



Managing Fibre Channel Routing and FSPF

Fabric Shortest Path First (FSPF) is the standard path selection process used by Fibre Channel fabrics. FSPF automatically calculates the best path between any two switches in the fabric. All routes across the fabric are established when switches are powered up. These routes do not change unless there is a failure or unless a new ISL (or EISL) is created that offers a path equal to or better than an existing path.

The Fabric Manager allows you to configure and monitor these routing services on multiple Cisco 9000 switches. The Device Manager allows you to configure and monitor Fibre Channel routing and FSPF on a single Cisco 9000 switch. For information about Fibre Channel routing and how to configure routing and FSPF using the command line interface (CLI), refer to the *Cisco 9000 Family Configuration Guide*.

Procedures for configuring Fibre Channel Routing include:

- [Configuring Fibre Channel Routes, page 10-1](#)
- [Configuring Fibre Channel Route Flows, page 10-2](#)

Procedures for configuring FSPF include:

- [Managing FSPF General Attributes, page 10-2](#)
- [Configuring FSPF Interfaces, page 10-3](#)
- [Viewing FSPF Statistics, page 10-3](#)
- [Viewing FSPF Interface Statistics, page 10-3](#)
- [Viewing Link State Records, page 10-3](#)
- [Viewing FSPF Links, page 10-4](#)

Configuring Fibre Channel Routes

To configure Fibre Channel routes, do the following:

-
- Step 1** From the Device Manager, choose **Routes** from the FC menu. The dialog box displays routes for a single switch.
 - Step 2** Configure the attributes for the route.
 - Step 3** To add a route from Device Manager, click **Create** on the dialog box.
You see the Create Route dialog box.
 - Step 4** Click the button to the right of the Interface field and select the interface on which to configure the Fibre Channel route.
 - Step 5** Complete the other fields on this window and click **OK** to add a route.

**Note**

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Configuring Fibre Channel Route Flows

To view Fibre Channel flows, do the following:

Step 1 From the Fabric Manager, choose **FC > Route Flow Statistics** on the menu tree. The Information pane from Fabric Manager displays flows for multiple switches.

From the Device View, choose **Routes** from the FC menu and click the **Flow Statistics** tab. The dialog box from the Device Manager displays flows for a single switch.

Step 2 Configure the flow attributes for the route.

Step 3 To add a route flow from Fabric Manager, click **Create Row** on the toolbar.

To add a route flow from Device Manager, click **Create** on the dialog box.
The Create Route flow dialog is displayed.

Step 4 Complete the fields on this window and click **Create** to add a route flow.

**Note**

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Managing FSPF General Attributes

To manage FSPF general attributes, do the following:

Step 1 From the Fabric Manager, choose **FC > FSPF** on the menu tree and click the **General** tab.

From the Device Manager, choose **FSPF** from the FC menu and click the **General** tab.

The Information pane from the Fabric Manager displays information for multiple switches. The dialog box from the Device Manager displays FSPF information for a single switch.

Step 2 Configure the FSPF general attributes.

**Note**

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Configuring FSPF Interfaces

To configure FSPF interfaces, do the following:

Step 1 From the Fabric Manager, choose **FC > FSPF** on the menu tree and click the **Interfaces** tab.

To configure FSPF interfaces from the Device Manager, choose **FSPF** from the FC menu and click the **Interfaces** tab.

Step 2 Configure the attributes for the FSPF interfaces.



Note

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Viewing FSPF Statistics

To monitor FSPF statistics from the Fabric Manager, choose **FC > FSPF** on the menu tree and click the **Statistics** tab.

To monitor FSPF statistics from the Device Manager, choose **FSPF** from the FC menu and click the **Statistics** tab.



Note

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Viewing FSPF Interface Statistics

To monitor FSPF interface statistics from the Fabric Manager, choose **FC > FSPF** on the menu tree and click the **Interface Stats** tab.

To monitor FSPF interface statistics from the Device Manager, choose **FSPF** from the FC menu and click the **Interface Stats** tab.



Note

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Viewing Link State Records

To monitor FSPF LSRs from the Device Manager, choose **FSPF** from the FC menu and click the **LSDB LSRs** tab.



Note

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.

Viewing FSPF Links

To view FSPF links from the Device Manager, choose **FSPF** from the FC menu and click the **LSDB Links** tab.

**Note**

You can access the field descriptions for the windows or dialog boxes in this procedure in the Reference section of the Fabric Manager or Device Manager help systems.
