

# Chapter 18

## Summary of CCC Configuration Statements

This chapter provides a reference for each of the circuit cross-connect (CCC) configuration statements. The statements are organized alphabetically.

### connections

<b>Syntax</b>	<pre>connections {   interface-switch <i>connection-name</i> {     interface <i>interface-name.unit-number</i>;     interface <i>interface-name.unit-number</i>;   }   lsp-switch <i>connection-name</i> {     transmit-lsp <i>label-switched-path</i>;     receive-lsp <i>label-switched-path</i>;   }   remote-interface-switch <i>connection-name</i> {     interface <i>interface-name.unit-number</i>;     transmit-lsp <i>label-switched-path</i>;     receive-lsp <i>label-switched-path</i>;   } }</pre>
<b>Hierarchy Level</b>	[edit protocols]
<b>Description</b>	Define the connection between two circuits in a CCC connection.
<b>Options</b>	The statements are explained separately.
<b>Usage Guidelines</b>	See “CCC Overview” on page 159 and also the <i>JUNOS Internet Software Configuration Guide: Interfaces and Chassis</i> .
<b>Required Privilege Level</b>	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

## encapsulation

### **encapsulation (physical interface)**

<b>Syntax</b>	encapsulation (cisco-hdlc-ccc   frame-relay-ccc   ppp-ccc   vlan-ccc);
<b>Hierarchy Level</b>	[edit interfaces <i>interface-name</i> ]
<b>Description</b>	Physical link-layer encapsulation type.
<b>Options</b>	<p>cisco-hdlc-ccc—Use Cisco-compatible HDLC framing on circuit cross-connect (CCC) circuits. When you use this encapsulation, you cannot configure a family on the logical interface.</p> <p>frame-relay-ccc—Use plain Frame Relay encapsulation or Frame Relay encapsulation on CCC circuits.</p> <p>ppp-ccc—Use serial PPP encapsulation on CCC circuits. When you use this encapsulation, you cannot configure a family on the logical interface.</p> <p>vlan-ccc—Use Ethernet Virtual Local Area Network (VLAN) encapsulation on CCC circuits.</p>
<b>Usage Guidelines</b>	See the <i>JUNOS Internet Software Configuration Guide: Interfaces and Chassis</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>

### **encapsulation (logical interface)**

<b>Syntax</b>	encapsulation (frame-relay-ccc   atm-ccc-vc-mux   vlan-ccc);
<b>Hierarchy Level</b>	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> ]
<b>Description</b>	Logical link-layer encapsulation type.
<b>Options</b>	<p>frame-relay-ccc—Use Frame Relay encapsulation on CCC circuits. When you use this encapsulation, you cannot configure a family on the logical interface.</p> <p>atm-ccc-vc-mux—Use ATM VC mux encapsulation on CCC circuits. When you use this encapsulation, you cannot configure a family on the logical interface.</p> <p>vlan-ccc—Use Ethernet Virtual Local Area Network (VLAN) encapsulation on CCC circuits.</p>
<b>Usage Guidelines</b>	See the <i>JUNOS Internet Software Configuration Guide: Interfaces and Chassis</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>

## interface-switch

<b>Syntax</b>	interface-switch <i>connection-name</i> { interface <i>interface-name.unit-number</i> ; interface <i>interface-name.unit-number</i> ; }
<b>Hierarchy Level</b>	[edit protocols connections]
<b>Description</b>	Configure Layer 2 switching cross-connects. The cross-connect is bidirectional, so packets received on the first interface are transmitted out the second interface, and those received on the second interface are transmitted out the first.  For Layer 2 switching cross-connects to work, you must also configure MPLS.
<b>Options</b>	interface <i>interface-name.unit-number</i> —Interface name. Include the logical portion of the name, which corresponds to the logical unit number.
<b>Usage Guidelines</b>	See “Configure Layer 2 Switching Cross-Connects” on page 161.
<b>Required Privilege Level</b>	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration

## lsp-switch

<b>Syntax</b>	lsp-switch <i>connection-name</i> { transmit-lsp <i>label-switched-path</i> ; receive-lsp <i>label-switched-path</i> ; }
<b>Hierarchy Level</b>	[edit protocols connections]
<b>Description</b>	Configure Layer 2 switching cross-connects.
<b>Options</b>	receive-lsp <i>label-switched-path</i> —Name of the LSP from the connection’s source.  transmit-lsp <i>label-switched-path</i> —Name of the LSP to the connection’s destination.
<b>Usage Guidelines</b>	See “CCC Overview” on page 159 and “Configure LSP Stitching Cross-Connects” on page 170.
<b>Required Privilege Level</b>	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

## remote-interface-switch

**Syntax** remote-interface-switch *connection-name* {  
 interface *interface-name.unit-number*;  
 transmit-lsp *label-switched-path*;  
 receive-lsp *label-switched-path*;  
 }

**Hierarchy Level** [edit protocols connections]

**Description** Configure MPLS LSP tunnel cross-connects.

**Options** interface *interface-name.unit-number*—Interface name. Include the logical portion of the name, which corresponds to the logical unit number.

receive-lsp *label-switched-path*—Name of the LSP from the connection's source.

transmit-lsp *label-switched-path*—Name of the LSP to the connection's destination.

**Usage Guidelines** See “CCC Overview” on page 159 and “Configure MPLS LSP Tunnel Cross-Connects” on page 165.

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