

CISCO SYSTEMS

Doc. No. 78-3543-01

Installing Feature Cards in the Cisco AS5200 Universal Access Server

This document describes how to install a feature card in the Cisco AS5200 Universal Access Server. Use this document in conjunction with the *Cisco AS5200 Universal Access Server Installation Guide* and the *Cisco AS5200 Universal Access Server Public Network Certification* publication.

Note Throughout this document, the term "AS5200" is used to refer to the Cisco AS5200 Universal Access Server.

This document contains the following information:

- Preventing Electrostatic Discharge Damage
- Installing Feature Cards
- Removing Feature Cards
- Cisco Connection Online

Preventing Electrostatic Discharge Damage

Before installing a feature card, read the electrostatic discharge (ESD) instructions in this section to prevent damage to the equipment. ESD is a discharge of stored static electricity that can damage equipment and impair electrical circuitry. It occurs when electronic components are improperly handled and can result in complete or intermittent failures.

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Following are guidelines for preventing ESD damage:

- Always use an ESD-preventive wrist or ankle strap and ensure that it makes good skin contact.
- Connect the equipment end of the strap to an unpainted surface on the chassis frame or another proper grounding point or surface. Attach it to the inside bottom of the chassis or to the rear panel (inside or outside) without making contact with any connectors.
- Avoid contact between equipment and clothing. The wrist or ankle strap only protects the equipment from ESD voltages on the body; ESD voltages on clothing can still cause damage.
- Handle printed circuit cards by the edges only; avoid touching the components, traces, or any connector pins.
- Place a removed card component side up on an antistatic surface or in a static shielding bag. If the component is being returned to the factory, immediately place it in a static shielding bag.
- Do not remove the wrist or ankle strap until the installation is complete.



Caution To avoid damaging the equipment, periodically check the resistance value of the antistatic strap. The measurement should be between 1 and 10 megohms (Mohms).

Required Tools

You need the following tools to install or remove the feature cards:

- Medium-size flat-blade screwdriver (1/4 inch [0.625 cm])
- ESD-sensitive mat
- ESD-preventive wrist strap

Installing Feature Cards

You can install feature cards in the Cisco AS5200 without removing the chassis cover. Each Cisco AS5200 chassis can accommodate up to three feature cards. The choice of feature cards is as follows:

- Dual T1 Primary Rate Interface (PRI) with integrated channel service unit (CSU) card
- Modem carrier card containing up to two 12-port modem cards

A blank slot cover must be installed over unused slots.

If you need to remove a feature card to replace it with a new one refer to the section “Removing Feature Cards.”

Perform the following steps to install a Cisco AS5200 feature card:

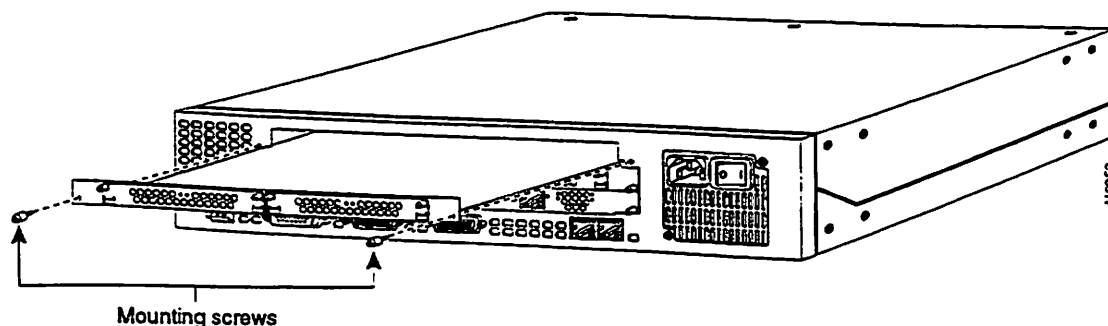
Step 1 Turn OFF power to the Cisco AS5200.



Caution Unlike some other Cisco access servers, the feature cards are not hot-swappable (that is, you cannot remove or install them when the power to the Cisco AS5200 is on). Be sure to turn OFF the power to the Cisco AS5200 before installing or removing feature cards. *Failure to do so may damage the Cisco AS5200.*

- Step 2** Remove the feature card from the electrostatic discharge (ESD) protective shipping material.
- Step 3** Slide the feature card into the appropriate slot along the card guides until it is completely seated in the connector inside the Cisco AS5200. (See Figure 1).
- Step 4** Tighten the two captive screws on the card to secure it to the chassis.

Figure 1 Installing a Feature Card



- Step 5** If the Cisco AS5200 is configured with fewer than three feature cards, make sure that a blank slot cover is installed over each open slot to ensure proper airflow inside the chassis.
- If you encounter any problems refer to the section "Cisco Connection Online."

Removing Feature Cards

Feature cards must be removed from the Cisco AS5200 to access the system card or to upgrade the feature cards.

Perform the following steps to remove the feature cards:



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. (To see translated versions of this warning, refer to the appendix "Translated Safety Warnings" in the *Cisco AS5200 Universal Access Server Installation Guide*.)

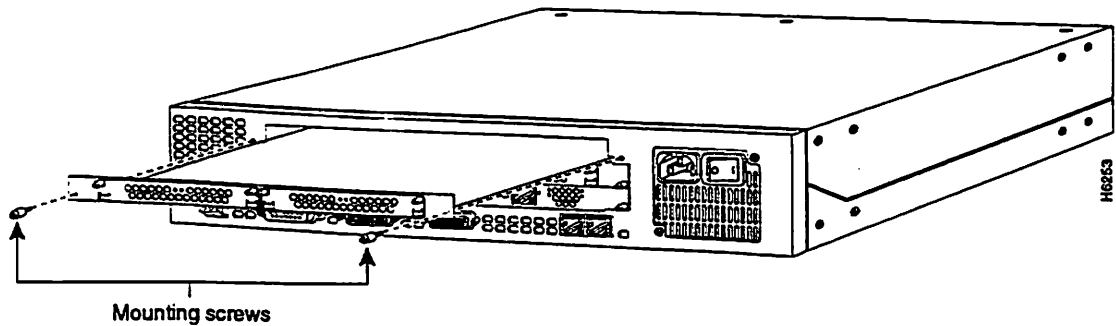
- Step 1** Turn OFF the Cisco AS5200.



Warning Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages. (To see translated versions of this warning, refer to the appendix "Translated Safety Warnings" in the *Cisco AS5200 Universal Access Server Installation Guide*.)

- Step 2** Remove all interface cables from the rear panel of the Cisco AS5200.
- Step 3** Place the Cisco AS5200 so that the rear panel is closest to you. Note that the feature cards are secured to the chassis by a captive mounting screw at each end of the feature card, as shown in Figure 2.

Figure 2 Feature Card Removal



- Step 4** Wear an ESD-sensitive wrist strap.
- Step 5** Loosen the two captive screws that secure the feature card to the chassis until each screw is free of the chassis.
- Step 6** Hold a captive screw in each hand, and pull until the card slides free of the chassis.
- Step 7** Pull the feature card toward you until it is separated from the card slot. Set the card aside on an ESD-sensitive mat.

Repeat the procedure to remove additional feature cards.

If you encounter any problems, refer to the section "Cisco Connection Online."

Cisco Connection Online

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You can access CCO in the following ways:

- WWW: <http://www.cisco.com>.
- 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 baud rates up to 14.4 kbps.

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

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

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