

## Monitoring BGP Routing Information

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

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

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

- show bgp summary
- show bgp neighbor

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

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

| Field                | Values   | Additional Information  |
|----------------------|--|---|
| <b>BGP Summary</b>   |  |   |
| Total Groups         | Number of BGP groups.  |   |
| Total Peers          | Number of BGP peers.   |   |
| Down Peers           | Number of unavailable BGP peers.   |   |
| Peer                 | Address of each BGP peer.  |   |
| InPkt                | Number of packets received from the peer.  |   |
| OutPkt               | Number of packets sent to the peer.  |   |
| Flaps                | Number of times a BGP session has changed state from Down to Up.   | A high number of flaps might indicate a problem with the interface on which the BGP session is enabled. |
| Last Up/Down         | Last time that a session became available or unavailable, since the neighbor transitioned to or from the established state.  | If the BGP session is unavailable, this time might be useful in determining when the problem occurred.  |
| State                | <p>A multipurpose field that displays information about BGP peer sessions. The contents of this field depend upon whether a session is established.</p> <ul style="list-style-type: none"><li>■ If a peer is not established, the field shows the state of the peer session: <b>Active</b>, <b>Connect</b>, or <b>Idle</b>.</li><li>■ If a BGP session is established, the field shows the number of active, received, and damped routes that are received from a neighbor. For example, <b>2/4/0</b> indicates two active routes, four received routes, and no damped routes.</li></ul> |   |
| <b>BGP Neighbors</b> |  |   |
| Peer Address         | Address of the BGP neighbor.   |   |

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

| Field             | Values  | Additional Information  |
|-------------------|---|---|
| Autonomous System | AS number of the peer.  |   |
| Type              | Type of peer: <b>Internal</b> or <b>External</b> .  |   |
| State             | <p>Current state of the BGP session:</p> <ul style="list-style-type: none"> <li>■ <b>Active</b>—BGP is initiating a TCP connection in an attempt to connect to a peer. If the connection is successful, BGP sends an open message.</li> <li>■ <b>Connect</b>—BGP is waiting for the TCP connection to become complete.</li> <li>■ <b>Established</b>—The BGP session has been established, and the peers are exchanging BGP update messages.</li> <li>■ <b>Idle</b>—This is the first stage of a connection. BGP is waiting for a Start event.</li> <li>■ <b>OpenConfirm</b>—BGP has acknowledged receipt of an open message from the peer and is waiting to receive a keepalive or notification message.</li> <li>■ <b>OpenSent</b>—BGP has sent an open message and is waiting to receive an open message from the peer.</li> </ul> | Generally, the most common states are <b>Active</b> , which indicates a problem establishing the BGP connection, and <b>Established</b> , which indicates a successful session setup. The other states are transition states, and BGP sessions normally do not stay in those states for extended periods of time. |
| Export            | Names of any export policies configured on the peer.  |   |
| Import            | Names of any import policies configured on the peer.  |   |
| Number of flaps   | Number of times the BGP sessions has changed state from <b>Down</b> to <b>Up</b> .  | A high number of flaps might indicate a problem with the interface on which the session is established.   |

- Related Topics**
- Configuring BGP Sessions (J-Web Procedure)
  - Layer 3 Protocols Supported on EX-series Switches