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Rack-Mounting the Cisco 2600 Series Router

Product Numbers: ACS-2600RM-19=, ACS-2600RM-24=

This document describes the procedure to install Cisco 2600 series routers in a rack and includes the following sections:

- Safety Recommendations, page 1
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- What to Do after Installing the Router Hardware, page 7
- Cisco Connection Online, page 8
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Safety Recommendations

Follow these guidelines to ensure general safety:

- Keep the chassis area clear and dust-free during and after installation.
- Do not wear loose clothing that could get caught in the chassis. Fasten your tie or scarf and roll up your sleeves.
- Wear safety glasses when working under any conditions that might be hazardous to your eyes.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.

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Safety Warnings

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



Warning This warning symbol means *danger*. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied this device.

Waarschuwing Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen. Voor vertalingen van de waarschuwingen die in deze publicatie verschijnen, kunt u het document *Regulatory Compliance and Safety Information* (Informatie over naleving van veiligheids- en andere voorschriften) raadplegen dat bij dit toestel is ingesloten.

Varoitus Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista. Tässä julkaisussa esiintyvien varoitusten käännökset löydät laitteen mukana olevasta *Regulatory Compliance and Safety Information* -kirjasesta (määräysten noudattaminen ja tietoa turvallisuudesta).

Attention Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions d'avertissements figurant dans cette publication, consultez le document *Regulatory Compliance and Safety Information* (Conformité aux règlements et consignes de sécurité) qui accompagne cet appareil.

Warnung Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewußt. Übersetzungen der in dieser Veröffentlichung enthaltenen Warnhinweise finden Sie im Dokument *Regulatory Compliance and Safety Information* (Informationen zu behördlichen Vorschriften und Sicherheit), das zusammen mit diesem Gerät geliefert wurde.

Avvertenza Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti. La traduzione delle avvertenze riportate in questa pubblicazione si trova nel documento *Regulatory Compliance and Safety Information* (Conformità alle norme e informazioni sulla sicurezza) che accompagna questo dispositivo.

Advarsel Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker. Hvis du vil se oversettelser av de advarslene som finnes i denne publikasjonen, kan du se i dokumentet *Regulatory Compliance and Safety Information* (Overholdelse av forskrifter og sikkerhetsinformasjon) som ble levert med denne enheten.

Aviso Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes. Para ver as traduções dos avisos que constam desta publicação, consulte o documento *Regulatory Compliance and Safety Information* (Informação de Segurança e Disposições Reguladoras) que acompanha este dispositivo.

¡Advertencia! Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes. Para ver una traducción de las advertencias que aparecen en esta publicación, consultar el documento titulado *Regulatory Compliance and Safety Information* (Información sobre seguridad y conformidad con las disposiciones reglamentarias) que se acompaña con este dispositivo.

Warning! Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador. Se förklaringar av de varningar som förekommer i denna publikation i dokumentet *Regulatory Compliance and Safety Information* (Efterrättelse av föreskrifter och säkerhetsinformation), vilket medföljer denna anordning.



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

FCC Class B Compliance

The equipment described in this document generates and may radiate radio-frequency energy. If it is not installed in accordance with Cisco's installation instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in part 15 of the FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the Cisco equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by Cisco Systems, Inc. could void the FCC approval and negate your authority to operate the product.

Required Tools and Equipment

Installation might require some tools and equipment that are not provided as standard equipment with the router. Following are the tools and parts required for a typical router installation:

- Flat-blade screwdrivers: small, 3/16-inch (0.476 cm) and medium, 1/4-inch (0.625 cm)
- ESD-preventive wrist strap
- Screws to secure the rack-mount brackets to the router

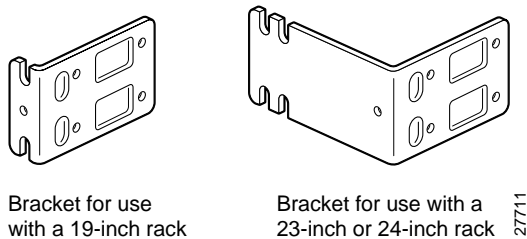
Mounting the Chassis in a Rack

This section describes the procedures for rack-mounting the chassis. The chassis comes with brackets for use with a 19-inch rack or, if specified in your order, optional larger brackets for use with a 23- or 24-inch rack. Figure 1 shows the two types of brackets.

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- If the rack contains only one unit, mount the unit at the bottom of the rack.
- If the rack is partially filled, load the rack from the bottom to the top, with the heaviest component at the bottom of the rack.
- If the rack contains stabilizing devices, install the stabilizers prior to mounting or servicing the unit in the rack.

Figure 1 Identifying the Brackets



Bracket for use with a 19-inch rack

Bracket for use with a 23-inch or 24-inch rack 27711

Attaching the Brackets

To install the chassis in a rack, attach the brackets in one of the following ways:

- With the front panel forward (see Figure 2 and Figure 3)
- With the rear panel forward (see Figure 4 and Figure 5)
- In a center-mount rack, with the rear panel forward (see Figure 6)

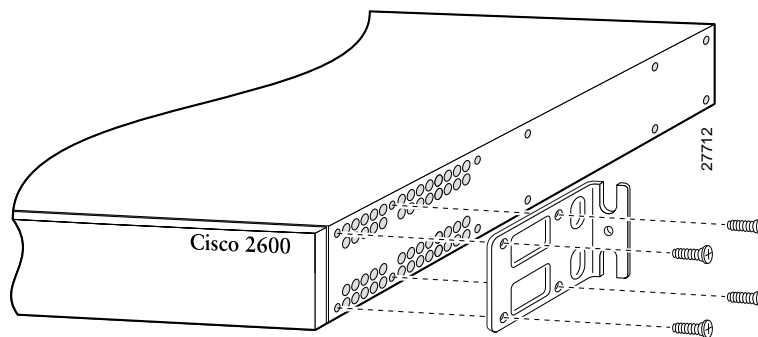
Note Use the Cisco-supplied screws for this installation.

Note If you are installing a Cisco 2600 series router in a 19-inch rack with a 17.5-inch opening, orient the rack-mount brackets so that, when installed, they do not increase the width of the chassis. (See Figure 2.)

If you are installing a Cisco 2600 series router in a 19-inch EIA-standard rack with a 17.75-inch opening or a 23- or 24-inch rack, orient the rack-mount brackets so that, when installed, they increase the width of the chassis. (See Figure 3.)

Note The following illustrations show how to connect the bracket to one side of the chassis. The second bracket connects to the opposite side of the chassis.

Figure 2 Bracket Installation—Front Panel Forward (19-Inch Rack with a 17.5-Inch Opening)



Note: The second bracket attaches to the other side of the chassis.

Note When installed in a 19-inch rack with a 17.75-inch opening, the Cisco 2600 series routers will protrude beyond the front of the rack.

Figure 3 Bracket Installation—Front Panel Forward (19-Inch Rack with a 17.75-Inch Opening or a 23- or 24-Inch Rack)

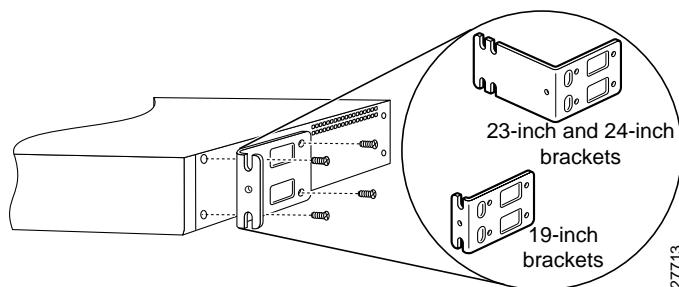


Figure 4 Bracket Installation—Rear Panel Forward (19-Inch Rack with a 17.5-Inch Opening)

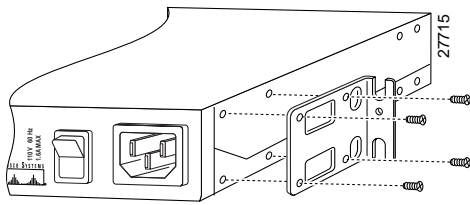


Figure 5 Bracket Installation—Rear Panel Forward (19-Inch Rack with a 17.75-Inch Opening or a 23- or 24-Inch Rack)

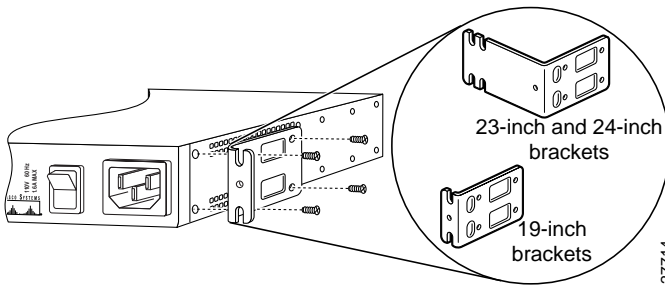
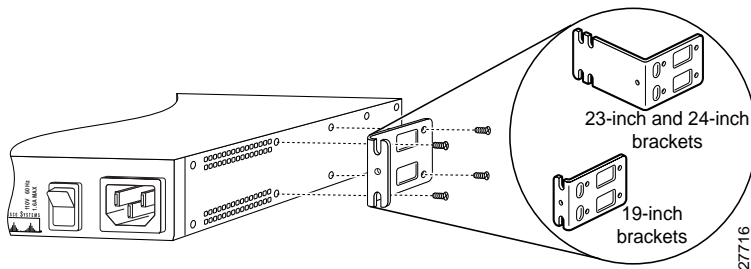


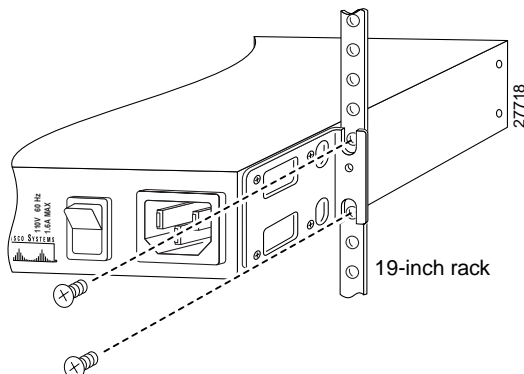
Figure 6 Center-Mount Bracket Installation—Rear Panel Forward



Installing the Router in a Rack

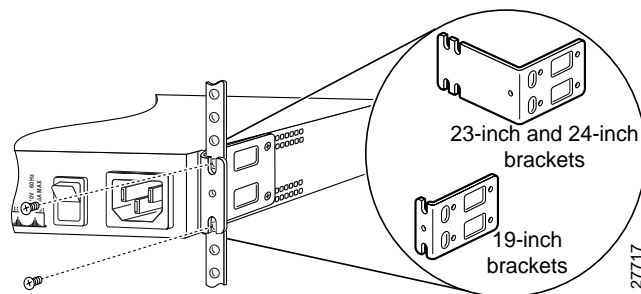
After the brackets are secured to the chassis, you can rack-mount it. Using screws that you provide, attach the chassis to the rack. (See Figure 7 and Figure 8).

Figure 7 Mounting the Chassis in a Rack (19-Inch Rack with a 17.5-Inch Opening)



The second bracket attaches to the rack at the other side of the chassis. The brackets can also be installed with the front panel forward.

Figure 8 Mounting the Chassis in a Rack (19-Inch Rack with a 17.75-Inch Opening or a 23- or 24-Inch Rack)



What to Do after Installing the Router Hardware

After you have installed the router, make all necessary LAN and WAN connections, connect the power cable to the rear panel of the router and the power source, and then power it ON. (If the router does not power ON, proceed to the “Troubleshooting the Router” appendix in the *Cisco 2600 Series Hardware Installation Guide* included in your router package.)

For information on making LAN and WAN connections, refer to the hardware guides included in your router package.

For initial software configuration information, refer to the *Software Configuration Guide* included in your router package.

Note The Cisco IOS command reference publications provide additional software configuration information. Cisco IOS command reference publications are available on the Documentation CD-ROM that came with your router or you can order printed copies. For ordering information, see the “Documentation CD-ROM” section on page 9.

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- Telnet: [cco.cisco.com](telnet://cco.cisco.com)
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO’s Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

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Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

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This document is to be used in conjunction with the *Cisco 2600 Series Hardware Installation Guide* publication.

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