# Installing a Network Module or Interface Card

This chapter describes how to install network modules in a Cisco 2600 Series router, and includes information on installing either a WAN interface card or a voice interface card (VWIC) into the appropriate network module. The chapter contains the following sections:

- Installing a Network Module
- · Installing a WAN Interface Card
- · Installing a Voice Interface Card



WAN and voice interface cards can be installed in the network module either before or after the network module is installed in the router chassis.

## Installing a Network Module

The following instructions apply only to installing a network module in a modular router chassis slot. You can install network modules in the chassis either before or after mounting the router, whichever is more convenient.



Before installing a network module into the router chassis, turn OFF electrical power to the router to avoid the risk of electrical shock to yourself or to the equipment. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied this device.



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Unless the router is using a copy of the Cisco IOS Release 11.3(3)T or later release, you cannot install an ISDN BRI network module (or ISDN BRI WAN interface card) into the same chassis as an ISDN PRI network module.

The following tools are required or recommended for this task:

- ESD-preventive wrist strap
- · Number 1 Phillips screwdriver
- Duct or electrical tape (for routers using a DC power supply only)

- Step 1 Turn OFF electrical power to the router. Do NOT unplug the power cable. If the router uses a DC power supply, remove power from the DC circuit with the following steps:
  - a. Locate the circuit breaker on the panel board that services the DC circuit.
  - b. Switch the circuit breaker to the OFF position.
  - c. Tape the switch handle of the circuit breaker in the OFF position.
- **Step 2** Remove all network cables, including telephone cables, from the rear panel of the router.



Network modules are not hot-swappable. To avoid damaging the module, turn OFF electrical power to the chassis and disconnect all network cables, including telephone cables, before inserting or removing a network module.

- Step 3 Attach an ESD-preventive wrist strap before handling the card, and connect the wrist strap to an electrical ground.
- Step 4 Using a number 1 Phillips screwdriver, remove the blank filler panel from the chassis slot. Save the blank filler panel for future use.
- Step 5 Align the network module with the guides in the chassis and slide it gently into the slot.
- Step 6 Slide the module into place until the edge connector is securely seated in the connector on the motherboard.
- Step 7 Using the number 1 Phillips screwdriver, tighten the module's captive mounting screws.
- Step 8 Reinstall blank panels to fill any unoccupied chassis slots.



To provide proper airflow, install the blank panels shipped with the router in any empty chassis slots.

Step 9 Plug in the network interface cables and turn ON power to the router. For a router using a DC power supply, remove the tape from the circuit breaker and turn the circuit breaker to the ON position.

#### Installing a WAN Interface Card



Warning

Before installing a WAN interface card into the network module, turn OFF electrical power to the router to avoid the risk of electrical shock to yourself or to the equipment. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied this device.

The following tools are required or recommended for this task:

- · ESD-preventive wrist strap
- Number 1 Phillips screwdriver
- Duct or electrical tape (for routers using a DC power supply only)

- Step 1 Turn OFF electrical power to the router and unplug the AC power cord. If the router uses a DC power supply, remove power from the DC circuit with the following steps:
  - a. Locate the circuit breaker on the panel board that services the DC circuit.
  - **b.** Switch the circuit breaker to the OFF position.
  - Tape the switch handle of the circuit breaker in the OFF position.
- Step 2 Remove all network cables, including telephone cables, from the rear panel of the router.



**Timesaver** 

Do not install a newer ISDN BRI WAN interface card in the same network module as an older ISDN BRI WAN interface card. To identify the newer cards, look for a horizontal arrangement of channel B LEDs. Older ISDN BRI WAN interface cards have channel B LEDs that are arranged vertically.

- Step 3 Attach an ESD-preventive wrist strap before handling the card, and connect the wrist strap to an electrical ground.
- Step 4 Using a number 1 Phillips screwdriver, remove the blank filler panel from the base module slot. Save the blank filler panel for future use.



If you are installing a single WAN interface card directly into the chassis, use slot W0 first. The router may not recognize the presence of the WAN interface card in slot W1 if slot W0 is empty.

- Step 5 Align the card with the guides in the module slot and gently slide it in.
- Step 6 Push the card into place until the edge connector is seated in the connector on the module.
- Step 7 Using a number 1 Phillips screwdriver, tighten the captive mounting screws.
- Step 8 Reinstall blank panels to fill any unoccupied module slots.



Caution

To provide proper airflow, install the blank panels shipped with the router in any empty module or chassis slots.

Step 9 Plug in the network interface cables and turn ON power to the router. For a router using a DC power supply, remove the tape from the circuit breaker and turn the circuit breaker to the ON position.

### Installing a Voice Interface Card



Warning

Before installing a voice interface card into the voice network module, turn OFF electrical power to the router to avoid the risk of electrical shock to yourself or to the equipment. To see translations of the warnings that appear in this publication, refer to the Regulatory Compliance and Safety Information document that accompanied this device.

A voice connection requires both a voice network module and a voice interface card. Voice interface cards are not installed directly into the router chassis, but must be installed in a voice network module to function. At least one other network module or WAN interface card must be installed in the router chassis for any desired connections to the IP LAN or WAN to function.



Voice interface cards must be installed in a voice network module. Voice network module slots are numbered V0 and V1 from right to left on the router chassis.

#### The following tools are required or recommended for this task:

- ESD-preventive wrist strap
- · Number 1 Phillips screwdriver
- Duct or electrical tape (for routers using a DC power supply only)
- Step 1 Turn OFF electrical power to the router and unplug the AC power cord. If the router uses a DC power supply, remove power from the DC circuit with the following steps:
  - a. Locate the circuit breaker on the panel board that services the DC circuit.
  - b. Switch the circuit breaker to the OFF position.
  - **c.** Tape the switch handle of the circuit breaker in the OFF position.
- Step 2 Remove all network cables, including telephone cables, from the rear panel of the router.
- Step 3 Attach an ESD-preventive wrist strap before handling the card, and connect the wrist strap to an electrical ground.
- Step 4 Using a number 1 Phillips screwdriver, remove the blank filler panel from the voice module slot in the voice network module. Save the blank filler panel for future use.



Do NOT install voice interface cards in a WAN interface card slot or in a two-slot network module.

- Step 5 Align the card with the guides in the module slot and gently slide it in.
- Step 6 Push the card into place until the edge connector is seated in the connector on the module.
- Step 7 Using a number 1 Phillips screwdriver, tighten the captive mounting screws.
- Step 8 Plug in the network interface cables and turn ON power to the router. For a router using a DC power supply, remove the tape from the circuit breaker and turn the circuit breaker to the ON position.