FSOS

Port Mirroring Configuration

Contents

1. Mirroring

Mirroring is to copy packets matching the specified rule to the mirroring destination port. Generally, the destination port is connected to the data detection device. Users can analyze the mirrored packets, monitor the network, and troubleshoot faults. Mirroring is divided into port mirroring, remote port mirroring, and flow mirroring.

1.1 Port Mirroring

Port mirroring, which is used to copy the packets received or sent on the specified port to the mirroring destination port. Switch supports one-to-one and many-to-one mirroring, which can support multiple mirroring sources.

- mirrored: it can be a port or a packet that the CPU receives or sends.
- mirror: For the Switch, the destination port of the mirror can only be one. If the mirroring destination port is configured, only the mirroring destination port of the last configuration takes effect.

1.1.1 Configure Port Mirroring

Configuring Port Mirroring

Operation	Command	Remarks
Enter global configuration mode	**configure terminal**	-
Configure mirrored	**mirror source-interface** {**ethernet** *device/slot/port* | **cpu** } {**ingress** | **egress** | **both**}	Required; You can configure multiple mirroring source ports
Configure mirror	**mirror destination-interface ethernet** *device/slot/port*	Required; You can specify only one mirroring destination port

Delete a mirroring group	**no mirror {soure-interface {cpu | ethernet** *device/slot/port* **} | destination-interface ethernet** *device/slot/port* | **all }**	optional
Display mirroring groups	**show mirror**	optional

1.1.2 Configuration Example for Port Mirror

1.Network requirements

Mirror the packet of CPU, e 0/0/1, e 0/0/2 to e 0/0/4.

2.Configuration steps

Switch(config)#mirror source-interface cpu both

Switch(config)#mirror source-interface ethernet 0/0/1 both

Switch(config)#mirror source-interface ethernet 0/0/2 both

Switch(config)#mirror destination-interface ethernet 0/0/4

3.Result validation

Switch(config)#show mirror

Information about mirror port(s)

The monitor port : e0/0/4

The mirrored egress ports : cpu,e0/0/1-e0/0/2.

The mirrored ingress ports : cpu,e0/0/1-e0/0/2.

The packet of CPU, e 0/0/1, e 0/0/2 can be mirrored to port e 0/0/4.

1.2 Flow Mirror

Flow mirror is to copy the service flow matching ACL rules to the specified destination port for packet analysis and monitoring. Before configuring flow mirror, you need to define the ACL rules that meet the requirements. The device references these ACL rules for flow identification.

1.2.1 Configure Flow Mirror

Configure Flow Mirror

Operation	Command	Remarks
Enter global configuration mode	**configure terminal**	-
Configure flow mirror	**mirrored-to** {ip-group<1-199>|link-group<200-299> [**subitem** <0-127>]	required
Remove flow mirror	**no mirrored-to** {ip-group<1-199>|link-group<200-299> } [**subitem** <0-127>]	optional
Verify the operation	**show mirror**	optional

1.2.2 Configuration Example for Flow Mirror

1.Network requirements

Mirror the packets whose source IP address is 10.1.1.1 to e 0/0/7.

2.Configuration steps

Switch(config)#access-list 100 permit 10.1.1.1 0 any

Switch(config)#mirror destination-interface ethernet 0/0/7

Switch(config)#mirrored-to ip-group 100

3.Result validation

The e 0/0/7 port can catch packets with source IP 10.1.1.1