

## Chapter 25

# Summary of Encryption Configuration Statements

The following sections explain each of the encryption services statements. The statements are organized alphabetically.

### address

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | <code>address <i>address</i> {<br/>    <i>destination address</i>;<br/>}</code>   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family <i>family</i> ]   |
| <b>Description</b>              | Configure the interface address.  |
| <b>Options</b>                  | <i>address</i> —Address of the interface.<br><br>The remaining statements are explained separately.                                     |
| <b>Usage Guidelines</b>         | See “Configuring an Encryption Interface” on page 288.  |
| <b>Required Privilege Level</b> | <i>interface</i> —To view this statement in the configuration.<br><i>interface-control</i> —To add this statement to the configuration. |

### backup-destination

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | <code>backup-destination <i>destination-address</i>;</code>   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> tunnel]  |
| <b>Description</b>              | For tunnel interfaces, specify the remote address of the backup tunnel.   |
| <b>Options</b>                  | <i>destination-address</i> —Address of the remote side of the connection.   |
| <b>Usage Guidelines</b>         | See “Configuring IPsec Tunnel Redundancy” on page 297.  |
| <b>Required Privilege Level</b> | <i>interface</i> —To view this statement in the configuration.<br><i>interface-control</i> —To add this statement to the configuration. |
| <b>See Also</b>                 | <i>destination</i> on page 300  |

## backup-interface

---

|                                 |  |
|---------------------------------|--|
| <b>Syntax</b>                   | <code>backup-interface <i>interface-name</i>;</code>   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> es-options]   |
| <b>Description</b>              | Configure a backup ES PIC. When the primary ES PIC has a servicing failure, the backup becomes active, inherits all the tunnels and security associations (SAs), and acts as the new next hop for IPSec traffic. |
| <b>Options</b>                  | <i>interface-name</i> —Name of ES interface to serve as the backup.  |
| <b>Usage Guidelines</b>         | See “Configuring ES PIC Redundancy” on page 296.   |
| <b>Required Privilege Level</b> | <code>interface</code> —To view this statement in the configuration.<br><code>interface-control</code> —To add this statement to the configuration.  |

## destination

---

|                                 |  |
|---------------------------------|--|
| <b>Syntax</b>                   | <code>destination <i>destination-address</i>;</code>   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet address <i>address</i> ],<br>[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> tunnel] |
| <b>Description</b>              | For tunnel and encryption interfaces, specify the remote address.  |
| <b>Options</b>                  | <i>destination-address</i> —Address of the remote side of the connection.  |
| <b>Usage Guidelines</b>         | See “Configuring an Encryption Interface” on page 288, “Configuring Traffic Sampling” on page 316, and “Configuring Flow Monitoring” on page 323.  |
| <b>Required Privilege Level</b> | <code>interface</code> —To view this statement in the configuration.<br><code>interface-control</code> —To add this statement to the configuration.  |

## es-options

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | <code>es-options {<br/>    backup-interface <i>interface-name</i>;<br/>}</code>   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> ]  |
| <b>Description</b>              | On ES interfaces, configure ES interface-specific interface properties.<br><br>The backup-interface statement is explained separately.              |
| <b>Usage Guidelines</b>         | See “Configuring ES PIC Redundancy” on page 296.  |
| <b>Required Privilege Level</b> | <code>interface</code> —To view this statement in the configuration.<br><code>interface-control</code> —To add this statement to the configuration. |

## family

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | family inet {<br>ipsec-sa <i>sa-name</i> ;<br>}   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> ]  |
| <b>Description</b>              | Configure protocol family information for the logical interface.  |
| <b>Options</b>                  | <p><i>family</i>—Protocol family:</p> <ul style="list-style-type: none"> <li>ccc—Circuit cross-connect protocol suite</li> <li>inet—Internet Protocol version 4 suite</li> <li>inet6—Internet Protocol version 6 suite</li> <li>iso—OSI ISO protocol suite</li> <li>mfr-end-to-end—Multilink Frame Relay FRF.15</li> <li>mfr-uni-nni—Multilink Frame Relay FRF.16</li> <li>multilink-ppp—Multilink Point-to-Point Protocol</li> <li>mpls—Multiprotocol Label Switching</li> <li>tcc—Translational cross-connect protocol suite</li> <li>tnp—Trivial Network Protocol</li> <li>vpls—Virtual private LAN service</li> </ul> <p>The remaining statements are explained separately.</p> |
| <b>Usage Guidelines</b>         | See “Encryption Interfaces Configuration Guidelines” on page 287; for a general discussion of family statement options, see the <i>JUNOS Network Interfaces and Class of Service Configuration Guide</i> .  |
| <b>Required Privilege Level</b> | <p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>  |
| <b>See Also</b>                 | <i>JUNOS Network Interfaces and Class of Service Configuration Guide</i> for other statements that do not affect services interfaces.   |

## filter

---

|                                 |  |
|---------------------------------|--|
| <b>Syntax</b>                   | filter {<br>input <i>filter-name</i> ;<br>output <i>filter-name</i> ;<br>}   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet]  |
| <b>Description</b>              | Define the filters to be applied on an interface.  |
| <b>Options</b>                  | input <i>filter-name</i> —Identifier for the input filter.<br>output <i>filter-name</i> —Identifier for the output filter. |
| <b>Usage Guidelines</b>         | See “Configuring Traffic” on page 289.   |
| <b>Required Privilege Level</b> | interface—To view this statement in the configuration.<br>interface-control—To add this statement to the configuration.    |

## interfaces

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | interfaces { ... }  |
| <b>Hierarchy Level</b>          | [edit]  |
| <b>Description</b>              | Configure interfaces on the router.   |
| <b>Default</b>                  | The management and internal Ethernet interfaces are automatically configured. You must configure all other interfaces.  |
| <b>Usage Guidelines</b>         | See the <i>JUNOS Network Interfaces and Class of Service Configuration Guide</i> .                                      |
| <b>Required Privilege Level</b> | interface—To view this statement in the configuration.<br>interface-control—To add this statement to the configuration. |

## ipsec-sa

---

|                                 |   |
|---------------------------------|---|
| <b>Syntax</b>                   | ipsec-sa <i>sa-name</i> ;   |
| <b>Hierarchy Level</b>          | [edit interfaces <i>es-fpc/pic/port</i> unit <i>logical-unit-number</i> family inet]                                    |
| <b>Description</b>              | Specify the IPsec security association (SA) name associated with the interface.   |
| <b>Options</b>                  | <i>sa-name</i> —IPsec security association name.  |
| <b>Usage Guidelines</b>         | See “Encryption Interfaces Configuration Guidelines” on page 287.   |
| <b>Required Privilege Level</b> | interface—To view this statement in the configuration.<br>interface-control—To add this statement to the configuration. |
| <b>See Also</b>                 | <i>JUNOS System Basics Configuration Guide</i>  |

## tunnel

---

|                                 |  |
|---------------------------------|--|
| <b>Syntax</b>                   | <pre>tunnel {   backup-destination <i>destination-address</i>;   destination <i>destination-address</i>;   routing-instance {     destination <i>routing-instance-name</i>;   }   source <i>source-address</i>;   ttl <i>number</i>; }</pre> |
| <b>Hierarchy Level</b>          | [edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> ]   |
| <b>Description</b>              | <p>Configure a tunnel. You can use the tunnel for unicast and multicast traffic or just for multicast traffic. You can also use tunnels for encrypted traffic or VPNs.</p> <p>The statements are explained separately.</p>                   |
| <b>Usage Guidelines</b>         | See “Encryption Interfaces Configuration Guidelines” on page 287 and “Tunnel Interfaces Configuration Guidelines” on page 491.   |
| <b>Required Privilege Level</b> | <p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>   |
| <b>See Also</b>                 | <i>JUNOS VPNs Configuration Guide</i>  |

## unit

---

|                        |   |
|------------------------|---|
| <b>Syntax</b>          | <pre>unit <i>logical-unit-number</i> {   family inet {     ipsec-sa <i>sa-name</i>;   }   tunnel {     backup-destination <i>destination-address</i>;     destination <i>destination-address</i>;     routing-instance {       destination <i>routing-instance-name</i>;     }     source <i>source-address</i>;     ttl <i>number</i>;   } }</pre> |
| <b>Hierarchy Level</b> | [edit interfaces <i>interface-name</i> ]  |
| <b>Description</b>     | Configure a logical interface on the physical device. You must configure a logical interface to be able to use the physical device.   |
| <b>Options</b>         | <p><i>logical-unit-number</i>—Number of the logical unit.</p> <p><b>Range:</b> 0 through 16,384</p> <p>The remaining statements are explained separately.</p>   |

**Usage Guidelines** See “Encryption Interfaces Configuration Guidelines” on page 287; for a general discussion of logical interface properties, see the *JUNOS Network Interfaces and Class of Service Configuration Guide*.

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

**See Also** *JUNOS Network Interfaces and Class of Service Configuration Guide* for other statements that do not affect services interfaces.