

netis PON OLT

User Manual



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1.Login to the graphical management interface

1.1.Log into the management interface

1. Open a web browser and type http://192.168.2.201 into the URL bar. Press **Enter** as shown in Figure (1-1).

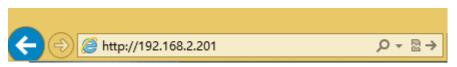


Figure 1-1

2. In a pop-up window type "guest" as the username and password respectively and click **Log In** or **OK** as shown in Figure (1-2). (Prompt: Enter username "guest" and password "guest" to login as a normal user. Enter username "root" and password "epondevp" to login as an administrator.)

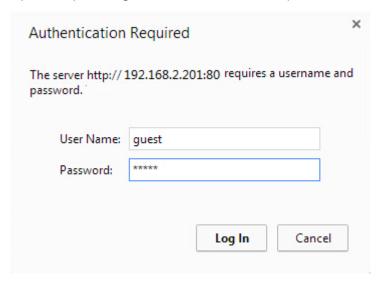


Figure 1-2

1.2. Management interface and usage

1. Enter into main interface after login, as shown in following figure.

BLK-C1 front panel structure chart is shown at top of page, the function menu interface has a tree structure as shown on the left of the page. There is a block of region in the middle of the page, which is also the main window displays configuration and query information, as shown in Figure (1-3).



Figure 1-3

2. The function menu shows the directory tree structure divided into two layers. Click any main item to display the item information. Select the desired item, the main window will switch to item configuration or query display page. Function menu is shown as Figure (1-4).



Figure 1-4

2. System Information

2.1. Device Information

Query page is shown as Figure (2-1):

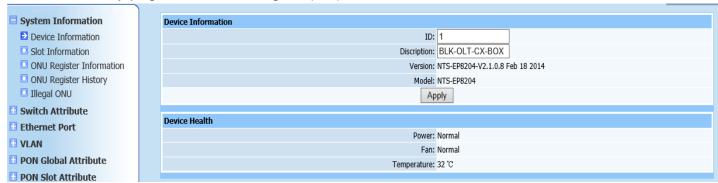


Figure 2-1

This query page is mainly to find OLT network element information, including equipment ID, equipment name, equipment version, power state, fan state and environment temperature.

2.2. Slot Information

Query page is shown as Figure (2-2):

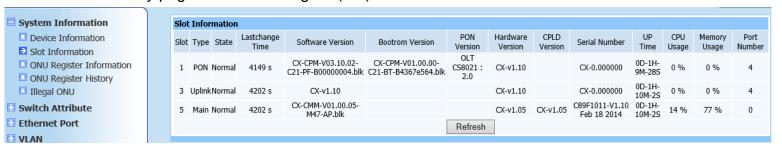


Figure 2-2

This query page is mainly to find OLT module information, including PON module, uplink module and control module.

2.3. ONU Resister Information

Query page is shown as Figure (2-3):



Figure 2-3

This query page is mainly to find all registered ONU information of OLT, in which ONUs registered under each PON are labeled in detail, including ONU type, MAC address, manufacturer ID and ONU model.

Authentication mode. If registered ONU is required to configure to authentication mode, select required modules and ports (if none is selected, authentication will add to all PON ports of OLT by default), then click **Auto Add Authentication**, corresponding PON ports of OLT will generate registered ONU authentication table (view relevant information via "ONU Authentication Table" in "PON Port Attributes").

2.4. ONU Register History

Query page is shown as Figure (2-4):

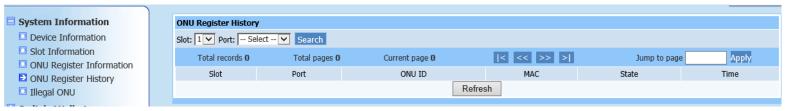


Figure 2-5

This query page is mainly to find registered ONU history on OLT.

2.5. Illegal ONU

Query page is shown as Figure (2-5):

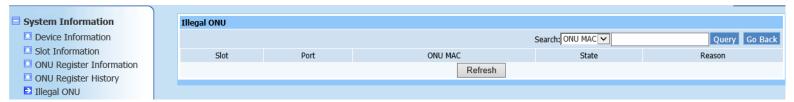


Figure 2-5
This query page is mainly to find illegally registered ONU information on OLT.

3. Switch Attribute

3.1. MAC Aging Time

Web configuration page is shown as Figure (3-1):



Figure 3-1

This page is to configure MAC aging time. After configuration is completed, MAC address will be auto-aging in a period of time [0 1000000] if no address is forwarded, it shows when aging time is 0, no aging time exists and this is only used for test.

3.2. Eth-Trunk

Web configuration page is shown as Figure (3-2):

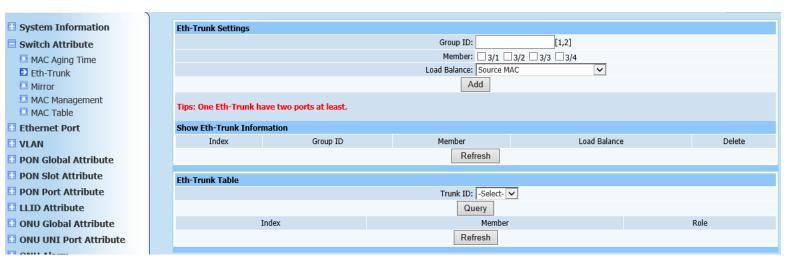


Figure 3-2

This Web configuration page is to add static TRUNK group. Click **Add** to refresh page after configuration is completed. The following TRUNK group displays static TRUNK group information which has been added.

If static TRUNK group information query is required, enter ID in corresponding

message field and click **Query** button, specific information displays in static TRUNK group information field.

3.3. Mirror

Web configuration page is shown as Figure (3-3):

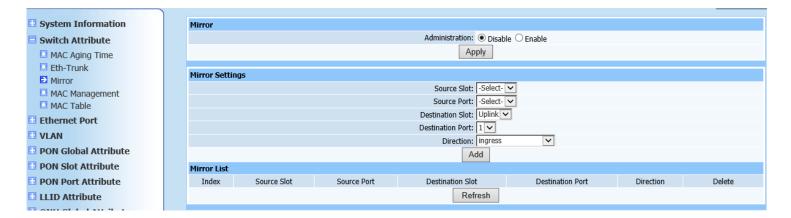


Figure 3-3

1. Overview

Mirroring is to mirror input/output message of certain port to another port. Output port is usually connected to network protocol analyzer. This function is often used to diagnose network failure and analyze network flow.

2. Configuration instructions

Enable **Administration** configuration, and click **Apply**, then configure port mirroring in **Mirror Settings** field. Click **Add** to automatically refresh page after configuration is completed, the added information displays in **Mirror List** field. Check if the information is configured as required.

3.4. MAC Management

Web configuration page is shown as Figure (3-4):

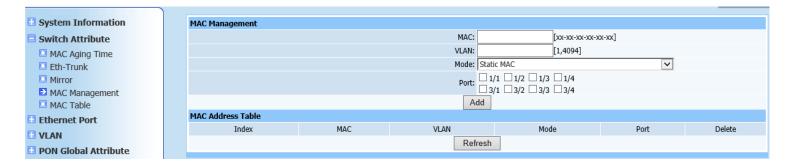


Figure 3-4

This page is to configure port MAC filtering. The purpose is disallow specific MAC addresses to pass the configured ports.

Enter as required in the following format in rectangle input field next to MAC. Enter VLAN of MAC address in its own configuration item. Configure filtering mode according to your need and select port to be configured, click **Add** to automatically refresh page after configuration is completed, added information displays in MAC filtering table.

3.5. MAC Table

Query page is shown as Figure (3-5):

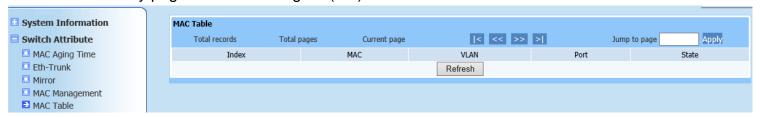


Figure 3-5

This page is to query MAC address forwarding table of uplink port and accessary MAC VLAN information.

4. Ethernet Port

4.1. Port Management

Web configuration page is shown as Figure (4-1):

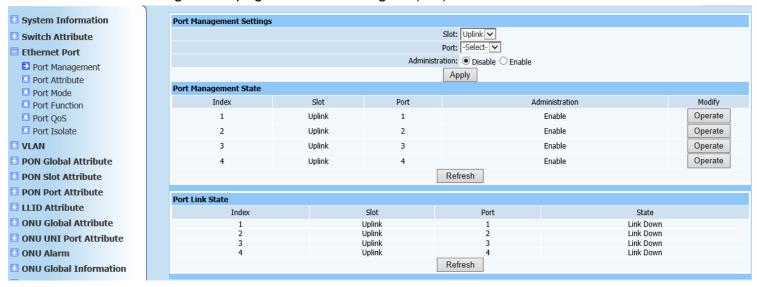


Figure 4-1

Port Management Setting is to configure Administration status of uplink port as required. Click **Apply** to automatically refresh Port Management State page after configuration is completed. Check if the displayed configuration information is as required.

4.2. Port Attribute

Web configuration page is shown as Figure (4-2):

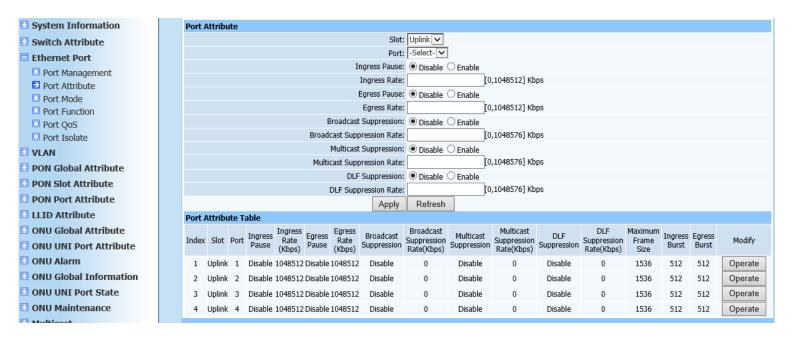


Figure 4-2

This page is to configure flow control of uplink port as required in configure prompt page. Click **Apply** to refresh port attribute list. Check if the displayed information is as required to add.

4.3. Port Mode

Web configuration page is shown as Figure (4-3):

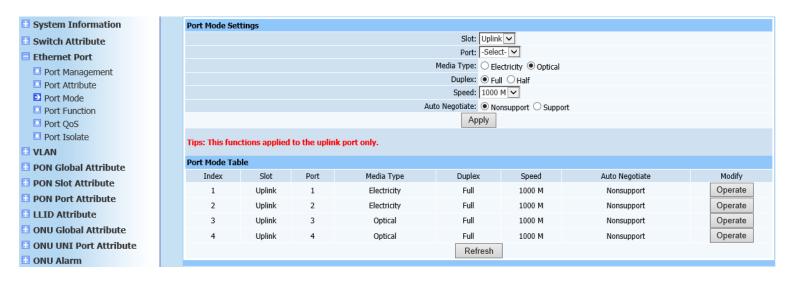


Figure 4-3

This page is mainly to configure media type, duplex mode, speed of uplink port and whether self-adaption information is supported. Configure uplink port mode according to your needs, and click **Apply** to automatically refresh port mode list after configuration is completed. Check if the displayed configuration information is as required.

4.4. Port Function

Web configuration page is shown as Figure (4-4):

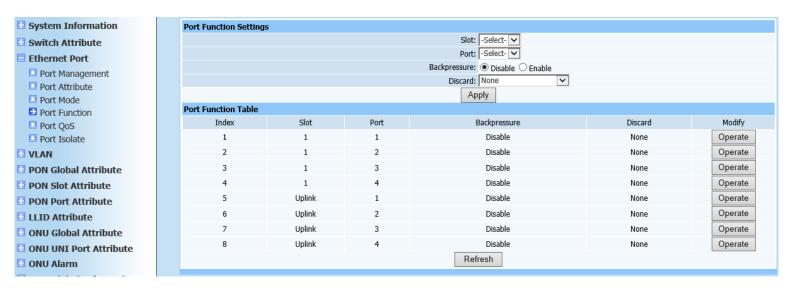


Figure 4-4

This page is to configure back-pressure administration of ports. If you need to limit packets received on ports, configure back-pressure administration as activated state to specific ports and select required mode in discard mode. Click **Apply** to automatically refresh port function list after configuration is completed. Check if the displayed configuration information is as required.

4.5. Port QoS

Web configuration page is shown as Figure (4-5):

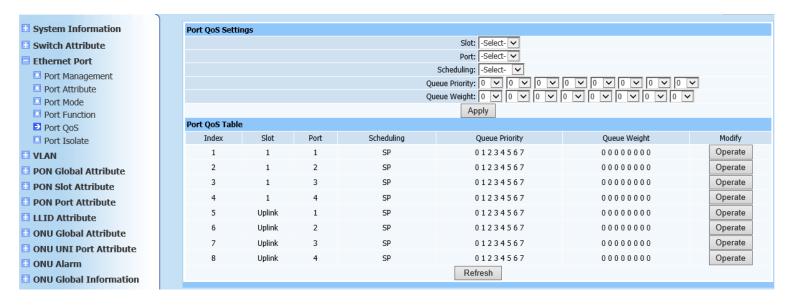


Figure 4-5

This configuration Web page is to configure QoS scheduling of ports. Select modules and ports required to configure according to demand in which there are three algorithms (sp scheduling, wrr scheduling and sp+wrr scheduling), then configure queue priority and queue Weight, click **Apply** after configuration is finished. Port Qos scheduling list will automatically refresh. Check displayed information is identical as required configuration.

4.6. Port Isolation

Web configuration page is shown as Figure (4-6):



Figure 4-6

This page is to configure OLT port isolation. Select ports need to isolate from each other, click **Add** button. After ports are successfully added, port isolation list displays configured information to verify the ports has configured correctly. If not, delete and re-configure.

5. VLAN

5.1. VLAN Stack

Web configuration page is shown as Figure (5-1):

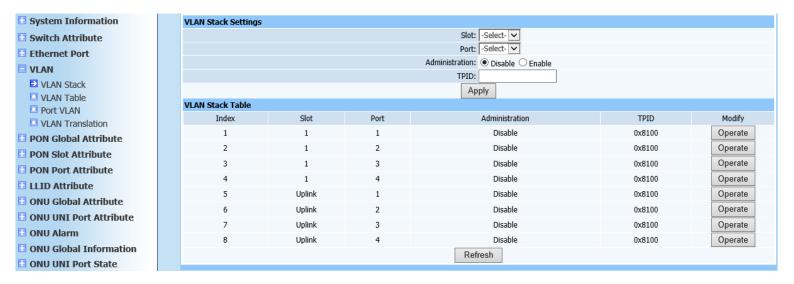


Figure 5-1

This page is to configure multiple VLAN Stack configuration status.

Select modules and ports according to page prompting, and select Administration status. TPID is hexadecimal format, default to 0x8100. Click **Apply** to automatically refresh multiple VLAN stack list after configuration is completed. Check if the displayed configuration information is as required.

5.2. VLAN Table

Web configuration page is shown as Figure (5-2):

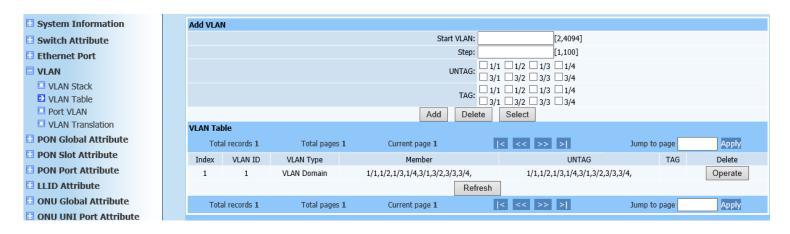


Figure 5-2

This page is to configure port VLAN and VLAN domain. Initial ID configure of VLAN is PON port VLAN domain's starting ID and VLAN's step size is vlan range. VLAN types divide into port VLAN and VLAN domain. Select port members and then select TAG string method. Click **Apply** to automatically refresh multiple VLAN table after configuration is completed. Check if the displayed configuration information is as required.

5.3. Port VLAN

Web configuration page is shown as Figure (5-3):

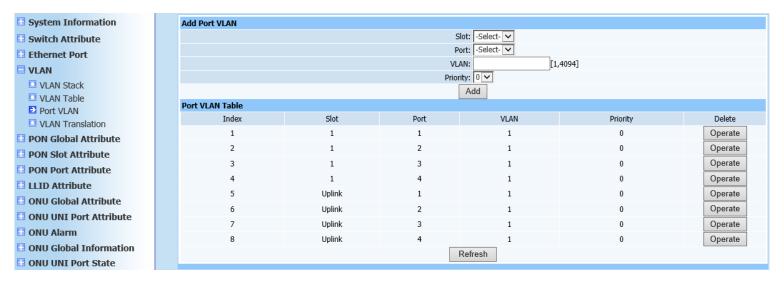


Figure5-3

This page is to configure port VLAN. Select modules and ports, enter port

VLAN's size in VLAN ID field, then select priority. Click **Add** to automatically refresh VLAN table after configuration is completed. Check if the displayed configuration information is as required.

5.4. VLAN Translation

Web configuration page is shown as Figure (5-4):

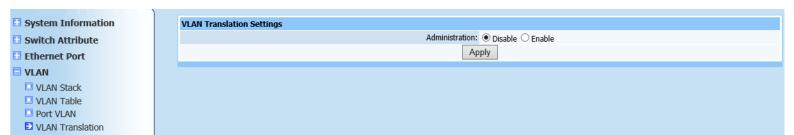


Figure 5-4

This page is to configure VLAN Translation Administration. It's Disabled in default.

6. PON Global Attribute

6.1. Global Settings

Web configuration page is shown as Figure (6-1):

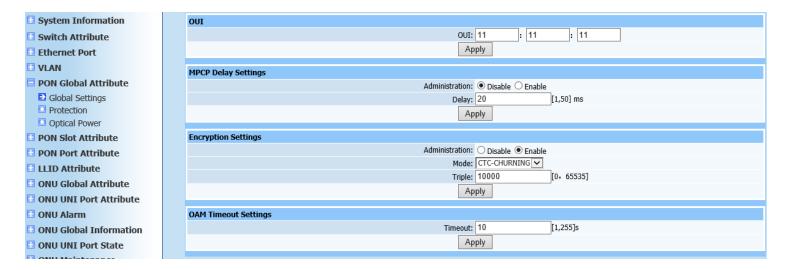


Figure 6-1

This page is to configure operator identifier, multi-point control protocol Administration (disable or enable), MPCP discovery delay time, PON encryption Administration (disable or enable), encryption mode, key update time and OAM timeout period.

6.2. Protection

Web configuration page is shown as Figure (6-2):

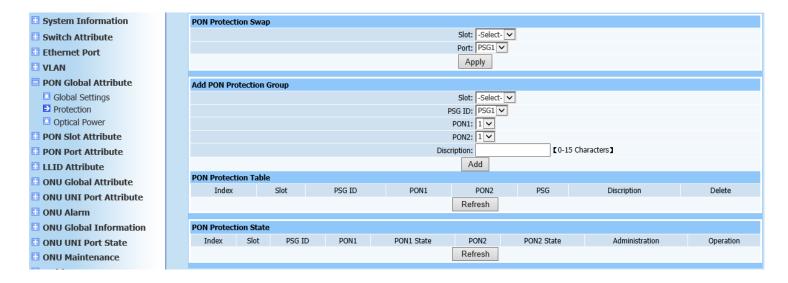


Figure 6-2

This page is to configure PON modules. If configuration is required, all PON ports of PON modules must be in unmanaged status (all PON ports Administration are disabled), then configure as required.

6.3. Optical Power

Web configuration page is shown as Figure (6-3):

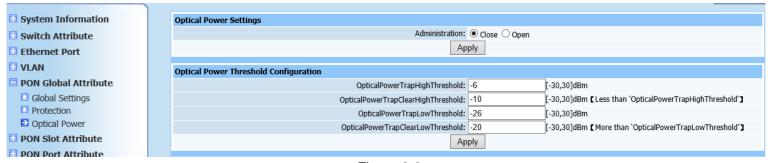


Figure 6-3

This page is to configure optical power. Configure optical power detector switch control as enable/disable, then configure the following parameters.

7. PON Slot Attribute

7.1. MAC Aging Time

Web configuration page is shown as Figure (7-1):



Figure 7-1

This page is to configure module aging time. Select modules required to configure and its aging time, ranging [0.2400] and default to 300ms. Click **Apply** button after configuration is completed. MAC aging time-table will automatically refresh. Check displayed information is identical as required.

7.2. DBA Mode

Web configuration page is shown as Figure (7-2):

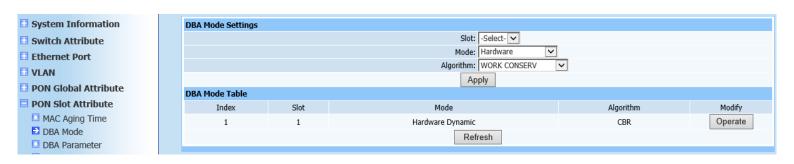


Figure 7-2

This page is to configure PON module DBA modes. DBA modes divide into hardware DBA, software DBA, hardware DBA and dynamic cycling time adjustment and software DBA and dynamic cycling time adjustment. DBA algorithms divide into three types of <maxMinWorkConserv

maxMinNonWorkConserv |maxMinCbr>. Click **Apply** to automatically refresh DBA mode table after configuration is completed. Check if the displayed configuration information is as required.

7.3. DBA Parameter

Web configuration page is shown as Figure (7-3):

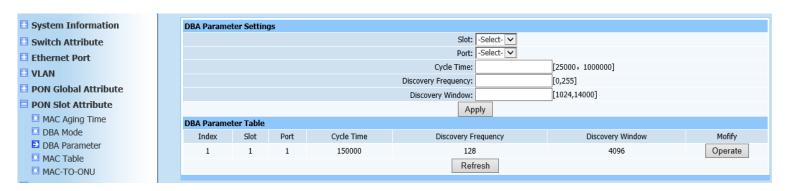


Figure 7-3

This page is to configure DBA parameters, including DBA cycle time, DBA discovery frequency and DBA discovery window. Select required modules and PON ports, type configured value {1024TQ (TQ=16ns) } in corresponding DBA parameter fields. Click **Apply** to automatically refresh the DBA parameter table after configuration is completed. Check if the displayed configuration information is as required.

7.4. MAC Table

Query page is shown as Figure (7-4):

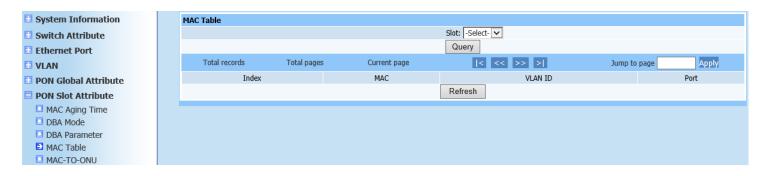


Figure7-4

This query page is used to find MAC forwarding table of PON modules.

7.5. MAC-TO-ONU

Query page is shown as Figure (7-5):

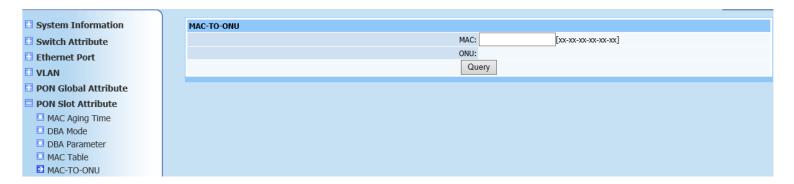


Figure7-5

This query page is used to find unknown information of OUN. Type MAC address to required ONU, click Search to display OUN location.

8. PON Port Attribute

8.1. Attribute

Web configuration page is shown as Figure (8-1):

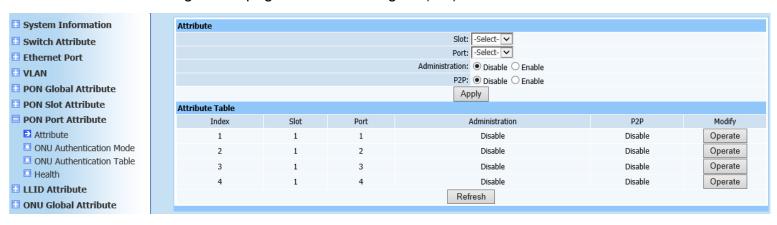


Figure 8-1

This page is to configure PON port attribution, including management state and P2P configuration. Select modules and PON ports, configure management state to disable or enable and P2P to disable or enable (to configure all registered ONU under same PON port to intercommunication). Click **Apply** to automatically refresh the PON port attribution list after configuration is completed. Check if the displayed configuration information is as required.

8.2. ONU Authentication Mode

Web configuration page is shown as Figure (8-2):

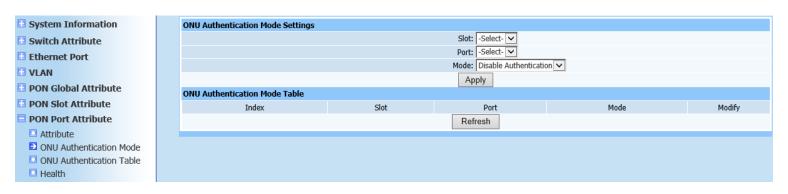


Figure 8-2

This page is to configure ONU authentication mode configuration, including Disable Authentication, MAC Authentication, LOID Authentication and Hybrid Authentication (mixed with MAC Authentication and LOID Authentication). Select modules and ports and then select corresponding authentication mode. Click **Apply** to automatically refresh the ONU authentication mode list after configuration is completed. Check if the displayed configuration information is as required.

8.3. ONU Authentication Table

Web configuration page is shown as Figure (8-3):

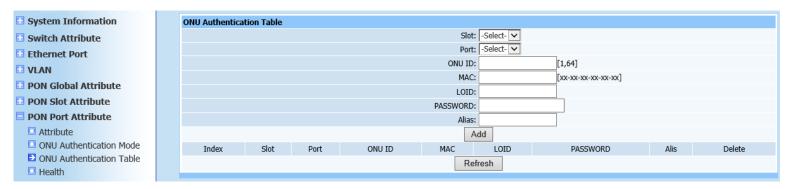


Figure 8-3

This page is to add ONU authentication table and only ONU in the authentication table is allowed to register. Select modules and ports, type logic ONU ID and its MAC address, LOID, Password and Alias. Click **Add** to automatically refresh the ONU authentication table after configuration is completed. Check if the ONU has been added into list as required.

8.4. Health

Query page is shown as Figure (8-4):

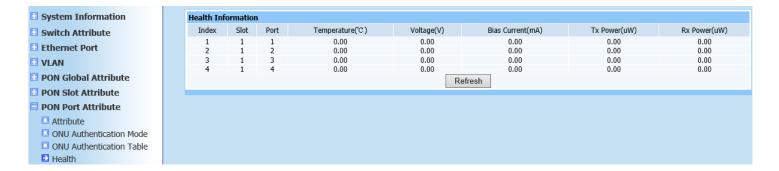


Figure 8-4
This query page is used to find PON port environment diagnosis information.

9. LLID Attribute

9.1. MAC Limit

Web configuration page is shown as Figure (9-1):

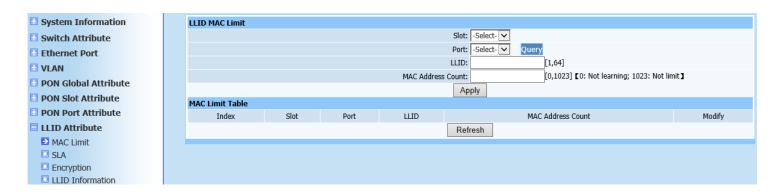


Figure 9-1

This page is to limit MAC of LLID port (grant maximum MAC address capacity table of ONU port). Select modules and ports, type required LLID number of ONU and MAC address capacity value. Click **Apply** to automatically refresh the LLID MAC limitation list after configuration is completed. Check if the displayed configuration information is as required.

9.2. SLA

Web configuration page is shown as Figure (9-2):

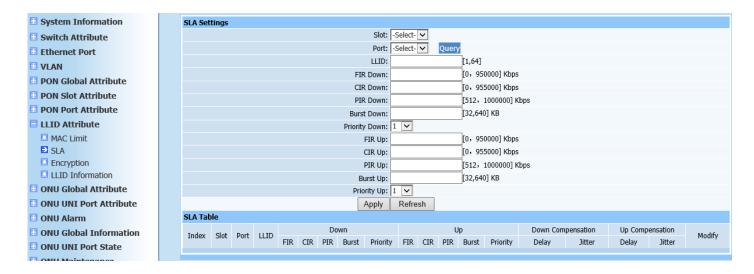


Figure 9-2

This page is to configure SLA parameter of ONU (DBA parameter configuration of ONU mainly refers to configure different types of band width). Select modules and ports, enter required LLID number of ONU and type SLA parameters. Click **Apply** to automatically refresh the LLID SLA parameter list after configuration is completed. Check if the displayed configuration information is as required.

9.3. Encryption

Web configuration page is shown as Figure (9-3):

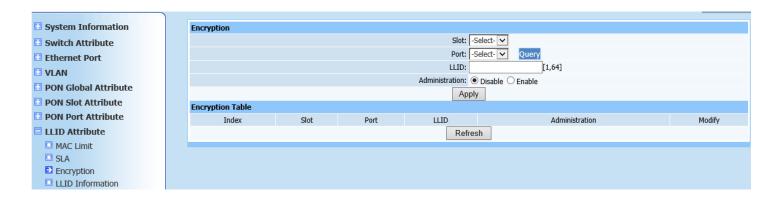


Figure 9-3

This page is to configure ONU encryption Administration. Select modules and ports, enter required LLID number of ONU, and select encryption status (disable or enable). Click **Apply** to automatically refresh the LLID encryption enabling control list after configuration is completed. Check if the displayed

configuration information is as required.

9.4. LLID Information

Query page is shown as Figure (9-4):



Figure 9-4

This query page is used to find ONU information, including state management, port state, FEC state, OAM PUD limitation, Fastleave state, MAC address, LLID distance and LLID RTT distance.

10. ONU Global Attribute

10.1. Multicast Mode

Web configuration page is shown as Figure (10-1):

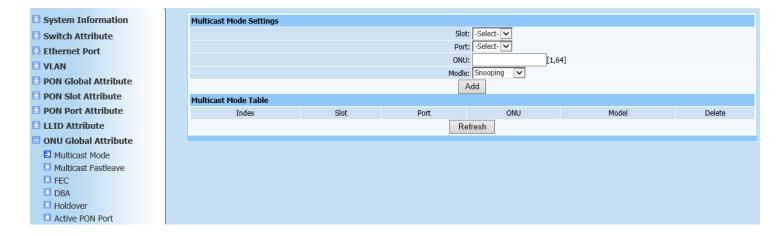


Figure 10-1

This page is to configure ONU multicast mode. Multicast types fall into snooping and telecom-controllable. Click **Apply** to automatically refresh the ONU multicast mode list after configuration is completed. Check if the displayed configuration information is as required.

10.2. Multicast Fastleave

Web configuration page is shown as Figure (10-2):

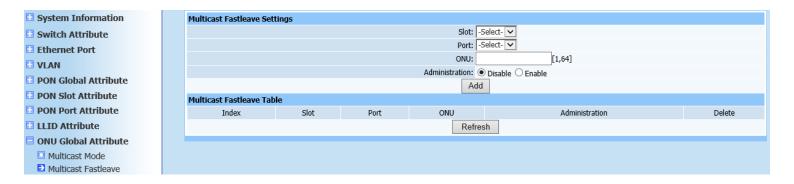


Figure 10-2

This page is to configure multicast Fastleave management state of ONU. Select management state to disable or enable. Click **Add** to automatically refresh the ONU multicast Fastleave list after configuration is completed. Check if the ONU has been added into the table as required.

10.3. FEC

Web configuration page is shown as Figure (10-3):



Figure 10-3

This page is to configure FEC capacity set of ONU. Select modules, ports, ONU logic ID and FEC capacity set (Unknown! Allowed! and Disable!). Click **Add** to automatically refresh the ONU FEC capacity list after configuration is completed. Check if the ONU FEC capacity set has been added into the table as required.

10.4. DBA

Web configuration page is shown as Figure (10-4):



Figure 10-4

This page is to configure DBA of ONU. Select modules, ports, ONU logic ID and required queue number. Each queue has 8 mapping from from 0-7. Click **Apply** after configuration is completed. Prompt will pop up to show if it's

successfully configured.

10.5. Holdover

Web configuration page is shown as Figure (10-5):

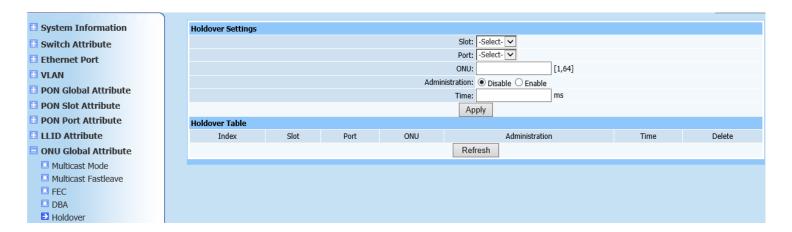


Figure 10-5

This page is to configure holdover time of ONU. If Holdover status is enabled, ONU needs not to register again only if ONU can be connected within certain time range in case of abnormal outage.

Select modules, ports, ONU logic ID, holdover state and state hold time parameters. Click **Apply** to automatically refresh the ONU protection switching time list after configuration is completed. Check if the list information is as required.

10.6. Active PON Port

Web configuration page is shown as Figure (10-6):

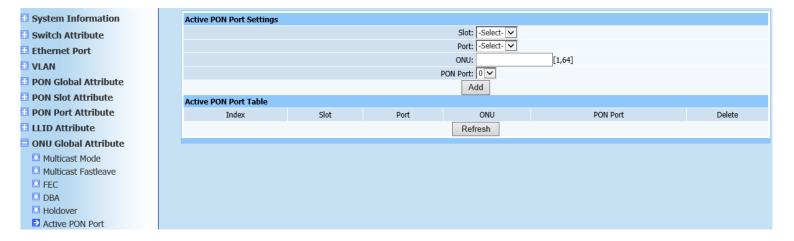


Figure 10-6

This page is to configure ONU Active port. Some ONUs have two PON ports, then Active port and backup port needs to configure when two PON ports are connected to OLT at the same time. If there is a failure to Active PON port, it will automatically switch to backup port. Select modules, ports, ONU logic ID and Active port parameters. Click **Apply** to automatically refresh the ONU Active port list after configuration is completed. Check if the required ONU Active port has been added.

11. ONU UNI Port Attribute

11.1. Pause

Web configuration page is shown as Figure (11-1):

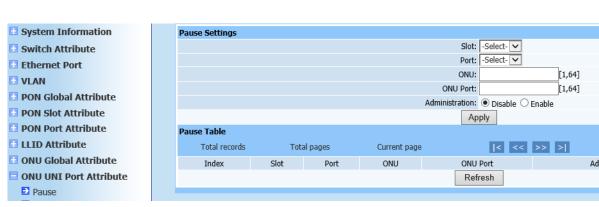


Figure 11-1

Apply

Jump to page

This page is to configure ONU UNI port Pause frame in order to play a role in flow control. If it exceeds limiting flow control, Pause frame will return.

Select modules, ports, ONU logic ID, ONU ports and configure flow control Administration to disable or enable. Click **Apply** to automatically refresh the Pause frame configuration list after configuration is completed. Check if the displayed configuration information is as required.

11.2. Egress Rate Limit

Web configuration page is shown as Figure (11-2):

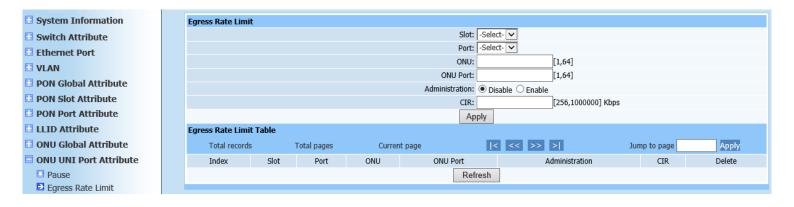


Figure 11-2

This page is to configure ONU UNI port egress rate limit. Select required configuration parameter according to page prompting. Click **Apply** to automatically refresh the ONU UNI port egress rate limit table after configuration is completed. Check if the ONU UNI port upstream rate-limiting has been added.

11.3. Ingress Policy

Web configuration page is shown as Figure (11-3):

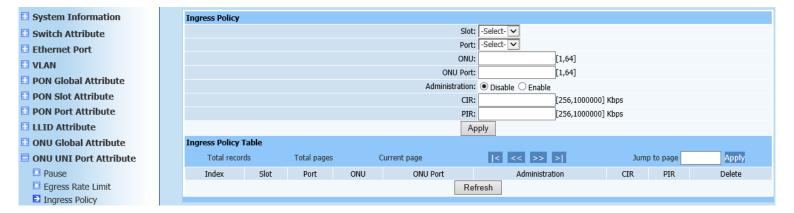


Figure11-3

This page is to configure ONU UNI port ingress rate limit. Select required configuration parameter according to page prompting. Click **Apply** to automatically refresh the ONU UNI port ingress rate limit table after configuration is completed. Check if the ONU UNI port downstream rate-limiting has been added.

11.4. VLAN

Web configuration page is shown as Figure (11-4):



Figure 11-4

This page is to configure ONU UNI port VLAN. Select required configuration parameter according to page prompting. VLAN modes fall into transparent, tag, translation, N:1 aggregate and trunk. Select any mode rather than transparent, more configuration items will appear below. User needs to enter required parameters. Click **Add** after configuration is completed. A prompt will pop up to show if configuration has been successfully done on the page.

11.5. Classification Mark

Web configuration page is shown as Figure (11-5):

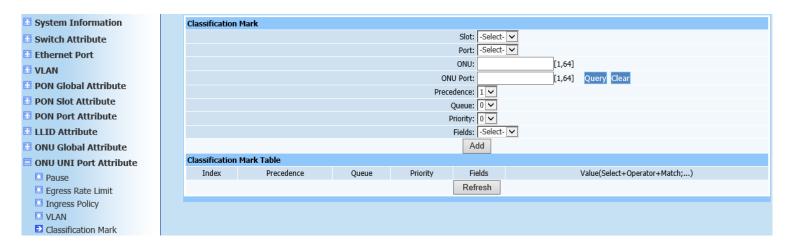


Figure 11-5

This page is to configure ONU UNI port flow classification. Enter required configuration parameter according to page prompting. Notice that red font word should be corresponding the format of in item. Click **Add** to automatically refresh the flow classification configuration after configuration is completed.

Check if required configuration parameters has been added into list.

11.6. Multicast VLAN

Web configuration page is shown as Figure (11-6):

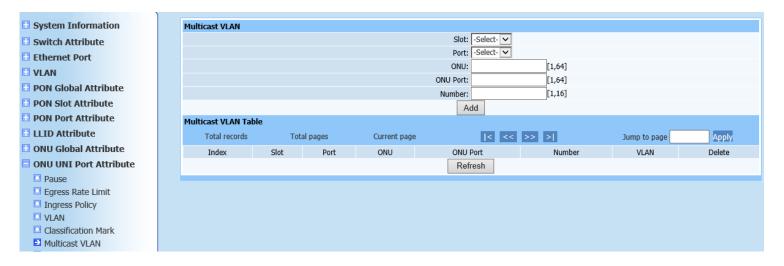


Figure 11-6

This page is to configure ONU UNI port VLAN.

Instruction: Number of required VLAN for ONU port configuration is maximum number of multicast VLAN received at the port.

Click **Add** to automatically refresh the multicast VLAN list after configuration is completed. Check if required configuration has been added into list.

11.7. Multicast VLAN Strip

Web configuration page is shown as Figure (11-7):



Figure 11-7

This page is to clear ONU UNI port multicast VLAN. Select required configuration parameter according to page prompting. Click **Add** to automatically refresh the ONU UNI port multicast VLAN clearing after configuration is completed. Check if required parameters have been added into list.

11.8. Maximum Multicast Group

Web configuration page is shown as Figure (11-8):

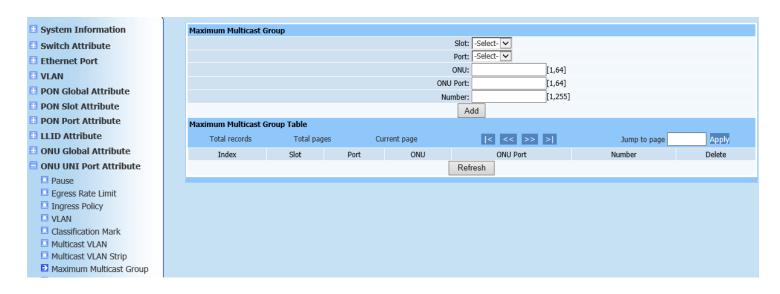


Figure 11-8

This page is to configure ONU UNI port maximum multicast group, which is maximum multicast number supported by ONU ports. Configure parameters according to page prompting. Click **Add** to automatically refresh the maximum multicast group list after configuration is completed. Check if required configuration information has been added into list.

11.9. Administration

Web configuration page is shown as Figure (11-9):

Administration								
	Slot:				-Select- V			
	Port:			-Select- ✓				
	ONU:			[1,64]				
	ONU Port:			ONU Port:		[1,64]		
Administration: One Disable Control Enable								
Add								
Total records	Total pages		Current page	< <<		>> >	Jump to page	Apply
Index	Slot	Port	ONU	ONU	Port		Administration	Delete
				Refr	esh			

Figure 11-9

This page is to configure ONU UNI port Administration. Configure parameters according to page prompting. Select Administration status to disable or enable (disable means this ONU port is not available; enable means this ONU port under normal operation). Click **Add** to automatically refresh the PHY Administration list after configuration is completed. Check if required configuration information has been added into list.

11.10. Negotiate

Web configuration page is shown as Figure (11-10):

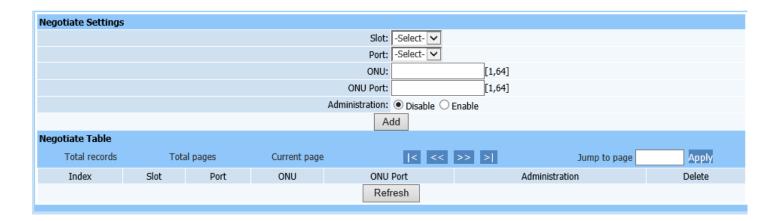


Figure 11-10

This page is to configure ONU UNI port automated negotiation. Configure parameters according to page prompting. Click **Add** to automatically refresh the automated negotiation list after configuration is completed. Check if required configuration information has been added into list.

11.11. Loop Detect

Web configuration page is shown as Figure (11-11):

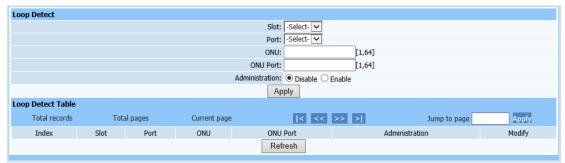


Figure 11-11

This page is to detect UNI port loopback. Only select required modules, PON ports, ONU logic ID, ports, and loop detection administration status, then click **Apply**. Check if ONU UNI port loop detection has been added into following list.

12. ONU Alarm

12.1. ONU Alarm Administration

Web configuration page is shown as Figure (12-1):

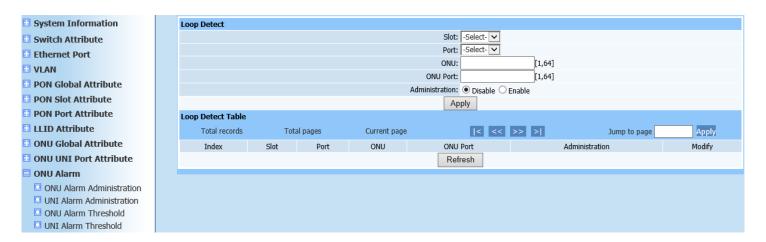


Figure 12-1

This page is to configure ONU Alarm Administration. Configure parameters according to page prompting. Click **Add** to automatically refresh the ONU Alarm Administration Table after configuration is completed. Check if required configuration information has been added into list.

12.2. UNI Alarm Administration

Web configuration page is shown as Figure (12-2):

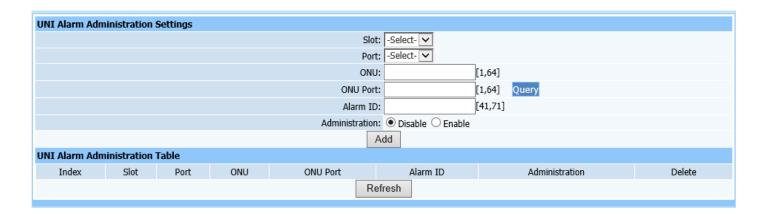


Figure 12-2

This page is to configure ONU UNI port Alarm. Configure parameters according to page prompting. Click **Add** to automatically refresh the ONU UNI port Alarm Administration Table after configuration is completed. Check if required configuration information has been added into list.

12.3. ONU Alarm Threshold

Web configuration page is shown as Figure (12-3):

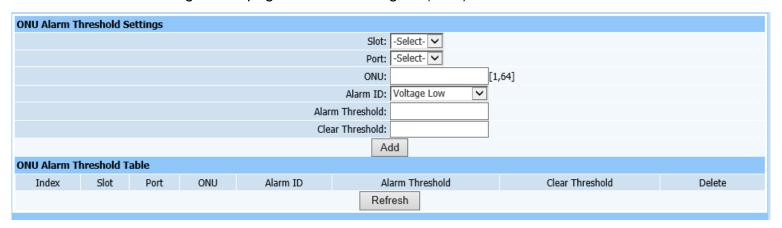


Figure 12-3

This page is to configure ONU alarm threshold. Configure alarm code first (i.e. Alarm mode, divided into brownout, high temperature and low temperature), and configure the threshold value of the required alarm mode. Click **Add** to automatically refresh the ONU UNI port alarm threshold list after configuration is completed. Check if required configuration information has been added into

list.

12.4. UNI Alarm Threshold

Web configuration page is shown as Figure (12-4):

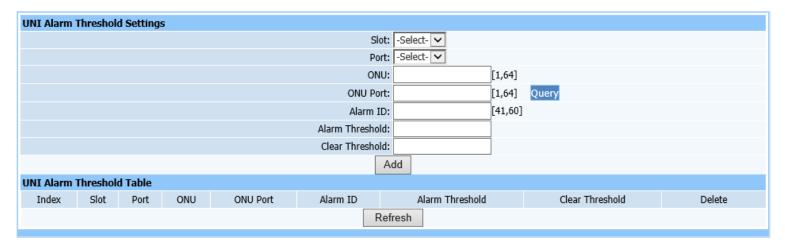


Figure 12-4

This page is to configure ONU UNI port alarm threshold. Configuration instructions are the same format as ONU alarm threshold.

13. ONU Global Information

13.1. ONU SN

Query page is shown as Figure (13-1):

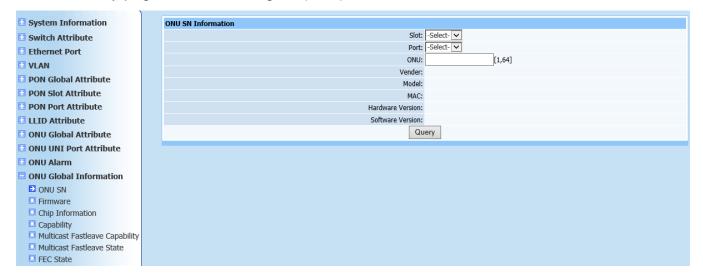


Figure13-1

This page is to query ONU version information. Only select required modules and ports including ONU logic ID, and click **Query**.

13.2. Firmware

Query page is shown as Figure (13-2):

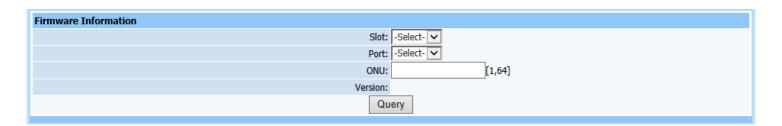


Figure 13-2

This query page is used to find ONU firmware information. Only select required modules and ports including ONU logic ID, and click **Query**.

13.3. Chip Information

Query page is shown as Figure (13-3):

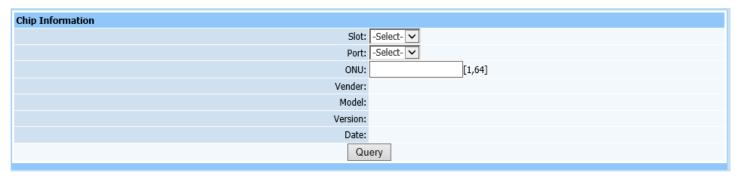


Figure 13-3

This query page is used to find PON chip information. Only select required modules and ports including ONU logic ID, and click **Query**.

13.4. Capacity

Query page is shown as Figure (13-4):

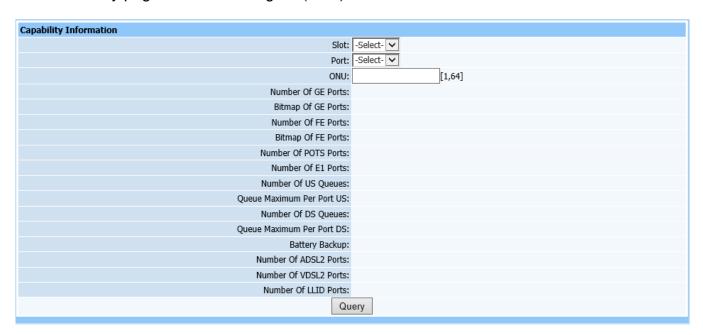


Figure 13-4

This query page is used to find PON capacity set. Only select required modules and ports including ONU logic ID, and click **Query**.

13.5. Multicast Fastleave Capacity

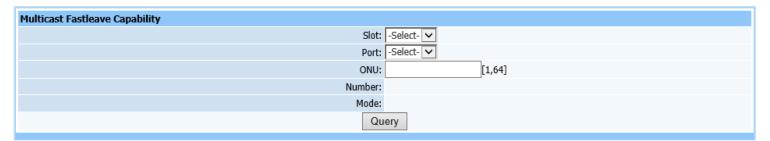


Figure 13-5

This query page is used to find multicast Fastleave capacity. Only select required modules and ports including ONU logic ID, and click **Query**.

13.6. Multicast Fastleave State

Query page is shown as Figure (13-6):

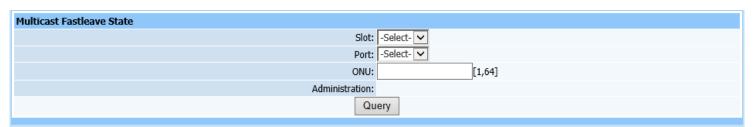


Figure 13-6

This query page is used to find multicast Fastleave state. Only select required modules and ports including ONU logic ID, and click **Query**.

13.7. FEC State

Query page is shown as Figure (13-7):



Figure 13-7

This query page is used to find FEC state. Only select required modules and ports including ONU logic ID, and click **Query**.

14. ONU UNI Port State

14.1. Link State

Query page is shown as Figure (14-1):

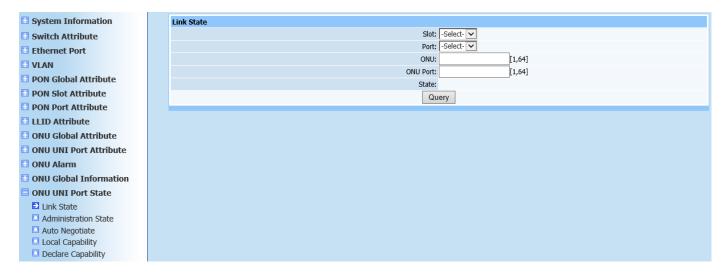


Figure 14-1

This query page is used to find ONU UNI port link status information. Only select required modules and ports including ONU logic ID and port, and click **Query**.

14.2. Administration State

Query page is shown as Figure (14-2):

Administration State Information					
Slot:	-Select- V				
Port:	-Select- 🗸				
ONU:	[1,64]				
ONU Port:	[1,64]				
State:					
Query					

Figure 14-2

This query page is used to find ONU UNI port administration state. Only select required modules and ports including ONU logic ID and port, and click **Query**.

14.3. Auto Negotiation

Query page is shown as Figure (14-3):

Auto Negotiate				
Slot:	-Select- 🗸			
Port:	-Select- 🗸			
ONU:		[1,64]		
ONU Port:		[1,64]		
State:				
Que	ery			

Figure 14-3

This query page is used to find ONU UNI port UNI auto negotiation information. Only select required modules and ports including ONU logic ID and port, and click **Query**.

14.4. Local Capability

Query page is shown as Figure (14-4):

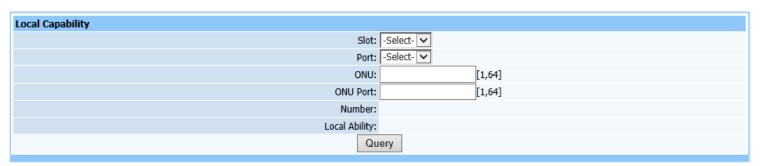


Figure 14-4

This query page is used to find ONU UNI port UNI local capability information. Only select required modules and ports including ONU logic ID and port, and click **Query**.

14.5. Declare Capability

Query page is shown as Figure (14-5):

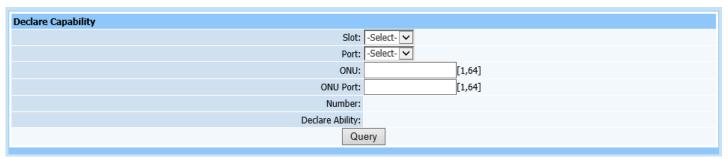


Figure 14-5

This query page is used to find ONU UNI port declare capability. Only select required modules and ports including ONU logic ID and port, and click **Query**.

15. ONU Maintenance

15.1. Reset ONU

Web configuration page is shown as Figure (15-1):

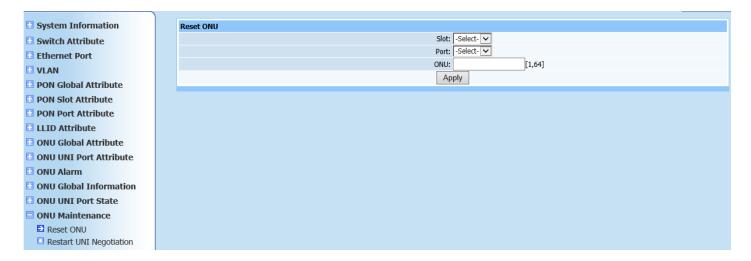


Figure 15-1

This page is to reset ONU. Only select required modules, PON ports and ONU logic ID, then click **Apply**.

15.2. Restart UNI Negotiation

Web configuration page is shown as Figure (15-2):

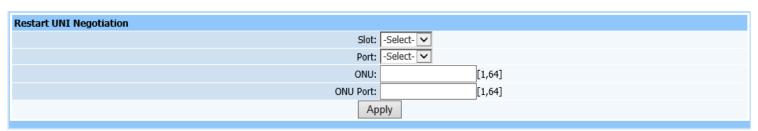


Figure 15-2

This page is to restart UNI auto negotiation. Only select required modules, PON ports and ONU logic ID, then click **Apply**.

16. Multicast

16.1. Multicast Parameter Settings

Web configuration page is shown as Figure (16-1):

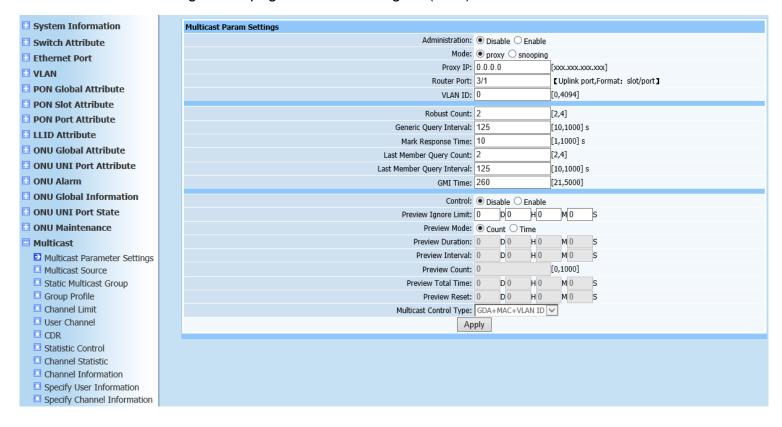


Figure 16-1

This page is to configure multicast parameters. Configure required parameters according to page prompting. The gray part can only be configured when controlled multicast enabling status is selected to enable. Click **Apply** after configuration is completed. Prompt will pop up to show if it's successfully configured.

16.2. Multicast Source

Web configuration page is shown as Figure (16-2):

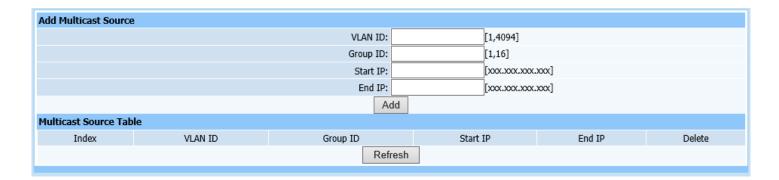


Figure 16-2

This page is to add multicast source. Configure required parameters according to page prompting. One thing to note is that starting IP and cut-of IP are all multicast IP which has strict definition. Click **Add** to automatically refresh the multicast source list after configuration is completed. Check if the configured parameters have been added into list.

16.3. Static Multicast Group

Web configuration page is shown as Figure (16-3):

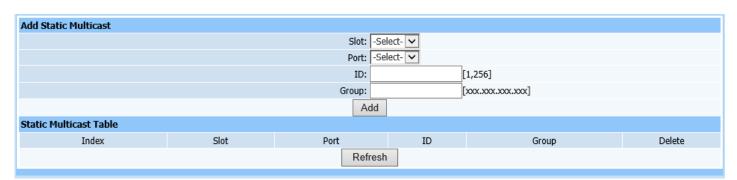


Figure 16-3

This page is to configure static multicast group. Select modules, ports and indexes numbered as static multicast group, then enter multicast source ip. Click **Add** to automatically refresh the static multicast group after configuration is completed. Check if the configured parameters have been added into list.

16.4. Group Profile

Web configuration page is shown as Figure (16-4):

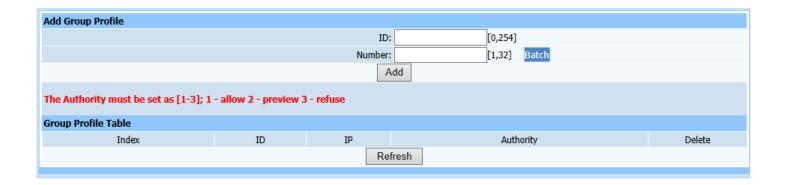


Figure 16-4

This page is to configure multicast group profile. Tips: Every multicast IP has three type permission: 1 represents allow, 2 represents preview and 3 represents decline. Click **Add** to automatically refresh the multicast permission template list after configuration is completed. Check if the configured parameters have been added into list.

16.5. Channel Limit and User Channel

Web configuration page is shown as Figure (16-5) and (16-6):

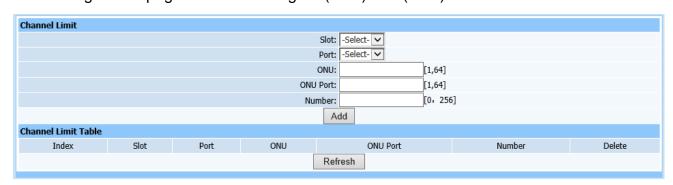


Figure 16-5

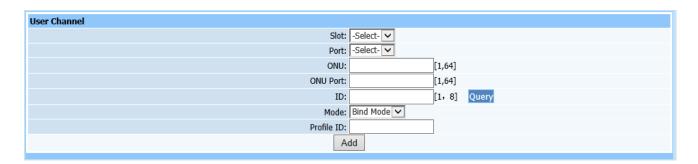


Figure 16-6

This page is to configure multicast channel limit and user multicast channel. Configure required parameters according to page prompting. Tips: Index is the value of multicast permission template. Click **Add** after configuration is completed. Window prompt will pop up to show if it's successfully configured on the page.

16.6. CDR

Web configuration page is shown as Figure (16-6):

DR Settings
Report Mode: Record Overflow Report ✓
Report Value: 20000 [10, 20000]
Apply
DR Manual Report
Report

Figure 16-6

This page is to configure multicast CDR control parameters. CDR refers to report. Configure report mode and overflow parameters of CDR according page prompting. Click **Apply** after configuration is completed. Window prompt will pop up to show if it's successfully configured on the page.

16.7. Statistic Control

Web configuration page is shown as Figure (16-7):

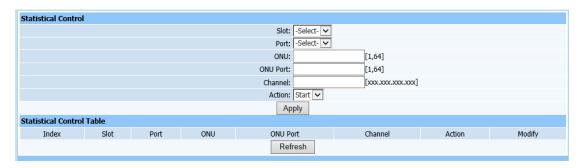


Figure 16-7

This page is to configure multicast statistic control parameters for ONU port. Click **Apply** after configuration is completed. Window prompt will pop up to show if it's successfully configured on the page.

16.8. Channel Statistic

Web configuration page is shown as Figure (16-8):

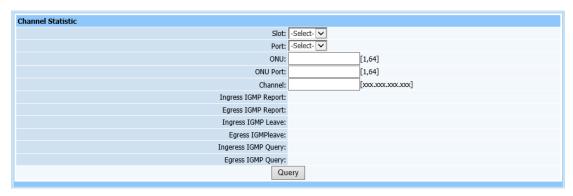


Figure 16-8

This page is to check multicast channel statistic. Only select required modules and ports including ONU logic ID, port and Channel, and click **Query**.

16.9. Channel Information

Query page is shown as Figure (16-9):



Figure 16-9

This query page is used to find all user channel information. Only switch to this page, all user channel information will display in the list on this page.

16.10. Specify User Information

Query page is shown as Figure (16-10):

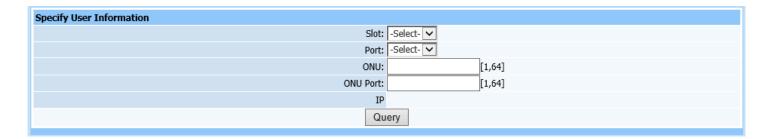


Figure 16-10

This query page is used to find specific user channel information. Switch to this page, select modules, ports, OUN logic ID and ONU ports, multicast ip address of specific user channel information will display.

16.11. Specify Channel Information

Query page is shown as Figure (16-11):

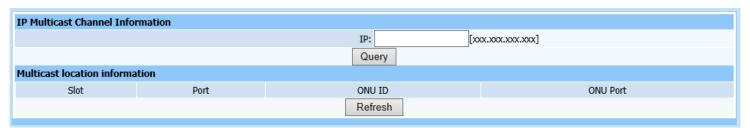


Figure 16-11

This query page is used to find user information of specific channel. Enter multicast IP address, then click **Refresh** to display all user information of the channel.

17. STP

17.1. STP Bridge Settings

Web configuration page is shown as Figure (17-1):

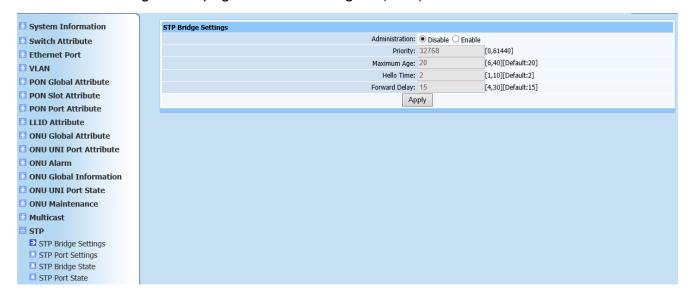


Figure 17-1

This page is to configure bridge of STP. Main parameters required to configure are spanning administration, priority, aging time, hello time and forward delay time. Click **Apply** after configuration is completed. Window prompt will pop up to show if it's successfully configured on the page.

17.2. STP Port Settings

Web configuration page is shown as Figure (17-2):

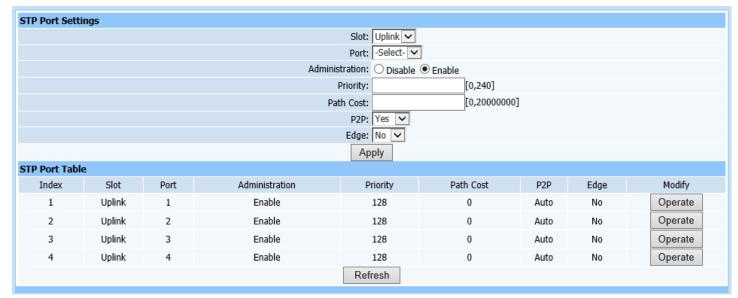


Figure 17-2

This page is to configure ports of STP. Configure required parameters according to page prompting as shown in Figure 17-2. Click **Apply** to automatically refresh the spanning tree port configuration list after configuration is completed. Check if the required parameters have been added into list...

17.3. STP Bridge State

Query page is shown as Figure (17-3):

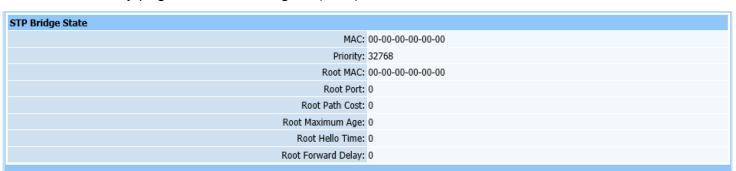


Figure 17-3

This query page is used to find configured parameters above to see if they are required parameters. Only switch to this page to query required information.

17.4. STP Port State

Web configuration page is shown as Figure (17-4):

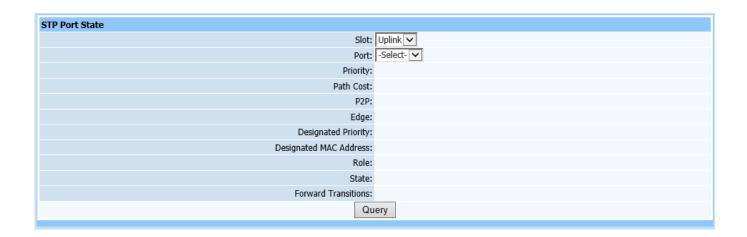


Figure 17-4

This query page is used to find port state of STP. Only select modules and ports, then click **Query** to find required information.

18. DHCP

18.1. Option82

Web configuration page is shown as Figure (18-1):

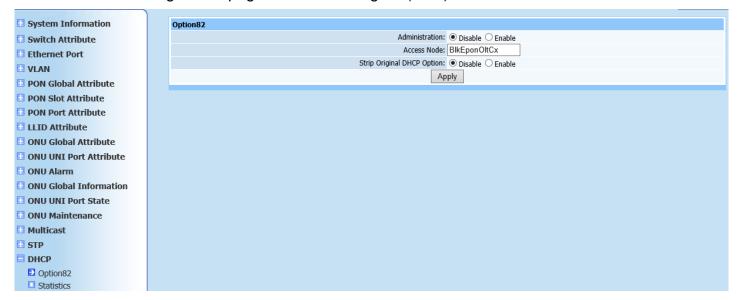


Figure 18-1

This page is to configure DHCP. Configure required parameters according to page prompting as shown in Figure 18-1. Click **Apply** after configuration is completed. Window prompt will pop up to show if it's successfully configured on the page.

18.2. Statistics

Query page is shown as Figure (18-2):



Figure 18-2

This query page is used to find DHCP information. Configure DHCP message statistic control to starting statistical mode first, select modules and ports, then click **Query** to find required information.

19. PPPoE

19.1. PPPoE+

Web configuration page is shown as Figure (19-1):

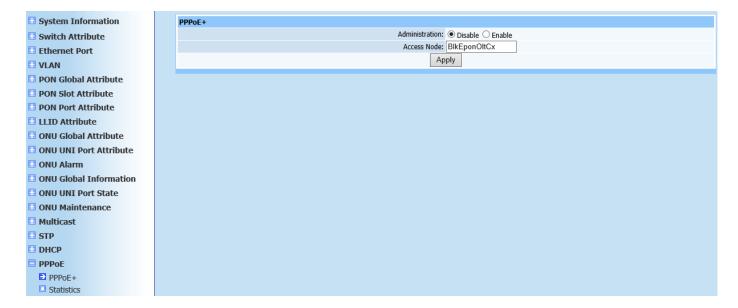


Figure 19-1

This page is to configure PPPoE. Configure according to prompt as shown in Figure 19-1.

19.2. Statistics

Query page is shown as Figure (19-2):

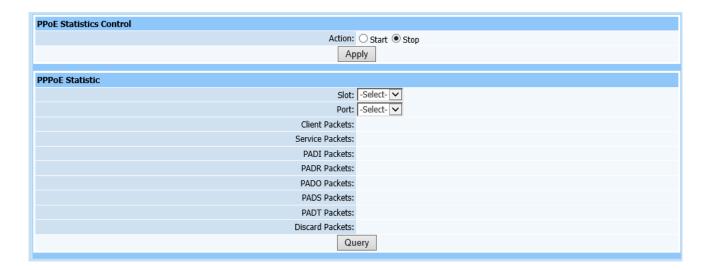


Figure 19-2

This query page is used to find PPPoE message statistics.

20. Alarm

20.1. Alarm Redefine

Web configuration page is shown as Figure (20-1):

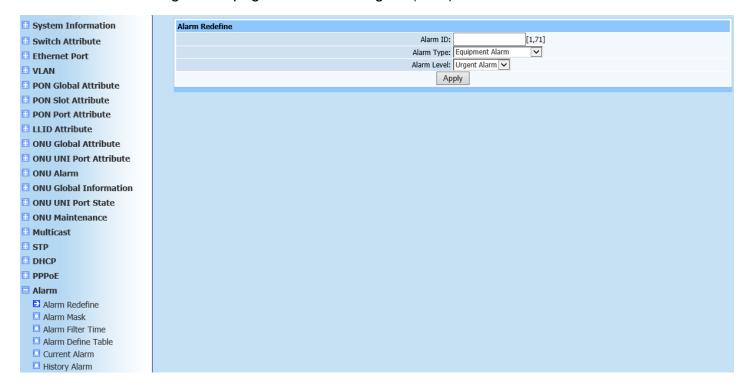


Figure 20-1

This page is to configure alarm redefinition. Configure alarm ID parameters, alarm types (1 Equipment Alarm, 2 Service Alarm, 3 Communication Alarm, 4 Environment Alarm and 5 Processing Failed Alarm) and alarm (1 Urgent Alarm, 2 Major Alarm, 3 Minor Alarm and 4 Warning). Click **Apply** after configuration is completed. A serial interface window will appear if configuration was completed successfully.

20.2. Alarm Mask

Query page is shown as Figure (20-2):

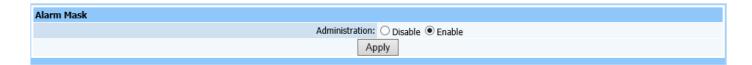


Figure 20-2

This page is to configure alarm block Administration.

20.3. Alarm Filtering Time

Web configuration page is shown as Figure (20-3):



Figure 20-3

This page is to configure alarm filtering time.

20.4. Alarm Definition Table

Query page is shown as Figure (20-4):

		ine Table					
dex I	ID	Source	Reason	Mask	Clear	Solution	Othe
1	1	CMM(Main control Module)	Power voltage lower than threshold	0	Auto clear	Please check device power board	0
		Olt Device Power board			Auto clear	Please check device power board	0
_		Olt Device Power board			Auto clear	Please check device power board	0
-	4	Olt device FAN board	FAN stopped	0	Auto clear	Please check device FAN	0
_	5	Olt device FAN board	FAN stopped	0	Auto clear	Please check device FAN	0
6	6	CUM port	Fiber not inserted or failure	0	Auto clear	Please check Optics fiber link	0
7	7	Ether port	Eth Port Loopback	0	Manual dear	Please check link connection	0
8	8	CMM(Main control Module)	Temperature exceeds threshold	0	Auto clear	Please check cooler or FAN system	0
9 !	9	OLT device board	Circuit board pulled out illegally	0	Auto clear	Please check board state	0
10 1	10	CMM(Main control Module)	FAN board absent	0	Auto clear	Please check device FAN	0
11 1	11	OLT device board	Temperature exceeds threshold	0	Auto clear	Please check cooler or FAN system	0
12 1	12	CMM(Main control Module)	CPU over charging	0	Auto clear	Please check configuration data	0
13 1	13	Ether port	Link layer failure	0	Auto clear	Please check link line	0
14 1	14	CPM(PON Module)	Optics Link failure	0	Manual clear	Please check Optics fiber link	0
15 1	15	CPM(PON Module)	Optics Link failure	0	Manual dear	Please check Optics fiber link	0
16 1	16	CPM(PON Module)	Optics Link failure	0	Manual dear	Please check Optics fiber link	0
17 1	17	ONU	ONU dying gasp	0	Auto clear	Please check ONU power	0
18 1	18	CPM(PON Module)	Link disconnected	0	Manual clear	Please check Optics fiber link	0
19 1	19	PON port	Optics Link failure	0	Manual dear	Please check Optics fiber link	0
20 2	20	CMM(Main control Module)	CMM absent or Standby CMM heartbeat abnormal	0	Auto clear	Please check Standby CMM	0
21 2	21	CMM(Main control Module)	Link layer failure	0	Auto clear	Please check PHY link	0
22 2	22	CMM(Main control Module)	Device loading	0	Auto clear	Please examine LED state	0
23 2	23	CMM(Main control Module)	Memory over charging	0	Auto clear	Please check configuration data	0
24 2	24	CPM(PON Module)	Optics Link failure	0	Manual clear	Please check Optics fiber link	0
25 2	25	CPM(PON Module)	Optics Link failure	0	Manual clear	Please check Optics fiber link	0
26 2	26	CPM(PON Module)	Optics Link failure	0	Manual dear	Please check Optics fiber link	0
27 2	27	ONU	Too short distance from onu to olt or deficiency of opt-pwr attenuation	0	Auto clear	Enlarge opt-pwr attenuation	0
28 2	28	ONU	Too far distance from onu to olt or large of opt-pwr attenuation	0	Auto clear	Reduce opt-pwr attenuation	0
29 2	29	ONU	ONU fiber pull out or link error	0	Auto clear	Please check Optics fiber link	0
30 3	30	ONU	Onu:Equipment Alarm	0	Manual dear	Please check hardware	0
31 3	31	ONU	Onu:Power Alarm	0	Auto clear	Please check standby battery	0
32 3	32	ONU	Onu:Battery Missing	0	Auto clear	Please check standby battery	0
	33	ONU	Onu:Battery Failure	0	Auto clear	Please check current battery or replace the battery	0

Figure 20-4

This query page is used to find alarm definition table.

20.5. Current Alarm

Query page is shown as Figure (20-5):



Figure 20-5

This query page is used to find all alarms. Query condition divides into alarm, alarm type, alarm level, alarm source, alarm reason and alarm time. Each query condition contains many kinds of conditions. Query current alarm according to user need.

20.6. History Alarm

Query page is shown as Figure (20-6):



Figure 20-6

This query page is used to find history alarm. Inquiry mode is as the same of current alarm query.

20.7. Auto Alarm

Query page is shown as Figure (20-7):

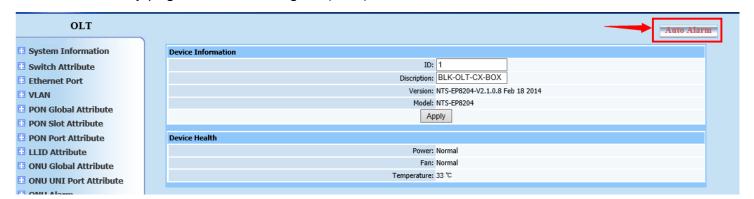


Figure 20-7

Click **Auto Alarm**, it is the red button in the top right corner of the window; an alarm window will appear as shown in Figure (20-8):

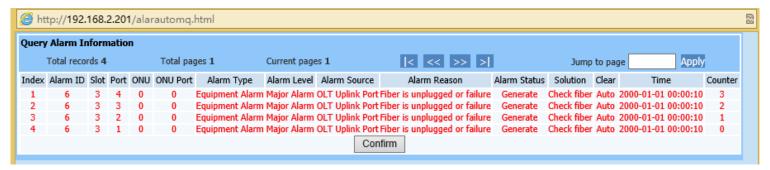


Figure 20-8

Clicking Auto Alarm, page as shown in Figure 20-8 will pop up and refresh every 30 seconds. Any alarm on OLT will report to this page after refreshing.

21. Statistics Management

21.1. Statistic Task

Web configuration page is shown as Figure (21-1):

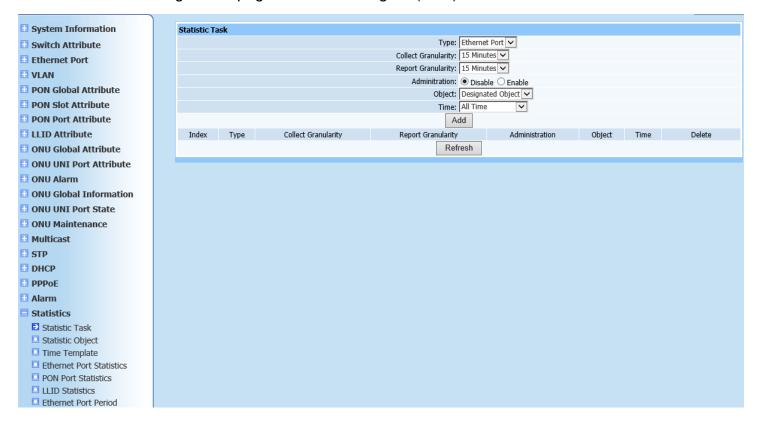


Figure 21-1

This page is to configure statistic task to add statistical object. Configure according to Figure 21-1. Click **Add** to automatically refresh the statistics task list after configuration is completed. Check if the configured parameters have been added into list.

21.2. Statistic Object

Web configuration page is shown as Figure (21-2):

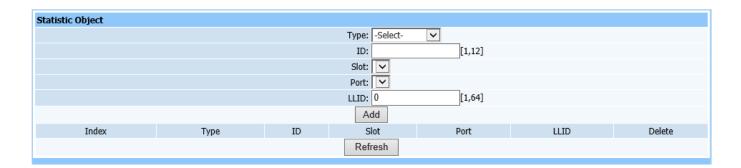


Figure21-2

This page is to add statistic object, it can specific to certain port.

21.3. Time Template

Web configuration page is shown as Figure (21-1):

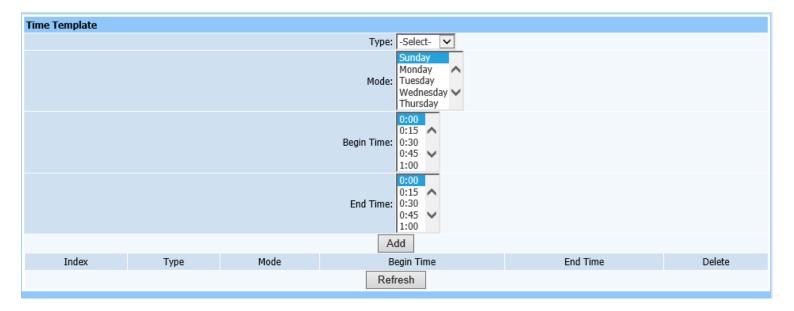


Figure 21-3

If a specific time is configured in **Statistic Task** item, the time slot must be configured in the time template. Select object type, time mode and start time and end time.

21.4. Ethernet port Statistics

Web configuration page is shown as Figure (21-4):

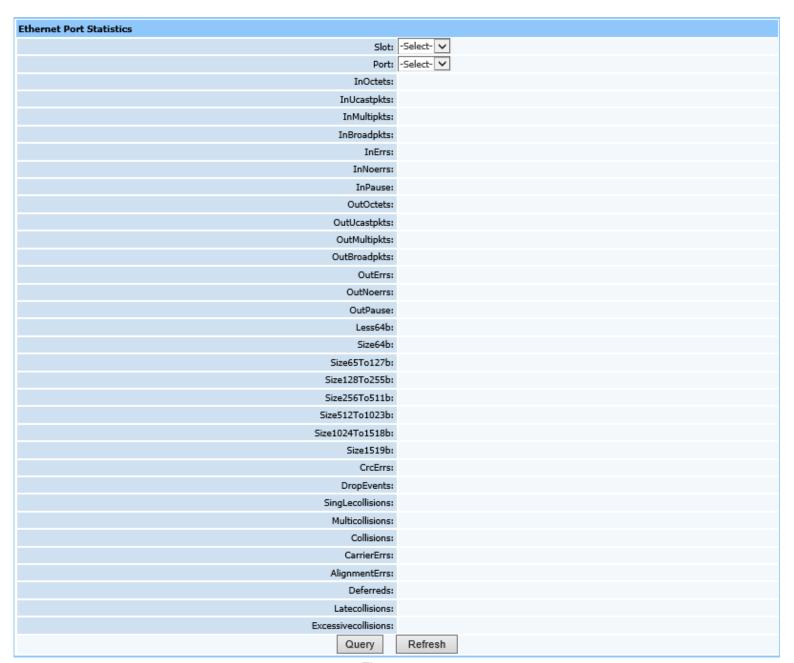


Figure 21-4

This query page is used to find Ethernet port information.

21.5. PON Port Statistics

Query page is shown as Figure (21-5):

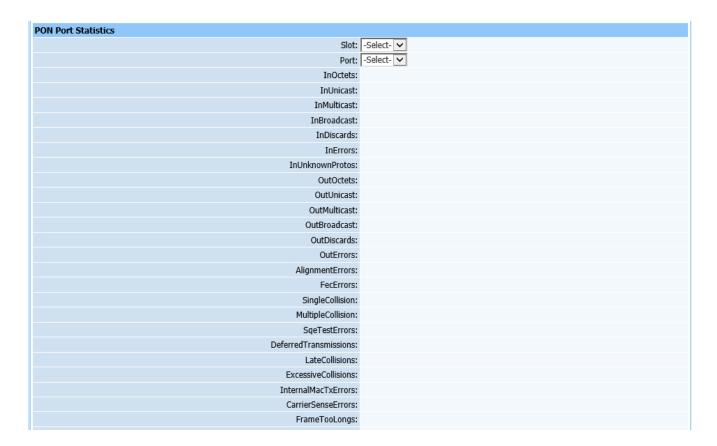


Figure 21-5

This query page is used to find statistical information of PON port.

21.6. LLID Statistics

Query page is shown as Figure (21-6):



Figure 21-6

This query page is used to find statistical information of LLID port.

21.7. Ethernet Port Period Statistics

Query page is shown as Figure (21-7):

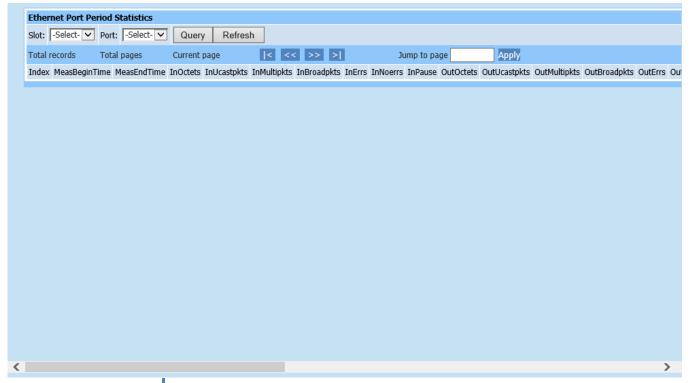


Figure 21-7

This page is for period statistics of OLT Ethernet port. If a specific time is configured in **Add Statistic Task** above, it means to count information within specific time.

21.8. PON Port Period Statistics

Query page is shown as Figure (21-8):



Figure 21-8

Inquiry mode is as the same of period statistics of OLT Ethernet port.

21.9. LLID Period Statistics

Query page is shown as Figure (21-9):



Figure 21-9

Inquiry mode is as the same of period statistics of PON port.

21.10. ONU Performance Analysis

Query page is shown as Figure (21-10):

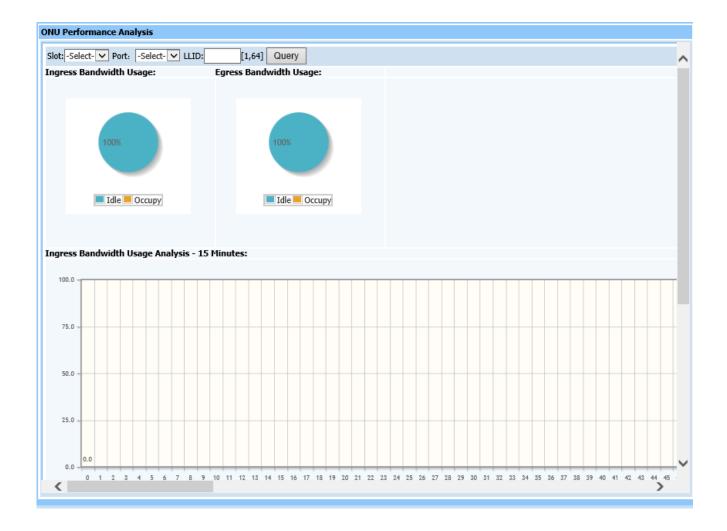


Figure 21-10

This page is to analyze ONU performance, including overall bandwidth use, ratio between upstream and downstream, 15 minute history showing performance statistics histogram of upstream and downstream.

21.11. PON Performance Analysis

Query page is shown as Figure (21-11):

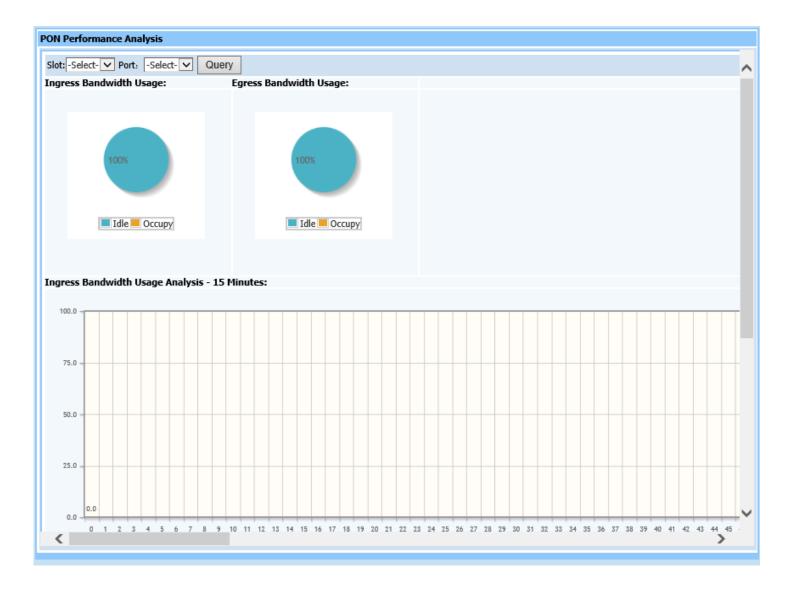


Figure 21-11

This query page is used to analyze PON port performance, including overall bandwidth use ratio between upstream and downstream and 15 minute history showing performance statistics histogram of upstream and downstream.

22. System Maintenance

22.1. Network Parameter

Web configuration page is shown as Figure (22-1):

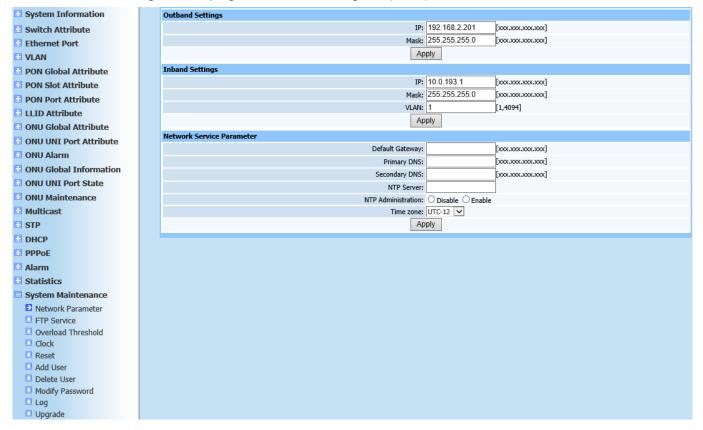


Figure 22-1

This page is to configure outband, inband and network service parameters. Configure according to Figure 22-1. Click **Apply** after configuration is completed. A prompt will pop up to show if configuration has been completed successfully.

22.2. FTP Service

Web configuration page is shown as Figure (22-2):

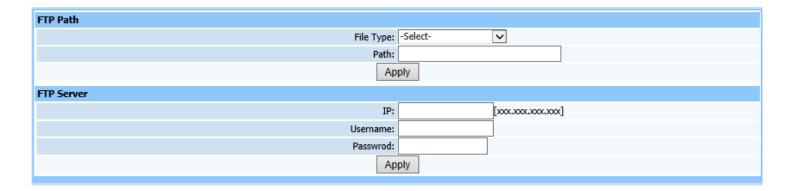


Figure 22-2

This page is to configure FTP service parameters. Configure according to page prompting. Click **Apply** after configuration is completed. A prompt will pop up to show if configuration has been completed successfully.

22.3. Overload Threshold

Web configuration page is shown as Figure (22-3):

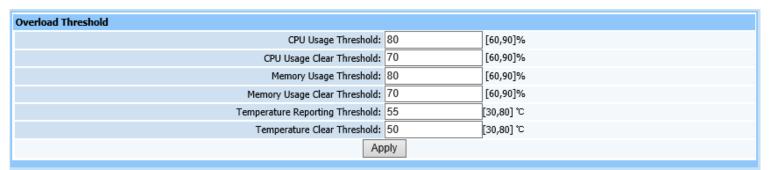


Figure 22-3

This page is to configure overload threshold parameters.

22.4. Clock

Web configuration page is shown as Figure (22-4):



Figure 22-4

This page is to set time in real time, which is convenient for statistical

management.

22.5. Reset

Web configuration page is shown as Figure (22-5):



Figure22-5

This page is used to reset modules. Operation shall be done as required.

22.6. Add User

Web configuration page is shown as Figure (22-6):

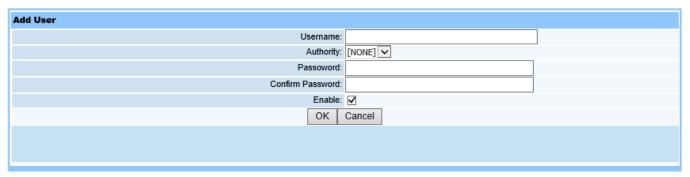


Figure 22-6

Only the administrator has operating authorization to add users and assign usernames. Authorization divides into no access, root and guest. Configure passwords, click **Enable**, and then click **OK** to display configuration information.

22.7. Delete User

Web operation interface is shown as in Figure (22-7):

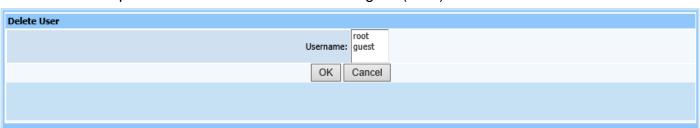


Figure22-7

This page is to delete users. Select desired username, and click OK. If it shows operation successfully completed, user has been deleted.

22.8. Delete User

Web operation interface is shown as in Figure (22-8):

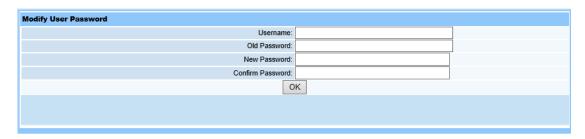


Figure22-8

This page is to configure the login username and password for your current guest or administrator account.

22.9. Log

Query page is shown as Figure (22-9):

Log					
Total records 120		Total pages 3	Current page 1	< << >> >	Jump to page Apply
Index	IP	Username	Time		Operation
1	192.168.2.11		01/JAN/2000:06:53:38		Show Clock
2	192.168.2.11		01/JAN/2000:06:52:37		Show Overload Threshold
3	192.168.2.11		01/JAN/2000:06:52:37		Show Overload Threshold
4	192.168.2.11		01/JAN/2000:06:52:36		Show Overload Threshold
5	192.168.2.11		01/JAN/2000:06:51:46		Show FTP Service
6	192.168.2.11		01/JAN/2000:06:50:18		Show Network Parameter
7	192.168.2.11		01/JAN/2000:06:50:18		Show Network Parameter
8	192.168.2.11		01/JAN/2000:06:50:18		Show Network Parameter
9	192.168.2.11		01/JAN/2000:05:37:21		Show Time Template
10	192.168.2.11		01/JAN/2000:05:37:02		Show Time Template
11	192.168.2.11		01/JAN/2000:01:35:49		Show Statistic Object
12	192.168.2.11		01/JAN/2000:01:34:23		Show Statistic Task
13	192.168.2.11		01/JAN/2000:01:33:48		Show Alarm Define Table
14	192.168.2.11		01/JAN/2000:01:33:21		Show Statistic Task
15	192.168.2.11		01/JAN/2000:01:28:15		Show Alarm Define Table
16	192.168.2.11		01/JAN/2000:01:27:51		Show Alarm Filter Time
17	192.168.2.11		01/JAN/2000:01:27:09		Show Alarm Mask
18	192.168.2.11		01/JAN/2000:01:23:23		Show PPPoE Statistic
19	192.168.2.11		01/JAN/2000:01:23:04		Show ONU Register Information
20	192.168.2.11		01/JAN/2000:01:23:04		Show ONU Register Information
21	192.168.2.11		01/JAN/2000:03:10:50		Show ONU UNI Port Pause
22	192.168.2.11		01/JAN/2000:03:07:22		Show ONU Global Active PON Port
23	192.168.2.11		01/JAN/2000:03:04:59		Show ONU Global Holdover
24	192.168.2.11		01/JAN/2000:03:04:09		Show ONU Global Holdover
25	192.168.2.11		01/JAN/2000:03:03:26		Show ONU Global FEC
26	192.168.2.11		01/JAN/2000:03:02:53		Show ONU Global FEC
27	192.168.2.11		01/JAN/2000:03:02:10		Show ONU Global Multicast Fastleave
28	192.168.2.11		01/JAN/2000:03:01:14		Show ONU Global Multicast Mode
29	192.168.2.11		01/JAN/2000:02:53:03		Show PON Port Health
30	192.168.2.11		01/JAN/2000:02:51:05	Sh	ow PON Port ONU Authentication Table
31	192.168.2.11		01/JAN/2000:02:45:08	Sh	now PON Port ONU Authentication Mode

Figure 22-9

This page shows saved logged detailed information for operation users. User can query which user has configured OLT information.

22.10. Upgrade

Select **Upgrade** in main item **System Maintenance** on left of the Web, click to switch to upgrade page. Interface is shown as in Figure (22-10):

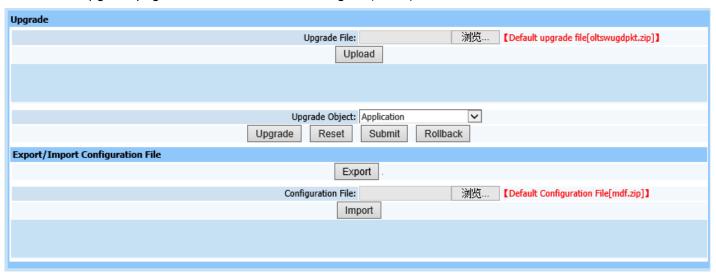


Figure22-10

Upgrading steps:

- 1. Browse and upload upgrade package click **Upload**, wait approximately 15 seconds.
- 2. After package is successfully uploaded, select corresponding upgrade module in pull-down menu of upgrade object.

Application: equipment software and WEB;

Default Configuration Data: restore default configuration parameter;

Firmware: upgrade PON firmware;

All: all three parts above.

During upgrading, it can select corresponding modules according to the actual situation and then click **Upgrade** button till it prompts successful operation. Click **Reset** button, view the version or system is normal running or not after restart. Click **Submit** when it's normal running, otherwise click **RollBack** to return last version.

- 3. Export configuration data: Click **Export** to export configuration data.
- 4. Import configuration data: Click **Browse** and select upload configuration file

mdf.zip package, then click **Import**. Select **Yes** when prompted to import. Configuration data will take effect when it has restarted.

22.11. Restore

Web configuration page is shown as Figure (22-11):



Figure 22-11

This page is to restore factory settings for OLT. Click **Restore**, OLT will restore factory settings.

Note: As the factory recovery resets all informations configured, please be careful for using this operation.