



# Installing Interface Cards in Cisco 2800 Series Routers

---

This chapter contains information on installing interface cards, interface card slot dividers, and blank panels in Cisco 2800 series integrated services routers.

This chapter contains the following sections:

- [Viewing the Cisco Interface Card Installation Guide, page 1](#)
- [Installing and Removing Slot Dividers, page 1](#)
- [Installing Blank Panels over Empty Chassis Slots, page 6](#)
- [Related Product Documentation, page 7](#)

## Viewing the Cisco Interface Card Installation Guide

The *Cisco Interface Card Installation Guide* contains the procedures for installing the various types of interface cards in external chassis slots. Interface cards include the following types:

- Voice interface cards (VIC)
- Voice-WAN interface cards (VWIC)
- WAN interface cards (WIC)
- High-speed WAN interface cards, single-wide (HWIC)
- High-speed WAN interface cards, double-wide (HWIC-D)

You can view the [Cisco Interface Cards Installation Guide](#) online on Cisco.com.

## Installing and Removing Slot Dividers

In HWIC slots, you can install a slot divider to convert a double-wide HWIC slot into two single-width slots.



---

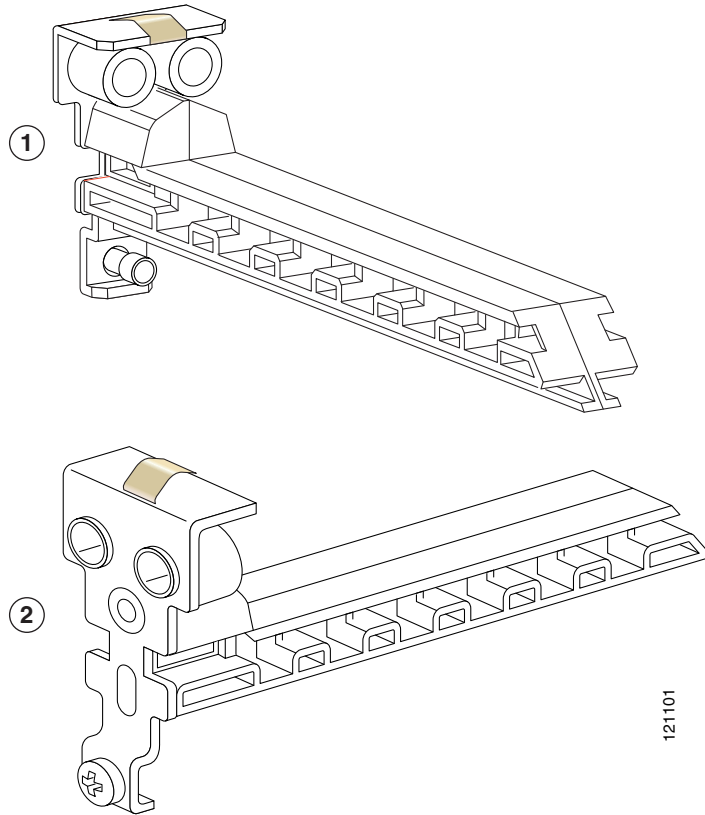
**Corporate Headquarters:**  
**Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA**

Copyright © 2004 Cisco Systems, Inc. All rights reserved.

## Installing Slot Dividers in HWIC Slots on Cisco 2801 Routers

Figure 1 shows a slot divider for HWIC slots on Cisco 2801 routers.

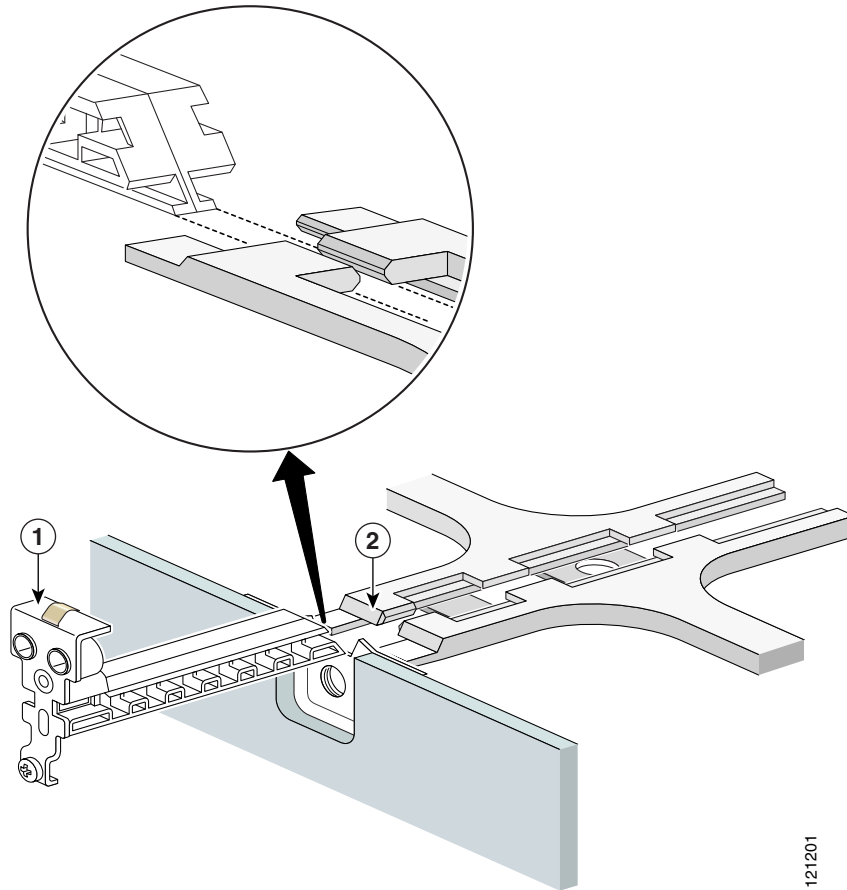
**Figure 1** Slot Divider for HWIC Slots on Cisco 2801 Routers



Install slot dividers into HWIC slots on Cisco 2801 routers as follows:

- 
- Step 1** Guide the slot divider between the two rails in the bottom of the HWIC slot. Push the slot divider in until it is fully seated. When the slot divider is fully seated, its outer end is flush with the front panel of the router. See [Figure 2](#).

**Figure 2** Inserting a Slot Divider into an HWIC Slot on a Cisco 2801 Router

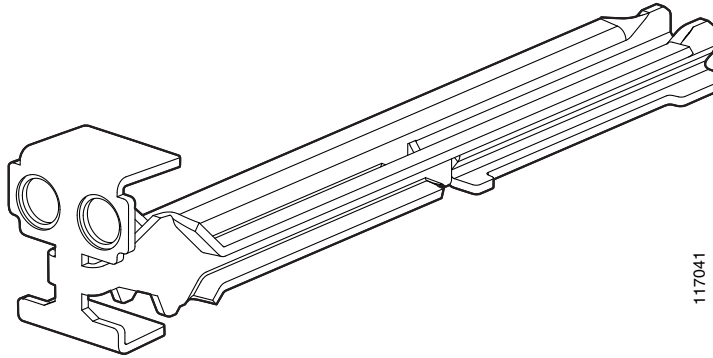


**Step 2** Tighten the retention screw on the slot divider.

## Installing Slot Dividers in HWIC Slots on Cisco 2811, Cisco 2821, and Cisco 2851 Routers

[Figure 3](#) shows a slot divider for HWIC slots on Cisco 2811, Cisco 2821, and Cisco 2851 routers.

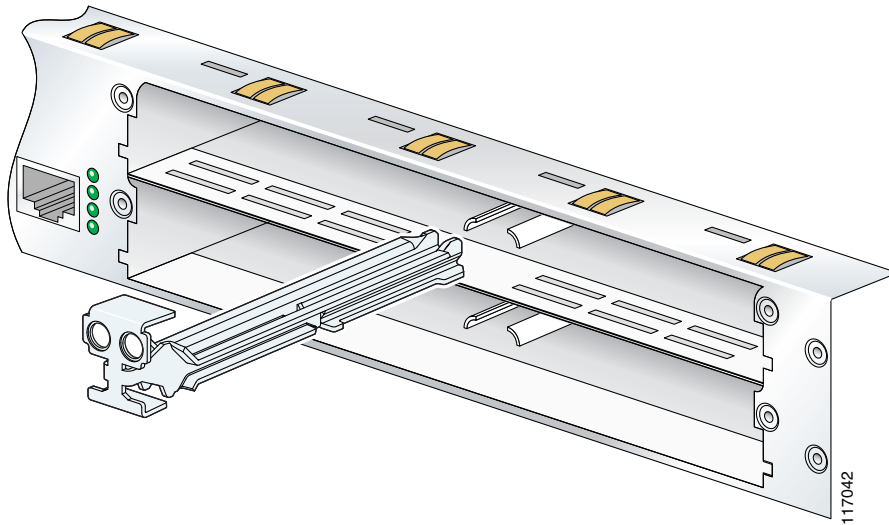
**Figure 3** Slot Divider for HWIC Slots on Cisco 2811, Cisco 2821, and Cisco 2851 Routers



Install slot dividers into HWIC slots on Cisco 2811, Cisco 2821, and Cisco 2851 routers as follows:

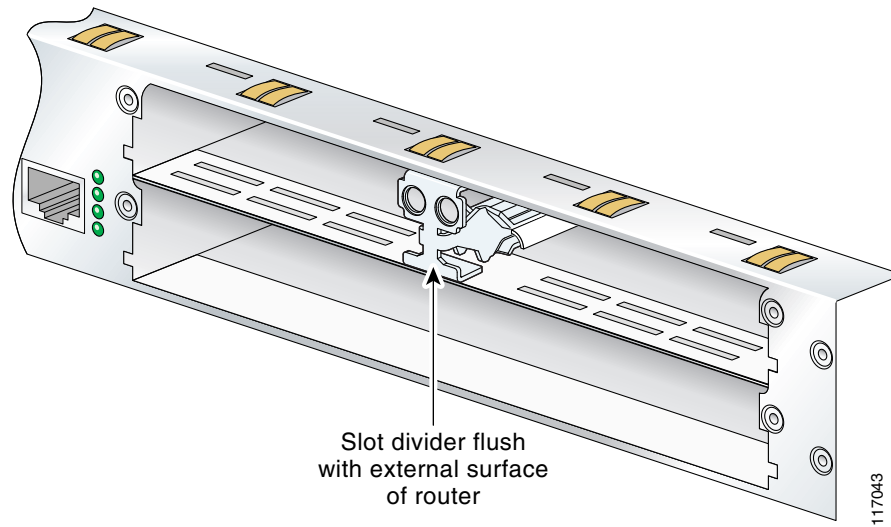
- Step 1** Guide the two halves of the slot divider between the two rails in the bottom of the HWIC slot. See [Figure 4](#).

**Figure 4** Inserting Slot Divider into an HWIC Slot on Cisco 2811, Cisco 2821, and Cisco 2851 Routers



- Step 2** Push the slot divider in until it seats and locks into place. When the slot divider is fully seated, its outer end is flush with the front panel of the router. See [Figure 5](#).
- Step 3** Gently pull the slot divider to check for complete seating. If properly seated, it does not come out.

**Figure 5** Slot Divider Installed in an HWIC Slot on Cisco 2811, Cisco 2821, and Cisco 2851 Routers



## Removing Slot Dividers from HWIC Slots on Cisco 2801 Routers



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

Remove slot dividers from HWIC slots on Cisco 2801 routers as follows:

- Step 1** Loosen the retention screw on the slot divider.
- Step 2** Pull the slot divider straight out of the HWIC slot.

## Removing Slot Dividers from HWIC Slots on Cisco 2811, Cisco 2821, and Cisco 2851 Routers

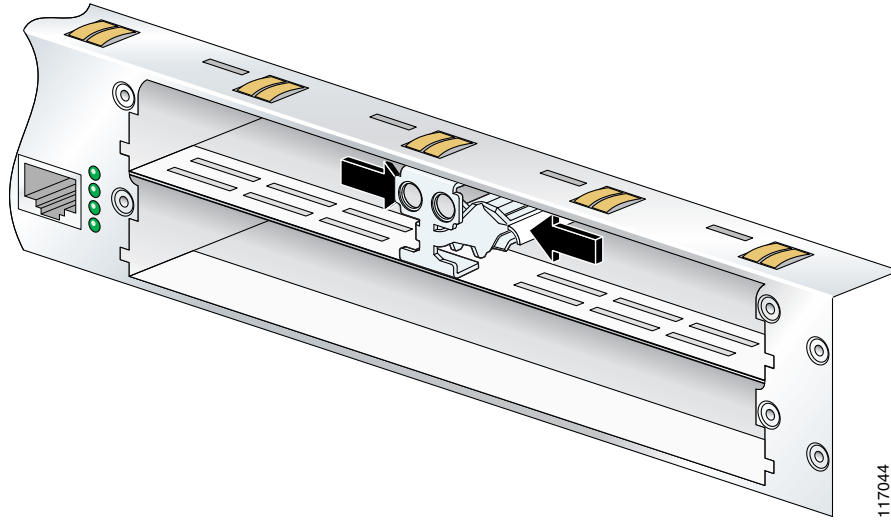


**Note** The HWIC slots on both sides of a slot divider must be empty before you remove the slot divider.

Remove slot dividers from HWIC slots on Cisco 2811, Cisco 2821, and Cisco 2851 routers as follows:

- Step 1** Reach into the HWIC slots on both sides of the slot divider, and squeeze the two halves of the slot divider together. See [Figure 6](#).
- Step 2** Pull the slot divider straight out of the HWIC slot.

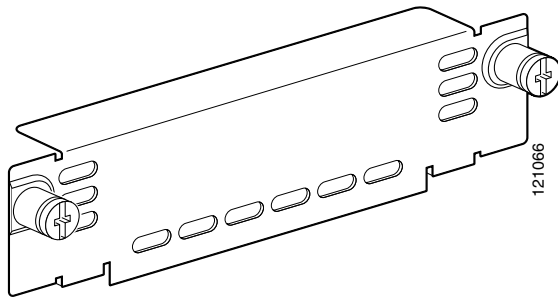
**Figure 6** Squeeze the Slot Divider to Release



## Installing Blank Panels over Empty Chassis Slots

All empty chassis slots for WAN interface cards and voice interface cards must be covered with blank panels. Blank panels are required to ensure proper cooling airflow and to prevent electromagnetic interference. [Figure 7](#) shows a typical blank panel.

**Figure 7** Typical Blank Panel



## Blank Panels for HWIC Slots

The high-speed WAN interface card (HWIC) hardware kit for Cisco 2800 series routers contains two blank panels. Each panel covers one single-wide HWIC slot.

Install blank panels over empty HWIC slots as follows:

- Single-wide slot—Attach a blank panel and tighten the two screws.
- Double-wide slot—Install a slot divider as described in the [“Installing Slot Dividers in HWIC Slots on Cisco 2811, Cisco 2821, and Cisco 2851 Routers”](#) section; then install two blank panels and tighten the two screws in each blank panel.

## Related Product Documentation

The following documentation is related to your product. This documentation was not shipped with your product, but you can access it online at Cisco.com.

- [Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information](#)

---

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website 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. (0711R)

Copyright © 2004 Cisco Systems, Inc. All rights reserved.