



Catalyst 6000 Family Supervisor Engine 1 and 1A NMP Boot ROM Upgrade Installation Note

Part Number: WS-X6K-BOOT=

This document describes how to determine if you need to upgrade the network management processor (NMP) boot ROM on your Catalyst 6000 family Supervisor Engine 1 or 1A and also provides a boot ROM upgrade procedure.



Note

For Supervisor Engine 2 with boot ROM version 6.1(3) or later, the boot ROM software image can be upgraded through a software download from Cisco.com. Refer to the boot ROM software upgrade procedure at http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/relnotes/78_13488.htm



Note

This NMP boot ROM upgrade is only required if you have NMP boot ROM version 5.1(1).



Note

For Supervisor Engine 1 and 1A, the minimum boot ROM required for software release 5.4(1) and later 5.x(x) releases is 5.2(1). The minimum boot ROM required for software releases 6.x(x) and later is 5.2(1). The default (shipping) image for software releases 6.x(x) and later is 5.3(1).

Follow these guidelines to upgrade the Boot ROM (ROMMON) on Supervisor Engine 1 or 1A:

- For supervisor engines with an MSFC, due to the location of the boot ROM, upgrading the boot ROM could damage your supervisor engine. This hardware configuration is not field upgradable.
- For supervisor engines with an MSFC2 or no PFC, the boot ROM upgrade can be done in the field.
- The boot ROM upgrade kit part number is WS-X6K-BOOT=



Note

The boot ROM upgrade kit is not orderable, if an upgrade is needed, contact the Technical Assistance Center (TAC) to verify your hardware configuration and arrange for delivery of the upgrade kit.



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Safety Overview

Safety warnings appear throughout this publication in procedures that, if performed incorrectly, may harm you. A warning symbol precedes each warning statement.



Warning

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, refer to the "Translated Safety Warnings" section in this document.



Warning

Before you install, operate, or service the system, read the *Site Preparation and Safety Guide*. This guide contains important safety information you should know before working with the system.



Warning

Only trained and qualified personnel should be allowed to install or replace this equipment

Required Tools

These tools are required to install an NMP boot ROM on the supervisor engine:

- 3/16-inch flat-blade screwdriver
- Programmable logic controller chip (PLCC) extractor tool
- Antistatic mat or antistatic foam
- Your own electrostatic discharge (ESD) grounding strap or the disposable ESD strap included with the system

Checking the Boot ROM Version on the Supervisor Engine

To check if you need to upgrade the boot ROM on your supervisor engine, follow these steps:

- Step 1** If not installed in a running chassis already, install the supervisor engine in the switch and boot the switch. (Refer to the *Catalyst 6000 Family Module Installation Guide* for installation instructions.)
- Step 2** With the switch up and running, enter the **show version** command to check the NMP boot ROM version number on the supervisor engine.

Check the Fw version. The Fw version number is the NMP boot ROM version.

If the NMP boot ROM version is release 5.1(1), you must upgrade the NMP boot ROM.

This example shows how to check the boot ROM version:

```

Console> (enable) show version
WS-C6009 Software, Version NmpSW:5.3(1)CSX
Copyright (c) 1995-1999 by Cisco Systems
NMP S/W compiled on Apr  8 1999, 11:35:52

System Bootstrap Version:5.1(1)

Hardware Version:0.215  Model:WS-C6000  Serial #:001905894

Mod Port Model                Serial #    Versions
-----
1   2   WS-X6K-SUP1-2GE             SAD03040546  Hw :1.4
                                   Fw :5.1(1)
                                   Fw1:4.2(0.24)VAI78
                                   Sw  :5.3(1)CSX
                                   Sw1:5.3(1)CSX

Console> (enable)

```

In this example, the NMP boot ROM (Fw) version is release 5.1(1).

Upgrading the Supervisor Engine NMP Boot ROM



Warning

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



Caution

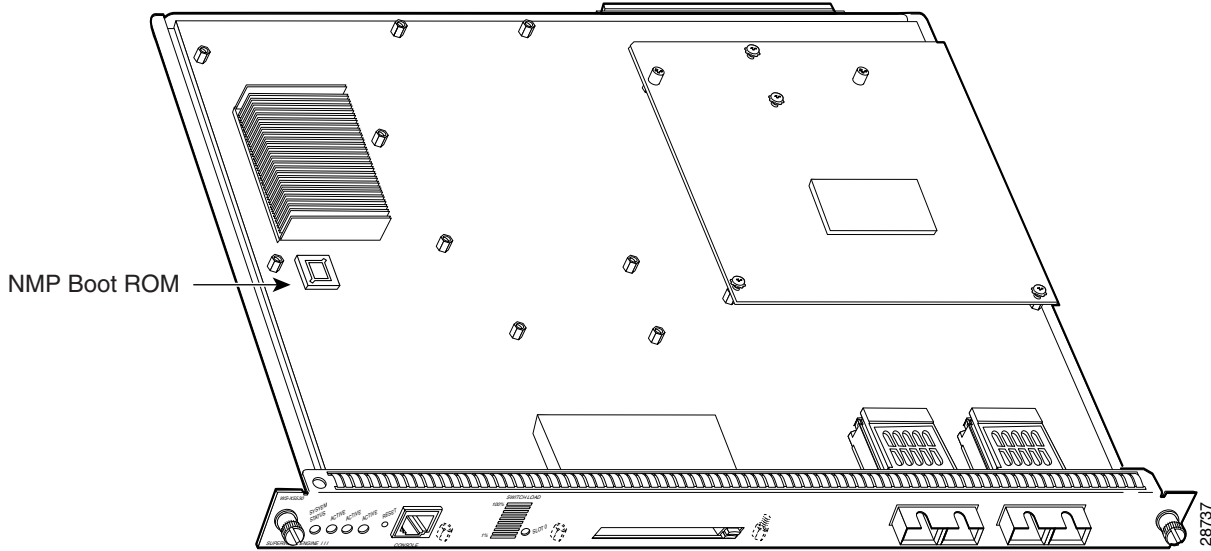
Always use an electrostatic discharge (ESD) wrist strap when handling modules or coming into contact with internal components.

To upgrade the NMP boot ROM in the supervisor engine, follow these steps:

- Step 1** If not already removed, remove the supervisor engine from the Catalyst 6000 family switch (refer to the *Catalyst 6000 Family Module Installation Guide* for removal instructions).
- Step 2** Place the supervisor engine on an antistatic mat or foam.

Step 3 Locate the NMP boot ROM on the supervisor engine (see Figure 1).

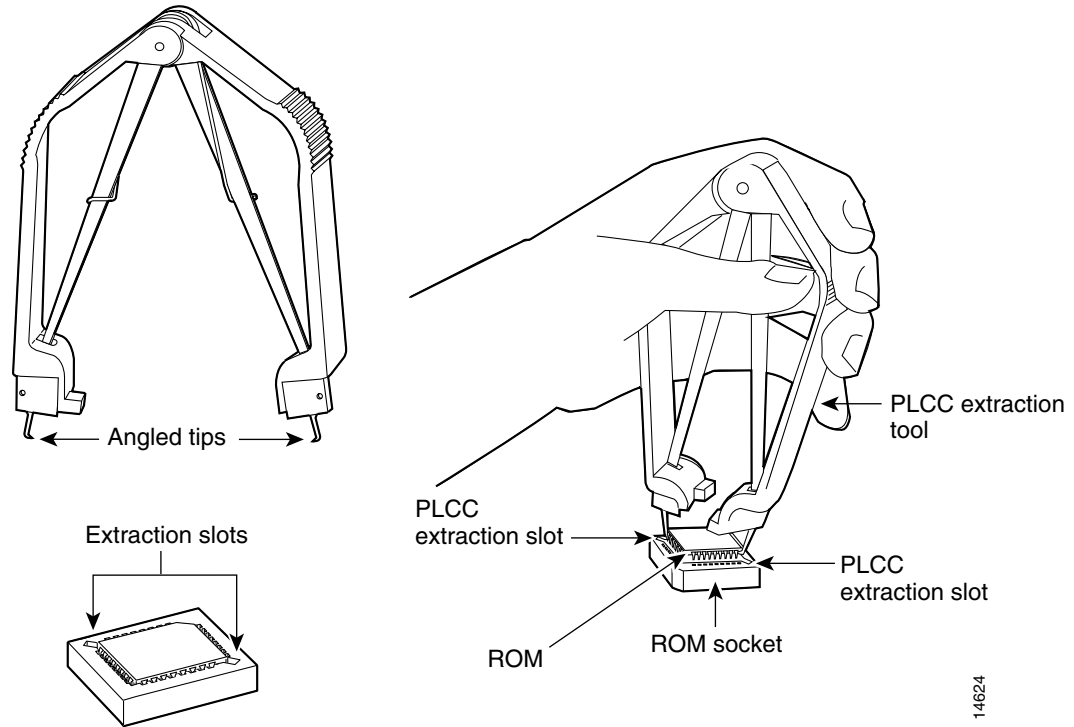
Figure 1 Supervisor Engine NMP Boot ROM Location



Step 4 To extract the NMP boot ROM from the motherboard, slide the tips of the programmable logic controller chip (PLCC) extractor tool into the socket extraction slots until the angled tips are beneath the boot ROM device (see Figure 2).

Holding the tool as shown in Figure 2, remove the chip from the socket by squeezing the handles of the extraction tool evenly and pulling the boot ROM device straight upward until it is released from the socket. Use care not to damage the boot ROM device or the socket.

Figure 2 Supervisor Engine NMP Boot ROM Extraction

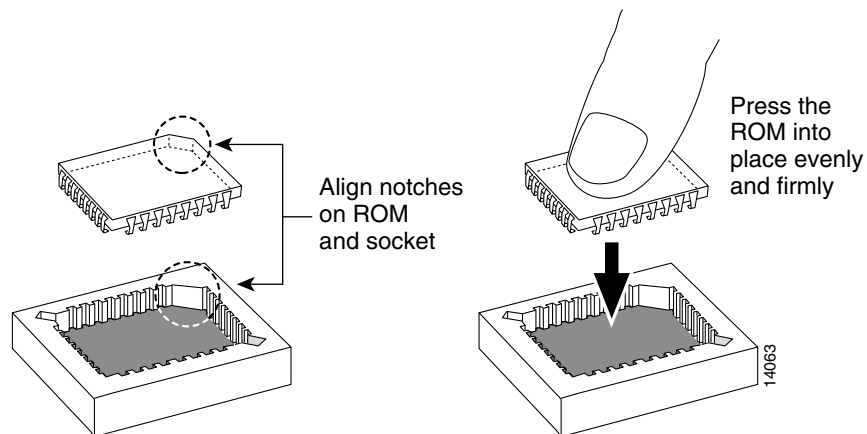


- Step 5** Place the extracted NMP boot ROM in an antistatic bag.
- Step 6** Carefully remove the new NMP boot ROM from its packaging.
- Step 7** Insert the new NMP boot ROM in the boot ROM socket on the motherboard. Be sure to orient the boot ROM so that the notched corner of the chip matches the notched corner of the socket (see Figure 3). Press the boot ROM into place evenly and firmly until it is completely seated in the socket.


Caution

Make sure you orient the chip to the socket correctly. If the chip is oriented to the socket improperly, you can damage both the chip and the socket.

Figure 3 Supervisor Engine Boot ROM Insertion



- Step 8** Install the supervisor engine in the Catalyst 6000 family switch (refer to the *Catalyst 6000 Family Module Installation Guide* for installation instructions) and boot the switch.
- Step 9** When the system comes online, use the **show version** command to verify that the supervisor engine Fw version is release 5.2(1) or 5.3(1) depending on what version was installed.

Translated Safety Warnings

Warning Definition



Warning

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, refer to the "Translated Safety Warnings" section in this document.

Waarschuwing

Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen. Voor vertalingen van de waarschuwingen die in deze publicatie verschijnen, kunt u het gedeelte "Translated Safety Warnings" (Vertalingen van veiligheidsvoorschriften) raadplegen in dit document.

Varoitus

Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista. Tässä julkaisussa esiintyvien varoitusten käännökset löydät tämän asiakirjan "Translated Safety Warnings" (käännetyt turvallisuutta koskevat varoitukset).

Attention

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions d'avertissements figurant dans cette publication, consultez la section « Translated Safety Warnings » (Traduction des avis de sécurité) de ce document.

Warnung

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewußt. Übersetzungen der in dieser Veröffentlichung enthaltenen Warnhinweise finden Sie im Abschnitt "Translated Safety Warnings" (Übersetzung der Warnhinweise) in diesem Dokument.

| | |
|---------------|--|
| Avvertenza | Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti. La traduzione delle avvertenze riportate in questa pubblicazione si trova nella documento "Translated Safety Warnings" (Traduzione delle avvertenze di sicurezza) nel presente documento. |
| Advarsel | Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker. Hvis du vil se oversettelser av de advarslene som finnes i denne publikasjonen, kan du se i avsnittet "Translated Safety Warnings" [Oversatte sikkerhetsadvarsler] i dette dokumentet. |
| Aviso | Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes. Para ver as traduções dos avisos que constam desta publicação, consulte a secção "Translated Safety Warnings" - "Traduções dos Avisos de Segurança" neste documento. |
| ¡Advertencia! | Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes. Para ver una traducción de las advertencias que aparecen en esta publicación, consultar la sección titulada "Translated Safety Warnings" que aparece en este documento. |
| Warning! | Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador. Om du vill se översättningar av de varningar som visas i denna publikation, se avsnittet "Translated Safety Warnings" [Översatta säkerhetsvarningar] i detta dokument. |

Safety Information Referral Warning



Warning

Before you install, operate, or service the system, read the *Site Preparation and Safety Guide*. This guide contains important safety information you should know before working with the system.

Waarschuwing

Lees de handleiding *Vorbereitung en veiligheid van de locatie Handleiding* voordat u het systeem installeert of gebruikt of voordat u onderhoud aan het systeem uitvoert. Deze handleiding bevat belangrijke beveiligingsvoorschriften waarvan u op de hoogte moet zijn voordat u met het systeem gaat werken.

| | |
|---------------|---|
| Varoitus | Ennen kuin asennat järjestelmän tai käytät tai huollat sitä, lue <i>Asennuspaikan valmistelu-jaturvaopas</i> -opasta. Tässä oppaassa on tärkeitä turvallisuustietoja, jotka tulisi tietää ennen järjestelmän käyttämistä. |
| Attention | Avant d'installer le système, de l'utiliser ou d'assurer son entretien, veuillez lire le <i>Guide de sécurité et de préparation du site</i> . Celui-ci présente des informations importantes relatives à la sécurité, dont vous devriez prendre connaissance. |
| Warnung | Warnhinweis Bevor Sie das System installieren, in Betrieb setzen oder warten, lesen Sie die <i>Anleitung zur Standortvorbereitung und Sicherheitshinweise</i> . Dieses Handbuch enthält wichtige Informationen zur Sicherheit, mit denen Sie sich vor dem Verwenden des Systems vertraut machen sollten. |
| Avvertenza | Prima di installare, mettere in funzione o effettuare interventi di manutenzione sul sistema, leggere le informazioni contenute nella documentazione sulla <i>Guida alla sicurezza</i> . Tale guida contiene importanti informazioni che è necessario acquisire prima di iniziare qualsiasi intervento sul sistema. |
| Advarsel | Før du installerer, tar i bruk eller utfører vedlikehold på systemet, må du lese <i>Veiledning for stedsklargjøring og sikkerhet</i> . Denne håndboken inneholder viktig informasjon om sikkerhet som du bør være kjent med før du begynner å arbeide med systemet. |
| Aviso | Antes de instalar, funcionar com, ou prestar assistência ao sistema, leia o <i>Guia de Preparação e Segurança do Local</i> . Este guia contém informações de segurança importantes que deve conhecer antes de trabalhar com o sistema. |
| ¡Advertencia! | Antes de instalar, manejar o arreglar el sistema, le aconsejamos que consulte la <i>Guía de prevención y preparación de una instalación</i> . Esta guía contiene importante información para su seguridad que debe saber antes de comenzar a trabajar con el sistema. |
| Varning! | Innan du installerar, använder eller utför service på systemet ska du läsa <i>Förberedelser och säkerhet Handbok</i> . Denna handbok innehåller viktig säkerhetsinformation som du bör känna till innan du arbetar med systemet. |

Installation Warning



Warning

Only trained and qualified personnel should be allowed to install or replace this equipment.

Waarschuwing

Installatie en reparaties mogen uitsluitend door getraind en bevoegd personeel uitgevoerd worden.

Varoitus

Ainoastaan koulutettu ja pätevä henkilökunta saa asentaa tai vaihtaa tämän laitteen.

| | |
|----------------------|--|
| Avertissement | Tout installation ou remplacement de l'appareil doit être réalisé par du personnel qualifié et compétent. |
| Achtung | Gerät nur von geschultem, qualifiziertem Personal installieren oder auswechseln lassen. |
| Avvertenza | Solo personale addestrato e qualificato deve essere autorizzato ad installare o sostituire questo apparecchio. |
| Advarsel | Kun kvalifisert personell med riktig opplæring bør montere eller bytte ut dette utstyret. |
| Aviso | Este equipamento deverá ser instalado ou substituído apenas por pessoal devidamente treinado e qualificado. |
| ¡Atención! | Estos equipos deben ser instalados y reemplazados exclusivamente por personal técnico adecuadamente preparado y capacitado. |
| Varning | Denna utrustning ska endast installeras och bytas ut av utbildad och kvalificerad personal. |

Wrist Strap Warning



| | |
|---------------------|---|
| Warning | During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself. |
| Waarschuwing | Draag tijdens deze procedure aardingspolsbanden om te vermijden dat de kaart beschadigd wordt door elektrostatische ontlading. Raak het achterbord niet rechtstreeks aan met uw hand of met een metalen werktuig, omdat u anders een elektrische schok zou kunnen oplopen. |
| Varoitus | Käytä tämän toimenpiteen aikana maadoitettuja rannesuojia estääksesi kortin vaurioitumisen sähköstaattisen purkauksen vuoksi. Älä kosketa taustalevyä suoraan kädelläsi tai metallisella työkalulla sähköiskuvaaran takia. |
| Attention | Lors de cette procédure, toujours porter des bracelets antistatiques pour éviter que des décharges électriques n'endommagent la carte. Pour éviter l'électrocution, ne pas toucher le fond de panier directement avec la main ni avec un outil métallique. |
| Warnung | Zur Vermeidung einer Beschädigung der Karte durch elektrostatische Entladung während dieses Verfahrens ein Erdungsband am Handgelenk tragen. Bei Berührung der Rückwand mit der Hand oder einem metallenen Werkzeug besteht Elektroschockgefahr. |

| | |
|--------------------|--|
| Avvertenza | Durante questa procedura, indossare bracciali antistatici per evitare danni alla scheda causati da un'eventuale scarica elettrostatica. Non toccare direttamente il pannello delle connessioni, né con le mani né con un qualsiasi utensile metallico, perché esiste il pericolo di folgorazione. |
| Advarsel | Bruk jordingsarmbånd under prosedyren for å unngå ESD-skader på kortet. Unngå direkte berøring av bakplanet med hånden eller metallverktøy, slik at di ikke får elektrisk støt. |
| Aviso | Durante este procedimento e para evitar danos ESD causados à placa, use fitas de ligação à terra para os pulsos. Para evitar o risco de choque eléctrico, não toque directamente na parte posterior com a mão ou com qualquer ferramenta metálica. |
| Advertencia | Usartiras conectadas a tierra en las muñecas durante este procedimiento para evitar daños en la tarjeta causados por descargas electrostáticas. No tocar el plano posterior con las manos ni con ninguna herramienta metálica, ya que podría producir un choque eléctrico. |
| Varning! | Använd jordade armbandsremmar under denna procedur för att förhindra elektrostatisk skada på kortet. Rör inte vid baksidan med handen eller metallverktyg då detta kan orsaka elektrisk stöt. |

Related Documentation

For additional information on Catalyst 6000 family switches and command-line interface (CLI) commands, refer to the following publications:

- *Catalyst 6000 Family Software Configuration Guide*
- *Catalyst 6000 Family Command Reference*
- *Catalyst 6000 Family Installation Guide*
- *Site Preparation and Safety Guide*
- *Configuration Fundamentals Command Reference* publication

Obtaining Documentation

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

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Registered CCO users can order the Documentation CD-ROM and other Cisco Product documentation through our online Subscription Services at <http://www.cisco.com/cgi-bin/subcat/kaojump.cgi>.

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Obtaining Technical Assistance

Cisco provides Cisco Connection Online (CCO) as a starting point for all technical assistance. Warranty or maintenance contract customers can use the Technical Assistance Center. All customers can submit technical feedback on Cisco documentation using the web, e-mail, a self-addressed stamped response card included in many printed docs, or by sending mail to Cisco.

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You can access CCO in the following ways:

- WWW: www.cisco.com
- Telnet: [cco.cisco.com](telnet://cco.cisco.com)
- Modem using standard connection rates and the following terminal settings: VT100 emulation; 8 data bits; no parity; and 1 stop bit.
 - From North America, call 408 526-8070
 - From Europe, call 33 1 64 46 40 82

You can e-mail questions about using CCO to cco-team@cisco.com.

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to warranty or maintenance contract customers who need technical assistance with a Cisco product that is under warranty or covered by a maintenance contract.

To display the TAC web site that includes links to technical support information and software upgrades and for requesting TAC support, use www.cisco.com/techsupport.

To contact by e-mail, use one of the following:

In North America, TAC can be reached at 800 553-2447 or 408 526-7209. For other telephone numbers and TAC e-mail addresses worldwide, consult the following web site:
<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>.

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This document is to be used in conjunction with the documents listed in the “Related Documentation” section.

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