



# Catalyst 4900 Family Center Rack-Mount Kits Installation Note

---

**Revised: January 19, 2011**

This installation note contains instructions on how to install the Catalyst 4900 family of switch chassis in a telco-style rack using one of the five center rack-mount kits listed in [Table 1](#).

**Table 1      Catalyst 4900 Family Center Rack-Mount Kits**

<b>Kit Part Number</b>	<b>Chassis Supported</b>	<b>Description</b>
WS-X4948-19CNTR=	Catalyst 4948, Catalyst 4948-10GE, Cisco ME 4924-10GE, Catalyst 4928-10GE	19-inch center rack-mount kit
WS-X4948-23CNTR=	Catalyst 4948, Catalyst 4948-10GE, Cisco ME 4924-10GE, Catalyst 4928-10GE	23-inch center rack-mount kit
WS-X4948E-19CNTR=	Catalyst 4948E, Catalyst 4948E-F	19-inch center rack-mount kit
WS-X4948E-23CNTR=	Catalyst 4948E, Catalyst 4948E-F	23-inch center rack-mount kit
WS-X4900M-23CNTR=	Catalyst 4900M	23-inch center rack-mount kit



**Note**

Use these kits in place of the standard rack-mount brackets shipped with the chassis when center rack-mounting the switch in a telco-style rack.

For a complete description of switch hardware installation, safety, and maintenance procedures, refer to the appropriate hardware installation guide for your chassis. See the “[Related Documentation](#)” section on page 19.

# Contents

This installation note is divided into the following topics:

- [Warnings, page 2](#)
- [Tools Required, page 7](#)
- [Installing the WS-X4948-19CNTR= or the WS-X4948-23CNTR= Center Rack-Mount Kits, page 8](#)
- [Installing the WS-X4948E-19CNTR= or the WS-X4948E-23CNTR= Center Rack-Mount Kits, page 11](#)
- [Installing the WS-X4900M-23CNTR= Center Rack-Mount Kit, page 15](#)
- [Related Documentation, page 19](#)

## Warnings

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

### Statement 1071—Warning Definition



#### **IMPORTANT SAFETY INSTRUCTIONS**

**This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.**

#### **SAVE THESE INSTRUCTIONS**

#### **Waarschuwing      BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

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

#### **BEWAAR DEZE INSTRUCTIES**

**Varoitus TÄRKEITÄ TURVALLISUUSOHJEITA**

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

**SÄILYTÄ NÄMÄ OHJEET****Attention IMPORTANTES INFORMATIONS DE SÉCURITÉ**

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

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

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

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

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

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

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

**TA VARE PÅ DISSE INSTRUKSJONENE**

**Aviso INSTRUÇÕES IMPORTANTES DE SEGURANÇA**

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

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

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

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

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

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

**Ez a figyelmezeto jel veszélyre utal. Sérülésveszélyt rejto 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 advarselssymbol betyder fare. Du befinder 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 المهمة**

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 μετάφρασή της στις μεταφρασμένες προειδοποίησεις ασφαλείας που συνοδεύουν τη συσκευή.

**ΦΥΛΑΞΤΕ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ**

ההזה

Опомена	<b>ВАЖНИ БЕЗБЕДНОСНИ НАПАТСТВИЈА</b>
	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. <b>ЧУВАЈТЕ ГИ ОВИЕ НАПАТСТВИЈА</b>

**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 wypadkom. 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

## Tools Required

You need the following tools to install the center rack-mount kits on the chassis and to mount the chassis in the equipment rack:

- No. 2 Phillips screwdriver
- No. 1 Phillips screwdriver
- Level
- Tape measure

# Installing the WS-X4948-19CNTR= or the WS-X4948-23CNTR= Center Rack-Mount Kits

The WS-X4948-19CNTR= center rack-mount kit for 19-inch equipment racks and the WS-X4948-23CNTR= center rack-mount kit for 23-inch equipment racks can be installed only on the following four chassis:

- Catalyst 4948 switch
- Catalyst 4948-10GE switch
- Catalyst 4928-10GE switch
- Cisco ME 4924-10GE switch



**Caution**

The center rack-mount brackets shipped in these two center rack-mount kits must be installed on the switch chassis in the forward direction only. If you install them backwards on the chassis, the airflow through the chassis is blocked, which will damage the switch.

## Center Rack-Mount Kit Contents

[Table 2](#) lists the contents of the two center rack-mount kits.

**Table 2            WS-X4948-19CNTR= and WS-X4948-23CNTR= Kit Contents**

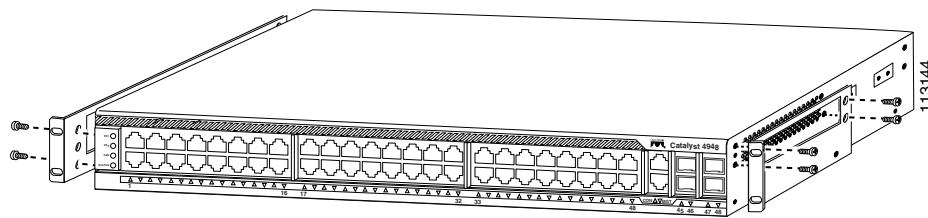
Kit	Contents
<b>WS-X4948-19CNTR=</b>	<ul style="list-style-type: none"><li>• One 19-inch left-side center rack-mount bracket (stamped L)</li><li>• One 19-inch right-side center rack-mount bracket (stamped R)</li><li>• Four 10-32 x 0.75-inch screws</li><li>• Four 12-24 x 0.75-inch screws</li><li>• Eight M4 x 0.7 x 7-mm screws</li></ul>
<b>WS-X4948-23CNTR=</b>	<ul style="list-style-type: none"><li>• One 23-inch left-side center rack-mount bracket (stamped L)</li><li>• One 23-inch right-side center rack-mount bracket (stamped R)</li><li>• Four 10-32 x 0.75-inch screws</li><li>• Four 12-24 x 0.75-inch screws</li><li>• Eight M4 x 0.7 x 7-mm screws</li></ul>

# Installing the WS-X4948-19CNTR= or the WS-X4948-23CNTR=Center Rack-Mount Kit

To install either the 19-inch or the 23-inch center rack-mount kit on the appropriate switch, follow these steps:

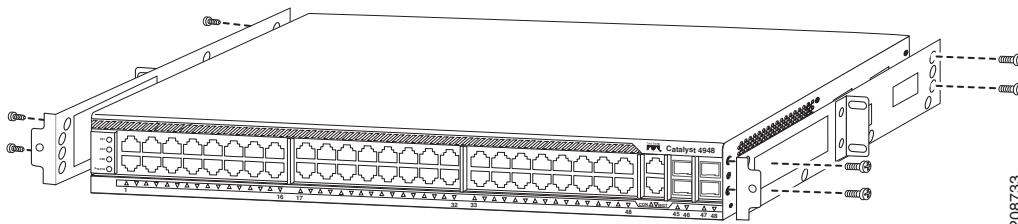
- Step 1** Place the switch chassis on an antistatic work surface.
- Step 2** If the standard rack-mount brackets are attached to the chassis, you need to remove them by loosening and removing the eight M4 screws (four on each side) that secure the brackets to the chassis sides. (See [Figure 1](#).) Set the screws and the brackets aside.

**Figure 1** *Removing the Standard Rack-Mount Brackets from the Chassis*



- Step 3** Verify that you have the correct center rack-mount kit for your chassis and for the equipment rack size (either 19-inch or 23-inch).
- Step 4** Open your center rack-mount kit and inventory the contents. See [Table 2](#) for the kit contents and quantities.
- Step 5** Position the left-side bracket (stamped L) against the left side of the chassis with the bracket's four mounting holes aligned with the holes in the chassis as shown in [Figure 2](#).
- Step 6** Secure the bracket in place with four M4 mounting screws.
- Step 7** Repeat step 5 and step 6 for the right-side bracket (stamped R).

**Figure 2** *Installing the Center Rack-Mount Brackets on the Chassis*



- Step 8** Have one person carefully lift and position the chassis in the equipment rack so that the center rack-mount bracket ears are in contact with the rack posts. (See [Figure 3](#).)



- Note** Use a tape measure or level to ensure that the chassis is positioned level in the equipment rack before you install the mounting screws.

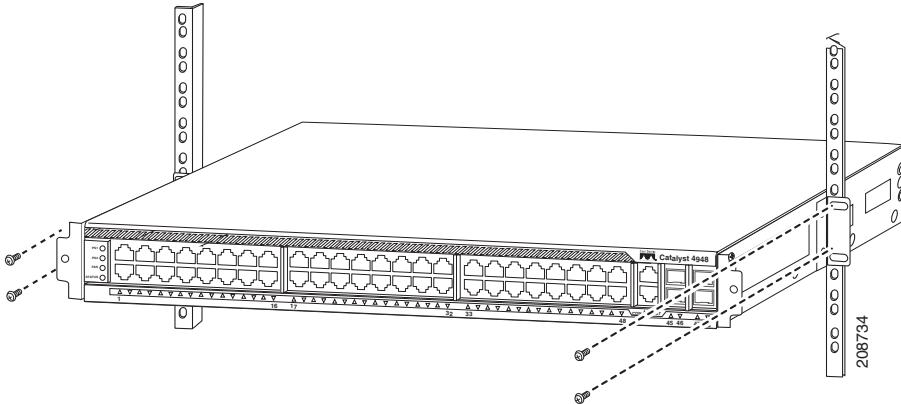
- Step 9** Adjust the chassis up or down in the rack until two screw holes in each center rack-mount bracket ear are aligned with mounting holes in the equipment rack post.

- Step 10** While one person holds the chassis in place, secure the chassis to the equipment rack posts with either the four 10-32 x 3/4-inch or the four 12-24 x 3/4-inch Phillips-head machine screws (two on each side) that are supplied in the accessory kit.



**Note** If the equipment rack post-mounting holes are not threaded, you need to obtain the proper size cage-nuts to secure the center rack-mount mounting screws in place.

**Figure 3** Attaching the Chassis to the Equipment Rack

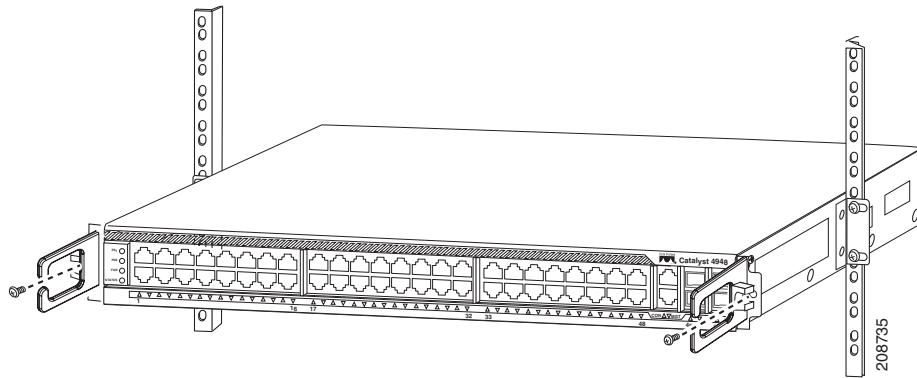


- Step 11** If you want to install the optional cable guide bracket, position the cable guide against either the left- or right-side threaded hole in the center rack-mount bracket as shown in [Figure 4](#). Secure the cable guide bracket in place with one M4 screw.



**Note** For complete chassis installation procedures and additional product information, refer to the installation guide for your chassis.

**Figure 4** Attaching the Optional Cable Guide Bracket to the Center Rack-Mount Bracket



# Installing the WS-X4948E-19CNTR= or the WS-X4948E-23CNTR= Center Rack-Mount Kits

The WS-X4948E-19CNTR= center rack-mount kit for 19-inch equipment racks and the WS-X4948E-23CNTR= center rack-mount kit for 23-inch equipment racks can be installed only on the Catalyst 4948E or the Catalyst 4948E-F switch chassis.


**Note**

The Catalyst 4948E and the Catalyst 4948E-F differ in the direction of the airflow through the chassis. The Catalyst 4948E switch chassis has front to back airflow; the Catalyst 4948E-F switch chassis has back to front airflow.

## Center Rack-Mount Kit Contents

[Table 3](#) lists the contents of the two Catalyst 4948E and Catalyst 4948E-F center rack-mount kits.

**Table 3      WS-X4948E-19CNTR= and WS-X4948E-23CNTR= Kit Contents**

Kit	Contents
<b>WS-X4948E-19CNTR=</b>	<ul style="list-style-type: none"> <li>• Two 19-inch center rack-mount brackets</li> <li>• Four 10-32 x 0.75-inch screws</li> <li>• Four 12-24 x 0.75-inch screws</li> <li>• Eight M4 x 0.7 x 7-mm screws</li> </ul>
<b>WS-X4948E-23CNTR=</b>	<ul style="list-style-type: none"> <li>• Two 23-inch center rack-mount brackets</li> <li>• Four 10-32 x 0.75-inch screws</li> <li>• Four 12-24 x 0.75-inch screws</li> <li>• Eight M4 x 0.7 x 7-mm screws</li> </ul>

## Installing the WS-X4948E-19CNTR= or the WS-X4948E-23CNTR=Center Rack-Mount Kit

To install either the 19-inch or the 23-inch center rack-mount kit on the Catalyst 4948E or the Catalyst 4948E-F chassis, follow these steps:

**Step 1**

Place the switch chassis on an antistatic work surface.

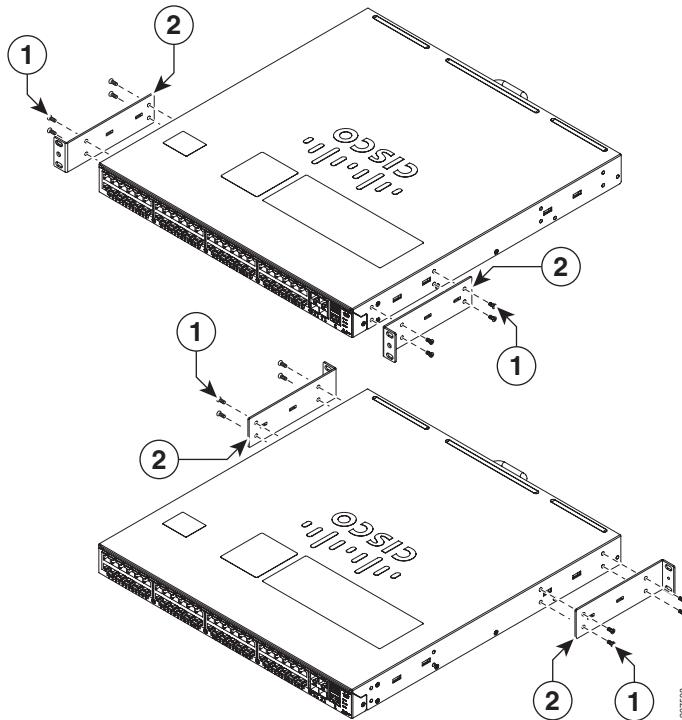
**Step 2**

If the standard rack-mount brackets are attached to the chassis, you need to remove them by loosening and removing the eight M4 screws (four on each side) that secure the brackets to the chassis sides. (See [Figure 5](#).) Set the screws and the brackets aside.


**Note**

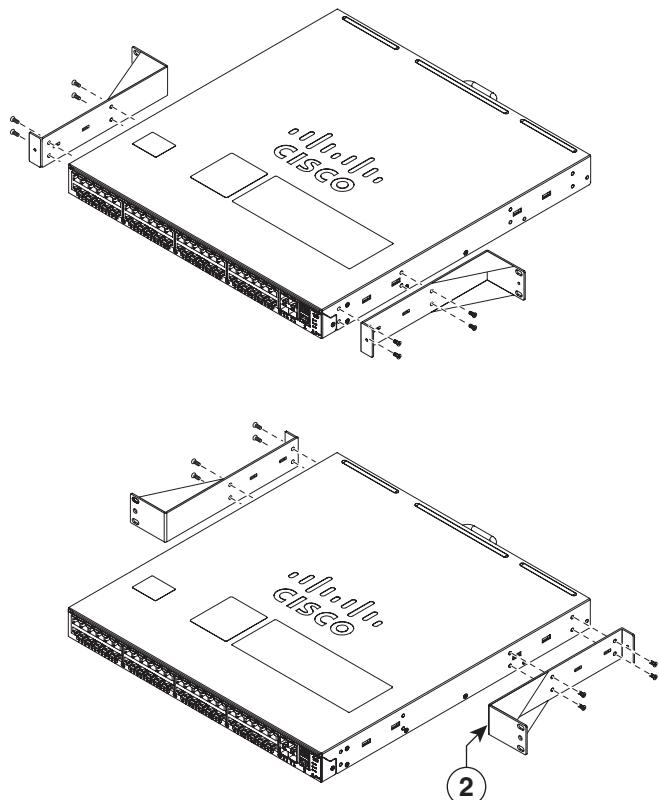
The standard rack-mount brackets can be installed either on the front of the chassis or the rear of the chassis. In either case, they must be removed before installing the center rack-mount brackets.

**Figure 5** *Removing the Standard Rack-Mount Brackets*



<b>1</b>	M4 screws (4 screws per bracket)	<b>2</b>	Standard 19-inch rack-mount bracket
----------	----------------------------------	----------	-------------------------------------

- Step 3** Verify that you have the correct center rack-mount kit for your chassis and for the equipment rack size.
- Step 4** Open your center rack-mount kit and inventory the contents. See [Table 3](#) for the kit contents and quantities.
- Step 5** Determine how you want to position the chassis in the equipment rack. The center rack-mount brackets are reversible; they can be installed either on the front sides of the chassis or on the rear sides of the chassis.
- Step 6** Position one of the brackets against the side of the chassis with the bracket's four mounting holes aligned with the holes in the chassis as shown in [Figure 6](#).
- Step 7** Secure the bracket in place with four M4 mounting screws.
- Step 8** Repeat step 6 and step 7 for the second bracket.

**Figure 6** *Installing the Center Rack-Mount Brackets on the Chassis*

<b>1</b>	M4 screws (4 screws per bracket)	<b>2</b>	Center rack-mount bracket
----------	----------------------------------	----------	---------------------------

- Step 9** Have one person carefully lift and position the chassis in the equipment rack so that the center rack-mount bracket ears are in contact with the rack posts.



**Note** Use a tape measure or level to ensure that the chassis is positioned level in the equipment rack before you install the mounting screws.

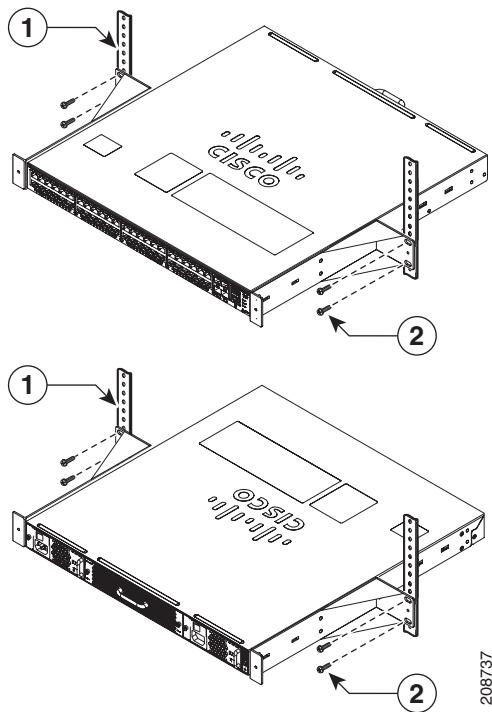
- Step 10** Adjust the chassis up or down in the rack until two screw holes in each center rack-mount bracket ear are aligned with mounting holes in the equipment rack post.

- Step 11** While one person holds the chassis in place, secure the chassis to the equipment rack posts with either the four 10-32 x 3/4-inch or the four 12-24 x 3/4-inch Phillips-head machine screws (two on each side). The screws are supplied in the accessory kit. (See [Figure 7](#).)



**Note** If the equipment rack post-mounting holes are not threaded, you need to obtain the proper size cage-nuts to secure the center rack-mount mounting screws in place.

**Figure 7** Mounting the Chassis in the Equipment Rack



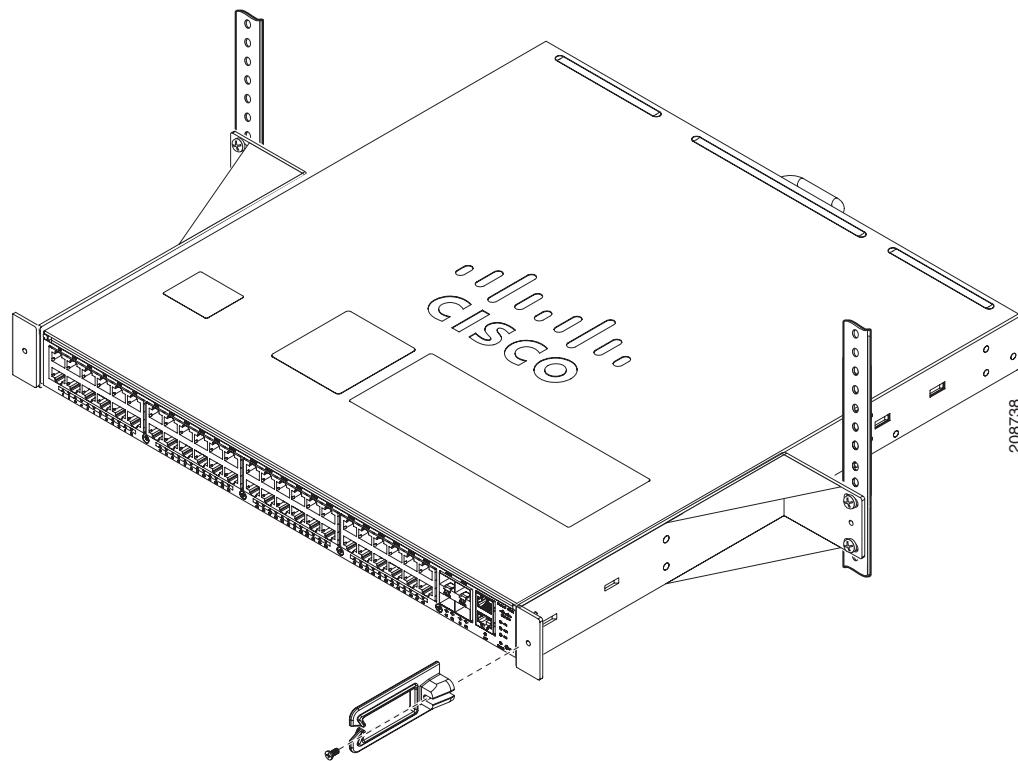
<b>1</b>	Equipment rack post	<b>2</b>	12-24 or 10-32 screws (2 per bracket)
----------	---------------------	----------	---------------------------------------

**Step 12** If you want to install the optional cable guide bracket, position the bracket against either the left- or right-side threaded hole in the center rack-mount bracket as shown in [Figure 8](#). Secure the cable guide bracket in place with one M4 screw.



**Note** For complete chassis installation procedures and additional product information, refer to the installation guide for your chassis.

**Figure 8** *Installing the Optional Cable Guide to the Center Rack-Mount Bracket*



## Installing the WS-X4900M-23CNTR= Center Rack-Mount Kit

The WS-X4900M-23CNTR= center rack-mount kit for 23-inch equipment racks can be installed only on the Catalyst 4900M switch chassis.



**Note** The Catalyst 4900M center rack-mount brackets can be installed on the chassis in the forward direction only.

## Center Rack-Mount Kit Contents

Table 4 lists the contents of the Catalyst 4900M center rack-mount kit.

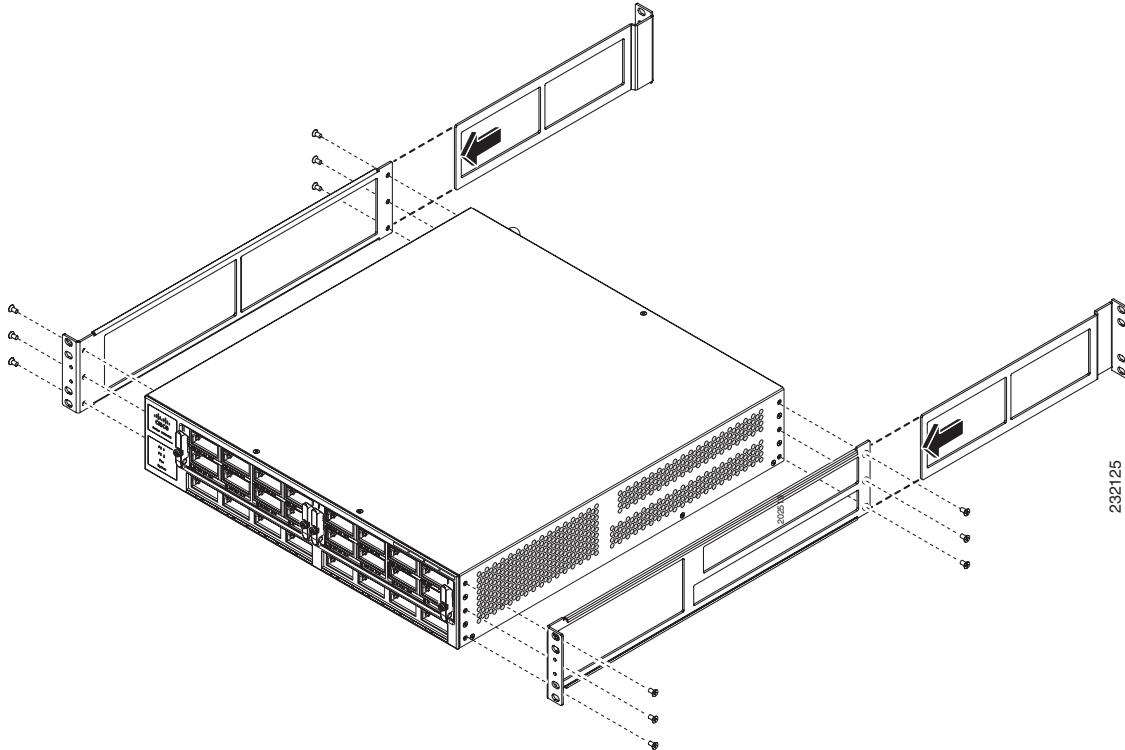
**Table 4** **WS-X4900M-23CNTR= Kit Contents**

<b>Kit</b>	<b>Contents</b>
<b>WS-X4900M-23CNTR=</b>	<ul style="list-style-type: none"> <li>• One left-side 23-inch center rack-mount bracket (stamped L)</li> <li>• One right-side 23-inch center rack-mount bracket (stamped R)</li> <li>• Four 10-32 x 0.75-inch screws</li> <li>• Four 12-24 x 0.75-inch screws</li> <li>• Twelve M4 x 0.7 x 7-mm screws</li> </ul>

## Installing the WS-X4900M-23CNTR=Center Rack-Mount Kit

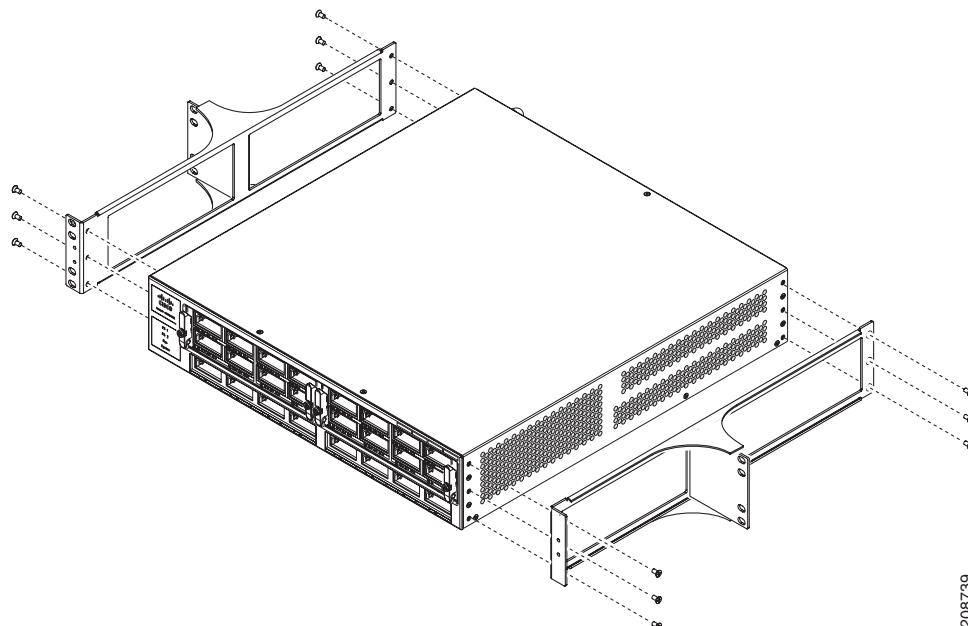
To install the 23-inch center rack-mount kit on the Catalyst 4900M chassis, perform the following steps:

- 
- Step 1** Place the switch chassis on an antistatic work surface.
  - Step 2** If necessary, remove the standard rack-mount brackets from the chassis by loosening and removing the 12 M4 screws (six on each side) that secure the brackets to the chassis sides. (See [Figure 9](#).) Set the screws and the brackets aside.

**Figure 9** **Removing the Standard Rack-Mount Brackets from the Catalyst 4900M Chassis**

- Step 3** Verify that you have the correct center rack-mount kit for your chassis.
- Step 4** Open your center rack-mount kit and inventory the contents. See [Table 4](#) for the kit contents and quantities.
- Step 5** Position the left bracket (stamped L) against the left side of the chassis with the bracket's six mounting holes aligned with the mounting holes in the chassis as shown in [Figure 10](#).
- Step 6** Secure the bracket in place with six M4 mounting screws.
- Step 7** Repeat step 5 and step 6 for the right-side bracket (stamped R).

**Figure 10** *Installing the Center Rack-Mount Brackets on the Chassis*



- Step 8** Have one person carefully lift and position the chassis in the equipment rack so that the center rack-mount bracket ears are in contact with the rack posts.



**Note** Use a tape measure or level to ensure that the chassis is installed level in the equipment rack.

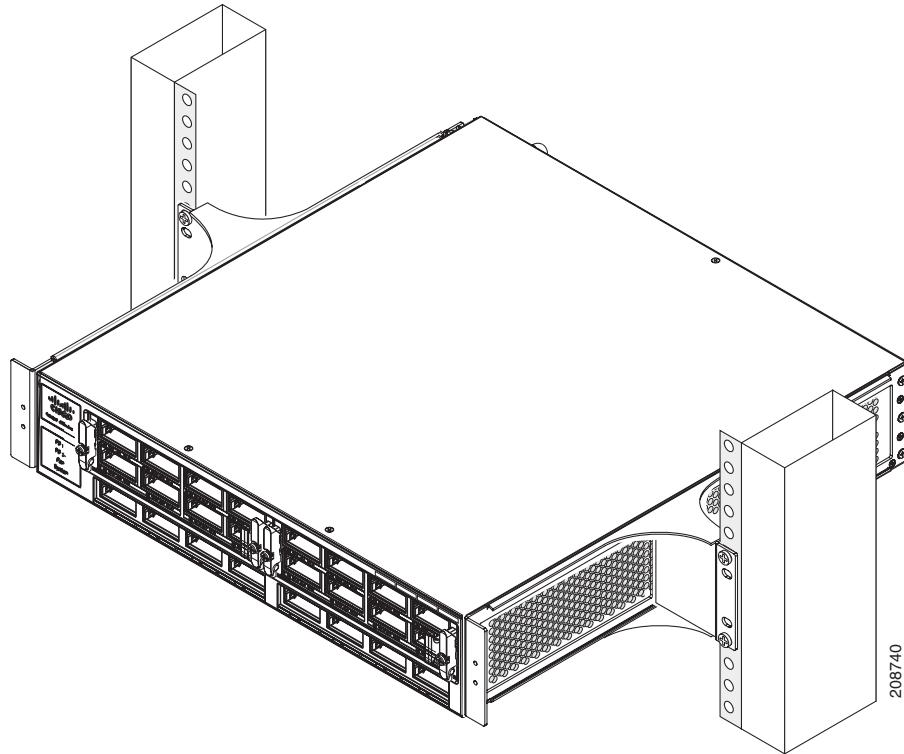
- Step 9** Adjust the chassis up or down in the rack until two screw holes in each center rack-mount bracket ear are aligned with mounting holes in the equipment rack post.

- Step 10** While one person holds the chassis in place, secure the chassis to the equipment rack posts with either the four 10-32 x 3/4-inch or the four 12-24 x 3/4-inch Phillips-head machine screws (two on each side) that are supplied in the accessory kit. (See [Figure 11](#).)



**Note** If the equipment rack post mounting holes are not threaded, you need to obtain the proper size cage-nuts to secure the center rack-mount mounting screws in place.

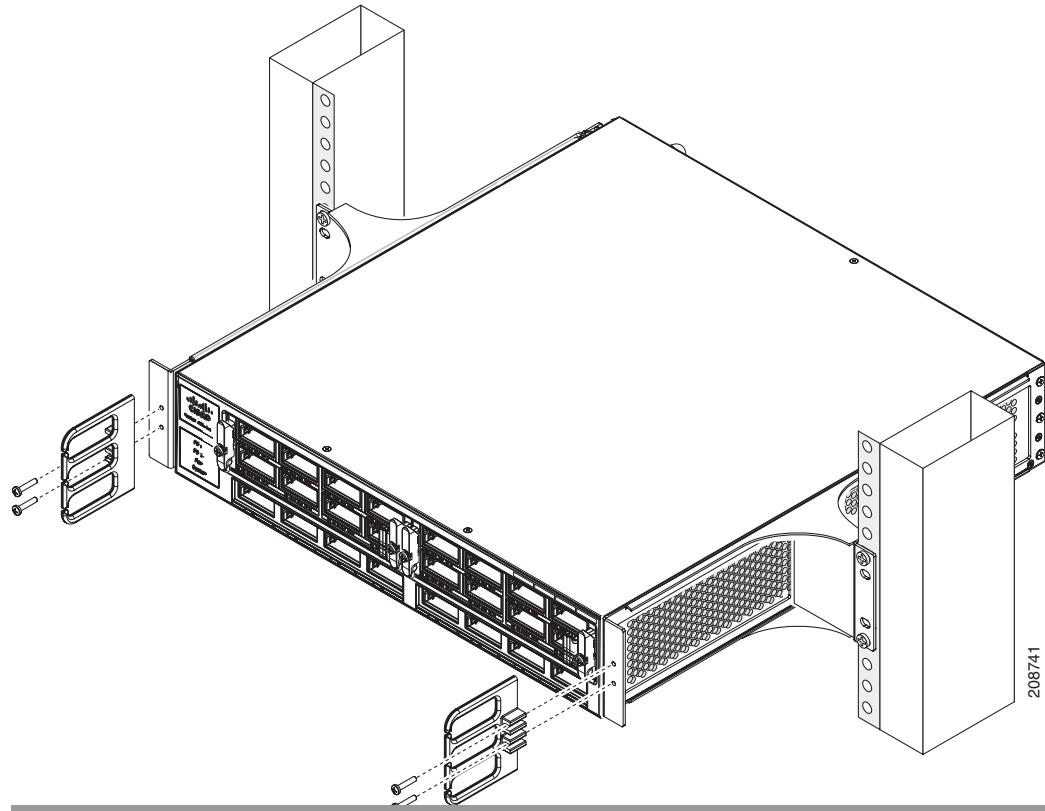
**Figure 11**      *Mounting the Catalyst 4900M Chassis in the Equipment Rack*



- Step 11** If you want to install the optional cable guide bracket, position the cable guide against the two threaded holes in either the left- or right-side center rack-mount bracket as shown in [Figure 12](#) and secure the cable guide bracket in place with two M4 screws provided with the cable guide bracket.



**Note** For complete chassis installation procedures and additional product information, refer to the installation guide for your chassis.

**Figure 12** *Installing the Optional Cable Guide to the Center Rack-Mount Bracket*

## Related Documentation

[Table 5](#) lists the publications that contain the complete Catalyst 4900 switch chassis installation procedures.

**Table 5** *Catalyst 4900 Family Installation Guides*

Chassis	Publication
Catalyst 4948	<a href="#">Catalyst 4948 Installation Guide</a>
Catalyst 4948 Catalyst 4948-10GE Catalyst 4928-10GE	<a href="#">Catalyst 4900 Series Switch Installation Guide</a>
Cisco ME 4924-10GE	<a href="#">Cisco ME 4924-10GE Ethernet Switch Hardware Installation Guide</a>
Catalyst 4948E Catalyst 4948E-F	<a href="#">Catalyst 4948E and Catalyst 4948E-F Switch Installation Guide</a>
Catalyst 4900M	<a href="#">Cisco Catalyst 4900M Switch Installation Guide</a>

## ■ Related Documentation

---

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

© 2011 Cisco Systems, Inc. All rights reserved.

♻ Printed in the USA on recycled paper containing 10% postconsumer waste.