



## Preface

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This preface explains the objectives, intended audience, and organization of *Cisco Carrier Routing System 16-Slot Line Card Chassis Enhanced Router Installation Guide* and describes the conventions that convey instructions and other information.

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## Audience

This guide is intended for line card chassis installers and Cisco installation partners who are responsible for installing the Cisco CRS Series Enhanced 16-Slot Line Card Chassis components. The chassis installers are expected to have installed networking hardware in the past. No additional knowledge of routing or the Cisco IOS XR software is assumed.

## Documentation Conventions

This document uses the following conventions:

Convention	Description
<b>bold</b> font	Commands and keywords and user-entered text appear in <b>bold</b> font.
<i>Italic</i> font	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.
[ ]	Elements in square brackets are optional.
{x   y   z}	Required alternative keywords are grouped in braces and separated by vertical bars.

Convention	Description
[x   y   z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
courier font	Terminal sessions and information the system displays appear in <code>courier</code> font.
	Indicates a variable for which you supply values, in context where italics cannot be used.
<>	Nonprinting characters such as passwords are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

**Note**

*Means reader take note.* Notes contain helpful suggestions or references to material not covered in the manual.

**Tip**

*Means the following information will help you solve a problem.* The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

**Caution**

*Means reader be careful.* In this situation, you might perform an action that could result in equipment damage or loss of data.

**Warning**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

**SAVE THESE INSTRUCTIONS****Warning**

Statements using this symbol are provided for additional information and to comply with regulatory and customer requirements.

# Related Documentation

For complete planning, installation, and configuration information, refer to the following documents:

- [Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Unpacking, Moving, and Securing Guide](#)
- [Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Site Planning Guide](#)
- [Cisco CRS Carrier Routing System 16-Slot Line Card Chassis System Description](#)
- [Cisco CRS 3-Phase AC Power Distribution Unit Installation Guide](#)
- [Cisco CRS Fiber-Optic Cleaning Kit Quick Start Guide](#)
- [Cisco CRS Carrier Routing System Hardware Documentation Guide](#)
- [Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Hardware Operations and Troubleshooting Guide](#)
- [Cisco CRS Carrier Routing System Regulatory Compliance and Safety Information](#)
- [Cisco CRS Carrier Routing System Ethernet Physical Layer Interface Module Installation Note](#)
- [Cisco CRS Carrier Routing System Packet-over-SONET/SDH Physical Layer Interface Module Installation Note](#)

For a complete listing of software documentation available, refer to *About Cisco IOS XR Software Documentation*, available online at

[http://cisco.com/en/US/products/ps5763/tsd\\_products\\_support\\_series\\_home.html](http://cisco.com/en/US/products/ps5763/tsd_products_support_series_home.html)

# Changes to This Document

The table lists the technical changes made to this document since it was first printed.

**Table 1: Changes to This Document**

Date	Change Summary
July 2014	Added support for new 2x100GE-FLEX-40 PLIM. Added updates to support the Cisco CRS-X 400G back-to-back and multishelf systems, which include new CRS-16-FC400/M switch fabric cards.
January 2014	Added updates to support the Cisco CRS-X, which includes new line cards, switch fabric cards, and PLIMs.
November 2013	Updates to procedures, specifications, and illustrations.
May 2012	Updates to procedures, specifications, and illustrations.

Date	Change Summary
October 2011	Initial release of the document.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*, at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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