



# Cisco Service and Application Module for IP Memory Upgrade Installation Note

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**Product number:**  
**MEM-SAMI-6P-2GB(=)**

This installation note provides procedures for upgrading the dual inline memory modules (DIMM) memory of the six Power Processors (PPCs) on a Cisco Service and Application Module for IP (SAMI).



**Note**

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For details about whether the Cisco SAMI 2 GB DIMM memory option is supported by the Cisco mobile wireless application running on the Cisco SAMI processors, refer to the release notes for that mobile wireless application.

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# Safety Guidelines

Following are safety guidelines that you should follow when working with any equipment that connects to electrical power or telephone wiring.



Warning

**Only trained and qualified personnel should be allowed to install, replace, or service this equipment. To see translations of the warnings that appear in this publication, refer to the “Translated Safety Warnings” section on page 11 section in this document.**

## Safety Warnings

Safety warnings appear throughout this publication in procedures that, if performed incorrectly, may harm you. A warning symbol precedes each warning statement.



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 “Translated Safety Warnings” section on page 11 section in this document.**



Warning

**Before you install, operate, or service the system, read the *Site Preparation and Safety Guide*. This guide contains important safety information you should know before working with the system. To see translations of the warnings that appear in this publication, refer to the “Translated Safety Warnings” section on page 11 section in this document.**



Warning

**Only trained and qualified personnel should be allowed to install, replace, or service this equipment. To see translations of the warnings that appear in this publication, refer to the “Translated Safety Warnings” section on page 11 section in this document.**

## Electrical Equipment Guidelines

Follow these basic guidelines when working with any electrical equipment:

- Before beginning any procedures requiring access to the chassis interior, locate the emergency power-off switch for the room in which you are working.
- Disconnect all power and external cables before moving a chassis.
- Do not work alone when potentially hazardous conditions exist.
- Never assume that power has been disconnected from a circuit; always check.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Carefully examine your work area for possible hazards such as moist floors, ungrounded power extension cables, and missing safety grounds.

## Preventing Electrostatic Discharge Damage

Electrostatic discharge (ESD) damage, which can occur when electronic cards or components are improperly handled, results in complete or intermittent failures. Port adapters and processor modules consist of printed circuit boards that are fixed in metal carriers. Electromagnetic interference (EMI) shielding and connectors are integral components of the carrier. Although the metal carrier helps to protect the board from ESD, use a preventive antistatic strap during handling.

Following are guidelines for preventing ESD damage:

- Always use an ESD wrist or ankle strap and ensure that it makes good skin contact.
- Connect the equipment end of the strap to an unfinished chassis surface.
- When installing a component, use any available ejector levers or captive installation screws to properly seat the bus connectors in the backplane or midplane. These devices prevent accidental removal, provide proper grounding for the system, and help to ensure that bus connectors are properly seated.
- When removing a component, use any available ejector levers or captive installation screws to release the bus connectors from the backplane or midplane.
- Handle carriers by available handles or edges only; avoid touching the printed circuit boards or connectors.
- Place a removed component board-side-up on an antistatic surface or in a static shielding container. If you plan to return the component to the factory, immediately place it in a static shielding container.
- Avoid contact between the printed circuit boards and clothing. The wrist strap only protects components from ESD voltages on the body; ESD voltages on clothing can still cause damage.
- Never attempt to remove the printed circuit board from the metal carrier.

**Caution**

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For safety, periodically check the resistance value of the antistatic strap. The measurement should be between 1 and 10 megohms.

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## Required Tools

These tools are required to upgrade the memory module on the Cisco SAMI PPCs:

- Antistatic mat or antistatic foam
- Your own ESD-prevention equipment or the disposable grounding wrist strap included with all upgrade kits, field-replaceable units (FRUs), and spares

**Caution**

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Always use an ESD wrist strap when handling modules or coming into contact with internal components.

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The software is delivered as a bundle of images for the Cisco SAMI base card its components (for example, the line control processor [LCP] and daughter cards). The images are loaded onto the appropriate component automatically when the new software image is loaded. Each image in the bundle has its own version and release number that is used during the upgrade process to determine if an image needs to be installed.

To verify the software currently running on the Cisco SAMI supports the 2 GB memory upgrade option, refer to the Cisco mobile wireless application release notes. If the bundle does not support the memory upgrade, use the following procedure to upgrade the software.

	Command	Purpose
Step 1	Sup> <b>enable</b>	Enters privileged EXEC mode.
Step 2	Sup# <b>upgrade hw-module slot slot_num software url/filename</b>	Copies the bundle from the specified URL to the compact flash on the SAMI in the specified slot and sets the initialization parameters.
Step 3	Sup# <b>hw-module module slot_num reset</b>	Reloads the entire SAMI (turns the power off and then on) from the new source file. <b>Note</b> The SAMI automatically boots from the new source file.
Step 4	Sup# <b>show upgrade software progress</b>	Displays status of the image upgrades that are occurring.

For example, to upgrade the image bundle on a SAMI in slot 2 of a Cisco 7600 series router chassis, enter the following commands from the supervisor engine.

```
Sup> enable

Sup# upgrade hw-module slot 2 software tftp://10.1.1.1/c7svcsami-ipbase-mz.bouncer.070724

Loading c7svcsami-ipbase-mz.bouncer.070724 from <TFTP SERVER IPADDRESS> (via Vlan10):
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
[OK - 34940891 bytes]

Sup# hw-module module 2 reset
Proceed with reload of module?[confirm]
% reset issued for module 2
Sup#

Sup# show upgrade software progress
Slot      Software File
9         c7svcsami-ipbase-mz.bouncer.070724
```

When an upgrade is initiated using the **upgrade hw-module** command, many processes occur automatically, including configuring the SAMI to automatically boot using the new image.



**Note** The Cisco SAMI will automatically boot from the new source file.

## Upgrading the Cisco SAMI Memory

This section provides the procedures for removing and replacing the memory on the Cisco SAMI PPCs.

The synchronous dynamic RAM (SDRAM) on the Cisco SAMI PPC is contained in one dual inline memory module (DIMM). (See [Figure 1](#).)

The Cisco SAMI has a default memory configuration of 1 GB, and is upgradable to 2 GB.



**Caution** To prevent ESD damage, handle the DIMM by the card edges only. (See [Figure 3](#).) Place the removed DIMM on an antistatic mat or store it in an antistatic container.

## Removing the PCC DIMM



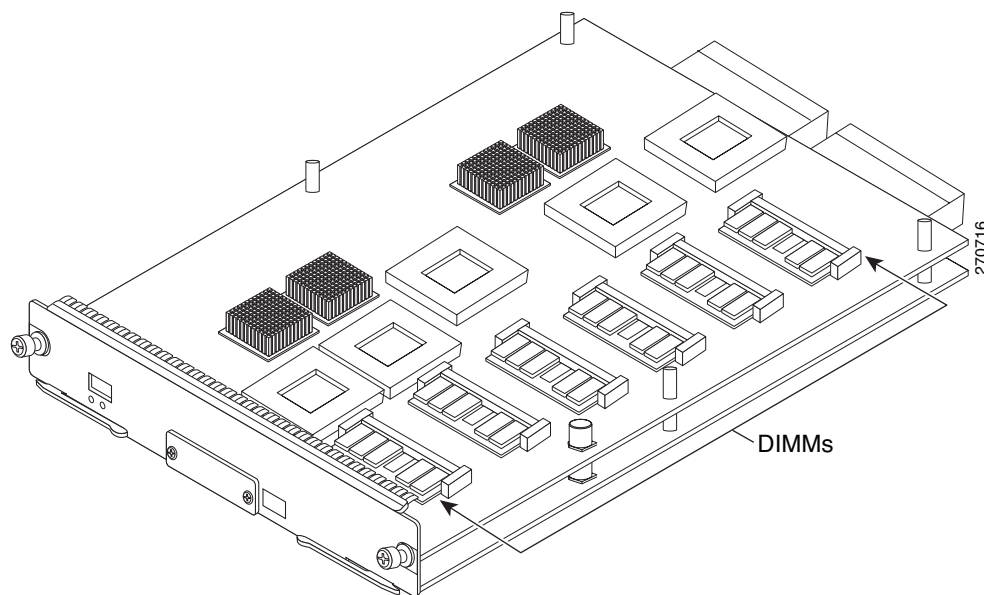
### Warning

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.

To remove the existing 1 GB DIMM, follow these steps:

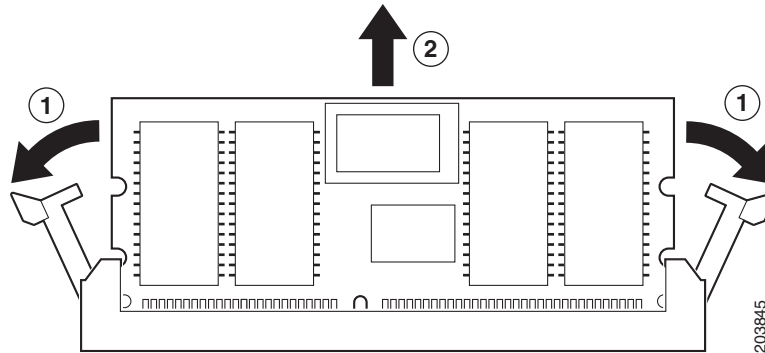
- Step 1** Make sure you take the necessary precautions to prevent ESD damage. (See the [“Preventing Electrostatic Discharge Damage”](#) section on page 3.)
- Step 2** Remove the Cisco SAMI from the system. (Refer to the *Cisco Service and Application Module for IP User Guide* for removal instructions.)
- Step 3** Place the Cisco SAMI on an antistatic mat or pad.
- Step 4** Locate the DIMM. The six DIMMs are located side-by-side on the right side of the board. (See [Figure 1.](#))

**Figure 1** Cisco SAMI PPC DIMMs



- Step 5** Pull the latches away from the DIMM at both ends and release the DIMM from the socket. (See [Figure 2](#)).

**Figure 2** Releasing the DIMM Latches



- Step 6** When both ends of the DIMM are released from the socket, grasp the ends of the DIMM with your thumb and forefinger and pull the DIMM completely out of the socket.  
Handle the edges of the DIMM only; avoid touching the memory modules, pins, or traces (the metal *fingers* along the connector edge of the DIMM), along the connector edge.
- Step 7** Place the DIMM in an antistatic container to protect it from ESD damage.
- Step 8** Repeat [Step 5](#) through [Step 7](#) to remove each of the six PPC DIMMs.

This completes the DIMM removal procedure. Proceed to the [“Installing a New PPC DIMM”](#) section on [page 6](#) to install the new DIMM.

## Installing a New PPC DIMM

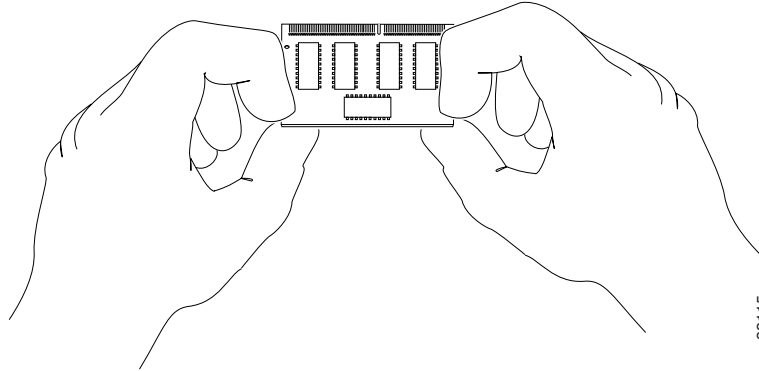
  
**Caution**

DIMMs are sensitive components that are susceptible to ESD damage. Handle DIMMs by the edges only; avoid touching the memory modules, pins, or traces (the metal *fingers* along the connector edge of the DIMM). (See [Figure 3](#).)

  
**Caution**

To prevent ESD damage, handle DIMMs as shown in [Figure 3](#).

**Figure 3 Handling a DIMM**



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Follow these steps to install the new DIMM:

- 
- Step 1** Make sure that both latches on the DIMM connector are open.
  - Step 2** Remove a new DIMM from the antistatic container.  
The DIMM is designed in such a way that the connector will fit only one way.
  - Step 3** Hold the DIMM component side up, with the connector edge away from you. Line up the notch in the connector traces with the notch in the socket on the board.
  - Step 4** Carefully insert the connector edge into the socket and firmly press the DIMM into the socket until both latches rotate to the close position against the DIMM.



**Caution**

When inserting DIMMs, use firm but not excessive pressure. If you damage a socket, you will have to return the Cisco SAMI to the factory for repair.



**Note**

The space between the first DIMM and the module face plate is narrow. Therefore, the installation of the first DIMM is more difficult than the others. When installing the first DIMM, ensure that you carefully apply enough pressure to push the DIMM into place.

- Step 5** Repeat [Step 1](#) through [Step 4](#) to install each of the DIMMs.
- Step 6** Reinstall the Cisco SAMI in the system. (Refer to the *Cisco Service and Application Module for IP User Guide* for installation instructions.)

## Verifying the Memory Upgrade

You can verify that the memory upgrade has been completed successfully from the supervisor console or from a Cisco SAMI PPC console.

### Verifying from the PPC

To verify that the memory upgrade on a PPC has been completed successfully, establish a session to each PPC and issue the **show version** command in privileged EXEC mode:

```
Router#show version
Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version
12.4(20080306:102145) [sami_ggsn_r8_0.nightly 108]
Copyright (c) 1986-2008 by Cisco Systems, Inc.
Compiled Thu 06-Mar-08 05:42 by
ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT
SOFTWARE
router uptime is 2 days, 19 hours, 40 minutes
System returned to ROM by SUP request
System image file is "c7svcsami-g8is-mz.GGSN_R8_0_NIGHTLY.03_05_20"
Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of
memory.
Processor board ID SAD113000GB
FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache
1 Gigabit Ethernet interface
65536K bytes of processor board system flash (AMD S29GL256N)
Configuration register is 0x2102
Router#
```

### Verifying from the Supervisor

To verify that the memory upgrade has been completed successfully on all PPCs when using the Remote Console and Logging (RCAL) feature, issue the **execute-on RCAL** command from the supervisor and specify **show version**:

```
Sup# execute-on 3 all-ppc show version
----- Slot 3/CPU 3, show version -----
Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version
12.4(20080306:102145) [sami_ggsn_r8_0.nightly 108]
Copyright (c) 1986-2008 by Cisco Systems, Inc.
Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT
SOFTWARE

PPC0-3-3 uptime is 1 week, 6 days, 21 hours, 30 minutes
System returned to ROM by SUP request
System image file is "c7svcsami-g8is-mz.GGSN_R8_0_NIGHTLY.03_05_200"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of
memory.
Processor board ID SAD113000GB
FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache
```

1 Gigabit Ethernet interface  
65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

----- Slot 3/CPU 4, show version -----

Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version  
12.4(20080306:102145) [sami\_ggsn\_r8\_0.nightly 108]  
Copyright (c) 1986-2008 by Cisco Systems, Inc.  
Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT  
SOFTWARE

PPC-3-4 uptime is 1 week, 6 days, 21 hours, 30 minutes  
System returned to ROM by SUP request  
System image file is "c7svcsami-g8is-mz.GGSN\_R8\_0\_NIGHTLY.03\_05\_2"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of  
memory.

Processor board ID SAD113000GB  
FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache  
1 Gigabit Ethernet interface  
65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

----- Slot 3/CPU 5, show version -----

Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version  
12.4(20080306:102145) [sami\_ggsn\_r8\_0.nightly 108]  
Copyright (c) 1986-2008 by Cisco Systems, Inc.  
Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT  
SOFTWARE

PPC-3-5 uptime is 1 week, 6 days, 21 hours, 30 minutes  
System returned to ROM by SUP request  
System image file is "c7svcsami-g8is-mz.GGSN\_R8\_0\_NIGHTLY.03\_05\_200"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of  
memory.

Processor board ID SAD113000GB  
FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache  
1 Gigabit Ethernet interface  
65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

----- Slot 3/CPU 6, show version -----

Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version  
12.4(20080306:102145) [sami\_ggsn\_r8\_0.nightly 108]  
Copyright (c) 1986-2008 by Cisco Systems, Inc.  
Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT  
SOFTWARE

PPC-3-6 uptime is 1 week, 6 days, 21 hours, 30 minutes  
System returned to ROM by SUP request  
System image file is "c7svcsami-g8is-mz.GGSN\_R8\_0\_NIGHTLY.03\_05\_200"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of memory.

Processor board ID SAD113000GB  
 FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache  
 1 Gigabit Ethernet interface  
 65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

----- Slot 3/CPU 7, show version -----  
 Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version  
 12.4(20080306:102145) [sami\_ggsn\_r8\_0.nightly 108]  
 Copyright (c) 1986-2008 by Cisco Systems, Inc.  
 Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT SOFTWARE

PPC-3-7 uptime is 1 week, 6 days, 21 hours, 30 minutes  
 System returned to ROM by SUP request  
 System image file is "c7svcsami-g8is-mz.GGSN\_R8\_0\_NIGHTLY.03\_05\_200"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of memory.

Processor board ID SAD113000GB  
 FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache  
 1 Gigabit Ethernet interface  
 65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

----- Slot 3/CPU 8, show version -----  
 Cisco IOS Software, SAMI Software (SAMI-G8IS-M), Experimental Version  
 12.4(20080306:102145) [sami\_ggsn\_r8\_0.nightly 108]  
 Copyright (c) 1986-2008 by Cisco Systems, Inc.  
 Compiled Thu 06-Mar-08 05:42

ROM: System Bootstrap, Version 12.3(20071010:141136) [bouncer-gbit 103], DEVELOPMENT SOFTWARE

PPC-3-8 uptime is 1 week, 6 days, 21 hours, 30 minutes  
 System returned to ROM by SUP request  
 System image file is "c7svcsami-g8is-mz.GGSN\_R8\_0\_NIGHTLY.03\_05\_200"

Cisco Systems, Inc. SAMI (MPC8500) processor (revision 2.1) with 2031616K/65536K bytes of memory.

Processor board ID SAD113000GB  
 FS8548H CPU at 1250MHz, Rev 2.0, 512KB L2 Cache  
 1 Gigabit Ethernet interface  
 65536K bytes of processor board system flash (AMD S29GL256N)

Configuration register is 0x2102

Sup#

For information on establishing a session with a Cisco SAMI PPC and using RCAL, see the *Cisco Service and Application Module for IP User Guide*.

# Translated Safety Warnings

## Warning Definition



**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 "Translated Safety Warnings" section in this document.

**Waarschuwing**

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 standaard maatregelen om ongelukken te voorkomen. Voor vertalingen van de waarschuwingen die in deze publicatie verschijnen, kunt u het gedeelte "Translated Safety Warnings" (Vertalingen van veiligheidsvoorschriften) raadplegen in dit document.

**Varoitus**

Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista. Tässä julkaisussa esiintyvien varoitusten käännökset löydät tämän asiakirjan "Translated Safety Warnings" (käännetyt turvallisuutta koskevat varoitukset).

**Attention**

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions d'avertissements figurant dans cette publication, consultez la section « Translated Safety Warnings » (Traduction des avis de sécurité) de ce document.

**Warnung**

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewußt. Übersetzungen der in dieser Veröffentlichung enthaltenen Warnhinweise finden Sie im Abschnitt "Translated Safety Warnings" (Übersetzung der Warnhinweise) in diesem Dokument.

**Avvertenza**

Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti. La traduzione delle avvertenze riportate in questa pubblicazione si trova nella documento "Translated Safety Warnings" (Traduzione delle avvertenze di sicurezza) nel presente documento.

**Advarsel**

Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker. Hvis du vil se oversettelser av de advarslene som finnes i denne publikasjonen, kan du se i avsnittet "Translated Safety Warnings" [Oversatte sikkerhetsadvarslar] i dette dokumentet.

Aviso	Este símbolo de aviso indica peligro. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes. Para ver as traduções dos avisos que constam desta publicação, consulte a secção "Translated Safety Warnings" - "Traduções dos Avisos de Segurança" neste documento.
¡Advertencia!	Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes. Para ver una traducción de las advertencias que aparecen en esta publicación, consultar la sección titulada "Translated Safety Warnings" que aparece en este documento.
Varning!	Denna varningssymbol 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 vanligt förfarande för att förebygga skador. Om du vill se översättningar av de varningar som visas i denna publikation, se avsnittet "Translated Safety Warnings" [Översatta säkerhetsvarningar] i detta dokument.

## Safety Information Referral Warning



### Warning

Before you install, operate, or service the system, read the *Site Preparation and Safety Guide*. This guide contains important safety information you should know before working with the system.

### Waarschuwing

Lees de handleiding *Vorbereiding en veiligheid van de locatie Handleiding* voordat u het systeem installeert of gebruikt of voordat u onderhoud aan het systeem uitvoert. Deze handleiding bevat belangrijke beveiligingsvoorschriften waarvan u op de hoogte moet zijn voordat u met het systeem gaat werken.

### Varoitus

Ennen kuin asennat järjestelmän tai käytät tai huollat sitä, lue *Asennuspaikan valmistelu-jaturvaopas* -opasta. Tässä oppaassa on tärkeitä turvallisuustietoja, jotka tulisi tietää ennen järjestelmän käyttämistä.

### Attention

Avant d'installer le système, de l'utiliser ou d'assurer son entretien, veuillez lire le *Guide de sécurité et de préparation du site*. Celui-ci présente des informations importantes relatives à la sécurité, dont vous devriez prendre connaissance.

### Warnung

Warnhinweis Bevor Sie das System installieren, in Betrieb setzen oder warten, lesen Sie die *Anleitung zur Standortvorbereitung und Sicherheitshinweise*. Dieses Handbuch enthält wichtige Informationen zur Sicherheit, mit denen Sie sich vor dem Verwenden des Systems vertraut machen sollten.

### Avvertenza

Prima di installare, mettere in funzione o effettuare interventi di manutenzione sul sistema, leggere le informazioni contenute nella documentazione sulla *Guida alla sicurezza*. Tale guida contiene importanti informazioni che è necessario acquisire prima di iniziare qualsiasi intervento sul sistema.

<b>Advarsel</b>	<b>Før du installerer, tar i bruk eller utfører vedlikehold på systemet, må du lese <i>Veiledning for stedsklargjøring og sikkerhet</i>. Denne håndboken inneholder viktig informasjon om sikkerhet som du bør være kjent med før du begynner å arbeide med systemet.</b>
<b>Aviso</b>	<b>Antes de instalar, funcionar com, ou prestar assistência ao sistema, leia o <i>Guia de Preparação e Segurança do Local</i>. Este guia contém informações de segurança importantes que deve conhecer antes de trabalhar com o sistema.</b>
<b>¡Advertencia!</b>	<b>Antes de instalar, manejar o arreglar el sistema, le aconsejamos que consulte la <i>Guía de prevención y preparación de una instalación</i>. Esta guía contiene importante información para su seguridad que debe saber antes de comenzar a trabajar con el sistema.</b>
<b>Varning!</b>	<b>Innan du installerar, använder eller utför service på systemet ska du läsa <i>Förberedelser och säkerhet Handbok</i>. Denna handbok innehåller viktig säkerhetsinformation som du bör känna till innan du arbetar med systemet.</b>

## Installation Warning



<b>Warning</b>	<b>Only trained and qualified personnel should be allowed to install, replace, or service this equipment.</b>
<b>Waarschuwing</b>	<b>Deze apparatuur mag alleen worden geïnstalleerd, vervangen of hersteld door bevoegd geschoold personeel.</b>
<b>Varoitus</b>	<b>Tämän laitteen saa asentaa, vaihtaa tai huoltaa ainoastaan koulutettu ja laitteen tunteva henkilökunta.</b>
<b>Attention</b>	<b>Il est vivement recommandé de confier l'installation, le remplacement et la maintenance de ces équipements à des personnels qualifiés et expérimentés.</b>
<b>Warnung</b>	<b>Das Installieren, Ersetzen oder Bedienen dieser Ausrüstung sollte nur geschultem, qualifiziertem Personal gestattet werden.</b>
<b>Avvertenza</b>	<b>Questo apparato può essere installato, sostituito o mantenuto unicamente da un personale competente.</b>
<b>Advarsel</b>	<b>Bare opplært og kvalifisert personell skal foreta installasjoner, utskiftninger eller service på dette utstyret.</b>
<b>Aviso</b>	<b>Apenas pessoal treinado e qualificado deve ser autorizado a instalar, substituir ou fazer a revisão deste equipamento.</b>
<b>¡Advertencia!</b>	<b>Solamente el personal calificado debe instalar, reemplazar o utilizar este equipo.</b>
<b>Varning!</b>	<b>Endast utbildad och kvalificerad personal bör få tillåtelse att installera, byta ut eller reparera denna utrustning.</b>

## Wrist Strap Warning



<b>Warning</b>	<b>During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.</b>
<b>Waarschuwing</b>	<b>Draag tijdens deze procedure aardingspolsbanden om te vermijden dat de kaart beschadigd wordt door elektrostatische ontlading. Raak het achterbord niet rechtstreeks aan met uw hand of met een metalen werktuig, omdat u anders een elektrische schok zou kunnen oplopen.</b>
<b>Varoitus</b>	<b>Käytä tämän toimenpiteen aikana maadoitettuja rannesuojia estääksesi kortin vaurioitumisen sähköstaattisen purkauksen vuoksi. Älä kosketa taustalevyä suoraan kädelläsi tai metallisella työkalulla sähköiskuvaaran takia.</b>
<b>Attention</b>	<b>Lors de cette procédure, toujours porter des bracelets antistatiques pour éviter que des décharges électriques n'endommagent la carte. Pour éviter l'électrocution, ne pas toucher le fond de panier directement avec la main ni avec un outil métallique.</b>
<b>Warnung</b>	<b>Zur Vermeidung einer Beschädigung der Karte durch elektrostatische Entladung während dieses Verfahrens ein Erdungsband am Handgelenk tragen. Bei Berührung der Rückwand mit der Hand oder einem metallenen Werkzeug besteht Elektroschockgefahr.</b>
<b>Avvertenza</b>	<b>Durante questa procedura, indossare bracciali antistatici per evitare danni alla scheda causati da un'eventuale scarica elettrostatica. Non toccare direttamente il pannello delle connessioni, né con le mani né con un qualsiasi utensile metallico, perché esiste il pericolo di folgorazione.</b>
<b>Advarsel</b>	<b>Bruk jordingsarmbånd under prosedyren for å unngå ESD-skader på kortet. Unngå direkte berøring av bakplanet med hånden eller metallverktøy, slik at di ikke får elektrisk støt.</b>
<b>Aviso</b>	<b>Durante este procedimento e para evitar danos ESD causados à placa, use fitas de ligação à terra para os pulsos. Para evitar o risco de choque eléctrico, não toque directamente na parte posterior com a mão ou com qualquer ferramenta metálica.</b>
<b>Advertencia</b>	<b>Usartiras conectadas a tierra en las muñecas durante este procedimiento para evitar daños en la tarjeta causados por descargas electrostáticas. No tocar el plano posterior con las manos ni con ninguna herramienta metálica, ya que podría producir un choque eléctrico.</b>
<b>Varning!</b>	<b>Använd jordade armbandsremmar under denna procedur för att förhindra elektrostatisk skada på kortet. Rör inte vid baksidan med handen eller metallverktyg då detta kan orsaka elektrisk stöt.</b>

## Related Documentation

These documents are available for the Cisco 7600 series router and the Cisco Service and Application Module for IP:

- Cisco 7600 series router platform:
  - Release Notes for Cisco IOS Release 12.2SR for the Cisco 7600 Series Routers
  - *Site Preparation and Safety Guide*
  - *Cisco 7600 Series Router Installation Guide*
  - *Cisco 7600 Series Router Module Installation Guide*
  - *Cisco 7600 Series Router Cisco IOS Command Reference*
  - *Cisco 7600 Series Router Cisco IOS System Message Guide*
  - For information about MIBs, refer to  
<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

The documents are available at:

- Cisco 7600 series home page on Cisco.com at  
**Products & Solutions: Products: Routers and Routing Systems: 7600 Series Routers**
- Cisco 7600 series technical documentation on Cisco.com at  
**Products & Solutions: Products: Routers and Routing Systems: 7600 Series Routers:** in the “Technical Documentation & Tools” box on the right of the page, Cisco 7600 Series Routers
- Cisco IOS software applications that are supported on the Cisco SAMI PCCs
  - Cisco Content Services Gateway - 2nd Generation (CSG2)  
*Release Notes for Cisco Content Services Gateway - 2nd Generation*  
*Cisco Content Services Gateway - 2nd Generation Installation and Configuration Guide*
  - Cisco Mobile Wireless Home Agent (HA)  
*Cisco Mobile Wireless Home Agent Feature for IOS 12.4(15)XM*  
*Command Reference for Cisco Mobile Wireless Home Agent Feature for Cisco IOS Release 12.4(15)XM*  
*Release Notes for the Cisco Mobile Wireless Home Agent Feature for IOS Release 12.4(15)XM*

## 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>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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