



IP HARDWARE SUBNET ROUTING CONFIGURATION
COMMANDS

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CHAPTER 1 IP HARDWARE SUBNET ROUTING CONFIGURATION COMMANDS

IP Hardware Subnet Routing Configuration Commands include:

- ip exf
- ip exf down-up-threshold
- debug ip exf

1.1. ip exf

Syntax

[no] ip exf

Parameter

N/A

Default value

Enable

Command mode

Global configuration mode

Usage guidelines

The IP hardware subnet routing function can be enabled through this command. If this function is not enabled, the hardware forwarding items can still be configured but they invalidate.

Example

The following example shows how to enable the IP hardware subnet route.

```
Switch_config#ip exf
```

1.2. ip exf down-up-threshold

Syntax

ip exf down-up-threshold *rate*

no ip exf down-up-threshold

Parameter

Name	Usage guidelines
down-up-threshold <i>rate</i>	Stands for the trigger value (percent) of hardware subnet routing switch.

Default value

90

Command mode

Global configuration mode

Usage guidelines

When the number of software routes exceeds the trigger value of hardware subnet routing, the hardware subnet routing will be shut down; when the number of software routes lowers to be less than the trigger value, the hardware subnet routing will be opened again.

Example

The following example shows how to enable the hardware subnet routing on a L3 switch and set the trigger value to 80%.

```
ip exf down-up-threshold 80
```

1.3. debug ip exf

Syntax

```
[no] debug ip exf
```

Parameter

N/A

Default value

N/A

Command mode

EXEC

Usage guidelines

It is used to enable or disable the debugging switch of IP EXF.

Example

The following are common examples of debugging information output.

```
2004-7-30 15:50:40 [EXF]: EXF entry (destination 2.10.0.0/16) delete from hardware table, EXF disabled
```

It means that user enters the **no ip exf** command and all **exf** items invalidate.

```
2004-7-30 15:50:44 [EXF]: EXF entry (destination 2.10.0.0/16) add to hardware, NAT enabled, nexthop CPU
```

It means that the NAT function is enabled at the port where the next hop of the configured **exf** item belongs. In this case, the packet of the **exf** item is transmitted to CPU for processing.

2004-7-30 15:52:03 [EXF]: EXF entry (destination 2.9.0.0/16) add to hardware, no ARP, nexthop CPU

It means that the ARP of the IP address of the next hop of the configured **exf** item is not learned. In this case, the packet of the **exf** item is transmitted to CPU for processing.

2004-7-30 15:50:44 [EXF]: EXF entry (destination 2.3.0.0/16) add to hardware successfully It means that the EXF entry is configured successfully.

2004-7-30 15:56:00 [EXF]: EXF entry (destination 2.2.0.0/16) delete from hardware table by command It means that the EXF entry is deleted through the corresponding command.

2004-7-30 15:56:59 [EXF]: EXF entry (destination 2.3.0.0/16) delete from hardware table, delete by interface It means that the interface for the next hop of the configured EXF entry is down or the EXF entry becomes invalid because of NAT settings.