Chapter3: Port Configuration

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Chapter 3 Port Configuration

3.1 Ethernet Port Configuration Overview

The gigabit port of the OLT supports 10/100/1000Base-T. The port can work in half-duplex andfull-duplex modes. It can negotiate with other network equipment to determine the working mode and rate, and automatically select the most suitable working mode and rate. Simplified system configuration and management. The 10G optical port supports 1000M, 10000Mbps full-duplex speed mode. The PON port has a fixed rate and does not support rate configuration

3.2 Configure Ethernet Port

3.2.1 Enter Interface Configuration Mode

Operation	Command	Remarks
Enter global configuration mode	**system-view**	
Enter interface configuration mode.	**interface** { { ethernet *interface-num* } | *interface-name* }	

3.2.2 Enter Interface Range Mode

Operation	Command	Remarks
Enter global mode	**system-view**	
Enter interface range	**interface range** { { **ethernet**	

mode.	*interface-list* } | *interface-name* }	

【Example】

！Enter interface range configuration mode, this range includes Ethernet 1~3

[GPON]interface range ethernet 0/0/1 to e 0/0/3

[GPON-port-range]

3.2.3 Basic Port Configuration

Operation	Command	Remarks
Enter global mode	**system-view**	
Enter interface mode	**interface** { { **ethernet** *interface-num* } | *interface-name* }	
Disable specific port	**shutdown**	
Enable specific port	**undo shutdown**	
Configure speed of a port	**speed** { **10** | **100** | **1000** | **10000** | **auto** }	
Configure default duplex of a port	**undo speed**	
Configure duplex of a port	**duplex** { **full** | **half** }	
Configure priority of a port	**priority** *priority-num*	
Configure default priority of a port	**undo priority**	
Configure port description	**description** *description-list*	
Delete port description	**undo description**	
Enable ingress filtering	**ingress filtering**	

Disable ingress filtering	**undo ingress filtering**	
Enable ingress acceptable-frame	**ingress acceptable-frame** { **all** | **tagged** }	
Disable ingress acceptable-frame	**undo ingress acceptable-frame**	
Enable Ethernet port flow control	**flow-control**	
Disable Ethernet port flow control	**undo flow-control**	
Display port flow control function	**display flow-control interface** [**ethernet** *interface-num*]	

3.2.4 Link Type of Ethernet Ports

An Ethernet port can operate in one of the three link types:

Access: An access port only belongs to one VLAN, normally used to connect user device. Trunk: A trunk port can belong to more than one VLAN. It can receive/send packets from/tomultiple VLANs and is generally used to connect another GPON. The packet sent from thisport can be with or without the tag label.

Hybrid: A hybrid port can belong to multiple VLANs, can receive, or send packets for multiple VLANs, used to connect either user or network devices. It allows packets of multiple VLANs tobe sent with or without the tag label

Operation	Command	Remarks
Enter global mode	**system-view**	
Enter interface mode	**interface** { { **ethernet** *interface-num* } | *interface-name* }	

Set port link type	**port mode** { **trunk** | **hybrid** | **access** }	
Configure default link type	**undo port mode**	The default port type is Hybrid

【Example】

！Set Ethernet port 1 as a trunk port

[GPON-ethernet-0/0/1]port mode trunk

3.2.5 Configure Default VLAN

Operation	Command	Remarks
Enter global mode	**system-view**	
Enter interface mode.	**interface** { { **ethernet** *interface-num* } | *interface-name* }	
Set port default vlan id	**port default vlan** *vlan-id*	
Restore port default vlan id	**undo port default vlan**	

【Example】

！Set the default VLAN ID of Ethernet 0/1 to 5

[GPON-ethernet-0/0/1] port default vlan 5

3.2.6 Add Port to a Vlan

Operation	Command	Remarks
Enter global mode	**system-view**	
Enter interface mode	**interface { { ethernet interface-num } | interface-name }**	
Configure the port mode as access	**port mode access**	
Add the Access port to the specified vlan	**port default vlan vlan-id**	
Configure the port mode as Hybrid	**port mode hybrid**	
Add Hybrid port to specific VLAN and keep the packet VID	**port hybrid tagged vlan { all | vlan-list }**	
Add Hybrid port to specific VLAN and strip the packet VID	**port hybrid untagged vlan { all | vlan-list }**	
Delete Hybrid port from specific VLAN	**undo port hybrid vlan { all | vlan-list }**	
Configure the port mode as Trunk	**port mode trunk**	
Add Trunk port to specific VLAN	**port trunk allowed vlan { all | vlan-list }**	
Delete Trunk port from specific VLAN	**undo port trunk allowed vlan { all | vlan-list }**	

3.2.7 Dsiplay Port Information

Operation	Command	Remarks
Display port information	**display interface** [**ethernet** *interface-num* }]	
Display summary information of all ports	**display interface brief**	
Display port sfp information	**display interface sfp** [**ethernet** *interface-num* }]	

3.2.8 Display and Clear Port Statistics

Operation	Command	Remarks
Display port statistics	**display statistics interface** [**ethernet** *interface-num* }]	
Display all port statistics	**display statistics interface brief**	
Display real-time sending and receiving rates and band utilization	**display utilization interface**	
Enter global mode	**system-view**	
Clear port statistics	**clear interface** [**ethernet** *interface-num* }]	
Enter interface mode	**interface** { { **ethernet** *interface-num* } | *interface-name* }	

Clear port statistics	**clear interface**	