

# Chapter 15

## Summary of LDP Configuration Statements

This chapter provides a reference for each of the LDP configuration statements. The statements are organized alphabetically.

### disable

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | disable;  |
| <b>Hierarchy Level</b>          | [edit protocols ldp interface <i>interface-name</i> ]   |
| <b>Description</b>              | Explicitly disable LDP on an interface.   |
| <b>Default</b>                  | LDP is enabled on interfaces configured with the LDP interface statement.   |
| <b>Usage Guidelines</b>         | See “Enable LDP” on page 144.   |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration. |

### hello-interval

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | hello-interval <i>seconds</i> ;   |
| <b>Hierarchy Level</b>          | [edit protocols ldp interface <i>interface-name</i> ]   |
| <b>Description</b>              | Control the rate at which hello messages are sent on the interface.   |
| <b>Options</b>                  | <i>seconds</i> —Length of time between hello packets.<br><b>Range:</b> 1 through 65535 seconds<br><b>Default:</b> 5 seconds |
| <b>Usage Guidelines</b>         | See “Configure the LDP Hello Interval” on page 144.   |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration.         |

## hold-time

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | hold-time <i>seconds</i> ;  |
| <b>Hierarchy Level</b>          | [edit protocols ldp interface <i>interface-name</i> ]   |
| <b>Description</b>              | How long a neighbor should consider the sending router to be operative. The hold time is advertised in LDP hello packets. |
| <b>Options</b>                  | <i>seconds</i> —Hold-time value.<br><b>Range:</b> 1 through 65535<br><b>Default:</b> 15 seconds                           |
| <b>Usage Guidelines</b>         | See “Configure the Hold Time” on page 145.  |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration.       |

## import

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | import [ <i>policy-names</i> ];   |
| <b>Hierarchy Level</b>          | [edit protocols ldp]  |
| <b>Description</b>              | Apply policy filtering to received LDP label bindings. All bindings are accepted from all neighbors.                |
| <b>Options</b>                  | <i>policy-names</i> —Name of one or more policies.  |
| <b>Usage Guidelines</b>         | See “Configure Received Label Filtering” on page 146.   |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration. |

## interface

|                                 |  |
|---------------------------------|--|
| <b>Syntax</b>                   | interface <i>interface-name</i> {<br>disable;<br>hello-interval <i>seconds</i> ;<br>hold-time <i>seconds</i> ;<br>}                                      |
| <b>Hierarchy Level</b>          | [edit protocols ldp]   |
| <b>Description</b>              | Enable LDP on one or more router interfaces.   |
| <b>Default</b>                  | LDP is disabled on all interfaces.   |
| <b>Options</b>                  | <i>interface-name</i> —Name of an interface. To configure all interfaces, you can specify all.<br><br>The remaining statements are explained separately. |
| <b>Usage Guidelines</b>         | See “Enable LDP” on page 144.  |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration.                                      |

## keepalive-interval

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | keepalive-interval <i>seconds</i> ;   |
| <b>Hierarchy Level</b>          | [edit protocols ldp]  |
| <b>Description</b>              | Set the keepalive interval value.   |
| <b>Options</b>                  | <i>seconds</i> —Keepalive value.<br><b>Range:</b> 1 through 65535<br><b>Default:</b> 10 seconds                     |
| <b>Usage Guidelines</b>         | See “Configure the Keepalive Interval” on page 145.   |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration. |

## keepalive-timeout

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | keepalive-timeout <i>seconds</i> ;  |
| <b>Hierarchy Level</b>          | [edit protocols ldp]  |
| <b>Description</b>              | Set the Keepalive timeout value.  |
| <b>Options</b>                  | <i>seconds</i> — keepalive timeout value.<br><b>Range:</b> 1 through 65535<br><b>Default:</b> 30 seconds            |
| <b>Usage Guidelines</b>         | See “Configure the Keepalive Timeout” on page 145.  |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration. |

## ldp

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | ldp { ... }   |
| <b>Hierarchy Level</b>          | [edit protocols]  |
| <b>Description</b>              | Enable LDP routing on the router.<br><br>You must include the ldp statement in the configuration to enable LDP on the router. |
| <b>Default</b>                  | LDP is disabled on the router.  |
| <b>Usage Guidelines</b>         | See “Minimum LDP Configuration” on page 144 and “Enable LDP” on page 144  |
| <b>Required Privilege Level</b> | routing—To view this statement in the configuration.<br>routing-control—To add this statement to the configuration.           |

• preference

• **Syntax** preference *preference*;

• **Hierarchy Level** [edit protocols ldp]

• **Description** Set the route preference level for LDP routes.

• **Options** *preference*—Preferred value.  
• **Range:** 0 through 255  
• **Default:** 9 seconds

• **Usage Guidelines** See “Configure Route Preferences” on page 145

• **Required Privilege Level** interface—To view this statement in the configuration.  
• interface-control—To add this statement to the configuration.

## traceoptions

|                        |   |
|------------------------|---|
| <b>Syntax</b>          | <pre> traceoptions {   file <i>filename</i> &lt;replace&gt; &lt;size <i>size</i>&gt; &lt;files <i>number</i>&gt; &lt;no-stamp&gt;     &lt;(world-readable   no-world-readable)&gt;;   flag <i>flag</i> &lt;<i>flag-modifier</i>&gt; &lt;disable&gt;; } </pre>   |
| <b>Hierarchy Level</b> | [edit protocols ldp]  |
| <b>Description</b>     | LDP protocol-level trace options.   |
| <b>Default</b>         | The default LDP protocol-level trace options are those inherited from the routing protocols traceoptions statement included at the [edit routing-options] hierarchy level.  |
| <b>Options</b>         | <p><b>disable</b>—(Optional) Disable the tracing operation. You can use this option is to disable a single operation when you have defined a broad group of tracing operations, such as all.</p> <p><b>filename</b>—Name of the file to receive the output of the tracing operation. Enclose the name within quotation marks. All files are placed in the directory /var/log. We recommend that you place LDP tracing output in the file ldp-log.</p> <p><b>files <i>number</i></b>—(Optional) Maximum number of trace files. When a trace file named <i>trace-file</i> reaches its maximum size, it is renamed <i>trace-file.0</i>, then <i>trace-file.1</i>, and so on, until the maximum number of trace files is reached. Then, the oldest trace file is overwritten.</p> <p>If you specify a maximum number of files, you also must specify a maximum file size with the size option.</p> <p><b>Range:</b> 2 to 1000<br/><b>Default:</b> 2 files</p> <p><b>flag</b>—Tracing operation to perform. To specify more than one tracing operation, include multiple flag statements.</p> <ul style="list-style-type: none"> <li>address—Operation of address and address withdrawal messages</li> <li>binding—Label-binding operations</li> <li>error—Error conditions</li> <li>event—Protocol events</li> <li>initialization—Operation of Initialization messages</li> <li>label—Operation of Label Request, Label Map, Label Withdrawal, and Label Release messages</li> <li>notification—Operation of Notification messages</li> <li>packets —Equivalent to setting address, initialization, label, notification, and periodic</li> <li>packet-dump—Contents of the messages selected with the message operation flags.</li> <li>periodic—Operation of Hello and Keepalive messages</li> </ul> |

- path—Label-switched path operations
- state—Protocol state transitions
- *flag-modifier*—(Optional) Modifier for the tracing flag. You can specify one or more of these modifiers:
  - detail—Provide detailed trace information
  - receive—Packets being received
  - send—Packets being transmitted
- no stamp—(Optional) Do not place timestamp information at the beginning of each line in the trace file.
  - **Default:** If you omit this option, timestamp information is placed at the beginning of each line of the tracing output.
- no-world-readable—(Optional) Disallow any user to read the log file.
- replace—(Optional) Replace an existing trace file if there is one.
  - **Default:** If you do not include this option, tracing output is appended to an existing trace file.
- size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named *trace-file* reaches this size, it is renamed *trace-file.0*. When the *trace-file* again reaches its maximum size, *trace-file.0* is renamed *trace-file.1* and *trace-file* is renamed *trace-file.0*. This renaming scheme continues until the maximum number of trace files is reached. Then, the oldest trace file is overwritten.
  - If you specify a maximum file size, you also must specify a maximum number of trace files with the *files* option.
  - **Syntax:** *xk* to specify KB, *xm* to specify MB, or *xg* to specify GB
  - **Range:** 10 KB through the maximum file size supported on your system
  - **Default:** 1 MB
- world-readable—(Optional) Allow any user to read the log file.
- **Usage Guidelines** See “Trace LDP Protocol Traffic” on page 148 and the *JUNOS Internet Software Configuration Guide: Installation and System Management* .
- **Required Privilege Level** routing and trace—To view this statement in the configuration.  
routing-control and trace-control—To add this statement to the configuration.