" to delete the corresponding ONU profile. The default profile cannot be deleted.

Click "**New**" to add the profile on the following page. On the page, you can edit Virtual Port ID, Virtual Port Profile, T-Cont ID and T-Cont Profile. After the configuration is

finished, click "**Apply**" to save the configuration.



4.6 Flow Mapping

In this section, Profile configuration > Flow Mapping, following page appears. There are two default profile, flow-mapping-default is for SFU and flow-mapping-default-hgu is for HGU type ONU.

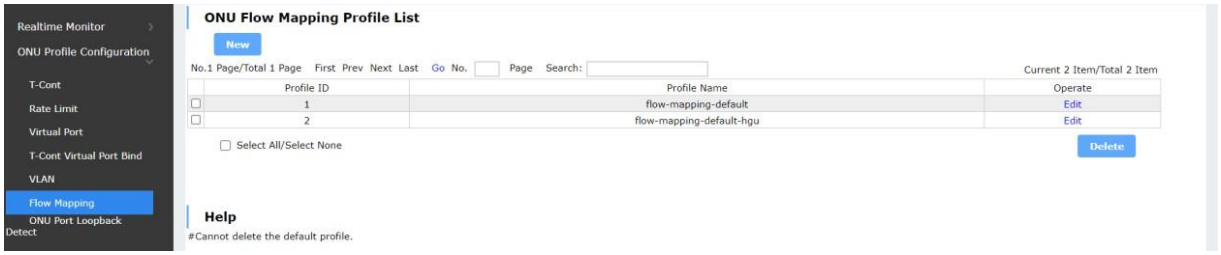
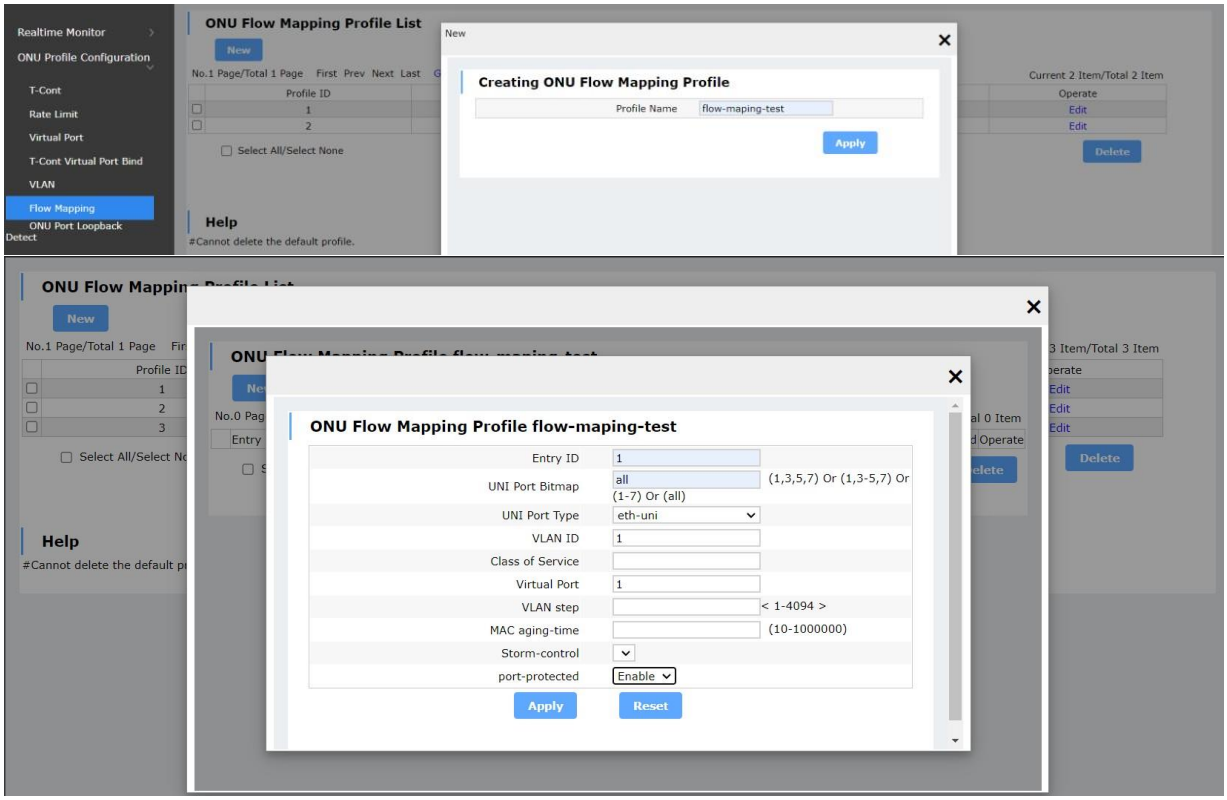


Figure 4-6: ONU Flow Mapping Profile List

On ONU Flow Mapping Profile List, select a to-be-deleted item, click “Delete” to delete the corresponding ONU profile. The default profile cannot be deleted.

[Note: Do not Change this default Profiles.]

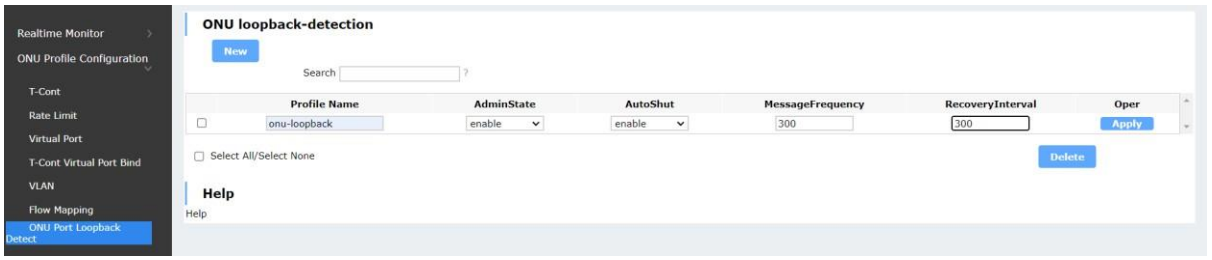
Click “New” or “Edit” to edit the profile on the following page. On the page, you can edit Entry ID, UNI Port Bitmap, VLAN ID, Class of Service and Virtual Port. After the configuration is finished, click “Apply” to save the configuration.



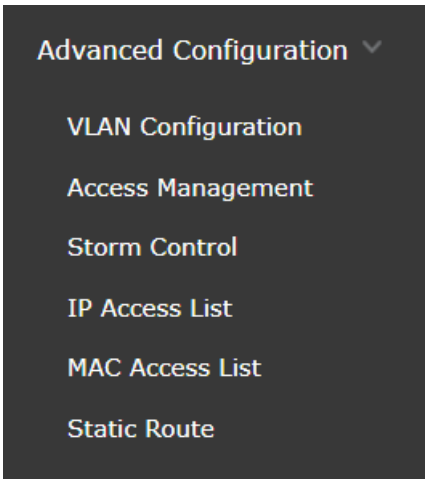
4.7 ONU Port Loopback

In this section, Profile configuration > ONU Port Loopback Detect, following page appears.

Need to create ONU Loop Back Profile in the next page clicking New. Need to configure Profile name, message frequency and Recovery Interval and click apply. Click Save all to save the configuration.



Chapter 5 Advanced Configuration



5.1 VLAN Configuration

On the left navigation bar, click "**Advanced Config**" -> "**VLAN Config**" and the following page appears.

There are 2 options here, VLAN ADD & Another is VLAN Delete. Put the VLAN you want to Add or Delete on the respective section and click apply. That VLAN/VLAN's will be added or Deleted. VLAN Operate: First add; Second delete.

Batch VLAN Configuration

VLAN Configured	1
VLAN Add	
VLAN Delete	

Apply Reset

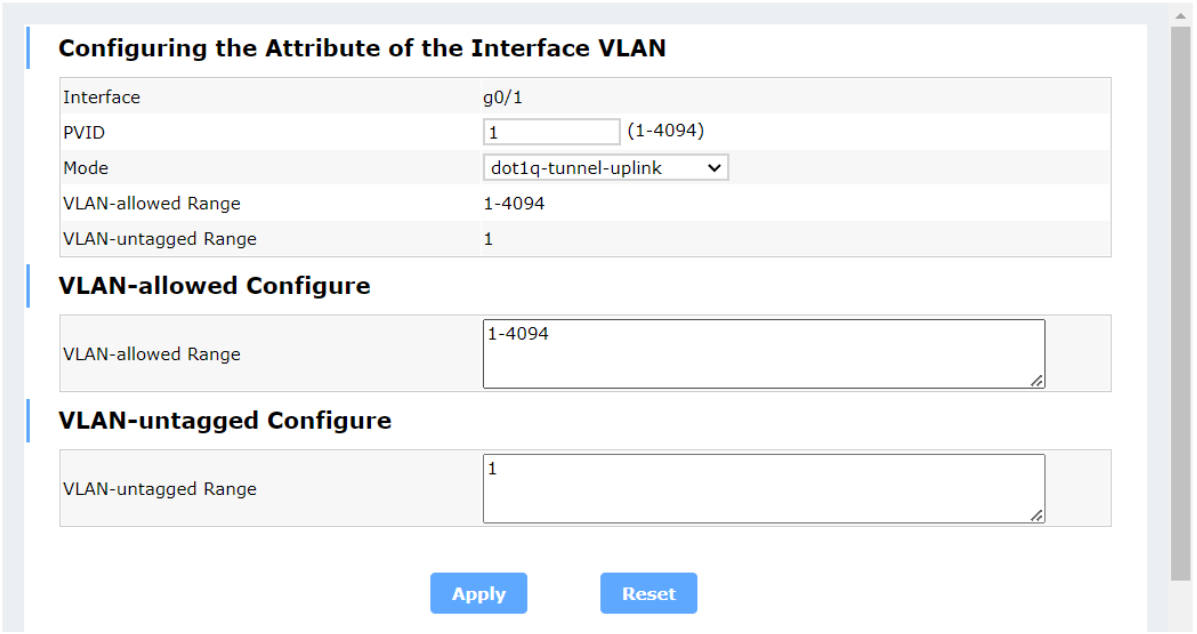
Interface VLAN Attribute List

No.1 Page/Total 1 Page First Prev Next Last Go No. Page Search: Current 20 Item/Total 20 Item

Interface	PVID	Mode	VLAN-allowed Range	VLAN-untagged Range	Operate
g0/1	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/2	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/3	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/4	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/5	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/6	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/7	1	dot1q-tunnel-uplink	1-4094	1	Edit
g0/8	1	dot1q-tunnel-uplink	1-4094	1	Edit
tg0/1	1	dot1q-tunnel-uplink	1-4094	1	Edit
tg0/2	1	dot1q-tunnel-uplink	1-4094	1	Edit
tg0/3	1	dot1q-tunnel-uplink	1-4094	1	Edit
tg0/4	1	dot1q-tunnel-uplink	1-4094	1	Edit
gpon0/1	1	access	1-4094	1	Edit
gpon0/2	1	access	1-4094	1	Edit
gpon0/3	1	access	1-4094	1	Edit
gpon0/4	1	access	1-4094	1	Edit
gpon0/5	1	access	1-4094	1	Edit
gpon0/6	1	access	1-4094	1	Edit
gpon0/7	1	access	1-4094	1	Edit
gpon0/8	1	access	1-4094	1	Edit

On the Interface VLAN Attribute List section, the VLAN items are listed out in ascending sequence. Click "**Pre**" below "**New**" to check the VLAN items before the current page; click "**Next**" to check the VLAN items after the current page. Or you can find out an item by input its VLAN ID or its VLAN Name in the box beside "**Search**".

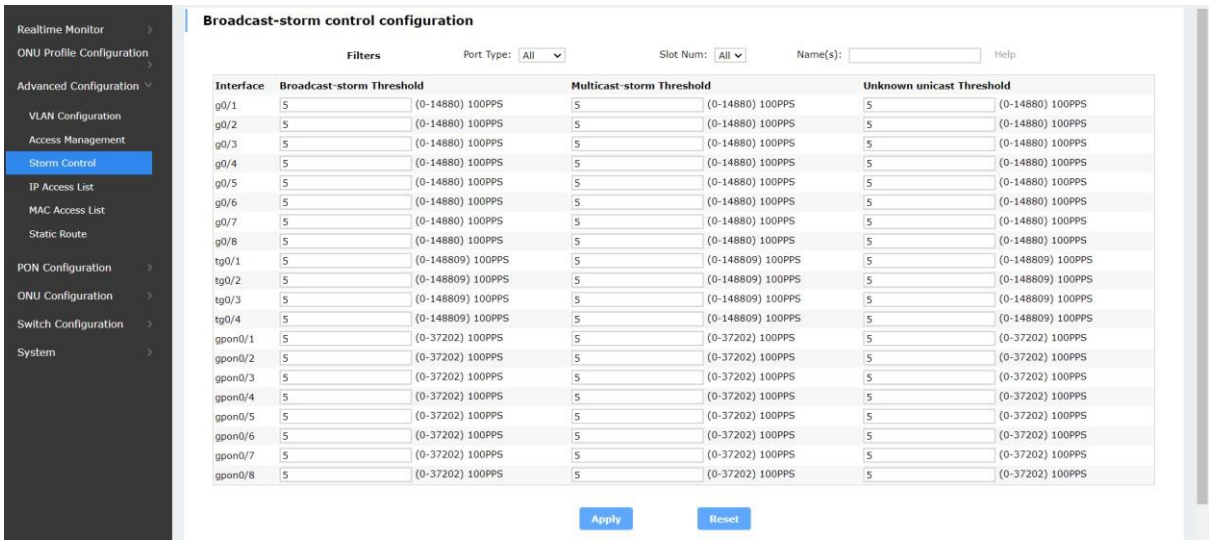
In this section, Interface, PVID, Mode, VLAN-allowed range, untagged range are shown. To Edit those attributes, Click Edit and following page will appear.



In this section, for any particular interface, Attribute of VLAN Can be configured.

5.2 Strom Control

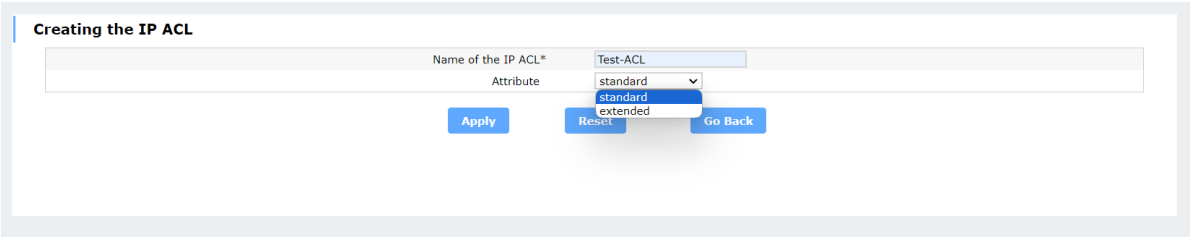
In this section, Every Interface's Broadcast, Multicast and Unknown unicast threshold can be controlled. Range of Threshold information is given.



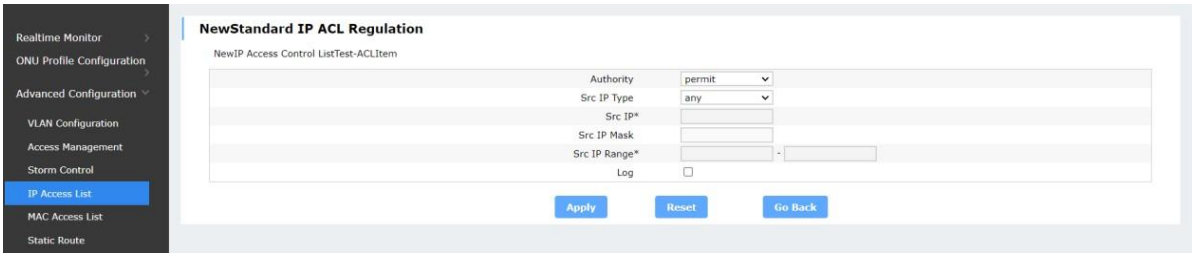
5.3 IP Access List

In this section, following page appears,

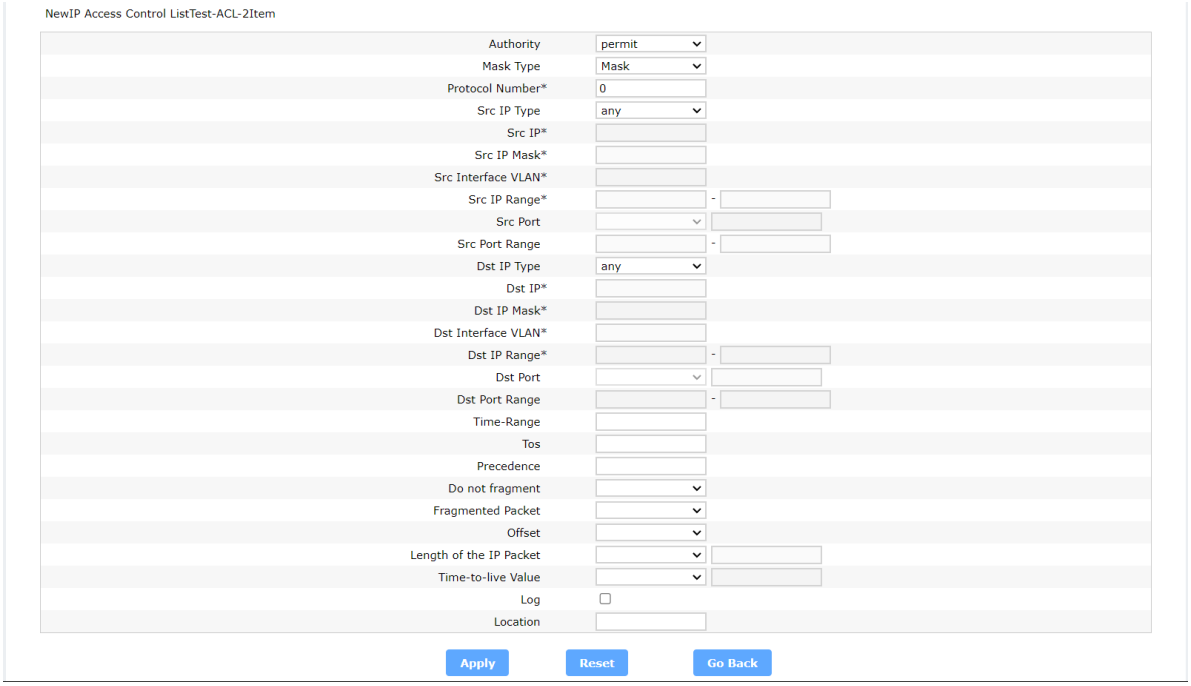
Click "**New**" on the top left of the interface to add an IP ACL List. Click "**Delete**" to delete the selected IP ACL List. If you click "**New**" on the top left of the interface, the following page will appear. Give a name of ACL and Attribute (Standard or Extended) and click Apply



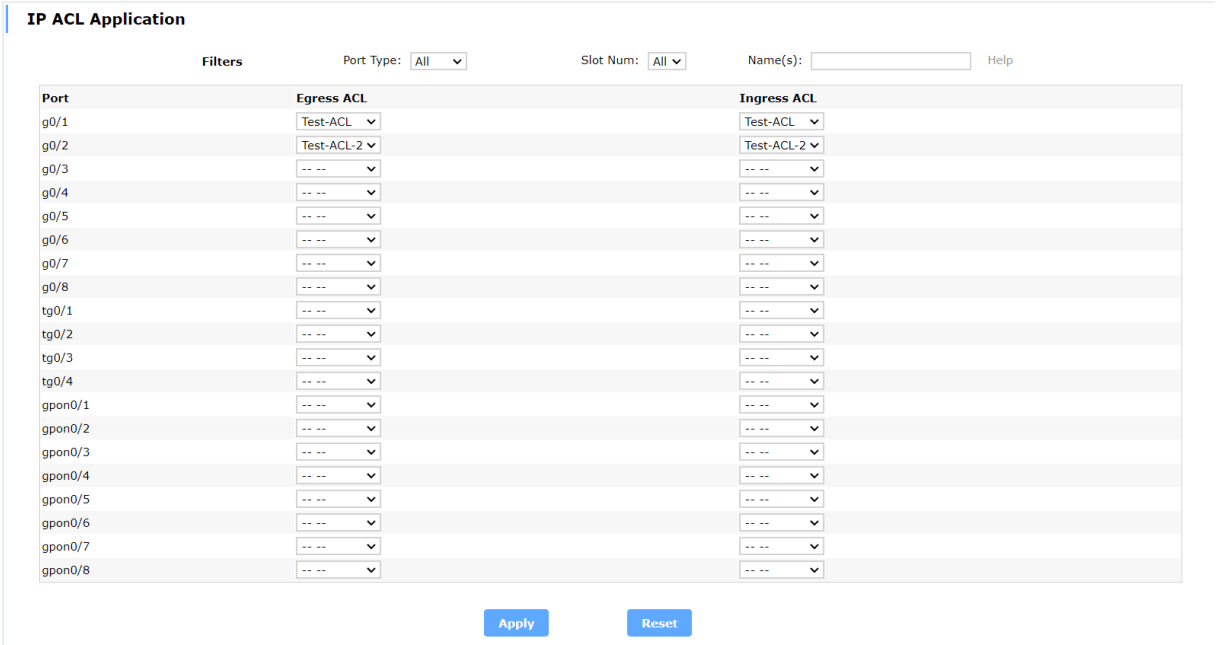
You can click on edit and modify created ACL. Following page will appear for standard ACL.



And if you choose to select Extended ACL in the dropdown menu, when you click on edit, Following page will appear.

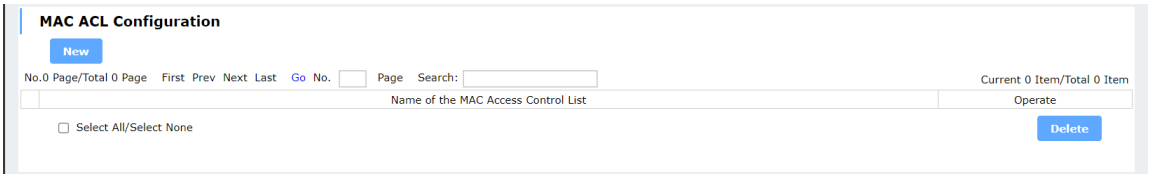


After Creating ACL, there will be a list of IP ACL Application where you can set Egress & Ingress ACL for ports.

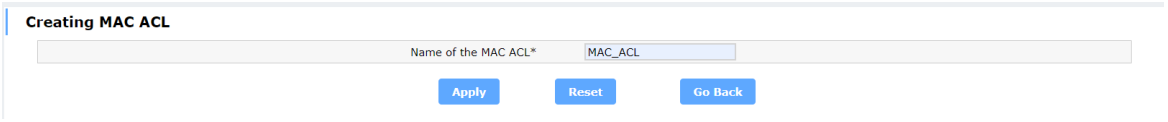


5.4 MAC Access List

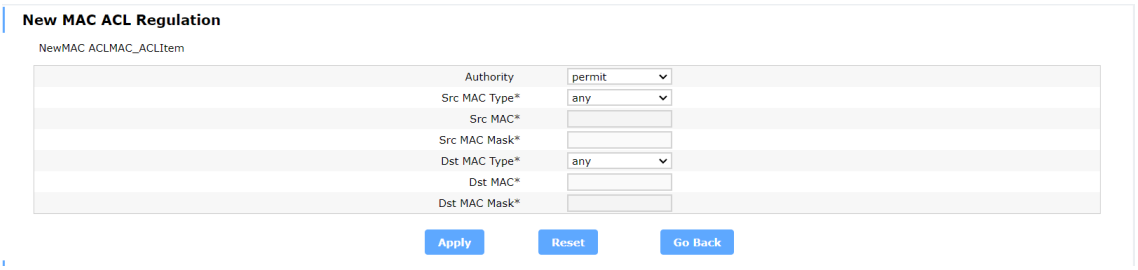
In this section, following page appears



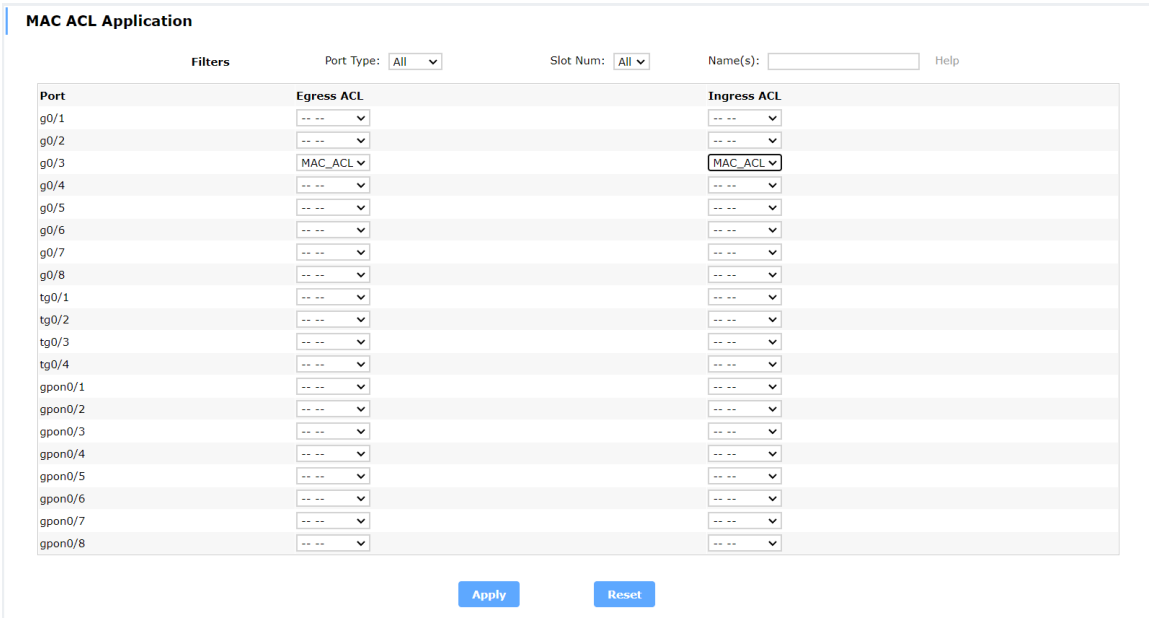
Click New to add MAC ACL



Select an ACL On the page click "**Edit**" and then click "**New**", you can configure the "**New MAC ACL Regulation**".

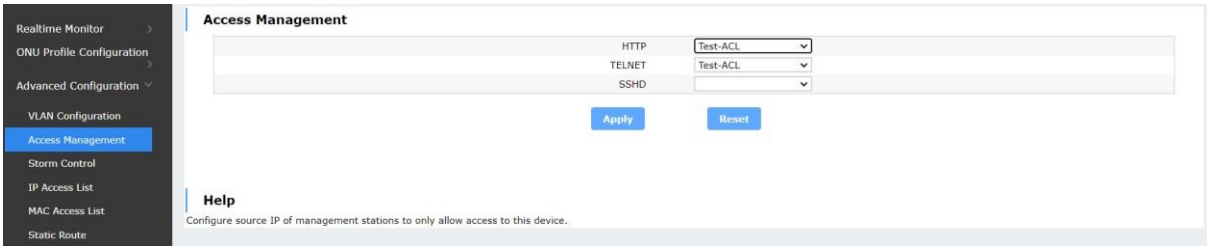


Add Created MAC ACL to the port in MAC ACL Application section and click apply.



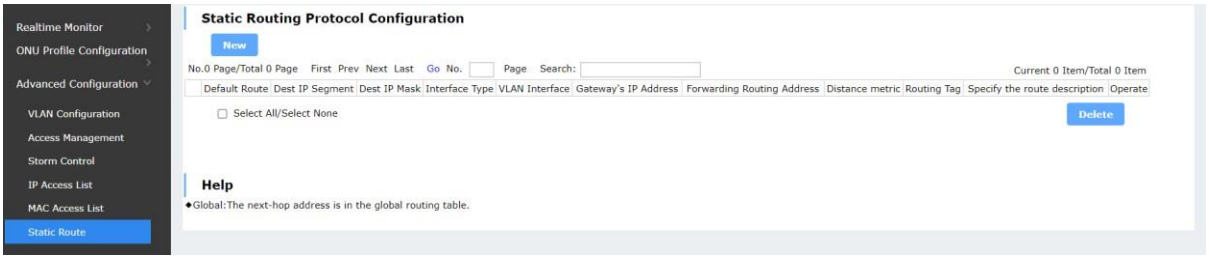
5.5 Access Management

In this section, ACL created on ***IP Access List*** is implemented for HTTP, TELNET and SSH port to configure source IP of management stations to only allow access to this device.

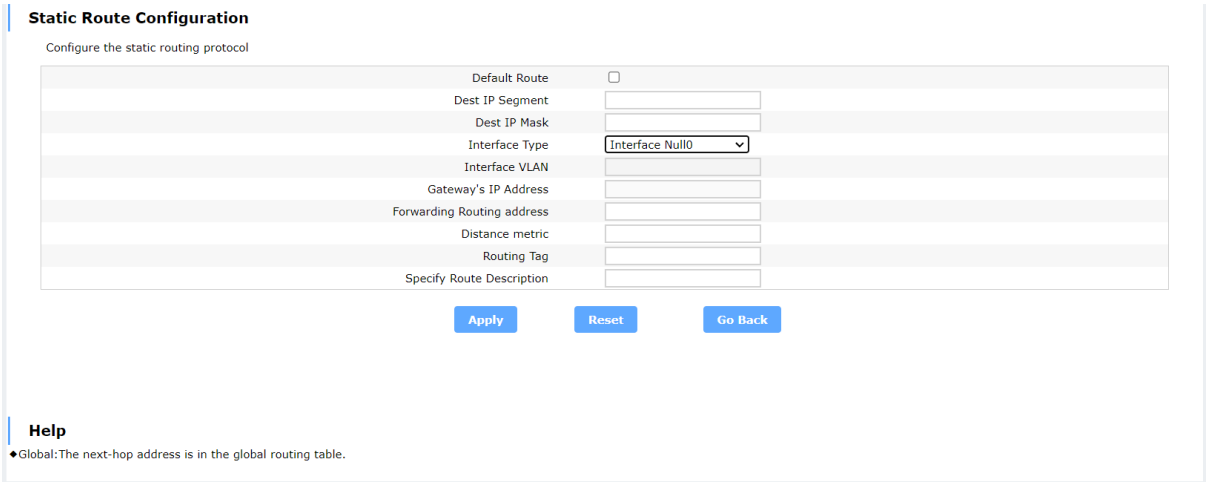


5.6 Static Route

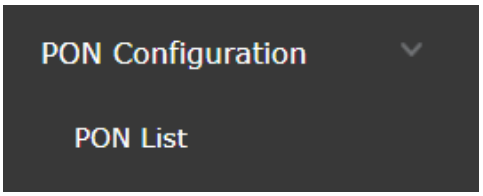
In this section, following page appears.



Click "**New**" to add a static route entry, as shown in the following interface. Tick an item and click "**Edit**" to modify the static routing entry. Tick an item and click "**Delete**" to delete the static routing entry.

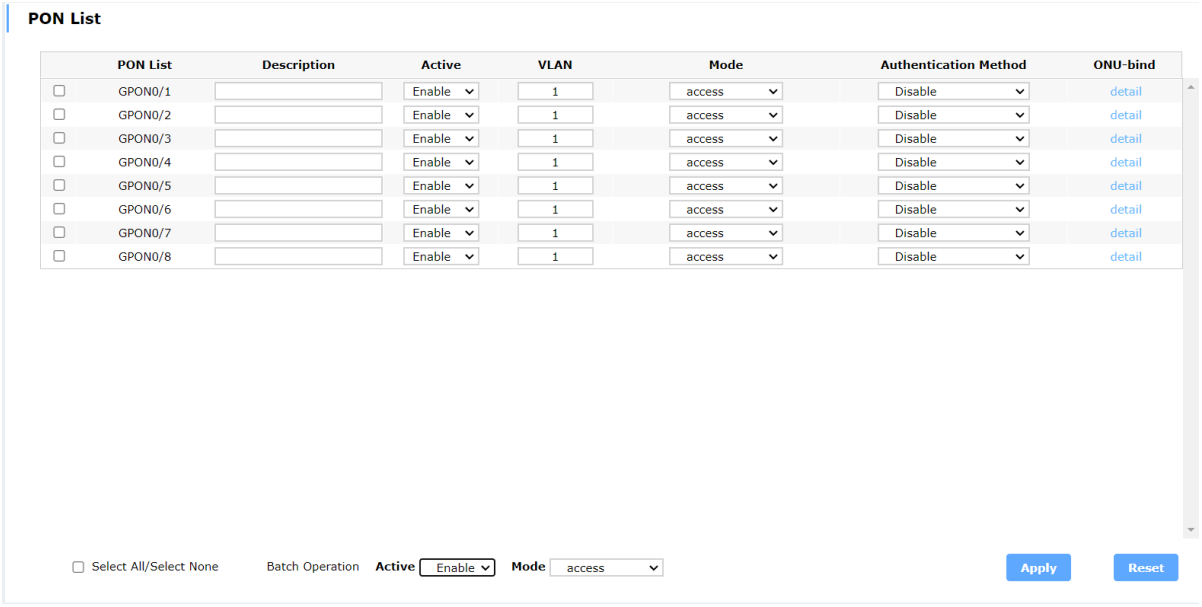


Chapter 6 PON Configuration



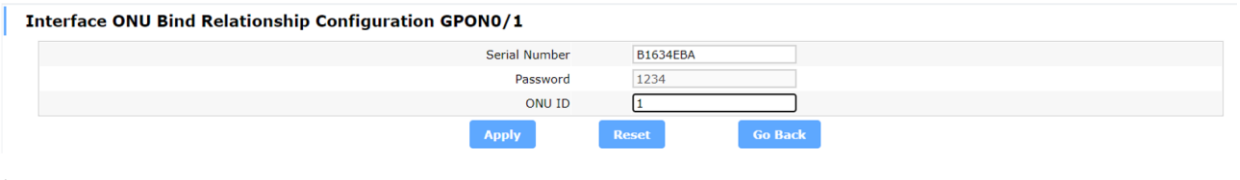
6.1 PON List

In this section, All the PON ports and basic configurations are shown. In this section, PON Port Description can be set, can enable or disable specific PON port, Add VLAN for PON port, can select VLAN Mode (access, trunk, dot1q-translating-tunnel). Authentication method can be set from here based on Serial number, or/and loid & password. You can do Batch operation (Enable/ Disable PON or Set mode of VLAN) in the bottom by selecting all/none and then click apply.



We can also view the connected ONU to a PON port from ONU-Bind Section. By clicking details, this page appears. Here we can see SN of ONU, ONU ID.

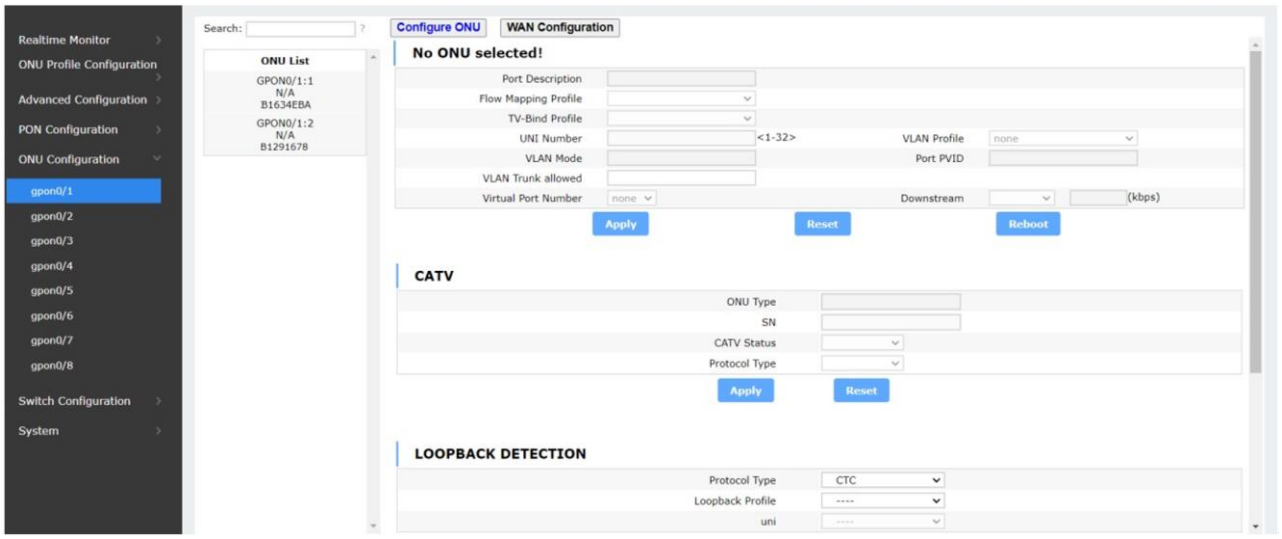
Depending on the ONU Authentication method, you can set a particular ONU's SN, ONU Password and ONU ID by clicking Edit in this page.



Chapter 7 ONU Configuration

7.1 ONU List

All the connected ONU to a specific PON is listed here. This section shows the PON Ports. And by clicking PON Port, you will see the connected ONU's to that PON Port.

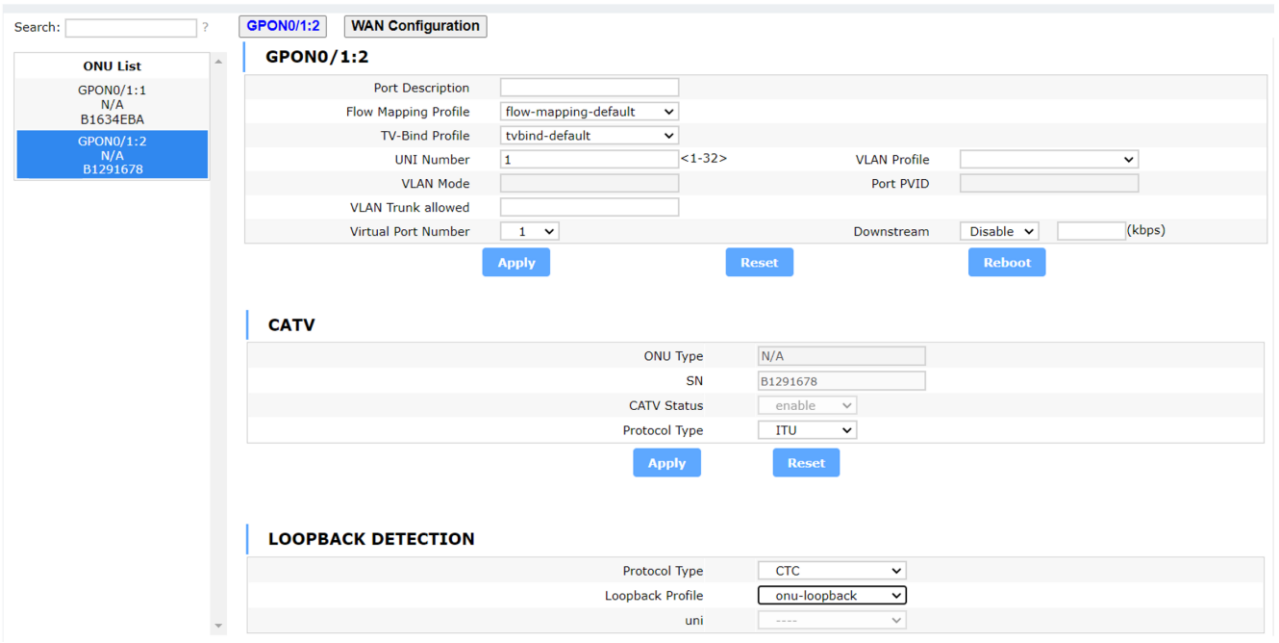


By clicking ONU from ONU list, ONU Can Be configured. In the Figure 7.2, there are 2 ONU Connected. 1st one is HGU, 2nd one is SFU. Depending on SFU or HGU, ONU needs to be configured in different way.

7.1.1. SFU Config

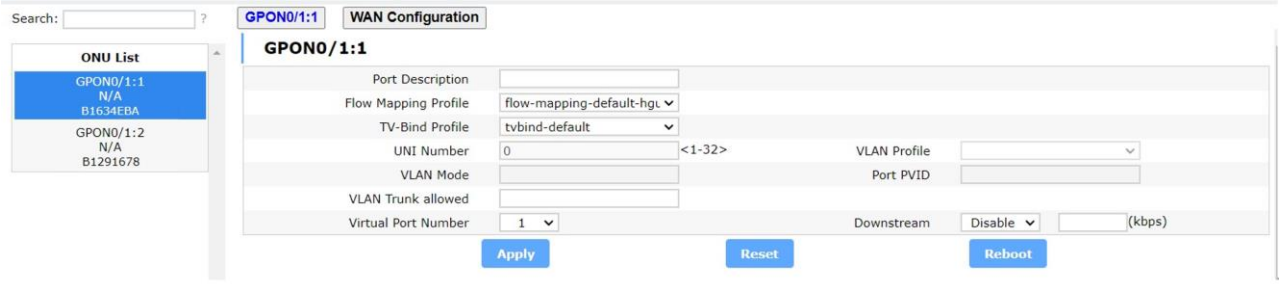
By default there is no configuration needed for Ascent's ONU will connect automatically and pass service. In this section you can Add port Description, VLAN Profile (If you want to pass service using different VLAN).

For Loopback detection, select Loopback detection Type CTC and Loopback detection profile (created in ONU Profile Configuration> ONU Port Loopback Detect)

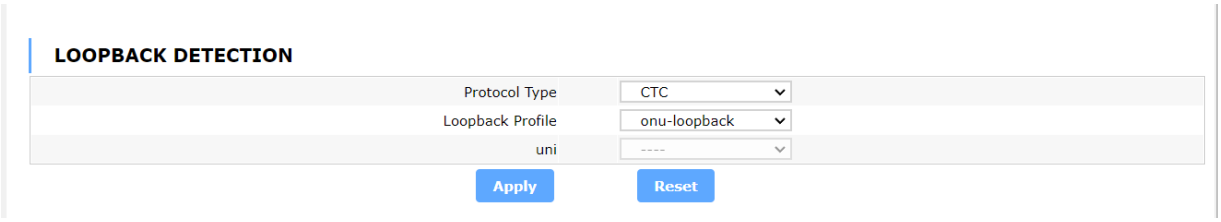


7.1.2. HGU Config

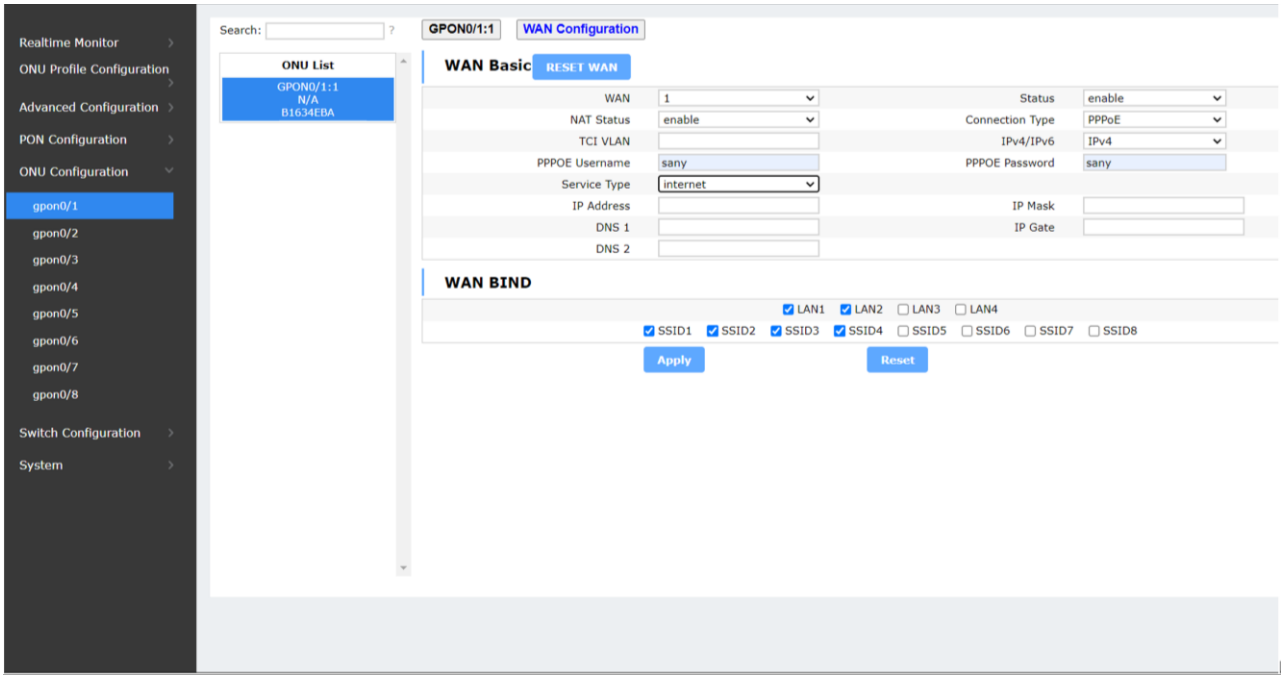
This one is HGU ONU.



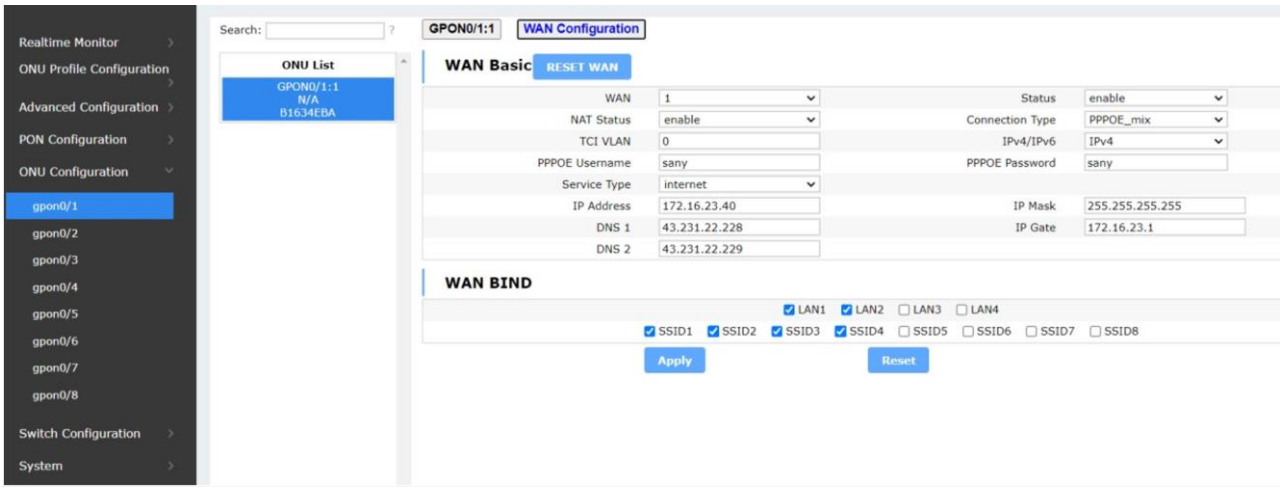
For Loopback detection, select Loopback detection Type CTC and Loopback detection profile (created in ONU Profile Configuration> ONU Port Loopback Detect)



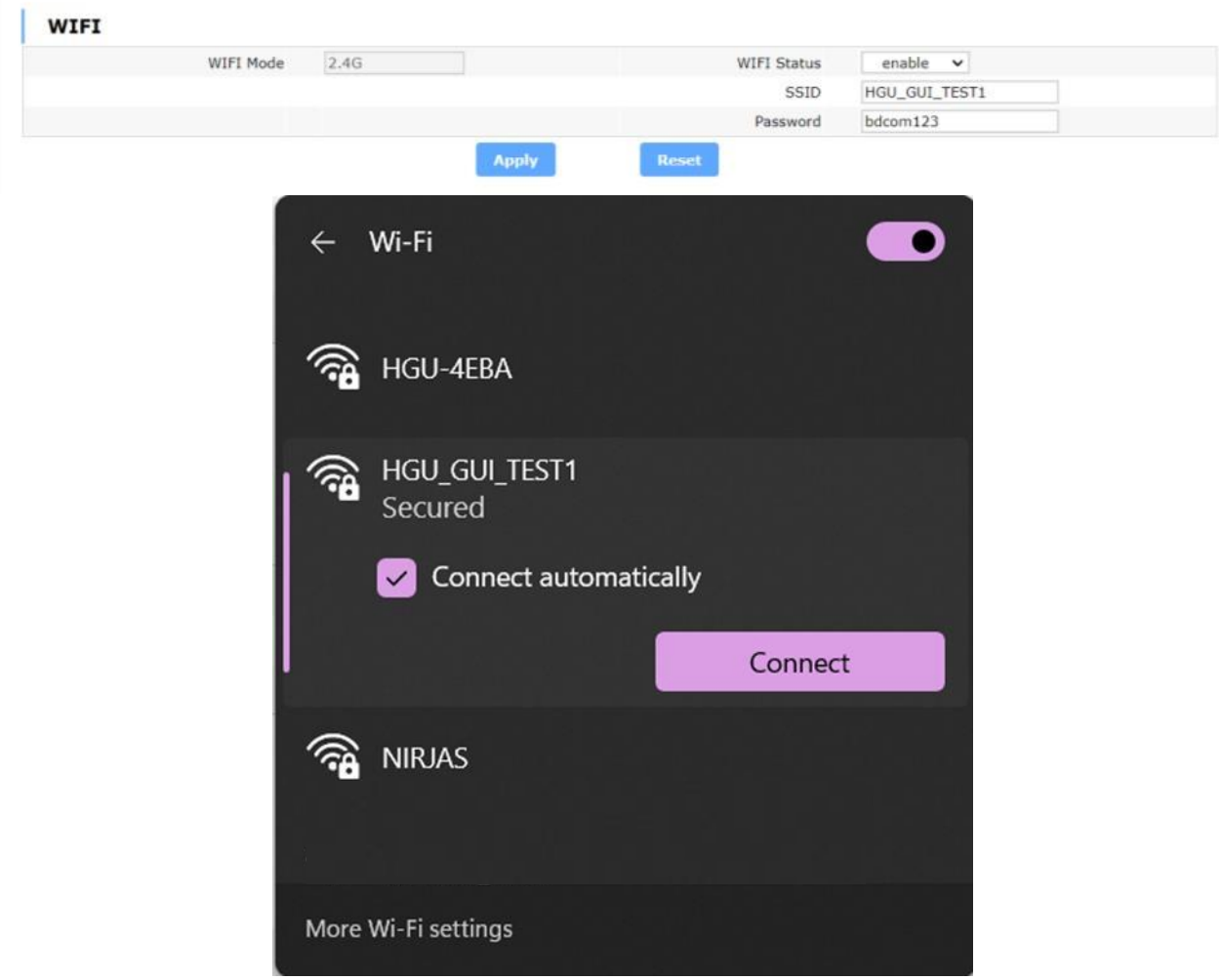
For HGU, need to configure WAN also as like as following image (for PPPOE).



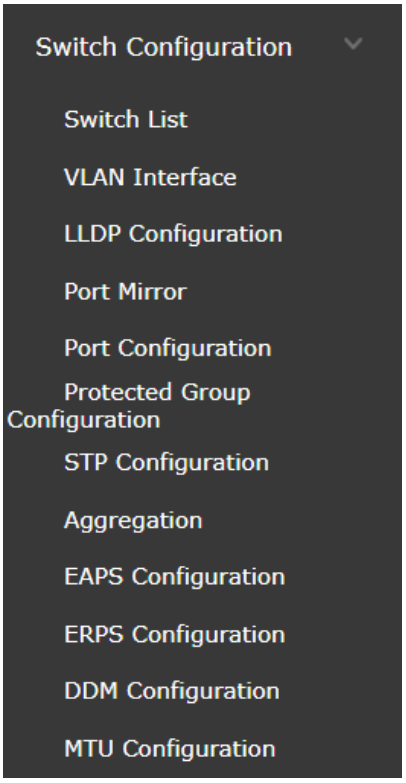
Need to provide tci vlan, pppoe username & password, enable nat, need to set connection type and service type. Need to bind this wan config with LAN and SSID. Click Apply and wait some moment. The following page will appear.



Now Need to set SSID and Password For the ONU, select ONU from ONU list and Set SSID and Password For ONU.

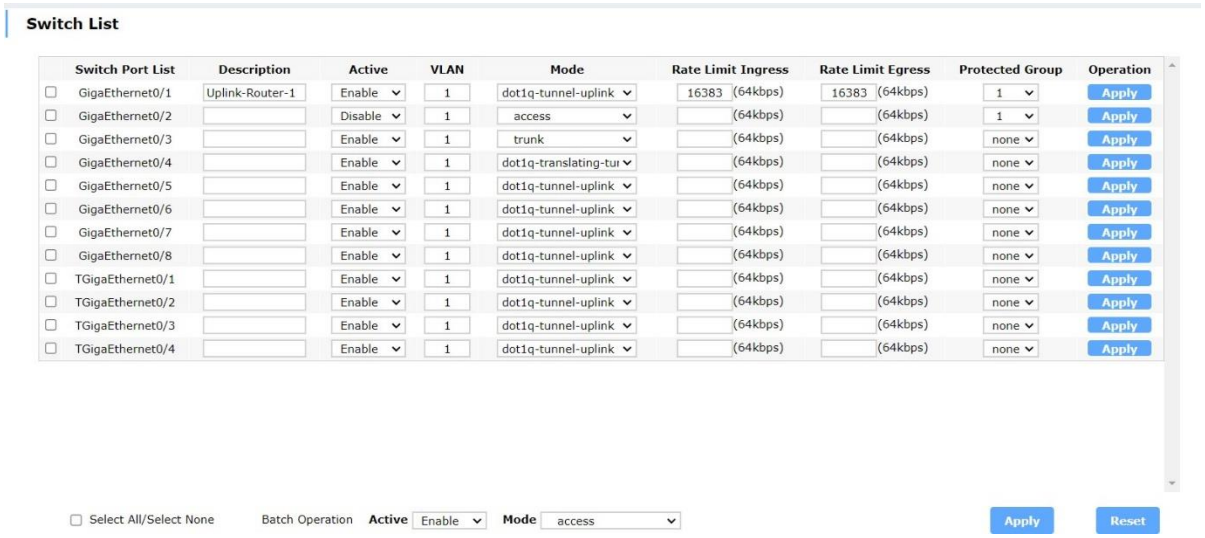


Chapter 8 Switch Configuration



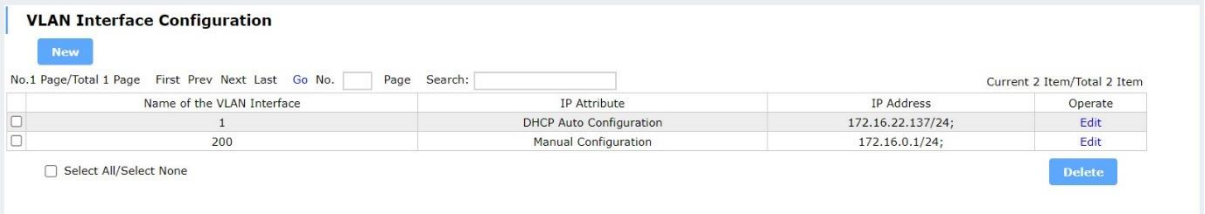
In this section, Ethernet (GigaEthernet & TGigaEthernet) ports are shown. In this section, Port description can be added, can enable or disable any port, set VLAN and VLAN mode (access, trunk, dot1q-tunnel-uplink, dot1q-translating-tunnel), limit inbound and outbound bandwidth(x64kbps) rate and also can add to protected group 1 or none. Change any of them and click apply. You can also do batch operation like select all/none and make changes like enabling or disabling all the ports and also can change the VLAN mode.

Note: If two or more ports are on protected group 1, those port can't communicate with each other.

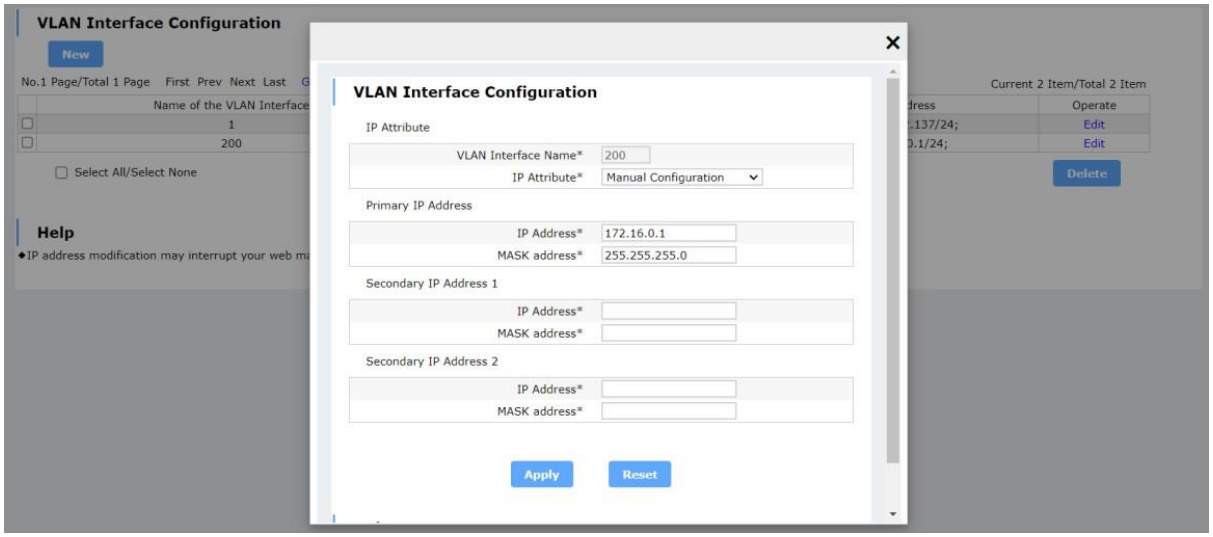


8.1 Switch List

In this section, Following Page Appears, this page contains VLAN Interface information of the device such as Name of the VLAN Interface, IP Attribute (Manual/ DHCP), IP Address with subnet mask.

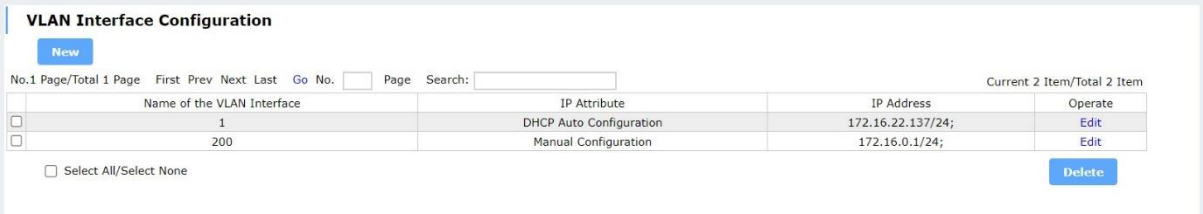


You can click 'New' or 'Edit' for adding or modifying VLAN Interface. Following page will appear if you click new or edit. For DHCP, VLAN Interface will get IP dynamically from uplink, for Manual configuration, Put VLAN ID in VLAN Interface name, set the IP address and Mask address. If you want you can also add secondary IP address as well. Then, click apply to make those changes.

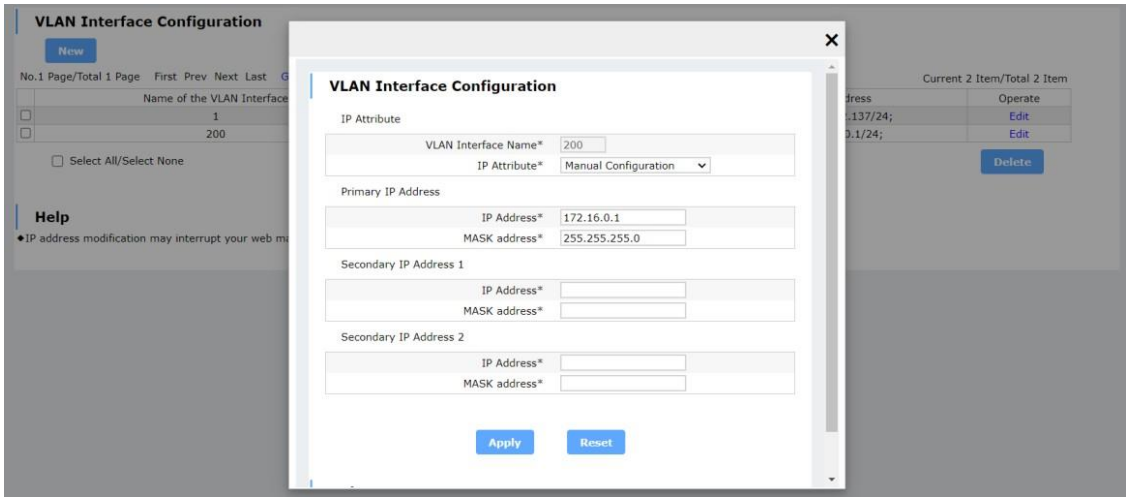


8.2 VLAN Interface

In this section, Following Page Appears, this page contains VLAN Interface information of the device such as Name of the VLAN Interface, IP Attribute (Manual/ DHCP), IP Address with subnet mask.



You can click "**New**" or "**Edit**" for adding or modifying VLAN Interface. Following page will appear if you click new or edit. For DHCP, VLAN Interface will get IP dynamically from uplink, for Manual configuration, Put VLAN ID in VLAN Interface name, set the IP address and Mask address. If you want you can also add secondary IP address as well. Then, click apply to make those changes.

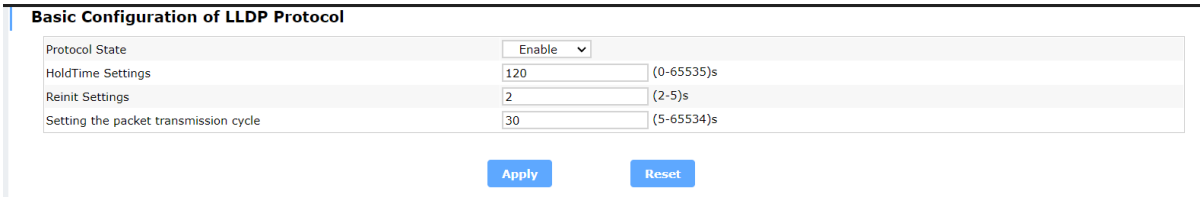


8.3 LLDP Configuration

Link Layer Discovery Protocol (LLDP) is a layer 2 neighbor discovery protocol that allows devices to advertise device information to their directly connected peers/neighbors. In this section, 2 section appears, 1st one is Basic Configuration of LLDP Protocol, 2nd one is LLDP Port Configuration.

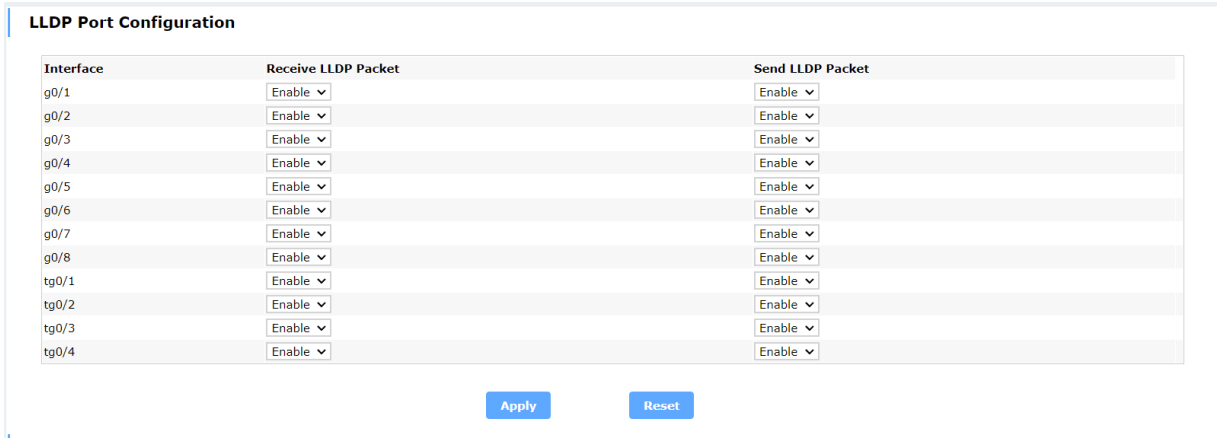
8.3.1. Basic Configuration of LLDP

Protocol State: Enable/Disable, **HoldTime** Means the TTL (Time to live) of sending LLDP packets. Its default value is 120s. **Reinit**, Means the delay of continuously sending LLDP packets. Its default value is 2s.



8.3.2. LLDP Port Configuration

In this section, Ports can be controlled (enable/disable) whether to receive or send LLDP packet not. Then click apply to save the changes.



8.4 Port Mirror

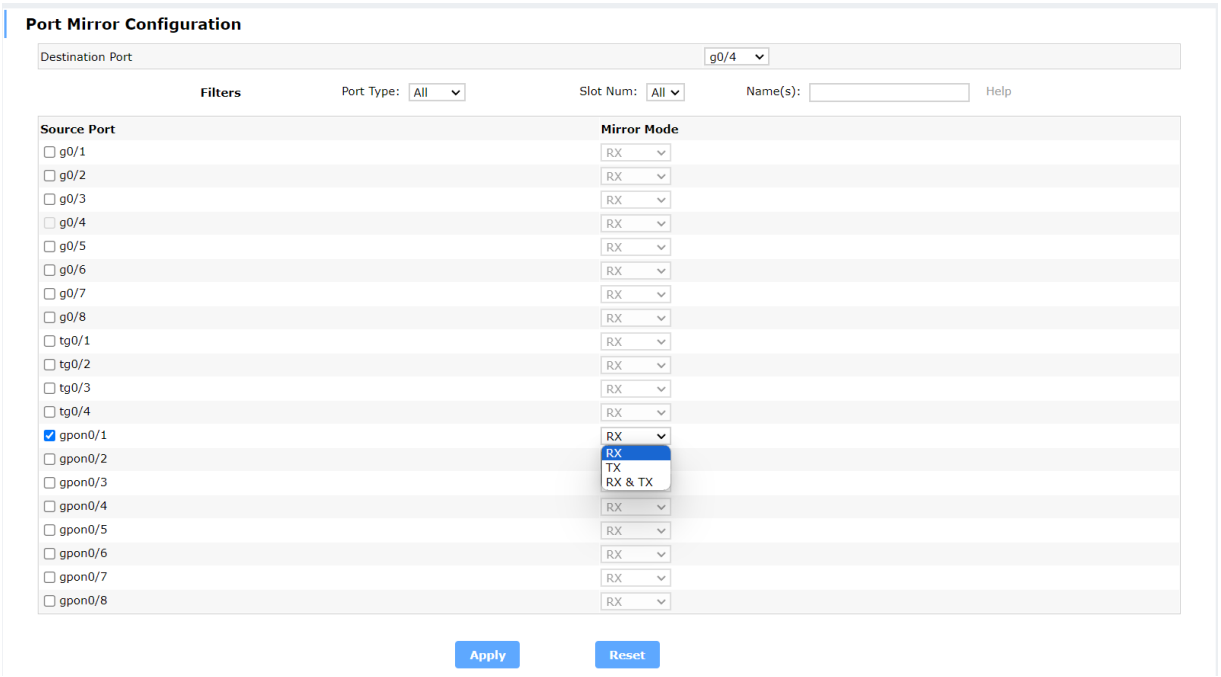
In this section, any port can be mirrored to another port. At the top, have to select the destination port, and then have to select a source port checkbox that need to mirror through that destination port. Mirror mode can be Rx, Tx, or Rx & Tx.

Rx Rx means that the received packet will be mirrored to the destination port.

Tx Tx means that the forwarded packet will be mirrored to the destination port.

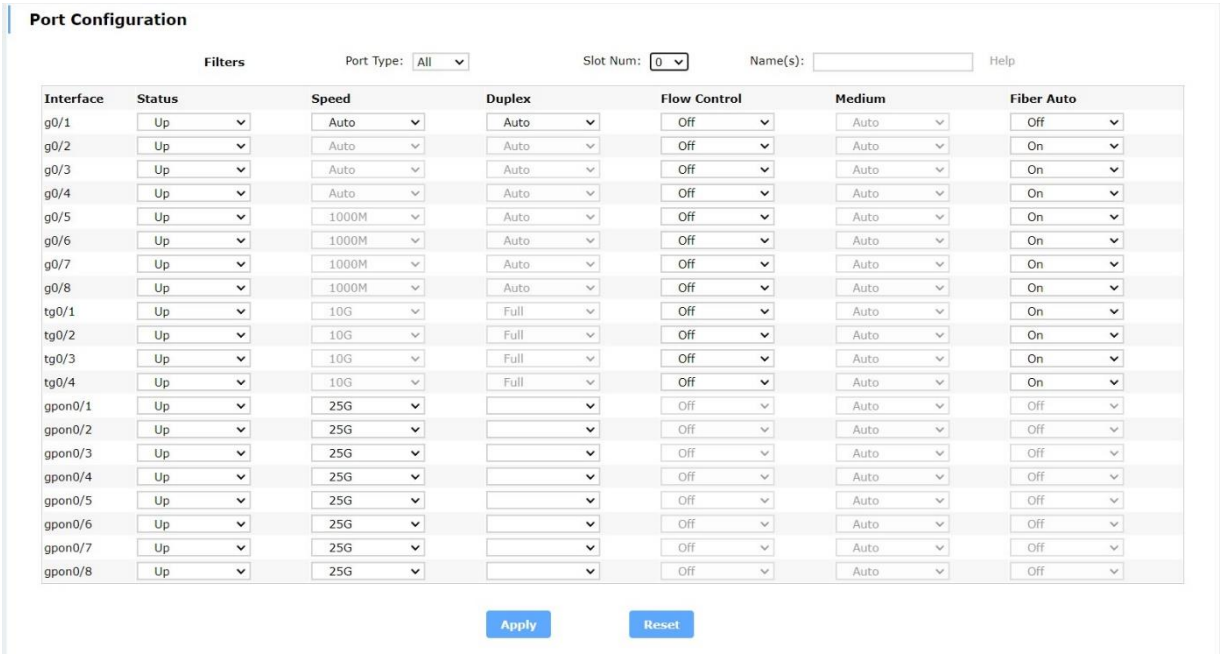
Rx

& Tx The received port and the forwarded packet will be mirrored simultaneously.



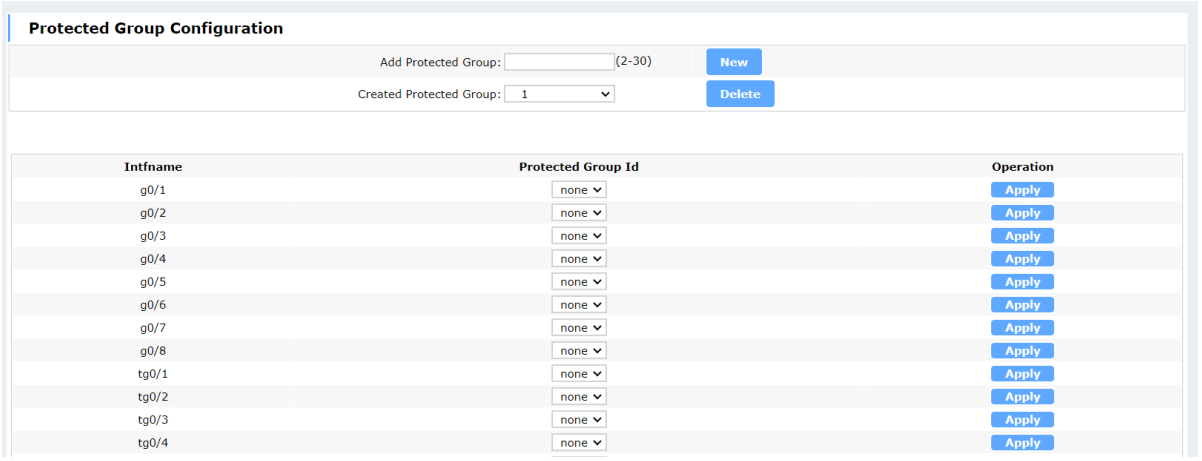
8.5 Port Configuration

In this section, Both Switching Ports and PON ports information is shown. To change any of this, 1st need to turn off **Fiber Auto** feature, otherwise can't change or modify any of these. All these port's Speed (10G to 1G, 1G to 100MB to 10MB) Transmission mode (Full/Auto), flow control can be configured.

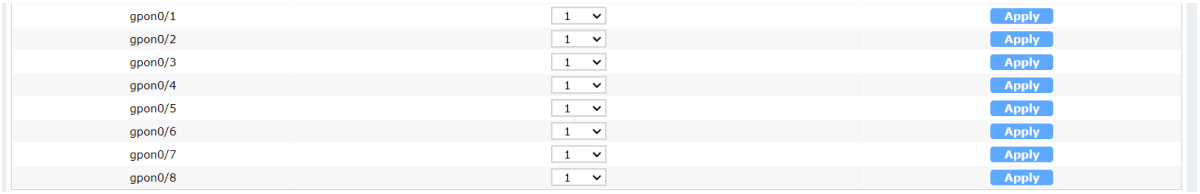


8.6 Protected Group Configuration

Protected Group means, If two or more ports are on similar protected group, those port can't communicate with each other. In protected group configuration section, Protected group 1 is created by default. You can create protected group 2-30 as per your requirements. By default switching ports are not in protected group so they can communicate between each other.

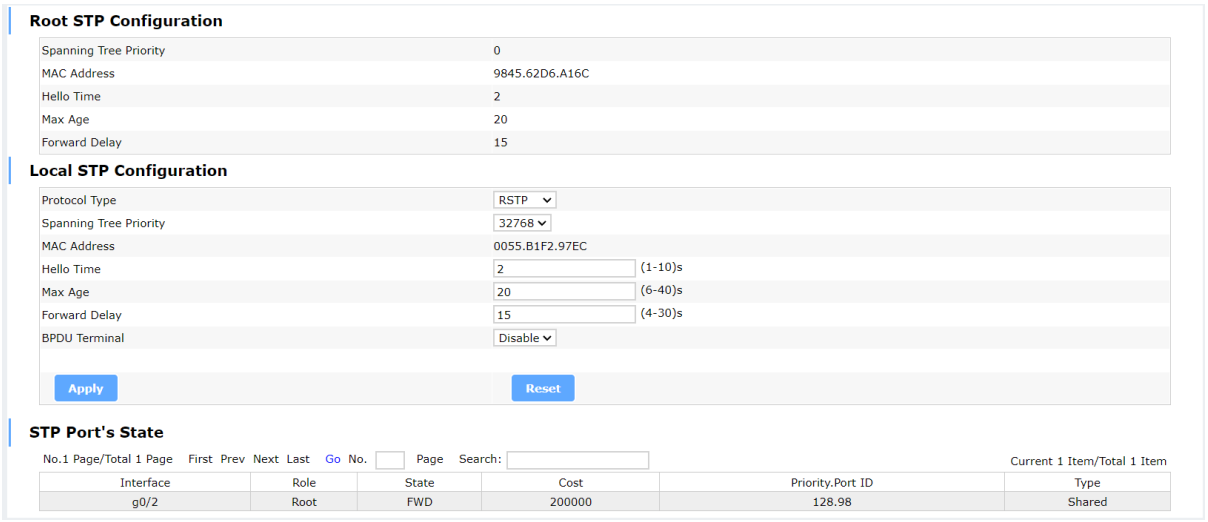


On the other hand Each PON port is under protected group 1, so they can't inter-communicate. To make inter-communication between two PON Port, Just need to make protected group 1 to none between those two or multiple PON port and click apply to make changes.



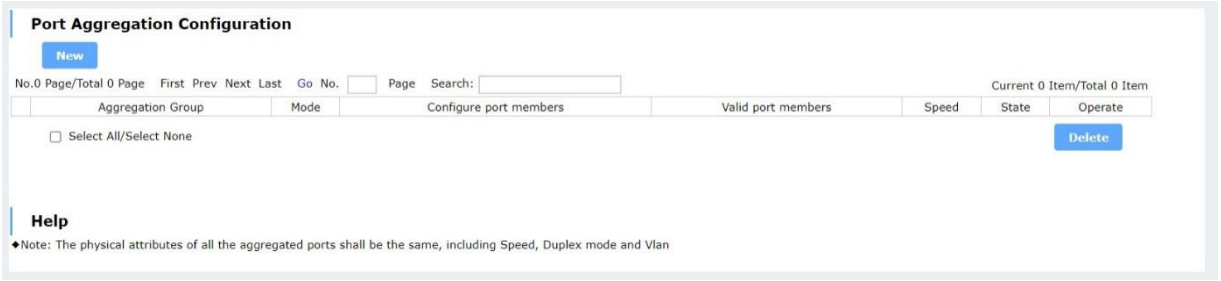
8.7 STP Configuration

In this section, STP information and configurations are shown. There are three parts in this page, Among the three parts, Root STP Config and STP Port's State are read only. In local STP configuration, select the Protocol Type in the dropdown box on the right. It supported mode includes SSTP, RSTP, PVST, MSTP and disable STP. The priority and time parameter be configured vary with the mode.



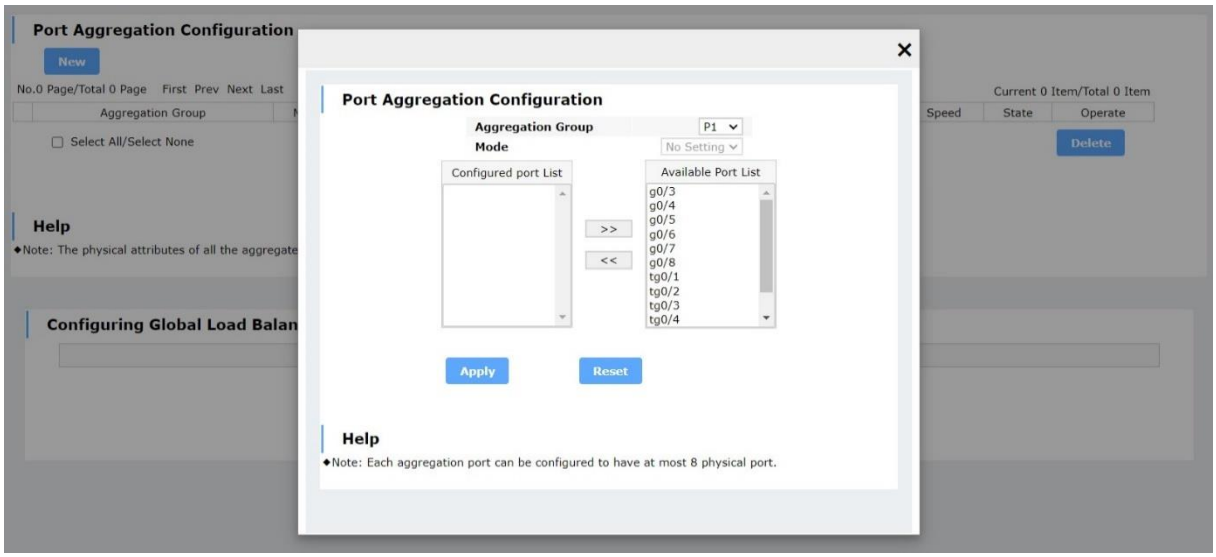
8.8 Aggregation

This page appears by clicking on Aggregation Tab.



8.8.1. Port Aggregation Configuration

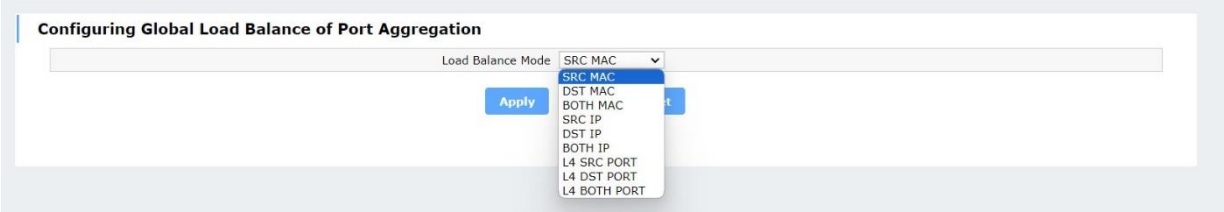
Click "**New**" on the page and the following page pops up. On the following page, you can configure at most 32 aggregation groups. Each group can configure at most 8 aggregation ports. Select the mode of the aggregation port in the dropdown box behind Mode. Tick an item on the page of "**Port Aggregation Config**" and Click "**Delete**" to delete the aggregation group.



When creating a new aggregation group, it is optional; when modifying the aggregation group, it is not optional. When the aggregation port exists the member port, you can select the aggregation mode: Static, LACP Active and LACP Passive. You can delete and add the aggregation member port by “>>” and “<<”.

8.8.2. Global Load Balance of Port Aggregation

Our OLT Support Global Load Balancing on different modes shown in the fig: 8-12.

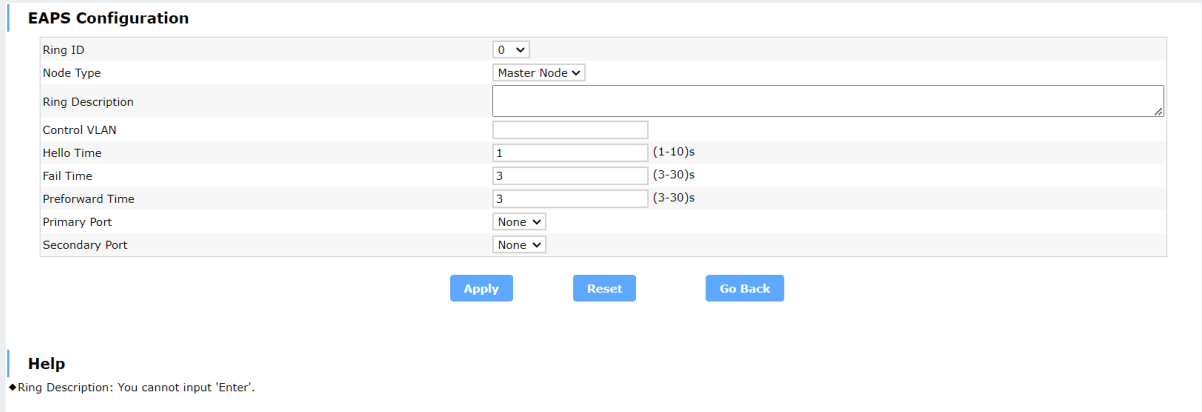


8.9 EAPS Configuration

In this section, following page appears,

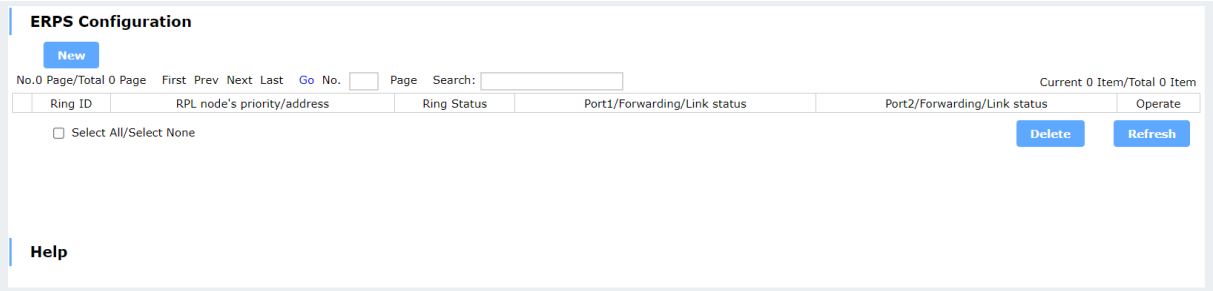
8.9.1. EAPS Configuration

By clicking New, in this section, ERPS can be configured.



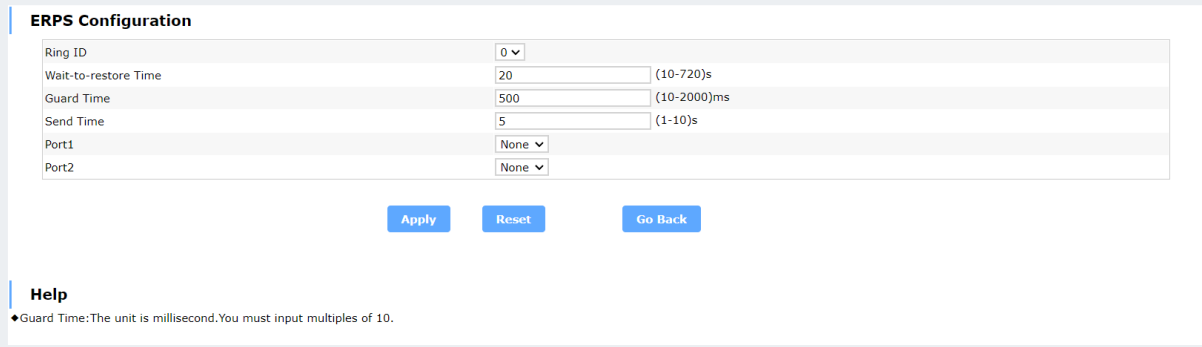
8.10 ERPS Configuration

In this section, following Page appears,



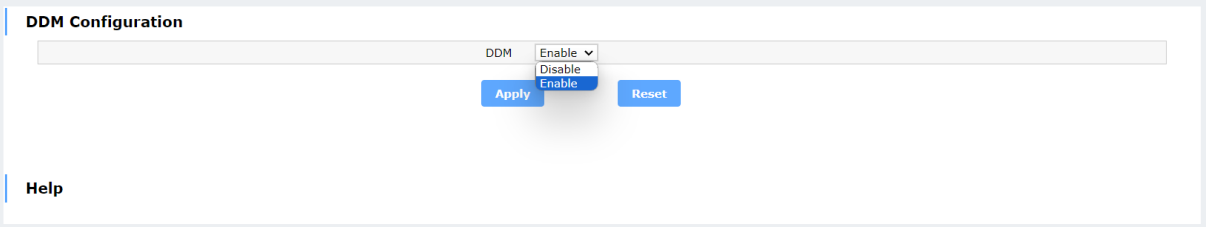
8.10.1. EAPS Configuration

By Clicking New, in this section, ERPS Can Be configured.



8.11 DDM Configuration

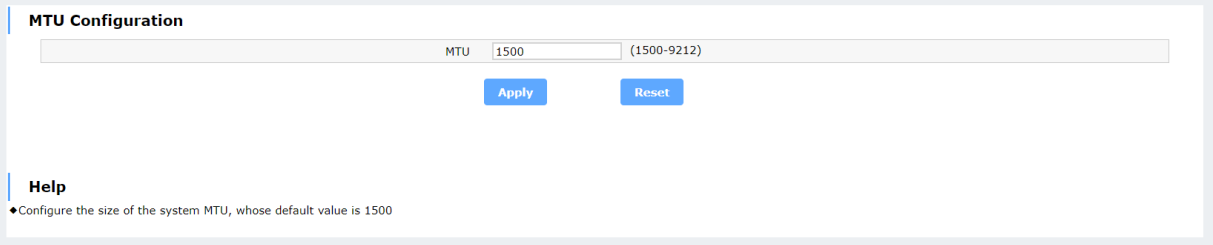
DDM Stands for 'Digital Diagnostics Monitoring'. It is used for checking Optical Tx & Rx, Voltage,Bias Current, temperature in realtime. In this section, we either can enable or disable DDM in OLT and click apply.



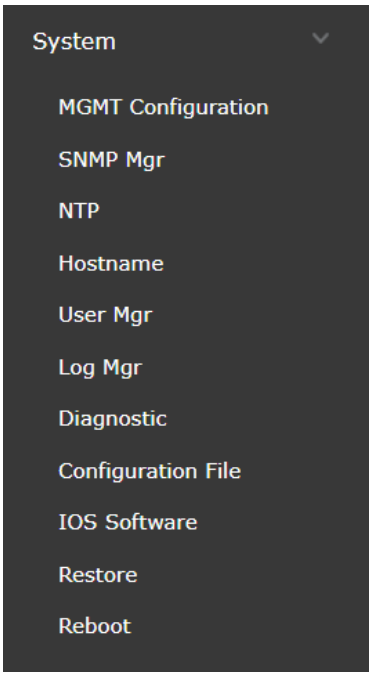
8.12 MTU Configuration

MTU stands for Maximum Transmission Unit. It's a measurement (typically in bytes) of the largest data packet a device can accept via an internet connection. Default MTU Value is 1500.

You can set the size of MTU within a designated range.

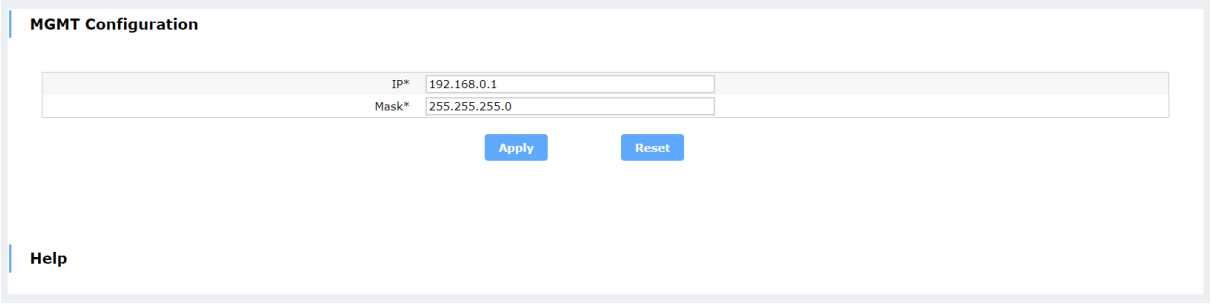


Chapter 9 System



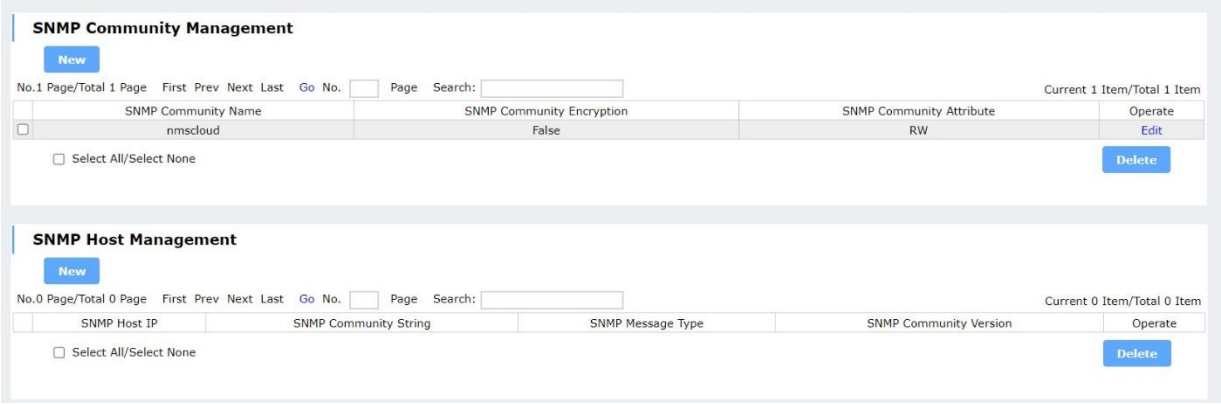
9.1 MGMT Configuration

In this section, Management Port IP address and subnet mask can be configured.



9.2 SNMP Mgr

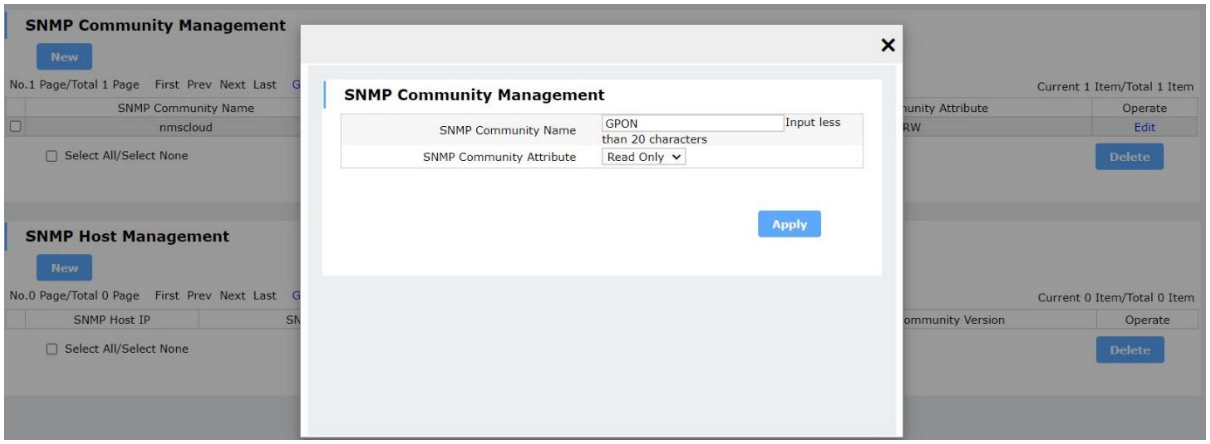
In this section, SNMP Community Management and Host Management information is shown.



9.2.1. SNMP Community Management

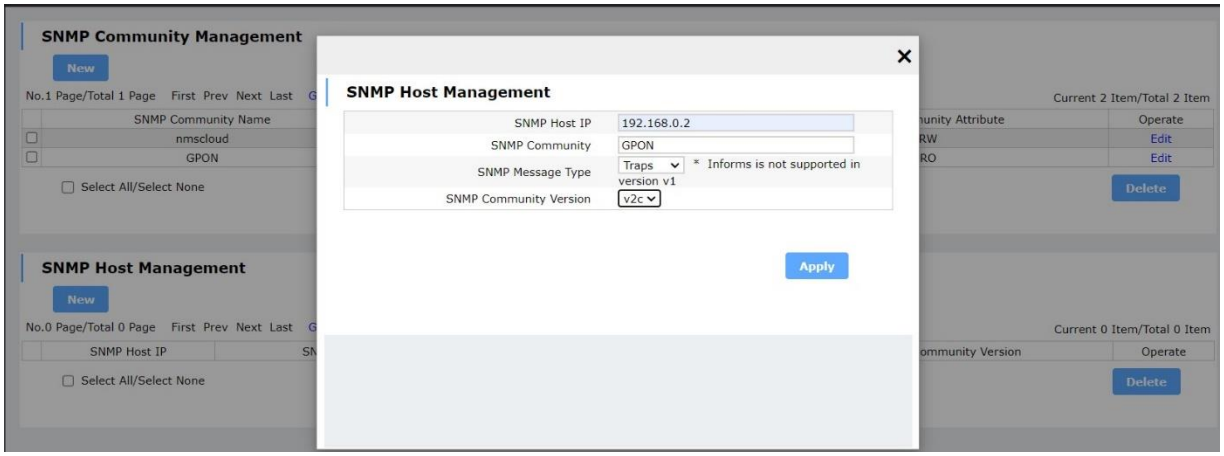
Click "**New**" or "**Edit**" to Add/Modify SNMP Community Management name and community attribute.

Attribute can be **Read Only** or **Read Write.**



9.2.2. SNMP Host Management

Click "**New**" or "**Edit**" to Add/Modify SNMP Host Management. Add SNMP Host IP, SNMP Community, Message type (Traps), SNMP community version v2c.

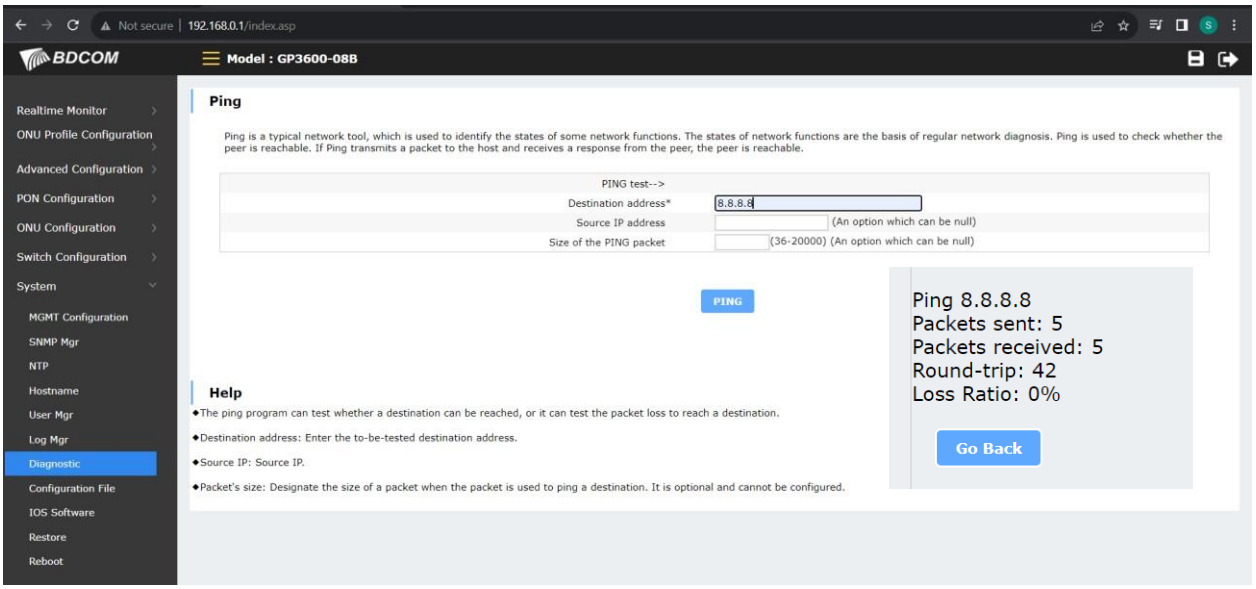


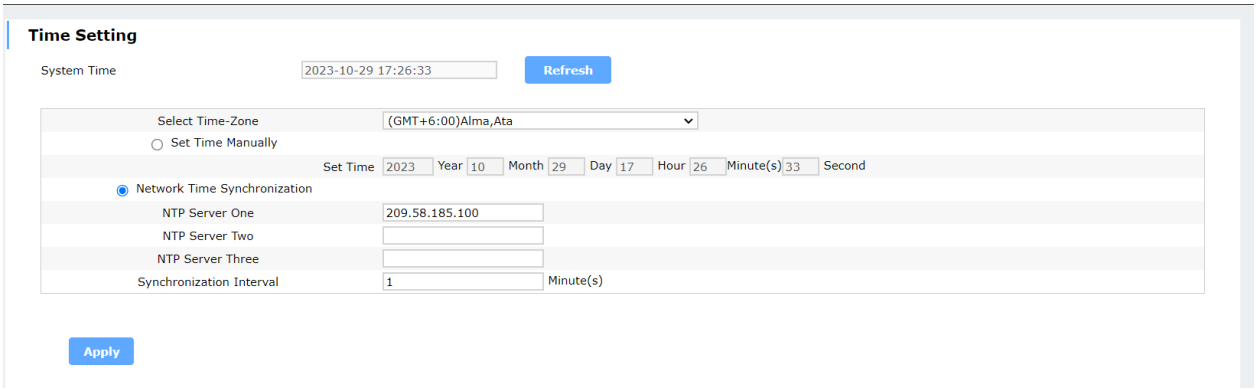
9.3 NTP

In this section, you set time Manually or automatically. For Automatic time synchronization, you need to go to Diagnostic, and check if the OLT is reachable to Internet or not. If internet is reachable, set the following IP address and select time zone. Wait a while and Refresh. Time and Date will synchronize with internet.

9.4 Diagnostic

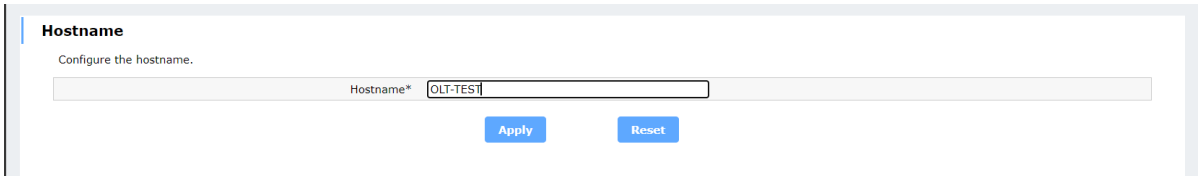
You can run PING test in this section. Can define source & destination IP also the packet size.





9.5 Hostname

Can Change the Hostname of the OLT From Here.

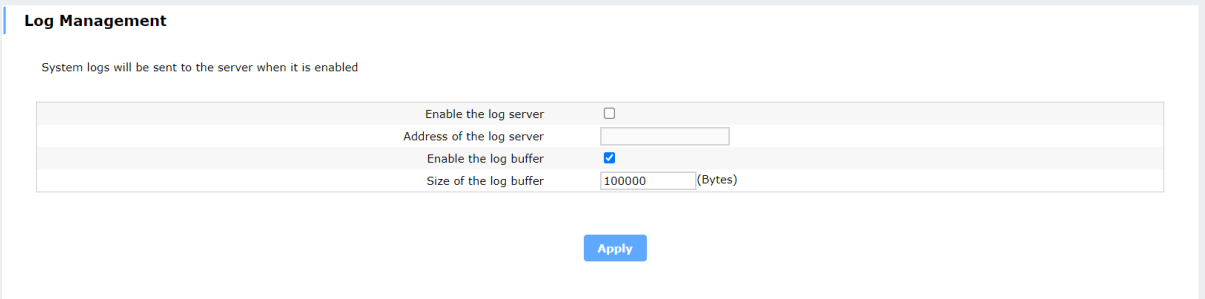


9.6 User Mgr

Here, User can be created. Click on New, Set User Name and Password for new user. You can Create two type of user, Administrator user who can do any configuration of OLT and Read Only User, Who is a limited user with some limited feature he can view and perform.

9.7 Log Mgr

In this section, Log Management is shown.



Enable log server: Enables/Disables the output of the device's logs to the log server (If the logs of the device are disabled, no information will be displayed on the log page).

Address of the system log server: Enter the address of the log server. The logs will be exported to the designated log server. You can browse the log information on the log server.

Grade of the system log information: The output of the system log can be divided into different grades. You can export the logs with designated range. The bigger the value of the log's range is, the more detailed the log is.

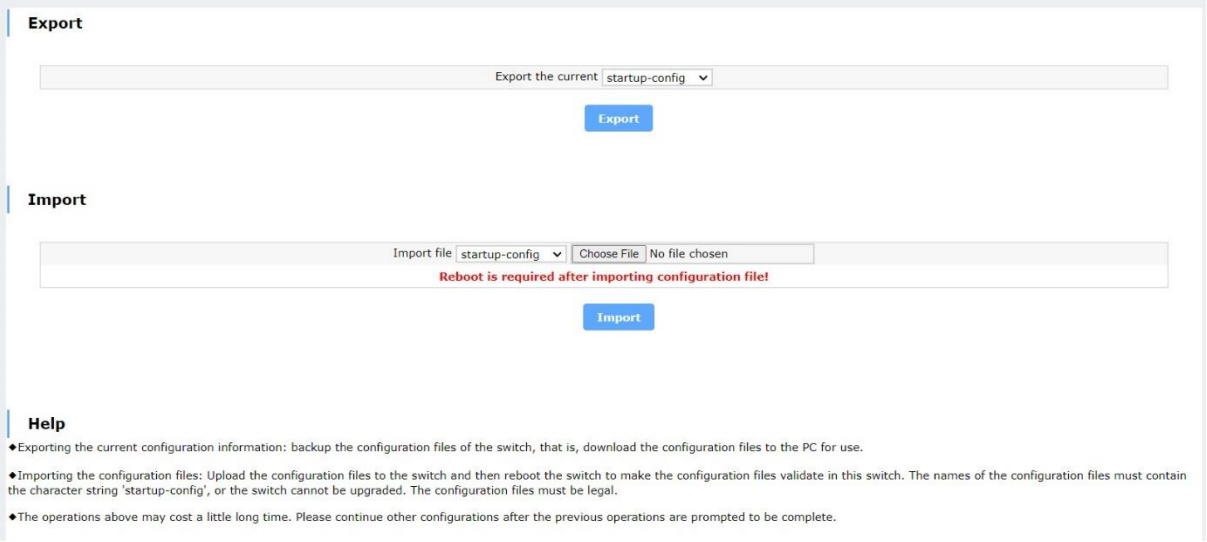
Enable log buffer: After the log buffer is enabled, you can set the information about the log buffer. Size of the system log cache: Sets the size of the log cache zone on the device.

Grade of the log cache information: Sets the grades of the logs in the cache of the device. The bigger the value of the log's grade is, the more detailed the log is.

9.8 Configuration File

In this section, Startup-config file can be exported from OLT, as well as imported to OLT. Click Export to Export current configuration file.

Choose Configuration file and click import to import the previous configuration. Reboot is required after importing any configuration file.

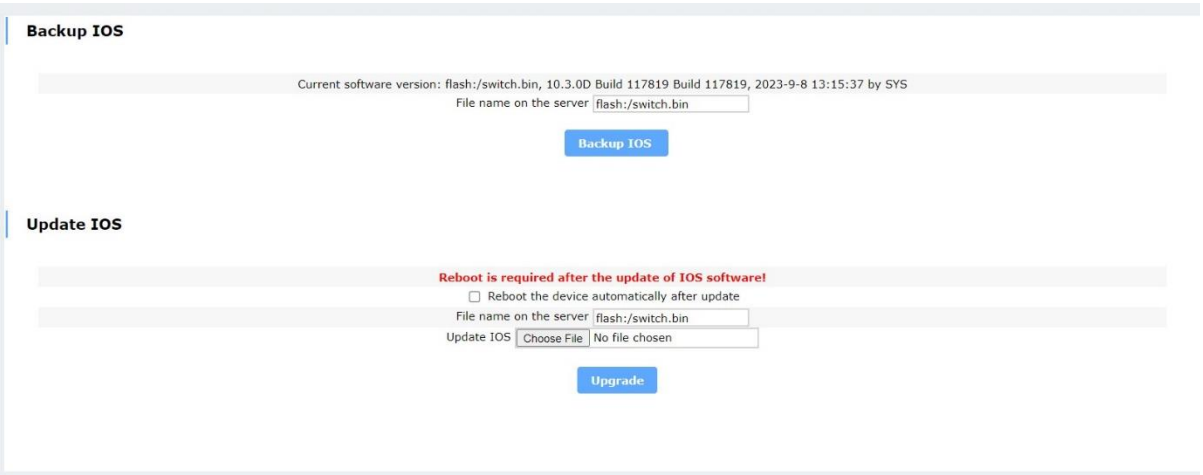


9.9 IOS File

OLT's current Firmware can be downloaded (Backup) or Upgraded from this page.

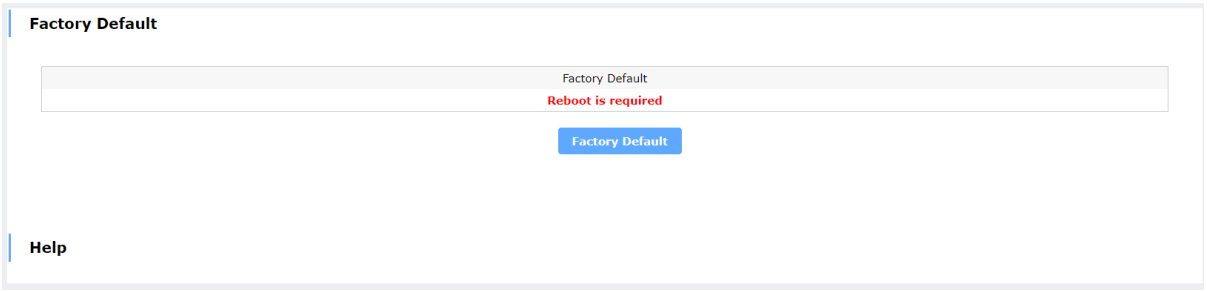
Click Backup IOS To download current software version of the OLT.

To Update, Choose the correct IOS version for the OLT in the choose file option, then click Upgrade. After uploading, reboot the OLT.



9.10 Restore

Restore the OLT from this section by clicking Restore Button. The OLT Will boot up in Factory Default mode after restoring.



9.11 Reboot

Reboot the OLT from this section by clicking Reboot Button.

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