



## Preface

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This preface describes who should read the *Cisco 7600 Series Router Installation Guide*, how it is organized, and its document conventions.



### Note

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This publication describes the following Cisco 7600 series routers:

- Cisco 7603 router—CISCO7603
- Cisco 7603-S router—CISCO7603-S
- Cisco 7604 router—CISCO7604
- Cisco 7606 router—CISCO7606
- Cisco 7606-S router—CISCO7606-S
- Cisco 7609 router—CISCO7609
- Cisco 7609-S router—CISCO7609-S
- Cisco 7613 router—CISCO7613

Information on the Cisco 7609 Router (product number OSR-7609) is in the *Cisco 7609 Router Installation Guide*, located at this URL:

<http://www.cisco.com/univercd/cc/td/doc/product/core/cis7600/hardware/osrouter/index.htm>

## Document Revision History

Revision	Date	Change Summary
OL-4503-26	January 2011	<ul style="list-style-type: none"><li>• Added chassis air flow requirements in <a href="#">Chapter 5, “Removal and Replacement Procedures.”</a></li></ul>
OL-4503-26	October 2010	<ul style="list-style-type: none"><li>• Added new troubleshooting information in <a href="#">Chapter 4, “Troubleshooting.”</a></li></ul>
OL-4503-25	July 2010	<ul style="list-style-type: none"><li>• Added clearance guidelines when planning to install or remove power supplies, at the rear of the Cisco 7606, Cisco 7606-S and Cisco 7604 routers, in <a href="#">“Clearance Guidelines” section on page 2.</a></li></ul>
OL-4503-25	April 2010	<ul style="list-style-type: none"><li>• Update configuration information about dynamic config Manager a 7606S Chassis with mixed Mode AC and DC.</li></ul>

Revision	Date	Change Summary
OL-4503-25	March 2010	<ul style="list-style-type: none"> <li>• Add information about cable management system in c7609 and c7609-S routers.</li> </ul>
OL-4503-25	February 2010	<ul style="list-style-type: none"> <li>• Added the section ‘Identifying Chassis Version in the Supported Line Card’ in Appendix E.</li> </ul>
OL-4503-25	January 2010	<ul style="list-style-type: none"> <li>• Added the Supported line cards in 7600 Chasis table 2-1 in Chapter 2.</li> </ul>
OL-4503-25	November 2009	<ul style="list-style-type: none"> <li>• Added 7606-C Dc power supply details in Chapter 5, Appendix A, and Appendix E.</li> </ul>
OL-4503-24	October 2008	<ul style="list-style-type: none"> <li>• Updated heat and power dissipation numbers in Chapter 2.</li> </ul>
OL-4503-23	June 2007	<ul style="list-style-type: none"> <li>• Added Cisco 7603-S router</li> <li>• Added Cisco 7606-S router</li> <li>• Added 1500 W DC input (PWR-1500-DC) power supply</li> </ul>
OL-4503-22	February 2007	<ul style="list-style-type: none"> <li>• Added Route Switch Processor 720 (RSP720)</li> <li>• Added Cisco 7609-S router</li> <li>• Added 6000 W DC input (PWR-6000-DC) power supply</li> </ul>
OL-4503-21	December 2005	<ul style="list-style-type: none"> <li>• Updated PWR-2700-DC/4 Power Supply information in <a href="#">Removing and Replacing the Power Supply</a> in Chapter 5.</li> <li>• Added acoustical noise information to Appendix A.</li> </ul>
OL-4503-20	December 2005	<ul style="list-style-type: none"> <li>• Added Supervisor Engine 32</li> <li>• Added 19" rack information to <a href="#">Installing the Chassis Brackets</a> in Chapter 3.</li> </ul>
OL-4503-19	September 2005	<ul style="list-style-type: none"> <li>• Added new cable information to <a href="#">2700 W Power Supply (PWR-2700-AC)</a> in Chapter 2.</li> </ul>
OL-4503-18	April 2005	<ul style="list-style-type: none"> <li>• Added PWR-2700-AC/4 for Cisco 7604.</li> </ul>
OL-4503-17	April 2005	<ul style="list-style-type: none"> <li>• Added 6000 W AC input (WS-CAC-6000W ) information to Chapters 1, 2, and 5, and to Appendix A.</li> <li>• Added Cisco 7604 router information to Chapters 1, 2, 3, and 5, and to Appendix A.</li> <li>• Added 2700 W DC input (PWR-2700-DC) information to Chapters 1, 2, and 5, and to Appendix A.</li> </ul>
OL-4503-16	January 2005	<ul style="list-style-type: none"> <li>• Added CAB-AC16A-CH for the 1400 W Power Supply (PWR-1400-AC) and the 3000 W Power Supply (WS-CAC-3000W) in Table 2-5.</li> <li>• Added 2700 W AC input (PWR-2700-AC) information to Chapters 1, 2, and 5, and to Appendix A.</li> </ul>
OL-4503-15	November 2004	<ul style="list-style-type: none"> <li>• Added CAB-ACS-10= for the 1400 W Power Supply (PWR-1400-AC=) in Table 2-5.</li> </ul>
OL-4503-14	November 2004	<ul style="list-style-type: none"> <li>• Updated 4000 W DC-input power supply terminal block lug information in Chapter 5.</li> </ul>
OL-4503-13	September 2004	<ul style="list-style-type: none"> <li>• Changed system grounding note in Chapter 3.</li> </ul>

Revision	Date	Change Summary
OL-4503-12	August 2004	<ul style="list-style-type: none"> <li>Added DWDM information to Appendix B.</li> </ul>
OL-4503-11	July 2004	<ul style="list-style-type: none"> <li>Initiated Document Revision History in Preface.</li> <li>Added 1400 W AC and 3000 W AC power supplies to Chapters 1, 2, and 5, and Appendix A.</li> <li>Added information on cleaning optical interfaces to Chapter 3 and to Appendix B.</li> <li>Added notes to 4000 W DC power supply section concerning the amount of space necessary to install power cables and the amount of torque necessary for tightening terminal nuts to Chapter 5.</li> <li>Added Appendix D for configuration register information.</li> <li>Added power supply and PEM table to Chapter 1.</li> </ul>

## Audience

Only trained and qualified service personnel (as defined in IEC 60950 and AS/NZS3260) should install, replace, or service the equipment described in this publication.

## Organization

This publication is organized as follows:

Chapter	Title	Description
Chapter 1	<a href="#">Product Overview</a>	Describes and lists the hardware features and functionality of the Cisco 7600 series routers.
Chapter 2	<a href="#">Preparing for Installation</a>	Describes how to prepare your site for the installation of the Cisco 7600 series routers.
Chapter 3	<a href="#">Installing the Cisco 7600 Series Router</a>	Describes how to install your Cisco 7600 series router.
Chapter 4	<a href="#">Troubleshooting</a>	Provides troubleshooting guidelines for the initial hardware installation and suggests steps to help isolate and resolve problems.
Chapter 5	<a href="#">Removal and Replacement Procedures</a>	Provides procedures for removing and installing chassis components.
Appendix A	<a href="#">Technical Specifications</a>	Lists the Cisco 7600 series router system specifications.
Appendix B	<a href="#">Connector and Cable Specifications</a>	Describes the connectors and cables used with the Cisco 7600 series routers.
Appendix C	<a href="#">Repacking the Cisco 7600 Series Router</a>	Provides procedures to repack your Cisco 7600 series router if you have to return it to the factory.

# Conventions

Notes use the following conventions:



**Note**

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

Cautions use the following conventions:



**Caution**

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

Warnings use the following conventions:



**Warning**

## **IMPORTANT SAFETY INSTRUCTIONS**

**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**

**Waarschuwing**

## **BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

**Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van de standaard praktijken om ongelukken te voorkomen. Gebruik het nummer van de verklaring onderaan de waarschuwing als u een vertaling van de waarschuwing die bij het apparaat wordt geleverd, wilt raadplegen.**

### **BEWAAR DEZE INSTRUCTIES**

**Varoitus**

## **TÄRKEITÄ TURVALLISUUSOHJEITA**

**Tämä varoitusmerkki merkitsee vaaraa. Tilanne voi aiheuttaa ruumiillisia vammoja. Ennen kuin käsittelet laitteistoa, huomioi sähköpiirien käsittelemiseen liittyvät riskit ja tutustu onnettomuuksien yleisiin ehkäisytapoihin. Turvallisuusvaroitusten käännökset löytyvät laitteen mukana toimitettujen käännettyjen turvallisuusvaroitusten joukosta varoitusten lopussa näkyvien lausuntonumeroiden avulla.**

### **SÄILYTÄ NÄMÄ OHJEET**

**Attention      IMPORTANTES INFORMATIONS DE SÉCURITÉ**

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

**CONSERVEZ CES INFORMATIONS****Warnung      WICHTIGE SICHERHEITSHINWEISE**

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

**BEWAHREN SIE DIESE HINWEISE GUT AUF.****Avvertenza      IMPORTANTI ISTRUZIONI SULLA SICUREZZA**

Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di intervenire su qualsiasi apparecchiatura, occorre essere al corrente dei pericoli relativi ai circuiti elettrici e conoscere le procedure standard per la prevenzione di incidenti. Utilizzare il numero di istruzione presente alla fine di ciascuna avvertenza per individuare le traduzioni delle avvertenze riportate in questo documento.

**CONSERVARE QUESTE ISTRUZIONI****Advarsel      VIKTIGE SIKKERHETSINSTRUKSJONER**

Dette advarselssymbolet betyr fare. Du er i en situasjon som kan føre til skade på person. Før du begynner å arbeide med noe av utstyret, må du være oppmerksom på farene forbundet med elektriske kretser, og kjenne til standardprosedyrer for å forhindre ulykker. Bruk nummeret i slutten av hver advarsel for å finne oversettelsen i de oversatte sikkerhetsadvarslene som fulgte med denne enheten.

**TA VARE PÅ DISSE INSTRUKSJONENE**

**Aviso INSTRUÇÕES IMPORTANTES DE SEGURANÇA**

Este símbolo de aviso significa perigo. Você está em uma situação que poderá ser causadora de lesões corporais. Antes de iniciar a utilização de qualquer equipamento, tenha conhecimento dos perigos envolvidos no manuseio de circuitos elétricos e familiarize-se com as práticas habituais de prevenção de acidentes. Utilize o número da instrução fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham este dispositivo.

**GUARDE ESTAS INSTRUÇÕES****¡Advertencia! INSTRUCCIONES IMPORTANTES DE SEGURIDAD**

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

**GUARDE ESTAS INSTRUCCIONES****Varning! VIKTIGA SÄKERHETSANVISNINGAR**

Denna varningssignal signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanliga förfaranden för att förebygga olyckor. Använd det nummer som finns i slutet av varje varning för att hitta dess översättning i de översatta säkerhetsvarningar som medföljer denna anordning.

**SPARA DESSA ANVISNINGAR****FONTOS BIZTONSÁGI ELOÍRÁSOK**

Ez a figyelmeztető jel veszélyre utal. Sérülésveszélyt rejtő helyzetben van. Mielőtt bármely berendezésen munkát végezte, legyen figyelemmel az elektromos áramkörök okozta kockázatokra, és ismerkedjen meg a szokásos balesetvédelmi eljárásokkal. A kiadványban szereplő figyelmeztetések fordítása a készülékhez mellékelte biztonsági figyelmeztetések között található; a fordítás az egyes figyelmeztetések végén látható szám alapján kereshető meg.

**ORIZZE MEG EZEKET AZ UTASÍTÁSOKAT!****Предупреждение ВАЖНЫЕ ИНСТРУКЦИИ ПО СОБЛЮДЕНИЮ ТЕХНИКИ БЕЗОПАСНОСТИ**

Этот символ предупреждения обозначает опасность. То есть имеет место ситуация, в которой следует опасаться телесных повреждений. Перед эксплуатацией оборудования выясните, каким опасностям может подвергаться пользователь при использовании электрических цепей, и ознакомьтесь с правилами техники безопасности для предотвращения возможных несчастных случаев. Воспользуйтесь номером заявления, приведенным в конце каждого предупреждения, чтобы найти его переведенный вариант в переводе предупреждений по безопасности, прилагаемом к данному устройству.

**СОХРАНИТЕ ЭТИ ИНСТРУКЦИИ**

**警告** 重要的安全性说明

此警告符号代表危险。您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾提供的声明号码来找到此设备的安全性警告说明的翻译文本。

请保存这些安全性说明

**警告** 安全上的重要注意事项

「危険」の意味です。人身事故を予防するための注意事項が記述されています。装置の取り扱い作業を行うときは、電気回路の危険性に注意し、一般的な事故防止策に留意してください。警告の各国語版は、各注意事項の番号を基に、装置に付属の「Translated Safety Warnings」を参照してください。

これらの注意事項を保管しておいてください。

## Related Documentation

For additional information on the Cisco 7600 series router, refer to these publications:

- *Regulatory Compliance and Safety Information for the Cisco 7600 Series routers*
- *Cisco 7609 router Installation Guide*
- *Cisco 7600 Series Internet Router Module Installation Guide*
- *Cisco 7600 Series Internet Router Quick Software Configuration Guide*
- *Cisco 7600 Series Internet Router Software Configuration Guide*
- *Cisco 7600 Series Internet Router IOS Command Reference*
- *Cisco 7600 Series Internet Router IOS System Message Guide*
- *Cisco 7600 Series Internet Router IOS Software Configuration Guide*
- *Cisco 7600 Series Internet Router IOS Command Reference*
- *Cisco 7600 Series Internet Router IOS System Message Guide*
- For information about MIBs, refer to <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

## 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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