



Installing Interface Cards in Cisco 3800 Series Routers

This document describes how to install interface cards in Cisco 3800 series integrated services routers. It contains the following sections:

- [Installing Interface Cards, page 1](#)
- [Installing and Removing Slot Dividers, page 2](#)
- [Installing Blank Faceplates over Empty HWIC Slots, page 7](#)

Installing Interface Cards

Interface cards install either into slots in the rear of the router, or into slots in network modules. Interface cards come in the following types:

- WAN interface card (WIC)
- Voice interface card (VIC)
- Voice/data T1/E1 WAN interface card (VWIC)
- High-speed WAN interface card (HWIC)



Note

You can install any type of interface card—WIC, VIC, VWIC, or HWIC—into a router HWIC slot. HWICs must be installed directly into router slots, not into network modules.

The Cisco 3825 and 3825-NOVPN router and the Cisco 3845 and 3845-NOVPN router each provide four interface card slots, labeled on the rear panel by HWIC and a number. Each of these slots can be occupied by one single-wide WIC, VIC, VWIC, or HWIC.

In addition, the HWIC 0 and HWIC 1 slots can be combined to hold one double-wide HWIC. The HWIC 2 and HWIC 3 slots can also be combined to hold one double-wide HWIC.



Note

Although the HWIC 1 and HWIC 2 slots on the Cisco 3845 and 3845-NOVPN router are adjacent to each other, they cannot be combined to hold a double-wide HWIC.



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The maximum capacity of Cisco 3800 series routers for interface cards inserted directly into the chassis is four WICs, VWICs, or HWICs, or two double-wide HWICs.

**Caution**

The Cisco 3845 and 3845-NOVPN router supports OIR with similar modules only. If you remove a network module, along with any installed WAN or voice interface cards, install another module and card combination exactly like it.

**Caution**

The Cisco 3825 and 3825-NOVPN router does not support OIR of network modules. To avoid damaging the module, you must turn off electrical power and disconnect network cables before you insert the module into a router slot.

The [Cisco Interface Cards Installation Guide](#) describes how to install interface cards in router slots and network modules.

Empty slots must be covered with blank faceplates for cooling, electromagnetic interference (EMI) reduction, and safety. Procedures for installing slot dividers and blank faceplates are described in the following sections.

**Warning**

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place. Statement 1029

Installing and Removing Slot Dividers

You can remove a slot divider to combine two single-wide HWIC slots into a double-wide slot, or install a slot divider to convert a double-wide slot into two single-wide slots.

Installing Slot Dividers in HWIC Slots

Cisco 3800 series routers use two different type of HWIC slot dividers:

- The Cisco 3825 and 3825-NOVPN router uses a two-pronged metal slot divider. See [Figure 37](#).
- The Cisco 3845 and 3845-NOVPN router uses a slot divider with a plastic body and a screw tab. See [Figure 38](#).

Figure 37 Slot Divider for Cisco 3825 and 3825-NOVPN HWIC Slot

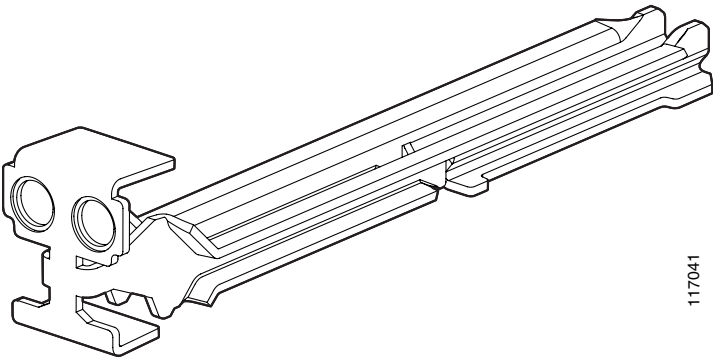
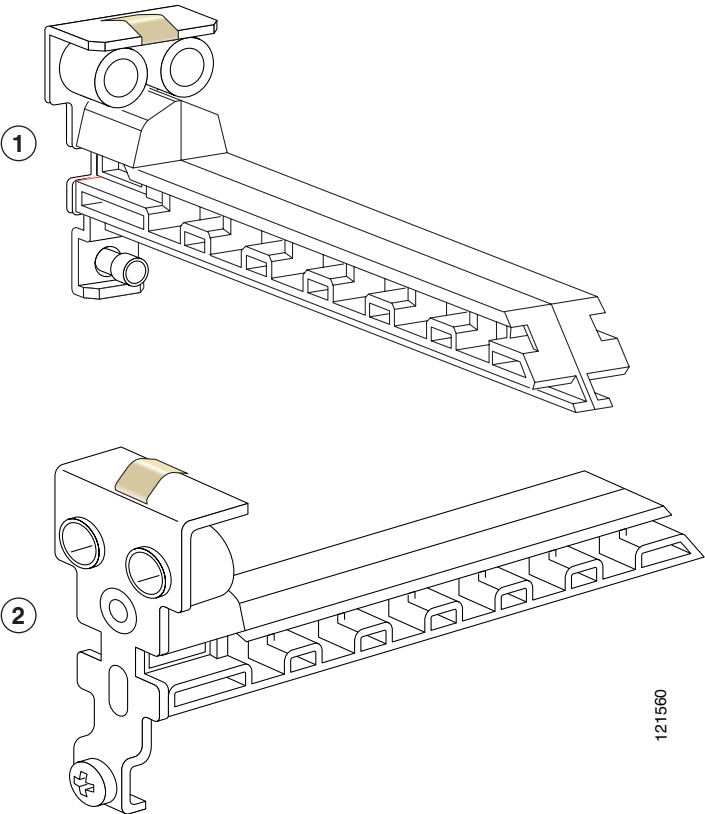


Figure 38 Slot Divider for Cisco 3845 and 3845-NOVPN HWIC Slot



1	Rear view	2	Front view
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To install slot dividers into HWIC slots, follow these steps:

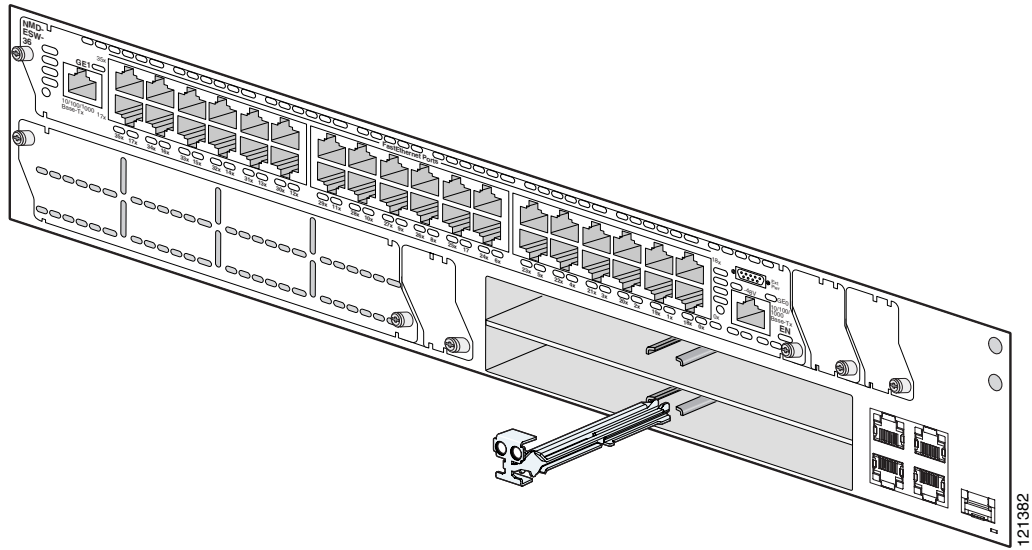
- Step 1** For a Cisco 3825 and 3825-NOVPN router, squeeze the prongs of the metal slot divider together and insert the ends between the guide rails on the bottom of the HWIC slot. Push the slot divider in until it locks into place. See [Figure 39](#).



Note The guide rails begin approximately 2.5 inch (6 cm) from the router's rear panel.

When the slot divider is fully seated, its outer end is flush with the router's rear panel.

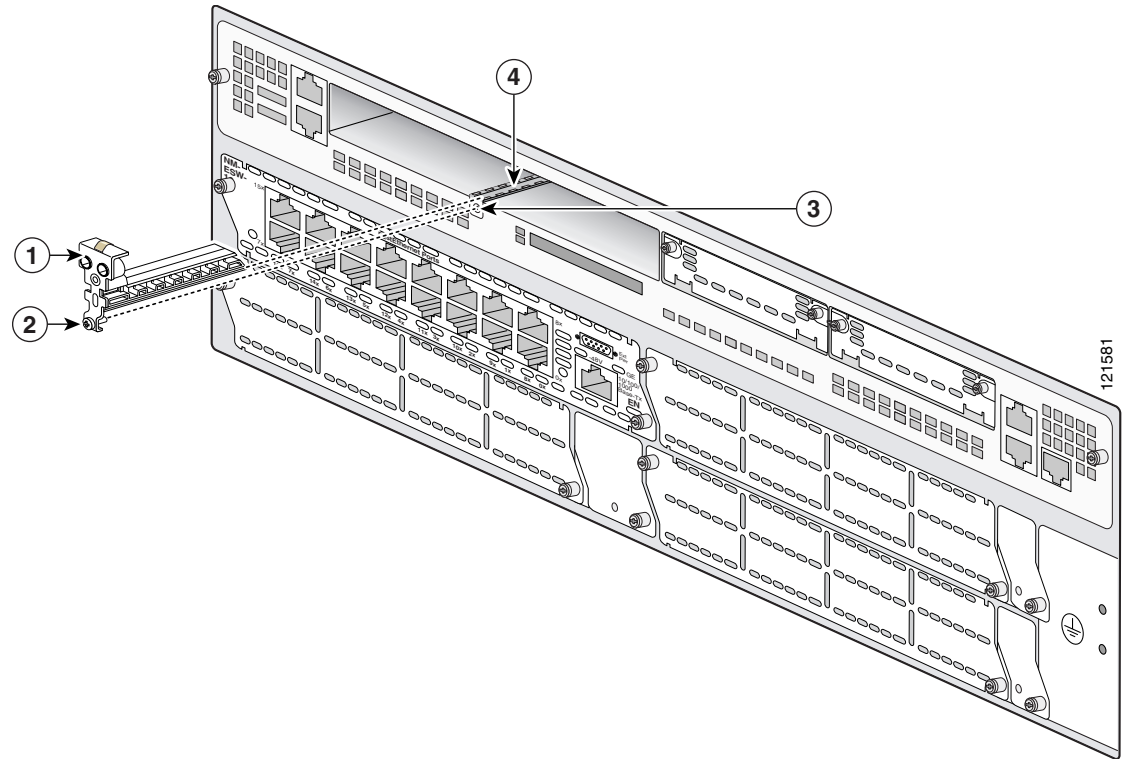
Figure 39 *Inserting Slot Divider into HWIC Slot (Cisco 3825 and 3825-NOVPN Router)*



For a Cisco 3845 and 3845-NOVPN router, insert the plastic rail on the bottom of the slot divider into the track in the router slot. Tighten the screw with a number 1 Phillips screwdriver. See [Figure 40](#) and [Figure 41](#).

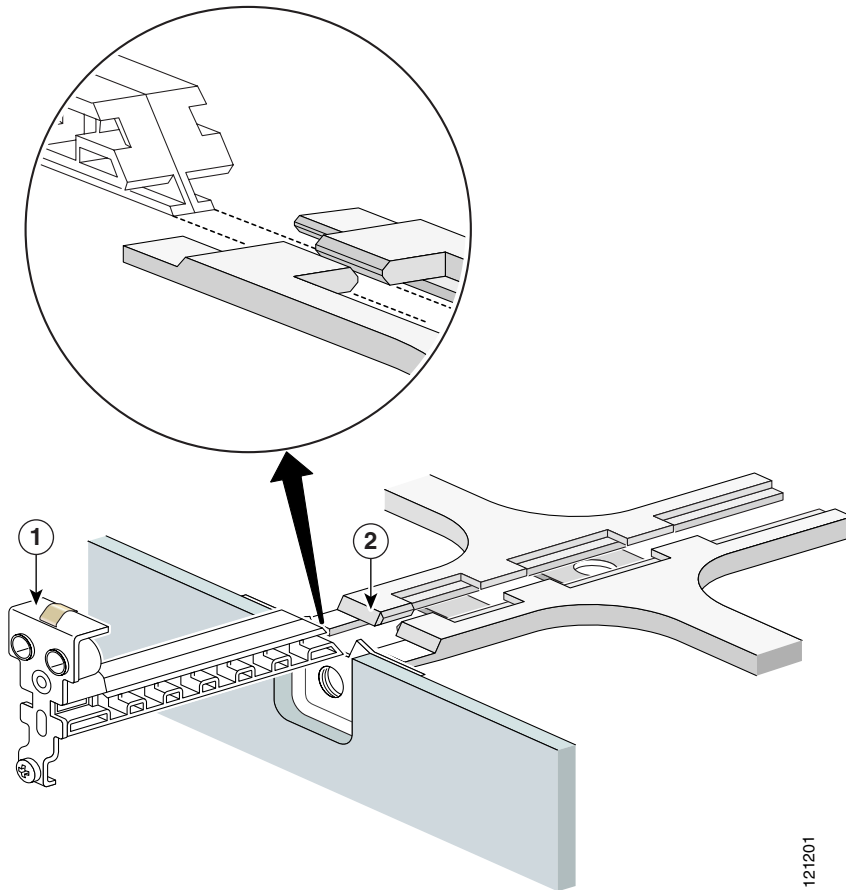
When the slot divider is fully seated, its outer end is flush with the router's rear panel.

Figure 40 *Inserting Slot Divider into HWIC Slot (Cisco 3845 and 3845-NOVPN Router)*



1	Slot divider	3	Screw hole
2	Screw tab	4	Track

Figure 41 Inserting Slot Divider into HWIC Slot (Cisco 3845 and 3845-NOVPN Router), Detail



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Step 2 Pull gently on the slot divider to check that it is seated securely.

Removing Slot Dividers from HWIC Slots



Note

The HWIC slots on both sides of a slot divider must be empty before you remove the slot divider.

To remove slot dividers from HWIC slots, follow these steps:

Step 1 For a Cisco 3825 and 3825-NOVPN router, reach into the HWIC slot and squeeze the two halves of the slot divider together.

Step 1 For a Cisco 3845 and 3845-NOVPN router, loosen the screw.



Tip

Do not remove the screw from the slot divider.

Step 2 Pull the slot divider straight out of the HWIC slot.



Tip

Save the slot divider for future use.

Installing Blank Faceplates over Empty HWIC Slots

All interface card slots must be covered by interface cards or blank faceplates for cooling, electromagnetic interference (EMI) reduction, and safety.



Warning

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place. Statement 1029

The high-speed WAN interface card (HWIC) hardware kit for Cisco 3800 series routers contains four blank faceplates. Each blank faceplate covers one single-wide HWIC slot.

Figure 42 and Figure 43 show a blank faceplate for an interface card slot.

Figure 42 *Blank Faceplate for Interface Card Slot*

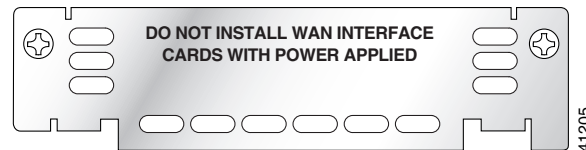
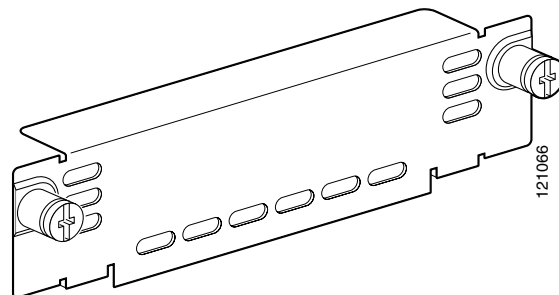


Figure 43 *Blank Faceplate for Interface Card Slot (Perspective View)*



To install blank faceplates over empty HWIC slots, follow these procedures:

- Single-wide slot—Attach a blank faceplate and tighten the two screws, using a number 1 Phillips screwdriver.
- Double-wide slot—Install a slot divider as described in the [“Installing and Removing Slot Dividers” section on page 2](#). Then install two blank faceplates and tighten the two screws in each blank faceplate.

**Tip**

Save blank faceplates for future use.
