Running Mobility Ping Tests

Information About Mobility Ping Tests

Controllers in a mobility list communicate with each other by controlling information over a well-known UDP port and exchanging data traffic through an Ethernet-over-IP (EoIP) tunnel. Because UDP and EoIP are not reliable transport mechanisms, there is no guarantee that a mobility control packet or data packet will be delivered to a mobility peer. Mobility packets may be lost in transit due to a firewall filtering the UDP port or EoIP packets or due to routing issues.

Restrictions on Mobility Ping Tests

• You can test the mobility communication environment by performing mobility ping tests. These tests may be used to validate connectivity between members of a mobility group (including guest controllers). Two ping tests are available:
  • Mobility ping over UDP—This test runs over mobility UDP port 16666. It tests whether the mobility control packet can be reached over the management interface.
  • Mobility ping over EoIP—This test runs over EoIP. It tests the mobility data traffic over the management interface.

• Only one mobility ping test per controller can be run at a given time.

• These ping tests are not Internet Control Message Protocol (ICMP) based. The term “ping” is used to indicate an echo request and an echo reply message.
Any ICMP packet greater than 1280 bytes will always be responded with a packet that is truncated to 1280 bytes. For example, a ping with a packet that is greater than 1280 bytes from a host to the management interface is always responded with a packet that is truncated to 1280 bytes.

- Mobility pings on ports 16666 and 16667 are notable exemptions and these ports cannot be blocked by any ACL.

**Running Mobility Ping Tests (CLI)**

- To test the mobility UDP control packet communication between two controllers, enter this command:
  
  `mping mobility_peer_IP_address`

  The `mobility_peer_IP_address` parameter must be the IP address of a controller that belongs to the mobility list.

- To test the mobility EoIP data packet communication between two controllers, enter this command:
  
  `eping mobility_peer_IP_address`

  The `mobility_peer_IP_address` parameter must be the IP address of a controller that belongs to the mobility list.

- To troubleshoot your controller for mobility ping, enter these commands:

  ```
  config logging buffered debugging
  show logging
  ```

  To troubleshoot your controller for mobility ping over UDP, enter this command to display the mobility control packet:

  `debug mobility handoff enable`

- **Note** We recommend using an ethereal trace capture when troubleshooting.