CHAPTER 33

Dense Wavelength Division Multiplexing

About DWDM

Dense Wavelength-Division Multiplexing (DWDM) multiplexes multiple optical carrier signals on a single optical fiber. DWDM uses different wavelengths to carry various signals.

To establish a DWDM link, both ends of an Inter Switch Link (ISL) need to be connected with DWDM SPFs (small form-factor pluggable) at each end of the link. To identify a DWDM link, Fabric Manager discovers the connector type on the Fiber Channel (FC) ports. If the ISL link is associated with the FC ports at each end, then the FC port uses DWDM SFP to connect the links.

Fabric Manager Server discovers FC ports with DWDM SFPs and the ISLs associated with the FC ports. The Fabric Manager Client displays ISL with DWDM attribute on the topology map.

Note The FSPF (Fabric Shortest Path First) database only displays an ISL link, which is connected with DWDM SPFs at both ends.

Viewing DWDM Links

The Fabric Manager Client displays DWDM links with “dash-dash” pattern. The tooltip for the link displays “DWDM” to indicate its link type.

To view the DWDM link, follow these steps:

Step 1 Select the switch in the Logical Domain region.

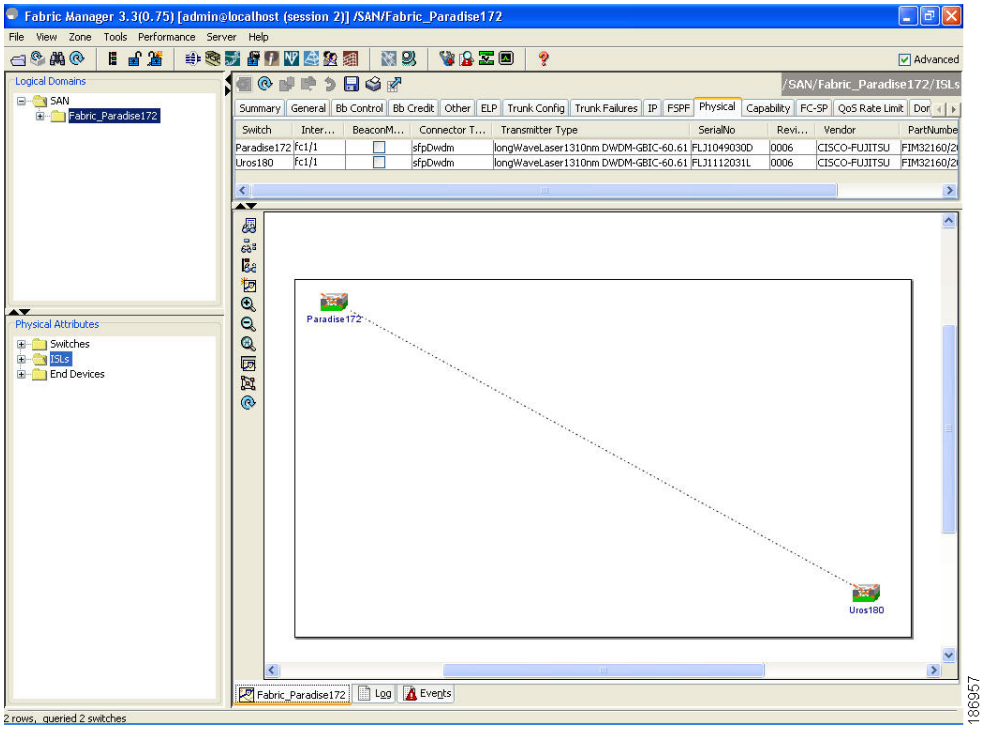
Step 2 Select ISL in the Physical Attributes region.

The Information pane diplays the ISL’s information.

Step 3 Click the **Physical** tab.

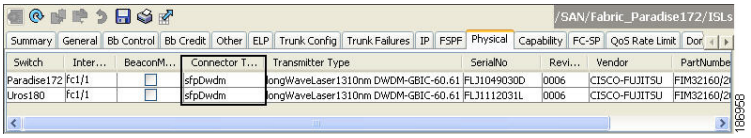
You see the ISL in the Information pane as shown in Figure 33-1.

Figure 33-1 Fabric Manager with ISL Link



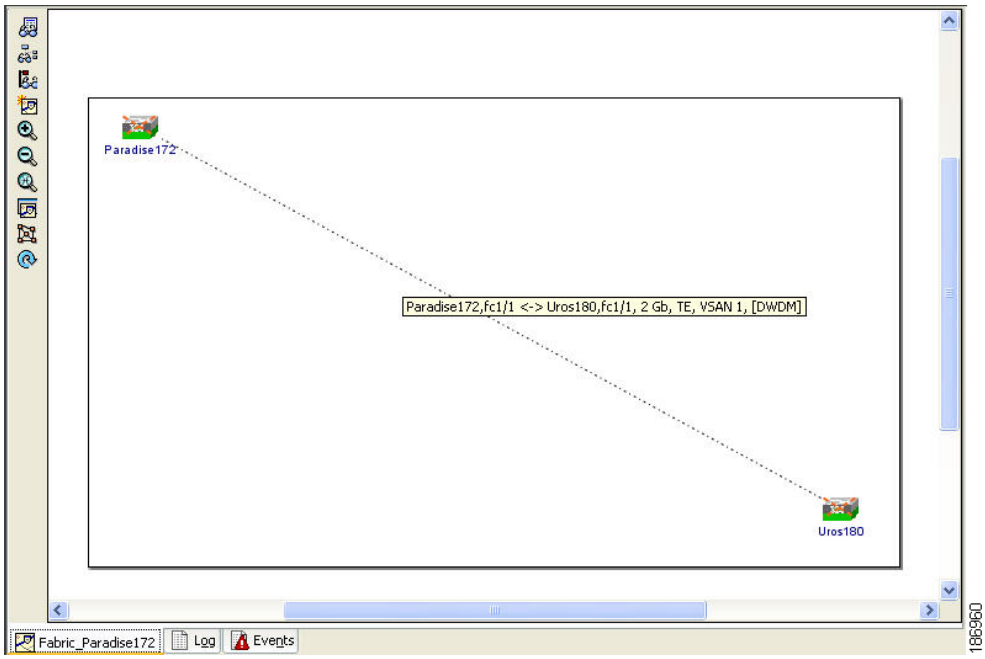
Step 4 The ISL's Physical table displays the connector type as **"sfpDwdm"** as shown in Figure 33-2.

Figure 33-2 Connector Type Displayed as "sfpDwdm"



Step 5 Move the mouse over the link to see the tooltip as DWDM indicating the link type as shown in Figure 33-3.

Figure 33-3 Tooltip Showing DWDM



Step 6 Perform a Dump Discovery of ISL to list all ISLs. DWDM links are listed with "[DWDM]" as shown in Figure 33-4.

Figure 33-4 ISL List Displayed in the Information Pane