

iMaster NCE-FAN GPON FTTB or FTTC IPTV Service Configuration

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Objectives

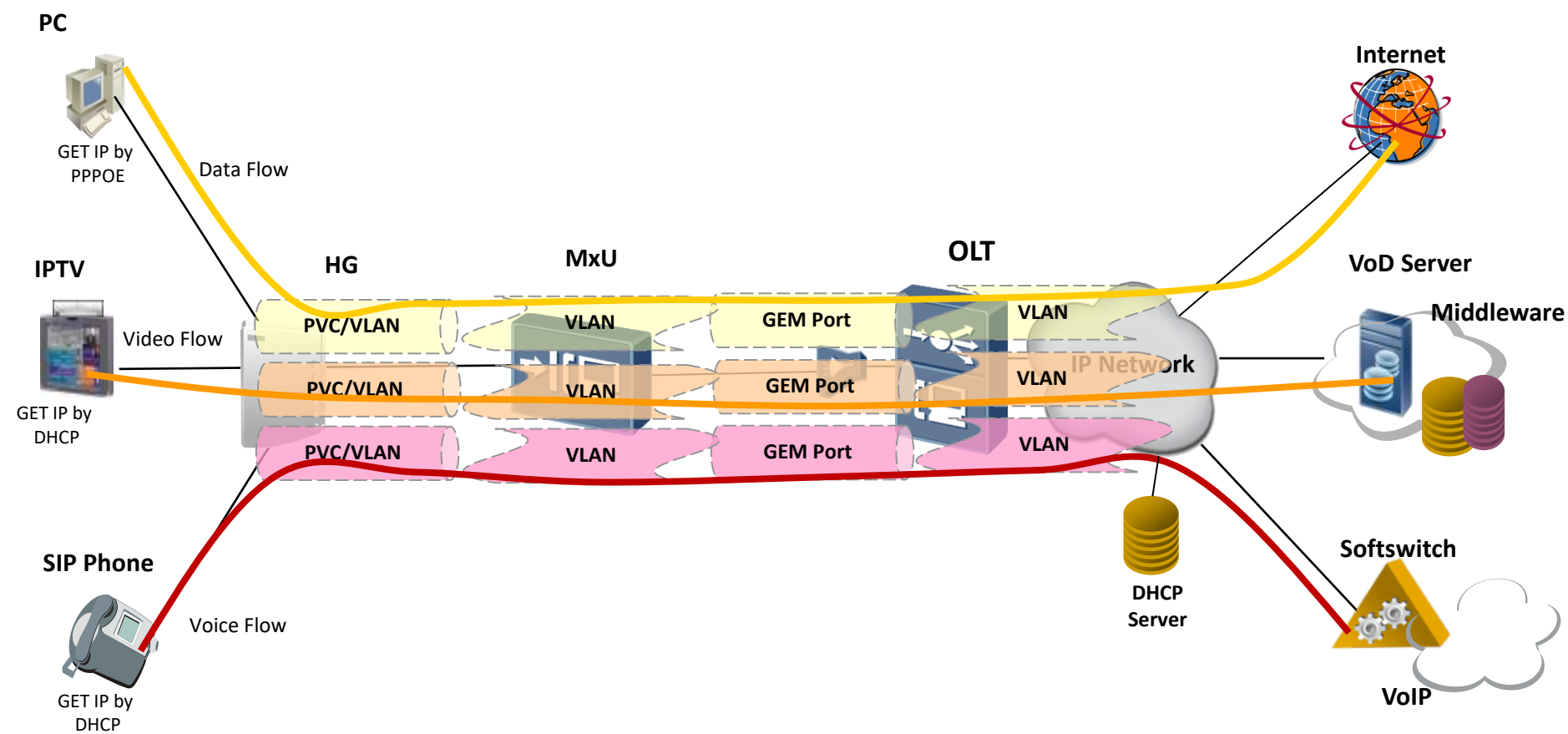
- Upon completion of this course, you will be able to:
 - Describe the GPON FTTB networking.
 - Describe the functions of profiles.
 - Outline the configuration flow
 - Complete FTTB IPTV service configuration tasks.



Contents

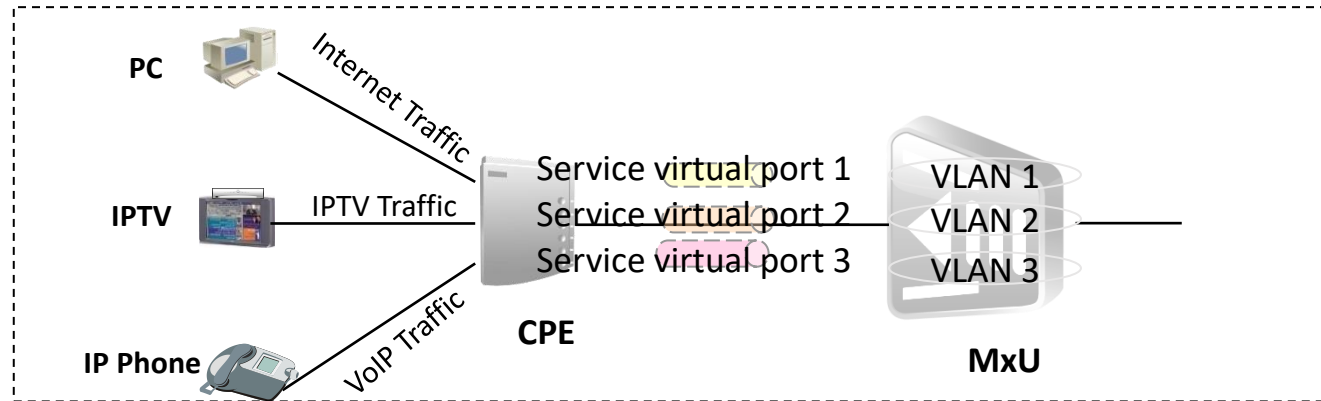
- 1. GPON FTTB IPTV Service Introduction**
2. GPON FTTB IPTV Service Configuration Flow
3. GPON FTTB IPTV Service Configuration Example

Service Mapping

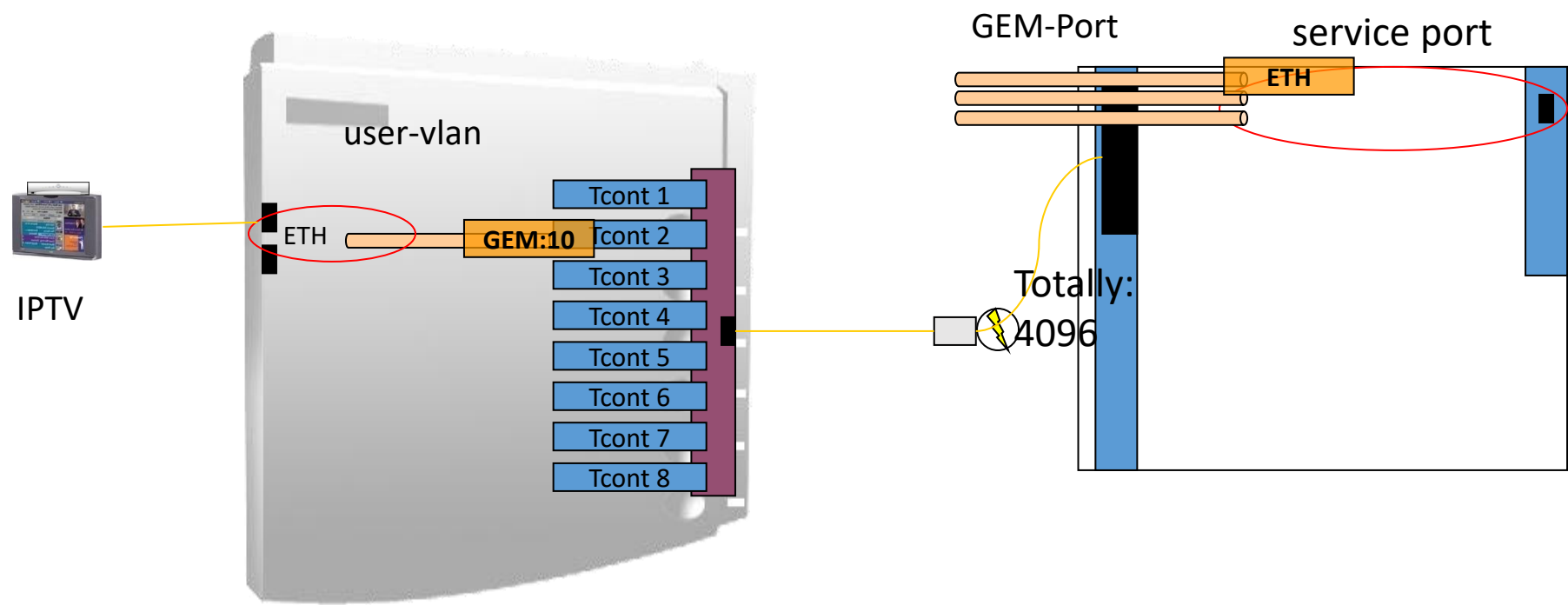


MxU VLANs and Ports

- Service VLAN
 - Service VLAN is used to mapping up play service network
 - Usually one service one VLAN
- Service virtual port
 - A virtual channel used to forward the user traffic from the user side
 - Used to classify the different services traffic and then mapping to the upstream VLAN



MxU and OLT Service Flow Principle



Necessary Profiles for ONUs

- DBA Profile

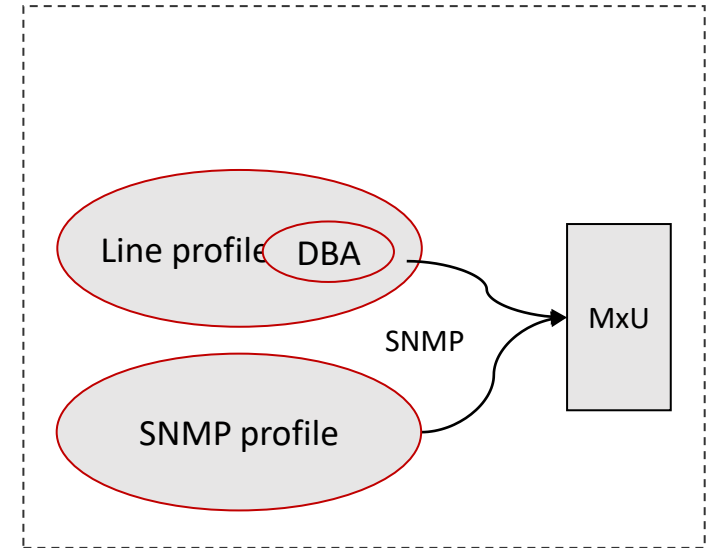
A DBA profile defines the traffic parameters of GPON and can be bound to dynamically allocate the bandwidth and improve the usage of the upstream bandwidth.

- ONU line profile ont-line profile

The GPON ONU line profile defines the DBA profile binding with the TCONT, GEM port ID and mapping between GEM port and VLAN.

- SNMP profile

SNMP profile is used to set the SNMP parameters of an ONT that is in the SNMP management mode.



Necessary Profiles for ONUs

- Traffic Profile

An IP traffic profile is used to manage the traffic of the service port through the traffic parameters defined in the profile (PIR/CIR, Priority policies).

- IGMP Profile

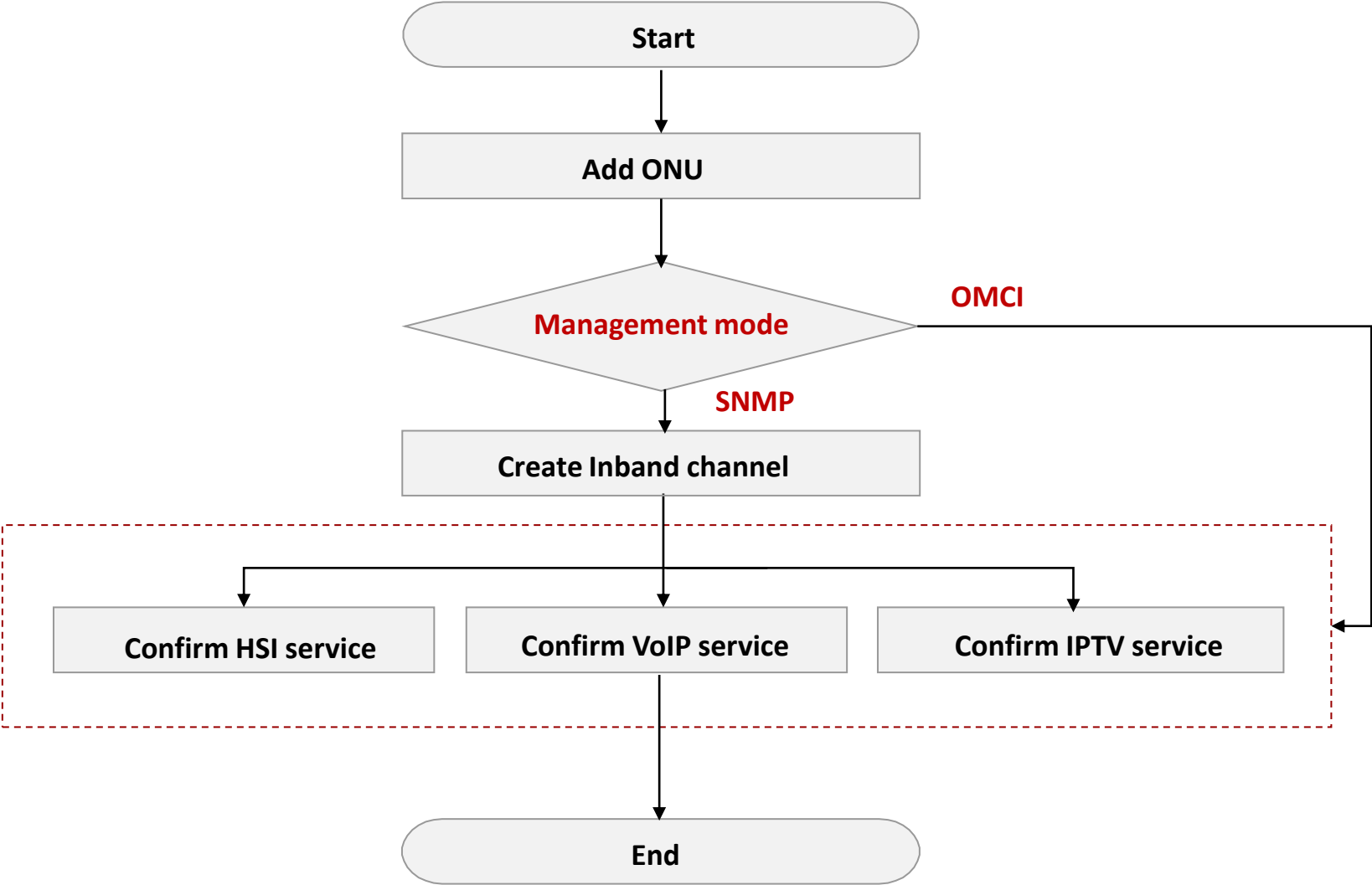
Internet Group Management Protocol (IGMP) profile contains the parameters required for configuring the multicast service. The IGMP profiles of the NE include program profiles, rights profiles, and preview profiles program profiles and rights profiles.



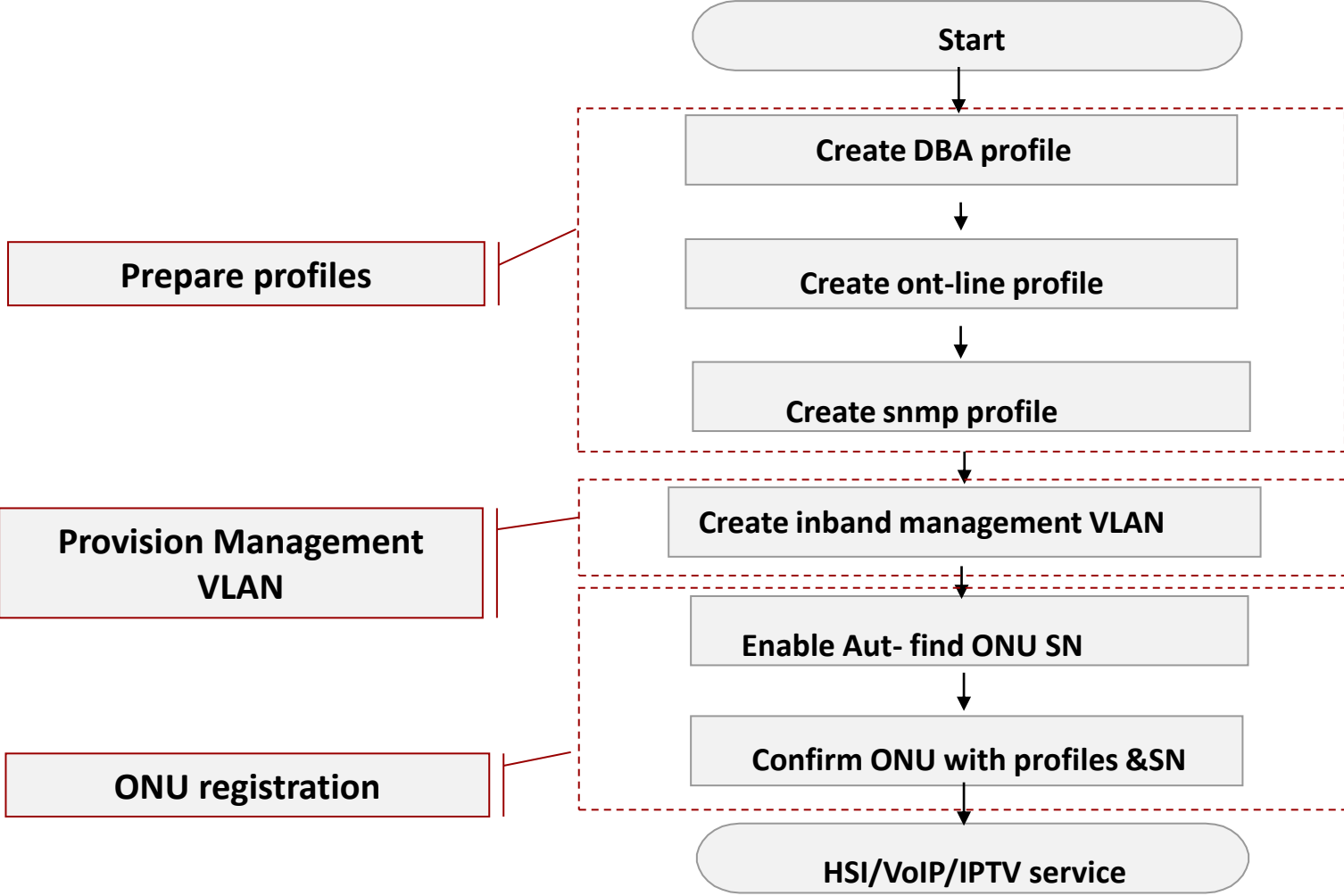
Contents

1. GPON FTTB IPTV Service Introduction
- 2. GPON FTTB IPTV Service Configuration Flow**
3. GPON FTTB IPTV Service Configuration Example

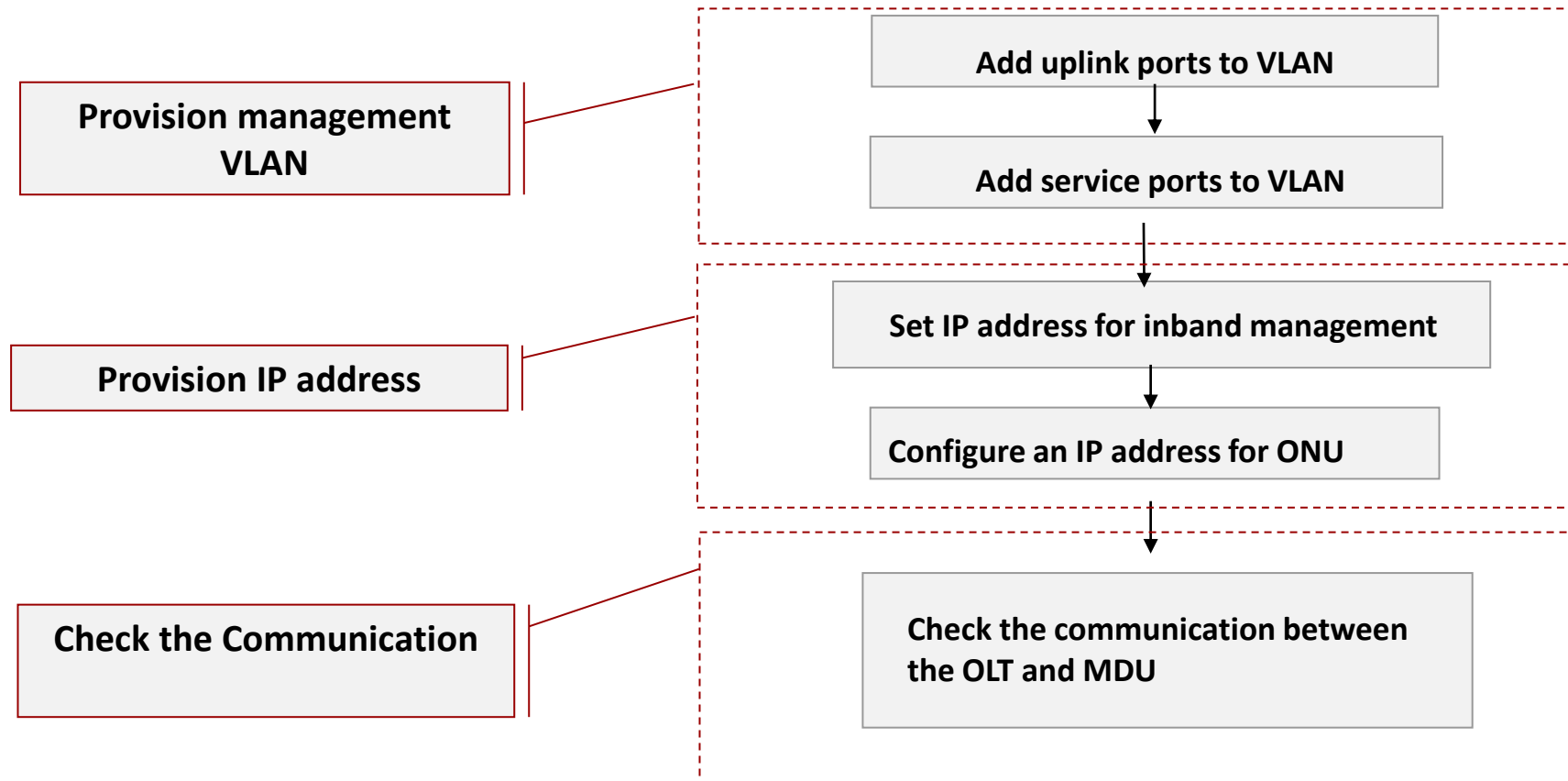
Full Configuration Flow



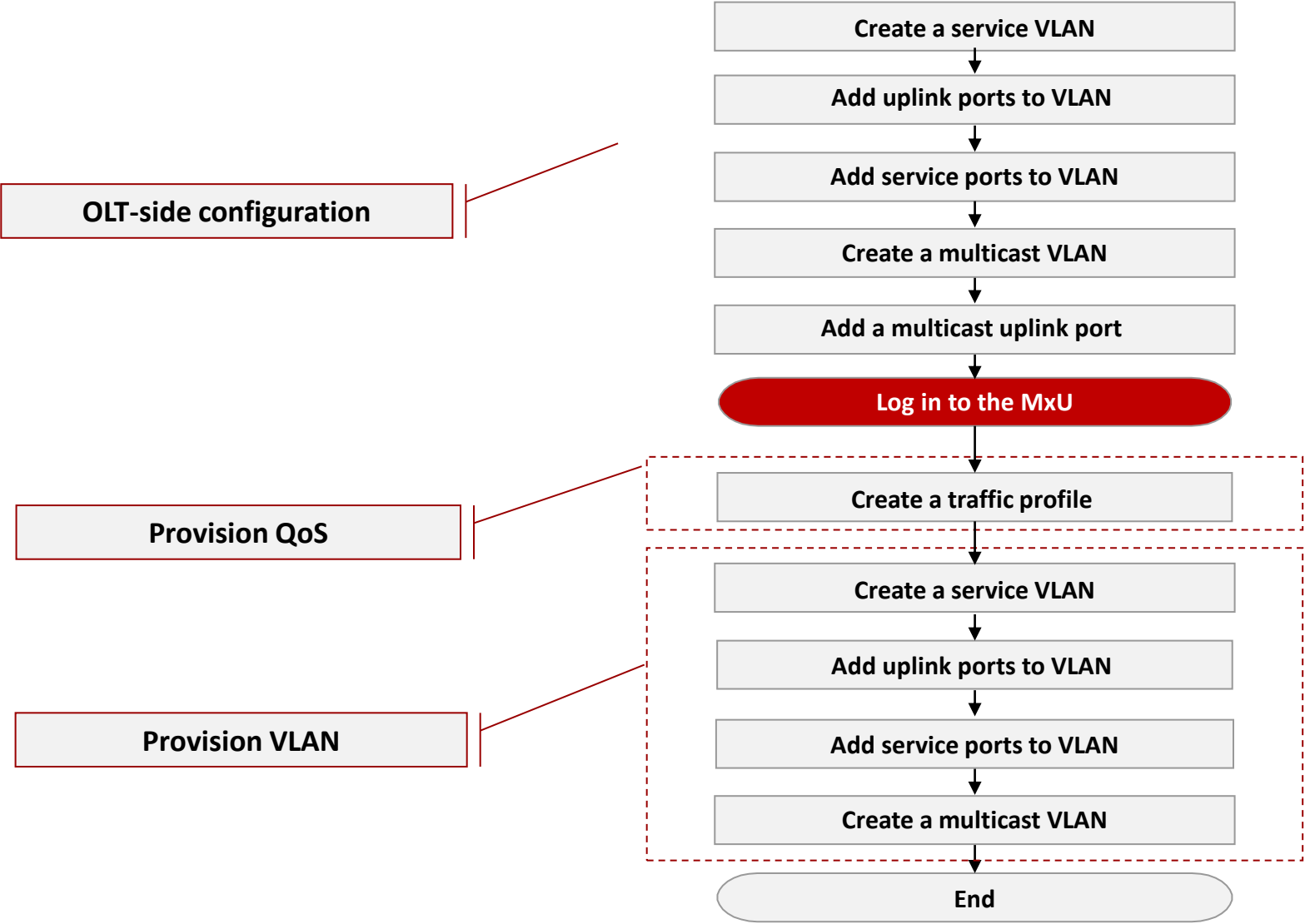
Flow Chart - Adding an ONU



Flow Chart - Configuring an Inband Management Channel



Flow Chart - Configuring an IPTV Service

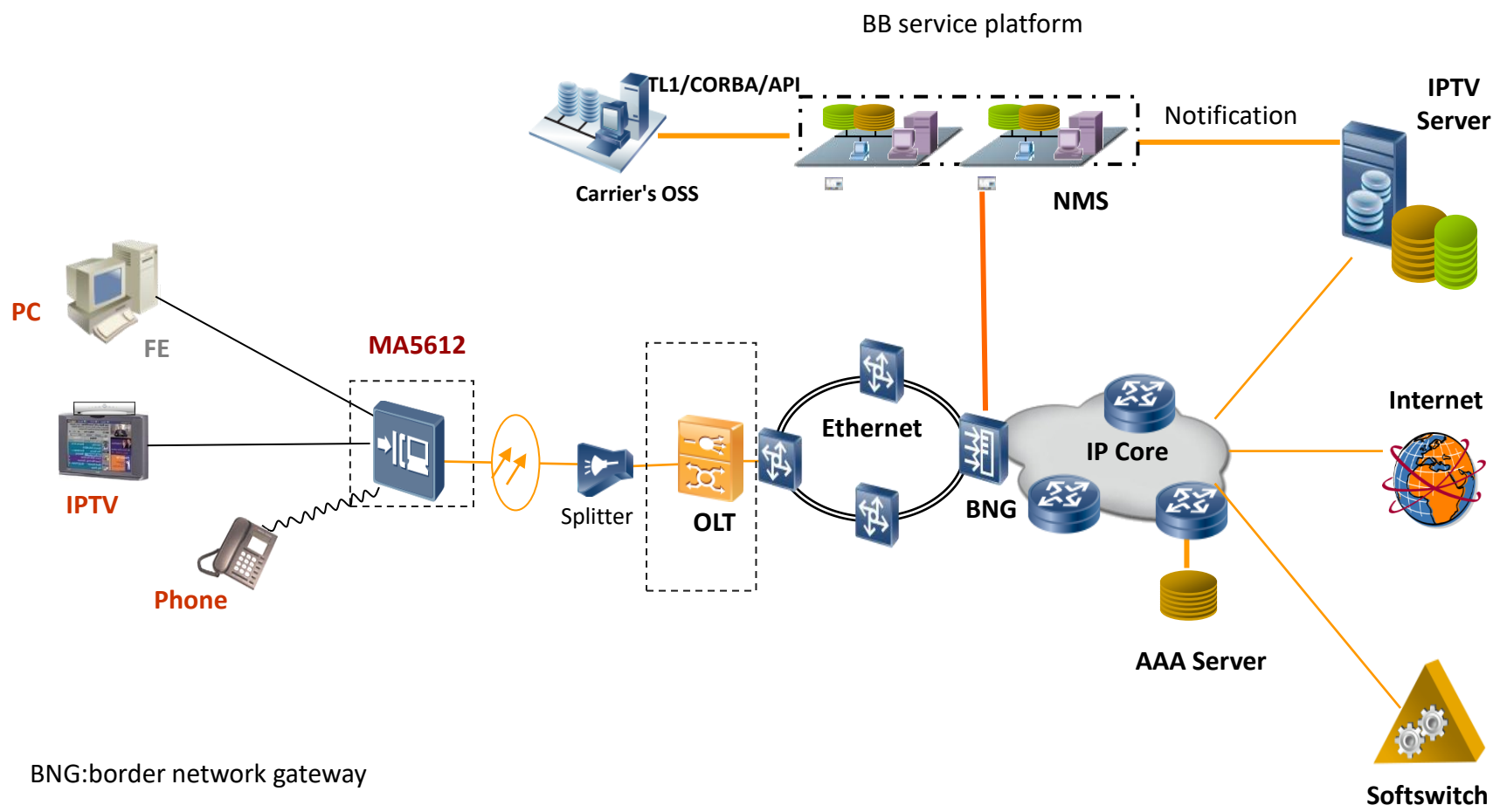




Contents

1. GPON FTTB IPTV Service Introduction
2. GPON FTTB IPTV Service Configuration Flow
- 3. GPON FTTB IPTV Service Configuration Example**

GPON FTTB Network



GPON FTTB Case Data Plan

Type	MxU port	C-VLAN	GEM	DBA	T-CONT	Traffic table	S-VLAN	OLT port
IPTV	LINE:0/4/0	1000	1	60M-60M	1	20M/20M	Common 1000	GPON: 0/18/0 Unlink: 0/9/0
EMS	-	4000	0	default	0	Not limited	4000	

Creating GPON Profiles

The screenshot displays the iMaster NCE web interface. At the top, there is a navigation bar with tabs: Topology, Monitor, Configuration, Service, Maintenance, Resource, System, and Security. The 'Service' tab is currently selected. Below the navigation bar, the main content area is divided into a left sidebar and a main panel. The sidebar contains a tree view with 'DSL Profile' and 'PON Profile' expanded. Under 'PON Profile', 'GPON Profile' is selected. The main panel shows the 'Access Profile Management' tab, which is highlighted with a red box. A dropdown menu is open, showing 'Access Service' and 'Access Profile Management' (highlighted with a red box). Below the dropdown, there is a table with columns: Name, Alias, Line Type, and ATU-C. The table is currently empty.

iMaster NCE

Topology Monitor Configuration **Service** Maintenance Resource System Security

Physical Topology **Access Profile Management** ×

DSL Profile
ADSL Profile
NGADSL Profile
VDSL Profile
VDSL2 Profile
VDSL2 Multi-Profile
G.fast Profile
G.SHDSL Profile
TR165 DSL Profile
Bonding Group Profile
Vectoring Profile

PON Profile
GPON Profile
EPON Profile
DBA Profile
Optical Alarm Profile
ONT VAS Profile
ONU Service Level Profile
ONU Power Reduction Profile
Traffic Alarm Profile

ADSL Line Profile | ADSL Alarm Profile | ADSL Extended Profile

Device Type (MPU Type): MA5100V1 All

Name ^	Alias ^	Line Type ^	ATU-C
--------	---------	-------------	-------

Access Service
Access Profile Management
FTTx Service View

Downstream Max. Tx Rate (kbit/s) ^

Creating GPON Profiles

Physical Topology | **Access Profile Management** ×

GPON Line Profile | GPON Service Profile | DBA Profile | GPON ONT Capacity Profile | GPON Alarm Profile | MDU SNMP Profile

DSL Profile

- ADSL Profile
- NGADSL Profile
- VDSL Profile
- VDSL2 Profile
- VDSL2 Multi-Profile
- G.fast Profile
- G.SHDSL Profile
- TR165 DSL Profile
- Bonding Group Profile
- Vectoring Profile

PON Profile

- GPON Profile**
- EPON Profile
- DBA Profile
- Optical Alarm Profile
- ONT VAS Profile
- ONU Service Level Profile
- ONU Power Reduction Profile
- Traffic Alarm Profile
- PQ Mapping Profile
- Power Shedding Profile
- Tr069 Server Profile

All

Name ^	Alias ^
100M	
AT_modify_1	
1M	
60M	

Adding a DBA Profile

Physical Topology

Access Profile Management

DSL Profile

- ADSL Profile
- NGADSL Profile
- VDSL Profile
- VDSL2 Profile
- VDSL2 Multi-Profile
- G.fast Profile
- G.SHDSL Profile
- TR165 DSL Profile
- Bonding Group Profile
- Vectoring Profile
- Profile

GPON Profile

EPON Profile

DBA Profile

Optical Alarm Profile

ONT VAS Profile

GPON Line Profile

GPON Service Profile

DBA Profile

GPON ONT Capacity Profile

GPON Alarm Profile

MDU SNMP Profile

All

Name ^	Alias ^	
dba-profile	dba-profile_1	Default

Add Global Profile...

File

Adding a DBA Profile

Add DBA Profile

Profile Parameters

Name: IPTV *

Alias:

DBA Type: Maximum Bandwidth

Assured Bandwidth (kbit/s) (128-10000000): 128

Fixed Bandwidth (kbit/s) (128-10000000): 128

Maximum Bandwidth (kbit/s) (128-10000000): 61440 *

Bandwidth Compensation: No

Additional Bandwidth: Best-effort

Best-effort Priority: 0

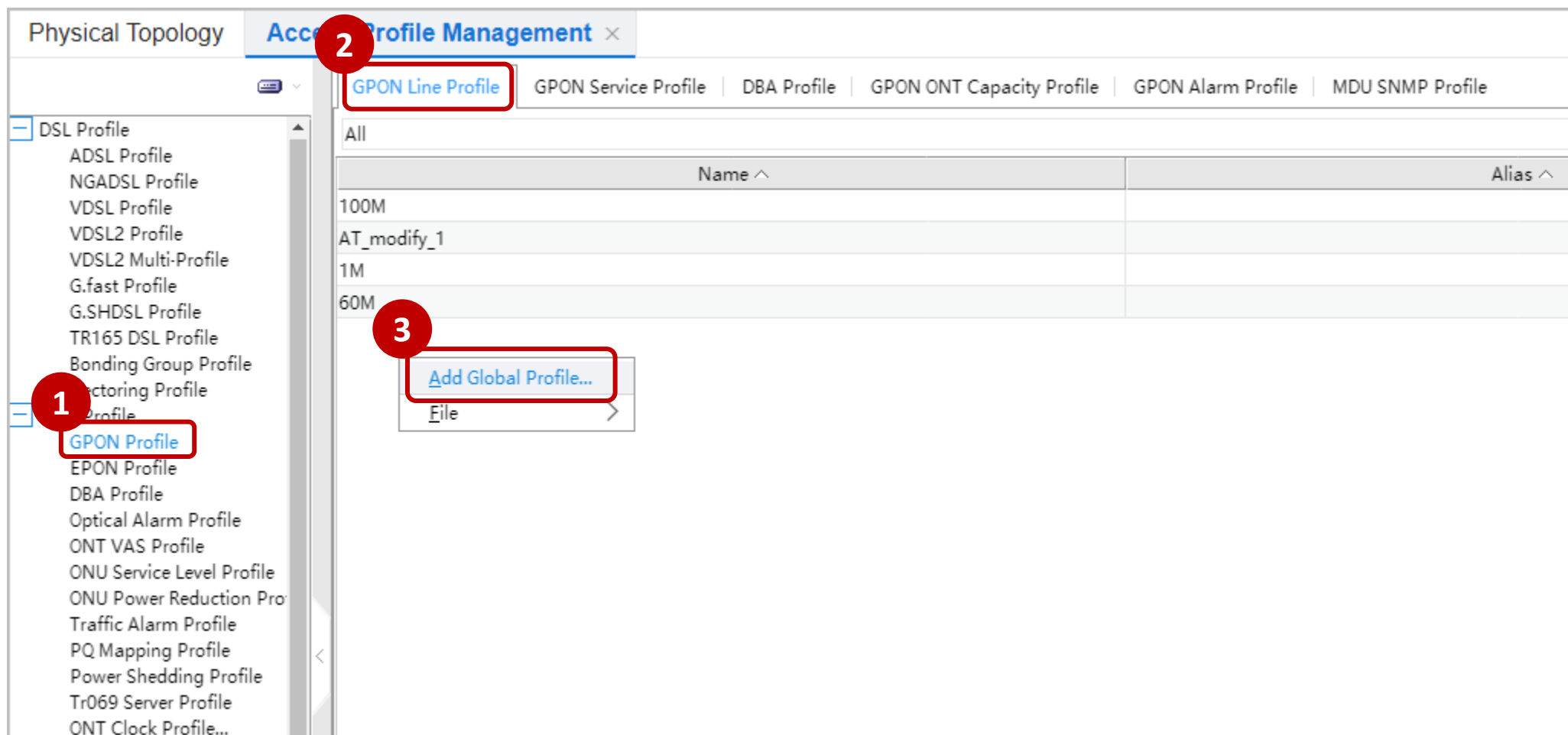
Best-effort Weight (1-10000): 128 *

Fixed Delay: No

Device Scope Profile

OK Cancel Apply

Adding a GPON Line Profile



Setting a Mapping Mode

Add GPON Line Profile

Name: GPON line profile * Alias:

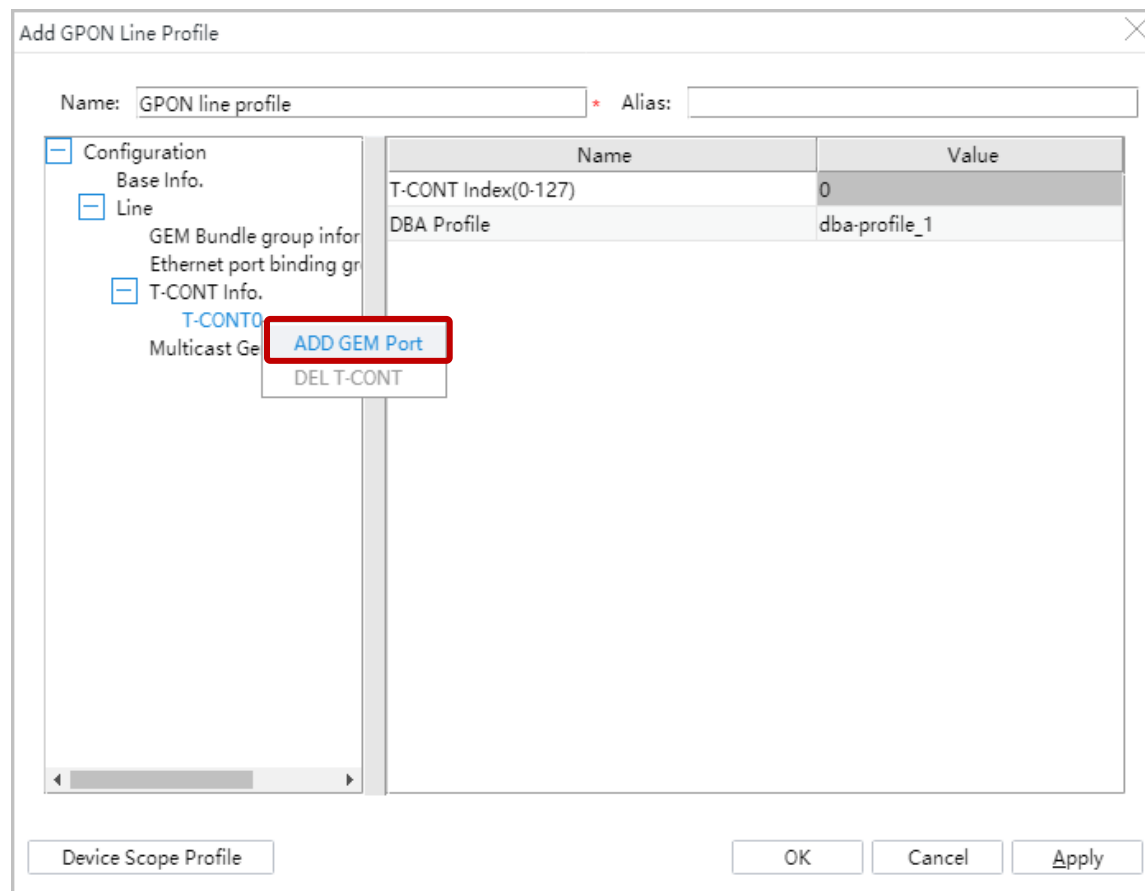
Configuration
Base Info.
+ Line

Name	Value
Upstream FEC Switch	OFF
<u>Mapping Mode</u>	<u>VLAN</u>
Qos Mode	Priority Queue
OMCC Encryption	Off
TR069 Management	Disable
TR069 Management IP Index	0

Device Scope Profile

OK Cancel Apply

Adding a GEM Port for a Management Channel



Adding a GEM Port for a Management Channel

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

- Base Info.
- Line
 - GEM Bundle group
 - Ethernet port binding
 - T-CONT Info.
 - T-CONT0
 - Multicast Gempor

ADD GEM Port

GEM Port Parameters

T-CONT Index (0-127): 0

GEM Port Index (0-1023): 0 *

Upstream Priority Queue: 0

Downstream Priority Queue:

CAR Profile:

Service Type: ETH

Encryption Switch: OFF

Cascade Switch: OFF

OK Cancel

Device Scope Profile

OK Cancel Apply

Name	Value
profile_1	

Adding a GEM Connection for a Management Channel

Add GPON Line Profile

Name: GPON line profile * Alias:

☐ Configuration

☐ Base Info.

☐ Line

 GEM Bundle group infor

 Ethernet port binding gr

☐ T-CONT Info.

☐ T-CONT0

 GEM Port0

 Multicast Gempo

Name	Value
GEM Port Index(0-1023)	0
Upstream Priority Queue	0
Downstream Priority Queue	
CAR Profile	
Service Type	ETH
	OFF
	OFF

[ADD GEM Connection](#)

DEL GEM Port

Device Scope Profile

OK Cancel Apply

Adding a GEM Connection for a Management Channel

Add GPON Line Profile

Name: **GPON line profile** * Alias:

Configuration

- Base Info.
- Line
 - GEM Bundle group
 - Ethernet port binding
 - T-CONT Info.
 - T-CONT0
 - GEM Port**
 - Multicast Gempop

ADD GEM Connection

GEM Connection Parameters

GEM Port Index (0-1023): 0

GEM Connection Index (0-7): 0 *

VLAN ID(0-4095): **4000**

Priority:

Port Type:

Port ID (1-24):

BindGroup ID:

CAR Profile:

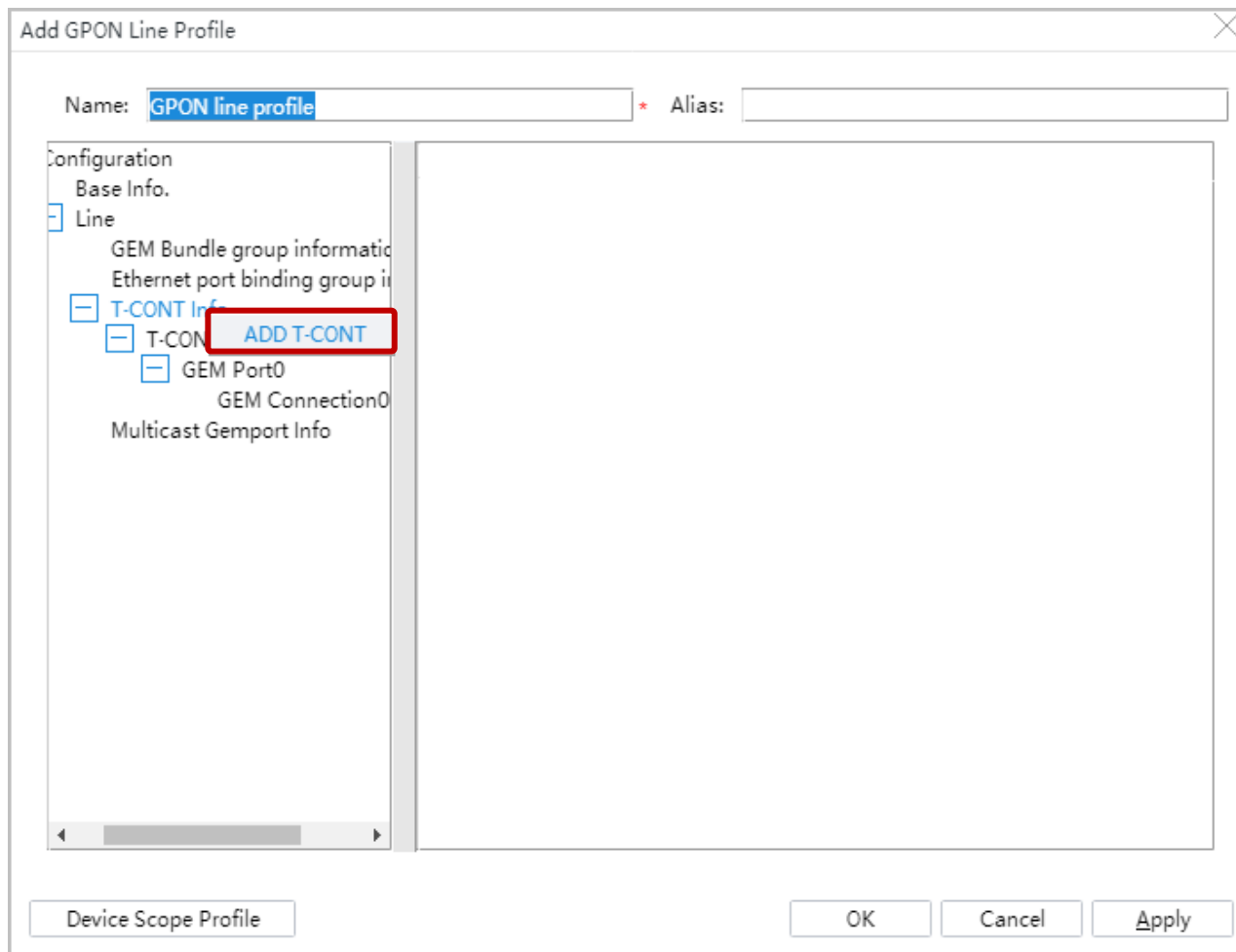
Transparent:

OK Cancel

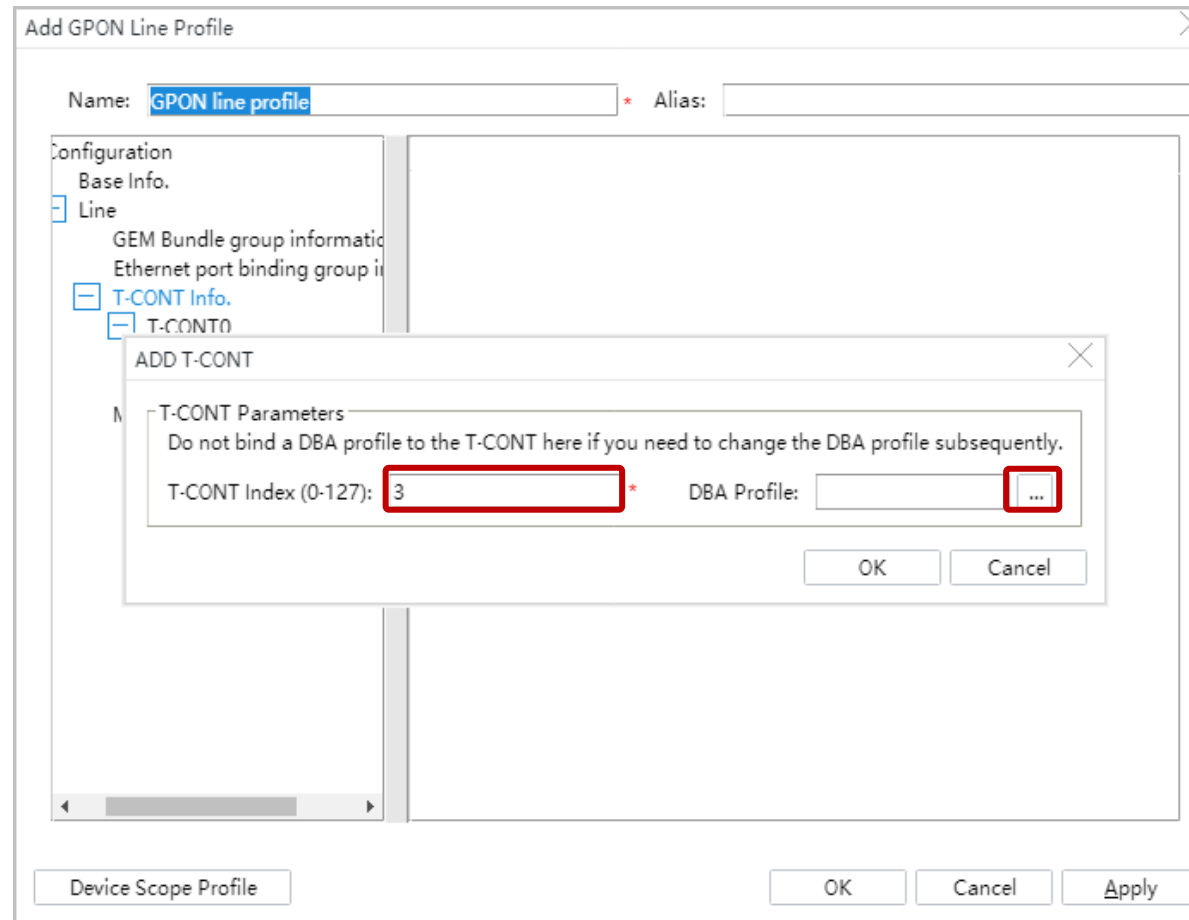
Device Scope Profile

OK Cancel Apply

Adding a T-CONT for a Service



Binding a DBA Profile



Binding a DBA Profile

Select DBA Profile

All

Filter...

No. 1, Total: 2

Name ^	Alias ^	Device Scope Profile ^	DBA Type ^
IPTV		Default	Maximum Bandwidth
dba-profile_1	dba-profile_1	Default	Fixed Bandwidth

OK

Cancel

Binding a DBA Profile

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

- Base Info.
- ☒ Line
 - GEM Bundle group information
 - Ethernet port binding group information
- ☒ T-CONT Info.
 - ☒ T-CONT0

ADD T-CONT

T-CONT Parameters

Do not bind a DBA profile to the T-CONT here if you need to change the DBA profile subsequently.

T-CONT Index (0-127): 3 * DBA Profile: IPTV ...

OK Cancel

Device Scope Profile

OK Cancel Apply

Adding a GEM Port for a Service

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

- Base Info.
- Line
 - GEM Bundle group information
 - Ethernet port binding group information
 - T-CONT Info.
 - T-CONT0
 - GEM Port0
 - GEM Connection0
 - ADD GEM Port**
 - DEL T-CONT

Name	Value
T-CONT Index(0-127)	3
DBA Profile	IPTV

Device Scope Profile

OK Cancel Apply

Adding a GEM Port for a Service

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

- Base Info.
- Line
 - GEM Bundle group info
 - Ethernet port binding g
 - T-CONT Info.
 - T-CONT0
 - GEM Port0
 - GEM Conne
 - T-CONT3**
 - Multicast Gempport Info

Name	Value

ADD GEM Port

GEM Port Parameters

T-CONT Index (0-127):

GEM Port Index (0-1023):

Upstream Priority Queue:

Downstream Priority Queue:

CAR Profile: ...

Service Type:

Encryption Switch:

Cascade Switch:

OK Cancel

Device Scope Profile OK Cancel Apply

Adding a GEM Connection

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

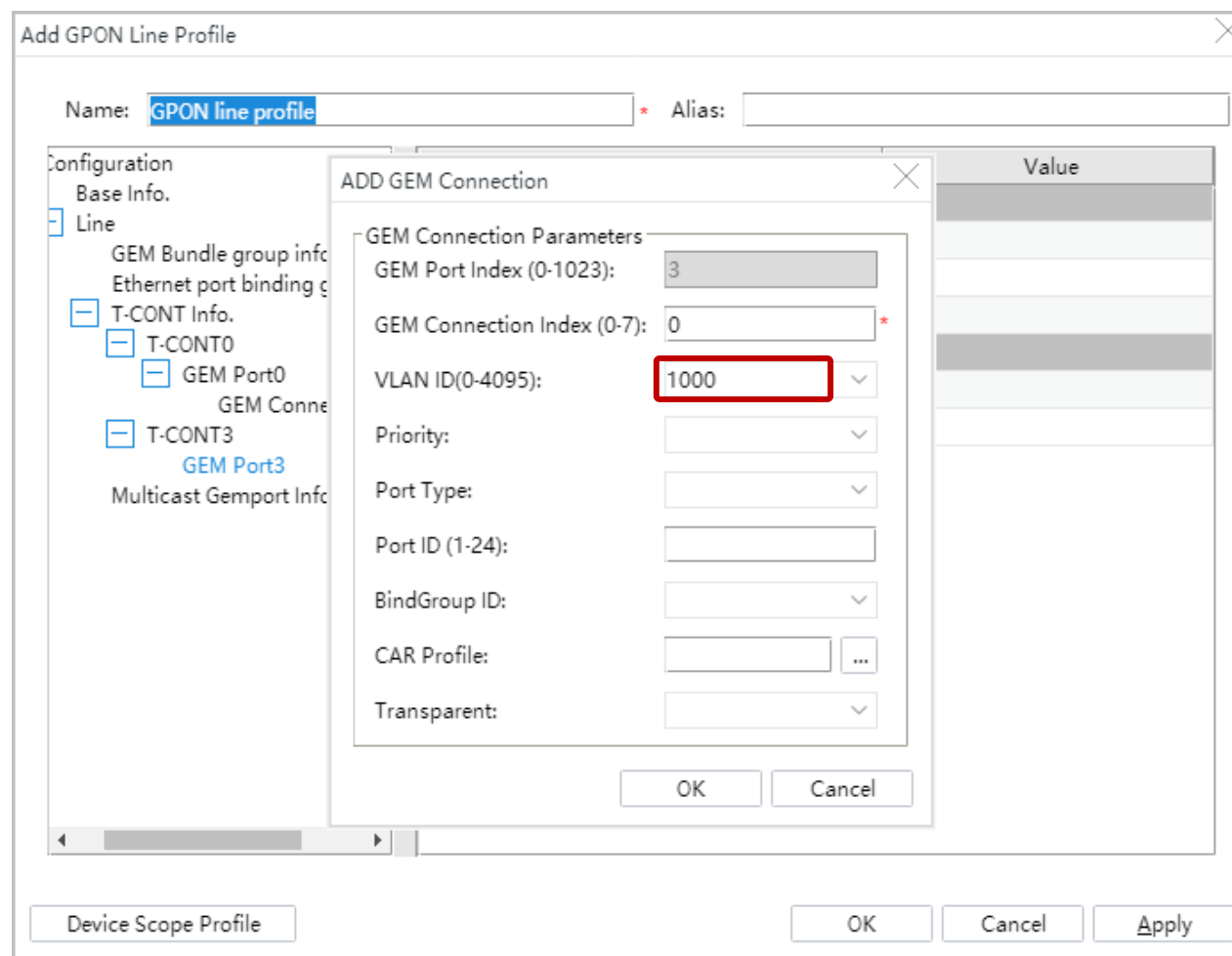
- Base Info.
- Line
 - GEM Bundle group information
 - Ethernet port binding group information
 - T-CONT Info.
 - T-CONT0
 - GEM Port0
 - GEM Connection0
 - ADD GEM Connection**
 - DEL GEM Port
 - T-CONT3
 - GEM Port3
 - Multicast GEM Port

Name	Value
GEM Port Index(0-1023)	3
Upstream Priority Queue	0
Downstream Priority Queue	
CAR Profile	
Service Type	ETH
Encryption Switch	OFF
Cascade Switch	OFF

Device Scope Profile

OK Cancel Apply

Adding a GEM Connection



Adding a GPON Line Profile

Add GPON Line Profile

Name: GPON line profile * Alias:

Configuration

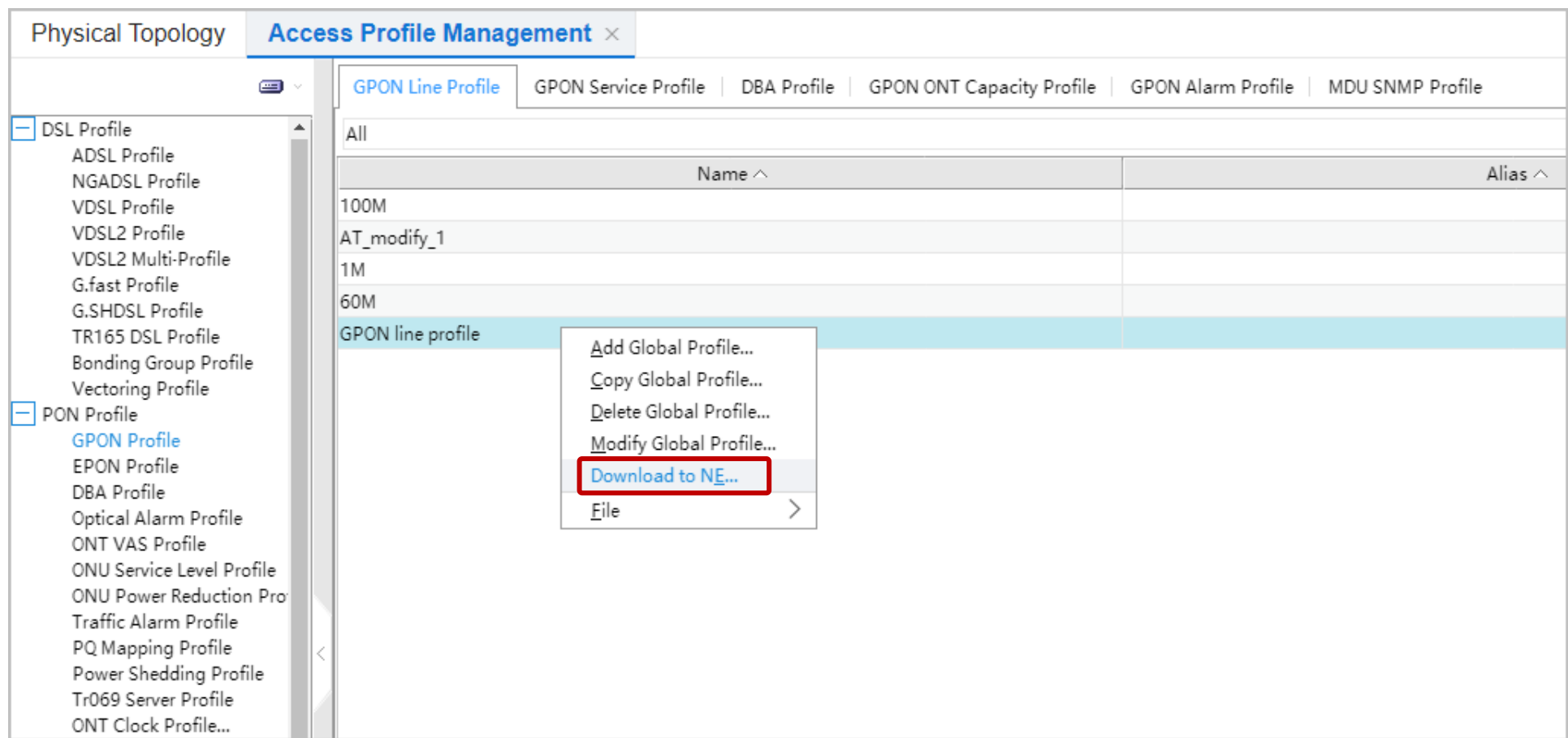
- Base Info.
- ☒ Line
 - GEM Bundle group information
 - Ethernet port binding group information
 - ☒ T-CONT Info.
 - ☒ T-CONT0
 - ☒ GEM Port0
 - GEM Connection0
 - ☒ T-CONT3
 - ☒ GEM Port3
 - GEM Connection0
 - Multicast Gempport Info

Name	Value
GEM Connection Index(0-7)	0
VLAN ID(0-4095)	1000
Priority	
Port Type	
Port ID(1-24)	
BindGroup ID	
CAR Profile	
Transparent	

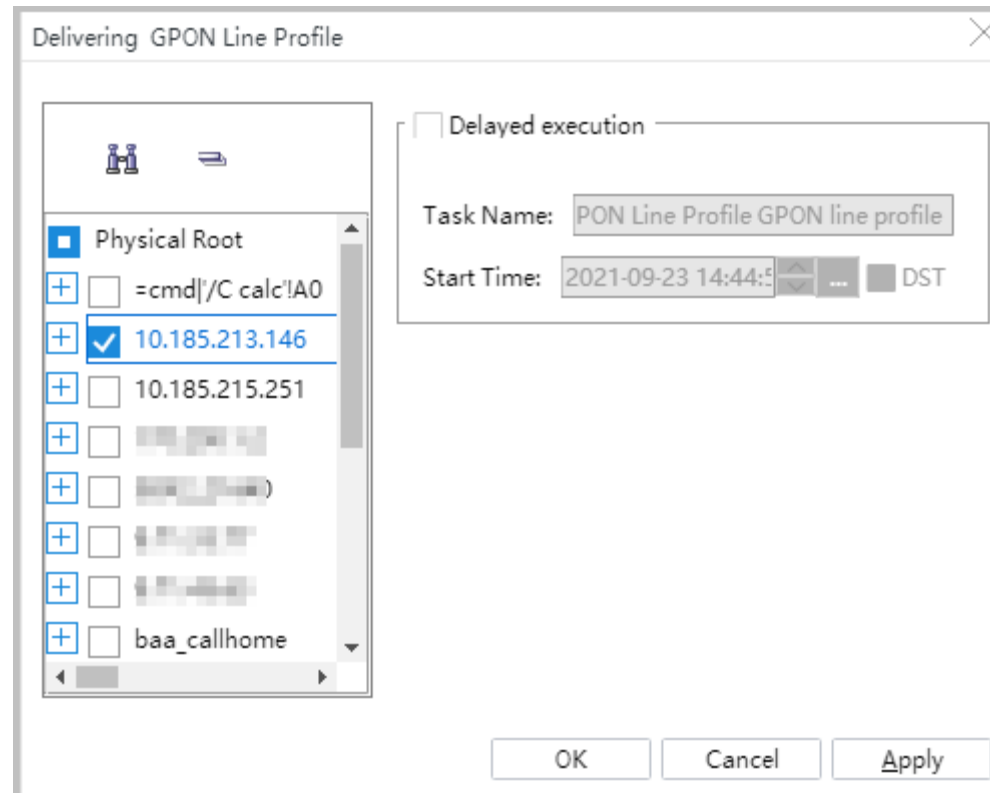
Device Scope Profile

OK Cancel Apply

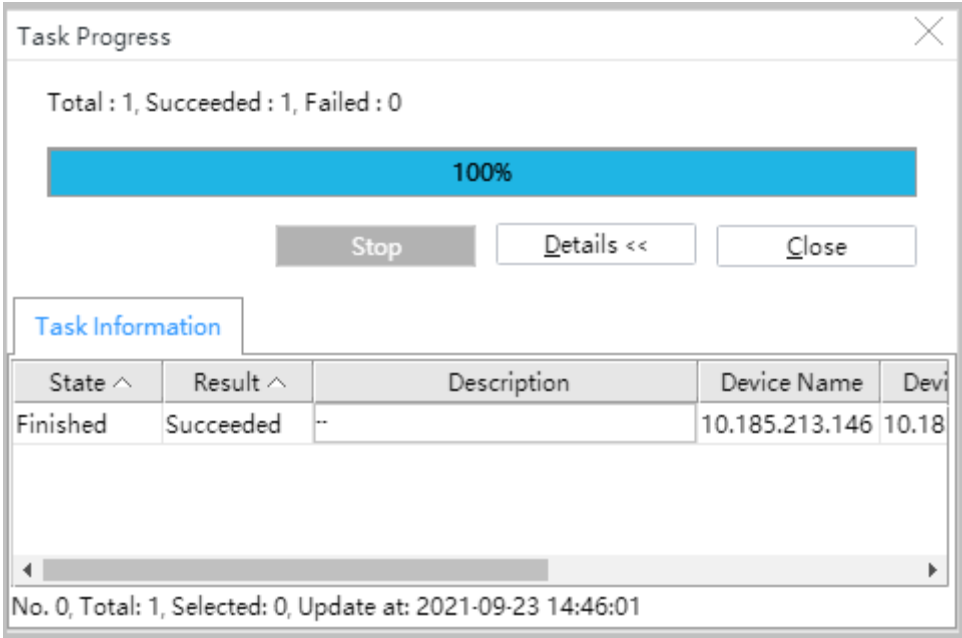
Downloading a GPON Line Profile to an NE



Downloading a GPON Line Profile to an NE



Downloading a GPON Line Profile to an NE



Adding an MDU SNMP Profile

Physical Topology

Access Profile Management

DSL Profile

- ADSL Profile
- NGADSL Profile
- VDSL Profile
- VDSL2 Profile
- VDSL2 Multi-Profile
- G.fast Profile
- G.SHDSL Profile
- TR165 DSL Profile
- Bonding Group Profile
- Aggregating Profile
- GPON Profile
- EPON Profile
- DBA Profile
- Optical Alarm Profile
- ONT VAS Profile
- ONU Service Level Profile
- ONU Power Reduction Profile
- Traffic Alarm Profile
- PQ Mapping Profile
- Power Shedding Profile
- Tr069 Server Profile
- ONT Clock Profile...

GPON Line Profile

GPON Service Profile

DBA Profile

GPON ONT Capacity Profile

GPON Alarm Profile

MDU SNMP Profile

All

Name ^	Alias ^	Device Scope Pro... ^	SNMP Version ^	SNMP Security N... ^	Read Community... ^	Write Community... ^
5656565656		lt	v1	public	Public_12345678*	Private_12345678*

Add Global Profile...

File

Adding an MDU SNMP Profile

Add MDU SNMP Profile

Profile Parameters

Name: * Alias:

Trap Host IP: * Trap Host Source UDP Port (1-65535): *

SNMP Version:

SNMPv1/v2c Profile Parameters

Read Community Name: * Write Community Name: *

SNMP Security Name: *

SNMPv3 Profile Parameters

User Name: Security Level:

Authentication Protocol: Authentication Password:

Note: HMACSHA is recommended because its security level is higher than that of HMACMD5.

Encryption Protocol: Encryption Password:

Note:

1. AES is recommended because its security level is higher than that of DES.

2. It is also recommended that authentication passwords and encrypted passwords not be set to the same value.

Timeout Interval(0~120)(s): Retries(0~32):

Poll Interval(0~32767)(s):

Device Scope Profile

OK Cancel Apply

Downloading an MDU SNMP Profile to an NE

Physical Topology | **Access Profile Management** ×

GPON Line Profile | GPON Service Profile | DBA Profile | GPON ONT Capacity Profile | GPON Alarm Profile | **MDU SNMP Profile**

DSL Profile
ADSL Profile
NGADSL Profile
VDSL Profile
VDSL2 Profile
VDSL2 Multi-Profile
G.fast Profile
G.SHDSL Profile
TR165 DSL Profile
Bonding Group Profile
Vectoring Profile

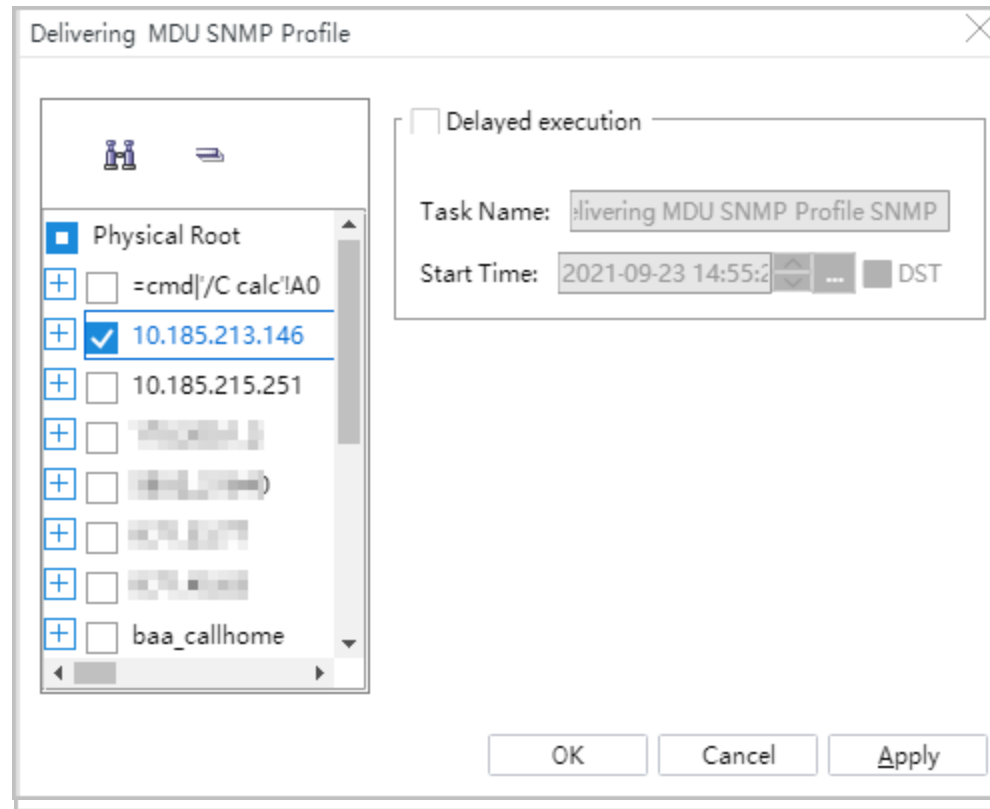
PON Profile
GPON Profile
EPON Profile
DBA Profile
Optical Alarm Profile
ONT VAS Profile
ONU Service Level Profile
ONU Power Reduction Profile
Traffic Alarm Profile
PQ Mapping Profile

All

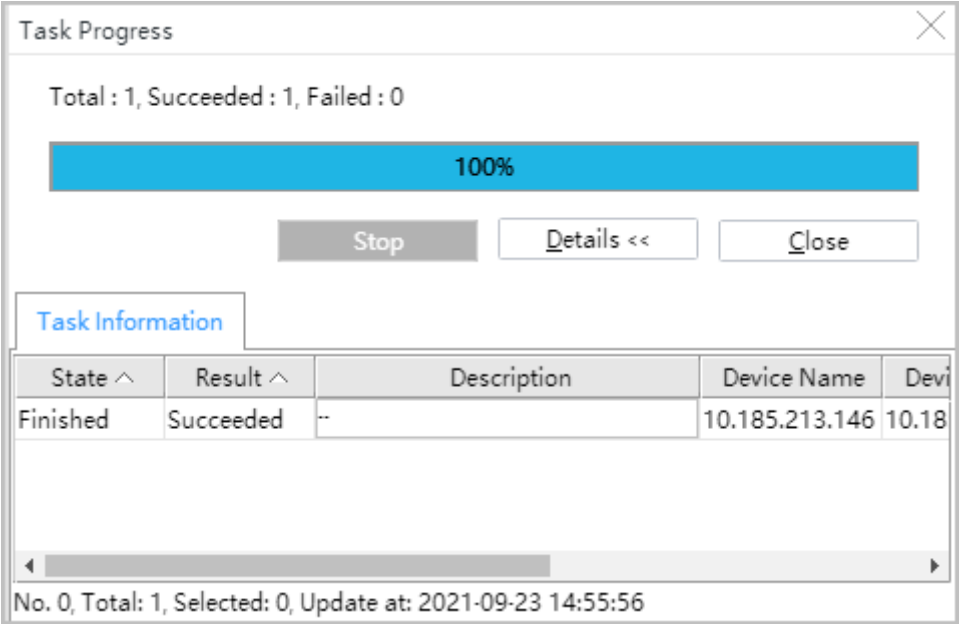
Name ^	Alias ^	Device Scope Pro... ^	SNMP Version ^	SNMP Security N... ^	Read Community... ^	Write Community...
5656565656		Default	v1	public	Public_12345678*	Private_12345678*
SNMP		Default			public123	private123

- Add Global Profile...
- Copy Global Profile...
- Delete Global Profile...
- Modify Global Profile...
- Download to NE...**
- File >

Downloading an MDU SNMP Profile to an NE



Downloading an MDU SNMP Profile to an NE



Creating a Management VLAN

Physical Topology

Access Profile Management x

Resource Tree

Legend & Filter

Layout

Physical Root / 10.185.213.146 /

baa_callhome

hostName_001

MA5800-X17

MA5800-X17

MA5800-X7

MA5800-X7-142

10.185.213.146

10.185.213.146

ODN_0_18_0

ODN_0_6_0

Double-click
the OLT

10.185.213.146

Physical Topology

Access Profile Management x

10.185.213.146(10.185.213.146) x

VLAN

Please input query condition

VLAN ID ^	Name
Synchronize	
Add...	
Batch Add...	
Configure...	
Delete	
Batch Bind...	
Batch Unbind...	
Config Encap Mode...	
Performance >	
File >	

No.0, Total: 0, Selected: 0 Updated at: 2021-09-23 14:59:25

Details

Creating a Management VLAN

Add VLAN

Basic Info
Configure VLAN

VLAN ID (1-4095): 4000 *

Name: VLANID_4000 *

Alias:

Type: Smart VLAN *

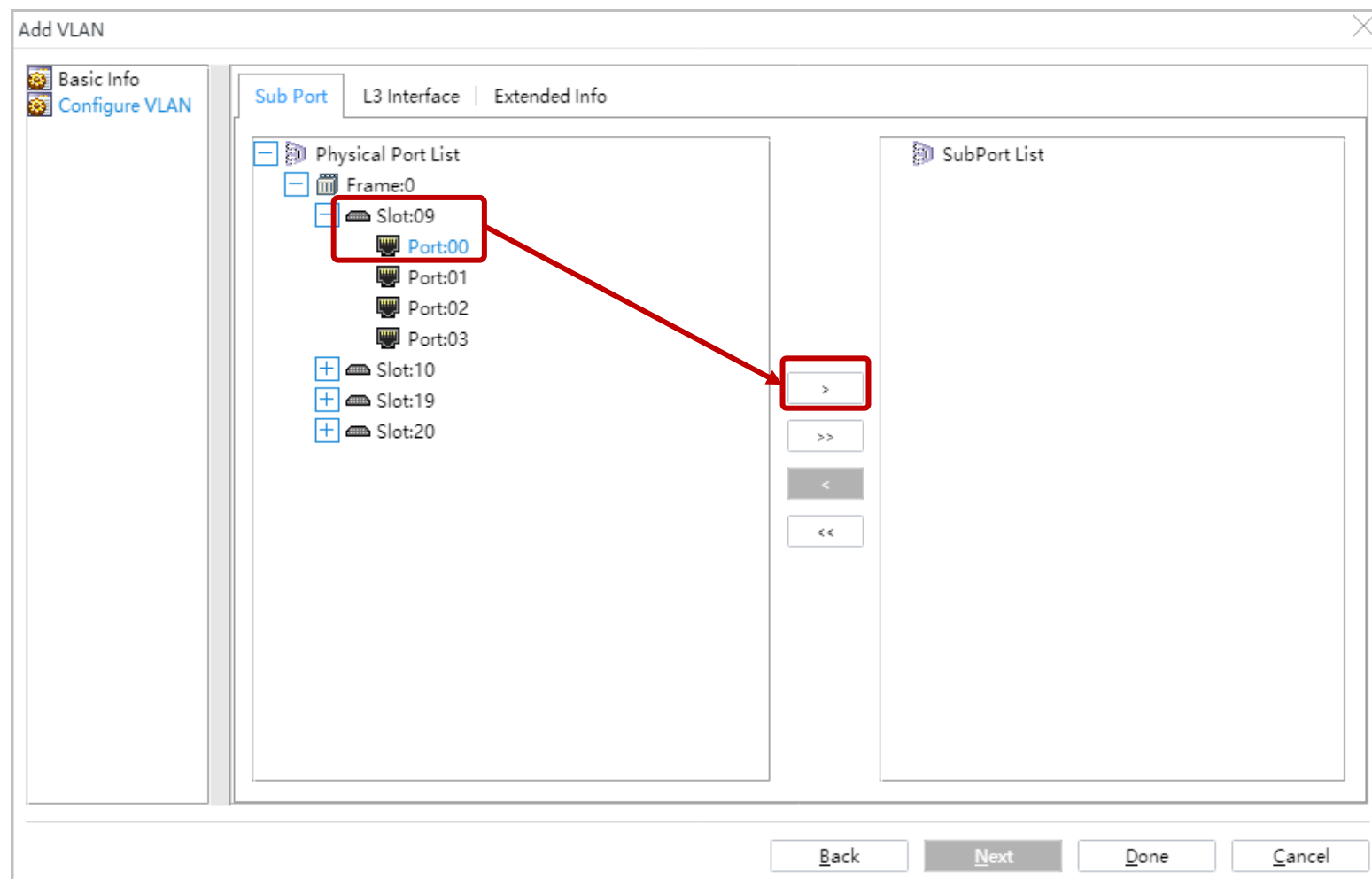
Attribute: Common *

VLAN Priority: Unconfigured *

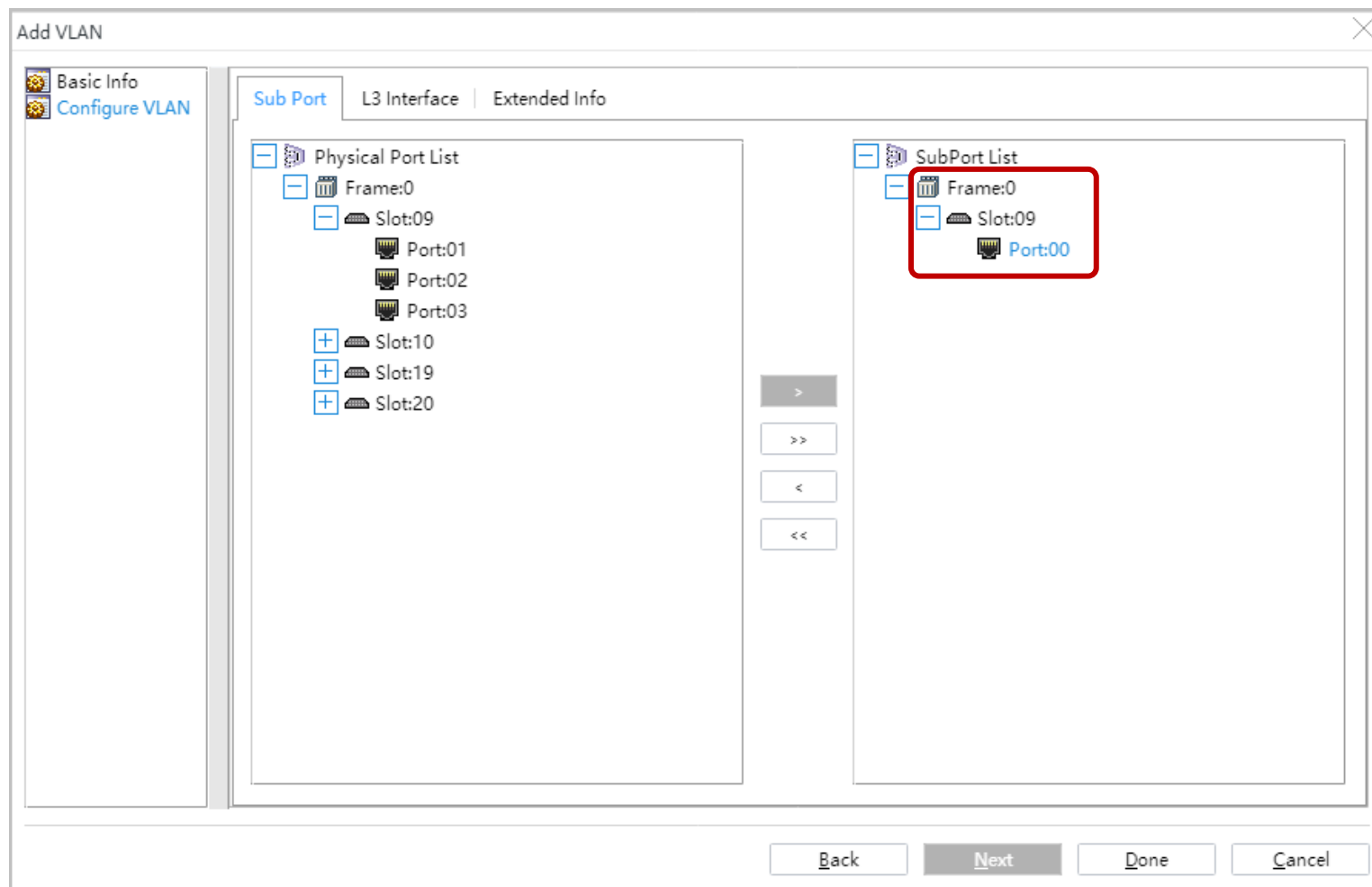
Service Description: HSI

Back Next Done Cancel

Selecting an Uplink Port



Selecting an Uplink Port



Configuring a Layer 3 Interface

Add VLAN

Basic Info
Configure VLAN

Sub Port: **L3 Interface** Extended Info

☒ Configure L3 Interface ☐ Enable L3 Interface ARP Proxy ☒ Enable L3 Interface ARP Learning

IPv4 Interface Info

Description:

Management Status: UP * DHCP Option60: HWAN

☐ Obtain the IP address in the DHCP mode

IP Address: 10 . 185 . 213 . 146 * IP Mask: 255 . 255 . 254 . 0 *

Acceptable Frame Type: ethernetII * Network-side Priority Mode: DSCP

DSCP for All Packets (0-63): DSCP for DHCP Packets (0-63):

DSCP for All Routing Protocol Packets (0-63): Max. Length of Transmitted Frame (1501-1560):

IPv6 Interface Info

☐ Configure IPv6 Interface ☐ Enable L3 Interface ND Proxy

IPv6 Management Status: Up Max. Neighbors (1-4): ☐ Prohibit LLA address forwarding

☒ Auto Configure Link-local Address Link-local Address:

Back Next **Done** Cancel

Checking a GPON UNI Port

The screenshot shows the Huawei NE Panel interface. On the left, the 'GPON Management' menu item is highlighted with a red box. The main area displays the 'GPON UNI Port' tab, which contains a table of GPON UNI ports. A red box highlights the 'Find' button in the top right corner of the table. A red callout box points to the table with the text 'Find out all the GPON UNI ports.'

Status ^	Name ^	Port Mode ^	Alias ^	Min. Distance (km) ^	Max. Distance (km) ^	Downstream FEC ^	ONU Auto Discovery
Activated (Offline, with...	Frame:0/Slot:13/Port:0	GPON	--	0	20	Disable	D
Energy (Laser Switch On)	Frame:0/Slot:13/Port:1	GPON	--	0	20	Disable	D
Energy (Laser Switch On)	Frame:0/Slot:13/Port:2	GPON	--	0	20	Disable	D
Energy (Laser Switch On)	Frame:0/Slot:13/Port:3	GPON	--	0	20	Disable	D
Activated (Online)	Frame:0/Slot:18/Port:0	GPON	--	0	20	Disable	E
Energy (Laser Switch On)	Frame:0/Slot:18/Port:1	GPON	--	0	20	Disable	D
Energy (Laser Switch On)	Frame:0/Slot:18/Port:2	GPON	--	0	20	Disable	Disable
Activated (Offline, with ...	Frame:0/Slot:18/Port:3	GPON	--	0	20	Disable	Disable

No.0, Total: 8, Selected: 0 Updated at: 2021-09-23 15:04:13

View Alarm Real-Time Performance

Details Running Info Optics Module Info ONU Info UnRegistered ONU Service Port Info Queue Line Quality Statistic

Enabling ONU Auto Discovery

The screenshot shows the Huawei NE Panel interface. On the left is a navigation tree with categories like NE Panel, NE Properties, NE Profile Management, Board Binding Pair, ETH Port, P2P Device Predeployment, DSL, EPON, GPON, and GPON Management. The main area displays the 'GPON UNI Port' configuration page, which includes a table of GPON ONU details. A context menu is open over the selected ONU (Frame:0/Slot:18/Port:0), and the 'Enable ONU Auto Discovery' option is highlighted with a red box.

Status ^	Name ^	Port Mode ^	Alias ^	Min. Distance (km) ^	Max. Distance (km) ^	Downstream FEC ^	ONU Auto Discovery ^
Activated (Offline, with...	Frame:0/Slot:13/Port:0	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:1	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:2	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:3	GPON	--	0	20	Disable	Disable
Activated (Online)	Frame:0/Slot:18/Port:0			0	20	Disable	Enable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:1			0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:2			0	20	Disable	Disable
Activated (Offline, with ...	Frame:0/Slot:18/Port:3			0	20	Disable	Disable

Context Menu Options:

- Synchronize...
- Locate to ONU Topology View (X)...
- Modify...
- GPON ID Maintenance
- Enable ONU Auto Discovery**
- Disable ONU Auto Discovery
- Query ARP Info...
- Query MAC Address Info...
- View Alarm (Q)
- Enable GPON UNI Port
- Disable GPON UNI Port (C)
- Detect Rogue ONU
- Remote Ping for Port-level ONTs...
- Send to Resource Marker(E)...
- SSM-QL Information Switch...
- Configure Customized Labels
- Legend...
- Performance
- File

Basic Info:

- Name
- Alias
- Min. Distance(km)
- Max. Distance(km)
- Downstream FEC
- ONU Auto Discovery
- DBA Bandwidth Assignment Mode
- Enable ONU Key Update
- Update Interval(min)

ONU Registration

GPON UNI Port

GPON ONU

ONU Details

Find

Status ^	Name ^	Port Mode ^	Alias ^	Min. Distance (km) ^	Max. Distance (km) ^	Downstream FEC ^	ONU Auto Discovery ^
Activated (Offline, with...	Frame:0/Slot:13/Port:0	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:1	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:2	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:3	GPON	--	0	20	Disable	Disable
Activated (Online)	Frame:0/Slot:18/Port:0	GPON	--	0	20	Disable	Enable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:1	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:2	GPON	--	0	20	Disable	Disable
Activated (Offline, with ...	Frame:0/Slot:18/Port:3	GPON	--	0	20	Disable	Disable

No.5, Total: 8, Selected: 1 Updated at: 2021-09-23 15:04:13

View Alarm

Real-Time Performance

Details

Running Info

Optics Module Info

ONU Info

UnRegistered ONU

Service Port Info

Queue

Line Quality Statistic

SN ^	ONU with Conflict ^	Cause of Registration Failure ^	Registration Time ^	Password ^	LOID ^	Checkcode ^	Vendor ID ^	Terminal Type ^	Software Version ^	Rate Type ^
48575443BCE32...	--	Unconfirmed.	2021-09-23 15:00:48	floor25612	floor25612	--	HWTC	SmartAX MA5612	V8R308 C00	--

Confirm

Choose SN of your ONT to do the registration.

No.1, Total: 1, Selected: 1 Updated at: 2021-09-23 15:06:41

Refresh

Binding a GPON Line Profile

Confirm ONU

Associated Port: 0/18/0 * Name: 10.185.212.183 *

Alias Mode: Alias:

ONU ID (0-127): ☒ Auto Assign * ONU Type: MDU *

Splitter ID: Splitter(L1) Rate Type: -- *

Basic Parameters Network Management Channel Parameters Extend Parameters

Line Profile: Service Profile:

Authentication Mode: SN *

SN: 48:5E:42:42

▶ [More Parameters](#)

☐ Locate to ONU list after operation succeeds

OK Cancel Apply

Binding a GPON Line Profile

GPON Line Profile

All Filter... No. 10, Total: 10

Name ^
111
14
3213123213
GGGGG
LZ-GPON-E8C
line-profile_10
line-profile_default_0
lineprofile_1
test
GPON line profile

OK

Cancel

Binding a GPON Line Profile

Confirm ONU

Associated Port: 0/18/0

Alias Mode:

ONU ID (0-127): ☒ Auto Assign

Splitter ID: Splitter(L1)

Name: 10.185.212.183

Alias:

ONU Type: MDU

Rate Type: --

Basic Parameters

Network Management Channel Parameters

Extend Parameters

Line Profile: GPON line profile

Service Profile:

Authentication Mode: SN

SN: 485-442

More Parameters

☐ Locate to ONU list after operation succeeds

OK

Cancel

Apply

Binding an SNMP Profile

Confirm ONU

Associated Port: 0/18/0 * Name: 10.185.212.183 *

Alias Mode: Alias:

ONU ID (0-127): ☒ Auto Assign * ONU Type: MDU *

Splitter ID: Splitter(L1) Rate Type: -- *

Basic Parameters **Network Management Channel Parameters** Extend Parameters

☒ Set by using OLT ☐ Auto Assign IP Address SNMP Version: SNMPV1/V2 * SNMP Profile: ... *

Network Parameters

Management VLAN (0-4095): * Priority (0-7):

IP Address: . . . * IP Address Mask: . . . *

Gateway IP Address: . . .

Static Route Parameters

Target IP Address: . . . Target Mask: . . .

Next Hop IP Address: . . .

OLT Management Channel Parameters

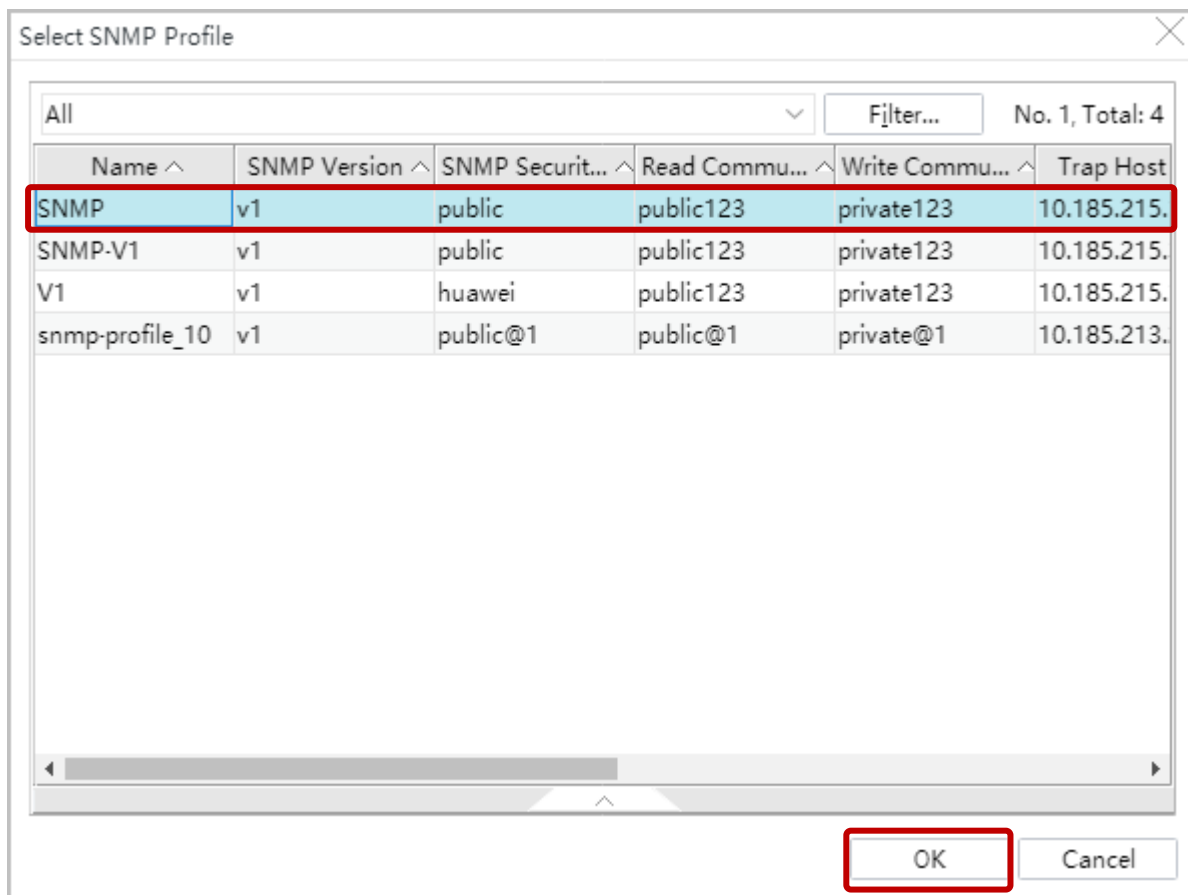
SVLAN (1-4095): ... * Service Type: *

Upstream Traffic Profile: ... Downstream Traffic Profile: ...

☐ Locate to ONU list after operation succeeds

OK Cancel Apply

Binding an SNMP Profile



Setting the Inband IP Address

Confirm ONU

Associated Port: 0/18/0 * Name: 10.185.212.183 *

Alias Mode: Alias:

ONU ID (0-127): ☒ Auto Assign * ONU Type: MDU *

Splitter ID: Splitter(L1) Rate Type: -- *

Basic Parameters Network Management Channel Parameters Extend Parameters

☒ Set by using OLT ☐ Auto Assign IP Address SNMP Version: SNMPV1/V2 * SNMP Profile: SNMP *

Network Parameters

Management VLAN (0-4095): 4000 * Priority (0-7):

IP Address: 10.185.212.183 * IP Address Mask: 255.255.254.0 *

Gateway IP Address: 10.185.212.1

Static Route Parameters

Target IP Address: . . . Target Mask: . . .

Next Hop IP Address: . . .

OLT Management Channel Parameters

SVLAN (1-4095): ... * Service Type: *

Upstream Traffic Profile: ... Downstream Traffic Profile: ...

☐ Locate to ONU list after operation succeeds

OK Cancel Apply

Selecting the Management VLAN

Confirm ONU

Associated Port: 0/18/0 * Name: 10.185.212.183 *

Alias Mode: Alias:

ONU ID (0-127): ☒ Auto Assign

Splitter ID: Splitter(L1)

Basic Parameters **Network Management Channel Parameters**

☒ Set by using OLT ☐ Auto Assign IP Address SNMP Ver

Network Parameters

Management VLAN (0-4095): 4000

IP Address: 10.185.212.183

Gateway IP Address: 10.185.212.1

Static Route Parameters

Target IP Address: . . .

Next Hop IP Address: . . .

OLT Management Channel Parameters

SVLAN (1-4095): ...

Upstream Traffic Profile: ...

Select VLAN

VLAN Attribute=Common Find

VLAN ID ^	Name	Alias	Type ^	Attribute ^	Super VLAN ID
23	VLANID_23		Smart VLAN	Common	--
24	VLANID_24		Smart VLAN	Common	--
25	VLANID_25		Smart VLAN	Common	--
45	VLANID_45		Smart VLAN	Common	--
496	VLANID_496		Smart VLAN	Common	--
555	VLANID_555		Smart VLAN	Common	--
595	VLANID_595		Standard V...	Common	--
774	VLANID_774		Smart VLAN	Common	--
1000	VLANID_1000		Smart VLAN	Common	--
1056	VLANID_1056		Smart VLAN	Common	--
1111	VLANID_1111		Smart VLAN	Common	--
1981	VLANID_1981		Smart VLAN	Common	--
4000	VLANID_4000		Smart VLAN	Common	--

No.27, Total: 27, Selected: 1 Updated at: 2021-09-23 15:14:57

OK Cancel

OK Cancel Apply

Binding Traffic Profiles

Confirm ONU

Associated Port: 0/

Alias Mode:

ONU ID (0-127): ☒

Splitter ID: Sp

Basic Parameters

☒ Set by using C

Network Param

Management VL

IP Address:

Gateway IP Add

Static Route Para

Target IP Address:

Next Hop IP Address:

OLT Management

SVLAN (1-4095): 4000

Upstream Traffic Profile:

Service Type:

Downstream Traffic Profile:

☐ Locate to ONU list after operation succeeds

OK Cancel Apply

Select Traffic Profile

All Filter... No. 10, Total: 19

Name ^	CIR ^	CBS ^	PIR ^	PBS ^	Fixed Bandwidth ^
DEFAULT_SCOS...					
FTTB	20480	657360	40960	1312720	0
HSI-4M	4096	133072	8192	264144	0
ip-traffic-table_0	1024	34768	2048	69536	0
ip-traffic-table_1	2496	81872	4992	163744	0
ip-traffic-table_2	512	18384	1024	36768	0
ip-traffic-table_3	576	20432	1152	40864	0
ip-traffic-table_4	64	4048	128	8096	0
ip-traffic-table_5	2048	67536	4096	135072	0
ip-traffic-table_6					
ip-traffic-table_7	5120	165840	10240	331680	0
test0824001	64	4048	128	8096	0
test0824002	64	4048	128	8096	0
test0824003	64	4048	128	8096	0

OK Cancel

ONU Registration

Confirm ONU

Associated Port: 0/18/0 *

Alias Mode:

ONU ID (0-127): ☒ Auto Assign *

Splitter ID: Splitter(L1) v

Name: 10.185.212.183 *

Alias:

ONU Type: MDU v *

Rate Type: -- v *

Basic Parameters

Network Management Channel Parameters

Extend Parameters

☒ Set by using OLT ☐ Auto Assign IP Address SNMP Version: SNMPV1/V2 v SNMP Profile: SNMP ... *

Network Parameters

Management VLAN (0-4095): 4000 * Priority (0-7):

IP Address: 10.185.212.183 * IP Address Mask: 255.255.254.0 *

Gateway IP Address: 10.185.212.1

Static Route Parameters

Target IP Address: . . . Target Mask: . . .

Next Hop IP Address: . . .

OLT Management Channel Parameters

SVLAN (1-4095): 4000 ... * Service Type: Multi-Service VLAN v *

Upstream Traffic Profile: ip-traffic-table_6 ... Downstream Traffic Profile: ip-traffic-table_6 ...

☐ Locate to ONU list after operation succeeds

OK

Cancel

Apply

ONU Registration

GPON UNI Port							
GPON ONU ONU Details							
Status ^	Name ^	Port Mode ^	Alias ^	Min. Distance (km) ^	Max. Distance (km) ^	Downstream FEC ^	ONU Auto Discovery ^
Activated (Offline, with...	Frame:0/Slot:13/Port:0	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:1	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:2	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:13/Port:3	GPON	--	0	20	Disable	Disable
Activated (Online)	Frame:0/Slot:18/Port:0	GPON	--	0	20	Disable	Enable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:1	GPON	--	0	20	Disable	Disable
Energy (Laser Switch On)	Frame:0/Slot:18/Port:2	GPON	--	0	20	Disable	Disable
Activated (Offline, with ...	Frame:0/Slot:18/Port:3	GPON	--	0	20	Disable	Disable

Adding a Traffic Profile

Physical Topology | **Access Profile Management** x

MEF IP Traffic Profile | ATM Traffic Profile | IP Traffic Profile | CAR Traffic Profile | Priority CAR Threshold Profile | Rate Profile | Queue Policy Profile | Priority Group Profile

Device Type (MPU Type): Common(Including MA58C) | All

Name ^	Alias ^	Device Scope Profile ^	CIR ^	CBS ^	PIR ^	PBS ^	Fixed Bandwidth ^	Outer Copy Priority ^	Index of Outer Priority Mapping Profile ^
10M		Default	64	10240	128	20480		Copy TOS domain	--
20M		Default	64	20480	128	40960		Copy TOS domain	--
4M		Default	64	4096	128	8192		Copy TOS domain	--
8M		Default	64	8192	128	8192		Copy TOS domain	--
DEFAULT_SCOS...		Default	64	7168	128	7168		Copy TOS domain	--
HSI		Default	4096					Assign Priority	--
not-limit		Default						Copy TOS domain	--

Add Global Profile...

File >

Details | NE Reference | Referencable NEs

ONU Service Level Profile
ONU Power Reduction Profile
Traffic Alarm Profile
PQ Mapping Profile
Power Shedding Profile
Tr069 Server Profile
Voice Profile
MGC Profile
Impedance Profile
TID Profile
UAS Profile
Digitmap Profile
Digitmap Group Profile
R2 Signaling Profile
Number Change Profile
User Extended Attribute Profile
VLAN Profile
VLAN CAR Profile
VLAN Group Profile
VLAN Service Profile
EOC Profile
EOC CBAT Line Profile
EOC CNU Line Profile
Cable Profile
IPDR Server Profile
EQAM Profile
Traffic Profile
WRED Profile
COS Group Profile
IGMP Profile

Adding a Traffic Profile

Add MEF IP Traffic Profile

- If you select the Default check boxes for CBS, PIR and PBS, they will be defaulted to the values generated on NEs.
- Parameter PIR must be greater than or equal to parameter CIR. Parameter PBS must be greater than or equal to parameter CBS.
- Parameter CIR must be greater than or equal to parameter Fixed Bandwidth.

Name: * Alias:

☐ Unlimited

CIR (kbit/s) (0-10240000): CBS (byte) (0-1024000000): ☒ Default

PIR (kbit/s) (64-10240000): ☒ Default PBS (byte) (2000-1024000000): ☒ Default

Fixed Bandwidth (kbit/s) (0-10240000): ☒ Default

Outer Priority (0-7): * Outer Copy Priority:

Inner Priority (0-7): * Inner Copy Priority:

Index of Inner Priority Mapping Profile:

Index of Outer Priority Mapping Profile:

Priority Policy:

Two Rate Three Color Policy:

Traffic Color Mode:

☐ Rate Profile:

☐ Priority Group Profile:

☐ Priority CAR Threshold Profile:

Adding a Traffic Profile

Add MEF IP Traffic Profile

E2E Mapping Priority: Does Not Edit

E2E Mapping Index (1-50): *

Green WRR Weight: auto

E2E Default Priority: *

Yellow WRR Weight: auto

Device Scope Profile

<Back Next> Finish Cancel

Downloading a Traffic Profile to an NE

Physical Topology | **Access Profile Management** x

MEF IP Traffic Profile | ATM Traffic Profile | IP Traffic Profile | CAR Traffic Profile | Priority CAR Threshold Profile | Rate Profile | Queue Policy Profile | Priority Group Profile

Device Type (MPU Type): Common(Including MA58C) v All

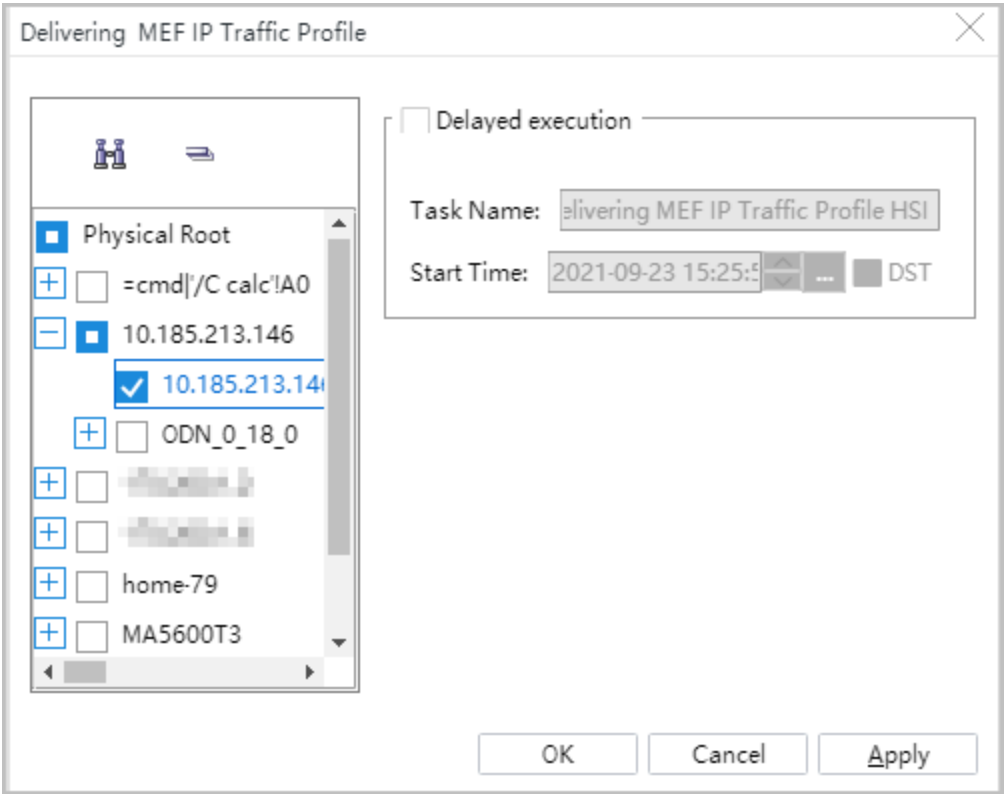
Name ^	Alias ^	Device Scope Profile ^	CIR ^	CBS ^	PIR ^	PBS ^	Fixed Bandwidth ^	Outer Copy Priority ^	Index of Outer Priority Mapping Profile ^
10M		Default	64	10240	128	20480		Copy TOS domain	--
20M		Default	64	20480	128	40960		Copy TOS domain	--
4M		Default	64	4096	128	8192		Copy TOS domain	--
8M		Default	64	8192	128	8192		Copy TOS domain	--
DEFAULT_SCOS...		Default	64	7168	128	7168		Copy TOS domain	--
HSI		Default	4096					Assign Priority	--
not-limit		Default						Copy TOS domain	--
FTTB		Default						Assign Priority	--

Add Global Profile...
Copy Global Profile...
Generate MA5800 Profile...
Delete Global Profile
Modify Global Profile...
Download to NE...
File >

Details | NE Reference | Referencable NEs

Name = FTTB

Downloading a Traffic Profile to an NE



Downloading a Traffic Profile to an NE

Task Progress

Total : 1, Succeeded : 1, Failed : 0

100%

Stop

Details <<

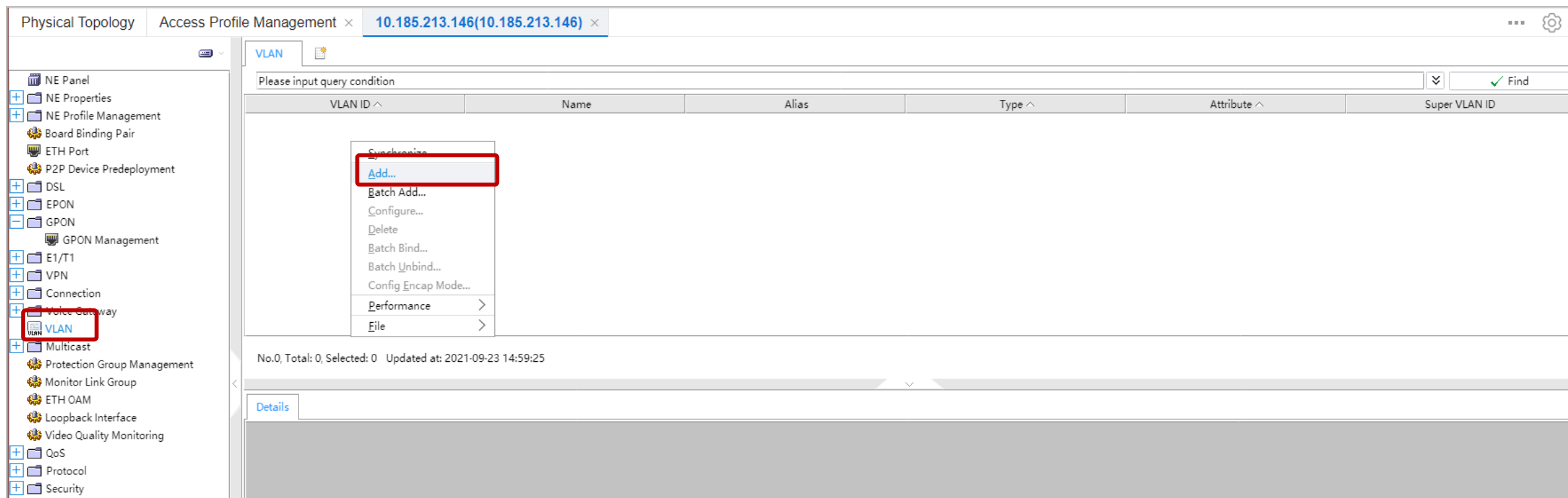
Close

Task Information

State ^	Result ^	Description	Device Name	Devi
Finished	Succeeded	--	10.185.213.146	10.18

No. 0, Total: 1, Selected: 0, Update at: 2021-09-23 15:27:26

Configuring a Service VLAN on the OLT



Configuring a Service VLAN

Add VLAN

Basic Info
Configure VLAN

VLAN ID (1-4095): 1000 *

Name: VLANID_1000 *

Alias:

Type: Smart VLAN *

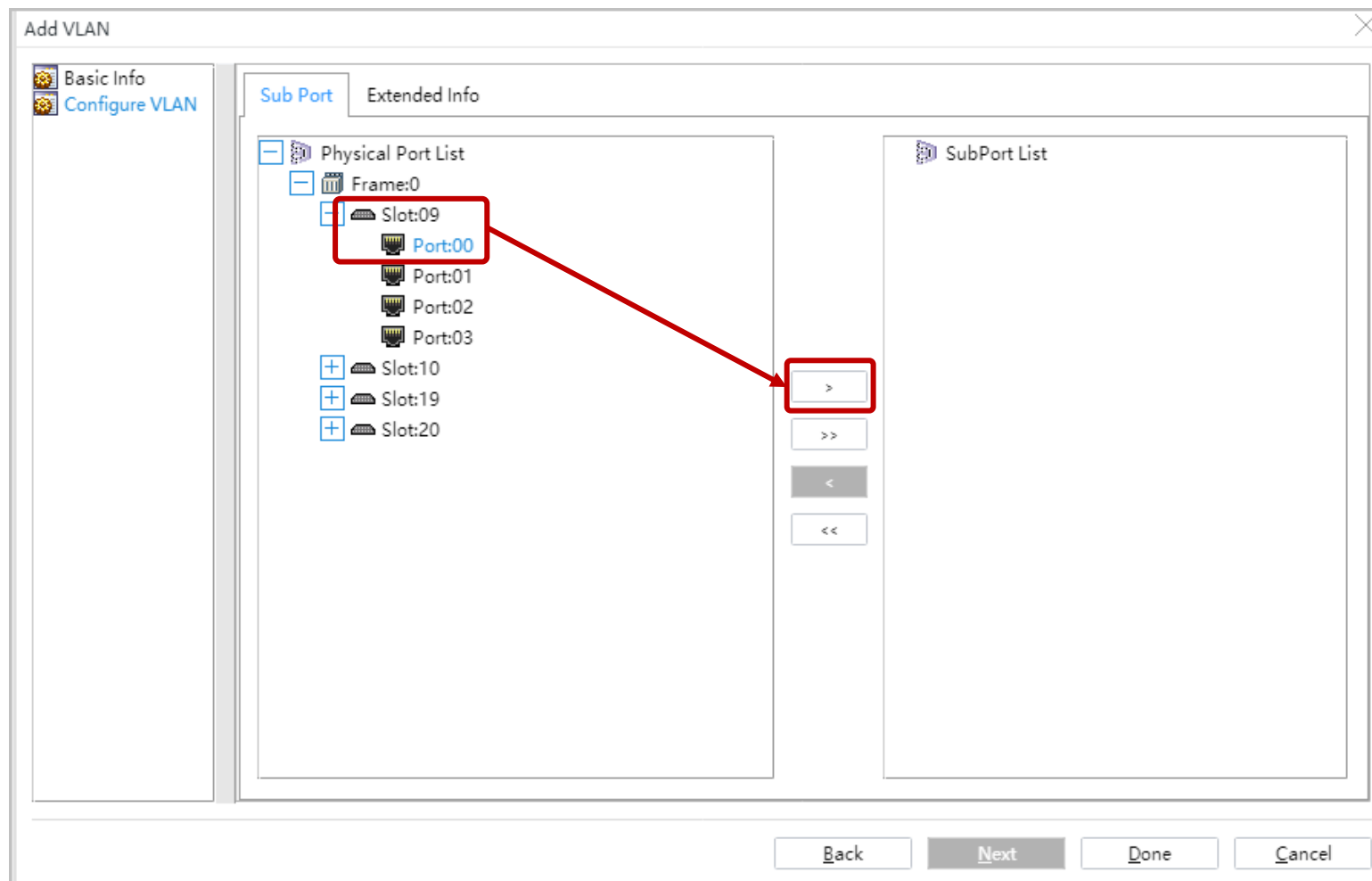
Attribute: Common *

VLAN Priority: Unconfigured *

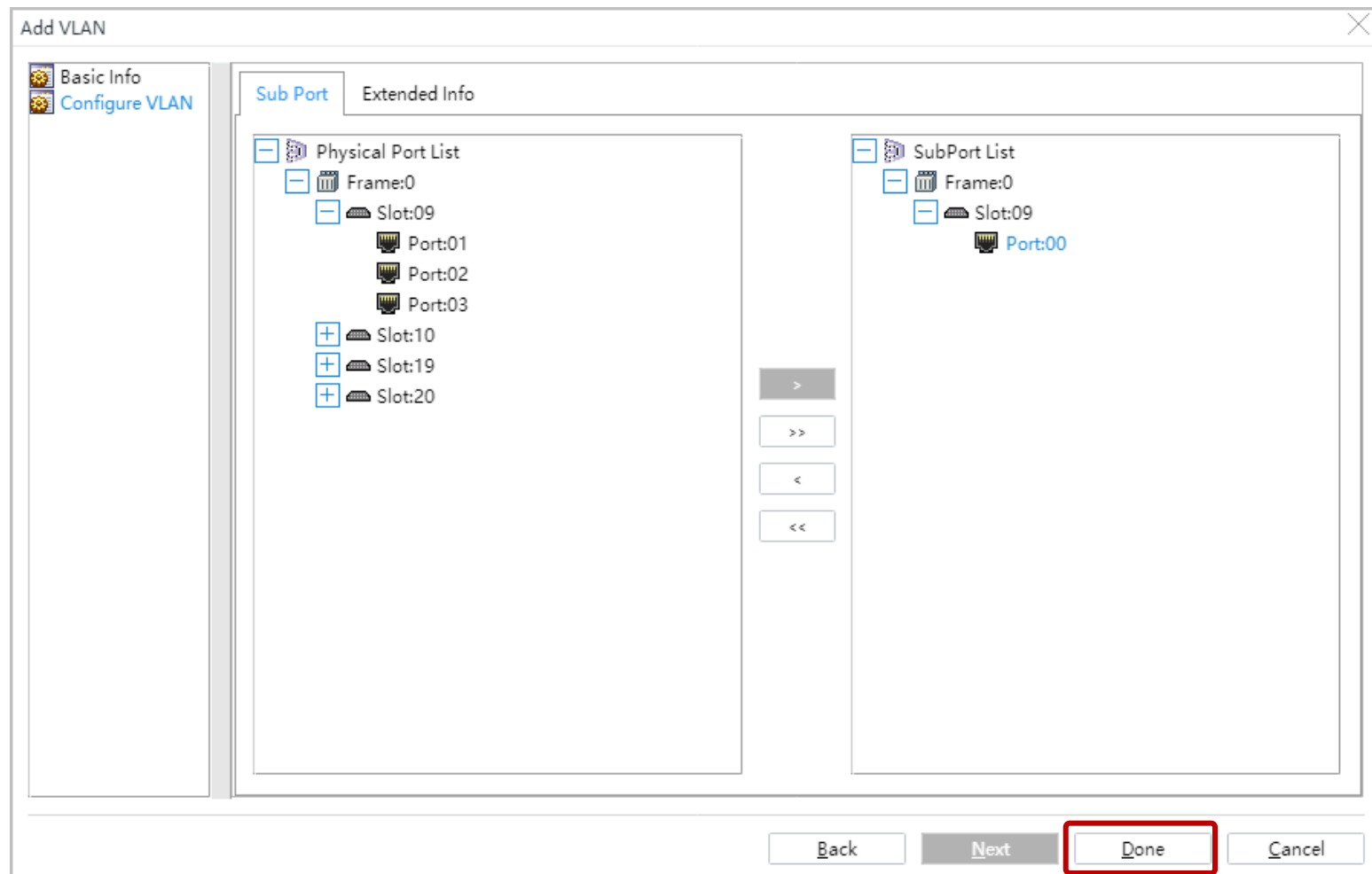
Service Description: IPTV *

Back Next Done Cancel

Selecting an Uplink Port



Configuring a Service VLAN



Adding a Service Port

VLAN

Find

VLAN ID ^	Name	Alias	Type ^	Attribute ^	Super VLAN ID
21	VLANID_21		Smart VLAN	Common	--
22	VLANID_22		Smart VLAN	Common	--
23	VLANID_23		Smart VLAN	Common	--
24	VLANID_24		Smart VLAN	Common	--
25	VLANID_25		Smart VLAN	Common	--
45	VLANID_45		Smart VLAN	Common	--
496	VLANID_496		Smart VLAN	Common	--
555	VLANID_555		Smart VLAN	Common	--
595	VLANID_595		Standard VLAN	Common	--
774	VLANID_774		Smart VLAN	Common	--
1000	VLANID_1000		Smart VLAN	Common	--
1056	VLANID_1056		Smart VLAN	Common	--

No.23, Total: 28, Selected: 1 Updated at: 2021-09-24 21:14:06

IPv6 Address Prefix Info | IPv6 Neighbor Info | IP Interface | Protocol Info | Extended Info | IP-aware | VLAN Service Profile | RAIO Profile | **Service Port** | PW | Inner Vlan

Details | Port List | L3 Interface | L3 Interface Sub IP | Global Unicast Address | IPv6 Address Info

Status	Name ^	Alias ^	Connection Type ^	Interface Information	Service Type ^	Service Para	Upstream Traffic Profile	Downstream Traffic Profile	VLAN ID ^	Inner VLAN ID ^	ID

Synchronise
Add...
Configure Extend Properties...
Configure Connect Properties...
Delete

Selecting a GEM Port

Add Service Port

Basic Info

Name: 1000/0_18_0/3/0/Single * Alias: *

Service Description: IPTV Connection Type: LAN-GPON *

Network Side

☐ Strict S+C Forwarding

Upstream Port: *

☐ Bundle ID (1-8192): ...

VLAN Choice: Smart VLAN *

Tag-Transform: *

VLAN ID (1-4095): 1000 *

CoS Value (0-7): *

User Side

Interface Selection: 0/18/0/3/0 *

Service Type:

- ☒ Slot:18
 - ☒ Port:00
 - ☐ ONT:00
 - ☐ ONT:02
 - ☒ ONT:03
 - ☒ GEM Port:00
 - ☐ ONT:04
 - ☐ ONT:05
 - ☐ ONT:06

Traffic Profile Info

☐ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile: ... Downstream Traffic Profile: ...

OK Cancel Apply

Setting the Service Type

Add Service Port

Basic Info

Name: 1000/0_18_0/3/0/Multi-Service VLAN * Alias:

Service Description: IPTV * Connection Type: LAN-GPON *

Network Side

☐ Strict S+C Forwarding

Upstream Port: *

☐ Bundle ID (1-8192): ...

VLAN Choice: Smart VLAN *

Tag-Transform:

VLAN ID (1-4095): 1000 *

CoS Value (0-7): *

User Side

Interface Selection: 0/18/0/3/0 *

Service Type: Multi-Service VLAN ^

User VLAN (1-4095):

- Single
- Multi-Service VLAN
- Multi-Service Encapsulation
- Multi-Service VLAN+802.1p
- Multi-Service VLAN+Encapsulation

Traffic Profile Info

☐ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile: ... Downstream Traffic Profile: ...

OK Cancel Apply

Setting the User VLAN

Add Service Port

Basic Info

Name: /0_18_0/3/0/Multi-Service VLAN/1000* Alias:

Service Description: IPTV Connection Type: LAN-GPON*

Network Side

☐ Strict S+C Forwarding

Upstream Port:

☐ Bundle ID (1-8192):

VLAN Choice: Smart VLAN*

Tag-Transform:

VLAN ID (1-4095): 1000*

CoS Value (0-7):

User Side

Interface Selection: 0/18/0/3/0*

Service Type: Multi-Service VLAN*

User VLAN (1-4095): 1000*

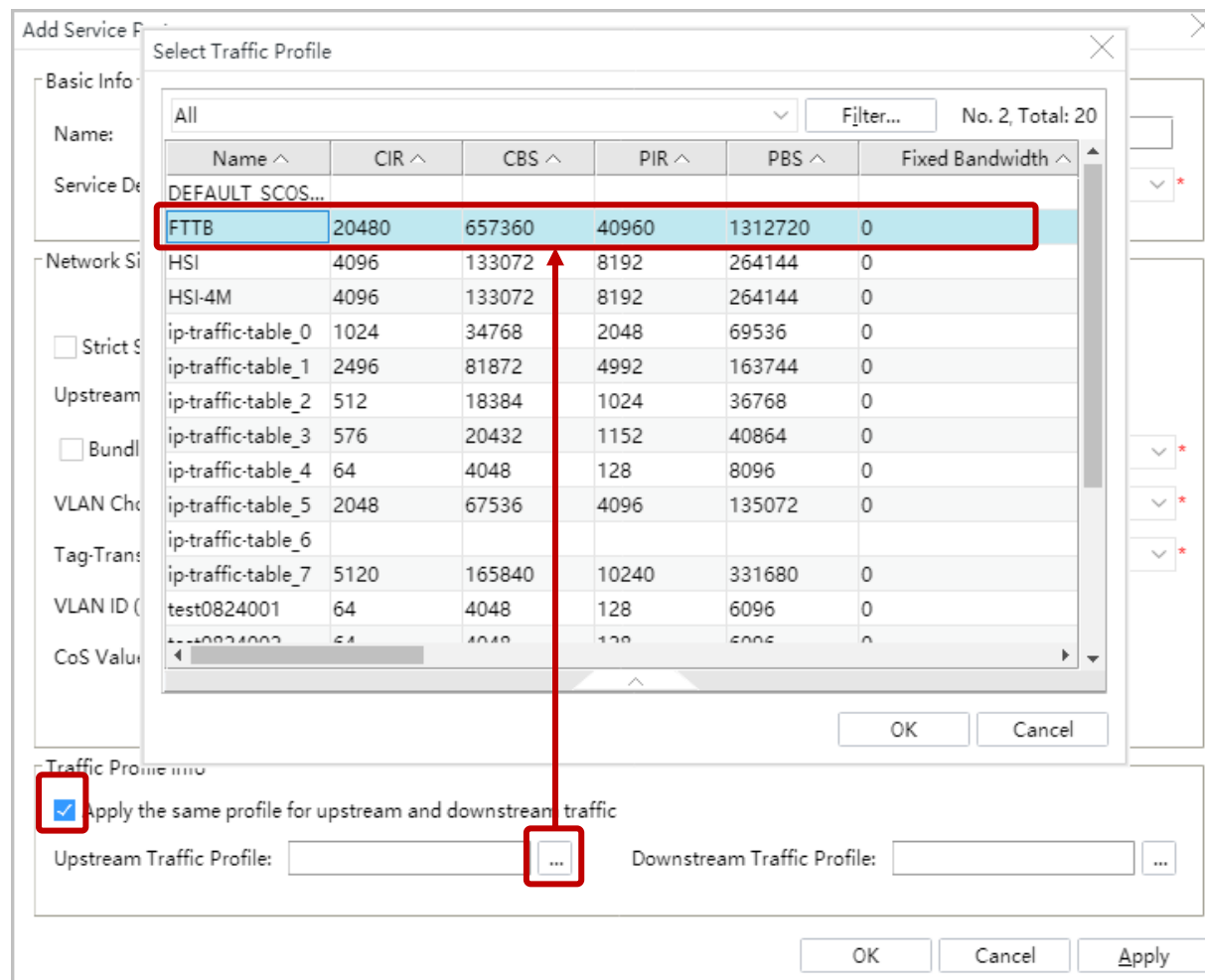
Traffic Profile Info

☐ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile: Downstream Traffic Profile:

OK Cancel Apply

Binding Traffic Profiles



Adding a Service Port

×

Add Service Port

Basic Info

Name:

/0_18_0/3/0/Multi-Service VLAN/1000*

Alias:

Service Description:

IPTV

Connection Type:

LAN-GPON

Network Side

☐ Strict S+C Forwarding

Upstream Port:

☐ Bundle ID (1-8192):

VLAN Choice:

Smart VLAN

Tag-Transform:

VLAN ID (1-4095):

1000

CoS Value (0-7):

User Side

Interface Selection:

0/18/0/3/0

Service Type:

Multi-Service VLAN

User VLAN (1-4095):

1000

Traffic Profile Info

☒ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile:

FTTB

Downstream Traffic Profile:

FTTB

OK

Cancel

Apply

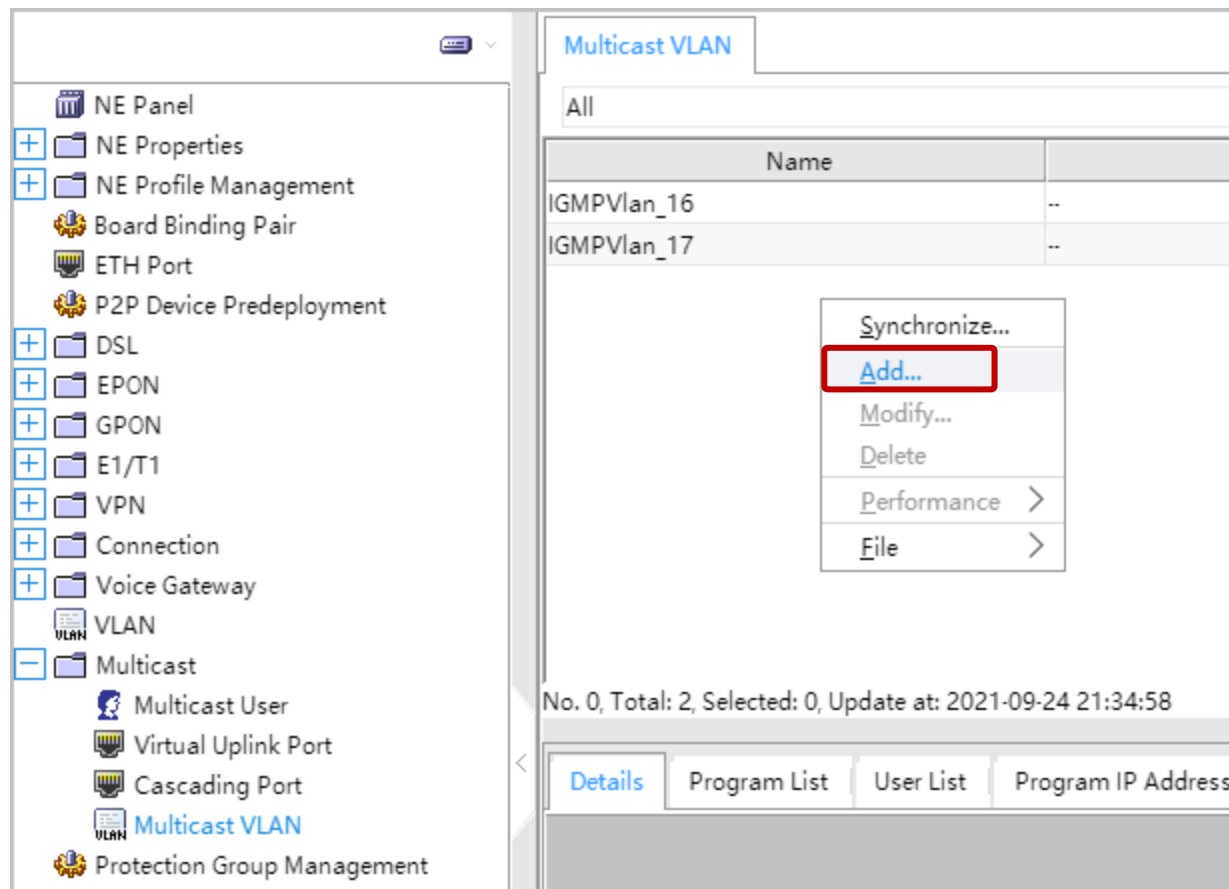
Adding a Multicast VLAN (on the OLT)

The screenshot displays the 'Multicast VLAN' configuration page in the Huawei OLT web interface. The left sidebar shows a tree view with 'Multicast VLAN' selected. The main area contains a table with the following data:

Name	Alias	Multicast VLAN ID ^	IGMP Version	IGMP Work Mode	IGMP Program Match M
IGMPVlan_16	--	16	IGMP V3	tv_off	Enable
IGMPVlan_17	--	17	IGMP V3	tv_off	Enable

Below the table, it shows 'No. 0, Total: 2, Selected: 0, Update at: 2021-09-24 21:34:58'. At the bottom, there are tabs for 'Details', 'Program List', 'User List', and 'Program IP Address'. A red box highlights the 'Find...' button in the top right corner, and a red callout bubble points to it with the text 'Find the multicast VLAN.'

Adding a Multicast VLAN



Adding a Multicast VLAN

Add Multicast VLAN

Basic Info

Name:

Alias:

☐ Default VLAN

IGMP

MLD

IGMP Version:

IGMP V3

Program Match Mode

Program Match Mode:

☒ Enable☐ Disable

Work Mode

IGMP Work Mode:

igmp_proxy

<Back

Next>

Finish

Cancel

Adding a Multicast VLAN

Add Multicast VLAN

IGMP Proxy

MLD Proxy

General Query Interval(s) (30-5000):

Max. Response Time to IGMPv3 General Query(0.1s)(1~31744):

Group-Specific Query Interval(0.1s) (1-50000):

Max. Response Time to IGMPv2 Group-Specific Query(0.1s)(1~255):

IGMPv2 Version Aging Time(s) (1-5000):

Unsolicited Report Interval(s) (10-5000):

10

Global-Leave Switch:

☒ Enable ☐ Disable

IGMP DSCP (0-63):

0

Max. Response Time to IGMPv2 General Query(0.1s)(1~255):

Robustness Variable (1-10):

Group-Specific Query Count (1-10):

Max. Response Time to IGMPv3 Group-Specific Query(0.1s)(1~31744):

Initial Unsolicited Report Interval (s) (1-10):

IGMP Report Priority (0-7):

6

Send IGMP packets over active and standby PWs:

☐ Enable ☒ Disable

Default Up Port Info

Other Parameter Info

Frame: 0 Slot: 9 Port: 0

Log Switch:

☒ Enable ☐ Disable

IGMP Cascade-Port Offline Query Switch:

☐ Enable ☒ Disable

<Back

Next>

Finish

Cancel

Adding a Multicast VLAN

Add Multicast VLAN

Select VLAN

Please input query condition

Find

VLAN ID ^	Name	Alias	Type ^	Attribute ^	Super VLAN ID
22	VLANID_22		Smart VLAN	Common	--
23	VLANID_23		Smart VLAN	Common	--
24	VLANID_24		Smart VLAN	Common	--
25	VLANID_25		Smart VLAN	Common	--
45	VLANID_45		Smart VLAN	Common	--
496	VLANID_496		Smart VLAN	Common	--
555	VLANID_555		Smart VLAN	Common	--
595	VLANID_595		Standard VLAN	Common	--
774	VLANID_774		Smart VLAN	Common	--
1000	VLANID_1000		Smart VLAN	Common	--
1056	VLANID_1056		Smart VLAN	Common	--
1111	VLANID_1111		Smart VLAN	Common	--
1981	VLANID_1981		Smart VLAN	Common	--
2000	VLANID_2000		Smart VLAN	Common	--
4000	VLANID_4000		Smart VLAN	Common	--

No.21, Total: 26, Selected: 1 Updated at: 2021-09-24 21:43:05

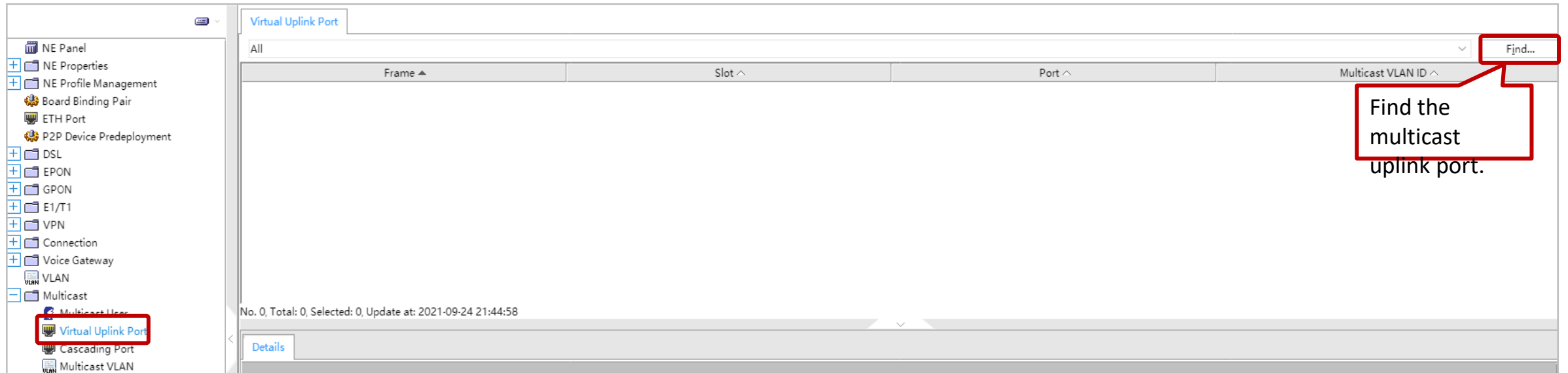
<Back

Next>

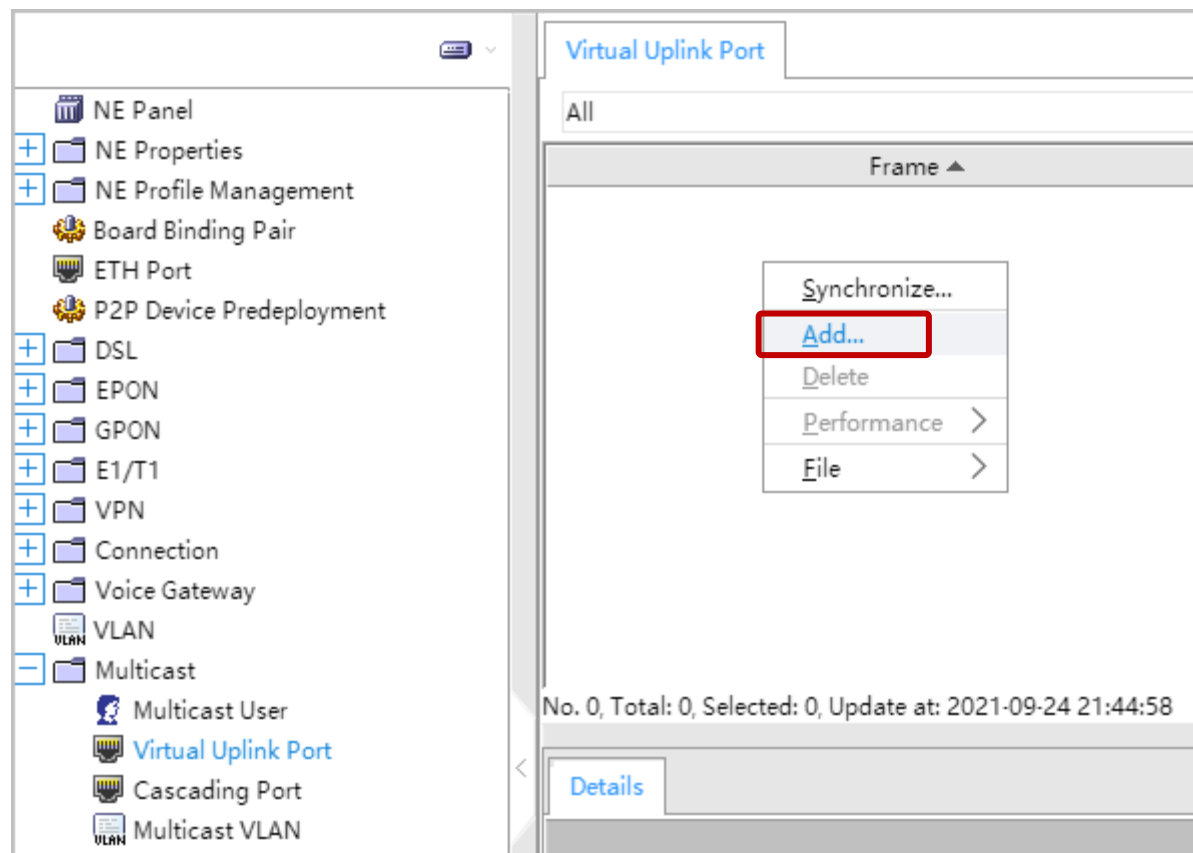
Finish

Cancel

Adding a Multicast Uplink Port



Adding a Multicast Uplink Port



Adding a Multicast Uplink Port

Add Virtual Uplink Port

Location Info

Device Name: 10.185.213.146

Multicast VLAN Info

VLAN ID(1-4095): *

Select Multicast VLAN

Please input query condition Find...

Name	Alias	Multicast VLAN ID ^	IGMP Versi
IGMPVlan_16	--	16	IGMP V3
IGMPVlan_17	--	17	IGMP V3
IGMPVlan_1000	VLANID_1000	1000	IGMP V3

No. 3, Total: 3, Selected: 1, Update at: 2021-09-24 21:47:15

OK Cancel

Adding a Multicast Uplink Port

Add Virtual Uplink Port

Location Info

Device Name: 10.185.213.146 *

Multicast VLAN Info

VLAN ID(1-4095): 1000 *

Uplink Port Info

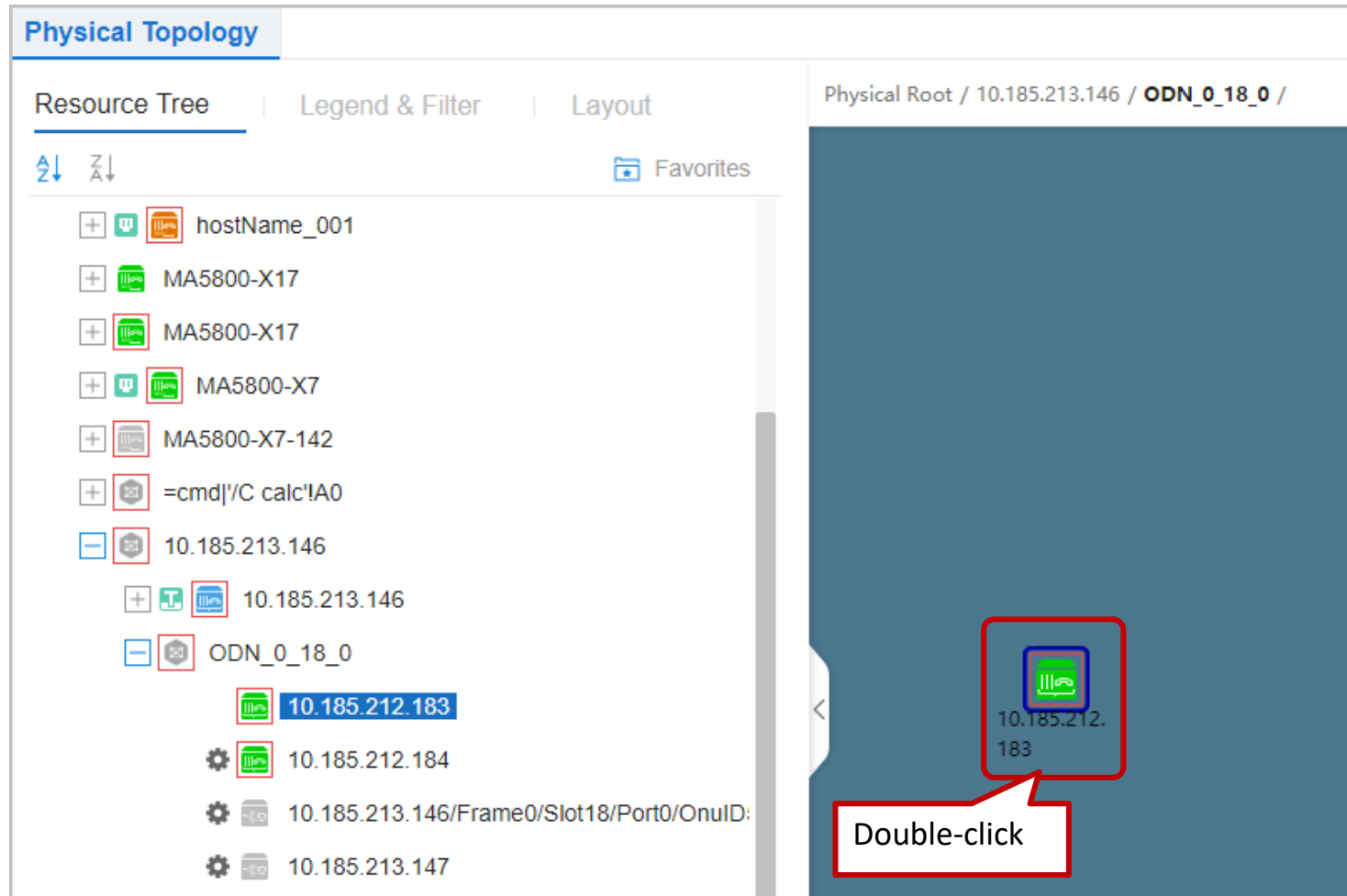
Frame: 0 *

Slot: 9 *

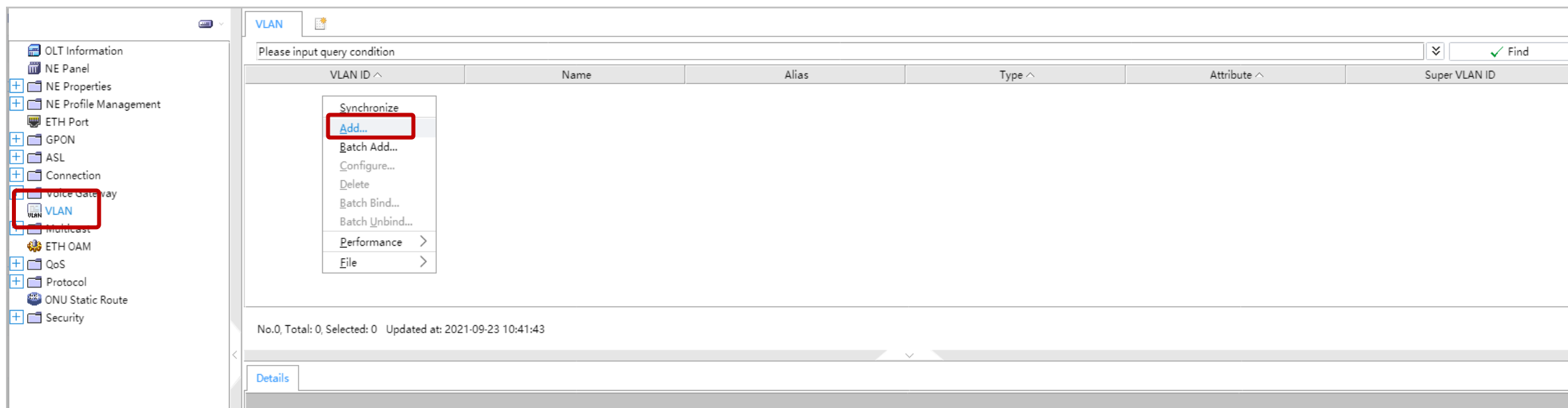
Port: 0 *

OK Cancel Apply

Double-clicking an ONU



Configuring a Service VLAN on the ONU



Configuring a Service VLAN

Add VLAN

Basic Info
Configure VLAN

VLAN ID (1-4095): 1000 *

Name: VLANID_1000 *

Alias:

Type: Smart VLAN *

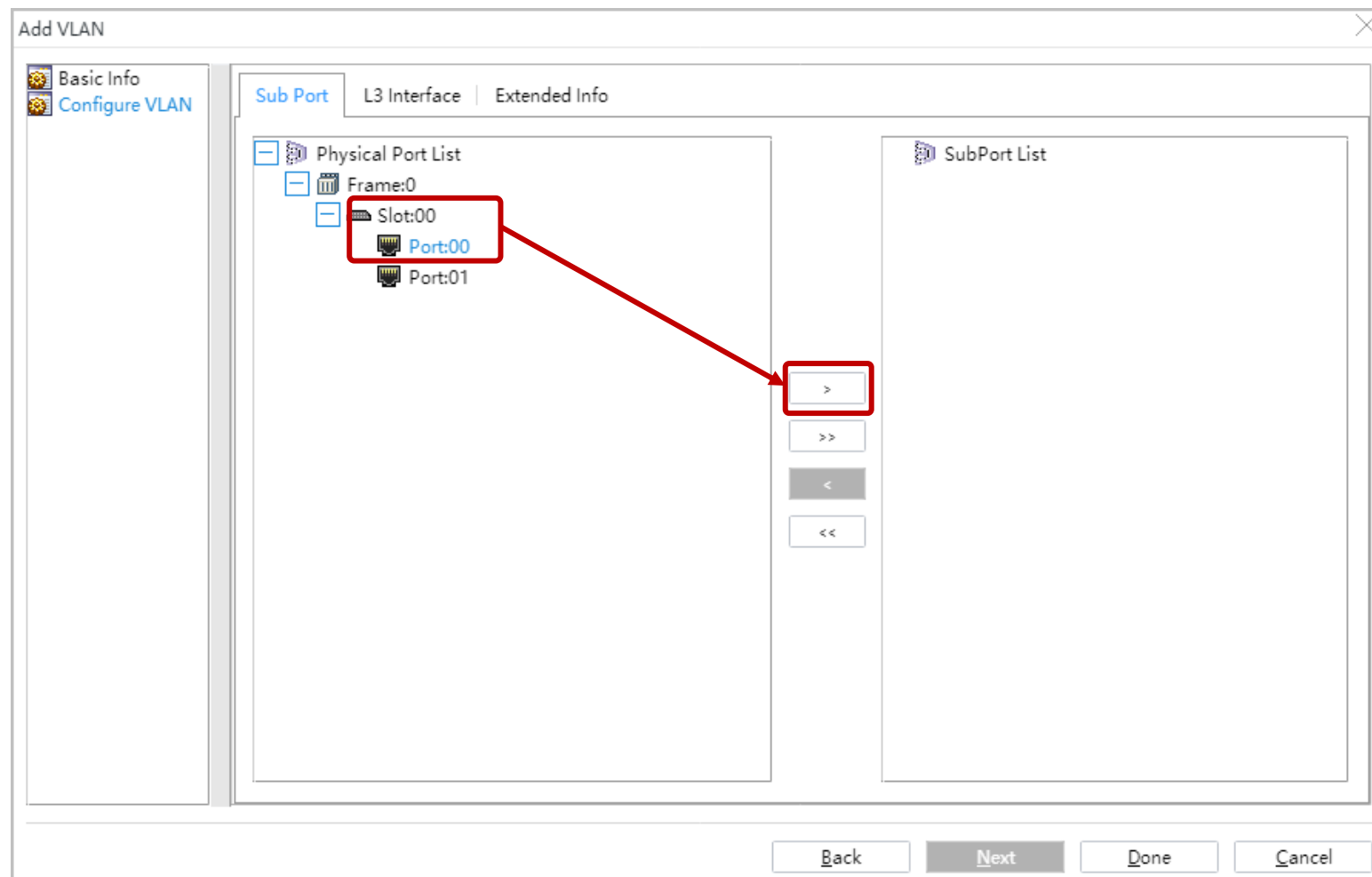
Attribute: Common *

VLAN Priority: Unconfigured *

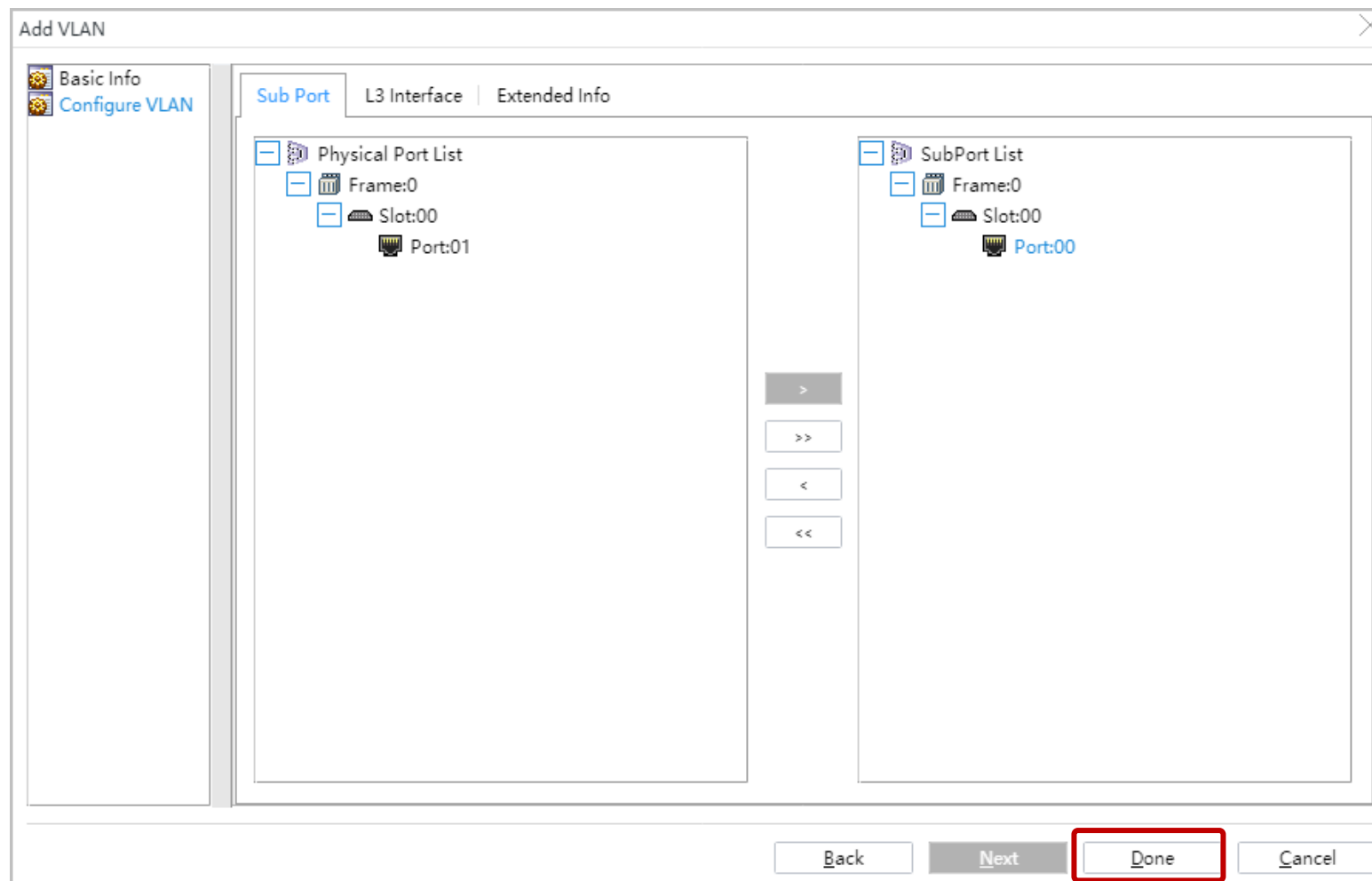
Service Description: IPTV *

Back Next Done Cancel

Selecting an Uplink Port



Configuring a Service VLAN



Adding a Service Port

VLAN

Find

VLAN ID ^	Name	Alias	Type ^	Attribute ^	Super VLAN ID
505	VLANID_505		Smart VLAN	Common	--
506	VLANID_506		Smart VLAN	Common	--
507	VLANID_507		Smart VLAN	Common	--
555	VLANID_555		Smart VLAN	Common	--
666	VLANID_666		Smart VLAN	Common	--
1000	VLANID_1000		Smart VLAN	Common	--
1981	VLANID_1981		Smart VLAN	Common	--
1982	VLANID_1982		MUX VLAN	Stacking	--
1983	VLANID_1983		MUX VLAN	Stacking	--
1984	VLANID_1984		Smart VLAN	Stacking	--
1985	VLANID_1985		Smart VLAN	Stacking	--
1986	VLANID_1986		Smart VLAN	QinQ	--

No.12, Total: 33, Selected: 1 Updated at: 2021-09-24 13:28:10

Details | Port List | L3 Interface | L3 Interface Sub IP | IP Interface | VLAN Service Profile | Service Port

Status	Name ^	Alias ^	Connection Type ^	Interface Information	Service Type ^	Service Para	Upstream Traffic Profile	Downstream Traffic Profile	VLAN ID ^	Inner VLAN ID ^
<div><div>Synchronize</div><div>Add...</div><div>Configure Extend Properties...</div><div>Configure Connect Properties...</div><div>Delete</div></div>										

Selecting the Ethernet Port

Add Service Port

Basic Info

Name: 1000/0_4_0/Multi-Service VLAN * Alias: *

Service Description: IPTV * Connection Type: LAN-ETHER *

Network Side

☐ Service Port Bundle

CoS Value (0-7): * *

VLAN Choice: Smart VLAN * *

VLAN ID (1-4095): 1000 * *

User Side

Interface Selection: 0/4/0 *

Service Type: *

User VLAN (1-4095): *

Traffic Profile Info

☐ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile: * *

Downstream Traffic Profile: * *

OK Cancel Apply

Frame:00

Slot:04

☒ Port:00

☐ Port:01

☐ Port:02

☐ Port:03

☐ Port:04

☐ Port:05

☐ Port:06

☐ Port:07

Setting the User VLAN

Add Service Port

Basic Info

Name: 1000/0_4_0/Multi-Service VLAN/1000 * Alias: *

Service Description: IPTV * Connection Type: LAN-ETHER *

Network Side

☐ Service Port Bundle

CoS Value (0-7): *

VLAN Choice: Smart VLAN *

VLAN ID (1-4095): 1000 ... *

User Side

Interface Selection: 0/4/0 *

Service Type: Multi-Service VLAN *

User VLAN (1-4095): 1000 *

Traffic Profile Info

☐ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile: ... * Downstream Traffic Profile: ... *

OK Cancel Apply

Binding Traffic Profiles

Basic Info

Name:

Service Description:

Network Side:

☐ Service F

CoS Value (

VLAN Choic

VLAN ID (1~

Select Traffic Profile

All

Filter...

No. 4, Total: 7

Name ^	CIR ^	CBS ^	PIR ^	PBS ^	Fixed Bandwidth ^
ip-traffic-table_0	512	18384	1024	36768	
ip-traffic-table_1	1024	34768	2048	69536	
ip-traffic-table_2	2048	67536	4096	135072	
ip-traffic-table_3	4096	133072	8192	266144	
ip-traffic-table_4	8192	264144	16384	528288	
ip-traffic-table_5	16384	526288	32768	1024000	
ip-traffic-table_6					

OKCancel

☒ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile:

...

Downstream Traffic Profile:

...

OKCancelApply

Adding a Service Port

×

Add Service Port

Basic Info

Name:

1000/0_4_0/Multi-Service VLAN/1000 *

Alias:

Service Description:

IPTV

Connection Type:

LAN-ETHER *

Network Side

☐ Service Port Bundle

CoS Value (0-7):

 *

VLAN Choice:

Smart VLAN

 *

VLAN ID (1-4095):

1000

 ... *

User Side

Interface Selection:

0/4/0

 *

Service Type:

Multi-Service VLAN

 *

User VLAN (1-4095):

1000

 *

Traffic Profile Info

☒ Apply the same profile for upstream and downstream traffic

Upstream Traffic Profile:

ip-traffic-table_3

 ... *

Downstream Traffic Profile:

ip-traffic-table_3

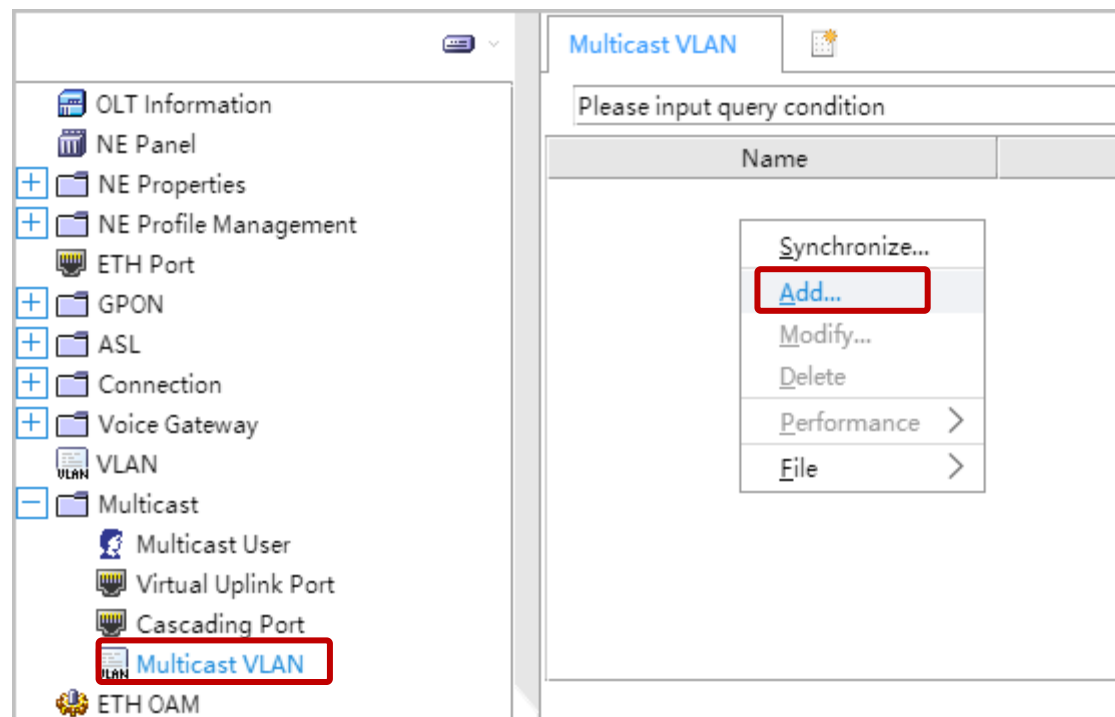
 ... *

OK

Cancel

Apply

Adding a Multicast VLAN (on the ONU)



Adding a Multicast VLAN

Add Multicast VLAN

Basic Information

Name: Alias:

IGMP Version: **IGMP V3**

Autogeneration Program IP Address

Program Match Mode: ☐ Enable ☒ Disable

Start IP Address: . . .

End IP Address: . . .

Work Mode

Work Mode: **igmp_proxy**

Snooping Report Switch: ☐ Enable ☒ Disable

Snooping Leave Switch: ☐ Enable ☒ Disable

Adding a Multicast VLAN

Add Multicast VLAN

Default Up Port Info

Frame: 0 Slot: 0 Port: 0

Other Parameter Info

IGMP Report Priority (0-7): 6 * Unsolicited Report Interval(s) (10-5000): 10 *

Log Switch: ☒ Enable ☐ Disable Global-Leave Switch: ☒ Enable ☐ Disable

Back Next Done Cancel

Adding a Multicast VLAN

Add Multicast VLAN

Select VLAN

Please input query condition

Find

VLAN ID ^	Name	Alias	Type ^	Attribute ^	Super VLAN ID
1	VLANID_1		Smart VLAN	Common	--
9	VLANID_9		Smart VLAN	Common	--
20	VLANID_20		Smart VLAN	Common	--
502	VLANID_502		Smart VLAN	Common	--
503	VLANID_503		Smart VLAN	Common	--
504	VLANID_504		Smart VLAN	Common	--
1000	VLANID_1000		Smart VLAN	Common	--
1981	VLANID_1981		Smart VLAN	Common	--
1982	VLANID_1982		MUX VLAN	Stacking	--
1983	VLANID_1983		MUX VLAN	Stacking	--
1984	VLANID_1984		Smart VLAN	Stacking	--

No.7, Total: 28, Selected: 1 Updated at: 2021-09-24 13:38:35

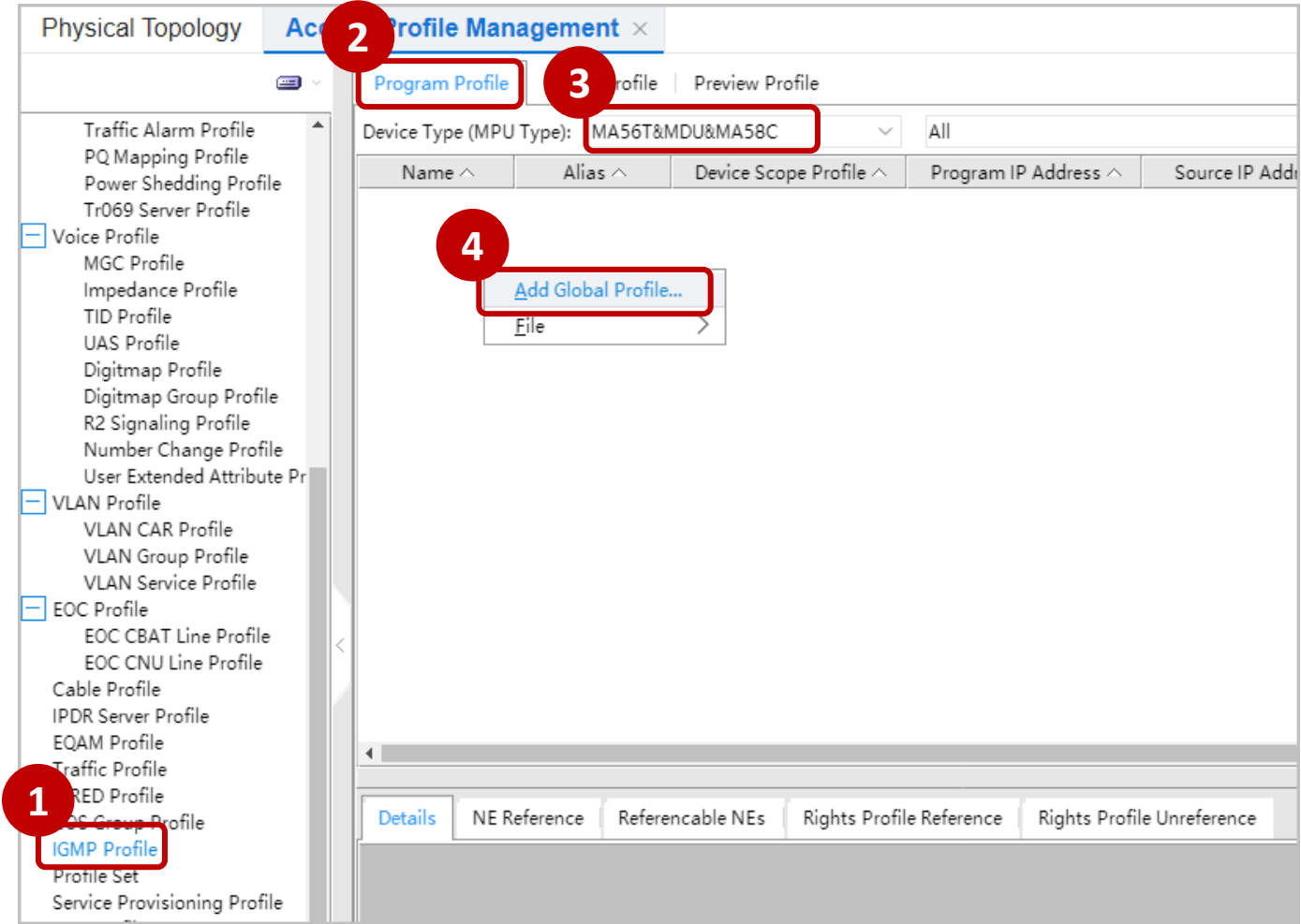
Back

Next

Done

Cancel

Configuring a Program Profile



Configuring a Program Profile

Add Program Profile

Name: *

Alias:

Protocol Type ☒ IGMP ☐ MLD

Begin IP Address: *

End IP Address: *

Source IP Address: Host IP:

Priority (0-7): * Bandwidth (kbit/s) (0-65534): *

Grade: Default Multicast VLAN(1-4095):

IGMP Video Mode:

Preview Parameter

Preview Profile: ... *

Attribute Parameter

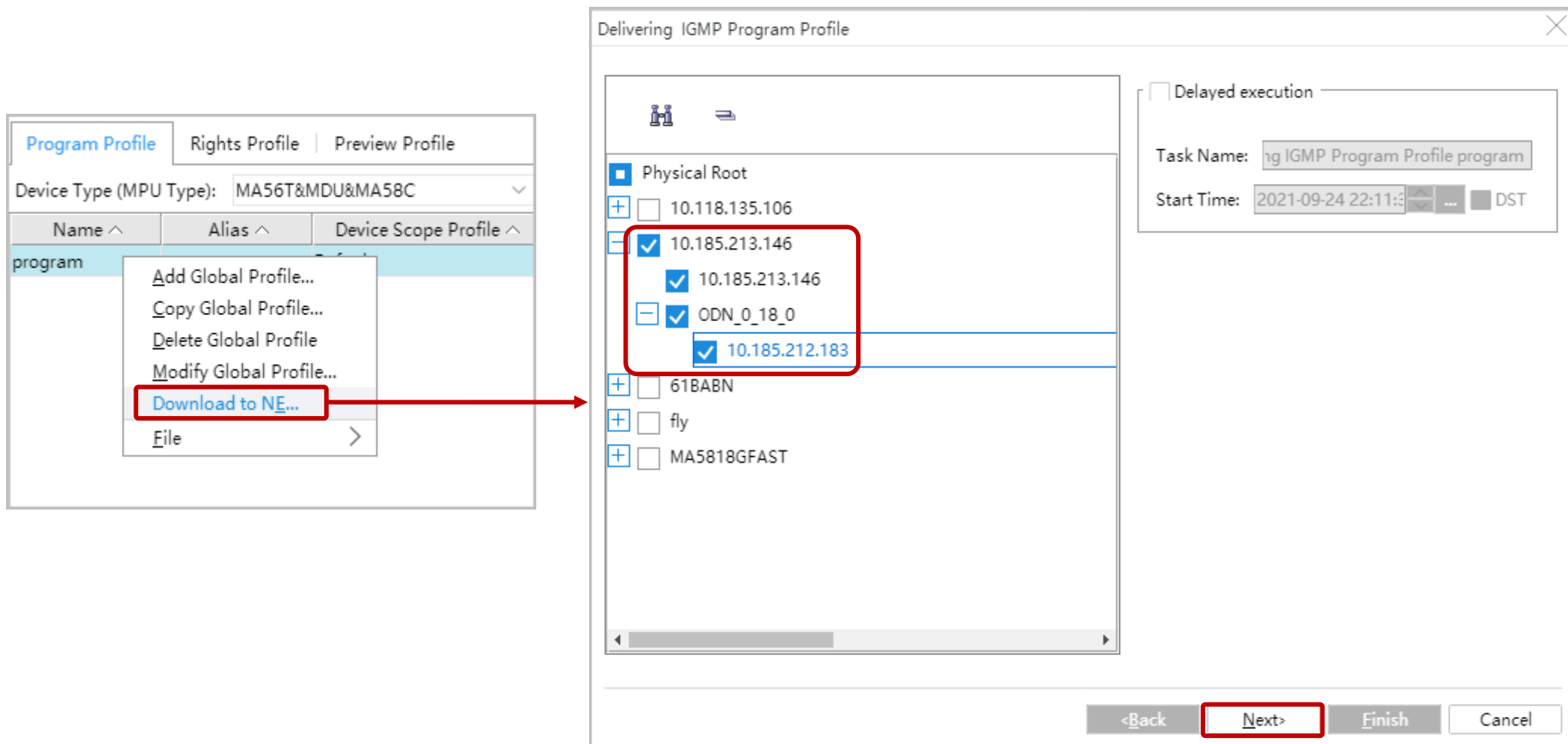
☐ Prejoin Attribute ☒ Host Attribute ☐ Unsolicited Attribute

☒ Log Attribute ☐ Across VLAN Attribute

Device Scope Profile

OK Cancel Apply

Delivering a Profile to an NE



Delivering a Profile to an NE

Delivering IGMP Program Profile

Configure program attribute

Device Name	Device IP ▲	Program Name ▲	Program Alias ▲	Up Port ▲	VLAN ID ▲
10.185.213.146	10.185.213.146	program			1000
10.185.212.183	10.185.212.183	program			1000

<BackNext>FinishCancel



Summary

- FTTB IPTV Service Configuration Flow
- Usage of profiles



Q&A

1. What are the functions of a traffic profile?
2. What are the functions of a service VLAN?
3. What are the functions of a service port?
4. What are the functions of a DBA profile?
5. When do users need to configure a multicast profile?



More Information

- For more cases, see [Huawei Technical Support](#).



Recommendations

- Huawei support case library:
 - <https://support.huawei.com/carrierindex/en/anony/index.html>



Tech Support App

Thank You

www.huawei.com