

# Chapter 41: Static Route Configuration



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# Chapter 41 Static Route Configuration

## 41.1 Static Route Overview

The GPON is an ASIC-based Gigabit intelligent GPON, in which a layer-3 forwarding and routing table is maintained to specify the next hops of routes and relevant information. These routes may be learned dynamically through routing protocols or added manually. A static route is a route to an address or a network segment which is configured manually.

## 41.2 Configure Static Route

### 41.2.1 Static Route Configuration List

Configuration Task	Description	Detailed Configuration
Adds a static routing entry	Required	41.2.2
Deletes a static routing entry	Required	41.2.2
Displays a specified routing entry	Optional	41.2.3
Displays an ECMP routing entry	Optional	41.2.3

### 41.2.2 Adding/Deleting a Static Route

Operation	Command	Remarks
Enters the global configuration mode.	<b>ip route</b> <i>dst-ip mask gate-ip</i>	
Enters the global configuration mode.	<b>undo ip route</b> <i>dst-ip mask [ gate-ip ]</i> <b>undo ip route static all</b>	

#### Notes:

gate-ip: next-hop IP address of a static route, in dotted decimal notation; dst-ip: destination address of a static route to be added, in dotted decimal notation; mask: mask of the destination address, in dotted decimal notation.

### 41.2.3 Display Routing Entries

This command displays the information relevant to the specified routing entry, such as the next-hop address and route type. You can choose to view the routes to a specific destination address, all static routes, and all routes. By default, all routes will be displayed.

Operation	Command	Remarks
Enters the all commands mode.	<b>display ip route</b> [ <i>ip-address [ mask ]</i> ] <b>static</b> <b>  rip   ospf</b> ]	

Enters the all commands mode.	<b>display ip route ecmp</b> [ <i>ip-address</i> [ <i>mask</i> ]   <b>static</b>   <b>rip</b>   <b>ospf</b> ]	
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**Parameter description:**

*ip-address*: destination address, in dotted decimal notation; *mask*: accompany an IP address to specify a destination network segment, in dotted decimal notation;

**static**: to display all static routing entries;

**rip**: to display all RIP routing entries;

**ospf**: to display all OSPF routing entries