EPON OLT Web User Manual



Product Name	Product Model	Product Software
EPON OLT	XE04/XE08/HE04/HE08/HE04L	epon_firmware_I_V3.0.8_Rel



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V1.1	2018.08.08		Add some functions
V2.0	2019.04.29		Redesign Web and add some functions
V2.0.2	2019.05.27		Add loid & CTC3.0 support
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1 OLT Login Setting	1
1.1 Connect OLT with PC	1
1.2 Login WEB	
1.3 WEB Home Page	
2 Topology	4
3 ONU Table	
4 VLAN Configurations	11
5 Advanced Setting	
5.1 Running Status	
5.2 System Management	
5.2.1 Device Management	
5.2.2 Diagnose	
5.2.3 Network Interface	14
5.2.4 Upgrade	
5.2.5 Time Setting	17
5.2.6 Service	17
5.2.7 Alarm	
5.2.8 User Management	
5.3 PON Port	24
5.3.1 ONU Deny List	24
5.3.2 Upstream Bandwidth	
5.3.3 PON Setting	25
5.3.4 LOID List	
5.3.5 ONU Batch Upgrade	
5.3.6 Optical Diagnose	
5.3.7 Batch Configuration	
5.4 ONU Device Management	
5.4.1 ONU Basic Info	
5.4.2 ONU Port Config(Only support SFU)	
5.4.3 ONU Multicast	40
5.4.4 ONU Performance Statistics	43
5.5 Port Management	

Content

5.5.1 Port Info	
5.5.2 Performance	45
5.5.3 Port Config	46
5.5.4 Port VLAN Configuration	47
5.5.5 Loop Detection	
5.5.6 Port Group	54
5.6 MAC Address Table	
5.6.1 MAC Address Age Time	
5.6.2 Add Static MAC Address	
5.6.3 Add Blackhole MAC Address	56
5.6.4 Delete MAC Address	56
5.6.5 View MAC Address	
5.7 Protocol	
5.7.1 RSTP	
5.7.2 IGMP	60
5.7.3 DHCP	68
5.7.4 MSTP	
5.8 ACL/QOS	77
5.8.1 Time-range	77
5.8.2 ACL Management	
5.8.3 Packet Filter	
5.8.4 QOS	83
5.9 Route	
5.9.1 Route Management	
5.9.2 ARP Table	87
5.10 Link Aggregation	
5.10.1 Create Link Aggregation	
5.10.2 View Link Aggregation	
5.10.3 Port Selection Criteria	
5.10.4 Delete Link Aggregation	
6 Shortcut	
7 root	94

1 OLT Login Setting

1.1 Connect OLT with PC

Our company OLT default out-band management IP is **192.168.100.1/24**, and the in-band management IP is **192.168.99.1/24**. When connecting to the NMS port to manage OLT, Please set your PC IP to 192.168.100.X (X:1~254). When connecting to the uplink port to manage OLT, Please set your PC IP to 192.168.99.X (X:1~254). The following figure is an example of connecting the NMS port to configure the IP address:

Internet Protocol Version 4 (TCP/IPv	r4) Properties
General	
You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.	tomatically if your network supports to ask your network administrator
🔘 Obtain an IP address automati	cally
• Use the following IP address:	
IP address:	192 . 168 . 100 . 125
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	x x x
Obtain DNS server address aut	comatically
• Use the following DNS server a	addresses:
Preferred DNS server:	
Alternate DNS server:	· · · ·
Validate settings upon exit	Advanced
	OK Cancel

After the setting is completed, you can ping to test connectivity, as shown below:

C:\Users\HSGQ001>ping 192.168.100.1 Pinging 192.168.100.1 with 32 bytes of data: Reply from 192.168.100.1: bytes=32 time=2ms TTL=64 Reply from 192.168.100.1: bytes=32 time=1ms TTL=64 Reply from 192.168.100.1: bytes=32 time=1ms TTL=64 Reply from 192.168.100.1: bytes=32 time=1ms TTL=64 Ping statistics for 192.168.100.1: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 1ms, Maximum = 2ms, Average = 1ms C:\Users\HSGQ001>

1.2 Login WEB

Please open the browser (now support firefox/chrome/IE 9 and up)

Input the OLT's management IP address

①192.168.100.1(Outbound IP address, connected to NMS port)

2192.168.99.1 (Inbound IP address, connected to Uplink port)

Enter your user name and password, as shown below :

Pe	Login esse Loge EPON OLT for Management
User Name	
Password	ø
Language	◎ 简体中文 * English
	Login

Note:

- 1. The default username "root" and password "admin", the CLI is the same;
- 2. The same user can login to the WEB and the CLI at the same time;

3. The login timeout is 5mins, There's no any operations will be logout automatically after 5mins.

1.3 WEB Home Page

After logging in to the WEB, enter "**status** " option on the home page, and you can view the status information of the PON port and GE port . The PON port shows how many ONUs are registered, how many ONUs are online, and how many ONUs are offline; the uplink port shows the port status and link connection status. As shown below:



2 Topology

Enter the OLT WEB, click "**TOPO**" option, this page can overview the ONUs connected to the OLT, where the red font indicates the offline status, as shown below:

NEUTRAL	Status	Status TOPO		VLAN Advanced Setting		Shortcut	root
					Refresh / Reset Save As	i Image mac / name	No Result $\psi \uparrow$ Find
			r00	t			
PONOI		PONB2		PO	N03	PONDA	
PONR1		PON82		PCI	N83	P0N04	
0NJ/920NJ/930NJ/940NJ/950NJ/960NJ/330NJ/970NJ/91	ONU2/01 ONU2/0	2 ONU2/83 ONU2/84 ONU2/85		0NU3/01 0NU3/02 0NU3/03 0NU3/04		0114/02	
		Language : 简体中文 English	Firmware Version : 1	Neutral-E04_I_V3.0.0_Rel MAC	C: 38:3a:21:10:01:64		

1. Move the mouse cursor to the PON icon, then it will automatically display the online state of the port, how many onus are online and how many onus are offline. As shown below:

Netural	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Pert1D PON01 Status Online Online 1 Offline 0		Point	rot	FOIR	Refresh / Reset Save As image	n mac / name No	Result + Find
CHU1/91			PONB1				

2. Right click the icon of PON port, you can quickly access to PON management including the following functions:

- ① Uplink bandwidth configuration
- ② PON settings
- ③ PON port optical diagnosis
- ④ Batch configuration

NEUTRAL	Status	ТОРО	ONU Table	VLAN	Advanced	Ivanced Setting Shortcut			root
					Refresh / Reset	Save As Image	mac / name	No Result	$\downarrow \ \uparrow \text{Find}$
			ro	ot					
Po Upstream Bandwidth		PON82		POWer			PONe4		
PI PON Setting		PON82		PON8			PON84		
Optical Diagnose ONU1/92 ONU1/93 ONU1/94 ONU1/95 ON Batch Configuration	CNU2/01 CNU2/0	2 ONU2/03 ONU2/04 ONU2/05		CNU3/01 CNU3/02 CMU3/03 CNU3/04		ONU4/	92		

3. Move the mouse cursor to the ONU icon, then it will automatically display the

name,MAC address,online state,authenticating state of the ONU. As shown below:

Netural	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
					Refresh / Reset Save As Imag	e mac / name M	No Result + + Find
Name: ONU01/01 MAC: 38.3a.21:20:22:98 Status: Online		PCMag	rost	POIN	7		
Auth State: true			PONB1				

4. Right click the icon of ONU, you can quickly access to ONU management including the following functions:

- ① Basic information
- ② Port configuration
- ③ Delete ONU/Reset ONU/Add ONU to deny list



5. In the gray box in the upper right corner of the interface, you can quickly find the corresponding ONU by searching the ONU name or the ONU MAC address. As shown below:

Neutral	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
					Refresh / Reset Save As Image	mac / name	No Result 🖕 🕆 Find
					/		
			root				
PONDI	POINE2	1403	PONI64	PONPS	POINT	PCN87	PCN08
			POND1				
ONUL/01 ONUL/02							

①You can input the MAC address or name of partial or full length at will, and the number of search results is shown as the following figure. Click the small black arrow up and down to quickly view the status of each ONU, and the corresponding ONU icon will blink five times automatically.



②The found ONU icon is surrounded by a layer of light blue. Click "**Refresh/Reset**" to reset the icon status.

③Click "**Save As Image**" to display the current topology status on the new label page of the browser. (the original topology interface cannot be operated by right clicking)



3 ONU Table

Enter the OLT WEB, click "**ONU Table**" option, you can view all ONU list information connected to the OLT in this page , the red font shows the offline ONU. Move the mouse to the "**Setting**" option to quickly access Advanced Setting -> ONU Device-> ONU Basic Info / ONU Port Config , Delete ONU, Add to deny list and Reboot ONU. As shown below:

 □ 192.168.100.1/#/onu_allow ← → C ▲ 不安全 1 	× + 92.168.100.1/#/onu_allow						- C 07 \$	• ×
Netu	ı ral sta	itus T	0P0 0f	IU Table V	/LAN Advanced Set	ing Shortcut	root	
ONU Table	Port ID All	• Total : 1 C	Online: 1 Offline: 0					
Refresh								0
Find ONU	Q Enter the M	IAC address or Name to search	for ONU. Supports partial match	ing and Regular Expressions.				
ONU ID	MAC	Status \$ Auth Stat	te Register	Time	Last Deregister Time	Last Deregister Reason	Setting)
ONU01/01	38:3a:21:20:22:98	Online true 🤿	2020/08/01	17:43:08	Not Down Before		Setting	~
							View Details	
							ONU Port Con	nfig
							Delete ONU	
							Add to deny lis	st
							Reboot ONU	

Left-click the blue icon next to the "**Auth State**" of the ONU, you can modify the current ONU authentication status, including "**true**" and "**false**". In generally, the normal registration needs to be set to true. As shown below:

192.168.100.1/#/onu_allow	× +							-	٥	×
← → C ▲ 不安全 192.	168.100.1/#/onu_allow			_				0+ ģ	Θ	÷
Netur	al st	atus	торо	ONU Table	VLAN	Advanced Setting	Shortcut	roc	đ	
ONU Table	Port ID PON01	• Total	: 1 Online: 1	Offline: 0						
Refresh Add	Upstream Bandwidth ONU	Deny List C	DNU Batch Managem	ant	pressions.				(3
ONU ID	MAC	Status \$	Auth State	Register Time	Last Deregis	ster Time	Last Deregister Reason	Set	ing	
ONU01/01	38:3a:21:20:22:98	Online	true 🥑 🚩	2020/08/01 17:43:08	Not Down	Before		Settir	ng ~	
			Are yo Certific	a sure you want to lift the curre ation?	ent state of the ONU Apply Cancel					

1. First choosing "**Port ID**", then you can view all ONUs connected to the corresponding PON port. You can also enter the MAC address or name in the Find ONU option box to find a specific ONU, click the "Refresh" button to restore, as shown below:

192.168.100.1/#/onu_allow	× +					- a ×		
← → C ▲ 不安全	192.168.100.1/#/onu_allow					☆ \varTheta :		
Netu	Iral stat	us TC	PO ONU Table	VLAN Advanced Se	tting Shortcut	root		
ONU Table	Port ID PON01	Total : 2 Or	line: 1 Offline: 1					
Rofresh Add Upstream Bandwidth ONU Deny List ONU Batch Management Find ONU 36/36/21 Q Enter the MAC address or Name to search for CNU. Supports partial matching and Regular Expressions.								
ONU ID	MAC	Status \$ Auth State	Register Time	Last Deregister Time	Last Deregister Reason	Setting		
ONU01/01	38.3a 21.20.22.98	Offline true 🥑	2020/08/01 17:43:08	Not Down Before	Laser out	Setting ~		
ONU01/02	38.3a.21.28.3a.ed	Online true 🥑	2020/08/02 10:12:27	Not Down Before		Setting ~		

2. Choose **Port ID** -> **ADD**, You can specify the ONU ID or onu id is 0 will automatically distribution the ONU ID. As shown below:

ONU Table	Port ID PON01	•									
Refresh Add	Refresh Add Upstream Bandwidth ORU Deny List ONU Blatch Management Image: Comparison of the second secon										
ONU ID	MAC	Status	Auth State	Register Time	Last Deregister Time	Last Deregister Reason	Setting				
ONU01/02	38:3a:21:27:8c:44	Offline	true 🥑	Manual Add ONU	×		Setting ~				
ONU01/03	38.3a.21.27.8c.2a	Offline	true 🎯				Setting ~				
ONU01/04	38:3a:21:27:8c:4d	Offline	true 🥑	ONU ID 1-64	if 0 or none: Auto assign		Setting ~				
ONU01/05	38:3a:21:27 f3:df	Offline	true 🌝	MAC 00:00:00:00:00	EX : 00:00:00:00:00:00		Setting ~				
ONU01/06	38.3a:21:28:03:03	Offline	true 🦁	Auth State taise •	Description	Power Down	Setting ~				
ONU01/07	38.3a 21:27:8a.39	Offline	true 🕑	Amely	Canaal	Laser LOS	Setting ~				
ONU01/33	38-3a 21-27-89-cc	Offline	true 🥑	мфріу	Cancer		Setting ~				
ONU01/01	38 3a 21 28 8a 94	Online	true 🦁	2020/05/06 11:16:20	2020/05/05 14:31:44	Laser LOS	Setting ~				

3. Choose **Port ID -> Upstream Bandwidth**, you can quickly enter ONU Upstream bandwidth configuration page. As shown below:

NEUTR	RAL Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Upstream Bandwidth	Port ID PON01 •					
System 🚫							
	ONU ID	Sla Type	Fix	Assure	Max	Setting	
PON Port	ONU01/1	type5	1	10000	900000	Setting	
ONU Deny List	ONU01/2	type5	1	10000	900000	Setting	
Upstream Bandwidth	ONU01/3	type5	1	10000	900000	Setting	
PON Setting	ONU01/4	type5	1	10000	900000	Setting	
PON Setting	ONU01/5	type5	1	10000	900000	Setting	
LOID List	ONU01/6	type5	1	10000	900000	Setting	
ONU Batch Upgrade	ONU01/7	type5	1	10000	900000	Setting	
Optical Diagnose	ONU01/33	type5	1	10000	900000	Setting	
Batch Configuration							
ONU Device 🚫							

4. Choose **Port ID** -> **ONU Deny List**, you can quickly enter ONU Deny List page. As shown below:

NEUTE	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Deny List	Port ID	PON01 ·					
System 😔								
PON Port	-						Add	
ONU Deny List	ONU ID		Name	MAC		Retry Counts	Setting	
Upstream Bandwidth				No data				
PON Setting								
LOID List								
ONU Batch Upgrade								
Optical Diagnose								
Batch Configuration								
ONU Device 😔								

5. Choose **Port ID -> ONU Batch Management ,** you can manage the batch of ONUs, including delete and add to deny list. As shown below:

	NEUTR	AL Status		торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
ONU	Table	Port ID PON01	•						
Refr	esh Add atch Management 💿	Upstream Bandwidth ONU Deny Select All Delete Add to d	List Exit Bat	ich Management		- 1			0
	ONU ID	MAC	Status Auth	State	Register Time	Last Deregis	ster Time Last	Deregister Reason	Setting
	ONU01/02	38-3a 21-27-8c 44	Offline true	0	Not Register Before	Not Down	Before		Setting ~
Θ	ONU01/03	38 3a 21 27 8c 2a	Offline true	0	Not Register Before	Not Down	Before		Setting ~
	ONU01/04	38.3a 21.27.8c.4d	Offline true	0	Not Register Before	Not Down	Before		Setting ~
	ONU01/05	38:3a:21:27:f3:df	Offline true	0	Not Register Before	Not Down	Before		Setting ~
8	ONU01/06	38.3a.21.28.03.03	Offline true	0	2020/05/05 19:27:48	2020/05/05	19:29:20	Power Down	Setting ~
	ONU01/07	38.3a.21.27.8a.39	Offline true	0	2020/05/05 19:49:15	Not Down	Before	Laser LOS	Setting ~
0	ONU01/33	38:3a:21:27:89:cc	Offline true	0	Not Register Before	Not Down	Before		Setting ~
0	ONU01/01	38-3a-21-28-8a-94	Online true	0	2020/05/06 11:16:20	2020/05/05	14:31:44	Laser LOS	Setting \sim

Choose multiple ONUs to operate:

	NEUTR	AL Status		ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut ~	root
ON	J Table	Port ID PON01	•						
Rufitesh Add Upstream Bandwidth ONU Deny List Exit Balch Management ONU Bandwidth Select All Deste Add to deny list									
	ONU ID	MAC	Status	Auth State	Register Time	Last Deregiste	ar Time Last	Deregister Reason	Setting
	ONU01/02	38.3a/21.27.8c.44	Offline	true 🥑	Not Register Before	Not Down B	efore		Setting ~
	ONU01/03	58.3a.21.27.8c.2a	Offline	true 🥑	Not Register Before	Not Down B	efore		Setting ~
	ONU01/04	38:3a:21:27:8c:4d	Offline	true 🥑	Not Register Before	Not Down B	efore		Setting ~
	ONU01/05	38:3a:21:27:f3:df	Offline	true 🥑	Not Register Before	Not Down B	efore		Setting ~
	ONU0106	38:3a:21:28:03:03	Offline	true 🥑	2020/05/05 19:27:48	2020/05/05 19	29:20	Power Down	Setting ~
2	ONU01/07	38:3a:21:27:8a:39	Offline	true 🥑	2020/05/05 19:49:15	Not Down B	efore	Laser LOS	Setting ~
2	ONU01/33	38:3a:21:27:89:cc	Offline	true 🥑	Not Register Before	Not Down B	efore		Setting ~
æ	ONU01/01	38:3a:21:28:8a:94	Online	true 🤡	2020/05/06 11:16:20	2020/05/05 14	1:31:44	Laser LOS	Setting \lor

4 VLAN Configurations

Enter the OLT WEB, click "**VLAN**" option, you can view the member ports of the created VLAN list, including tagged ports, untagged ports, and default VLAN ports. As shown below:

NEUTRAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
VLAN Config							
Create VLAN Delete VLAN	Configure Multi-VLANs						
VLAN List VLAN ID	Q						
VLAN ID Tagged	Untagged			As Default VLAN Port			Setting
		Language - Michaeler Paralle	b I Eirmune Version : Neutral	E04 1 1/2 0 0 Pol 1 MAC : 2	0.20.2140.01.04		

1. Choose VLAN -> Create VLAN, you enter VLAN ID and select both tagged port and untagged port. If you want to create a VLAN, just enter the same VLAN ID; if you want to create multiple consecutive VLANs, you can enter a valid VLAN ID range. As shown below:

NEUTRAL	Status	торо	ONU Table	VL	AN	Advanced Sett	ting Shortcut	root
VLAN Config								
Create VLAN Delete VLAN Configure Multi-VLAN	Is							
VLAN LIST VLAN ID Q								
VLAN ID Tagged Untagge	t l							Setting
1	Create					×	3E08	Setting
	VLAN ID:	101 ~ 110	The range of VLAN	ID is 1-4094				
	tagged:	PON01 PON	02					
		GE01	GE02	GE03	GEC)4		
		U GE05	U GE06	□ GE07	U GEO	18		
	untagged:	PON01 PON	02 🗏 PON03 🗏 PON04					
		GE01	GE02	GE03	GE0	04		
		💷 GE05	💷 GE06	□ GE07	GE()8		
					Apply	Cancel		
					мрру	Cancer		

NEU	TRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut 🗠	root
VLAN Config Create VLAN	Delete VLAN Con	figure Multi-VLANs		✓ Create vlan success, Please	e waiting for apply			
VLAN ID	Tagged	Untagged			As Default VLAN Port	E.		Setting
1		-		PON01,PON02,PON03	PON04,GE01,GE02,GE03,0	GE04,GE05,GE06,GE07,GE08		Setting
101								Setting Delete
102	-	-			-			Setting Delete
103		-			-			Setting Delete
104		-			-			Setting Delete
105	-	-			-			Setting Delete
106	-	-			-			Setting Delete
107	-	-			-			Setting Delete
108		-			-			Setting Delete
109	-				-			Setting Delete
110	-							Setting Delete

2. Choose **VLAN -> Delete VLAN**, you can delete one VLAN or a valid VLAN ID range. As shown below:



NEU	TRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
VLAN Config				✓ Setting success				
Create VLAN [VLAN ID	figure Multi-VLANs						
VLAN ID	Tagged	Untagged			As Default VLAN Po	nt		Setting
1	-			PON01,PON02,PON03,	PON04,GE01,GE02,GE03	GE04,GE05,GE06,GE07,GE08		Setting

5 Advanced Setting

5.1 Running Status

Choose Advanced Setting -> Running Status, you can view OLT system information,

hardware status and system running time, as shown below:

NE	UTF	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut -	root				
Running Status		Running Statu	s										
System	\odot	System Informations			Hardware Status								
PON Port	\odot	Product Model	Neutral-E04		CPU Usage	Memory Usage							
	\sim	System Version	Neutral-E04_I_V1.4.0_F	Rel									
UNU Device	\odot	Firmware Version	Neutral-E04_I_V3.0.0_F	Rel									
Switch Port	\odot	Hardware Version	Neutral-E04-hw-version	-v2.0	9%	27%							
	0	MAC	38.3a.21.10.01.64										
MAC Address Ta	able	PON Ports	4										
Protocol	rotocol 🛇	GE Ports	8		System Running Time								
FIGGEDI		XGE Ports	0		Current Time : 2020-5-6	14:30:14							
ACL/QoS	\odot	Size	16		Running Time: 1 Day 4 H	our 02 Min 48 Sec							
Route	\odot	Build Time	2020/04/27 13:52:27										
Link Aggregation	1												
			L	anguage:简体中文 En	glish Firmware Version : Neu	tral-E04 V3.0.0 Rel MAC : 38	3 3a 21 10 01 64						

5.2 System Management

5.2.1 Device Management

Choose Advanced Setting -> System -> Device. On this page, you can view, save,

backup and restore the OLT configuration, restart and initialize the OLT. As shown below:

NE	UTRA	L Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	Î							
Custom		Restore Config						
System	0	Notice: You can restore the configuration file						
Diagnose		Click to select file	Restore Config	1				
Network Interfa	ace			•				
Upgrade		Reboot			Backup Config			
Time Setting		Notice: Click the button, you can restart the OLT			Notice: You can backup the	configuration file		
Alarm			Reboot			Backup Config		
User Manager	ment						-	
PON Port	\odot	Default Factory Config			Save configuration			
ONU Device	\odot	Notice: After default the OLT configuration, device	will be the factory config		Notice: Save all current con	figurations and write them to the device		
Switch Port	\odot	Defa	ult Factory Config			Save configuration	n	
MAC Address Ta	ble	View current config						
Protocol	\odot	Click to download all current configurations (includ	ing unsaved configurations)					
ACL/QoS	\odot	Vie	w current config					
Route	\odot			I. Florence Marshare Mandael		0.0.0100101		

5.2.2 Diagnose

Choose **Advanced Setting -> System -> Diagnose**. On this page, you can ping diagnosis and check the link connection. As shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Diagnose							
System 🚫	Diagnose Tools Type	Ping Test						
Device	Destination IP	192.168.99.100	ex: 127.0.0.1					
Diagnose	Out Interface	Outbound Interface						
Network Interface	PING Count	4	(1-50)					
Upgrade	DINO Desired Circ							
Service	PING Packet Size	04	(4-1472 Bytes)					
Alarm	Start							
User Managerment	The device is ready!							
PON Port								
ONU Device \bigotimes								
Switch Port								
MAC Address Table					h			

Note: Support ping domain name

5.2.3 Network Interface

Choose **Advanced Setting -> System -> Network Interface**. On this page, you can configure management port network parameters, including default route, DNS, in-band and out-of-band management interfaces. As shown below:

N	leutra	al	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status System	6	Network Interface	Setting						
Device Diagnose Network Inter Upgrade	face	DNS: Primary DNS: 0.0.0. Secondary DNS: 0.0	0 Setting						
Time Setting Service		Outbound Interface						Setting	
Alarm	rmont	IP Address Rx Packets	192.168.100.1	IP Mask Rx Bytes		255.255.255.0 2058364			
PON Port	\bigcirc	Tx Packets	15484	Tx Bytes		1710525			
ONU Device	\odot	Inbound Interface	Add						
Switch Port	\odot	vlanif-1						Delete Setting	
MAC Address T	able	IP Address	192.168.99.1	IP Mask		255.255.255.0	VLAN	1	
		Rx Packets	207	Rx Bytes		23679			
Protocol	\odot	Tx Packets	170	Tx Bytes		28043			
ACL/QoS	\odot								
Route	. ⊙		Language	: 简体中文 English Firr	mware Version : Integra	ation-XE08_I_V3.0.1_Rel MAC :	38.3a.21.20.00.01		

1. Configure default route

Neutr	al					Advanced Setting		
Running Status	Network Interface							
System 🔿	Default Route :	Setting						
Device Diagnose Network Interface Upgrade	DNS: Primary DNS: 0.0.0.0 Secondary DNS: 0.0.	Setting						
Time Setting Service	Outbound Interface	192 168 100 1	Setting	Default Route	×		Setting	
Alarm User Managerment	Rx Packets	16954	Default Ro	oute 0.0.0.0	ex: 127.0.0.1			
PON Port 😔	Tx Packets	15484		Apply	Cancel			
ONU Device 😡	Inbound Interface	Add						
Switch Port	vlanif-1						Delete Setting	
MAC Address Table	IP Address	192.168.99.1	IP Mas	sk 2	55.255.255.0	VLAN	1	
	Rx Packets	207	Rx Byt	ies 2	3679			
Protocol 🚫	Tx Packets	170	Tx Byte	es 2	8043			

Note: It must exist the same network segment out-band and in-band management IP address.

2. Configure DNS

Neuti	ral					Advanced Setting			
Running Status	Network Interface								
System 🔿	Default Route :	Setting							
Device Diagnose Network Interface Upgrade	DNS: Primary DNS: 0.0.0.0 Secondary DNS: 0.0.	Setting							
Time Setting Service	Outbound Interface		Setting DNS		×			Setting	
Alarm	IP Address	192.168.100.1	Primary DNS	0000	ev: 127.0.0.1				
User Managerment	Rx Packets	16954	Secondary DNS	0.0.0.0					
PON Port 🕟	Tx Packets	15484	Secondary DNS		Cancel				
ONU Device 🚫	Inbound Interface	Add			_				
Switch Port	vlanif-1						Delete	Setting	
MAC Address Table	IP Address	192.168.99.1	IP Mask	25	55.255.255.0	VLAN	1		
In to Hadross Table	Rx Packets	207	Rx Bytes	23	3679				
Protocol 😔	Tx Packets	170	Tx Bytes	28	8043				
ACL/QoS 🚫									

3. Configure out-band interface IP address

Neutr	ral				VLAN	Advanced Setting	Sh	ortcut	root
Running Status	Network Interface								
System 🔿	Default Route :	Setting							
Device Diagnose Network Interface Upgrade	DNS: Primary DNS: 0.0.0 (Secondary DNS: 0.0) Setting							
Time Setting	Outbound Interface		Network Interfa	ace Quthound In	erface	-		Setting	
Alarm	IP Address	192.168.100.1	IP.	Address 192 168 100	1				
User Managerment	Rx Packets	16954		P Mask 255 255 255	0				
PON Port	Tx Packets	15484		VLAN -					
ONU Device 🚫	Inbound Interface	Add	Ap	ply	Cancel				
Switch Port							Delete	Setting	
MAC Address Table	IP Address	192.168.99.1	IP Mask	255.2	5.255.0	VLAN	1		
III/O Address Table	Rx Packets	207	Rx Bytes	23679					
Protocol 🚫	Tx Packets	170	Tx Bytes	28043					
ACL/QoS 🛇									
Route 🚫		Language	: 简体中文 English Firm	ware Version : Integration-XE0	BIV3.0.1 Rel I MAC	38.3a 21.20.00.01			

Note: Out-band management IP only can be modified, not added and deleted.

4. Add in-band interface IP address:

Neu	tral			ONU Tab	le	VLAN	Advanced Setting	Shortcut	root
Running Status	Networl	k Interface							
System 🔗	Default Ro	oute : Setting							
Device Diagnose Network Interface Upgrade	DNS: Pri	mary DNS: 0.0.0 Setti	ng						
Time Setting		d Interface	Network I	Interface	ulanif 1	×			Setting
Alarm	IP Addres	ss 192.168.1	100.1	IP Address	192.168.99.1				
User Managerment	Rx Packe	ets 16954		IP Mask	255.255.255.0				
PON Port	Tx Packe	its 15484		VLAN	1				
ONU Device 🚫		Interface Add		Apply	C	ancel			
Switch Port								Delete	Setting
MAC Address Table	IP Addres	ss 192.168.9	9.1 IP M	ask	255.255.25	5.0	VLAN	1	
	Rx Packe	ats 207	Rx B	ytes	23679				
Protocol 😔	Tx Packe	its 170	Tx B	ytes	28043				
ACL/QoS 🛇									
Route (javascript.void(0);			Language : 简体中文 English	Firmware Version :	Integration-XE08_I_V	3.0.1_Rel MAC :	38 3a 21 20 00 01		

Note: Before you add it, you need create the corresponding vlan id.

5.2.4 Upgrade

Choose **Advanced Setting -> System -> Upgrade**. On this page, you can upgrade device Firmware(.img file), System(.img file) and Full Version(.zip). As shown below:

NEU	TRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Upgrade							
System 📀	Firmwar	e File format is *.img						
Device Diagnose		Click to select file	Apply					
Network Interface	System	File format is *.img		-				
Time Setting		Click to select file	Apply					
Service Alarm	Full Vers	ion Upgrade File	format is *.zlp					
User Managerment		Click to select file	Apply					
PON Port)			-				
ONU Device)							
Switch Port)							
MAC Address Table								
Protocol 🕞)							
ACL/QoS)							
Route 😔)		Language: 節体中文 English 1 Fi	irmware Version : Neutra	LEN4 I V300 Rel I MAC 3	8 3a 21 10 01 64		

5.2.5 Time Setting

Choose **Advanced Setting -> System -> Time Setting** On this page, you can configure the OLT system time, including automatically get time and manually set time, as shown below:

Running Status System Due Due Due Due Setting Time Current Time Setting Time Out Jupgrade Due Due Due Setting Time Cet Timescone Asiar/ChongangUTC+08.00) Time Setting Due Courent Time Asiar/ChongangUTC+08.00) Time Setting Due Courent Time Asiar/ChongangUTC+08.00) Time Setting Due Courent Time Courent Time Courent Time Setting Time Courent Time Courent Time Courent Time Setting Time Courent Time Setting Time Number Coure Courent Time Number Courent	NEU	JTRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
System Current Time Device Setting Time Degrade Setting Time Deprade Setting Time Upprade Setting Time Day 2020. Year 5 . Month 6 . Day Service Time 14 . Hour 52 . Minute 30 . Second Alarm Setting Time User Management Settors Time Ver Management Settors Time Volt Device Settors Switch Peri Settors Protocol Settors	Running Status	Time Setting							
Device Setting Time Cet Time Automatically	System (Current Time	2020-5-6 14:52:30						
Network Interface Select Timezone Asia/ChongringUTC+08.00) Upgrade Day 2.020. Year 5 . Month 4 . Day Service Time 14. Hour 52. Minute 30. Second Aam Cet Device Time Note: WebGUTs time dapsys maybe different from server, you can press this button for synchronezation PON Port O Switch Port O NAC Address Tabic	Device Diagnose	Setting Time	 Get Time Automatica 	illy 💿 Manual Setting	Time				
Time Sate Bay 2020 Service Lam User Management Cet Device Time Note: WebGU's time display maybe different from server; you can press this button for synchronization PON Port ONU Device Switch Port ONU Device ONU De	Network Interface	8 Select Timezone	Asia/Chongqing(UTC+0	8:00) •					
Service Tme 14 Hour 52 Munute 30 Second User Management Get Device Time Note: WeoGUTs the display maybe different from server; you can press this button for synchronization PON Port O ONU Device O Switch Port O MACAddrsss Table Protocol O	Time Setting	Day	2020 • Year 5	• Month 6 • Day	(
Agem Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization PON Port Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization ONU Device Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization Mach Address Table Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization Mach Address Table Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization Protocol Image: Cdd Dewice Time Notice: WebGU/'s time display maybe different from server; you can press this button for synchronization	Service	Time	14 • Hour 52	• Minute 30 • Se	cond				
PON Pont Image: Constraint of the second of the seco	Alarm User Managerme	ent Get Device Time	Notice: WebGUI's tir	ne display maybe different from	m server, you can press this bu	tton for synchronization			
ONU Device Image: Comparison of the comparison	PON Port (Apply Apply							
Switch Port Image: Comparison of the system of the syste	ONU Device (⊘							
MAC Address Table Protocol	Switch Port (⊘							
Protocol 📀	MAC Address Table	0							
	Protocol (⊘							
ACLUGOS (ACL/QoS (\odot							
Route 📀	Route (\odot							

5.2.6 Service

Choose **Advanced Setting -> System -> Service** On this page, you can configure system port , turning on or off 5620 function, snmp trap server, snmp community and SSH-Key. As shown below:

 Interface Interfac	1/#/service ▲ 不命会 192	× +							- σ ×
	Netur	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut ~	root
Running Sta	itus	Service					-		
System	\odot								
Device		System Port	Setting						
Diagnose		http: 80	https: 443 telnet	23					
Network In	nterface								
Upgrade	_	5620 Support : No	ot Support Setting						
Time Setti	ing								
Service		SNMP trapserver			hity				
Alarm		server ip	192.168.100.100	Read comr	nunity 🔲 Write community				
User Man	agerment	trap port	162	Read commun	ity public				
DOM Dest	0	trap community	public	Write commun	iity private				
PUN POR	\odot		Apply		Apply				
ONU Device	, ⊘			.					
Switch Port	\odot	SSH-Key	Add SSH						

1. Configure the system port. This device supports modifying the default port number of the http/https/telnet services, as shown below:

☐ 192.168.100.1/₩/s ← → C ▲ 2	iervice × 不安全 192.1	+ 68.100.1/#/service							- σ × ⊶ ☆ Θ :
N	letura	al	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		Service							
Device Diagnose		System Port http: 80	Setting https: 443 telnet: 23						
Network Interfa	ace	5620 Support : No	t Support Setting						
Time Setting Service		SNMP trapserver	192 168 100 100	Setting		×			
Alarm User Manager	ment	trap port	162	http	80	80 - 50000			
PON Port	\odot	trap community	public	telnet	23	23, 1000 - 50000			
ONU Device	\odot		жерну		opły	Cancel			
Switch Port	\odot		Add SSH						

2. Configure 5620 support. This function is developed for compatibility with Huawei ONU. When there is a problem with Huawei ONU, you can try to configure 5620 as "**Support**", as shown below:

192.168.100.1/₩/service	× +							- 0 ×
Netu	ral	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Service							
System 🚫 Device Diagnose Network Interface	System Port http: 80	Setting https: 443 telnet: 23						
Upgrade Time Setting Service	5620 Support : N	192 168 100 100	Setting			7		
Alarm User Managerment PON Port 📀	trap port	162 public	5620 Support :	Not Support Not Support Support	ADDay Cancel	-		
		Apply		_	- context			
Switch Port	SSH-Key	Add SSH						

3. Configure SNMP parameters, including SNMP trap server parameters and read-write community parameters. The default trap server IP is 192.168.100.100, and you can modify it according to your own needs. After the parameters is completed, click the **"Apply"** button, as shown below:

■ 192.168.100 ← → C	1/#/service	× + .168.100.1/#/service							- σ × ∾ ☆ ⊖ :
	Netur	al	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Sta	itus	Service							
Device	\odot	System Port http: 80	Setting https: 443 telnet:	23					
Network li Upgrade	nterface	5620 Support : No	t Support Setting						
Time Sett Service	ing	SNMP trapserver		SNMP co	ommunity				
Alarm User Man	agerment	trap port	192.168.100.100	Read c	ad community Write community public				
PON Port	\odot	trap community	public Apply	Write c	community private Apply				
ONU Device Switch Port	, ⊘ ⊘	SSH-Key	Add SSH						

4. Configure SSH-Key for higher-level connections. You can log in to the CLI by SSH. The specific steps are as follows:

First, you need to add a public key to server.

Note: you need create a OPENSSH format public key, its type need by legacy,key type RSA.

Secure CRT like this:

	Choose a directory and filename for the private key. Standard Public Key and VanDyke Private Key format OpenSSH Key format (new) OpenSSH Key format (legacy) Private key filename:
	C:\Users\Administrator\Documents\Identity
10000	Public key filename:
	C:\Users\Administrator\Documents\Identity.pub
	After exiting the Wizard, upload the public key file to the appropriate folder on your SSH server. See help or refer to your SSH server documentation for more information.
-	

Putty gen:

Public key for pas	ting into OpenCCU authoriz	d I and file.					
_ublic key for pus	ung into Openson autrionze	ed_keys file:					
ssh-rsa AAAAB31 +G5O32iBb5W71 cQQa84LZmTi0u OslV62uIVo9dIB	VzaC1yc2EAAAABJQAAAQ B3RaEZjXtAn YQU1KzmWjS iF9nKpe5oq6rHeuX2L8Bcu p9iZn0FbUa0JP0fp2dzSDiA	EAtLZolmSO+DZzsRu2 64-5j2DSU90CEtHYDM FnMYisBDQ5TdUWi4P, kwioouTwYn6P6st7Nk	vr/ZP/CuRE 5saHbgvEHwFT1 XCq799EzHBHdO GHQ/m				
+0AmAiuU3McD	zLDTt2P89QOHqaTyxd9D1	oRJqQzzBSBlz8BRhs0	R5xwzMSZtKvo75 🗸				
Key fingerprint ssh-rsa 2048 e3:7a:9a:89:46:23:96:cd:03:44:f6:3e:a4:7b:10:d6							
key <u>c</u> omment:	rsa-key-20180809						
(ey p <u>a</u> ssphrase:							
Confirm passphras	se:						
ctions							
ctions ienerate a public	/private key pair		<u>G</u> enerate				
ctions Generate a public Load an existing p	/private key pair private key file		<u>G</u> enerate Load				
ctions ienerate a public oad an existing p iave the generate	/private key pair private key file ed key	Save p <u>u</u> blic key	<u>G</u> enerate Load Save private key				
actions Generate a public Load an existing p Gave the generate larameters	/private key pair private key file ed key	Save p <u>u</u> blic key	<u>G</u> enerate Load Save private key				
Actions Generate a public Load an existing p Gave the generate Gave the generate arameters Que of key to ge Que SA	√private key pair private key file ed key nerate: ◯ DSA ◯ ECD	Save public key	<u>G</u> enerate Load Save private key ○ SSH-1 (RSA)				

① Now, you need add the public key to OLT

SSH-Key	Add SSH
Add Key	
Title	
Enter a name to ensure clear use	
Key	
Begins with 'ssh-rsa', 'ssh-dss', 'ssh-ed25519', 'ecdsa-sha2-nistp256', 'ecdsa-sha2-nistp384', or 'ecdsa-sha2-nistp521'	
Apply Cancel	

② After done

SSH-Key	Add SSH
Title windows	
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCs5MVDjrHDM6wtxq7UKH8e(gygaY910ulk0kubqflSwDSgT8KFGvsgleqC9/A6NxdxMDmi6ALPMTyctDqLij2Bxyi72d9M jXDvFBxSwfnG8ziOT1a9TenOQxTcJ5m3Jb4G5Of2JkjLFyzYuECu4SuEKb+rc6PYIHyBiL9sy39bQ20+iX/2SCUIgo4E40vrwCpOx79vmEfoV97YJBN/Dy5bLeCaphjbCvtxso	Delete
Title linux	
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDFkr4tNiHUKTINNJuM7JeAXN5VibwxYUMtGwzYtZIDUnyYqak2Bj4ByleNn+dLZVAQw7hYoLJzVpmaMlnwcCtgXwhFy1 DDzXD2UsU2G0tMSSQIX1thV8Eukc/6GDggc077L/V8T3hPCWcddthVxywn0jp3VrXn0KQ7ZkRDwvDj3TcSVvTyyFPnsLKm/3gwWR/rX7mHJ/QV5iZy1D/iBJ74GwzvBgAJ	Delete
Title putty	
ssh-rsa AAAAB3NzaC1yc2EAAAABJQAAAQEAtLZoImSO+DZzsRu2vr/ZP/CuRE+G5O32/Bb5W7B3RaEZJXIAnYQU1KzmWjS6+5j2DSU90CEIHYDV15saHbgvEHwFT1cQ Qa84LZmTl0uF9nKpe5oq6rtHeuX2L8BcuFnMYisBDQ5TdUWi4PXCq799EzHBHdOOsIV62uIVp9dIRp9iZn0FbUa0JP0fp2dzSDjAkwjoouTwYn6P6st7NkGHQ/m+0AmAiuU3	Delete

you can enter the username and password to login, it will be done.

5.2.7 Alarm

Choose **Advanced Setting -> System -> Alarm** On this page, you can view and download alarm information, enable and disable log record and download log. As shown below:

NE	EUTF	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut -	root			
Running Status	5	Alarm Inforn	nation	Refresh Dow	wnload							
System	\odot	[2020/05/06 11:16	20] Info: ONU 1/1 38:3a:21	1:28:8a:94 ONU link up								
Device		[2020/05/06 11.16.17] Info. ONU 1/1 38 3a 21.28 8a 94 ONU authorization success [2020/05/05 19 49 26] Info. ONU 1/7 Port 1 38 3a 21.27 8a 39 Uni port link down										
Diagnose		[2020/05/05 19:49	15] Info: ONU 1/7 38:3a:21	1:27:8a:39 ONU link up								
Network Inter	rface	[2020/05/05 19:49	13] Info: ONU 1/7 38:3a:21	1:27:8a:39 ONU authorization s	uccess							
Upgrade		[2020/05/05 19:35	:04] Info: ONU 1/7 38:3a:21	1:27:8a:39 ONU link up								
Time Setting		[2020/05/05 19:35	:00] Info: ONU 1/7 38:3a:21	1:27:8a:39 ONU authorization s	uccess							
nine Setting		[2020/05/05 19:34	491 Info: ONU 1/1 38.38.21	1.28.88.94 ONU link up 1.28.88.94 ONU authorization s	uccess							
Service		[2020/05/05 19:29	20] Info: ONU 1/6 38:3a:21	1:28:03:03 ONU link down								
Alarm		[2020/05/05 19:29	19] Info: ONU 1/6 38:3a:21	1:28:03:03 ONU dying gasp								
User Manage	erment	[2020/05/05 19:27	48] Info: ONU 1/6 38:3a:21	1:28:03:03 ONU link up								
DON Det	\circ	[2020/05/05 19:27	47] Info: ONU 1/6 38:3a:21	1:28:03:03 ONU authorization s	uccess							
FONFOIL	\otimes	[2020/05/05 18:44	20] Info: ONU 1/1 38:3a:21	1:28:8a:94 ONU link up								
ONILI Device	0	[2020/05/05 18:44	54] Info: ONU 1/1 38:38:21	1.28.88.94 ONU autoonzation s	uccess							
ONO DONCO	۲	[2020/05/05 17:25	:08] Info: GE 1 Uplink port I	link down								
Switch Port	0	[2020/05/05 15:41	30] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link u	p							
	U	[2020/05/05 15:41	08] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link d	lown							
MAC Address T	Table	[2020/05/05 15:40	55] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link u	p							
		[2020/05/05 15:40	52] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link d	lown							
Protocol	\odot	[2020/05/05 15:40	43j Into: GE 1 Uplink port I 411 Info: GE 1 Uplink port I	ink up link down								
	0 -	[2020/05/05 15:39	34] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link u	p							
ACL/QoS	\odot	[2020/05/05 15:39	29] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link d	iown							
		[2020/05/05 15:38	:10] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link u	p							
Route	\odot	[2020/05/05 15:38	06] Info: ONU 1/1 Port 1 3	8:3a:21:28:8a:94 Uni port link d	lown							
	*			Language:简体中文 English	Firmware Version : Neutral-	E04_I_V3.0.0_Rel MAC: 3	18:3a:21:10:01:64					

5.2.8 User Management

Choose Advanced Setting -> System -> User Management On this page, you can add,

NEUTR		RAL	Statu	IS	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root	
Running Status	Î	User Mana	agerment								
System	\odot	Currently ex	kisting user list	Add User	Delete User Modify current user password						
Device Diagnose Network Interf	face	User root	Status Online	User Rights super	Maximum 1	Logins	Number of logins 2	Des Sup	cription ar User		
Upgrade Time Setting Service											
Alarm User Manager	rment										
PON Port	\odot										
ONU Device	\odot										
Switch Port	\odot										
MAC Address Ta	able										
Protocol	\odot										
ACL/QoS	\odot										
Route	⊘ .			Langua	ge : 简体中文 English	Firmware Version : Neu	tral-E04_1_V3.0.0_Rel M	IAC : 38:3a:21:10:01:64			

delete users, and modify user passwords, as shown below:

In user management menu, You can Add/Delete and modify user password

1. Add user

NE	UTF	RAL	Sta	lus	торо о	NU Table	VLAN	Advanced Setting	Shortcut	root	
Running Status		User Mar	agerment								
System			existing user list	Add User	Delete User Modify carrent user password						
Diagnoso		User Status User Rights			Maximum Logins	Number	of logins	Des	ription		
Diagnose		root	root Online super		1 2 Super User				er User		
Network Interia	ace				Add User		×				
Upgrade											
Time Setting					User	test					
Service					New Password						
Alarm					Confirm Password						
User Managerr	ment				User Rights						
PON Port	\odot				Maximum Logins	4					
ONU Device	\odot				Description	test					
Switch Port	\odot				Apply		Cancel				

2. Add user

Us	er Managerment						
Cu		Add User De	lete User Modify current	user password			
	User	Status	User rights	Maximum logins	Description		
	root	Online	super	1	Super User		
	zeng111111	zeng111111 Offline		3	3		
test Offline			operator	4	test		
			Delete User User test	T	×		
			Apply	Cancel			

User Managerment		✓ Delete suc	cess		
Currently existing user list Add User Delete User		Delete User	Modify curre	ent user password	
User	Status		User rights	Maximum logins	Description
root	Online		super	1	Super User
zeng111111	Offline		admin	3	3

Note: The supper use can't be deleted.

NEUTRAL Stat			us	торо	ONU Table	VLAN	Advanced Setting		Shortcut -	root	
Running Statu	IS	User Man	agerment			(2) Error, can't	delete itself ×				
System	\odot	Currently existing user list Add User		Delete User	Modify current us	er password					
Device										980 F	_
Diagnose		User	Status	User Rights	Maximur	n Logins	Number of logins		Descripti	on	
Network Interface		root Online super		1	1	2		Super Us	ser		

3. Modify user password, only can change your current login user password.

M	leutra	al Stat			VLAN		Advanced setting		
Running Status		User Managerment							
System			Add User	Delete User Modify c	urrent user password				
Device		User	Status	User rights	Maximum lo	gins	Description		
Diagnose		root	Online	super	1		Super User		
Remote		zeng111111	Offline	admin	3		3		
Upgrade		test	Offline	operator	4		test		
Time Setting				Modify current user	password	×			
Service									
Alarm				User	root				
User Manager				current password					
				new password					
PON Port	\odot			confirm password					
ONU Device	\odot			Apply	Cance	-			
10 10 10 10 10 10 10 10 10 10 10 10 10 1	\sim			1994 - C.					

5.3 PON Port

5.3.1 ONU Deny List

Select **Advanced Setting -> PON Port -> ONU Deny List**, enter this page, select the corresponding **"PON Port ID**", you can view the ONU deny list under the current PON port, as shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Deny List	Port ID	PON01 ·					
System 🚫	-							-
PON Port							Add	2
ONU Deny List	ONUID		Name	MAC No data		Retry Counts	Setting	
Upstream Bandwidth PON Setting								
LOID List								
ONU Batch Upgrade								
Batch Configuration								
ONU Device 🛇								
Switch Port								
MAC Address Table								
Protocol 🛇								
ACL/QoS 🚫								
Route 😔								
Link Aggregation			Language:简体中文 English	Firmware Version : Neutral-E04_1_V	/3.0.0_Rel MAC: 3	8:3a:21:10:01:64		

1. Add ONU to deny list. Click "Add" button, enter ONU mac, as shown below:

ONU Deny List	Port ID PON04 •			
				Add 🕐
MAC		Description	Apply	Cancel
No more data				

2. Delete ONU from deny list. First select ONU needed to be deleted, then click "**Delete Selected**", as shown below:

 ☐ 192.168.100.1/#/onu_deny ← → C ① 不安全 19 	× + 92.168.100.1/#/onu_deny							- ¤ × \$ • • :
Netu	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Deny List	Port ID	PON01					
System 😔								
PON Port							2 Delete Selected	Add ?
ONILL Down List	2	ONU ID	Name		MAC	Retry Counts	Reason	Setting
UNU DUNY LISI			ONILIOAIOA	38:38:2	1-20-22-08	3	tort	Delete
	1	ONU01/1	ON001/01		1.20.22.00	0	lest	Duroto
Upstream Bandwidth	2 1	ONU01/1	ONUUT/01		1.20.22.00		lesi	buch
Upstream Bandwidth PON Setting	2	ONU01/1	ONUUTUT		120.22.00	5	1051	Ducio
Upstream Bandwidth PON Setting LOID List	2 1	ONU01/1	רטרטטאט		12022.00		1001	June
Upstream Bandwidth PON Setting LOID List ONU Batch Upgrade	2	ONU01/1	ONDUTION		12022.00		iesi	Unite
Upstream Bandwidth PON Setting LOID List ONU Batch Upgrade Optical Diagnose	2	ONU01/1	UNUUNUI		12022.00		1631	Unit

5.3.2 Upstream Bandwidth

Choose **Advanced Setting** -> **PON Port** -> **Upstream Bandwidth**, enter this page to configure ONU upstream bandwidth allocation rules, including 5 types, type1 (Fix bandwidth), type2 (Assure bandwidth), type3 (Assure bandwidth + Max bandwidth), Type4 (Max bandwidth), type5 (Fixed bandwidth + Assure bandwidth + Max bandwidth), as shown below:

NEUTRAI	Status				Advanced Setting		
Running Status	stream Randwidth Detto	DONO1 -					
System 😔 —	Stream Danawidun Portib	PONUT					
	ONU ID	Sla Type	Fix	Assure	Max	Setting	
PON Port	ONU01/1	type5	1	10000	900000		
ONU Deny List	ONU01/2	type5	1	10000	900000		
	ONU01/3	ONU Setting			× 900000		
PON Setting	ONU01/4				900000		
LOID List	ONU01/5	ONU ID	ONU01/1		900000		
LOID LISI	ONU01/6	Sla Type	type5	. 0	900000		
ONU Batch Upgrade	ONU01/7				900000		
Optical Diagnose	ONU01/33	Fix	1	range: 1-1000000kbs	900000		
Batch Configuration		Assure	10000	range: 1-1000000kbs			
ONU Device 🕟		Max	900000	range: 1-1000000kbs			
Switch Port		A	\pply	Cancel			
MAC Address Table							
Protocol							
ACL/QoS \bigotimes							
Route 🚫							
Link Aggregation 🗸	La	nguage:简体中文 English Fi	irmware Version : Neutra	al-E04_I_V3.0.0_Rel MAC : 3	8:3a:21:10:01:64		

5.3.3 PON Setting

Choose **Advanced Setting -> PON Port -> PON Setting**, enter this page to set the pon port auth type, P2P function, rogue ONU detection function, optical limit power, and turning off and on the PON port. As shown below:

192.168.100.1/#	#/pon_setting	× +								- 0
← → C ③) 不安全 19	2.168.100.1/#/pon_sett	ing							☆ ●
1	Netu	ral	Status)PO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Statu System	s (PON Settin	ıg							
	U	Port ID	PON optical	Auth Type	Auth Mode	P2P Status	Rogue ONU	Optical power limit	Optical power below limit	Setting
PON Port	\odot	PON01	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~
ONUD	1.4	PON02	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Auth Mode
ONU Deny L	List	PON03	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	ON P2P
Upstream Ba	andwidth	PON04	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	
PON Setting)									Rogue ONU
LOID List										Optical power limit
ONU Batch	Upgrade									OFF PON optical
Optical Diag	nose									
Roteh Confid	autotion									

5.3.3.1 Auth Mode

Enter the PON setting page, move the mouse to the corresponding pon port "**Setting**" option, and select "**Auth Mode**" to set. Auth type includes "auto" and "manual" and auth modes include mac/loid/loid+password/hybrid, which can be set according to the actual application. As shown below:

Example 1: Set auth type to manual

NEUT	RAL	Status	торо	ONU Table	VLAN	1	Advanced Setting		Shortcut	root
Running Status	PON Setting									
System 🚫		200398-	2010-0-	12/2/10/2010						
DOM David	Port ID	Auth	ype	Auth Mode	2		P2P Status	Rogu	e ONU	
PON POIL	PON01	Au		mac		Disable		OFF		
ONU Deny List	PON02	Aut	0	mac		Disable		OFF		
Unstream Randwidth	PON03	Au	0	mac		Disable	ON	OFF		
PON Setting	PON04	Au	PON A	Authorize		×	ON	OFF		
LOID List						_				
ONU Batch Upgrade				Port ID						
Optical Diagnose				Auth Type	Manual •					
Batch Configuration				Auth Mode	MAC •					
ONU Device 🚫				ânnly	Cancel					
Switch Port				(4))	Guilco					





5.3.3.2 P2P

Enter the PON setting page, move the mouse to the corresponding pon port "**Setting**" option, and select "**ON/OFF P2P**" to set. The function is default off status. As shown below:

For example: Set P2P Status Enable



NEUI	KAL	Status	ТОРО	ONU lable	VLAN	Advanced Setting
Running Status	PON Setting		×	 Setting succes 	s	
System 😔						
Ŭ	Port ID	Auth	Туре	Auth Mode		P2P Status
PON Port	PON01	A	uto r	nac S	etting Enable	OFF
ONU Deny List	PON02	A	uto r	nac S	etting Disable	ON
Upstream Bandwidth	PON03	A	uto r	mac S	etting Disable	ON
PON Setting	PON04	A	uto r	mac S	etting Disable	ON

5.3.3.3 Rogue ONU detection

Enter the PON setting page, move the mouse to the corresponding pon port "**Setting**" option, and select "**Rogue ONU**" to set. Detect whether there is rogue ONU under PON port. Default status is off. As shown below:

NEUTI	RAL	Status	торо	ONU 1	fable	VLAN	Advanced Setting		Shortcut	root
- Running Status	PON Setting									
System 🚫					0820575					
PON Part	Port ID	Auth Typ	e	Auth	Mode	E alte	P2P Status	Rog	ue ONU	
	PONOT	Auto		mac		Enable		OFF		
ONU Deny List	PONU2	Auto		mac		Disable		OFF		
Upstream Bandwidth	PON03	Auto		mac		Disable		OFF		
PON Setting	PON04	Auto		mac		Disable	ON	OFF		
LOID List										
ONU Batch Upgrade			Set							
Onlical Diagnose			Mode	OFF						
Optical Diagnose			intege	OFF						
Batch Configuration				Auto		Cancel				
			_	Manual	_	Cancer				

5.3.3.4 Optical Power Limit

Enter the PON setting page, move the mouse to the corresponding pon port "**Setting**" option, and select "**Optical power limit**". This function can control the ONU to go online

by configuring the lower limit of the optical power. When the ONU power is lower than the configured threshold, the ONU can be added to the deny list. It is not configured by default and needs to be configured manually. As shown below:

■ 192.168.100.1/#/pon_setting	× +	laa							- a ×	
Netu	ral	Status		Status TOPO		Status TOPO ONU Table VLAN		Advanced Setting	Shortcut	root
Running Status	PON Settir	ıg					-			
System 🕑	Port ID	PON optical	Auth Type	Auth Mode	P2P Status	Roque ONU	Optical power limit	Optical power below limit	Setting	
PON Port	PON01	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
	PON02	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
ONU Deny List	PON03	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
Upstream Bandwidth	PON04	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
PON Setting LOID List ONU Batch Upgrade				Optical pov	Port ID PON01	>	<			
Ontical Diagnose										
Batch Configuration					Lower limit -27	dBm	1			
ONU Device 🚫				Optical pow	ver below limit No ope No ope Add to	eration Tation deny list				
Switch Port					Apply	Cancel				

5.3.3.5 Turn on&off Port

Enter the PON setting page, move the mouse to the corresponding pon port "**Setting**" option, and select "**ON/OFF PON optical**" to turn on or off pon port. As shown below:

192.168.100.1)	/#/pon_setting ×	4								- 0	×
← → C 🚺	▲ 不安全 192.1	168.100.1/#/pon_sett	ing							0 4 ģ	00
I	Netura	al	Status	т	оро	ONU Table	VLAN	Advanced Setting	Shortcut	root	
Running State	us										
System	\odot	- ON OCUM	19								
		Port ID	PON optical	Auth Type	Auth Mode	P2P Status	Rogue ONU	Optical power limit	Optical power below limit	Setting	
PON Port		PON01	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
ONILI Dony	List	PON02	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
ONO Delly	LIST	PON03	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
Upstream E	Bandwidth	PON04	ON	Auto	mac	Disable	OFF	-(dBm)	No operation	Setting ~	
PON Settin											
LOID List											
ONU Batch	Upgrade				Notice		/				
Optical Diag	gnose				Please confirm (DEE PONIA PON optic	al 2				
Batch Confi	iguration					or in other in our open					
ONU Device	\odot						Apply Cance				

5.3.4 LOID List

Choose **Advanced Setting -> PON Port -> LOID List**, enter this page, select the corresponding **"Port ID**", you can view the LOID allowed list under the current PON port, as shown below:

■ 192.168.100.1/#/loid_mgmt	× +							- a ×
Netu	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut ~	root
Running Status	LOID List	Port ID	PON01 ·					
System 🚫								
PON Port	Add	Refresh			1.010			
ONU Deny List	1		38.3a.21.20.22.98		ztepon	Password	Dek	ing ete
Upstream Bandwidth								
PON Setting								
LOID List								
ONU Batch Upgrade								
Optical Diagnose								
Batch Configuration								

1. On the LOID list page, click the "**Add**" button to add the corresponding ONU to the LOID list, as shown below:

NEUTI	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	LOID List	Port	D PON01 ·					
System 😔	_							
PON Port	Add	Refresh	-	LOID	Dee		Calling	
ONU Deny List	15	05	ea	N	o data	word	Seang	
Upstream Bandwidth PON Setting								
LOID List			Add LOI	D	×			
ONU Batch Upgrade			port id	PON01	•			
Batch Configuration			LOID	user	Range: 1-24 characters Range: 0-12 characters			
ONU Device 🚫				Apply	Cancel			
Switch Port				··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··				
MAC Address Table								
Protocol 🚫								
ACL/QoS 🛇								
Route 🚫								
Link Aggregation -			Language: 简体中文 English	Firmware Version : Neutra	al-E04_1_V3.0.0_Rel MAC 3	8 3a 21 10 01 64		

2. On the LOID list page, click the **"Delete"** button to remove the corresponding ONU from the LOID list, as shown below:

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		Port ID	PON01 ·					
System 😔	Add	Defrech						
PON Port		THEIREST	lisert		OID	Password	Settion	
ONU Deny List	1		38 3a 21 28 8a 94		Iser		Delete	
Upstream Bandwidth								
PON Setting								
LOID List			Notice					
ONU Batch Upgrade								
Optical Diagnose			Please confir	rm				
Batch Configuration					and a Consul			
ONU Device 🚫				^	ppiy Cancel			
Switch Port								

5.3.5 ONU Batch Upgrade

Choose **Advanced Setting -> PON Port -> ONU Batch Upgrade**, enter this page,you can upgrade the same type multiple ONUs at one time, as shown below:

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut 🐱	root
Running Status	ONU Batch Upg	rade						
System 🛇	Upgrade Type Manage	ment						
PON Port	Add Delete	ONU Binding Upgrad	le Type					
ONU Deny List	Currently Upgrade Types	 No currently available 	le type of upgrade					
PON Setting	ONU Batch Upgrade							
LOID List ONU Batch Upgrade	Click to select file	Click to s	elect file					
Optical Diagnose	Select Upgrade Type	No currently available	type of upgrade					
Batch Configuration	Port ID	Select	٠					
ONU Device 😡	Apply							
Switch Port								
MAC Address Table								
Protocol 😔								
ACL/QoS 😔								
Route 🚫								
Link Aggregation 🗸			Language : 简体中文 English	Firmware Version : Neutral-E	04_I_V3.0.0_Rel MAC : 38	8:3a:21:10:01:64		

1. Click the **"Add"** button to manually configure the ONU upgrade type, as shown below:

NEUTF	RAL				VLAN	Advanced Setting	
Running Status System S PON Port S ONU Deny List Upstream Bandwidth	ONU Batch Upg Upgrade Type Manag Add Delete Currently Upgrade Type	prade ement ONU Binding Upgrade Ty es: No currently available ty	pe pe of upgrade				
PON Setting LOID List ONU Batch Upgrade Optical Diagnose Batch Configuration ONU Device	ONU Batch Upgrade Click to select file Select Upgrade Type Port ID Apply	Click to selec No currently available type Select •	t file Add at	n ONU upgrade type rade Type Realtek grade type name only consists of Englis Apply	h letters, numbers and "-"		

2. Click **"ONU Binding Upgrade Type"**, select the corresponding upgrade type and the ONU that needs to be upgraded, as shown below:

ONU Batch Upgr	ade		
Upgrade type managen	nent		
Add Delete	ONU bind	ling upgrade type	
Currently upgrade types	: Realtek		
			\mathbf{i}
ONU Batch Upgrade			
Click to select file		Click to select	file
Select upgrade type	Select	•	
Port ID	Select	•	
Apply			

NEUT	RAL	Status		торо	ONU.	Table	VLAN	Ad	dvanced Setting	Shortcut	root
Running Status											
System 😔	Upgrade Type Manageme										
PON Port	Add Delete C	ONU Bind	ding Upgr	ade Type						×	
ONU Deny List	Currently Upgrade Types:	Upgrade Ty	/pe:	Realtek							
Upstream Bandwidth		Doct ID :		DONOA	-						
PON Setting		FOILID.	L	FONUT							
LOID List			Name	Vendor	SN Model	Chip Model	Chip Vendor	Software	Upgrade Type		
ONU Batch Upgrade	Click to select file		ONU01/01	HS		967	479	M473-200504	-		
Optical Diagnose	Select Lingrade Type		ONU01/02			00	00				
Roteh Configuration	ouder opgrade type		ONU01/03	<i></i>		00	00		170		
Batch Conliguration	Port ID :		ONU01/04			00	00	с.	-	-	
ONU Device 🛇	Apply		ONU01/05	-	-	00	00	-	1.1	-	
	rapy		ONU01/06	HSGQ	-	902	479	127CV(1.0.0R02	-		
Switch Port			ONU01/33			00	479	12/0/1.0.0003	-	-	
MAC Address Table					Apply		Cancel		~		

3. Select a file upgrade file and other select upgrade type, select which pon port you want to upgrade.Click "**Apply**", OLT will start to batch upgrade some ONUs.

ONU Batch Upgrade			
Click to select file	C	lick to select file	
Select upgrade type	Select	•	
Port ID	Select	Ψ.	
Apply			

5.3.6 Optical Diagnose

Choose **Advanced Setting -> PON Port -> Optical Diagnose**, enter this page, you can view optical module, PON optical and ONU optical information, as shown below:

🗖 192.168.100.1/#/pon	optical ×	+								-	٥	×
← → C ③ 不幸	全 192.168	8.100.1/#/pon_optica	al							☆	0	0
Ne	etura	l	Status	торо	ONU Table	VLAN	Advanced Setting		Shortcut	rool	ŧ	
Running Status	c	Optical Diag	nose	Refresh								
System (⊘ -											
PON Port (⊘ .	Optical Mod	ule Information	Optical Diagnose	ONU Optical Diagnose							_
ONU Deny List		Port ID	Port State	Module State	Work Temperature	Work Voltage	Transmit Bias	Transmit Po	wer	View Details		
Linctroom Bandu	uidth	PON01	Online	Detected	32.95 C	3.24 V	12.82 mA	4.8612 dBm(3.06	i28 mW)	View Details		
opstream bandw	wam	PON02	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.000	0 mW)	View Details		
PON Setting		PON03	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.000	0 mW)	View Details		
LOID List		PON04	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.000	0 mW)	View Details		
ONU Batch Upgr	ade											
Optical Diagnose												
Batch Configurat	tion											

1. View details of optical module information

NEUT	RAL	Statu	s T	OPO	ONU Table	'LAN	Advanced Setting		Shortcut	root
Running Status		gnose	Refresh							
System 🚫			Port ID: PON01				>			
PON Port	Optical Mo	dule Information	Optical Module State	e	Optical Module Manufactur	er Information				_
			Port State	Online	Vendor Name	Hisense	9			
ONU Deny List	Port ID	Port State	Module State	Detected	Vendor OUI	Unspeci	ified	t Power	View Details	
Under an Dankuldh	PON01	Online	Calibrated	Externally Calibrat	Vendor REV	1.0		3.0628 mW)	View Details	
Opstream bandwidth	PON02	Offline	Galipiated	ed	Vendor PN	LTE430	2M-BC+HW	0000 mW)		
PON Setting	PON03	Offline	Work Temperature	35.49 C	Vendor SN	F98460	03601	0000 mW)		
LOID List			Work Voltage	3.24 V	Date	14-06-2	24			
LOID LIST	PON04	Offline	I ransmit Blas	12.55 MA	Vendor Specific	00000	000000000000	0000 mW)		
ONU Batch Upgrade			Transmit Power	4.8012 dBm(3.002 8 mW)						
Batch Configuration			Onthe of Mandada Otati	- Information	Onthe I Mediate Three heads					
baich conliguration			Optical Module Stat	c information	Optical Module Threshold	arameter	10.00 70.001			
			Module Type	EPON	Temperature warning thres	loid(c)	[-8.00, 75.00]			
			Max Distance	20	Temperature alarm thresho	d(c)	[-13.00, 80.00]			
			Viave Length	Cingle Mede	Voltage warning (meshold(.)	[3.10, 3.50]			
Switch Port			Huer Type	Single Mode	Tx bigs warning threshold(1	[3.00, 3.00]			
			Connector	SPE OF SPE Flus	Tx bias alarm threshold(c)	1	[0.00, 100,00]			
MAC Address Table			Encoding	8B10B	Tx power warning threshold	(c)	[2.50, 7.00]			
			CC Base	142	Tx power alarm threshold/)	[1.50, 8.00]			
Destauri			00 5450	112	Rx power warning threshol	(c)	[-24.95_0.00]			
Protocol					Rx power alarm threshold()	[-26.02.1.00]			
						,	(
ACL/QoS 🛇										
Route										
0										
Link Anaronation			Language : 1	新体中文 English Firm	ware Version : Neutral-F04 V3.0.0	Rel L MAG : 3	38 3a 21 10 01 64			
сик муугеуанон			congaage (And the mighting of Film	10.0.0.000		00.00.21.10.01.04			

2. Read PON module's optical diagnose

NEUTR	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Optical Diagno	ose Port	t ID PON01 · ONI	U ID ONU1/1 •				
System 😔								
PON Port	Optical Module	Information O	ptical Diagnose ONU Opt	tical Diagnose				
ONU Deny List	Here it is the PON Mo	odule's RSSI, you need	select the location of which ONU y	you want to trigger			Refresh	
Upstream Bandwidth	Work Temperature	35.49 °C						
PON Setting	Work Voltage	3.24 V						
LOID LIN	Transmit Bias	12.55 mA						
LOID LIST	Transmit Power	4.861187 dBm						
ONU Batch Upgrade	Receive Power	-40.000000 dBm						
Optical Diagnose								
Batch Configuration								

3. Read ONU optical diagnose, you must refresh first to update data

NEUTR	RAL Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Optical Diagnose	Port ID PON01 •	Refresh				
System 😔							
PON Port	Optical Module Information	Optical Diagnose	ONU Optical Diagnose				
ONI I Denv List	ONU ID	Work Temperature	Work Voltage	Transmit Bias	Transmit Power	Receive Power	
Upstream Bandwidth	ONU01/01	24 °C	3.39 V	16 mA	2.3596 dBm	-14.2713 dBm	
PON Setting							
LOID List							
ONU Batch Upgrade							
Optical Diagnose							
Batch Configuration							

5.3.7 Batch Configuration

Choose Advanced Setting -> PON Port -> Batch Configuration, enter this page, you can configure ONU port VLAN, ONU WLAN, ONU WAN connection.
Note: ONU WLAN and WAN configuration is private protocol and only supports our company ONU.

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Batch	Management Port ID	PON01 V					
System 😔								
PON Port	ONU Port VI	AN WLAN WAN	Connection					-
ONU Deny List	Add							
Upstream Bandwidth		ONU Port ID		Mode		VLAN ID	Setting	
PON Setting				No dat	8			
LOID List								
ONU Batch Upgrade								
Optical Diagnose								
Batch Configuration								
ONU Device 🚫								
Switch Port								
MAC Address Table								
Protocol 🛇								
ACL/QoS 😔								
Route 🛇								
Link Aggregation		Li	inguage : 简体中文 English	Firmware Version : Neutral-E04		38.3a.21.10.01.64		

5.3.7.1 ONU Port VLAN(Only Support SFU)

Enter the ONU batch management page, choose **PON ID** -> **ONU Port VLAN**, and click the "**Add**" button to configure the ONU port VLAN. VLAN with up to 8 ONU port numbers can be configured, as shown below:

NEUTR	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Batch Ma	nagement Port IE	PON01 •					
System 🚫	ONU Port VLAN	WLAN	WAN Connection					
ONU Deny List	Add							
Upstream Bandwidth PON Setting		ONU Port ID	Add		×	VLAN ID	Setting	
LOID List ONU Batch Upgrade			Port ID	PON01				
Optical Diagnose			ONU Port ID VLAN Mode	1 transparent	•			
ONU Device 🛇			VLAN ID		Range: 1-4094			
Switch Port				Apply	Cancel			

5.3.7.2 ONU WLAN(Only Support ONU with WIFI)

Enter the ONU batch management page, choose **PON ID** -> **WLAN**, You can modify the encryption method,SSID name and SSID password. As shown below:

NEUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root					
Running Status	ONU Batch	n Management	Port ID PON01 ·										
System 🚫													
PON Port	ONU Port	VLAN WLAN	WAN Connection					-					
ONU Deny List	ONU ID	Mode 2.4	4G Encryption 2.4G SSID	2.4G Password	5G Encryption	5G SSID 5G Pa	ssword Setting						
Upstream Bandwidth	ONU1/6	2.4G	None	A.N.			- Setting Clear						
PON Setting			Setting wi		^								
LOID List			ONU ID:	ONU1/6									
ONU Batch Upgrade			WLAN Mode:	* 2.4G									
Optical Diagnose			Encryption:	None	•								
Batch Configuration			SSID:		4 - 32 characters								
ONU Device 🚫			Password		8 - 32 characters								
Switch Port				Apply	Cancel								

5.3.7.3 WAN Connection(Only Support HGU)

Enter the ONU batch management page, choose PON ID -> WAN Connection, You can

view the created WAN connections and add new WAN connections.

1. View ONU WAN connections. It shows the WAN connection status of all onus under the PON port.

NEUTRAL		Status	торо	TOPO ONU Table VLAN		Advanced Setting	Shortcu	ut	root				
Running Status	ONU Batch Ma	nagement Port ID PC	0N01 •										
System 😔													
PON Port	ONU Port VLAN WLAN WAN Connection												
ONUL Denvil list	ONU ID	MAC	Status	Configured	VLAN ID	Channel Mode	Connection Type	Description	Setting				
Upstream Bandwidth	ONU01/06	38:3a:21:28:03:03	Offline	0/4	-	-	-		Detail				
PON Setting													
LOID List													

2. Create ONU WAN connections. Select the "**Detail**" button to enter the WAN connection detail interface, then click the "**Add**" button to configure the WAN connection parameters on this interface, as shown below:

NEUTRAL					Advanced Setting	Shorte		
Running Status System ONU PON Port O ONU Deny List Upstream Bandwidth	Detail WAN Connection Add	Refresh Add			× ray Status	Setting	Setting Detail	
PON Setting LOID List ONU Batch Upgrade Optical Disgnase Batch Configuration ONU Device S Switch Port S		Name Channel Mode Connection Type Enable VLAN VLAN ID Port Mapping IGMP Proxy	test Bridge INTERNET D KLAN1 & LAN2 Not concerned	 4-32 characters Range: 1 - 4094. WLAN1 				
MAC Address Table Protocol		Α	pply	Cancel				
Link Aggregation +	Langua	ige:简体中文 English	Firmware Version : Neutral-E0	LV3.0.0_Rel MAC ::	38:3a:21:10:01:64			

3. Delete ONU WAN connections. Select the "**Detail**" button to enter the WAN connection detail interface, then click the "**Delete**" button to remove the WAN connection on this interface, as shown below:

192.168.100.1/#/batch_config	9 × +									- ø ×
← → C ▲ 不安全 1!	92.168.100.1	l/#/batch_config					_		_	☆ θ :
Netu	ral						Advanc	ed Setting	Shortcut	
Running Status	ONU	Batch Mana	gement Port I	D PON01 ·						
System 😔		Detail							×	
PON Port	F	WAN Connecti	ion Add	Refresh						cuinting Catting
ONU Deny List		Name	VLAN ID	Connection Type	Channel Mode	IP Address	Gateway	Status	Setting	Emption Setting
Upstream Bandwidth	-	12345	0	INTERNET	Bridge	0.0.0.0	0.0.0.0	Up	Detail Delete	
PON Setting										
LOID List										
ONU Batch Upgrade										
Optical Diagnose										
Batch Configuration										
ONU Device 😡										
Switch Port										
MAC Address Table										
Protocol 🛇										
ACL/QoS 🚫										

Note: If you delete the WAN connection you just added,wait for 30s.

5.4 ONU Device Management

5.4.1 ONU Basic Info

Select **Advanced Setting** -> **ONU Device** -> **ONU Basic Info**, enter this page, you can view ONU basic information and configure ONU management and other settings, as shown below:

NEUTR	AL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	ONU Basic Info	Port ID	PON01 V ONU ID	ONU1/1				
System 🚫								
PON Port	ONU Info	ONU Alarm						
ONU Device 🔿	ONU Device	Setting ONU Info	Reboot ONU	Deregister ONU	Change Fec Mod	e		
ONU Basic Info	ONU ID	1				ONU Optical Diagnose	Refresh	
ONU Port Config	llid	0				Work Temperature	23 °C	
ONU Multicast	Name	0N001/01				Work Voltage	3.40 V	
ONU Performance	Auth Mode	mac				Transmit Bias	16 mA	
	Auth State	TRUE				Transmit Power	2.3596 dBm	
Switch Port	Status	Online				Receive Power	-14.0561 dBm	
MAC Addross Table	ONU Type							
INAC Address Table	Round Trap Time	98				ONIL Unwords		
Protocol	Distance(m)	6				OND OPgrade		
\smile	MAC	38:3a:21:28:8a:94						
ACL/QoS 😔	LOID	user				Click	to select file	
	Password						Apply	
Route 🚫	Upgrade Type							
Link Aggregation	CTC Version	3.0						
	Software Versions	M473-200504						
	Hareware Versions	XPON						

5.4.1.1 Configure ONU Info

Enter the ONU basic info page, select the corresponding ONU at the top, and click the "**Setting ONU Info**" button to configure the ONU name and description information. As shown below:

NEUTI	RAL	Status	торо с	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		Port ID PON01		ONU1/1 *				
System 🚫		Politib	ONOID	ONO INT				
PON Port	ONU Info	ONU Alarm						
ONU Device		Setting ONU Info	Reboot ONU D	teregister ONU Ch	nange Fec Mode			
ONU Basic Info	ONU ID	1	Cotting ONUL Inf	6	~		Dofrach	
ONU Port Config	llid	0	Setting Oldo III	0			ronom	
ONU Multicast	Name	ONU01/01	ONU ID	ONU1/1		Work Temperature	23 °C	
ONI I Performance	Auth Mode	mac	Name	ONU01/01		Work Voltage	3.40 V	
ONO Performance	Auth State	TRUE	Description			Transmit Blas	16 mA	
Switch Port	Status	Online				Receive Power	-14 0561 dBm	
	ONU Type							
MAC Address Table	Round Trap Time	98	Appl	hu Car	acol			
Protocol	Distance(m)	6	Appi		icor			
U.S. Salar	MAC	38:3a:21:28:8a:94						
ACL/QoS 🛇	LOID	user				Click	to select file	
	Password						Apply	
Route 🚫	Upgrade Type							
Link Annualiza	CTC Version	3.0						
Link Aggregation	Software Versions	M473,200504						
	Hareware Versions	XPON						
		Language	: 简体中文 English Firmwar	re Version : Neutral-E04_1_V3	0.0_Rel MAC:3	8:3a:21:10:01:64		

5.4.1.2 Reboot ONU

Enter the ONU basic info page, select the corresponding ONU at the top, and click the **"Reboot ONU"** button to restart ONU.

5.4.1.3 Deregister ONU

Enter the ONU basic info page, select the corresponding ONU at the top, and click the **"Deregister ONU"** button to let ONU offline. As shown below:

□ 192.168.100.1/#/onu_bar → C ▲ 不安全	ic_in: ×	+ 00.1/#/onu basic info							- 0 2 0
Net	ural		Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	01	NU Basic Info	Port ID PC		ONU1/1 •		_		
System (9 –								
PON Port (ର _	ONU Info	ONU Alarm						
ONU Device	م م		Setting ONU Info	Reboot ONU	Deregister ONU	Change Fec Mode			
		ONU ID	1						Refresh
ONU Port Config		Llid	1						
ONU Multicast		Name	ONU01/01	Mating			Work Temperature	0 °C	
ONI I Performance		Auth Mode	loid	Notice			Work Voltage	0.00 V	
onormance		Auth State	TRUE	Confirm to	deregister onu?		Transmit Dower	inf dBm	
Switch Port (9	Status	Offline				Receive Power	-inf dBm	
		ONU Type				Apply Cancel			
MAC Address Table		Round Trap Time	1329				and the second sec		
Protocol	ລ	Distance(M)	2021						
	9	MAC	38 3a 21 20 22 98						
ACL/QoS (9	LOID					Ch	tk to select file	
		Password						Apply	
Route (\mathfrak{I}	Upgrade Type							
Link Addregation		CTC Version	2.1						
Circle 199-990001		Software Versions	V1.0.1T02						
		Hareware Versions	V1.0						
		Vendor	ZTE						

5.4.1.4 Turn on/off ONU Fec Mode

Enter the ONU basic info page, select the corresponding ONU at the top, and click the **"Change Fec Mode"** button to enable or disable this function. The default setting is disable. As shown below:

Netu	ral				VLAN	Advanced Setting		
nning Status		Ded ID	N04 - 0101	D ONUSU -				
stem 🕟		Politio	NUT • UNUT	D ONOTH .				
N Port	ONU Info	ONU Alarm						
iron 🔘	ONU Device	Setting ONU Info	Reboot ONU	Derecister ONU	Change Fer: Mode			
		and the second distance of the second distance of the		Contraction Constant Contraction	Contractory and Contractory			
	ONU ID	1				ONU Optical Diagnose		Refresh
U Port Config	Llid	1	_			Illing Transmission		
U Multicast	Name	ONU01/01	Notice			Work Veltage	0.00 M	
U Performance	Auth Mode	loid	Trotice			Transmit Rias	0.00 v	
~	Auth State	TRUE	Confirm to	o change fec mode?		Transmit Power	-inf dBm	
th Port 🚫	Status	Offline				Receive Power	-inf dBm	
	ONU Type				Apply Cancel			
Address Table	Round Trap Time	1329				and the second se		
	Distance(M)	2021						
0	MAC	38.3a.21.20.22.98						
QoS 🛇	LOID					Clic	k to select file	
	Password						Apply	
, 🛇	Lingrade Type							
	CTC Marries	24						
Aggregation	CTC Version	2.1						

5.4.1.5 View ONU Optical Diagnose Information

Enter the ONU basic info page, select the corresponding ONU at the top, and click the ONU optical diagnose"**Refresh**" button to view ONU optical power information.

5.4.1.6 Upgrade ONU

Enter the ONU basic information page, select the corresponding ONU at the top, fist click the **"Click to select file"** button to upload the ONU upgrade file, and then click the **"Apply"** button, the ONU will enter the upgrade state. As shown below:

NEU	TRAL	ly.	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		J Basic Info	Port ID	PON01 • ONU ID	ONU1/1 •		-		
System	9 —								
PON Port		ONU Info	ONU Alarm						
ONU Device		J Device	Setting ONU Info	Reboot ONU	Deregister ONU	Change Fec Mod	6		
ONU Basic Info		ONU ID	1				ONU Optical Diagnose	Refresh	
ONU Port Config		llid	0						
ONU Multicast		Name	ONU01/01				Work Temperature	23 'C	
ONU Performance		Auth Mode	mac				Transmit Bias	16 mA	
		Auth State	TRUE				Transmit Power	2 3596 dBm	
Switch Port)	Status	Online				Receive Power	-13.9469 dBm	
		ONU Type							
MAC Address Table		Round Trap Time	98				ONU US STATE		
Protocol	2	Distance(m)	6				ONU Upgrade		
0		MAC	38:3a:21:28:8a:94						
ACL/QoS	9	LOID	user				Click	c to select file	
_		Password						Apply	
Route)	Upgrade Type							
Link Aggregation		CTC Version	3.0						
a	S	oftware Versions	M473-200504						
	н	areware Versions	XPON						

5.4.1.7 View ONU Alarm Information

Choose Advanced Setting -> ONU Device -> ONU Basic Info, enter this page, choose "ONU Alarm" you can view alarm information, as shown below:

N	eut	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	Î	ONU Basic Info	Port ID	PON01 V ONU ID	ONU1/2 •				
System	\odot								
PON Port	\odot	ONU Info	ONU Alarm	WAN Connection					
ONU Device	\odot	[2020/05/07 17:49:0 [2020/05/07 17:49:0	7] Info: ONU 1/2 38:3a 7] Info: ONU 1/2 38:3a	a:21:27:8c:18 ONU link up a:21:27:8c:18 ONU authorization	success				
ONU Basic Info	o								
ONU Port Confi	fig								
ONU Multicast									
ONU Performan	nce								
Switch Port	\odot								
MAC Address Tab	ble								
Protocol	\odot								
ACL/QoS	\odot								
Route	\odot								
Link Aggregation									

5.4.2 ONU Port Config(Only support SFU)

Select Advanced Setting -> ONU Device -> ONU Port Config, enter this page, you can configure ONU port basic functions and VLAN mode. As shown below:

NE	EUTE	RAL	Slatus		торо	ONU Table	9	VLAN	Advanced S	ietting	Shorter	at ->	root
Running Status	Ê	ONU Port Co	onfig Port ID	PON01	ONU ID	ONU1/	1 •						
System	\odot												
PON Port	\odot	ONU1/1 Port I	nfo ONU Port	Configuration									
ONU Device	\odot	ONU Port ID	Auto Negonation	Flow Control	Loop Detect	Enable	down stream rate limit	CIR	PIR	up stream rate limit	Band Width	Status	
ONI L Basic In	1fo	1	Enable	Disable	Enable	Enable	Disable	0	0	Disable	0	Link UP	
ONU Part Car	nfia	2	Enable	Disable	Enable	Enable	Disable	0	0	Disable	0	Link Down	
ONU Put Co	et.	3	Enable	Disable	Enable	Enable	Disable	0	0	Disable	0	Link Down	
ONU Porform	20000	4	Enable	Disable	Enable	Enable	Disable	0	0	Disable	0	Link Down	
Switch Port	\odot	ONU1/1 VLAN	ONU port V	/LAN mode config	uration								
MAC Address T	Table	ON	U Port ID	ONU	port VLAN mode		Default VLAN		Default VLAN P	riority			
	~		1		transparent		0		0				
Protocol	\odot	ON	U Port ID	ONU	port VLAN mode		Default VLAN		Default VLAN P	riority			
ACL/QoS	\odot		2		transparent		0		0				
Route	\odot	ON	U Port ID	ONU	port VLAN mode		Default VLAN		Default VLAN P	riority			
			3		transparent		0		0				
Link Aggregatio	m	ON	U Port ID	ONU	port VI AN mode		Default VI AN		Default VI AN P	riority			
			4	- ONO	transparent		0		0				
									-				
				Language	: 简体中文 English	Firmware Version	: Neutral-E04_I_V3.0.	0_Rel MAC:3	18:3a:21:10:01:64				

5.4.2.1 ONU Port Attribute Config

Enter the ONU port config page, select the corresponding ONU at the top, and click the **"ONU Port Configuration**" button to configure the ONU port attribute parameters, including port negonation, flow control, loop detect, port status, upstream and downstream limits speed, etc. As shown below:

NE	UTR	AL	Status	т	OPO ONU	Table	VLAN	Advar	nced Setting	Shorte	sut	root
Running Status			nfig Port ID	PON01		NU1/1 •						
System	\odot		ing total	10001								
PON Port	\odot		nfo ONU Port	Configuration			-					
ONU Davisa		ONU Port ID	Auto Negonation	Flow Control	ONU Port Configuration	1	0	PIR	up stream rate	limit Band Width	Status	
ONO DEVICE		1	Enable	Disable	ONU Port ID	1	•	0	Disable	0	Link UP	
ONU Basic Info		2	Enable	Disable	Auto Negonation	Enable		0	Disable	0	Link Down	
ONU Port Confi		3	Enable	Disable	Flow Control	Disable	•	0	Disable	0	Link Down	
ONU Multicast		4	Enable	Disable	Loop Detect	Enable	•	0	Disable	0	Link Down	
ONU Performan	ice				Enable	Enable	•					
Switch Port	\odot		ONU port	VLAN mode configur	down stream rate limit	Disable	•					
		ON	U Port ID	ONU p	CIR	0	Kbps	Default V	LAN Priority			
MAC Address Tab	le		1	tri	PIR	Director	Kbps		0			
Protocol					up stream rate limit	Disable	•					
	0	ON	U Port ID	ONU p	Band widen	0	KDps	Default VI	LAN Priority			
ACL/QoS	\odot		2	tri	Apply] [c	ancel		0			
Poute		ON	U Port ID	ONU p	ort VLAN mode	Default VLA	N	Default VI	LAN Priority			

5.4.2.2 ONU Port VLAN Config

Enter the ONU port config page, select the corresponding ONU at the top, and click the "**ONU port VLAN mode configuration**" button to configure the ONU port VLAN mode, VLAN ID, VLAN priority. As shown below:

NEUT				TOPO	ONU	Table	VLAN		Advanced S	Setting	Shortc	ut	root
Running Status	ONU Port Co	nfig Port ID	PON01	ONU ID	10	NU1/1 •							
System 🚫													
PON Port		nfo ONU Port	Configuration										
	ONU Port ID	Auto Negonation	Flow Control	Loop Detect	Enable	down stream ra limit	ite CIR		PIR	up stream rate lim	t Band Width	Status	
<u> </u>	1	Enable	Disable	Enable	Enable	Disable	0		0	Disable	0	Link UP	
ONU Basic Info	2	Enable	Disable	ONU port VI	AN mode o	configuration		×	0	Disable	0	Link Down	
ONU Port Contig	3	Enable	Disable						0	Disable	0	Link Down	
ONU Multicast	ance			ONIL port V	AN mode	1 ·			0	Disable	0	Link Down	
ONO Performance		4 Enable Disable			ault VI AN	100	Range : 1-4094						
Switch Port		ONO poit	VEAN mode comigui	Default VL	AN Priority	0	Range : 0-7						
MAC Address Table	ON	U Port ID	ONU p	ONU po					Default VLAN F	Priority			
		1	tr	8	Apply	Ca	incel		0				
Protocol 🚫	ON	U Port ID	ONU p	ort VLAN mode		Default VLAM			Default VLAN Priority				
ACL/QoS 🚫		2	tr	ansparent		0			0				
Route	ON	U Port ID	ONU p	ort VLAN mode		Default VLAN			Default VLAN F	Priority			
0		3	tr	ansparent		0			0				
Link Aggregation	Link Aggregation ONU Port ID ONU port VLAN mode Default				Default VI AN			Default VI AN F	Priority				
		4	tr	ansparent		0			0				

5.4.3 ONU Multicast

Select **Advanced Setting -> ONU Device -> ONU Multicast.** enter this page, you can configure ONU multicast function, including ONU multicast and multicast vlan. As shown below:

	+ 92.168.100.1/#/onu_multicast							- a × ∾☆⊖8:
Netu	ral	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU	ID ONU1/1 •				
System 😔								
PON Port 😔	ONU Multicast	Multicast VLAN]					
ONU Device 🔗	ONU Multicast Info multicast mode	igmp-snooping	Setting					
ONU Basic Info	Fast Leave	Disable	Setting					
ONU Port Config								
ONU Multicast								
ONU Performance								

5.4.3.1 ONU Multicast Mode

Enter the ONU multicast page, select the corresponding ONU at the top, and click multicast mode "**Setting**" button, as shown below:

NEUT	RAL					Advanced Setting	
Running Status	ONU Multicast	Port ID	PON01 • ONU I	D ONU1/1	•		
System 🚫							
PON Port 🚫	ONU Multicast	Multicast VLAN]				
ONU Device 🔗	ONU Multicast Info multicast mode	rmation igmp-snooping	Setting				
ONU Basic Info	Fast Leave	Disable	Setting				
ONU Port Config							
ONU Multicast			ONU	Aulticast Setting	×		
ONU Performance				multicast mode	amp-saoopiga		
Switch Port				Apply	IC Cancer		
MAC Address Table							

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	ĺ	ONU Multicast	Port ID	PON01 • ONU II	✓ Success				
System	\odot								
PON Port	\odot	ONU Multicast	Multicast VLAN]					
ONU Device	\odot	ONU Multicast Informulticast mode	mation ctc	Setting					
ONU Basic Inf	io 👘	Fast Leave	Disable	Setting					
ONU Port Con	fig								
ONU Multicast	t i								
ONU Performa	ance								

5.4.3.2 ONU Multicast Fast Leave

Enter the ONU multicast page, select the corresponding ONU at the top, and click fast leave "**Setting**" button, as shown below:

■ 192.168.100.1/#/o	nu_multicas	× +								- σ × е ф А :
N	etu	ral	Status	торо	ONU Tab	le	VLAN	Advanced Setting	Shortcut	root
Running Status		ONU Multicast	Port ID	PON01 ·		/1 •				
System	\odot									
PON Port	\odot	ONU Multicast	Multicast VLAN]						
ONU Device		ONU Multicast Info multicast mode	rmation igmp-snooping	Setting						
ONU Basic Inf	io	Fast Leave	Disable	Setting						
ONU Port Con	ifig							_		
ONU Multicast					Fast Leave Setting		×			
ONU Performa	ance				Eact Loavo	Dicablo				
Switch Port	\odot				Apply	Enable Disable	апсет			

NEUTI	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU IE	✓ Success				
System 😔								
PON Port 🚫	ONU Multicast	Multicast VLAN]					
ONU Device	ONU Multicast Info multicast mode	rmation ctc	Setting					
ONU Basic Info	Fast Leave	Enable	Setting					
ONU Port Config								
ONU Multicast								
ONU Performance								

5.4.3.3 ONU Multicast Max Group

Enter the ONU multicast page, select the corresponding ONU at the top, click Multicast VALN -> Multicast Max Group setting, you can set this value. As shown below:

NEU	TRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID P	PON01 • ONU ID	ONU1/1 •				
System	∂							
PON Port	ONU Multicast	Multicast VLAN						
ONU Device	ONU Multicast In multicast mode	formation igmp-snooping	Setting					
ONU Basic Info	Fast Leave	Enable	Setting					
ONU Port Config								
ONU Multicast								
ONU Performance								

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU ID	ONU1/1 +				
System 🚫			-					
PON Port 😡	ONU Multicast	Multicast VLAN					is.	
ONU Device 🔗	port id Multicast Max Group	64		Setting				
ONU Basic Info ONU Port Config	Multicast VLAN Mode	untag		Setting				
ONU Multicast			Multica	st Max Group Setting	×			
Switch Port			Multi	cast Max Group 32				
MAC Address Table				Apply	Cancel			
NELIT	ΡΛΙ	Status	TOPO	ONI L Table	VI AN	Advanced Setting	Shortcut	mot

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU IE	✓ Success				
System 😔								
PON Port 🚫	ONU Multicast	Multicast VLAN	L					
ONU Device 🔗	ONU Port Multicast port id	1 •						
ONU Basic Info	Multicast Max Group Multicast VLAN Mode	32 untag		Setting Setting				
ONU Port Config	Multicast VLAN			Add				
ONU Performance								

5.4.3.4 ONU Multicast VLAN Mode

Enter the ONU multicast page, select the corresponding ONU at the top, click Multicast VALN -> Multicast VLAN Mode Setting, you can set this value. this configuration determines whether the multicast streams forwarded by the ONU port has a VLAN tag. Untag is for stripping the tag, tag is for not stripping the tag, and translate is for converting the VLAN tag.

Example 1: configure multicast VLAN mode tag or untag.

NEUT	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU ID	ONU1/1 +				
System 😔								
PON Port	ONU Multicast	Multicast VLAN						
	ONU Port Multicast port id	1						
ONU Basic Info ONU Port Config	Multicast Max Group Multicast VLAN Mode Multicast VLAN	32 untag	Multicas	Setting Setting	×			
ONU Multicast ONU Performance			Multicas	st VLAN Mode untag	•			
Switch Port				translate				
MAC Address Table				Apply	Cancel			

Example 2: Configure multicast VLAN mode translate ,up to 8 group translation can be configured(CTC standard definition, depending on ONU support).

NEUTI	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU Multicast	Port ID	PON01 • ONU ID	ONU1/1 •				
System 😔								
PON Port 😔	ONU Multicast	Multicast VLAN						-
	ONU Port Multicast	1 •						
ONU Basic Info	Multicast Max Group Multicast VLAN Mode	32 tag		Setting				
ONU Port Config	Multicast VLAN		Multicas	t VLAN Mode Setting	×			
ONU Performance			Multicas	t VLAN Mode translate	•			
Switch Port				svlan 100 cvlan 200				
MAC Address Table				Apply	Cancel			

5.4.3.5 ONU Multicast VLAN

port id Multicast Max Group

Multicast VLAN Mode

Multicast VLAN

ONU Basic Info

ONU Port Config

ONU Multicast ONU Performance

Enter the ONU multicast page, select the corresponding ONU at the top, click Multicast

NEUTRAL				VLAN	Advanced Setting		
Running Status ONU Multic	ast Port ID	PON01 • ONU ID	ONU1/1 •				
PON Port ONU Multic	ast Multicast VLAN						
ONU Device ONU Port Multic	ast 1 •						
ONU Basic Info ONU Port Config Multicast VLAN M ONU Port Config	ode tag		Setting Add				
ONU Multicast		Add Mu	Iticast VLAN	×			
Switch Port		. N	Julticast VLAN 100	Cancol			
MAC Address Table			лфру	Cancer			
NEUTRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ast Port ID	PON01 • ONU IE	✓ Success				
System 😔							
PON Port ONU Multic	ast Multicast VLAN	L					
ONLI Port Multic							

VALN -> Multicast VLAN Add, you can set this value, as shown below:

Note: Only if the ONU multicast mode is configurable as igmp-snooping, when the ONU multicast mode switches from igmp-snooping to another mode, the multicast VLAN will be cleared. Each port can be configured with up to 8 multicast vlan(CTC standard definition, depending on ONU support).

5.4.4 ONU Performance Statistics

32

tag 100

Select Advanced Setting -> ONU Device -> ONU Performance Statistics. enter this page, you can view, configure and clear ONU performance information.

1. Enter the ONU Performance page, select the corresponding ONU at the top, and click the "**Refresh**" button to view the current ONU port statistics, as shown below:

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	Î	ONU	Port ID		LID ONU1/1				
System	\odot	Performance							
PON Port	\odot	ONU Port ID PON	• Re	fresh Clear Pe	rformance View Histo	rical Statistics			
ONU Device	\odot	ONU Performance Status :	Disable ONU	Performance Period : 900	Setting				
ONU Basic In	fo	Downstream DropEvents		0		Upstream DropEvents	0		
ONU Port Cor	nfig	Downstream Octets		1196213		Upstream Octets	24690274		
ONU Multicas	t.	Downstream Frames		18035		Upstream Frames	356002		
ONI L Dorform		Downstream Broadcast Fra	imes	378		Upstream Broadcast Frames	336885		
ONO Periorin	ance	Downstream Multicast Fran	nes	17652		Upstream Multicast Frames	19116		
Switch Port	\odot	Downstream CRC Errored	Frames	0		Upstream CRC Errored Frame	s 0		
	~	Downstream Undersize Fra	imes	0		Upstream Undersize Frames	0		
MAC Address Tr	able	Downstream Oversize Fran	nes	0		Upstream Oversize Frames	0		
		Downstream Fragments		0		Upstream Fragments	0		
Protocol	\odot	Downstream Jabbers		0		Upstream Jabbers	0		
		Downstream Frames 64 oc	tets	17451		Downstream Frames 65 to 127	octets 292		
ACL/QoS	\odot	Downstream Frames 128 to	o 255 octets	286		Downstream Frames 256 to 51	1 octets 6		
		Downstream Frames 512 to	o 1023 octets	0		Downstream Frames 1024 to 1	518 octets 0		
Route	\odot	Upstream Frames 64 octets	5	17535		Upstream Frames 65 to 127 oc	tets 336034		
		Upstream Frames 128 to 2	55 octets	719		Upstream Frames 256 to 511 c	ctets 1702		
Link Aggregatio	n	Upstream Frames 512 to 10	023 octets	0		Upstream Frames 1024 to 151	8 octets 12		
		Downstream Discards		0		Upstream Discards	0		
		Downstream Errors		0		Upstream Errors	0		
		Status Channe Times		0	and I. Planting Marries Martin	504 L 100 0 0 0 L 100 0 000	0440-04-04		

Also you will get the detail of PON & LAN port of ONU.Change the port to other. As show below:

NEUT	NEUTRAL		торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ONU	Port ID	PON01 • ONU ID	ONU1/1 •				
System 🚫	Performance							
PON Port	ONU Port ID PON	• Re	fresh Clear Performan	ce View Histor	ical Statistics			
ONU Device	ONU Performanc 1 2	le ONU	Performance Period : 900	Setting				
ONU Basic Info	Downstream Dr(4		0		Upstream DropEvents	0		
ONU Port Config	Downstream Octets		1196213		Upstream Octets	24690274		
ONU Multicast	Downstream Frames		18035		Upstream Frames	356002		
ONU Performance	Downstream Broadcast Fi	rames	378		Upstream Broadcast Frame	s 336885		
	Downstream Multicast Fra	imes	17652		Upstream Multicast Frames	19116		
Switch Port	Downstream CRC Errorer	Frames	0		Unstream CRC Errored Fran	mes 0		

2. Enter the ONU Performance page, select the corresponding ONU at the top, and click the "**Setting**" button to configure ONU port performance monitor state, as shown below:

NE	EUTI	RAL Status	ТОРО	ONU Te	able	VLAN	Advanced	Setting	Shortcut	root
Running Status		ONUL Port ID	PON01 .		1 .					
System	\odot	Performance	PONOT		1 *					
PON Port	\odot	ONU Port ID PON •	Refresh Clear	Performance	View Historical \$	Statistics				
ONU Device		ONU Performance Status : Disable C	NU Performance Period : 9	00 Setting						
ONU Basic In	nfo	Downstream DropEvents	0				_	0		
ONU Port Co	nfig	Downstream Octets	1196213	Setting ONU Perform	nance Status	\times		24690274		
ONU Multicas	st	Downstream Frames	18035		[managed and			356002		
ONUL Porform		Downstream Broadcast Frames	378	ONU Port ID	PON •		35	336885		
ONO Penolin		Downstream Multicast Frames	17652 Of	U Performance Status	Disable •		5	19116		
Switch Port	\odot	Downstream CRC Errored Frames	0	U Performance Period		s	imes	0		
	-	Downstream Undersize Frames	0	to r chomaneo r choa		5	3S	0		
MAC Address T	Table	Downstream Oversize Frames	0	Apply		Cancel	5	0		
		Downstream Fragments	0					0		
Protocol	\odot	Downstream Jabbers	0		Ups	tream Jabbers		0		
		Downstream Frames 64 octets	17451		Dov	instream Frames 65 to	o 127 octets	292		
ACL/QoS	\odot	Downstream Frames 128 to 255 octets	286		Dov	instream Frames 256	to 511 octets	6		
		Downstream Frames 512 to 1023 octets	0		Dov	Instream Frames 102-	4 to 1518 octets	0		
Route	\odot	Upstream Frames 64 octets	17535		Ups	tream Frames 65 to 1	27 octets	336034		
		Upstream Frames 128 to 255 octets	719		Ups	tream Frames 256 to	511 octets	1702		
Link Aggregatio	n	Upstream Frames 512 to 1023 octets	0		Ups	tream Frames 1024 to	o 1518 octets	12		
		Downstream Discards	0		Ups	tream Discards		0		
		Downstream Errors	0		Ups	tream Errors		0		
		Status Channe Times	0 Language:简体中文	English Firmware Vers	sion : Neutral-E04 I	V3.0.0 Rel MAC :	38:3a:21:10:01:64			

3. Enter the ONU Performance page, select the corresponding ONU at the top, and click the **"View History Statistics"** button to get history performance monitor data, as shown below:

NE	EUTI	RAL Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	5. Å	ONU Port ID		ONU1/1				
System	\odot	Performance		ono n				
PON Port	\odot	ONU Port ID PON •	Refresh Clear Performa	ince View Curren	nt Statistics			
ONU Device	\odot	ONU Performance Status : Disable	ONU Performance Period : 900	Setting				
ONU Basic Ir	nfo	Downstream DropEvents	0		Upstream DropEvents	0		
ONU Port Co	onfig	Downstream Octets	0		Upstream Octets	0		
ONU Multica	st	Downstream Frames	0		Upstream Frames	0		
ONU Desfer		Downstream Broadcast Frames	0		Upstream Broadcast Frames	0		
ONO Periori	nance	Downstream Multicast Frames	0		Upstream Multicast Frames	0		
Switch Port	\odot	Downstream CRC Errored Frames	0		Upstream CRC Errored Frames	0		
	Ŭ	Downstream Undersize Frames	0		Upstream Undersize Frames	0		
MAC Address 1	Table	Downstream Oversize Frames	0		Upstream Oversize Frames	0		
		Downstream Fragments	0		Upstream Fragments	0		
Protocol	\odot	Downstream Jabbers	0		Upstream Jabbers	0		
	Ŭ	Downstream Frames 64 octets	0		Downstream Frames 65 to 127 or	tets 0		
ACL/QoS	\odot	Downstream Frames 128 to 255 octets	s 0		Downstream Frames 256 to 511 c	ctets 0		
	Ŭ	Downstream Frames 512 to 1023 octe	ts 0		Downstream Frames 1024 to 151	B octets 0		
Route	\odot	Upstream Frames 64 octets	0		Upstream Frames 65 to 127 octef	5 0		
	9	Upstream Frames 128 to 255 octets	0		Upstream Frames 256 to 511 octe	ts 0		
Link Aggregatio	n	Upstream Frames 512 to 1023 octets	0		Upstream Frames 1024 to 1518 c	ctets 0		
		Downstream Discards	0		Upstream Discards	0		
		Downstream Errors	0		Upstream Errors	0		
		Status Channe Times	0					

5.5 Port Management

5.5.1 Port Info

Choose **Advanced Setting -> Switch Port-> Port Info**, enter this page, you can view the OLT PON port and uplink port basic information, as shown below:

unning Status ystem Son Port	Port Info Port ID										
ystem 😔	Port ID										
ON Port		Admin Status	Link Status	Auto Negonation	Speed	Duplex	Flow Control	MTU	Medium	Default VLAN	Setting
	PON01	Enable	Link UP	Enable	1000M	full	Disable	1518	Fiber	1	Setting
	PON02	Enable	Link Down	Enable	1000M	full	Disable	1518	Fiber	1	Setting
U Device <	PON03	Enable	Link Down	Enable	1000M	full	Disable	1518	Fiber	1	Setting
	PON04	Enable	Link Down	Enable	1000M	full	Disable	1518	Fiber	1	Setting
vitch Port	GE01	Enable	Link UP	Enable	100M	full	Disable	1518	Copper	1	Setting
lort Info	GE02	Enable	Link Down	Enable	auto	half	Enable	1518	Copper	1	Setting
ortinio	GE03	Enable	Link Down	Enable	auto	half	Enable	1518	Copper	1	Setting
Performance	GE04	Enable	Link Down	Enable	auto	half	Enable	1518	Copper	1	Setting
Port Config	GE05	Enable	Link Down	Disable	1000M	full	Enable	1518	Fiber	1	Setting
ort VLAN	GE06	Enable	Link Down	Disable	1000M	full	Enable	1518	Fiber	1	Setting
oop Detection	GE07	Enable	Link Down	Disable	1000M	full	Enable	1518	Fiber	1	Setting
ort Isolation	GE08	Enable	Link Down	Disable	1000M	full	Enable	1518	Fiber	1	Setting

5.5.2 Performance

Choose **Advanced Setting -> Switch Port-> Performance**, enter this page, you can view and clear the OLT PON port and uplink port statistic information, as shown below:

NE	UTI	RAL	Stat	lus	торо	ONU Table	VLAN	Ad Ad	vanced Setting	Sho	ortcut	root
Running Status	ĺ	Performa	ince									
System	\odot	Port ID	Recieved Bytes	Recieved Frames	Recieved Discard	Recieved Error	Transmits Bytes	Transmits Frames	Transmits Discard	Transmits Error	Setting	
PON Port	0	PON01	27912791	367729	351739	0	11826399	30198	0	0	Detail Clear	
	0	PON02	0	0	0	0	1488410	13538	0	0	Detail Clear	
ONU Device	\odot	PON03	0	0	0	0	1488410	13538	0	0	Detail Clear	
	Ŭ	PON04	0	0	0	0	1488410	13538	0	0	Detail Clear	
Switch Port		GE01	12049638	32008	1917	0	8742764	61205	0	0	Detail Clear	
Destints		GE02	0	0	0	0	0	0	0	0	Detail Clear	
Portinio		GE03	0	0	0	0	0	0	0	0	Detail Clear	
Performance		GE04	0	0	0	0	0	0	0	0	Detail Clear	
Port Config		GE05	0	0	0	0	0	0	0	0	Detail Clear	
Port VLAN		GE06	0	0	0	0	0	0	0	0	Detail Clear	
Loop Detection	n	GE07	0	0	0	0	0	0	0	0	Detail Clear	
Port Isolation		GE08	0	0	0	0	0	0	0	0	Detail Clear	
/AC Address Ta Protocol	able											
ACL/QoS	\odot											
Route	\odot											
.ink Aggregatior	1								101			

5.5.3 Port Config

Choose Advanced Setting -> Switch Port-> Port Config, enter this page, you can first select the corresponding port at the top of the page, and then you can configure port parameters, including admin status, link status, auto negonation, speed, duplex mode, and MTU, default VLAN, port description, broadcast/multicast/unicas storm control and port mirroring functions. As shown below:

NEU	TRAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port Config		Refresh					
System 😔	Port ID: PC	DN01 • Link S	Status: Link UP	Admin Status: Enable				
PON Port	Switch port ba	asic configuration	0	Storm Control	0	Mirror		
ONU Device 😔	Admin Status	Enable •		Broadcast 512	pps	Destination Port Select	•	
Switch Port	Link Status Auto Negonatio	Link UP		Multicast 0 Unicast 0	pps	Type Select	•	
Port Info	Speed	1000M *			Apply		Flush Apply	
Performance	Duplex	Full •						
Port Config	Flow Control	Disable •						
Port VLAN	MIU.	1518						
Loop Detection	Default VLAN	+iber						
Port Isolation	DUNUM TO UT							
MAC Address Table			Apply					
Protocol								
ACL/QoS 📀								
Route 🛇								
Link Aggregation			Language · 節体中文 i	English I. Firmware Version : Ne	utraLE04 LV300 Rel L MAC 38	39 21 10 01 64		

Note: The MTU default value is 1518, which can be configured according to the actual situation of the network. Broadcast/multicast/unicast storm control, with PPS as the unit, 0 means off storm suppression function.

5.5.4 Port VLAN Configuration

Choose **Advanced Setting -> Switch Port-> Port VLAN**, enter this page, you can configure port VLAN parameter. As shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 ·	Refresh				
System 😔								
PON Port 😔	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 🛇	Port Type Default VLAN	Hybrid Setting 1 Setting						
Switch Port	Tagged							
Port Info	Untagged							
Performance	Add VLAN	Remove VLAN						
Port Config								
Port VLAN								
Loop Detection								
Port Isolation								
MAC Address Table								
Protocol 🛇								
ACL/QoS 😔								
Route 😔								
Link Aggregation			angunga : Strict Caslish	L Einnunge Version : Neutral E		0.2-2140.01464		

5.5.4.1 Port VLAN Config

1. **Configure the port VLAN type:** enter the port VLAN page, select the interface to be set at the top, click the port type "**Setting**" button, you can configure the port VLAN to hybrid, access and trunk modes, as shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 •	Refresh				
System 😔								
PON Port 🚫	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 🚫	Port Type Default VLAN	Hybrid Setting 1 Setting						
Switch Port	Tagged							
Port Info	Untagged				×			
Performance	Add VLAN	Remove VLAN	Port ID	PON01				
Port Config			Port T	vpe Hybrid	•			
Port VLAN				Access	Canad			
Loop Detection				Hybrid	Cancer			
Port Isolation								

2. **Configure port default VLAN**: enter the port VLAN page, select the interface to be set at the top, click the default VLAN "**setting**" button, modify the default port VLAN here, and the port default VLAN is 1. As shown below:

NEUT	RAL	Status	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID P	ON01 •	Refresh				
System 🚫								
PON Port 😡	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 🛇	Port Type Default VLAN	Hybrid Setting 1 Setting						
Switch Port	Tagged							
Port Info	Untagged				×			
Performance	Add VLAN	Remove VLAN	Port IE	PON01				
Port Config			Defaul	t VLAN 100				
Fort VLAN				Apply	Concel			
Loop Detection				Арриу	Calicer			
Port Isolation								

3. Add VLAN to this port: enter the port VLAN page, select the interface to be set at the top, click the "Add VLAN" button, you can add VLAN to this port and select the vlan tag or untag mode, as shown below:

NEUT	RAL	Status	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 ·	Refresh				
System 🚫								
PON Port 😔	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 😡	Port Type	Hybrid Setting						
Switch Port	Tagged	Sound	Add		0 ×			
Port Info	Untagged		Port ID	PON01				
Performance	Add VLAN	Remove VLAN	Port Type	Hybrid				
Port Config			VLAN List	101				
Port VLAN			VLAN Mo	te Tagged •				
Loop Detection								
Port Isolation				Apply	Cancel			
MAC Address Table				APP J	Concor			

4. **Delete VLAN from this port:** enter the port VLAN page, select the interface to be set at the top, click the **"Remove VLAN"** button, you can delete VLAN from this port, as shown below:

NEUT	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 +	Refresh				
System 🚫								
PON Port 🛇	VLAN Config	VLAN Translate	VLAN QinQ					
	Port Type Default VLAN	Hybrid Settin 1 Settin	ng l					
Switch Part	Tagged		Delete		0 ×			
Port Info	Untagged		Port ID	PON01				
Performance	Add VLAN	Remove VLAN	Port Ty	e Hybrid				
Port Config			VLAN L	st 101				
Port VLAN			VLAN N	ode Tagged	,			
Loop Detection								
Port Isolation				A	Connel			
MAC Address Table				Афру	Cancon			

5.5.4.2 VLAN Translate

Enter the port VLAN page, select the interface to be set at the top, and then select VLAN translate, click the **"Add**" button below, you can create port translation, as shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 +	Refresh				
System 🚫								
PON Port 😡	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 🚫	Old VLAN	New VLAN VLAN Priority	Add	-				
Switch Port			A	ld	×			
Port Info			Old	VLAN 100				
Port Config			New	VLAN 101				
Port VLAN			VLA	N Priority	•			
Loop Detection Port Isolation				Apply	Cancel			

5.5.4.3 VLAN QinQ

Enter the port VLAN page, select the interface to be set at the top, and then select VLAN QinQ, click the **"Add"** button,here you can add the port QinQ, support the configuration of a single CVLAN, and also support the configuration of the CVLAN range, as shown below:

NEUT	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Port VLAN	Port ID	PON01 +	Refresh				
System 🚫								
PON Port 😔	VLAN Config	VLAN Translate	VLAN QinQ					
ONU Device 🚫	CVLAN (CVLAN Start CVLAN End	SVLAN SVL	N Priority	Add			
Switch Port			Add		×			
Port Info			CV	AN 100				
Performance			CV	.AN Start				
Port Config			CV	.AN End				
Port VLAN			SV	.AN 200				
Loop Detection			SV	AN Priority -	*			
Port Isolation				Apply	Cancel			

NEUTI	RAL					Advanced Setting	
Running Status	Port VLAN	Port ID	PON01 ·	Refresh			
System 🚫							
PON Port	VLAN Config	VLAN Translate	VLAN QinQ				
ONU Device 🚫	CVLAN C	CVLAN Start CVLAN En	SVLAN SVLA	N Priority	Add		
Switch Port			Add		×		
Port Info			CVL	AN			
Performance			CVL	AN Start 100			
Port Config			CVL	AN End 110			
			SVL	AN 200			
Loop Detection			SVL	AN Priority -	•		
Port Isolation				Apply	Cancel		
MAC Address Table							

5.5.5 Loop Detection

This function is to process the loop that appears in the network to prevent the loop from affecting the services, and it is necessary to detect the user-side loop.After the user-side loop detection function is turned on, the system will automatically detect the user-side loop.

When the loop is detected, the occurrence of the loop will be stopped and an alarm will be issued.

Choose **Advanced Setting -> Switch Port-> Loop Detection**, enter this page, you can configure port loop detection function. As shown below:

■ 192.168.100.1 ← → C	/#/loop_detect A 不安全 19	× +							- 0 ×
	Netu	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Stat	us	Loop Detection							
System	\odot	PON Loop Detection	Uplink Loop Detectio	n					
PON Port	\odot	Loop Detect Status	Disable	Modify					
ONU Device	\odot								
Switch Port	\odot								
Port Info									
Performant	ce								
Port Config	,								
Port VLAN									
Loop Detec	tion								
Port Group									

5.5.5.1 PON Loop Detection

1. Introduction of PON loop detection function:

PON loop detection function is turned on by default. There are three conditions of loop detection processing:

(1) When a loop occurs on the same ONU port or connected device, the PON loop detection will not be triggered because the ONU port loop detection function is turned on by default.

(2) If loop occurs between different ONU in the same PON port, when the P2P function is turned off (by default), only ring alarm will be issued, and ONU will not be added to the blacklist. When the P2P function is turned on, an alarm is issued for the loop and an ONU of the loop is added to the blacklist.

(3) When the PON port isolation function is turned on (by default), only ring alarm will be issued, and ONU will not be added to the blacklist. When the PON port isolation function is turned off and the default VLAN of the two PON ports are the same, the ring alarm will be issued and one of the ONU of the loop will be added to the blacklist.

Note:

1-> PON loop detects the blacklist ONU and saves the configuration without automatically removing the blacklist or in manual recovery mode. After reboot the device, the ONU will be permanently on the blacklist and the blacklist needs to be removed manually.

2-> In manual authentication mode, loop detection is added to the blacklist and manual authentication is required before re-online.

2. **PON loop detection parameter configuration:** enter the loop detection page, click the **"Modify"** button, here you can enable or disable the function, when configuring the enable status, you can modify the corresponding parameters, as shown below:



(1).Loop detect status: The default is the enable state. If the optional configuration disable, the PON loop detection function will not take effect after configuration.

(2).Loop detect interval:This parameter is to configure the PON loop detection packet sending interval, and send a loop detection packet in 5 seconds by default.

(3). Loop detect recover mode: This parameter is to configure whether to automatically restore and remove the blacklist after the loop ONU is added to the blacklist. The default is automatic recovery mode, manual recovery mode is optional;

(4).Auto recover time: This parameter only takes effect when the loop detection recovery mode is Auto, and the default is automatic recovery for 30 seconds.

(5).Manual recover: This configuration is only available when the loop detects that the recovery mode is Manual, and ONU is removed from the blacklist.

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	5	Loop Detection							
System	\odot	PON Loop Detection	on Uplink Loop (Detection					
PON Port	\odot	Loop Detect Status	Enable	Modify					
ONU Device	\odot	Loop Detect Interval Recover Mode	5 s	Modify Apply Ca	ancel				
Switch Port	\odot	Auto Recover Time	Auto Manual	Modify					
Port Info		Loop Detection Infe	ormation Ref	resh					
Performance					No mo	ro data			
Port Config									
Port VLAN									
Loop Detection	on								
Port Isolation									

3. Enter the loop detection page, where you can view the PON loop detection information, as shown below:

Loop detection information Ref	resh		
PON ID / ONU ID	Status	ONU status	Loopback PON ID / ONU ID
1/ 1	Loop-Detect	Add Black List	4/1
4/ 1	Loop-Detect	-	1/1

5.5.5.2 Uplink Loop Detection

1. Introduction of uplink loop detection function:

The loop detection function of the uplink port is turned on by default, and there are three conditions for loop detection processing:

(1). When the spanning tree protocol is enabled, the uplink loop detection does not take effect, and only when the spanning tree protocol is disabled will the uplink loop detection take effect.

(2). If a loop occurs with the same uplink port, directly link down the uplink port;

(3). When the default VLAN is different at the same time, the loop alarm occurs, and don't link down the port. When the default VLAN is same, the loop alarm occurs and Link Down one of the ports.

2. **Configuration of uplink loop detection parameters**: enter the loop detection page, select the uplink loop detection, click **"Modify"** button, here you can enable or disable the function, when the enable status is configured, the corresponding parameters can be modified, as shown below:

NEUT	TRAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Loop Detection	n						
System 🚫	PON Loop Detec	tion Uplink Loop D	etection					
PON Port	Loop Detect Status	Enable •	Apply Ca	ancel				
ONU Device	Loop Detect Interval Recover Mode	5 s Auto	Modify					
Switch Port	Auto Recover Time	30 s	Modify					
Port Info	Loop Detection Ir	Iformation Refr	esh					
Performance				No more	data			
Port Config				NO INC.	o data			
Port VLAN								
Loop Detection								
Port Isolation								

(1).Loop detect status:The default is the enable state. If the optional configuration disable, the uplink loop detection function will not take effect after configuration.

(2).Loop detect interval:This parameter is to configure the uplink loop detection packet sending interval, and send a loop detection packet in 5 seconds by default.

(3). Loop detect recover mode: This parameter is to configure whether to automatically restore the link down port to link up. The default is automatic recovery mode, manual recovery mode is optional;

(4).Auto recover time: This parameter only takes effect when the loop detection recovery mode is Auto, and the default is automatic recovery for 30 seconds.

(5).Manual recover: This configuration is only available when the loop detects that the recovery mode is Manual, and the link down port will be link up.

NE	UTF	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	Loop Detection							
System	\odot	PON Loop Detection	n Uplink Loop Dete	ction					
PON Port	\odot	Loop Detect Status	Enable •	Apply C	ancel				
ONU Device	\odot	Loop Detect Interval Recover Mode	5 s	Modify Apply C	ancel				
Switch Port	\odot	Auto Recover Time	Auto Manual	Modify	_				
Port Info		Loop Detection Info	rmation Refres	1					
Performance	_			_	No more	a data			
Port Config	_								
Port VLAN	_								
Loop Detection									
Port Isolation									

3. Enter the loop detection page, select "uplink Loop Detection" here to view the uplink port loop detection information, as shown below:

Port ID Status Port Status Loopback port GE03 Loop-Detect - GE04	Loop detection information Ref	resh		
GE03 Loop-Detect - GE04	Port ID	Status	Port Status	Loopback port
	GE03	Loop-Detect		GE04
GE04 Loop-Detect Blocked GE03	GE04	Loop-Detect	Blocked	GE03

5.5.6 Port Group

Select **Advanced Setting** -> **Switch Port** -> **Port Group** to enter this page to configure port isolation and inter-working functions. As shown below:

192.168.100.1/	/#/port_group	× +							- a ×
← → C 🚺	▲ 不安全 19	2.168.100.1/#/port_group							÷ 0 0
	Netu	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running State	us	Port Group			✓ Setting Success				
System	\odot		0.00						
PON Port	\odot	PON Port Isolation	Add Port	Delete Port					
ONU Device	\odot	PON Isolate Port Member:	PON01,PON02	PON03,PON04					
Switch Port	\odot								
Port Info		Uplink Port Isolation	Add Port	Delete Port					
Performanc	:e	Uplink Isolate Port Member:	-						
Port Config									
Port VLAN									
Loop Detec	tion								
Port Group									

5.5.6.1 Port Isolation

Enter the port group page, the current port group mode is isolation mode, you can click the **"Add Port**" and **"Delete Port**" buttons to configure port isolation. By default, PON port isolation is enabled and uplink port isolation is disabled. As shown below:

192.168.100.1/#/	/port_group	× +									- 5 ×
← → C ▲	不安全 19	2.168.100.1/#/port_group									* 🖯 🔾
N	letu	ral						AN	Advanced Setting	Shortcut	
Running Status	Î	Port Group									
System	\odot		-								
PON Port	\odot	Port Group Mode: Isolation PON Port Isolation	Setting Add Port	Delete Port							
ONU Device	\odot	PON Isolate Port Member:	PON01,PON	02,PON03,PON04							
Switch Port				Durin Duri							
Port Info			AbsPort	Add Port					×		
Performance		Uplink Isolate Port Member:									
Port Config				Port ID	GE01	GE02	□ GE03	GE04			
Port VLAN					XGE01	XGE02	CGE03	XGE04			
Loop Detection	on				Apply		Can	cel			
Port Group											

5.5.6.2 Port Inter-working

Enter the port group page, click the "**Setting**" button, select the inter-working mode. Enter the inter-working mode setting page, configure the inter-working group, first select the ingress port, and then select the egress port, the port group member ports can inter-communicate and isolate from the ports outside the group. As shown below:

■ 192.168.100.1/#/port_group ← → C ▲ 不安全 1	× + 92.168.100.1/#/port_group							- σ × * Θ Ο
Netu	iral					Advanced Setting		root
Running Status	Port Group							
System 🚫	Port Group Mode: Isolation	Setting						
PON Port		Add Port	Delete Port					
ONU Device 🚫	PON Isolate Port Member:	PON01,PON02	PON03,PON04					
Switch Port								
Port Info		Add Port	Delete Port					
Performance	Uplink Isolate Port Member:		Setting			-		
Port Config			Port Group	Mode: Inter-working	•			
Port VLAN				Inter-working	Cancel			
Loop Detection					лрру Сансен			
■ 192.168.100.1/#/port_group ← → C ▲ 不安全 1	× + 92.168.100.1/#/port_group							- σ × \$\ 0 0
	× + 92.168.100.1/#/port_group	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	– σ × ☆ ⊖ O
	× + 92.168.100.1/#/port_group	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	- or x ★ ⊖ O root
192168.100.1/#/port_group ← → で ▲ 不安全 1 Netu Running Status System	x + 92168.100.1/#/port_group Iral Port Group	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	- σ × ☆ ⊖ O root
192168.100.1/#/port.group ← → @ ▲ #### 1	x + 92.168.100.1/#/port_group ITEAL Port Group Port Group Mode: Inter-woo	Status king Setting	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	- d X ÷ 0 0 root
192.168.100.1/#/port_group ← → C ▲ ★★★★ 1 Netuo Running Status System ··· PON Port ··· ···	x + SIG81001/P/port_group Port Group Mode Inter-wo Port Group Mode Inter-wo Port Mapping Table	Status king Setting rg Reset	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	- σ × ★ ⊖ O root
192.164.103.1/4/jost_group ← → C ▲ F#2 1	x + 22.168.100.1/P/port_group ITEL Port Group Port Group Mode Inter-wor Port Mapping Table	Status king Qotteg ng Resat	торо	ONU Table	vlan Eginos	Advanced Setting	Shortcut	- σ × ★ θ 0 root
192.164.103.1/4/jort_group ← →	x + 22.168.100.1/#/port_group ITEL Port Group Port Group Mode Inter-wor Port Mapping Table Inter- Port Mapping Table Inter- Port Mapping Table Inter-	Status king Setting ng Reset	TOPO	ONU Table	VLAN Egiess editiged/geological Xgeot X	Advanced Setting	Shortcut	x C - C
ID2 192.168.103.1/P/jport_group ← → C ▲ TREE 1 Running Status System ○ ● ○ ● ○ ● ○ ● ○ ● ○ ● ○ ● ○ ● ○ ● ○ ●	x + V Vert Group Port Group Mode: Inter-wor Port Group Mode: Inter-wor Port Mapping Table Ingress PoNN3 PONN3 PONN3 PONN3 PONN3	Status king Setting ng Reset	TOPO Set Port	ONU Tabio Gł	VLAN Egross 501 (GE02 (GE03 (GE04 XOEO) X	Advanced Setting KGE02 XGE03 XGE04 XGE02 XGE04 XGE04 XGE04 XGE04 XGE04 XGE04 XGE04 XGE04 XGE05 X	Shortcut	x C - C
ID2:163.103.1/#/jord_group ← → C ▲ TRME 1 Running Status System ·	+ Port Group Port Group Mode: Inter-wol Port Group Mode: Inter-wol Port Mapping Table Ingress PONN1 PONN2 PONN3 PONN4 PONN3 PONN4 PONN3 PONN4 PON4	Status king Settroj Pg Retat	TOPO Set Port	CNU Tablo Gr	VLAN Egiross E01.GE02.GE03.GE04.XGE01.X	Advanced Setting	Shotcut	rod
ID2 192163.103 //#/jord_group ← → C A F## 1 Nettu Running Status System · PON Port · ONU Device · Switch Port · Port Info Performance Port Config ·	x + 22.168.100.1/#/port_group IT al Port Group Port Group Mode Inter-wol Port Mapping Table at PortMapping Table at PON01 PON03 PON03 PON04 GE01 GE02	Status King Ederg Pg Reck	TOPO Set Port Ingress: PON	CNU Table Gl 101 • N02 PON3	VLAN Egross E01.GE02.GE03.GE04.XGE01.≯	Advanced Setting GGE02:XGE03:XGE04 XGE02:XGE03:XGE04 AE04 32:XGE03:XGE04 22:XGE03:XGE04 22:XGE03:XGE04	Shortcut	x O X
ID1 192.168.103.1/#/jord_group IO1 2014.103.1/#/jord_group IO1 2014.103.1/#/jord_group Running Status System PON Port ONU Device ONU Device Port Info Port Info Port Config Port Config Port VLN	x + 92.166.100.1/P/port_group IT al Port Group Mode Interven Port Agroup Mode Interven Port Mapping Table Intervent Port Intervent Intervent Port Mapping Table Intervent Port Mapping T	Status King Geneg Ng Reat	TOPO Set Port Ingress: PON PO Egress: * CE	CNU Table GI 101 • N02 • PON3 22 # GE3	VLAN Egiross 201.GE02.GE03.GE04.XGE01.X 201.GE02.GE03.GE04.XGE01 201.GE02.GE03.GE04.XGE01	Advanced Setting GE022XXE003 XCE04 XE04 3ZXGE03XCE0 3XCE	Shortcut	rod
E 192.164.100.17//jord_group C → C → C → Tele 1 C → Tele 1	x + 22.16.100.1/P/port_group IT Cl Port Group Mode Inter-won Port Group Mode Inter-won Port Mapping Table Cent Ingress Ingress Ponvo2 Ponvo3 Ponvo3 Cent Geo3 GEO4	Status King Berley Ng Reat	TOPO Set Port Ingress: PON PON Egress: # OE # XG	ONU Table GI 401 • N02 PON33 02 # OR33 02 # GE033	VLAN Epross 01 GE02 GE03 GE04 XGE01 X © GE04 ¥ GE01 ¥ GE04 ¥ XGE01 ¥ XGE04	Advanced Setting GGE02/XGE03/XGE04 X BE04 BE04 BE04 32/XGE03/XGE0 32/XGE03/XGE0 32/XGE03/XGE0 32/XGE03/XGE0 32/XGE03/XGE0 32/XGE03/XGE0	Shortcut	root X
E 192.164.103.194/port_group C → C ▲ Tele 1 International Status System ONU Device ONU Device ONU Device ONU Device Port Info Performance Port Config Port VLAN Loop Detection Port Consp	x + 2164100.1/P/port_group Port Group Mode Inter-wo Port Group Mode Inter-wo Port Group Mode Inter-wo Pot Mapping Table Inter- Pot Mapping Tab	Status	TOPO Set Port Ingress: PON Egress: # GE # XG	ONU Table Gl 401 • N02 P PONGS 02 # GE03 C2 # GE03	VLAN Egress 201 (5 602 (5 603 (5 604 X0691) 201 (5 602 (5 603 (5 604 X0691) 201 (5 604 (5 8 504) 201 (5 604 (5 8 504)) 201 (5 604) 201 (5 604) 2	Advanced Setting	Shortcut	
Image: System Image: System PON Port Image: System ONU Device Image: System PON Port Image: System ONU Device Image: System Port Info Image: System Port Info Image: System Port Config Port VLAN Loop Detection Port VLAN NaCe Ardress Tables Image: System	x + 2.163.001//P/port_group Port Group Port Group Mode Inter.exo Port Mapping Table PON03 PON04 CE01 CE01 CE03 CE03 CE04 XGE01 XGE02 XGE02 XGE03	Status Krng Breng Rg Reng Rg Reng	TOPO Set Port Ingress: PON Egress: X GE X X3	CNU Table CH R01 • N02 PON03 02 # GE03 02 # GE03 E02 # XGE03	VLAN Egress 2010/06/02/06/03/06/04 X/06/01 # 06/04 # X/06/01 # X/06/04 # X/06/04	Advanced Setting	Shortcut	

5.6 MAC Address Table

5.6.1 MAC Address Age Time

Choose **Advanced Setting** -> **MAC Address Table**, enter this page and click "**Setting**" button to modify the MAC address table age time. The default MAC address age time is 300S. As shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	MAC Address Ta	able						
System 😔	Age Time : 300	Setting						
PON Port 😔	Are Time : kecends	range	0. 10-1000000 Ar	nlv Cancel				
ONU Device	Age time : pocorde	interge.	., 10 100000	ouncor				
Switch Port	Detail							
MAC Address Table	Add MAC F	IUSH MAC						
MAC Address Table	Query Method: MAG	C Address Type	al v					

5.6.2 Add Static MAC Address

Choose Advanced Setting -> MAC Address Table, enter this page and click "Add MAC" button, and select the MAC address type as static MAC, as shown below:

NE	UTR	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		MAC Address Table							
System	\odot	Aug. 200	Callina						
PON Port	\odot	Age time : 500	Setting						
ONU Device	\odot	Detail							
Switch Port	\odot	Add MAC Flush M	AC	Add MAC		×			
MAC Address Ta	ble	Query Method: MAC Addr	ess Type 🔹 all	MAC Address Type	Static Static	•			
		Index	MAC	MAC	Blackhole	ex: 00:00:00:00:00:00	MAC Address Type	Delete	
Protocol	\odot	1	e4 54 e8 bf 4f	VLAN ID		range: 1-4094	Dynamic	Û	
	_	2	10.44.00 c6.38				Dynamic		
ACL/QoS	\odot	3	c4.06.83.32.8	Port ID	PON01	•	Dynamic		
-	0	4	28.d2.44.18.42	Apr	ply	Cancel	Dynamic		
Route	\odot	5	b0:e1 7e.83 bb				Dynamic		
Link Aggregation		6	52:71:54 f0 78				Dynamic		

5.6.3 Add Blackhole MAC Address

Choose Advanced Setting -> MAC Address Table, enter this page and click "Add MAC" button, and select the MAC address type as blackhole MAC, as shown below:

1 92.168.100.1/#/	mac_mgmt	× +							- 0	×
← → C ▲	不安全 192	2.168.100.1/#/mac_mgmt							☆ €	9 :
N	letui	'al Status	т	горо	ONU Table	VLAN	Advanced Setting	Shortcut	root	
Running Status		MAC Address Table								
System	\odot	Age Time : 300 Settin	ng							
PON Port	\odot									
ONU Device	\odot	Add MAC Flush MAC								
Switch Port	\odot	Query Method : MAC Address Type	• all	MáC áddress Tune	Blackhole		~			
MAC Address		Index	140	mino nuuress type	Diackinois		MACAddama	Tere Delete		
Protocol	\bigcirc	Index	58:20:59:65	MAC	11.22.33.44.55.66	ex: 00:00:00:00:00:00	Dynamic	Type Delete		
	0	2	38:38:21:20	VLAN ID	100	range: 1-4094	Dynamic			
ACL/QoS	\odot	3	28:d2:44:f8	Port ID	PON01	•	Dynamic			
Douto	0	4	38:3a 21:27		_		Dynamic			
Route	\odot	5	e8:9f;ec:9e	Арр	ly	Cancel	Dynamic			
Link Aggregatio	n	6	e4:54:e8:c6				Dynamic			
		7	10:79:59:e0:70	0:74	1	GE01	Dynamic			

5.6.4 Delete MAC Address

Choose Advanced Setting -> MAC Address Table, enter this page and click "Flush MAC" button. In the pop-up option box, you can select the port number or VLAN ID to delete the corresponding MAC, as shown below:

NE	UTF	RAL	Status	тс	OPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		MAC Address	Table							
System	\odot	Are Time : 300	Setting							
PON Port	\odot		County							
ONU Device	\odot	Detail		12						
Switch Port	\odot	Add MAC	Flush MAC		Flush MAC			×		
MAC Address Ta		Query Method:	MAC Address Type *	all	Flush Method	MAC Address Type MAC Address Type				
		Index		MAC	MAC Address Type	Port ID VLAN ID		MAC Address Type	Delete	
Protocol	\odot	1	e4.	54:e8:bf:4f				Dynamic		
		2	10:4	14:00:c6:38				Dynamic		
ACL/QoS	\odot	3	c4:	06:83:32:8f				Dynamic		
	~	4	28	d2:44:f8:42				Dynamic		
Route	\odot	5	b0:e	e1:7e:83:bb	Appl	y Can	cel	Dynamic		
		6	52:	71:54:f0:78:ep		1	GEUI	Dynamic		

NE	UTF	RAL	Status	ļ,	торо	ONU Table	1	VLAN	Advance	d Setting	Shortcut	root
Running Status		MAC Address	Table									
System	\odot	Age Time : 300	Setting	1								
PON Port	\odot											
ONU Device	\odot	Detail	FUSIN MAC						-			
Switch Port	\odot	Ourse Matheda	FIGSTINAG		Flush MAC				×.			
MAC Address T		Query method.	MAG Address Type *	31	Flush Method	Port ID	•					
		Index		MAC	MAC Address Type	all	•		MAC A			
Protocol	\odot	1	e4;	54 e8 bf 4f		Static		PON03	D	ynamic		
		2	10.4	44.00 c6.38	Port ID Select All	all		GE02	D	ynamic		
ACL/QoS	\odot	3	c4.1	06 83 32 8f		GE03	GE04	GE05	D	ynamic		
	~	4	28%	d2:44:18:42		GEUG	GEUI	GEUG	D	ynamic		
Route	\odot	5	b0.e	e1 7e 83 bb	Appl	y .	Cance	Ы	D	ynamic		
		6	50-	74 6 4 10 70					0	unamir		

NE	UTF	RAL Statu	s	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		MAC Address Table							
System	\odot	Age Time : 300	Setting						
PON Port	\odot	_							
ONU Device	\odot	Add MAC Flush MAC							
Switch Port	\odot	Query Method: MAC Address T	vpe v all	Flush MAC			×		
MAC Address Ta				Flush Method	MAC Address Type				
-	0	Index	MAC	MAC Address Type	Dynamic		MAC Address Type	Delete	
Protocol	\odot	1	e4:54:e8:bf:4f		Static		Dynamic		
10110-0	\sim	2	10:44:00:c6:38		ali		Dynamic		
ACL/QoS	\odot	3	c4:06:83:32:81				Dynamic		
Deate	\sim	4	28.d2.44.18.42				Dynamic		
Route	\odot	5	b0:e1:7e:83:bb	Арр	ly Ca	ncel	Dynamic		
		6	52 71 54 10 78	90		(artu)	Dynamic		

5.6.5 View MAC Address

Choose Advanced Setting -> MAC Address Table, enter this page and click "Flush MAC" button. In the pop-up option box, you can query the corresponding MAC address according to the MAC address type, port ID, VLAN ID, and MAC address, as shown below:

192.168.100.1/#/	mac_mgmt	× +						- o ×
← → C ▲	不安全 19	2.168.100.1/#/mac_mgm	t					± ⊖ :
N	letu	ral	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut root
Running Status		MAC Addres	s Table					
System	\odot	Age Time : 300	Setting					
PON Port	\odot	Detail		-				
ONU Device	\odot	Add MAC	Flush MAC					
Switch Port	\odot	Query Method:	MAC Address Type •	all				
MAC Address T	Table		MAC Address Type Port ID		-			
	~	Inc	VLAN ID MAC	MAC	VLAN ID 🔺	Port ID 🔺	MAC Address T	rpe Delete
Protocol	\odot			58:20:59:65:db:d7	1	GE01	Dynamic	<u> </u>
ACLI0:00	\bigcirc	2	2	38:3a:21:20:80:01	1	GE01	Dynamic	<u> </u>
ACD/Q03	\odot	3	3	28:d2:44:f8:42:6a	1	GE01	Dynamic	<u> </u>
Route	\bigcirc	4	L.,	38:3a:21:27:68:96	1	GE01	Dynamic	<u> </u>
	٢	5	5	e8:9f:ec:9e:00:01	1	CPU	Dynamic	<u> </u>
Link Aggregation	n	6	3	e4.54:e8:ce:9f:95	1	GE01	Dynamic	Ū.
00 0		ī		f0:79:59:e0:70:74	1	GE01	Dynamic	ini i

5.7 Protocol

5.7.1 RSTP

Choose **Advanced Setting** -> **Protocol** -> **RSTP**, enter this page, you can view and configure RSTP protocol parameters, as shown below:

NE	EUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Short	ut 🗸	
Running Status	5	RSTP								
System	\odot	Rstp Bridge	Setting							
PON Port	\odot	Status		Disable	9					
ONU Device	\odot	Rstp Mode		rstp						
	Ŭ	Root Bridge Prior	ity	32768						
Switch Port	\odot	Root Bridge Addr	BSS	38:3a:2	21:10:01:65					
		Designated Bridg	e Priority	32768						
IAC Address 1	Table	Designated Bridge BDDU Max Area	e Address	38:38:	21:10:01:65					
	0	BPDU Max Age		20						
Protocol	\odot	Forward Delay		15						
RSTP		BPDU Hold Coun	t	3						
IGMP		IST Port Cost		0						
DHCP MSTP		Rstp Port	Setting port priority	Dalh Cast	Edan Status	Admin 1 inl/Tonne	Ower LinkTown	Data	Cinture	
ACL/QoS	\odot	GE01	Port Phoney	Path Cost	NEdge	Aumin Link type	Shared	Nono	Down	
	0	GE02	0	0	NEdge	P2P	Shared	None	Down	
oute	\odot	GE03	0	0	NEdge	P2P	Shared	None	Down	
	5	GE04	0	0	NEdge	P2P	Shared	None	Down	
ink Aggregatic	n	GE05	0	0	NEdge	P2P	Shared	None	Down	
		GE06	0	0	NEdge	P2P	Shared	None	Down	
		GE07	0	0	NEdge	P2P	Shared	None	Down	
		0500	^	0	x17 d	000	o	Alexan	Davia	

1. Set RSTP bridge parameters: Enter the RSTP page and click the "**Setting**" button to set RSTP global parameters, including RSTP status, mode, root bridge priority, etc., as shown below:

NE	UTF	RAL					Advanced Setting	Shortcut	
Running Status		RSTP							
System	\odot		Setting						
PON Port	\odot	Status		Disable					
ONU Device	\odot	Rstp Mode Root Bridge Pri	ority	Setting rstp gloat	al	×			
Switch Port	\odot	Root Bridge Ad Designated Brid	dress Ige Priority	Status	Enable	×			
MAC Address Ta	able	Designated Brid BPDU Max Age	lge Address	Rstp Mode Root Bridge Priority	rstp 32768				
Protocol		BPDU Hello Tin Forward Delay	ne	BPDU Max Age	20	range: 6-40			
RSTP		BPDU Hold Co	unt	Forward Delay	15	range: 4-30			
IGMP DHCP		IST Port Cost Rstp Port	Setting port priority	BPDU Hold Count	3	range: 1-255			
motP		Port ID	Port Priority	Path Com	onanao		Oper LinkType	Role Status	

If setting successfully, you will get some result, it shows below:

N	EUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shorte	cut - root	
Running Statu:	s	RSTP			✓ Setting success					
System	\odot	Data Daidas	0.0							
PON Port	\odot	Status	Setting	En	blo					
ONU Device	\odot	Rstp Mode		rstp	Die					
Switch Port	Ø	Root Bridge Pr Root Bridge Ad	iority Idress	327	68 3a:21:10:01:65					
MAC Addross	Tabla	Designated Bri Designated Bri	dge Priority dge Address	327	68 3a:21:f0:01:65					
MAC Address		BPDU Max Age	3	20						
Protocol	\odot	Forward Delay		15						
IGMP		BPDU Hold Co IST Port Cost	unt	3						
DHCP		Rstp Port	Setting port priority							
	0	Port ID	Port Priority	Path Cost	Edge Status	Admin LinkType	Oper LinkType	Role	Status	
ACLIQOS	\odot	GE01	128	200000	NEdge	Auto	P2P	Designated	Block	
	~	GE02	128	2000000	NEdge	Auto	P2P	None	Down	
Route	\odot	GE03	128	2000000	NEdge	Auto	P2P	None	Down	
		GE04	128	20000000	NEdge	Auto	P2P	None	Down	
Link Aggregati	on	GE05	128	20000	NEdge	Auto	P2P	None	Down	
		GE06	128	20000	NEdge	Auto	P2P	None	Down	
		GE07	128	20000	NEdge	Auto	P2P	None	Down	
		0500	400	Language:简体中文 En	glish Firmware Version : Neu	tral-E04 V3.0.0 Rel MAC : 3	38 3a 21 10 01 64	×1	D	

2. Set RSTP port parameters: Enter the RSTP page and click the **"Setting port priority"** button to set RSTP port parameters, including port priority, path cost, edge status and link type, as shown below:

NE	EUT	RAL						Advanced Setting				
Running Status	5	RSTP										
System	\odot											
PON Port	\odot		Setting									
		Status			Enable							
ONU Device	\odot	Rstp Mode		_	rstp							
		Root Bridge Price	ority		Setting rstp port	oriority	×					
Switch Port	\odot	Root Bridge Add	iress									
		Designated Brid	ige Priority		Port ID	GE01						
MAC Address	Table	Designated Brid	ige Address		Port Priority	128						
		BPDU Max Age			Bath Cost	200000	100001 0 200000000					
		BPDU Hello Tim	ie		Fair Cost	200000	range: 0-20000000					
		Forward Delay			Edge Status	NEdge	•					
		BPDU Hold Cou	int		Admin LinkType	Auto	•					
IGMP		IST Port Cost										
DHCP												
METD			Setting port priority		Apply		Cancel					
MOTE		Port ID	Port Priority	Path Cost	Edge Sta	itus	Admin LinkType	Oper LinkType	Role	Status		
ACL/QoS	\odot	GE01	128	200000	NEdge	9	Auto	P2P	Designated	Block		
		GE02	128	20000000	NEdge	9	Auto	P2P	None	Down		
Route	\odot	GE03	128	20000000	NEdge)	Auto	P2P	None	Down		
		GE04	128	20000000	NEdge)	Auto	P2P	None	Down		
Link Aggregatio	on	GE05	128	20000	NEdge)	Auto	P2P	None	Down		
		GE06	128	20000	NEdge	9	Auto	P2P	None	Down		
		GE07	128	20000	NEdge	9	Auto	P2P	None	Down		
		0500	400	00000	Alt Jul		A.4.	000	**	D		

5.7.2 IGMP

Select **Advanced Setting -> Protocol -> IGMP**, enter this page, you can view and set IGMP protocol parameters, the default mode is disable.

NE	EUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	s	IGMP							
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONU Device	\odot	IGMP Information	Setting						
Switch Port	\odot	Mode	uisable						
MAC Address	Table								
Protocol	\odot								
RSTP									
IGMP									
DHCP									
MSTP									
ACL/QoS	\odot								
Route	\odot								
Link Aggregatio	on								
				Language : 简体中文 English	Firmware Version : Neutral-E	04_1_V3.0.0_Rel MAC:3	38:3a:21:10:01:64		

5.7.2.1 IGMP Snooping Mode

Enter the IGMP management page, click the "**setting**" button, and configure the IGMP mode as **Snooping** in the pop-up option box, as well as the protocol policy, fast leave and group aging time parameters. As shown below:

IGMP					
Information	Multicast table	multicast VLA	IGMP Setting		×
	Setting		Mode	snooping	•
Mode	disable		protocol policy	pass	•
			fast leave	disable	•
			group aging time	260	s
			robustness	2	
			general response time	10	s
			general query interval	125	s
			query source IP	192.168.100.1	
			query source MAC	38:3a:21:2c:03:0b	
			special query interval	1000	ms
			special response time	800	ms
			special query number	2	
			Apply	Cance	el 🚽

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	IGMP			✓ Setting success				
System 😔	-							
PON Port	Information	Multicast Table	Multicast VLAN					
ONU Device 😡	IGMP Information	Setting						
-	Mode	snooping						
Switch Port	Protocol Policy	disable						
MAC Address Table	Group Aging Ti	me 260 s						
invio viduress rubie								
Protocol 🔗								
RSTP								
IGMP								
DHCP								
MSTP								

- 1> protocol policy: Whether IGMP protocol packets outside the multicast program are allowed to pass.
- 2> fast leave: When enabled fast leave, the device receives the IGMP leave packets and immediately disconnects the multicast service.When the device is not enabled fast leave, the multicast streams will be disconnected when the device fails to receive IGMP report packets within the maximum response time of general query or specific query.Default is not enabled.
- 3> group aging time: When the device does not receive IGMP report packets within the aging time, it is deemed that the user has gone offline and disconnected the user multicast service streams. The default is 260 seconds.

5.7.2.2 IGMP Proxy Mode

Enter the IGMP management page, click the "**setting**" button, and configure the IGMP mode as **Proxy** in the pop-up option box, as well as the protocol policy, quick leave, robustness, general response time, general query interval, query source IP and query source MAC address and other parameters. As shown below:

IGMP				
Information	Multicast Table Multicast VI	At IGMP Setting		×
	Setting	Mode	proxy	•
Mode	disable	Protocol Policy	pass	•
		Fast Leave	disable	•
		Group Aging Time	260	s
		Robustness	2	
		General Response Time	10	s
		General Query Interval	125	s
		Query Source IP	192.168.100.1	
		Query Source MAC	e8:9f;ec:9e:00:01	
		Special Query Interval	1000	ms
		Special Response Time	800	ms
		Special Query Number	2	
		Apply	Cancel	

NEU	TRA	NL st	atus T	горо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	SMP		~	Setting success				
System) -								
PON Port		Information Multica	st Table Multicast \	VLAN					
ONU Device) IG	MP Information	ietting						
0		Mode	proxy						
Switch Port	2	Fast Leave	disable						
_		Protocol Policy	pass						
MAC Address Table		Robustness	2						
	_	Query Source IP	192.168.100.1						
Protocol	0	Query Source MAC	38:3a:21:f0:01:65						
_		General Response Time	10 s						
RSTP		General Query Interval	125 s						
IGMP		Special Response Time	800 ms						
DHCP		Special Query Interval	1000 ms						
MSTP		Special Query Number	2						

- 1> protocol policy: Same as above
- 2> fast leave: Same as above
- 3> robustness: This configuration can be used when the user wants to adjust the robustness coefficients, depending on the stability of the network. After setting, the system uses the robustness coefficient to confirm the aging time of the multicast user. The robustness coefficient is set to enhance the robustness of the system, which directly affects the aging time of multicast users and also affects the number of times to send generic group query messages. If a subnet may lose packets, the robustness factor should be added to ensure the stability of multicast users. The default is 2.
- 4> general response time: When the general query packet is sent, all online users will respond to the report packets within the response time, which is 10 seconds by default.
- 5> general query interval: When the device is in proxy mode, the device will send a general query packet at each general query interval. The default is 125 seconds.
- 6> query source IP: Configure the general query packet sent to the user side by the multicast router or the source IP address of a specific query packet, default is 192.168.100.1.
- 7> query source MAC: Configure the general query packet sent to the user side by the multicast router or the source MAC address of a specific query packet, default is device inbound address.
- 8> special query interval: For a specific program in accordance with the command to set the interval of send a specific set of queries to confirm that whether the user is watching the show, not received the report user feedback message, that the user is not in watching the show, the system is no longer sent to the user, the program

flow to avoid users do not have television still receive multicast flows and the waste of bandwidth.The default is 1000 milliseconds.

- 9> special response time: A specific set of queries is sent N times for a particular program (N is set by this command) to confirm that the user is watching the program, default is 2 times.
- **10**>special query number: After a specific query packets are sent, all online users will respond to the report packets within the response time, which is 800 milliseconds by default.

5.7.2.3 Multicast VLAN

Enter the IGMP page and select the "**Multicast VLAN**" option to view and configure the multicast VLAN related parameters .

Ne	etu	al	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		IGMP							
System	\odot	-							
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONU Device	\odot	Multicast VLAN	Create						
Switch Port	\odot								
MAC Address Table	9								
Protocol	\odot								
RSTP									
IGMP									
DHCP									
MSTP									
ACL/QoS	\odot								
Route	\odot								
Link Aggregation									

1. Click the **"Create"** button to add a multicast VLAN. The VLAN must exist to be successfully created. As shown below:

IGMP			
Information Multicast Table Multicast VLA			
Multicast VLAN Create			
	Create Multicast VLAN	×	
	VLAN ID 100 Apply Cancel	J	

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	IGMP			✓ Create Success				
System 😔								
PON Port	Information	Multicast Table	Multicast VLAN					
ONU Device 🚫	Multicast VLAN	Create						
Switch Port	Description	MVLAN100					Setting Delete Setting	
	Router Port	-						
MAC Address Table	Multicast Unknown	Policy Transparent						
Protocol	Program	IP Address		Program Descrip	ion		Setting	
RSTP								
IGMP								
DHCP								
MSTP								

2. Configure the multicast VLAN description information, as shown below:

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status								
System 🚫								
PON Port	Information Mu	Iticast Table	Multicast VLAN					
ONU Device	Multicast VLAN	Create						
0	Multicast VLAN	100 •					Setting Delete	
Switch Port	Description	MVLAN100	Setting	Multicast VI AN Desc	rintion V		Setting	
	Router Port		outing	multicust v Den Desti	in the second seco			
MAC Address Table	Multicast Unknown Policy	Transparent	VLA	N ID 100				
Protocol 🔗	Program	IP Address	Desc	ription Server			Setting	
RSTP								
IGMP								
DHCP				Apply	Cancel			
MSTP								

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	IGMP			✓ Success				
System 😔								
PON Port	Information	Multicast Table	Multicast VLAN					
ONU Device \bigotimes	Multicast VLAN	Create					Satting Delate	
Switch Port	Description	Server					Setting	
	Router Port	-						
MAC Address Table	Multicast Unknown	Policy Transparent						
Protocol	Program	IP Address		Program Descrip	otion		Setting	
RSTP								
IGMP								
DHCP								
MSTP								

3. Configure IGMP router port. The IGMP router port is uplink ports, to connect IGMP program servers.

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut -	raot
Running Status	IGMP							
System 🚫								
PON Port	Information	Multicast Table	Multicast VLAN					
ONU Device 😡	Multicast VLAN	Create	•				Setting Delete	
Switch Port	Description	Server	Setting		×		Setting	
MAC Address Table	Router Port Multicast Unknown	- Policy Transparent	VLAN	ID 100				
Protocol 🔗	Program	IP Address	Туре	Router Port	•		Setting	
RSTP			Router	Port 1				
			The routing	port is only for the uplink port, 1	for GE1, and 2 for GE2			
DHCP				Apply	Cancel			
MSTP								

NE	EUTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	ŝ	IGMP			✓ Add Success				
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONU Device	\odot	Multicast VLAN	Create						
Switch Port	\odot	Description	Server	•				Setting Delete Setting	
MAC Address T	Tabla	Router Port	GE01						
mino radicas i	TUDIO	Multicast Unknown	Policy Transparent		Program Doccri	intion		Setting	
Protocol	\odot	Program	IF Address		Program Desch	pion		Johning	
RSTP									
IGMP									
DHCP									
MSTP									

4. Configure multicast unknown policy. Configure the suppression strategy for unknown multicast traffic. If the business flow hosts unknown multicast for a specific purpose, it is configured for pass through. Unknown multicast with no special purpose consumes bandwidth and is typically configured to be discarded.

NEUT	RAL					Advanced Setting	Shortcut	
Running Status								
System 😔								
PON Port	Multicast VLAN	Multicast Table	Multicast VLAN					
ONU Device 🚫	Multicast VLAN	100				-	Setting Delete	
Switch Port	Description	Server	Setting		×		Setting	
	Router Port	GE01	MANUD	100				
MAC Address Table	Multicast Unknown Pol	icy Transparent	VLANID	100				
	Program	IP Address	Mode	Setting	•		Setting	
Protocos			Type	Multicast Unkr	nown Polic *			
RSTP			Multicast Unknow	n				
			Policy	Discard	•			
DHCP			۸¢	ply	Cancel			
MSTP								

NEUT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut –	root
Running Status	IGMP			✓ Add Success				
System 😔								
PON Port	Information	Multicast Table	Multicast VLAN					
ONU Device 🚫	Multicast VLAN	Create					Sotting Dalata	
Switch Port	Description	Server					Setting	
MAC Address Table	Router Port	GE01						
Braharal	Program	IP Address	_	Program Descri	ption		Setting	
RSTP								
IGMP								
DHCP								
MSTP								

5. Configure IGMP program. Add the program library, users can switch to the multicast VLAN program channel.

NE	UTI	RAL	Status	ТОРО	ON	U Table	VLAN		Advanced Setting	Shortcut	root
Running Status											
System	\odot										
PON Port	\odot	Information	Multicast Table	Multicast VLAN							
ONU Device	\odot	Multicast VLAN	Create	. s	etting			×	1	Setting Delete	
Switch Port	\odot	Description	Server		VLAN ID	100				Setting	
		Router Port	GE01		Mode	Add	•				
MAC Address Tal	ble	Multicast Unknown I	Policy Discard		Туре	Program	•				
Destauri		Program	IP Address		Program	224.1.1.1	~ 224.1.1.2			Setting	
Protocol					Effective addr	ess range:224.0.1.	-239.255.255.255				
RSTP				Pro	gram Description	cctv5					
IGMP											
DHCP											
MSTP					Apply		Cancel				
ACL/QoS	\bigcirc										

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	5	IGMP			✓ Add Success				
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					-
ONU Device	\odot	Multicast VLAN	100 •					Setting Delete	
Switch Port	\odot	Description	Server					Setting	
MAC Address T	Table	Router Port Multicast Unknown Po	GE01 licy Discard						
Protocol		Program	IP Address 224.1.1.1 - 224	1.1.2	Program Descr cctv5	ption		Setting Delete	
RSTP									
IGMP									
DHCP									
MSTP									

5.7.2.4 Multicast Table

Enter the IGMP page and select the "**Multicast Table**" option to view and configure the multicast table related parameters.

N	etui	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut 🗠	root
Running Status		IGMP					-		
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONU Device	\odot	Multicast Table	Add Static Table	Delete All Dynamic Table					
Switch Port	0	Mult	icast IP	Multicast VLAN	Action	F	Port Members	Router Port	Setting
ownerror	•					Ho data			
MAC Address Tab	Ne								
Protocol	\odot								
RSTP									
IGMP									
DHCP									
MSTP									
ACL/QoS	\odot								
Route	\odot								
Link Aggregation									

1. Configure static multicast table, click "Add Static Table" as shown below:

NE	UTI	RAL					VLAN	Advanced Setting		
Running Status		IGMP								
System	\odot									
PON Port	\odot	Information	Multicast Table	Multicast VLAN						•
ONU Device	\odot	Multicast Table	Add Static Table	Delete All Dynamic Table	Ac	tion	Port Members	Router	Port Setting	
Switch Port	\odot			Add St	atic Table	No data				
MAC Address T	lable			Mu	Iticast IP	224.1.1.1				
Protocol				Multi	cast VLAN	100				
RSTP				F	Port ID	PON01				
IGMP					Apply		Cancel			
DHCP										
MSTP										

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	5	IGMP			✓ Setting success				
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONU Device	\odot	Multicast Table	Add Static Table	Delete All Static Table Dele	te All Dynamic Table				
Switch Port	\odot	224.1.1.1		Multicast VLAN 100	Static	Port Members PON01	GE	01 Delete	
MAC Address 1	Table								
Protocol									
RSTP									
IGMP									
DHCP									
MSTP									

2. Delete Multicast table, as shown below:

Ν	etur	ral	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		IGMP							
System	\odot								
PON Port	\odot	Information	Multicast Table	Multicast VLAN					
ONUL Davies	0	Multicast Table	Add Static Table	Delete All Static Table Delete	All Dynamic Table				
ONU Device	\odot	Multic	ast IP	Multicast VLAN	Action	Po	ort Members	Router Port	Setting
Switch Port	\odot	224.1	.1.1	100	Static		PON01		Delete
MAC Address Ta	ble								
Protocol	\odot								
RSTP									
IGMP									
DHCP									
MSTP									

Note: there are static multicast table items and dynamic multicast table,static multicast table do not aging.

5.7.3 DHCP

Select **Advanced Setting** -> **Protocol** -> **DHCP**, enter this page, click the "**Setting**" button to enable DHCP, and then you can configure the DHCP function parameters. This device supports the configuration of DHCP Snooping function, DHCP Relay function, DHCP Option82 function and DCHP Server function. As shown below:

192.168.100.1 /	₽/dhcp	× +							- a ×
€ → C A	Netu	ral	Status	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Statu	IS								
System	\odot								
PON Port	\odot	DHCP Status: Disable	Setting						
ONU Device	\odot								
Switch Port	\odot								
MAC Address	Table			Set		×			
Protocol				DHCP Status	Disable	•			
RSTP					Apply Enable	- 1			
DHCP MSTP									

5.7.3.1 DHCP Relay

It works in three layers, which enables the request message of DHCP client to be sent to the specified DHCP server. Default status is disable.

Tips: Before enable the DHCP relay function, you need to ensure that the DHCP function is enabled and the IP route function is also enabled.Besides, to enable the configuration of related functions of the DHCP relay, you need to ensure that the DHCP relay function is enabled.
NE	UT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	5	DHCP							
System	\odot								
PON Port	\odot	DHCP Status: Enable	Setting						
ONU Device	\odot	DHCP Relay	DHCP Option82	DHCP Snooping	DHCP Server				
Switch Port	\odot	Relay Status, Disable	Setting						
MAC Address 1	Table								
Protocol	\odot								
RSTP									
IGMP									
DHCP									
ACL/QoS	\odot								
Route	\odot								
Link Aggregatic	n			M17					

1. Configure DHCP Relay policy. Click the "**Setting**" button of the relay policy, and in the pop-up option box, you can select standard policy (default policy) or Option60 policy. As shown below:

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status		DHCP							
System	\odot	DHCD Status: Epoble	Calling						
PON Port	\odot	Drice Status. Enable	Setting						
ONU Device	\odot	Relay Status: Enable	Soffing	DHCP Snooping	DHCP Server				
Switch Port	\odot	Relay Policy: standard	Setting	Add Server Addre	55				
MAC Address Tab	ble		VLAN ID	S	et	×	ver Address	Setting	
Protocol				Re	lay Policy Standard(VLANIF)	•			
RSTP					Option60	Cancel			
IGMP									
DHCP									
MSTP									

There are two strategies for DHCP relay:

(1)Standard policy(default policy):Finding DHCP server address baesd on VLAN.

(2)Option60 policy:Finding server address according to the option60 region value carried by the DHCP client.

Tips: Switching policy will clear the server table established by another policy.

2. Click **"Add Server Address**" to add the corresponding server address in the pop-up option box. The device supports a maximum of 32 server tables, as shown below:

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	5	DHCP			✓ Set Success				
System	\odot								
PON Port	\odot	DHCP Status: Enable	Setting						
ONU Device	\odot	DHCP Relay	DHCP Option82	DHCP Snooping	DHCP Server				
Switch Port	\odot	Relay Status: Enable Relay Policy: standard	Setting	Add Server Address					
MAC Address 1	Table		VLAN ID			Se	rver Address	Setting	
Protocol			101			193	2.168.88.100	Delete	
RSTP									
IGMP									
DHCP									
MSTP									

5.7.3.2 DHCP Option82

In order to enhance the security of DHCP server and improve the IP address configuration policy, a DHCP option is proposed. Default status is disable.

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	DHCP							
System 🚫	DHCP Status: Enable	Setting						
PON Port 😔	DHCP Relay	DHCP Option82	DHCP Snooping	DHCP Server				
ONU Device \bigotimes	Option82 Status:	Enable	Setting					
Switch Port	Option82 Policy:	Reserve	Setting					
MAC Address Table	Sub-Option 1(Circuit IE): VLAN+PORT	Set		×			
	Sub-Option 2(Remote	ID): OLT MAC	Option82	Policy Reserve				
RSTP				Apply Drop Replace				
IGMP								
MSTP								

There are three strategies for DHCP Option82:

- Reserving policy(default policy): If the client sends a request message without option82 information, OLT will bring option82 information. If the client sends it with option82 information, OLT will not process the direct forwarding server.
- 2) Dropping strategy: The client sends the request message without option82 information, and the OLT does not process the direct forwarding server. If the client sends the message with option82 information, the OLT strips the option82 information and forwards it to the server.
- 3) Replacement strategy: If the request message sent by the client does not contain option82 information, OLT will not process the direct forwarding server. If the message sent by the client contains option82 information, OLT will replace the option82 information and then forward the server.

5.7.3.3 DHCP Snooping

The DHCP snooping function records the user's IP / MAC information by monitoring the message interaction between the DHCP client and the server. Default status is disable.

Tip: To open the DHCP snooping function, you need to ensure that the DHCP function is turned on.To open the DHCP snooping related function configuration, you need to ensure that the DHCP snooping function is turned on.

NEU	ITRAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	DHCP							
System 🤆	DHCD Status: Epoble	Calling						
PON Port		Setting						
ONU Device	DHCP Relay	DHCP Option82	DHCP Snooping	DHCP Server				-
Switch Port	Client Address Check	Enable Set	ling					
MAC Address Table	Response Wait Time	60 s Setting						
Protocol	Trust Ports	Add	Delete					
RSTP	Snooping Table	Clear	Refresh					
IGMP	IP Ac	dress	MAC	Port ID	VLAN ID	Lease Time(s)	Status	
DHCP					No data			
MSTP								

Add trust ports

NEUT	RAL						N	Adva	anced Setting		
Running Status	DHCP										
System 😔	DHCP Status: Enable	Setting									
PON Port 🛇	DHCP Relay	DHCP Ontion82	DHCP Snoopi	DHC	Sonier						
ONU Device 🚫	Snooping Status	Enable Set	ling	ig Dilo							-
Switch Port	Client Address Check	Enable Set	ting								
MAC Address Table	Response Wait Time	60 s Setting	Add					×			
Protocol 🔗	Trust Ports	Add	Trust Ports:	 GE01 GE05 	GE02 □ GE06	GE03	✓ GE04				
RSTP	Snooping Table	Clear		Apply		Cancel					
IGMP	IP Addr	ess						_	Lease Time(s)	Status	
DHCP						No data					
MSTP											

This configuration is only available for the upper interface. The trust port allows to receive all DHCP messages, and the non trust port does not allow to receive DHCP response messages. All ports are not trusted by default.

5.7.3.4 DHCP server

Default status is disable.Please turn off the function of DHCP relay, DHCP option82 and DHCP snooping before opening.

After enabling, you can start to configure the DHCP server. The default is in band management network segment, and the interface is the logical port vlanif-1.

NEU	JTR	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	Î	DHCP							
System	\odot								
PON Port	\odot	DHCP Status: Enable	Setting						
ONU Device (\odot	DHCP Relay	DHCP Option82	DHCP Snooping	DHCP Server				
Curitate Dana		Server Status	Enable	OFF	Setting				
Switch Polit	⊗	Interface: Starting IP Address:	vlanif-1 192 168 99 20	Setting					
MAC Address Table	e	End IP Address:	192.168.99.254						
Protocol (\odot	IP Mask:	255.255.255.0						
RSTP		Priamry DNS Server:	192.168.99.1						
IGMP		Secondary DNS Server							
DHCP		Gateway:	192.168.99.1						
MSTP		Lease Time(s):	86400						

NE	EUTI	RAL	Status	торо с	NU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		DHCP							
System	\odot	DHCD Status: Enable	Solting						
PON Port	\odot		County						
ONU Device	\odot	DHCP Relay	DHCP Option82 DHC	Setting		×	_		
Switch Port	\odot	Interface:	vlanif-1	Starting IP Address	192.168.99.20	ex. 127.0.0.1			
MAC Address T	fable	Starting IP Address:	192.168.99.20	End IP Address	192.168.99.254	ex. 127.0.0.1			
		End IP Address:	192.168.99.254	IP Mask	255 255 255 0	ex. 255.255.255.0			
Protocol		IP Mask:	255.255.255.0	Priamry DNS Server	192.168.99.1	ex. 127.0.0.1			
RSTP		Priamry DNS Server:	192.168.99.1	Secondary DNS Server		ex. 127.0.0.1			
IGMP		Secondary DNS Server		Gateway	192.168.99.1	ex: 127.0.0.1			
DHCP		Gateway:	192.168.99.1	Lease Time(s)	86400	Range: 60-864000			
MSTP		Lease Time(s):	86400						
ACL/QoS	\odot			Apply	Can	;el			

5.7.4 MSTP

MSTP is compatible with STP and RSTP, which can not only converge rapidly, but also make the traffic of different VLAN forward along their own paths, thus providing a better load sharing mechanism for redundant links. Through MSTP, a switching network is divided into multiple regions, each region forms multiple spanning trees, and the spanning trees are independent of each other. Each spanning tree is called MSTI (multiple spanning tree instance), and each region is called MST region (multiple spanning tree region).Default status is disable.

Choose **Advanced Setting -> Protocol -> MSTP**, enter this page, click the "**Setting**" button to enable MSTP, and then you can configure the MSTP parameters. As shown below:

192.168.100.1/#/mstp	x +						- σ ×
Net	Jral Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	MSTR				_		
System)						
PON Port	MSTP Status: Disable		Setting				
ONU Device)						
Switch Port)						
MAC Address Table		Setting		×			
Protocol		Statu	s Disable				
RSTP		0.000	Disable	cel			
IGMP DHCP			_	_			
MSTP							
MSTP							
MSTP Status:	Enable	Setting					
MST Region	CIST MSTI Port Config						
Format Selector:	0						
Regional Name:	E89FEC9E0001	Setting	Reset				
Revision Level:	0	Setting					
Configuration Digest	0xAC36177E50283CD4B83821D8AB26DE	20					

5.7.4.1 MST Region

It is composed of multiple devices in the switching network and the network segments between them. A LAN can have multiple MST regions. Each MST region is directly or indirectly connected. Multiple devices can be divided into the same MST region by MSTP configuration command.

111 巡用 U Google 🐮 田家	- N. STROUGH S ONUSSER	月20月1日 Hanc H3C S3600歳91はス 1995 【神道日96月3	十页]			
NEUT	RAL				Advanced Setting	
Running Status	MSTP					
System 😔	MSTP Status:	Enable	Setting			
ONU Device 🚫	MST Region	CIST MSTI Port C	onfig			
Switch Port	Regional Name:	383A21F00165	Setting Reset			
MAC Address Table	Revision Level:	0	Setting	×		
Protocol	Configuration Digest:	0xAC36177F50283CD4B83821D8AB2	6 Regional Name 383A21F00165	Length: 0-32 character		
RSTP			Apply	Cancel		
IGMP						
DHCP						
MSTP						

The configurable length of the region name is 0-32 bits, and it will be restored to system MAC after reset.

NE	UTR	AL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		MSTP							
System	\odot	MSTP Status	Enable		2 mm				
PON Port	\odot	MST Dagion	CIST	Port Confin					
ONU Device	\odot	Format Selector:	0	a bit coming					
Switch Port	\odot	Regional Name.	383A21F00165		Setting Reset		_		
MAC Address Tal	ble	Revision Level:	0	Sett	ling	×			
Protocol		Configuration Digest	0xAC36177F50283CD4B8	3821D8AB26I Revi	sion Level 0	Range: 0-65535			
RSTP					Apply	Cancel			
IGMP									
MSTP									

The configurable range of the modified version is 0-65535.

5.7.4.2 CIST

MSTP generates IST (a spanning tree in each MST region) through calculation in each MST region. At the same time, MSTP treats each MST region as a single switching device, and generates CST (a spanning tree connecting all MST regions in the switching network) between MST regions through calculation. CIST is a single spanning tree connecting all devices in a switching network, which is composed of IST and CST. VLAN mapping table is an attribute of MST region. It describes the mapping relationship between VLAN and MSTI. The default value is 1-4094.

NEUT	TRAL	Status	τορο ονι	J Table VLAN	Advanced Setti	ng	Shortcut -	root
Running Status	MSTP							
System 🚫								
PON Port	MSTP Status:	Enable	Setting					
ONU Device 😡	MST Region	CIST MSTI	Port Config					-
Switch Port	VLAN Mappir	tting Setting Priority 1g: 1-4094						
MAC Address Table	Bridge Priori IST Root Priori	ty: 32768 ty: 32768	Bridge MAC: 38:3A:2 IST Root MAC: 38:3A:2	1:F0:01:65 1:F0:01:65				
Protocol 🔗	CST Root Priori Root Po	ty: 32768 rt: None	CST Root MAC: 38:3A:2	1:F0:01:65				
RSTP	IST Port Co CST Port Co	st 0 st 0						
DHCP	Bridge Tin Root Tin	ie: Hello Time: 2 Forw ie: Hello Time: 2 Forw	ard Delay: 15 Max Age: 20 ard Delay: 15 Max Age: 20	Max Hop: 20				
MSTP	Port List							
ACL/QoS 🚫	Port ID	Role	Port Priority	Status	Admin Cost	Oper Cost	Setting	
Route	GE01	Designated	128	Forwarding	Auto	200000	Setting	
Link Aggregation								

Configuration interface and priority

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Statu	IS	MSTP							
System	\odot			_	_				
PON Port	\odot	MSTP Status	Enable	2	etting				
ONU Device	\odot	MST Region	CIST MSTI	Port Config					-
Switch Port	\odot	VLAN Mapping	ng Setting Priority g. 1-4094	Setting		×			
MAC Address	Table	Bridge Priorit	y. 32768 y. 32768	Max Age:	20	Range: 6-40			
Protocol		CST Root Priorit	y: 32768 t None	Hello Time:	2	Range: 1-10, 20			
RSTP		IST Port Cos CST Port Cos	t. 0 t. 0	Max Hop: Forward Delay:	15	Range: 1-40 Range: 4-30			
DHCP		Bridge Time Root Time	e: Hello Time: 2 F 9: Hello Time: 2 F	orward D	Can	of			
MSTP									
ACL/QoS	\odot	Port ID	Role	Port Priority	Status		Admin Cost	Oper Cost Setting	
Route	\odot	GE01	Designated	128	Forwarding		Auto	200000 Sutting	



5.7.4.3 MSTI

In one MST region, multiple spanning trees can be generated through MSTP, and each spanning tree is independent of each other, with the following characteristics:

- 1) Each MSTI computes its own spanning tree independently and does not interfere with each other.
- 2) The calculation method of the spanning tree of each MSTI is basically the same as that of STP.
- 3) Each MSTI spanning tree can have different roots and different topology.
- 4) Each MSTI sends BPDU in its own spanning tree.
- 5) The topology of each MSTI is determined by command configuration.
- 6) The spanning tree parameters of each port on different MSTI can be different.
- 7) The role and status of each port on different MSTI can be different.
- In the network running MSTP protocol, a VLAN message will be forwarded along the following path:

- ① Within the MST region, forward along its corresponding MSTI.
- ② Between MST regions, forward along CST.

NE	UTR	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		MSTP							
System	\odot				_				
PON Port	\odot	WISTP Status.	Enable		Secting				
ONU Device	\odot	MST Region	CIST MSTI	Port Config					-
Switch Port	\odot	MSTI Information	Add VI AN Mapping	Bridge M			Priority Reat Part	CST Port Cost Setting	
MAC Address Tab	sle			Add			<		
Protocol				Instance VLAN List	1	• ex 1,35			
RSTP									
IGMP					Apply	Cancel			
DHCP									
MSTP									



5.7.4.4 Port Configuration

You can switch of BPDU protection, loop protection, edge port and P2P functions of each Ge port quickly.

NE	UTR	AL	Status	торо	ONU Table	VLAN	Advanced Setting	SI	hortcut -
Running Status	Î	MSTP							
System	\odot								
PON Port	\odot	MSTP Status:	Enable		Setting				
ONU Device	\odot	MST Region	CIST MSTI	Port Config					
		Port ID	Port BPDU Guard		Loop Detect Guard	Edge Port	Admin P2P	Oper P2P	Setting
Switch Port	\odot	GE01	Disable		Disable	Auto	false	false	Setting ~
	-	GE02	Disable		Disable	Auto	auto	false	Port BPDU Guard
MAC Address Tabl	le	GE03	Disable		Disable	Auto	auto	false	Loop Detect Guard
		GE04	Disable		Disable	Auto	auto	false	Loop Deleter Odding
Protocol	\odot	GE05	Disable		Disable	Auto	auto	false	Admin Edge
DOTD		GE06	Disable		Disable	Auto	auto	false	Admin P2P
RSTP		GE07	Disable		Disable	Auto	auto	false	Port Mcheck
IGMP		GE08	Disable		Disable	Auto	auto	false	ourning ~
DHCP									
MSTP									

NEUT	NEUTRAL Status TOPO ONU Table VLAN Advanced Setting Shortcu							
Running Status	MSTP							
System 😔								
PON Port	MSTP Status:	Enable		Setting				
ONU Device 😡	MST Region	CIST MSTI	Port Config					
	Port ID							Setting
Switch Port	GE01	Disable		Disable	Auto	false	false	Setting ~
	GE02	Disable	-	D. 11	• • • •	auto	false	Setting ~
MAC Address Table	GE03	Disable	Setting		×	auto	false	Setting ~
	GE04	Disable				auto	false	Setting ~
Protocol	GE05	Disable	Port BPI	OU Guard Disable	•	auto	false	Setting ~
	GE06	Disable		Disable		auto	false	Setting ~
RSTP	GE07	Disable		Apply Citable		auto	false	Setting ~
IGMP	GE08	Disable		Disable	Auto	auto	false	Setting ~
DHCP								
MSTP								

5.8 ACL/QOS

5.8.1 Time-range

It is used to specify a time period for the ACL rule to take effect.Once the configuration is executed successfully, the ACL rule can be created to specify the effective time by referring to the time period name, and the ACL rule is only valid for the effective time period.

1. Add time-range

1> Relative time: A periodic time, for example, Monday from 09:00 to 18:00

NEUTRAL					Advanced Setting	
Running Status Timerat	ige					
System 🚫 Add	Delete All					
PON Port						
Switch Port		Add		×		
MAC Address Table		Name	test1	3 - 16 characters		
Protocol		Start Time	09:00	Range: 00:00 - 23:59		
		End Time	23:00	Range: 00:00 - 23:59		
ACLIGOS (S)		Day	Tuesday	•		
			Apply	Cancel		
ACL Management						
QoS						
Route \bigotimes						
Link Aggregation						
	Lan	iguage:简体中文 English F	irmware Version : Neutral-E04	L_V3.0.0_Rel MAC : 3	8 3a 21 10 01 64	

NE	UTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	Î	Timerange	e						
System	\odot	Add	Delete All						
PON Port	\odot	Name : test1 Relative	Start Time 09.00	State : Inactive End Time 23:00	Day	View Details C Tuesday	Delete		
ONU Device	\odot								
Switch Port	\odot								
MAC Address T	Table								
Protocol	\odot								
ACL/QoS	\odot								
Timerange									
ACL Manage	ment								
Packet Filter									
QoS									

2> Absolute time: From a specific time to a specific time, such as 9:00 on April 29, 2019 to 18:00 on April 29, 2019.

NE	UTR	AL					Advanced Setting	
Running Status		Timerange						
System	\odot	Add.	Delete Ali					
PON Port	\odot	Name test1 Relative	Start Time 09.00	State Inactive End Time 23.00	Da	View Details C 7 Tuesday	Delete	
ONU Device	\odot							
Switch Port	\odot			Name	test2	3 - 16 characters		
MAC Address Tab	le			Туре	Absolute	•		
Protocol	\odot			Start Day Start Time	9:00	Range: 00:00 - 23:59		
ACL/QoS				End Day	2020/4/30			
Timerange ACL Manageme Packet Filter	ent			End Time	18:00 Apply	Range: 00.00 - 23.59 Cancel		
QoS								

NE	UT	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	Timerange			✓ Setting success				
System	\odot	Add	Delete All						
PON Port	\odot	Name : test1 Name : test2		State : Inactive State : Inactive		View Details View Details	Delete		
ONU Device	\odot	Absolute	Start Time 2020-04-29 09:00	End Time 2020	0-04-30 18:00				
Switch Port	\odot								
MAC Address T	able								
Protocol	\odot								
ACL/QoS	\odot								
Timerange									
ACL Manage	ment								
Packet Filter									
QoS									

2. Delete Time-range

You can delete one by one or delete all, as shown below:

Timerange			
Add Delete All			
Name : test1	State : Inactive	View details	Delete 🔶
Name : test2	State : Inactive	View details	Delete 🔶

5.8.2 ACL Management

Use this configuration to create an access control list when you need to filter specific packets through matching rules. Select **Advanced Setting** -> **ACL/QOS** -> **ACL Management**, enter this page, you can configure ACL rules, as shown below:

Ne	etur	al	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		ACL Manager	ment						
System	\odot	Add ACL	Delete ACL						
PON Port	\odot								
ONU Device	\odot								
Switch Port	\odot								
MAC Address Table	9								
Protocol	\odot								
ACL/QoS	\odot								
Timerange									
ACL Managemen	nt								
Packet Filter									
QoS									

5.8.2.1 Basic ACL

Use this configuration when ACL rules need to be made based on the IP address of the source of the message. After successful rule creation, packet-filter configuration reference rules can be used to filter packets.

1. Create basic ACL, the ID range is 2000-2999. As shown below:

NEUT	NEUTRAL					Advanced Setting	
Running Status	ACL Manage	ment					
System 🚫	Add ACL	Delete ACL					
PON Port							
ONU Device 🚫							
Switch Port							
MAC Address Table			Add ACL		×		
Protocol 🚫			ACL Type ACL ID	Basic ACL 2000	• Range:2000-2999		
ACL/QoS 🚫				Apply	Cancel		
Timerange							
Packet Filter							
QoS							

2. Add rule:You can select time range take effect within the specified time or not select time range for immediate effect.

NEUT	RAL	Status	ТОРО	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	ACL Manage	ment						
System 🚫	Add ACL	Delete ACI.						
PON Port	ACL ID : 2000			View Rules Add Rule				
ONU Device 🚫			Add Ru	le	×			
Switch Port			ACL ID	2000				
MAC Address Table			Rule ID	1 Resis ACL Dula	Range: 1-16			
Protocol			Action	deny	•			
			Source II IP Mask	9 192 168 10 1 0.0.0.255				
Timerange			Timerang	test1	•			
ACL Management Packet Filter				Apply	Cancel			
QoS								

NE	UTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	ACL Manage	ment		✓ Setting success				
System	\odot	Add ACL	Delete ACL						
PON Port	\odot	ACL ID : 2000	Rule Count :	1	View Rules Setting	Add Rule 🛛 Adjust RULE	Priority		
ONU Device	\odot	RULE ID:1	Action : deny Timerange : test1		Source IP : 192.168.10.1	Source I	IP Mask : 0.0.0.255		1
Switch Port	\odot								
MAC Address T	Table								
Protocol	\odot								
ACL/QoS	\odot								
Timerange									
ACL Manage	ment								
QoS									

5.8.2.2 Advanced ACL

This configuration is used when matching rules need to be made based on the packet's source address information, destination address information, the protocol type hosted by the IP, and the characteristics of the protocol. After successful rule creation, packet-filter configuration reference rules can be used to filter packets.

1. Create Advanced ACL, the ID range is 3000-4999. As shown below:

NE	EUTI	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		ACL Manage	ment						
System	\odot	Add ACL	Delete ACL						
PON Port	\odot	ACL ID : 2000	Rule Count : 1		View Rules Setting	Add Rule 📘 Adjust RULE	Priority		
ONU Device	\odot	RULE ID 1	Action : deny Timerange : test1	s	ource IP : 192.168.10.1	Source II	P Mask : 0.0.0.255		
Switch Port	\odot								
MAC Address 1	Table			Add A	CL	×			
Protocol	\odot			ACL T	iype Advanced ACL ID 3000	• Range:3000-4999			
ACL/QoS					Apply	Cancel			
Timerange									
ACL Manage									
Packet Filter									
QoS									

2. Add Rule: You can select time range take effect within the specified time or not select time range for immediate effect.

NEU	ITRAL				VLAN	Advanced Setting	
Running Status	ACL Managem	ent					
System 🤆	Add ACL	Delete ACL	Add Rule		×		
PON Port	ACL ID 2000 ACL ID 3000	Rule Count :	ACL ID	3000			
ONU Device	9		Rule ID ACL Type	1 Advanced ACL Rule *	Range: 1-16		
Switch Port	9		Action	deny •	i		
MAC Address Table			Source IP	192.168.10.12	0-255(Required)		
Protocol	9		IP Mask	0.0.0.255			
ACLIQOS (IP Mask	0 0 0 255			
Timerange ACL Management			Source Port Destination Port		Range: 0-65535 Range: 0-65535		
Packet Filter QoS			Precedence		Range: 0-7 Range: 0-63		
Route	9		Timerange	ly Car	icel		

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	ACL Manage	ment		✓ Setting success				
System	\odot	Add ACL	Delete ACL						
PON Port	\odot	ACL ID : 2000 ACL ID : 3000	Rule Cou Rule Cou	nt : 1	View Rules Setting View Rules Setting	Add Rule Add Rule Adjust RULE	Priority		
ONU Device	\odot	RULE ID:1	Action : deny Source IP Mask : 0.0.0.255		Protocol : tcp	Source I	P: 192.168.10.12	Ī	Ĵ
Switch Port	\odot								
MAC Address Tab	xle								
Protocol	\odot								
ACL/QoS	\odot								
Timerange	_								
ACL Manageme	ent								
QoS									

5.8.2.3 Link ACL

This configuration is used when ACL rules need to be formulated based on link-layer information such as the source MAC address of the message, the source VLAN ID, the

layer 2 protocol type, and the destination MAC address. After successful rule creation, packet-filter configuration reference rules can be used to filter packets.

1. Create link ACL, the ID range is 5000-5999. As shown below:

NE	UTI	RAL	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		ACL Manage	ment						
System	\odot	Add ACL	Delete ACL						
PON Port	\odot	ACL ID : 2000 ACL ID : 3000	Rule Count : *		View Rules Setting View Rules Setting	Add Rule Adjust RULE	Priority		
ONU Device	\odot	RULE ID:1	Action : deny Source IP Mask : 0.0.0.255		Protocol : tcp	Source II	P: 192.168.10.12		
Switch Port	\odot								
MAC Address T	Table			Add	ACL	,×,			
Protocol	\odot			ACL	Link ACL CLID 5000	• Range:5000-5999			
ACL/QoS					Apply	Cancel			
Timerange									
ACL Manager									
Packet Filter									
QoS									

2. Add Rule: You can select time range take effect within the specified time or not select time range for immediate effect.

NE	UT	RAL	Status	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Ĩ	ACL Manage	ment						
System	\odot	Add ACL	Delete ACL	Add Rule		×			
PON Port	0	ACL ID : 2000	Rule Count : 1	ACLID	5000				
1 Ort Fort	S	ACL ID : 3000	Rule Count : 1	Rule ID	1	Ranne 1-16	Priority		
ONU Device	\odot	RULE ID 1	Action : deny Source IP Mask : 0.0.0.255	ACL Type	Link ACL Rule	*	P: 192.168.10.12		
Switch Port	\odot	ACL ID - 5000		Action	deny	•			
		NOL ID JOBU		Ethernet Type	0x8600	Range: 0x0-0xfff			
MAC Address T	able			COS		Range: 0-7			
Protocol	0			Inner COS		Range: 0-7			
ETOROCOT	0			VLAN ID		Range: 1-4094			
ACLIQOS				Inner VLAN ID		Range: 1-4094			
Timerange				Source MAC	0000-0000-0000				
ACL Manage				MAC Mask	0000-0000-ffff				
Packet Filter				Destination M/	AC 0000-0000-0000				
QoS				MAC Mask	mm-0000-0000				
				Timerange		•			
Route	\odot				Apply	Cancel			

NE	UTI	RAL	Status		торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	i i	ACL Mana	gement			✓ Setting success				
System	\odot	Add ACL	Delete ACL							
PON Port	\odot	ACLID: 20	00	Rule Count : 1		View Rules Setting	Add Rule			
ONU Device	\odot	ACL ID : 50	00	Rule Count : 1		View Rules Setting	Add Rule Adjust Rt	JLE Priority		
Switch Port	Ø	RULE ID:1	Action : deny			Ethernet Type : 0x8600			<u> </u>	
MAC Address 7										
MAC Address 1	able									
Protocol	\odot									
ACL/QoS	\odot									
Timerange										
ACL Manage	ment									
QoS										

5.8.3 Packet Filter

It is used to configure and enable ACL filtering rules for a specified port. Use this configuration when you need to filter port traffic using ACL rules. Choose **Advanced Setting -> ACL/QOS -> Packet Filter**, enter this page, you can apply ACL rules to specific ports, as shown below:

NEUTI	RAL					Advanced Setting		
Running Status	Packet Filter							
System 🚫	Add Delete							
PON Port								
ONU Device 😡								
Switch Port			Add		×	-		
MAC Address Table			ACL ID	2000	Range: 2000 - 5999			
Protocol 😡			Rule ID	1 PON01 PON00	Range: 0 - 16 (Optional)			
ACL/QoS 🚫			Port List	■ PON04 ■ GE01 ■ GE03 ■ GE04	GE02 GE05			
Timerange ACL Management				Apply	Cancel			
Packet Filter								
Q0S								
NEUTI	RAI	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Rupping Status								
Suctom	Packet Filter			✓ Add Success				
PON Port	ACL ID: 2000	Rule ID: 1	State : I	Not running				
	Port List : GE01							
Switch Port								
MAC Address Table								
Protocol 🚫								
ACL/QoS								

5.8.4 QOS

Timerange ACL Manage

Configure the queue scheduling mode for the system.Queue scheduling is to divide the messages that need to be sent from the same port into multiple queues and schedule them between queues to decide which queue's messages should be sent first and which queue's messages should be sent later.This configuration is used when the user needs to select different queue scheduling modes according to the degree of importance of the service to ensure that QoS guarantee can be provided for the important service in case of network congestion.

Choose **Advanced Setting** -> **ACL/QOS** ->**QoS**, enter this page, you can configure QoS parameters, as shown below:

N	NEUTRAL		Status	торо		ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Statu	s	QoS								
System	\odot	Mode: SP								
PON Port	\odot	Priority Se	tting	0						
		Priority :	0	Queue	0					
ONU Device	\odot	Priority :	1	Queue	1					
		Priority :	2	Queue	2					
Switch Port	\odot	Priority :	4	Queue	4					
		Priority :	5	Queue	5					
MAC Address	Table	Priority :	6	Queue	6					
	~	Priority :	7	Queue	7					
Protocol	\odot	Queue Scheduler	Setting							
ACL/QoS		cos	0	Mode	SP	Weight	0			
Timerange		COS	1	Mode	SP	Weight	0			
	1000	COS	2	Mode	SP	Weight	0			
ACL Manage	ement	COS	3	Mode	SP	Weight	0			
Packet Filter	r	COS	4	Mode	SP	Weight	0			
QoS		COS	5	Mode	SP	Weight	0			
Davida	0	COS	6	Mode	SP	Weight	0			
Route	\odot	COS	7	Mode	SP	Weight	0			
Link Aggregati	on									
		•		Language :	简体中文 English	Firmware Version : Neutral-E	04_1_V3.0.0_Rel MAC:3	38.3a 21.10.01.64		

1. You can sets the mapping of priority and queue, as shown below:

NE	NEUTRAL		Status	тс	PO	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status										
System	\odot	Mode: SP								
PON Port	\odot	Priority Sett	ing 0	Queue	0					
ONU Device	\odot	Priority Priority	1 2	Queue Queue	1 2					
Switch Port	\odot	Priority Priority	3 4	Queue Queue	3					
MAC Address	lable	Priority Priority	5	Queue Queue	Priority		×			
Protocol	\odot	Priority Queue Scheduler	7 Setting	Queue	Priority Queue	0 1 2 3 4	5 6 7 5 6 7 Range: 0 - 7			
		cos	0	Mode		Apply	Cancel			
Timerange		COS	1	Mode	SP	weight	U			
ACL Manage	ment	COS	2 3	Mode Mode	SP	Weight Weight	0			
Packet Filter		cos	4	Mode	SP	Weight.	0			
		COS	5	Mode	SP	Weight	0			
		COS	6	Mode	SP	Weight	0			

N	EUTI	RAL	Status		торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Statu:	s	QoS				✓ Setting success				
System	\odot	Mode: SP								
PON Port	\odot	Priority S	etting							
	<u> </u>	Priority :	0	Queue	0					
ONI L Device	0	Priority :	1	Queue	0					
one bonce	٢	Priority :	2	Queue	1					
Switch Port	0	Priority :	3	Queue	1					
Switch For	۲	Priority :	4	Queue	4					
MAC Address	Tabla	Priority :	5	Queue	5					
MAG Address	Table	Priority :	6	Queue	6					
Protocol	0	Priority :	7	Queue	7					
	0	Queue Scheduler	Setting							
ACL/QoS	\odot	COS	0	Mode	SP	Weight	0			
Timerande		COS	1	Mode	SP	Weight	0			
		COS	2	Mode	SP	Weight	0			
ACL Manage	ement	COS	3	Mode	SP	Weight	0			
Packet Filter		COS	4	Mode	SP	Weight	0			
QoS		COS	5	Mode	SP	Weight	0			
		000			0.0					

2. You can set Queue scheduler. If you select WRR mode, all weight plus must be 100 or zero. as shown below:

NE	NEUTRAL		Status		торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status		QoS								
System	\odot	Mode: SP								
PON Port	\odot	Priority Sett	ing 0	Queue	0					
ONU Device	\odot	Priority	1	Queue	0					
Switch Port	\odot	Priority : Priority :	3	Queue	1					
MAC Address T	able	Priority : Priority :	5	Queue Queue	Mode	WRR	×			
Protocol	\odot	Priority :	7	Queue	COS	0 1 2 3 4	5 6 7			
ACL/QoS		COS	0	Mode	Weight	100 0 0 0 0 Apply	0 0 0 Cancel			
Timerange		COS	1	Mode Mode	SP	Weight	0			
ACL Manager	nent	cos	3	Mode	SP	Weight	0			
QoS		COS	5	Mode	SP	weight Weight	0			

NE	EUT	RAL	Status		торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status	5	QoS				✓ Setting success				
System	\odot	Mode: SP								
PON Port	0	Priority Si	etting							
	0	Priority :	0	Queue	0					
ONU Device	\odot	Priority :	1	Queue	0					
	0	Priority :	2	Queue	1					
Switch Port	\odot	Priority :	3	Queue	1					
	0	Priority :	4	Queue	4					
MAC Address	Table	Priority :	5	Queue	5					
1111071001000		Priority :	6	Queue	6					
Protocol	0	Priority :	7	Queue	7					
	0	Queue Scheduler	Setting							
ACL/QoS	\odot	COS	0	Mode	WRR	Weight	100			
Timeranne		COS	1	Mode	SP	Weight	0			
rinolango		COS	2	Mode	SP	Weight	0			
ACL Manage	ement	COS	3	Mode	SP	Weight	0			
Packet Filter		COS	4	Mode	SP	Weight	0			
QoS		COS	5	Mode	SP	Weight	0			
	-	COS	6	Mode	SP	Weight	0			
Route	\odot	COS	7	Mode	SP	Weight	0			

5.9 Route

5.9.1 Route Management

 Choose Advanced Setting -> Route -> Route Management, enter this page, you can start route management. By default, this function is disabled. To configure static route, you need to turn on the routing switch first. As shown below:

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	⇔ root
Running Status		Route Configur	ation		✓ Setting success				
System	\odot								
PON Port	\odot	Route Status 🛛 🌑							
ONU Device	\odot	Static Route	Add Refr	esh					
Cuitab Dard	\sim	Destinat	ion IP/ Mask	Next Hop	Interface	Protocol	Preference	Status	Setting
Switch Port	\odot	192.10	68.99.0/24	192.168.99.1	Vlanif1	Direct	1	Reachale	
MAC Address Tal	ble								
Protocol	\odot								
ACL/QoS	\odot								
Route	\odot								
Route Manage	ment								
ARP Table									
Link Aggregation									
			L	anguage : 简体中文 English	Firmware Version : Neutral-E04	_I_V3.0.0_Rel MAC: 3	8:3a:21:10:01:64		

Note: When you close route status, all the static route entry and arp entry will clear. 2. After turning on the route switch, click the **"Add"** button to add a static routing entry. When next-hop is reachable, will learn the next-hop gateway ARP, the status will become reachable. As shown below:

NE	UTF	RAL Status			VLAN	Advanced Setting			
Running Status									
System	\odot								
PON Port	\odot	Route Status							
ONU Device	0	Static Route Add Re	fresh						
Switch Dort	0	Destination IP/ Mask	Next Hop	Interface	Protocol	Preference	Status	Setting	
Switch Port	0	192 168 99 0/24	Add	10.24	×	1	Reachale		
MAC Address Tab	Ne		Destination IP	192 168 5 184	EX 127.0.0.1				
Protocol	\odot		IP Mask	255.255.255.0	EX. 255.255.255.0				
	0		Next Hop	192.168.1.55	EX. 127.0.0.1				
ACL/QoS	\odot			Apply	Cancel				
ARP Table									
NE	UTF	RAL Status	торо	ONU Table	VLAN	Advanced Setting		Shortcut	root
NE	UTF	RAL Status	τορο	ONU Table	VLAN	Advanced Setting		Shortcut -	root
NE Running Status	UTF	RAL Status Route Configuration	торо	ONU Table Add Success	VLAN	Advanced Setting		Shortcut	root
NE Running Status System	UTF ©	RAL Status Route Configuration	торо	ONU Table Add Success	VLAN	Advanced Setting		Shortcut	root
Running Status System PON Port	UTF © ©	Route Configuration	торо	ONU Table Add Success	VLAN	Advanced Setting		Shortcut	rcot
Running Status System PON Port	UTF ©	Route Configuration Route Status Status Add Route Status Route Add Route Route	TOPO	ONU Table Add Success	VLAN	Advanced Setting	-	Shortcut	root
Running Status System PON Port ONU Device	UTF © ©	Route Configuration Route Status Status Add Ro Rotestatus Configuration Route Status Configuration Route Rou	TOPO	ONU Table Add Success Interface	VLAN	Advanced Setting	Status	Shortcut -	root
Running Status System PON Port ONU Device Switch Port	UTR © © ©	Route Configuration Route Status Status Configuration Route Status Configuration Route Static Route Ro	TOPO	ONU Table Add Success Interface	VLAN	Advanced Setting Proference 2	Status Unreachaie	Shortcut Setting Dolete	root
Running Status System PON Port ONU Device Switch Port	UTF © © ©	Route Configuration Route Status Static Route Add Route Destination IPY Mesk 192 168 5 0/24 192 168 99 0/24	TOPO	ONU Table Add Success Interface Van(f)	VLAN	Advanced Setting Preference 2 1	Status Unreechale Reachale	Shortcut Setting Delete	root
Running Status System PON Port ONU Device Switch Port MAC Address Tab	UTF © © ©	Route Configuration Route Status Static Route Configuration Route Status Configuration Route Route Configuration Route Route Configuration Route Rou	TOPO	ONU Table Add Success Interface Van(f)	VLAN	Advanced Setting Preference 2 1	Status Unreechale Reachale	Shortcut Setting Date1e	root
Running Status System PON Port ONU Device Switch Port MAC Address Tab Protocol	UTF © © ©	Route Configuration Route Status Static Route Configuration Route Static Route Add Route Destination IPP Mask 192 108 59 0/24	TOPO	ONU Table Add Success Interface Vian(1)	VLAN	Advanced Setting Proforence 2 1	Status Unreechale Reachale	Shortcut Setting Date1e	root
Running Status System PON Port ONU Device Switch Port MAC Address Tatt Protocol ACL/QoS		Route Configuration Route Status Configuration Static Route Add Destination IP/ Mask 192 108 5 0.24 192 108 59 0.024	TOPO	ONU Table Add Success Interface Viant1	VLAN	Advanced Setting Professional 2 1	Status Unreachaie Reachaie	Shortcut Solution Solution Doile10	root
Running Status System PON Port ONU Device Switch Port MAC Address Tab Protocol ACL/QoS		State Route Configuration Route Status Configuration Static Route Add Destination IP/ Mask 192 108 50 024	TOPO	ONU Table Add Success Interface Viant1	VLAN	Advanced Setting Proference 2 1	Status Urreachaie Reachaie	Shortcut Softing Delete	root
Running Status System PON Port ONU Device Switch Port MAC Address Tab Protocol ACL/QoS Route	VTF © © © % ©	State Route Configuration Route Status Configuration Static Route Add Destination IP7 Mask 192 198 5 0/24	TOPO	ONU Table Add Success Interface Viant1	VLAN	Advanced Setting Proference 2 1	Status Urreachaie Reachaie	Shortcut Softing Delete	root

5.9.2 ARP Table

Choose **Advanced Setting -> Route -> ARP Table**, enter this page, you can view and delete ARP entries, as shown below:

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		ARP		Refresh Delete	Ali				
System	\odot	_							
PON Port	\odot		IP Address		MAC No da	VLA ta		Port ID	
ONU Device	\odot								
Switch Port	\odot								
MAC Address Ta	able								
Protocol	\odot								
ACL/QoS	\odot								
Route	\odot								
Route Manage	ement								
ARP Table									

5.10 Link Aggregation

Link aggregation is the binding of multiple connected ports of the same type into one logical port, which can increase the bandwidth of the connected ports without upgrading the hardware, and effectively improve the reliability between links through the link backup mechanism.

Choose **Advanced Setting -> Link Aggregation**, enter this page to configure link aggregation function parameters, as shown below:

192.168.100.1/#/lin	nk_aggregal	× +							- 0	y ×
← → C ▲ 7	Fæt 192	2.168.100.1/#/link_aggregation							\$	0 0
N	etur	ral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root	
Running Status		Link Aggregation	Create							
System	\odot									
PON Port	\odot									
ONU Device	\odot									
Switch Port	\odot									
MAC Address Tal	ble									
Protocol	\odot									
ACL/QoS	\odot									
Route	\odot									
Link Aggregation	n									

5.10.1Create Link Aggregation

Enter the link aggregation page, click the **"Create**" button, input the group ID and select port members in the pop-up option box, as shown below:

NEU.	TRAL				VLAN	Advanced Setting	
Running Status	Link Aggregation	Create					
System (9						
PON Port (9						
ONU Device (9						
Switch Port	9		Create		×		
MAC Address Table			Trunk ID	1	Canas 1.9		
Protocol (9		Port Members	Ø GE01 Ø GE02	Range, 140 ■ GE03 ■ GE04		
ACLIQoS (9			■ GE05	GE07 GE08		
Route	9			/bbly	Cancel		
		Languag	e:简体中文 English Firr	nware Version : Neutral-I	E04_1_V3.0.0_Rel MAC : 38	8.3a.21.10.01.64	

Note:

- 1) One port cannot join multiple aggregation groups at the same time;
- Spanning tree protocol: the port joining the aggregation group will be treated as a logical port for protocol operation;
- Uplink loop detection: when the port joins the aggregation group, the port loop detection does not take effect;
- 4) Port attributes: the port attributes of members joining the aggregation group must be consistent: speed, port type, MTU, port rate limit and storm control;When the aggregation group member port property is configured, the members of the group are bound together for configuration.
- 5) VLAN attribute: the port VLAN configuration of members joining the aggregation group must be consistent: PVID and port VLAN;When the aggregation group member VLAN is configured, the members of the group are bound together for configuration.
- Port mirroring destination port cannot join the aggregation group as a member of the aggregation group, and the port joining the aggregation group cannot become the mirroring destination port;
- A port configured with a static MAC address cannot join an aggregation group as a member;

- 8) Ports configured with ACL rules cannot join an aggregation group as a member;
- The multicast VLAN routing port configured cannot be added to the aggregation group as a member of the aggregation group;

5.10.2View Link Aggregation

After successful creation, the member ports to join the link aggregation group can be viewed, and link aggregation group members can be added and deleted within the aggregation group. As shown below:

NE	UTF	RAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
Running Status		Link Aggregation	Create		✓ Setting success				
System	\odot	Trunk ID 1	Port Selection Criteria	a src-mac Setting		Add Por			
PON Port	\odot	Port Members: GE01,GE	E02,GE03	a. Storing Obtains					
ONU Device	\odot								
Switch Port	\odot								
MAC Address Tal	ble								
Protocol	\odot								
ACL/QoS	\odot								
Route	\odot								
Link Aggregation	n								

5.10.3Port Selection Criteria

The default load balancing routing algorithm is based on src-mac for hashing, and other routing algorithms can be configured according to requirements. As shown below:

NE	UTF	RAL	Status	τορο	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status		Link Aggregation	Create						
System	\odot	Trunk ID - 1	Port Selection Criteria	ere mar Softing					
PON Port	\odot	Port Members: GE01,0	GE02,GE03	arc-mac usening					
ONU Device	\odot								
Switch Port	\odot								
MAC Address Ta	able			Setting		×			
Protocol	\odot			Trunk ID : Port Selectio Criteria	n src-mac •				
ACL/QoS	\odot			Cintena.	Apply dest-mac src-dest-mac	Cancel			
Route	\odot				src-ip dest-ip src-dest-ip				
Link Aggregatio									

5.10.4Delete Link Aggregation

When link aggregation needs to be removed, all members of the link aggregation group are deleted, and the aggregation group is removed. As shown below:

NE	UTF	RAL	Status	ТОРО	ONU Table	e	v	_AN	Advanced Setting	Shortcut	root
Running Status		Link Aggregation	Create								
System	\odot	Touch ID	Dest Collection Orderin	an man Dollars							
PON Port	\odot	Port Members. GE01,GE	02,GE03	actinac county							
ONU Device	\odot										
Switch Port	\odot										
MAC Address Ta	ible			Delete				×			
Protocol	\odot			Port Members	I GE01	Ø GE02	I GE03	🗐 GE04			
ACL/QoS	\odot				GE05	GE06	GE07	GE08			
Route	\odot				Apply		Cancel				
Link Aggregatio											

6 Shortcut

Enter OLT WEB, move the mouse to the "**Shortcut**" option, you can quickly use some common functions, including turn off / on real-time alters, saving configuration, sign out, reboot, optical diagnosis, viewing current configuration, simplified Chinese and English settings Features. As shown below:

NEUTRAL	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
	PON Informations Registered : 8 Online: 0 Offine: 8 Offine: 8 Offine: 8 Offine: 8 Offine: 8 Offine: 8	PON2 : offline	Registered : 5 Online: 0 Offline: 5	Registered : 4 Online: 0 Offline: 4	Registered : 1 Online 0 PON4 : offine	Turn off real-time alerts Save configuration Sign Out Reboot Optical Diagnose	
	GE Infomations					View current config 简体中文	
	GE01: online Admin Status: Enable Link Status: Link UP	G Ar Li	3E02: offline Idmin Status: Enable ink Status: Link Down	GE03: offline Admin Status: E Link Status: Lint	inable GE04: offline Admin Status: Ena Link Status: Link E	English ble own	
	GE05: offline Admin Status: Enable Link Status: Link Down	G Av Li	EE06: offline Idmin Status: Enable ink Status: Link Down	GE07: offline Admin Status: E Link Status: Link	inable GE08: offline Admin Status: Enc Link Status: Link E	ble own	
	Lange	iage:简体中文 English	Firmware Version : Ne	eutral-E04_1_V3.0.0_Rel MAC :	38:3a:21:10:01:64		

1. Choose **Shortcut** -> **Turn off /on real-time alters**, you can close or open the real-time alarm information that automatically pops up in the lower right corner of the page. As shown below:

Neutral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
9	PON Informations						
	PON1 : online: 1	PON2 : offline	egistered : 0 nline: 0 ffine: 0	Registered : 0 Online: 0 Offine: 0	Registered : 0 Online: 0 Offline: 0 Offline: 0		
	PON5 : offline Registered : 0 Online: 0 Offline: 0	PON6 : offline	agistered : 0 nline: 0 ffine: 0	Registered : 0 Online: 0 PON7 : offline	Registered : 0 Online: 0 PON8 : offline		
	GE Infomations						
	GE01: online Admin Status: Enable Link Status: Link UP	GE0 Adm Link	2: offline in Status: Enable Status: Link Down	GE03: offline Admin Status: Enable Link Status: Link Down	GE04: offline Admin Status: Enable Link Status: Link Dow	1	
	XGE01: offline Admin Status: Enable Link Status: Link Down	XGE Adm Link	02: offline in Status: Enable Status: Link Down	XGE03: offline Admin Status: Enable Link Status: Link Down	XGE04: offline Admin Status: E 38: Link Status: Link Jour	20/05/07 19:33:00] Info: ONU 1/ a:21:28:8a:94 ONU link up	1 ×
					[20 38: suc	20/05/07 19:32:57] Info: ONU 1/ a:21:28:8a:94 ONU authorizatio :ess	1 n ×
	Language	· 油体由文 English E	irmulare Version : Integra	ation XE08 V3.0.1 Rel MAC : 39:39:1	21 20 00 01		

Neutral	Status	торо	ONU Table	VLAN	Advanced Setting	Shortcut -	root
	PON Informations Registered : 2 Online 2 Offine 0 Offine 0	PON2 : offline	gistered : 0 line: 0 line: 0 PON3	e offline Provide Contraction	Registered : 0 Online: 0 PON4 : offline		
	PON5 : offline Offline O	PON8 : offline	gistered : 0 line: 0 line: 0 PON7	Registered : 0 Online: 0 Offline: 0	PON8: offline Registered : 0 Online: 0 Offline: 0		
	GE01: online Admin Status: Enable Link Status: Link UP	GE02 Admir Link S	2: offline n Status: Enable Status: Link Down	GE03: offline Admin Status: Enable Link Status: Link Down	GE04: offline Admin Status: Enable Link Status: Link Down		
	XGE01: offline Admin Status: Enable Link Status: Link Down	XGE0 Admir Link S	02: offline n Status: Enable Status: Link Down	XGE03: offline Admin Status: Enable Link Status: Link Down	XGE04: offline Admin Status: E [202 Link Status: Link 38:34)/05/07 19:29:41] Info: ONU 1 s21:28:8a:94 ONU link down	/1 x
					[202] 38:3a)/05/07 19:29:40] Info: ONU 1 (21:28:8a:94 ONU dying gasp	/1 ×

2. Choose **Shortcut -> Saving configuration**, you can save all modified configuration.

3. Choose **Shortcut -> Sign Out**, you can exit the current login interface to the login interface.

4. Choose **Shortcut -> Reboot**, you can restart device right now.

 Choose Shortcut -> Optical Diagnosis, you can quickly access to PON port -> Optical diagnosis. As shown below:

NEUTR	RAL	Status	торо	ONU Tab	le	VLAN	Advanced Setting	Shortcut -	root
Running Status	Optical Dia	nnose	Refresh						
System 😔		,	Honosh						
PON Port	Optical Mo	dule Information	Optical Diagnose	ONU Optical Diagnose]				_
ONU Denv List	Port ID	Port State	Module State	Work Temperature	Work Voltage	Transmit Bias	Transmit Pov	er View Details	
Linstreem Bandwidth	PON01	Offline	Detected	35.91 C	3.24 V	13.37 mA	4.8612 dBm(3.06	t8 mW) View Details	
Opstream bandwiden	PON02	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.0000	mW) View Details	
PON Setting	PON03	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.0000	mW) View Details	
LOID List	PON04	Offline	Not Detected	0.00 C	0.00 V	0.00 mA	-inf dBm(0.0000	mW) View Details	
Cprical Degrose Bach Configuration ONU Device Switch Port MAC Address Table Protocol ACL/QoS Coute Cou									
Link Aggregation			Language:简体中	中文 English Firmware Versio	n : Neutral-E04_I_V3.0	0.0_Rel MAC : 38:3	21.10.01.64		

6. Choose **Shortcut -> View current config**, you can export OLT current configuration into file, the default file name is oltconfigtmp.txt. As shown below:

H = 192,168,100 ← → C	0.1/#/advanced_se	× + 92.168.100.1/#/advanced_setti	ng						- σ × ∾ ☆ Θ :
	Netu	ral	Status	TOPO	ONU Table	VLAN	Advanced Setting	Shortcut ~	root
Running S	tatus	Running Statu	S						
System	\odot	System Informations			Hardware Status				
PON Port	\odot	Product Model	Netural		CPU Usage	Memory Usage			
ONU Devic		System Version	Netural_I_V1.4.0_Rel			27%			
0110 00110	~ O	Firmware Version	Netural_I_V3.0.9_Rel		8%				
Switch Port	\odot	MAC	e8:9f:ec:9e:00:00		070 2770				
MAC Addre	iss Table	SN	H4EB202006150002						
Protocol	0	PON Ports	4		System Running Time				
TROLOCOT	\odot	GE Ports	4		Current Time : 2020-8-3 1	5.22.14			
ACL/QoS	\odot	XGE Ports	4		Running Time: 0 Day 1 Ho	our 02 Min 27 Sec			
Route	\odot	Size	16						
	0	Build Time	2020/06/26 16:45:51						
Link Aggreg	gation								
	-		La	nguage:简体中文 E	inglish Firmware Version : Ne	tural_I_V3.0.9_Rel MAC : e8:91	f.ec.9e:00:00		
l oltconfigt	mp (3).txt								全部显示 ×

7. Choose **Shortcut -> Simplified Chinese & English**, you can switch page language.

7 root

Enter OLT WEB, the upper right corner of the page is the currently logged-in user name, click on the user name, you can jump to the System -> User Management page, if you are currently logged in with the system default user name **root/admin**, the upper right corner of the page displays " **root**". As shown below:

NE	UTR	AL	Statu		торо	ONU Table	VLAN	Advanced Setting	Shortcut	root
Running Status	Î	Liser Man	agerment							
System	\odot	Currently existing user list Add User Delete User Modify current user password								
Device		User	Status	Liser Rights	Maximum	Logins	Number of Iogins	Des	cription	
Diagnose		root	Online	super	1	Logino	1	Sup	er User	
Network Interfa	ice									
Upgrade										
Time Setting										
Service										
Alarm	_									
User Managern	ment									
PON Port	\odot									
ONU Device	\odot									
Switch Port	\odot									
MAC Address Tab	ble									
Protocol	\odot									
ACL/QoS	\odot									
Route	\odot									
	-			Languag	e: 简体中文 English	Firmware Version : Ne	eutral-E04_1_V3.0.0_Rel N	IAC 38:38:21:10:01:64		