

## Monitoring OSPF Routing Information

**Purpose** Use the monitoring functionality to monitor OSPF routing information.

**Action** To view OSPF routing information in the J-Web interface, select **Monitor > Routing > OSPF Information**.

To view OSPF routing information in the CLI, enter the following CLI commands:

- show ospf neighbor
- show ospf interface
- show ospf statistics

**Meaning** Table 1 on page 1 summarizes key output fields in the OSPF routing display.

**Table 1: Summary of Key OSPF Routing Output Fields**

Field	Values	Additional Information
<b>OSPF Neighbors</b>		
Address	Address of the neighbor.	
Interface Name	Interface through which the neighbor is reachable.	
State	State of the neighbor: Attempt, Down, Exchange, ExStart, Full, Init, Loading, or 2way.	Generally, only the Down state, indicating a failed OSPF adjacency, and the Full state, indicating a functional adjacency, are maintained for more than a few seconds. The other states are transitional states that a neighbor is in only briefly while an OSPF adjacency is being established.
ID	ID of the neighbor.	
Priority	Priority of the neighbor to become the designated switch.	
<b>OSPF Interfaces</b>		
Interface	Name of the interface running OSPF.	
State	State of the interface: BDR, Down, DR, DRother, Loop, PtToPt, or Waiting.	The Down state, indicating that the interface is not functioning, and PtToPt state, indicating that a point-to-point connection has been established, are the most common states.
Area	Number of the area that the interface is in.	
DR ID	Address of the area's designated device.	
BDR ID	Address of the area's backup designated device.	
Neighbors	Number of neighbors on this interface.	
Adjacency Count	Number of devices in the area using the same area identifier.	

**Table 1: Summary of Key OSPF Routing Output Fields** (continued)

Field	Values	Additional Information
Stub Type	The areas into which OSPF does not flood AS external advertisements	
Passive Mode	In this mode the interface is present on the network but does not transmit or receive packets.	
Authentication Type	The authentication scheme for the backbone or area.	
Interface Address	The IP address of the interface.	
Address Mask	The subnet mask or address prefix.	
MTU	The maximum transmission unit size.	
Interface Cost	The path cost used to calculate the root path cost from any given LAN segment is determined by the total cost of each link in the path.	
Hello Interval	Displays how often the switch sends hello packets out of the interface.	
Dead Interval	The interval during which the switch receives no hello packets from the neighbor.	
Retransmit Interval	The interval for which the switch waits to receive a link-state acknowledgment packet before retransmitting link-state advertisements to an interface's neighbors.	
<b>OSPF Statistics</b>		
Packet Type	Type of OSPF packet.	
Packets Sent	Total number of packets sent.	
Packets Received	Total number of packets received.	
Depth of flood Queue	Number of entries in the extended queue.	
Total Retransmits	Number of retransmission entries enqueued.	
Total Database Summaries	Total number of database description packets.	

- Related Topics**
- [Configuring an OSPF Network \(J-Web Procedure\)](#)
  - [Layer 3 Protocols Supported on EX-series Switches](#)

