Configure Traffic-Copy Policies

Traffic copy policies

Using Catalyst Center, you can set up an Encapsulated Remote Switched Port Analyzer (ERSPAN) configuration such that the IP traffic flow between two entities is copied to a specified destination for monitoring or troubleshooting.

To configure ERSPAN using Catalyst Center, create a traffic copy policy that defines the source and destination of the traffic flow that you want to copy. You can also define a traffic copy contract that specifies the device and interface where the copy of the traffic is sent.

Note Because traffic copy policies can contain either security groups or IP network groups, throughout this guide, we use the term *groups* for both security groups and IP network groups, unless specified otherwise.

Sources, destinations, and traffic copy destinations

Catalyst Center simplifies the process of monitoring traffic. You do not have to know the physical network topology. You only have to define a source and destination of the traffic flow and the traffic copy destination where you want the copied traffic to go.

- **Source**: One or more network device interfaces through which the traffic that you want to monitor flows. The interface might connect to endpoint devices, specific users of these devices, or applications. A source

group comprises Ethernet, Fast Ethernet, Gigabit Ethernet, 10-Gigabit Ethernet, or port channel interfaces only.

- **Destination**: The IP subnet through which the traffic that you want to monitor flows. The IP subnet might connect to servers, remote peers, or applications.
- **Traffic Copy Destination**: Layer 2 or Layer 3 LAN interface on a device that receives, processes, and analyzes the ERSPAN data. The device is typically a packet capture or network analysis tool that receives a copy of the traffic flow for analysis.

Note At the destination, we recommend that you use a network analyzer, such as a Switch Probe device, or other Remote Monitoring (RMON) probe, to perform traffic analysis.

The interface type can be Ethernet, Fast Ethernet, Gigabit Ethernet, or 10-Gigabit Ethernet interfaces only. When configured as a destination, the interface can be used to receive only the copied traffic. The interface can no longer receive any other type of traffic and cannot forward any traffic except that required by the traffic copy feature. You can configure trunk interfaces as destinations. This configuration allows the interfaces to transmit encapsulated traffic.

Note There can be only one traffic copy destination per traffic copy contract.

Catalyst Center supports traffic copy policy on these devices:

- Source: Cisco Catalyst 3000, Catalyst 4000, Catalyst 9000
- Destination: Cisco Nexus 7000, ASR 1000, Catalyst 6000, ISR 4000

Guidelines and limitations of traffic copy policy

The traffic copy policy feature has these limitations:

- You can create up to 8 traffic copy policies, 16 copy contracts, and 16 copy destinations.
- The same interface cannot be used by more than one traffic copy destination.
- Catalyst Center does not show a status message to indicate that a traffic copy policy has been changed and is no longer consistent with the one that is deployed in the network. However, if you know that a traffic copy policy has changed since it was deployed, you can redeploy the policy.
- You cannot configure a management interface as a source group or traffic copy destination.

Workflow to configure a traffic copy policy

Before you begin

- To be monitored, a source security group that is used in a traffic copy policy needs to be statically mapped to the switches and their interfaces.

  For more information about creating a security group and assigning a security group to a source port, see Create a security group and Configure ports within the fabric site.

- A traffic copy policy destination group needs to be configured as an IP network group. For more information, see Create an IP Network Group.

Procedure

Step 1 Create a traffic copy destination.

This is the interface on the device where the traffic flow will be copied for further analysis. For information, see Create a traffic copy destination, on page 3.

Step 2 Create a traffic copy contract.

The contract defines the copy destination. For information, see Create a traffic copy contract, on page 4.

Step 3 Create a traffic copy policy.

The policy defines the source and destination of the traffic flow and the traffic copy contract that specifies the destination where the copied traffic is sent. For information, see Create a traffic copy policy, on page 5.

Create a traffic copy destination

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy** > **Traffic Copy Destination**.

Step 2 Enter a name and description for the traffic copy destination.

Step 3 Select the device and one or more ports.

Step 4 Click **Save**.

Edit or delete a traffic copy destination

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy Destination**.

Step 2 Check the check box next to the destination that you want to edit or delete.

Step 3 Do one of these tasks:

- To make changes, click **Edit**, make the necessary changes, and click **Save**.
- To delete the destination, click **Delete**.

Create a traffic copy contract

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy Contract**.

Step 2 Click **Add**.

Step 3 In the dialog box, enter a name and description for the contract.

Step 4 From the **Copy Destination** drop-down list, choose a copy destination.

Note
You can have only one destination per traffic copy contract.

If no copy destinations are available for you to choose, you can create one. For more information, see Create a traffic copy destination, on page 3.

Step 5 Click **Save**.

Edit or delete a traffic copy contract

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy Contract**.

Step 2 Check the check box next to the contract that you want to edit or delete.

Step 3 Do one of these steps:

- To make changes, click **Edit**, make the necessary changes, and click **Save**.
- To delete the contract, click **Delete**.

Create a traffic copy policy

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy Policies** .
Step 2 Click **Add Policy**.
Step 3 In the **Policy Name** field, enter a name.
Step 4 In the **Description** field, enter a word or a phrase that identifies the policy.
Step 5 In the **Contract** field, click **Add Contract**.
Step 6 Click the radio button next to the contract that you want to use and then click **Save**.
Step 7 Drag and drop groups from the **Available Groups** area to the **Source** area.
Step 8 Drag and drop groups from the **Available Groups** area to the **Destination** area.
Step 9 Click **Save**.

Edit or delete a traffic copy policy

Procedure

Step 1 From the main menu, choose **Policy** > **Traffic Copy** > **Traffic Copy Policies**.
Step 2 Check the check box next to the policy that you want to edit or delete.
Step 3 Do one of these tasks:

- To make changes, click **Edit**, make the necessary changes, and click **Save**.
- To delete the policy, click **Delete**.