



# Regulatory Compliance and Safety Information for the Cisco Service Control Engines (SCE)

## Document Version History

This is the first version of this document. The document version history is documented in [Table 1](#).

*Table 1 Document Version History*

Document Version	Date	Notes
78-17090-02	June, 2007	Added Statement 371.
78-17090-01	August, 2005	This document contains all the Cisco Service Control Engine platforms regulatory compliance and safety information.

Read this document before installing or servicing the Cisco Service Control Engine (SCE) systems:

- SCE 2020 4xGBE
- SCE 2020 4/8xFE
- SCE 1010 2xGBE



**Note**

Only trained and qualified service personnel (as defined in IEC 60950 and AS/NZS 3260) should install, replace, or service the equipment. Install the system in accordance with the U.S. National Electric Code if you are in the United States.

This document includes the following sections:

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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.

## Warning Definition Statement

This section includes translations in multiple languages of the warnings that may appear in your product documents.

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## Statement 10—Installation Warning



Warning

Read the installation instructions before you connect the system to its power source.

Waarschuwing

Raadpleeg de installatie-aanwijzingen voordat u het systeem met de voeding verbindt.

Varoitus

Lue asennusohjeet ennen järjestelmän yhdistämistä virtalähteeseen.

Attention

Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

Warnung

Lesen Sie die Installationsanweisungen, bevor Sie das System an die Stromquelle anschließen.

Avvertenza

Consultare le istruzioni di installazione prima di collegare il sistema all'alimentatore.

Advarsel

Les installasjonsinstruksjonene før systemet kobles til strømkilden.

Aviso

Leia as instruções de instalação antes de ligar o sistema à sua fonte de energia.

¡Advertencia!

Ver las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Varning!

Läs installationsanvisningarna innan du kopplar systemet till dess strömförsörjningsenhet.

警告

システムを電源に接続する前に、インストラクションについての説明書を必ずお読みください。

## Statement 1040—Product Disposal



Warning

Ultimate disposal of this product should be handled according to all national laws and regulations.

Waarschuwing

Het uiteindelijke wegruimen van dit product dient te geschieden in overeenstemming met alle nationale wetten en reglementen.

Varoitus

Tämä tuote on hävitettävä kansallisten lakien ja määräysten mukaisesti.

Attention

La mise au rebut ou le recyclage de ce produit sont généralement soumis à des lois et/ou directives de respect de l'environnement. Renseignez-vous auprès de l'organisme compétent.

Warnung

Die Entsorgung dieses Produkts sollte gemäß allen Bestimmungen und Gesetzen des Landes erfolgen.

Avvertenza

Lo smaltimento di questo prodotto deve essere eseguito secondo le leggi e regolazioni locali.

Advarsel	Endelig kassering av dette produktet skal være i henhold til alle relevante nasjonale lover og bestemmelser.
Aviso	Deitar fora este produto em conformidade com todas as leis e regulamentos nacionais.
¡Advertencia!	Al deshacerse por completo de este producto debe seguir todas las leyes y reglamentos nacionales.
Varning!	Vid deponering hanteras produkten enligt gällande lagar och bestämmelser.
Figyelem	<b>A készülék végső elhelyezéséről az adott országban érvényes törvények és előírások szerint kell intézkedni.</b>
Предупреждение	Окончательная установка данного изделия должна выполняться в соответствии со всеми региональными и местными правилами и нормами.
警告	本产品的废弃处理应根据所有国家的法律和规章进行。
警告	この製品を廃棄処分する際は、各国の法律および規制に従って取り扱ってください。
주의	해당 국가의 관련 법규 및 규정에 따라 이 장치를 폐기해야 합니다.
Aviso	<b>O descarte definitivo deste produto deve estar de acordo com todas as leis e regulamentações nacionais.</b>
Advarsel	Endelig bortskaffelse af dette produkt skal ske i henhold til gældende love og regler.
تحذير	عند التخلص من المنتج يجب اتباع القوانين والتشريعات المحلية.
Upozorenje	<b>Zbrinjavanje ovoga proizvoda u otpad treba provesti u skladu s važećim zakonima i odredbama.</b>
Upozornění	<b>Upozornění: Likvidace tohoto výrobku musí být provedena podle platných zákonů a předpisů.</b>
Προειδοποίηση	Η τελική απόρριψη αυτού του προϊόντος πρέπει να γίνεται σύμφωνα με όλους τους εθνικούς νόμους και κανονισμούς.
אזהרה	סילוק סופי של מוצר זה חייב להיות בהתאם להנחיות ולחוקי המדינה.
Оромона	Крайното фрлање на овој производ треба да се изврши во согласност со сите национални закони и прописи.

- Ostrzeżenie** Ostateczna likwidacja tego urządzenia po jego wycofaniu z eksploatacji powinna odbywać się zgodnie z przepisami krajowymi.
- Upozornenie** Upozornenie Likvidácia tohto výrobku musí byť vykonaná podľa platných zákonov a predpisov.
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## Statement 43—Jewelry Removal Warning



Before you work on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.

- Waarschuwing** Alvorens aan apparatuur te werken die met elektrische leidingen is verbonden, sieraden (inclusief ringen, kettingen en horloges) verwijderen. Metalen voorwerpen worden warm wanneer ze met stroom en aarde zijn verbonden, en kunnen ernstige brandwonden veroorzaken of het metalen voorwerp aan de aansluitklemmen lassen.
- Varoitus** Ennen kuin työskentelet voimavirtajohtoihin kytkettyjen laitteiden parissa, ota pois kaikki korut (sormukset, kaulakorut ja kellot mukaan lukien). Metalliesineet kuumentuvat, kun ne ovat yhteydessä sähkövirran ja maan kanssa, ja ne voivat aiheuttaa vakavia palovammoja tai hitsata metalliesineet kiinni liitäntänapoihin.
- Attention** Avant d'accéder à cet équipement connecté aux lignes électriques, ôter tout bijou (anneaux, colliers et montres compris). Lorsqu'ils sont branchés à l'alimentation et reliés à la terre, les objets métalliques chauffent, ce qui peut provoquer des blessures graves ou souder l'objet métallique aux bornes.
- Warnung** Vor der Arbeit an Geräten, die an das Netz angeschlossen sind, jeglichen Schmuck (einschließlich Ringe, Ketten und Uhren) abnehmen. Metallgegenstände erhitzen sich, wenn sie an das Netz und die Erde angeschlossen werden, und können schwere Verbrennungen verursachen oder an die Anschlußklemmen angeschweißt werden.
- Avvertenza** Prima di intervenire su apparecchiature collegate alle linee di alimentazione, togliersi qualsiasi monile (inclusi anelli, collane, braccialetti ed orologi). Gli oggetti metallici si riscaldano quando sono collegati tra punti di alimentazione e massa: possono causare ustioni gravi oppure il metallo può saldarsi ai terminali.
- Advarsel** Fjern alle smykker (inkludert ringer, halskjeder og klokker) før du skal arbeide på utstyr som er koblet til kraftledninger. Metallgjenstander som er koblet til kraftledninger og jord blir svært varme og kan forårsake alvorlige brannskader eller smelte fast til polene.

Aviso	Antes de trabalhar em equipamento que esteja ligado a linhas de corrente, retire todas as jóias que estiver a usar (incluindo anéis, fios e relógios). Os objectos metálicos aquecerão em contacto com a corrente e em contacto com a ligação à terra, podendo causar queimaduras graves ou ficarem soldados aos terminais.
¡Advertencia!	Antes de operar sobre equipos conectados a líneas de alimentación, quitarse las joyas (incluidos anillos, collares y relojes). Los objetos de metal se calientan cuando se conectan a la alimentación y a tierra, lo que puede ocasionar quemaduras graves o que los objetos metálicos queden soldados a los bornes.
Varning!	Tag av alla smycken (inklusive ringar, halsband och armbandsur) innan du arbetar på utrustning som är kopplad till kraftledning. Metallobjekt hettas upp när de kopplas ihop med ström och jord och kan förorsaka allvarliga brännskador; metallobjekt kan också sammansvetsas med kontakterna.

## Statement 1001—Work During Lightning Activity



**Warning** Do not work on the system or connect or disconnect cables during periods of lightning activity.

Waarschuwing	Tijdens onweer dat gepaard gaat met bliksem, dient u niet aan het systeem te werken of kabels aan te sluiten of te ontkoppelen.
Varoitus	Älä työskentele järjestelmän parissa äläkä yhdistä tai irrota kaapeleita ukkosilmalla.
Attention	Ne pas travailler sur le système ni brancher ou débrancher les câbles pendant un orage.
Warnung	Arbeiten Sie nicht am System und schließen Sie keine Kabel an bzw. trennen Sie keine ab, wenn es gewittert.
Avvertenza	Non lavorare sul sistema o collegare oppure scollegare i cavi durante un temporale con fulmini.
Advarsel	Utfør aldri arbeid på systemet, eller koble kabler til eller fra systemet når det tordner eller lyner.
Aviso	Não trabalhe no sistema ou ligue e desligue cabos durante períodos de mau tempo (trovoada).
¡Advertencia!	No operar el sistema ni conectar o desconectar cables durante el transcurso de descargas eléctricas en la atmósfera.
Varning!	Vid åska skall du aldrig utföra arbete på systemet eller ansluta eller koppla loss kablar.
Figyelem	Villámlás közből ne dolgozzon a rendszeren, valamint ne csatlakoztasson és ne húzzon ki kábeleket!
Предупреждение	Не следует работать с устройством, а также подключать или отключать кабели во время грозы.

**警告** 请勿在发生雷电时操作系统，也不要在此期间连接或断开电缆。

**警告** 雷が発生しているときは、システムに手を加えたり、ケーブルの接続や取り外しを行わないでください。

## Statement 49—Qualified Personnel Warning

This equipment is to be installed and maintained by service personnel only as defined by AS/NZS 3260 Clause 1.2.14.3 Service Personnel.



**Warning**

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

**Waarschuwing** Installatie en reparaties mogen uitsluitend door getraind en bevoegd personeel uitgevoerd worden.

**Varoitus** Ainoastaan koulutettu ja pätevä henkilökunta saa asentaa tai vaihtaa tämän laitteen.

**Avertissement** Tout installation ou remplacement de l'appareil doit être réalisé par du personnel qualifié et compétent.

**Achtung** Gerät nur von geschultem, qualifiziertem Personal installieren oder auswechseln lassen.

**Avvertenza** Solo personale addestrato e qualificato deve essere autorizzato ad installare o sostituire questo apparecchio.

**Advarsel** Kun kvalifisert personell med riktig opplæring bør montere eller bytte ut dette utstyret.

**Aviso** Este equipamento deverá ser instalado ou substituído apenas por pessoal devidamente treinado e qualificado.

**¡Atención!** Estos equipos deben ser instalados y reemplazados exclusivamente por personal técnico adecuadamente preparado y capacitado.

**Varning** Denna utrustning ska endast installeras och bytas ut av utbildad och kvalificerad personal.

## Australia SA/NZS 3260 Warning

The cores in the mains leads are colored in accordance with the following code:

**Table 2** *Australia SCE Platform Lead Color*

Lead Color	Function
Green and Yellow	Earth
Blue	Neutral
Brown	Live

The colors of the cores in the main leads may not correspond with the colored markings identifying the terminals in the plug if power supply cord rewiring is required. Following are the colors of the main leads of this equipment:

- The green and yellow colored core must be connected to the terminal in the plug, which is marked with the letter E or by the earth symbol, or colored green and yellow.
- The blue core must be connected to the terminal, which is marked with the letter N or colored black.
- The brown core must be connected to the terminal, which is marked with the letter L or colored red.

## Statement 328—Main Ground Connection Warning

When installing the unit, always make the ground connection first and disconnect it last.



Warning

For Nordic countries (Norway, Finland, Sweden and Denmark) this system must be installed in a Restricted Access Location, where the voltage of the main ground connection of all equipment is the same (equipotential earth) and the system is connected to a grounded electrical outlet.

Waarschuwing

Voor de Noord-Europese landen (Noorwegen, Finland, Zweden en Denemarken) dient dit systeem geïnstalleerd te worden in een locatie met beperkte toegang, waarbij het voltage van de hoofdaardingsaansluiting van alle apparatuur hetzelfde is (equipotentiale aarding) en het systeem aangesloten is op een geaarde elektrische contactdoos.

Varoitus

Pohjoismaissa (Norja, Ruotsi, Suomi ja Tanska) tämä järjestelmä on asennettava paikkaan, johon on rajoitettu pääsy ja jossa kaikkien laitteiden päämaadoituksen jännite on sama (tasapotentialinen maa) ja järjestelmä on kytketty maadoitettuun pistorasiaan.

Attention

Dans les pays scandinaves (Norvège, Finlande, Suède et Danemark), ce système doit être installé dans un local à accès restreint, où le voltage de la prise de terre principale de tous les appareils est le même (" terre équipotentielle ") et où le système est connecté à une prise électrique mise à la terre.

Warnung

In nordischen Ländern (Norwegen, Finnland, Schweden und Dänemark) muss dieses System an einem Standort mit beschränktem Zugang installiert werden, an dem die Spannung der Haupterdungsverbinding aller Geräte gleich ist (Äquipotential-Erdung) und das System an eine geerdete Steckdose angeschlossen ist.



Avvertenza	In Scandinavia (Norvegia, Finlandia, Svezia e Danimarca) questo sistema deve essere installato in un'Area ad Accesso Limitato, in cui il livello di tensione della connessione di terra della rete è lo stesso per tutti gli apparecchi (terra equipotenziale) e il sistema è connesso ad un impianto di messa a terra.
Advarsel	I de nordiske land (Norge, Finland, Sverige og Danmark) må dette systemet installeres på et sted merket begrenset adgang, der spenningen i apparatjordforbindelsen for alt utstyr er den samme (ekvipotensial jord) og der systemet er koblet til et jordet elektrisk uttak.
Aviso	Para países Nórdicos (Noruega, Finlândia, Suécia e Dinamarca) este sistema deve ser instalado em um local de acesso restrito onde a voltagem do aterramento principal de todos os equipamento é o mesmo (equipotential earth) e o sistema está conectado a uma tomada elétrica aterrada.
¡Advertencia!	En los países nórdicos (Noruega, Finlandia, Suecia y Dinamarca), este sistema debe ser instalado en una ubicación de acceso restringido donde el voltaje de la conexión principal a tierra de todo el equipamiento sea el mismo (tierra equipotencial) y el sistema se conecte a un enchufe con descarga a tierra.
Varning!	I de nordiska länderna (Norge, Finland, Sverige och Danmark) måste detta system installeras på en plats med begränsad åtkomst, där spänningen i huvudjordningsanslutningen för all utrustning är densamma (ekvipotentiell jordning) och där systemet är anslutet till ett jordat eluttag.

## Statement 39—Grounded Equipment Warning



Warning	This equipment is intended to be grounded. Ensure that the host is connected to earth ground during normal use.
Waarschuwing	Deze apparatuur hoort geaard te worden Zorg dat de host-computer tijdens normaal gebruik met aarde is verbonden.
Varoitus	Tämä laitteisto on tarkoitettu maadoitettavaksi. Varmista, että isäntälaitte on yhdistetty maahan normaalikäytön aikana.
Attention	Cet équipement doit être relié à la terre. S'assurer que l'appareil hôte est relié à la terre lors de l'utilisation normale.
Warnung	Dieses Gerät muß geerdet werden. Stellen Sie sicher, daß das Host-Gerät während des normalen Betriebs an Erde gelegt ist.
Figyelem!	A készüléket védőföldeléssel kell ellátni. Győződjön meg róla, hogy a készülék normál használat során csatlakozik a földhöz.
Avvertenza	Questa apparecchiatura deve essere collegata a massa. Accertarsi che il dispositivo host sia collegato alla massa di terra durante il normale utilizzo.
Advarsel	Dette utstyret skal jordes. Forviss deg om vertsterminalen er jordet ved normalt bruk.

Aviso	Este equipamento deverá estar ligado à terra. Certifique-se que o host se encontra ligado à terra durante a sua utilização normal.
¡Advertencia!	Este equipo debe conectarse a tierra. Asegurarse de que el equipo principal esté conectado a tierra durante el uso normal.
Varning!	Denna utrustning är avsedd att jordas. Se till att värdenheten är jordad vid normal användning.
Предупреждение	Данное устройство должно быть заземлено. Убедитесь, что при обычной работе устройство заземлено.
警告	此设备应该接地。请确保主机在正常使用期间连接接地。
警告	この装置はアースに接続するものです。通常の使用では、ホストがアース端子に接続されていることを確認してください。

## Statement 190—Grounding Requirement Warning

This equipment is Class 1 type and must be permanently earthed for protection and functional purposes. For safe operation and servicing, install the AC socket outlet near the equipment so that it is readily accessible. Use the appropriate AC power cord and plug, as required by national standards. This equipment must be permanently earthed.



Warning

This equipment needs to be grounded. Use a green and yellow 14 AWG ground wire to connect the host to earth ground during normal use.

Waarschuwing

Deze apparatuur hoort geaard te woden. Gebruik een groen/gele 14 AWG aarddraad om de host tijdens normaal gebruik met de aarde te verbinden.

Varoitus

Tämä laitteisto täytyy maadoittaa. Yhdistä isäntälaitte maahan normaalikäytön aikana käyttämällä vihreä-keltaista 14 AWG -maadoitusjohtoa.

Attention

Cet équipement doit être relié à la terre. Utilisez un fil vert et jaune de gabarit 14 (AWG) pour connecter l'hôte à la terre lors son utilisation normale.

Warnung

Dieses Gerät muß geerdet werden. Verwenden Sie ein grün/gelbes 14-AWG-Erdungskabel, um damit das Host-Gerät während des normalen Betriebs zu erden.

Figyelem!

A készüléket védőföldeléssel kell ellátni. A készüléket normál használat esetén zöld és sárga 14 AWG jelű földelővezetékekkel kösse a földponthoz.

Avvertenza

Questa apparecchiatura deve essere collegata a massa. Durante l'uso normale, collegare l'host alla massa di terra usando un filo di massa verde e giallo di diametro pari a 14 AWG.

Advarsel	Dette utstyret må jordes. Bruk en grønn og gul 14 AWG jordledning til å kople vertsterminalen til jording i løpet av normalt bruk.
Aviso	É necessário que este equipamento esteja ligado à terra. Utilize um fio de ligação à terra de 14 AWG, verde e amarelo, para ligar o host à ligação à terra durante a sua utilização normal.
Advertencia	Este equipo debe conectarse a tierra. Utilizar un hilo de puesta a tierra 14 AWG verde y amarillo para conectar a tierra el equipo principal durante el uso normal.
Varning!	Denna utrustning är avsedd att jordas. Använd en gulgrön jordledning av storlek 14 AWG till att jorda värdenheten vid normal användning.
Предупреждение	Данное устройство должно быть заземлено. Воспользуйтесь зеленым и желтым заземляющими проводами 14 AWG для заземления оборудования при обычном режиме работы.
警告	此设备需要接地。请使用绿色和黄色的 14 AWG 接地线将主机在正常使用期间连接接地。
警告	この装置はアースに接続するものです。通常の使用では、緑と黄色の 14 AWG アースコードを使用してホストをアース端子に接続してください。

## Protective Earth Warning



Warning

Protective earth is referred to as chassis ground in this document. To make protective earth connection, use the two-hole compression lug grounding points on the back panel.

## Statement 93—Ground Conductor Warning



Warning

Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.

**Waarschuwing** De aardingsleiding mag nooit buiten werking gesteld worden en de apparatuur mag nooit bediend worden zonder dat er een op de juiste wijze geïnstalleerde aardingsleiding aanwezig is. Neem contact op met de bevoegde instantie voor elektrische inspecties of met een elektricien als u er niet zeker van bent dat er voor passende aarding gezorgd is.

**Varoitus** Älä koskaan ohita maajohdinta tai käytä laitteita ilman oikein asennettua maajohdinta. Ota yhteyttä asianmukaiseen sähkötarkastusviranomaiseen tai sähköasentajaan, jos olet epävarma maadoituksen sopivuudesta.

Attention	Ne jamais rendre inopérant le conducteur de masse ni utiliser l'équipement sans un conducteur de masse adéquatement installé. En cas de doute sur la mise à la masse appropriée disponible, s'adresser à l'organisme responsable de la sécurité électrique ou à un électricien.
Warnung	Auf keinen Fall den Erdungsleiter unwirksam machen oder das Gerät ohne einen sachgerecht installierten Erdungsleiter verwenden. Wenn Sie sich nicht sicher sind, ob eine sachgerechte Erdung vorhanden ist, wenden Sie sich an den zuständigen elektrischen Fachmann oder einen Elektriker.
Avvertenza	Non escludere mai il conduttore di protezione né usare l'apparecchiatura in assenza di un conduttore di protezione installato in modo corretto. Se non si sa con certezza che è disponibile un collegamento di messa a terra adeguato, esaminare le Norme CEI pertinenti o rivolgersi a un elettricista qualificato.
Advarsel	Omgå aldri jordingslederen og bruk aldri utstyret uten riktig monterte jordingsleder. Ta kontakt med det riktige organet for elektrisk inspeksjon eller en elektriker hvis du er usikker på om det finnes velegnet jording.
Aviso	Nunca anule o condutor à terra nem opere o equipamento sem ter um condutor à terra adequadamente instalado. Em caso de dúvida em relação ao sistema de ligação à terra, contacte os serviços locais de inspeção eléctrica ou um electricista qualificado.
¡Advertencia!	No inhabilitar nunca el conductor de tierra ni hacer funcionar el equipo si no existe un conductor de tierra instalado correctamente. Póngase en contacto con una autoridad apropiada de inspección eléctrica o con un electricista competente si no está seguro de que hay una conexión a tierra adecuada.
Varning!	Koppla aldrig från jordledningen och använd aldrig utrustningen utan en på lämpligt sätt installerad jordledning. Om det föreligger osäkerhet huruvida lämplig jordning finns skall elektrisk besiktningsauktoritet eller elektriker kontaktas.

## FCC Warning



### Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## Restricted Area Warning (DC platform only)



This unit is intended for installation in restricted access areas. A restricted access area is where access can only be gained by service personnel through the use of a special tool, lock and key, or other means of security, and is controlled by the authority responsible for the location.

## Statement 94—Wrist Strap 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 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.

Varoitus

Käytä tämän toimenpiteen aikana maadoitettuja rannesuojia 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.

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 szenvedhet.

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 di 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!	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.
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.
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 1—Power Disconnection Warning



Warning	Before working on a system that has an on/off switch, turn OFF the power and unplug the power cord.
Waarschuwing	Voordat u aan een systeem werkt dat een aan/uit schakelaar heeft, dient u de stroomvoorziening UIT te schakelen en de stekker van het netsnoer uit het stopcontact te halen.
Varoitus	Ennen kuin teet mitään sellaiselle järjestelmälle, jossa on kaksiasentokytkin, katkaise siitä virta ja kytke virtajohto irti.
Attention	Avant de travailler sur un système équipé d'un commutateur marche-arrêt, mettre l'appareil à l'arrêt (OFF) et débrancher le cordon d'alimentation.
Warnung	Bevor Sie an einem System mit Ein/Aus-Schalter arbeiten, schalten Sie das System AUS und ziehen das Netzkabel aus der Steckdose.
Figyelem!	Ha olyan készüléken dolgozik, amelynek van ki/bekapcsoló gombja, kapcsolja KI a készüléket, és húzza ki a tápkábelt.
Avvertenza	Prima di lavorare su un sistema dotato di un interruttore on/off, spegnere (OFF) il sistema e staccare il cavo dell'alimentazione.
Advarsel	Slå AV strømmen og trekk ut strømledningen før det utføres arbeid på et system som er utstyrt med en av/på-bryter.

Aviso	Antes de começar a trabalhar num sistema que tem um interruptor on/off, DESLIGUE a corrente eléctrica e retire o cabo de alimentação da tomada.
¡Advertencia!	Antes de utilizar cualquier sistema equipado con interruptor de Encendido/Apagado (ON/OFF), cortar la alimentación y desenchufar el cable de alimentación.
Varning!	Slå AV strömmen och dra ur nätsladden innan du utför arbete på ett system med strömbrytare.
Предупреждение	Перед работой с оборудованием, снабженным выключателем, отключите электропитание и выдерните вилку шнура питания из розетки.
警告	在操作有切换开关的系统以前，请关闭电源并拔出电源线。
警告	オン/オフスイッチのあるシステムで作業を始める場合、はじめに電源スイッチをオフにし、電源コードのプラグを抜いてください。

## Statement 4—Power Supply Warning



Warning

Do not touch the power supply when the power cord is connected. For systems with a power switch, line voltages are present within the power supply even when the power switch is off and the power cord is connected. For systems without a power switch, line voltages are present within the power supply when the power cord is connected.

Waarschuwing

U dient de voeding niet aan te raken zolang het netsnoer aangesloten is. Bij systemen met een stroomschakelaar zijn er lijnspanningen aanwezig in de voeding, zelfs wanneer de stroomschakelaar uitgeschakeld is en het netsnoer aangesloten is. Bij systemen zonder een stroomschakelaar zijn er lijnspanningen aanwezig in de voeding wanneer het netsnoer aangesloten is.

Varoitus

Älä kosketa virtalähdettä virtajohdon ollessa kytkettynä. Virrankatkaisimella varustetuissa järjestelmissä on virtalähteen sisällä jäljellä verkkojännite, vaikka virrankatkaisin on katkaistu-asennossa virtajohdon ollessa kytkettynä. Järjestelmissä, joissa ei ole virrankatkaisinta, on virtalähteen sisällä verkkojännite, kun virtajohto on kytkettynä.

Attention

Ne pas toucher le bloc d'alimentation quand le cordon d'alimentation est branché. Avec les systèmes munis d'un commutateur marche-arrêt, des tensions de ligne sont présentes dans l'alimentation quand le cordon est branché, même si le commutateur est à l'arrêt. Avec les systèmes sans commutateur marche-arrêt, l'alimentation est sous tension quand le cordon d'alimentation est branché.

Warnung

Berühren Sie das Netzgerät nicht, wenn das Netzkabel angeschlossen ist. Bei Systemen mit Netzschalter liegen Leitungsspannungen im Netzgerät vor, wenn das Netzkabel angeschlossen ist, auch wenn das System ausgeschaltet ist. Bei Systemen ohne Netzschalter liegen Leitungsspannungen im Netzgerät vor, wenn das Netzkabel angeschlossen ist.

<b>Figyelem!</b>	<b>Ha a tápkábel csatlakoztatva van, ne érjen hozzá a tápegységhez. Az olyan készülékeknél, amelyeknek van ki/bekapcsoló gombja, a hálózati feszültség akkor is jelen van a tápegységben, ha a készülék ki van kapcsolva, de a tápkábel csatlakoztatva van. Az olyan készülékeknél, amelyeknek nincs ki/bekapcsoló gombja, a hálózati feszültség akkor van jelen a tápegységben, ha a tápkábel csatlakoztatva van.</b>
<b>Avvertenza</b>	<b>Non toccare l'alimentatore se il cavo dell'alimentazione è collegato. Per i sistemi con un interruttore di alimentazione, tensioni di linea sono presenti all'interno dell'alimentatore anche quando l'interruttore di alimentazione è in posizione di disattivazione (off), se il cavo dell'alimentazione è collegato. Per i sistemi senza un interruttore, tensioni di linea sono presenti all'interno dell'alimentatore quando il cavo di alimentazione è collegato.</b>
<b>Advarsel</b>	<b>Berør ikke strømforsyningsenheden når strømledningen er tilkoblet. I systemer som har en strømbryter, er det spenning i strømforsyningsenheden selv om strømbryteren er slått av og strømledningen er tilkoblet. Når det gjelder systemer uten en strømbryter, er det spenning i strømforsyningsenheden når strømledningen er tilkoblet.</b>
<b>Aviso</b>	<b>Não toque na unidade abastecedora de energia quando o cabo de alimentação estiver ligado. Em sistemas com interruptor, a corrente eléctrica estará presente na unidade abastecedora, sempre que o cabo de alimentação de energia estiver ligado, mesmo quando o interruptor se encontrar desligado. Para sistemas sem interruptor, a tensão eléctrica dentro da unidade abastecedora só estará presente quando o cabo de alimentação estiver ligado.</b>
<b>¡Advertencia!</b>	<b>No tocar la fuente de alimentación mientras el cable esté enchufado. En sistemas con interruptor de alimentación, hay voltajes de línea dentro de la fuente, incluso cuando el interruptor esté en Apagado (OFF) y el cable de alimentación enchufado. En sistemas sin interruptor de alimentación, hay voltajes de línea en la fuente cuando el cable está enchufado.</b>
<b>Varning!</b>	<b>Vidrör inte strömförsörjningsenheden när nätsladden är ansluten. För system med strömbrytare finns det nätspänning i strömförsörjningsenheden även när strömmen har slagits av men nätsladden är ansluten. För system utan strömbrytare finns det nätspänning i strömförsörjningsenheden när nätsladden är ansluten.</b>
<b>Предупреждение</b>	<b>Не дотрагивайтесь до блока питания, когда шнур подключен к электрической сети. Если в оборудовании используются выключатели электропитания, блок питания находится под напряжением даже в том случае, если выключатель отключен, но шнур питания подключен к электросети. Если в оборудовании не используются выключатели питания, блок питания находится под напряжением, если шнур питания подключен к электросети.</b>
<b>警告</b>	<b>连接电源线时，请勿接触电源。对于有电源切换开关的系统，即使关闭了电源开关，在连接电源线时，电源内仍有电网电压。对于没有电源切换开关的系统，连接电源线时，电源内仍有电网电压。</b>
<b>警告</b>	<b>電源コードが接続されているときには電源に触らないでください。電源スイッチを備えたシステムの場合、電源スイッチがオフになっていても、電源コードが接続されていれば、電源装置内部に線間電圧がかかっています。電源スイッチのないシステムでは、電源コードが接続されていると電源装置内部に線間電圧がかかっています。</b>



## Power Compatibility Warning



Never install an AC power module and a DC power module in the same chassis.

## Statement 12—Power Supply Disconnection Warning



This unit may have more than one power supply cord. Disconnect all power supply cords before servicing to avoid electric shock.



Before working on a chassis or working near power supplies, unplug the power cord on AC units; disconnect the power at the circuit breaker on DC units.

Waarschuwing

Voordat u aan een frame of in de nabijheid van voedingen werkt, dient u bij wisselstroom toestellen de stekker van het netsnoer uit het stopcontact te halen; voor gelijkstroom toestellen dient u de stroom uit te schakelen bij de stroomverbreker.

Varoitus

Kytke irti vaihtovirtalaitteiden virtajohto ja katkaise tasavirtalaitteiden virta suojakytkimellä, ennen kuin teet mitään asennuspohjalle tai työskentelet virtalähteiden läheisyydessä.

Attention

Avant de travailler sur un châssis ou à proximité d'une alimentation électrique, débrancher le cordon d'alimentation des unités en courant alternatif ; couper l'alimentation des unités en courant continu au niveau du disjoncteur.

Warnung

Bevor Sie an einem Chassis oder in der Nähe von Netzgeräten arbeiten, ziehen Sie bei Wechselstromeinheiten das Netzkabel ab bzw. schalten Sie bei Gleichstromeinheiten den Strom am Unterbrecher ab.

Figyelem!

Mielőtt elkezdene dolgozni a házon vagy tápegységek közelében, húzza ki a váltóáramú készülékek tápkábelét; egyenáramú készülék esetén szakítsa meg az áramot az árammegszakítónál

Avvertenza

Prima di lavorare su un telaio o intorno ad alimentatori, scollegare il cavo di alimentazione sulle unità CA; scollegare l'alimentazione all'interruttore automatico sulle unità CC.

Advarsel

Før det utføres arbeid på kabinettet eller det arbeides i nærheten av strømforsyningsenheter, skal strømledningen trekkes ut på vekselstrømsenheter og strømmen kobles fra ved strømbryteren på likestrømsenheter.

Aviso

Antes de trabalhar num chassis, ou antes de trabalhar perto de unidades de fornecimento de energia, desligue o cabo de alimentação nas unidades de corrente alternada; desligue a corrente no disjuntor nas unidades de corrente contínua.

¡Advertencia!

Antes de manipular el chasis de un equipo o trabajar cerca de una fuente de alimentación, desenchufar el cable de alimentación en los equipos de corriente alterna (CA); cortar la alimentación desde el interruptor automático en los equipos de corriente continua (CC).

**Varning!** Innan du arbetar med ett chassi eller nära strömförsörjningsenheter skall du för växelströmsenheter dra ur nätsladden och för likströmsenheter bryta strömmen vid överspänningskyddet.

**Предупреждение** Перед выполнением монтажных работ или других работ в непосредственной близости от источников питания отключите кабель электропитания от устройств с питанием переменным током. Устройства с питанием постоянным током отключите с помощью выключателя питания.

**警告** 在机架或电源附近工作时，请拔下交流设备的电源电缆，断开直流设备断路器的电源。

**警告** シャーシの作業を行うとき、または電源装置の付近で作業するときは、事前にAC装置から電源コードを外してください。DC装置の場合は、回路ブレーカーで電源を切断します。

## Statement 264—Power Module Warning



**Warning**

Never install an AC power module and a DC power module in the same chassis.

<b>Waarschuwing</b>	Een voedingsmodule met wisselstroom mag nooit samen met een gelijkstroomvoedingsmodule in het chassis geïnstalleerd worden.
<b>Varoitus</b>	Älä koskaan asenna vaihtosähkötehomoduulia ja tasasähkötehomoduulia samaan asennuspohjaan.
<b>Attention</b>	N'installez jamais un module d'alimentation AC et un module d'alimentation DC dans le même châssis.
<b>Warnung</b>	Ein Wechselstromsmodul und ein Gleichstrommodul dürfen niemals in demselben Chassis installiert werden.
<b>Avvertenza</b>	Non installare un modulo di alimentazione in corrente alternata e un modulo di alimentazione in corrente continua nello stesso chassis.
<b>Advarsel</b>	En vekselstrømsmodul og en likestrømsmodul må aldri installeres i samme chassis.
<b>Aviso</b>	Nunca instale um modulo de corrente CA (corrente alternada) e um modulo CC (corrente contínua) no mesmo chassis.
<b>¡Advertencia!</b>	Nunca instale un módulo de potencia de corriente alterna (CA) en un módulo de potencia de corriente continua (CC) en el mismo chasis.
<b>Varning!</b>	Installera aldrig en växelströms- och en likströmskraftenhet i samma chassi.

## Statement 140—Chassis Power Connection



**Warning**

Before connecting or disconnecting ground or power wires to the chassis, ensure that power is removed from the DC circuit. To ensure that all power is OFF, locate the circuit breaker on the panel board that services the DC circuit, switch the circuit breaker to the OFF position, and tape the switch handle of the circuit breaker in the OFF position.

**Waarschuwing**

Voordat u aarddraden of elektriciteitsdraden op het frame aansluit of van het frame neemt, dient u te controleren of de stroom naar het gelijkstroomcircuit uitgeschakeld is. Om u ervan te verzekeren dat alle stroom UIT is geschakeld, kiest u op het schakelbord de stroomverbreker die het gelijkstroomcircuit bedient, draait de stroomverbreker naar de UIT positie en plakt de schakelaarhandel van de stroomverbreker met plakband in de UIT positie vast.

**Varoitus**

Varmista, että tasavirtapiirissä ei ole virtaa ennen maadoitus- tai virtajohtojen kytkemistä asennuspohjaan tai ennen niiden irrottamista. Varmistaaksesi, että virta on KATKAISTU täysin, paikanna tasavirrasta huolehtivassa kojetaulussa sijaitseva suojakytkin, käännä suojakytkin KATKAISTU-asentoon ja teippaa suojakytkimen varsi niin, että se pysyy KATKAISTU-asennossa.

**Attention**

Avant de connecter ou de déconnecter les câbles d'alimentation (pôles et terre) du châssis, vérifiez que le circuit de courant continu est hors tension : localisez le disjoncteur sur le panneau de commande du circuit de courant continu, poussez-le sur la position fermée (OFF) et, à l'aide d'un ruban adhésif, bloquez sa poignée sur cette position.

**Warnung**

Gleichstrom-Unterbrechung Bevor Sie Erdungs- oder Stromkabel an das Chassis anschließen oder von ihm abtrennen, ist sicherzustellen, daß der Gleichstrom-Stromkreis unterbrochen ist. Um sicherzustellen, daß sämtlicher Strom AUS ist, machen Sie auf der Schalttafel den Unterbrecher für die Gleichstromschaltung ausfindig, stellen Sie den Unterbrecher auf OFF, und kleben Sie den Schaltergriff des Unterbrechers mit Klebeband in der AUS-Stellung fest.

**Figyelem!**

Mielőtt a föld- vagy a fázisvezetéket a házhoz csatlakoztatja, feltétlenül szakítsa meg az egyenáramú áramkör tápellátását. Úgy gondoskodhat arról, hogy mindenféle tápellátás meg legyen szakítva, hogy megkeresi az árammegszakítót az egyenáramú áramkört kiszolgáló kártyán, az árammegszakítót OFF (KI) helyzetbe állítja, és árammegszakító kapcsolóját az OFF (KI) helyzetben leragasztja.

**Avvertenza**

Prima di collegare o distaccare i cavi elettrici o di messa a terra dallo chassis, assicuratevi che il circuito DC non sia alimentato. Per verificare che tutta l'alimentazione sia scollegata (OFF), individuare l'interruttore automatico sul quadro strumenti che alimenta il circuito CC, mettere l'interruttore in posizione OFF e fissarlo con nastro adesivo in tale posizione.

**Advarsel**

Før til- eller frakobling av jord- og strømledninger til kabinettet, kontroller at strømmen er frakoblet likestrømkretsen. Sørg for at all strøm er slått AV. Dette gjøres ved å lokalisere strømbryteren på brytertavlen som betjener likestrømkretsen, slå strømbryteren AV og teipe bryterhåndtaket på strømbryteren i AV-stilling.

Aviso	Antes de conectar ou desconectar a ligação à terra ou a alimentação do chassis, certifique-se de que desligou a fonte de alimentação de energia do circuito de corrente contínua. Para se assegurar que toda a corrente foi DESLIGADA, localize o disjuntor no painel que serve o circuito de corrente contínua e coloque-o na posição OFF (Desligado), segurando nessa posição a manivela do interruptor do disjuntor com fita isoladora.
¡Advertencia!	Antes de conectar o desconectar el circuito de tierra o de alimentación del chasis, asegúrese que la alimentación del circuito CC esté cortada (OFF). Para asegurarse de que toda la alimentación esté cortada (OFF), localice el interruptor automático en el panel que alimenta el circuito de corriente continua, cambie el interruptor automático a la posición de apagado (OFF) y sujete con cinta la palanca del interruptor automático en posición de apagado (OFF).
Varning!	Innan du kopplar jord- eller elledningar till eller från chassit måste du kontrollera att strömförsörjningen till likströmskretsen är bruten. Kontrollera att all strömförsörjning är BRUTEN genom att slå AV det överspänningsskydd som skyddar likströmskretsen och tejpa fast överspänningsskyddets omkopplare i FRÅN-läget.
Предупреждение	Перед подключением к шасси проводов заземления или питания необходимо убедиться в том, что питание в цепи постоянного тока отключено. Чтобы убедиться в том, что питание полностью ОТКЛЮЧЕНО, найдите на панели выключатель цепи постоянного тока, установите его в положение ВЫКЛ и закрепите рычажок переключателя в этом положении липкой лентой.
警告	将接地线或电源线连接到底盘或从底盘上断开前，应确保电源已与直流电路断开。为了确保所有电源均处于“关闭”状态，须找到控制直流电路面板上的断路器，将断路器切换到“关闭”位置，并用胶带将断路器的开关手柄固定在“关闭”位置上。
警告	シャーシヘアース端子または電源コードを接続したり、切断したりする場合、DC回路から電源がはずれていることを確認してください。すべての電源がオフになっていることを確認する際は、DC回路をサポートするパネルボード上に回路ブレーカを設置し、回路ブレーカのスイッチをオフにし、回路ブレーカのスイッチハンドルをオフの位置に接着します。

## Statement 22—SELV Circuit Warning



### Warning

To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.



Warning

The ports labeled "Ethernet," "10BaseT," "Token Ring," "Console," and "AUX" are safety extra-low voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits. Because the BRI circuits are treated like telephone-network voltage, avoid connecting the SELV circuit to the telephone network voltage (TNV) circuits.

Waarschuwing

De poorten die "Ethernet", "10BaseT", "Token Ring", "Console" en "AUX" zijn gelabeld, zijn veiligheidscircuits met extra lage spanning (genaamd SELV = Safety Extra-Low Voltage). SELV-circuits mogen alleen met andere SELV-circuits verbonden worden. Omdat de BRI-circuits op dezelfde manier als telefoonnetwerkspanning behandeld worden, mag u het SELV-circuit niet verbinden met de telefoonnetwerkspanning (TNV) circuits.

Varoitus

Portit, joissa on nimet "Ethernet", "10BaseT", "Token Ring", "Console" ja "AUX", ovat erityisen pienen jännityksen omaavia turvallisuuspiirejä (SELV-piirejä). Tällaiset SELV-piirit tulee yhdistää ainoastaan muihin SELV-piireihin. Koska perusluokan liitännöiden (Basic Rate Interface- eli BRI-liitännät) jännite vastaa puhelinverkoston jännitettä, vältä SELV-piirin yhdistämistä puhelinverkoston jännitepiireihin (TNV-piireihin).

Attention

Les ports étiquetés « Ethernet », « 10BaseT », « Token Ring », « Console » et « AUX » sont des circuits de sécurité basse tension (Safety Extra-Low Voltage ou SELV). Les circuits SELV ne doivent être interconnectés qu'avec d'autres circuits SELV. Comme les circuits BRI sont considérés comme des sources de tension de réseau téléphonique, éviter de connecter un circuit SELV à un circuit de tension de réseau téléphonique (telephone network voltage ou TNV).

Warnung

Die mit "Ethernet", "10BaseT", "Token Ring", "Console" und "AUX" beschrifteten Buchsen sind Sicherheitskreise mit Sicherheitskleinspannung (Safety Extra-Low Voltage, SELV). SELV-Kreise sollten ausschließlich an andere SELV-Kreise angeschlossen werden. Da die BRI-Kreise wie Telefonnetzspannungen behandelt werden, ist der SELV-Kreis nicht an Telefonnetzspannungskreise (TNV) anzuschließen.

Avvertenza

Le porte contrassegnate da "Ethernet", "10BaseT", "TokenRing", "Console" e "AUX" sono circuiti di sicurezza con tensione molto bassa (SELV). I circuiti SELV devono essere collegati solo ad altri circuiti SELV. Dato che i circuiti BRI vengono trattati come tensioni di rete telefonica, evitare di collegare il circuito SELV ai circuiti in cui è presente le tensione di rete telefonica (TNV).

Advarsel

Utgangene merket "Ethernet", "10BaseT", "Token Ring", "Console" og "AUX" er lavspenningkretser (SELV) for ekstra sikkerhet. SELV-kretser skal kun kobles til andre SELV-kretser. Fordi BRI-kretsene håndteres som telenettspenning, unngå å koble SELV-kretsene til kretser for telenettspenning (TNV).

Aviso

As portas "Ethernet", "10BaseT", "Token Ring", "Console", and "AUX" são circuitos de segurança de baixa tensão (SELV). Estes circuitos deverão ser apenas ligados a outros circuitos SELV. Devido ao facto de os circuitos BRI (Interface de Ritmo Básico) serem tratados como sendo de tensão equivalente à da rede telefónica, evite ligar o circuito SELV aos circuitos TNV (tensão de rede telefónica).

- ¡Advertencia!** Los puertos "Ethernet", "10BaseT", "Token Ring", "Console" y "AUX" son circuitos de muy baja señal que garantizan ausencia de peligro (Safety Extra-Low Voltage = SELV). Estos circuitos SELV deben ser conectados exclusivamente con otros también de tipo SELV. Puesto que los circuitos tipo BRI se comportan como aquéllos con voltajes de red telefónica, debe evitarse conectar circuitos SELV con circuitos de voltaje de red telefónica (TNV).
- Varning!** De portar som är märkta "Ethernet", "10BaseT", "Token Ring", "Console" och "AUX" är SELV-kretsar, d.v.s. skyddskretsar med extra låg spänning (SELV: Safety Extra-Low Voltage = skyddsklenspänning). SELV-kretsar får endast anslutas till andra SELV-kretsar. Eftersom BRI-kretsar behandlas liksom telefontätsspänning bör SELV-kretsen inte anslutas till telefontätsspänningskretsar (TNV-kretsar).

## Statement 116—WAN Port Static Shock Warning



### Warning

Hazardous network voltages are present in WAN ports regardless of whether power to the unit is OFF or ON. To avoid electric shock, use caution when working near WAN ports. When detaching cables, detach the end away from the unit first.

### Waarschuwing

Er is gevaarlijke netwerkspanning aanwezig in WAN poorten ongeacht of de stroom naar de router INGESCHAKELD of UITGESCHAKELD is. Om elektrische schokken te vermijden, dient u voorzichtig te werk te gaan wanneer u in de nabijheid van WAN poorten werkt. Wanneer u kabels losmaakt, dient u eerst het uiteinde dat zich het verst van de eenheid vandaan bevindt, te verwijderen.

### Varoitus

WAN-porteissa on vaarallisia verkkojännitteitä riippumatta siitä, onko yksikön virta kytketty vai ei. Välttääksesi sähköiskulta ole varovainen työskennellessäsi WAN-porttien lähetyvillä. Kun irrotat kaapeleita, irrota yksiköstä kauimpana sijaitseva pää ensiksi.

### Attention

Les ports de réseau longue distance (WAN) gèrent des tensions de réseau dangereuses, que l'unité soit sous tension ou pas. Pour éviter tout risque d'électrocution, prenez toutes les précautions nécessaires avant de travailler à proximité des ports WAN. Pour déconnecter les câbles, commencez par débrancher l'extrémité la plus éloignée du routeur.

### Warnung

In WAN-Ports sind gefährliche Netzspannungen vorhanden, auch wenn der Strom zur Einheit abgeschaltet wurde. Zur Vermeidung von Elektroschock Vorsicht bei der Arbeit in der Nähe von WAN-Ports. Beim Abtrennen von Kabeln zuerst das vom Router entfernte Ende lösen.

### Avvertenza

Nelle porte WAN sono presenti tensioni di rete pericolose, sia che il sistema sia acceso o meno (ON od OFF). Per evitare scosse elettriche, fare attenzione quando si lavora in prossimità di porte WAN. Quando si scollegano cavi, staccare per primo il connettore collegato al router.

### Advarsel!

Det er livsfarlig nettverksspenning i WAN-utganger, uavhengig av om strømmen til enheten er slått av (OFF) eller på (ON). Vær forsiktig når du jobber nær WAN-utganger slik at du unngår elektrisk støt. Hvis du skal løsne kabler, må du først løsne den enden som er lengst borte fra fordelingsenheten.

Aviso	Existem sempre tensões de rede perigosas nas portas WAN, independentemente da corrente para a unidade estar desligada (OFF) ou ligada (ON). Para evitar choques eléctricos, tenha o devido cuidado ao trabalhar junto das portas WAN. Ao desconectar os cabos, separe primeiro a extremidade do cabo que se encontra ligada à unidade.
¡Advertencia!	En los puertos de redes de área extendida (WAN) existen tensiones de red peligrosas, tanto si la unidad está conectada como si está desconectada. Para evitar descargas eléctricas, proceda con precaución cuando trabaje cerca de los puertos WAN. Para desconectar los cables, desconecte primero el extremo que va a la unidad.
Varning!	Farlig nätverksspänning föreligger i WAN-portarna oavsett om strömförsörjningen till enheten är bruten eller ej. För att undvika elektriska stötar ska du vara försiktig vid arbete i närheten av dessa portar. När du kopplar bort en kabel ska du först koppla bort den ände som inte är ansluten till enheten.

## Statement 29—Class I and Class 1M Laser Warning



Warning	Class I (21 CFR 1040.10 and 1040.11) and Class 1M (IEC 60825-1 2001-01) laser products.
Waarschuwing	Laserproducten van Klasse I (21 CFR 1040.10 en 1040.11) en Klasse 1M (IEC 60825-1 2001-01).
Varoitus	Luokan I (21 CFR 1040.10 ja 1040.11) ja luokan 1M (IEC 60825-1 2001-01) lasertuotteita.
Attention	Produits laser catégorie I (21 CFR 1040.10 et 1040.11) et catégorie 1M (IEC 60825-1 2001-01).
Warnung	Laserprodukte der Klasse I (21 CFR 1040.10 und 1040.11) und Klasse 1M (IEC 60825-1 2001-01).
Avvertenza	Prodotti laser di Classe I (21 CFR 1040.10 e 1040.11) e Classe 1M (IEC 60825-1 2001-01).
Advarsel	Klasse I (21 CFR 1040.10 og 1040.11) og klasse 1M (IEC 60825-1 2001-01) laserprodukter.
Aviso	Produtos laser Classe I (21 CFR 1040.10 e 1040.11) e Classe 1M (IEC 60825-1 2001-01).
¡Advertencia!	Productos láser de Clase I (21 CFR 1040.10 y 1040.11) y Clase 1M (IEC 60825-1 2001-01).
Varning!	Laserprodukter av Klass I (21 CFR 1040.10 och 1040.11) och Klass 1M (IEC 60825-1 2001-01).

## Statement 33—Battery Handling Warning



### Warning

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### Waarschuwing

Er is ontploffingsgevaar als de batterij verkeerd vervangen wordt. Vervang de batterij slechts met hetzelfde of een equivalent type dat door de fabrikant aanbevolen is. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften weggeworpen te worden.

### Varoitus

Räjähdyksen vaara, jos akku on vaihdettu väärään akkuun. Käytä vaihtamiseen ainoastaan samantai vastaavantyyppistä akkua, joka on valmistajan suosittelema. Hävitä käytetyt akut valmistajan ohjeiden mukaan.

### Attention

Danger d'explosion si la pile n'est pas remplacée correctement. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

### Warnung

Bei Einsetzen einer falschen Batterie besteht Explosionsgefahr. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

### Avvertenza

Pericolo di esplosione se la batteria non è installata correttamente. Sostituire solo con una di tipo uguale o equivalente, consigliata dal produttore. Eliminare le batterie usate secondo le istruzioni del produttore.

### Advarsel

Det kan være fare for eksplosjon hvis batteriet skiftes på feil måte. Skift kun med samme eller tilsvarende type som er anbefalt av produsenten. Kasser brukte batterier i henhold til produsentens instruksjoner.

### Aviso

Existe perigo de explosão se a bateria for substituída incorrectamente. Substitua a bateria por uma bateria igual ou de um tipo equivalente recomendado pelo fabricante. Destrua as baterias usadas conforme as instruções do fabricante.

### ¡Advertencia!

Existe peligro de explosión si la batería se reemplaza de manera incorrecta. Reemplazar la batería exclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

### Varning!

Explosionsfara vid felaktigt batteribyte. Ersätt endast batteriet med samma batterityp som rekommenderas av tillverkaren eller motsvarande. Följ tillverkarens anvisningar vid kassering av använda batterier.



## Statement 258—Fan Tray Removal Warning



**Warning**

When removing the fan tray, keep your hands and fingers away from the spinning fan blades. Let the fan blades completely stop before you remove the fan tray.

**Waarschuwing**

Houd tijdens het verwijderen van de ventilator de handen en vingers uit de buurt van de draaiende ventilatorschoepen. Laat de ventilatorschoepen volledig tot stilstand komen alvorens de ventilator te verwijderen.

**Varoitus**

Pidä kädet ja sormet pois tuulettimen pyörivistä siivistä tuuletinalustaa poistaessasi. Anna tuulettimen siipien pysähtyä kokonaan ennen kuin irrotat tuuletinalustan.

**Attention**

Lors du retrait du plateau du ventilateur, veillez à ce que vos mains et doigts restent à l'écart des pales en rotation du ventilateur. Attendez que les pales du ventilateur soient parvenues à une immobilité complète avant de retirer le plateau du ventilateur.

**Warnung**

Beim Herausnehmen des Lüfterkastens Hände und Finger von den sich drehenden Gebläseflügeln fern halten. Vor Herausnehmen des Gebläsekastens warten, bis die Gebläseflügel völlig zum Stillstand gekommen sind.

**Figyelem!**

Ha eltávolítja a ventilátor borítóját, ügyeljen rá, hogy ne tegye kezét vagy ujjait a ventilátor forgó lapátjai közelébe. A ventilátor borítójának eltávolítása előtt várja meg, hogy a ventilátor lapátjai teljesen megálljanak.

**Avvertenza**

Quando si toglie il vano della ventola, fare attenzione che le mani e le dita non vengano in contatto con la ventola in movimento. Attendere che la ventola si fermi completamente prima di togliere il vano.

**Advarsel**

Når du fjerner viftedekselet, hold hender og fingre borte fra de roterende viftebladene. La viftebladene stanse helt før du fjerner viftedekselet.

**Aviso**

Mantenha as suas mãos e dedos afastados das lâminas em movimento da ventoinha, ao retirar a respectiva bandeja. Deixe as lâminas da ventoinha parar completamente antes de retirar a bandeja.

**¡Advertencia!**

Cuando quite la bandeja del abanico, mantenga las manos y los dedos alejados de las aspas en movimiento. Deje que las aspas se detengan completamente antes de quitar la bandeja del abanico.

**Varning!**

Håll händer och fingrar borta från de roterande fläktbladen när du tar av fläktskyddet. Låt fläkten stanna helt innan du tar av fläktskyddet.

**Предупреждение**

При снятии вентиляторного блока не подносите руки близко к вращающимся лопастям вентилятора. Перед снятием вентиляторного блока дождитесь полной остановки лопастей вентилятора.

**警告** 在拆卸风扇架时，手和手指不要碰到旋转着的风扇叶片。待风扇叶片完全停止旋转后再拆卸风扇架。

**警告** ファントレイを取り外すときは、回転しているファンブレードに手や指が触れないように注意してください。ファンブレードが完全に静止してから、ファントレイを取り外してください。

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# Regulatory Compliance

This section includes all regulatory, safety, EMC (Class A or Class B), telecom, and NEBS standards. The Cisco SCE platform is in compliance with national and international standards as described in [Table 3](#).

**Table 3** *Regulatory Standards Compliance*

Specification	Description
Regulatory Compliance	Products with the CE[1] Marking indicate compliance with the 93/68/EEC directive, which includes the safety and EMC standards listed.
Safety	<ul style="list-style-type: none"><li>• UL 1950,</li><li>• CAN/CSA[2]-C22.2 No. 60950-00</li><li>• EN[3] 60950</li><li>• IEC[4] 60950</li><li>• IEC 60825-1</li><li>• EN 60825-1</li><li>• UL60950</li><li>• 73/23/EEC</li><li>• IEC825-1</li><li>• IEC825-2</li><li>• EN60825-1</li><li>• EN60825-2</li><li>• 21CFR1040</li><li>• NOM-019-SCFI-1998</li><li>• Class I laser product</li></ul>

**Table 3 Regulatory Standards Compliance (continued)**

Specification	Description
EMC[5]	<ul style="list-style-type: none"> <li>• FCC[6] Part 15 (CFR 47) Class A</li> <li>• ICES[7]-003</li> <li>• EN55022</li> <li>• CISPR22</li> <li>• EN 55024</li> <li>• EN50082-1</li> <li>• EN61000-3-2</li> <li>• EN61000-3-3</li> <li>• VCCI Class A</li> <li>• 89/336/EEC</li> </ul>

- [1] CE—Committee European
- [2] CSA—Canadian Standards Association
- [3] EN—European Norm
- [4] IEC—International Electrotechnical Commission
- [5] EMC—Electromagnetic Compatibility
- [6] FCC—Federal Communications Commission
- [7] ICES—Interference-Causing Equipment Standard

The Cisco SCE platform conforms to the following list of industry EMC, safety, and environmental standards.

**Table 4 Industry EMC, Safety, and Environmental Standards**

Specification	Description
ETS—European Telecommunications Standards	<ul style="list-style-type: none"> <li>• ETS 300 019-1-2, Class 2.3 Transportation</li> <li>• ETS 300 019-1-3, Class 3.2 Stationary Use</li> <li>• ETS 300 019-2-1, Class 1.2 Storage</li> <li>• ETS 300 019-2-2, Class 2.3 Public Transportation</li> <li>• ETS 300 019-2-3, Class 3.2 In Use Weather Protected</li> </ul>
NEBS—Network Equipment Building Systems	<ul style="list-style-type: none"> <li>• Fully complies with Level 3 requirements:                             <ul style="list-style-type: none"> <li>– GR63-Core, issue 3</li> <li>– GR1089-Core, issue 4</li> </ul> </li> </ul>

# EMC Environmental Conditions for Products Installed in the European Union

This section applies to products to be installed in the European Union. The equipment is intended to operate under the following environmental conditions with respect to EMC:

- A separate defined location under user's control.
- Earthing and bonding shall meet the requirements of ETS 300 253 or CCITT K27.
- AC power distribution shall be one of the following types, where applicable: TN-S and TN-C as defined in IEC 364-3.

In addition, if equipment is operated in a domestic environment, interference may occur.

## FCC Declaration of Conformity Information

Product Cisco Service Control Engine platforms

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

This equipment complies with the UL1950, the system must be connected to secondary circuits that are electrically isolated from accesses and connected to earth.

## EMC Class A Compliance

For Class A compliance to the tested standards, the system is required to be cabled with Shielded Twisted Pair (STP) or Foiled Twisted Pair (FTP) cabling.

## Canada ICES Class A Statement

This class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

## Statement 340—Class A Warning for CISPR22



<b>Warning</b>	This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
<b>Waarschuwing</b>	Dit is een product van klasse A. In een woonomgeving kan dit product radiostoring veroorzaken. In dat geval moet de gebruiker de juiste maatregelen nemen.
<b>Varoitus</b>	Tämä on A-luokan tuote. Kotona käytettynä tämä tuote voi aiheuttaa radiotaajuushäiriöitä, jolloin käyttäjän tulisi ryhtyä vaadittaviin toimenpiteisiin häiriöiden ehkäisemiseksi.
<b>Attention</b>	Il s'agit d'un produit de classe A. Dans un environnement local, ce produit peut entraîner des perturbations radioélectriques, auquel cas l'utilisateur devra éventuellement prendre des mesures adéquates.
<b>Warnung</b>	Dies ist ein Produkt der Klasse A. Bei der Verwendung dieses Produkts im Haus- oder Wohnungsbereich kann es zu Funkstörungen kommen. In diesem Fall muss der Benutzer u. U. angemessene Maßnahmen ergreifen.
<b>Avvertenza</b>	Prodotto di classe A. È possibile che il prodotto generi interferenze radio in un ambienti chiusi. In questo caso l'utente deve intraprendere le misure adeguate per risolvere il problema.
<b>Advarsel</b>	Dette er et produkt i klasse A. I et hjemmemiljø kan dette produktet forårsake radioforstyrrelser, og brukeren kan da være nødt til å ta de nødvendige forholdsregler.
<b>Aviso</b>	Este é um produto de classe A. Em um ambiente doméstico, este produto pode causar interferência de rádio. Nesse caso, talvez o usuário precise tomar as medidas adequadas.
<b>¡Advertencia!</b>	Este es un producto de clase A. En el ámbito doméstico, este producto puede causar radiointerferencias, lo que puede hacer necesaria la puesta en marcha de medidas adecuadas.
<b>Varning!</b>	Detta är en klass A-produkt. Denna produkt kan orsaka radiostörningar inomhus. Det kan då vara ett krav att användaren vidtar lämpliga åtgärder.
<b>Figyelem</b>	Ez egy A osztályba tartozó termék. Lakáson belüli környezetben előfordulhat, hogy a termék rádióvédelmi interferenciát okoz; ilyen esetben megfelelő lépéseket kell tenni a zavar megszüntetése érdekében.
<b>Предупреждение</b>	Данное изделие относится к классу А. При установке в жилых помещениях данное изделие может стать причиной радиопомех, в результате чего пользователю может потребоваться предпринять соответствующие меры.
<b>警告</b>	这是类别 A 产品。在家用环境中，该产品可能会引起无线电干扰，此时用户需要采取适当措施。

**警告使用者** 這是甲類資訊產品，在居住環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

**警告** この装置はクラスA製品です。この装置を住宅地で使用した場合、電波妨害を引き起こすことがあります。その場合、ユーザが適切な防止措置を講じるよう求められることがあります。

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## Statement 191—VCCI Class A Warning for Japan



This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

**警告** これは、情報処理装置等電波障害自主規制協議会（VCCI）の規定に基づくクラスA装置です。この装置を家庭環境で使用すると、電波妨害を引き起こすことがあります。この場合には、使用者が適切な対策を取るよう要求されることがあります。

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## Statement 257—Class A Notice for Taiwan and Other Traditional Chinese Markets



This is a Class A Information Product, when used in residential environment, it may cause radio frequency interference, under such circumstances, the user may be requested to take appropriate countermeasures.

**警告** 這是甲類資訊產品，在居住環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

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## Statement 294—Class A Warning for Korea



Warning

This is a Class A Device and is registered for EMC requirements for industrial use. The seller or buyer should be aware of this. If this type was sold or purchased by mistake, it should be replaced with a residential-use type.

주의 A급 기기 이 기기는 업무용으로 전자파 적합 등록을 한 기기이  
오니 판매자 또는 사용자는 이 점을 주의하시기 바라며 만약  
잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

## Statement 256—Class A Warning for Hungary



Warning

This equipment is a class A product and should be used and installed properly according to the Hungarian EMC Class A requirements (MSZEN55022). Class A equipment is designed for typical commercial establishments for which special conditions of installation and protection distance are used.

Figyelem

**Figyelmeztetés a felhasználói kézikönyv számára: Ez a berendezés "A" osztályú termék, felhasználására és üzembe helyezésére a magyar EMC "A" osztályú követelményeknek (MSZ EN 55022) megfelelően kerülhet sor, illetve ezen "A" osztályú berendezések csak megfelelő kereskedelmi forrásból származhatnak, amelyek biztosítják a megfelelő speciális üzembe helyezési körülményeket és biztonságos üzemelési távolságok alkalmazását.**

## Statement 371-Power Cable and AC Adapter - Japan

接続ケーブル、電源コード、ACアダプタなどの部品は、必ず添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となります。また、電気用品安全法により、当該法の認定（PSEとコードに表記）でなくUL認定（ULとコードに表記）の電源ケーブルは弊社が指定する製品以外の電気機器には使用できないためご注意ください。



## Class A Notice for FCC

Modifying the equipment without Cisco's authorization may result in the equipment no longer complying with FCC requirements for Class A digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

## CSA NRTL (Canada)

This equipment is designed to meet the CSA requirements of UL1950, Safety of Information Technology Equipment. CSA is listed by the American Federal OSHA as equivalent to UL and other American safety testing laboratories under the NRTL program.

## ULC (Canada)

The Industry Canada (formerly known as the Department of Communications) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. Industry Canada does not guarantee that equipment will operate to the user's satisfaction.

# Site Preparation and Safety Information

## Preparing Your Site for Installation

To ensure normal system operation, plan your site configuration and prepare your site before installation.

### Choosing a Site for Installation

- Install the system in a restricted access area, where access can be gained only by service personnel through the use of a special tool, lock and key, or other means of security.
- Choose a site with a dry, clean, well-ventilated and air-conditioned area.
- Choose a site that maintains an ambient temperature of 23° to 131°F (-5° to 55°C).

## Ensuring Overcurrent Protection

The system relies on the protective devices in the building installation for protection against short-circuit, overcurrent, and earth (grounding) fault. Ensure that the protective devices in the building installation are properly rated to protect the system, and that they comply with national and local codes.

## Grounding the System

- Do not defeat the ground conductor on an AC plug.
- Connect AC-powered systems to grounded power outlets.
- Connect the system to earth (ground).

## Creating a Safe Environment

- Keep tools and platform chassis off the floor and away from foot traffic.
- Clear the area of possible hazards, such as moist floors, ungrounded power extension cables, and missing safety grounds.
- Keep the area around the chassis free from dust and foreign conductive material (such as metal flakes from nearby construction activity.)

## Rack-Mounting the System

A rack-mount kit comes with the system. The kit is not suitable for racks with obstructions (such as a power strip) that could impair access to system components. Allow sufficient clearance around the rack for system maintenance.

## Ensuring Proper Airflow

- Install the system in an open rack whenever possible. If installation in an enclosed rack is unavoidable, ensure that the rack has adequate ventilation.
- Maintain ambient airflow to ensure normal operation. If the airflow is blocked or restricted, or if the intake air is too warm, an overtemperature condition can occur.
- Allow at least 2 inches (5 cm) of clearance at each side and at least 5 inches (12.7 cm) of clearance at the rear of the platform.
- Avoid placing the system in an overly congested rack or directly next to another equipment rack. Heat exhaust from other equipment can enter the inlet air vents and cause an overtemperature condition.
- Ensure that cables from other equipment do not obstruct the airflow through the chassis or impair access to the power supplies.

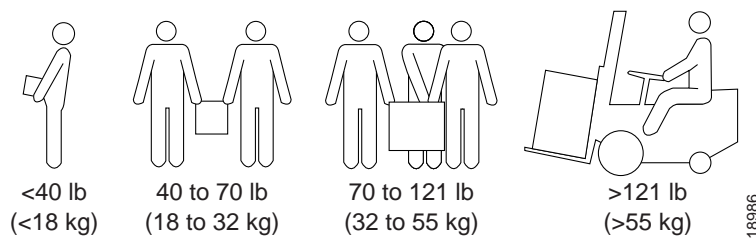
## Stabilizing the System

- Install any stabilizers that came with your equipment rack before mounting or servicing the system in the rack.
- Load the rack from the bottom to the top, with the heaviest system at the bottom.
- Do not stack the system on top of any other equipment. If the system falls, it can cause severe bodily injury and damage the equipment.
- If you are using an equipment shelf, ensure that the shelf is constructed to support the weight and dimensions of the chassis.
- If you are using a two-post rack, ensure that the weight of the chassis does not make the rack unstable. Secure the two-post rack with ceiling brackets if the rack is populated with heavy equipment.
- Bolt the rack to the floor for stability.

## Lifting the System

- Depending on the weight of the system, more than one person might be required to lift it.
- Disconnect all power and external cables before lifting the system.
- Ensure that your footing is solid and the weight of the system is evenly distributed between your feet.
- Lift the system slowly, keeping your back straight. Lift with your legs, not with your back. Bend at the knees, not at the waist.
- Do not attempt to lift the system with the handles on the power supplies. These handles are not designed to support the weight of the system.

**Figure 1** Safety Lifting the System



## Power Considerations

Both AC and DC power supplies are available. Under normal operating conditions, the system is intended to operate with either two AC power supplies or two DC power supplies.



Note

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Refer to your hardware installation guide for AC and DC power specifications.

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Caution

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Be careful when connecting systems to the supply circuit so that wiring is not overloaded.

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## AC Power

- The system is designed for connection to TN power systems. A TN power system is a power distribution system with one point connected directly to earth (ground). The exposed conductive parts of the installation are connected to that point by protective earth conductors.
- Ensure that the plug-socket combination is accessible at all times, because it serves as the main disconnecting device.

## DC Power

- Connect DC-input power supplies only to a DC power source that complies with the safety extra-low voltage (SELV) requirements in the UL1950, UL60950, CSA60950, CSA950, EN60950, and IEC60950 standards.
- Incorporate a readily accessible two-poled disconnect device in the fixed wiring.
- Ensure that power is removed from the DC circuit before installing or removing power supplies. Tape the switch handle of the DC circuit breaker in the off position.
- Use only copper conductors to connect to a DC terminal block.
- Use approved wiring terminations; hex or loop connectors. These terminations should be the appropriate size for the wires and should clamp both the insulation and the conductor.
- Ensure that no exposed portion of the DC-input power source wire extends from the terminal block plug. An exposed wire can conduct a harmful level of electricity.

## Redundant Power

Connect each of the two power supplies to different input power sources. Failure to do so makes the system susceptible to total power failure in the event that one of the power supplies fails.

## Preventing ESD

Electrostatic discharge (ESD) damage occurs when electronic cards or components are mishandled and can result in complete or intermittent failures. Note the following guidelines before you install or service the system:

- Always wear an ESD-preventive wrist or ankle strap when handling electronic components. Connect one end of the strap to an ESD jack or an unpainted metal component on the system (such as a captive installation screw).
- Handle cards by the faceplates and edges only; avoid touching the printed circuit board and connector pins.
- Place any removed component on an antistatic surface or in a static shielding bag.
- Avoid contact between the cards and clothing. The wrist strap only protects the card from ESD voltages on the body; ESD voltages on clothing can still cause damage.



**Note**

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

# Installing and Servicing the System

- Disconnect all power and external cables before installing the system.
- Install the system in compliance with your local and national electrical codes:
  - United States: National Fire Protection Association (NFPA) 70; United States National Electrical Code.
  - Canada: Canadian Electrical Code, Part I, CSA C22.1.
  - Other countries: If local and national electrical codes are not available, refer to IEC 364, Part 1 through Part 7.
- Do not work alone under potentially hazardous conditions.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Remove all jewelry (including rings and chains) or other items that could get caught in the system or heat up and cause serious burns

## Disconnecting Power

- Locate the emergency power-off switch for the room before working with the system.
- Turn off the power and disconnect the power from the circuit when working with components that are not hot-swappable. If the system does not have an on/off switch, unplug the power cord.
- To completely de-energize the system, disconnect the power connection to all power supplies.
- For DC power supplies, locate the circuit breaker on the panel board that services the DC circuit, switch the circuit breaker to the off position, and tape the switch handle of the circuit breaker in the off position.
- Do not touch the power supply when the power cord is connected. Line voltages are present within the power supply even when the power switch is off and the power cord is connected.

## Preventing EMI

When you run wires for any significant distance in an electromagnetic field, electromagnetic interference (EMI) can occur between the field and the signals on the wires.



Note

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Bad plant wiring can result in radio frequency interference (RFI).

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Note

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Strong EMI, especially when it is caused by lightning or radio transmitters, can destroy the signal drivers and receivers in the system, and can even create an electrical hazard by conducting power surges through lines and into the system.

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Note

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To predict and remedy strong EMI, consult RFI experts.

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# Disposing of the System

Dispose of the system and its components (including batteries) as specified by all national laws and regulations.

## Related Publications

Your *SCE Platform* and the software running on it contain extensive features and functionality, which are documented in the following resources:

- Cisco CLI software:
  - Cisco Service Control Engine (SCE) Software Configuration Guide
  - Cisco Service Control Engine (SCE) CLI Command Reference



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**Note** You can access Cisco software configuration and hardware installation and maintenance documentation on the World Wide Web at Cisco Website URL <http://www.cisco.com>. Translated documentation is available at the following URL: International Cisco Website [http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

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- For initial installation and startup information, refer to the relevant *Cisco SCE Platform Quick Start Guide*.
- For complete installation and initial configuration instructions, refer to the relevant *Cisco SCE Platform Installation and Configuration Guide*.
- For installation and configuration of the other components of the Service Control Management Suite refer to:
  - Subscriber Management User Guide
  - Collection Manager User Guide
  - Service Control Application Suite for Broadband User Guide
- To view Cisco documentation or obtain general information about the documentation, refer to the following sources:
  - Obtaining Documentation
  - The Cisco Information Packet that shipped with your Cisco SCE platform.

# Cisco Service Control Engine 2000 GBE-FE RCS Differences

Table 5 lists the differences between the Cisco SCE 2000 FE and the SCE 2000 GBE.

**Table 5** *RCS Differences Between the Cisco Service Engines, SCE2000 GBE and SCE2000 FE*

RCS Topic	SCE2000 GBE	SCE2000 FE
Warning Definition Statement	Class 1/I laser product warning	No laser warning
Regulatory Standards Compliance	Class I laser product	No laser
Regulatory Compliance table		
In Safety row—		
Working with Lasers	Topic present	Topic not present

## Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

### Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Documentation Feedback

You can send comments about technical documentation to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems  
 Attn: Customer Document Ordering  
 170 West Tasman Drive  
 San Jose, CA 95134-9883

We appreciate your comments.



# Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

## Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year, at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>



### Note

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

## Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

## Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

## Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

<http://cisco.com/univercd/cc/td/doc/pcat/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- World-class networking training is available from Cisco. You can view current offerings at this URL:

<http://www.cisco.com/en/US/learning/index.html>

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