



Configuration Notes for the Cisco ME 3400G-12CS Ethernet Access Switch

September 22, 2006

These configuration notes contain information about configuring the Cisco ME-3400G-12CS-A and Cisco ME-3400G-12CS-D switches. This information is specific to these switches and does not apply to other Cisco ME 3400 switches.

The Cisco ME-3400G-12CS switch requires Cisco IOS Release 12.2(25)SEG1 or later. Cisco IOS Release 12.2(25)SEG does not support the ME 3400G-12CS switch.



Note

When you select an IOS product code in the Cisco ordering tool, the selection lists only the 12.2(25)SEG image. However, the image installed on the switch will be the latest available version of the release, in this case 12.2(25)SEG1.

For hardware information about the switch, see the *Cisco ME 3400 Ethernet Access Switch Hardware Installation Guide, September 2006* at this URL:

http://www.cisco.com/en/US/products/ps6580/prod_installation_guides_list.html

For information about Cisco IOS Release 12.2(25)SEG1, see the release notes at this URL:

http://www.cisco.com/en/US/products/ps6580/prod_release_note09186a00806700ee.html

For other information about the Cisco ME 3400 switch, see the documentation for Cisco IOS Release 12.2(25)SEG at this URL:

http://www.cisco.com/en/US/products/ps6580/tsd_products_support_series_home.html

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New Software Features on the Cisco ME 3400G-12CS Switch

These are the new software features on this switch:

- Configurable dual-purpose ports supporting two types of media
- Power-supply alarm-suppression command for using a single power supply
- Change in outputs to **show env** user and privileged EXEC commands to reflect dual power supplies, dual fans, and temperature alarm settings.

Dual-Purpose Ports

The switch has 12 dual-purpose ports that can be configured as 10/100/100 ports by using an RJ-45 connector or as small form-factor pluggable (SFP) module ports. The software includes a new command to configure these ports.



Note

The dual-purpose ports are designated as Gigabit Ethernet ports (gigabitethernet 0/1 through gigabitethernet 0/12). The switch also has four standard SFP-only module ports (gigabitethernet 0/13 through 0/16). Even when operating at 10 or 100 Mbps, the dual-purpose ports (as well as the SFP-only module ports) use the frame size set with the **system mtu jumbo** global configuration command.

Each dual-purpose port is considered as a single interface with dual front ends (an RJ-45 connector and an SFP module connector). The dual front ends are not redundant interfaces; the switch activates only one connector of the pair.

By default, the dual-purpose ports are user-network interfaces (UNIs) and the SFP-only module ports are network node interfaces (NNIs). If the switch is running the metro IP access image, there is no limit to the number of ports that can be configured as NNIs. If the switch is running the metro base or metro access image, only four ports can be configured as NNIs. When running these images, if you want to configure a dual-purpose port as an NNI, you must first change the port type of an SFP-only module port to UNI by entering the **port-type uni** interface configuration command so as not to exceed the switch maximum of four NNIs.



Note

By default, the ME 3400 switch sends keepalive messages on UNI s and does not send keepalive messages on NNIs. Changing the port type from UNI to NNI or from NNI to UNI has no effect on the keepalive status. You can change the keepalive state from the default setting by entering the **[no]**

keepalive interface configuration command. If you enter the **keepalive** command with no arguments, keepalive packets are sent at the default time interval (10 seconds) and number of retries (5). Entering the **no keepalive** command disables keepalive packets on the interface.

By default, the switch dynamically selects the dual-purpose port media type that first links up. However, you can use the **media-type** interface configuration command to manually select the RJ-45 connector or the SFP module connector. In **auto-select** mode, the switch gives preference to SFP mode if both copper and fiber signals are simultaneously detected.

Each dual-purpose port has two LEDs: one shows the status of the SFP module port, and one shows the status of the RJ-45 port. The port LED is on for whichever connector is active. For more information about the LEDs, see the hardware installation guide.

Setting the Type of a Dual-Purpose Port

Beginning in privileged EXEC mode, follow these steps to select which dual-purpose media type to activate. This procedure is optional.

	Command	Purpose
Step 1	configure terminal	Enter global configuration mode.
Step 2	interface <i>interface-id</i>	Specify the dual-purpose port to be configured, and enter interface configuration mode.
Step 3	media-type { auto-select rj45 sfp }	Select the active interface and media type of a dual-purpose port. The keywords have these meanings: <ul style="list-style-type: none"> • auto-select—The switch dynamically selects the media type. This is the default. When a linkup is achieved, the switch disables the other type until the active link goes down. When the active link goes down, the switch enables both types until one of them links up. In auto-select mode, the switch configures both types with autonegotiation of speed and duplex (the default). • rj45—The switch disables the SFP module interface. If you connect a cable to the SFP port, it cannot attain a link even if the RJ-45 side is down or is not connected. In this mode, the dual-purpose port behaves like a 10/100/1000BASE-TX interface. You can configure the speed and duplex settings consistent with this interface type. • sfp—The switch disables the RJ-45 interface. If you connect a cable to the RJ-45 port, it cannot attain a link even if the SFP side is down or if the SFP module is not present. Based on the type of installed SFP module, you can configure the speed and duplex settings consistent with this interface type.
Step 4	end	Return to privileged EXEC mode.
Step 5	show interfaces <i>interface-id</i> transceiver properties	Verify your setting.
Step 6	copy running-config startup-config	(Optional) Save your entries in the configuration file.

To return to the default setting, use the **no media-type** interface configuration command.

When you change the interface type, the speed and duplex configurations are removed. The switch configures both types to autonegotiate speed and duplex (the default). If you configure **auto-select**, you cannot configure the **speed** and **duplex** interface configuration commands.

When the switch is configured with **sfp** or **rj45** media type, the non-configured media type is disabled, even if there is a media installed in that interface and no media in the configured one.

When the media type is **auto-select**, the switch uses these criteria to select the media type:



Note An SFP is not *installed* until it has a fiber or copper cable plugged into the SFP module.

- If only one media type is installed, that interface is active and remains active until the media is removed or the switch is reloaded.
- If you install both media types in a dual-purpose port that is enabled, the switch selects the active link based on which type is installed first.
- If both media are installed in the dual-purpose port, and the switch is reloaded or the port is disabled and then reenabled through the **shutdown** and the **no shutdown** interface configuration commands, the switch gives preference to the SFP module interface.

See the [media-type](#) interface configuration command for more information.

Power-Supply Alarm Suppression

The switch has two power supplies and normally activates alarm indications (LED state, MIB state, and MIB traps) when it detects that a power supply is not operating. However, the switch can also operate with a single power supply. You can enter the **no power-supply dual** global configuration command to suppress the alarm when the switch is using a single power supply.

When two power supplies are operating and you enter the **no power-supply dual** command, alarms are suppressed on power supply 2. When one power supply is operating, alarms are suppressed for the power supply that is not providing power.

Beginning in privileged EXEC mode, follow these steps to suppress alarms on the second power supply. This procedure is optional.

	Command	Purpose
Step 1	configure terminal	Enter global configuration mode.
Step 2	no power-supply dual	Suppress alarms if a second power supply is not providing power.
Step 3	end	Return to privileged EXEC mode.
Step 4	show env {all power}	Verify your setting.
Step 5	copy running-config startup-config	(Optional) Save your entries in the configuration file.

Enter the **power-supply dual** global configuration command to return to the default setting where alarms are sent if two power supplies are not supplying power.

See the [power-supply dual](#) global configuration command for more information.

Changes in Output for show env Command

The outputs of the **show env all**, **show env fan**, and **show env temperature** user and privileged EXEC commands have changed to reflect dual power supplies, dual fans, and increased control of temperature alarm indicators. See the [show env](#) user EXEC command for more information.

Clarification for the test cable-diagnostics tdr Command

The command reference states that the **test cable-diagnostics tdr** privileged EXEC command is supported only on Ethernet copper 10/100 ports. The command is also supported on Ethernet copper 10/100/100 ports, including dual-purpose ports that are configured as 10/100/100 ports by using the RJ-45 connector. The command is not supported on SFP module ports.

New or Revised Commands

These commands are new for the Cisco ME 3400G -12CS switches and are not visible or supported on other Cisco ME 3400 switches:

- [media-type](#), page 5
- [power-supply dual](#), page 8

The output for this command on the Cisco ME 3400G -12CS switch is different than on other Cisco ME 3400 switches:

- [show env](#), page 9

media-type

Use the **media-type** interface configuration command to manually select the interface and type of a dual-purpose port or to enable the switch to dynamically select the type that first links up. Use the **no** form of this command to return to the default setting.

```
media-type { auto-select | rj45 | sfp }
```

```
no media-type
```



Note

This command is visible only on the Cisco ME- 3400G-12CS-A and ME-3400G-12CS-D switches.

Syntax Description

auto-select	Enable the switch to dynamically select the type based on the first to link up.
rj45	Select the RJ-45 interface.
sfp	Select the small form-factor pluggable (SFP) module interface.

Defaults

The default is that the switch dynamically selects the link (**auto-select**)

Command Modes Interface configuration

Command History

Release	Modification
12.2(25)SEG1	This command was introduced.

Usage Guidelines

You cannot use the RJ-45 interface and the SFP interface of the dual-purpose ports simultaneously to provide redundant links.

When you select **auto-select**, the switch dynamically selects the type that first links up. This is the default mode. The switch disables the other media type until the active link goes down. When the active link goes down, the switch enables both types until one of them links up. If there are active links on both media, the SFP link has priority. In auto-select mode, the switch configures both types with autonegotiation of speed and duplex (the default).

When you select **rj45**, the switch disables the SFP module interface. If you connect a cable to the SFP port, it cannot attain a linkup even if the RJ-45 side is down or is not connected. In this mode, the dual-purpose port behaves like a 10/100/1000BASE-TX interface. You can configure the speed and duplex settings consistent with this interface type.

When you select **sfp**, the switch disables the RJ-45 interface. If you connect a cable to this port, it cannot attain a linkup even if the SFP module side is down or if the SFP module is not present. Based on the type of installed SFP module, you can configure the speed and duplex settings consistent with this interface type.

To configure speed or duplex settings on a dual-purpose port, you must first select the media type. If you configure **auto-select**, you cannot configure the **speed** and **duplex** interface configuration commands. When you change the interface type, the speed and duplex configurations are removed. The switch configures both types to autonegotiate speed and duplex (the default).

When the media type is **auto-select**, the switch uses these criteria to select the media type:



Note An SFP is not *installed* until it has a fiber or copper cable plugged into the SFP module.

- If only one media type is installed, that interface is active and remains active until the media is removed or the switch is reloaded.
- If you install both media types in a dual-purpose port that is enabled, the switch selects the active link based on which type is installed first.
- When the switch powers on with both cables connected, or when you enable a dual-purpose port through the **shutdown** and the **no shutdown** interface configuration commands, the switch gives preference to the SFP module interface. In all other situations, the switch selects the active link based on the type that first links up.

Examples

This example shows how to select the SFP interface:

```
Switch(config)# interface gigabitethernet0/1
Switch(config-if)# media-type sfp
```

You can verify your setting by entering the **show interfaces interface-id capabilities** or the **show interfaces interface-id transceiver properties** privileged EXEC commands.

Related Commands	Command	Description
	show interfaces capabilities	Displays the capabilities of all interfaces or the specified interface.
	show interfaces transceiver properties	Displays speed, duplex and media-type settings on all interfaces or the specified interface.

power-supply dual

Use the **power-supply dual** global configuration command to enable power supply alarm indications (LED state, MIB state, and MIB traps) when a power supply is not providing power. Use the **no** form of this command when running the switch on a single power supply to suppress the power-supply alarm for the second power supply.

power-supply dual

no power-supply dual



Note

This command is visible only on the Cisco ME- 3400G-12CS-A and ME-3400G-12CS-D switches.

Syntax Description

This command has no arguments or keywords.

Defaults

The default is that the switch sends power-supply alarm indications when either power supply is not supplying power.

Command Modes

Interface configuration

Command History

Release	Modification
12.2(25)SEG1	This command was introduced.

Usage Guidelines

When you enter the **no power-supply dual** command and two power supplies are operating, alarms are suppressed on power supply 2. When one power supply is operating, alarms are suppressed for the power supply that is not providing power.

Examples

This example shows how to suppress power-supply alarm indications for the second power supply and verify the configuration:

```
Switch(config)# no power-supply dual
Switch(config)# end
Switch# show env power
POWER SUPPLY 1 is OK
POWER SUPPLY 2 is Alarm disabled
```

You can display the power-supply alarm status by entering the **show env all** or **show env power** privileged EXEC commands.

Related Commands

Command	Description
show env {all power}	Displays the power-supply alarm setting for the switch.

show env

Use the **show env** user EXEC command to display fan, temperature, redundant power system (RPS) availability, and power supply information for the switch.

```
show env {all | fan | power | rps} | temperature [status] [ | {begin | exclude | include} expression]
```

Syntax Description		
all		Display all switch fan, power supply, temperature environmental status.
fan		Display the switch fan status. The Cisco
power		Display the switch power supply status.
rps		Display whether a Cisco RPS is connected to the switch. (The Cisco ME switch does not support the RPS.)
temperature		Display the switch temperature status as <i>OK</i> or <i>FAULTY</i> . Green and yellow states are shown as <i>OK</i> ; the red state shows as <i>FAULTY</i> .
status		(Optional) Show more detailed temperature status, including the temperature value, state (green, yellow, or red), and the yellow and red threshold values.
 begin		(Optional) Display begins with the line that matches the <i>expression</i> .
 exclude		(Optional) Display excludes lines that match the <i>expression</i> .
 include		(Optional) Display includes lines that match the specified <i>expression</i> .
<i>expression</i>		Expression in the output to use as a reference point.

Command Modes User EXEC

Command History	Release	Modification
	12.2(25)EX	This command was introduced.
	12.2(25)SEG1	The outputs were expanded for the Cisco ME 3400G-12CS switches to reflect the dual fans, dual power supplies, and temperature setting. The status keyword was added.

Usage Guidelines On a Cisco ME switch, you can use the **show env temperature** command to display the switch temperature status. The command output shows the green and yellow states as *OK* and the red state as *FAULTY*. If you enter the **show env temperature status** command on this switch, the temperature information is the same as the **show env all** command output.

You can use the **system env temperature threshold yellow** global configuration command to configure the yellow temperature threshold. If not configured, the yellow threshold defaults to 10 degrees Celsius below the red threshold.

Expressions are case sensitive. For example, if you enter **| exclude output**, the lines that contain *output* are not displayed, but the lines that contain *Output* are displayed.

Examples

Displays for the Cisco ME 3400G-12CS switch are different than those for other Cisco ME switches. This is an example of output from the **show env all** command for the Cisco ME 3400G-12CS switch:

```
Switch> show env all
FAN 1 is OK
FAN 2 is OK
TEMPERATURE is OK
Temperature Value: 31 Degree Celsius
Temperature State: GREEN
Yellow Threshold : 56 Degree Celsius
Red Threshold    : 66 Degree Celsius
POWER SUPPLY 1 is OK
POWER SUPPLY 2 is Alarm disabled
```

This is an example of output from the **show env all** command for other Cisco ME switches:

```
Switch# show env all
FAN is OK
TEMPERATURE is OK
POWER is OK
RPS is NOT PRESENT
```

This is an example of output from the **show env fan** command for the Cisco ME 3400G-12CS switch:

```
Switch> show env fan
FAN 1 is OK
FAN 2 is OK
```

This is an example of output from the **show env fan** command for other Cisco ME switches:

```
Switch> show env fan
FAN is OK
```

This is an example of output from the **show env power** command for the Cisco ME 3400G-12CS switch:

```
Switch> show env power
POWER SUPPLY 1 is OK
POWER SUPPLY 2 is Alarm disabled
```

These are examples of output from the **show env temperature** command for the Cisco ME 3400G-12CS switch:

```
Switch> show env temperature
TEMPERATURE is OK
```

```
Switch> show env temperature status
Temperature Value: 31 Degree Celsius
Temperature State: GREEN
Yellow Threshold : 56 Degree Celsius
Red Threshold    : 66 Degree Celsius
```

Related Commands

Command	Description
power-supply dual	Sets or suppresses alarms for the switch second power supply.
system env temperature threshold yellow	Configures the yellow temperature threshold.

Getting Started Guide Updates

This information was added to the package contents list:

- The Cisco ME-3400-24TS-A switch ships with one AC power cord; the Cisco ME-3400G-12CS-A switch ships with two power cords.
- The Cisco ME-3400-24TS-D switch ships with one DC terminal block; the Cisco ME-3400G-12CS-D switch ships with two terminal blocks.

RCSI Updates

These translated safety warnings were added to the Regulatory Compliance and Safety Information (RCSI), for the Cisco ME 3400-12CS Ethernet Access switches:

- [Statement 1005—Circuit Breaker \(Cisco ME 3400G-12CS Switches\)](#), page 11
- [Statement 1028—More Than One Power Supply \(Cisco ME 3400G-12CS Switches\)](#), page 12

Statement 1005—Circuit Breaker (Cisco ME 3400G-12CS Switches)



Warning

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than:

6 A Statement 1005

Waarschuwing

Dit product is afhankelijk van de installatie van het gebouw voor beveiliging tegen kortsluiting (overstroom). Controleer of de beschermingsinrichting niet meer dan:

6 A is.

Varoitus

Tämä tuote on riippuvainen rakennukseen asennetusta oikosulkusuojuuksesta (ylivirtasuojauksesta). Varmista, että suojalaitteen mitoitus ei ole yli:

6 A

Attention

Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à :

6 A

Warnung

Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als:

6 A beträgt.

Avvertenza

Questo prodotto dipende dall'impianto dell'edificio per quanto riguarda la protezione contro cortocircuiti (sovracorrente). Assicurarsi che il dispositivo di protezione non abbia un rating superiore a:

6 A

Advarsel	Dette produktet er avhengig av bygningens installasjoner av kortslutnings (overstrøm)-beskyttelse. Påse at verneenheten ikke er merket høyere enn: 6 A
Aviso	Este produto depende das instalações existentes para proteção contra curto-circuito (sobrecarga). Assegure-se de que o fusível ou disjuntor não seja superior a: 6 A
¡Advertencia!	Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 6 A
Varning!	Denna produkt är beroende av i byggnaden installerat kortslutningsskydd (överströmsskydd). Kontrollera att skyddsanordningen inte har högre märkvärde än: 6 A
Figyelem	A termék védelmi rendszerének része az épület kábelezésébe épített rövidzárlat (túláram) elleni védelem is. Gondoskodjon róla, hogy a készüléket védő eszköz legfeljebb a következő áramerősségre legyen méretezve: 6 A
Предупреждение	Защита устройства от короткого замыкания (перегрузки) осуществляется с помощью оборудования, являющегося частью электропроводки здания. Убедитесь, что номинал защитного устройства не превышает: 6 A
警告	此产品的短路（过载电流）保护由建筑物的供电系统提供。确保短路保护设备的额定电流不大于： 6 A
警告	この製品は、設置する建物にショート（過電流）保護機構が備わっていることを前提に設計されています。保護装置の定格が以下の値を超えないことを確認してください。 6 A 2

Statement 1028—More Than One Power Supply (Cisco ME 3400G-12CS Switches)



Warning

This unit might have more than one power supply connection. All connections must be removed to de-energize the unit. Statement 1028

Waarschuwing

Deze eenheid kan meer dan één stroomtoevoeraansluiting bevatten. Alle aansluitingen dienen ontkoppeld te worden om de eenheid te ontcrachten.

Varoitus

Tässä laitteessa voi olla useampia kuin yksi virtakytkentä. Kaikki liitännät on irrotettava, jotta jännite poistetaan laitteesta.

Attention	Cette unité peut avoir plus d'une connexion d'alimentation. Pour supprimer toute tension et tout courant électrique de l'unité, toutes les connexions d'alimentation doivent être débranchées.
Warnung	Dieses Gerät kann mehr als eine Stromzufuhr haben. Um sicherzustellen, dass der Einheit kein Strom zugeführt wird, müssen alle Verbindungen entfernt werden.
Avvertenza	Questa unità può avere più di una connessione all'alimentazione elettrica. Tutte le connessioni devono essere staccate per togliere la corrente dall'unità.
Advarsel	Denne enheten kan ha mer enn én strømtilførselskobling. Alle koblinger må fjernes fra enheten for å utkoble all strøm.
Aviso	Esta unidade poderá ter mais de uma conexão de fonte de energia. Todas as conexões devem ser removidas para desligar a unidade.
¡Advertencia!	Puede que esta unidad tenga más de una conexión para fuentes de alimentación. Para cortar por completo el suministro de energía, deben desconectarse todas las conexiones.
Varning!	Denna enhet har eventuellt mer än en strömförsörjningsanslutning. Alla anslutningar måste tas bort för att göra enheten strömlös.
Figyelem	Előfordulhat, hogy a készülék többszörösen van csatlakoztatva az áramforráshoz. A készülék áramtalanításához mindegyik csatlakozást meg kell szüntetni.
Предупреждение	В данном устройстве может использоваться несколько подключений к электросети. Чтобы обесточить устройство, необходимо отключить все эти подключения.
警告	此部件连接的电源可能不止一个。必须将所有电源断开才能停止给该部件供电。
警告	この装置には、複数の電源が接続されている場合があります。装置の電源を完全にオフにするには、すべての電源を切断する必要があります。
주의	본 장치에는 2개 이상의 전원 공급 연결 단자가 있을 수 있습니다. 이 장치의 전원을 차단하려면 모든 연결 단자를 제거해야 합니다.
Aviso	Esta unidade pode ter mais de uma conexão de fonte de alimentação. Todas as conexões devem ser removidas para interromper a alimentação da unidade.
Advarsel	Denne enhed har muligvis mere end en strømforsyningstilslutning. Alle tilslutninger skal fjernes for at aflade strømmen fra enheden.
تحذير	قد تتضمن هذه الوحدة أكثر من اتصال بمورد الطاقة. يجب فصل كافة التوصيلات حتى يمكن إفراغ طاقة الوحدة.
Upozorenje	Uređaj može imati više priključaka za izvore napajanja. Za potpuno isključivanje napajanja potrebno je iskopčati sve priključke.

Upozornění	Toto zařízení může být připojeno k více než jednomu zdroji napájení. Aby se zařízení zcela odpojilo od proudu, musí být odpojeno od všech zdrojů napájení.
Προειδοποίηση	Αυτή η συσκευή ίσως να έχει περισσότερες συνδέσεις τροφοδοσίας. Για να απενεργοποιηθεί η συσκευή, πρέπει να αφαιρεθούν όλες οι συνδέσεις.
אזהרה	ייתכן שביחידה זו קיימים יותר מחיבור אחד לספק כוח. יש להסיר את כל החיבורים כדי להפסיק את אספקת המתח ליחידה.
Ορρομєηα	Уредот може да има повеќе од еден приклучок за напојување. Сите приклучоци мора да се извадат за да се прекине доводот на енергија во уредот.
Ostrzeżenie	To urządzenie może mieć podłączone więcej niż jedno źródło zasilania. Aby całkowicie odciąć dopływ energii do urządzenia, należy odłączyć wszystkie źródła zasilania.
Upozornenie	Toto zariadenie môže byť pripojené k viac ako jednému zdroju napájania. Aby sa zariadenie odpojilo od prúdu, musí byť odpojené od všetkých zdrojov.
警告	本裝置可能有一個以上的供電連線。必須移除所有連線才能將裝置斷電。

Related Documentation

These documents provide complete information about the switch and are available from this Cisco.com site:

http://www.cisco.com/en/US/products/ps6580/tsd_products_support_series_home.html

You can order printed copies of documents with a DOC-xxxxxx= number from the Cisco.com sites and from the telephone numbers listed in the “Obtaining Documentation” section on page 15.

- *Cisco ME 3400 Ethernet Access Switch Software Configuration Guide* (not orderable but available on Cisco.com)
- *Cisco ME 3400 Ethernet Access Switch Command Reference* (not orderable but available on Cisco.com)
- *Cisco ME 3400 and ME 2400 Ethernet Access Switch System Message Guide* (not orderable but available on Cisco.com)
- *Cisco ME 3400 Ethernet Access Switch Hardware Installation Guide* (not orderable but available on Cisco.com)
- *Cisco ME 3400 and ME 2400 Ethernet Access Switches Getting Started Guide* (order number DOC-7817050=)
- *Regulatory Compliance and Safety Information for the Cisco ME 3400 and ME 2400 Ethernet Access Switches* (order number DOC-7817051=)

These compatibility matrix documents are available from this Cisco.com site:

http://www.cisco.com/en/US/products/hw/modules/ps5455/products_device_support_tables_list.html

- *Cisco Gigabit Ethernet Transceiver Modules Compatibility Matrix* (not orderable but available on Cisco.com)
- *Cisco 100-Megabit Ethernet SFP Modules Compatibility Matrix* (not orderable but available on Cisco.com)
- *Cisco Small Form-Factor Pluggable Modules Compatibility Matrix* (not orderable but available on Cisco.com)
- *Cisco CWDM SFP Transceiver Compatibility Matrix* (not orderable but available on Cisco.com)
- *Compatibility Matrix for 1000BASE-T Small Form-Factor Pluggable Modules* (not orderable but available on Cisco.com)

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. This section explains the product documentation resources that Cisco offers.

Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/techsupport>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Product Documentation DVD

The Product Documentation DVD is a library of technical product documentation on a portable medium. The DVD enables you to access installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the HTML documentation and some of the PDF files found on the Cisco website at this URL:

<http://www.cisco.com/univercd/home/home.htm>

The Product Documentation DVD is created monthly and is released in the middle of the month. DVDs are available singly or by subscription. Registered Cisco.com users can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at the Product Documentation Store at this URL:

<http://www.cisco.com/go/marketplace/docstore>

Ordering Documentation

You must be a registered Cisco.com user to access Cisco Marketplace. Registered users may order Cisco documentation at the Product Documentation Store at this URL:

<http://www.cisco.com/go/marketplace/docstore>

If you do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

Documentation Feedback

You can provide feedback about Cisco technical documentation on the Cisco Technical Support & Documentation site area by entering your comments in the feedback form available in every online document.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you will find information about how to do the following:

- Report security vulnerabilities in Cisco products
- Obtain assistance with security incidents that involve Cisco products
- Register to receive security information from Cisco

A current list of security advisories, security notices, and security responses for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

To see security advisories, security notices, and security responses as they are updated in real time, you can subscribe to the Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed. Information about how to subscribe to the PSIRT RSS feed is found at this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you have identified a vulnerability in a Cisco product, contact PSIRT:

- For emergencies only — security-alert@cisco.com

An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- For nonemergencies — psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532



Tip

We encourage you to use Pretty Good Privacy (PGP) or a compatible product (for example, GnuPG) to encrypt any sensitive information that you send to Cisco. PSIRT can work with information that has been encrypted with PGP versions 2.x through 9.x.

Never use a revoked encryption key or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

If you do not have or use PGP, contact PSIRT to find other means of encrypting the data before sending any sensitive material.

Product Alerts and Field Notices

Modifications to or updates about Cisco products are announced in Cisco Product Alerts and Cisco Field Notices. You can receive Cisco Product Alerts and Cisco Field Notices by using the Product Alert Tool on Cisco.com. This tool enables you to create a profile and choose those products for which you want to receive information.

To access the Product Alert Tool, you must be a registered Cisco.com user. (To register as a Cisco.com user, go to this URL: <http://tools.cisco.com/RPF/register/register.do>) Registered users can access the tool at this URL: <http://tools.cisco.com/Support/PAT/do/ViewMyProfiles.do?local=en>

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>



Note

Use the **Cisco Product Identification Tool** to locate your product serial number before submitting a request for service online or by phone. You can access this tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link, clicking the **All Tools (A-Z)** tab, and then choosing **Cisco Product Identification Tool** from the alphabetical list. This tool offers three search options: by product ID or model name; by tree view; or, for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.



Tip

Displaying and Searching on Cisco.com

If you suspect that the browser is not refreshing a web page, force the browser to update the web page by holding down the Ctrl key while pressing F5.

To find technical information, narrow your search to look in technical documentation, not the entire Cisco.com website. On the Cisco.com home page, click the **Advanced Search** link under the Search box and then click the **Technical Support & Documentation** radio button.

To provide feedback about the Cisco.com website or a particular technical document, click **Contacts & Feedback** at the top of any Cisco.com web page.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests, or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411

Australia: 1 800 805 227

EMEA: +32 2 704 55 55

USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—An existing network is “down” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of the network is impaired while most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco channel product offerings. To order and find out more about the *Cisco Product Quick Reference Guide*, go to this URL:

<http://www.cisco.com/go/guide>

- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- Cisco Press publishes a wide range of general networking, training, and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the magazine for Cisco networking professionals. Each quarter, *Packet* delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can subscribe to *Packet* magazine at this URL:

<http://www.cisco.com/packet>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:

<http://www.cisco.com/ipj>

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:
<http://www.cisco.com/en/US/products/index.html>
- Networking Professionals Connection is an interactive website where networking professionals share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:
<http://www.cisco.com/discuss/networking>
- “What’s New in Cisco Documentation” is an online publication that provides information about the latest documentation releases for Cisco products. Updated monthly, this online publication is organized by product category to direct you quickly to the documentation for your products. You can view the latest release of “What’s New in Cisco Documentation” at this URL:
<http://www.cisco.com/univercd/cc/td/doc/abtnicd/136957.htm>
- World-class networking training is available from Cisco. You can view current offerings at this URL:
<http://www.cisco.com/en/US/learning/index.html>
- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:
<http://www.cisco.com/en/US/products/index.html>
- Networking Professionals Connection is an interactive website for networking professionals to share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:
<http://www.cisco.com/discuss/networking>
- World-class networking training is available from Cisco. You can view current offerings at this URL:
<http://www.cisco.com/en/US/learning/index.html>

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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