

# Quick Start Guide

GPON OLT

TES7001&TES7002



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# Preface

Thank you for choosing Tenda! Please read this guide before you start OLT or PoE service configuration.

## Application model

This guide applies to Tenda GPON OLT. The "OLT" and "device" mentioned in this guide refer to GPON OLT. All the screenshots herein, unless other specified, are taken from TES7002.

## Audience

This guide is intended for internal staff, FTTX O&M (operation and maintenance) engineer and Customer technical engineer.



## Conventions

This guide is for reference only and does not imply that the product supports all functions in the guide. The functions may differ with product models. The actual product prevails.

The product figures and screenshots in this guide are for examples only. They may be different from the actual products you purchased, but do not affect the normal use.

If the function or parameter is displayed in gray on the product web UI, the product model is not supported or cannot be modified.

The symbols that may be found in this document are defined as follows.

Symbol	Meaning
 NOTE	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
 TIP	This format is used to supplement or explain the description of relevant operations.

## For more documents

If you want to get more documents about the device, visit [www.tendacn.com](http://www.tendacn.com) and search for the corresponding product model.

## Technical support

Contact us if you need more help. We will be glad to assist you as soon as possible.

Email address: [support@tenda.cn](mailto:support@tenda.cn)

Website: [www.tendacn.com](http://www.tendacn.com)

## Revision history

Tenda is constantly searching for ways to improve its products and documentation. The following table indicates any changes that might have been made since the guide was released.

Version	Date	Description
V1.0	2024-6-20	Original publication.

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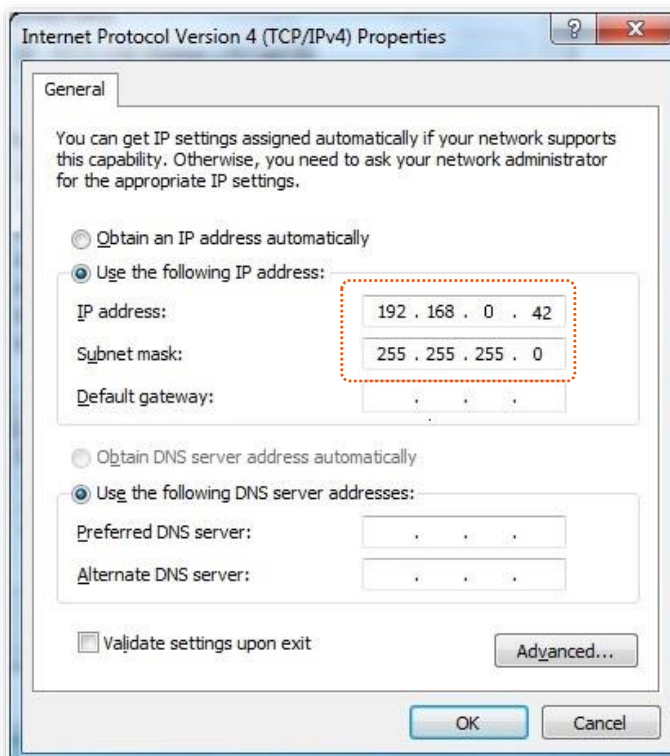
# 1 OLT login

## 1.1 OLT connection

The default inband management IP address is **192.168.0.254/24**. For the first-time connection, you can connect the management device (such as a computer) to any uplink RJ45 Ethernet port of the OLT using an Ethernet cable.

### Configuration procedure

- Step 1** Connect any uplink RJ45 Ethernet port of the OLT to the computer using an Ethernet cable.
- Step 2** Configure the IP address of the computer to one in a same network segment with the management IP address of the OLT inband, that is, **192.168.0.X** (X ranges from 1 to 253 and is unused). The following figure is for reference only.



----End

After the configuration is completed, you can perform ping test to check the connectivity in the Command Prompt of the computer. Received value  $\neq 0$ , indicating that the computer is connected to the OLT (as below).

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\admin>ping 192.168.0.254

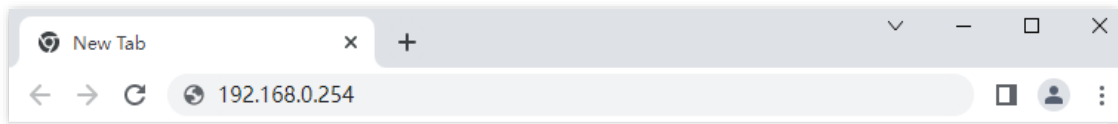
Pinging 192.168.0.254 with 32 bytes of data:
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\admin>
```

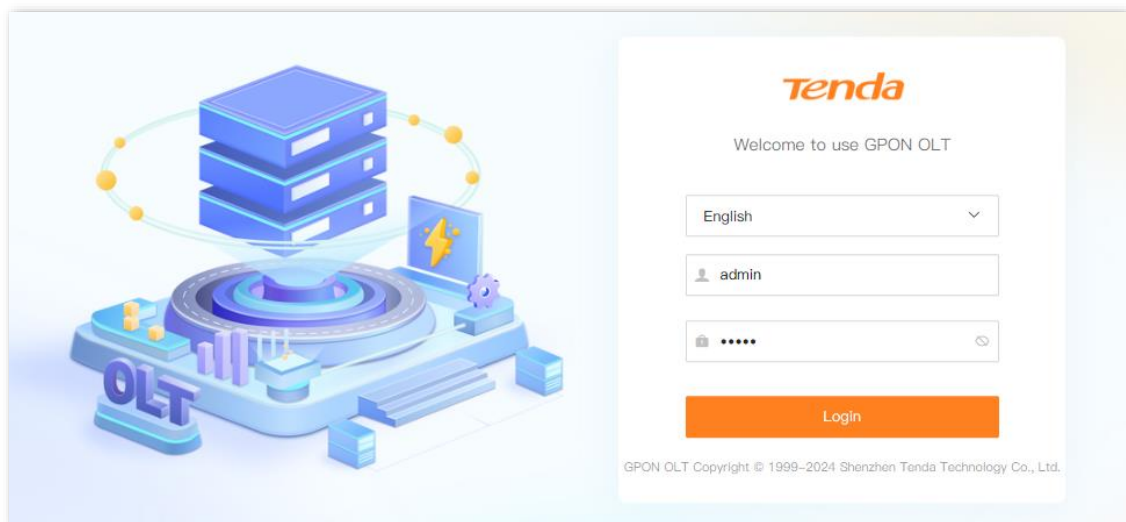
## 1.2 Log in to the web UI

**Step 1** [On the computer connected to the OLT](#), start a browser (Chrome/Firefox/Edge and above versions supported). Enter the OLT inband management IP address (**192.168.0.254** by default).



**Step 2** (Optional) Select language as required. By default, it is displayed in **English**.

**Step 3** Enter the username and password (both are **admin** by default) and click **Login** to enter the web UI of the OLT.

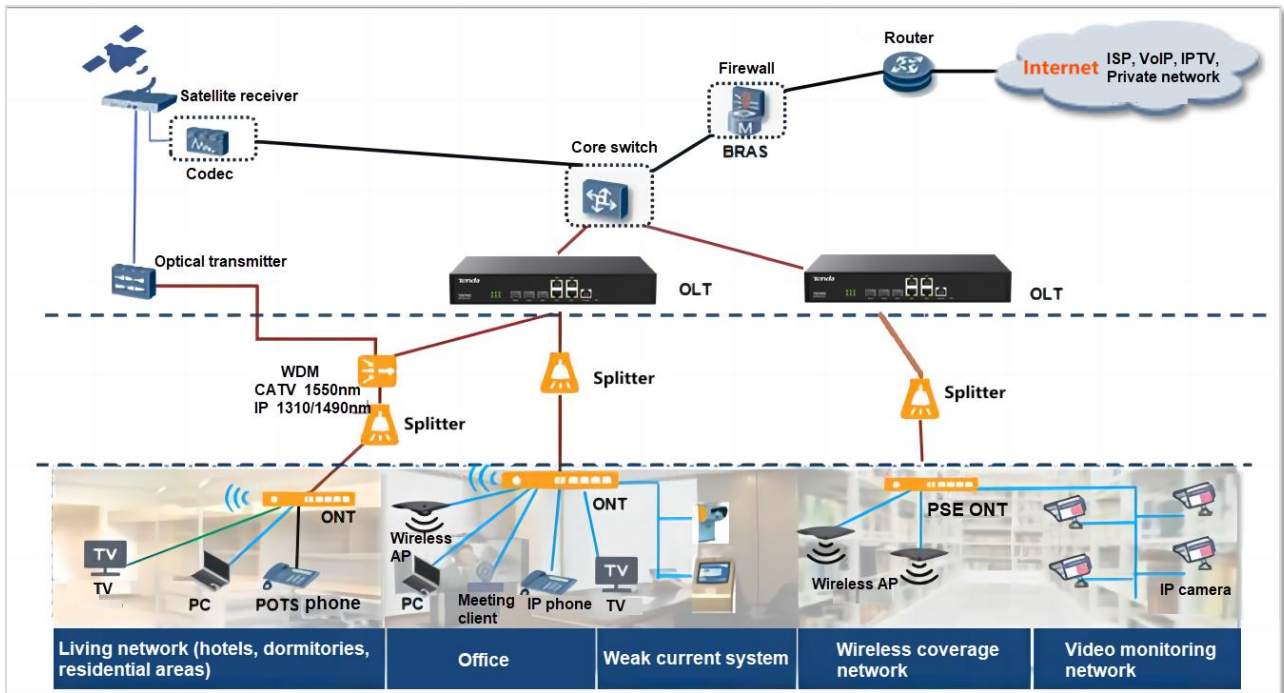


----End



# 2 OLT service configuration

## 2.1 Network topology



## 2.2 GPON OLT interconnection SFU service configuration

This part mainly introduces the configuration of a single internet service.

### 2.2.1 Internet data enters OLT without VLAN (inband static IP management)

#### Service scenario

- There is only one internet access service in the network.
- There is no VLAN for data transmitted through the uplink port of the OLT.

#### Data plan

- Uplink service port: XGE1 (uplink SFP port)
- Local management port: Any uplink RJ45 Ethernet port, which is the GE3 port in this example.
- Downlink PON ports: PON 1 to PON 2
- DBA template: easy-profile-1
- Default settings are used for service transparent transmission and service VLAN of the uplink port.

## Web UI configuration

**Step 1** Connect the local computer to the GE3 port on the front panel of the OLT, and [log in to the web UI of the OLT](#).

**Step 2** Configure the OLT management VLAN.

It is recommended to keep the default settings for local management VLAN. The following figure is for reference only. Modify the IP address, subnet mask and gateway as required. In this example, **DHCP Enable** is disabled.

The screenshot shows the 'OLT Management' configuration page. At the top, there is a progress bar with four steps: 1. OLT Management (highlighted in orange), 2. OLT Service VLAN, 3. Template Configuration, and 4. Preview. Below the progress bar, the configuration fields are as follows:

- Inband Management VLAN: 4088
- IP Address Obtain Type: Static
- IP Address: 192 . 168 . 0 . 254
- Subnet Mask: 255 . 255 . 255 . 0
- Gateway (Optional): 192 . 168 . 0 . 1
- DHCP Enable:  (disabled)

**Step 3** Configure the OLT service VLAN.

Default settings are used for the OLT service VLAN in this example.

The screenshot shows the 'OLT Service VLAN' configuration page. At the top, there is a progress bar with four steps: 1. OLT Management, 2. OLT Service VLAN (highlighted in orange), 3. Template Configuration, and 4. Preview. Below the progress bar, there is an 'Add' button and a table with the following columns: Service Type, Service Name, Start VLAN, End VLAN, Uplink Interface, Tag/Untag, and Operation. The table is currently empty, showing 'No Data'. At the bottom, there are buttons for 'Back to Home', 'Previous', and 'Next'.

**Step 4** Configure templates.

**1.** Configure the DBA template.

By default, OLT binds the DBA template **easy-profile-1** to all online ONTs. Keep the default settings in this example.

Template Name	Bandwidth Type	Fixed (kbps)	Assured (kbps)	Max. (kbps)	Operation
easy_profile_1	max	0	0	1024000	Edit
easy_profile_2	fix-assure-max	256	256	1024000	Edit

**2.** Configure the service template.

By default, OLT configures SFU ONT. All ports are in VLAN full transparent transmission mode (Transparent). Keep the default settings in this example.

Port No.	Port VLAN Mode	VLAN ID	Operation
PORT 1	Transparent		Configure
PORT 2	Transparent		Configure
PORT 3	Transparent		Configure
PORT 4	Transparent		Configure

**Step 5** Confirm configuration.

Enter the preview page and confirm that all configurations are correct. Click **Finish** to deliver the configuration.

The screenshot shows a configuration preview interface with a progress bar at the top. The progress bar has four steps: OLT Management (checked), OLT Service VLAN (checked), Template Configuration (checked), and Preview (active, highlighted in orange). Below the progress bar, there are two tables for service templates.

**HGU Service Template**

DBA Template	Port No.	Port VLAN Mode	VLAN ID
easy_profile_1	VEIP1	Transparent	-

**SFU Service Template**

DBA Template	Port No.	Port VLAN Mode	VLAN ID
easy_profile_1	PORT 1	Transparent	-
	PORT 2	Transparent	-
	PORT 3	Transparent	-
	PORT 4	Transparent	-

At the bottom of the page, there are three buttons: "Back to Home", "Previous", and "Finish" (highlighted in orange).

----End

**Verification**

- When the computer is connected to the LAN port of the ONT, the internet can be accessed normally.
- The local computer connected to the GE3 port of the OLT can manage the OLT normally.

## 2.2.2 Internet data enters OLT with VLAN (inband management IP address obtained through DHCP)

### Service scenario

- There is only one internet access service in the network.
- There is VLAN for data transmitted through the uplink port of the OLT.
- The inband management IP address is obtained through DHCP.

### Data plan

- Internet service VLAN ID: 2000
- Local management VLAN ID: 4088
- Inband management VLAN ID: 200
- Uplink service and remote management port: XGE1
- Local management port: GE3
- Downlink PON ports: PON 1 to PON 2
- DBA template: easy-profile-1

### Web UI configuration

- Step 1** Connect the local computer to the GE3 port on the front panel of the OLT, and [log in to the web UI of the OLT](#).
- Step 2** Configure the OLT management VLAN.  
By default, the local management VLAN is **4088**. It is recommended to keep the default settings. Modify the IP address, subnet mask and gateway as required. Enable the **DHCP Enable** function, set **DHCP VLAN ID** to **200**, and click **Next**.

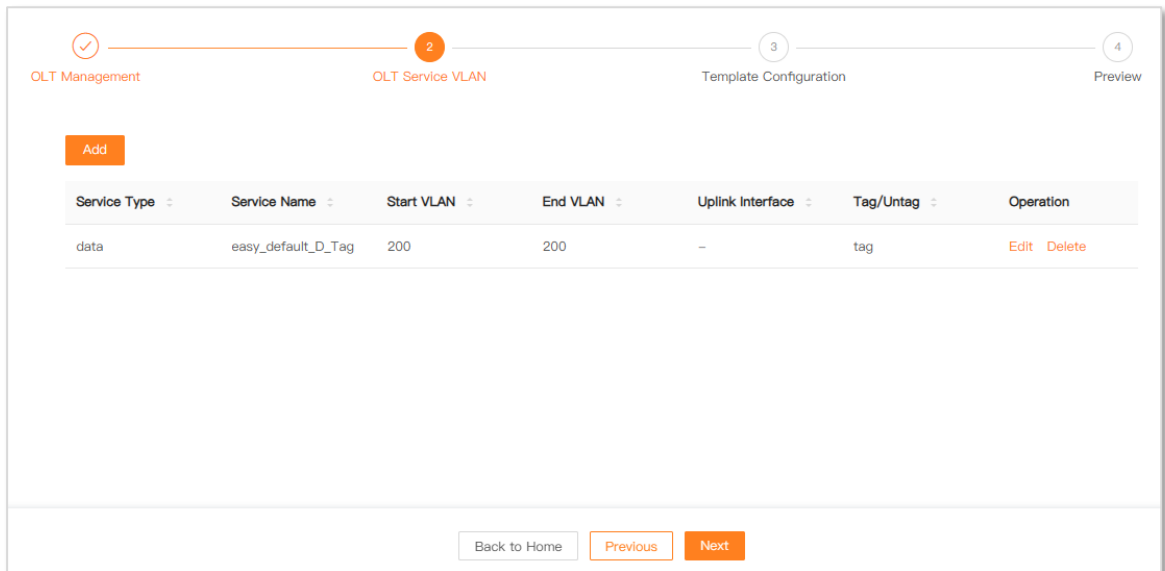
The screenshot displays the 'OLT Service VLAN' configuration page in a web browser. At the top, there is a progress bar with four steps: 1. OLT Management, 2. OLT Service VLAN (current step), 3. Template Configuration, and 4. Preview. The main configuration area includes the following fields and controls:

- Inband Management VLAN:** A text input field containing the value '4088'.
- IP Address Obtain Type:** A dropdown menu set to 'Static'.
- IP Address:** A text input field containing '192 . 168 . 0 . 254'.
- Subnet Mask:** A text input field containing '255 . 255 . 255 . 0'.
- Gateway (Optional):** A text input field containing '192 . 168 . 0 . 1'.
- DHCP Enable:** A toggle switch that is currently turned on (orange).
- DHCP VLAN ID:** A text input field containing '200'.

At the bottom of the page, there are two buttons: 'Back to Home' and 'Next'.

**Step 3** Configure the OLT service VLAN.

1. The DHCP VLAN (VLAN ID is 200) configured in the above steps will automatically generate a service VLAN on this page, and the VLAN 200 tag is used for remote inband management. Click **Edit** of the corresponding service VLAN.



2. Set **Uplink Interface** to **XGE1**, and click **Apply**.

3. Add a new service VLAN on the **OLT Service VLAN** page, and click **Apply**.
  - Set **Service Name**, which is **easy\_default1** in this example.
  - Set **Start VLAN** and **End VLAN** to **2000**.
  - Select **XGE1** for **Uplink Interface**.

- Select **tag** for **Tag/Untag**.

**Add OLT Service VLAN**
✕

Service Type

Service Name

Start VLAN  ?

End VLAN  ?

Uplink Interface

Tag/Untag

Added successfully.

1 OLT Management
2 OLT Service VLAN
 3 Template Configuration
 4 Preview

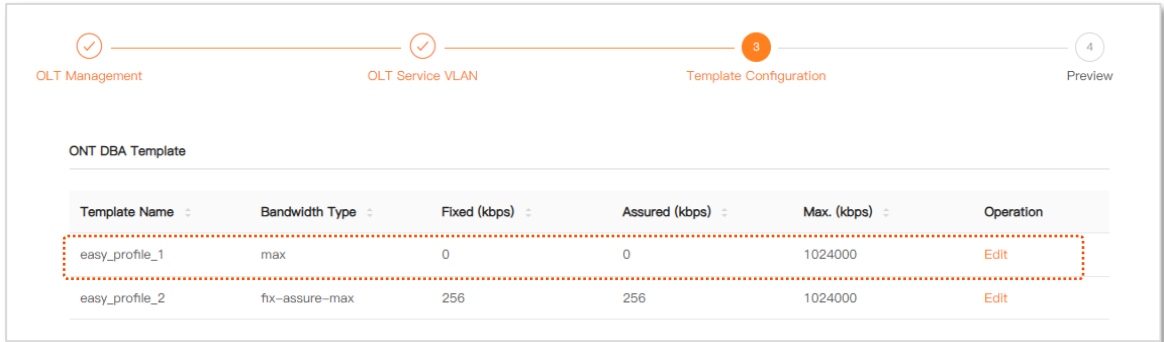
Service Type	Service Name	Start VLAN	End VLAN	Uplink Interface	Tag/Untag	Operation
data	easy_default_D_Tag	200	200	XGE1	tag	<a href="#">Edit</a> <a href="#">Delete</a>
data	easy_default1	2000	2000	XGE1	tag	<a href="#">Edit</a> <a href="#">Delete</a>

#### Step 4 Configure templates.

1. Configure the DBA template.

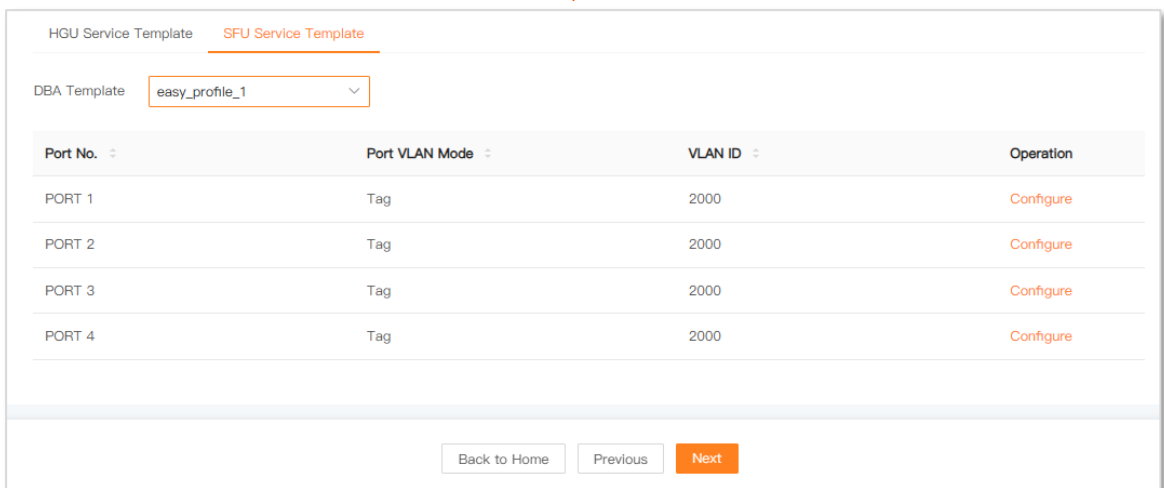
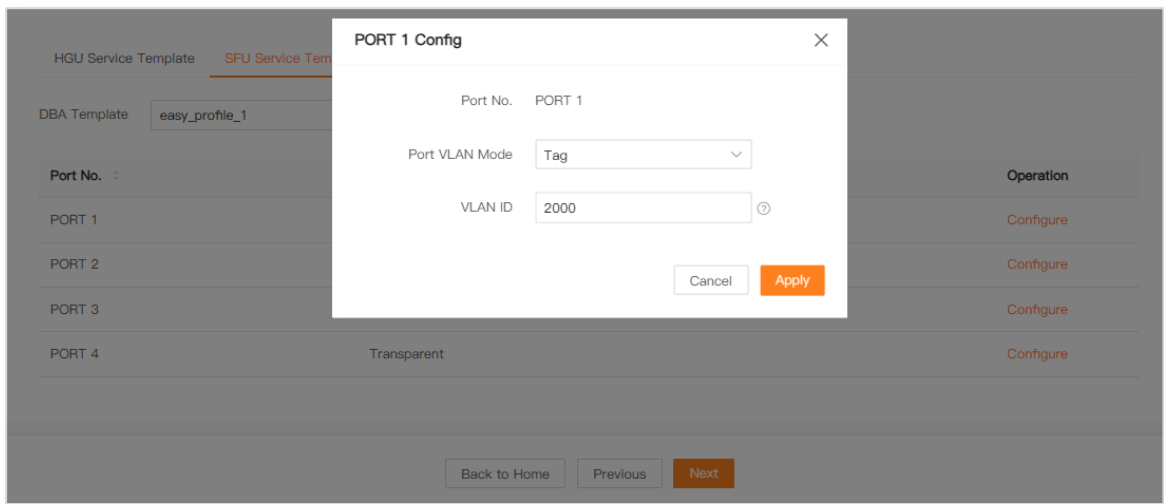
By default, OLT binds the DBA template **easy-profile-1** to all online ONTs. Keep the default settings in this example.





2. Configure the ONT service template, and click **Apply**.

- Set **Port VLAN Mode** to **Tag**.
- Enter **2000** in **VLAN ID**.



- Step 5** Confirm configuration.  
Enter the preview page and confirm that all configurations are correct. Click **Finish** to deliver the configuration.

The screenshot displays a configuration preview interface with a progress bar at the top. The progress bar has four steps: OLT Management (checked), OLT Service VLAN (checked), Template Configuration (checked), and Preview (active, indicated by a red circle with the number 4). Below the progress bar, there are two main sections: OLT Management and OLT Service VLAN.

**OLT Management**

Management VLAN	IP Address Obtain Type	IP Address	Subnet Mask	Gateway	DHCP Enable	DHCP VLAN ID
4088	Static	192.168.0.254	255.255.255.0	192.168.0.1	Enable	200

**OLT Service VLAN**

Service Type	Service Name	Start VLAN	End VLAN	Uplink Interface	Tag/Untag
data	easy_default_D_Tag	200	200	XGE1	tag
data	easy_default1	2000	2000	XGE1	tag

At the bottom of the page, there are three buttons: "Back to Home", "Previous", and "Finish".

----End

## Verification

- When the computer is connected to the LAN port of the ONT, the internet can be accessed normally.
- The local computer connected to the GE3 port of the OLT can manage the OLT normally.
- OLT can be managed remotely through the OLT SFP port XGE1 (uplink port).

## 2.3 GPON OLT interconnection HGU service configuration

This part mainly introduces the configuration of a single internet service.

### 2.3.1 Internet data enters OLT without VLAN (inband static IP management)

#### Service scenario

- There is only one internet access service in the network.
- There is no VLAN for data transmitted through the uplink port of the OLT.

#### Data plan

- Uplink service port: XGE1 (uplink SFP port)
- Local management port: Any GE port (uplink RJ45 Ethernet port), which is the GE3 port in this example.
- Downlink PON ports: PON 1 to PON 2
- DBA template: easy-profile-1
- Default settings are used for service transparent transmission and service VLAN of the uplink port.

#### Web UI configuration

##### Configure the OLT

**Step 1** Connect the local computer to the GE3 port on the front panel of the OLT, and [log in to the web UI of the OLT](#).

**Step 2** Configure the OLT management VLAN.

It is recommended to keep the default settings for local management VLAN. The following figure is for reference only. Modify the IP address, subnet mask and gateway as required. In this example, **DHCP Enable** is disabled.

1 OLT Management

2 OLT Service VLAN

3 Template Configuration

4 Preview

Inband Management VLAN

IP Address Obtain Type Static

IP Address

Subnet Mask

Gateway (Optional)

DHCP Enable

**Step 3** Configure the OLT service VLAN.  
 Default settings are used for the OLT service VLAN in this example.

1 OLT Management

2 OLT Service VLAN

3 Template Configuration

4 Preview

Add

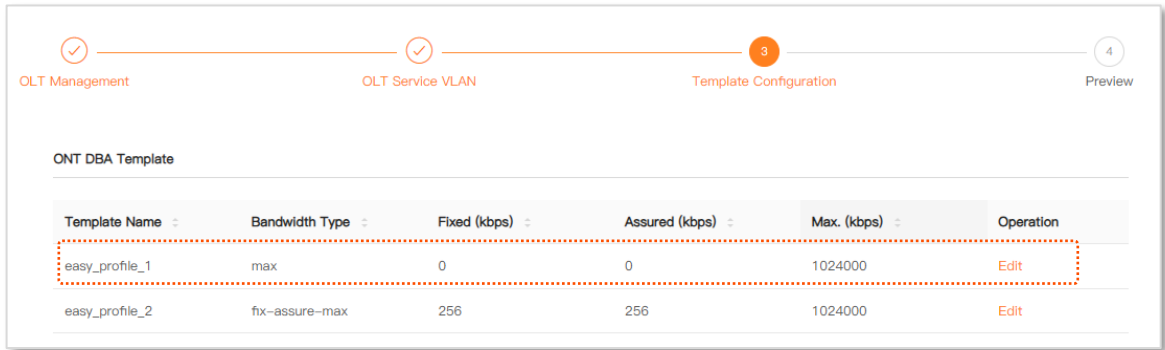
Service Type	Service Name	Start VLAN	End VLAN	Uplink Interface	Tag/Untag	Operation
No Data						

Back to Home Previous Next

**Step 4** Configure templates.

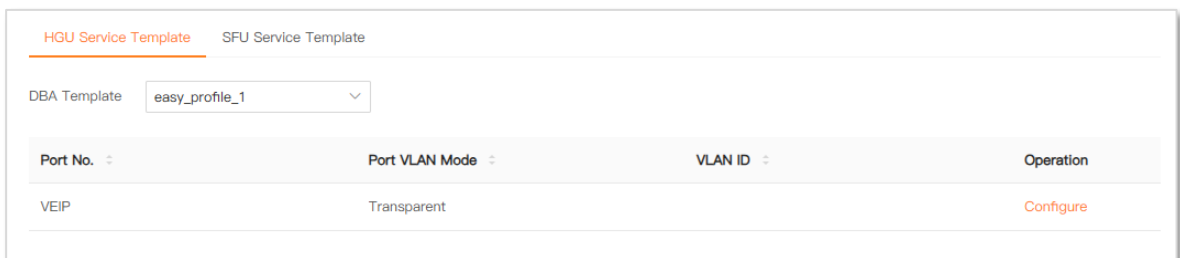
1. Configure the DBA template.

By default, OLT binds the DBA template **easy-profile-1** to all online ONTs. Keep the default settings in this example.



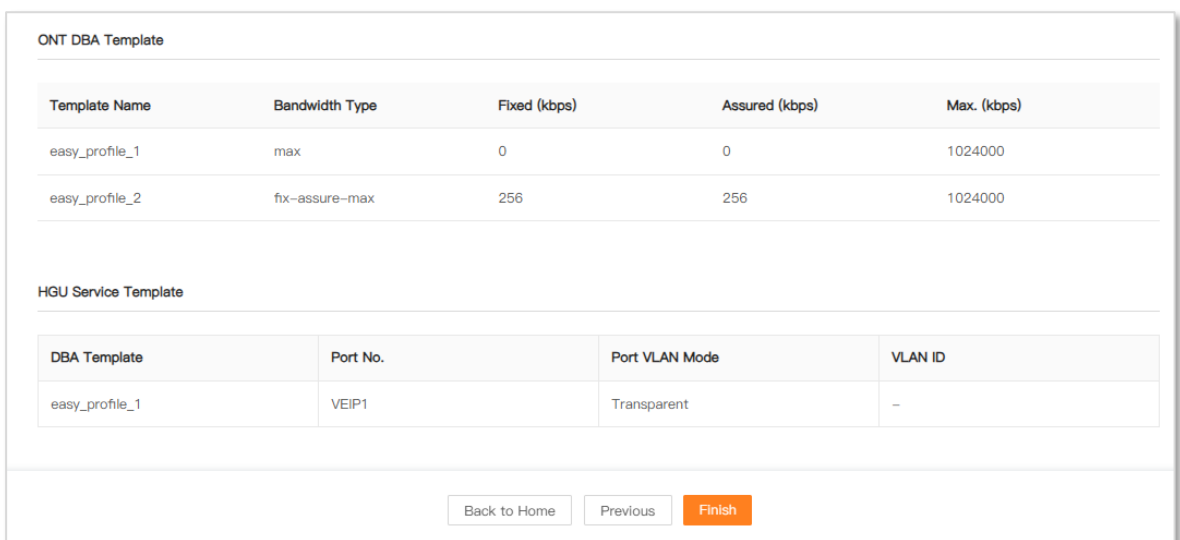
**2. Configure the service template.**

By default, all VEIP ports of the Home Gateway Unit (HGU) ONT are configured in VLAN full transparent transmission mode (Transparent) on the OLT. Keep the default settings in this example.



**3. Confirm configuration.**

Enter the preview page and confirm that all configurations are correct. Click **Finish** to deliver the configuration.



## Configure the ONT.

You can deliver the ONT WAN configurations [remotely](#) or [locally](#).

- **Method 1: Configure the ONT WAN connection on the OLT and remotely deliver the configuration.**

Used to remotely set WAN connections for HGU ONTs.



Currently for HGU ONTs, only WAN configurations delivered through the OLT can be edited, viewed and deleted. Local WAN configurations on the HGU ONTs cannot be read.

**Step 1** [Log in to the web UI of the OLT.](#)

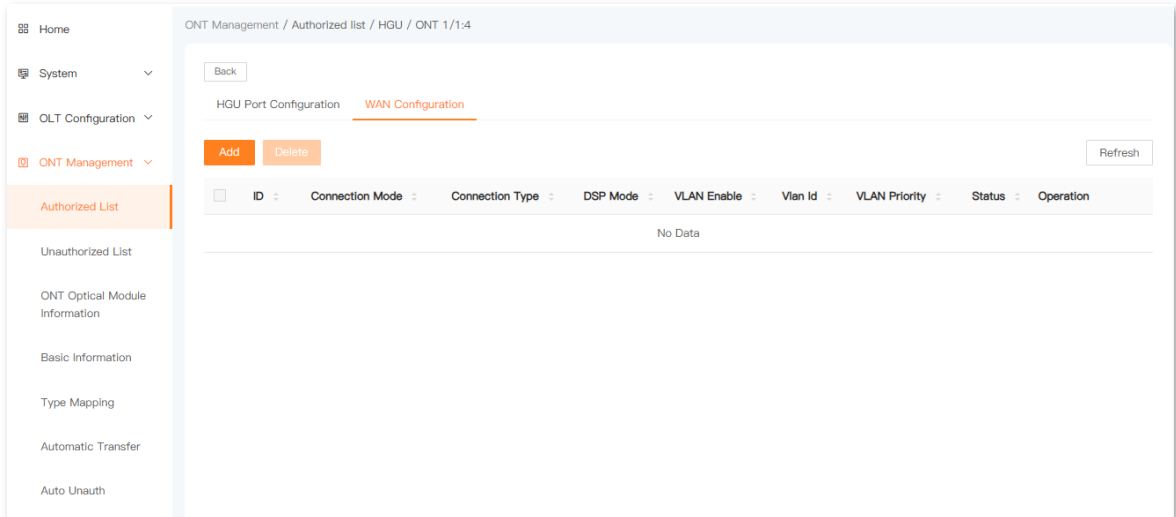
**Step 2** Navigate to **ONT Management > Authorized List.**

**Step 3** Locate the HGU ONT (started with HG) to be configured, and click **Configure**.

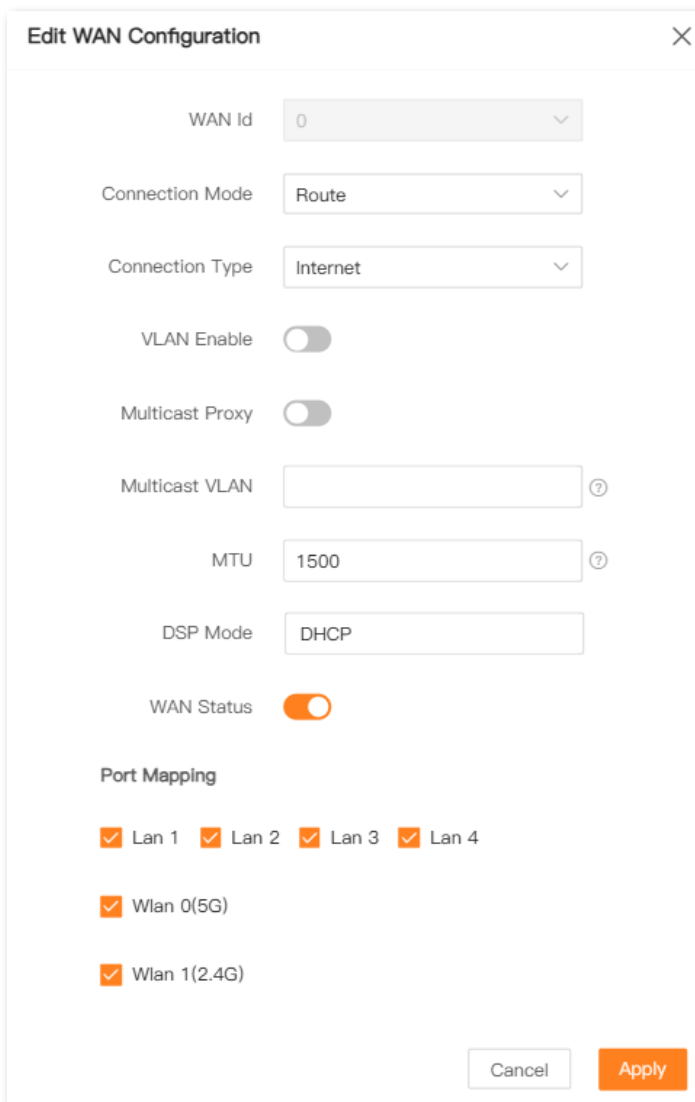
Slot No.	PON Port	Auth ID	SN	ONT Type	Model	Status	Online Time	LOID	Operation
1	1	1	GPON16800146	SG104	VISTA-B...	Offline	0d 0h 0m 0s	-	Configure Unauth
1	1	2	GPON16800133	SG104		Offline	0d 0h 0m 0s	-	Configure Unauth
1	1	3	ACEG18800107	SG504	B13504-...	Offline	0d 0h 0m 0s	-	Configure Unauth
1	1	4	ZTEGCB42a556	HG804	ZXHN F6...	Online	0d 0h 0m 0s	-	Configure Unauth

**Step 4** Click **WAN Configuration**.

**Step 5** Click **Add**.



**Step 6** Set WAN parameters and click **Apply**.



## Method 2: Locally set ONT WAN configurations

Used to set WAN connections for HGU ONTs of other manufacturers locally.

Log in to the web UI of the ONT to configure a WAN connection with VLAN disabled. For the configuration procedure, refer to the user guide of the corresponding ONT. The configuration of Tenda HG6 is taken as an example here.

**PON WAN**  
This page is used to configure the parameters for PONWAN

nas0\_0

Enable VLAN:

VLAN ID:

802.1p\_Mark: 0

Channel Mode: IPoE

Admin Status:  Enable  Disable

Connection Type: INTERNET

MTU: 1500

Enable IGMP-Proxy:

Enable MLD-Proxy:

IP Protocol: IPv4

**WAN IP Settings:**

Type:  Fixed IP  DHCP

Local IP Address:

Remote IP Address:



WAN IP Settings:	
Type:	<input type="radio"/> Fixed IP <input checked="" type="radio"/> DHCP
Local IP Address:	<input type="text"/>
Remote IP Address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
IP Unnumbered	<input type="checkbox"/>
Request DNS:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Primary DNS Server:	<input type="text"/>
Secondary DNS Server:	<input type="text"/>
Port Mapping:	
<input checked="" type="checkbox"/> LAN_1	<input checked="" type="checkbox"/> LAN_2
<input checked="" type="checkbox"/> LAN_3	<input checked="" type="checkbox"/> LAN_4
<input checked="" type="checkbox"/> WLAN0	
<input type="checkbox"/> WLAN0-AP1	<input type="checkbox"/> WLAN0-AP2
<input type="checkbox"/> WLAN0-AP3	<input type="checkbox"/> WLAN0-AP4
<input type="button" value="Apply Changes"/>	<input type="button" value="Delete"/>

----End

## Verification

- The WAN connection of the ONT is normal. The WAN port of the ONT obtains the IP address assigned by the upper-layer server. Clients (such as computers, smartphones) can connect to the ONT's LAN port or Wi-Fi to access the internet normally.

## Device Status

This page shows the current status and some basic settings of the device.

System						
Device Name	HG6					
Uptime	24 min					
Software version	v1.1.0					
Hardware Version	v1.0					
Magic Number	0116827					
CPU Usage	6%					
Memory Usage	24%					

LAN Configuration	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
MAC Address	C83A35102CF8

WAN Configuration						
Interface	VLAN ID	Connection Type	Protocol	IP Address	Gateway	Status
nas0_0	0	INTERNET	IPoE	192.168.11.22	192.168.11.1	up

Refresh

- The local computer connected to the GE3 port of the OLT can manage the OLT normally.

## 2.3.2 Internet data enters OLT with VLAN (inband management IP address obtained through DHCP)

### Service scenario

- There is only one internet access service in the network.
- There is VLAN for data transmitted through the uplink port of the OLT.
- The inband management IP address is obtained through DHCP.

### Data plan

- Internet service VLAN ID: 3060
- Local management VLAN ID: 4088
- Inband management VLAN ID: 200
- Uplink port: XGE1 (uplink SFP port)
- Local management port: GE3 (uplink RJ45 Ethernet port)
- Downlink PON ports: PON 1 to PON 2
- DBA template: easy-profile-1

### Web UI configuration

#### Configure the OLT

- Step 1** Connect the local computer to the GE3 port on the front panel of the OLT, and [log in to the web UI of the OLT](#).
- Step 2** Configure the OLT management VLAN.  
By default, the local management VLAN is **4088**. It is recommended to keep the default settings. Modify the IP address, subnet mask and gateway as required. Enable the **DHCP Enable** function, set **DHCP VLAN ID** to **200**, and click **Next**.

1 OLT Management

2 OLT Service VLAN

3 Template Configuration

4 Preview

Inband Management VLAN

IP Address Obtain Type Static

IP Address

Subnet Mask

Gateway (Optional)

DHCP Enable

DHCP VLAN ID

[Back to Home](#) [Next](#)

### Step 3 Configure the OLT service VLAN.

1. The DHCP VLAN (VLAN ID is 200) configured in the above steps will automatically generate a service VLAN on this page, and the VLAN 200 tag is used for remote inband management. Click **Edit** of the corresponding service VLAN.

1 OLT Management

2 OLT Service VLAN

3 Template Configuration

4 Preview

[Add](#)

Service Type	Service Name	Start VLAN	End VLAN	Uplink Interface	Tag/Untag	Operation
data	easy_default_D_Tag	200	200	-	tag	<a href="#">Edit</a> <a href="#">Delete</a>

[Back to Home](#) [Previous](#) [Next](#)

2. Set **Uplink Interface** to **XGE1**, and click **Apply**.

**Edit OLT Service VLAN**

Service Type: data

Service Name: easy\_default\_D\_Tag

Start VLAN: 200

End VLAN: 200

Uplink Interface: XGE1

Tag/Untag: tag

Buttons: Cancel, Apply

3. Add a new service VLAN on the **OLT Service VLAN** page, and click **Apply**.
  - Set **Service Name**, which is **easy\_default1** in this example.
  - Set **Start VLAN** and **End VLAN** to **2000**.
  - Select **XGE1** for **Uplink Interface**.
  - Select **tag** for **Tag/Untag**.

**Add OLT Service VLAN**

Service Type: data

Service Name: easy\_default1

Start VLAN: 3060

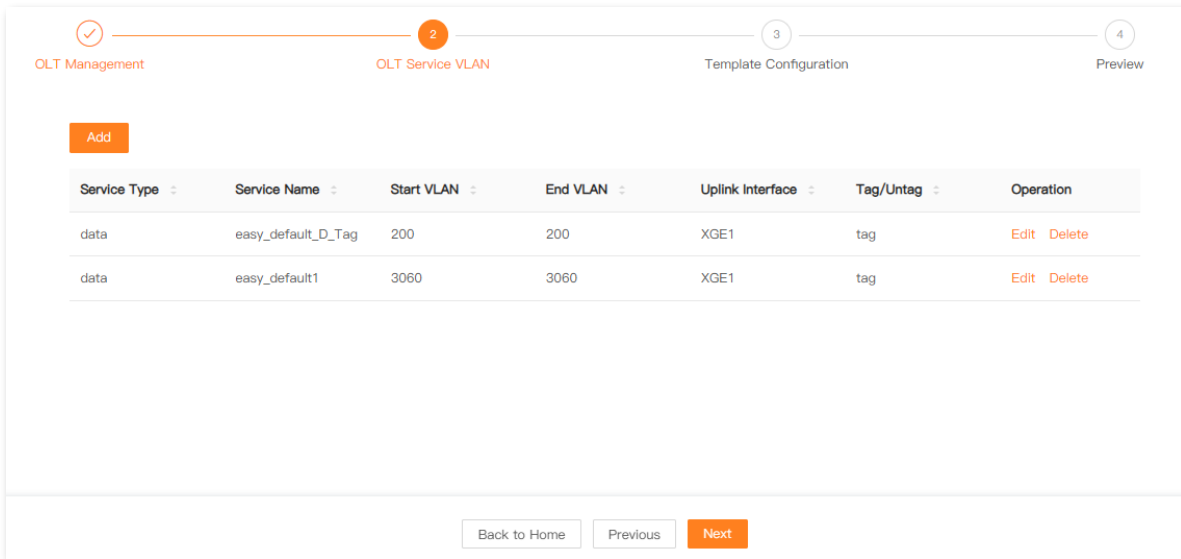
End VLAN: 3060

Uplink Interface: XGE1

Tag/Untag: tag

Buttons: Cancel, Apply

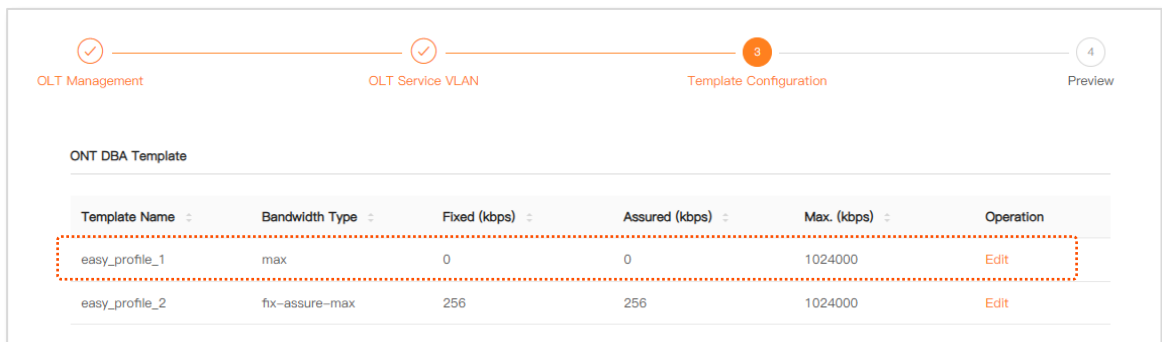
Added successfully.



**Step 4** Configure templates.

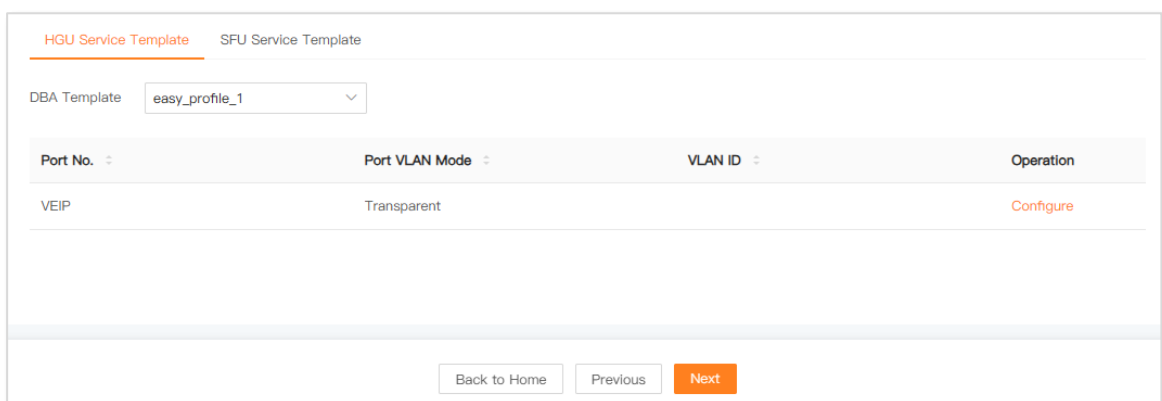
**1.** Configure the DBA template.

By default, OLT binds the DBA template **easy-profile-1** to all online ONTs. Keep the default settings in this example.



**2.** Configure the ONT service template.

By default, the VEIP port configuration of the HGU ONT is unicast VLAN transparent transmission mode. Keep the default settings in this example.



### 3. Confirm configuration.

Enter the preview page and confirm that all configurations are correct. Click **Finish** to deliver the configuration.

ONT DBA Template				
Template Name	Bandwidth Type	Fixed (kbps)	Assured (kbps)	Max. (kbps)
easy_profile_1	max	0	0	1024000
easy_profile_2	fix-assure-max	256	256	1024000

HGU Service Template			
DBA Template	Port No.	Port VLAN Mode	VLAN ID
easy_profile_1	VEIP1	Transparent	-

### Configure the ONT.

You can deliver the ONT WAN configurations [remotely](#) or [locally](#).

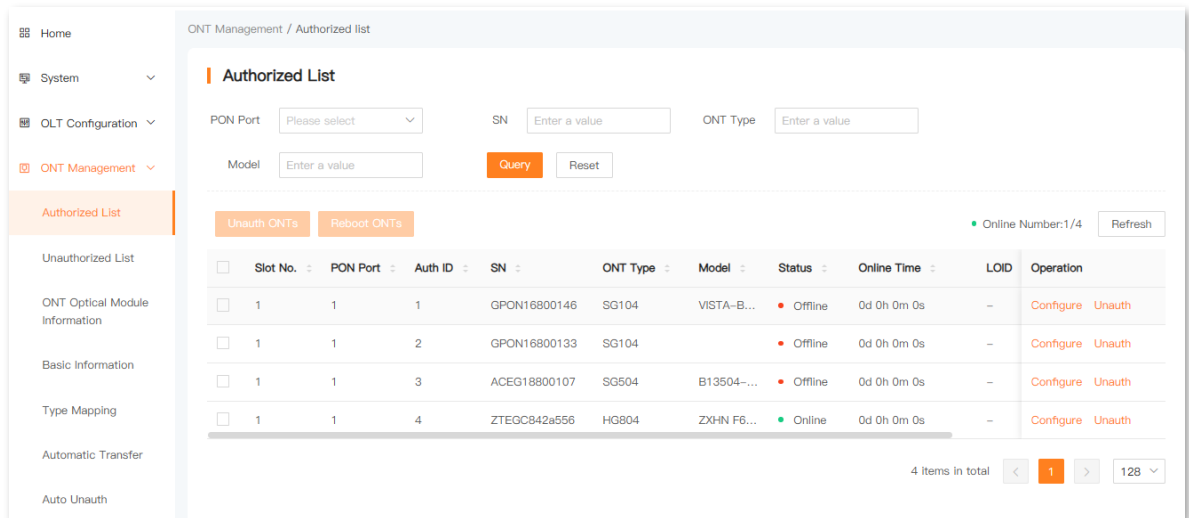
- **Method 1: Configure the ONT WAN connection on the OLT and remotely deliver the configuration.**

Used to remotely set WAN connections for HGU ONTs.



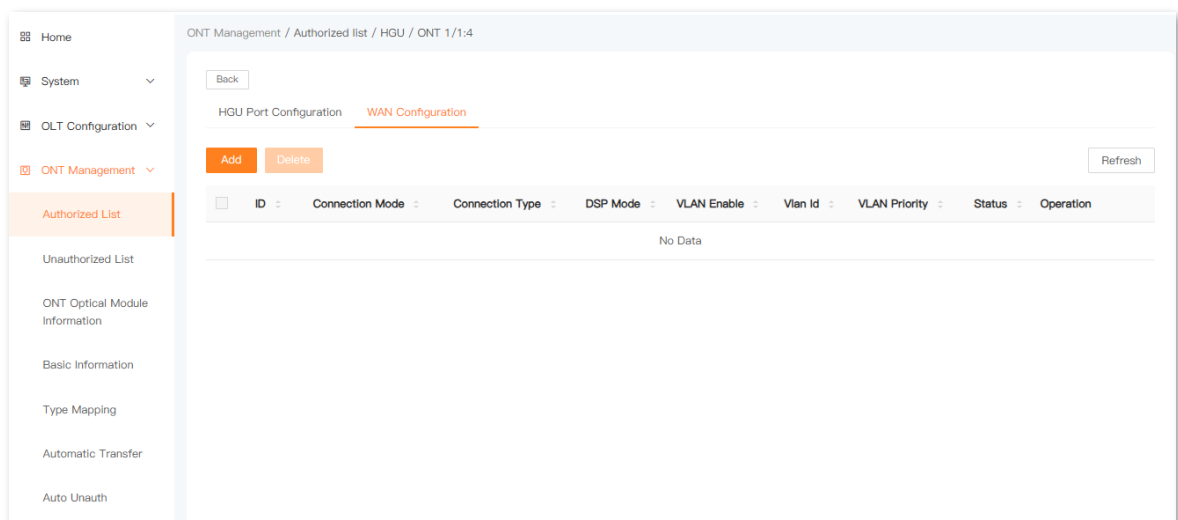
Currently for HGU ONTs, only WAN configurations delivered through the OLT can be edited, viewed and deleted. Local WAN configurations on the HGU ONTs cannot be read.

1. [Log in to the web UI of the OLT.](#)
2. Navigate to **ONT Management > Authorized List**.
3. Locate the HGT ONT (started with HG) to be configured, and click **Configure**.



4. Click **WAN Configuration**.

5. Click **Add**.



6. Set WAN parameters and click **Apply**.



**Edit WAN Configuration** [X]

WAN Id: 0

Connection Mode: Route

Connection Type: Internet

VLAN Enable:

Vlan Id: 3060

Priority: 0

Multicast Proxy:

Multicast VLAN: [?]

MTU: 1500

DSP Mode: DHCP

WAN Status:

**Port Mapping**

Lan 1  Lan 2  Lan 3  Lan 4

Wlan 0(2.4G)

Cancel Apply

- **Method 2: Locally set ONT WAN configurations**

Used to set WAN connections for HGU ONTs of other manufacturers locally.

Log in to the web UI of the ONT to configure a WAN connection with VLAN3060 enabled. For the configuration steps, refer to the user guide of the corresponding ONT. The configuration of Tenda HG6 is taken as an example here.

**WAN**

» PON WAN

### PON WAN

This page is used to configure the parameters for PONWAN

nas0\_0

Enable VLAN:	<input checked="" type="checkbox"/>
VLAN ID:	3060
802.1p_Mark	0
Channel Mode:	IPoE
Admin Status:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type:	INTERNET
MTU:	1500
Enable IGMP-Proxy:	<input type="checkbox"/>
Enable MLD-Proxy:	<input type="checkbox"/>
IP Protocol:	IPv4

#### WAN IP Settings:

Type:	<input type="radio"/> Fixed IP <input checked="" type="radio"/> DHCP
Local IP Address:	<input type="text"/>
Remote IP Address:	<input type="text"/>
Subnet Mask:	<input type="text"/>

#### WAN IP Settings:

Type:	<input type="radio"/> Fixed IP <input checked="" type="radio"/> DHCP
Local IP Address:	<input type="text"/>
Remote IP Address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
IP Unnumbered	<input type="checkbox"/>
Request DNS:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Primary DNS Server:	<input type="text"/>
Secondary DNS Server:	<input type="text"/>

#### Port Mapping:

<input checked="" type="checkbox"/> LAN_1	<input checked="" type="checkbox"/> LAN_2
<input checked="" type="checkbox"/> LAN_3	<input checked="" type="checkbox"/> LAN_4
<input checked="" type="checkbox"/> WLAN0	
<input type="checkbox"/> WLAN0-AP1	<input type="checkbox"/> WLAN0-AP2
<input type="checkbox"/> WLAN0-AP3	<input type="checkbox"/> WLAN0-AP4

Apply Changes    Delete

----End

## Verification

- The WAN connection of the ONT is normal. The WAN port of the ONT obtains the IP address assigned by the upper-layer server. Clients (such as computers, smartphones) can connect to the ONT's LAN port or Wi-Fi to access the internet normally.

**Status**

- > Device
- > IPv6
- > PON

**Device Status**

This page shows the current status and some basic settings of the device.

System	
Device Name	HG6
Uptime	13 min
Software version	v1.1.0
Hardware Version	v1.0
Magic Number	0116827
CPU Usage	6%
Memory Usage	24%

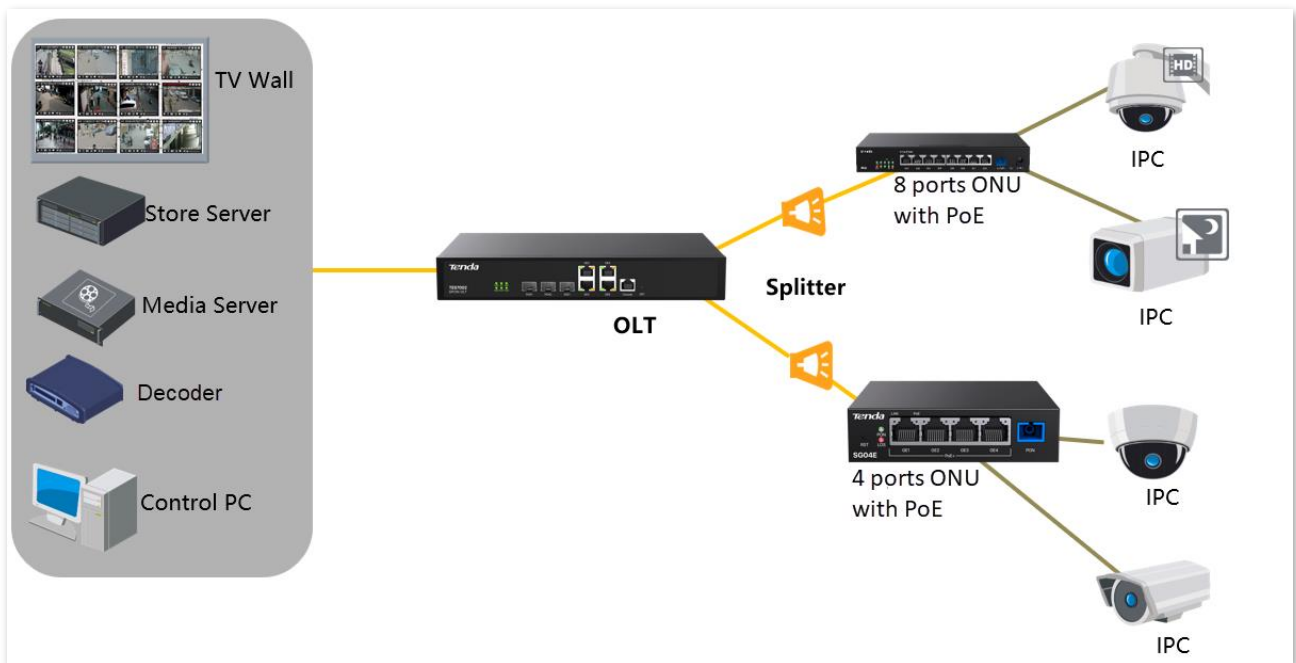
LAN Configuration	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
MAC Address	C83A35102CF8

WAN Configuration						
Interface	VLAN ID	Connection Type	Protocol	IP Address	Gateway	Status
nas0_0	3060	INTERNET	IPoE	192.168.11.22	192.168.11.1	up

- The local computer connected to the GE3 port of the OLT can manage the OLT normally.
- OLT can be managed remotely through the OLT uplink port XGE1.

# 3 PoE service configuration (optional)

## 3.1 Network topology



## 3.2 GPON OLT interconnection PoE ONT service configuration

### Service scenario

- There is only one internet access service in the network.
- There is no VLAN for data transmitted through the uplink port of the OLT.
- PoE ONT is connected to an IP camera that supports PoE.

### Data plan

- Uplink service port: XGE1 (uplink SFP port)
- Local management port: Any uplink port, which is the GE3 port in this example.
- Downlink PON ports: PON 1 to PON 2
- DBA template: easy-profile-1
- Default settings are used for service transparent transmission and service VLAN of the uplink port.
- PoE configuration parameters: The power management mode is DHCP.

### Web UI configuration

**Step 1** OLT management and service configuration.

For detailed steps, refer to [2.2.1 Internet data enters OLT without VLAN \(inband static IP management\)](#).

**Step 2** Enter the single PoE service configuration page and view (modify) the PoE configuration of a single PoE ONT.

1. Navigate to **ONT Management > Authorized List**, locate the PoE ONT to be configured, and click **Configure**. (Example: SG104E&SG108E)

The screenshot shows the 'Authorized List' page with search filters and a table of ONT entries. The table columns are: Slot No., PON Port, Auth ID, SN, ONT Type, Model, Status, Online Time, LOID, and Operation. The 'ONT Type' column for rows 1, 3, 5, and 7 is highlighted with a red dashed box.

Slot No.	PON Port	Auth ID	SN	ONT Type	Model	Status	Online Time	LOID	Operation
1	1	1	GPON16800114	SG104E	WGP3200	Online	0d 5h 11m 10s	-	Configure Unauth
1	1	2	GPON16800146	SG104E	MSTA B1...	Online	0d 5h 11m 10s	W1234	Configure Unauth
1	1	3	GPON16800103	SG108E	WGP3200	Online	0d 5h 11m 1s	-	Configure Unauth
1	2	1	TDT352CC340	HG602	HG3	Online	0d 5h 10m 41s	-	Configure Unauth
1	2	2	TDT35102E08	HG604	HG6	Online	0d 5h 11m 10s	-	Configure Unauth
1	2	3	GPON16800138	SG104E	WGP3200	Online	0d 5h 11m 1s	-	Configure Unauth
1	2	6	TOTCQEAEM4DA	HG1104	HM8668	Online	0d 5h 11m 10s	-	Configure Unauth
1	2	5	GPON16800136	SG104E	WGP3200	Online	0d 5h 11m 1s	-	Configure Unauth

## 2. Set the PoE global configuration of the PoE ONT.

Navigate to **ONT Management > Authorized List > PoE Global Configuration**, set the **Power Management Mode** to **Dynamic** and view the current power and chip temperature of the PoE ONT as required.



In the **Dynamic** power management mode, the PoE ONT automatically supplies power to the Powered Device (PD) device according to the power supply priority.

The screenshot shows the 'PoE Global Configuration' page with the following settings:

- Power Management Mode: Dynamic
- Available Total Power: 60W
- Total Remaining Power: 60W
- Chip temperature: 40°C

Buttons: Back, Apply, Refresh, Copy.

## 3. Configure PoE power supply for the PoE ONT port.

Navigate to **ONT Management > Authorized List > PoE Port Configuration**, view or configure the PoE power supply configuration of the PoE ONT port as required, and click **Configure** to configure the PoE power supply parameters of the corresponding port.

Back

SFU Port Configuration PoE Global Configuration **PoE Port Configuration**

Enable PoE in Batches Refresh

<input type="checkbox"/>	Port No. ▾	Enable PoE ▾	Power Supply Standard ▾	Transmission Power ▾	PD Level ▾	Priority ▾	Operation
<input type="checkbox"/>	PORT 1	Enable	AT	0.00W	Low	Low	Configure
<input type="checkbox"/>	PORT 2	Enable	AT	0.00W	Low	Low	Configure
<input type="checkbox"/>	PORT 3	Enable	AT	0.00W	Low	Low	Configure
<input type="checkbox"/>	PORT 4	Enable	AT	0.00W	Low	Low	Configure



**PORT 1 PoE Config** [X]

Port No. PORT 1

Enable PoE

Power Supply Standard

Priority

Cancel Apply

----End

### Parameter description

Parameter	Description
Power Supply Standard	<p>Specifies the PoE power supply standard of the port.</p> <ul style="list-style-type: none"> <li>- <b>AT</b>: The maximum power that can be allocated to a single port is 30W.</li> <li>- <b>AF</b>: The maximum power that can be allocated to a single port is 15.4W.</li> </ul>
Priority	<p>Specifies the PoE power supply priority of the port.</p> <p>When the remaining available power is insufficient, the PD device under the high-priority port is priorities to be powered.</p>

## **Verification**

- When the computer is connected to the LAN port of the ONT, the internet can be accessed normally.
- The local computer connected to the GE3 port of the OLT can manage the OLT normally.
- The video server can manage the IP camera normally and view the real-time image.



# Acronyms and abbreviations

Acronym or Abbreviation	Full Spelling
DBA	Dynamic Bandwidth Assignment
DHCP	Dynamic Host Configuration Protocol
FTTB	Fiber To The Building
FTTH	Fiber To The Home
GE	Gigabit Ethernet
GPON	Gigabit-Capable PON
HGU	Home Gateway Unit
IEEE	Institute of Electrical and Electronics Engineers
IGMP	Internet Group Management Protocol
IP	Internet Protocol
IPTV	Internet Protocol Television
LAN	Local Area Network
MAC	Medium Access Control
OLT	Optical Line Terminal
ONT	Optical Network Terminal
ONU	Optical Network Unit
PD	Powered Device
PoE	Power over Ethernet
PON	Passive Optical Network
RSTP	Rapid Spanning Tree Protocol

Acronym or Abbreviation	Full Spelling
VLAN	Virtual Local Area Network
SFU	Single Family Unit
WAN	Wide Area Network