



# Cisco Catalyst 6500 Series ASA Services Module Installation Note

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**Revised: July 15, 2011**

**Product Numbers:**

**WS-SVC-ASA-SM1-K7**

**WS-SVC-ASA-SM1-K8**

**WS-SVC-ASA-SM1-K9**

This installation note provides the hardware installation instructions for the Cisco ASA Services Module.

## Contents

This document contains these sections:

- [Safety, page 2](#)
- [Overview, page 8](#)
- [Required Tools, page 9](#)
- [Installing the ASA Services Module, page 9](#)
- [Removing the ASA Services Module, page 17](#)
- [Preventing Electrostatic Discharge Damage, page 18](#)
- [Translated Safety Warnings, page 21](#)
- [Obtaining Documentation and Submitting a Service Request, page 29](#)



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# Safety

Safety warnings appear throughout this publication in procedures that may harm you if performed incorrectly. A warning symbol precedes each warning statement. The warnings below are general warnings that are applicable to the entire publication.

## Statement 1071—Warning Definition



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. Statement 1071

### 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 käsitlet laitteistoa, huomioi sähköpiirien käsittelymisen liittyvät riskit ja tutustu onnettomuuksien yleisiin ehkäisytapoihin. Turvallisuusvaroitusten käänökset 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 von 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**

**Varng! 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****Figyelem FONTOS BIZTONSÁGI ELOÍRÁSOK**

Ez a figyelmezeto jel veszélyre utal. Sérülésveszélyt rejtő helyzetben van. Mielott 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 mellékelt 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 安全上の重要な注意事項**

「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。

**주의 중요 안전 지침**

이 경고 기호는 위험을 나타냅니다. 작업자가 신체 부상을 일으킬 수 있는 위험한 환경에 있습니다. 장비에 작업을 수행하기 전에 전기 회로와 관련된 위험을 숙지하고 표준 작업 관례를 숙지하여 사고를 방지하십시오. 각 경고의 마지막 부분에 있는 경고문 번호를 참조하여 이 장치와 함께 제공되는 번역된 안전 경고문에서 해당 번역문을 찾으십시오.

이 지시 사항을 보관하십시오.

**Aviso INSTRUÇÕES IMPORTANTES DE SEGURANÇA**

**Este símbolo de aviso significa perigo. Você se encontra em uma situação em que há risco de lesões corporais. Antes de trabalhar com qualquer equipamento, esteja ciente dos riscos que envolvem os circuitos elétricos e familiarize-se com as práticas padrão de prevenção de acidentes. Use o número da declaração fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham o dispositivo.**

**GUARDE ESTAS INSTRUÇÕES****Advarsel VIGTIGE SIKKERHEDSANVISNINGER**

**Dette advarselsymbol betyder fare. Du befinner dig i en situation med risiko for legemesbeskadigelse. Før du begynder arbejde på udstyr, skal du være opmærksom på de involverede risici, der er ved elektriske kredsløb, og du skal sætte dig ind i standardprocedurer til undgåelse af ulykker. Brug erklæringsnummeret efter hver advarsel for at finde oversættelsen i de oversatte advarsler, der fulgte med denne enhed.**

**GEM DISSE ANVISNINGER****تحذير****إرشادات الأمان الهامة**

يوضح رمز التحذير هذا وجود خطر، وهذا يعني أنك متواجد في مكان قد ينبع عنه التعرض لاصابات. قبل بدء العمل، احذر مخاطر التعرض للخدمات الكهربائية وكن على علم بالإجراءات القياسية للحيولة دون وقوع أي حوادث. استخدم رقم البيان الموجود في آخر كل تحذير لتحديد مكان ترجمته داخل تحذيرات الأمان المترجمة التي تأتي مع الجهاز. قم بحفظ هذه الإرشادات.

**Upozorenje VAŽNE SIGURNOSNE NAPOMENE**

**Ovaj simbol upozorenja predstavlja opasnost. Nalazite se u situaciji koja može prouzročiti tjelesne ozljede. Prije rada s bilo kojim uređajem, morate razumjeti opasnosti vezane uz električne sklopove, te biti upoznati sa standardnim načinima izbjegavanja nesreća. U prevedenim sigurnosnim upozorenjima, priloženima uz uređaj, možete prema broju koji se nalazi uz pojedino upozorenje pronaći i njegov prijevod.**

**SAČUVAJTE OVE UPUTE**

**Upozornění DŮLEŽITÉ BEZPEČNOSTNÍ POKYNY**

Tento upozorňující symbol označuje nebezpečí. Jste v situaci, která by mohla způsobit nebezpečí úrazu. Před prací na jakémkoliv vybavení si uvědomte nebezpečí související s elektrickými obvody a seznamte se se standardními opatřeními pro předcházení úrazům. Podle čísla na konci každého upozornění vyhledejte jeho překlad v přeložených bezpečnostních upozorněních, která jsou přiložena k zařízení.

**USCHOVEJTE TYTO POKYNY****Προειδοποίηση ΣΗΜΑΝΤΙΚΕΣ ΟΔΗΓΙΕΣ ΑΣΦΑΛΕΙΑΣ**

Αυτό το προειδοποιητικό σύμβολο σημαίνει κίνδυνο. Βρίσκεστε σε κατάσταση που μπορεί να προκαλέσει τραυματισμό. Πριν εργαστείτε σε οποιοδήποτε εξοπλισμό, να έχετε υπόψη σας τους κινδύνους που σχετίζονται με τα ηλεκτρικά κυκλώματα και να έχετε εξοικειωθεί με τις συνήθεις πρακτικές για την αποφυγή ατυχημάτων. Χρησιμοποιήστε τον αριθμό δήλωσης που παρέχεται στο τέλος κάθε προειδοποίησης, για να εντοπίσετε τη μετάφραστή της στις μεταφρασμένες προειδοποίησεις ασφαλείας που συνοδεύουν τη συσκευή.

**ΦΥΛΑΞΤΕ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ**

אזהרה

סימן אזהרה זה מסמל סכנה. אתה נמצא במצב העולול לגרום לפציעה. לפני שתעבד עם ציוד כלשהו, עיר להיות מודע לסכנות הרכבות במערכות חשמליים ולהכיר את הנהלים המקבילים למשמעות תאוות. השתמש במספר ההוראות המופיע בסופה של כל אזהרה כדי לאתר את התרגומים באזהרות הבטיחות המתורגמות שמצורפות להתקן.

**שמור הוראות אלה****ВАЖНИ БЕЗБЕДНОСНИ НАПАТСТВИЈА**

Симболот за предупредување значи опасност. Се наоѓате во ситуација што може да предизвика телесни повреди. Пред да работите со опремата, бидете свесни за ризикот што постои кај електричните кола и треба да ги познавате стандардните постапки за спречување на несреќни случаи. Искористете го бројот на изјавата што се наоѓа на крајот на секое предупредување за да го најдете неговиот период во преведените безбедносни предупредувања што се испорачани со уредот.

**ЧУВАЈТЕ ГИ ОВИЕ НАПАТСТВИЈА****Ostrzeżenie WAŻNE INSTRUKCJE DOTYCZĄCE BEZPIECZEŃSTWA**

Ten symbol ostrzeżenia oznacza niebezpieczeństwo. Zachodzi sytuacja, która może powodować obrażenia ciała. Przed przystąpieniem do prac przy urządzeniach należy zapoznać się z zagrożeniami związanymi z układami elektrycznymi oraz ze standardowymi środkami zapobiegania wypadkowi. Na końcu każdego ostrzeżenia podano numer, na podstawie którego można odszukać tłumaczenie tego ostrzeżenia w dołączonym do urządzenia dokumencie z tłumaczeniami ostrzeżeń.

**NINIEJSZE INSTRUKCJE NALEŻY ZACHOWAĆ**

**Upozornenie DÔLEŽITÉ BEZPEČNOSTNÉ POKYNY**

Tento varovný symbol označuje nebezpečenstvo. Nachádzate sa v situácii s nebezpečenstvom úrazu. Pred prácou na akomkoľvek vybavení si uvedomte nebezpečenstvo súvisiace s elektrickými obvodmi a oboznámte sa so štandardnými opatreniami na predchádzanie úrazom. Podľa čísla na konci každého upozornenia vyhľadajte jeho preklad v preložených bezpečnostných upozorneniach, ktoré sú priložené k zariadeniu.

**USCHOVAJTE SI TENTO NÁVOD****Opozorilo POMEMBNI VARNOSTNI NAPOTKI**

Ta opozorilni simbol pomeni nevarnost. Nahajate se v situaciji, kjer lahko pride do telesnih poškodb. Preden pričnete z delom na napravi, se morate zavedati nevarnosti udara električnega toka, ter tudi poznati preventivne ukrepe za preprečevanje takšnih nevarnosti. Uporabite obrazložitveno številko na koncu posameznega opozorila, da najdete opis nevarnosti v priloženem varnostnem priročniku.

**SHRANITE TE NAPOTKE!****警告****重要安全性指示**

此警告符號代表危險，表示可能造成人身傷害。使用任何設備前，請留心電路相關危險，並熟悉避免意外的標準作法。您可以使用每項警告後的聲明編號，查詢本裝置隨附之安全性警告譯文中的翻譯。請妥善保留此指示

**Warning**

**Only trained and qualified personnel should be allowed to install, replace, or service this equipment.**  
Statement 1030

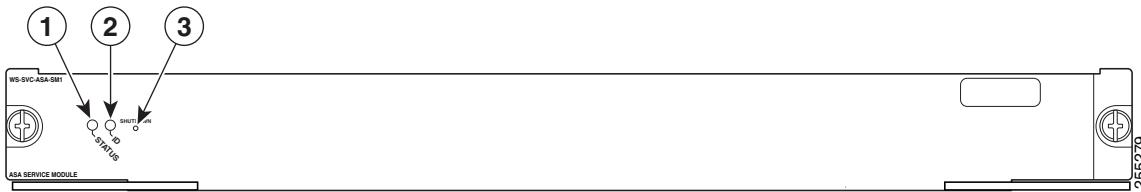
**Warning**

**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.**  
Statement 94

# Overview

The ASA Services Module, see [Figure 1](#), is the next generation 10Gbps+ Security Services blade for the Catalyst 6500 series switch. The ASA Services Module is supported in any slot in the Catalyst 6500 E-series chassis. The ASA Services Module is not supported in non-E-series chassis. The ASA Services Module requires either a Supervisor Engine 720-3B, Supervisor Engine 720-3BXL, or Supervisor Engine 720-10GE (either a VS-S720-10G-3C or a VS-S720-10G-3CXL) to operate.

**Figure 1** ASA Services Module Faceplate



|   |            |   |              |
|---|------------|---|--------------|
| 1 | STATUS LED | 3 | RESET switch |
| 2 | ID LED     |   |              |

## LEDs

The ASA Services module has two LEDs visible on the module front panel. [Table 1](#) lists the LEDs and their function.

**Table 1** ASA Services Module LEDs

| LED    | Color and Meaning  |
|--------|--|
| STATUS | Green—Both ASA Services module processors have finished booting up, all diagnostics pass, and the module is operational<br>Yellow—ROMMON is running; the ASA Services module has not finished booting up<br>Red—The module is powering up or the ASA Services Module has a fault.                            |
| ID     | The ID LED functions as a service indicator. The blue LED is turned on and off by the system administrator from the switch console to aid the service personnel in identifying which ASA Services Module within a chassis needs attention. When turned on, the LED flashes on and off at 500 msec intervals. |

## SHUTDOWN Switch

The ASA Services Module has a recessed switch, labeled SHUTDOWN, mounted on the module front panel. If a fault is detected on the ASA Services Module, the operator must press the SHUTDOWN switch to interrupt the Services module processors and initiate an orderly shutdown of the storage devices on the module before the module is removed from the chassis.

## Required Tools

These tools are required to install the ASA Services Module in the chassis:

- Small flat-blade screwdriver
- No. 2 Phillips screwdriver
- Antistatic mat or foam pad to support the module
- Your own ESD-prevention equipment or the disposable grounding wrist strap included with the module
- Switching-module filler plates (Cisco part number SLOTBLANK-09 or WS-X6K-SLOT-CVR-E). Replaces blank slot covers in slots that are directly adjacent to the Services Module slot (either above and below on horizontal slot chassis or left and right on vertical slot chassis).

## Chassis Unused Slots Restrictions

If you are installing one or more of the Cisco Services Modules in your chassis that are listed in [Table 2](#), the slots directly adjacent to the services module (above and below or to the left and to the right) must contain either line cards or switching-module filler plates (Cisco part numbers WS-X6K-SLOT-CVR-E or SLOTBLANK-09). If either adjacent slot is unused and currently has a blank slot cover (Cisco part number WS-X6K-SLOT-CVR) installed, you must remove the blank slot cover and replace it with a switching-module filler plate for NEBS compliance.

**Table 2      Service Modules Requiring Switching-Module Filler Plates**

|                      |                      |
|----------------------|----------------------|
| WS-SVC-NAM3-6G-K9(=) | WS-SVC-ASA-SM1-K7(=) |
| WS-SVC-ASA-SM1-K8(=) | WS-SVC-ASA-SM1-K9(=) |

## Installing the ASA Services Module



**Note**

For NEBS compliance when installing Cisco Services Modules, refer to “[Chassis Unused Slots Restrictions](#)” section on page 9.

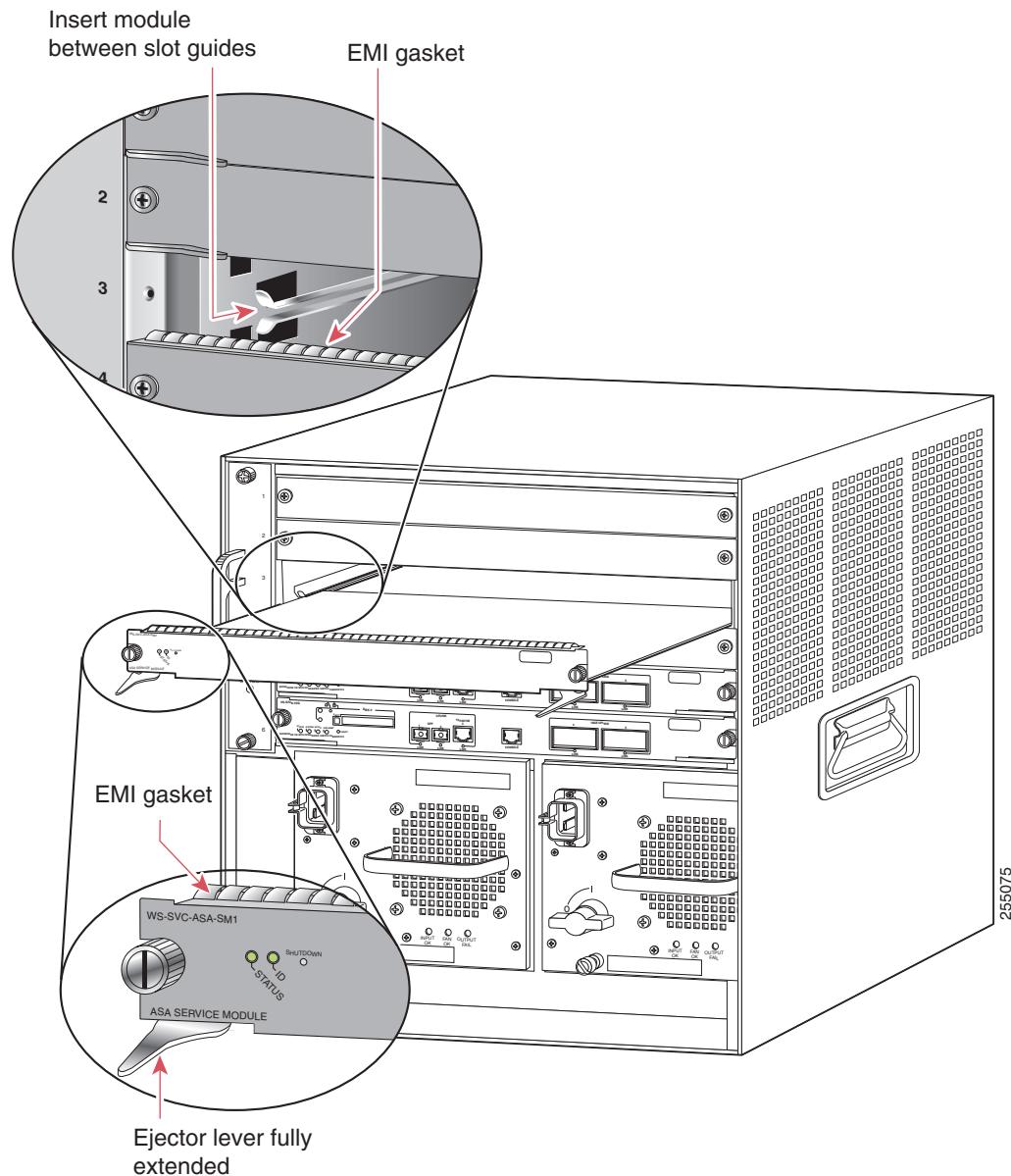


**Caution**

To prevent ESD damage, handle the module by the metal carrier edges only.

To install the ASA Services Module in the chassis, follow these steps:

- 
- Step 1** Verify that an ESD grounding strap is attached to your wrist and to proper ground. If you are unsure about the correct way to attach an ESD grounding strap, see the “[Preventing Electrostatic Discharge Damage](#)” section on page 18 for instructions.
- Step 2** Verify that the two slots adjacent to the slot where you are installing the services module have either a module installed in them or a switching-module filler plate installed (Cisco part numbers SLOTBLANK-09 or WS-X6K-SLOT-CVR-E) if either slot is unused. If either slot has a blank slot cover (Cisco part number WS-X6K-SLOT-CVR), you need to remove the blank slot cover and replace it with a switching-module filler plate for NEBS compliance.
- Step 3** Verify that the captive installation screws are tightened on all of the modules installed in the chassis. This step assures that the EMI gaskets on all of the installed modules are fully compressed in order to maximize the opening space for the services module.
-  **Note** If the captive installation screws are loose, the electromagnetic interference (EMI) gaskets on the installed modules expand and push the modules toward the open slot, which reduces the opening size and makes it difficult to reinstall the module.
- 
- Step 4** If you are installing the ASA Services Module in an empty slot, remove the module filler plate that covers the selected chassis slot by removing the two Phillips pan-head screws from the filler plate. Save the module filler plate and the two screws for future use.
-  **Note** If you must remove an existing module, see the “[Removing the ASA Services Module](#)” section on page 17. The procedure is applicable to services modules and other types of modules.
- 
- Step 5** Remove the new ASA Services Module from its shipping packaging and from the antistatic shipping bag.
-  **Caution** To prevent ESD damage, handle the module by the metal carrier edges only. Place the unpackaged services module on an antistatic surface.
- 
- Step 6** Fully open both ejector levers on the ASA Services Module. (See [Figure 2](#).)

**Figure 2** Positioning the ASA Services Module in a Horizontal Slot Chassis

- Step 7** Depending on the orientation of the slots in the chassis (horizontal or vertical), perform one of the following two sets of substeps:

**Horizontal Slots**

- a. Position the ASA Services Module in the slot. (See [Figure 2](#).) Make sure that you align the edges of the module carrier with the slot guides on each side of the slot.
- b. Carefully slide the module into the slot until the EMI gasket on the top edge of the module makes contact with the module in the slot above it and both ejector levers have engaged and closed to approximately 45 degrees with respect to the ASA Services Module faceplate. (See [Figure 3](#).)
- c. Using the thumb and forefinger of each hand, grasp the two ejector levers and press down to create a small (0.040 inch [1 mm]) gap between the module's EMI gasket and the module above it. (See [Figure 3](#).)



**Caution**

Do not press down too hard on the levers because they can bend and be damaged.

- d. While gently pressing down, simultaneously close the left and right ejector levers to fully seat the ASA Services Module in the chassis backplane connector. The ejector levers are fully closed when they are flush with the module faceplate. (See [Figure 4](#).)



**Note**

Failure to fully seat the module in the chassis backplane connector can result in error messages.

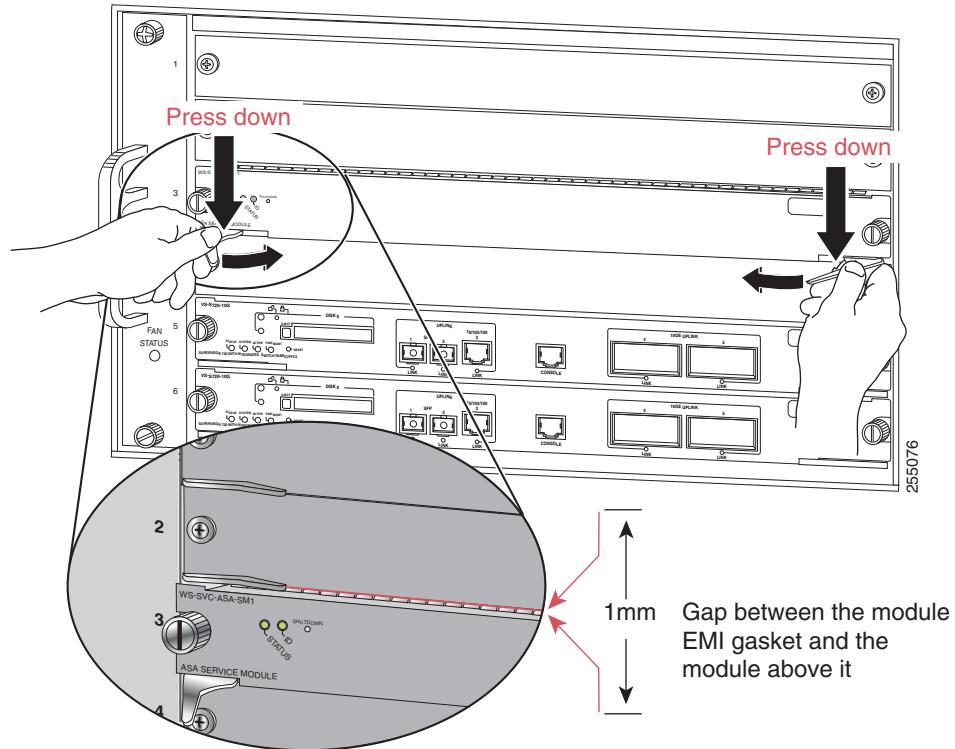
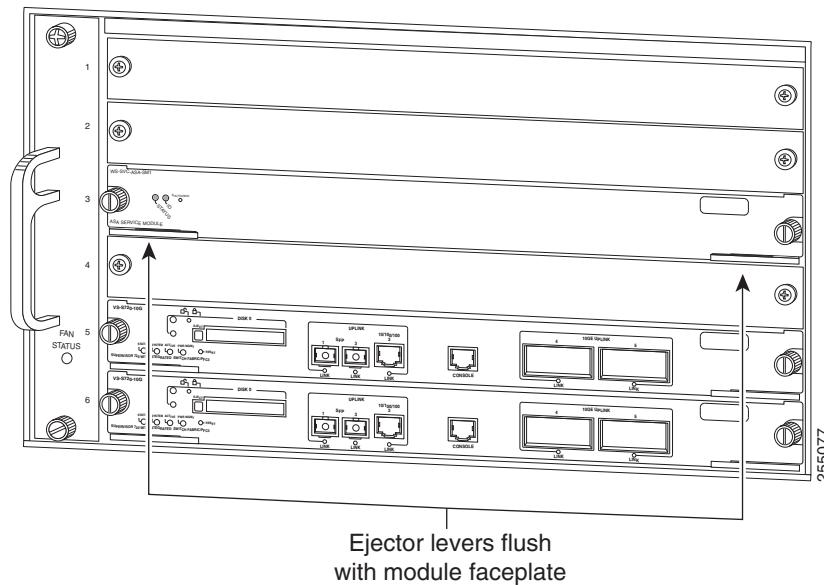
- e. Tighten the two captive installation screws on the ASA Services Module.



**Note**

Make sure that the ejector levers are fully closed before tightening the captive installation screws.

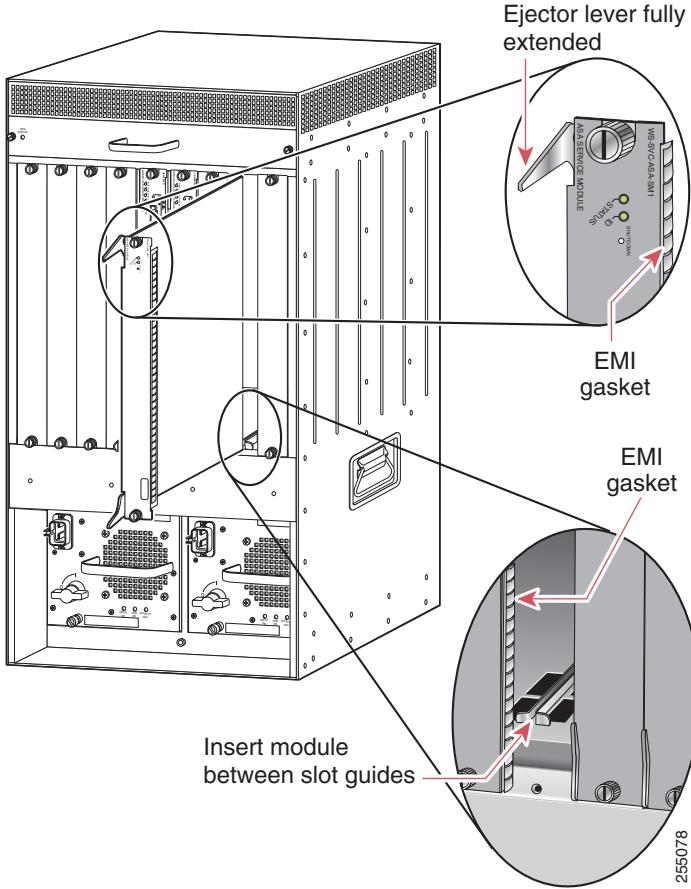
- f. Verify that the ASA Services Module STATUS LED is lit. Check the STATUS LED periodically. If the STATUS LED changes from orange to green, the module has successfully completed the boot process and is now online. If the STATUS LED remains orange or turns red, the module has not successfully completed the boot process and may have encountered an error.

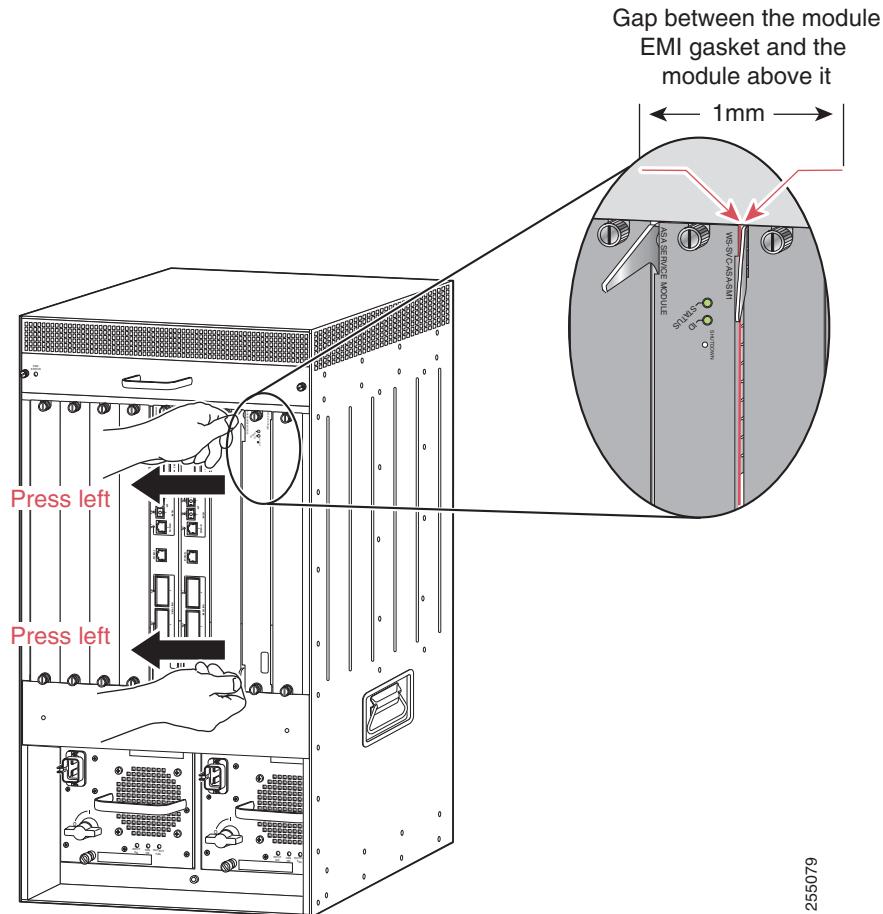
**Figure 3** Clearing the EMI Gasket in a Horizontal Slot Chassis**Figure 4** Closing the Ejector Levers in a Horizontal Slot Chassis

**Chassis with Vertical Slots**

- a. Position the ASA Services Module in the slot. (See [Figure 5](#).) Make sure that you align the sides of the switching-module carrier with the slot guides on the top and bottom of the chassis slot.
- b. Carefully slide the ASA Services Module into the slot until the EMI gasket on the right edge of the module makes contact with the module or cover plate in the slot adjacent to it and the module ejector levers have both closed to approximately 45 degrees with respect to the module faceplate. (See [Figure 6](#).)

**Figure 5** *Positioning the Services Module in a Vertical Slot Chassis*



**Figure 6** Clearing the EMI Gasket in a Vertical Slot Chassis

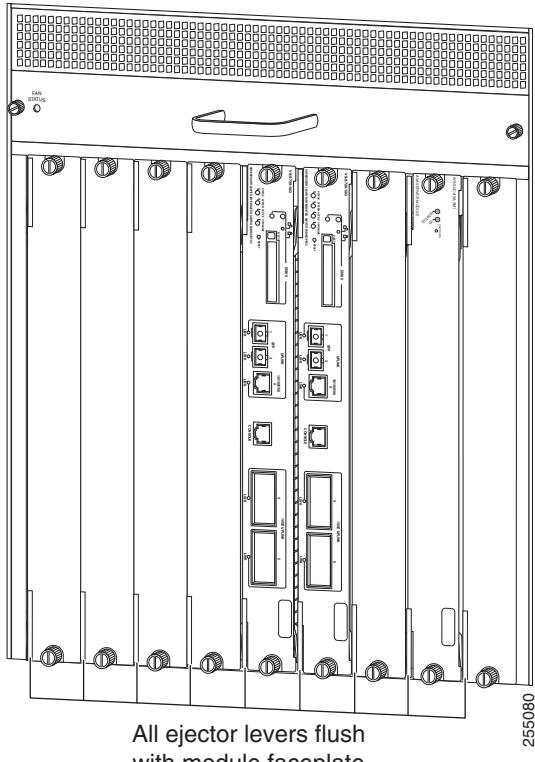
- c. Using the thumb and forefinger of each hand, grasp the two ejector levers and exert a slight pressure to the left, deflecting the ASA Services Module approximately 0.040 inches (1 mm) creating a small gap between the module's EMI gasket and the module or cover plate adjacent to it. (See [Figure 6](#).)



**Note** Do not exert too much pressure on the ejector levers because they will bend and become damaged.

- d. While gently pressing down on the ejector levers, simultaneously close both levers to fully seat the ASA Services Module in the backplane connector. The ejector levers are fully closed when they are flush with the module faceplate. (See [Figure 7](#).)

**Figure 7**      **Closing the Ejector Levers in a Vertical Slot Chassis**



All ejector levers flush  
with module faceplate

255080

- e. Tighten the two captive installation screws on the ASA Services Module.



**Note** Make sure that the ejector levers are fully closed before tightening the captive installation screws.

- f. Verify that the ASA Services Module STATUS LED is lit.

- g. Periodically check the STATUS LED:

- If the STATUS LED changes from orange to green, the module has successfully completed the boot process and is now online.
- If the STATUS LED remains orange or turns red, the module has not successfully completed the boot process and may have encountered an error.

---

Once the ASA Services Module is online, refer to the system configuration guide for procedures on how to configure the module.

# Removing the ASA Services Module

This section describes how to remove the ASA Services Module from the Catalyst 6500 series switch chassis.


**Note**

The ASA Services Module has an ID LED located on the module front panel. Normally, the LED is off. However, should the service module require servicing, the system administrator can turn on the ID LED to assist the service personnel in identifying the faulty module. The ID flashes blue at half-second intervals.


**Note**

The ASA Services Module also has a SHUTDOWN switch located on the module front panel. Before removing the ASA Services Module from the chassis slot you need to press the SHUTDOWN switch. Pressing the switch interrupts the module processors allowing the module software to gracefully shut down the module. The STATUS LED on the front panel provides the module's activity status during the shutdown.


**Caution**

During this procedure, wear grounding wrist straps to avoid ESD damage to the module.

To remove the ASA Services Module from the chassis, follow these steps:

**Step 1** Press the SHUTDOWN button on the ASA Services Module faceplate to initiate a shut down of the module. Do not remove the ASA Services Module before the module has completely shutdown.

**Step 2** Attach an ESD grounding strap to your wrist and to ground.

**Step 3** Verify that the captive installation screws on all of the modules in the chassis are tight.



**Note** This step ensures that the space created by the removed module is maintained. If the captive installation screws are loose, the EMI gaskets on the installed modules will push the modules toward the open slot, reducing the opening size and making it difficult to remove the module.

**Step 4** Loosen the two captive installation screws on the ASA Services Module. Make sure that the two captive installation screws are completely unscrewed from the chassis.

**Step 5** Depending on the orientation of the slots in the chassis (horizontal or vertical), perform one of the following two sets of steps:

### Horizontal Slots

- a. Place your thumbs on the left and right ejector levers and simultaneously rotate the levers outward to unseat the ASA Services Module from the backplane connector.
- b. Grasp the front edge of the ASA Services Module and slide the module part of the way out of the slot. Place your other hand under the module to support the weight of the module. Do not touch the module circuitry.

### Vertical Slots

- a. Place your thumbs on the ejector levers located at the top and bottom of the ASA Services Module, and simultaneously rotate the levers outward to unseat the module from the backplane connector.
- b. Grasp the edges of the module, and slide the module straight out of the slot. Do not touch the module circuitry.

**Step 6** Place the removed ASA Services Module on an antistatic mat or in an antistatic bag, or immediately reinstall it in another slot.

**Step 7** If the slot is to remain empty and there is another services module installed in an adjacent slot, you must install a switching-module filler plate (Cisco part number SLOTBLANK-09 or WS-X6K-SLOT-CVR-E) in the empty slot. If there isn't a services module adjacent to the empty slot, you can install either a switching-module filler plate or a blank slot cover (Cisco part number WS-X6K-SLOT-CVR) over the empty slot.



**Warning**

**Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.** Statement 1029

## Preventing Electrostatic Discharge Damage

Electrostatic discharge (ESD) damage, which can occur when modules or other field-replaceable units (FRUs) are improperly handled, results in intermittent or complete failures. 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, always use an ESD grounding strap when handling modules.

Follow these guidelines for preventing ESD damage:

- When using an ESD wrist strap, make sure that it makes maximum contact with bare skin and with earth ground. ESD grounding straps are available with an adhesive pad, banana plug, metal spring clip, or alligator clip earth ground connector. All Catalyst 6500 series chassis are equipped with a banana plug connector (identified by the ground symbol next to the connector) on the front panel. This connector should not be confused with the system NEBs ground pad that is also located on the chassis. If you have an older Catalyst 6500 series chassis equipped with a plastic banana plug connector, we recommend that you use either the supplied ESD grounding wrist strap (with an adhesive pad or a metal clip) or an ESD grounding wrist strap equipped with an alligator clip. If you have a newer Catalyst 6500 series chassis that has a bare metal hole as the banana plug connector (also identified by the ground symbol next to the connector), we recommend that you use a personal ESD grounding strap equipped with a banana plug.

- If you choose to use the disposable ESD wrist strap supplied with most FRUs or an ESD wrist strap equipped with an alligator clip, you must attach the system ground lug to the chassis in order to provide a proper grounding point for the ESD wrist strap.



**Note** This system ground is also referred to as the network equipment building system (NEBS) ground.

- If your chassis does not have the system ground attached, you must install the system ground.

After you install the system ground, follow these steps:

---

**Step 1** Attach the ESD wrist strap to bare skin as follows:

- If you are using the ESD wrist strap supplied with the FRUs, open the wrist strap package and unwrap the ESD wrist strap. Place the black conductive loop over your wrist and tighten the strap so that it makes good contact with your bare skin.
- If you are using an ESD wrist strap equipped with an alligator clip, open the package and remove the ESD wrist strap. Locate the end of the wrist strap that attaches to your body and secure it to your bare skin.

**Step 2** Grasp the spring or alligator clip on the ESD wrist strap and momentarily touch the clip to a bare metal spot (unpainted surface) on the rack. We recommend that you touch the clip to an unpainted rack rail so that any built-up static charge is then safely dissipated to the entire rack.

**Step 3** Attach either the spring clip or the alligator clip to the ground lug screw as follows (See [Figure 8](#)):

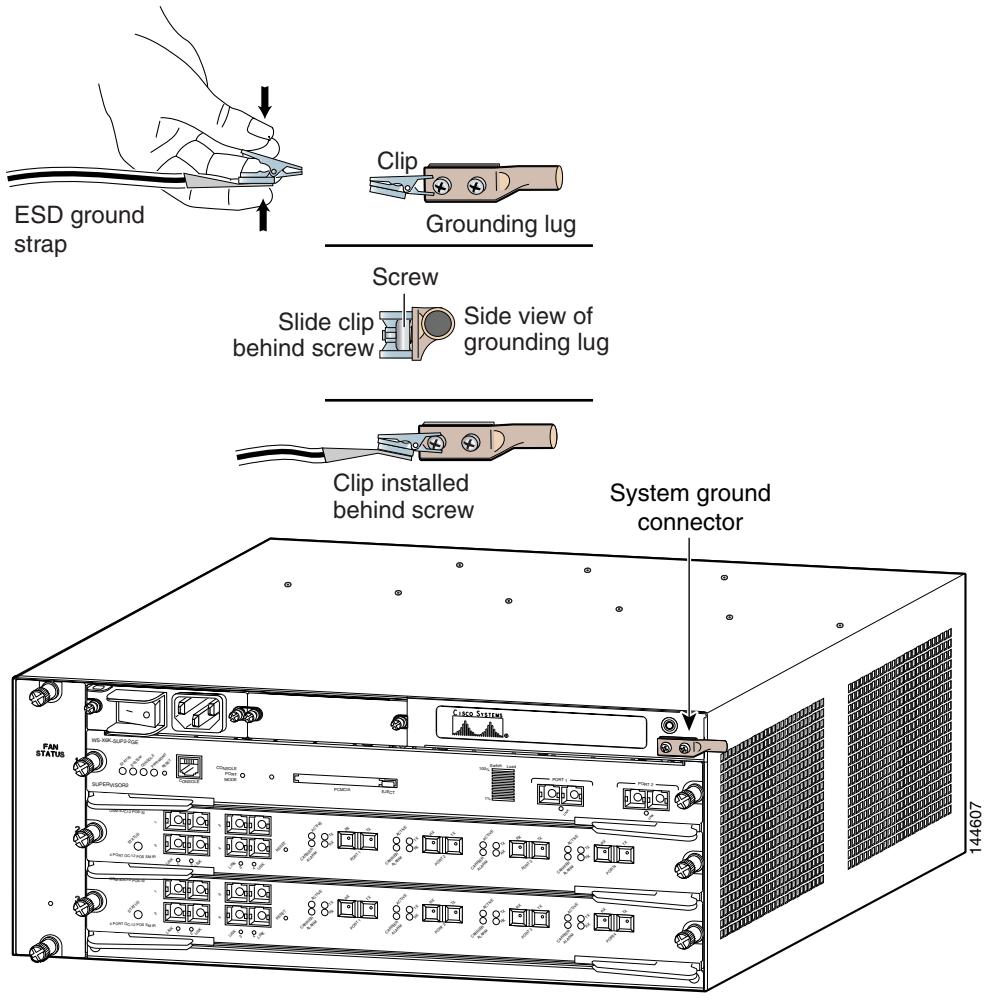
- If you are using the ESD wrist strap that is supplied with the FRUs, squeeze the spring clip jaws open, position the spring clip to one side of the system ground lug screw head, and slide the spring clip over the lug screw head so that the spring clip jaws close behind the lug screw head.



**Note** The spring clip jaws do not open wide enough to fit directly over the head of the lug screw or the lug barrel.

- If you are using an ESD wrist strap that is equipped with an alligator clip, attach the alligator clip directly over the head of the system ground lug screw or to the system ground lug barrel.

**Figure 8** Attaching the ESD Wrist Strap Clip to the System Ground Lug Screw



In addition, follow these guidelines when handling modules:

- Handle modules by the metal carrier or edges only; avoid touching the printed circuit boards or connectors.
- Place a removed module component board-side-up on a properly grounded antistatic surface or in a antistatic bag. If you plan to return the module to the factory, immediately place it in an antistatic bag.
- Never attempt to remove the printed circuit board from the metal carrier.



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

# Translated Safety Warnings

This section repeats in multiple languages the basic warnings that appear in this publication.

## Statement 94—Wrist Strap Warning



### 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.**

### Waarschuwing

**Draag tijdens deze procedure aardingspolssbanden 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.**

### Varoitus

**Käytä tämän toimenpiteen aikana maadoitettuja rannesuojaia estääksesi kortin vaurioitumisen sähköstaattisen purkauksen vuoksi. Älä kosketa taustalevyä suoraan kädelläsi tai metallisella työkalulla sähköiskuvaaran takia.**

### Attention

**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.**

### Warnung

**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.**

### Avvertenza

**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.**

### Advarsel

**Bruk jordingsarmbånd under prosedyren for å unngå ESD-skader på kortet. Unngå direkte berøring av bakplanet med hånden eller metallverktøy, slik at du ikke får elektrisk støt.**

### Aviso

**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.**

### ¡Advertencia!

**Usa tiras 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.**

### Varning!

**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.**

### Figyelem

**Az elektromos kisülés okozta meghibásodás elkerülése érdekében az eljárás során viseljen földelő csuklópántot. Se kézzel, se fém eszközzel ne érjen hozzá a kártya hátlapjához, mert különben áramütést szennedhet.**

**Предупреждение** При выполнении данной процедуры наденьте заземленные браслеты, чтобы избежать повреждения платы электростатическим разрядом. Не дотрагивайтесь до задней панели рукой или металлическим предметом, поскольку это может привести к поражению электрическим током.

**警告** 在此过程中，请佩戴接地腕带以避免ESD 损坏插卡。请勿用手或任何金属工具直接接触后面板，否则您可能受到电击。

**警告** この手順を行う際には、ESD によるカードの損傷を防ぐため、静電気防止用リスト ストラップを着用してください。電気ショックを防ぐために、装置の背面を直接手や金属で触らないようにします。

## Statement 1029—Blank Faceplates and Cover Panels



### Warning

**Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.**

### Waarschuwing

**Lege vlakplaten en afdekpanelen vervullen drie belangrijke functies: ze voorkomen blootstelling aan gevaarlijke voltages en stroom binnenin het frame, ze bevatten elektromagnetische storing (EMI) hetgeen andere apparaten kan verstoren en ze leiden de stroom van koellucht door het frame. Het systeem niet bedienen tenzij alle kaarten, vlakplaten en afdekkingen aan de voor- en achterkant zich op hun plaats bevinden.**

### Varoitus

**Tyhjillä tasolaikoilla ja suojaaneelleilla on kolme tärkeää käyttötarkoitusta: Ne suojaavat asennuspohjan sisäisille vaarallisille jännitteille ja sähkövirralle altistumiselta; ne pitävät sisällään elektromagneettisen häiriön (EMI), joka voi häirittää muita laitteita; ja ne suuntaavat tuuletusilman asennuspohjan läpi. Järjestelmää ei saa käyttää, elleivät kaikki tasolaikat, etukannet ja takakannet ole kunnolla paikoillaan.**

### Attention

**Ne jamais faire fonctionner le système sans que l'intégralité des cartes, des plaques métalliques et des panneaux avant et arrière ne soient fixés à leur emplacement. Ceux-ci remplissent trois fonctions essentielles : ils évitent tout risque de contact avec des tensions et des courants dangereux à l'intérieur du châssis, ils évitent toute diffusion d'interférences électromagnétiques qui pourraient perturber le fonctionnement des autres équipements, et ils canalisent le flux d'air de refroidissement dans le châssis.**

### Warnung

**Blanke Faceplates und Abdeckungen haben drei wichtigen Funktionen: (1) Sie schützen vor gefährlichen Spannungen und Strom innerhalb des Chassis; (2) sie halten elektromagnetische Interferenzen (EMI) zurück, die andere Geräte stören könnten; (3) sie lenken den kühlenden Luftstrom durch das Chassis. Das System darf nur betrieben werden, wenn alle Karten, Faceplates, Vorder- und Rückabdeckungen an Ort und Stelle sind.**

|                       |  |
|-----------------------|--|
| <b>Avvertenza</b>     | <b>Le piattaforme bianche e i panelli di protezione hanno tre funzioni importanti: Evitano l'esposizione a voltaggi e correnti elettriche pericolose nello chassis, trattengono le interferenze elettromagnetiche (EMI) che potrebbero scomussolare altri apparati e dirigono il flusso di aria per il raffreddamento attraverso lo chassis. Non mettete in funzione il sistema se le schede, le piattaforme, i panelli frontali e posteriori non sono in posizione.</b>                   |
| <b>Advarsel</b>       | <b>Blanke ytterplater og deksler sørger for tre viktige funksjoner: de forhindrer utsettelse for farlig spenning og strøm inni kabinettet; de inneholder elektromagnetisk forstyrrelse (EMI) som kan avbryte annet utstyr, og de dirigerer luftavkjølingsstrømmen gjennom kabinettet. Betjen ikke systemet med mindre alle kort, ytterplater, frontdeksler og bakdeksler sitter på plass.</b>  |
| <b>Aviso</b>          | <b>As faces furadas e os painéis de proteção desempenham três importantes funções: previnem contra uma exposição perigosa a voltagens e correntes existentes no interior do chassis; previnem contra interferência electromagnética (EMI) que poderá danificar outro equipamento; e canalizam o fluxo do ar de refrigeração através do chassis. Não deverá operar o sistema sem que todas as placas, faces, proteções anteriores e posteriores estejam nos seus lugares.</b>               |
| <b>¡Advertencia!</b>  | <b>Las placas frontales y los paneles de relleno cumplen tres funciones importantes: evitan la exposición a niveles peligrosos de voltaje y corriente dentro del chasis; reducen la interferencia electromagnética (EMI) que podría perturbar la operación de otros equipos y dirigen el flujo de aire de enfriamiento a través del chasis. No haga funcionar el sistema a menos que todas las tarjetas, placas frontales, cubiertas frontales y cubiertas traseras estén en su lugar.</b> |
| <b>Varng! </b>        | <b>Tomma framplattor och skyddspaneler har tre viktiga funktioner: de förhindrar att personer utsätts för farlig spänning och ström som finns inuti chassit; de innehåller elektromagnetisk interferens (EMI) som kan störa annan utrustning; och de styr riktningen på kylluftsflödet genom chassit. Använd inte systemet om inte alla kort, framplattor, fram- och bakskydd är på plats.</b>   |
| <b>Figyelem</b>       | <b>Az előlapok és burkolópanelek három fontos funkciót töltenek be: biztosítják a veszélyes feszültségű és áramerősséggű területek érintésvédelmét; elnyelik a más berendezések működésében működési zavarokat okozó elektromágneses interferenciát (EMI); a gépházban belül terelik a hűtőlevegőt. Csak úgy működtesse a rendszert, ha minden kártya, lemez, előlisi és hátlisi burkolat a helyén van.</b>  |
| <b>Предупреждение</b> | <b>Заглушки передней панели и защитные панели выполняют три важные функции: помогают избежать поражения электротоком высокого напряжения при прикосновении к внутренним элементам, экранируют электромагнитное излучение, которое может нарушить работу другого оборудования, а также направляют охлаждающий воздушный поток внутри корпуса. Не пользуйтесь устройством со снятыми крышками, заглушками, передними и задними защитными панелями.</b>                                       |
| <b>警告</b>             | <b>空白面板和盖板具有三个重要的功能：它们可以防止接触到底盘内危险的电压和电流；它们将可能破坏其它设备的电磁干扰(EMI)封闭起来；它们可以使冷气流从底盘通过。请勿在全部卡、面板、前盖和后盖未安装完毕时操作系统。</b>  |
| <b>警告</b>             | <b>プランクの前面プレートおよびカバー パネルは、3つの重要な役割を果たします。シャーシ内部の危険な電圧および電流に接触しないように防御の役割を果たします。他の機器に悪影響を与えるEMI(電磁波干渉)を外に出しません。さらに、シャーシ全体に冷却用の空気を流します。カード、前面プレート、前面カバー、および背面カバーがすべて取り付けられてから、システムを稼働させてください。</b>  |

|               |   |
|---------------|---|
| 주의            | 비어있는 전면케이스 커버와 커버 패널은 다음과 같은 세가지 중요한 역할을 합니다. 새시 내부의 위험한 전압 및 전류에 노출되는 것을 방지, 기타 장비에 영향을 끼칠 수 있는 전자파 간섭(EMI)을 포함, 냉각 공기를 새시로 유입. 모든 카드, 전면케이스 커버, 전면 및 후면 커버가 장착되어 있지 않은 경우, 시스템을 작동하지 마십시오.  |
| Aviso         | <b>Plaquetas vazias e painéis de proteção têm três funções importantes: impedem a exposição a tensões e correntes elétricas perigosas dentro do chassi; apresentam interferência eletromagnética (EMI) que pode danificar outros equipamentos: direcionam o fluxo do ar refrigerado pelo chassi. Não opere o sistema a menos que todas as placas, plaquetas, tampas frontais e tampas traseiras estejam em seu devido lugar.</b>  |
| Advarsel      | <b>Blanke frontplader og sidepaneler tjener tre vigtige formål: de forhinder udsættelse for farlig spænding og strøm inde i chassiset, de isolerer elektromagnetisk interferens (EMI), der kan forstyre andet udstyr, og de leder en strøm af kølig luft gennem chassiset. Betjen ikke systemet medmindre alle kort, frontplader, sidepaneler og bagpaneler er på plads.</b>  |
| تحذير         | تؤدي كل من الواجهات الفارغة ولوحات التغطية ثلاثة وظائف هامة: الحيلولة دون التعرض للجهد الكهربائي الخطير والتيارات الموجودة في الهيكل المعدني، حيث يحتوي كلاً منها على واجهة كهرومغناطيسية () والتي قد تعيق عمل الأجهزة الأخرى كما يقوما بتجهيزه تيار التبريد داخل الهيكل المعدني. لا تحاول تشغيل النظام إلا إذا كانت كافة البطاقات والواجهات والأغطية الأمامية والخلفية موضوعة في مكانها.   |
| Upozorenje    | Prazna prednja ploča i pokrovne ploče imaju tri važne funkcije: sprječavaju izlaganje opasnom visokom naponu i strujama unutar kućišta, proizvode elektromagnetnu interferenciju koja može ometati rad ostalih uređaja, te usmjeravaju protok rashladnog zraka kroz kućište. Sustav nemojte koristiti ako sve kartice, te prednje, pokrovne i stražnje ploče nisu pravilno ugrađene.  |
| Upozornění    | Prázdne lícové desky a krycí panely mají tři důležité funkce: zabraňují odkrytí nebezpečného napětí a proudu uvnitř skříně; obsahují elektromagnetické rušení, které může rušit jiná zařízení; směřují proud chladícího vzduchu skříní. Nepoužívejte systém, pokud nejsou všechny karty, lícové desky, přední kryty a zadní kryty na svém místě.  |
| Προειδοποίηση | Οι κενές προσόφωεις και τα κενά πλαίσια καλύμματος χρησιμεύουν για τρεις σημαντικές λειτουργίες: Αποκλείουν την έκθεση σε επικίνδυνες τάσεις και ρεύματα στο εσωτερικό του σασί, περικλείουν τις ηλεκτρομαγνητικές παρεμβολές (EMI) που ενδέχεται να προκαλέσουν προβλήματα σε άλλο εξοπλισμό και κατευθύνουν τη ροή του αέρα ψύξης μέσα στο σασί. Μην θέτετε το σύστημα σε λειτουργία αν δεν βρίσκονται στη θέση τους όλες οι κάρτες, οι μπροστινές πλάκες, οι προσόφωεις και οι πλάτες. |
| ازهارה        | לוחות CISCO ריקים ולוחות CISCO שימושיים לשלוש פונקציות חשובות: הם מונעים חשיפה למתחים מסוכנים ולזרם בתוך התושבת; הם מכילים הפרעות אלקטומגנטיות (EMI) העוללות לשבש ציוד אחר; והם מכונים את זרימת האוויר המגן דרך התושבת. אל תפעיל את המערכת אלא אם כל הcartisim,لوحות CISCO, הלוחות הקדמיים והзадים האחוריים נמצאים במקומם.  |

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| Opomena     | Празните предни плочи и плочите за покривање служат за три важни функции: го спречуваат изложувањето на ризични напони и струи во кукиштето; содржат електромагнетни интерференции (EMI) што можат да попречуваат друга опрема; и го насочуваат протокот на воздухот за разладување низ кукиштето. Не работете со системот ако сите картички, предни плочи, предни капаци и задни капаци не се на своите места.   |
| Ostrzeżenie | <b>Zaślepki i panele osłonowe pełnią trzy ważne funkcje: zapobiegają kontaktowi użytkownika z niebezpiecznymi napięciami i prądami wystającymi wewnątrz obudowy; pochłaniają zakłócenia elektromagnetyczne, które mogłyby negatywnie wpływać na działanie innych urządzeń; kierują przepływem powietrza chłodzącego wewnątrz obudowy. System można eksploatować wyłącznie wtedy, gdy zamontowane są wszystkie karty, zaślepki oraz przednie i tylne osłony.</b> |
| Upozornenie | Prázdne lícne dosky a krycie panely majú tri dôležité funkcie: zabraňujú odkrytiu nebezpečného napäťa a prúdu vnútri skrine; obsahujú elektromagnetické rušenie, ktoré môže rušíť iné zariadenia; smerujú prúd chladiaceho vzduchu cez skriňu. Nepoužívajte systém, pokiaľ nie sú všetky karty, lícne dosky, predné kryty a zadné kryty na svojom mieste.   |

## Statement 1030—Equipment Installation



### Warning

**Only trained and qualified personnel should be allowed to install, replace, or service this equipment.**

### Waarschuwing

**Deze apparatuur mag alleen worden geïnstalleerd, vervangen of hersteld door bevoegd geschoold personeel.**

### Varoitus

**Tämän laitteen saa asentaa, vaihtaa tai huoltaa ainoastaan koulutettu ja laitteen tunteva henkilökunta.**

### Attention

**Il est vivement recommandé de confier l'installation, le remplacement et la maintenance de ces équipements à des personnels qualifiés et expérimentés.**

### Warnung

**Das Installieren, Ersetzen oder Bedienen dieser Ausrüstung sollte nur geschultem, qualifiziertem Personal gestattet werden.**

### Avvertenza

**Questo apparato può essere installato, sostituito o mantenuto unicamente da un personale competente.**

### Advarsel

**Bare opplært og kvalifisert personell skal foreta installasjoner, utskiftninger eller service på dette utstyret.**

### Aviso

**Apenas pessoal treinado e qualificado deve ser autorizado a instalar, substituir ou fazer a revisão deste equipamento.**

**¡Advertencia!** **Solamente el personal calificado debe instalar, reemplazar o utilizar este equipo.**

**Varning!** **Endast utbildad och kvalificerad personal bör få tillåtelse att installera, byta ut eller reparera denna utrustning.**

**Figyelem** **A berendezést csak szakképzett személyek helyezhetik üzembe, cserélhetik és tarthatják karban.**

**Предупреждение** Установку, замену и обслуживание этого оборудования может осуществлять только специально обученный квалифицированный персонал.

**警告** 只有经过培训且具有资格的人员才能进行此设备的安装、更换和维修。

**警告** この装置の設置、交換、保守は、訓練を受けた相応の資格のある人が行ってください。

**주의** 교육을 받고 자격을 갖춘 사람만 이 장비를 설치, 교체, 또는 서비스를 수행해야 합니다.

**Aviso** **Somente uma equipe treinada e qualificada tem permissão para instalar, substituir ou dar manutenção a este equipamento.**

**Advarsel** **Kun uddannede personer må installere, udskifte komponenter i eller servicere dette udstyr.**

**تحذير** يسمح للفنيين المتخصصين فقط بتركيب المعدة أو استبدالها أو إجراء الصيانة عليها.

**Upozorenje** **Uredaj smije ugradjivati, mijenjati i servisirati samo za to obučeno i sposobljeno servisno osoblje.**

**Upozornění** **Instalaci, výměnu nebo opravu tohoto zařízení smějí provádět pouze proškolené a kvalifikované osoby.**

**Προειδοποίηση** Η τοποθέτηση, η αντικατάσταση και η συντήρηση του εξοπλισμού επιτρέπεται να γίνονται μόνο από καταρτισμένο προσωπικό με τα κατάλληλα προσόντα.

**אזהרה**

**Опомена** Местењето, заменувањето и сервисирањето на оваа опрема треба да биде дозволено само на обучен и квалификуван персонал.

|             |  |
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| Ostrzeżenie | Do instalacji, wymiany i serwisowania tych urządzeń mogą być dopuszczone wyłącznie osoby wykwalifikowane i przeszkolone. |
| Upozornenie | Inštaláciu, výmenu alebo opravu tohto zariadenia smú vykonávať iba vyškolené a kvalifikované osoby.                      |

## Statement 1034—Backplane Voltage



**Warning**

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.**

**Waarschuwing**

**Er is gevaarlijke spanning of energie aanwezig op de achterplaat wanneer het systeem bediend wordt. Wees voorzichtig bij het onderhoud.**

**Varoitus**

**Kun laite on toiminnassa, taustalevyn muodostuu vaarallista jännitettä. Ole varovainen huoltaessasi laitetta.**

**Attention**

**Lorsque le système est en fonctionnement, des tensions électriques circulent sur le fond de panier. Prendre des précautions lors de la maintenance.**

**Warnung**

**Wenn das System in Betrieb ist, treten auf der Rückwandplatine gefährliche Spannungen oder Energien auf. Vorsicht bei der Wartung.**

**Avvertenza**

**Quando il sistema è in funzione, il pannello posteriore è sotto tensione pericolosa. Prestare attenzione quando si lavora sul sistema.**

**Advarsel**

**Farlig spenning er til stede på bakpanelet når systemet kjøres. Utvis forsiktighet under service.**

**Aviso**

**Há presença de voltagem perigosa ou de energia na placa traseira quando o sistema está em operação. Tenha cuidado ao fazer a manutenção.**

**¡Advertencia!**

**Cuando el sistema está en funcionamiento, el voltaje del plano trasero es peligroso. Tenga cuidado cuando lo revise.**

**Varning!**

**Farlig spänning föreligger på bakplattan när systemet körs. Var försiktig vid service.**

**Figyelem**

**A rendszer működése közben veszélyes feszültség vagy energia van jelen a hátlapon. Karbantartás közben óvatosan járjon el!**

**Предупреждение**

**При работе оборудования на разъемах задней панели присутствует высокое напряжение. Будьте внимательны при работе с оборудованием.**

|               |   |
|---------------|---|
| 警告            | 当系统正在运行时，背板上有很危险的电压或能量。进行维修时务必小心。   |
| 警告            | システムの稼働中は、バックプレーンに危険な電圧またはエネルギーがかかっています。保守作業を行うときは注意してください。   |
| 주의            | 시스템이 가동 중일 때 뒷면에서 위험한 전압 또는 에너지가 발생합니다. 서비스 수행 시 주의하십시오.  |
| Aviso         | <b>O sistema em funcionamento emite tensão ou energia elétrica perigosa no painel traseiro. Seja cauteloso ao fazer a manutenção.</b>   |
| Advarsel      | <b>Der er farlig spænding og energi på bagpladen når systemet er i brug. Vær forsiktig under servicering.</b>   |
| تحذير         | عند تشغيل النظام، يوجد قدر كبير من الجهد الكهربائي الخطير في الجزء الخلفي. كن حريصاً عند إجراء الصيانة.   |
| Upozorenje    | <b>Kad sustav radi, na stražnjoj je ploči prisutan opasan visoki napon ili energija. Budite oprezni kod servisiranja.</b>   |
| Upozornění    | <b>Při provozu systému je na zadní desce nebezpečné napětí nebo energie. Při opravě dbejte opatrnosti.</b>  |
| Προειδοποίηση | Όταν το σύστημα λειτουργεί, στην πίσω πλάκα συνδέσεων είναι παρούσα επικίνδυνη τάση ή ενέργεια. Να είστε προσεκτικοί κατά τις εργασίες συντήρησης.  |
| ازهارה        | מתוך מסוכן וחשמל קיימים בלוח האחורי כאשר המערכת פועלה. נקטו זהירות בעת הティיפול.   |
| Opomema       | На задната плоча има ризичен напон или енергия кога системот работи. Бидете претпазливи при сервисирањето.  |
| Ostrzeżenie   | <b>Podczas pracy systemu na płycie interfejsu magistrali występują niebezpieczne napięcia lub energia elektryczna. Przy wykonywaniu czynności serwisowych należy zachować ostrożność.</b> |
| Upozornenie   | <b>Počas prevádzky systému je na zadnej doske nebezpečné napätie alebo energia. Pri oprave budte opatrní.</b>   |

# 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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