# Preface

This preface contains the following sections:

## Objective

This guide describes how to interconnect the two 8-slot chassis that comprise the CRS Back-to-Back System . This guide supplements other chassis documentation, such as site planning and installation documents.

## Audience

This guide is written for hardware installers and system administrators of Cisco routers.

This publication assumes that the user has a substantial background in installing and configuring router and switch-based hardware. The reader should also be familiar with electronic circuitry and wiring practices, and have experience as an electronic or electromechanical technician.

## Changes to This Document

This table lists the technical changes to this document since it was first released.

**Table 1: Changes to This Document**

| Date | Change Summary |
|---|---|
| January 2014 | Added chapter with procedures for upgrading from Cisco IOS-XR release 5.1.1 or later. |
| May 2013 | Initial release of this document. |

# Document Organization

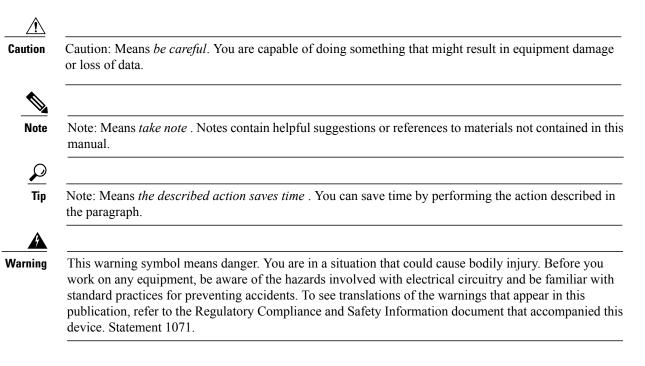This guide includes the following sections:

| Section | Title | Description |
|---|---|---|
| 1 | Introduction to the CRS Back-to-Back System | Provides an overview of the CRS Back-to-Back System and describes what is required to interconnect system components. |
| 2 | Cabling for System Management, Alarms, and Network Clocking | Provides information about how to provide cabling for basic system management. |
| 3 | Cabling the CRS Back-to-Back System | Describes how to physically cable the fabric planes between chassis in a Back-to-Back system |
| 4 | Upgrading to a CRS Back-to-Back System Using Cisco IOS-XR 4.3.1 or Earlier | Describes how to upgrade a single-chassis Cisco CRS-1 or Cisco CRS-3 to a CRS Back-to-Back System using Cisco IOS-XR version 4.3.1 or earlier. |
| 5 | Upgrading to a CRS Back-to-Back System Using Cisco IOS-XR 5.1.1 or Later | Describes how to upgrade a single-chassis Cisco CRS-3 to a CRS Back-to-Back System using Cisco IOS-XR version 5.1.1 or later. |

# Document Conventions

This document uses the following conventions:

**Caution** Caution: Means *be careful*. You are capable of doing something that might result in equipment damage or loss of data.

**Note** Note: Means *take note* . Notes contain helpful suggestions or references to materials not contained in this manual.

**Tip** Note: Means *the described action saves time* . You can save time by performing the action described in the paragraph.

**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. To see translations of the warnings that appear in this publication, refer to the Regulatory Compliance and Safety Information document that accompanied this device. Statement 1071.

### Understanding Warning Statement Numbers

Each Warning in this guide contains a Statement Number. For example, the previous warning is Statement 1071. The *Regulatory Compliance and Safety Information for the Cisco CRS-1 Carrier Routing System* booklet contains translations of every warning that appears in this guide. The compliance and safety booklet shipped with your chassis. The booklet lists translated warnings in numerical sequence, by statement number.

# Related Cisco CRS Documentation

This section refers you to other documentation that contains complete planning, installation, and configuration information.

The documentation listed below is available online.

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Site Planning Guide*

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Installation Guide*

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Unpacking, Moving, and Securing Guide*

- *Regulatory Compliance and Safety Information for the Cisco CRS Carrier Routing System*

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Enhanced Router Site Planning Guide*

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Enhanced Router Installation Guide*

- *Cisco CRS Carrier Routing System 16-Slot Line Card Chassis Enhanced Router Unpacking, Moving, and Securing Guide*

- *Cisco CRS-1 Carrier Routing System Fiber-Optic Cleaning Guide*

# Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation* , which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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