

FSOS

Static Routing Configuration

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1. Static Routing Configuration

1.1 Static Routing Overview

Layer3 Switch is a kind of gigabit intelligent routing Switches based on ASIC technology. There is a layer-3 forward routing table maintained in system, applied to specify the next-hop address of some certain destinations and related information. All of these routings can be learned dynamically via certain routing protocol, of course, manually adding is OK. Static routing refers to the routing which specified to one or a certain field by manual.

1.2 Detailed Configuration of Static Routing Table

1.2.1 Add/Delete Static Routing Table

static routing basic configurations

Operation	Command	Remarks
Enter global configuration mode	ip route <i>dst-ip mask gate-ip</i>	
Delete specified static routing table	no ip route <i>dst-ip mask [gate-ip]</i>	
Delete all static routing table	no ip route static all	

Note:

gate-ip: the next-hop address of static routing. Moreover, it is dot-decimal notation format.

dst-ip: the destination address of static routing which you are going to add. Moreover, it is dot-decimal notation format.

mask: the mask of destination address. Moreover, it is dot-decimal notation format.

1.2.2 Add/ Delete Static Routing Backup Table

There are multiple static routers forwarded to a certain ip address or network segment. It forms a primary router and multiple backup routers according to the priorities. It will

switch to backup router which possesses the highest priority if the primary router loses efficacy. However, it will switch to the primary router again when the primary router renews.

static routing basic configurations

Operation	Command	Remarks
Enter global configuration mode	configure terminal	
Configure static routing backup	ip route <i>dst-ip mask gate-ip priority</i>	
Delete static routing backup	no ip route <i>dst-ip mask gate-ip priority</i>	

Note: The smaller the value is, the higher priority it will be. And the priority with smallest value will be the primary route.

1.2.3 Display Routing Table Information

This command is used to display the related information of specified routing table, including the next-hop address, routing type and so forth. It can be displayed the information of specified destination address routings, all static routings and all routings. If you do not input the parameter, it will display all routings information.

Display Routing Table Information

Operation	Command	Remarks
Display routing table	show ip route [<i>ip-address [mask]</i> static rip ospf]	
Display static routing backup table	show ip route priority static	

Note:

ip-address: the destination address. In addition, it is dot-decimal notation format.

mask: the destination network segment presented with IP address. In addition, it is dot-decimal notation format.

static: display all static routing tables

rip: display all rip routing tables

ospf: display all ospf routing tables

priority: the priority of the static routing table. The smaller the value is, the higher priority it will be.

1.3 Configuration Example

! add a network routing to 192.168.0.100, set 10.11.0.254 as next-hop

```
Switch(config)#ip route 192.168.0.100 255.255.0.0 10.11.0.254
```

! delete a network routing to 192.168.0.100

```
Switch(config)#no ip route 192.168.0.100 255.255.0.0
```

! delete all static routing

```
Switch(config)#no ip route static all
```

! display the routing information of 192.168.0.100

```
Switch(config)#show ip route 192.168.0.100
```

! display all routing information

```
Switch(config)#show ip route
```

! display all rip information

```
Switch(config)#show ip route rip
```

! display all ospf information

```
Switch(config)#show ip route ospf
```