EPON OLT Products User Manual

New 4Port/8Port/

16Port /Plug-in 16Port OLT

---Quick Configuration Guide

Version: V1.3

©Statement

No part of this manual may be reproduced or transmitted in any form or by any means without the prior written consent.

The information in this document may be update at any time due to product versions upgrade or any other reasons. Unless otherwise agreed, this manual is for reference only. All statements, information and recommendations in this manual do not constitute the warranty of any kind, express or implied.

Please contact your suppliers to get the latest version of this document, thank you !

About This Manual

This manual is applicable to our company New 4Port/8Port/1Port/Plug-in 16Port EPON OLT products quickly installation configuration guide, Is the user to quickly and easily manage EPON OLT equipment should read the information before guidelines.

The related documents for EPON OLT device are:

《New 4Port/8Port/16Port/Plug-in 16Port OLT User Manual-Device Installation User Manual》

«New 4Port/8Port/16Port/Plug-in 16Port OLT User Manual-CLI Operation User Manual»

 $\langle\!\!\! \mbox{New 4Port/8Port/16Port/Plug-in 16Port OLT User Manual-EMS Software Part -} \!\!\!\! \rangle$

1 Instruction	1
Document Scope	1
Revision History	1
Proper Noun	1
Note	2
2 OLT Login Manage	2
2.1 OLT Login Manage Explanation	2
2.2 OLT Login By Console	2
2.3 OLT Login By Telnet	3
3 OLT Upgrade Method	4
4 OLT WEB Access Management Installation Method	6
5 Configure Service In OLT Discrete Mode (Non-Template) CLI Command Method	7
5.1 FTTH Service Topology	8
5.2 Data Plan	8
5.3 Config Guide	8
5.4 Configure OLT Service	9
5.4.1 Configure OLT Global Vlan	9
5.4.2 Configure OLT GE Port Service Vlan	9
5.4.3 Configure OLT PON Port Service Vlan	11
5.4.4 Configure OLT Multicast Service	12
5.5 Check ONU Register Status	12
5.6 Configure Bridge ONU(SFU) Service	12
5.6.1 Configure Bridge Onu(SFU) Internet Service	12
5.6.2 Configure Bridge Onu(SFU) Multicast Service	13
5.7 Configure Gateway ONU(HGU) Service	14
5.7.1 Configure Gateway ONU (HGU) Internet ServiceRTK Solution	14
5.7.2 Configure Gateway ONU (HGU) Multicast ServiceRTK Solution	15
5.7.3 Configure Gateway ONU (HGU) Internet ServiceZTE Solution	16
5.7.4 Configure Gateway ONU (HGU) Multicast ServiceZTE Solution	18
5.7.5 Configure Gateway ONU (HGU) VOIP ServiceZTE Solution	20
6 Configure Service In OLT Profile ModeCLI Command Method	23
6.1 Data Plan	23
6.2 Configure Process	23
6.3 Configure OLT Service	24
6.3.1 Configfure OLT Globle Vlan	24
6.3.2 Configure OLT GE Port Service Vlan	24
6.3.3 Configure OLT PON Port Service Vlan	25
6.3.4 Configure OLT Multicast Service	25
6.4 Create ONU Profile	26
6.4.1 Create ONU DBA Profile	26
6.4.2 Create ONU Lineprofile	26
6.4.3 Create ONU Srvprofile	27
6.5 Add ONU Manually	27

6.6 Check ONU Registration Status	27
6.7 Configure Bridge ONU (SFU) Service	28
6.7.1 Configure Bridge ONU(SFU) Internet Service	28
6.7.2 Configure Bridge ONU(SFU) IPTV Service	29
6.8 Gateway ONU (HGU) Service Configure Introduction	29
7 Configure OLT QinQ Service	30
7.1 Data Plan	30
7.2 Configure Processes	30
7.3 Configure OLT	31
8 Common Command Description	31
9 Configure Service In OLT Discrete Mode (Non-Template) EMS Method	32
9.1 Data Plan	32
9.2 Configuration Guide	32
9.3 Configure OLT Service	33
9.3.1 Configure OLT Global Vlan	33
9.3.2 Configure OLT GE Port Service Vlan	34
9.3.3 Configure OLT PON Port Service Vlan	36
9.3.4 Configure OLT Multicast Service	37
9.4 Configure Bridge ONU(SFU) Service	40
9.4.1 Configure Bridge Onu(SFU) Internet Service	40
9.4.2 Configure Bridge Onu(SFU) Multicast Service	41
10 Configure Service In OLT Discrete Mode (Non-Template)WEB Method	43
10.1 Data Plan	43
10.2 Configuration Guide	43
10.3 Configure OLT Service	44
10.3.1 Configure OLT Global Vlan	44
10.3.2 Configure OLT GE Port Service Vlan	45
10.3.3 Configure OLT PON Port Service Vlan	46
10.3.4 Configure OLT Multicast Service	48
10.4 Configure Bridge ONU(SFU) Service	50
10.4.1 Configure Bridge Onu(SFU) Internet Service	50
10.4.2 Configure Bridge Onu(SFU) Multicast Service	51
Concluding Remarks	53

1 Instruction

Document Scope

Reading Object	Product	Products Software Version
Our company		
Employees,		
FTTX	EPON OLT (New	
Operation&Maintenanc	4Port/8Port/16Port/Plug-in 16Port	V1.3.X
e Engineer,	OLT)	
Customer's Technical		
Engineer		
Compiling Department	Product Management Center	Document
Compling Department	Technical Support Department	VI.3

Revision History

Date	Version	Description	Author
2017-12-07	V1.1	OLT version switch to V1.2.X, cli command line have been changed.,update config guide fully	Technical Support Department
2018-03-04	V1.2	 1.OLT version switch to V1.3.X, cli command line have been changed,update config guide fully 2.Add Plug-in 16port OLT config instruction 	Technical Support Department
2019-02-13	V1.3 V1.3 V1.3 V1.3 V1.3 V1.3 V1.3 V1.3		Technical Support Department

Proper Noun

Acronym	Full name	Instructions	
EPON	Ethernet Passive Optical Network	Ethernet Passive Optical Network	
OLT	Optical Line Terminal	Optical Line Terminal	
ONU	Optical Network Unit	Optical Network Unit	
омсі	ONU Management and Control	GPON OLT&ONU Management and	

	Interface	Control Interface(protocol)
ΟΑΜ	Operation Administration and Maintenance	EPON OLT&ONU Operation Administration and Maintenance Protocol
DBA	Dynamic Bandwidth Allocation	Dynamic Bandwidth Allocation
VLAN	Virtual Local Area Network	Virtual Local Area Network
VoIP	Voice over IP	Voice over IP
WLAN	Wireless Local Area Networks	Wireless Local Area Networks
FTTH	Fiber To The Home	Fiber To The Home
FTTB	Fiber To The Building	Fiber To The Building

Note

- > The command line described in the document is case sensitive in OLT.
- If we meet a command that cannot be inputed or is prompted for error, we can input "?" to see the latter command format.
- > Input incomplete commands can be completed by pressing the **"Tab"** key.
- New 4Port、8Port、16Port are Pizza-Box OLT, only have one card, so, if we want to enter PON mode, need input interface epon 0/0
- Plug-in 16Port is Plug-in card OLT,has four PON card,so the comamnd for entering PON mode is OLT(config)# interface epon 0/<**SlotID**>,SlotID is Slot Number,range is 1-4, for example,the command for entering slot 1 is OLT(config)# interface epon 0/1

2 OLT Login Manage

2.1 OLT Login Manage Explanation

New 4Port/8Port/16Port/Plug-in 16Port OLT support CLI,EMS and WEB management;CLI manege type divided into telnet remote manage and console local manage, please check #2.2 and #2.3 chapter to see concrete operations;please check EMS user manual to see EMS manage way;please check #4 to see WEB manage way.

2.2 OLT Login By Console

First, find console port on OLT front surface, which is a RJ45 port. if want to login OLT by Console port, we need do prepare as follows:

• Need RJ-45-to-DB-9 serial line

- Connect PC to OLT concole port, find COM number in "computer management"
- Software for logining OLT by console port(Putty,SecureCRT)
- parameter for console login software

Baud Rate:9600

Parity Check:None

Databit:8

Stopbit:1

Flow Control:None

Login OLT by console login software, then input username: root, password: admin

[OLT console connection diagram]



RJ-45 to DB-9 Console Cable

USB to RS-232 compatible serial port adapter

Port on Computer	Required Cable	Port on OLT
Serial Port	RJ-45 to DB-9 Console Cable	
USB Type-A Port	 USB to RS-232 compatible serial port adapter (Adapter may require a software driver) 	RJ-45 Console Port
	• RJ-45 to DB-9 Console Cable	

2.3 OLT Login By Telnet

There are two way to telnet, one is outband management, another is inband management.

1. Outband management(connect OLT MGMT port).

set PC ip as 192.168.1.X(except 192.168.1.100),PC connect to OLT MGMT port, login the OLT with OLT default manage IP (default IP : 192.168.1.100). then input username and password, default login username is root, password is admin.

Use command as follow can modify the outband management IP:

OLT> enable

OLT# config

OLT(config)# interface mgmt

OLT(config-interface-mgmt)# ip address 192.168.5.100 24

OLT(config-interface-mgmt)# exit

2. Inband management(connect OLT ge port)

First we login olt via console port or mgmt port, and add a vlanif for inband management, assigned an IP address to this vlan,add the ge port to the vlan,ge port vlan mode can be access or trunk,which depend on your network environment,then pc connect to OLT ge port (ge1-ge8) and telnet to the OLT.

The way to set inband mangement ip as follows:

OLT> enable OLT# config OLT(config)# vlan 100 OLT(config)# interface ge OLT(interface-ge)# vlan access 5 100 ----configure ge 5 as inband management port OLT(interface-ge)# exit OLT(config)# interface vlanif 100 OLT(config)# interface vlanif 100 OLT(interface-vlanif-100)# ip address 192.168.2.100 255.255.255.0 OLT(interface-vlanif-100)# exit

3 OLT Upgrade Method

1.Set up OLT update topology:

Use a PC as FTP server(run wftpd32.exe or Wftpd.exe in this pc), and connect to OLT mgmt port or ge port to transmit firmware.



2.Test network connectivity

a.Connnect PC to OLT console port, used for updating OLT in boot mode.

b.Connect pc to OLT MGMT port or ge port,configure PC ip and OLT ip(inband ip or outband ip) are in same segment.

c.PC can ping OLT manegemnet IP, if pc can ping OLT manegemnet ip, means OLT can connect to FTP server.

d.Close PC firewall, prevent firewall intercept FTP software.

3. FTP server configuration

a.Open FTP software, configure FTP username and password, such as: admin/admin

b.Set up a directory of OLT updade files for the FTP server, such as the way for setting up the wftp32. Exe software:

---Security --> User/Rights Security Dialog --> User Name —input admin

- ----Change Password input admin
- ---Home Directory —set directory of OLT upgrade files

e Edit	View L	ogging Messages Security Help	
		User / Rights Security Dialog	
		Home F:\ Browse Help Rights >>	

4.OLT update command

New 4Port/8Port/16Port/Plug-in 16Port OLT need update two file,one is FW file,another is Kernel file; if the boot file is too old, we need update boot file in OLT boot mode, boot upgrade way will be provided separately.OLT the common upgrade method please see below:

a.Enter config view,input command as follows to update OLT kernel file(file name include Kernel)

OLT(config)# load packetfile ftp 192.168.1.222 admin admin New16Port _Kernel_X000_171 114_1833.img

Broadcast message from root:

Upgrade is in process.

File [New16Port_Kernel_X000_171114_1833.img] download OK

File [New16Port_Kernel_X000_171114_1833.img] upgrade OK

b.Input command as follows to update OLT FW file(file name include FW):

OLT(config)# load packetfile ftp 192.168.1.222 admin admin New16Port_FW_V1.3.1_X000_1 71114_1841.img

Broadcast message from root:

Upgrade is in process.

File [New16Port _FW_V1.3.1_X000_171114_1841.img] download OK File [New16Port _FW_V1.3.1_X000_171114_1841.img] upgrade OK

5.After update OLT,we need reboot OLT(Note:only reboot OLT,OLT can use new version) OLT(config)# reboot

Please check whether data has saved, the unsaved data will lose if reboot system. Are you sure to reboot system? (y/n)[n]:y

4 OLT WEB Access Management Installation Method

1. First, update the WEB firmware via the #3 OLT upgrade way, (firmware name include Web word

```
,such as New16Port _Web_V1.0.1_X000_171114_1841.img)
OLT(config)# load packetfile ftp 192.168.1.222 admin admin New16Port_Web_V1.0.1_X000_
171114_1841.img
```

2.PC connect to OLT mgmt port or inband management port, make sure PC can ping OLT inband management ip or outband management ip

3.Before accessing OLT's web management from a PC, you need to enable OLT's SNMP functionality by the OLT command line. The configuration command is as follows:
 OLT(config)# snmp-agent enable
 OLT(config)# snmp-agent community read public
 OLT(config)# snmp-agent community write private

4.After the OLT WEB firmware upgrade, can use below method check the OLT if have the web firmware version informaton, if see the information on the OLT, this mean the OLT have the web firmware version:

```
OLT(config)# show version
Hardware version : V1.0B1
Firmware version : V1R03B002 (Tue, 22 Jan 2019 11:02:30 +0800)
<u>Kernel version : V1.0.0 190122 (Tue, 22 Jan 2019 10:54:57 +0800)</u>
Web version : V1.1.0_181125 (Sun, 25 Nov 2018 11:26:18 +0800)
```

5.Open PC browser input OLT management ip, then we can see web login interface, web login username and password is admin/admin:

← → C (C	不安全 192.168	.5.63/cgi/login	.php								
👖 应用 🗋 上网	网导航 🎦 百度一下	① 领双11红包	□ 天猫商城	□ 天猫超市	阔 爱淘宝	🗋 淘宝特卖	□ 京东商城	🗋 打开新的标签团	ī 🔀 Login	🗋 收藏到有道云笔记	🔀 【新扬
	xPO	N OLT									
				L	ogin	b					
							•				
					User pleas	e enter user	name				
				į.	Pass Pleas	e enter admi	nistrator pass	W			
						Login					

5 Configure Service In OLT Discrete Mode (Non-Template)

----CLI Command Method

This section mainly introduct New 4Port/8Port/16Port/Plug-in 16Port OLT internet service, voice service and multicast service in discrete mode in FTTH environment. Mainly introduce the bridge ONU(SFU and Home Gateway ONU (HGU), The following will introduce the service configuration way for OLT and ONU according to two types ONU.

5.1 FTTH Service Topology



5.2 Data Plan

Main Data Plan List				
Configuration Item	Data			
	VLAN 100: Internet Service			
VLAN Data	VLAN 200: IPTV Service			
	VLAN 300: VOIP Service			
	Ge5: VLAN 100 access mode			
OLT Port Sotting	Ge6: VLAN 200 access mode			
OLI Port Setting	Ge7: VLAN 300 access mode			
	PON1: VLAN 100, VLAN 200, VLAN 300 trunk mode			
ONUL Register ID	Bridge ONU ID: 1			
ONO Register ID	Gateway ONU ID: 2			
	LAN 1: VLAN 100			
Bridge ONU Port config	LAN 2: VLAN 200			
	LAN3: VLAN 300connect to VOIP phone			
	Internet WAN: VLAN 100			
Gateway ONU Port config	IGMP WAN: VLAN 200			
	VOIC WAN: VLAN 300			

5.3 Config Guide



5.4 Configure OLT Service

5.4.1 Configure OLT Global Vlan

In **config** mode, we can use **OLT(config)# show vlan all** to show the created vlan. If the created vlan can't meet the need, we can use command **OLT(config)# vlan** vlan-list to create new vlan, According to the data plan, we create vlan100, vlan200, vlan300 firstly:

OLT(config)# vlan 100 OLT(config)# vlan 200 OLT(config)# vlan 300

5.4.2 Configure OLT GE Port Service Vlan

We can config GE port vlan mode as access, hybrid and trunk, we can configure different mode according to our network plan, configure way of three mode as follows.

Configure GE 5,6,7 port vlan mode is access(in this document,GE port connect to PC,so we configure ge port vlan mode as access):

OLT(config)# interface ge 0/0 OLT(config-interface-ge-0/0)# vlan mode 5-7 access OLT(config-interface-ge-0/0)# vlan access 5 100 OLT(config-interface-ge-0/0)# vlan access 6 200 OLT(config-interface-ge-0/0)#vlan access 7 300 OLT(config-interface-ge-0/0)# exit

Configure GE 5、6、7 \square vlan mode is trunk:

OLT(config)# interface ge 0/0

OLT(config-interface-ge-0/0)# vlan mode 5-7 trunk OLT(config-interface-ge-0/0)# vlan trunk 5 100 OLT(config-interface-ge-0/0)# vlan trunk 6 200 OLT(config-interface-ge-0/0)#vlan trunk 7 300 OLT(config-interface-ge-0/0)# exit

Configure GE 5、6、7 \square vlan mode is hybrid:

OLT(config)# interface ge 0/0 OLT(config-interface-ge-0/0)# vlan mode 5-7 hybrid

OLT(config-interface-ge-0/0)# vlan hybrid 5 tagged 100

OLT(config-interface-ge-0/0)# vlan hybrid 6 tagged 200

OLT(config-interface-ge-0/0)# vlan hybrid 7 tagged 300

OLT(config-interface-ge-0/0)# exit

D NOTE:

The OLT vian handle process as follows:

Vlan mode	Direction	Message have vlan tag or not	Handling method
		vlan tag	Discard
	In	untag	Add port configured vlan in access mode for message (main parameter is VID), and forword
Access mode	Out	vlan tag	Forward message to the corresponding port according to VID and remove vlan tag; If the VLAN ID of the Tagged message is not same to the port VID, it is discard.
		untag	Discard
Trunk mode	In	vlan tag	If the VLAN in the message is permit to pass port, it will be forwarded directly; If the VLAN in the message doesn't permit to pass port, it is discarded.
		untag	Add default vlan(native-vlan) for untagged message and forward.
	Out	vlan tag	If the VLAN in the message is permit to pass port, it will be forwarded directly; If the VLAN ID of the message is the default (native- VLAN)VLAN, then the VLAN tag is discard and forward;If the VLAN in the message doesn't permit to pass port, it is discarded.

		untag	Discard
Hybrid mode	In	vlan tag	If the VLAN in the message is permit to pass port, it will be forwarded directly; If the VLAN in the message doesn't permit to pass port, it is discarded.
		untag	Add default vlan(native-vlan) for untagged message and forward.
	Out	vlan tag	If the VLAN in the message is permit to pass port,according vlan tag or vlan untag of message to discard or no discard vlan tag,then forward message,If the VLAN ID of the message is the default (native-VLAN) VLAN, then the VLAN tag is discard and forward; If the VLAN in the message doesn't permit to pass port, it is discarded.
		untag	Discard

5.4.3 Configure OLT PON Port Service Vlan

We can config PON port vlan mode as access, hybrid and trunk, according to our network plan configure different mode, if message from ONU is untag, we can configure PON port vlan mode is access or hybrid untag mode; if message from ONU is tag, we can configure PON port vlan mode is trunk or hybrid tag mode; configure way as follows.

Config PON1 port vlan mode is access:

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)# vlan mode 1 access OLT(config-interface-epon-0/0)# vlan access 1 100 OLT(config-interface-epon-0/0)# exit

Config PON1 port vlan mode is trunk: (PON port is trunk mode in this document):

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)# vlan mode 1 trunk

OLT(config-interface-epon-0/0)# vlan trunk 1 100,200,300

OLT(config-interface-epon-0/0)# exit

Config PON1 port vlan mode is hybird:

OLT(config)# interface epon 0/0 OLT(config-interface-epon-0/0)# vlan mode 1 hybrid OLT(config-interface-epon-0/0)# vlan hybrid 1 tagged 100,200,300 OLT(config-interface-epon-0/0)# exit

5.4.4 Configure OLT Multicast Service

Configure IGMP and multicast-vlan 200

OLT(config)# igmp mode snooping OLT(config)# multicast-vlan 200 OLT(config-multicast-vlan-200)# igmp program add program-index 1 ip 224.3.3.3 OLT(config-multicast-vlan-200)# igmp router-port ge 0/0/6 OLT(config-multicast-vlan-200)# btv OLT(config-btv)# igmp user add user-index 1 pon 0/0/2 ont 2 vlan 1000 no-auth OLT(config-btv)# multicast-vlan 200 OLT(config-multicast-vlan-200)# igmp member user-index 1 OLT(config-multicast-vlan-200)# igmp member user-index 1

NOTE:

igmp program add program-index command is used to create multicast program table. Only the program table in the multicast vlan, the user can watch the program. Create multicast program table can use **igmp program add program-index <1-2000> batch** command to batch add program or use **igmp program add program-index <1-2000> ip** command to add program single.

5.5 Check ONU Register Status.

In OLT discrete mode,ONU is automatically registered,after ONU is automatically registered,use command **show ont info** to query ONU online status.make sure ONU "Control flag" is "Active", "Run State" is "Online", "Config state" is "Success" and "Match state" is "Match"

F/S P ON	IT MAC	Control	Run	Config	Match	Desc
	ID	flag	state	state	state	
0/0 1 1	E0:67:B3:09:F0:21	active	online	success	match	
0/0 1 2	E0:67:B3:12:05:3E	active	online	success	match	

Total: 2, online 2

5.6 Configure Bridge ONU(SFU) Service

 Ω T(config-interface-enon- Ω/Ω)# show ont info 1 all

In OLT discrete mode, we need enter OLT to config ONU one by one, config way as follows:

5.6.1 Configure Bridge Onu(SFU) Internet Service

Premise condition of ONU to open internet service:

• OLT connect to uplink device and open internet service

- OLT have created vlan for internet service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

SFU ethernet port vlan mode have transparent,tag(access),trunk mode and so on,we can according to our network plan configure different mode.all onu vlan is configured by OLT,configure way as follows:

Configure ONU1 eth1 vlan mode is tag(access) (ONU eth port vlan mode is tag in this document):

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)# ont port native-vlan 1 1 eth 1 vlan 100

OLT(config-interface-epon-0/0)# exit

Configure ONU1 eth1 vlan mode is transparent:

OLT(config)# **interface epon 0/0** OLT(config-interface-epon-0/0)# **ont port vlan 1 1 eth 1 transparent** OLT(config-interface-epon-0/0)# **exit**

Config ONU1 eth1 vlan mode is trunk:

OLT(config)# interface epon 0/0 OLT(config-interface-epon-0/0)# ont port vlan 1 1 eth 1 100 OLT(config-interface-epon-0/0)# exit

5.6.2 Configure Bridge Onu(SFU) Multicast Service

Premise Condition

- OLT connect to uplink device and open service
- OLT have created vlan for multicast service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

In OLT discrete mode, we need enter OLT to config ONU multicast service, configure way as follows:

Configure ONU1 multicast vlan mode is snooping,ONU1 eth2 vlan is 200,and multicast vlan mode is untag:

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)#ont multicast-mode 1 1 igmp-snooping

OLT(config-interface-epon-0/0)#ont port attribute 1 1 eth 2 multicast-tagstrip untag

OLT(config-interface-epon-0/0)# ont port multicast-vlan 1 2 eth 2 200

OLT(config-interface-epon-0/0)# exit

----End

5.7 Configure Gateway ONU (HGU) Service

Gateway ONU (HGU) can provide internet,VOIP,IPTV service for FTTH,support PPPOE/DHCP dial-up,NAT, IGMP.Because HGU have route function, ONU service need to be configured with the local web or tr069,include wan and vlan configuration,don't need configure vlan in olt,only make sure ONU can register to OLT.OLT don't support configure ONU route wan,specific configure as follows:

5.7.1 Configure Gateway ONU (HGU) Internet Service--RTK Solution

premise condition

- OLT connect to uplink device and open service
- OLT have created vlan for internet
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

1. Create route wan and bind LAN1 in onu web

Click Internet \rightarrow Internet Config \rightarrow WAN Config

Status	Internet	Security	Appli	Ca
ternet Config Por	t Binding DHCP Server	WLAN Config	Remote Mgmt	Qc
WAN Config				
WAN Connection name	Add WAN connection 🗸			
Mode :	Route 🗸 🗸			
Connection Mode::	Ipv4/Ipv6 🗸			
DHCP	Obtain an IP address automatically			
OStatic	Use Static IP address			
O PPPoE	PPP over Ethernet (PPPoE)			
NAT:				
Enable Vlan:				
Vlan ID:	100			
802.1p:	(NULL)			
MTU:	1500			
Request DNS:	Enable			
	O Disable			
Primary DNS:				
Secondary DNS:				
Service Mode:	INTERNET 🗸			
Bind port:				
Fort_1	Port_2			
Port_3	Port_4			
wireless (SSID)				

NOTE:

Mode select **Route**. Check **Enable VLAN** and Vlan ID input 100. Service Mode select **INTERNET**. Bind port check **Port_1** and **wireless(SSID)**.

Internet service take DHCP mode as an example in this document. The service type please select suitable type according to the user's actual environment. ONT detail usage please refer to ONT user manual.

2. Check ONU internet wan status

Click Status→Internet Info

ce Info In	nternet Info LAN & WLAN]	R-069 Status				
WAN Info						
	Interface	VLAN ID	Protocol	IGMP	Status	IP address
	1_TR069_R_VID_46	46	IPoE	Enable	down	
	O INTERNET B HID 100	100	TPoF	Enable	110	192 168 5 129
	2_INTERNET_R_VID_TOU	200	1102			102.100.0.110
Network Inform Default Gatewa	ation y 192. 168. 5. 254	200				
Network Informs Default Gatewa Subnet Mask	z_INTERCEL_K_V1D_100 ation y 192, 168, 5, 254 255, 255, 255, 0				up.	
Network Inform Default Gatewa Subnet Mask Primary DNS	v 192. 168. 5. 254 255. 255. 255. 0 192. 168. 5. 254	100				

5.7.2 Configure Gateway ONU (HGU) Multicast Service--RTK Solution

premise condition

DOTE:

- OLT connect to uplink device and open multicast service
- OLT have created vlan for multicast
- OLT have configured GE port multicast vlan
- OLT have configured PON port multicast vlan
- ONU have registered

1. Create bridge wan and bind LAN2 in onu web

Click Internet \rightarrow Internet Config \rightarrow WAN Config

Status	Int	ternet	Securi	ty	Applic	cation	Management	Diagnosis
Internet Config	Port Binding	DHCP Server	WLAN Config	Remote Mgmt	QoS	Time Config	Routing	
WAN Config								
-								
WAN Connection name	Add WAN	connection 🗸						
Mode :	Bridge	~						
Connection Mode::	Ipv4/Ipv	r6 🗸						
Enable Vlan:	\checkmark							
Vlan ID:	200							
802.1p:	(NULL)	~						
Service Mode:	Other	~						
Bind port:								
Port_1	Port_2							
Port_3	Port_4							
wireless (SSID)								
NOIE: Can not bind previous configurat When the Bridge mod careful not to bind	the same port to ions on this por e is set to Othe all LAN ports f	o different WAN co t. r, the FC on the for such a situati	nnection. If the s port does not dyns on!	ame port has been	binded to	o different WAN co	onnection, the last constant	figuration will flush your e mode is Other, please be
Apply	elete							

Mode select to Bridge. Check Enable Vlan, Vlan ID input 200. Service Mode select Other. Bind port click Port_2.

2. Config IGMP mode in ONU web

Click Application \rightarrow IGMP Config \rightarrow IGMP Snooping. Enable IGMP Snooping.

Application	Status		Internet	Securit	у	Application
	DDNS Config	Advanced NAT	UPNP Config	IGMP Config	MLD Config	Multicast Vlan
IGMP Snooping	IGMP Snooping This page allows you t	to config IGMP Sn	mooping function.			
IGMP Proxy	IGMP Snooping:	ODisable	• Enable			
	Save/Apply					

3. Configure multicast vlan on ONU web

Click Application \rightarrow Multicast Vlan \rightarrow 3_Other_B_VID_200 \rightarrow Modify. Input 200 behind VLAN multicast(blank said set).

	16					Gateway Name. nome
Application	l Status	Internet	Security	Application	Management	Diagnosis
IPTV	VLAN multicast (blank said se	e)				
		Interface		Multicast VLAN	Modi	fy
		1_TR069_R_VID_46			l	,
		2_INTERNET_R_VID_100			1	, ,
		3_Other_B_VID_200			/	,

4. Check ONU multicast wan status

Click Status→Internet Info

Status		Internet	Security	Appli	cation	Management	Diagnosis
Device Info	Interne	t Info LAN & WLAN 7	TR-069 Status				
WAN Info							
		Interface	VLAN ID	Protocol	IGMP	Status	IP address

	Interface	VLAN ID	Frotocol	IGHE	Status	ir address
1	1_TR069_R_VID_46	46	IPoE	Enable	down	
	2_INTERNET_R_VID_100	100	IPoE	Enable	up	192. 168. 5. 129
J	3_Other_B_VID_200	200	br1483	Disable	up	

Default Gateway	192. 168. 5. 254	
Subnet Mask	255. 255. 255. 0	
Primary DNS	192. 168. 5. 254	
Secondary DNS		

----end

5.7.3 Configure Gateway ONU (HGU) Internet Service--ZTE Solution

premise condition

- OLT connect to uplink device and open internet service
- OLT have created vlan for internet
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

1. Create route wan and bind LAN1 in ont web

Click Network \rightarrow WAN \rightarrow WAN Connection. Type select to DHCP. Connection Name select to Create WAN Connection. Port Binding check LAN1 and SSID1. Service List select to INTERNET. VLAN Mode select to Used. VLAN ID enter 100. finally click Create.

					1GE3F	E2P1UW
Status N	letwork	Security	Арр	Administration	Diagnosis	Help
WAN WAN Connection 4in6 Tunnel Connec ARP Detect DHCP Palance Size	ction	IP Version Type Connection Name Port Binding	IPv4 DHCP Create	WAN Connection	×	English 🗸 Help
Bonding configuration	1	Enable DHCP Enable NAT	⊠ssidi ⊠	SSID2 SSID3 SSID4		Logout
LAN Configuration PON information setti	ngs	Service List VLAN Mode	INTERN Used	IET v		
WLAN		VLAN ID 802.1p Enable DSCP	0			
TR-069		DSCP MTU	1492			

D NOTE:

Type select to **DHCP**. Connection Name select to **Create WAN Connection**. Port Binding check **LAN1** and **SSID1**. Service List select to **INTERNET**. VLAN Mode select to **Used**. VLAN ID enter **100**. Enable DHCP and Enable NAT keep default checked status.

In this document, Internet service take DHCP mode as an example.please selected suitable service type according to the user's actual need. ONT detail use way please refer to ONT user manual.

			1GE3FE2P1UW
Status Network	Security	App Administration Dia	agnosis Help
Device Information	Туре	DHCP	
Network Interface	Connection Name	3_INTERNET_R_VID_100	English
WAN Connection(IPv4)	NAT	Enabled	Help
WAN Connection(IPv6)	IP	192. 168. 5. 194/255. 255. 255. 0	
4in6 Tunnel Connection	DNS1	192. 168. 5. 1	Logout
PON Alarm	DNS2	0. 0. 0. 0	
	DNS3	0. 0. 0. 0	
User Interface	WAN MAC	E0:67:B3:00:00:BC	
VoIP Status	Gateway	192. 168. 5. 1	
Remote ManageMent Status	Connection Status	Connected	
	Remaining Lease Time	85544sec	

2. Check ONT internet wan status

---end

5.7.4 Configure Gateway ONU (HGU) Multicast Service--ZTE Solution

premise condition

- OLT connect to uplink device and open multicast service
- OLT have created vlan for multicast
- OLT have configured GE port multicast vlan
- OLT have configured PON port multicast vlan
- ONU have registered

1. Create bridge wan in ont web

Click Network \rightarrow WAN \rightarrow WAN Connection. Type select to Bridge. Connection Name select to Create WAN Connection. Port Binding check LAN2. Service List select to OTHER. VLAN Mode select to Used. VLAN ID enter 200. Finally click Create.

1		1GE3FE2	P1UW
Status Netwo	rk Security	App Administration Diagnosis	Help
WAN WAN Connection 4in6 Tunnel Connection ARP Detect DHCP Release First	IP Version Type Connection Name Port Binding	IPv4 Bridge Create WAN Connection LAN1 MLAN2 LAN3 Data	English ~ Help
Bonding configuration	Enable DHCP Service List	CTHER ~	
PON information settings	VLAN Mode VLAN ID	Used ~ 200	
Prefix Management WLAN	802. 1p Enable DSCP		
Port Settings TR-069	DSCP		

Type select to **Bridge**. Connection Name select to **Create WAN Connection**. Port Binding check **LAN2**. Service List select to **OTHER**. VLAN Mode select to **Used**. VLAN ID enter **200**. Enable DHCP keep default unchecked status.

2. Check ONT Bridge wan status

Click Status \rightarrow Network Interface \rightarrow WAN Connection(IPv4).

1				1GE3FE2P1UW
Status	Network	Security	App Administration Diag	gnosis Help
Device Informati	on	Туре	DHCP	
Network Interfac	e	Connection Name	3_INTERNET_R_VID_100	English
WAN Connection(IPv4)		NAT	Enabled	Help
WAN Connectio	on (IPv6)	IP	192. 168. 5. 194/255. 255. 255. 0	
PON Inform	Connection	DNS1	192. 168. 5. 1	Logout
PON Alarm		DNS2	0. 0. 0. 0	
		DNS 3	0. 0. 0. 0	
User Interface		WAN MAC	E0:67:B3:00:00:BC	
VoIP Status		Gateway	192. 168. 5. 1	
Remote ManageMent Status		Connection Status	Connected	
		Remaining Lease Time	85544sec	
		Туре	Bridge Connection	
		Connection Name	2_Other_B_VID_200	

3. Configure multicast vlan on ONT web

Click App \rightarrow Normal App \rightarrow IPTV. Modify the Bridge WAN 2_Other_B_VID_200

		~	1GE	E3FE2P1UW
Status Network	Security App	Administrat	ion Diagnos	is Help
Advance NAT Configuration	Companyion None			
Voip configuration	Multicast VLAN			English 🗸
IGMP		Modify		Help
Normal App	C N	M. Jedan et MIAN	DNR9	Logout
Home storage	3_INTERNET_R_VID_100	MULTICEST VLAN		Logout
IPTV	2_Other_B_VID_200			
MLD Configuration				
DNS Service				
Port Filter				
Multicast				
Multicast				

Multicast VLAN enter 200. Then click Modify $_{\circ}$

1					1GE3FE2P1UW
Status Network	Security	Арр	Administrat	ion Diag	nosis Help
Advance NAT Configuration					
Voip configuration	Multicast V	LAN			English ~
IGMP		Me	odify		Help
Normal App	Connection Name		Multicest VLAN	DNS2 server	Logout
Home storage	3_INTERNET_R_VID_100		· · · · · · · · · · · · · · · · · · ·	2	
IPTV	2_Other_B_VID_200		200		
MLD Configuration					
DNS Service					
Port Filter					
Multicast					

---end

5.7.5 Configure Gateway ONU (HGU) VOIP Service--ZTE Solution

premise condition

- OLT connect to uplink device and open multicast service
- OLT have created vlan for VOIP
- OLT have configured GE port VOIP vlan
- OLT have configured PON port VOIP vlan
- ONU have registered

1. Configure Voice in ONT web

Click Network \rightarrow WAN \rightarrow WAN Connection. Type Select to DHCP. Connection Name Select to Create WAN Connection. Service List select to VOICE. VLAN Mode select to Used. VLAN ID enter 300. Finally click Create $_{\circ}$

1				1GE3F	E2F	P1UW
Status Network	Security	App Administrat	ion	Diagnosis	1	Help
WAN TAN Connection 4in6 Tunnel Connection ARP Detect DHCP Release First	IP Version Type Connection Name Service List VLAN Mode	IPv4 v DHCP v Create WAN Connection VOICE v Used v	<u>~</u>	×		English V Help Logout
Bonding configuration	VLAN ID	300				
LAN Configuration	802. 1p MTU	0 🗸				
PON information settings						
Prefix Management						

2. Configure ONT VOIP

Click App \rightarrow Voip configuration \rightarrow SIP. Enther Sip server ip address.

		1GE3FE	2P1UW
Status Network	Security App	Administration Diagnosis	Help
Advance NAT Configuration	Enable	<u>م</u>	
Voip configuration	Sip Protocol	Soft Switching S 🗸	English ~
SIP	Local Port	5060 (0 ~ 65535)	Holp
account information			пер
Call control	Primary Register Server	192. 168. 2. 201	Logout
Additional Setting	Primary Proxy Server	192. 168. 2. 201	
Digital Map	Primary Outbound Proxy Server	192. 168. 2. 201	
VOIP QoS	Primary Proxy Port	5060 (0 ~ 65535)	
Agreement cancellation			
Media	Secondary Register Server	0. 0. 0. 0	
Advanced	Secondary Proxy Server	0. 0. 0. 0	
Call Display	Secondary Outbound Proxy Server	0. 0. 0	
SLIC Configuration	Secondary Proxy Port	5060 (0 ~ 65535)	
IGMP			
	Register Expires	3600 sec	
Normal App	Unregister On Reboot		
MLD Configuration	Enable Link Test		
DNS Service	Link Test Interval	60 sec	
	Enable # escape		
Port Filter	Register Retry Interval	60 sec	

3. Configure ONT VOIP Account

Click App \rightarrow Voip Configuration \rightarrow account information. Enther Sip account information.

	1GE3FE2P1UW			P1UW					
Status Networ	k ∣ Sec	urity	Арр	E	Administration	Dia	gnosis	-1	Help
Advance NAT Configuration Voip configuration SIP account information Call control	Auth	Sip F mentication us	Enable [Account [Password] er name [English 🗸 Help Loqout
Additional Setting	Enable	Sip Accou	nt		Authentication user name		Modefy		
Digital Map	Yes	895			895		2		
VOIP QoS	Yes	896			896		2		
Agreement cancellation Media Advanced Call Display SLIC Configuration						I	_		

Sip Account, Password, Authentication user name please modify according to the user's actual need.

4. Check Sip account register status

Click Status \rightarrow VoIP Status \rightarrow Register Status.

Status I	Network	Security	Арр	Administration	Ì	Diagnosis	1	Help
Device Information								
			Line Phone	Line Phonel				English ~
Network Interface			Register Status	Registered				
User Interface			Line Phone	Line Phone2				Help
VoIP Status			Register Status	Registered				Locout
Register Statu	s							Logoat
Sip Account								
Remote ManageMent	Status							
								Refresh
🛄 note:								
The Register	Status is Reg	istered mea	n sip accoun	t register succes	sful	ly.		

----end

6 Configure Service In OLT Profile Mode---CLI Command

Method

This section is mainly introduct New 4Port/8Port/16Port/Plug-in 16Port OLT internet service, voice service and multicast service in profile mode in FTTH environment.we can configure different service profile based on different types of ONU, which can be handled flexibly.Mainly introduce the bridge ONU(SFU) and family gateway ONU (HGU),The following will introduce the service configure way for OLT and ONU according to two types ONU.

6.1 Data Plan

Main Data Plan List							
Configure Iteam	Data						
	Ge5: VLAN 100 access mode						
OIT Port Config	Ge6: VLAN 200 access mode						
OLI POIT COINig	Ge7: VLAN 300 access mode						
	PON1: VLAN 100, VLAN 200, VLAN 300 trunk mode						
	Profile number: 1						
DBA Profile (upload	DBA type: Type3						
bandwidth control)	Assure bandwidth: 8Mbit/s						
	Max bandwidth: 20Mbit/s						
ONULLineprofile	Profile ID: 1						
	LLID: 1						
ONU Styprofile	Profile ID: 1						
	ONU Port Capability: 4 ETH Port, 1 POTS Port						
	LAN 1: VLAN 100						
Bridge ONU Port Config	LAN 2: VLAN 200						
	LAN 3: VLAN 300connect to VOIP phone						
	LAN1: VLAN 100						
Gateway ONT Port Config	LAN2: VLAN 200						
	POTS1: VLAN 300						

6.2 Configure Process



6.3 Configure OLT Service

6.3.1 Configfure OLT Globle Vlan

In config mode, we can use OLT(config)# show vlan all to show the created vlan.

If the created vlan can't meet the need, we can use command **OLT(config)# vlan** vlan-list to create new vlan, According to the data plan, we create vlan100, vlan200, vlan300 firstly:

- OLT(config)# vlan 100
- OLT(config)# vlan 200

OLT(config)# vlan 300

6.3.2 Configure OLT GE Port Service Vlan

We can config GE port vlan mode as access, hybrid and trunk, according to our network plan configure different mode, configure way of three mode as follows.

Configure GE 5_{5} 6_{5} 7 port vlan mode is access(in this document,GE port connect to PC,so we configure ge port vlan mode as access):

- OLT(config)# interface ge 0/0
- OLT(config-interface-ge-0/0)# vlan mode 5-7 access
- OLT(config-interface-ge-0/0)# vlan access 5 100

OLT(config-interface-ge-0/0)# vlan access 6 200

OLT(config-interface-ge-0/0)#vlan access 7 300

OLT(config-interface-ge-0/0)# exit

Configure GE 5、6、7 port vlan mode is trunk:

OLT(config)# interface ge 0/0

OLT(config-interface-ge-0/0)# vlan mode 5-7 trunk OLT(config-interface-ge-0/0)# vlan trunk 5 100 OLT(config-interface-ge-0/0)# vlan trunk 6 200

OLT(config-interface-ge-0/0)#vlan trunk 7 300

OLT(config-interface-ge-0/0)# exit

Configure GE 5、6、7 port vlan mode is hybrid:

OLT(config)# interface ge 0/0 OLT(config-interface-ge-0/0)# vlan mode 5-7 hybrid OLT(config-interface-ge-0/0)# vlan hybrid 5 tagged 100 OLT(config-interface-ge-0/0)# vlan hybrid 6 tagged 200

OLT(config-interface-ge-0/0)# vlan hybrid 7 tagged 300

OLT(config-interface-ge-0/0)# exit

6.3.3 Configure OLT PON Port Service Vlan

We can config PON port vlan mode as access, hybrid and trunk, according to our network plan configure different mode, if message from ONU is untag, we can config PON port vlan mode is access or hybrid untag mode; if message from ONU is tag, we can config PON port vlan mode is trunk or hybrid tag mode; configure way as follows.

Configure PON1 port vlan mode is access:

OLT(config)# **interface epon 0/0** OLT(config-interface-epon-0/0)# **vlan mode 1 access** OLT(config-interface-epon-0/0)# **vlan access 1 100** OLT(config-interface-epon-0/0)# **exit**

Configure PON1 port vlan mode is trunk: (PON port is trunk mode in this document):

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)# vlan mode 1 trunk OLT(config-interface-epon-0/0)# vlan trunk 1 100,200,300 OLT(config-interface-epon-0/0)# exit

Configure PON1 port vlan mode is hybird:

OLT(config)# **interface epon 0/0** OLT(config-interface-epon-0/0)# **vlan mode 1 hybrid** OLT(config-interface-epon-0/0)# **vlan hybrid 1 tagged 100,200,300** OLT(config-interface-epon-0/0)# **exit**

6.3.4 Configure OLT Multicast Service

Configure IGMP and multicast-vlan 200

OLT(config)# igmp mode snooping OLT(config)# multicast-vlan 200 OLT(config-multicast-vlan-200)# igmp program add program-index 1 ip 224.3.3.3 OLT(config-multicast-vlan-200)# igmp router-port ge 0/0/6 OLT(config-multicast-vlan-200)# btv OLT(config-btv)# igmp user add user-index 1 pon 0/0/2 ont 2 vlan 1000 no-auth OLT(config-btv)# multicast-vlan 200 OLT(config-multicast-vlan-200)# igmp member user-index 1 OLT(config-multicast-vlan-200)# igmp member user-index 1

D NOTE:

igmp program add program-index command is used to create multicast program table. Only the program table in the multicast vlan, the user can watch the program. Create multicast program table can use **igmp program add program-index <1-2000> batch** command to batch add program or use **igmp program add program-index <1-2000> ip** command to add program single.

6.4 Create ONU Profile

EPON ONU profile include DBA-profile,ont-lineprofile,ont-srvprofile.

- DBA profile:DBA profile describes the EPON flow parameters,the LLID bind DBA profile to distribute bandwidth dynamically,and increases utilization of uplink bandwidth.
- ont-lineprofile:ont-lineprofile describes the bind relationship of LLID and DBA profile,FEC mode,QOS mode and so on.
- ont-srvprofile:ont-srvprofile provides a service configuration channel for ONU manage by oam.such as ONU port vlan configure,ONU igmp configure.

6.4.1 Create ONU DBA Profile

Use **show dba-profile all** command to query the existing DBA profile in the system, if the existing DBA profile can't meet the demand, we need use dba-profile to add DBA profile. Create different DBA profile for different service type.

Create dba profile number is 1,type is Type3,assure bandwidth is 8Mbit/s,max bandwidth is 20Mbit/s:

OLT(config)# dba-profile profile-id 1 OLT(dba-profile-1)# type3 assure 8192 max 20480 OLT(dba-profile-1)# commit

OLT(dba-profile-1)# exit

D NOTE:

DBA based on the entire ONU schedule, we need to select the appropriate bandwidth type and bandwidth size according to the service type and onu users number. The summation of fixed bandwidth (fix) and guarantee bandwidth (assure) not surpass the total bandwidth of PON port.

6.4.2 Create ONU Lineprofile

Create EPON ONU lineprofile,number is 1,bind to DBA profile 1: OLT(config)# **ont-lineprofile epon profile-id 1** OLT(config-epon-lineprofile-1)# **llid 1 dba-profile-id 1** OLT(config-epon-lineprofile-1)# **commit** OLT(config-epon-lineprofile-1)# **exit**

6.4.3 Create ONU Srvprofile

Create EPON ONU **srvprofile**, number is 1, configure ONU ETH port number is 4, POTS port number is 2:

OLT(config)# ont-srvprofile epon profile-id 1

OLT(config-epon-srvprofile-1)# ont-port eth 4 pots 2

OLT(config-epon-srvprofile-1)# commit

OLT(config-epon-srvprofile-1)# exit

//finish config, use commit command to make parameter effect

6.5 Add ONU Manually

1. Modify PON port ONU authentication method is manually registered with MAC.

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)# ont authmode 1 mac

2.Open pon port ONU automatic find function:

OLT(config)# interface epon 0/0

OLT(config-interface-epon-0/0)#ont autofind 1 enable

OLT(config-interface-epon-0/0)#show ont autofind 1

//This command show all unregistered ONT information that is connected to the EPON port by the spectrometer.

3.Register ONU manually and bind lineprofile and srvprofile.

OLT(config-interface-epon-0/0)# ont add 1 1 mac-auth E0:67:B3:12:05:3E ont-lineprofile-id 1 ont srvprofile-id 1

Add pon 1 onu 1 successfully.

OLT(config-interface-epon-0/0)# ont add 1 2 mac-auth E0:67:B3:09:f0:21 ont-lineprofile-id 1 ont-srvprofile-id 1

Add pon 1 onu 2 successfully.

4.Add all the ONU under PON port:

ont confirm command can be used to add all the ONU under PON port, and also can add ONU separately.:

OLT(config-interface-epon-0/0)# ont confirm 1 all mac-auth ont-lineprofile-id 1 ont-srvprofile-id 1

6.6 Check ONU Registration Status

After adding ONU, use show ont info command to query the online status of ONU, and ensure that

the "Control flag" of ont is "Active", "Run State" is "Online", "Config state" is "Success" and "Match state" is "Match".

OLT(config-	interface-epon-0/0)# s	how ont inf	o 1 all			
F/S P C	INT MAC	Control	Run	Confi	g Match	Desc
	ID	flag	state	state	state	
0/0 1 1	E0:67:B3:09:F0:21	active	online	success	match	
0/0 1 2	E0:67:B3:12:05:3E	active	online	success	match	

Total: 2, online 2

When the ONU configuration status is failed, ONU cannot up:

- If the "Control flag" is "deactive", we need to use ont activate command to activate ONU in EPON mode.
- If the ONU not online, the "Run state" is "offline", it may be a physical line break, or optical module is damaged, so we need to check all device and the physical line.
- If the ONU "config state" is "failed", it means ONU's configuration is not applicable to some configuration of srvprofile, we need to capture packet on the ONU and analyze onu not accept which configuration.
- If the ONU "Match state" is "Mismatch", it shows that onu srvprofile capability(port number) don't Match ONU practical capability, we can use show ont capability and show ont config capability to contrast ONU practical ability and onu srvprofile capability.

6.7 Configure Bridge ONU (SFU) Service

6.7.1 Configure Bridge ONU(SFU) Internet Service

premise condition of ONU to open internet service:

- OLT connect to uplink device and open internet service
- OLT have created vlan for internet
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered and bind to lineprofile and srvprofile

SFU ethernet port vlan mode have transparent,tag(access),trunk mode and so on,we can configure vlan in srvprofile mode or discrete mode(note : If we configure onu port vlan in srvprofile and discrete mode,the discrete configuration priority is higher than the profile configuration,when ONU port discrete configuration vlan is transparent,will apply profile configuration),#4.5 show the discrete configuration, profile config is introduced as follows we can according to our network plan configure different vlan mode,configure way as follows:

Configure ONU port vlan mode is tag(access) (ONU port vlan mode is tag in this document):

OLT(config)# ont-srvprofile epon profile-id 1

OLT(config-epon-srvprofile-1)# port native-vlan eth 1 100

OLT(config-epon-srvprofile-1)# commit OLT(config-epon-srvprofile-1)# exit

Configure ONU port vlan mode is transparent:

OLT(config)# ont-srvprofile epon profile-id 1

OLT(config-epon-srvprofile-1)# port vlan eth 1 transparent

OLT(config-epon-srvprofile-1)# commit

OLT(config-epon-srvprofile-1)# exit

Configure ONU port vlan mode is trunk: OLT(config)# ont-srvprofile epon profile-id 1 OLT(config-epon-srvprofile-1)# port vlan eth 1 100 OLT(config-epon-srvprofile-1)# commit OLT(config-epon-srvprofile-1)# exit

6.7.2 Configure Bridge ONU(SFU) IPTV Service

Premise condition of ONU to open internet service:

- OLT connect to uplink device and open internet service
- OLT have created vlan for IPTV
- OLT have configured GE port IPTV vlan
- OLT have configured PON port IPTV vlan
- ONU have registered and bind to lineprofile and srvprofile

we can configure SFU IPTV service in srvprofile mode or discrete mode(note: if we configure onu iptv service in srvprofile and discrete mode, the discrete configuration priority is higher than the profile configuration, when ONU iptv service in discrete configuration is default, will apply profile configuration), #4.5 show the discrete config, profile config is introduced as follows, we can according to our network plan configure different vlan mode, configure way as follows:

Configure ONU port multicast mode ,multicast vlan,process mode of multicast vlan

OLT(config)# interface epon 0/0 OLT(config-interface-epon-0/0)#ont multicast-mode 1 1 igmp-snooping OLT(config-interface-epon-0/0)# exit OLT(config)# ont-srvprofile epon profile-id 11 OLT(config-epon-srvprofile-11)# port eth 1 multicast-tagstrip untag OLT(config-epon-srvprofile-11)# port multicast-vlan eth 1 200 OLT(config-epon-srvprofile-11)# commit OLT(config-epon-srvprofile-11)# exit

----end

6.8 Gateway ONU (HGU) Service Configure Introduction

Gateway ONU(HGU) can provide internet, voice, iptv service for FTTH, support PPPOE dial-up,

network address translation (NAT), Internet Group Management Protocol (IGMP), due to the ONU



heve route function, so we need configure onu wan and lan in onu web or TR069 server, not need configure ONU port in OLT, OLT don't support configure ONU route wan, specific configure way can refer to the previous discrete configuration method and the ONU user manual.

7 Configure OLT QinQ Service

7.1 Data Plan

Main Data Plan List				
Configure Iteam	Data			
VLAN	SVLAN 400 : QinQ service outer vlan CVLAN 100-200:QinQ service inner vlan			
OLT Port Configure	Ge8: VLAN 400 Hybrid mode PON2: VLAN 400 Hybrid mode			
Bridge ONT Port Configure	LAN 3: VLAN 100			
Gateway ONT Port Configure	LAN 3: VLAN 100			

7.2 Configure Processes

7.3 Configure OLT

Create outer vlan:

Oprate **show vlan all** command can query the existing vlan, If the existing vlan does not meet the need, we can use vlan command to create outer vlan.

OLT(config)# vlan 400

Configure GE port QinQ outer vlan:

OLT(config)# interface ge 0/0 OLT(config-interface-ge-0/0)#vlan mode 8 hybrid OLT(config-interface-ge-0/0)# vlan hybrid 8 tagged 400 OLT(config-interface-ge-0/0)# exit

Configure PON port QinQ outer vlan and PON port QinQ:

OLT(config)# interface epon 0/0 OLT(config-interface-epon-0/0)#vlan mode 2 hybrid OLT(config-interface-epon-0/0)#vlan hybrid 2 tagged 400 OLT(config-interface-epon-0/0)# vlan qinq 2 cvlan-range 1000 2000 400 OLT(config-interface-epon-0/0)# exit

8 Common Command Description

Command	Description			
	Enter OLT PON board (Apply to			
interface epon 0/0	box OLT new 4port/8port/16port			
	OLT,all default is 0/0)			
OLT(config)# interface epon 0/ < <i>SlotID</i> >	Enter OLT PON board (apply to			
Example: OLT(config)# interface epon 0/1Enter slot 1	Plug-in card 16port OLT)			
interface go 0/0	Enter OLT uplink(ge) board (In			
	default,box OLT all is 0/0)			
show vlan all	View all vlan in OLT			
	View OLT uplink(ge) and PON port			
show port vlan < Port ID>	vlan(The premise is we need enter			
	the board card mode.)			
	View OLT uplink port and PON port			
show port state < Port ID>	status (The premise is we need			
	enter the board card mode.)			
show version	View OLT software version			
	View OLT mode and other			
	information			
show interface mgmt	View OLT outband Manage IP			
show interface vlanif brief	View OLT inband Management			

	IP(The premise is we need have		
	vlanif interface)		
show current-config	View OLT running configuration		
show saved-config	View OLT have saved configuration		
show ontinfo 0/0 (Dent ID) oll	View ONU register status in PON		
snow ont into 0/0 < Port ID> all	port		
show ont info 0/0 < Port ID> <ont id=""></ont>	View ONU details information		
	View autofind but unregistered		
show out out of a coart (D)	ONU in PON port(The premise is		
snow ont autoring < Port ID>	we need to enter the PON board		
	mode)		
show ont optical-info < Port ID> <ont id=""></ont>	View ONU optical information		
	View ONU port status(The premise		
show ont port state < Port ID> <ont id=""></ont> eth <ont id="" port=""></ont>	is we need to enter the PON board		
	mode)		

9 Configure Service In OLT Discrete Mode (Non-Template)

---EMS Method

This section mainly introduct New 4Port/8Port/16Port/Plug-in 16Port OLT internet service and multicast service in discrete mode in FTTH environment. The following will introduce the service configuration way for OLT and ONU according to the bridge ONU(SFU).

9.1 Data Plan

Main Data Plan List				
Configuration Item	Data			
VI AN Data	VLAN 110: Internet Service			
VLAN Data	VLAN 120: IPTV Service			
	Ge5: VLAN 110 access mode			
OLT Port Setting	Ge6: VLAN 120 access mode			
	PON5: VLAN 110, VLAN 120 trunk mode			
ONU Register ID	Bridge ONU ID: 9			
Bridge ONU Port config	LAN 1: VLAN 110			
	LAN 2: VLAN 120			

9.2 Configuration Guide



9.3 Configure OLT Service

9.3.1 Configure OLT Global Vlan

Click **"Switch Control Card --> Vlan list"** to query the created Vlan.

If the created vlan cannot meet the requirements, vlan can be created by clicking the **Vlan** List. According to the data planning, we create vlan110 and vlan120 firstly:



F1 F3 F5 F7 F0 F0 F0 F0 F0 F2 F4 F6 F6 F6	P9 P11 P10 P12	1 P13 1 P13 1 P14	P15 P1 P1 P16 P15 P15	GE2 GE3 GE4 55 GE5	CONSOLE CES GET GEB CONSOLE CO	ŝī
	VLAN Lis	t				
DLT Device 192.168.5.64 FD1216SUP -	Selected	VLAN ID	VLAN Name	Tag Port	UnTag Port	Modify
		1	vlan1	Pon1	GE1-GE6;XGE1;XGE2;Pon2-Pon9;Pon10	Po Config
System Status		3	vlan3			Config
Management Config		10	vlan10			Config
Device Upgrade Management		20	vlan20	Pon1		Config
SwitchCard Attribute		21	vlan21		GE7	Config
SwitchCard Mirror	Pr	ompt		×		Config
MacAddress Management						Config
SniBroadcastStormSuppression		Cre	ate successfully	! ,total:2	GE8	Config
Port VLAN Manegement		-	[reserved]		Pon1	Config
Vlan List			OK			Config
Port VLAN Config		1999	Manooo			Config
Port VLAN Translation Port VLAN Aggregation QinQ Config IGMP Management Stp Global Set Stp Fort Set ACL Rule Current ACL RULE Apply to Port ACL Ons Global Confin	Selec	t All Del	lete		Refresh Add Set	

9.3.2 Configure OLT GE Port Service Vlan

-

1. Click "Switch Control Card --> Port VLAN Config", and then configure GE 5 port vlan mode is access and add the vlan 110 to the ge5 port :

77 P3 P11 P13 P15 1 P1 P12 P14 P15 1 1 P10 P12 P14 P16 2 1 P10 P12 P14 P16 2 1 P10 P12 P14 P16 2 0 0 0 0 0 0 0 0 0 0 0 0 0	OFE OFE <thofe< th=""> <thofe< th=""> <thofe< th=""></thofe<></thofe<></thofe<>	VLANMode access trunk access	Modify Config Config Config
Vian Priority 0 0 0 0 0 0 0 0 0	PVid 1 1 1 1 1 1 1	VLANMode access access trunk access	Modify Config Config Config
0 0 0 0 0 0 0 0	1 1 1 1 1 1	access access trunk access	Config Config Config
0 0 0 0 0 0	1 1 1 1 1	access trunk access	Config
0 0 0 0 0	1 1 1 1	trunk access	Config
0 0 0 0	1	access	
0	1		Config
0		itrunk	2 Config
0	1	trunk	Config
	21	access	Config
0	56	access	Config
0	1	access	Config
0	1	access	Config
0	100	trunk	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	trunk	Config
0	1	access	Config
0	1	trunk	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	access	Config
0	1	trunk	Config
0	1	access	Config
	0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	0 1 trunk 0 1 access 0 1 acc

Control Module Managemen	t		×
	P3 P5 P7 P9 Image Image Image Image Image Image Image		Punti Punti STR Auran RST
OLT Device 192.168.5.64 👻	Port VLAN Config Port ID	Vian Priority	0 *
System Status Management Config Device Upgrade Management SwitchCard Attribute Link-aggregation Group Config SwitchCard Mirror MacAddress Management SniBroadcastStormSuppressi Port VLAN Manegement Van List Port VLAN Config Port VLAN Config Port VLAN Config	PVid Port VLAN Trunk Device ID GE5	3 110- VLANMode access 4 Refresh 5 Set Back Prompt X ist i Set [PVid:110,VLANMode:access],success	
Port VLAN Aggregation Oning Config IIGMP Management STP Management STP Management Stp Global Sat Stp Port Sat CL Management forup ACL Rule Ourrent ACL RULE Apply to Port ACL Cos Global Config			

2. Click **"Switch Control Card --> Port VLAN Config"**, and then configure GE 6 port vlan mode is access and add the vlan 120 to the ge6 port :

👹 Control Module Managemen	t				×
	F3 F5 F7 F9 F11 F 100 100 100 100 100 100 100 101 100 100 100 100 100 100 100 101 100 100 100 100 100 100 100	3 P15 1 101 1 CE1 CE2 CE3 CE4 1 101 2 1 CE1 CE2 CE3 CE4 1 101 1 CE1 CE2 CE3 CE4 1 101 1 CE1 CE2 CE3 CE4		ST TRANSPORT	
OLT Device 192.168.5.64 System Status System Status Management Config Device Upgrade Management SwitchCard Attribute Link-aggregation Group Config SwitchCard Mirror	Port ID GE1 GE2 GE3 GE4 GE6 GE6 GE6 GE7 GE8 GE8	Vlan Priority 0 0 0 0 0 0 0 0 0 0 0 0 0	PVid 1 1 1 1 1 1 1 21 56	VLANMode access access trunk access access trunk access access	Modify Config Config Config Config Config 2 Config Config Config
MacAdress Management SniBrodcastStormSupressi Port VLAN Management Vian List 1 Port VLAN Aggregation OinQ Config ICAP Management	XGE1 XGE2 PON1 PON2 PON3 PON3 PON4 PON5 PON5 PON5 PON6 PON6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1	access access trunk access access access access trunk access trunk access	Config Config Config Config Config Config Config Config Config Config Config
STP Management Stp Fort Set Stp Port Set Stp Port Set ACL Ranagement Group ACL Rule Current ACL RULE Apply to Port ACL Qos Global Config	PON9 PON10 PON11 PON12 PON13 PON13 PON15 PON15	0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1	access access access access access access trunk access	Config Config Config Config Config Config Config Config
Control Module Management	1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 P15 1 12 1 CE1 CE2 CE3 CE4 1 12 1 2 10 10 10 10	GES GEB GET GEB	XOE1 XOE2 TOTAL XOE3 TOTAL X	×
OLT Device 192.168.5.64 V	Port VLAN Config Port ID PVid	3	Vian Priority 120 - VLANMode access	4	0
Management Config Device Upgrade Management Switch/Card Athrbute Link-aggregation Group Config Switch/Card Mirror MacAdress Management SniBroadcastStormSuppressi Port VLAM Manegement - Vian List	Port VLAN Trunk Device ID GE6	Prompt i Set [PVid:120,VLANMode	5 Set Bi	ack	
Port VLAN Config Port VLAN Translation Port VLAN Aggregation Oning Config IGMP Management STP Management Stp Global Set Stp Global Set Stp Conf Set ACL Rule Act Rule Act Rule Apply to Port ACL Gos Global Config					

9.3.3 Configure OLT PON Port Service Vlan

 Click "Switch Control Card --> Port VLAN Config --> Config", and then config PON5 port vlan mode is trunk:



 Click "Switch Control Card --> Port VLAN Config --> Config -->Add", and then add the vlan 110 and vlan 120 to pon 5 port:

Control Module Managemer	nt		>
P1 P1 P1 P2 P2	P3 P5 P7 P9 P1 Image: 1 Image:		
	Port VLAN Config		
OLT Device 192.168.5.64	Port ID PON5	Vlan Priority	0 *
System Status	PVid	1 VLANMode trunk	
Management Config			Lines
Device Upgrade Management SwitchCard Attribute		Refresh Set Back	
Link-aggregation Group Config	Port VLAN Trunk	ADD Trunk VLAN X	
MacAddress Management	Device ID	WidList	
SniBroadcastStormSuppressi	PON5		
Port VLAN Manegement Vian List		VLANID 110,120 0	
Port VLAN Config			
Port VLAN Translation Port VLAN Aggregation			
QinQ Config		7 QK Cancel	
STP Management			
Stp Global Set			
ACL Management Group			
ACL Rule			
Apply to Port ACL			
Qos Global Config			
		5 Add Delete	
Control Module Managemen	nt		
PI P2	P3 P5 P7 P9 P Image: P3 Image: P3		
	Port VLAN Config		
OLT Device 192.168.5.64 👻	Port ID PON5	Vian Priority	0
System Status	PVid	1 + VLANMode trunk	
Management Config			
SwitchCard Attribute		Reliesh Set Back	
Link-aggregation Group Config	Port VLAN Trunk		
MacAddress Management	Device ID DON5	TrunkVidList	
SniBroadcastStormSuppressi	PONS		
Vian List		Prompt X	
Port VLAN Config			
Port VLAN Aggregation		Add trunk VLAN[.110,120]->PON5 success	
QinQ Config		OK	
STP Management			
Stp Global Set			
Stp Port Set			
ACL Rule			
Apply to Port ACL			
Qos Global Config			
		Add Delete	

9.3.4 Configure OLT Multicast Service

 Click "Switch Control Card --> IGMP Management", and then configure IGMP mode is snooping:

Element Management System	Control Module Management		×
	P1 P3 P5 P7 P9 P1 P P P P P2 P2 P	P11 P13 P15 P11 P	
12:188.54 FD1104B 12:188.54 FD1218S 1 Switch Control Card 1 Pont-1 1 Pont-2 1 Pont-3 1 Port-4 1 Port-6 1 Port-6 1 Port-10 1 Port-10 1 Port-10 1 Port-10 1 Port-10 1 Port-13 1 Port-14 2 Port-15 1 Port-13 2 Port-14 2 Port-13 2 Port-14 3 Port-15 3 Port-14 3 Port-15 4 Port-16	OLT Device 192.168.5.64 FD1216SUP System Status Management Config Device Upgrade Management SwitchCard Almbute Link-aggregation Group Config SwitchCard Miror MacAddress Management SniBroadcastStormSuppression Port VLAN Config Port VLAN Config Port VLAN Config Port VLAN Aggregation OinD Config GMP Management Stg Global Set Stg Clobal Set Stg Con Set ACL Male Current ACL RULE Apply to Port ACL Ocos Global Config	KMP Management IGMP Model IGMP Model RobustnessVariable 2 ¹ / ₂ GeneralQueryInterval 125 ¹ / ₂ MaxSpecificResponseTime 10 ¹ / ₂ SpecificQueryCount 2 ¹ / ₂ Refresh 4 Set [IGMP Modet:snooping].success IX	

2. Click **"Switch Control Card --> IGMP Management -->Add"**, and then configure IGMP router port is GE6 and multicast vlan is 120:

Gontrol Module Management				
	P11 P13 P15 Image: Image in the image in t	GE4 GE5 GE6 G	ET GER <u>XGE1 XGE2</u> CONSOLE	PUURI PUUR2 PLARM RST
OLT Device 192.168.5.64 FD1216SUP	IGMP Management IGMP Model RobustnessVariable<1-10>	snooping	MaxGeneralResponseTime <1-25>s GeneralQueryInterval <2-3000>s	10 + 125 -
Management Config Device Upgrade Management SwitchCard Attribute	MaxSpe 🗾 Add Multicast Vlan	× 10	SpecificQueryCount <1-10>	2
Link-aggregation Group Config SwitchCard Mirror MacAddress Management SniBroadcastStormSuppression Port VLAN Manegement Vian List Port VLAN Config Port VLAN Config Port VLAN Aggregation On VLAN Aggregation On VLAN Aggregation GMP Management STP Management Stp Global Set Stp Port Set ACL Rule Current ACL RULE Apply to Port ACL Qos Global Config	Multice Multice Multice Contr Multice GE1 GE2 GE3 GE7 GE5 GE7 GE7 120 XGE1 XGE2 8 OK C2	6 120 rd Info	outer Port :5 :6 :5	
	Refresh	Set 5 Add	Delete Config	

		Control	Module M	Manageme
--	--	---------	----------	----------

🗐 Control Module Management		
P1 P3 P5 P7 P1 P3 P5 P7 P1 P3 P5 P7 P2 P4 P6 P8	P9 P11 P13 P15 T T T T T T T T T T T T T T T T T T T	
OLT Device 192.168.5.64 FD1216SUP	IGMP Management IGMP Model RobustnessVariable<1-10> 2 GeneralQueryInterval <2-3000>s	10
 Management Config Device Upgrade Management SwitchCard Attribute Link-aggregation Group Config 	MaxSpecificResponseTime<100-10000>ms 10 + SpecificQueryCount <1-10>	2
SwitchCard Mirror MacAddress Management SnilbroadcastStormSuppression Port VLAN Manegement Vian List Port VLAN Config Port VLAN Aggregation OinQ Config GMP Management Stp Clobal Set Stp Port Set ACL Management Group ACL Rule Current ACL RULE Apply to Port ACL Qos Global Config	Controlled Multicast VLAN Multicast Vlanid Prompt 20 55 Add MulticastVian.120,success CK	
	Refresh Set Add Delete Config	

3. Click "Switch Control Card --> IGMP Management -->Program List", and then configure IGMP program id is 1, multicast vlan is 120 and multicast address is 224.3.3.3:

🗐 Control Module Management		>
P1 P3 P5 P7 P9 P1 P3 P5 P7 P9 P2 P4 P6 P8 P1	P11 P13 P15 T T T T T T T T T T	uuri uuri vys larm RST
OLT Device 192.168.5.64 FD1216SUP System Status Management Config Device Upgrade Management SwitchCard Attribute	IGMP Management IGMP Model snooping MaxGeneralResponseTime <1-25>s RobustnessVariable<1-10> 2 × 3 GeneralQueryInterval <2-3000>s MaxSpecificResponseTime<100-10000>ms 10 × 3 SpecificQueryCount <1-10>	10 * * 125 * 2 *
Link-aggregation Group Config SwitchCard Mirror MacAddress Management SniBroadcastStormSuppression Port VLAN Manegement Vian List Port VLAN Config Port VLAN Translation Port VLAN Aggregation Oind Config IGMP Management STB Management	Multicast VIan Program List User Config Forward Info Proxy List Program ID Multicast/VID proxy ID(1-2000) 1 3 MVID 120 4 Ip Address 224.3.3 5 6 QK Cancel	Port
Stp Ciobal Set Stp Port Set ACL Rule ACL Rule Current ACL RULE Apply to Port ACL Qos Global Config	Refresh Set 2 Add Delete	

🗐 Control Module Management		>
P1 P3 P5 P7 P9 P1 P3 P5 P7 P9 P2 P4 P6 P6 P10 P10	P11 P13 P15 P11 P13 P15 P11 P13 P15 P12 P14 P16 P12 P14 P16 P12 P14 P16 P12 P14 P16 P12 P14 P16 P12 P14 P16 P12 P14 P16 P13 P15 P13 P15 P13 P15 P14 P15 P14 P16 P14 P16 P16 P16	
OLT Device 192.168.5.64 FD1216SUP System Status Management Config Device Upgrade Management	IGMP Management IGMP Model snooping MaxGeneralResponseTime <1-25>s RobustnessVariable<1-10> 2 + + GeneralQueryInterval <2-3000>s MaxSpecificResponseTime<100-10000>ms 10 + + SpecificQueryCount <1-10>	
SwitchCard Attribute Link-aggregation Group Config SwitchCard Mirror MacAddress Management SniBroadcastStormSuppression Port VLAN Manegement Vian List Port VLAN Config	Multicast VIan Program List User Config Forward Info Proxy List Program ID MulticastVID Prompt X	
Port VLAN Translation Port VLAN Aggregation GinQ Config IGMP Management STP Management Stp Global Set Stp Port Set		
ACL Management Group ACL Rule Current ACL RULE Apply to Port ACL Qos Global Config	Refrach Set Add Datate	
	Iteriesii Ser Add Delete	

9.4 Configure Bridge ONU(SFU) Service

In OLT discrete mode, we need enter OLT to config ONU one by one, config way as follows:

9.4.1 Configure Bridge Onu(SFU) Internet Service

Premise condition of ONU to open internet service:

- OLT connect to uplink device and open internet service
- OLT have created vlan for internet service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

SFU ethernet port vlan mode have transparent,tag(access),trunk mode and so on,we can according to our network plan configure different mode.all onu vlan is configured by OLT,configure way as follows:

 Click "Pon Module --> Port-5 --> ONU ID9 --> ONU Port VLAN", and then configure ONU9 eth1 vlan mode is tag(access):

	ONU Management([OLT:192.1	68.5.64 FD1216SUP]>Pon Module>Port-5>[19:DA:63]ONU-9)
Image: Clear Virallocated Region Image: Virallocated Region Image: Virallocated Region Image: Vira	Onu Basic Information Onu PonPort Trans Information Onu Capability Information Onu Capability Information Onu Port Manegement Port Rate Limit ONU Port VLAN 4 ONU IGMP	ONU Port coord 5 VLAN mode lag 6 Prionity 0 PVID 7 110
		Refresh 8 Set

9.4.2 Configure Bridge Onu(SFU) Multicast Service

Premise Condition

- OLT connect to uplink device and open service
- OLT have created vlan for multicast service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

In OLT discrete mode, we need enter OLT to config ONU multicast service, configure way as follows:

1. Click **"Pon Module --> Port-5 --> ONU ID 9 --> ONU IGMP"**, and then config ONU9 multicast vlan mode is snooping:

System Config Performance Alarm Log Help	ONU Management([OLT:192.10	58.5.64 FD1216SUP]>	Pon Module>Port-5>[19:DA:63]]ONU-9)		×
	Onu PonPort Trans Information	IGMP Mode Igmp-sit	ooping 5			
Generated Region	Onu Capability Information	ONU IGMP				
# 192,168.5.80 FD1108SUP	Onu Port Management	Port ID	MVIan ID	MaxMultiNum	Tag/unTag	
192.168.5.54 FD1104B	Port Rate Limit					
E 192.168.5.64 FD1216SUP	ONU Port VLAN					
Switch Control Card	ONU IGMP 4					
E Pon Module 1						-
Port-1						•
Foli-2						
Port-4						
🖻 📶 Port-5 2						
[01:2C:4D]ONU-1		Promot	~			
[01:2C:5D]ONU-2						
[33:A7:88]ONU-3		(i) Set [IGM	P Mode:igmp-snooping;],success	3		
[35.30.A9]0NU-5				-		
[19:DA:75]ONU-6			OK			
[1A:01:AA]ONU-8						
[19:DA:63]ONU-9 3						
Poll-6						
Port-8						
Port-9	4					· · · · · · · · · · · · · · · · · · ·
Clear Severity Handler						
Trap Log Operation log			F	Refresh 6 Set		

2. Click "Pon Module --> Port-5 --> ONU ID 9 --> ONU IGMP -->Add", and then config ONU9 eth2

vlan is 120:



Element ivianagement System						U
stem <u>C</u> onfig <u>P</u> erformance <u>A</u> larm <u>Log H</u> elp	ONU Management([OLT:192.1	68.5.64 FD1216SUP]>	Pon Module>Port-5>[19:DA:63	I]ONU-9)		×
	Onu Basic Information	IGMP Mode igmp-sn	ooping			-
📴 Top Tree	Onu Capability Information	ONU IGMP				
 With the second s	Onu Sla Information	Port ID	MVIan ID	MaxMultiNum	Tag/unTag	
192.168.5.54 FD1104B	Port Rate Limit	1		0	NoStrip	
= 192.168.5.64 FD1216SUP	- ONU Port VLAN	2		0	NoStrip	
- Switch Control Card	ONU IGMP	3		0	NoStrip	
Pon Module		4		D	Incomb	[
B Port-1						
Port-2						
Port-3						
Port-4						
F01-5						
[01:20:40]0101-2						
[33:A7:88]ONU-3			Prompt	×		
[35:9C:A9]ONU-4						
US: **** [1B:8F:89]ONU-5				DD MVLAN[120]->Port-2,success		
IJ::: **** [19:DA:75]ONU-6						
- [1A:01:44]ONU-7				OK		
[1A:01:AA]ONU-8]	
[19:DA:63]ONU-9						
Port-6						
Port-7						
Port-8						
Port-9	4					
Clear Severity Handler						
an Log Operation log	=					
ap Log operation log			Refresh	Set Add	Clear	
rant I lear admin Currant Rola Svetam Rola 2						

3. Click **"Pon Module --> Port-5 --> ONU ID 9 --> ONU IGMP -->Set"**, and then config multicast vlan mode is strip:

Element Management System System <u>Config</u> Performance Alarm Log Help	I ONU Management([OLT:192.1	68.5.64 FD1216SUP]>Pc	n Module>Port-5>[19:DA:63]O)NU-9)		×
	Onu Basic Information	IGMP Mode igmp-snoo	ping			
a 📴 Top Tree	Onu Capability Information	ONU IGMP				
a) ∰ Top Tree ⇒ @ Unallocated Region 192 168 5 64 FD1108SUP 192 168 5 64 FD1108SUP 192 168 5 64 FD1108 ⇒ PonthOute Pont-1 ⇒ Pont-1 ⇒ Pont-1 ⇒ Pont-2 ⇒ Pont-3 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-5 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-4 ⇒ Pont-5 ⇒ Pont-4 ⇒ Pont-6 ⇒ Pont	Onu Capability Information Onu Sia Information Onu Port Manegement Port Rate Limit ONU Port VLAN ONU IGMP	ONU IGMP Fort ID 1 2 3 4 Prompt i Set [Tag/un]	MVIan ID 120 sg.Strip:][index Port ID.1] success	MaxMuttNum 0 0 0 0	TaglunTag NSStip 11 Strp NoStrp NoStrp	
Clear Severity Handler	Z1		Refresh 12 Se	et Add	Clear	

10 Configure Service In OLT Discrete Mode (Non-Template)

---WEB Method

This section mainly introduct New 4Port/8Port/16Port/Plug-in 16Port OLT internet service and multicast service in discrete mode in FTTH environment. The following will introduce the service configuration way for OLT and ONU according to the bridge ONU(SFU).

10.1 Data Plan

	Main Data Plan List
Configuration Item	Data
VI AN Data	VLAN 110: Internet Service
VLAN Data	VLAN 120: IPTV Service
	Ge5: VLAN 110 access mode
OLT Port Setting	Ge6: VLAN 120 access mode
	PON5: VLAN 110, VLAN 120 trunk mode
ONU Register ID	Bridge ONU ID: 9
Bridge ONUL Dort config	LAN 1: VLAN 110
Bridge Ono Fort coning	LAN 2: VLAN 120

10.2 Configuration Guide



10.3 Configure OLT Service

10.3.1 Configure OLT Global Vlan

Click the "Main Board --> Vlan-->Vlan Config" to query the created Vlan.

If the created vlan cannot meet the requirements, vlan can be created by clicking the **"VLAN** --> Vlan Config ". According to the data planning, we create vlan110 and vlan120 firstly:

xPON OLT	Version : V1.0.1					Language: Englisl ~	ပံ <u>Exit</u>	
Topology	OLT Main Board VLAN	VlanCo	nfig					
Main Board 1	 E- SystemInfo ManagementInterface PoS 		Vlan	VlanName	TaggedPort	UntaggedPort	Vlan- Edit	
	- ACL - IGMP VIAN 2 VIanGlobalInfo VianConfig 3 - PortVianTranslation - QinQ		1	vlan1	¥	GEI GEZ GE3 GE4 GE5 GE6 XGE1 XGE2 PON1 PON2 PON3 PON4 PON5 PON6 PON7 PON8 PON9 PON10 PON11 PON12 PON13 PON14 PON15 PON16 LAG1 LAG2 LAG3 LAG4 LAG5 LAG6 LAG7 LAG8 LAG1 LAG2 LAG3 LAG4 LAG5 LAG6 LAG7 LAG8		
- = pon0/0/8	- OltPortVlan		10	vlan10	PON5		Edit	
□ = pon0/0/9 □ = pon0/0/10	+ Perf		20	vlan20	PON1		Edit	
 pon0/0/11 pon0/0/12 pon0/0/13 			21 55	vlan21 vlan55	GE5 PON15	GE7	<u>Edit</u> Edit	
pon0/0/14			56	vlan56	PON15	GE8	Edit	
 			100	vlan100	GE3 PON15	4 Delete Add 2507	<u>Edit</u>	

xPON O	LT Version : V1.0.1						La	nguage: Er	nglisl ~ (ט <u>Exit</u>
Тороlоду	OLT Main Board VLAN	VlanConfig								
OLT Main Board	E SystemInfo	Vlan ID:	5 110	•						
Switching Board	Wanagementinterrace QoS		tac	gedPort			unt	taggedPort		^
PON Board		GEI	GE2		GEA		Псы	Пста	DGM	
- pon0/0/2	IGMP									
		LIGES	GEO	GE/	GE8	LI GES	GE6	LI GE/	GE8	
	VlanGlobalInfo	XGE	1 XGE2	PON1	PON2	L XGE1	L XGE2	LI PON1		
া 🖝 pon0/0/5	VlanConfig	DOI	N3 PON4	PON5	PON6	D PON:	B PON4	PON5	PON6	
🕞 🖷 pon0/0/6	PortVlanTranslation	OP D	N7 PON8	PON9	PON10	D PON	7 PON8	PON9	PON10	
🗄 🖷 pon0/0/7	- QinQ	OP DO	N11 PON12	PON13	PON14	D PON	11 DPON12	PON13	PON14	
- pon0/0/8	- OltPortVlan	D POP	N15 PON16	LAG1	LAG2	PON	15 PON16	LAG1	LAG2	
⊡ = pon0/0/9	Perf	LAG	3 LAG4	LAG5	LAG6	LAG	LAG4	LAG5	LAG6	
- pon0/0/11		LAC		DAGS	LAGIO	LILAGI	LILAGO	LI LAG9	LILAGIU	v
- = pon0/0/13					6 ok	return	1			
= pon0/0/14										
🗄 🖷 pon0/0/15										
🖃 🖷 pon0/0/16		attention:	The Port can be co	on <mark>figure</mark> d for t	ag ports only for it's	s Vlan mode	is Trunk or Hybri	d.		
	Version : V1 () 1						5 I.	anduade. I	Engliel	(1) Evit
XFON C								anguage. [Linglist	
and a second			4							
opology	OLT Main Board VLAN	VlanConfig	1							
OLT	⊡ SystemInfo		1			1				Lange L
Main Board 1	ManagementInterface		an VlanName		TaggedPort		U	ntaggedPort		Vlan-
Switching Board	⊡- QoS									Edit
PON Board	⊡- ACL					0	GE1 GE2 GE3 GE4	GE5 GE6 XGE1	1 XGE2 PON1	
- pon0/0/1	⊡- IGMP							A DONS DONG	DONZ DONR	
pon0/0/2	ULAN 2						ONZ POINS POIN	4 POINS POING	POINT POINS	
- pon0/0/4	VlanGlobalInfo	1	vlan1			1	PON9 PON10 PO	N11 PON12 PC	ON13 PON14	
🗄 🖷 pon0/0/5	- VlanConfig 3						PON15 PON16 LA	G1 LAG2 LAG	3 LAG4 LAG5	
🕞 🖛 pon0/0/6	- PortVlanTranslation						LAG6 LAG7 LAG	8 LAG1 LAG2	LAG3 LAG4	
🗄 🖷 pon0/0/7	QinQ						LAG5 L	AG6 LAG7 LAG	G8	
🖃 🖝 pon0/0/8	- OltPortVlan		0 ulan10		DONS					E dia
🕒 🖛 pon0/0/9	⊞- Perf		Vianto		POID					Luix
🖃 🖷 pon0/0/10		2	0 vlan20		PON1					Edit
🖃 🖷 pon0/0/11		2	1 vlan21					GE7		Edit
		□ 5	5 vlan55		GE5 PON15					Edit
□			c		DONIS			CT0		C.15
E pon0/0/14		>	o vianoo		POINTS			GE8		Edit
- pon0/0/15		10	0 vlan100		GE3 PON15					Edit
in point/of to		11	0 vlan110							Edit
							4			
				EachPa	age 50 V Entry	ys Delet	e Add A	剥新		
	Version : V1.0.1						La	nguage: E	nalis ~ (9 Exit
nology	OLT Main Roard VI ANI	VianConfig	5							
pology		vianconing								
OLT	⊡- SystemInfo	Man ID:	5 120							
Main Board	HanagementInterface									
Switching Board DON Read	⊡- QoS		tag	gedPort			un	taggedPort		^
+ = pon0/0/1	E ACL	GEI	GE2	□ GE3	GE4	GE1	GE2	GE3	GE4	
- = pon0/0/2	E- IGMP	Пен		0.657	CER					
🗄 🔎 pon0/0/3	- VLAN									
🕒 🖛 pon0/0/4	- VlanGlobalInfo	XGE	1 XGE2	LI PON1	PON2	LI XGE1	LJ XGE2	LI PON1	LI PON2	
🖭 🖷 pon0/0/5	VlanConfig	POI	N3 PON4	PON5	PON6	PON	3 PON4	PON5	PON6	
🕞 🖷 pon0/0/6	PortVlanTranslation	PO	N7 PON8	PON9	PON10		7 PON8	PON9	PON10	
🗄 🖷 pon0/0/7	QinQ	PO	N11 PON12	PON13	PON14	D PON	11 DPON12	PON13	DPON14	
🕞 🖷 pon0/0/8	OltPortVlan		N15 PON16	AG1	LAG2		15 PON16		LAG2	
# pon0/0/9	+- Perf									
= pon0/0/10			LAG4	LAG5	LAGD		LI LAG4			
		LAC	67 LAG8	LAG9	LAG10	LI LAG7	LI LAG8	LI LAG9	LI LAG10	~
pon0/0/12					6	1 rate				
- pono/0/13					OK	return	50 50			
pon0/0/15										
		attention:	The Port can be c	onfigured for t	ag ports only for it	's Vlan mode	is Trunk or Hybri	d.		
= pon0/0/16								100 C		

10.3.2 Configure OLT GE Port Service Vlan

1. Click "Main Board --> VLAN --> OLT Port Vlan", and then config GE 5 port vlan mode is access, vlan id is 110 :

xPON O	Version : V1.0.1				Language:	Englisl ~ 🕐 Exit
Topology	OLT Main Board VLAN O	ltPortVlan				
	SystemInfo	DeviceIndex	TagPriority	PortVlanPVid	PortVlanMode	Oper
Switching Board	⊡ QoS	GE1	0 ~	1 😫	Access ~	Submit
	⊡- ACL	GE2	0 ~	1 🕏	Access v	Submit
⊡- = pon0/0/2	VLAN 2	GE3	0 ~	1 🕏	Trunk ~	Submit
	VlanGlobalInfo	GE4	0 ~	1 😫	Access ~	Submit
	- VlanConfig	GE5	0 ~	4 110 ≑	5 Access ~	6 Submit
⊡- = pon0/0/6	PortVlanTranslation	GE6	0 ~	1 🗄	Access ~	Submit
	- QinQ	GE7	0 ~	21 🗘	Access ~	Submit
pon0/0/9	⊡- Perf	GE8	0 ~	56 ≑	Access ~	Submit
- = pon0/0/10		XGE1	0 ~	1 🖨	Access ~	Submit
pon0/0/11		XGE2	0 ~	1 🗟	Access V	Submit
⊡- = pon0/0/13		PON1	0 ~	1 🗟	Trunk ~	Submit
pon0/0/14		PON2	0 ~		Access ~	Submit
- pon0/0/15		PON3	0 ~	1 🕏	Access ~	Submit

2. Click **"Main Board--> VLAN --> OLT Port Vlan"**, and config GE 6 port vlan mode is access, vlan id is 120 :

xPON O	Version : V1.0.1				Language	: Englisl 🗸 🕐 🖪	Exit
Topology	OLT Main Board VLAN O	ltPortVlan					
OLT Main Board 1	SystemInfo ManagementInterface	DeviceIndex	TagPriority	PortVlanPVid	PortVlanMode	Oper	
Switching Board	⊡- QoS	GE1	0 ~	1 🕈	Access ~	Submit	^
Pon board	E- ACL	GE2	0 ~	1 😫	Access ~	Submit	
🖃 🖷 pon0/0/2		GE3	0 ~	1 🗄	Trunk ~	Submit	
pon0/0/3 pon0/0/4	VlanGlobalInfo	GE4	0 ~	1 🕏	Access ~	Submit	
🗄 🖝 pon0/0/5	VlanConfig	GE5	0 ~	110 🕏	Access ~	Submit	
= pon0/0/6	- PortVlanTranslation	GE6	0 ~	4 120 ÷	5 Access ~	6 Submit	
e pon0/0/7	QinQ	GE7	0 ~	21 🗘	Access ~	Submit	
🔄 🖝 pon0/0/9	E Perf	GE8		56 🗣	Access ~	Submit	
🔄 🖛 pon0/0/10		XGE1	0 ~	1 1	Access	Submit	
pon0/0/11		XGE2			Access	Submit	
pon0/0/13		PON1		1 4	Trunk	Submit	
🔄 🖷 pon0/0/14		PON2	0		Access	Submit	
		PONZ	0		Access	Submit	
= pointy 0/10		PON3			Access	Submit	
5.64/cai/login.php?logout=1		PON4	0 ~	1 📼	Access ~	Submit	

10.3.3 Configure OLT PON Port Service Vlan

1. Click **"Main Board --> VLAN --> OLT Port Vlan"**, and then Config PON5 port vlan mode is trunk:

Version: V1.1.0_181125		Curren	t Online User Num	ber:1(User Numbe	r Limit:10) Lang	English ~ 🔱 j
ree Topology	OLT Main Board VLAN C	DitPortVian				
OLT Main Board 1	SystemInfo ManagementInterface	DeviceIndex	TagPriority	PortVlanPVid	PortVlanMode	Oper
Swap Board PON Board	🗄 Qos	GE0/0/7	0 ~	21 🕏	Access ~	Submit
PON Card0/0	IGMP	GE0/0/8	0 ~	56 🖨	Access ~	Submit
	VLAN 2	XGE0/0/1	0 ~	1 🖨	Access ~	Submit
	- VlanGlobalInfo	XGE0/0/2	0 ~	1 😫	Access ~	Submit
	VlanConfig	PON0/0/1	0 ~	1 🕀	Trunk v	Submit
	QinQ	PON0/0/2	0 ~	1 🚖	Access ~	Submit
	OltPortVlan 3	PON0/0/3	0 ~	1 보	Access ~	Submit
		PON0/0/4	0 ~	1 🕏	Access ~	Submit
		PON0/0/5	0 ~	1 🕏	4 Trunk V	5 Submit
		PON0/0/6	0 ~	1 🖨	Trunk ~	Submit
		PON0/0/7	0 ~	1 🚖	Access ~	Submit
		PON0/0/8	0 ~	1 🖨	Trunk ~	Submit
		PON0/0/9	0 ~	1 🕏	Access ~	Submit
		PON0/0/10	0 ~	1 🐳	Access ~	Submit

 Click "Main Board--> VLAN--> OLT Port Vlan--> (vlan110)Edit", and then add tag vlan 110 to pon 5:

Topology	OLT Main Board VLAN	VlanConfi	9							
Main Board 1 Switching Board	+- SystemInfo +- ManagementInterface		lan VlanName		TaggedPort		U	ntaggedPort		Vlan
- → PON Board - → pon0/0/1 - → pon0/0/2 - → pon0/0/3 - → pon0/0/4 - → pon0/0/6 - → pon0/0/6	- ACL - IGMP VLAN 2 - VlanGlobalInfo VlanConfig 3 - PortVlanTranslation - QinQ		1 vlan1				GE1 GE2 GE3 GE PON3 PON4 PON PON10 PON1 PON15 PON16 LJ LAG6 LAG7 LAG LAG5 L	4 XGE1 XGE2 15 PON6 PON7 1 PON12 PON AG1 LAG2 LAG 58 LAG1 LAG2 LAG6 LAG7 LAG	PON1 PON2 7 PON8 PON9 13 PON14 3 LAG4 LAG5 LAG3 LAG4 G8	
= pon0/0/8	- OltPortVlan		10 vlan10		PON5					Edit
pon0/0/9	• Perf		20 vlan20		PON1					Edi
- = pon0/0/11			21 vlan21					GE7		Edi
🕞 🖷 pon0/0/12								00		
🕞 🖷 pon0/0/13			55 vlan55		PONTS		0			Ed
- pon0/0/14			56 vlan56		PON15			GE8		Ed
pon0/0/15			00 vlan100		GE3 PON15					Ed
E ponoror ro			10 vlan110					GE5		4 <u>Ed</u>
			20 vlan120					GE6		Ed
xPON C	DLT Version : V1.0.1						La	nguage: Er	nglisl ~ Č) <u>Exit</u>
xPON C	OLT Version : V1.0.1	VlanConfi					La	nguage: Er	nglisl~ 선) <u>Exit</u>
xPON C	OLT Version : V1.0.1	VlanConfi	Î				La	nguage: Er	nglisl~) <u>Exit</u>
xPON C	OLT Version : V1.0.1	VlanConfi Vlan ID:	110				La	nguage: Er	nglisl > 선) <u>Exit</u>
COLT Main Board Switching Board	OLT Version : V1.0.1	VlanConfi Vlan ID:	110 5 t t	ggedPort			La	nguage: Er	nglisl~ 신) <u>Exit</u>
Dopology OLT Main Board Switching Board DON Board D	OLT Version : V1.0.1	VlanConfi Vlan ID:	110 5 tz	ggedPort	GE4	GEI	La unt	nguage: Er	nglisl > d) <u>Exit</u>
	OLT Version : V1.0.1	VlanConfig Vlan ID:	110 5 tt 11 GE2	ggedPort	GE4		La unt	taggedPort) <u>Exit</u>
	OLT Version : V1.0.1	VlanConfig Vlan ID:	110 5 t t 11 GE2 15 GE6	ggedPort	GE4 GE8	□ GE1 □ GE2	La unt GE2 GE5	taggedPort	nglisl > U) <u>Exit</u>
Colt Main Board PON Board PON Board PON Doard Pon0//1 Pon0//2 pon0//2 pon0//3 Pon0//4	Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS AcL IGMP VLAN VIAN	VlanConfig Vlan ID: G G G X	110 5 tz 1 GE2 5 GE6 5E1 XGE2	ggedPort GE3 GE7 PPON1	GE4 GE8 PON2	GE1	La unt GE2 GE6 1 SE6 1	taggedPort	nglisl > C) <u>Exit</u>
CONTRACTOR CONTRACTO	OLT Version : V1.0.1	VlanConfig Vlan ID: G G G C XI	110 5 tz 1 GE2 5 GE6 5E1 XGE2 NN3 PON4	ggedPort GE3 GE7 PON1 6 PON5	GE4 GE8 PON2 PON6	GE1	La 	nguage: Er taggedPort GE3 GE7 PON1 PON5	nglislv d) <u>Exit</u>
PON Board Pon0//1 Pon0//1 Pon0//2 Pon0//3 Pon0//3 Pon0//3 Pon0//5 Pon0//5	Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VLAN VanConfig PortVlanTranslation	VlanConfig Vlan ID: G G G G C XI P P C	110 5 tz 5 GE2 55 GE6 561 XGE2 1N3 PON4 1N7 PON8	ggedPort GE3 GE7 PON1 6 ØPON5 PON9	GE4 GE8 PON2 PON6 PON10	GE1 GE2 CASE PON PON	La 	nguage: Er taggedPort GE3 GE7 PON1 PON5 PON9	nglisl V C	
CONTRACT CONTRACT CONTRACT CONTRACT CONTRAC	Version : V1.0.1 OLT Main Board VLAN • SystemInfo • ManagementInterface • QoS • ACL • GAP • VAN • VanGlobalInfo • VanConfig • PortVlanTranslation • QinQ • QinQ • Van • Van	VlanConfit Vlan ID: G G G XI PP PC	110 5 tz 61 GE2 55 GE6 561 XGE2 5003 PON4 5007 PON8 50011 PON13	ggedPort GE3 GE7 PON1 6 ØPon5 PON9 2 PON13	GE4 GE8 PON2 PON6 PON10 PON14	GE1 GE2 CASE PON PON PON	La GE2 GE5 1 XGE2 13 PON4 17 PON8 111 PON12	nguage: Er taggedPort GE3 GE7 PON1 PON5 PON9 PON13	nglisl V C) <u>Exit</u>
CONSTRUCTION	Version : V1.0.1 Version : V1.0.1 OLT Main Board VLAN Systeminfo Managementinterface QoS ACL IsMP VLAN VanConfig PortVlanTranslation QinQ OltPortVlan	VlanConfig Vlan ID: G G G C Vlan ID: C C C C C C C C C C C C C C C C C C C	110 5 tt 61 GE2 55 GE6 56E1 XGE2 50N3 PON4 50N7 PON8 50N11 PON12 50N15 PON10	ggedPort GE3 GE7 PON1 6 Ø PON5 PON9 2 PON13 3 LAG1	GE4 GE8 PON2 PON6 PON10 PON14 LAG2	GE1 GE2 DON PON PON PON	La GE2 GE6 1 XGE2 13 PON4 17 PON8 111 PON12 115 PON16	aggedPort GE3 GE7 PON1 PON5 PON9 PON13 LAG1	nglisi > C	
	Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VlanGiobalInfo VlanConfig PortVlanTranslation QinQ OltPortVlan E Perf	VlanConfig Vlan ID: G G G G G G G G G G G G G G G G G G G	110 5 ta 11 GE2 55 GE6 56E1 XGE2 50N3 PON4 50N7 PON8 50N11 PON12 50N15 PON14 G3 LAG4	ggedPort GE3 GE7 PON1 G 2005 PON9 PON9 PON9 C PON13 G LAG1 LAG5	GE4 GE8 PON2 PON6 PON10 PON14 LAG2 LAG6	GE1 GE2 DON PON PON DON DON DON	La GE2 GE6 1 CXGE2 I3 PON4 I7 PON8 I11 PON12 I15 PON16 3 LAG4	taggedPort GGE3 GE7 PON1 PON5 PON9 PON13 LAG1 LAG5	nglisi v C	
	Version : V1.0.1 Version : V1.0.1 Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VLAN VanGonfig PortVlanTranslation QinQ OltPortVlan	VlanConfig Vlan ID: G G G G G G G G G G G G G G G G G G G	110 5 tt 11 GE2 15 GE6 11 XGE2 15 GE6 14 XGE2 1003 PON4 1007 PON8 10015 PON11 10015 PON11 10015 PON14 1001 Ct 100 1001 Ct 100 1000 1001 Ct 100 1001 Ct 100 1000 1000 1000 1000 1000 1000 1000	ggedPort G G3 G G7 □PON1 6 ☑ PON5 □PON9 1 □PON5 1 □AG1 □LAG5 □LAG9	GE4 GE8 PON2 PON10 PON14 LAG2 LAG6 LAG10	GET GES XGE PON PON DO LAG	La GG2 GG2 GG6 1 GXG2 I3 PON4 I7 PON8 I11 PON12 I15 PON16 3 LAG4 7 LAG8	aggedPort	nglisi> C) <u>Exit</u>
	Version : V1.0.1 Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VLAN ValoBoalinfo VlanConfig PortVlanTranslation QinQ OltPortVlan Perf	VlanConfi Vlan ID: GG GG Vlan ID: GG Vlan Vlan Vlan Vlan Vlan Vlan Vlan Vlan	110 5 ta 11 GE2 55 GE6 561 XGE2 57 GE6 561 XGE2 57 ONN 5 ONN	ggedPort GE3 GE7 PON1 6 ØPON5 PON9 2 PON13 CLAG1 CLAG5 CLAG9	GE4 GE8 PON2 PON6 PON10 PON14 LAG2 LAG6 LAG10	GE1 GE5 CG5 PON PON PON LAG CLAG	La GE2 GE2 GE5 I GE2 I GE5 I GE6 I ON4 II PON4 II PON12 II PON16 3 CLAG4 I LAG8	aggedPort GG3 GG7 PON1 PON5 PON9 PON9 LAG1 LAG5 LAG9	nglisi> C) Exit
	Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VanConfig PortVlanTranslation QitPortVlan OltPortVlan	VlanConfi Vlan ID: G G G Vlan ID: P P P P P P P P P P P P P P P P P P P	110 5 12 61 GE2 55 GE6 561 XGE2 53 PON4 57 PON8 5011 PON1 5011 PON1 501 LAG4 67 LAG8	ggedPort GE3 GE7 PON1 6 PON5 PON9 2 PON13 6 LAG1 LAG5 LAG9	GE4 GE8 PON2 PON6 PON10 PON14 LAG2 LAG6 LAG10 7 ok	GE1 GE2 CGE3 CGE3 CGE3 CGE3 CGE3 CGE3 CGE3 CGE3	La und GE2 GE6 1 XGE2 13 PON4 17 PON8 11 PON12 115 PON16 3 LAG4 7 LAG8 reture	aggedPort Ge3 Ge7 Pon1 Pon5 Pon9 Pon3 LAG1 LAG2	nglisi > C	
CONTRACT CONTRACT CONTRACT CONTRACT CONTRACT	Version : V1.0.1 OLT Main Board VLAN SystemInfo ManagementInterface QoS ACL IGMP VLAN VanGlobalInfo VanConfig PortVlanTranslation QinQ OltPortVlan Perf	VlanConfie Vlan ID: G G G G Q P Q P Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	110 5 tz 5 GE6 55 GE6 561 XGE2 593 PON4 107 PON8 1011 PON13 1015 PON16 G3 LAG4 G7 LAG8	ggedPort GE3 GE7 PON1 G 2009 PON3 G 2009 PON3 G 200 GE3 GE4	GE4 GE8 PON2 PON6 PON10 PON14 LAG2 LAG6 LAG10 7 Cok	GE1 GE5 XGE PON PON PON CLG CLG Tefresh	La GE2 GE6 1 CXGE2 13 PON4 17 PON8 111 PON12 115 PON16 3 LAG4 7 LAG8 return	nguage: Er taggedPort GE3 GE7 PON1 PON5 PON9 PON13 LAG1 LAG5 LAG9	nglisi > C) <u>Exit</u>
Copology OUT Main Board On Dond Out O	Version : V1.0.1 OLT Main Board VLAN Systeminfo ManagementInterface QaS ACL IGMP VLAN VanGlobalInfo VanCoorfig PortVlanTranslation QinQ OttPortVlan Perf	VlanConfie Vlan ID: G G G C Vlan P C P C P C C C C	110 5 tz 61 GE2 55 GE6 561 XGE2 5003 PON4 5007 PON8 50011 PON12 50015 PON16 63 LAG4 67 LAG8	ggedPort GE3 GE7 PON1 6 ØPON5 PON9 2 PON13 3 LAG1 LAG5 LAG9	GE4 GE8 PON2 PON6 PON10 PON14 LAG2 LAG6 LAG10 7 Cok	GE1 GE5 XGE PON PON PON LAG CLAG	La GE2 GE5 1 CXGE2 I3 PON4 I7 PON8 I11 PON12 I15 PON16 3 LAG4 7 LAG8 return	nguage: Er aggedPort GE3 GE7 PON1 PON5 PON9 PON9 LAG1 LAG5 LAG9	nglisi> C	

3. Click **"Main Board--> VLAN--> OLT Port Vlan--> (vlan120)Edit"** ,and then add tag vlan 120 to pon 5:

Main Board 1	+ CurtomInfo										
- Swap Board	Systemmo ManagementInterface Oos		Vlan	VlanName	Тадо	gedPort		Untagg	edPort	Vlan- Edit	
PON Board PON Card0/0	- ACL - IGMP - VIanGlobalInfo - VlanGlobalInfo - VlanConfig 3 - PortVlanTranslation - QinQ - OltPortVlan - Perf		1	"vlan1"			GE0/0/ XGE0/ PON0/ PON0/C PON0/C Lag5	1 GE0/0/2 GE0/0 0/2 PON0/0/1 F /0/4 PON0/0/5 I 0/8 PON0/0/9 Pi N0/0/12 PON0/ 0/15 PON0/0/16 Lag6 Lag7 Lag8 ag12 Lag13 Lag	0/3 GE0/0/4 XGE PON0/0/2 PON0, PON0/0/6 PON0 ON0/0/10 PON0 ON0/0/10 PON0 (0/13 PON0/0/1- 5 Lag1 Lag2 Lag3 3 Lag9 Lag10 Lag1	0/0/1 /0/3 /0/7 /0/11 4 Lag4 j11	
			10	"vlan10"	PON0/0/	5 PON0/0/7				Edit	
			20	"vlan20"						Edit	
			21	"vlan21"						Edit	
			55	"vlan55"	PON	10/0/15				Edit	
			56	"vlan56"	PON	10/0/15				Edit	
			100	"vlan100"	GE0/0/3	PON0/0/15				Edit	
			110	"vlan110"	POI	N0/0/5		GE0/	/0/5	Edit	
xPON OLT	Version: V1.1.0_181125		120	°vlan120° Current Or	nline User Ni	umber:1(Use	r Number Li	GE0/ mit:10) L	.ang English	4 Edit	it
xPON OLT ee Topology	Version: V1.1.0_181125 OLT Main Board VLAN V • Systeminfo • Managementinterface • Qost	/lanCor	120 fig	*vlan120* Current Or	nline User No edPort	umber:1(Usei	r Number Li	GEO/ mit:10) L	ang English	4 Edit	it
xPON OLT COLT Main Board Swap Board PON Goard - PON Card0/0	Version: V1.1.0_181125 OLT Main Board VLAN V SystemInfo ManagementInterface Oos ACL	/lanCor	120 fig	Vlan120* Current Or 5 120 tagg 660/0/2	edPort	umber:1(User	r Number Li	GE0/ mit:10) L untag	gedPort	4 <u>Edit</u> √ ⁽¹⁾ Ex	it
xPON OLT Te Topology Main Board Swap Board PON Board PON Carddyo	Version: V1.1.0_181125 OLT Main Board VLAN V SystemInfo ManagementInterface Qos ACL GIGMP WAN	Vlan II	120 fig	*vlan120* Current Or 5 120 tagg GE0/0/2 GE0/0/6	edPort GE0/0/3 GE0/0/7	umber:1(User	Number Lin	GE0/ mit:10) L untag □ GE0/0/2 ☑ GE0/0/6	GE0/0/3 GE0/0/7	4 Edit	it
xPON OLT COLT Main Board Swap Board PON Board PON Card0/0	Version: V1.1.0_181125 OLT Main Board VLAN V SystemInfo ManagementInterface Qos ACL IGMP VULN VuRGIobalInfo	/lanCon	120 fig	*vlan120* Current Or 5 120 tagg GE0/0/2 GE0/0/6 XGE0/0/2	edPort GE0/0/3 GE0/0/7 PON0/0/1	umber:1(User GE0/0/4 GE0/0/8 PON0/0/2	r Number Li	GE0/ mit:10) L untag □ GE0/0/2 ☑ GE0/0/6 □ XGE0/0/2	gedPort GE0/0/3 GE0/0/7 PON0/0/1	4 Edit C Edit Ed	it
xPON OLT e Topology SOLT Swap Board Swap Board PON Board PON Card0/0	Version: V1.1.0_181125 OLT Main Board VLAN V SystemInfo ManagementInterface Qos ACL GIGMP VLAN VlanCiobalInfo VlanConfig	Vlan II Gi Gi Si Po	120 fig 0)0/1 0)0/5 560/0/1 0)N0/0/3	tylan120* Current Or 5 120 6 660/0/2 6 660/0/2 3 PON0/0/4	edPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5	GE0/0/4 GE0/0/4 PON0/0/2 PON0/0/6	r Number Li GE0/0/1 GE0/0/5 XGE0/0/1	GE0/ mit:10) L □ GE0/0/2 □ GE0/0/2 □ GE0/0/2 □ PON0/0/4	gedPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5	4 Edit C Ext GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/2	it
xPON OLT e Topology SOLT Swap Bard PON Bard PON Card0/0	Version: V1.1.0_181125 OLT Main Board VLAN V Systeminfo Managementinterface Oos ACL GMP VLAN - VlanGlobalInfo - VlanConfig - PortVlanTranslation	Vlan II Gi Gi Qi Qi Qi Qi Qi Qi Qi Qi Qi Qi Qi Qi Qi	120 fig :0/0/1 :0/0/5 :0/0/5 :0/0/1 :0/0/5 :0/0/1 :0/0/0/:	tylan120* Current Or 5 120 6 660/0/2 6 660/0/2 6 90N0/0/4 7 PON0/0/8	edPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5 PON0/0/9	GE0/0/4 GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/10	r Number Lin	GE0/ mit:10) L GE0/0/2 GE0/0/2 GE0/0/2 GE0/0/2 PON0/0/4 PON0/0/8	gedPort geGPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5 PON0/0/9	4 Edit C Ext GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/1	it
xPON OLT e Topology solT • Wani Board • Wap Board • PON Board • PON Card0/0	Version: V1.1.0_181125 OLT Main Board VLAN V Systeminfo Managementinterface Qos ACL UGMP VLAN - VlanClobalInfo - VlanConfig - PortVlanTranslation - QinQ - OliPortVlan	Vlan II Ga Ga Creation Control	120 fig :0/0/1 :0/0/5 :0/0/5 :0/0/0/1 :0/0/0/1 :0/0/0/1 :0/0/0/1	tylan120* Current Or 5 120 6 660/0/2 6 660/0/2 3 PON0/0/4 7 PON0/0/8 11 PON0/0/12	edPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/9 PON0/0/9 PON0/0/13	GE0/0/4 GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/10 PON0/0/14	Number Li GE0/0/1 GE0/0/1 GE0/0/5 XGE0/0/1 PON0/0/3 PON0/0/7 PON0/0/1	GE0/ mit:10) L GE0/0/2 GE0/0/2 GE0/0/2 GE0/0/2 PON0/0/4 PON0/0/12	gedPort gedPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/9	4 Edit	it ; 0 4
xPON OLT e Topology SOLT Swap Board PON Board PON Card0yo	Version: V1.1.0_181125 OLT Main Board VLAN V Systeminfo Managementinterface Qos ACL Gos ACL UlanGlobalinfo VlaN VlaN VlaN VlanGobalinfo VlanConfig - PortVlanTranslation - QinQ - OltPortVlan Perf	Vlan II GG GG CPC PC	120 fig 0.0: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	tylan120* Current Or 5 120 5 120 6E0/0/2 6E0/0/2 6E0/0/2 6E0/0/2 3 PON0/0/4 7 PON0/0/8 11 PON0/0/16 5 PON0/0/16	edPort □ GE0/0/3 □ GE0/0/3 □ GE0/0/7 □ PON0/0/1 □ PON0/0/9 □ PON0/0/13 □ Lag1	GE0/0/4 GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/10 PON0/0/14 Lag2	Number Li GE0/0/1 GE0/0/1 GE0/0/5 XGE0/0/1 PON0/0/3 PON0/0/7 PON0/0/15	GE0/ mit:10) L untag GE0/0/2 GE0/0/2 GE0/0/2 GE0/0/2 PON0/0/4 PON0/0/4 PON0/0/12 PON0/0/12 PON0/0/12	90/6 ang English gedPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5 PON0/0/5 Lag1	4 Edit GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/1 PON0/0/1 Lag2	it ; 0 4
xPON OLT	Version: V1.1.0_181125 OLT Main Board VLAN V Systeminfo ManagementInterface Cos ACL Gos ACL UlanGlobalInfo VlaN VlaN VlaConfig - OrtVlanTranslation - QinQ - OltPortVlan	Vian II Gei Gei Crec Pec Pec	120 fig ::::::::::::::::::::::::::::::::::::	tylan120* Current Or 5 120 5 120 660/0/2 660/0/2 68 PON0/0/4 7 PON0/0/4 11 PON0/0/16 15 PON0/0/16	edPort □ GE0/0/3 □ GE0/0/3 □ GE0/0/7 □ PON0/0/1 □ PON0/0/3 □ CON0/0/3 □ Lag1 □ Lag5 □ PON0/0/3	GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/10 PON0/0/14 Lag2 Lag6	■ GE0/0/1 GE0/0/5 □ GE0/0/5 □ XGE0/0/1 ■ PON0/0/3 ■ PON0/0/7 ■ PON0/0/15 ■ Lag3 ■	GE0/ mit:10) L GE0/0/2 GE0/0/2 GE0/0/2 GE0/0/2 PON0/0/4 PON0/0/12 PON0/0/12 Lag4	90/6 ang English gedPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5 PON0/0/5 Clag1 Lag5 Double Contemport	4 Edit GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/2 PON0/0/1 PON0/0/1 Lag2 Lag6 Don 1000 Carlot Control	it.
xPON OLT	Version: V1.1.0_181125 OLT Main Board VLAN V Systeminfo ManagementInterface Cos ACL GMP VLAN VlaGlobalInfo VlaConfig - PortVlanTranslation - QinQ - OltPortVlan	Vian II Gi Gi Correction PC PC PC Correction PC CO PC PC PC PC PC PC PC PC PC PC PC PC PC	120 fig 60/0/1 60/0/5 56E0/0/1 50N0/0/7 50N0/0/7 93 97 11	tylan120* Current Or 5 120 5 120 660/0/2 660/0/2 660/0/2 9000/0/4 7 PON0/0/8 11 PON0/0/18 15 PON0/0/16 Lag8 142	edPort GE0/0/3 GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/9 PON0/0/3 Lag1 Lag5 Lag5	GE0/0/4 GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/6 PON0/0/10 PON0/0/14 Lag2 Lag6 Lag10	Number Li GE0/0/1 GE0/0/1 GE0/0/5 XGE0/0/1 PON0/0/3 PON0/0/7 PON0/0/15 Lag3 Lag3	GE0/ mit:10) L GE0/0/2 GE0/0/2 GE0/0/6 GE0/0/6 GE0/0/6 PON0/0/12 PON0/0/12 PON0/0/12 DE080/0/16 Lag4 Lag4	90/6 ang English gedPort GE0/0/3 GE0/0/7 PON0/0/1 PON0/0/5 PON0/0/5 Lag1 Lag5 Lag5 Lag5	4 Edit GE0/0/4 GE0/0/8 PON0/0/2 PON0/0/2 PON0/0/1 PON0/0/1 Lag2 Lag6 Lag6 Lag6	it ; 0 4

10.3.4 Configure OLT Multicast Service

1. Click "Main Board --> IGMP --> IGMP Global Config", and then config IGMP mode is snooping:

xPON O	LT Version : V1.0.1	Language: Englisi v 😃 Exit
XPON O ■ OLT ■ Main Board 1 ■ ■ Switching Board ■ ● pon0/0/1 ■ ● pon0/0/2 ■ ● pon0/0/3 ■ ● pon0/0/3 ■ ● pon0/0/6 ■ ● pon0/0/7 ■ ● pon0/0/7 ■ ● pon0/0/7 ■ ● pon0/0/1 ■ ● pon0/0/1	Version : V1.0.1 OLT Main Board IGMP IGMP Global SystemInfo ManagementInterface QoS ACL IGMP 2 IGMP 22 IGMP Clobal Config Multicast Vlan Manage Multicast Vlan Manage Multicast Program IP Ma - Controlled Multicast Jac - Controlled Multicast Use - Multicast Forward Info VLAN - VlanGlobalInfo - VLAN - VlanGlobalInfo - VLAN	Config IgmpMode ¹ snooping v Max General Response 10 Time <1-25> (s) : Robustness Variable <1-10> : 2 General Query Interval <2-3000> (s) : 125 Specific Query 1000 Interval <100-10000> (ms) : Specific Query Count <1-10> : 2 IGMP Version : V2 5 Save Refresh
 ● pon0/0/13 ● pon0/0/14 ● pon0/0/15 ● pon0/0/16 	- PortVlan - QinQ - OltPortVlan Perf	

 Click "Main Board --> IGMP --> Multicast Vlan Manage --> Add", and then config multicast-vlan is 120 and IGMP route port is ge6 :

xPON OLT	Version : V1.0.1				Language: Englisl > 🖞 Exit
Topology	OLT Main Board IGMP M	lulticas	t Vlan Manage		
OLT Main Board	SystemInfo		Multicast VlanId	Router Port	Router Port Edit
- Switching Board			10	GES.	Edle
PON Board	The ACI		10	GED;	Edit
	IGMP		20	GE6;	Edit
	ICMB Clabal Castia		55	GE5;	Edit
⊡ ■ pon0/0/3	6 Multicent Vien Manager			7	
⊡r ■ pon0/0/4	Multicast Vian Manage			Refresh Add Delete	
□ = pon0/0/5	- Multicast Program IP Ma				
Er ■ pon0/0/6	Controlled Multicast Pac				
	Controlled Multicast Use				
	Multicast Forward Info				
En = pon0/0/10	ULAN				
	- VlanGlobalInfo				
	VlanConfig				
- = pon0/0/12	- PortVlanTranslation				
- = pon0/0/13	- QinQ				
+- = pon0/0/15	- OltPortVlan				
	+- Perf				
ree Topology 🛛 📢	OLT Main Board IGMP Mu	ulticast	Vlan Manage		
Main Board	🗄 SystemInfo	Multic	astVID<1-4094	->: 8 120 ≑	
- Swap Board	ManagementInterface				
PON Board	+ Qos			Router Port	
- PON Card0/0	H- ACL	GE	0/0/1 GE0/0/2	GE0/0/3 GE0/0/4 GE0/0/5 GE0/0/6 G	E0/0/7 GE0/0/8 XGE0/0/1
+ PON0/0/1	L- IGMP				
- # PON0/0/2	- IGMP Global Config	LIXGE	0/0/2		
E PON0/0/3	- Multicast Vlan Manage				
- # PON0/0/4	- Multicast Program IP Ma			10 Confirm Concel	
	- Controlled Multicast Pac				
ONU1[00:1A:69:01:2C:4D]	- Controlled Multicast Use				
	- Multicast Forward Info				
ONU3[E0:67:B3:33:A7:88]	T- VLAN				
	🖭 Perf				
ONU6[E0:67:B3:19:DA:75]					
ONU9[E0:67:B3:19:DA:63]					

3. Click **"Main Board --> IGMP --> Multicast Program IP Manage --> Add"**, and then config program id is 1, multicast-vlan is 120 and program ip is 224.3.3.3 :

xPON OL	.T Version : V1.0.1					Language: Englisl >	ර <u>Exit</u>
Topology	OLT Main Board IGMP Mi	ulticast Progra	m IP Manage				
OLT Main Board Switching Board PON Board	 F- SystemInfo ManagementInterface Monos Monos Monos 	Program	Index SrcIPAddress	MulticastVID	Multicast IP Address	Router Port	~
 ➡ = pon0/0/1 ➡ = pon0/0/2 ➡ = pon0/0/3 ➡ = pon0/0/4 	- IGMP - IGMP Global Config - Multicast Vlan Manage			12 Refresh	2 Add Delete		~
 	11 - Multicast Program IP Ma - Controlled Multicast Pac - Controlled Multicast Use						
 → ● pon0/0/8 → ● pon0/0/9 → ● pon0/0/10 → ● pon0/0/11 	Multicast Forward Info VLAN VlanGlobalInfo						
 → ● pon0/0/12 → ● pon0/0/13 → ● pon0/0/14 	VlanConfig PortVlanTranslation QinQ						
 ● pon0/0/15 ● pon0/0/16 	OltPortVlan ⊕- Perf						

xPON O	Version : V1.0.1	Language: Englisi v 🕐 Exit
Topology OLT Main Board Switching Board PON Board pon0/01 pon0/02 pon0/03 pon0/04 pon0/05 pon0/06 pon0/07 pon0/07 pon0/07 pon0/08 pon0/09 pon0/011 pon0/0711 pon0/0713 pon0/0713 pon0/0715	OLT Main Board IGMP Multicast Progr SystemInfo ManagementInterface QoS ACL IGMP - IGMP Global Config Multicast Vlan Manage Multicast Vlan Manage Multicast Program IMa Controlled Multicast Pac Controlled Multicast Pac Multicast Forward Info VLAN VlanGlobalInfo VlanGlobalInfo VlanConfig PortVlan Translation - OiRP Controlled Multicast Pac OIRPOrtVlan	ProgramIndex<1-2000> : 13 1 MulticastVID<1-4094> : 14 120 MulticastVIPAddress : 15 224.3.3 16 Confirm Concel
Er = pono/o/16	C. For	

10.4 Configure Bridge ONU(SFU) Service

In OLT discrete mode, we need enter OLT to config ONU one by one, config way as follows:

10.4.1 Configure Bridge Onu(SFU) Internet Service

Premise condition of ONU to open internet service:

- OLT connect to uplink device and open internet service
- OLT have created vlan for internet service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

SFU ethernet port vlan mode have transparent,tag(access),trunk mode and so on,we can according to our network plan configure different mode.all onu vlan is configured by OLT,configure way as follows:

 Click "PON Control --> PON0/0/5 --> ONU ID 9 --> ONU port --> ONU Port Vlan Table --> Edit", Config ONU9 eth1 vlan mode is tag(access):

Version: V1.1.0_181125			Current Online U	lser Number:1	(User Number I	Limit:10) L	ang English	~ <u>Ф Ех</u> і	it
Tree Topology	OLT PON Board PON0/0/5	ONU 9 ONI	U Port ONU Port V	lan Table					
OLT Main Board	ONU Manage	Port	Vlan Mode	Priority	PVID	SVLAN	CVLAN	Edit	
Swap Board	- ONU Basic Info =	1	Transparent	0	0			6 Edit	^
PON Board 1	ONU Network Config	2	Transparent	0	0			Edit	
	- Onu Optical Parameter	3	Transparent	0	0			Edit	
	- ONU Sla List	4	Transparent	0	0			Edit	
PON0/0/4	- ONU IGMP		munsparent	•				Luit	~
PON0/0/5 2	ONU Port 4				Refresh				
== ONU1[00:1A:69:01:2C:4D]	ONU Port Config				And the second				
== ONU2[00:1A:69:01:2C:5D]	- ONU Port Rate Limit								
ONU3[E0:67:B3:33:A7:88]	ONU Port Vlan Table 5								
ONU5[E0:67:B3:1B:8F:89]									
=== ONU6[E0:67:B3:19:DA:75]									
ONU7[E0:67:B3:1A:01:44]									
ONU8[E0:67:B3:1A:01:AA]	2								
PON0/0/6									
Version: V1.1.0_181125 Tree Topology	OLT PON Board PON0/0/5	ONU 9 ONI	Current Online U	lser Number:1	(User Number I	Limit:10) L	ang English	✓ Ů Ex	<u>át</u>
OLT	- ONU Manage								
Main Board	ONU Basic Info		Port: 1						
PON Board	- ONU Capability		Vian Mode : 7	tan					
PON Card0/0	- ONU Network Config		vian wode .	tay v					
+ PON0/0/1	- Onu Optical Parameter		Priority :	0 ~					
# PON0/0/2	- ONU Sla List		PVID : 8	110 ≑					
- # PON0/0/4	- Mac-Address Manage								
	- ONU Port			9 0	onfirm Concel				
ONU1[00:1A:69:01:2C:4D]	ONU Port Config								
== ONU2[00:1A:69:01:2C:5D]	- ONU Port Rate Limit								
ONU3[E0:67:B3:33:A7:88]	-ONU Port Vlan Table								
ONU4[E0:67:B3:35:9C:A9]									
ONU0[E0:67:B3:14:01:44]									
ONU8[E0:67:B3:1A:01:AA]									

10.4.2 Configure Bridge Onu(SFU) Multicast Service

Premise Condition

- OLT connect to uplink device and open service
- OLT have created vlan for multicast service
- OLT have configured GE port vlan
- OLT have configured PON port vlan
- ONU have registered

In OLT discrete mode, we need enter OLT to config ONU multicast service, configure way as follows:

 Click "PON Control --> PON0/0/5 --> ONU ID 9 --> ONU IGMP", Configure ONU9 multicast vlan mode is snooping:

Version: V1.1.0_181125			Current Online Us	er Number:1(User Number Limit:1	0) Lang English	- U Ex
Tree Topology	OLT PON Board PON0/0/	5 ONU 9	ONU Manage ONU IGN	p Jamp Mode: Speeping V Appl	v	
- Swap Board	- ONU Basic Info	Port	MVlan ID(at most 8)	Max Multicast Numbers(0-255)	MVlan Tag Strip	operation
PON Board 1	- ONU Capability			0 ≑	NoStrip ~	Apply
PON Card0/0	- ONU Network Config			0 🗘	NoStrip ~	Apply
⊡- # PON0/0/2	- ONU Sla List	□3		0 🗘	NoStrip ~	Apply
	4 ONU IGMP	□4		0 🗘	NoStrip ~	Apply
 PON0/0/5 2 ONU1[00:1A:69:01:2C:4D] ONU2[00:1A:69:01:2C:5D] ONU3[06:78:33:347:88] ONU4[06:78:33:347:88] ONU5[06:78:33:35:2C:49] ONU5[06:78:33:19:DA:75] ONU7[06:67:83:18:19:DA:75] ONU8[06:67:83:18:19:DA:75] ONU8[06:67:83:18:19:DA:75] ONU9[06:67:83:18:19:DA:63] PON00/06 	ONU Port ONU Port Config ONU Port Canfig ONU Port Vian Table		2	tefresh Add MVIan ID Delete MV	lan ID	

 Click "PON Control --> PON0/0/5 --> ONU ID 9 --> ONU IGMP --> Add Mvlan ID", Configure ONU9 eth2 vlan is 120, and multicast vlan mode is untag:

Version: V1.1.0_181125			Current Online Us	er Number:1(User Number Limit:10) Lang English	- <mark>ك Exit</mark>
Tree Topology	OLT PON Board PON0/0/	5 ONU 9	ONU Manage ONU IGN	19		
	ONU Manage	2		Igmp Mode: Snooping 🗸 Apply		
- Swap Board	- ONU Basic Info	Port	MVlan ID(at most 8)	Max Multicast Numbers(0-255)	MVlan Tag Strip	operation
PON Board	- ONU Capability			0 対	NoStrip ~	Apply
PON Card0/0	- ONU Network Config	7 6				
	- Onu Optical Parameter			0 💌	NoStrip ~	Apply
EF = PON0/0/2	ONU Sla List	□3		0 🗢	NoStrip ~	Apply
	ONU IGMP	□4		0 🖨	NoStrip ~	Apply
E = PON0/0/5	Mac-Address Manage			0		
 ONU2[00:1A:69:01:2C:5D] ONU3[E06:7:83:33:A7:88] ONU4[E06:7:83:35:9C:A9] ONU5[E0:67:83:18:6F:89] ONU5[E0:67:83:14:01:A75] ONU7[E0:67:83:14:01:A4] ONU8[E0:67:83:14:01:A4] ONU9[E0:67:83:14:01:A4] ONU9[E0:67:83:14:01:A4] 	- ONU Port Rate Limit - ONU Port Vlan Table					
E⊢ # PON0/0/6	_		Current Online Use	er Number:1(User Number Limit:10)	Lang English ~	() Exit
Version: V1.1.0_181125	OLT PON Board PON0/0/5	5 ONU 9	Current Online Use	er Number:1(User Number Limit:10) c Info	Lang English ~	D Exit
Version: V1.1.0_181125	OLT PON Board PON0/0/5	5 ONU 9	Current Online Use	er Number:1(User Number Limit:10) c Info Igmp Mode: <u>Snooping</u> v Apply	Lang English ~) () Exit
Version: V1.1.0_181125	OLT PON Board PON0/0/9	5 ONU 9	Current Online Use	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: <u>Snooping</u> V Apply Max Multicast Numbers(0-255)	Lang English ~	O Exit
Version: V1.1.0_181125 Tree Topology Main Board Main Board PON Board PON Board	OLT PON Board PON0/0/9 ONU Manage ONU Basic Info ONU Capability	5 ONU 9	Current Online Use ONU Manage ONU Basie MVlaniD(1-4094)	er Number:1(User Number Limit:10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-235)	Lang English ~ MVlan Tag Strip	O Exit
Version: V1.1.0_181125 Tree Topology OLT Main Board PON Board PON Board PON Card0/0	OLT PON Board PON0/0/5 - ONU Manage - ONU Basic Info - ONU Capability - ONU Network Config	5 ONU 9	Current Online Use ONU Manage ONU Basic MVlanID(1-4094) 20	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255)	Lang English ~	O Exit
	OLT PON Board PON0/0/5 ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Network Config - Onu Optical Parameter	5 [ONU 9]	Current Online Use ONU Manage ONU Basie MVIanID(1-4094) 20	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: <u>Snooping v</u> Apply Max Multicast Numbers(0-255) 0 *	Lang English ~	O Exit
	OLT PON Board PON0/0/5 ONU Manage - ONU Basic Info - ONU Capability - ONU Optical Parameter - ONU Sla List	5 ONU 9	Current Online Use ONU Manage ONU Basie MVlaniD(1-4094) 20 10 ● 确定 ● 取消	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255) 0 \$ 0 \$	Lang English v MVlan Tag Strip NoStrip v NoStrip v	© Exit operation Apply Apply Apply
	OLT PON Board PON0/0/5 ONU Basic Info - ONU Basic Info - ONU Capability - ONU Activation Config - Onu Optical Parameter - ONU Sla List - ONU Sla List - ONU IGMP	5 ONU 9	Current Online Use ONU Manage ONU Basie MVIantD(1-4094) 2억 10 【義定】 取満	er Number:1(User Number Limit:10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255) 0 ÷ 0 ÷	Lang English v MVlan Tag Strip NoStrip v NoStrip v NoStrip v	Operation Apply Apply Apply
	OLT PON Board PON0/0/9 ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Capability - ONU Stal Stat - ONU Stat - ONU Stal Stat - ONU - ONU	5 ONU 9]	Current Online Use ONU Manage ONU Basie MVlaniD(1-4094) 20 10 @@ @@	er Number:1(User Number Limit:10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255) 0 \$ 0 \$ 0 \$	Lang English ~ MVIan Tag Strip NoStrip ~ NoStrip ~ NoStrip ~	Operation Apply Apply Apply
	OLT PON Board PON0/0/9 ONU Manage - ONU Basic Info - ONU Capability - ONU Ca	5 ONU 9]	Current Online Use ONU Manage ONU Basic MVIanID(1-4094) 20 10 [@2] [@3]	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Mas: Multicast Numbers(0-255) 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Lang English ~	O Exit operation Apply Apply Apply Apply
	CLT PON Board PON0/0/9 ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Capability - ONU Network Config - ONU Sla List - ONU Port Config	5 ONU 9 0 0 0 0 0 0 0 0 0 0	Current Online Use ONU Manage ONU Basid MVIanID(1-4094) 20 10 @@@ @@# R	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lang English ~ MVIan Tag Strip NoStrip ~ NoStrip ~ NoStrip ~ NoStrip ~	O Exit operation Apply Apply Apply
PON0/0/6 Version: V1.1.0_181125 Tree Topology OUT Main Board OUT PON Board PON Card0/0 PON Card0/0 PON0/0/1 PON0/0/3 PON0/0/3 PON0/0/3 PON0/0/3 OUT[00:1A69:01:2C:4D] OUT[00:1A69:01:2C:5D] OUT[00:1A69:0	OLT PON Board PON0/0/9 ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Capability - ONU Capability - ONU Capability - ONU Jaki Linit - ONU Jaki Linit - ONU Jaki Port Config - ONU Port Config - ONU Port Rate Linit	5 ONU 9 0 0 0 0 0 0 0 0 0 0 0 0 0	Current Online Use ONU Manage ONU Basid MVIanID(1-4094) 20 10 @@	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping C Apply Max Multicast Numbers(0-255) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lang English ~ MVIan Tag Strip NoStrip ~ NoStrip ~ NoStrip ~ NoStrip ~	O Exit operation Apply Apply Apply
PON0/0/6 Version: V1.1.0_181125 Tree Topology OLT Main Board Swap Board PON0/0/2 PON0/0/2 PON0/0/2 PON0/0/2 PON0/0/3 PON0/0/4 PON0/0/4 OLT ONU2[00:7.83335.7.83] ONU2[D0:7.83335.7.84] ONU4[D0:7.83335.7.84] ONU4[D0:7.83335.7.84] ONU4[D0:7.83335.7.84] ONU4[D0:7.83335.7.84] ONU4[D0:7.83335.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83355.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.835555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.83555.7.84] ONU4[D0:7.85555.7.84] ONU4[D0:7.85555.7.84] ONU4[D0:7.85555.7.84] ONU4[D0:7.85555.7.84] ONU4[D0:7.85555.7.84] ONU4[D0:7.855555.7.84] ONU4[D0:7.8555555 ONU4[D0:7.8555555 ONU4[D0:7.855555 ONU4[D0:7.855555 ONU4[D0:7.855555 ONU4[D0:7.85555 ONU4[D0:7.85555 ONU4[D0:7.85555 ONU4[D0:7.85555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555 ONU4[D0:7.8555	CLT PON Board PON/0/9 ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Optical Parameter - ONU Sla List - ONU Sla List - ONU Sla List - ONU Sla List - ONU Port - ONU Port - ONU Port Config - ONU Port Rate Limit - ONU Port Vlan Table	5 ONU 9]	Current Online Use ONU Manage ONU Basia MVlanID(1-4094) 20 10 ()))))))))))))))))))	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping Apply Max Multicast Numbers(0-25) 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Lang English ~ MVIan Tag Strip NoStrip ~ NoStrip ~ NoStrip ~	Operation Apply Apply Apply Apply
PON0/0/6 Version: V1.1.0_181125 Tree Topology OLT Main Board Swap Board PON Board PON Board PON Cord0/0 PON0/0/1 PON0/0/2 PON0/0/2 PON0/0/4 PON0/0/5 ONU3[00:1A69:01:2C:4D] ONU3[0	OLT PON Board PONO/0/5 ONU Manage - ONU Basic Info - ONU Capability - ONU Optical Parameter - ONU Sla List - ONU Port Config - ONU Port Config - ONU Port Van Table	5] ONU 9]	Current Online Use ONU Manage ONU Basic MVIanID(1-4094) 20 10 (1995) (1994) 20 10 (1995) (1994) 20 10 (1995) (1994) 20 10 (1995) (1995) (1995) (1995) 20 10 (1995) (1995	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping Apply Max Multicast Numbers(0-255) 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Lang English ~	O Exit
PON0/0/6 Version: V1.1.0_181125 Tree Topology OUT Main Board Swap Board PON Board PON Cord0/0 PON0/0/1 PON0/0/1 PON0/0/2 PON0/0/4 PON0/0/5 ONU3(2061783:314.768) ONU3(2061783:1887.69) ONU3(20617883.79) ONU3(20617883.79) ONU3(20617883.79) ONU3(20617883.7	OLT PON Board PON0/0/ ONU Manage - ONU Basic Info - ONU Capability - ONU Capability - ONU Statist - ONU Port - ONU Port Config - ONU Port Vian Table	5 [ONU 9]	Current Online Use ONU Manage ONU Basi MVlaniD(1-4094) 20 10 @@@ @@@ R	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping (Apply) Max Multicast Numbers(0-255) 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Lang English ~ MVIan Tag Strip NoStrip ~ NoStrip ~ NoStrip ~	O Exit
PON0/0/6 Version: V1.1.0_181125 Tree Topology Main Board OUT Main Board PON Card00 PON0/0/1 PON0/0/1 PON0/0/2 PON0/0/2 PON0/0/3 PON0/0/5 OUT[00:1A69:01:2C:4D] OUT[0	OLT PON Board PON0/0/ ONU Manage ONU Basic Info ONU Capability ONU Capability ONU Capability ONU Capability ONU Statist ONU Statist ONU Statist ONU Statist ONU John Mac-Address Manage ONU Port ONU Port Config ONU Port Config ONU Port Vian Table	5] ONU 9]	Current Online Use ONU Manage ONU Basic MVlanID(1-4094) 20 10 () () () () () () () () () () () () ()	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-25) 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Lang English ~	Operation Apply Apply Apply
	OLT PON Board PON0/0/ ONU Basic Info ONU Capability ONU Port Canfig ONU Port Vian Table	5 ONU 9	Current Online Use ONU Manage ONU Basid MVIanID(1-4094) 20 10 @@@ @@@ R	er Number: 1 (User Number Limit: 10) c Info Igmp Mode: Snooping V Apply Max Multicast Numbers(0-255) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lang English ~	O Exit

Version: V1.1.0_181125			Current Online Us	er Number:1(User Number Limit:	10) Lang English	✓ Ů Exit
Tree Topology	OLT PON Board PON0/0/	5 ONU 9	ONU Manage ONU Basi	ic Info		
Tree Topology Image: Content of the image: Cont	OLT PON Board PON0/0/ ONU Basic Info ONU Capability ONU Anage ONU Capability ONU Capability ONU Capability ONU Stal List ONU Stal List ONU Stal List ONU Stal Development ONU Port ONU Port ONU Port Sonfig ONU Port Sonfig	ONU 9 O	ONU Manage ONU Basi MVlan ID(at most 8) 120	ic Info Igmp Mode: <u>Snooping</u> ~ App Max Multicast Numbers(0-255) 0 0 0 0 0 0 0 0 0 0 Refresh Add MVIan ID Delete M	MVlan Tag Strip NoStrip ~ 11 Strip ~ NoStrip ~ NoStrip ~ NoStrip ~	operation Apply 12 Apply Apply Apply Apply
 ONU3[E0:67:83:33:A7:88] ONU4[E0:67:83:35:9C:A9] ONU5[E0:67:83:18:87:89] ONU5[E0:67:83:18:10:A7:3] ONU5[E0:67:83:14:01:4A] ONU7[E0:67:83:1A:01:44] ONU7[E0:67:83:14:01:44] 	- ONU Port Rate Limit					

Concluding Remarks

Thanks for choosing our company products!