



Installing the IDSM2


Note

All IPS platforms allow ten concurrent CLI sessions.

This chapter lists the software and hardware requirements of the IDSM2, and describes how to remove and install it. It contains the following sections:

- [Specifications, page 7-1](#)
- [Software and Hardware Requirements, page 7-2](#)
- [Minimum Supported the IDSM2 Configurations, page 7-2](#)
- [Using the TCP Reset Interface, page 7-3](#)
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- [Installation and Removal Instructions, page 7-4](#)
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- [Powering the IDSM2 Up and Down, page 7-15](#)

Specifications

[Table 7-1](#) lists the specifications for the IDSM2.

Table 7-1 IDSM2 Specifications

Specification	Description
Dimensions (H x W x D)	1.18 x 15.51 x 16.34 in. (30 x 394 x 415 mm)
Weight	Minimum: 3 lb (1.36 kg) Maximum: 5 lb (2.27 kg)
Operating temperature	+32° to +104°F (+0° to +40°C)
Nonoperating temperature	-40° to +167°F (-40° to +75°C)
Humidity	10% to 90%, noncondensing

Software and Hardware Requirements

The following are the IDSM2 software and hardware requirements:

- Catalyst software release 7.5(1) or later with Supervisor Engine 1A with MSFC2
- Catalyst software release 7.5(1) or later with Supervisor Engine 2 with MSFC2 or PFC2
- Cisco IOS software release 12.2(14)SY with Supervisor Engine 2 with MSFC2
- Cisco IOS software release 12.1(19)E or later with Supervisor Engine 2 with MSFC2
- Cisco IOS software release 12.1(19)E1 or later with Supervisor Engine 1A with MSFC2
- Cisco IOS software release 12.2(14)SX1 with Supervisor Engine 720
- Cisco IDS software release 4.0 or later
- Any Catalyst 6500 series switch chassis or 7600 router

Minimum Supported the IDSM2 Configurations


Note

The following matrix is not intended to recommend any particular version, but rather lists the earliest supported versions.

Table 7-2 lists the minimum supported configurations for the IDSM2.

Table 7-2 Minimum Catalyst 6500 Software Version for IDSM2 Feature Support

Catalyst/IDSM2 Feature	Catalyst Software				Cisco IOS Software			
	Sup1	Sup2	Sup32	Sup720	Sup1	Sup2	Sup32	Sup720
SPAN	7.5(1)	7.5(1)	8.4(1)	8.1(1)	12.1(19)E1	12.1(19)E1 12.2(18)SXF1	12.2(18)SXF1	12.2(14)SX1
VACL capture ¹	7.5(1)	7.5(1)	8.4(1)	8.1(1)	12.1(19)E1	12.1(19)E1 12.2(18)SXF1	12.2(18)SXF1	12.2(14)SX1
ECLB with VACL capture ²	8.5(1)	8.5(1)	8.5(1)	8.5(1)	N/A	12.2(18)SXF4	12.2(18)SXF1	12.2(18)SXE1
Inline interface pairs	8.4(1)	8.4(1)	8.4(1)	8.4(1)	N/A	12.2(18)SXF4	12.2(18)SXF4	12.2(18)SXE1
ECLB with inline interface pairs	8.5(1)	8.5(1)	8.5(1)	8.5(1)	N/A	12.2(18)SXF4	12.2(18)SXF4	12.2(18)SXF4
Inline VLAN pairs	8.4(1)	8.4(1)	8.4(1)	8.4(1)	N/A	12.2(18)SXF4	12.2(18)SXF4	12.2(18)SXF4
ECLB with inline VLAN pairs	8.5(1)	8.5(1)	8.5(1)	8.5(1)	N/A	12.2(18)SXF4	12.2(18)SXF4	12.2(18)SXF4

1. Requires PFC2/3 or MSFC2/3.

2. Requires PFC2/3 or MSFC2/3.

Using the TCP Reset Interface

The IDSM2 has a TCP reset interface—port 1. The IDSM2 has a specific TCP reset interface because it cannot send TCP resets on its sensing ports.

If you have reset problems with the IDSM2, and the switch is running Catalyst software, try the following:

- If the sensing ports are access ports (a single VLAN), you need to configure the reset port to be in the same VLAN.
- If the sensing ports are dot1q trunk ports (multi-VLAN), the sensing ports and reset port all must have the same native VLAN, and the reset port must trunk all the VLANs being trunked by both the sensing ports.



Note In Cisco IOS when the IDSM2 is in promiscuous mode, the IDSM2 ports are always dot1q trunk ports (even when monitoring only 1 VLAN), and the TCP reset port is automatically set to a trunk port and is not configurable.

Front Panel Features

The IDSM2 has a status indicator and a Shutdown button. [Figure 7-1](#) shows the front panel features.

Figure 7-1 IDSM2 Front Panel



[Table 7-3](#) describes the IDSM2 states as indicated by the status indicator.

Table 7-3 Status Indicator

Color	Description
Green	All diagnostics tests pass—The IDSM2 is operational.
Red	A diagnostics test other than an individual port test failed.
Amber	The IDSM2 is running through its boot and self-test diagnostics sequence, or the IDSM2 is disabled, or the IDSM2 is in the shutdown state.
Off	The IDSM2 power is off.

To prevent corruption of the IDSM2, you must use the **shutdown** command to shut it down properly. For instructions on properly shutting down the IDSM2, see Step 1 of [Removing the IDSM2](#), page 7-10. If the IDSM2 does not respond, firmly press the Shutdown button on the faceplate and wait for the Status indicator to turn amber. The shutdown procedure may take several minutes.

**Caution**

Do not remove the IDSM2 from the switch until the module shuts down completely. Removing the module without going through a shutdown procedure can corrupt the application partition on the module and result in data loss.

Installation and Removal Instructions

All Catalyst 6500 series switches support hot swapping, which lets you install, remove, replace, and rearrange modules without turning off the system power to the switch. When the system detects that a module has been installed or removed, it runs diagnostic and discovery routines, acknowledges the presence or absence of the module, and resumes system operation with no operator intervention.

**Caution**

You must first shut down the IDSM2 before removing it from a Catalyst 6500 series switch. For the procedure for removing an IDSM2 from a Catalyst 6500 series switch, see [Removing the IDSM2, page 7-10](#).

This section contains the following topics:

- [Required Tools, page 7-4](#)
- [Slot Assignments, page 7-5](#)
- [Installing the IDSM2, page 7-5](#)
- [Verifying Installation, page 7-9](#)
- [Removing the IDSM2, page 7-10](#)

Required Tools

**Note**

You must have at least one supervisor engine running in the Catalyst 6500 series switch with the IDSM2.

You need the following tools to install the IDSM2 in the Catalyst 6500 series switches:

- Flat-blade screwdriver
- Wrist strap or other grounding device
- Antistatic mat or antistatic foam

Whenever you handle the IDSM2, always use a wrist strap or other grounding device to prevent serious damage from ESD.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030

For More Information

- For more information about supervisor engines, refer to the [Catalyst 6500 Series Switch Installation Guide](#).
- For more information on handling ESD, see [Working in an ESD Environment, page 1-32](#).

Slot Assignments

**Note**

The Catalyst 6509-NEB switch has vertical slots numbered 1 to 9 from right to left. Install the IDSM2 with the component side facing to the right.

The Catalyst 6006 and 6506 switch chassis each have six slots. The Catalyst 6009 and 6509 switch chassis each have nine slots. The Catalyst 6513 switch chassis has 13 slots. You can install the IDSM2 in the following ways:

- You can install the IDSM2 in any slot that is not used by the supervisor engine.
- You can install up to eight IDSM2s in a single chassis.

**Caution**

Install module filler plates (blank module carriers) in the empty slots to maintain consistent airflow through the switch chassis.

**Note**

The IDSM2 works with any supervisor engine using SPAN, but the copy capture feature with security VACLs requires that the supervisor engine has the PFC or the MSFC option.

Installing the IDSM2

To install the IDSM2 in the Catalyst 6500 series switch, follow these steps:

Step 1

Make sure that you take necessary ESD precautions.

**Warning**

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not touch the backplane with your hand or any metal tool, or you could shock yourself.

Step 2

Choose a slot for the IDSM2.

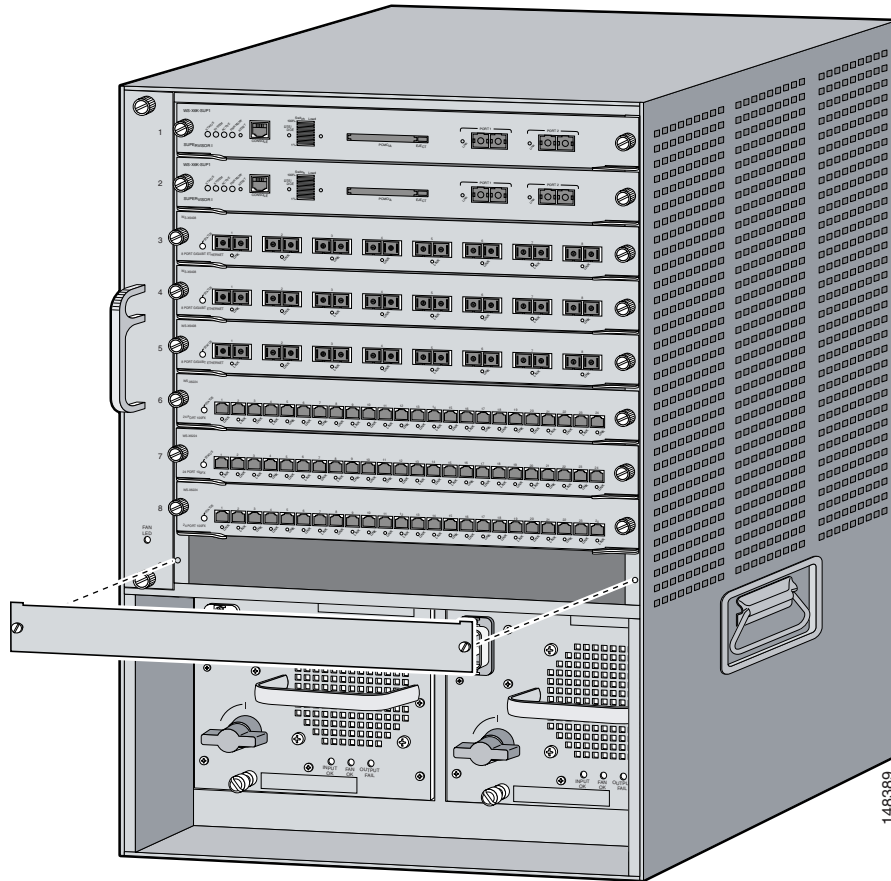
**Note**

You can install the IDSM2 in any slot that is not reserved for a supervisor engine or other module. Refer to your switch documentation for information about which slots are reserved for the supervisor engine or other modules.

Step 3

Remove the installation screws (use a screwdriver, if necessary) that secure the filler plate to the desired slot.

Step 4 Remove the filler plate by prying it out carefully.



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

Step 5

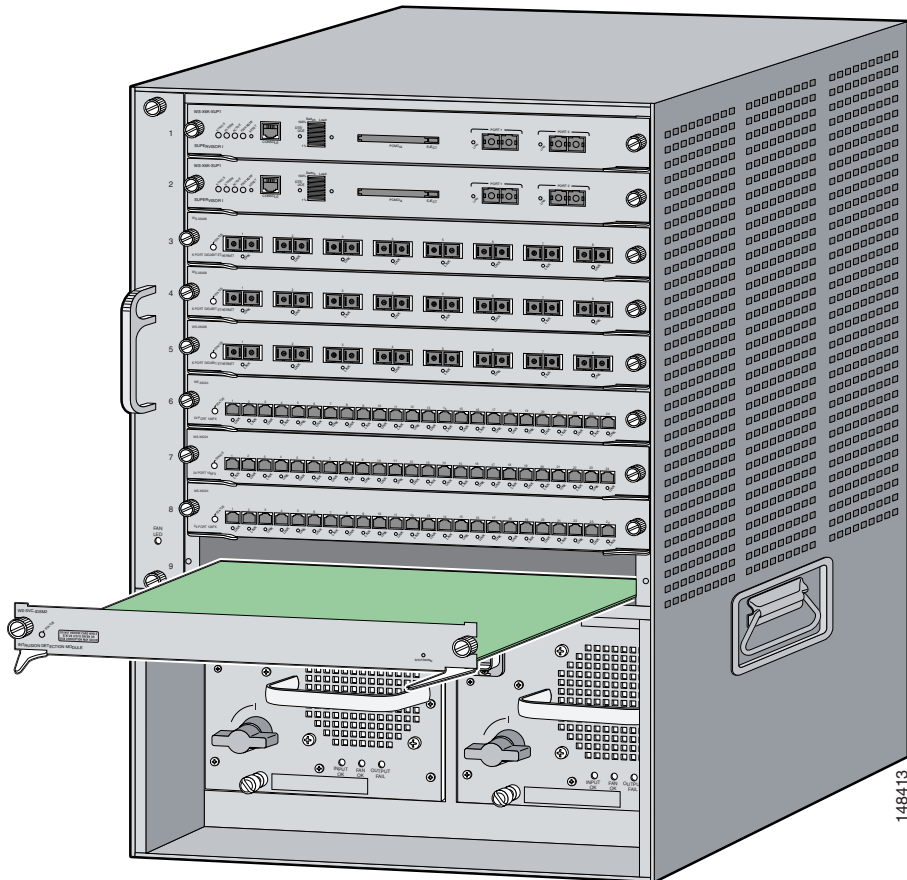
Hold the the IDSM2 with one hand, and place your other hand under the IDSM2 carrier to support it.



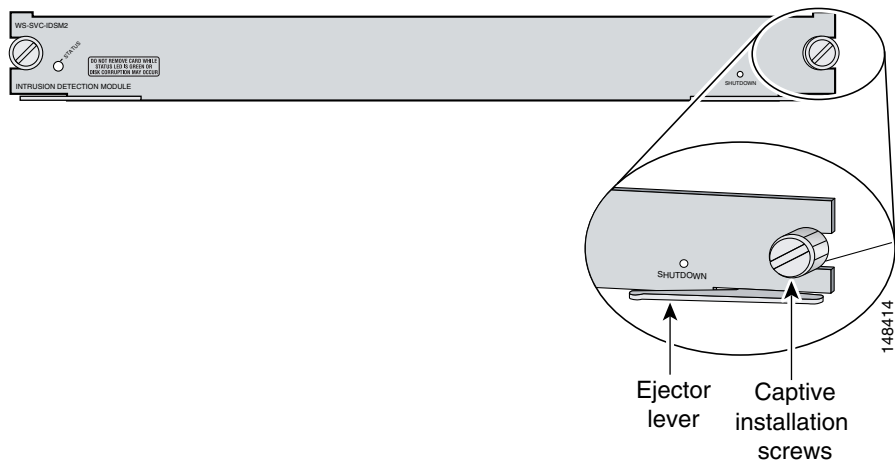
Caution

Do not touch the printed circuit boards or connector pins on the IDSM2.

- Step 6** Place the IDSM2 in the slot by aligning the notch on the sides of the IDSM2 carrier with the groove in the slot.



- Step 7** Keeping the IDSM2 at a 90-degree orientation to the backplane, carefully push it into the slot until the notches on both ejector levers engage the chassis sides.



- Step 8** Using the thumb and forefinger of each hand, simultaneously pivot in both ejector levers to fully seat the IDSM2 in the backplane connector.

**Caution**

Always use the ejector levers when installing or removing the IDSM2. A module that is partially seated in the backplane causes the system to halt and subsequently crash.

**Caution**

If you perform a hot swap, the console displays the message `Module x has been inserted`. This message does not appear, however, if you are connected to the Catalyst 6500 series switch through a Telnet session.

- Step 9** Use a screwdriver to tighten the installation screws on the left and right ends of the IDSM2.
- Step 10** Verify that you have correctly installed the IDSM2 and can bring it online.
- Step 11** Initialize the IDSM2.
- Step 12** Configure the switch for command and control access to the IDSM2.
- Step 13** Upgrade the IDSM2 to the most recent Cisco IDS software.
- Step 14** Set up the IDSM2 to capture IPS traffic. You are now ready to configure the IDSM2 for intrusion prevention.

For More Information

- For more information on ESD-controlled environments, see [Working in an ESD Environment, page 1-32](#).
- For the procedure for verifying the IDSM2 installation, see [Verifying Installation, page 7-9](#).
- For the procedure for using the **setup** command to initialize the IDSM2, see [Initializing the Sensor, page 10-1](#).
- For the procedure for configuring the switch for command and control access to the IDSM2, refer to [Configuring the Catalyst 6500 Series Switch for Command and Control Access to the IDSM2](#).
- For the procedure for obtaining and installing the most recent IPS software, see [Obtaining Cisco IPS Software, page 11-1](#).
- For the procedure for configuring the IDSM2 to capture IPS traffic, refer to [Configuring the IDSM2](#).
- For the procedure for using HTTPS to log in to IDM, refer to [Logging In to IDM](#).
- For the procedures for configuring intrusion prevention on your sensor, refer to the following guides:
 - [Installing and Using Cisco Intrusion Prevention System Device Manager 7.0](#)
 - [Installing and Using Cisco Intrusion Prevention System Manager Express 7.0](#)
 - [Configuring the Cisco Intrusion Prevention System Sensor Using the Command Line Interface 7.0](#)

Verifying Installation



Note

It is normal for the status to read `other` when the IDSM2 is first installed. After the IDSM2 completes the diagnostics routines and comes online, the status reads `ok`. Allow up to 5 minutes for the IDSM2 to come online.

Use the **show module** command to verify that the switch acknowledges the IDSM2 and has brought it online. To verify the installation, follow these steps:

Step 1 Log in to the console.

Step 2 Verify that the IDSM2 is online:

- Catalyst Software

```

console> (enable) show module
Mod Slot Ports Module-Type           Model                Sub Status
-----
 1   1     2   1000BaseX Supervisor      WS-X6K-SUPLA-2GE    yes ok
15   1     1   Multilayer Switch Feature WS-F6K-MSFC         no  ok
 2   2    48   10/100BaseTX Ethernet     WS-X6248-RJ-45     no  ok
 3   3    48   10/100/1000BaseT Ethernet WS-X6548-GE-TX     no  ok
 4   4    16   1000BaseX Ethernet       WS-X6516A-GBIC     no  ok
 6   6     8   Intrusion Detection Mod   WS-SVC-IDSM2       yes ok

Mod Module-Name          Serial-Num
-----
 1                      SAD041308AN
15                      SAD04120BRB
 2                      SAD03475400
 3                      SAD073906RC
 4                      SAL0751QYN0
 6                      SAD062004LV

Mod MAC-Address(es)      Hw    Fw    Sw
-----
 1  00-d0-c0-cc-0e-d2 to 00-d0-c0-cc-0e-d3 3.1   5.3.1  8.4(1)
   00-d0-c0-cc-0e-d0 to 00-d0-c0-cc-0e-d1
   00-30-71-34-10-00 to 00-30-71-34-13-ff
15 00-30-7b-91-77-b0 to 00-30-7b-91-77-ef 1.4   12.1(23)E2 12.1(23)E2
 2  00-30-96-2b-c7-2c to 00-30-96-2b-c7-5b 1.1   4.2(0.24)V 8.4(1)
 3  00-0d-29-f6-01-98 to 00-0d-29-f6-01-c7 5.0   7.2(1)    8.4(1)
 4  00-0e-83-af-15-48 to 00-0e-83-af-15-57 1.0   7.2(1)    8.4(1)
 6  00-e0-b0-ff-3b-80 to 00-e0-b0-ff-3b-87 0.102 7.2(0.67) 5.0(0.30)

Mod Sub-Type            Sub-Model            Sub-Serial  Sub-Hw  Sub-Sw
-----
 1  L3 Switching Engine   WS-F6K-PFC           SAD041303G6 1.1
 6  IDS 2 accelerator board WS-SVC-IDSUPG        .          2.0
console> (enable)

```

- Cisco IOS Software

```

router# show module
Mod Ports Card Type           Model                Serial No.
-----
 1   48  48 port 10/100 mb RJ-45 ethernet     WS-X6248-RJ-45     SAD0401012S
 2   48  48 port 10/100 mb RJ45          WS-X6348-RJ-45     SAL04483QBL
 3   48  SFM-capable 48 port 10/100/1000mb RJ45 WS-X6548-GE-TX     SAD073906GH
 6   16  SFM-capable 16 port 1000mb GBIC       WS-X6516A-GBIC     SAL0740MMYJ

```

```

7    2  Supervisor Engine 720 (Active)           WS-SUP720-3BXL      SAD08320L2T
9    1  1 port 10-Gigabit Ethernet Module     WS-X6502-10GE       SAD071903BT
10   3  Anomaly Detector Module                WS-SVC-ADM-1-K9     SAD084104JR
11   8  Intrusion Detection System              WS-SVC-IDSM2        SAD05380608
13   8  Intrusion Detection System              WS-SVC-IDSM2        SAD072405D8

```

```

Mod MAC addresses                Hw  Fw          Sw          Status
-----
1  00d0.d328.e2ac to 00d0.d328.e2db  1.1  4.2(0.24)VAI  8.5(0.46)ROC  Ok
2  0003.6c14.e1d0 to 0003.6c14.e1ff  1.4  5.4(2)        8.5(0.46)ROC  Ok
3  000d.29f6.7a80 to 000d.29f6.7aaf  5.0  7.2(1)        8.5(0.46)ROC  Ok
6  000d.ed23.1658 to 000d.ed23.1667  1.0  7.2(1)        8.5(0.46)ROC  Ok
7  0011.21a1.1398 to 0011.21a1.139b  4.0  8.1(3)        12.2(PIKESPE) Ok
9  000d.29c1.41bc to 000d.29c1.41bc  1.3  Unknown       Unknown       PwrDown
10 000b.fcf8.2ca8 to 000b.fcf8.2caf  0.101 7.2(1)        4.0(0.25)     Ok
11 00e0.b0ff.3340 to 00e0.b0ff.3347  0.102 7.2(0.67)     5.0(1)        Ok
13 0003.feab.c850 to 0003.feab.c857  4.0  7.2(1)        5.0(1)        Ok

```

```

Mod Sub-Module                Model                Serial                Hw  Status
-----
7  Policy Feature Card 3       WS-F6K-PFC3BXL      SAD083305A1          1.3  Ok
7  MSFC3 Daughterboard        WS-SUP720           SAD083206JX          2.1  Ok
11 IDS 2 accelerator board     WS-SVC-IDSUPG      .                    2.0  Ok
13 IDS 2 accelerator board     WS-SVC-IDSUPG      0347331976          2.0  Ok

```

```

Mod Online Diag Status
-----

```

```

1  Pass
2  Pass
3  Pass
6  Pass
7  Pass
9  Unknown
10 Not Applicable
11 Pass
13 Pass
router#

```

Removing the IDSM2

This procedure describes how to remove the IDSM2 from the Catalyst 6500 series switch.



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030



Caution

Before removing the IDSM2, be sure to perform the shutdown procedure. If the IDSM2 is not shut down correctly, you could corrupt the software.



Warning

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not touch the backplane with your hand or any metal tool, or you could shock yourself.

To remove the IDSM2, follow these steps:

Step 1 Shut down the IDSM2 by one of these methods:

- Log in to the IDSM2 CLI and enter **reset powerdown**.



Note The **reset powerdown** command performs a shut down but does not remove power from the IDSM2. To remove power from the IDSM2, use the **set module power down *module_number*** command.

- Log in to the switch CLI and enter one of the following commands:

- For Catalyst software

```
set module shutdown module_number
```

- For Cisco IOS software

```
hw-module module module_number shutdown
```

- Shut down the IDSM2 through IDM.
- Press the Shutdown button.



Note Shutdown may take several minutes.



Caution If the IDSM2 is removed from the switch chassis without first being shut down, or the chassis loses power, you may need to reset the IDSM2 more than once. If the module fails to respond after three reset attempts, boot the maintenance partition, and perform the instructions for restoring the application partition.

Step 2 Verify that the IDSM2 shuts down. Do not remove the IDSM2 until the status indicator is amber or off.

Step 3 Use a screwdriver to loosen the installation screws at the left and right sides of the IDSM2.

Step 4 Grasp the left and right ejector levers and simultaneously pull the left lever to the left and the right lever to the right to release the IDSM2 from the backplane connector.

Step 5 As you pull the IDSM2 out of the slot, place one hand under the carrier to support it.



Caution Do not touch the printed circuit boards or connector pins.

Step 6 Carefully pull the IDSM2 straight out of the slot, keeping your other hand under the carrier to guide it.



Note Keep the IDSM2 at a 90-degree orientation to the backplane (horizontal to the floor).

Step 7 Place the IDSM2 on an antistatic mat or antistatic foam.

Step 8 If the slot is to remain empty, install a filler plate (part number 800-00292-01) to keep dust out of the chassis and to maintain proper airflow through the module compartment.

**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

For More Information

- For more information on ESD-controlled environments, see [Working in an ESD Environment](#), page 1-32.
- For the procedure for resetting the IDSM2, see [Resetting the IDSM2](#), page 7-13.
- For the procedure for restoring the application partition, see [Installing the IDSM2 System Image](#), page 12-27.
- For the procedure for powering the IDSM2 up and down, see [Powering the IDSM2 Up and Down](#), page 7-15.

Enabling Full Memory Tests

When the IDSM2 initially boots, by default it runs a partial memory test. You can enable a full memory test in Catalyst software and Cisco IOS software. This section describes how to enable memory tests, and contains the following topics:

- [Catalyst Software](#), page 7-12
- [Cisco IOS Software](#), page 7-13

Catalyst Software

Use the **set boot device *boot_sequence module_number mem-test-full*** command to enable a full memory test. The full memory test takes about 12 minutes. To enable a full memory test, follow these steps:

Step 1 Log in to the console.

Step 2 Enter privileged mode.

```
console> enable
```

Step 3 Enable the full memory test.

```
console> (enable) set boot dev cf:1 3 mem-test-full
Device BOOT variable = cf:1
Memory-test set to FULL
Warning: Device list is not verified but still set in the boot string.
console> (enable) set boot dev hdd:1 3 mem-test-full
Device BOOT variable = hdd:1
Memory-test set to FULL
Warning: Device list is not verified but still set in the boot string.
console> (enable)
```

The **set boot device** command can either contain **cf:1** or **hdd:1**.

Step 4 Reset the IDSM2. The full memory test runs.



Note A full memory test takes more time to complete than a partial memory test.

Cisco IOS Software

Use the **hw-module module *module_number* reset mem-test-full** command to enable a full memory test. The full memory test takes about 12 minutes. To enable a full memory test, follow these steps:

Step 1 Log in to the console.

Step 2 Enable the full memory test.

```
router# hw-module module 9 reset mem-test-full
Device BOOT variable for reset = <empty>
Warning: Device list is not verified.

Proceed with reload of module?[confirm]
% reset issued for module 9
router#
```

Step 3 Reset the IDSM2. The full memory test runs.



Note A full memory test takes more time to complete than a partial memory test.

Resetting the IDSM2

If for some reason you cannot communicate with the IDSM2 through SSH, Telnet, or the switch **session** command, you must reset the IDSM2 from the switch console. The reset process requires several minutes. This section describes how to reset the IDSM2, and contains the following topics:

- [Catalyst Software, page 7-13](#)
- [Cisco IOS Software, page 7-14](#)

Catalyst Software

To reset the IDSM2 from the CLI, follow these steps:

Step 1 Log in to the console.

Step 2 Enter privileged mode.

```
console> enable
```

Step 3 Reset the IDSM2 to the application partition or the maintenance partition.

```
console> (enable) reset module_number [hdd:1 | cf:1]
```



Note If you do not specify either the application partition (hdd:1 the default) or the maintenance partition (cf:1), the IDSM2 uses the boot device variable.

Example

```
console> (enable) reset 3
2003 Feb 01 00:18:23 %SYS-5-MOD_RESET: Module 3 reset from console//
Resetting module 3... This may take several minutes.
2003 Feb 01 00:20:03 %SYS-5-MOD_OK: Module 3 is online.
console> (enable)
```



Caution

If the IDSM2 is removed from the switch chassis without first being shut down, or the chassis loses power, you may need to reset the IDSM2 more than once. If the IDSM2 fails to respond after three reset attempts, boot the maintenance partition, and perform the instructions for restoring the application partition.

Cisco IOS Software

Use the **hw-module module slot_number reset [hdd:1 | cf:1]** command in EXEC mode to reset the IDSM2. The reset process takes several minutes. The IDSM2 boots into the boot partition you specify. If you do not specify the boot string, the default boot string is used.

To reset the IDSM2 from the CLI, follow these steps:

Step 1 Log in to the console.

Step 2 Reset the IDSM2.

```
router# hw-module module module-number reset [hdd:1 | cf:1]
```



Note If you do not specify either the application partition (**hdd:1** the default) or the maintenance partition (**cf:1**), the IDSM2 uses the boot device variable.

Example

```
router# hw-module module 8 reset
Device BOOT variable for reset =
Warning: Device list is not verified.
Proceed with reload of module? [confirm]
% reset issued for module 8
router#
```

Powering the IDSM2 Up and Down

You can remove and restore power to the IDSM2 through the switch CLI. This section describes how to power the IDSM2 up and down through the switch CLI, and contains the following sections:

- [Catalyst Software, page 7-15](#)
- [Cisco IOS Software, page 7-16](#)

Catalyst Software

Once you power off the IDSM2, you must power it up through the switch CLI.

**Note**

The IDSM2 CLI **reset powerdown** command performs a shut down, but does not remove power from the IDSM2.

To power the IDSM2 up and down from the switch CLI, follow these steps:

Step 1 Log in to the console.

Step 2 Enter privileged mode.

```
console> enable
```

Step 3 Power up the IDSM2.

```
console> (enable) set module power up module_number
```

Step 4 Power down the IDSM2.

```
console> (enable) set module power down module_number
```

Cisco IOS Software

Once you power off the IDSM2, you must power it up through the switch CLI.

**Note**

The IDSM2 CLI **reset powerdown** command performs a shut down, but does not remove power from the IDSM2.

To power the IDSM2 up and down from the switch CLI, follow these steps:

Step 1 Log in to the console.

Step 2 Enter configure terminal mode.

```
router# configure terminal
```

Step 3 Power up the IDSM2.

```
router(config)# power enable module module_number
```

Step 4 Power down the IDSM2.

```
router(config)# no power enable module module_number
```
